
# Operating Manual

# Table of Contents

# ABOUT HALDELUXE

HALdeluxe gives you the power to control your home *by voice* from anywhere in the house or from anywhere in the world! How are you able to talk to your home from anywhere with HALdeluxe? Because HALdeluxe introduces telephone control to the HAL home control system. With HALdeluxe, you can pick up any phone in the home, press the pound (#) key, and speak to HAL as if you were standing at the microphone in front of the PC. It's the same from anywhere outside the home -- pick up the phone, dial your house, enter your access code, and begin talking to your house as if you were there! With HALdeluxe, any phone -- anywhere in the world -- becomes a remote control for your home!

## Control Lights, Devices, and Appliances

HALdeluxe delivers complete power line control using the X-10 protocol. There's no need to tear your house apart to rewire your home -- simply use the home's existing wiring. Using economically priced X-10 wall switches, lamp modules, or power outlets, you can control every light in your house with HALdeluxe. You can schedule your lights to go on and off according to your lifestyle. HAL tracks sunrise and sunset where you live by matching the latitude and longitude with the position of the sun, so you can tell HAL to turn your front porch lights on at dusk every night and then turn them off at 11:30pm. Use easy-to-set-up macros to establish lighting scenes. For instance, you can program HAL to dim the lights in the family room to 30% when it hears the phrase "It's time for a movie."

HAL will operate appliances, too, like coffee makers and popcorn poppers, so you can tell HAL to brew the coffee every morning at 7am. Even more impressive is HAL's power to link numerous actions together. In addition to dimming the family room lights when you say, "It's time for a movie," you could also have HAL begin popping the popcorn.

## Voice Control

The key to effective home control is simplicity -- how easy the system is to use. There's no easier way to control your home than with normal, conversational speech. Once HALdeluxe is installed in your home, you can begin controlling an unlimited number of devices with your voice. Simply tell HAL, "Turn on the front door lights," or establish schedules by telling HAL, "Every night at 6pm turn on the front porch lights for five hours."

## Telephone Control

HALdeluxe will make your phone smart. HAL can be your phone message center -- it will answer the phone after whatever number of rings you specify and will deliver a greeting or play one that you recorded. You may configure up to ten (10) voice mailboxes and each one can have its own greeting. You can retrieve voice mail messages by phone from anywhere -- in the home or out. HAL will announce Caller ID information so there's no need to read a small Caller ID display and you can leave custom messages for certain callers.

## Internet Information Automation

HALdeluxe makes it easy for you to get the information you want -- *when you want it*! No more waiting for weather reports or watching a stock ticker on the TV. HAL will go out to the Internet automatically as often as you want, and will bring back weather reports for your area, the stock quotes you ask for, and a copy of your E-mail messages. The information is stored on the PC, just waiting for you to ask HAL, "What's the weather forecast for Thursday?" or "What is Microsoft at?" or "Are there any new E-mail messages?" HAL delivers the information you want -- *when you want it!* In addition to E-mail, weather, and stocks, HALdeluxe retrieves sports scores, news headlines, TV listings, and traffic reports (in select areas). So if you were unable to see the game, you can call HAL and simply ask, "What was the score for the Baltimore Orioles tonight?"

Information -- *when you want it!*

# USING HELP

## Starting Online Help

Any of the methods listed below can be used to open the Online Help Guide:

- Go to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe Help**
- Right-click on the ear icon and select OPEN HAL HELP
- Press the HELP button on a screen if one is available
- Press F1 when any of HAL's screen are visible and active on the Windows® desktop

## Operating Manual Conventions

We strongly recommend that you read through this Operating Manual before using HAL. Many of the concepts and commands are unfamiliar to people who have never used a voice-controlled system.

This operating manual assumes that:

- You have a basic knowledge of using computers and understand basic terms, such as click, left-click, right-click, double-click, etc.
- You are familiar with Windows® 98, 2000, or Millennium Edition (Me).

*Program Pathways* -- There are several instances in the Operating Manual where instructions will be given to run an external program. These paths will be indicated with bold text. For instance, **Start**... **Programs**... **HALdeluxe**... **HALdeluxe Help** indicates that you should open the HAL Online Help Guide by clicking START (in the Windows taskbar), then PROGRAMS, then HALDELUXE, and then HALDELUXE HELP.

*Keystroke Commands* -- Buttons, icons, and menu selections that are to be pressed, clicked, or selected are indicated by capital letters. For instance, "Click DELETE" means that you should click on the button labeled "Delete".

*Terms and Definitions* -- Chapter 13 contains a list of words and phrases that may be unfamiliar to many people. Some of the terms relate to computers or home automation, but most of the terms relate to features, functions, and concepts in HALdeluxe.

If you have questions or need assistance with this HAL product, please look for solutions in the Online Help Guide or this Operating Manual first. If this Operating Manual or the Online Help Guide don't answer your questions or offer a solution, please visit Home Automated Living's website at www.AutomatedLiving.com. Our website includes the latest product information, program updates, and "Frequently Asked Questions" on using HAL products. If the website doesn't help you, then please go to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe Support** for information on contacting Technical Support.

## Updating Help

An updated copy of the Online Help Guide is included with every software release of HAL. The updated copy will automatically install over the older version of the Online Help Guide, so long as the option to do so was not disabled during installation.

Updated versions of the Operating Manual are only available from the "Downloads" section of the HAL website (www.AutomatedLiving.com). Newer versions of the Online Help Guide are also available from the website.

## CHAPTER 1
# Getting Started

## SYSTEM REQUIREMENTS

Listed below are the minimum system requirements for running HALdeluxe:

- Windows® 98, 2000, or Millennium Edition (Me)
- Pentium® Processor-- 266MHz or higher
- 64MB RAM
- 40MB free disk space for installation; 60MB for normal operation
- HAL-compatible modem and phone line (required for some telephony features)
- Connection to the Internet through dial-up networking or direct/dedicated access (LAN, DSL, cable modem, etc.)
- Sound card

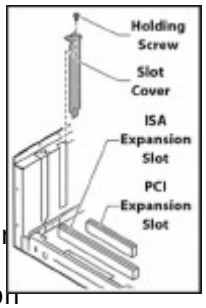
## HAL-COMPATIBLE MODEMS

Not all Voice/Fax/Data (VFD) modems support all of HAL's features. Some modems, for instance, may work with HAL's Internet feature but not with its voice mail feature. Other modems may work with the Internet and voice mail features but not the *In-House Phone Interaction Feature* (see page 18). Home Automated Living's development team and technical support staff test modems to determine if they support all of HAL's features. The list of modems proven to be HAL-compatible is maintained on the HAL website at www.AutomatedLiving.com. If you have or know of a modem that supports all of HAL's features but is not listed on HAL's website, please send an E-mail message to HAL's Technical Support department (support@AutomatedLiving.com). Include the name of the modem manufacturer, the model number, and the firmware version, if known.

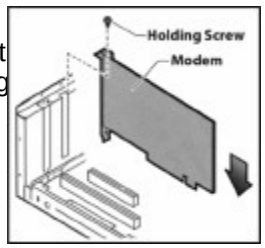
HAL-compatible modems can be purchased from HAL's website. Go to the end of this section for information on using one or more modems and broadband connections with HAL.

### Installing the HAL Internal PCI Voice Portal

Follow the steps below if you're installing a *HAL Internal PCI Voice Portal*.




1. Shut down the computer and remove all cables connected to it.
2. Remove the cover on the computer so that you can access the PCI Bus expansion slots. (See the computer's *Owner's Manual* for more information.)
3. Find an available PCI expansion slot and remove the slot cover if one is in place. Save the screw that was holding the slot cover in place. (Note: If the slot cover for this slot has never been removed before, then you may need to tap on the slot cover to separate it from the computer casing.)
4. Remove the PCI modem from the anti-static bag and insert it into the PCI expansion slot. Firmly press down on the top edge of the modem to seat the modem into the slot. When pressing down, use equal pressure along the top so that the modem goes in straight and not at an angle.
5. Use the screw from Step 3 to anchor the modem in place.

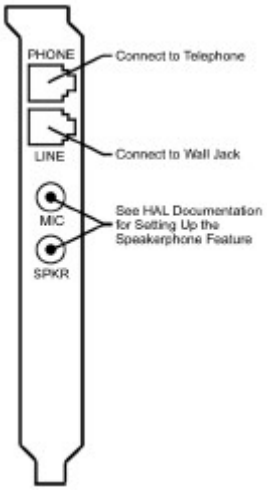


6. There are four jacks on the back of the modem: PHONE, LINE, MIC, and SPKR (speaker).

   a. Plug the telephone cable from a nearby phone jack into the LINE jack.

   b. Plug another telephone cable into the PHONE jack and plug the other end of that cable into a touch-tone phone*.

   c. (optional) You won't need to use the MIC and SPKR jacks unless you wish to use HAL's *Speakerphone Feature* (see page 21). If you choose not to use that feature or don't want to set it up now, then leave the MIC and SPKR jacks empty.



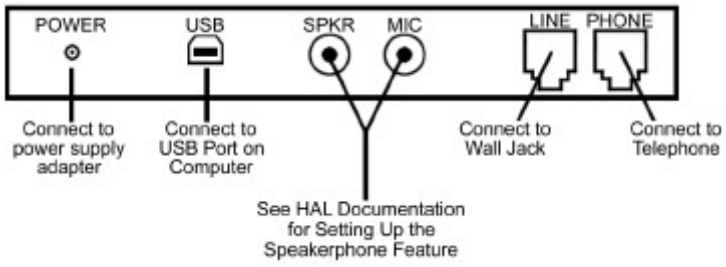

   * This configuration is if you only intend to use one house phone to talk to HAL. If you want to be able to talk to HAL from *any* phone in the house, then additional steps and hardware are required. Go to the *In-House Phone Interaction Feature* on page 18 for more information.

7. Replace the computer's cover and any cables that you removed. Turn the computer back on. Proceed to "Installing Modem Drivers" (below).

## Installing the HAL External USB Voice Portal

Follow the steps below if you're installing a *HAL External USB Voice Portal*.

There are six jacks on the back of the modem: PHONE, LINE, MIC, SPKR (speaker), USB, and POWER.




1. Plug the USB cable that was supplied with the modem into the USB jack on the back of the modem. Plug the other end of the cable into the USB port on the computer. (The ends of the cable are different -- the longer, thinner connector goes into the USB port on the computer; the shorter, thicker connector goes into the USB slot on the back of the modem.)

2. Plug a telephone cable from a nearby phone jack into the LINE jack.

3. Plug another telephone cable into the PHONE jack and plug the other end of that cable into a touch-tone phone.*

4. (optional) You won't need to use the MIC and SPKR jacks unless you wish to use HAL's *Speakerphone Feature* (see page 21). If you choose not to use that feature or don't want to set it up now, then leave the MIC and SPKR jacks empty.

5. Plug a power supply adapter into the POWER jack. Plug the other end of the adapter into an available wall outlet or power strip.

6. The modem is now installed. Proceed to "Installing Modem Drivers".

   * This configuration is if you only intend to use one house phone to talk to HAL. If you want to be able to talk to HAL from *any* phone in the house, then additional steps and hardware are required. Go to the *In-House Phone Interaction Feature* on page 18 for more information.

## Installing Modem Drivers

**Windows 98**

1. If a HAL Internal PCI Voice Portal was installed, then turn on the computer, if it's not already on. Windows® will automatically detect the new hardware and will open the *Add New Hardware Wizard* screen.

   If a HAL External USB Voice Portal was installed, then Windows® will detect the new hardware as soon as you connect the modem to the USB port on the computer and will open the *Add New Hardware Wizard* screen.

   Click NEXT at the bottom of the *Add New Hardware Wizard* screen.

2. Insert the HAL program CD into the CD-ROM drive (you can also download the drivers from **www.AutomatedLiving.com**).

3. In the second screen of the *Add New Hardware Wizard*, select the option "Search for the best driver for your device (recommended)". Click NEXT to continue.

4. In the next screen, select the option "Specify a Location." Click BROWSE.

   a. Click the plus (+) icon next to the letter for the CD-ROM drive where the HAL program CD is.

   b. Click the plus (+) icon next to the folder DRIVERS.

   c. If the HAL Internal PCI Voice Portal was installed, click the plus (+) icon next to the folder HAL INTERNAL PCI VOICE PORTAL.

      If the HAL External USB Voice Portal was installed, click the plus (+) icon next to the folder HAL EXTERNAL USB VOICE PORTAL.

   d. Click on the "Windows98" folder. Click OK to close the screen and return to the *Add New Hardware Wizard* screen.

   e. Click NEXT.

5. Windows will indicate that it has found the driver at the location you specified. Click NEXT to proceed installing the drivers.

6. When Windows is finished installing the drivers, click FINISH to close the *Add New Hardware Wizard* screen. Windows may take a few more minutes to install additional files for the modem. When it's finished, all file copying/driver installation screens will disappear.

7. Restart the computer.

8. The modem is now ready. After HAL is installed, the *HAL Setup Wizard* (see page 24) will detect the modem and set HAL up to use that modem.

**Windows 2000**

1. If a HAL Internal PCI Voice Portal was installed, then turn on the computer, if it's not already on. Windows® will automatically detect the new hardware and will open the *Found New Hardware Wizard* screen.

   If a HAL External USB Voice Portal was installed, then Windows® will detect the new hardware as soon as you connect the modem to the USB port on the computer and will open the *Found New Hardware Wizard* screen.

   Click NEXT at the bottom of the *Found New Hardware Wizard* screen.

2. Insert the HAL program CD into the CD-ROM drive (you can also download the drivers from **www.AutomatedLiving.com**).

3. In the second screen of the *Found New Hardware Wizard*, select the option "Display a list of the known drivers for this device so that I can choose a specific driver". Click NEXT to continue.

4. In the next screen, select the button for "Have Disk." The *Install from Disk* screen will appear. Click BROWSE.

   a. The *Locate File* screen will appear. Click the icon for "My Computer", then double-click on the icon for the CD-ROM drive.

   b. Double-click on the DRIVERS folder.

   c. If the HAL Internal PCI Voice Portal was installed, doubleclick on the HAL INTERNAL PCI VOICE PORTAL folder.

      If the HAL External USB Voice Portal was installed, doubleclick on the HAL EXTERNAL USB VOICE PORTAL folder.

   d. Click on the "Windows2000" folder and click the OPEN button. The *Install from Disk* screen will re-appear -- click OK. The *Found New Hardware Wizard* screen will re-appear and will have "HAL HCF V.90 PCI Voice Portal VP100PCI" (if using PCI Voice Portal) or "HAL USB Voice Portal VP100USB" (if using USB Voice Portal) highlighted. Click NEXT.

   e. (optional) The *Update Driver Warning* screen may appear. We recommend clicking YES in this screen.

5. The system will ask to "Start Device Driver Installation." Click NEXT. (A *Digital Signature not Found* warning may appear -- we recommend clicking YES.)

6. When Windows is finished installing the drivers, click FINISH to close the *Found New Hardware Wizard* screen. Windows may take a few more minutes to install additional files for the modem. When it's finished, all file copying/driver installation screens will disappear.

7. Restart the computer.

8. The modem is now ready. After HAL is installed, the *HAL Setup Wizard* (see page 24) will detect the modem and set HAL up to use that modem.

**Windows Me**

1. If a HAL Internal PCI Voice Portal was installed, then turn on the computer, if it's not already on. Windows® will automatically detect the new hardware and will open the *Add New Hardware Wizard* screen.

   If a HAL External USB Voice Portal was installed, then Windows® will detect the new hardware as soon as you connect the modem to the USB port on the computer and will open the *Add New Hardware Wizard* screen.

2. Insert the HAL program CD into the CD-ROM drive (you can also download the drivers from **www.AutomatedLiving.com**).

3. In the *Add New Hardware Wizard* screen, select the option "Specify the location of the driver". Click NEXT to continue.

4. In the next screen, make sure "Search for the best drivers for your device" is selected, and that "Specify a location" is checked. Click BROWSE.

   a. Click the plus (+) icon next to the letter for the CD-ROM drive where the HAL program CD is.

   b. Click the plus (+) icon next to the folder DRIVERS.

   c. If the HAL Internal PCI Voice Portal was installed, click the plus (+) icon next to the folder HAL INTERNAL PCI VOICE PORTAL.

      If the HAL External USB Voice Portal was installed, click the plus (+) icon next to the folder HAL EXTERNAL USB VOICE PORTAL.

   d. Click on the "WindowsMe" folder. Click OK to close the screen and return to the *Add New Hardware Wizard* screen.

   e. Click NEXT.

5. Windows will indicate that it has found the driver at the location you specified. Click NEXT to proceed installing the drivers.

6. When Windows is finished installing the drivers, click FINISH to close the *Add New Hardware Wizard* screen. Windows may take a few more minutes to install additional files for the modem. When it's finished, all file copying/driver installation screens will disappear.

7. Restart the computer.

8. The modem is now ready. After HAL is installed, the *HAL Setup Wizard* (see page 24) will detect the modem and set HAL up to use that modem.

## When the HAL modem is the onlymodem in the computer…

In this setup, the HAL Voice Portal will be used for both the telephony options and the Internet options. In other words, HAL will use the HAL Voice Portal to answer calls and record voice mail messages, and it will use it to connect to the Internet to download information.

**Advantages**

If the Internal PCI Voice Portal is being used, then only one PCI slot is being used, instead of two slots if two modems are being used. If the External USB Voice Portal is being used, then no slots inside the computer are being used by modems.

**Disadvantages**

HAL has control of the HAL Voice Portal so that it can answer the phone and record voice messages and download information from the Internet. If you wish to browse the Internet, you must either connect to the Internet through HAL or release the modem from HAL's control so that you can manually connect to the Internet.

**Installation**

If the computer contains an ISA or another PCI modem, then remove that modem and install the HAL Voice Portal following the instructions above.

**Computer Setup**

In order for HAL to be able to download information from the Internet using the HAL Voice Portal, a Dial-up Networking (DUN) connection must be set up on the computer. This DUN connection will contain the information that the modem will use to connect to your Internet Service Provider (ISP). If a previous DUN connection was set up on the computer for a previous modem, then you can modify it to use the HAL Voice Portal that was just installed. If there was no previous DUN connection specified on the computer, then you will need to set up one. Go to the Windows® online help guide for information on setting up a Dial-up Networking connection.

**HAL Configuration**

When *HAL Setup* runs, select for the Internet connection method the "Phone Line Method" option, then click NEXT. In the next screen, select the DUN connection that is set up to use this HAL Voice Portal. Click NEXT and continue through the rest of *HAL Setup*. When it reaches the telephony section, it will ask if you wish to allow remote access of HAL and have HAL act as an answering machine. If you respond with "yes" to either of these options, then HAL will automatically search for and detect the HAL Voice Portal. Finish running *HAL Setup*. When HAL starts, it will be set up to use the HAL Voice Portal for downloading information and for answering the phone.

## When the HAL modem is being used with another modem in the computer…

There are two possible setups for this situation. One setup is to have HAL use the HAL Voice Portal for its telephone features, such as answering the phone, and to have HAL use the other modem for downloading information from the Internet. The other setup is to have HAL use the HAL Voice Portal for the telephony *and* Internet features, and use the other modem for manually connecting to the Internet and browsing it.

**Advantages**

Regardless of which setup you choose, there is no need to connect to the Internet through HAL or to release the modem from HAL's control so that you can browse the Internet.

**Disadvantages**

The other modem and the HAL Internal PCI Voice Portal will each take one expansion slot, thereby reducing the number of available slots for other hardware cards (the HAL External USB Voice Portal does not require an expansion slot inside the computer).

**Installation**

Install the HAL Voice Portal following the instructions above.

**Computer Setup**

In order for each modem to have access to the phone line, you must use a telephone splitter, available from any telephone or electronics supply store. Plug this splitter into the telephone jack in the wall. Run a telephone cable from one of the jacks in the splitter to the Line In jack on the HAL Voice Portal. Run a second telephone cable from the other jack on the splitter to the Line In jack on the other modem.

> NOTE: If you intend to set it up so that you can talk to HAL through any of the house phones, then the instructions in the previous paragraph will be changed slightly; the splitter mentioned in the previous paragraph must be connected to the Line 1 jack of the adapter used for setting up the *In-House Phone Interaction Feature* (see page 18). A telephone cable must also be connected between the Phone jack on the HAL Voice Portal and the Line 2 jack on that adapter (not the splitter mentioned above).

In order for HAL to be able to download information from the Internet, a Dial-Up Networking (DUN) connection must be set up on the computer. This DUN connection will contain the information that the modem will use to connect to your Internet Service Provider (ISP). If both modems will be used for accessing the Internet (one modem for manual connection and one for HAL to use to connect to the Internet), then two DUN connections must be set up -- one DUN connection will specify the HAL Voice Portal and the other DUN connection will specify the other modem. If the other modem is the only one that will be used for connecting to the Internet, then only one DUN connection needs to be set up, and that DUN connection must specify that other modem. Go to the Windows® online help guide for information on setting up a Dial-Up Networking connection.

**HAL Configuration**

When *HAL Setup* runs, select for the Internet connection method the "Phone Line Method" option, then click NEXT. In the next screen, select the DUN connection for whichever modem will be connecting to the Internet. Click NEXT and continue through the rest of *HAL Setup*. When it reaches the telephony section, it will ask if you wish to allow remote access of HAL and have HAL act as an answering machine. If you respond with "yes" to either of these options, then HAL will automatically search for a modem. Because there are two modems on the computer, *HAL Setup* will ask which modem you wish to use. Select the HAL Voice Portal. Finish running *HAL Setup*. When HAL starts, it will be set up either to use the HAL Voice Portal for the telephony and Internet features, or it will be set up to use the HAL Voice Portal for the telephony features and the other modem for downloading information from the Internet.

## When the HAL modem is being used with a LAN, DSL, cable modem, etc…

In this setup, HAL will use the HAL Voice Portal for telephony features, such as recording voice messages, and will use the LAN, DSL, cable modem, etc., for connecting to the Internet.

**Advantages**

There's never a need to release the modem from HAL's control before connecting to the Internet, because HAL won't be using the modem for retrieving Internet information.

**Disadvantages**

None.

**Installation**

Install the HAL Voice Portal following the instructions above.

**Computer Setup**

No special setup is required, other than what's involved with installing the HAL Voice Portal and setting up the computer to use the LAN, DSL, cable modem, etc.

**HAL Configuration**

When *HAL Setup* runs, select for the Internet connection method the "Broadband... or Home Network/LAN" option, then click NEXT and continue through the rest of *HAL Setup*. When it reaches the telephony section, it will ask if you wish to allow remote access of HAL and have HAL act as an answering machine. If you respond with "yes" to either of these options, then HAL will automatically search for and detect the HAL Voice Portal. Finish running *HAL Setup*. When HAL starts, it will be set up to use the HAL Voice Portal for answering the phone and the LAN, DSL, cable modem, etc., to connect to the Internet.

# INSTALLING THE HARDWARE

If your copy of HALdeluxe was shipped with a Power Line Adapter and a Serial Port Cable and Connector or if you already own these hardware components, then follow the steps below to connect this hardware to the computer on which HAL will be installed. These hardware components can be installed at any time, but HAL can not control electrical devices like lights and appliances until a Power Line Adapter is connected to it.

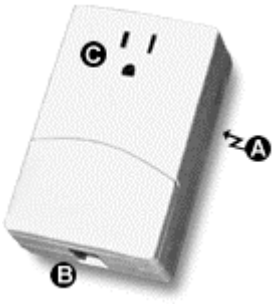
NOTE: The instructions below are for using a Power Line Adapter, such as a CM11 or HD11, with HAL. If you're using a different type of Power Line Interface, use the instructions included with that interface for information on installing it.

Instructions for installing a Lamp Module are also included below. Lamp Modules and other-X10 compatible devices can be installed at any time. For information on installing other X10 compatible devices, see the manufacturer's documentation or website for instructions.

## The Power Line Adapter

The Power Line Adapter has three prongs on the back (**A**), a three-prong outlet on the front (**C**), and an additional interface connector port, similar to those used on telephone handsets, on the bottom (**B**). The model number on the back of the Power Line Adapter will be CM11, HD11, or something similar. Power Line Adapters are shipped with a Serial Port Cable and Connector (see below).

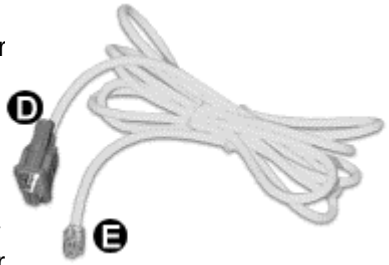
1. Plug the Power Line Adapter (**A**) into a standard wall outlet.




NOTE: The Power Line Adapter must be plugged into an outlet that is always on; it can be plugged into a power strip, but do not plug it into an outlet that is controlled by a wall switch.

2. One end of the Serial Port Cable and Connector is a serial port adapter (**D**). Connect that end to a serial port on the computer.

3. The other end of the Serial Port Cable and Connector is similar to the type of connector used for telephone handsets. Connect that end (**E**) to the bottom of the Power Line Adapter (**B**).




The outlet on the front of the Power Line Adapter (**C**) is the same as a standard outlet -- anything plugged into this outlet will draw electricity just as if it were plugged directly into a standard wall outlet or power strip. This outlet is not an X10 outlet, so HAL will not be able to control any light or appliance plugged into it.

## The Lamp Module

The Lamp Module is smaller than the Power Line Adapter. There are two prongs on the back (**F**) and a two- or three-prong outlet (depending on the model) on the bottom (**G**). On the front of the Lamp Module are two dials (**H**). One dial is the *Unit* code with a number range of 1 to 16. The other dial is the *House* code with a letter range of A to P.

1. Use a coin or screwdriver to turn the dials on the front of the Lamp Module (**H**). The combination of these two dials is referred to as the device's "address". For instance, the Lamp Module pictured above is set to an address of **A1** -- the House code is set to "A" and the Unit code is set to "1". There are 256 possible address combinations with X10 devices.

2. Plug a table or floor lamp into the outlet on the bottom of the Lamp Module (**G**). *Lamp Modules are for incandescent lights ONLY* (to control an appliance, you will need to use an Appliance Module).

3. Plug the Lamp Module (**F**) into a standard wall outlet.

   NOTE: The Lamp Module must be plugged into an outlet that is always on; it can be plugged into a power strip, but do not plug it into an outlet that is controlled by a wall switch.

4. Make sure that the lamp itself is on.

5. Read *Create an X-10 Device* (see page 139) for information on naming the light plugged into this Lamp Module. Once that's done you can control that light by voice (see Chapter 3).

*Related Topics*


pg. 47 Control devices by voice
110 Set up HAL to control devices
139 Create devices in HAL
174 Use devices in rules, macros, and schedules
182 Control devices from the computer
204 About X-10


## THE IN-HOUSE PHONE INTERACTION FEATURE

The *In-House Phone Interaction Feature* refers to the ability to interact with HAL by using one of the phones in the house. *Having* the ability to use this feature is part of HAL's program. Being able to *use* this feature, however, requires a HAL-compatible modem (see page 9).

There are two methods available for implementing the feature. The instructions for both methods are described below, along with the advantages, disadvantages, and requirements for each. Neither of the methods will affect the normal use of the phones (receive/place calls) or the ability to dial in from a remote phone to interact with HAL.

### Single Phone Option

**Advantage**: Easier to implement than the other method.

This method is simple-- plug a cordless telephone into the phone jack on the modem.

**Disadvantage(s)**:

- Only one phone can be used to interact with HAL.

- The cordless phone would have to be returned to its base periodically to recharge - not always convenient for those users who have a dedicated computer for home automation and have it located in the basement or a closet.

**Requirements**:

- A HAL-compatible modem (see page 9).

## All House Phones Option

**Advantage**: All of the phones in the house can be used.

This method works by having phone signals coming in from the street rerouted so that they pass through HAL before continuing on to the rest of the house. Likewise, signals originating in the house pass through HAL before proceeding out to the street. This means that when a phone is picked up in the house, HAL "listens" in to determine if a command is coming its way or if an outgoing call is being placed. If HAL doesn't hear the tone for the *attention key* (generally the pound [#] sign), then it allows the signal to continue outside.

**Disadvantage(s)**:

- The phone line has to be rerouted at the telephone junction box outside, which may require the assistance of a qualified telephone technician. The graphic below diagrams the new route.
- There are usually at least two pairs of phone lines going through every home. Homes with one phone line (one phone number) use only one of these pairs, and homes with two phone lines (two phone numbers) use both pairs. This method for setting up the In-House Phone Interaction Feature can't be used in homes that have two phone lines because the recommended HAL wiring explained in the diagram below requires both pairs. There are a couple of ways, however, to have multiple phones lines in the home and still have in house phone interaction with HAL:
    1. Use a PBX Phone System to handle the multiple phone lines (go to Chapter 11, *Miscellaneous Information*, for information on connecting PBX systems to HAL).
    2. If the second phone line (second phone number) is dedicated to just one device, such as a "teen" line or a fax machine or strictly for Internet access, then a dedicated line can be run from the telephone junction box directly to the phone jack for that device. In other words, the second phone line is connected to another pair of lines that wasn't used before or to a new pair that is installed specifically for this device (the first phone line will still need to be rerouted -- see the diagram below). Contact your local telephone company for additional information and assistance.

**Requirements**:

- A HAL-compatible modem (see page 9).

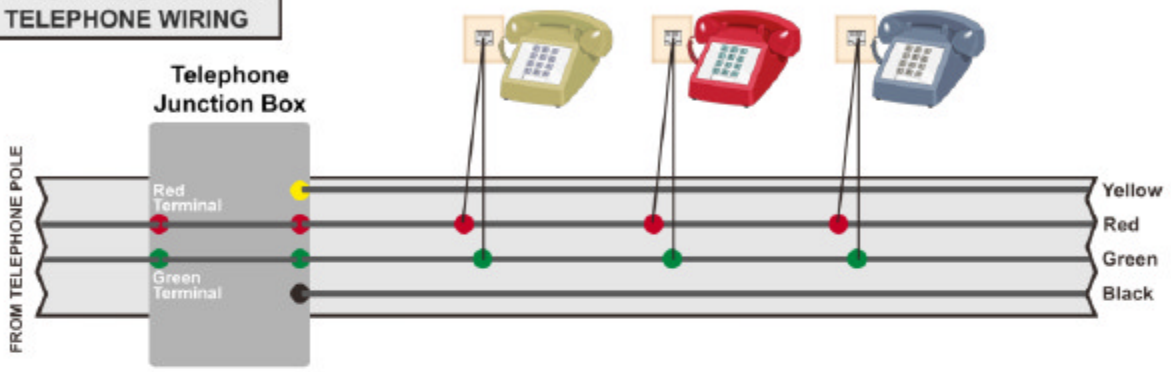
Related Topics
pg. 43 Talk to HAL from telephones
98 Set up HAL to use telephones
211 Use PBX Phone Systems with HAL

# PHONE LINE SETUP FOR THE LOCAL HANDSET FEATURE

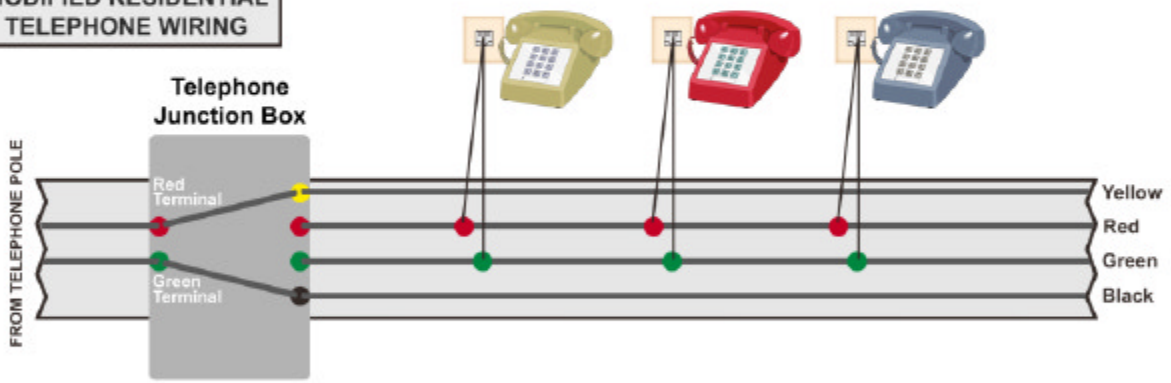
(NOT DRAWN TO SCALE)

Reroute the phone lines as shown to extend the local handset feature to all of the phones in the house.

**TYPICAL RESIDENTIAL TELEPHONE WIRING**



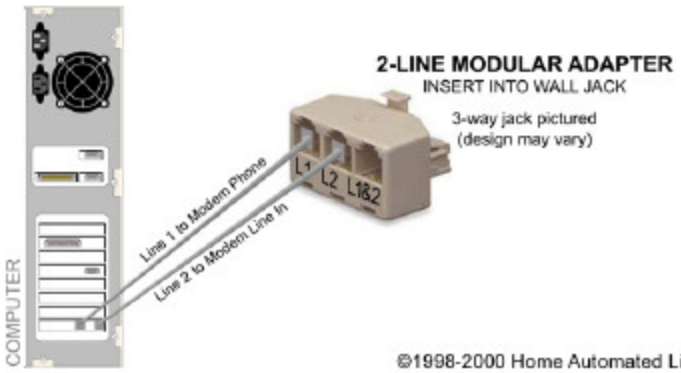

**MODIFIED RESIDENTIAL TELEPHONE WIRING**




**CONNECTING HAL TO THE MODIFIED WIRING**

Connect the adapter's LINE 1 jack to the modem's PHONE jack

Connect the adapter's LINE 2 jack to the modem's LINE IN jack



# THE SPEAKERPHONE FEATURE

The diagram below shows how to use HAL (and the computer) as a speakerphone when talking to someone on the phone. This means that you can talk to someone on the phone by talking into the microphone connected to the computer and hear the person on the phone through the computer's speaker.

**If you set up the speakerphone feature**:

- When you're talking into a microphone and you tell HAL to call someone, the speakerphone feature is automatically engaged.
- If you have a HAL-compatible modem and have HAL set up to work with house phones, then you can pick up a phone in the house and tell HAL to call someone. At that point, HAL will get a dial tone (while you're still on the phone) and call that person – you never even have to hang up the house phone! (Go to Chapter 3, *Talking to HAL*, for information on telling HAL to call someone.)
- If you call someone using a house phone, you can turn on the speakerphone feature by clicking on the SPEAKERPHONE button in the *Phone Pad*. (This works regardless of whether or not you have HAL set up to work with house phones.)
- If you are using a HAL-compatible modem and have HAL set up to work with house phones, then you can switch from the speakerphone to normal handset interaction simply by picking up the handset of a house phone. To switch back to speakerphone, click on the SPEAKERPHONE button and hang up the handset.

**If you *don't* set up the speakerphone feature:**

- If the microphones and speakers aren't set up the way they're described below, then the speakerphone feature won't work. You can still have HAL call someone for you, though; speak into a microphone and tell HAL to call someone or dial that person's number in the *Phone Pad* (see page 187). Once HAL starts dialing, you can pick up the handset of any house phone to join the call.

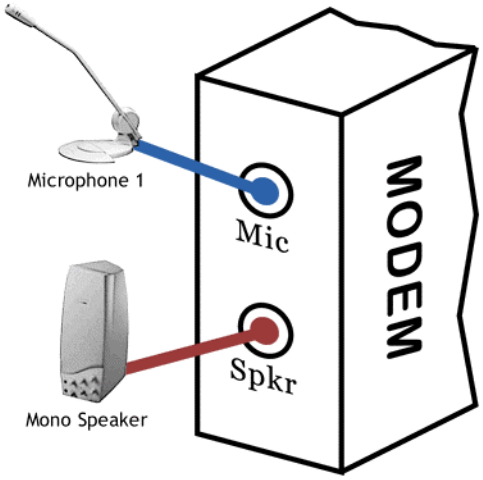
*Related Topics*

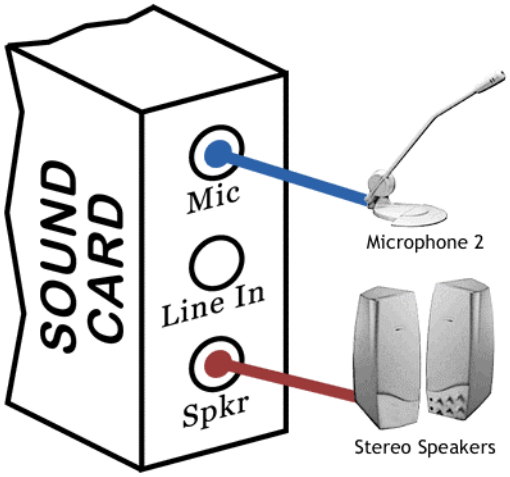

pg. 18 Set up the in-house phone interaction feature
43 Talk to HAL from telephones
47 Tell HAL to call someone
98 Set up HAL to use telephones
187 Activate the speakerphone from the *Phone Pad*
211 Use PBX Phone Systems with HAL

# Modem/Sound Card Setup for Speakerphone Feature

The Speakerphone option is for incoming and outgoing phone calls. This feature requires a HAL-compatible modem.

When HAL's speakerphone option is being used, Microphone 1 takes place of the telephone's mouth piece, and the Mono Speaker acts as the telephone's speaker. (Microphone 2 and the Stereo Speakers are disengaged)




When the speakerphone option is off, microphone interaction with HAL is done through Microphone 2. HAL's responses are heard through the stereo speakers. (Microphone 1 and the Mono Speaker are disengaged)

# INSTALLING HAL

**Installing from a CD**

1. Load the HALdeluxe program CD into the CD-ROM drive.

   - If the drive is configured to autorun CDs, then the HAL Interactive Demo will run. Once it's finished, the *Installation Menu* will appear. Click on the INSTALL HALDELUXE option.
   - If the drive is not configured to autorun CDs, then:
     - Go to **Start**... **Programs**... **Windows Explorer**. Navigate to the CD-ROM drive and double-click on INSTALLMENU.EXE. The HAL Interactive Demo will run. When it's finished, the *Installation Menu* will appear. Click on the INSTALL HALDELUXE option.
     - Or go to **Start**... **Run**. Type D:\INSTALLMENU.EXE (where "D" is the letter corresponding to the CD-ROM drive). Click OK. The HAL Interactive Demo will run. When it's finished, the *Installation Menu* will appear. Click on the INSTALL HALDELUXE option.

2. Follow the onscreen instructions for installing the software. If you choose "Custom" installation method, we recommend that you install HAL to the default installation path.

**Installing from the Internet**

Follow the instructions on HAL's website (www.AutomatedLiving.com) for downloading and Installing HAL.

After the installation is complete, the *HAL Setup Wizard* will start automatically (see below).

*Related Topics*

pg. 263 Updating and upgrading the software

# THE HAL SETUP WIZARD

The *HAL Setup Wizard* will start automatically after the software has finished installing. HALdeluxe will not start until the *HAL Setup Wizard* has been run in its entirety. If for some reason you need to re-run the *HAL Setup Wizard*, you can do so by going to **Start**... **Programs**... **HALdeluxe**... **HAL Setup Wizard**.

Make sure that all programs that use COM ports are shut down and that the modem is properly configured in the system Control Panel. If the Power Line Adapter that was included with HALdeluxe hasn't been installed yet, do it now (see page 17).

## Introduction

The first screen in the *HAL Setup Wizard* introduces the program and restates the instructions given in the paragraph above.

Click NEXT in the setup screen to continue.


## Verify Audio

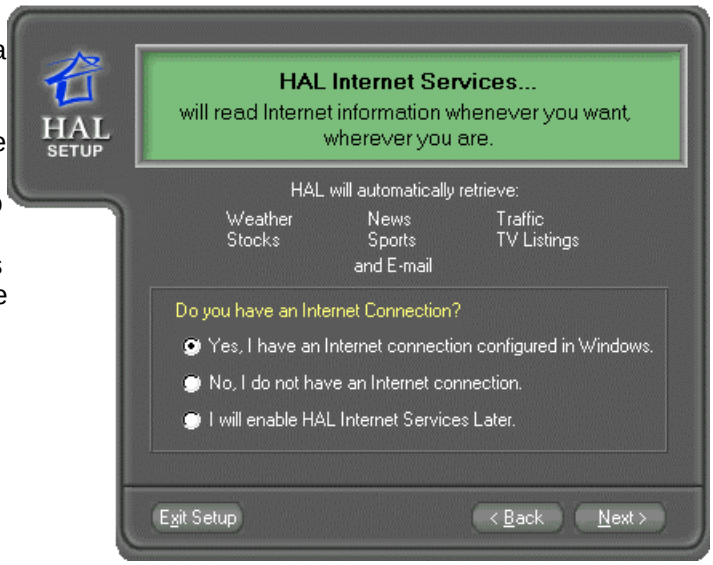
Click the VERIFY AUDIO button on this screen to open the *HAL Audio Verification* program. Follow the instructions on the *Audio Verification* program screens to verify that HAL is properly connected to your sound card and that HAL can hear you. Click EXIT TO SETUP on the last *Audio Verification* screen to return to the *HAL Setup Wizard*.

Click NEXT in the setup screen to continue.

## Internet Connection Option

Select whether or not you already have a method for connecting to the Internet configured on the computer and if you want HAL to use that method to retrieve information from the Internet. If "Yes" is selected, then clicking NEXT will take you to the *Internet Connection Method* screen (see below). If either of the other options is selected, then the next screen will be the *Telephone Interaction Option* screen (see below).

Click NEXT in the setup screen to continue.



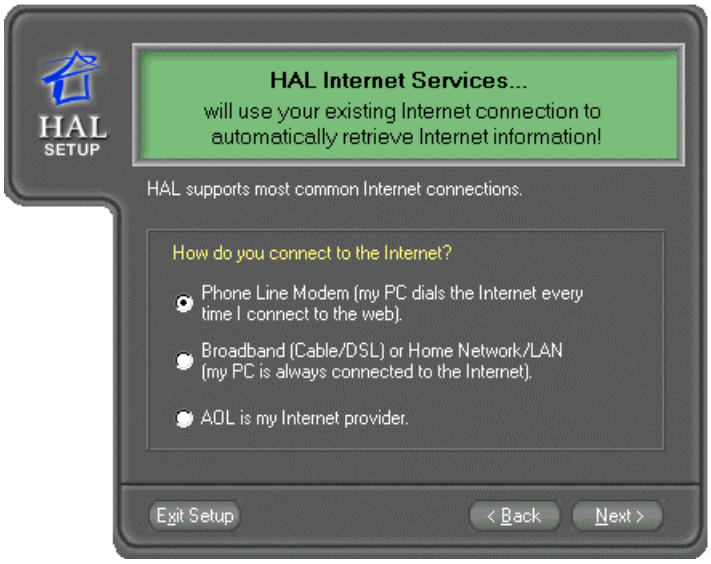

## Internet Connection Method

Specify the method you want HAL to use to connect to the Internet. If "Phone Line Modem" is selected, then clicking NEXT will bring up another screen where you are to select which Dial-Up Connection to use for connecting to the Internet.

(Go to page 209 for information on using America Online with HAL.)

This option can be changed later from within the *Internet Configuration* screen (see page 79).

Click NEXT in the setup screen to continue.



## Weather Setup

Use this screen to specify the city whose weather forecasts you want HAL to retrieve. If your city is not listed, then select the city that is closest to you.

The city selected can be changed later from within the *Internet Configuration* screen (see page 92).

Click NEXT in the setup screen to continue.


## Stocks Setup

Click ADD in this screen to open the *Stocks Phrase* screen. Type in that screen the symbol for a stock and give that stock a name (the name you give to the stock is the name you will use when asking HAL for information on that stock). Click OK to add that stock to this screen. HAL can track up to forty (40) stocks.

This information in this screen can be modified later from within the *Internet Configuration* screen (see page86).

Click NEXT in the setup screen to continue.

## TV Listings Setup

If you have cable TV, select your time zone. HAL will download the TV listings for standard cable channels for the time zone you specify.

If you have satellite TV, select the satellite program provider you use and a time zone. HAL will download TV listings for that satellite provider and will adjust the TV listings to match the time zone you're in. For instance, if you live in the Pacific time zone, then programs listed for 8pm Eastern time will display in HAL's *Internet* screen (see page 130) as airing at 5pm your time.

This option can be changed later from within the *Internet Configuration* screen (see page 90).

Click NEXT in the setup screen to continue.

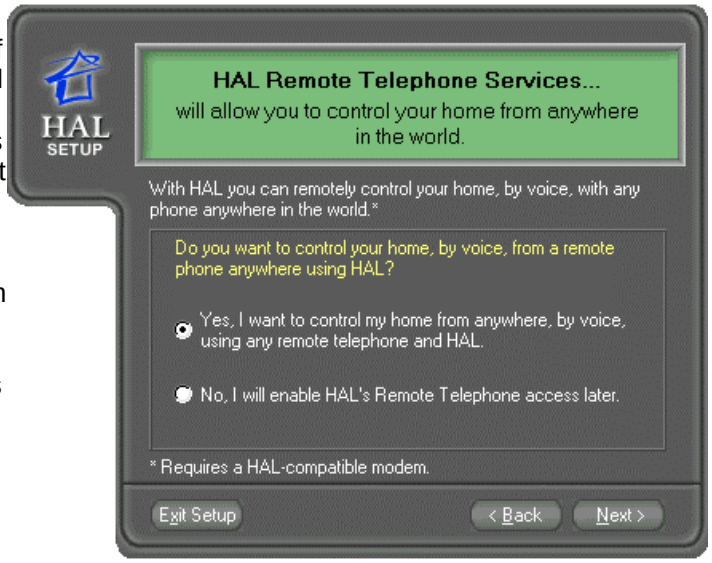

## Remote Telephone Interaction Option

Select whether or not you want to be able to talk to HAL using remote telephones. If "Yes" is selected, then clicking NEXT will bring up another screen where you are to specify an access code. HAL will ask for this access code when you want to control it through a remote phone.

If "No" is selected, then you won't be able to control HAL or retrieve messages from remote phones.

The option for interacting through telephones can be changed later from within the *Telephone Configuration* screen (see page 98). The access code can be changed later from within the *Mailbox Edit* screen (see page 197).

Click NEXT in the setup screen to continue.



## House Phone Interaction Option

Select whether or not you want to be able to talk to HAL using house phones. In order to be able to talk to HAL from a house phone, you must have a HAL-compatible modem. Go to *In-House Phone Interaction Feature* on page 18 for more information on setting up this feature in HAL, including information on how to set it up so that you can use *all* of the phones in the house to talk to HAL.

If "No" is selected, then you won't be able to interact with HAL through house phones.

The option for interacting through telephones can be changed later from within the *Telephone Configuration* screen (see page 98).

Click NEXT in the setup screen to continue.


## Answering Machine Option

Indicate whether or not you want HAL to be your answering machine. If "Yes" is selected, then clicking NEXT will take you to the *Modem Selection* screen (see below). If "No" is selected, then the next screen will be the *E-mail Setup* screen (see below).

This option can be changed later from within the *Telephone Configuration* screen (see page 98).

Click NEXT in the setup screen to continue.

## Modem Selection


As soon as this screen appears, another screen will appear over it. This second screen indicates HAL's progress as it searches your computer for a modem. Once it's found the modem, click CONTINUE in that screen to get to this *Modem Selection* screen. The modem that was just found and the COM Port that the modem is using will be listed in this screen.

Modems listed by manufacturer brand and model name (e.g. "Digicom ModemBlaster DI5630-3H") are modems that are fully HAL-compatible. This means that you can use all of HAL's telephony features, including the In-House Phone Interaction Feature.

If the modem you're using is not a HAL-compatible modem, then the *HAL Setup Wizard* will select one of the generic models. You will be able to retrieve information from the Internet and may be able to interact with HAL remotely, but you won't be able to interact with HAL through local (house) phones.

If HAL determines that your modem is not a voice modem, then NO VOICE MODEM INSTALLED will be selected. If this occurs, then HAL's telephony features (answering machine, local and remote interaction, etc.) will be disabled. You will still be able to use this modem to download information from the Internet.

If you are using one modem with HAL, then make sure that a checkmark is visible next to the "My Telephone and Internet connection use the same phone line" option.

If you install a different modem at a later date, you can have HAL automatically find that modem by re-running the *HAL Setup Wizard* and clicking AUTO SENSE in this screen.

Click NEXT in the setup screen to continue.

## Answering Machine Greeting


Specify whether you want to record your own voice greeting or if you want HAL to read a greeting using its voice. Click RECORD if you choose to record your own greeting. Another screen will appear where you can record that greeting.

This option can be changed at a later date from within the *Mailbox Edit* screen for each mailbox (see page197).

Click NEXT in the setup screen to continue.

## E-mail Setup

Type in this screen the information necessary to download a copy of your Email messages.

The information in this screen can be changed later from within the *Internet Configuration* screen (see page82).

Click NEXT in the setup screen to continue.


## X-10 Option

Specify whether or not you have an X10 Power Line Adapter. HAL sends signals to the electrical devices in the home through this Power Line Adapter. If "Yes" is selected, then clicking NEXT will take you to the*X-10 Interface Selection* screen (see below). If either of the other options is selected, then the next screen will be the last screen in the *HAL Setup Wizard*.

Click NEXT in the setup screen to continue.

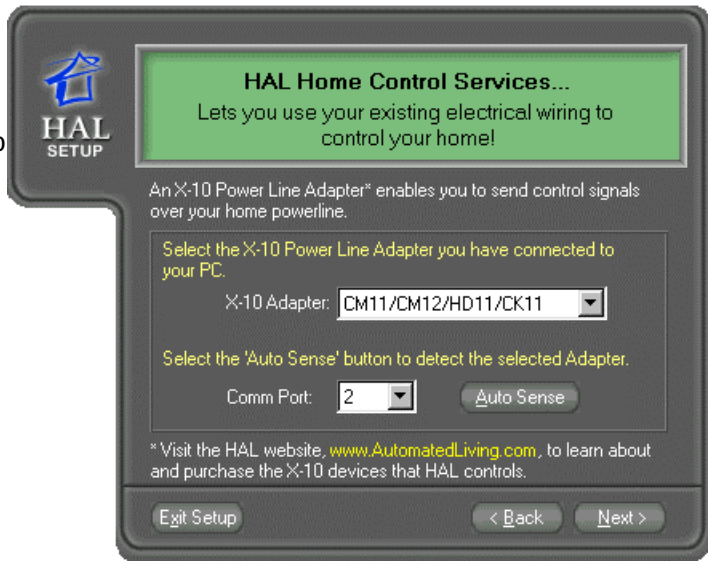
## X-10 Interface Selection

Choose from the drop-down menu the model of the X-10 Power Line Adapter you're using. Click AUTO SENSE to have HAL automatically search for the COM Port to which that Power Line Adapter is connected.

(*If* HAL Setup *was unable to* AUTO SENSE *the Power Line Adapter, then you may need to exit* HAL Setup *and restart the computer in order for the computer to recognize that the serial port is now in use. After the computer restarts, run* HAL Setup.)

This option can be changed later from within the *X-10 Configuration* screen (see page 110).

Click NEXT in the setup screen to continue.

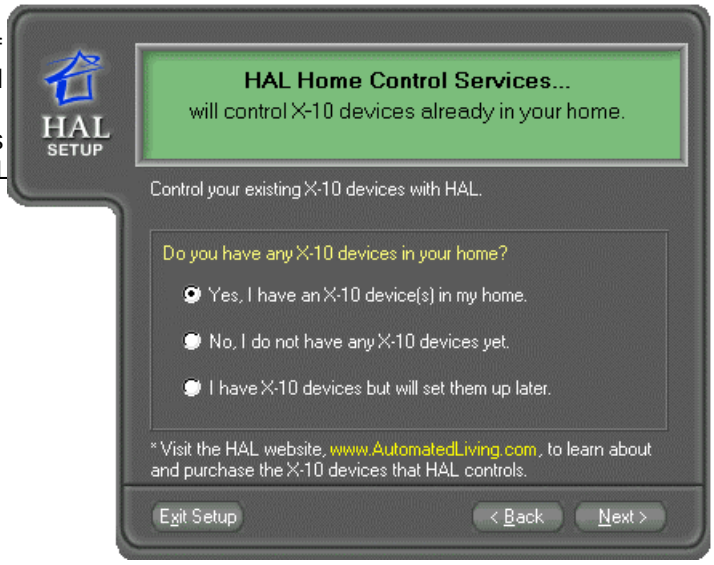



NOTE: Some of the power line interfaces listed in the drop-down menu are home automation controllers that have other features in addition to the ability to send and receive X-10 signals. These features could include thermostat control, security system control, infrared control, or other features. These additional features are not be supported by HALdeluxe, but are supported when used with HAL2000.

## X-10 Device Option

Indicate whether or not you have any X-10 compatible devices installed in your home. If "Yes" is selected, then clicking NEXT will take you to the *X-10 Device Creation* screen (see below). If either of the other options is selected, then the next screen is the last HAL Setup screen (see below).

Click NEXT in the setup screen to continue.



## X-10 Device Creation

If you have X-10 compatible devices already installed in your home, then you can use this screen to name those devices in HAL (devices must be named in HAL before it -- and you -- can control them).


Click ADD to bring up the *Device Wizard* screen (see below right). In the first *Device Wizard* screen, give the device a name. Click NEXT to proceed.

In the second *Device Wizard* screen, adjust the dials for the House and Unit codes so that they match the code set on the device itself. Click NEXT to proceed.

In the third Device Wizard screen, indicate the type of action this device performs. For lights or appliances, select ON/OFF. If the device is an incandescent light and you want HAL to be able to dim it (even if the light itself doesn't have that feature) then enable the DIMMABLE option. If the device is a garage door or blinds or drapes or something similar, select the OPEN/UNLOCK option. Click FINISH in this screen to add the device to HAL.


NOTE: *Please see the note on page 145 about using OPEN/CLOSE and LOCK/ UNLOCK commands and actions with HAL.*

The information in this screen can be modified later from within the *System Data Devices* screen (see page137).

Click NEXT in the setup screen to continue.

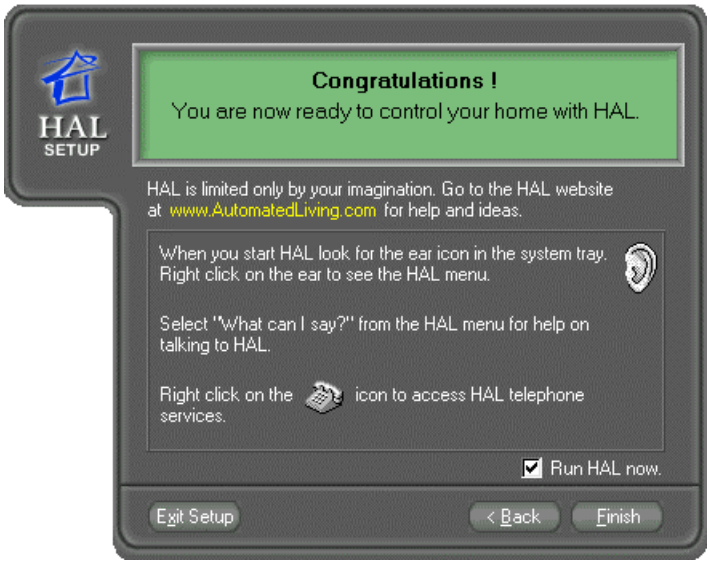

The information in this screen can be modified later from within the *System Data Devices* screen (see page137).

Click NEXT in the setup screen to continue.

**Finishing HAL Setup**

The last screen in the *HAL Setup Wizard* gives you an introduction on how to interact with HAL (for more detailed information, go to Chapter 3, *Talking to HAL*).

If the RUN HAL NOW option is enabled, then clicking FINISH will close the *HAL Setup Wizard* and start HAL. If the option isn't enabled, then clicking FINISH will simply close the *HAL Setup Wizard*. In that case, you will need to start HAL manually. Go to *Starting HAL* (below) for information on manually starting HAL and what happens when it starts.




## STARTING HAL

If the option to create a desktop icon was selected during installation, then you can start HAL by double clicking on that shortcut (labeled HAL DELUXE by default). You can also start HAL by clicking **Start**... **Programs**... **HALdeluxe**... **HALdeluxe**.

A registration screen appears the first time HALdeluxe is run. The registration screen will appear every time HAL starts, until registration information is entered. To temporarily bypass the registration screen, click LATER and the program will continue loading. Each time after that click LATER until it's registered. HAL will stop working if it's not registered within 30 days.

When HAL launches, the program will say, "*Welcome to HALdeluxe by Home Automated Living*." An ear icon and a phone icon (see Chapter 2) will appear in the system tray (generally the lower-right corner of the Windows® 98/2000/Me screen). HAL is now running in the background. Other programs can operate while HAL is running.

## REGISTERING HAL

A registration number is required to officially install HALdeluxe. If HAL is running, shut it down and restart it. A registration screen will appear with information on how to register HAL. Have this screen visible when registering. You will be asked for the serial code and computer number, which appear in the registration screen. An authorization code will be issued. Enter this code in the registration screen. Click REGISTER to complete the registration process and close the screen. HALdeluxe will continue loading.

NOTE: *Do not* click LATER or EXIT after entering the authorization code. Doing so will bypass or close the registration screen without registering the software. If this happens, shut down HAL and restart it. The registration screen will appear again with different numbers.

The numbers that appear in the registration screen change every time HAL is started, so this screen *must* be visible when registering the software. If it's not visible then shut down HAL and restart it. The screen will reappear with different numbers.

Generally this registration screen will not appear again once HAL has been registered. However, some system changes, such as installing a new motherboard or changing firmware, may cause the screen to reappear. This happens because the program thinks that you've installed HAL onto a different computer, which is not allowed under the License Agreement. If this happens, you will need to re-register your copy of HAL. If you need to move HAL to a different computer, or if you install a new hard drive and want to install HAL on it, you must call the Authorization Desk first to unregister HAL.

For Authorization Desk hours and telephone numbers go to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe Support**.

## WHAT TO DO NEXT

At this point, there are already a few things you can ask HALdeluxe. Additional commands and queries become available as you configure HAL and add devices.

Left-click on the ear icon in the system tray to get HAL's attention. HAL will say "*Yes?*" and moving sound waves will appear next to the ear icon. Talk into a microphone connected to the computer and ask HAL these questions:

"What time is it?"

"What is today's date?"

If you enabled Internet services in the *HAL Setup Wizard* (see page 24), then you can ask for information downloaded from the Internet. (HAL will need to connect to the Internet and download information at least once before you can ask it Internet-related questions. HAL will automatically connect to the Internet about three minutes after it starts.) For example, you could ask HAL:

"What is the weather forecast for tomorrow?"

If you created a device in the *HAL Setup Wizard*, then you can control it by voice. For example, you could say:

"**Turn on** the *living room light*." or "**Turn** the *living room light* **on**."
"**Shut off** the *living room light*." or "**Shut** the *living room light* **off**."
"**Dim** the *living room light* **40%**." or "**Dim** the *living room light* **to 40%**."

Left-click on the ear icon to take it out of listening mode or say "Thank you," "That's all", or "Goodbye."

Listed below are just some of the topics of this Operating Manual that will help you to become familiar with HAL.

| Go to... | for information on... |
|---|---|
| ...Chapter 2 | ... navigating HAL's screens |
| ...Chapter 3 | ... verbally interacting with HAL |
| ...Chapter 4 | ... configuring the various features in HAL |
| ...Chapter 5 | ... monitoring HAL as it responds to commands |
| ...Chapter 6 | ... viewing information downloaded from the Internet |
| ...Chapter 7 | ... setting up HAL to run devices in your home |
| ...Chapter 8 | ... controlling devices from the computer |
| ...Chapter 9 | ... using HAL as a telephone and answering machine |

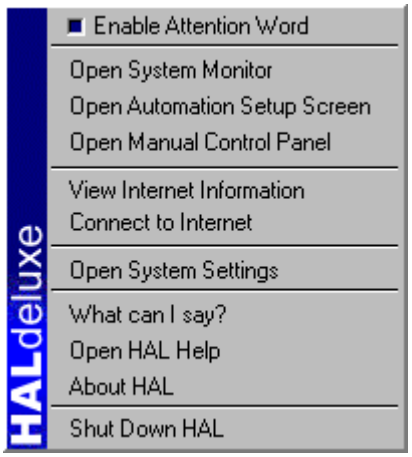
## CHAPTER 2
# Moving Around in HAL

When HAL starts, an ear icon and a phone icon are added to the Windows® system tray.

## THE EAR ICON

Left-click on the ear icon to get HAL's attention. HAL will say, "*Yes?*". Sound waves will appear next to the ear icon to indicate that HAL is listening, as shown below.


Right-click on the ear icon for other options. The menu below will appear. Left-click on an option in the menu to select it.




**Enable Attention Word**

A filled (blue) square indicates that the Attention Word Mode is enabled. An empty square indicates that the Attention Word Mode is disabled. Left-click on the option to change its condition.

When this option is enabled (filled in), it means that you can get HAL's attention by saying its attention word into a microphone connected to HAL. The default attention word, for instance, is "Computer." If you say "Computer", then HAL will go into *listening mode* so that you can give it commands or ask it questions (moving sound waves will appear next to the ear icon and HAL will say "*Yes?*" to indicate that it's listening).

When this option is disabled, it means that you can't get HAL's attention by saying the attention word. In that case, you must get HAL's attention by left-clicking on the ear icon or by using one of the other methods explained in Chapter 3, *Talking to HAL*.

This option is disabled by default. Go to *Personal Assistant Configuration* (see page 95) for information on configuring HAL to start with the Attention Word Mode enabled and on changing HAL's default attention word.

**Open System Monitor**

Click on this option to open the *HAL Status* screen. In this screen, commands issued to HAL, HAL's verbal responses to those commands, phone line status, X-10 commands transmitted, and other aspects of HAL's operations are displayed. The *Status* screen displays what HAL is hearing and doing as it's occurring. For this reason, it's useful to have this screen visible when you're first learning to interact with HAL, because you can see what HAL is hearing from you and you can see it carry out commands as you issue them.

Go to Chapter 5 for more information on the *Status* screen.

**Open Automation Setup Screen**

Click on this option to open the *HAL System Data* screen. The *System Data* screen is where you automate your home by creating Devices, adding Macros, setting up Schedules, naming Sensors, and programming Rules. This is also where you can add names, addresses, and phone numbers to HAL's Directory.

Go to Chapter 7 for more information on the *System Data* screen.

**Open Manual Control Panel**

Click on this option to open the *HAL Manual Control Panel*. The *Manual Control Panel* is where you can manually control the devices that you created in HAL. From this screen you can turn lights on or off or dim them, close or open blinds and garage doors, or lock and unlock doors and gates. Any device that you can control by voice, you can control from this screen.

Go to Chapter 8 for more information on the *Manual Control Panel*.

**View Internet Information**

Click on this option to open the *HAL Internet* screen. This screen is where you can view information that's been downloaded from the Internet, such as stock quotes, sports scores, TV listings, and weather forecasts. HAL can be programmed to automatically download information from the Internet at set intervals, or you can manually download the information from this screen. Go to *Internet Configuration* (see page 79) for information on setting the automatic intervals.

Go to Chapter 6 for more information on the *Internet* screen.

**Connect to Internet/Disconnect from Internet**

CONNECT TO INTERNET will be an option in the ear icon if you set up HAL to connect to the Internet using a dial-up connection method. Click on the option to have HAL connect to the Internet using the method specified in the *Internet Configuration* screen (see page 79). When HAL is connected, the option will change to DISCONNECT FROM INTERNET. Click on that option to have HAL log off.

This option will show INTERNET CONNECTED and will be grayed out if you configured HAL to connect to the Internet through a LAN, DSL, ISDN, cable modem, or similar type of dedicated connection.

**Open System Settings**

Click on this option to open the *HAL Configuration* screen. From this screen you can enable and program the different features in HAL. For instance, you can open the *Internet Configuration* screen to specify which city to download weather forecast information for or open the *Personal Assistant Configuration* screen to change HAL from speaking in a female voice to using a male voice. Many of the various configuration screens were enabled and programmed when the *HAL Setup Wizard* was run (see page 24).

Go to Chapter 4 for more information on the configuration screens.

**What can I say?**

Click on this option to open the Online Help Guide directly to the section dealing with verbal commands (see Chapter 3).

**Open HAL Help**

Click on this option to open the Online Help Guide.

**About HAL**

Click on this option to open the *About* screen. This screen displays registration and version information for HALdeluxe.

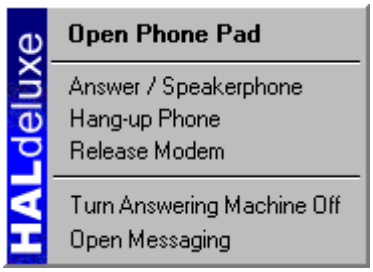
**Shut Down HAL**

Click on this option to completely shut down HAL. All areas of HAL will be closed. HAL will not be able to run any macros, schedules, or rules, and it won't be able to record voice messages or download information from the Internet or respond to commands.

# THE PHONE ICON

Left-click on the phone icon to open the *Phone Pad* (see page 187).

Right-click on the icon for other options. The menu below will appear. Left-click on an option in the menu to select it.




**Open Phone Pad**

Click on this option to open the *HAL Phone Pad*. The *Phone Pad* is where you create and edit voice mailboxes, add names, addresses, and numbers to the *Directory*, and view records of incoming and outgoing calls. You can also dial a number for HAL to call, answer incoming calls, and hang up the phone. This screen is also where you turn on HAL's speakerphone feature (see page 21 for information on setting up the speakerphone feature).

Go to Chapter 9 for more information on the *Phone Pad*.

**Answer / Speaker Phone**

Click on this option to answer an incoming phone call. If you have the speakerphone feature set up on your computer (see page 21), then HAL will answer the call in speakerphone mode. If you don't have that feature set up, then you must pick up a telephone handset to join the call. The phone can also be answered as the result of an action in a Macro, Rule, or Schedule (see page 174).

**Hang-up Phone**

Click on this option to have HAL hang up (disconnect) the open phone line. HAL can also hang up the phone as the result of a verbal command (see page 47) or as the result of an action in a Macro, Rule, or Schedule (see page 174).

NOTE: If HAL is in the middle of downloading information from the Internet using a dial up connection, then clicking this button will stop the download, and HAL will not re-establish the Internet connection until the next time it's scheduled to do so (see *Internet Configuration* on page 79 for more information).

**Release Modem/Activate Modem**

Click on this option to have HAL release the modem so that other programs have access to it. HAL normally retains control of the modem so that it can answer incoming calls, place outgoing calls on demand, and download information from the Internet (if a dial-up connection is used for information retrieval). When this option is clicked, a red X appears over the phone icon, the ANSWER and HANGUP options in the phone menu are disabled (grayed out), and this menu option changes to ACTIVATE MODEM.

To give control of the modem back to HAL, click on ACTIVATE MODEM in the phone icon. The red X disappears and all of the options in the phone icon are enabled.

**Turn Answering Machine Off/Turn Answering Machine On**

When "Turn Answering Machine Off" is displayed, the answering machine is enabled and HAL can record voice messages. When "Turn Answering Machine On" is displayed, the answering machine is disabled and HAL can't record voice messages. You can still interact with HAL in this state through remote phones by simply letting the phone ring enough times for HAL to pick it up (go to *Telephone Configuration* on page 100 for more information).

Left-click on this option to switch it from "Off" to "On" or vice versa.

**Open Messaging**

Click on this option to open the *HAL Messages* screen. This screen is where you can view logs for voice messages recorded and E-mail messages downloaded. You can also have HAL playback/read those messages from this screen, as well as save and delete the messages.

Go to Chapter 9 for more information on the *Messages* screen.

*Related Topics*


pg. 47 Retrieving messages by voice
98 Setting up HAL to use telephones
187 The *Phone Pad*
199 The *Messages* screen


# ABOUT HAL'S SCREENS

## Keyboard Shortcuts

Some of the screens and areas of HAL can be opened by using keyboard shortcuts that are identified by an underlined letter. For instance, one of the buttons in the *Internet* screen is labeled Weather, which is the area of the program where weather forecasts that have been downloaded are displayed in text form. Any time the *Internet* screen is visible, you can get to the Weather area by holding down the ALT key and pressing "W" on the keyboard. The underlined letter-- in this case "W" -- can be pressed with CAPS LOCK on or off.

To close any HAL screen, click ALT + F4.

## Topic Buttons

Several of HAL's screens have multiple sub-topics that are represented by buttons along the top of the screen. To go to a different topic within that screen, simply click on one of the topic buttons. The graphic below is a cutout from the *System Data* screen and indicates that the currently displayed topic is *Devices*. To go to the *Sensors* screen, simply click on the button labeled "Sensors" or press ALT + S.


The *Internet* screen is slightly different than the other screens in HAL. Instead of buttons, the Internet screen has icons. The current topic is indicated with bold, yellow text. The cutout graphic below indicates that the E-mail topic is currently selected. To go to another topic, simply click on the icon for that topic or press ALT and the underlined letter for that topic (e.g. ALT + E).

**Common Buttons**

Listed below are some of the buttons that appear in HAL's various screens. Each button's functionality is the same no matter which screen it's in. Buttons unique to a screen are described in the section of this Operating Manual dealing with that screen.

Click this button to minimize the screen to the Windows® taskbar. To maximize the screen, left-click on the minimized screen title in the taskbar, or right-click on the minimized title and select RESTORE.

Click this button to close the screen.


Click this button to open the Online Help Guide to the section dealing with the current screen.


Click this button to generate a screen containing information relating to the current topic. For instance, clicking on the REPORT button when the "Devices" topic is active in the *System Data* screen will generate a list of all of the devices currently created within HAL. Click PRINT in that screen to print the list.


Click this button to add an item.


Click this button to modify the selected item.


Click this button to delete the selected item.


Click this button to close the screen.


Click this button to save any changes to the screen and then close it.


Click this button to close the screen without saving any changes.


Click this button to advance to the next screen. Certain screens may require information to be filled in or options selected before HAL will allow you to advance to the next screen (HAL will display a warning informing you of the fields that need to be completed).


Click this button to return to the previous screen.


This button appears on the last screen of HAL's various Wizard screens (*HAL Setup Wizard*, *Action Wizard*, *Device Wizard*, etc.). Clicking this button completes the current process, saves the settings to HAL, and closes the Wizard screen. Clicking FINISH in the *Device Wizard* screen, for instance, adds the device to HAL and closes the *Device Wizard* screen.

## CHAPTER 3
# Talking to HAL

Examples are provided for some of the syntax listed in this section of the Operating Manual. The examples are for demonstration purposes only. Some words, such as those indicating device names, will be different for each user, depending on how his or her system is set up.

## USING MICROPHONES

One of the ways that HAL can be controlled is to issue commands into a microphone that's connected to the computer. A series of microphones (open-air microphone network) can also be installed throughout the house to control HAL. These microphones will need to be routed to a central, automatic mixer, whose output is then connected to HAL. Consult a qualified audio technician for more information on installing this type of microphone system.

Before talking to HAL by microphone, HAL must be put into *listening mode*. If the "Enable Attention Word" option is enabled in the ear icon (indicated by a filled, blue square), then you can get HAL's attention by saying HAL's attention word into the microphone. (The default attention word is "Computer", which can be changed from the *Personal Assistant Configuration* screen -- see Chapter 4.) If the "Enable Attention Word" is disabled, then you must put HAL into listening mode using other means before you can interact with HAL through microphones. Go to *Getting HAL's Attention* later in this chapter for more information.

When interacting with HAL via microphone, there are a couple of things to keep in mind:

- Quality of the equipment you're using may affect the quality of the audio that HAL hears. In other words, if the microphone is damaged or if the sound card isn't properly installed or configured, then HAL may not be hearing everything that you're saying or your voice may be distorted or intermittent. Make sure that all sound-related hardware is of good quality and installed properly.
- HAL is shipped with a default set of voice recognition parameters for the microphone and the telephones. If HAL is having trouble understanding you, or if you're having a hard time getting HAL's attention using the Attention Word, then you may need to adjust these parameters. Go to *Voice Recognition Configuration* (see page 106) for information on the different parameters that can be adjusted.
- HAL indicates when it doesn't understand something you've said by saying, "Please repeat." When HAL says this, pause a second and then re-state the previous command or question. If HAL says it again, double-check that you're saying the command or asking the question in the correct manner (see *Syntax* later in this chapter). If you're issuing a command to control a device, make sure that you're referring to the device by the name assigned to it when it was created (see *Devices* in Chapter 7 for more information). The option of having HAL say something when it doesn't understand you can be changed to having it make a specific sound or it can be disabled altogether. For more information, go to *Personal Assistant Configuration* on page 95.
- If you get HAL's attention and then don't say anything within a certain time period, HAL will ask, "Are you still there?". If you say "No" or don't respond, HAL will say "Goodbye" and will automatically take you out of listening mode. The length of time that HAL will wait for commands is set in the *Voice Recognition Configuration* screen (see page 106).

*Related Topics*


pg. 36 Enabling/Disabling the attention word mode from the ear icon
47 Voice commands
95 Changing the attention word
106 Adjusting HAL's voice recognition parameters for the microphone

## USING TELEPHONES

HAL can receive voice commands by telephone from anywhere in the world, but the system must be set up to do so (see *Telephone Configuration* on page 98 for more information).

Certain telephony features require a HAL-compatible modem (see page 9). The ability to interact with HAL using phones in the house, for example, requires a compatible modem. If a standard voice/fax/data modem is used, then you may still be able to interact with HAL by calling in from a remote telephone, but you will most likely not be able to use any house phone to interact with HAL.

If one or more house phones are set up for interaction (see page 18), then you can talk to HAL by picking up a house phone and pressing the attention key (the default attention key is the pound [#] key, which can be changed in the *Telephone Configuration* screen).

If you're calling in from a remote telephone, then you get HAL's attention by pressing the attention key while the main greeting is playing. After pressing the attention key, HAL will ask you for an access code.

> NOTE: An access code for the main mailbox will have been entered when *HAL Setup Wizard* was run if the option for remote accessibility was selected at that time (see page 24 for more information on the *HAL Setup Wizard*). If you didn't enable this option in the *HAL Setup Wizard*, then you will need to rerun the *HAL Setup Wizard* and enable it there, or you will need to enable it from the *Telephone Configuration* screen (see page 98). Access codes are added or modified in the *Mailbox Edit* screen (see page 197).

There are a couple of things to keep in mind when interacting with HAL through a telephone:

- Speak into the telephone just as you would talk to another person. Putting your mouth directly against the mouthpiece, shouting, or talking away from the mouthpiece may affect the quality of the audio going to HAL.
- HAL indicates when it doesn't understand something you've said by saying, "Please repeat." When HAL says this, pause a second and then re-state the previous command or question. If HAL says it again, double-check that you're saying the command or asking the question in the correct manner (see *Syntax* later in this chapter). If you're issuing a command to control a device, make sure that you're referring to the device by the name assigned to it when it was created (see *Devices* in Chapter 7 for more information). The option of having HAL say something when it doesn't understand you can be changed to having it make a specific sound or it can be disabled altogether. For more information, go to *Personal Assistant Configuration* on page 95.
- If you don't take HAL out of listening mode (see *Getting HAL's Attention* later in this chapter) before hanging up a remote telephone, then HAL will not immediately release the phone line. HAL will wait for the period of time specified in the *Voice Recognition Configuration* screen (see page 106) before it will release the line. HAL will, however, immediately release the phone line if you *do* take it out of listening mode before hanging up the remote phone.

*Related Topics*


pg. 18 Set up house phones
21 Set up the speakerphone feature
47 Voice commands
98 Set up HAL to use telephones
197 Set the access code(s) to use for accessing HAL from remote telephones

## THINGS TO KEEP IN MIND

Many people have never before talked to their computer, or any other machinery for that matter. Listed below are some simple tips to keep in mind when commanding or conversing with HAL.

- Talk in a natural voice, as if talking to another person in the room:
  - Don't talk too fast or too slow
  - Don't pause unnaturally or too long between words
  - Don't speak in extremes, such as shouting or mumbling
  - Don't over-emphasize words
- HAL will try to understand anything it hears once the system has entered listening mode, which is indicated by moving sound waves next to the ear icon in the Windows® system tray. If you're interacting with HAL through a microphone and HAL has a problem understanding a command or question, then the system will say, "Please repeat." Wait a couple of seconds and give the command or ask the question again. (Instead of saying something, HAL can be set up to make a specific sound or do nothing at all. Go to *Personal Assistant Configuration* on page 95 for information on changing this option.)
- Have the *Status* screen visible when first experimenting with voice recognition (see Chapter 5). The commands and questions as HAL hears them are displayed in this screen.
- Compose your thoughts before you begin speaking and use appropriate sentence construction explained in the *Syntax* section later in this chapter.
- Remember the names given to devices that HAL will be controlling. Name them intuitively, e.g. "dining room lights", and they will be easier to remember. When naming similar devices, use the same name for all of them, such as "light" or "lamp", to distinguish them. For example, use "light" for overhead lights and "lamp" for table or floor lamps. The names of the devices can be composed of up to 64 characters including spaces (up to 48 characters for the location and up to 16 characters for the device type). Keep in mind that you must refer to each device by its entire name-- a device with five words and 64 characters in the name might be hard to remember. (See Chapter 7 for information on creating devices in HAL.)
- HAL recognizes words phonetically. When entering words or names, remember that HAL will repeat the words more accurately if they are spelled as they are pronounced. For example, the woman's name *Gina* is pronounced with a long "e", but HAL pronounces it with a short "i". Enter the name as *Geena* to have HAL pronounce it correctly. If you're unsure of how HAL may say -- or recognize -- a word or phrase, type it in the *Attention Word* field in the *Personal Assistant Configuration* screen (see page 95). Press the SPEAK WORD button to hear HAL say it. HAL's pronunciation of the word or phrase is the pronunciation that it uses to recognize that word or phrase. In other words, HAL expects you to say the word or phrase the same way that it says the word or phrase.
- Certain commands or questions can only be issued or asked from within sub-context modes. These modes are ones that start with an "Open" command, such as "Open Portfolio." Once in a sub-context mode, the system will assume all commands issued or questions asked are to affect just that area of the program. Devices or other areas of the system will not be affected until the mode has been exited (closed). Commands and questions that can only be used from within a sub-context mode are indicated in the *Syntax* section later in this chapter.

## GETTING HAL'S ATTENTION

Before you can talk to HAL, you must first put it into *listening mode*. In other words, before you can talk to HAL, you must first get its attention. When you first get its attention, HAL will say "*Yes?*", and sound waves will appear next to the ear icon to indicate that HAL is listening.

There are several ways to get HAL's attention:

- Left-click on the ear icon in the Windows® system tray.
- Say the attention word that was programmed in the *Personal Assistant Configuration* screen (see page 95). The default attention word is "Computer". In order to use this option, the "Enable Attention Word" option must be selected in the ear icon (indicated by a filled square).
- When an action in a *Macro*, *Rule*, or *Schedule* puts HAL into listening mode (see Chapter 7).
- Pick up a house phone and press the attention key (the default attention key is the pound [#] key -- the default can be changed in *Telephone Configuration*).
- Call in from a remote phone and press the attention key (the default is the pound [#] key) while HAL is playing the main greeting.

If a certain length of time passes and HAL doesn't hear any valid commands, it will ask, "*Are you still there?*". If you say "No" or don't respond, then HAL will say "*Goodbye*" and exit listening mode (the sound waves will disappear from the ear icon). The length of time that HAL will wait can be set in the *Voice Recognition Configuration* screen (see page 106). However, instead of waiting for this automatic timeout feature, we recommend using one of the methods below to take HAL out of listening mode.

- Say one of the these phrases: "Goodbye", "Thank you", or "That's all".
- Left-click on the ear icon in the Windows system tray.
- When an action in a *Macro*, *Rule*, or *Schedule* takes HAL out of listening mode.
- Hang up the telephone when using a house phone or when calling in on a remote phone.

## VOCABULARY STANDARDS

Listed below are some standard words or phrases that are to be used when interacting with HAL. Examples of how those words and phrases might be used are included. For more information on issuing commands, go to the *Syntax* section later in this chapter.

| | |
|---|---|
| Day | First, second… tenth, eleventh…<br>Twentieth, thirtieth… twenty sixth, thirty first…<br>"On January **twenty-first** at 4:45pm turn on the living room lamp." |
| Day of the week | Monday, Tuesday, Wednesday, etc.<br>"What is the weather forecast for **Saturday**?" |
| Duration | For (time)<br>"Turn on the porch lights **for** *one hour*." |
| Frequency | Everyday, every other day, every Sunday (Monday, Tuesday, etc.), weekdays, weekends, today, tomorrow<br>"**Every Friday** at 11pm turn on the garage lights." |
| Locations | Home, work, business, pager, cell, fax<br>"Call Jack Walker at **work**." |
| Month | January, February, March, etc.<br>"On **March** eleventh at 2pm, turn on the floor lamp." |
| Number | One, two… ten, eleven… twenty, thirty… twenty one, thirty four…<br>"Turn on the hallway lights for **five** minutes." |
| Responses | Yes, yeah, ok, no, nope, nah |
| Text Numbers | 95 -- read as *ninety-five*<br>295 -- read as *two hundred ninety-five*<br>2 95 -- read as *two ninety-five*<br>2 9 5 -- read as *two nine five*<br>"What is the traffic report for **one seventy-five**?" |
| Time | Seconds, minutes, hours, a.m., p.m., in the morning, in the afternoon, in the evening<br>"What is on NBC at *ten* **in the evening**?" |
| Time (Future) | In (time), at (time), on (date and time)<br>"**On** *October 10th at 10pm* turn on the front yard lights." |

# SYNTAX

Certain commands or questions can only be issued or asked from within sub-context modes. These modes are ones that start with an "Open" command, such as "Open Portfolio." Once in a sub-context mode, the system will assume all commands issued or questions asked are to affect just that area of the program. Devices or other areas of the system will not be affected until the mode has been exited (closed). You can also go from one context mode to another without exiting the first one. For instance, after saying "Open Messaging", you can say "Open News" instead of saying "Close" or "Close Messaging." Context modes are indicated in the following pages, wherever they're required.

## To Ask for the Date

This question can be asked at any time, even from within a sub-context mode. HAL will read the date based on the computer's calendar.

Say: "What is today's date?"
HAL will say: *Today's date is (date).*
… Today's date is *Wednesday, August 23, 2000*.

## To Ask for the Time

This question can be asked at any time, even from within a sub-context mode. HAL will read the time based on the computer's clock.

Say: "What time is it?"
HAL will say: *The time is (time).*
… The time is *10:37pm*.

## To Turn a Light or Device ON

Exit any sub-context modes before issuing commands to control a device. The article "the" is optional.

"Turn on (the) [device name]." or "Turn (the) [device name] on."
… "Turn on the *living room light*."
… "Turn *dining room light* on."
… "Turn on *family room fan*."

"Switch on (the) [device name]." or "Switch (the) [device name] on."
… "Switch on the *living room light*."
… "Switch *dining room light* on."
… "Switch on *family room fan*."

To have the device turn on for a specified length of time, add a duration phrase to the end of the above commands:

"Turn on (the) [device name] (duration)." or "Turn (the) [device name] on (duration)."
… "Turn on the *living room fan* for 30 minutes."
… "Turn *dining room light* on for one hour."
… "Turn on the *front porch lights* for 15 seconds"

"Switch on (the) [device name] (duration)." or "Switch (the) [device name] on (duration)."
… "Switch on the *living room fan* for 30 minutes."
… "Switch *dining room light* on for one hour."
… "Switch on the *front porch lights* for 15 seconds"

You can also add the word "please" to the beginning or end of the above statements, but it's not required.

… "Please turn on the *living room light*."
… "Switch on the *den lamp* please."
… "Please switch on the *hallway light* for two hours."
… "Turn the *front porch lights* on for one hour please."

## To Turn a Light or Device OFF

Exit any sub-context modes before issuing commands to control a device. The article "the" is optional.

"Turn off (the) [device name]." or "Turn (the) [device name] off."
... "Turn off the *living room lamp*."
... "Turn the *dining room light* off."
... "Turn off *family room fan*."

"Shut off (the) [device name]." or "Shut (the) [device name] off."
... "Shut off the *living room light*."
... "Shut *dining room light* off."
... "Shut off *family room fan*."

To have the device turn off for a specified length of time, add a duration phrase to the end of the above commands:

"Turn off the [device name] (duration)." or "Turn the [device name] off (duration)."
... "Turn off the *living room fan* for 30 minutes."
... "Turn the *dining room light* off for one hour."
... "Turn off *front porch lights* for 15 seconds"

"Shut off the [device name] (duration)." or "Shut the [device name] off (duration)."
... "Shut off *living room fan* for three hours."
... "Shut the *dining room light* off for 45 minutes."
... "Shut off the *front porch lights* for 30 seconds"

You can also add the word "please" to the beginning or end of the above statements, but it's not required.

... "Please turn off the *living room light*."
... "Shut off the *den lamp* please."
... "Please shut off the *hallway light* for two hours."
... "Turn the *front porch lights* off for one hour please."

## To Turn a Group of Lights ON

Exit any sub-context modes before issuing commands to control a group of lights.

"Turn on all [group name] lights." or "Turn all [group name] lights on."
... "Turn on all *inside* lights."
... "Turn all *outside* lights on."

"Switch on all [group name] lights." or "Switch all [group name] lights on."
... "Switch on all *downstairs* lights."
... "Switch all *upstairs* lights on."

You can also add the word "please" to the beginning or end of the above statements, but it's not required.

... "Please turn all *basement* lights on."
... "Switch on all *upstairs* lights please."

NOTE: Duration phrases can't be used with the ALL command.

## To Turn a Group of Lights OFF

Exit any sub-context modes before issuing commands to control a group of lights.

"Turn off all [group name] lights." or "Turn all [group name] lights off."
... "Turn off all *inside* lights."
... "Turn all *outside* lights off."

"Shut off all [group name] lights." or "Shut all [group name] lights off."
... "Shut off all *inside* lights."
... "Shut all *outside* lights off."

You can also add the word "please" to the beginning or end of the above statements, but it's not required.

... "Please turn all *outside* lights off."
... "Shut off all *front* lights please."

NOTE: Duration phrases can't be used with the ALL command.

## To DIM a Light

Exit any sub-context modes before issuing commands to control a light. The word "to" and the article "the" are optional.

"Dim (the) [device name] (to) [percent]."
... "Dim the *living room light* 40 percent."
... "Dim *hallway lights* to 60 percent."
... "Dim *dining room lights* 54 percent."

You can also add the word "please" to the beginning or end of the above statements, but it's not required.

... "Please dim the *living room light* to 25 percent."
... "Dim the *den lamp* 60 percent please."

NOTE: Duration phrases can't be used with the DIM command.

## To RESET a Light

Exit any sub-context modes before issuing commands to control a light. This syntax resets the light to 100% luminance.

"Reset [device name]."
... "Reset *living room lamp*."

You can also add the word "please" to the beginning or end of the above statement, but it's not required.

... "Please reset the *living room light*."
... "Reset the *den lamp* please."

NOTE: Duration phrases can't be used with the RESET command.

## To CLOSE Garage Doors, Blinds, Etc.

Exit any sub-context modes before issuing commands to control a device. The article "the" is optional. *Please see the note on page 145 about using this command with certain devices.*

"Close (the) [device name]."
... "Close the *garage doors*."
... "Close *living room blinds*."

To have the device close for a specified length of time, add a duration phrase to the end of the above commands:

"Close (the) [device name] (duration)."
... "Close the *garage doors* for twelve minutes"
... "Close *family room drapes* for thirty seconds"

You can also add the word "please" to the beginning or end of the above statements, but it's not required.

... "Please close the *garage doors*."
... "Close the *kitchen blinds* please."
... "Please close the *living room drapes* for two hours"
... "Close the *front porch shades* for one hour please."

## To OPEN Garage Doors, Blinds, Etc.

Exit any sub-context modes before issuing commands to control a device. The article "the" is optional. *Please see the note on page 145 about using this command with certain devices.*

"Open (the) [device name]."
... "Open the *garage doors*."
... "Open *living room blinds*."

To have the device open for a specified length of time, add a duration phrase to the end of the above commands:

"Open (the) [device name] (duration)."
... "Open the *garage doors* for five minutes"
... "Open *family room drapes* for two hours"

You can also add the word "please" to the beginning or end of the above statements, but it's not required.

... "Please open the *garage doors*."
... "Open the *kitchen blinds* please."
... "Please open the *living room drapes* for two hours"
... "Open the *front porch shades* for one hour please."

## To LOCK Doors, Gates, etc.

Exit any sub-context modes before issuing commands to control a device. The article "the" is optional. *Please see the note on page 145 about using this command with certain devices.*

"Lock (the) [device name]."
... "Lock the *front door*."
... "Lock *back gate*."

To have the device locked for a specified length of time, add a duration phrase to the end of the above commands:

"Lock (the) [device name] (duration)."
... "Lock the *back door* for 10 minutes."
... "Lock *patio door* for six hours."

You can also add the word "please" to the beginning or end of the above statements, but it's not required.
... "Please lock the *back door*."
... "Lock the *back gate* please."
... "Please lock the *front door* for two hours."
... "Lock the *sliding doors* for one hour please."

## To UNLOCK Doors, Gates, etc.

Exit any sub-context modes before issuing commands to control a device. The article "the" is optional. *Please see the note on page 145 about using this command with certain devices.*

"Unlock (the) [device name]."
... "Unlock the *front door*."
... "Unlock *back gate*."

To have the device unlocked for a specified length of time, add a duration phrase to the end of the above commands:

"Unlock (the) [device name] (duration)."
... "Unlock the *back door* for forty minutes."
... "Unlock *patio door* for three hours."

You can also add the word "please" to the beginning or end of the above statements, but it's not required.
... "Please unlock the *back door*."
... "Unlock the *back gate* please."
... "Please unlock the *front door* for two hours."
... "Unlock the *sliding doors* for one hour please."

## To Ask the STATUS of a Light or Device

The status of a particular device can be queried if HAL is configured to ask for that information (see *Devices* in Chapter 7) and if the device itself is capable of relaying that information (see product literature)

Exit any sub-context modes before asking this question.

"What is the status of the [device name]?"
... "What is the status of the *living room light*?"

## To SCHEDULE a Device to Take Action in Seconds, Minutes, or Hours

You can create this type of schedule when you're not in any subcontext mode or you can create it from within the *Schedule* context mode. In other words, if you've just been retrieving sports scores and you're still in the *Sports* mode, then say "Close" or "Close Sports" to exit that mode. At that point you can create this type of schedule. See one of the other *Schedule* formats below for information on using the *Schedule* mode.

This type of schedule begins with the format **"In [Number] [Time Increment]** Time increments are "seconds", "minutes", or "hours."

The article "the" is optional.

NOTE: You cannot *verbally* schedule DIM or group (ALL) actions, but you can *manually* schedule them (see *Schedules* in Chapter 7).

"In [Number] [Time Increment] turn [on/off] (the) [device name]."
or
"In [Number] [Time Increment] turn (the) [device name] [on/off]."
... "IN TEN MINUTES turn on the *living room fan*."
... "IN ONE HOUR turn *dining room light* off."
... "IN THIRTY SECONDS turn on the *den light*."

"In [Number] [Time Increment] switch on (the) [device name]."
or
"In [Number] [Time Increment] switch (the) [device name] on."
... "IN THIRTY MINUTES switch on the *living room fan*."
... "IN TWO HOURS switch *dining room light* on."

"In [Number] [Time Increment] shut off (the) [device name]."
or
"In [Number] [Time Increment] shut (the) [device name] off."
... "IN FOUR HOURS shut off the *living room fan*."
... "IN SIXTY SECONDS shut *dining room light* off."
... "IN TWELVE MINUTES shut off the *den light*."

"In [Number] [Time Increment] [close/open]* (the) [device name]."
... "IN SEVEN HOURS close the *living room drapes*."
... "IN TEN MINUTES open *garage door*."

"In [Number] [Time Increment] [lock/unlock]* (the) [device name]."
... "IN TWENTY MINUTES lock *front door*."
... "IN THIRTY SECONDS unlock the *back gate*."

To schedule a device to turn on or off for a specified length of time, add a duration phrase to the end of the above commands:

... "IN TEN MINUTES turn on the *living room fan* for thirty seconds"
... "IN TWELVE MINUTES switch on the *master bath light* for thirty minutes."
... "IN ONE HOUR turn *dining room light* off for ninety minutes."
... "IN THIRTY SECONDS shut off the *den light* for two hours."
... "IN FIVE HOURS close* the *kitchen blinds* for eight hours."
... "IN FOURTEEN MNUTES unlock* the *front door* for thirty-five minutes"

You can also add the word "please" to the above statements, either after the time increment phrase or at the end of the sentence, but it's not required.

... "IN TEN MINUTES please turn on the *living room fan*."
... "IN TWELVE MINUTES switch the *master bath light* on for thirty minutes please."
... "IN ONE HOUR please lock* the *patio door* for ninety minutes."
... "IN THIRTY SECONDS close* the *kitchen blinds* please."

* See the note on page 145 for information on using these commands with certain devices.

## To SCHEDULE a Device to Take Action Today or Tomorrow

This syntax must be used from within the *Schedule* context mode. Exit the *Schedule* mode before issuing commands or asking questions about other parts of the system.

"Open *Schedule*." or "Open the *Schedule*."

"Close." or "Close *Schedule*." or "Close the *Schedule*."

This type of schedule begins with the format **"[(Today)/Tomorrow] at [Time]."** "Today" and the article "the" are optional.

NOTE: You cannot *verbally* schedule DIM or group (ALL) actions, but you can *manually* schedule them (see *Schedules* in Chapter 7).

"[(Today)/Tomorrow] at [Time] turn [on/off] (the) [device name]."
or
"[(Today)/Tomorrow] at [Time] turn (the) [device name] [on/off]."
... "AT TEN IN THE MORNING turn on the *living room fan*."
... "TODAY AT 8P.M. turn *dining room light* off."
... "TOMORROW AT EIGHT IN THE MORNING turn on the *den light*."

"[(Today)/Tomorrow] at [Time] switch on (the) [device name]."
or
"[(Today)/Tomorrow] at [Time] switch (the) [device name] on."
... "AT TWELVE IN THE AFTERNOON switch on the *living room fan*."
... "TODAY AT 6:30P.M. switch *dining room light* on."

"[(Today)/Tomorrow] at [Time] shut off (the) [device name]."
or
"[(Today)/Tomorrow] at [Time] shut (the) [device name] off."
... "AT TWO IN THE AFTERNOON shut off the *living room fan*."
... "TOMORROW AT 7:30P.M. shut *dining room light* off."
... "TODAY AT NINE IN THE EVENING shut off the *den light*."

"[(Today)/Tomorrow] at [Time] [close/open]* (the) [device name]."
... "AT TEN IN THE MORNING close the *living room drapes*."
... "TOMORROW AT 8:30P.M. open *garage door*."

"[(Today)/Tomorrow] at [Time] [lock/unlock]* (the) [device name]."
... "AT 5:30P.M. lock *front door*."
... "TODAY AT 10A.M. unlock the *back gate*."

To schedule a device to turn on or off for a specified length of time, add a duration phrase to the end of the above commands:

... "AT 7:30A.M. turn on the *living room fan* for thirty seconds."
... "TOMORROW AT 6:30A.M. switch on the *coffee pot* for thirty minutes."
... "TODAY AT SEVEN IN THE EVENING turn *dining room light* off for ninety minutes."
... "AT 2:30P.M. shut off the *den light* for two hours."
... "TOMORROW AT ELEVEN IN THE MORNING close* the *kitchen blinds* for eight hours."
... "AT 6:15P.M. unlock* the *front door* for thirty-five minutes"

You can also add the word "please" to the above statements, either after the time increment phrase or at the end of the sentence, but it's not required.

... "AT 12PM please turn on the *living room fan*."
... "TODAY AT 6:30PM switch the *whirlpool spa* on for thirty minutes please."
... "AT TEN IN THE MORNING please lock* the *patio door* for ninety minutes."
... "TOMORROW AT 2PM close* the *kitchen blinds* please."

* See the note on page 145 for information on using these commands with certain devices.

## To SCHEDULE a Device to Take Action on One or More Days of this Week

NOTE: "This week" refers to today and up to, but not including, the same day next week. In other words, if today is Monday, then you can use this syntax to schedule through Sunday. To schedule an event for *next* Monday, you would need to schedule the event by its date.

This syntax must be used from within the *Schedule* context mode. Exit the *Schedule* mode before issuing commands or asking questions about other parts of the system.

"Open *Schedule*." or "Open the *Schedule*."

"Close." or "Close *Schedule*." or "Close the *Schedule*."

This type of schedule begins with the format **(On) [Day or Days] at [Time]** "On" and the article "the" are optional.

NOTE: You cannot *verbally* schedule DIM or group (ALL) actions, but you can *manually* schedule them (see *Schedules* in Chapter 7).

"(On) [Day or Days] at [Time] turn [on/off] (the) [device name]."
or
"(On) [Day or Days] at [Time] turn (the) [device name] [on/off]."
... "ON TUESDAY AT THREE IN THE AFTERNOON turn on the *living room fan*."
... "WEDNESDAY AND FRIDAY AT 7P.M. turn *dining room light* off."
... "SATURDAY AND TUESDAY AT TEN IN THE EVENING turn on the *den light*."

"(On) [Day or Days] at [Time] switch on (the) [device name]."
or
"(On) [Day or Days] at [Time] switch (the) [device name] on."
... "ON FRIDAY AT FOUR IN THE AFTERNOON switch on the *living room fan*."
... "MONDAY AND FRIDAY AT 6:30P.M. switch *dining room light* on."

"(On) [Day or Days] at [Time] shut off (the) [device name]."
or
"(On) [Day or Days] at [Time] shut (the) [device name] off."
... "ON MONDAY, TUESDAY, WEDNESDAY AT 11:30P.M. shut off the *living room fan*."
... "SUNDAY AT 4P.M. shut *dining room light* off."

"(On) [Day or Days] at [Time] [close/open]* (the) [device name]."
... "ON MONDAY, WEDNESDAY, FRIDAY AT 10A.M. close the *living room drapes*."
... "ON THURSDAY AT 2:30P.M. open *garage door*."

"(On) [Day or Days] at [Time] [lock/unlock]* (the) [device name]."
... "FRIDAY AT 5:30P.M. lock *front door*."
... "ON SATURDAY AND SUNDAY AT 10A.M. unlock the *back gate*."

To schedule a device to turn on or off for a specified length of time, add a duration phrase to the end of the above commands:

... "ON MONDAY AT 7:30A.M. turn on the *living room fan* for thirty seconds"
... "ON FRIDAY AT 6:30A.M. switch on the *coffee pot* for thirty minutes."
... "ON THURSDAY AT SEVEN IN THE EVENING turn *dining room light* off for ninety minutes"
... "FRIDAY AND SUNDAY AT 2:30P.M. shut off the *den light* for two hours"
... "ON TUESDAY AT ELEVEN IN THE MORNING close* the *kitchen blinds* for eight hours."
... "FRIDAY AT 6:15P.M. unlock* the *front door* for thirty-five minutes"

You can also add the word "please" to the above statements, either after the time increment phrase or at the end of the sentence, but it's not required.

... "ON FRIDAY AT 4:14PM please turn on the *living room fan*."
... "MONDAY AND TUESDAY AT 8PM switch the *whirlpool spa* on for thirty minutes please."
... "SUNDAY AT 11AM please lock* the *patio door* for ninety minutes"
... "THURSDAY AT THREE IN THE AFTERNOON close* the *kitchen blinds* please."

* See the note on page 145 for information on using these commands with certain devices.

## To SCHEDULE a Device to Take Action on a Specific Date

This syntax must be used from within the *Schedule* context mode. Exit the *Schedule* mode before issuing commands or asking questions about other parts of the system.

"Open *Schedule*." or "Open the *Schedule*."

"Close." or "Close *Schedule*." or "Close the *Schedule*."

This type of schedule begins with the format **(On) [Date] at [Time]**. "On" and the article "the" are optional.

NOTE: You cannot *verbally* schedule DIM or group (ALL) actions, but you can *manually* schedule them (see *Schedules* in Chapter 7).

"(On) [Date] at [Time] turn [on/off] (the) [device name]."
or
"(On) [Date] at [Time] turn (the) [device name] [on/off]."
... "FEBRUARY SECOND AT 10P.M. turn on the *living room fan*."
... "ON JUNE TWELFTH AT SEVEN IN THE EVENING turn *dining room light* off."
... "ON MAY TENTH AT SIX IN THE MORNING turn on the *den light*."

"(On) [Date] at [Time] switch on (the) [device name]."
or
"(On) [Date] at [Time] switch (the) [device name] on."
... "APRIL THIRD AT 10P.M. switch on the *living room fan*."
... "ON JUNE NINETEENTH AT SEVEN IN THE EVENING switch *dining room light* on."

"(On) [Date] at [Time] shut off (the) [device name]."
or
"(On) [Date] at [Time] shut (the) [device name] off."
... "MARCH 22ND AT 11:30P.M. shut off the *living room fan*."
... "JANUARY FIRST AT TEN IN THE EVENING shut *dining room light* off."

"(On) [Date] at [Time] [close/open]* (the) [device name]."
... "SEPTEMBER THIRD AT 10A.M. close the *living room drapes*."
... "ON APRIL FOURTH AT 2:30P.M. open *garage door*."

"(On) [Date] at [Time] [lock/unlock]* (the) [device name]."
... "DECEMBER 24TH AT 5:30P.M. lock *front door*."
... "ON MAY NINTH AT 10A.M. unlock the *back gate*."

To schedule a device to turn on or off for a specified length of time, add a duration phrase to the end of the above commands:

... "ON JUNE TENTH AT 7:30A.M. turn on the *living room fan* for thirty seconds"
... "DECEMBER FOURTH AT 6:30A.M. switch the *coffee pot* on for thirty minutes."
... "ON JULY EIGHTH AT SEVEN IN THE EVENING turn *dining room light* off for ninety minutes."
... "AUGUST FIFTH AT 2:30P.M. shut off the *den light* for two hours."
... "ON FEBRUARY 28TH AT TEN IN THE MORNING close* the *kitchen blinds* for eight hours."
... "OCTOBER 14TH AT 6:15P.M. unlock* the *front door* for thirty-five minutes"

You can also add the word "please" to the above statements, either after the time increment phrase or at the end of the sentence, but it's not required.

... "ON MARCH FIRST AT 4:14PM please turn on the *living room fan*."
... "DECEMBER 16TH AT 8PM switch the *whirlpool spa* on for thirty minutes please."
... "ON JUNE NINTH AT 11AM please lock* the *patio door* for ninety minutes."
... "APRIL THIRD AT THREE IN THE AFTERNOON close* the *kitchen blinds* please."

* See the note on page 145 for information on using these commands with certain devices.

## To SCHEDULE a Device to Take Action Every Day or Every Other Day

This syntax must be used from within the *Schedule* context mode. Exit the *Schedule* mode before issuing commands or asking questions about other parts of the system.

"Open *Schedule*." or "Open the *Schedule*."

"Close." or "Close *Schedule*." or "Close the *Schedule*."

This type of schedule begins with the format **"[Every Day/Every Other Day] at [Time]"**. The article "the" is optional.

NOTE: You cannot *verbally* schedule DIM or group (ALL) actions, but you can *manually* schedule them (see *Schedules* in Chapter 7).

"[Every Day/Every Other Day] at [Time] turn [on/off] (the) [device name]."
or
"[Every Day/Every Other Day] at [Time] turn (the) [device name] [on/off]."
... "EVERY DAY AT 10P.M. turn on the *living room fan*."
... "EVERY OTHER DAY AT 7P.M. turn *dining room light* off."
... "EVERY DAY AT SIX IN THE MORNING turn on the *den light*."

"[Every Day/Every Other Day] at [Time] switch on (the) [device name]."
or
"[Every Day/Every Other Day] at [Time] switch (the) [device name] on."
... "EVERY OTHER DAY AT 5:30P.M. switch on the *living room fan*."
... "EVERY DAY AT 6P.M. switch *dining room light* on."

"[Every Day/Every Other Day] at [Time] shut off (the) [device name]."
or
"[Every Day/EveryOther Day] at [Time] shut (the) [device name] off."
... "EVERY DAY AT 11:30P.M. shut off the *living room fan*."
... "EVERY OTHER DAY AT 4P.M. shut *dining room light* off."

"[Every Day/Every Other Day] at [Time] [close/open]* (the) [device name]."
... "EVERY OTHER DAY AT 10A.M. close the *living room drapes*."
... "EVERY DAY AT 2:30P.M. open *garage door*."

"[Every Day/Every Other Day] at [Time] [lock/unlock]* (the) [device name]."
... "EVERY DAY AT 5:30P.M. lock *front door*."
... "EVERY OTHER DAY AT 10AM. unlock the *back gate*."

To schedule a device to turn on or off for a specified length of time, add a duration phrase to the end of the above commands:

... "EVERY DAY AT 7:30A.M. turn on the *living room fan* for thirty seconds"
... "EVERY DAY AT 6:30A.M. switch the *coffee pot* on for thirty minutes."
... "EVERY OTHER DAY AT 2:30P.M. shut off the *den light* for two hours."
... "EVERY OTHER DAY AT TEN IN THE MORNING close* the *kitchen blinds* for eight hours."
... "EVERY DAY AT 6:15P.M. unlock* the *front door* for thirty-five minutes"

You can also add the word "please" to the above statements, either after the time increment phrase or at the end of the sentence, but it's not required.

... "EVERY DAY AT 4:14PM please turn on the *living room fan*."
... "EVERY DAY AT 8PM switch the *whirlpool spa* on for thirty minutes please."
... "EVERY OTHER DAY AT 11AM please lock* the *patio door* for ninety minutes."
... "EVERY DAY AT THREE IN THE AFTERNOON close* the *kitchen blinds* please."

* See the note on page 145 for information on using these commands with certain devices.

## To SCHEDULE a Device to Take Action Every Weekday or Every Weekend

This syntax must be used from within the *Schedule* context mode. Exit the *Schedule* mode before issuing commands or asking questions about other parts of the system.

"Open *Schedule*." or "Open the *Schedule*."

"Close." or "Close *Schedule*." or "Close the *Schedule*."

This type of schedule begins with the format **[Weekdays/Weekends] at [Time]** The article "the" is optional.

NOTE: You cannot *verbally* schedule DIM or group (ALL) actions, but you can *manually* schedule them (see *Schedules* in Chapter 7).

"[Weekdays/Weekends] at [Time] turn [on/off] (the) [device name]."
or
"[Weekdays/Weekends] at [Time] turn (the) [device name] [on/off]."
... "WEEKDAYS AT 10P.M. turn on the *living room fan*."
... "WEEKENDS AT ONE IN THE AFTERNOON turn *dining room light* off."
... "WEEKDAYS AT 6A.M. turn on the *den light*."

"[Weekdays/Weekends] at [Time] switch on (the) [device name]."
or
"[Weekdays/Weekends] at [Time] switch (the) [device name] on."
... "WEEKENDS AT 4:30P.M. switch on the *living room fan*."
... "WEEKDAYS AT 6P.M. switch *dining room light* on."

"[Weekdays/Weekends] at [Time] shut off (the) [device name]."
or
"[Weekdays/Weekends] at [Time] shut (the) [device name] off."
... "WEEKDAYS AT 11:30P.M. shut off the *living room fan*."
... "WEEKENDS AT 8A.M. shut *dining room light* off."

"[Weekdays/Weekends] at [Time] [close/open]* (the) [device name]."
... "WEEKDAYS AT 10A.M. close the *living room drapes*."
... "WEEKENDS AT 2:30P.M. open *garage door*."

"[Weekdays/Weekends] at [Time] [lock/unlock]* (the) [device name]."
... "WEEKENDS AT 5:30P.M. lock *front door*."
... "WEEKDAYS AT 10A.M. unlock the *back gate*."

To schedule a device to turn on or off for a specified length of time, add a duration phrase to the end of the above commands:

... "WEEKENDS AT 7:30A.M. turn on the *living room fan* for thirty seconds"
... "WEEKDAYS AT 6:30A.M. switch the *coffee pot* on for thirty minutes."
... "WEEKDAYS AT 2:30P.M. shut off the *den light* for two hours."
... "WEEKENDS AT TEN IN THE MORNING close* the *kitchen blinds* for eight hours."
... "WEEKDAYS AT 6:15P.M. unlock* the *front door* for thirty-five minutes."

You can also add the word "please" to the above statements, either after the time increment phrase or at the end of the sentence, but it's not required.

... "WEEKENDS AT 4:14PM please turn on the *living room fan*."
... "WEEKDAYS AT 8PM switch the *whirlpool spa* on for thirty minutes please."
... "WEEKDAYS AT 11AM please lock* the *patio door* for ninety minutes."
... "WEEKENDS AT THREE IN THE AFTERNOON close* the *kitchen blinds* please."

* See the note on page 145 for information on using these commands with certain devices.

## To SCHEDULE a Device to Take Action Every Week on the Same Day(s)

This syntax must be used from within the *Schedule* context mode. Exit the *Schedule* mode before issuing commands or asking questions about other parts of the system.

"Open *Schedule*." or "Open the *Schedule*."

"Close." or "Close *Schedule*." or "Close the *Schedule*."

This type of schedule begins with the format **[Every] [Day(s) of the Week] at [Time]** The article "the" is optional.

NOTE: You cannot *verbally* schedule DIM or group (ALL) actions, but you can *manually* schedule them (see *Schedules* in Chapter 7).

"[Every] [Day(s) of the Week] at [Time] turn [on/off] (the) [device name]."
or
"[Every] [Day(s) of the Week] at [Time] turn (the) [device name] [on/off]."
... "EVERY TUESDAY AT TEN IN THE EVENING turn on the *living room fan*."
... "EVERY TUESDAY AND THURSDAY AT 7P.M. turn *dining room light* off."
... "EVERY MONDAY, WEDNESDAY, FRIDAY AT 6A.M. turn on the *den light*."

"[Every] [Day(s) of the Week] at [Time] switch on (the) [device name]."
or
"[Every] [Day(s) of the Week] at [Time] switch (the) [device name] on."
... "EVERY TUESDAY AND THURSDAY AT FOUR IN THE AFTERNOON switch on the *living room fan*."
... "EVERY WEDNESDAY, FRIDAY, AND SATURDAY AT 6:30P.M. switch *dining room light* on."

"[Every] [Day(s) of the Week] at [Time] shut off (the) [device name]."
or
"[Every] [Day(s) of the Week] at [Time] shut (the) [device name] off."

... "EVERY SUNDAY AT FIVE IN THE AFTERNOON shut off the *living room fan*."
... "EVERY TUESDAY, THURSDAY, AND SATURDAY AT 10P.M. shut *dining room light* off."

"[Every] [Day(s) of the Week] at [Time] [close/open]* (the) [device name]."

... "EVERY MONDAY AT 10A.M. close the *living room drapes*."
... "EVERY TUESDAY AND FRIDAY AT 2:30P.M. open *garage door*."

"[Every] [Day(s) of the Week] at [Time] [lock/unlock]* (the) [device name]."

... "EVERY THURSDAY, FRIDAY, AND SATURDAY AT 5:30P.M. lock *front door*."
... "EVERY WEDNESDAY AT 10A.M. unlock the *back gate*."

To schedule a device to turn on or off for a specified length of time, add a duration phrase to the end of the above commands:

... "EVERY MONDAY AND FRIDAY AT 7:30A.M. turn on the *living room fan* for thirty seconds"
... "EVERY MONDAY, WEDNESDAY, FRIDAY AT 6:30A.M. switch the *coffee pot* on for thirty minutes."
... "EVERY SUNDAY AT 2:30P.M. shut off the *den light* for two hours."
... "EVERY TUESDAY AT TEN IN THE MORNING close* the *kitchen blinds* for eight hours."
... "EVERY MONDAY AND SATURDAY AT 6:15P.M. unlock* the *front door* for thirty-five minutes"

You can also add the word "please" to the above statements, either after the time increment phrase or at the end of the sentence, but it's not required.

... "EVERY TUESDAY AND THURSDAY AT 4:14PM please turn on the *living room fan*."
... "EVERY MONDAY, WEDNESDAY, FRIDAY AT 8PM switch the *whirlpool spa* on for thirty minutes please."
... "EVERY SATURDAY AT 11AM please lock* the *patio door* for ninety minutes."
... "EVERY FRIDAY AT THREE IN THE AFTERNOON close* the *kitchen blinds* please."

* See the note on page 145 for information on using these commands with certain devices.

## To Run a MACRO

A macro is a set of actions that can be executed with a single command. A macro called "sleep", for example, could turn on the lights in the bedroom and turn off the lights in the rest of the house. Go to Chapter 7, *Automating Your Home*, for information on creating macros.

A macro can be activated verbally by using its name or by using its recognition phrase. Both the name and the recognition phrase are assigned when a macro is created. For instance, assume a macro called "sleep" was given a recognition phrase of "I'm going to bed." The examples below show how to verbally start this macro.

(Exit any sub-context modes before issuing commands to run a macro.)

**By Recognition Phrase**:

"[Recognition phrase]."
… "I'm going to bed."

**By Name**:

“Set mode to [macro].”
… “Set mode to *sleep*.”

“Run macro [macro].”
… “Run macro *sleep*.”

## E-Mail Messages

HAL must be configured to download E-mail messages before this syntax can be used. See *Internet Configuration* on page 82 for more information.

Commands or questions relating to E-mail have to be asked from within the *Messaging* mode. Exit the *Messaging* mode before issuing commands or asking questions about other parts of the system.

"Open *Messaging*." or "Open the *Messaging*."

"Close." or "Close *Messaging*." or "Close the *Messaging*."

**TO RETRIEVE NEW MESSAGES:**

"What are my (new) E-mail messages?" or "What are the (new) E-mail messages?"
... "What are my new E-mail messages?"
... "What are the messages?"

"Read my (new) E-mail messages." or "Read the (new) E-mail messages"
... "Read my E-mail messages."
... "Read the new E-mail messages."

**TO RETRIEVE SAVED MESSAGES:**

"What are my saved E-mail messages?" or "What are the saved E-mail messages?"
... "What are my saved E-mail messages?"
... "What are the saved E-mail messages?"

"Read my saved E-mail messages." or "Read the saved E-mail messages."
... "Read my saved E-mail messages."
... "Read the saved E-mail messages."

**Message Handling Options**

When retrieving E-mail messages by phone, select an option by pressing the associated number on the keypad of the phone (the number can be pressed at any time once HAL has started to read the message). When retrieving messages by microphone, select an option by saying the associated word into the microphone (wait until HAL has finished reading the message before selecting one).

| Press | Say | Action |
|---|---|---|
| 1 | Delete | Deletes the message from the system |
| 2 | Save | Saves the message |
| 3 | Repeat | Plays the message again |
| 4 | Next | Advances to the next message and plays it |
| 5 | Previous | Replays the previous message |
| 6 | Saved | Plays messages that were saved previously |
| 0 | Stop | HAL stops playing messages -- other commands can be issued at this time |
| * | Options | HAL will list these options |

NOTE: When retrieving E-mail messages by phone, you can interrupt message playback by pressing the pound (#) key.

## News Headlines

HAL must be configured to retrieve information from the Internet before this syntax can be used. See *Internet Configuration* on page 79 for more information.

Commands or questions relating to News have to be asked from within the *News* mode. Exit the *News* mode before issuing commands or asking questions about other parts of the system.

"Open *News*." or "Open the *News*."

"Close." or "Close *News*." or "Close the *News*."

Use the syntax below to have HAL read news headlines.

"What is in the news?"

"Read news." or "Read the news."

"Read headlines."

HAL will pause after reading each news headline to allow time for additional commands to be issued. If no commands are given, HAL will automatically read the next headline.

"Read." or "Read it." or "Read that."
*HAL will read the news story corresponding to the headline it just read*.

"Next."
*HAL will read the next news headline*.

"Previous."
*HAL will read the previous news headline*.

"Stop."
*HAL stops reading news headlines and waits for new commands*.

Use the syntax below to have HAL read a specific headline and its story.

"Read news item [number]."
… "Read news item *five*."

## Sports Scores

HAL must be configured to download information from the Internet before this syntax can be used. See *Internet Configuration* on page 84 for more information.

Commands or questions relating to Sports have to be asked from within the *Sports* mode. Exit the *Sports* mode before issuing commands or asking questions about other parts of the system.

"Open *Sports*." or "Open the *Sports*."

"Close." or "Close *Sports*." or "Close the *Sports*."

You can ask for the score for specific teams, in specific sports, for a specific day of the week, or a combination of the above.

- If no team is specified, then the scores for all teams will be read.
- If no day of the week is specified, then games played or scheduled to play on the current day in the specified sport will be announced.

The word(s) in brackets can be substituted with the corresponding word(s) in the list below.

"What are the [sport] scores?" or "What were the [sport] scores?"
... "What are the ***baseball*** scores?"
... "What were the ***football*** scores?"

"What are [time] [sport] scores?" or "What were [time] [sport] scores?"
... "What are *today's* ***basketball*** scores?"
... "What were *Tuesday's* ***baseball*** scores?"

"What are the [sport] scores for [time]?" or "What were the [sport] scores for [time]?"
... "What are the ***football*** scores for *today*?"
... "What were the ***soccer*** scores for *yesterday*?"

"What is the [sport] [info] for [team]?" or "What was the [sport] [info] for [team]?"
... "What was the ***baseball*** **score** for Baltimore Orioles?"
... "What is the ***hockey*** **score** for Detroit Red Wings?"

"What is [time] [sport] [info] for [team]?" or "What was [time] [sport] [info] for [team]?"
... "What is *today's* ***baseball*** **schedule** for New York Yankees?"
... "What was *yesterday's* ***basketball*** **score** for Chicago Bulls?"

| **FIELD** | **POSSIBILITIES** |
|---|---|
| *Info* | Score, schedule |
| *Sport* | Baseball, basketball, football, hockey, soccer |
| *Team* | Default team name that downloads from the Internet (e.g. *Chicago Cubs*) or English name that is created or modified (e.g. *My Team*) in the *Internet Configuration* screen. |
| *Time* | Today/today's, yesterday/yesterday's, Monday/Monday's, Tuesday/Tuesday's, etc. |

## Stock Quotes

HAL must be configured to download information from the Internet and stock symbols and names must be entered in the system before this syntax can be used. See *Internet Configuration* on page 86 for more information.

Commands or questions relating to Stocks have to be asked from within the *Portfolio* mode. Exit the *Portfolio* mode before issuing commands or asking questions about other parts of the system.

"Open *Portfolio*." or "Open the *Portfolio*."

"Close." or "Close *Portfolio*." or "Close the *Portfolio*."

Use the syntax below to ask for information about a particular stock.

"What is [stock name] at?"
… "What is *X Y C Corporation* at?"

"What is the price of [stock name]?"
… "What is the price of *Microsoft*?"

"What is (the) news for [stock name]?" or "What is (the) news on [stock name]?"
… "What is the news on *Intel*?"

Use the syntax below to ask for information on all of the stocks configured in the system.

"What is my portfolio at?"
"What are my stocks at?" or "What are my mutual funds at?" or "What are my investments at?"
"What are (the) market indices?"

## Traffic Information

HAL must be configured to download information from the Internet and traffic routes must be selected and named in the system before this syntax can be used. See *Internet Configuration* on page 88 for more information.

Commands or questions relating to Traffic have to be asked from within the *Traffic* mode. Exit the *Traffic* mode before issuing commands or asking questions about other parts of the system.

"Open *Traffic*." or "Open the *Traffic*."

"Close." or "Close *Traffic*." or "Close the *Traffic*."

Use the syntax below to have HAL read the traffic report for a specific route. The word "report" is optional.

"What is the traffic (report) for [route name]?"
… "What is the traffic for *B W Parkway*?"
… "What is the traffic report for *U S 1*?"

Use the syntax below to have HAL read the traffic report for all of the routes selected in the configuration screen. The word "report" is optional.

"What is the traffic (report)?"
… "What is the traffic?"
… "What is the traffic report?"

## TV Listings

HAL must be configured to download information from the Internet before this syntax can be used. See *Internet Configuration* on page 90 for more information.

Commands or questions relating to TV Listings have to be asked from within the *TV Listings* mode. Exit the *TV Listings* mode before issuing commands or asking questions about other parts of the system.

"Open *TV Listings*." or "Open the *TV Listings*."

"Close." or "Close *TV Listings*." or "Close the *TV Listings*."

The channel names are listed in the *Internet Configuration* screen and can be modified in that screen. The channel name goes in place of the [channel] parameter in the syntax below.

Use the syntax below to have HAL announce the program currently airing on the specified channel.

"What is on [channel]?"
… "What is on *NBC*?"
… "What is on *A and E*?"

Use the syntax below to have HAL announce the programs scheduled to air on the specified channel at the selected time.

"What is on [channel] at [time]?"
… "What is on *HBO* at 9pm?"
… "What is on *TNT* at ten in the morning?"

Use the syntax below to have HAL announce the programs scheduled to air on the favorite channels at the selected time. Favorite channels are selected in the *Internet Configuration* screen.

"What is on at [time]?"
… "What is on at *7:30pm*?"
… "What is on at *eleven in the evening*?"

## Weather Forecasts

HAL must be configured to retrieve information from the Internet before this syntax can be used. See *Internet Configuration* on page 92 for more information.

Exit any sub-context modes before asking HAL for the weather forecast.

"What is the weather forecast for today?"

"What is the weather forecast for tomorrow?"

"What is the weather forecast for [day of the week]?"
… "What is the weather forecast for *Monday*?"

## Voice Mail Messages

HAL can record voice mail messages if it's connected to the telephone line, has control of the modem (see *Phone Icon Menu* -- page 38), and if it's configured to do so (see *Telephone Configuration* -- page 98). Go to *Phone Pad Mailboxes* on page 197 for information on modifying the default mailbox and on creating new ones.

Commands or questions relating to voice mail messages have to be asked from within the *Messaging* mode. Exit the *Messaging* mode before issuing commands or asking questions about other parts of the system.

"Open *Messaging*." or "Open the *Messaging*."

"Close." or "Close *Messaging*." or "Close the *Messaging*."

The phrases below are used to verbally retrieve voice mail messages, but the process is slightly different depending on how you're interacting with HAL.

### Retrieving by Remote Telephone

When you call into HAL from a remote phone, press the attention key while HAL plays the main greeting. HAL will ask for an access code. Whichever mailbox's access code you enter is the mailbox whose messages HAL will play when you use one of the commands below. For instance, if you enter the access code for mailbox 2, then HAL will play the messages in mailbox 2. If you enter the access code for mailbox 3, then HAL will play the messages in mailbox 3. If you entered the access code for mailbox 2 but want to hear the messages in mailbox 3, then use the syntax below where you specify a mailbox by its name.

NOTE: Go to the *Telephone Configuration* screen on page 98 for more information on the attention key. Go to the *Mailbox Edit* screen on page 197 for information on naming mailboxes and assigning access codes to them.

### Retrieving by Microphone or House Phone

After you say one of the phrases below into a microphone or a local (house) phone, HAL will ask for the name of the mailbox for which messages are to be retrieved. Say the name given to that mailbox.

NOTE: You won't be able to retrieve messages for a specific mailbox from a microphone if that mailbox was set to require a code in order to access the messages in that mailbox. If the mailbox was set up in that manner, then you can only retrieve messages for that mailbox through remote or local (house) phones. Go to the *Mailbox Edit* screen on page 197 for more information on naming mailboxes and assigning access codes to them.

Items in parentheses are optional.

**TO RETRIEVE NEW MESSAGES:**

"Are there (any) new (voice/voice mail) messages?"
... "Are there new messages?"
... "Are there any new messages?"
... "Are there any new *voice mail* messages?"

"What are [my/the] new [voice/voice mail] messages?"
... "What are the new *voice* messages?"
... "What are my new *voice mail* messages?"
... "What are the new *voice mail* messages?"

"Play (my) (new) messages."
... "Play messages."
... "Play my messages."
... "Play my new messages."

"Play (the) messages in (the) [mailbox name] mailbox."
... "Play the messages in the *Main* mailbox."
... "Play messages in *Stacy's* mailbox."

**TO RETRIEVE SAVED MESSAGES:**

"What are [my/the] [voice/voice mail] messages?"
... "What are my *voice* messages?"
... "What are the *voice mail* messages?"

"Play (my) saved messages."
... "Play my saved messages."
... "Play saved messages."

"Play [my/the] (saved) [voice/voice mail] messages."
... "Play my *voice* messages.
... "Play the saved *voice mail* messages."

"Play (the) saved messages in the [mailbox name] mailbox."
... "Play saved messages in the *Main* mailbox."

"What are the saved messages in (the) [mailbox name] mailbox?"
... "What are the saved messages in *Susie's* mailbox?"
... "What are the saved messages in the *Main* mailbox?"

**Message Handling Options**

When retrieving messages by phone, select an option by pressing the associated number on the keypad of the phone (the number can be pressed at any time once HAL has started to play the message). When retrieving messages by microphone, select an option by saying the associated word into the microphone (wait until HAL has finished playing the message before selecting one).

If the "Play retrieval options" item is enabled in the *Telephone Configuration* screen (see page 100), then HAL will list these options once before playing the first voice mail message. If this option is disabled, then HAL will start playing the voice mail messages immediately. You can hear the list of options at any time by pressing the star (*) key (when interacting by telephone) or by saying "Options" when HAL finishes playing a message (when interacting by microphone).

| Press | Say | Action |
|---|---|---|
| 1 | Delete | Deletes the message from the system |
| 2 | Save | Saves the message |
| 3 | Repeat | Plays the message again |
| 4 | Next | Advances to the next message and plays it |
| 5 | Previous | Replays the previous message |
| 6 | Saved | Plays messages that were saved previously |
| 0 | Stop | HAL stops playing messages -- other commands can be issued at this time |
| * | Options | HAL will list these options |

NOTE: When retrieving voice messages by phone, you can interrupt message playback by pressing the pound (#) key.

## Enabling/Disabling the Answering Machine

The answering machine must be enabled or disabled from within the *Messaging* mode. Exit the *Messaging* mode before issuing commands or asking questions about other parts of the system.

"Open *Messaging*." or "Open the *Messaging*."

"Close." or "Close *Messaging*." or "Close the *Messaging*."

Use the syntax below to enable or disable HAL's answering machine feature. The article "the" is optional.

NOTE: The "Telephone Enabled" option must be selected in the *Telephone Configuration* screen (see page 98) before the answering machine or these commands will work.

"Enable (the) answering machine." or "Turn on (the) answering machine."
... "Enable the answering machine."
... "Turn on answering machine."

"Disable (the) answering machine." or "Turn off (the) answering machine."
... "Disable answering machine."
... "Turn off the answering machine."

## To Call Someone

This syntax must be used from within the *Directory* mode. Exit the *Directory* mode before issuing commands or asking questions about other parts of the system.

"Open *Directory*." or "Open the *Directory*."

"Close." or "Close *Directory*." or "Close the *Directory*."

HAL can place a phone call if it's connected to the telephone line, has control of the modem (see *Phone Icon Menu* on page 38), and if it's configured to do so (see *Telephone Configuration* on page 98).

If the location for a directory entry is not specified, then the system will default to using the phone number entered in the "home" field for that entry. Possible locations are HOME, WORK, BUSINESS, and CELL. If a location is given but the corresponding field in the Directory entry is blank, then HAL will say that it doesn't have that information.

"Call [name]."
... "Call *John Smith*."
... "Call *Mom*."

"Call [name] at [location]."
... "Call *Mary Kelly* at work."
... "Call *Amy Jones* at cell."

**Interaction Methods**

**Microphone**:
If you give either of the above commands through a microphone, HAL will activate the speakerphone feature (see page 21), which will allow you to interact with the person you're calling by talking into the computer's microphone or through an open-air microphone.

If you have **not** set up the speakerphone feature…
… then you can still join the conversation by picking up a house phone after HAL has dialed the number, so long as that house phone is on the same line that HAL is on. (A HAL compatible modem is not required for joining a phone call after HAL has already dialed the number.)

**Local (House) Phone**:
(HAL-compatible modem is required) If you give either of the above commands through a house phone, HAL will stop interaction with you (you'll hear a click), will get an open line (you'll hear dial tone), and will dial the requested phone number. Once the person answers, you can engage in conversation the way you normally would.

If you **have** set up the speakerphone feature…
… then you can talk to the person through the computer's microphone and hear them through the speaker connected to the modem by clicking the SPEAKERPHONE button in the *Phone Pad*. If you don't hang up the house phone, then the person on the other end will hear audio from the house phone as well as audio through the computer's microphone. If you don't want the person on the other end to hear audio through the house phone, then hang up that phone **after** you click the SPEAKERPHONE button (the light on the button will be on when the speakerphone feature is on).

## To Page Someone

This syntax must be used from within the *Directory* mode. Exit the *Directory* mode before issuing commands or asking questions about other parts of the system.

"Open *Directory*." or "Open the *Directory*."

"Close." or "Close *Directory*." or "Close the *Directory*."

HAL can place a phone call if it's connected to the telephone line, has control of the modem (see *Phone Icon Menu* on page 38), and if it's configured to do so (see *Telephone Configuration* on page 98).

Go to the *System Data Directory* screen (see page 146) or the *Phone Pad Directory* screen (see page 192) for information on entering a pager number for an individual. Go to *Paging Configuration* (page 102) for information on specifying the number that HAL will send to the pager as the numeric message.

"Page [name]."
… "Page *April Jones*."
… "Page *Acme Plumbing*."

## To Ask for a Phone Number or Address

This syntax must be used from withinthe *Directory* mode. Exit the *Directory* mode before issuing commands or asking questions about other parts of the system.

"Open *Directory*." or "Open the *Directory*."

"Close." or "Close*Directory*." or "Close the*Directory*."

HAL can read the phone numberfor a Directory entry. If the location for a directory entry is not specified, then the system will default to using the phone number entered in the "home" field for that entry. Possible locations are HOME, WORK, BUSINESS, FAX, PAGER, and CELL. If a location is given but the corresponding field in the Directory entry is blank, then HAL will say that it doesn't have that information.

The word "phone" is optional.

"What is the [location] (phone) number for [name]?"
… "What is the work number for *Jackie Evans*?"
… "What is the phone number for*Mary*?"
… "What is the fax phone number for *Home Automated Living*?"

HAL can also read the address for a Directory entry.

"What is the address for [name]?"
… "What is the address for*Jack Jones*?"
… "What is the address for*Karl*?"

## To Leave a Special Message for a Specific Caller

This syntax must be used from within the*Directory* mode. Exit the *Directory* mode before issuing commands or asking questions about other parts of the system.

"Open *Directory*." or "Open the *Directory*."

"Close." or "Close*Directory*." or "Close the*Directory*."

If your phone line has the Caller ID option and if HAL is configured to use that information (see *Telephone Configuration* on page 106), then you can record a custom message for a specific caller. When a phone call comes in from the matching phone number, HAL will play that special message instead of the generic message that's played for all other callers. If no location is specified, then the system will default to using the phone number entered in the "home" field of that caller's Directory entry. Possible locations are HOME, WORK, BUSINESS, and CELL.

Use the syntax below to leave a custom message for a specific caller.

"Leave a message for [name] at [location]."
… "Leave a message for*Tom Williams* at cell."
… "Leave a message for*Dad*."

Use the syntax below to erase the custom message for a specific caller. The caller will now hear the same message that all other callers hear.

"Clear message for [name] at [location]." or "Erase message for [name] at [location]."
… "Erase message for *Tom Williams* at cell."
… "Clear message for *Dad*."

NOTE: You can also erase the message from the *Directory Edit* screen for that directory entry (see page 194).

## To Hang-Up the Phone

NOTE: The hang-up syntax is for when you're talking to someone on the phone using HAL's Speakerphone Feature (see page 21).

This syntax must be used from within the *Directory* mode. Exit the *Directory* mode before issuing commands or asking questions about other parts of the system.

"Open *Directory*." or "Open the *Directory*."

"Close." or "Close *Directory*." or "Close the *Directory*."

Use the syntax below to verbally tell HAL to hang up the phone (you can also hang up or answer the phone as part of an action in a macro, rule, or schedule - see page 174 for more information).

The article "the" is optional.

"Hang up (the) phone." or "Hang up (the) telephone."
… "Hang up phone."
… "Hang up the telephone."

## To Open HAL's Screens

This syntax must be used from within the *Console* mode. Exit the *Console* mode before issuing commands or asking questions about other parts of the system.

"Open *Console*." or "Open the *Console*."

"Close." or "Close *Console*." or "Close the *Console*."

Use these commands to have HAL reveal its main screens.

"Open Automation Setup." or "Open Automation Setup Screen."
"Close Automation Setup." or "Close Automation Setup Screen."
… for the *System Data* screen.

"Open Internet." or "Open Internet Information."
"Close Internet." or "Close Internet Information."
… for the *Internet* screen.

"Open Manual Control Panel."
"Close Manual Control Panel."
… for the *Manual Control Panel* screen.

"Open Message Window."
"Close Message Window."
… for the *Messages* screen.

"Open Phone Pad."
"Close Phone Pad."
… for the *Phone Pad* screen.

"Open System Monitor."
"Close System Monitor."
… for the *Status* screen.

"Open System Settings."
"Close System Settings."
… for the *Configuration* screen.

"Open HAL Help." or "Open Help."
"Close HAL Help." or "Close Help."
… for this Online Help Guide.

## To Verbally Connect to or Disconnect from the Internet

This syntax must be used from within the *Console* mode. Exit the *Console* mode before issuing commands or asking questions about other parts of the system.

"Open *Console*." or "Open the *Console*."

"Close." or "Close *Console*." or "Close the *Console*."

Use this command to have HAL connect to the Internet using the settings established in the *Internet Configuration* screen (see page 79). If a dedicated connection was selected, then HAL will indicate that a dedicated connection is being used and that it can't connect to the Internet.

"Connect Internet." or "Connect to Internet."

Use this command to have HAL disconnect from the Internet. If a dedicated connection was selected, then HAL will indicate that a dedicated connection is being used and that it can't disconnect from the Internet.

"Disconnect Internet." or "Disconnect from Internet."

## To Turn an X-10 Address On or Off

This syntax must be used from within the *Console* mode. Exit the *Console* mode before issuing commands or asking questions about other parts of the system.

"Open *Console*." or "Open the *Console*."

"Close." or "Close *Console*." or "Close the *Console*."

Use these commands to have HAL control the specified X-10 address. Go to the *Interfaces* section on page 204 for more information on X-10 addresses.

"Turn [house code] [unit code] on." or "Turn [house code] [unit code] off."
… "Turn **A 3** on."
… "Turn **P 12** off."

## To Verbally Shut Down HAL

This syntax must be used from within the *Console* mode. If you do not issue the command below, then you must exit the *Console* mode before issuing commands or asking questions about other parts of the system.

"Open *Console*." or "Open the *Console*."

"Close." or "Close *Console*." or "Close the *Console*."

Use this command to shut down HAL. Items in parentheses are optional.

"Shut (HAL) down (system)."
… "Shut down."
… "Shut HAL down."
… "Shut down system."

## CHAPTER 4
# Setting Up HAL

HAL is the operating system for an array of home automation peripherals and devices. In order for HAL to control the peripherals that control the home, HAL must be told what devices will be used and how to send and receive information to and from those devices. This is done in the *HAL Configuration* screen. Configuring HAL is a very simple, wizard-driven procedure. Many of the items in the *Configuration* screen will already be set if you ran the *HAL Setup Wizard* after HAL was installed (see page 24). To configure the system or make changes to the settings, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**

# CONFIGURATION SCREEN

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**… **Programs**… **HALdeluxe**… **HAL System Configuration**.

The *HAL Configuration* screen opens with the "Configuration View" option selected. Double-click on an item to bring up its configuration screen.


**View Configuration**
Click to view the configurable items in HALdeluxe. This is the default view for this screen.

**View COM Ports**
Click to view the COM Ports assigned within HAL such as to which COM Port the modem is assigned.

**Help**
Click to open the Online Help Guide to this section.

**Configuration Menu**
Double-click on a menu item to launch the configuration screen for that item. This is the same as clicking once on the item name to select it and then clicking SETTINGS.

**Settings**
Click on a menu item to select it and then click on this button to open the configuration screen for that item. This is the same as double-clicking the item.

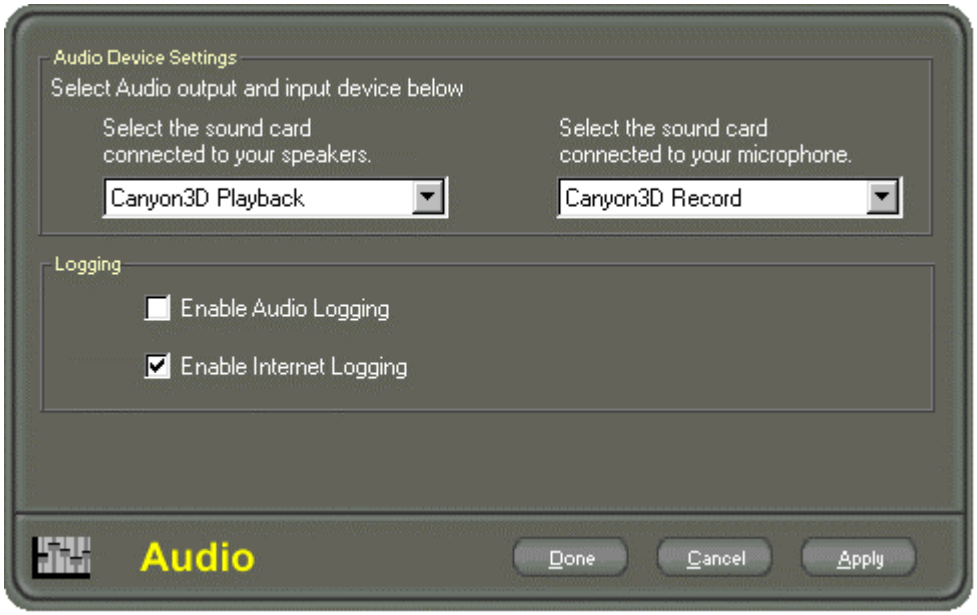
**Report**
Brings up a screen that can be printed out. The screen includes the details of the various configuration settings, such as *Internet*, *Personal Assistant*, etc.

**Done**
Saves the settings and closes the screen. Some modifications may require that HAL be restarted before they will take effect. HAL will issue a warning if this is necessary.

# AUDIO CONFIGURATION

The *Audio Configuration* screen is where you specify what sound card HAL is to use. The information in this screen will already be filled in if *HAL Setup Wizard* was run after HAL was installed (see page 24).

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on AUDIO.




**Audio Device Settings**
Select from the drop-down menus the audio device that HAL is to use to talk or play WAV files over the speakers and the device that it's to use to hear commands and questions through the microphone.

**Enable Audio Logging**
Enable this option (checkmark visible) to have HAL keep track of interaction between you and HAL. The log files will continue to grow as time passes, so you should only enable this option at Technical Support's suggestion or if you are comfortable with periodically deleting the log files from your system.

**Enable Internet Logging**
Enable this option (checkmark visible) to have HAL keep track of its interaction with the Internet. The log file will continue to grow as time passes, so you should only enable this option at Technical Support's suggestion or if you are comfortable with periodically deleting the log files from your system.

**Done**
Saves the settings and closes the screen.

**Cancel**
Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

# INTERNET CONFIGURATION

The *Internet Configuration - Connection* screen is where you specify how HAL is to connect to the Internet and how often it should do so.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on INTERNET.

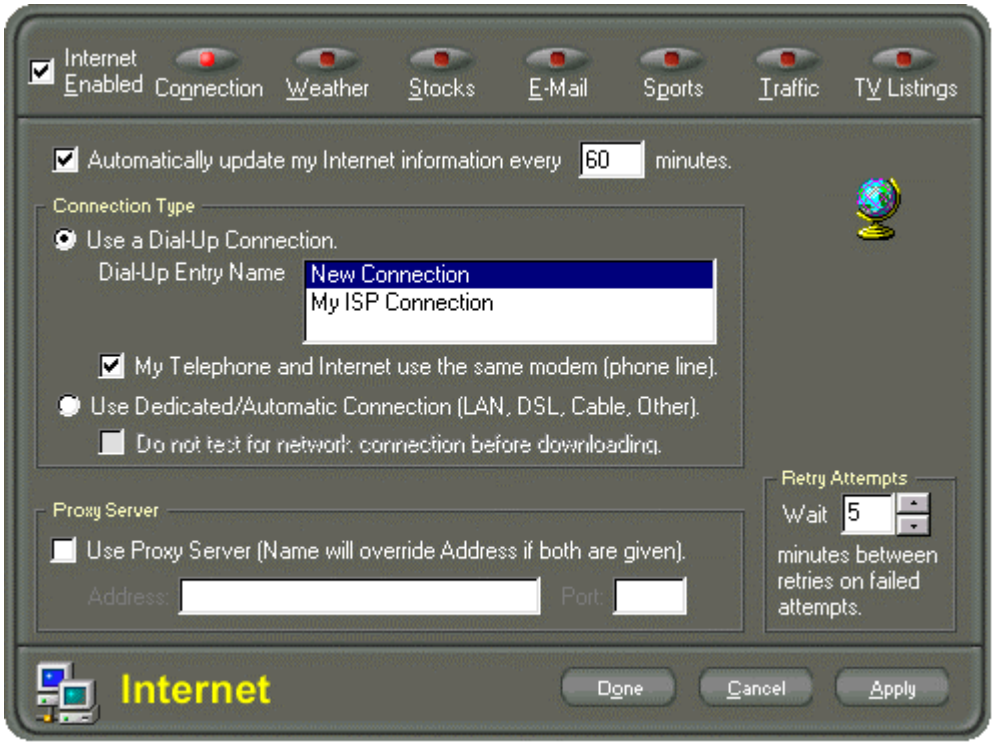
Some of the information in this screen will already be filled in if *HAL Setup Wizard* (see page 24) was run after HAL was installed.

---

*If you're connecting to the Internet via a dial-up connection, please read the note on page 81.*
*If you're an America Online customer, please read the note on page 209.*

---

Click a button at the top of the screen to go to the configuration screen for that topic (see the following pages for descriptions of those screens).




**Internet Enabled**

This option must be checked in order for HAL to download information from the Internet.

**Automatically update my Internet information every...**

This determines how often (in minutes) HAL will connect to the Internet to update the weather forecasts, news headlines, stock quotes, etc. A value of zero (0) prevents HAL from automatically updating the information, in which case the information will need to be downloaded manually from the *Internet* screen (see page 132). The option is enabled by default.

NOTE: This option will be disabled if the "Disable Automatic Updates" option is enabled in the *Internet* screen. Enabling the automatic updating option in this screen will disable the "Disable Automatic Updates" option.

**Use a Dial-Up Connection**

Select this option if using a dial-up connection to connect to the Internet. Users who connect to the Internet via modem, telephone line, and ISP (Internet Service Provider) should select this option. *See the note on page 81 about using a dial-up connection with HAL.*

**Dial-Up Entry Name**

The names that are listed in this area are the dial-up connection settings that HAL found on the computer. Click on a connection setting to select it as the method to use for connecting to the Internet. If this field is blank, or if another connection that's not yet created is to be used, then a new dial-up connection must be created (**My Computer**... **Dial-Up Networking**... **Make New Connection**). For assistance on making a new dial-up connection, use Windows® 98/2000/Me Online Help.

**My Telephone and Internet use the same modem (phone line)**

This option is generally enabled when the "Use a Dial-Up Connection" is selected above. **Do not** disable this option *unless* the modem that HAL will use to connect to the Internet is a *different* modem than the one it will use for the telephony features, such as placing calls and recording voice mail messages (see the note on page 81). If the same modem is being used for both telephony and Internet features and this option *isn't* checked, then HAL's telephony program will never release the modem, so the Internet program will never be able to connect and will not download information.

**Use Dedicated/Automatic Connection (LAN, DSL, Cable, other)**

Select this option if the connection will be made automatically or if there is nothing that needs to be done to enable HAL to have access to the Internet. LAN, DSL, and cable modem users should select this option.

**Do not test for network connection before downloading**

If you connect to the Internet through a LAN, DSL, cable modem, or similar type of connection, then you can indicate to HAL whether or not you want it to test the network before it tries to download information. The default setting is for this option to be unchecked, so that HAL *will* test the network. If HAL can't detect the network, then it won't try to download information and will try again after the length of time in the "Retry Attempts" field has passed. If HAL does detect the network, then it will go ahead and download information.

In some situations, you will need to enable this option (checkmark is visible) so that HAL won't check the network before it attempts a download. This might be the case if you have an Intranet set up with only one computer that connects to the Internet. If HAL is running on a computer other than the Internet computer, then you will want to enable this option; otherwise it may not be able to detect the Internet through the other computer and will never try to download information. Enabling this option may also be required with some proxy servers.

**Use Proxy Server**

Select this option if using a Proxy Server to connect to the Internet. Fill in the Proxy Server's name or address in the fields provided.

**Retry Attempts**

If HAL is unable to make a connection to the Internet, it will try three more times to connect. Specify in this field how much time HAL should wait between attempts. Use the up and down arrow keys to change the time. If HAL is unable to connect to the Internet after three attempts, it will cancel the process and wait until the next scheduled download time to try again.

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings.

**Apply**

Saves the settings without closing the screen.

*Related Topics*

pg. 47 Retrieve Internet information by voice
132 Monitor an Internet download

## Modem Control and Dial-Up Connections

If you set up HAL to connect to the Internet through a dial-up connection and you have only one modem, then be aware that HAL will be in control of that modem. HAL has to have control of the modem so that it can answer the phone and record voice messages (if enabled), so that you can interact with HAL through the telephone when you want, and so that it can automatically connect to the Internet for downloading information. This means that if you wish to browse the Internet when HAL is *not* connected to the Internet, you must get control of the modem so that you can dial out to the Internet or have HAL make the connection for you.

NOTE: There is no need to get control of the modem if you're using a LAN, DSL, cable modem, or similar method to access the Internet. Also, if you have two modems installed on the computer and only one of the modems is being used with HAL, then you can still connect to the Internet through dial-up access using the other modem.

There are three ways that you can connect to the Internet when HAL is running:

1. Right-click on the ear icon and select CONNECT TO INTERNET. HAL will connect to the Internet using the dial-up connection that it's setup to use (see *Internet Configuration* on page 79). Once HAL has established a connection to the Internet, you can launch a web browser or any other Internet-related program. The option in the ear icon will change to DISCONNECT FROM INTERNET-- click that option when you want to log off the Internet.

2. Right-click on the ear icon and select VIEW INTERNET INFORMATION. When the *Internet* screen appears (see page 119), click on the MONITOR DOWNLOAD button. When the *Update* screen appears, click on the CONNECT button to have HAL connect to the Internet using the dial-up connection that it's set up to use. Once HAL has established a connection to the Internet, you can launch a web browser or any other Internet-related program. When you're done, click DISCONNECT to have HAL log off the Internet and return control of Internet access to HAL.

3. Right-click on the phone icon and select RELEASE MODEM. A red X will appear over the phone icon. HAL is no longer in control of the modem, so it won't be able to connect to the Internet on its own and it won't be able to receive or place calls. You can now connect to the Internet through the dial-up connection so that you can browse the Internet. To return control of the modem to HAL so that it can automatically download information from the Internet and place and receive calls, right-click on the phone icon and select ACTIVATE MODEM. The red X will disappear from the phone icon and the modem will return to HAL's control.

## E-mail Configuration

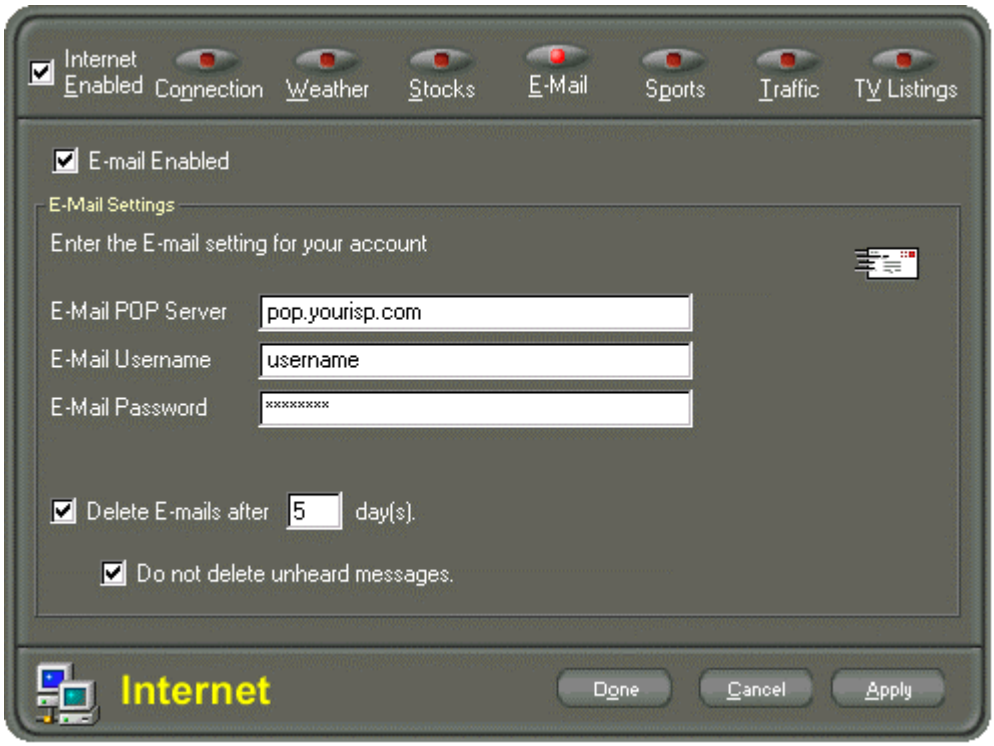
This screen is where you indicate the E-mail account for which HAL is to download messages.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on INTERNET, then click on the E-MAIL button.

Some of the information in this screen will already be filled in if *HAL Setup Wizard* (see page 24) was run after HAL was installed.

In its current configuration, you can't send E-mail messages from within HAL and there is no ability within HAL to determine how long E-mail messages should be kept on your main E-mail server. HAL will, however, read E-mail messages to you. It will read the date and time that the E-mail message was received, who sent the message, and the text in the body of the message. There are certain types of messages that HAL can't read or display, and although HAL will download mail attachments, it will not read the information in those attachments.

Click a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for descriptions of those screens).




NOTE: If you have Microsoft® Outlook™ or another E-mail program set up to erase E-mail messages off the mail server after downloading them and you have HAL set up to download from the same E-mail account, then you won't be able to ask HAL to read you those E-mail messages because they'll be deleted from the mail server before HAL can download a copy of them. If you want to be able to have HAL read you E-mail messages, then you must set up the other E-mail program so that it downloads a copy of the E-mail messages and leaves the original messages on the mail server for HAL to download. You then either have to manually delete messages from the mail server or have the mail server automatically delete messages after a certain number of days.

If the other E-mail program downloads E-mail from one account and HAL downloads E-mail from a different account, then there is no conflict.

**Internet Enabled**
This option must be checked in order for HAL to download information from the Internet.

**E-mail Enabled**
This option must be checked in order for HAL to download E-mail messages.

**E-mail POP Server**
Type the name of the server that handles the E-mail. If your E-mail provider uses different mail servers for outgoing (SMTP) and incoming (POP3) mail, use the address of the POP3 server (e.g. pop.yourisp.com).

**E-mail Username**
Type the username associated with the E-mail account.

**E-mail Password**
Type the password used to access E-mail (the password appears as asterisks).

**Delete E-mails after…**
Enable this option to have HAL automatically delete E-mail messages after a specified number of days. Deleting messages from HAL does not mean that they're deleted from the main mail server - since HAL only downloads *copies* of E-mail messages, the original messages remain on the main mail server until they're deleted manually by you or automatically by the mail server.

**Do not delete unheard messages**
Enable this option to prevent HAL from automatically deleting an E-mail message if that message has not yet been heard.

**Done**
Saves the settings and closes the screen.

**Cancel**
Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

*Related Topics*

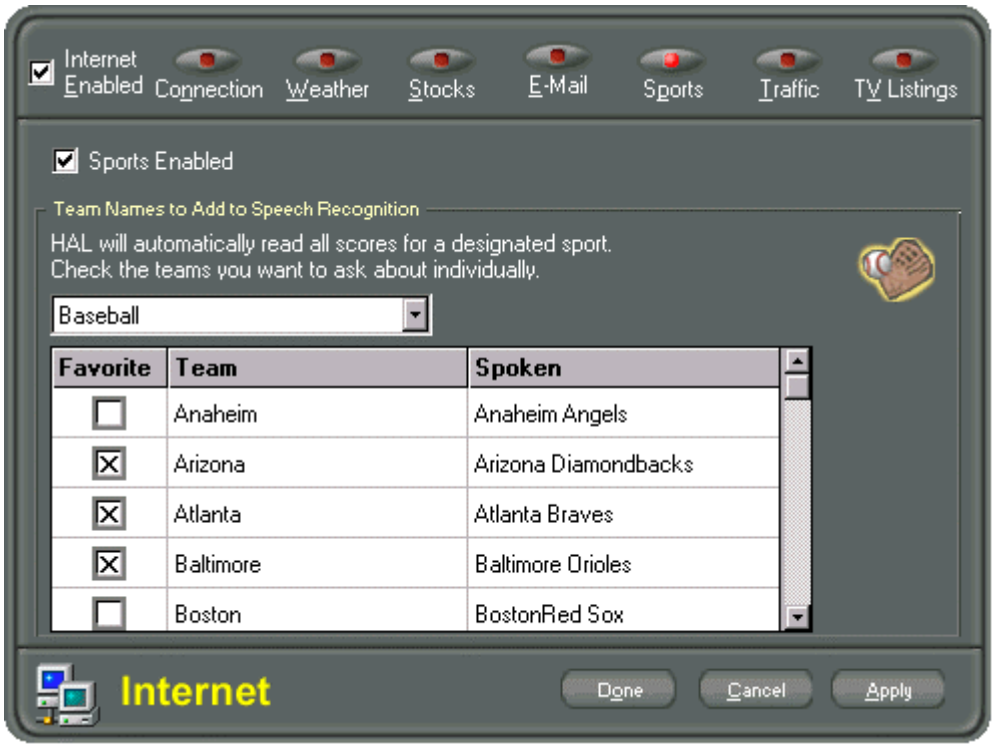
pg. 47 Retrieve E-mail messages by voice
120 View E-mail messages downloaded from the Internet
199 Manually have HAL read E-mail messages
213 Text-to-speech codes

## Sports Configuration

HAL downloads sports score for teams in the professional sports of baseball, basketball, football, hockey, and soccer. This *Sports Configuration* screen is where you select the teams that you want to be able to refer to by name. In other words, if you want to be able to ask for the score of a specific team, such as the Baltimore Orioles, click in the box to the left of the team name (a checkmark will appear). Put a checkmark next to each team name if you want to be able to ask for the score for any team (all team names are selected by default). The scores for all teams in all sports are displayed in the *Internet* screen (see page 124).

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on INTERNET, then click on the SPORTS button.

Click a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for descriptions of those screens).




**Internet Enabled**
This option must be checked in order for HAL to download information from the Internet.

**Sports Enabled**
This option must be checked in order for HAL to download sports scores.

**Professional Sport**
Choose from the drop-down menu the sport whose team names are to be selected or modified. Possible choices are BASEBALL, BASKETBALL, FOOTBALL, HOCKEY, and SOCCER. Any number of team names can be selected in each sport.

NOTE: Scores for a particular sport will not be downloaded if that sport is not in season. Baseball scores, for example, will not be downloaded in winter months.

**Favorite**

Put a checkmark next to a team if you wish to be able to ask for that team's score by name. In other words, in order to be able to ask, "What is the baseball score for Baltimore Orioles?", a checkmark must be visible in the box to the left of "Baltimore" in the baseball grid. Any number of team names can be selected in each sport (all teams are selected by default).

**Team**

The names in this column are how the team names are identified in the *Internet* screen. The entries in this column can not be modified.

**Spoken**

The names in this column are the names to be used when asking for a team's score (a checkmark must be visible next to a team in order to ask for that team's score by name). To change the default name for a team, left-click in the *Spoken* field next to that team. For instance, left-click in the field labeled "Baltimore Orioles" in the baseball grid. The *Sports Phrase* screen will appear with the words "Baltimore Orioles" already entered. Click in that field and type a different name, such as "The Orioles". Click OK in the *Sports Phrase* screen. The *Spoken* name for the Baltimore Orioles is now "The Orioles." If a checkmark is visible next to the team name, then you could ask HAL, "What is the baseball score for *The Orioles*?".

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings

**Apply**

Saves the settings without closing the screen.

*Related Topics*

pg. 47 Retrieve sports scores by voice
124 View sport scores downloaded from the Internet
213 Text-to-speech codes

## Stocks Configuration

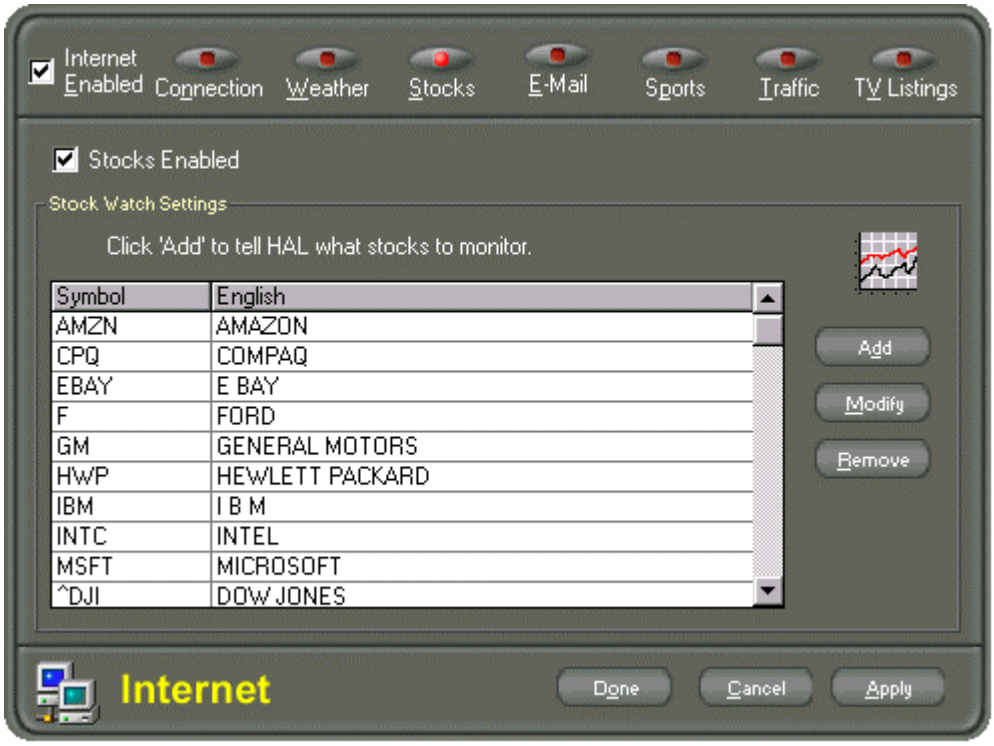
The *Stocks Configuration* screen is where you specify what stocks you want HAL to monitor.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on INTERNET, then click on the STOCKS button.

Some of the information in this screen will already be filled in if *HAL Setup Wizard* (see page 24) was run after HAL was installed.

Information for up to forty (40) stock symbols can be downloaded in HALdeluxe. Some codes require a carat (^) symbol before the stock code (see the list below). The entries in the screen below are illustrations.

Click a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for descriptions of those screens).




**Internet Enabled**
This option must be checked in order for HAL to download information from the Internet.

**Stocks Enabled**
This option must be checked in order for HAL to download stock information.

**Symbol**
This column displays the codes that identify the stocks that HAL is to track.

**English**
This column displays the stocks' names that will be used when talking to HAL (see Chapter 3).

**Add**

Opens the *Stock Phrase* screen. Type the code that is used to identify that particular stock and give it a name. This name is what will be used when talking to HAL. Some additional codes are available for evaluating some of the stock market indices, such as Dow Jones and the S & P 500. These codes require a carat (^) symbol before the stock code (see the list below).


**Modify**

Click on a stock code or name to highlight it, then click this button to modify the entry.

**Remove**

Click on a stock code or name to highlight it, then click this button to remove that stock.

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings.

**Apply**

Saves the settings without closing the screen.

## Stocks Requiring the Carat Symbol

***Dow Jones Averages***

| | |
|---|---|
| ^DJA | Composite |
| ^DJI | Industrials |
| ^DJT | Transportation |
| ^DJU | Utilities |

***New York Stock Exchange***

| | |
|---|---|
| ^NYA | Composite |

***Nasdaq***

| | |
|---|---|
| ^IXIC | Composite |
| ^NDX | Nasdaq 100 |

***Standard and Poor's***

| | |
|---|---|
| ^OEX | 100 Index |
| ^SPC | 500 Index |

***Treasury Securities***

| | |
|---|---|
| ^IRX | 13-Week Bill |
| ^TYX | 30-Year Bond |
| ^FVX | 5-Year Note |
| ^TNX | 10-Year Note |

***Commodities***

| | |
|---|---|
| ^DJS | Dow Jones Spot |
| ^DJC | Dow Jones Futures |
| ^XAU | Philadelphia Gold and Silver |

***Other Indices***

| | |
|---|---|
| ^XMI | Major U.S. Market Index |

*Related Topics*


pg. 47 Retrieve stock quotes by voice
126 View stock information downloaded from the Internet
213 Text-to-speech codes

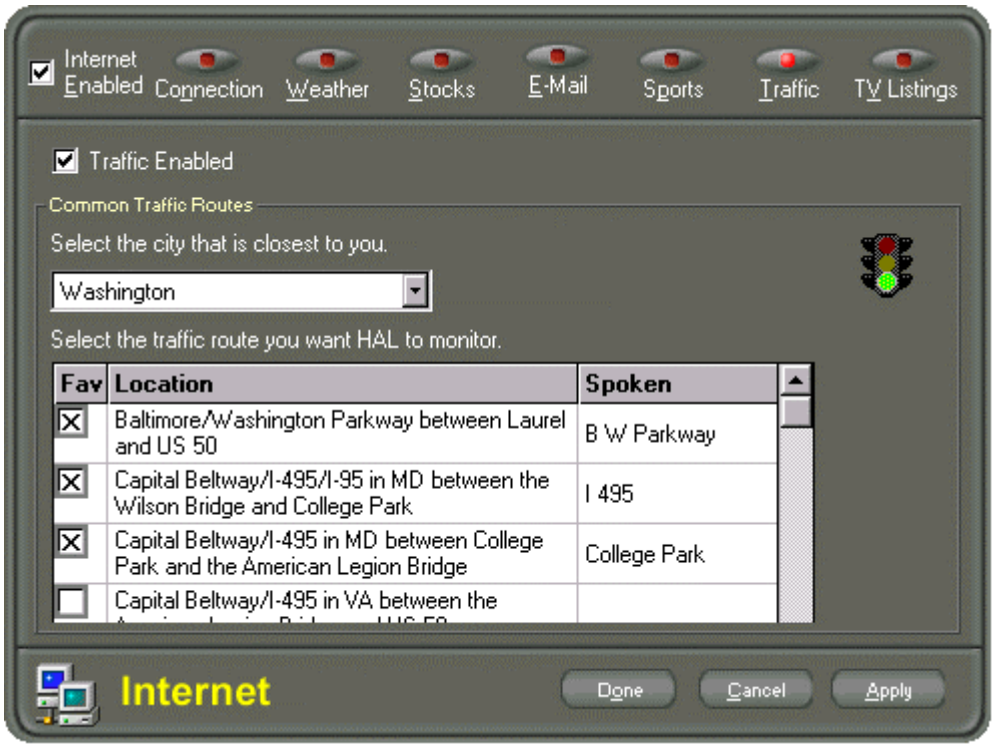
## Traffic Configuration

The *Traffic Configuration* screen is where you select the traffic routes for which HAL is to download information. Currently, traffic information can only be downloaded for a few cities. Additional cities will be added to HAL's Internet traffic retrieval database in future versions. Watch the HAL website (www.AutomatedLiving.com) for software updates.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration** In the *HAL Configuration* screen, double-click on INTERNET, then click on the TRAFFIC button.

Up to five (5) traffic routes can be selected.

Click a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for descriptions of those screens).




**Internet Enabled**
This option must be checked in order for HAL to download information from the Internet.

**Traffic Enabled**
This option must be checked in order for HAL to download traffic information.

**Common Traffic Routes**
Select from the drop-down menu the city whose traffic information is to be downloaded.

**Fav**(orite)
A checkmark in this column next to a traffic route indicates that the route has been added to HAL's vocabulary. If a traffic route isn't checked as a favorite, then you can't ask about that route's information.

**Location**
The descriptions in this column are how the traffic routes are identified in the *Internet* screen (see page 128). The information in this column can't be modified.

**Spoken**

The names displayed in this column are the names to use when interacting with HAL by voice. To give a traffic route a name, left-click in this field. Another screen will appear. Type a name for this traffic route and click OK. The name will appear in this column. (Make sure to click DONE or APPLY at the bottom of this configuration screen for the names to be saved.)

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings.

**Apply**

Saves the settings without closing the screen.

*Related Topics*

pg. 47 Retrieve traffic information by voice
128 View traffic information downloaded from the Internet
213 Text-to-speech codes

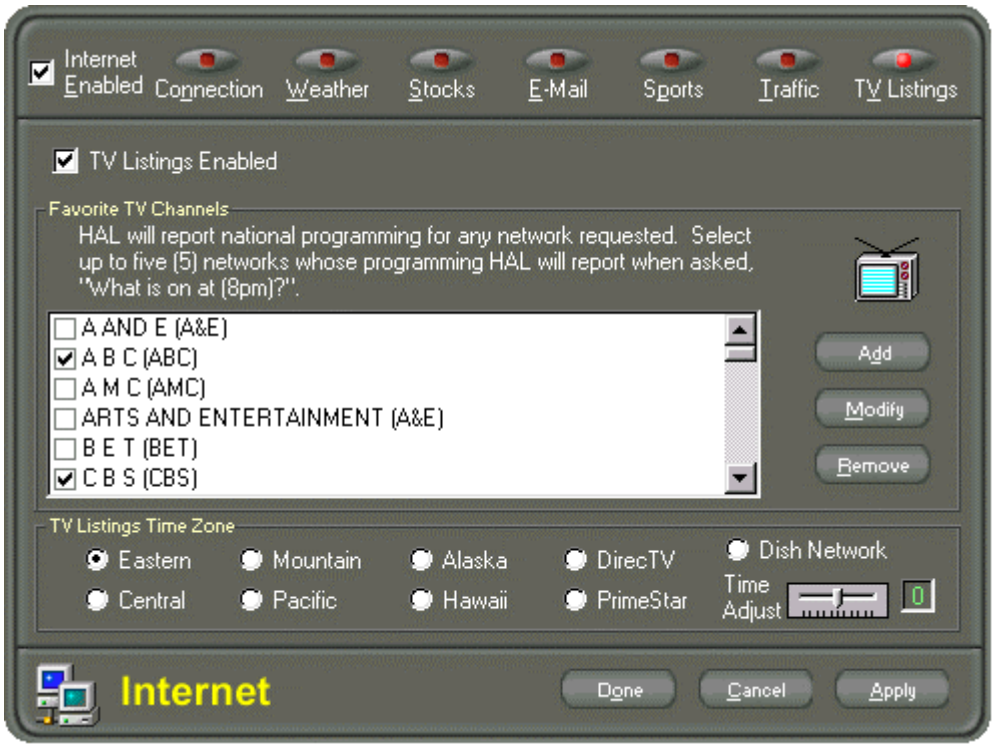
## TV Listings Configuration

The *TV Listings Configuration* screen is where you choose whether HAL is to download TV listings for network/cable channels or a specific satellite provider.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on INTERNET, then click on the TV LISTINGS button.

Local programming information is not retrieved currently. The list of channels in this screen is all of the channels that can be downloaded, but only the channels that correspond to the selected network/cable channel time zone or satellite program provider will be downloaded and only those channels can be queried by voice.

Click a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for descriptions of those screens).




**Internet Enabled**
This option must be checked in order for HAL to download information from the Internet.

**TV Listings Enabled**
This option must be checked in order for HAL to download TV listings.

**Channel List**
Each line represents a different channel. The first few words in a line represent the "name" of that channel, at least as far as HAL is concerned. In other words, use this name when you want to ask HAL what will be airing on that channel at a specific time. The channel names appear just to the right of the check boxes.

The letters in parentheses represent how HAL identifies each channel in the *Internet* screen (see page 130). In other words, to see the programming scheduled to air on the *Arts and Entertainment* channel, look for the letters A & E in the *Internet* screen.

**Favorites**

Select up to five (5) favorite channels among the network/cable or satellite channels that are selected for downloading. When HAL is asked a generic question, such as "What is on at 9pm?", it will respond by reading the programs scheduled to air on the favorite channels. This does not prevent you from asking about a specific channel. For instance, if *ABC* is not selected as a favorite, you could still ask, "What is on ABC at 9pm?" and HAL will respond. If it's not selected as a favorite, however, its programming will not be listed when the generic question "What is on at 9pm?" is asked.

NOTE: It's easier to select favorite channels after the system has downloaded program listings at least once, because only the channels for the selected time zone or satellite system will be downloaded. Go to the *Internet* screen (see page 130) and note the initials of the channels that you wish to select as favorites. Then come back to this screen and select the channels that match those initials. If a channel appears in the *Internet* screen but isn't listed in this grid, then you need to add it to this screen (see ADD below).

**TV Listings Time Zone**

Select whether to download program listings for network and cable channels for a specific time zone or to download the schedule of one of the satellite program providers.

NOTE: Program schedules may be downloaded for channels that aren't available in your area or aren't included with your cable or satellite system.

The "Time Adjust" field is for users who choose to download TV listings for satellite program providers but want HAL to announce and display the program times based on local time, not Eastern time. For instance, a satellite program provider is scheduled to air a movie at 8:00pm. Users living on the East Coast will see that movie at 8:00pm, but people living in California will actually see that movie at 5:00pm because California is three (3) hours behind the East Coast. Users in California could move the "Time Adjust" field to the left until it indicates "-3". HAL will then subtract three hours from the program times downloaded from the Internet, so a movie that is scheduled to air at 8:00pm Eastern time will show up in the *Internet* screen as airing at 5:00pm.

**Add**

Opens the *Channel Edit* screen. In the "Channel Code" field, enter the initials that identify this channel in the *Internet* screen (the initials entered in this screen must match the initials that appear in the *Internet* screen). In the "Channel Name" field, type a name that will be used when asking HAL for the new channel's programming (see *Syntax* in Chapter 3 for more information).


NOTE: Adding a channel to this list does not affect the actual downloading of programming information. In other words, if "DirecTV" is selected in the *TV Listings Configuration* screen and you add a channel called "XAM", program information for this channel won't be downloaded unless DirecTV includes programming information for "XAM".

**Modify**

Click this button to modify the channel code or name for the selected channel.

**Remove**

Click this button to remove the selected channel from HAL's vocabulary. Deleting a channel from this list only removes it from the vocabulary so that you can't ask for that channel's programming by name. The program information for that channel will still download and appear in the *Internet* screen.

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

*Related Topics*
pg. 47 Retrieve TV listings by voice
130 View TV listings downloaded from the Internet
213 Text-to-speech codes

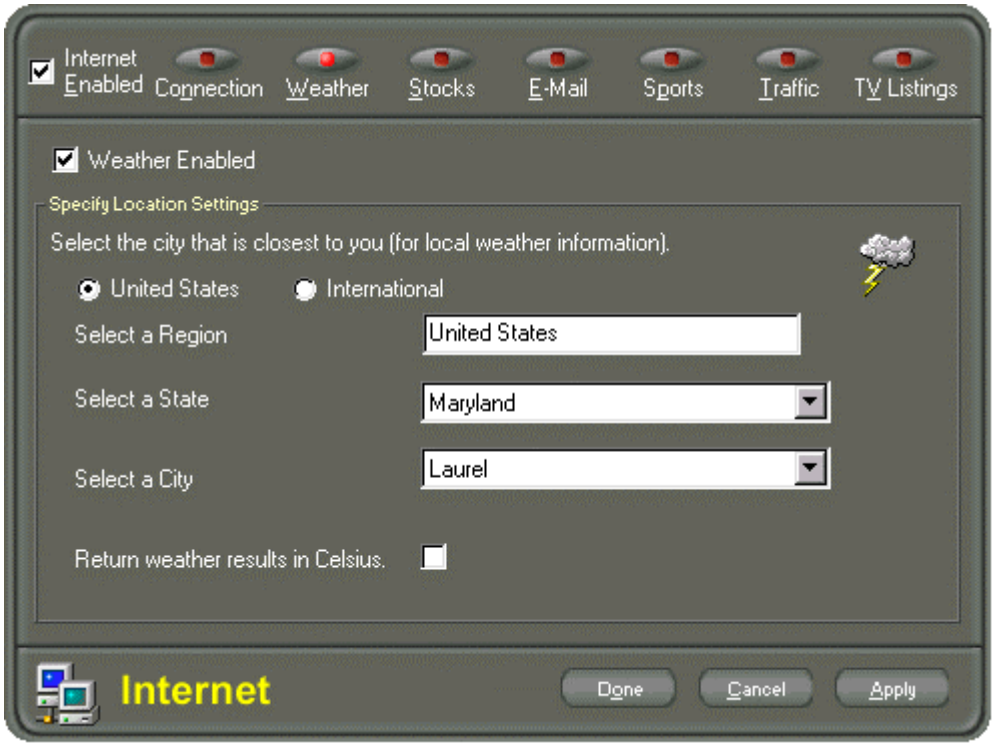
## Weather Configuration

The *Weather Configuration* screen is where you select the city whose weather information HAL is to download.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on INTERNET, then click on the WEATHER button.

Some of the information in this screen will already be filled in if *HAL Setup Wizard* (see page 24) was run after HAL was installed.

Click a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for descriptions of those screens).




**Internet Enabled**
This option must be checked in order for HAL to download information from the Internet.

**Weather Enabled**
This option must be checked in order for HAL to download weather forecasts.

**United States/International**
Select whether to download weather information for a city in the United States or a city in another country.

**Select a Region**
If "United States" is chosen above, then "United States" will appear in this field. If "International" is selected above, then select from this field the international region that the city is in.

**Select a State**
If "United States" is chosen above, then use this field to select the state that the city is in. If "International" is selected above, then select from this field the area of that international region that the city is in.

**Select a City**
Select a city from this drop-down menu. The cities that are available depend on the options selected in the two fields above.

**Return weather results in Celsius**
Enable this field if you'd like HAL to read and display temperature information in Celsius instead of Fahrenheit.

**Done**
Saves the settings and closes the screen.

**Cancel**
Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

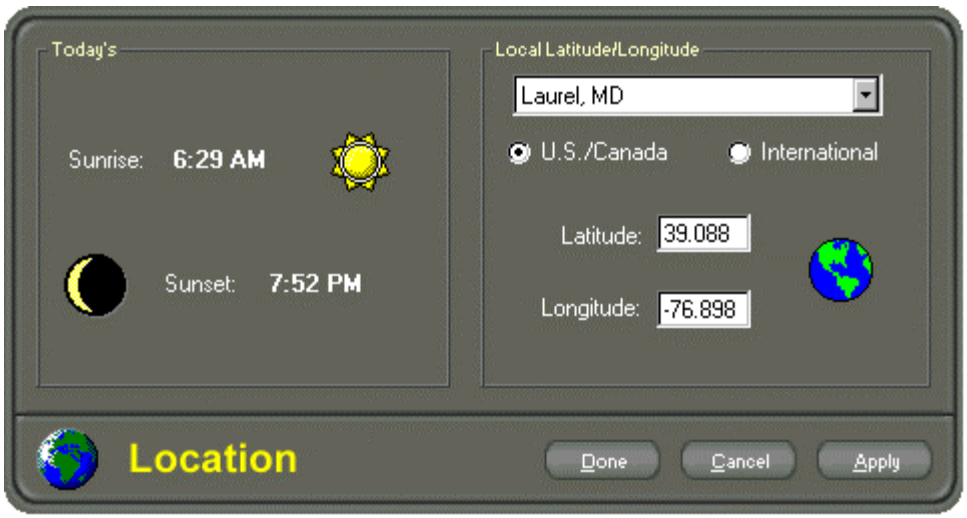
*Related Topics*

pg. 47 Retrieve weather forecasts by voice
134 View weather forecasts downloaded from the Internet
213 Text-to-speech codes

# LOCATION CONFIGURATION

The *Location Configuration* screen is where you specify your location by its latitude and longitude coordinates. The sunrise and sunset times will be displayed in this screen. Sunrise and sunset information can be used in *rules* and *schedules* (see Chapter 7). If the latitude and/or longitude coordinates are changed, HAL will need to be restarted for the sunrise and sunset times to be calculated for the new coordinates.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on LOCATION.




**Local Latitude/Longitude**

Select whether you want sunrise and sunset information for a city in the U.S. or Canada or for a city in another part of the world, then choose from the drop-down menu the city nearest to the location of interest. If the city you're interested in is not listed, then select USER DEFINED and enter the coordinates for that location in the fields below.

**Latitude/Longitude**

This field is populated automatically when a location is selected from the drop-down menus above. To enter latitude and longitude coordinates directly into this field, set the "Local Latitude/Longitude" field (above) to USER DEFINED then enter the coordinates. For the latitude, locations north of the equator are positive numbers and locations south of the equator are negative numbers. For longitude, locations west of Greenwich Mean Time (GMT) are negative, and locations east of GMT are positive. Minutes should be converted to their percentage of an hour (divide the minute time by 60). For example, a location with a latitude of 39° N 15', would be entered as 39.25 because "N" indicates a positive number for "39" and 15 divided by 60 is ".25".

**Today's Sunrise and Sunset**

This area indicates the sunrise and sunset times for the current day. If the latitude and/or longitude coordinates were changed recently, then HAL should be restarted so that it can recalculate the sunrise and sunset times.

The times are displayed according to the time zone selected in the Windows® Date/Time Properties screen. In other words, if the PC's internal clock is set to Eastern time zone, and Los Angeles, California, is selected for the latitude/longitude coordinates, then the times displayed for sunrise/sunset will be based on Eastern time and not California (Pacific) time (i.e. 9:08am instead of 6:08am).

**Done**

Saves the settings and closes the screen.

**Cancel**
Closes the screen without saving the settings.

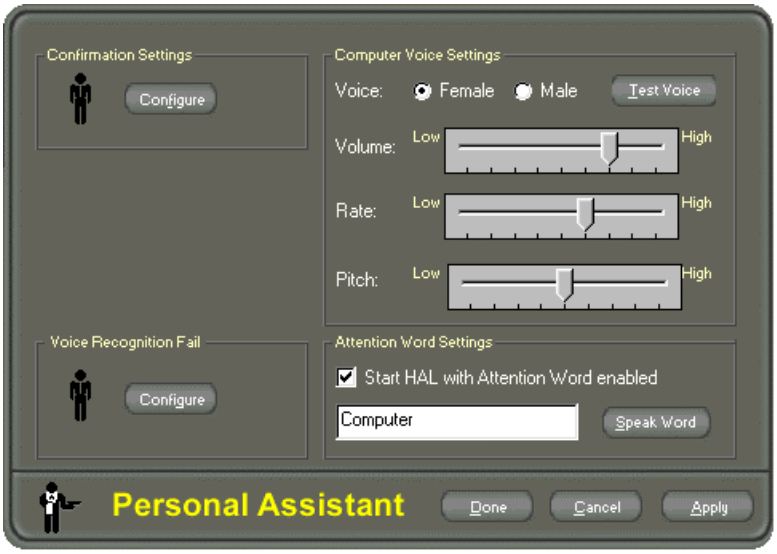
**Apply**
Saves the settings without closing the screen.

*Related Topics*
pg. 156 Use sunrise or sunset times as a condition in a Rule
165 Use sunrise or sunset times to start a Schedule

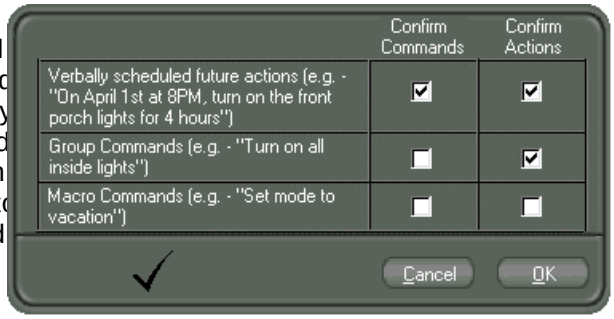
## PERSONAL ASSISTANT CONFIGURATION

The *Personal Assistant Configuration* screen is where you specify certain parameters within HAL, such as whether it speaks in a male or female voice, whether or not it confirms commands and actions, and what Attention Word will be used to put HAL into listening mode.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on PERSONAL ASSISTANT.



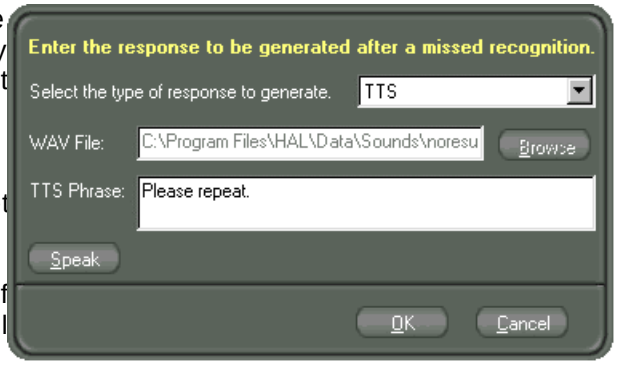

**Configure**
Click this button to open the *Confirmations* screen.




*Confirm Commands*
A checkmark in this column indicates that HAL will ask for confirmation of that type of command before carrying it out. The system will then comply or not comply, depending on whether you respond "Yes," "No," or "Cancel." The "Confirm Commands" option for Macros relates only to commands to run a Macro by using its name and not its recognition phrase (see *Syntax* in Chapter 3 for more information).

*Confirm Actions*
A checkmark in this column indicates that HAL will announce when it has completed or cancelled the specific type of verbal command, such as "*I have turned on the living room light*".

**Voice Recognition Fail**
Click on the CONFIGURE button to bring up the screen at right. This screen is where you specify how you want HAL to inform you when it doesn't hear or understand a command whenyou give it. The possible choices are NONE, WAV, and TTS.




"NONE" means that HAL won't do anything to let you know that it didn't hear or understand you.

"WAV" means that a .wav file will be played. If WAV is selected, then the BROWSE button will become active; click that button to locate and select a WAV file for HAL to play. The SPEAK button will change to PLAY- click that button to hear the WAV file.

"TTS" means that HAL will read the text that you write in this screen. Click the SPEAK button to hear HAL say the text.

The default option for this screen is TTS.

**Voice**
Choose whether HAL will speak with a male or female voice.

**Test Voice**
Click on this button to hear an example of HAL speaking in the male or female voice and with varying volume, rate, and pitch settings.

**Volume, Rate, Pitch**
Adjust these levels to vary HAL's voice. Click the TEST VOICE button to hear the modifications.

**Attention Word**
Type the word or phrase that will put HAL into *listening mode*. If the attention word is a phrase, like "Hello Computer", the phrase could be entered as one word ("HelloComputer") instead of two. This may increase the accuracy of HAL's speech recognition by eliminating the possibility that HAL could enter listening mode after hearing just part and not all of the attention word or phrase. Be aware that typing a phrase as one word may affect how HAL pronounces it. Use the SPEAK WORD button to hear how HAL pronounces the attention word.

NOTE: HAL's speech recognition accuracy can also be adjusted in the *Voice Recognition Configuration* screen (see page 106).

**Start HAL with Attention Word Enabled**
A checkmark in this box means that every time HAL is started, HAL will be listening for the attention word, and will enter listening mode when it hears that word or phrase. If this is not selected, then HAL can only be put into listening mode by using the ear icon or if it's put into listening mode as part of an action in a rule, macro, or schedule. This option is disabled by default.

NOTE: The attention word only applies to interaction with HAL via microphones- the attention word is not used when interacting with HAL through telephones.

**Speak Word**

Once the attention word has been entered in the field at left, click this button to hear HAL say it. If the computer does not pronounce the word as desired, change the spelling of the word to manipulate HAL's pronunciation of the word or phrase. HAL pronounces and understands written words phonetically. For example, the name *Gina* is pronounced with a long "e", but HAL pronounces it with a short "i". Spell the name phonetically, "Geena", so that HAL will pronounce it properly.

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings.

**Apply**

Saves the settings without closing the screen.

*Related Topics*


pg. 36 Enable/Disable the Attention Word Mode from the ear icon
45 Get HAL's attention using the Attention Word
116 Monitor voice interaction from the *Status* screen
213 Change HAL's speech using text-to-speech codes

# TELEPHONE CONFIGURATION

The *Telephone Configuration - General* screen is where you set up HAL to use telephones.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on TELEPHONE.

The modem type and COM Port fields will already be configured if the *HAL Setup Wizard* (see page 24) was run after HAL was installed.

Click on a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for explanations of those screens).


**Telephone Enabled**
This option must be selected in order to access HAL's telephony features.

**Modem Type**
This field displays the name of the modem you selected in the *HAL Setup Wizard* (see page 24).

**COM Port**
This field displays the COM Port that the modem above is using.

**Supports house phones**
A checkmark in this field indicates that you can interact with HAL through one or more phones in the house. Go to the *In-House Phone Interaction Feature* on page 18 for information on setting up one or more phones for local interaction. If this field is disabled, then you will only be able to talk to HAL through microphones and remote phones. This feature requires a HAL-compatible modem (see page 9) and will be enabled by default if HAL found a compatible modem on the system during *HAL Setup* (see page 24).

**Telephone Interaction Attention Tone**

Select from these drop-down menus which key to use to get HAL's attention when using a local (house) phone or a remote phone. The default option is the pound (#) key. When using a local phone, simply press this key after picking up the phone and before pressing any digits. (If you press a digit other than this attention key, then HAL will assume you are trying to place a call and will release control of the phone line so that you can do so.) When calling in on a remote phone, press this key while HAL is playing the greeting for the main mailbox.

**Telephone Handset Volume**

This field is for adjusting the volume level as it goes into or comes out of remote or local (house) phones. The volume going into and coming out of the modem when HAL's speakerphone feature (see page 21) is being used can also be adjusted in this field (it can also be adjusted in the *Phone Pad*). For example, if callers complain that they can't hear your voice mail greeting that well, then select "Output Remote Handset" from the drop-down menu and slide the bar further to the right. If HAL seems to be having trouble hearing you through house phones, then select "Input Local Handset"; slide the bar to the right if you think the volume is too low, or slide it to the left if you think the volume is too loud and is being distorted.

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings

**Apply**

Saves the settings without closing the screen.

*Related Topics*

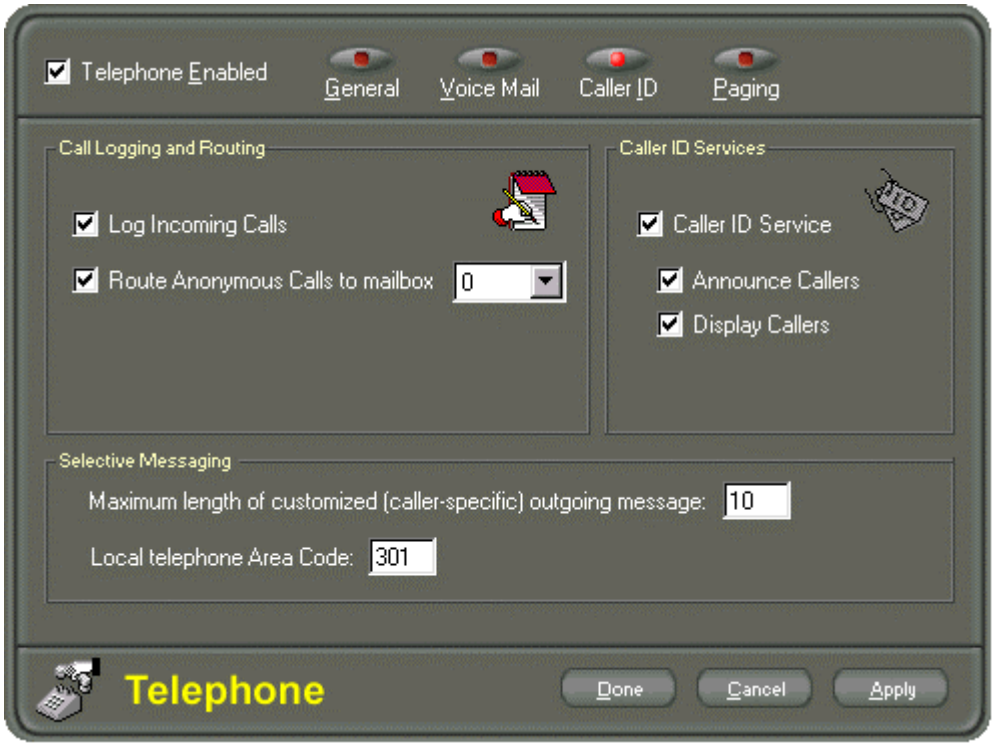

pg. 18 Set up the In-House Phone Interaction Feature
21 Set up HAL's Speakerphone Feature
43 Use telephones with HAL
47 Tell HAL to call someone
115 Monitor telephone line status from the *Status* screen
187 Use the *Phone Pad*
211 Use HAL with PBX Phone Systems

## Caller ID Configuration

The *Caller ID Configuration* screen is where you enable HAL's Caller ID features. The telephone line going into HAL must have the Caller ID service in order for the features in this screen to work. Call your telephone provider for more information on obtaining the Caller ID service.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on TELEPHONE, then click on the CALLER ID button.

Click on a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for explanations of those screens).




**Telephone Enabled**
This option must be selected in order to access HAL's telephony features.

**Log Incoming Calls**
Enable this option to have Caller ID information for all incoming calls listed in the *Calls In* screen (see page 188), in the *Messages* screen (see page 199) and in the *Status All* and *Status Phone* screens (see page 111).

**Route anonymous calls to mailbox**
If the Caller ID information of an incoming call has been blocked by the caller, then you can have it automatically routed to a specific mailbox that perhaps treats those calls differently than normal calls. For instance, you could have these types of calls automatically routed to a mailbox that greets them with a special message (e.g. "We don't accept calls from blocked phones") and then perhaps hangs up on the caller without allowing the caller to leave a message. "Blocked" calls are displayed in HAL's *Messages* and *Calls In* screens as a "B" in the Caller ID field.

**Caller ID Service**
This option must be enabled in order for HAL's Caller ID features to work.

**Announce Callers**

Enable this option if you'd like HAL to announce Caller ID information over the speakers. Caller ID information is generally sent between the first and second rings, so the phone must ring at least that many times for the information to be announced. If the Caller ID service on the phone line includes the name and number, then both sets of information are announced.

**Display Callers**

Enable this option to have Caller ID information for an incoming call appear in the display area of the *Phone Pad* screen (see page 187).

**Maximum length of customized outgoing message**

Type in this field how long a customized message can be. Caller-specific greetings will be heard only by the caller specified when the custom greeting is recorded. Go to *Syntax* in Chapter 3 for information on how to leave a customized greeting for a specific caller.

**Local telephone Area Code**

Indicate in this field the local area code. If you enter only seven (7) digits for local numbers in the Directory (see page 146), then HAL will use this area code when it evaluates phone numbers of incoming calls. Because Caller ID almost always displays ten (10) numbers, entering a number in this field in effect forces HAL to skip the area code and evaluate only the remaining digits. If the remaining digits match a number in the Directory, then HAL will check to see if there is a caller-specific greeting for that caller. This field allows up to five (5) digits (for use with Caller ID functionality in countries other than the United States).

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings.

**Apply**

Saves the settings without closing the screen.

*Related Topics*

pg. 43 Use telephones
115 Monitor the telephone line status from the *Status* screen
188 View the incoming call log
190 View the outgoing call log
213 Text-to-speech codes

## Paging Configuration

The *Paging Configuration* screen is where you specify what numeric message is sent when you verbally tell HAL to page someone (see *Syntax* on page 71). A page can also be sent as an action in a macro, rule, or schedule, but the numeric message for that action is entered in the *Action Wizard* screen (see page 174).

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on TELEPHONE, then click on the PAGING button.


**Telephone Enabled**
This option must be selected in order to access HAL's telephony features.

**Phone Number to leave on numeric pagers**
Enter the number that you want to show up in the recipient's message window. This number will be transmitted as the message when you verbally tell HAL to page someone (see *Syntax* on page 71).

**To terminate page, dial this character**
Enter the telephone digit that HAL is to "press" to indicate to the paging system that it has finished entering the message. Typically, this will be the pound (#) key or the star (*) key.

**Done**
Saves the settings and closes the screen.

**Cancel**
Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

*Related Topics*

pg. 43 Use telephones
71 Tell HAL to page someone
148 Add pager information to HAL's Directory
174 Have HAL page someone as an action in a macro, rule, or schedule

## Voice Mail Configuration

The *Voice Mail Configuration* screen is where you set parameters relating to HAL's answering machine.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on TELEPHONE, then click on the VOICE MAIL button.

The answering machine will already be enabled if the *HAL Setup Wizard* (see page 24) was run after HAL was installed.

Click on a button at the top of the screen to go to the configuration screen for that topic (see the rest of this chapter for explanations of those screens).


**Telephone Enabled**
This option must be selected in order to access HAL's telephony features.

**Turn answering machine on**
Check this box to activate HAL's answering machine (voice mail) feature. The answering machine can also be enabled and disabled verbally (see *Syntax* in Chapter 3) or from the phone icon menu.

**When answering machine is on, answer on ring**

Choose from the drop-down menu the number of rings after which HAL will answer the phone and play the main greeting. This field grays out when the "Enable Toll Saver" option is selected.

**When it is off, answer to HAL on ring**

Choose from the drop-down menu the number of rings after which HAL will answer the phone when the answering machine is off. This is for remotely accessing HAL when the answering machine is disabled (when the answering machine is enabled, HAL can be accessed remotely by pressing the key that's selected in the General section of this *Telephone Configuration* screen).

**Enable Toll Saver**

A checkmark indicates that this option is enabled. This option helps to save money when calling long distance to retrieve messages - if the phone is not answered before the specified number of rings, then there are no messages and the phone can be hung up before long distance charges are incurred. For instance, this screen indicates that if HAL does not answer the phone after two (2) rings, then you know that there are no new messages and you can hang up before the fourth (4) ring because that's when HAL will pick up, regardless of the number of messages.

**No Messages, Answer on Ring**

Choose from the drop-down menu the number of times the phone is to ring before the answering machine picks up if there are no messages.

**Unheard Messages, Answer on Ring**

Choose from the drop-down menu the number of times the phone rings before being picked up when there are unheard (new) messages.

**Move heard messages to SAVED**

Select this option if you want voice mail messages to be moved to the *Saved* area in HAL after the messages have been heard. Saved messages can be viewed and played back in the *Messages* screen (see page 199) or played again verbally (see *Syntax* in Chapter 3).

**Leave heard messages marked as NEW**

Select this option if you want voice mail messages to remain in the *New* area in HAL after the messages have been heard. New messages can be viewed and played back in the *Messages* screen (see page 199) or played again verbally (see *Syntax* in Chapter 3).

**Show/Play newest message first**

Select this option if you want HAL to display and play messages in the reverse order of how they were recorded or downloaded. In other words, the newest message will be displayed at the top of the *Messages* screen (see page 199) and played first and the oldest message will be displayed at the bottom of the screen and played last.

**Show/Play oldest message first**

Select this option if you want HAL to display and play messages in the order of how they were recorded or downloaded. In other words, the oldest message will be displayed at the top of the *Messages* screen (see page 199) and played first and the newest message will be displayed at the bottom of the screen and played last.

**Play sound every…**

Enable this option if you want HAL to "beep" when there are new, unheard voice mail messages. Enter a number to indicate how often HAL is to "beep".

**Automatically delete messages which are…**

Enable this option if you want HAL to automatically delete "hang-ups" by having it delete messages that are shorter than the time specified in the drop-down menu.

**Play 'options' message…**

Enable this option if you want HAL to read the message options before playing the first voice message when retrieving them verbally (see *Syntax* in Chapter 3). If this option isn't enabled, then HAL won't list the options. The options can be played at any time, however, by saying "Options" after HAL reads a message (when interacting through microphones), or by pressing the star (*) key during or after HAL plays a message (when interacting through telephones).

**Done**

Saves the settings and closes the screen.

**Cancel**

Closes the screen without saving the settings.

**Apply**

Saves the settings without closing the screen.

*Related Topics*

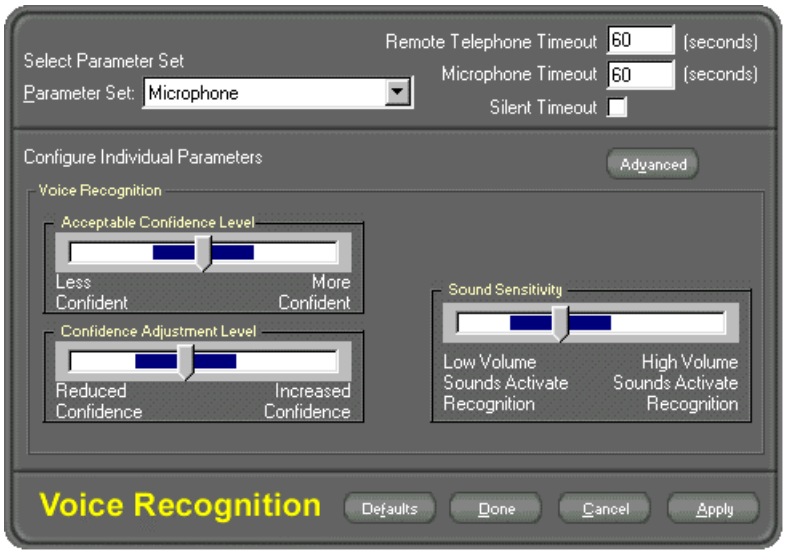

pg. 38 Enable/Disable the answering machine from the phone icon
43 Use telephones
47 Retrieve voice mail messages by voice and verbally enable/disable the answering machine
115 Monitor the telephone line status from the *Status* screen
187 The *Phone Pad* screen
197 Add and modify mailboxes
199 The *Messages* screen
213 Text-to-speech codes

# VOICE RECOGNITION CONFIGURATION

The *Voice Recognition Configuration* screen is where you modify the parameters that HAL uses during verbal interaction. Adjust the values in this screen to tailor HAL's speech recognition abilities to the environment in which HAL is running. Background noise, speech patterns, and computer hardware all have an impact on HAL's ability to recognize speech.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on VOICE RECOGNITION.

## ***Basic* Screen**




**Parameter Set**

Choose from the drop-down menu the voice recognition environment that is to be set. Possible choices are MICROPHONE, ATTENTION WORD, LOCAL TELEPHONE HANDSET, and REMOTE TELEPHONE HANDSET. Although the types of parameters to be set are the same for each environment, the specific levels those parameters are set to will not necessarily be the same for each environment. For instance, you may not want to set the levels for the Attention Word as "loose" as you set the levels for the Microphone. Stricter recognition parameters for the Attention Word make it more difficult for HAL to go into listening mode accidentally, but tighter levels in the other environments increase the chances of HAL not understanding a spoken command. Experiment with the levels to achieve the best recognition for each environment.

**Remote Telephone Timeout/Microphone Timeout**

These fields are for setting how long HAL is to wait for a valid command before it automatically exits listening mode (stops listening). Which timeout period HAL uses depends on how you were interacting with HAL -- whether it was through a microphone or from a remote phone. If HAL doesn't hear a valid command during the specified time, then it will say "Goodbye" and exit listening mode. (A value of "0" disables the timeout feature.)

NOTE: If you don't say "Goodbye", "That's all", or "Thank you" before hanging up a remote phone, then HAL will still wait the timeout period before it sends the command to hang up the phone. Anyone calling in before that time expires will hear a busy signal. If you *do* say one of those phrases, then HAL will send the hang up command immediately.

**Silent Timeout**

If you have the *Microphone Timeout* feature above enabled (any number other than "0" is in the field), then you can disable HAL's "Goodbye" announcement when it times out by enabling this field.

NOTE: This does not prevent HAL from saying "Goodbye" or "You're welcome" if you verbally end conversation with HAL by saying "That's all", "Goodbye", or "Thank you." This option only relates to the microphone timeout feature.

**Advanced**

Click to reveal the "Advanced" Voice Recognition screen (see below), where you have greater control over these settings and other parameters.

**Acceptable Confidence Level**

Slide the tab to set HAL's confidence level threshold. In other words, how confident the engine is about the result it's returning in relation to what was said. A high number indicates a high amount of confidence and a low number indicates a low amount of confidence. A confidence level is returned with each result that the engine processes. If the confidence level is higher than the set acceptable confidence level, the result is accepted, or what was spoken is accepted. If the confidence level of the result is below the set acceptable confidence level threshold, then the result (or what was spoken) is rejected. For example, if you say "What dime is it?" instead of "What time is it?", the Automatic Speech Recognition (ASR) engine might -- after looking at the list of possible words -- return the word TIME instead of DIME, but it will likely do so if the confidence level is low. In other words, when the engine evaluates how close to "time" the word "dime" is, it might decide that its level of confidence in the match is 30. If the acceptance threshold is set to 50, then the engine rejects the phrase "What dime is it?" because the confidence level of 30 is below the acceptable threshold of 50. If, however, the acceptance threshold is set to 25, then the engine will accept the phrase because the confidence level of 30 is higher than the acceptance threshold. The *Status* screen (see page 116) includes a field to indicate HAL's level of confidence.

**Confidence Adjustment Level**

Slide the tab to set HAL's rejection threshold. HAL looks at how close the phonemes of what was spoken matches the phonemes in the context. The higher the rejection penalty, the less it rejects. The lower the rejection penalty, the more it rejects.

There are two things that can happen:

False Rejection -- a user says something that is in the context but the engine rejects it. In other words, the engine rejects something that it should have accepted. This can happen when the rejection penalty is set low.

False Acceptance -- a user says something that is NOT in the context but the engine accepts it. In other words, the engine accepts something that should have been rejected. This can happen when the rejection penalty is set high.

A trade-off between these situations must be determined. In other words, which is worse -- accepting something that is not said, or rejecting something that is?

**Sound Sensitivity**

Slide to tab to set the level at which the speech engine separates speech from normal background noise and microphone/sound board hiss. In other words, how much louder than background noise do you have to speak for HAL to understand you. If you happen to have the microphone level and the master recording levels set high, yet you are still getting low volume signals (as sampled using the Windows® Sound Recorder program), then you can lower this level to get more sensitivity. Over amplification sends a distorted signal to the speech engine, so try not to have your microphone or master recording levels set too high. If these levels are set very high, consider changing your microphone placement or microphone type. If you desire to decrease the background noise by raising this level, be aware that this increases the decibel jump that is required to trigger the engine -- you may have to initially speak much louder than the background noise to get the recognition engine to start recognizing. It is best to make sure with the Sound Recorder test that you are getting a good, clean signal.

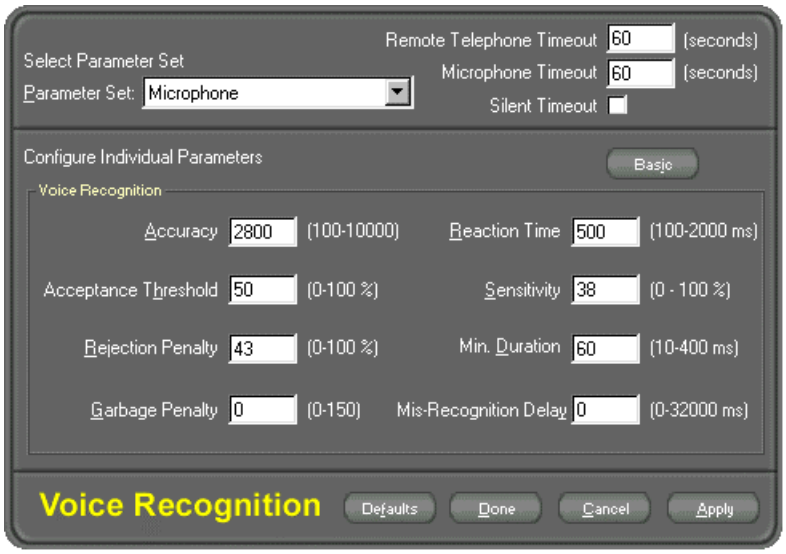
**Defaults**
Resets the voice recognition parameters to the default values. This cannot be undone, even by clicking CANCEL.

**Done**
Saves the settings and closes the screen

**Cancel**
Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

## ***Advanced* Screen**




**Parameter Set**
Same as the *Parameter Set* field in the "Basic" screen.

**Remote Telephone Timeout/Microphone Timeout**
Same as the *Remote Telephone Timeout/Microphone Timeout* fields in the "Basic" screen.

**Silent Timeout**
Same as the *Silent Timeout* field in the "Basic" screen.

**Basic**
Click to return to the "Basic" screen.

**Accuracy**
This determines how hard the engine will work to get a result. The higher the parameter, the harder the engine works. The harder the engine works the higher the recognition accuracy. The trade-off is that as the engine works harder, it takes longer to get a result and uses more CPU load and memory. The lower the parameter, the lower the CPU load, the lower the memory usage, the quicker a result is returned and, in turn, the recognition accuracy is lower. The default setting works well in most cases.

**Acceptance Threshold**
Same as the *Acceptable Confidence Level* field in the "Basic" screen.

**Rejection Penalty**
Same as the *Confidence Adjustment Level* field in the "Basic" screen.

**Garbage Penalty**
Higher values require a closer matching of key words. A lower value allows for some flexibility but increases the chance of accepting false commands. This parameter does not affect recognition a great deal at this time.

**Reaction Time**
When speaking, the Automatic Speech Recognition (ASR) engine is looking for space between sounds as a means of determining when you are done speaking so that it can begin to process what it heard. If you speak slowly, thus creating a longer period of time between words, then increase this parameter to provide more time between words before the engine starts to process the command.

**Sensitivity**
Same as the *Sound Sensitivity* field in the "Basic" screen.

**Minimum Duration**
This is the shortest amount of sound that can be considered as a possible speech command. Lower settings may accept background noise from the area around the microphone, such as clicks or door slams. Raise the settings too high and short commands, such as "goodbye", may be ignored.

**Mis-Recognition Delay**
If HAL doesn't understand something you've said, then it will say, "Please repeat." The option to have HAL say something can be changed to instead having it emit a specific sound or the option can be disabled altogether (see *Personal Assistant Configuration* on page 95). If the option is changed to having HAL play a sound when it doesn't understand and if the volume over the speakers is too high or the speakers are too close to the microphone, then HAL may hear this sound. Because the sound isn't a valid command and HAL doesn't understand it, it will again play the sound, which the microphone hears causing HAL to make the sound again, and so on and so on. If this situation occurs, then enter a value in this field to indicate how long HAL will wait after saying something or issuing the sound before it will start listening again. In other words, if you enter a value in this field, then whenever HAL says something or makes the sound you will have to wait this length of time before saying anything. Time is in milliseconds. (This field only applies to interaction through a microphone and isn't available for the other parameter sets.)

**Defaults**
Resets the voice recognition parameters to the default values. This cannot be undone, even by clicking CANCEL.

**Done**
Saves the settings and closes the screen.

**Cancel**
Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

*Related Topics*
pg. 95 Change the attention word
116 Monitor voice interaction from the *Status* screen

# X-10 CONFIGURATION

The *X-10 Configuration* screen is where you specify the X-10 power line interface that HAL is to use for sending signals over the home's electrical wiring.

To open this screen, right-click on the ear icon in the system tray and select OPEN SYSTEM SETTINGS from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**. In the *HAL Configuration* screen, double-click on X-10.

The information in this screen will already be filled in if the *HAL Setup Wizard* (see page 24) was run after HAL was installed.


**Enable X-10 Services**
This option must be selected in order for HAL to control X-10 devices.

**X-10 Interface Type**
Choose from the drop-down menu the type of X-10 power line interface that is being used to control X-10 compatible devices.

NOTE: Some of the power line interfaces listed in the drop-down menu are home automation controllers that have other features in addition to the ability to send and receive X-10 signals. These features could include thermostat control, security system control, infrared control, or other features. These additional features are not be supported by HALdeluxe, but are supported when used with HAL2000.

**COM Port**
Choose from the drop-menu the COM Port to which the X-10 power line interface is connected.

**Auto Sense**
Click this button to have HAL find the COM Port to which the power line interface is connected.

**Done**
Saves the settings and closes the screen.

**Cancel**
Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

*Related Topics*


pg. 47 Control devices by voice
118 Monitor X-10 signals from the *Status* screen
139 Create X-10 devices
174 Use devices in macros, rules, and schedules
182 Control devices from the computer
204 About X-10

## CHAPTER 5
# Monitoring HAL

The *HAL Status* screen displays what the system is doing as it happens. It's a good idea to have this screen visible when first using HAL. Voice commands issued, X-10 signals sent, and telephone line status are all displayed in this screen. If you issue a voice command to HAL and it doesn't show up in the *Status* screen, then there is a problem somewhere in the system before the point where HAL recognizes the signal. For instance, if the microphone is muted, then HAL can't hear voice commands through it. Other problems could be related to the settings in the *Voice Recognition Configuration* screen (see page 106), Attention Word settings in the *Personal Assistant Configuration* screen (see page 95), or there could be problems in other areas of the system. The problem could also be hardware-related. Think of the *Status* screen as a diagnostic tool.

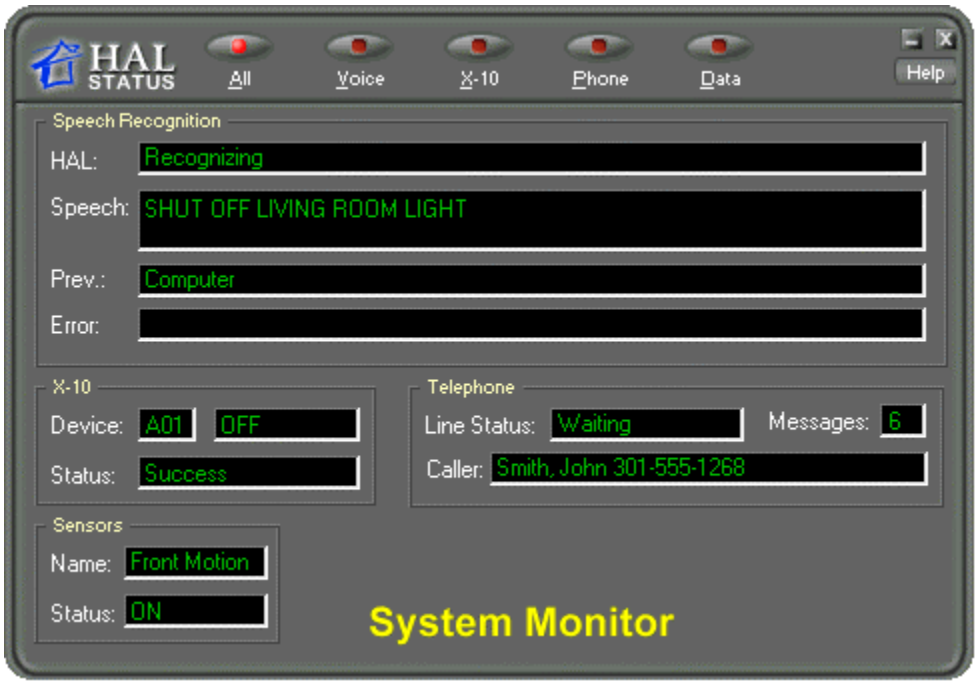
To open the *Status* screen, right-click on the ear icon and select OPEN SYSTEM MONITOR from the pop-up menu.

## ALL STATUS

This screen displays the status of all areas of HAL at a glance.

To open this screen, right-click on the ear icon and select OPEN SYSTEM MONITOR from the pop-up menu.

Click on a button at the top of the screen to go to the status screen for that topic (see the rest of this chapter for explanations of those screens).




**HAL**

This field will display "Recognizing" when HAL is in listening mode, "Idle" after it's left listening mode, or prompts ("Yes", "No", "Read", "Next", etc.) that HAL is waiting to hear. Prompts for some commands are only available when "Confirm Commands" is enabled in the *Personal Assistant Configuration* screen (see page 95). Prompts for commands relating to devices are only available when "Confirm Verbal Commands" is selected in the *Device Wizard* screen for those devices (see page 112).

**Speech**

This field displays the last command or question that HAL recognized. See Chapter 3, *Talking to HAL*, for information on interacting with HAL by voice.

**Prev**

This field displays the second-to-last command or question that HAL recognized. This screen, for example, indicates that after the Attention Word was said ("Computer"), a command was given to shut off the living room light. See Chapter 3, *Talking to HAL*, for information on interacting with HAL by voice.

**Error**

Error messages will be displayed in this field.

**Telephone**

This section displays the status of the telephone line, the number of new voice mail messages waiting, and the phone number and name of an incoming call (if the Caller ID option is available on the phone line).

**X-10**

If a command is issued that affects an X10 device, the device's address, the command (e.g. "On" or "Off") and status (e.g. "Success") are displayed in this area.

**Sensors**

If a sensor is triggered in some manner, then that sensor and its status are displayed in this area.

**Help**

Click this button to open the Online Help Guide to this topic.

*Related Topics*

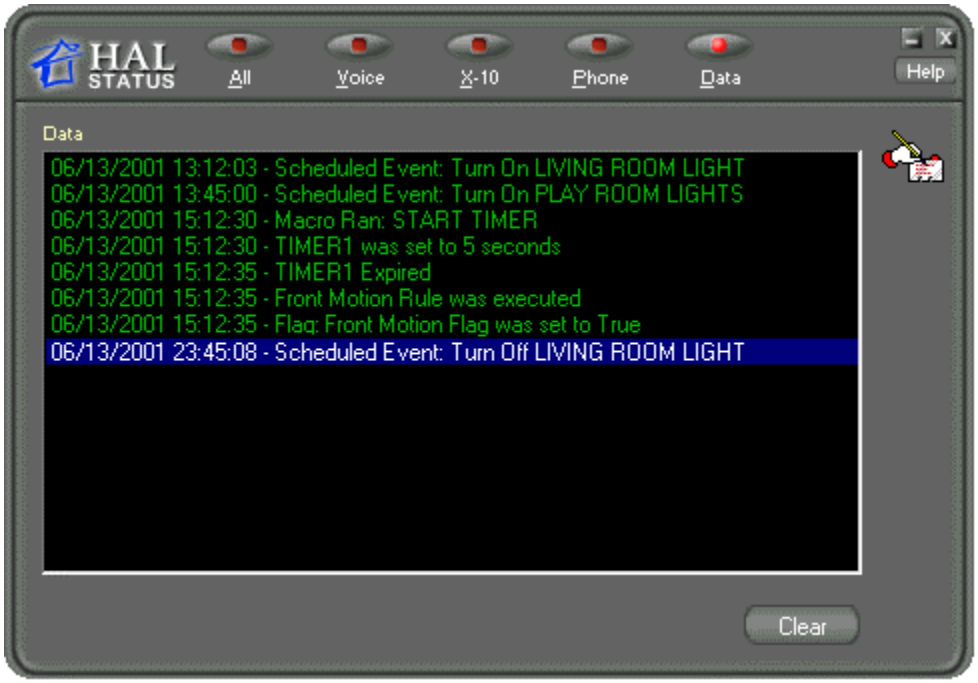

pg. 47 Talk to HAL
95 Change the attention word
98 Set up HAL to use telephones
106 Adjust voice recognition settings
110 Set up HAL to control X-10 devices
136 Create devices and sensors in HAL

# DATA STATUS

This screen shows when macros, rules, schedules, and timers are run and when flags have a change in status.

To open this screen, right-click on the ear icon and select OPEN SYSTEM MONITOR from the pop-up menu. When the *HAL Status* screen appears, click on the DATA button.

Click on a button at the top of the screen to go to the status screen for that topic (see the rest of this chapter for explanations of those screens).




**Data**
This field displays the date and time that macros, rules, schedules, and timers are run and the date and time that the status of a flag was changed.

**Clear**
Click this button to clear the display.

**Help**
Click this button to open the Online Help Guide to this topic.

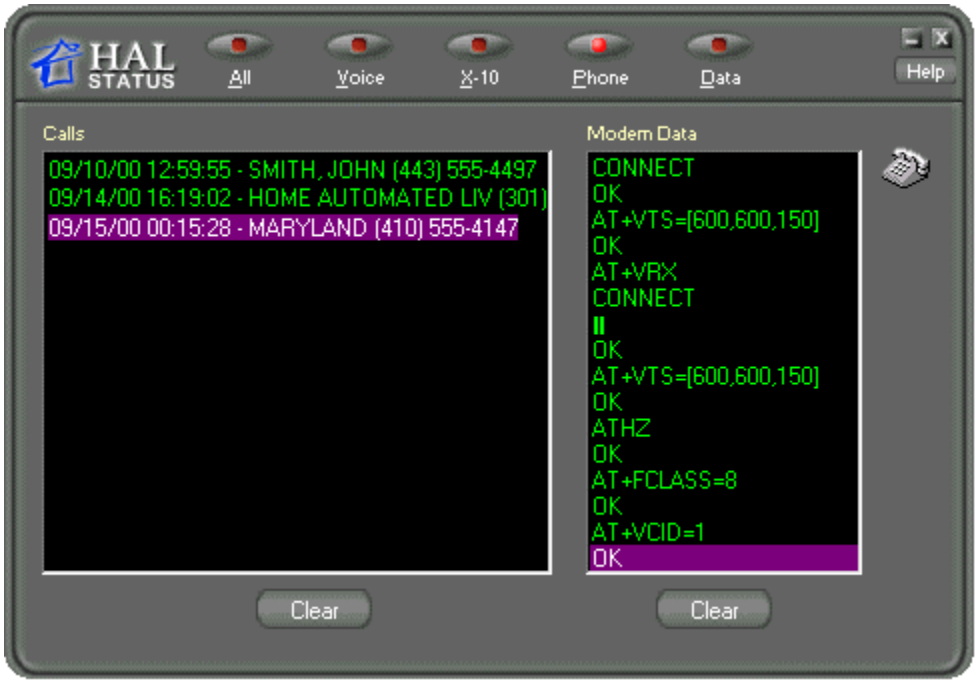
*Related Topics*
pg. 136 Create devices, flags, macros, rules, schedules, and timers

# PHONE STATUS

This screen display information on phone calls and the modem's representation of the commands and data it receives.

To open this screen, right-click on the ear icon and select OPEN SYSTEM MONITOR from the pop-up menu. When the *HAL Status* screen appears, click on the PHONE button.

Click on a button at the top of the screen to go to the status screen for that topic (see the rest of this chapter for explanations of those screens).




**Calls**

This field lists the date and time that calls came in and the Caller ID information for each caller. This feature requires that Caller ID is available on the phone line and that HAL is configured to keep track of that information (see *Telephone Configuration* on page 106). If Caller ID is not on the phone line, then this field will just list the date and time of each call.

**Modem Data**

This field shows commands as they're sent to the modem and indicates its status.

**Clear**

Click this button to clear the information from the field directly above this button.

**Help**

Click this button to open the Online Help Guide to this topic.

*Related Topics*

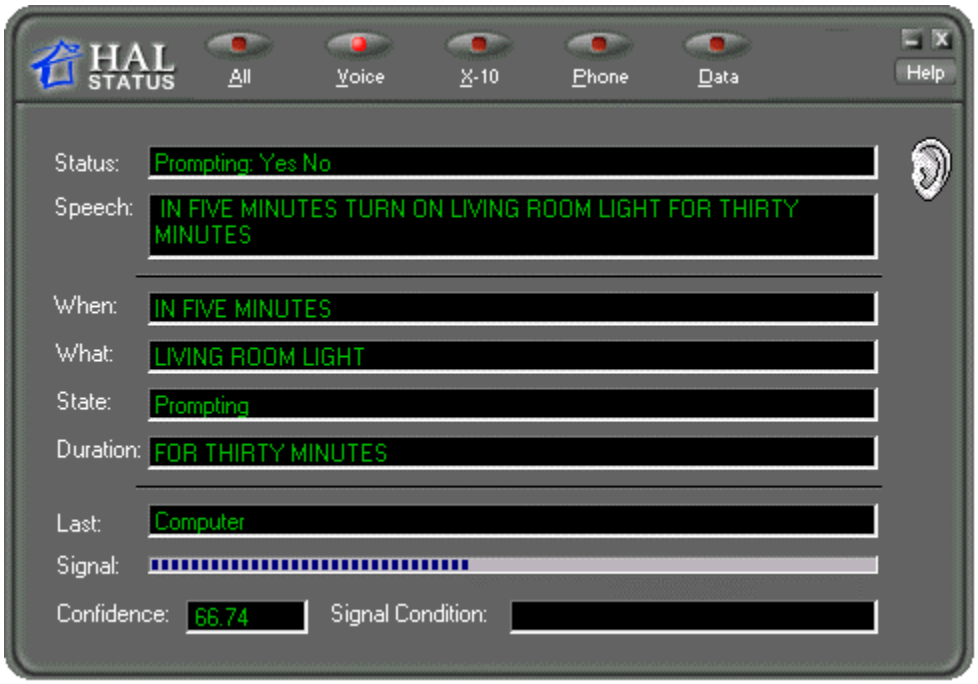

pg. 38 The phone icon
98 Set up HAL to use telephones
187 The *Phone Pad* screen

# VOICE STATUS

This screen displays verbal interactions with HAL in more detail than is available in the *HAL Status* screen.

To open this screen, right-click on the ear icon and select OPEN SYSTEM MONITOR from the pop-up menu. When the *HAL Status* screen appears, click on the VOICE button.

Click on a button at the top of the screen to go to the status screen for that topic (see the rest of this chapter for explanations of those screens).




**Status**

This field will display "Recognizing" when HAL is in listening mode, "Idle" after it's left listening mode, or prompts ("Yes", "No", "Read", "Next", etc.) that HAL is waiting to hear. Prompts for some commands are only available when "Confirm Commands" is enabled in the *Personal Assistant Configuration* screen (see page 95). Prompts for commands relating to devices are only available when "Confirm Verbal Commands" is selected in the *Device Wizard* screen for those devices (see page 143).

**Speech**

This field displays the last command or question that HAL recognized. See Chapter 3, *Talking to HAL*, for information on interacting with HAL by voice.

**When**

This field displays the time that something is requested to happen, e.g. "At 7pm", "Every Monday, Wednesday, Thursday", "On May 20 at 6am", etc. (see Chapter 3, *Talking to HAL*, for more information on issuing commands by voice).

**What**

This field displays the name of the device being affected (e.g. "Table Lamp") or the system's current state (see the *Status* field).

**State**

This field reports HAL's status, such as "listening", "prompting", or "idle".

**Duration**

The field displays how long the action is to last, e.g. "for two hours."

**Last**

This field displays the second-to-last command or question that HAL recognized. This screen, for example, indicates that after the Attention Word was said ("Computer"), a command was given to verbally schedule a light ("In five minutes..."). See Chapter 3, *Talking to HAL*, for information on interacting with HAL by voice.

**Signal**

This is a sound meter that indicates the level of audio that HAL is registering. If this meter continuously indicates that incoming audio is too low or too high and voice recognition is not satisfactory, then the input levels in the computer's sound card may need to be adjusted. (If the audio is too high or too low during telephone interaction, then you can adjust those levels from the *Telephone Configuration* screen -- see page 98).

**Confidence**

This number represents how confident HAL's speech recognition program is about what it heard. In other words, how confident it is that the command it's responding to is the command that was actually given. See the *Acceptable Confidence Level* field in the *Voice Recognition Configuration* screen (see page 106) for more information.

**Signal Condition**

Indicates how HAL judges the incoming audio -- it will indicate if the audio is too low, too loud, garbled, etc. If this field continuously indicates that incoming audio is too low or too high and voice recognition is not satisfactory, then the input levels in the computer's sound card may need to be adjusted (microphone interaction) or the telephone input levels in the *Telephone Configuration* screen need to be adjusted. If it continuously indicates that incoming audio is garbled, then the sound card or one or more of the input devices may need to be repaired or replaced. Contact Technical Support for assistance if you encounter voice recognition problems.

**Help**

Click this button to open the Online Help Guide to this topic.

*Related Topics*

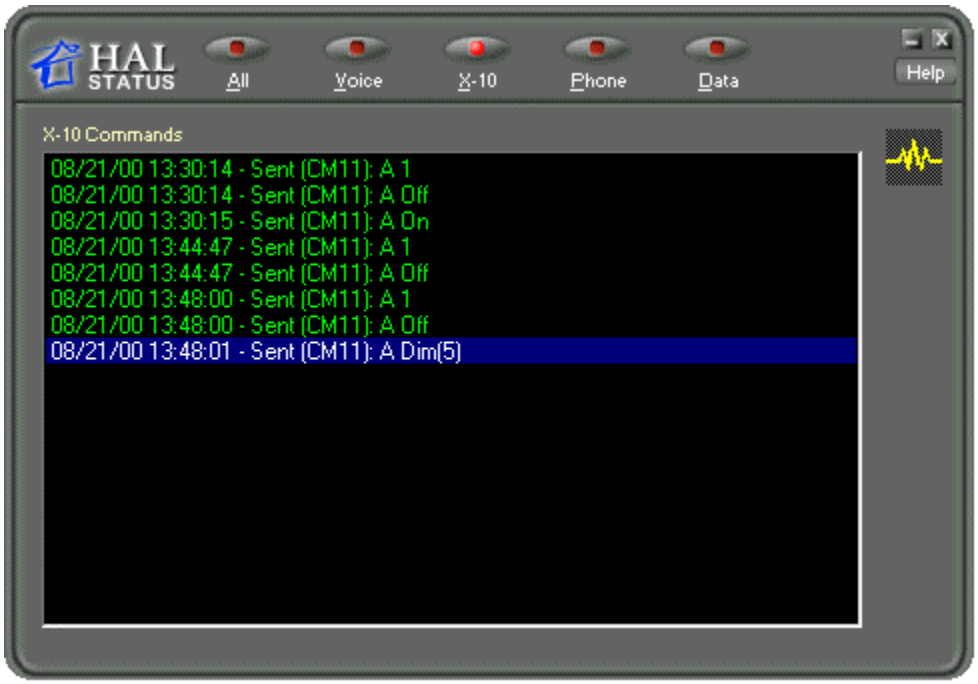
pg. 47 Talk to HAL
95 Change the attention word
106 Adjust voice recognition settings

# X-10 STATUS

This screen displays more detailed information about X-10 commands as they're issued.

To open this screen, right-click on the ear icon and select OPEN SYSTEM MONITOR from the pop-up menu. When the *HAL Status* screen appears, click on the X-10 button.

Click on a button at the top of the screen to go to the status screen for that topic (see the rest of this chapter for explanations of those screens).




**X-10 Commands**

This field displays the date and time that an X-10 command was sent, what X-10 address the command was sent to, and the type of command that was sent.

**Help**

Click this button to open the Online Help Guide to this topic.

*Related Topics*


pg. 47 Control X-10 devices by voice
110 Set up HAL to control X-10 devices
139 Create X-10 devices
182 Control X-10 devices from the computer
204 About X-10

## CHAPTER 6
# Viewing Internet Information

The *HAL Internet* screen allows for manual control of HAL's Internet operations and for viewing downloaded information in text form (the information can also be verbally announced -- see Chapter 3, *Talking to HAL*). HAL goes to the Internet at user-defined intervals to retrieve information about topics represented by icons in the *Internet* screen.

To open the *Internet* screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**.

Once the Internet feature has been configured (see *Internet Configuration* on page 79), the *Internet* screen will run in the background every time HAL is started.

---

*Please read the note on page 81 about accessing the Internet through a dial-up connection.*
*If you're an America Online customer, please read the note on page 209.*

---

## E-MAIL SCREEN

To open this screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**. When the *Internet* screen appears, click on the E-MAIL icon.

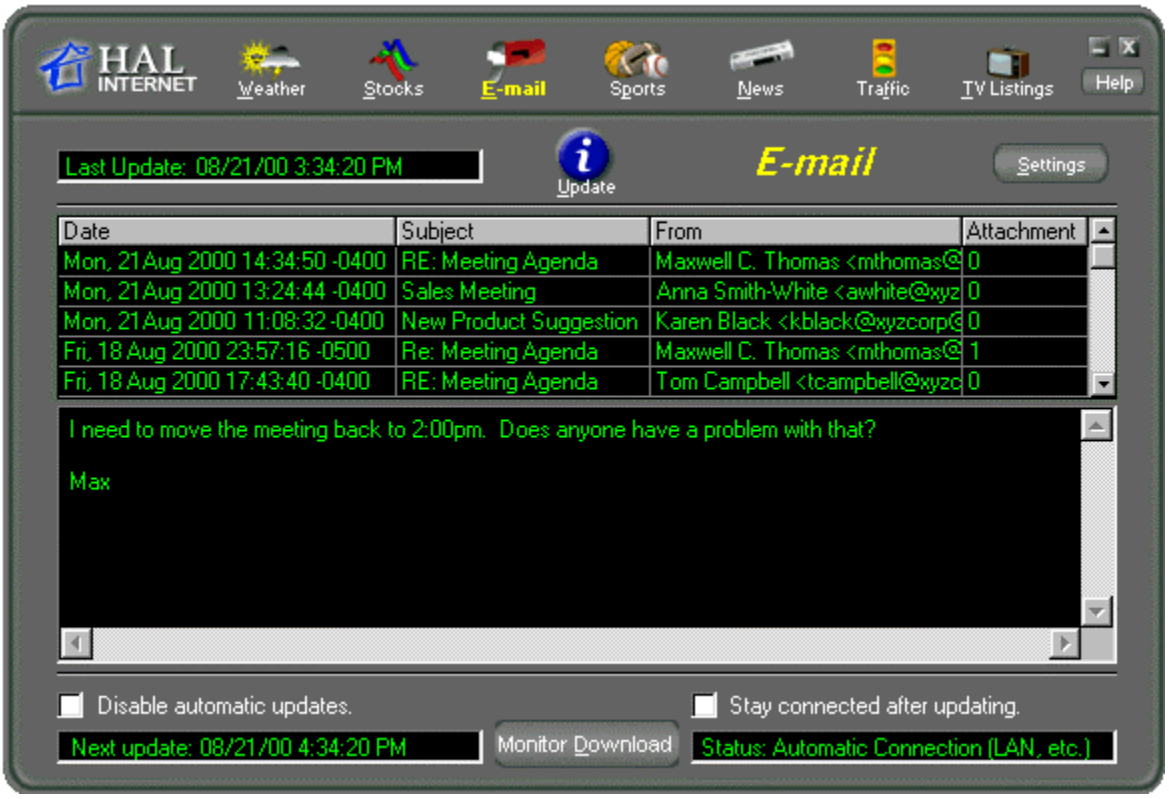
Information in the screen below is for demonstration purposes only. The actual information that appears depends on how HAL was configured (see *Internet Configuration* on page 82) and on the information that was downloaded from the Internet.

Click on an E-mail message to read it (go to Chapter 3 for information on requesting this information by voice). The text from the E-mail message will be displayed in the lower screen. Click in that area and use the slide bar or the arrow keys on the keyboard to scroll through the information. If the message includes an attachment, a paper clip icon will appear on the left side of the screen and the number of attachments will be indicated in the "Attachment" field. Click on the paper clip icon to view the attached file -- if the attachment is in a recognizable format, then HAL will start an external program (like a word processing or image editing program) to view that attachment.

Click on the yellow ***E-mail*** title in the screen to have HAL connect to the Internet and download just the latest E-mail messages. Click the UPDATE button to have HAL download the latest information for all of the Internet topics.

To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).



NOTE: If you have Microsoft® Outlook™ or another E-mail program set up to erase E-mail messages off the mail server after downloading them and you have HAL set up to download from the same E-mail account, then you won't be able to ask HAL to read you those E-mail messages because they'll be deleted from the mail server before HAL can download a copy of them. If you want to be able to have HAL read you E-mail messages, then you must set up the other E-mail program so that it downloads a copy of the E-mail messages and leaves the original messages on the mail server for HAL to download. You then either have to manually delete messages from the mail server or have the mail server automatically delete messages after a certain number of days. If the other E-mail program downloads E-mail from one account and HAL downloads E-mail from a different account, then there is no conflict.

**Last update**
This field indicates the last time that HAL ran an automatic download of Internet information.

**Update**
Click this button to have HAL download information from the Internet. If HAL is not currently connected to the Internet, then it will connect using the method selected in the *Internet Configuration* screen (see page 79).

**Settings**
Click this button to open the *Internet Configuration* screen (see page 82).

**Disable automatic updates**
Enable this field to prevent HAL from connecting to the Internet automatically. HAL will only download information when the UPDATE button is clicked or when you click on the yellow title in the individual Internet screens. Disable this option to have HAL download information at the intervals set in the *Internet Configuration* screen (see page 79). If this field is enabled when HAL is shut down, then it will be enabled when HAL is restarted.

**Stay connected after updating**
Enable this option to have HAL stay connected to the Internet. Certain Internet Service Providers (ISPs) do not allow their customers to stay connected indefinitely and will disconnect users if there's been no activity in a certain time period. Disable this option to have HAL automatically disconnect after it finishes downloading information.

NOTE: It is not necessary to enable this option when connecting to the Internet via cable modems, ISDNs, DSLs, or other dedicated methods.

**Next Update**
This field indicates when HAL is next scheduled to connect to the Internet and download information. If the "Disable automatic updates" option is enabled (checkmark is visible), then this field will display *Automatic Updates Disabled* and HAL will not download information from the Internet until the "Disable automatic updates" field is disabled.

**Monitor Download**
Click this button to bring up the *Internet Update* screen (see page 132).

**Connection Status**
This field indicates the current status of HAL's connection to the Internet.

**Help**
Click this button to open the Online Help Guide to this topic.

*Related Topics*

pg. 47 Retrieve E-mail messages by voice
82 Set up HAL to download E-mail messages
199 Manually have HAL read E-mail messages
213 Text-to-speech codes

## NEWS SCREEN

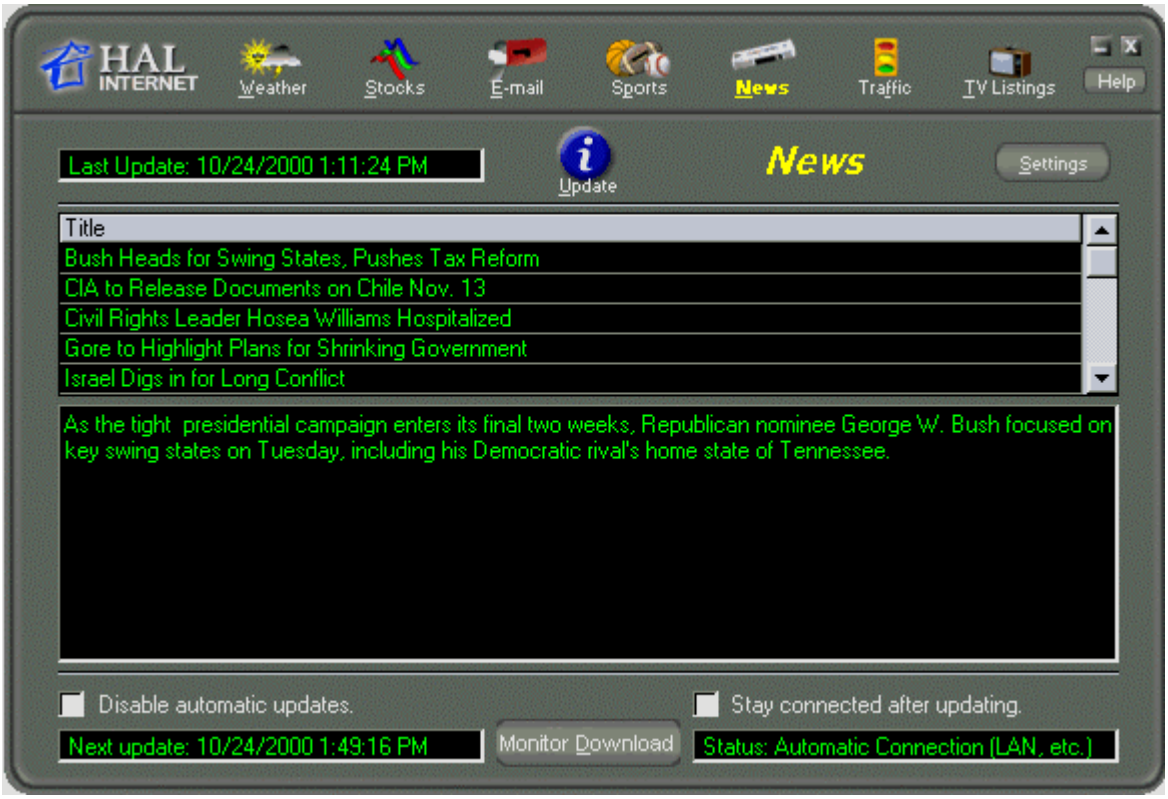
To open this screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**. When the *Internet* screen appears, click on the NEWS icon.

Information in the screen below is for demonstration purposes only. The actual information that appears depends on the information that was downloaded from the Internet.

Click on a news headline to view its story in the lower pane of the screen. Use the slide bar to scroll through the list of news headlines. Go to Chapter 3 for information on verbally requesting the information.

Click on the yellow ***News*** title in the screen to have HAL connect to the Internet and download just the latest news headlines and stories. Click the UPDATE button to have HAL download the latest information for all of the Internet topics.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).




**Last update**
This field indicates the last time that HAL ran an automatic download of Internet information.

**Update**
Click this button to have HAL download information from the Internet. If HAL is not currently connected to the Internet, then it will connect using the method selected in the *Internet Configuration* screen (see page 79).

**Settings**
Click this button to open the *Internet Configuration* screen (see page 79).

**Disable automatic updates**

Enable this field to prevent HAL from connecting to the Internet automatically. HAL will only download information when the UPDATE button is clicked or when you click on the yellow title in the individual Internet screens. Disable this option to have HAL download information at the intervals set in the *Internet Configuration* screen (see page 79). If this field is enabled when HAL is shut down, then it will be enabled when HAL is restarted.

**Stay connected after updating**

Enable this option to have HAL stay connected to the Internet. Certain Internet Service Providers (ISPs) do not allow their customers to stay connected indefinitely and will disconnect users if there's been no activity in a certain time period. Disable this option to have HAL automatically disconnect after it finishes downloading information.

NOTE: It is not necessary to enable this option when connecting to the Internet via cable modems, ISDNs, DSLs, or other dedicated methods.

**Next Update**

This field indicates when HAL is next scheduled to connect to the Internet and download information. If the "Disable automatic updates" option is enabled (checkmark is visible), then this field will display *Automatic Updates Disabled* and HAL will not download information from the Internet until the "Disable automatic updates" field is disabled.

**Monitor Download**

Click this button to bring up the *Internet Update* screen (see page 132).

**Connection Status**

This field indicates the current status of HAL's connection to the Internet.

**Help**

Click this button to open the Online Help Guide to this topic.

*Related Topics*

pg. 47 Retrieve news headlines by voice
79 Set up HAL to download information from the Internet
213 Text-to-speech codes

## SPORTS SCREEN

To open this screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**. When the *Internet* screen appears, click on the SPORTS icon.

Information in the screen below is for demonstration purposes only. The actual information that appears depends on the information that was downloaded from the Internet.

Click on the icon of the sport whose information is to be viewed. HAL downloads sports information one day at a time and holds that day in memory for one week. For example, Tuesday's scores will remain in the Tuesday listing until the following Tuesday when new scores and schedules will be downloaded.

Go to Chapter 3 for information on verbally requesting the information.

Click on the yellow ***Sports*** title in the screen to have HAL connect to the Internet and download just the latest sports scores. Click the UPDATE button to have HAL download the latest information for all of the Internet topics.

To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Last update**

This field indicates the last time that HAL ran an automatic download of Internet informati

**Update**
Click this button to have HAL download information from the Internet. If HAL is not currently connected to the Internet, then it will connect using the method selected in the *Internet Configuration* screen (see page 79).

**Settings**
Click this button to open the *Internet Configuration* screen (see page 84).

**Disable automatic updates**
Enable this field to prevent HAL from connecting to the Internet automatically. HAL will only download information when the UPDATE button is clicked or when you click on the yellow title in the individual Internet screens. Disable this option to have HAL download information at the intervals set in the *Internet Configuration* screen (see page 79). If this field is enabled when HAL is shut down, then it will be enabled when HAL is restarted.

**Stay connected after updating**
Enable this option to have HAL stay connected to the Internet. Certain Internet Service Providers (ISPs) do not allow their customers to stay connected indefinitely and will disconnect users if there's been no activity in a certain time period. Disable this option to have HAL automatically disconnect after it finishes downloading information.

NOTE: It is not necessary to enable this option when connecting to the Internet via cable modems, ISDNs, DSLs, or other dedicated methods.

**Next Update**
This field indicates when HAL is next scheduled to connect to the Internet and download information. If the "Disable automatic updates" option is enabled (checkmark is visible), then this field will display *Automatic Updates Disabled* and HAL will not download information from the Internet until the "Disable automatic updates" field is disabled.

**Monitor Download**
Click this button to bring up the *Internet Update* screen (see page 132).

**Connection Status**
This field indicates the current status of HAL's connection to the Internet.

**Help**
Click this button to open the Online Help Guide to this topic.

*Related Topics*

pg. 47 Retrieve sports scores by voice
84 Set up HAL to download sports scores
213 Text-to-speech codes

# STOCKS SCREEN

To open this screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**. When the *Internet* screen appears, click on the STOCKS icon.

Information in the screen below is for demonstration purposes only. The actual information that appears depends on how HAL was configured (see *Internet Configuration* on page 86) and on the information that was downloaded from the Internet.

Go to Chapter 3 for information on verbally requesting the information.

Click on the yellow ***Stocks*** title in the screen to have HAL connect to the Internet and download just the latest stock information. Click the UPDATE button to have HAL download the latest information for all of the Internet topics.

To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Symbol**

This column displays the symbols of the stocks that were programmed during configuration (see *Internet Configuration* on page 86).

**English**

This column displays the names assigned to the stocks during configuration (see *Internet Configuration* on page 86).

**Date** and **Time**
These columns show the last time and date that the information for each stock was downloaded.

**Price**
This column lists the price of each stock at the time that the information was last downloaded.

**Volume**
This column indicates the volume of each stock at the time that the information was last downloaded.

**Change**
The last two columns indicate the change to each stock's price from the last official posting of that stock's information.

**Last update**
This field indicates the last time that HAL ran an automatic download of Internet information.

**Update**
Click this button to have HAL download information from the Internet. If HAL is not currently connected to the Internet, then it will connect using the method selected in the *Internet Configuration* screen (see page 79).

**Settings**
Click this button to open the *Internet Configuration* screen (see page 86).

**Disable automatic updates**
Enable this field to prevent HAL from connecting to the Internet automatically. HAL will only download information when the UPDATE button is clicked or when you click on the yellow title in the individual Internet screens. Disable this option to have HAL download information at the intervals set in the *Internet Configuration* screen (see page 79). If this field is enabled when HAL is shut down, then it will be enabled when HAL is restarted.

**Stay connected after updating**
Enable this option to have HAL stay connected to the Internet. Certain Internet Service Providers (ISPs) do not allow their customers to stay connected indefinitely and will disconnect users if there's been no activity in a certain time period. Disable this option to have HAL automatically disconnect after it finishes downloading information.

NOTE: It is not necessary to enable this option when connecting to the Internet via cable modems, ISDNs, DSLs, or other dedicated methods.

**Next Update**
This field indicates when HAL is next scheduled to connect to the Internet and download information. If the "Disable automatic updates" option is enabled (checkmark is visible), then this field will display *Automatic Updates Disabled* and HAL will not download information from the Internet until the "Disable automatic updates" field is disabled.

**Monitor Download**
Click this button to bring up the *Internet Update* screen (see page 132).

**Connection Status**
This field indicates the current status of HAL's connection to the Internet.

**Help**
Click this button to open the Online Help Guide to this topic.

*Related Topics*

pg. 47 Retrieve stock quotes by voice
86 Set up HAL to download stock quotes
213 Text-to-speech codes

# TRAFFIC SCREEN

To open this screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**. When the *Internet* screen appears, click on the TRAFFIC icon.

Information in the screen below is for demonstration purposes only. The actual information that appears depends on how HAL was configured (see *Internet Configuration* on page 88) and on the information that was downloaded from the Internet.

Click on a traffic route to view its information in the lower pane of this screen. Go to Chapter 3 for information on verbally requesting the information.

Click on the yellow ***Traffic*** title in the screen to have HAL connect to the Internet and download just the latest traffic information. Click the UPDATE button to have HAL download the latest information for all of the Internet topics.

To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Last update**

This field indicates the last time that HAL ran an automatic download of Internet information.

**Update**

Click this button to have HAL download information from the Internet. If HAL is not currently connected to the Internet, then it will connect using the method selected in the *Internet Configuration* screen (see page 79).

**Settings**
Click this button to open the *Internet Configuration* screen (see page 88).

**Disable automatic updates**
Enable this field to prevent HAL from connecting to the Internet automatically. HAL will only download information when the UPDATE button is clicked or when you click on the yellow title in the individual Internet screens. Disable this option to have HAL download information at the intervals set in the *Internet Configuration* screen (see page 79). If this field is enabled when HAL is shut down, then it will be enabled when HAL is restarted.

**Stay connected after updating**
Enable this option to have HAL stay connected to the Internet. Certain Internet Service Providers (ISPs) do not allow their customers to stay connected indefinitely and will disconnect users if there's been no activity in a certain time period. Disable this option to have HAL automatically disconnect after it finishes downloading information.

NOTE: It is not necessary to enable this option when connecting to the Internet via cable modems, ISDNs, DSLs, or other dedicated methods.

**Next Update**
This field indicates when HAL is next scheduled to connect to the Internet and download information. If the "Disable automatic updates" option is enabled (checkmark is visible), then this field will display *Automatic Updates Disabled* and HAL will not download information from the Internet until the "Disable automatic updates" field is disabled.

**Monitor Download**
Click this button to bring up the *Internet Update* screen (see page 132).

**Connection Status**
This field indicates the current status of HAL's connection to the Internet.

**Help**
Click this button to open the Online Help Guide to this topic.

*Related Topics*
pg. 47 Retrieve traffic information by voice
88 Set up HAL to download traffic information
213 Text-to-speech codes

# TV LISTINGS SCREEN

To open this screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**. When the *Internet* screen appears, click on the TV LISTINGS icon.

Information in the screen below is for demonstration purposes only. The actual information that appears depends on how HAL was configured-- which time zone or satellite program provider was selected (see *Internet Configuration* on page 90) -- and on the information that was downloaded from the Internet. HAL downloads one day's worth of programming each time it connects to the Internet, for a maximum of three days (today, tomorrow, day after tomorrow).

Go to Chapter 3 for information on verbally requesting the information.

Click on the yellow ***TV Listings*** title in the screen to have HAL connect to the Internet and download just the latest program schedules. Click the UPDATE button to have HAL download the latest information for all of the Internet topics.

To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width. Use the slide bar to scroll up and down through the grid.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Date**

To view information for a different day, click in the date to select the month, day, or year. Use the arrow keys to advance or return to another month, day, or year. The grid will be blank if no information was downloaded for that particular date and time.

**Previous Day**

Click the first oval button (vertical bar with the left-facing arrow) to view TV listings for previous days. Each button click moves the grid back one full day. The grid will appear blank if no information was downloaded for that particular date and time.

**Previous Half-Hour**

Click the second oval button (left-facing arrow) to view TV listings for the previous half-hour. Each button click moves the grid back in half-hour increments. The grid will appear blank if no information was downloaded for that particular time period.

**Current Time**

Click the third oval button (square) to view TV listings for the current date and time. The grid will appear blank if the TV listings for the current time and date haven't been downloaded yet.

**Next Half-Hour**

Click the fourth oval button (right-facing arrow) to view TV listings for the next half-hour. Each button click moves the grid forward in half-hour increments. The grid will appear blank if no information was downloaded for that particular time period.

**Next Day**

Click the fifth oval button (right-facing arrow and vertical bar) to view TV listings for future days. Each button click moves the grid forward one full day. The grid will appear blank if no information was downloaded for that particular date and time.

**Last update**

This field indicates the last time that HAL ran an automatic download of Internet information.

**Update**

Click this button to have HAL download information from the Internet. If HAL is not currently connected to the Internet, then it will connect using the method selected in the *Internet Configuration* screen (see page 79).

**Settings**

Click this button to open the *Internet Configuration* screen (see page 90).

**Disable automatic updates**

Enable this field to prevent HAL from connecting to the Internet automatically. HAL will only download information when the UPDATE button is clicked or when you click on the yellow title in the individual Internet screens. Disable this option to have HAL download information at the intervals set in the *Internet Configuration* screen (see page 79). If this field is enabled when HAL is shut down, then it will be enabled when HAL is restarted.

**Stay connected after updating**

Enable this option to have HAL stay connected to the Internet. Certain Internet Service Providers (ISPs) do not allow their customers to stay connected indefinitely and will disconnect users if there's been no activity in a certain time period. Disable this option to have HAL automatically disconnect after it finishes downloading information.

NOTE: It is not necessary to enable this option when connecting to the Internet via cable modems, ISDNs, DSLs, or other dedicated methods.

**Next Update**

This field indicates when HAL is next scheduled to connect to the Internet and download information. If the "Disable automatic updates" option is enabled (checkmark is visible), then this field will display *Automatic Updates Disabled* and HAL will not download information from the Internet until the "Disable automatic updates" field is disabled.

**Monitor Download**

Click this button to bring up the *Internet Update* screen (see page 132).

**Connection Status**
This field indicates the current status of HAL's connection to the Internet.

**Help**
Click this button to open the Online Help Guide to this topic.

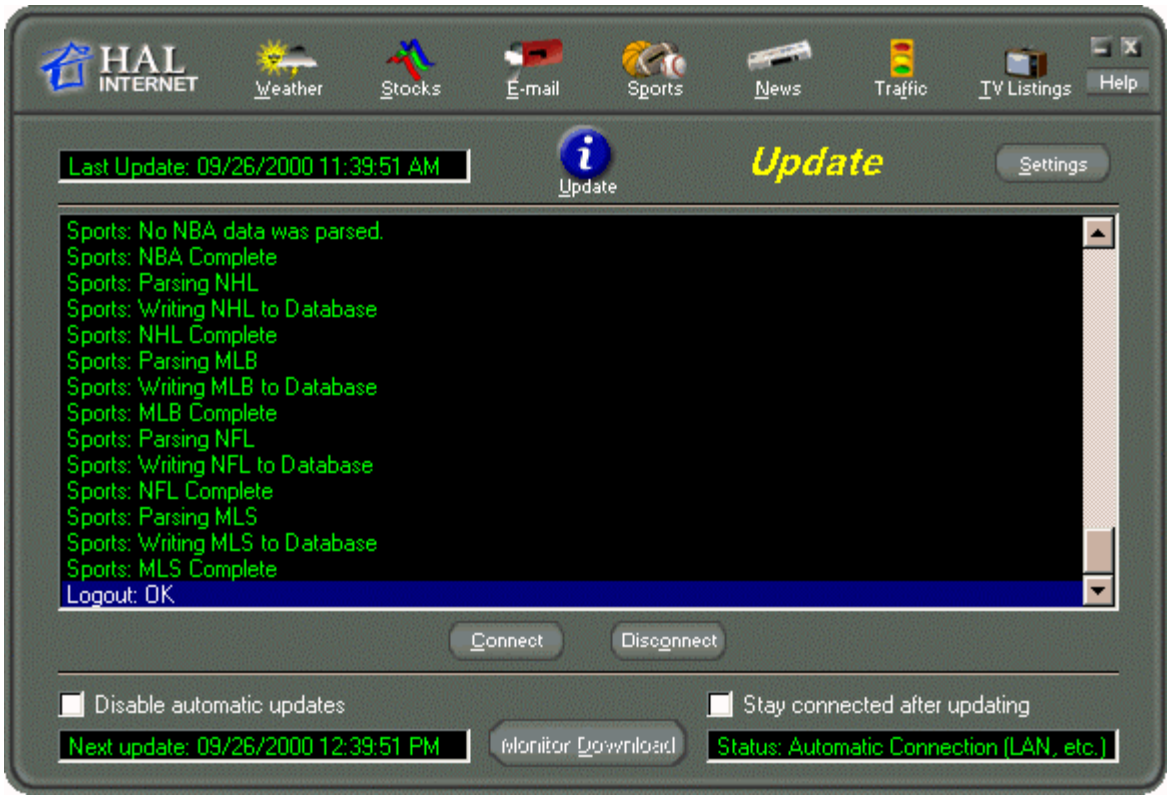
*Related Topics*
pg. 47 Retrieve TV listings by voice
90 Set up HAL to download TV listings
213 Text-to-speech codes

## UPDATE SCREEN

The *Internet Update* screen is where you can view the status of Internet downloads as they occur.

To open this screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**. When the *Internet* screen appears, click on the MONITOR DOWNLOAD button.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).




**Last update**
This field indicates the last time that HAL ran an automatic download of Internet information.

**Update**
Click this button to have HAL download information from the Internet. If HAL is not currently connected to the Internet, then it will connect using the method selected in the *Internet Configuration* screen (see page 79).

**Settings**
Click this button to open the *Internet Configuration* screen (see page 79).

**Connect**
Use this button when it's not a time that HAL is scheduled to download information but you want to download information now or browse the Internet. HAL will connect to the Internet using the method selected in the *Internet Configuration* screen (see page 79). HAL will stay connected to the Internet until you click DISCONNECT. Clicking this button bypasses the automatic updates, so HAL won't download any information until you tell it to. There is no need to use this button if HAL is connected to the Internet through a LAN, DSL, cable modem, etc.

NOTE: Some Internet Service Providers (ISPs) restrict how long you can stay connected without any activity. If you are not actively browsing the Internet or downloading information, then the ISP may disconnect you.

**Disconnect**
Click this button to have HAL disconnect from the Internet. You should only use this button if you connected to the Internet by using the CONNECT button in this screen.

**Disable automatic updates**
Enable this field to prevent HAL from connecting to the Internet automatically. HAL will only download information when the UPDATE button is clicked or when you click on the yellow title in the individual Internet screens. Disable this option to have HAL download information at the intervals set in the *Internet Configuration* screen (see page 79). If this field is enabled when HAL is shut down, then it will be enabled when HAL is restarted.

**Stay connected after updating**
Enable this option to have HAL stay connected to the Internet. Certain Internet Service Providers (ISPs) do not allow their customers to stay connected indefinitely and will disconnect users if there's been no activity in a certain time period. Disable this option to have HAL automatically disconnect after it finishes downloading information.

NOTE: It is not necessary to enable this option when connecting to the Internet via cable modems, ISDNs, DSLs, or other dedicated methods.

**Next Update**
This field indicates when HAL is next scheduled to connect to the Internet and download information. If the "Disable automatic updates" option is enabled (checkmark is visible), then this field will display *Automatic Updates Disabled* and HAL will not download information from the Internet until the "Disable automatic updates" field is disabled.

**Monitor Download**
This button is disabled in this screen. In all other *Internet* screens, clicking this button will bring up this screen.

**Connection Status**
This field indicates the current status of HAL's connection to the Internet.

**Help**
Click this button to open the Online Help Guide to this topic.

*Related Topics*

pg. 47 Retrieve Internet information by voice
79 Set up HAL to download Internet information

# WEATHER SCREEN

To open this screen, right-click on the ear icon and select VIEW INTERNET INFORMATION from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Internet Server**. When the *Internet* screen appears, click on the WEATHER icon.

Information in the screen below is for demonstration purposes only. The actual information that appears depends on how HAL was configured-- what location was selected (see *Internet Configuration* on page 92) -- and on the information that was downloaded from the Internet.

Click on a day of the week to view the weather forecast for that day. Go to Chapter 3 for information on verbally requesting the information.

Click on the yellow ***Weather*** title in the screen to have HAL connect to the Internet and download just the latest weather forecasts. Click the UPDATE button to have HAL download the latest information for all of the Internet topics.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Last update**

This field indicates the last time that HAL ran an automatic download of Internet information.

**Update**

Click this button to have HAL download information from the Internet. If HAL is not currently connected to the Internet, then it will connect using the method selected in the *Internet Configuration* screen (see page 79).

**Settings**

Click this button to open the *Internet Configuration* screen (see page 92).

**Disable automatic updates**

Enable this field to prevent HAL from connecting to the Internet automatically. HAL will only download information when the UPDATE button is clicked or when you click on the yellow title in the individual Internet screens. Disable this option to have HAL download information at the intervals set in the *Internet Configuration* screen (see page 79). If this field is enabled when HAL is shut down, then it will be enabled when HAL is restarted.

**Stay connected after updating**

Enable this option to have HAL stay connected to the Internet. Certain Internet Service Providers (ISPs) do not allow their customers to stay connected indefinitely and will disconnect users if there's been no activity in a certain time period. Disable this option to have HAL automatically disconnect after it finishes downloading information.

NOTE: It is not necessary to enable this option when connecting to the Internet via cable modems, ISDNs, DSLs, or other dedicated methods.

**Next Update**

This field indicates when HAL is next scheduled to connect to the Internet and download information. If the "Disable automatic updates" option is enabled (checkmark is visible), then this field will display *Automatic Updates Disabled* and HAL will not download information from the Internet until the "Disable automatic updates" field is disabled.

**Monitor Download**

Click this button to bring up the *Internet Update* screen (see page 132).

**Connection Status**

This field indicates the current status of HAL's connection to the Internet.

**Help**

Click this button to open the Online Help Guide to this topic.

*Related Topics*

pg. 47 Retrieve weather information by voice
92 Set up HAL to download weather forecasts
213 Text-to-speech codes

## CHAPTER 7
# Automating Your Home

The *HAL System Data* screen is for configuring devices, setting up macros, scheduling events, creating rules, adding X-10 sensors, and maintaining an address book.

To open the *System Data* screen, right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**.

# DEVICES

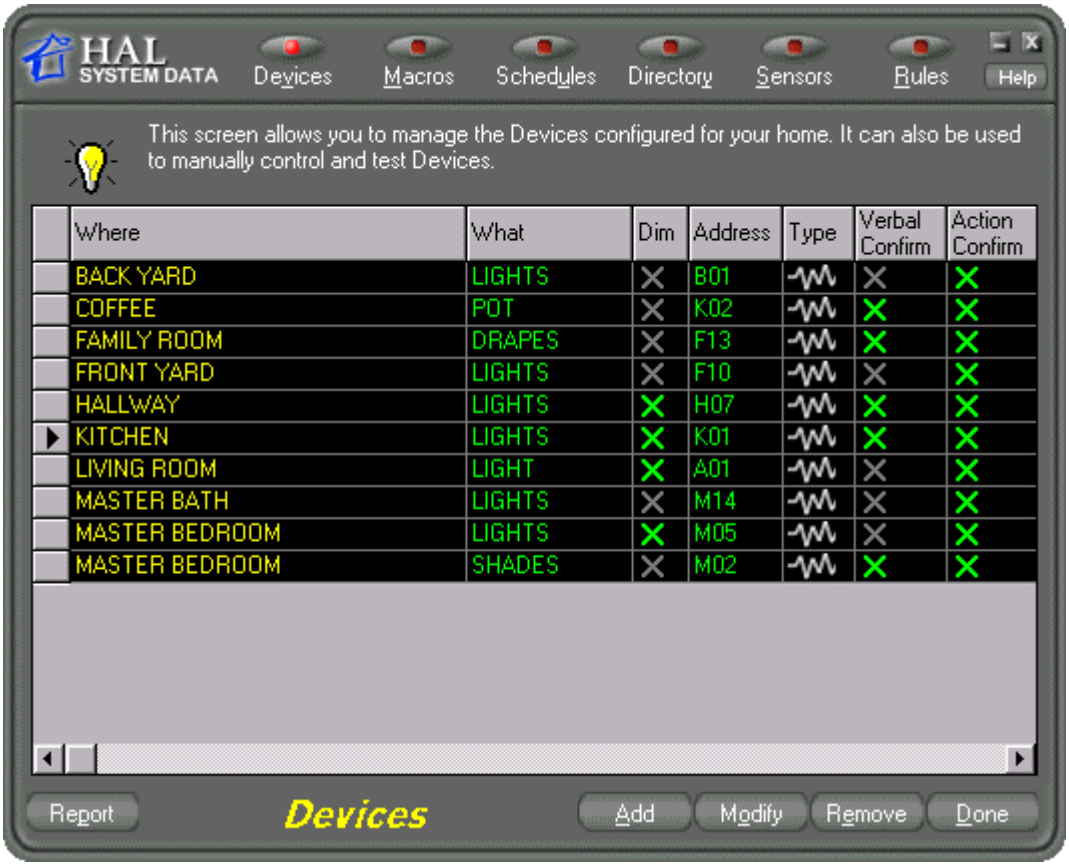
The *HAL System Data -- Devices* screen is for adding, deleting, and modifying devices in HAL.

To open this screen, right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**. When the *HAL System Data* screen appears, click on the DEVICES button.

Information in the grid below is for demonstration purposes only. The actual information that appears depends on the devices that you add to the system (see *Create an X-10 Device* below).

Click on a column heading to sort the list by the information in that column. To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).




**Where**
This is the location information for the device.

**What**
What the device is, e.g. "light", "door", "lamp", etc.

**Dim**
If an "X" is highlighted in this field, then the device is dimmable.

**Address**
The X-10 address assigned to the device.

**Type**
The symbol indicates the type of device this is (all devices in HALdeluxe are X10 devices).

**Verbal Confirm**
A checkmark in this column indicates that HAL will ask you to confirm the command you just gave relating to this device. For instance, if you tell HAL, "Turn on the living room light," HAL will ask *"Do you want me to turn on the living room light?"* You would then respond with "Yes," "No", or "Cancel."

**Action Confirm**
A checkmark in this column indicates that HAL will verify when it has carried out a command. For instance, if you tell HAL, "Turn on the living room light", HAL will turn on the light and then say *"I have turned on the living room light."*

**Report**
Generates a printable screen with the list of devices and their settings.

**Add**
Click to create an X-10 device (see below).

**Modify**
Click on the name of the device to select it, then click this button to modify it.

**Remove**
Click on the name of the device to select it, then click this button to delete it

**Done**
Saves the settings and closes the screen.

**Help**
Click this button to open the Online Help Guide to this section.

*Related Topics*


pg. 47 Control devices by voice
110 Set up HAL to control X-10 devices
118 Monitor X-10 signals in the *Status* screen
139 Create devices
174 Use devices in macros, rules, and schedules
182 Control devices from the computer
204 About X-10

## Create an X-10 Device

### Naming the Device

Click on ADD in the *System Data Devices* screen (see page137). The *Device Wizard* appears.


**Location**

Name the device by entering its location in the house. Use one or all three available fields. Spaces can't be used within a field. For instance, "living room" typed in one field appears as "livingroom". Type "living" in one field and "room" in another field for it to appear as "living room". Be aware that combined words may alter their pronunciations. For instance, "patio light" typed in one field appears as "patiolight", which HAL pronounces as "pay shay light". Some common names are available in the drop-down menus.

The text that is typed in these fields will also appear in the area below the *Device* field.

NOTE: The location fields are not required but are recommended. You can create a device whose name is simply comprised of the name in the "Device" field (see below).

**Device**

Type the device itself in this field, e.g. lamp, light, drapes, door, etc. Some common names are available in the drop-down menu. The text that is typed in this field will also appear in the area below this field.

**Type**

Only "X-10" is available as a device type in HALdeluxe.

**Name**

The name that appears in this field is the full name of the device, as it will be identified to HAL. In this example, the device would be referred to as "living room light". This full name *must* be used when commanding HAL. Otherwise the command may not be recognized.

**Cancel**

Closes the screen without saving the settings.

**Back**

This button is disabled in this screen.

**Next**

Advances to the next screen.

Click NEXT to proceed to the next screen (see below).

**Setting the Address**


Configure the address dials to set the *House Code* and *Unit Code* for the X-10 device being added (for more information on House and Unit Codes, see *About X-10* on page 204). The address selected at this screen must match the codes set on the X-10 compatible receiver. If multiple devices have the same address then all of those devices will be affected by the same commands. For example, assume the porch lights and the kitchen lights are set to the same House and Unit Codes; the kitchen lights will turn on when HAL is commanded to turn on the porch lights and vice versa. Instead of setting the devices to the same house code, assign them to the same group (see *Assigning Groups* below). To view a list of previously assigned X-10 codes, see the *Manual Control Panel* (see page 182).

Move the dials until the address in the display matches the address on the device. You can also set the address by hitting the appropriate letter and number(s) on the computer's keyboard.

Click NEXT to proceed to the next screen (see below).

**Selecting Device Actions**


**On/Off**

If this device is a light or an appliance that will be turned on or off, then select this option.

**Dimmable**
This option becomes available when ON/OFF is selected above. Enable this option to be able to dim a light. X-10 devices control the flow of electricity to fixtures and can dim lights that were not originally designed to do so. This is only recommended for incandescent lights connected to lamp modules or light switches (appliance modules do not have dimming capabilities).

**Open/Unlock**
Select this option if the device is one that will be opened/closed or locked/unlocked.

---

*Please read the note on page 145 about using OPEN/CLOSE and LOCK/UNLOCK commands with HAL .*

---

**Options**
Click this button to reveal the *Device Options* screen (see below), where additional parameters can be set for this device.

**Test area**
Test the configuration settings and the operation of the device by clicking on the buttons in this area the device should react immediately. If it doesn't, then double-check that everything is set up correctly.

**Cancel**
Closes the screen without saving the settings.

**Back**
Return to the previous screen.

**Next**
Proceed to the next screen.

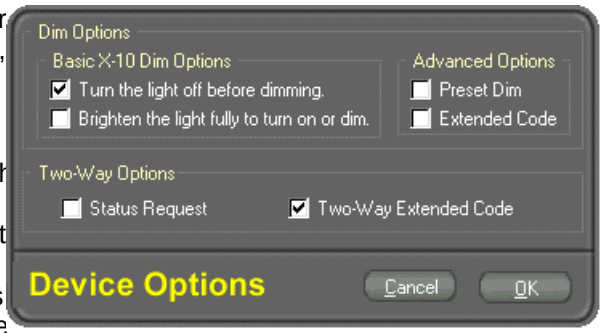
Click NEXT to proceed to the next screen (see *Selecting Confirmation Options* below).

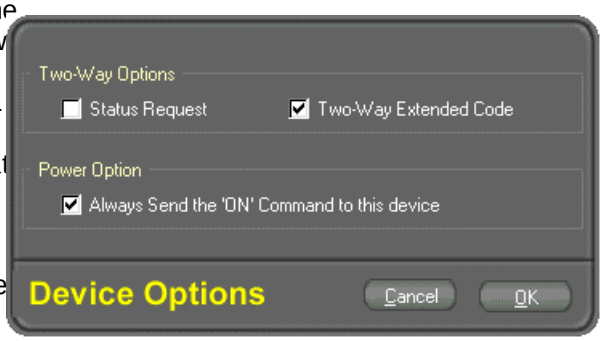
## Device Options

If you click on OPTIONS in the *Device Wizard Actions* screen (see above) and ON/OFF is selected in that screen, then the first screen below will appear. If you click on OPTIONS in the *Device Wizard Actions* screen and OPEN/UNLOCK is selected in that screen, then the second screen below will appear.

### Basic X-10 Dim Options

If the X-10 receiver uses either the Preset Dim or Extended Code methods for dimming the device, then this section can be ignored (make sure no checkmarks are visible).




Many X-10 receivers only have 16 dim levels, with each dim level representing about 6% luminance. A light at dim level 3, for instance, is only about 18% bright, while a light at dim level 13 is about 78% bright*. If neither of the options in this area is selected, then HAL lowers the light to the requested level, regardless of the level at which the light started. In other words, HAL determines how many levels from level 16 the light has to drop to reach the desired dim setting. For instance, if HAL is told to dim a light 40% (or *to* 40%), then it drops the light about nine dim levels, because 40% is at about dim level 7 (16 – 9 = 7). However, if the light is at 60% (dim level 10) to begin with, then the light will end up at about 6% (10 – 9 = level 1). If the light was at 50% or lower to begin with, then the light dims so low it's basically off.

* It's not necessary to know the exact dim levels – simply tell HAL what percentage to dim the light to and it will adjust the light to the closest dim level.

Select one of the options below to have HAL reset the light to 100% before it dims it. That way, when HAL is told to dim a light, it will dim it to the exact level requested. In other words, 40% will always be 40%, never 6%. (Ignore these settings if the X-10 receiver uses either the Preset Dim or Extended Code methods for dimming.)

#### Turn the light off before dimming

Check this box to have the light turn off, then turn on to 100%, then dim to the requested level.

#### Brighten the light fully to turn on or dim

Check this box to have the light turn on to 100%, then dim to the requested level. This option may take 5-10 seconds to complete, because multiple brighten commands are sent to ensure that the light is at 100% before it starts dimming.

### Preset Dim/Extended Code

Some X-10 compatible receivers use a different method for sending dim commands than the standard X-10 method. Select one of these methods if the X-10 compatible receiver supports that method (check the receiver's specifications for its capabilities). If neither of these options is supported, then HAL will use the standard X10 method to dim the light or lamp.

NOTE: If one of these dimming methods is selected in this screen but the X-10 receiver *does not* support that method, then HAL won't be able to dim the light because the receiver won't understand the signal that HAL transmits.

**Status Request**

Check this box if the X-10 receiver being installed is able to report the status of the device being controlled (check product specifications). If the device is a light, ask, "What is the status of the (device name)?" A two-way power line adapter must also be used in order for HAL to receive this information.

**Two-way Extended Code**

Check this box if the X-10 receiver being installed is able to send extended-X10 code information (check the receiver's specifications). A two-way power line adapter must also be used in order for HAL to receive this information.

**Always send the 'ON' command to this device**

This field is for use with toggle devices (like garage door openers) connected to X-10 universal modules. Universal modules can be set to "momentary" or "continuous" states. If a universal module is set to "momentary", then enable this option so that every time a command is sent to control this device, it will act as if the button has been pressed, regardless of whether you told HAL to open/close or lock/unlock the device. If the universal module is set to "momentary" and you do *not* enable this option, then when you tell HAL to close the garage door nothing will happen, because HAL will send a "close" ("off") command which will have no effect (the module is set to react only to "on" commands).

When a universal module is in "continuous" mode, an "off" command must be sent to activate the device, so make sure that this option is disabled when the universal module is in "continuous" mode (if it's enabled then HAL will never send an "off" command so nothing will happen).

**Cancel**

Closes the screen without saving the settings.

**Ok**

Saves the settings and closes the screen. The *Device Wizard Action* screen re-appears (see above).

## Selecting Confirmation Options

This screen appears after clicking NEXT in the *Device Wizard Actions* screen (see above).


**Confirm Verbal Commands**

A checkmark in this field indicates that HAL will ask for confirmation before it carries out any verbal commands relating to this device. For instance, if you say "Shut off the *living room light*", HAL will ask "*Do you want me to shut off the living room light*?" HAL will then wait for you to say "Yes," "No", or "Cancel," and will react accordingly when you say one of those words. If this option is not enabled (checkmark isn't visible), then HAL will carry out the action without asking for confirmation.

**Confirm the Action**
A checkmark in this field indicates that HAL will announce when it has performed an action involving this device. For instance, if you tell HAL to "Dim *living room light* to 40%", it will dim the light to the desired level and then say *I' have dimmed the living room light*." If this option is not enabled (checkmark isn't visible), then HAL will carry out the action without announcing that it was done.

**Cancel**
Closes the screen without saving the settings.

**Back**
Return to the previous screen.

**Next**
Proceed to the next screen.

Click NEXT to proceed to the next screen (see below).

## Assigning Groups

This screen is where groups are created. This gives the ability to group common devices together so that group commands may be issued. For example, "living room light", "kitchen light", and "den lamp" could all be associated with a group called "Downstairs". Once the group is established, a single command, such as "Turn all *downstairs lights* off", will affect all of the devices in that group (see Chapter 3 for more information on commanding grouped devices by voice).


**Available Groups**
The names listed in this field are the group names that have been added to the system. To assign this device to one of these groups, click on the group name to highlight it then click the ADD-> button. The group name will appear in the "Associated Groups" field.

**Associated Groups**
The names listed in this field are the groups to which this device has been added. Commands relating to a group that appears in this field will affect this device. For instance, if you give the command "Turn on all *downstairs* lights", then this device will also be one of the devices affected because it's associated with the "downstairs" group. To assign the device to another group, click on that group name in the "Available Groups" field and click the ADD-> button. The group name will then appear in this field to indicate that the device is associated with it.

**New**
Click this button to create a new group. A separate screen will appear. Type in a name for the group. The group name will be listed in the *Available Groups* field.

**Remove**
Click on a group name to highlight it, then click this button to delete that group name.

**Add ->**
Highlight one or more group names in the *Available Groups* field and then press this button. The group name(s) will appear in the *Associated Groups* field, indicating that the device being created can also be referenced by this group name(s).

**<- Remove**
Highlight one or more group names in the *Associated Groups* field and then press this button. The group name(s) will disappear from this field, indicating that the device is no longer associated with that group or groups.

**Remove All**
Click to remove all of the group names in the *Associated Groups* field.

**Cancel**
Closes the screen without saving the settings.

**Back**
Returns to the previous screen.

**Finish**
Click to complete creating the device. The information for the device will be displayed in the *System Data Devices* screen (see page 137). See Syntax on page 47 for instructions on controlling the device by voice. Go to the *Manual Control Panel* on page 182 for information on controlling the device from the keyboard.

---

## Using OPEN/CLOSE and LOCK/UNLOCK Actions with HAL

If you are using an X-10 Universal module in conjunction with HAL to automate the operation of a garage door or a door lock, additional sensors must be used to determine if the door is OPEN or CLOSED, LOCKED or UNLOCKED. If you tell HAL to "Close the garage door," HAL will send a signal that will, in effect, press the button that *you* press when operating the door opener manually. The door opener does not tell HAL if the door is up or down - that can only be determined by visual inspection. The button sends the same signal regardless of the position of the door -- if it is down and you want it to go up, you press the button -- if it is up and you want it to go down, you press the button. This is not a problem because you can see the door when you press the button. But HAL gives you the ability to "press the button" by voice from anywhere in the world. HAL understands the difference between open/close and lock/unlock. But you must install sensors to tell HAL if the door is up/down or locked/unlocked -- the sensors will perform the visual inspection that will assure that your command has been accurately carried out. Visit the "Do-It-Yourself" section of the HAL website at www.AutomatedLiving.com for instructions on the use of sensors.

---

# DIRECTORY

This screen is where individuals and businesses are added to HAL's internal Directory database. The database can also be modified from the *Phone Pad* (see page 192).

To open this screen, right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**. When the *HAL System Data* screen appears, click on the DIRECTORY button.

Information in the grid below is for demonstration purposes only. The actual information that appears depends on the information entered while creating or modifying entries (see *Add Information to the Directory* below).

Click on a column heading to sort the list by the information in that column. Use the slider bar at the bottom of the screen to scroll through the information. To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Letters/ALL**

To view the entries whose last name begins with a specific letter, click on that letter at the bottom of the *Directory* screen. Click ALL to view all entries and to view entries missing first and last name information, such as companies.

**Report**

Generates a printable screen with the list of Directory entries and their information.

**Export**
Click to export the information in the Directory database. Directory information is exported as ASCII text in a CSV format (data fields are separated by commas).

**Import**
Click to import information from another database into HAL's Directory database. Directory information can be imported from CSV formatted files (data fields are separated by commas) containing ASCII text. The data fields in the CSV file must have titles that match the ones listed below. The data can be in any order, but the titles must match and the first line of the CSV file must list the data fields in the order in which the data is written in the file.

Imported data fields:
FIRSTNAME, LASTNAME, COMPANY, STREET, CITY, STATE, ZIP, PHONE, WORKPHONE, CELLPHONE, FAXPHONE, PAGER, PIN

**Add**
Click to add information to the Directory (see below).

**Modify**
Click on the name of the entry to select it, then click this button to modify it.

**Remove**
Click on the name of the entry to select it, then click this button to delete it.

**Done**
Saves the settings and closes the screen.

**Help**
Click this button to open the Online Help Guide to this section.

*Related Topics*


pg. 21 Set up HAL's Speakerphone Feature
47 Ask for Directory information and tell HAL to call someone
98 Set up HAL to use telephones
148 Add phone numbers and addresses to the Directory
192 The *Phone Pad* screen

## Add Information to the System Data Directory

Click ADD at the bottom of the *System Data Directory* screen (see page 146) to bring up the *Directory Add* screen. Fill in the information and click OK to save the entry.


When paging some individuals, a pause may be necessary before the PIN number is entered. This pause is to allow time for the paging system to answer the phone and request the PIN number. If this individual's paging system uses PIN numbers and requires a pause, then add one or more commas after the pager number or before the PIN number (e.g. 3015554694,, 22689 or 3015554694 ,,22689). Each comma is equal to about a two-second pause. Some trial-and-error may be required to achieve the best timing. (See *Paging Configuration* on page 102 for information on specifying the numeric message to send with the page and go to *Syntax* on page 71 for information on verbally telling HAL to page someone.)

A checkmark next to a location indicates that a customized greeting has been recorded for that location. A customized greeting is a special message that plays when HAL receives a phone call from a specific phone number (this feature requires Caller ID on the phone line). Customized greetings can be recorded verbally (see Chapter 3) or from within the *Phone Pad Directory Edit* screen (see page 194). Click the ERASE button to clear the customized greeting – that caller will now hear the standard greeting when he or she calls in. Customized messages can also be erased verbally or from the *Phone Pad Directory Edit* screen.

NOTE: You can also add a phone number to the Directory by right-clicking on an entry in the *Calls In* screen (see page 188).

*Related Topics*


pg. 47 Leave a custom greeting for a specific caller
146 The *System Data Directory* screen
192 The *Phone Pad* screen

# MACROS

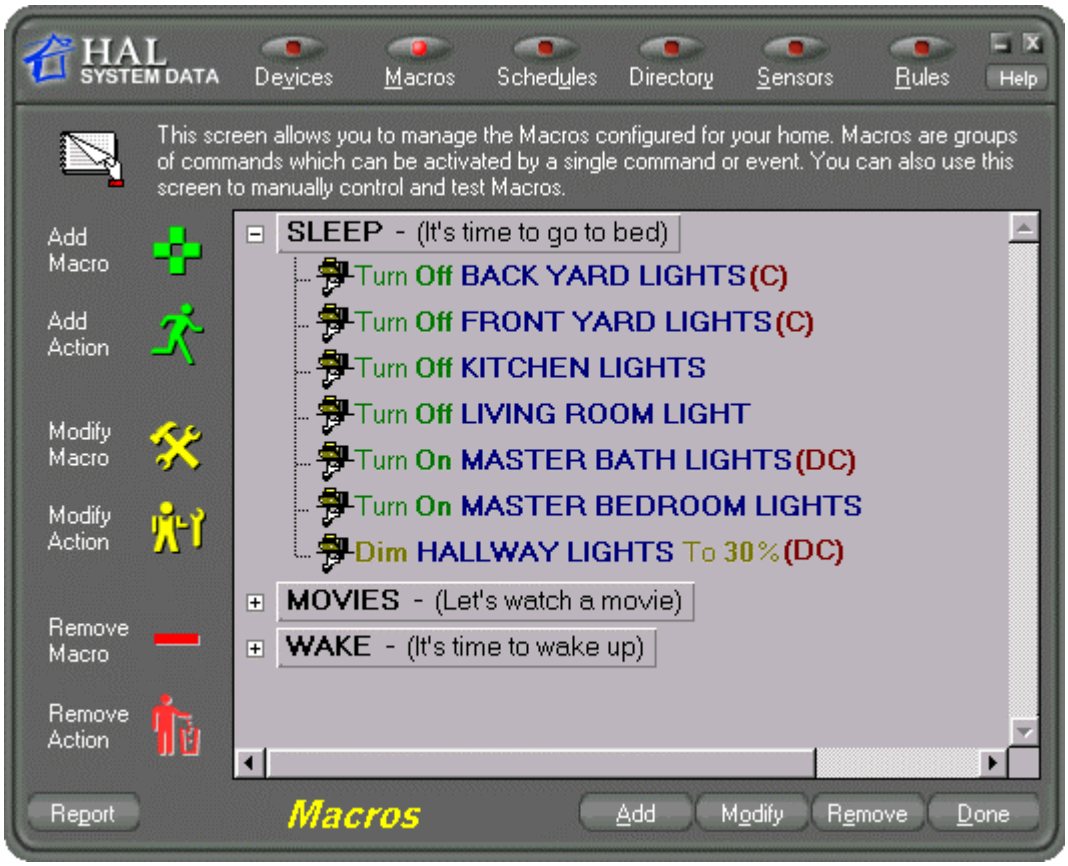
To open this screen, right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN or go to **Start**… **Programs**… **HALdeluxe**… **HAL Data Environment**. When the *HAL System Data* screen appears, click on the MACROS button.

HAL can be programmed to run a macro (a series of commands) when it receives a single command. For example, a macro called "sleep" could be created to turn off the outside lights, turn off the kitchen light, and turn on the bedroom light. Go to Chapter 3 for instructions on running macros by voice.

Information in the grid below is for demonstration purposes only. The actual information that appears depends on the macros that are created (see *Create a Macro* below).

Click on the minus (-) sign to collapse the macro and hide its information. Click on the plus (+) sign to expand the macro and view its information.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).




***Information for the "sleep" macro can be interpreted like this:***

SLEEP -- The name of the macro. This name is used when commanding HAL to activate the macro (see Chapter 3). The macro can also be activated by using a recognition phrase.

*It's time to go to bed* -- This is the recognition phrase that can be said into the computer microphone or a telephone to activate the macro. The macro can also be activated by using the macro name.

Turn off BACK YARD LIGHTS... -- These are the actions that are carried out when the macro is activated. The actions are started in the order that they appear in the macro, but an action does not have to be completed before the next one is started. In other words, the second action will not wait for the first action to be *completed* before it starts. For instance, if the kitchen light is programmed with a one-minute delay at the beginning but the living room light isn't, then the living room light will turn off *before* the kitchen light turns off.

The codes in parentheses indicate which confirmation option was selected in the *Action Wizard* screen for that action (see page 174). No code after the device indicates that HAL will not confirm when this action has taken place. A code of (C) indicates that HAL will confirm the action. A code of (DC) indicates that HAL will follow the confirmation option that was selected when that device was created (see page 143) -- if "Confirm Actions" was selected, then HAL will confirm the action, but if it wasn't selected, then HAL won't confirm it. Not all actions in the *Action Wizard* screen have confirmation options.

**Add Action**
Click this icon to add an action to a macro. The *Action Wizard* screen will appear (see page 174).

**Add Macro**
Click this icon to create a macro (see below).

**Modify Action**
Click on an action in a macro to highlight it, then click this button to modify it. The *Action Wizard* screen will appear.

**Modify Macro**
Click on a macro to highlight it, then click this button to modify it.

**Remove Action**
Click on an action in a macro to highlight it, then click this button to delete it.

**Remove Macro**
Click on a macro to highlight it, then click this button to delete it.

**Help**
Click this button to open the Online Help Guide to this section.

**Report**
Generates a printable screen with the list of macros and their information.

**Add**
Click to create a macro (see below).

**Modify**
Click on the name of the macro to select it, then click this button to modify it.

**Remove**
Click on the name of the macro to select it, then click this button to delete it.

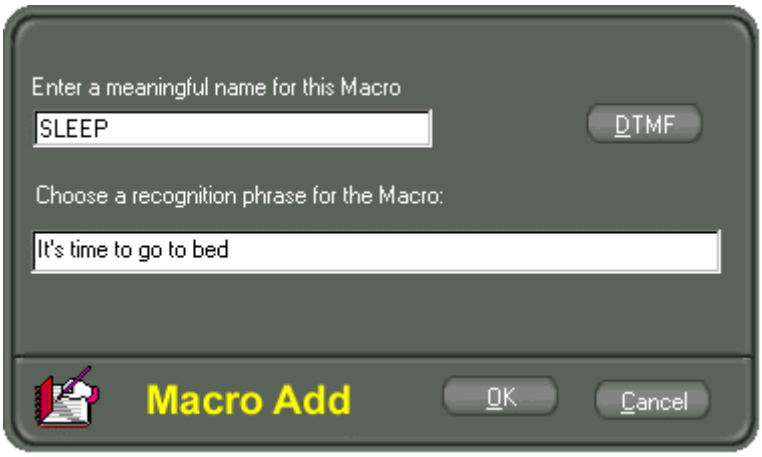
**Done**
Saves the settings and closes the screen.

*Related Topics*

pg. 47 Start a macro by voice
150 Create a macro
152 Mouse shortcuts in the *Macros* screen
174 Use macros in rules, schedules, and other macros

## Create a Macro

Click on ADD at the bottom of the *System Data Macros* screen (see page 149). The following screen will appear.




**Enter a meaningful name for this Macro**

Type a one-word name for the macro. The macro can be activated by this name (see Chapter 3) or by the recognition phrase.

**DTMF**

If you want to be able to run a macro by using the keypad on a remote or local (house) phone, then click this button. The *Macro Options* screen will appear.


Type three numbers into the "Telephone Number" field. When speaking to HAL from a telephone, use either a vocal command to activate the macro (see Chapter 3) or press the numbers on the telephone keypad that correspond to the numbers set in this field. If the keypad code matches another macro, the system will issue a warning. Click OK to save the settings and close the screen.

**Choose a recognition phrase for the Macro**

Type a phrase that can be used to activate the macro (see Chapter 3). The whole phrase will have to be said to run the macro, so the phrase shouldn't be too long or too complex to remember. There is a maximum limit of 128 characters (including spaces) for the recognition phrase.

NOTE: Don't start the phrase with any of the standard words or phrases that are used in HAL context, such as "turn on", "turnoff", "open", "close", etc.

**Ok**

Saves the settings and closes the screen.

**Cancel**

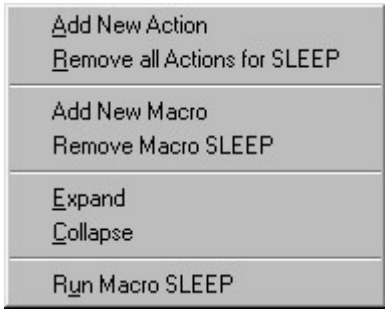
Closes the screen without saving the settings.

## Mouse Shortcuts in the Macros Screen

Some functions appear when you right-click in the *System Data Macros* screen (see page 149). Which functions appear depends on if you right-click on a macro's name or on one of its actions.

### Macro's Name

If you right-click on the macro's name, the menu at right appears.




**Add New Action**
Click to add a new action to the selected macro. The *Action Wizard* screen will appear (see page 174).

**Remove all Actions for SLEEP**
Click to delete all of the actions programmed for the selected macro. In this case, the selected macro is called "sleep".

**Add New Macro**
Click to create a macro (see page 150).

**Remove Macro SLEEP**
Click to remove the selected macro, in this case the macro called "sleep".

**Expand**
Click to expand the selected macro to view its actions. This is the same as clicking the plus (+) symbol next to the macro name.

**Collapse**
Click to collapse the selected macro to hide its actions. This is the same as clicking the minus (-) symbol next to the macro name.

**Run Macro SLEEP**
Click to activate the selected macro, in this case the macro "sleep".

### Macro's Action

If you right-click on the macro's action, the menu at right appears.


**Add New Action**
Click to add a new action to the selected macro. The *Action Wizard* screen will appear (see page 174).

**Remove 'Turn Off…' from SLEEP**
Click to remove the selected action from the selected macro. In this case, it would remove the action "turn off the kitchen light" from the "sleep" macro.

**Modify 'Turn Off…' in SLEEP**
Click to re-open the *Action Wizard* screen (see page 174) to modify the settings for this action.

**Add New Macro**
Click to create a macro (see page 150).

**Remove Macro SLEEP**
Click to remove the selected macro, in this case the macro called "sleep".

**Expand**
Click to expand the selected macro to view its actions. This is the same as clicking the plus (+) symbol next to themacro name.

**Collapse**
Click to collapse the selected macro to hide its actions. This is the same as clicking the minus (-) symbol next to the macro name.

**Move Device Up/Move Device Down**
Click to move the selected action up or down one line.

**Execute Action**
Click to perform the action without running the rest of the macro.

*Related Topics*

pg. 47 Run a macro by voice
149 The *System Data Macros* screen
150 Create a macro
174 The *Action Wizard* screen

# RULES

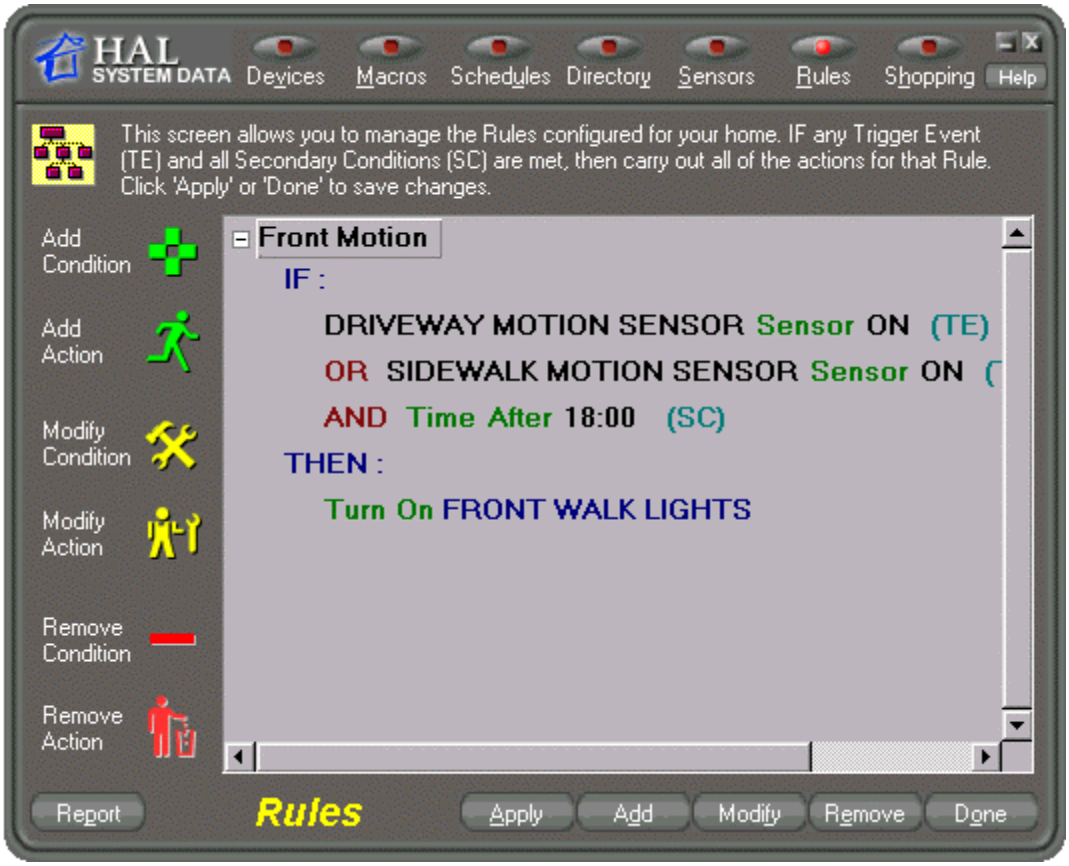
To open this screen, right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN or go to **Start**… **Programs**… **HALdeluxe**… **HAL Data Environment**. When the *HAL System Data* screen appears, click on the RULES button.

This screen is where you create mini-programs that HAL will perform when conditions in those mini-programs are met.

Additional options appear by right-clicking on a Rule's name, a condition, or an action.

Information in the screen below is for demonstration purposes only. The actual information that appears depends on the Rules that you add to the system (see *Create a Rule* below).

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).




A Rule's conditions appear under the **IF:** header and its actions appear under the **THEN:** header.

There are two types of conditions that can be used in a Rule - **Trigger Events** and **Secondary Conditions**. A Trigger Event causes a Rule to be evaluated when that condition is met. In other words, when a Trigger Event occurs, HAL will check the Secondary Conditions in that Rule to see if those conditions have also been met. If they have, then the Rule runs (actions are carried out). If one or more Secondary Conditions haven't been met, then the Rule doesn't run.

Each Rule needs at least one Trigger Event (indicated by a TE in parentheses), but can contain more than one Trigger Event. In that situation either Trigger Event is used to start the evaluation process (multiple Trigger Events in the same Rule are separated by the article OR).

Secondary Conditions are not required, but if a Rule does contain one or more Secondary Conditions (indicated by an SC in parentheses), then all of those Secondary Conditions must be met (Secondary Conditions are separated from Trigger Events and other Secondary Conditions by the article AND).

## Example

In the screen above, the Rule called "Front Motion" has two Trigger Events. If either the Driveway Motion Sensor or the Sidewalk Motion Sensor detects movements (turns on), then HAL also checks to see if it's after 6:00pm (18:00 hours in military time). If it is after 6:00pm, then the Front Walk Lights will turn on. If it's not after 6:00pm, then that condition isn't met so the Rule won't run so the Front Walk Lights won't turn on.

Go to *Create a Rule* on page 156 for information on adding a new Rule and go to *Add Conditions to a Rule* on page 156 for more information on the types of conditions that can be used in Rules. For more information on the actions that can be added to a Rule, go to the section on the *Action Wizard* screen (see page 174).

**Add Condition**
Click to add a condition (*If* statement) to the selected Rule (see *Add Conditions to a Rule* below).

**Add Action**
Click to add an action (*Then* statement) to the selected Rule. Clicking this option launches the *Action Wizard* screen (see page 174).

**Modify Condition**
Click to modify a condition.

**Modify Action**
Click to modify an action.

**Remove Condition**
Click to delete the selected condition from a Rule.

**Remove Action**
Click to delete the selected action from a Rule.

**Report**
Generates a printable screen with the list of Rules and their conditions and actions.

**Apply**
Click to save any changes to the screen, including any additions, deletions, and modifications to Rules, actions, and conditions.

**Add**
Click to create a Rule (see below).

**Modify**
Click to delete the selected Rule.

**Remove**
Click to remove the selected Rule.

**Done**
Saves the settings and closes the screen.

**Help**
Click this button to open the Online Help Guide to this section.

*Related Topics*

pg. 156 Create a Rule
156 Add conditions to a Rule
171 Create a flag, timer, or sensor to use with a Rule

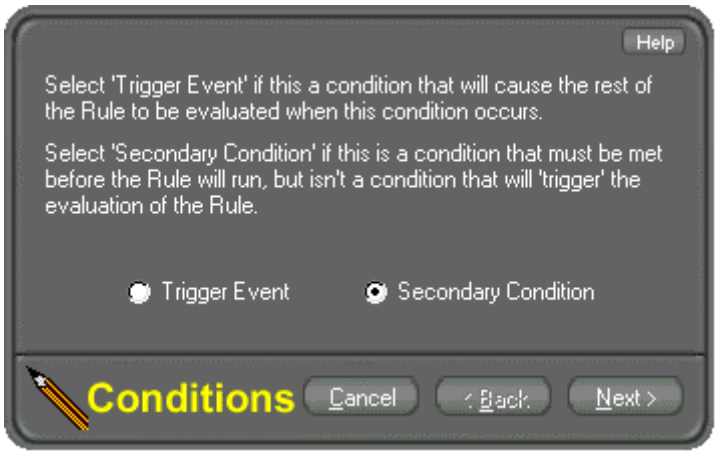
## Create a Rule

Click on the ADD button or the ADD RULE icon in the main *System Data Rules* screen (see page 154). The following screen appears.


Type a name for the Rule. Press OK. The *Conditions* screen automatically opens (go to *Add Conditions to a Rule* below).

## Add Conditions to a Rule

The *Conditions* screen appears automatically when creating a new Rule (see above) or when ADD CONDITION is clicked in the *System Data Rules* screen (see page 154).




A Rule's conditions appear in the main *System Data Rules* screen under the **IF:** header.

There are two types of conditions that can be used in a Rule - **Trigger Events** and **Secondary Conditions**. A Trigger Event causes a Rule to be evaluated when that condition is met. In other words, when a Trigger Event occurs, HAL will check the Secondary Conditions in that Rule to see if those conditions have also been met. If they have, then the Rule runs (actions are carried out). If one or more Secondary Conditions haven't been met, then the Rule doesn't run.

Each Rule needs at least one Trigger Event (indicated by a TE in parentheses), but can contain more than one Trigger Event. In that situation either Trigger Event is used to start the evaluation process (multiple Trigger Events in the same Rule are separated by the article OR).

Secondary Conditions are not required, but if a Rule does contain one or more Secondary Conditions (indicated by an SC in parentheses), then all of those Secondary Conditions must be met (Secondary Conditions are separated from Trigger Events and other Secondary Conditions by the article AND).

Which condition types are available when you click NEXT in the screen above depends on whether you're adding a Trigger Event or a Secondary Condition to the Rule. Not all condition types can be Trigger Events and not all condition types can be Secondary Conditions. Each condition type is described below.

NOTE: Some of the condition types won't be available until the system has been set up to use those types. For instance, sensors, flags, and timers have to be created in the system before those condition types will appear in the *Condition* field's drop-down menu.

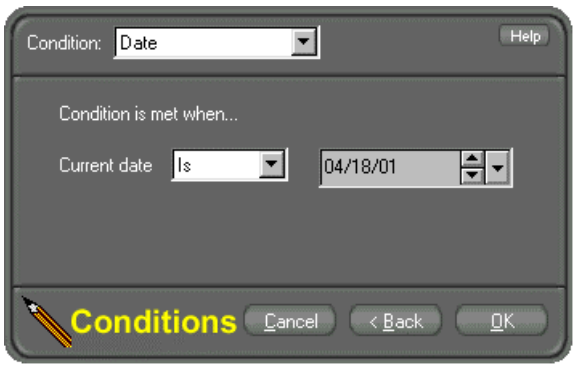
| PAGE | CONDITION TYPE | TRIGGER EVENT | SECONDARY CONDITION |
|---|---|---|---|
| 158 | Date | No | Yes |
| 158 | Day of Week | No | Yes |
| 158 | Device Status | No | Yes |
| 158 | Expired Timer | Yes | Yes |
| 159 | Flag | Yes | Yes |
| 159 | Listening | Yes | No |
| 159 | New E-mails | Yes | Yes |
| 160 | New Voice Messages | Yes | Yes |
| 160 | Sensor | Yes | Yes |
| 160 | Sunrise/Sunset | Yes | Yes |
| 161 | Telephone | Yes | No |
| 162 | Time | | |
| | Is | Yes | No |
| | After/Before/Between | No | Yes |

## Date Condition

The screen at right appears if DATE is chosen in the *Condition* field. Set the condition to be After, Before, or on (Is) a certain date or Between two dates.

Dates can only be Secondary Conditions:

*If…date is 04/18/01*

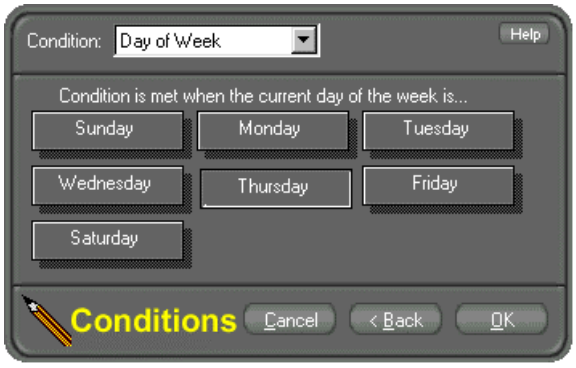



## Day of Week Condition

The screen at right appears if DAY OF WEEK is chosen in the *Condition* field. Select one or more days of the week.

Days of the week can only be Secondary Conditions:

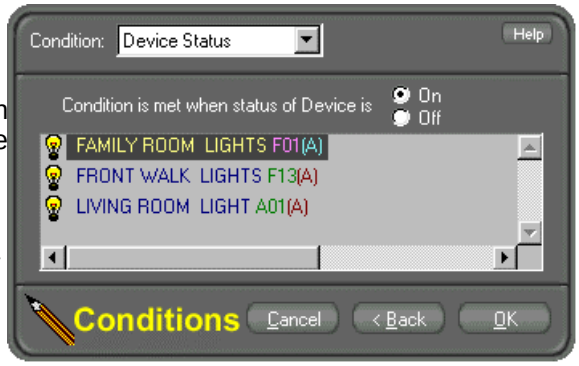
*If…day of week* = ----*T*-- [Thursday]




## Device Status Condition

The screen at right appears if DEVICE STATUS is chosen in the *Condition* field. Choose a device from the drop-down menu and indicate whether the condition is true when the device is on or off. Only devices that can report their status and have that feature enabled in the *Device Wizard* (see page 142) will be listed in this screen.

The Device Status condition can only be a Secondary Condition (*If…Family Room Lights Status is On*).

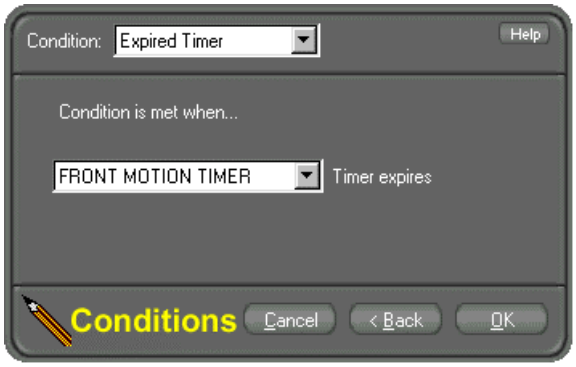



## Expired Timer Condition

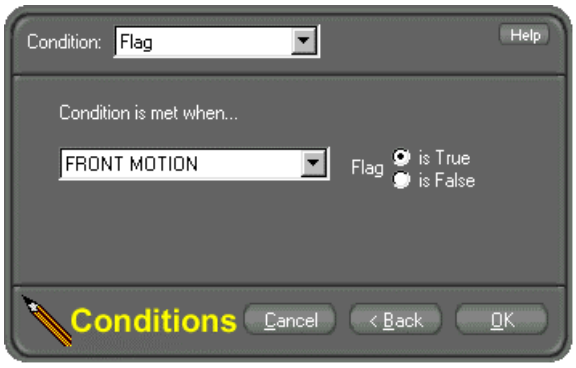
The screen at right appears if EXPIRED TIMER is chosen in the *Condition* field. Choose a timer from the drop-down menu. Timers must first be created in the *System Data Sensors* screen (see page 173) before they can be used in conditions.

A timer can be a Trigger Event or a Secondary Condition:

*If…Kitchen Timer has Expired*



## Flag Condition

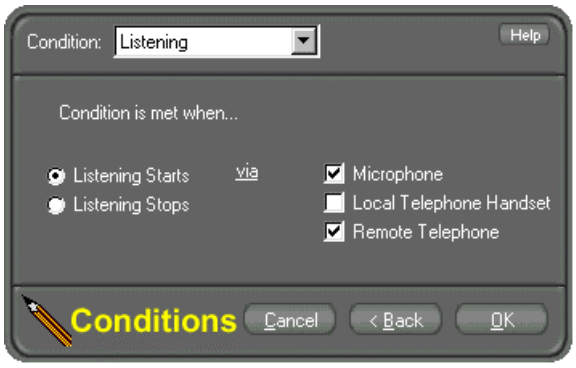



The screen at right appears if FLAG is chosen in the *Condition* field. Choose a flag from the drop-down menu and select whether its status must be *True* or *False*. Flags must first be created in the *System Data Sensors* screen (see page 172) before they can be used in conditions.

A flag can be a Trigger Event or a Secondary Condition:
*If…Outside Motion Flag is True*

NOTE: If a flag is currently set to False and it's set to False again as part of an action in a Macro, Schedule, or Rule, then the flag's condition is considered to be changed. If a Rule has a Trigger Event that watches that flag for a change of status to False, then that condition is met.

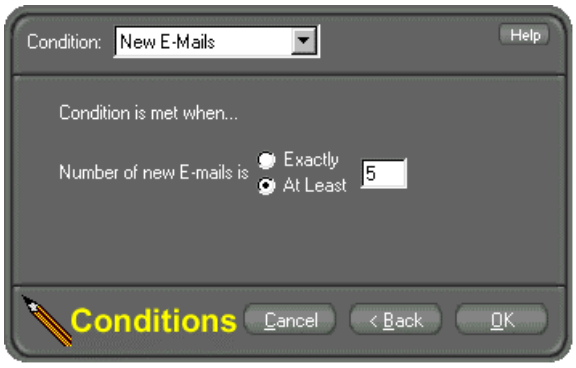
## Listening Condition




The screen at right appears if LISTENING is chosen in the *Condition* field. Select whether this condition is for when HAL goes into listening mode (*listening starts*) or just after HAL exits listening mode (*listening stops*). Then select whether this condition only relates to interaction through the microphone, the local handset (house phone), a remote phone, or a combination of them.

Listening can only be a Trigger Event:
*If…Listening via Mic, Remote Starts*

## New E-mails Condition

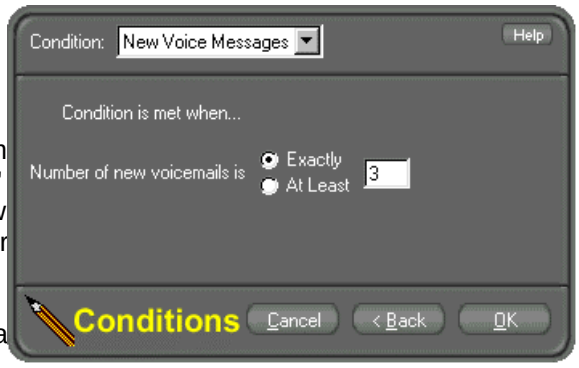



The screen at right appears if NEW E-MAILS is chosen in the *Condition* field. The "Exactly" option means that the condition is met so long as the number of new (unread) E-mail messages matches the number specified. "At Least" means that the condition is met when the number of new E-mail messages is equal to or greater than the number specified.

New E-mails can be a Trigger Event or a Secondary Condition:
*If…New E-mails >= 5*

NOTE: When used as a Trigger Event with "At Least" selected, the Rule will be evaluated when the number of new E-mail messages reaches the specified number and each time an E-mail message comes in after that.

## New Voice Messages Condition



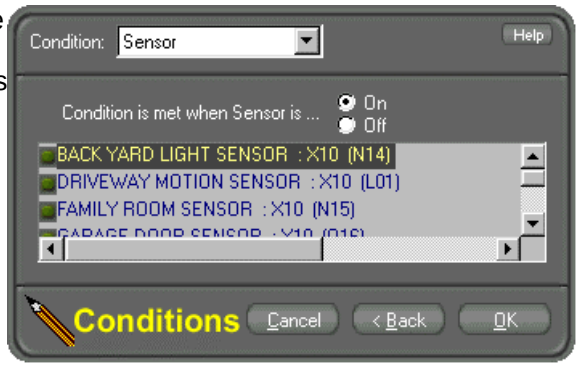

The screen at right appears if NEW VOICE MESSAGES is chosen in the *Condition* field. The "Exactly" option means that the condition is met so long as the number of new (unheard) voice messages in the system matches the number specified in this screen. "At Least" means that the condition is met when the number of new voice messages is equal to or greater than the number specified.

New voice messages can be a Trigger Event or a Secondary Condition:

*If…New Voice Messages = 3*

NOTE: When used as a Trigger Event with "At Least" selected, the Rule will be evaluated when the number of new voice messages reaches the specified number and each time a voice message comes in after that.

## Sensor Condition




The screen at right appears if SENSOR is chosen in the *Condition* field. Select a sensor from the list and indicate whether the condition is met when the sensor is *On* or *Off*. Sensors must first be created in the *System Data Sensors* screen (see page171) before they can be used in conditions.

A sensor can be a Trigger Event or a Secondary Condition:

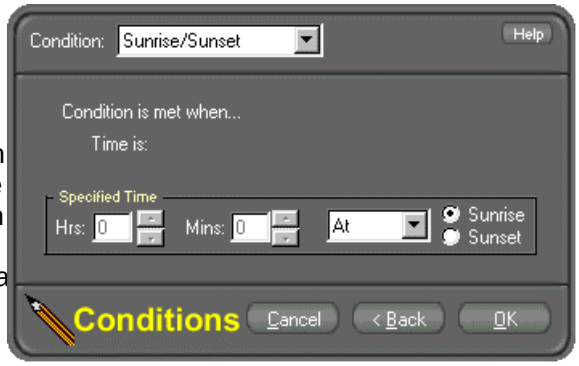
*If…Living Room Sensor is On*

NOTE: If a sensor is currently "on" and something occurs that again "turns it on", then the sensor's condition is considered to be changed. If a Rule has a Trigger Event that watches that sensor for a change of status to "on", then that condition is met.

## Sunrise/Sunset Condition

Which screen appears depends on if you're using the Sunrise/Sunset condition as a Trigger Event or a Secondary Condition.

(Go to *Location Configuration* on page 94 for information on setting up HAL to track sunrise and sunset for your location.)




Using as a Trigger Event

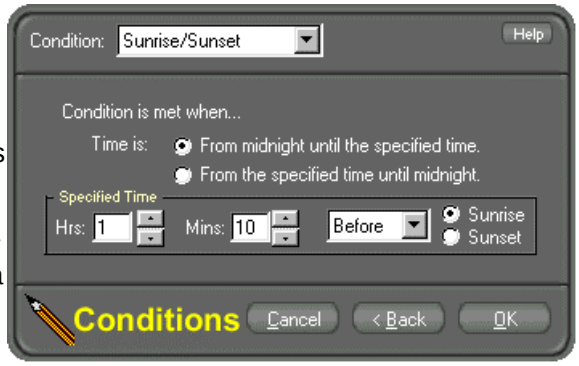
If sunrise/sunset is being used as a Trigger Event, then the screen at right will appear. The condition will be based on "absolute" time. In other words, the condition is met when the time of day is *exactly* what's specified. The time of day can be set to sunrise or to sunset or to a number of hours and/or minutes before or after sunrise or sunset.

Some examples would be:

*If…Time is Sunrise*
(the time when sunrise will occur that day, such as 6:43am, 7:12am, etc.)
*If…Time is 0:30 Before Sunrise* (30 minutes before sunrise)
*If…Time is 1:30 After Sunset* (1 hour 30 minutes after sunset)

Using as a Secondary Condition

If sunrise/sunset is being used as a Secondary Condition, then the screen at right will appear. The condition will be based on a range of time. In other words, the condition is met when the time of day is falls within the specified range. The time of day can be between midnight and sunrise or a number of hours and/or minutes before or after sunrise, or the time of day can be between sunset and midnight or between a number of hours and/or minutes before or after sunset and midnight.




Some examples of the "From midnight until…" option would be:

*If…Time is Before Sunset* (anytime between midnight and sunset)
*If…Time is Before 3:00 After Sunset* (anytime between midnight and three hours after sunset)
*If…Time is Before 2:30 Before Sunrise* (anytime between midnight and 2 1/2 hours before sunrise)

Some examples of the "From the specified time until…" option would be:

*If…Time is After Sunrise* (anytime between sunrise and midnight)
*If…Time is After 1:15 Before Sunrise* (anytime between 1 hour 15 minutes before sunrise and midnight)
*If…Time is After 0:15 After Sunset* (anytime between 15 minutes after sunset and midnight)

**Telephone Condition**

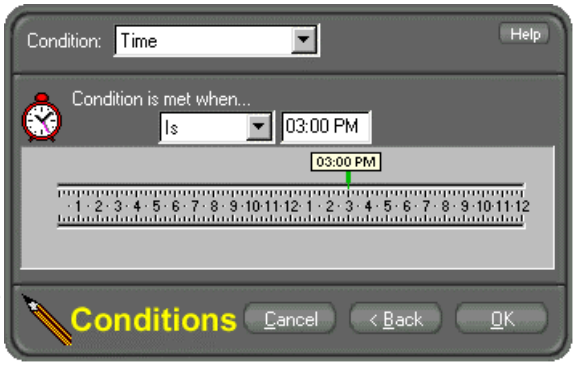
The screen at right appears if TELEPHONE is chosen in the *Condition* field.

Telephone can only be a Trigger Event:

*If…Telephone is ON Hook*

## Time Condition

Which options are available in the screen at right depends on if you're using the Time condition as a Trigger Event or a Secondary Condition.




### Using as a Trigger Event

If time is being used as a Trigger Event, then the condition will be based on "absolute" time. In other words, the condition is met when the time of day is *exactly* what's specified (*If…Time* ***is*** *17:30*). Simply slide the green indicator to the desired time.

### Using as a Secondary Condition

If time is being used as a Secondary Condition, then the condition will be based on a range of time. In other words, the condition is met when the time of day falls within the specified range. The time of day can be between midnight and the time specified (*If…Time* ***Before*** *9:30*), between the time specified and midnight (*If…Time* ***After*** *18:00*), and between two set times (*If…Time* ***Between*** *12:00 And 23:59*).

NOTE: You can't wrap a time condition around midnight. In other words, if "between" is selected as the time option, you can't drag the bars so that the first time is before midnight and the second time is after midnight (HAL will issue a warning if you try). To set a range of time that includes both sides of midnight, create two Rules with the same Trigger Events but different secondary time conditions. In one Rule, set the time condition to the period before midnight, such as *If Time After 23:00*. In the second Rule, set the time condition to the period after midnight, such as *If Time Before 6:00*.

# SCHEDULES

To open this screen, right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN or go to **Start**… **Programs**… **HALdeluxe**… **HAL Data Environment**. When the *HAL System Data* screen appears, click on the SCHEDULES button.

Devices can be scheduled on an hourly, daily, weekly, or customized basis. Devices can be scheduled to begin at a specific time or in relation to sunrise or sunset (see *Location Configuration* on page 94). Schedules can be created by voice (see Chapter 3) or manually (see *Schedule an Event* below).

Information in the grid below is for demonstration purposes only. The actual information that appears depends on the scheduled events that you add to the system (see *Schedule an Event*).

Click on a column heading to sort the list by the information in that column. To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Action**

This is the action that's being scheduled.

**Date**

The date that the event is scheduled to run is listed in this column. If it's a one-time event, then the event will disappear from this screen after it runs. If it's a recurring event, then the date in this column will change to reflect the next scheduled date.

**Start Time**
If the event was programmed to start at a specific time, then that start time is listed in this column (time is based on military time). If the event was programmed to start in relation to sunrise or sunset, then this column displays that offset time. In other words, if the event was programmed to start one hour after sunrise, then HAL would indicate 01:00, but if it was scheduled to begin right at sunrise or sunset, then this column would display 0:00.

**End Time**
If the event was programmed to end at a specific time, then that end time is listed in this column (time is based on military time).

**Day**
If the event is scheduled to run on one or more days of the week, then abbreviations for those days are listed in this column.

**Type**
This is the type of action that's being scheduled.

**Show Rules Events**
Enable this option to show the Schedules that are based on Rules. If this option were not enabled, then Schedules that have a type of "SUN_TRIGGER" or "TIME_TRIGGER" would not be listed.

**Report**
Generates a printable screen with the list of events and their information.

**Add**
Click to schedule an event (see below).

**Modify**
Click on the name of the event to select it, then click this button to modify it.

**Remove**
Click on the name of the event to select it, then click this button to delete it.

**Done**
Saves the settings and closes the screen.

**Help**
Click this button to open the Online Help Guide to this section.

*Related Topics*

pg. 47 Create a schedule by voice
165 Create a schedule manually

## Schedule an Event

### Specifying the Type of Event

Click on ADD at the bottom of the *System Data Schedules* screen (see page 163). The *Schedule Wizard* screen will appear.


**Action**
Click the EDIT ACTION button to modify the action that is to be carried out when this event runs. The action selected and its parameters will be displayed in this field.

**Edit Action**
Opens the *Action Wizard* screen (see page 174). Select within that screen the action that is being scheduled, such as turning a light on or off, opening or closing blinds, etc.

**One time on specific date(s)**
Select this option if the event is to occur on a specific date or dates.

**Repeat occurrence**
Select this option if the event is to occur every week on a specific day or days.

**Cancel**
Closes the screen without saving the settings.

**Back**
Inactive in this screen.

**Next**
Proceeds to the next screen.

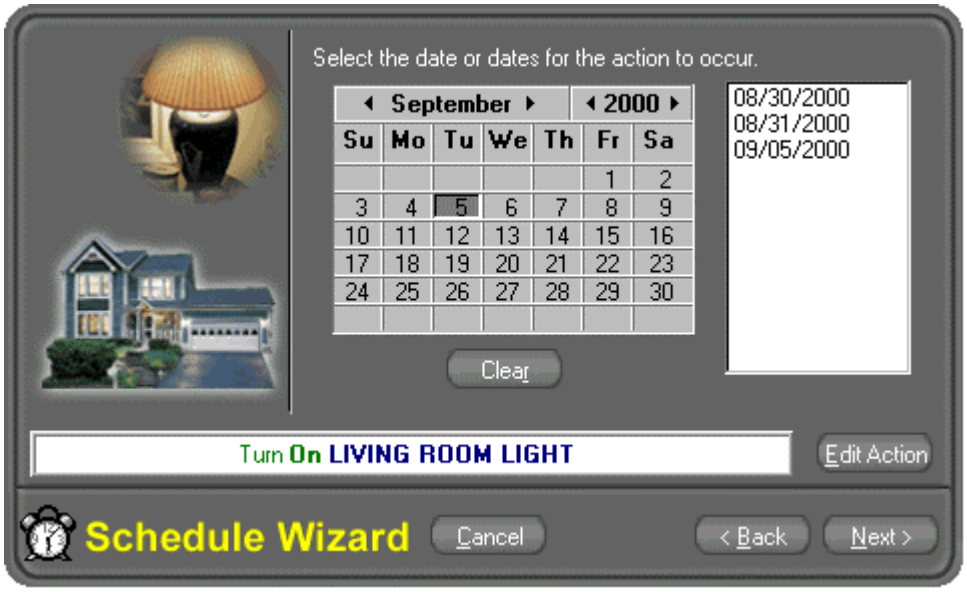
Click NEXT to proceed (see below).

**Specifying Days**

The screen that appears for this step will depend on which option was selected in the previous screen (see above).

***If One Time on Specific Date(s) Was Chosen***…

…then this screen will appear next.




**Select the date or dates for the action to occur**
Click on a date or dates. The date(s) will appear in the field to the right. To select a date in a different month or year, click on the arrows next to the item to be changed. If multiple dates are selected, then each date will appear as a separate scheduled event in the *System Data Schedules* screen.

**Clear**
Clears the field to the right where the date(s) is displayed.

**Action**
Click the EDIT ACTION button to modify the action to be carried out when this event runs. The action selected and its parameters will be displayed in this field.

**Edit Action**
Opens the *Action Wizard* screen (see page 174). Select within that screen the action that is being scheduled, such as turning a light on or off, opening or closing blinds, etc.

**Cancel**
Closes the screen without saving the settings.

**Back**
Returns to the previous screen.

**Next**
Proceeds to the next screen.

***If Repeat Occurrence Was Chosen…***

…then this screen will appear next.


**Action**

Click the EDIT ACTION button to modify the action to be carried out when this event runs. The action selected and its parameters will be displayed in this field.

**Edit Action**

Opens the *Action Wizard* screen (see page 174). Select within that screen the action that is being scheduled, such as turning a light on or off, opening or closing blinds, etc.

**Days of the Week**

Select the day or days of the week on which the event is to occur. Click on EVERYDAY to select every day of the week, WEEKDAYS to select Monday through Friday only, WEEKENDS to select Saturday and Sunday only, or USER DEFINED to select days that don't fall into one of the other patterns (one or more days must also be selected at left).

**Cancel**

Closes the screen without saving the settings.

**Back**

Returns to the previous screen.

**Next**

Proceeds to the next screen.

Click NEXT to proceed (see below).

## Specifying Time

The appearance of this screen depends on whether "Start/End Time" or "Sunrise/Sunset" is selected.

**If *Start/End Time* is Selected…**


**Event will be for a duration of time**

If the event is to run for a specified length of time, select this option. If this option is not selected, then the action scheduled in the event will continue running until another macro, schedule, verbal command, or keyboard process stops it. In other words, if the event turns on a light, that light will stay on until it receives a turn off command issued by something not related to this schedule.

**Start**

Set the time at which the event is to occur. Use the arrows next to the field to set the time. To change the minutes or seconds, click on one of the digits to select it (indicated by a blinking arrow). Use the arrow keys to change the time or enter the time using the numbers on the computer keyboard.

**End**

If desired, set the time at which the event is to end. An end time can only be set if the *Event will be for a duration of time* option has been selected. Use the arrows next to the field to set the time. To change the minutes or seconds, click on one of the digits to select it (indicated by a blinking arrow). Use the arrow keys to change the time or enter the time using the numbers on the computer keyboard. *Scheduled events are not required to have "end" times.*

**Clear**

Resets the clocks to zero.

**Action**

Click the EDIT ACTION button to modify the action to be carried out when this event runs. The action selected and its parameters will be displayed in this field.

**Edit Action**

Opens the *Action Wizard* screen (see page 174). Select within that screen the action that is being scheduled, such as turning a light on or off, opening or closing blinds, etc.

**Cancel**

Closes the screen without saving the settings.

**Back**
Returns to the previous screen.

**Finish**
Click this button to save the event and close the *Schedule Wizard* screen.

**If *Sunrise/Sunset* is Selected…**

Sunrise and sunset times are calculated based on latitude and longitude coordinates, which are set and explained in more detail in *Location Configuration* (see page 94).


**Sunrise or Sunset**
Select whether the event will occur in relation to sunrise or sunset, then choose from the drop-down menu whether it will occur Before, After, or At sunrise or sunset.

**Hours and Minutes**
Use these fields to selected how far before or after sunrise or sunset the event will take place.

**Action**
Click the EDIT ACTION button to modify the action to be carried out when this event runs. The action selected and its parameters will be displayed in this field.

**Edit Action**
Opens the *Action Wizard* screen (see page 174). Select within that screen the action that is being scheduled, such as turning a light on or off, opening or closing blinds, etc.

**Cancel**
Closes the screen without saving the settings.

**Back**
Returns to the previous screen.

**Finish**
Click this button to save the event and close the *Schedule Wizard* screen.

# SENSORS

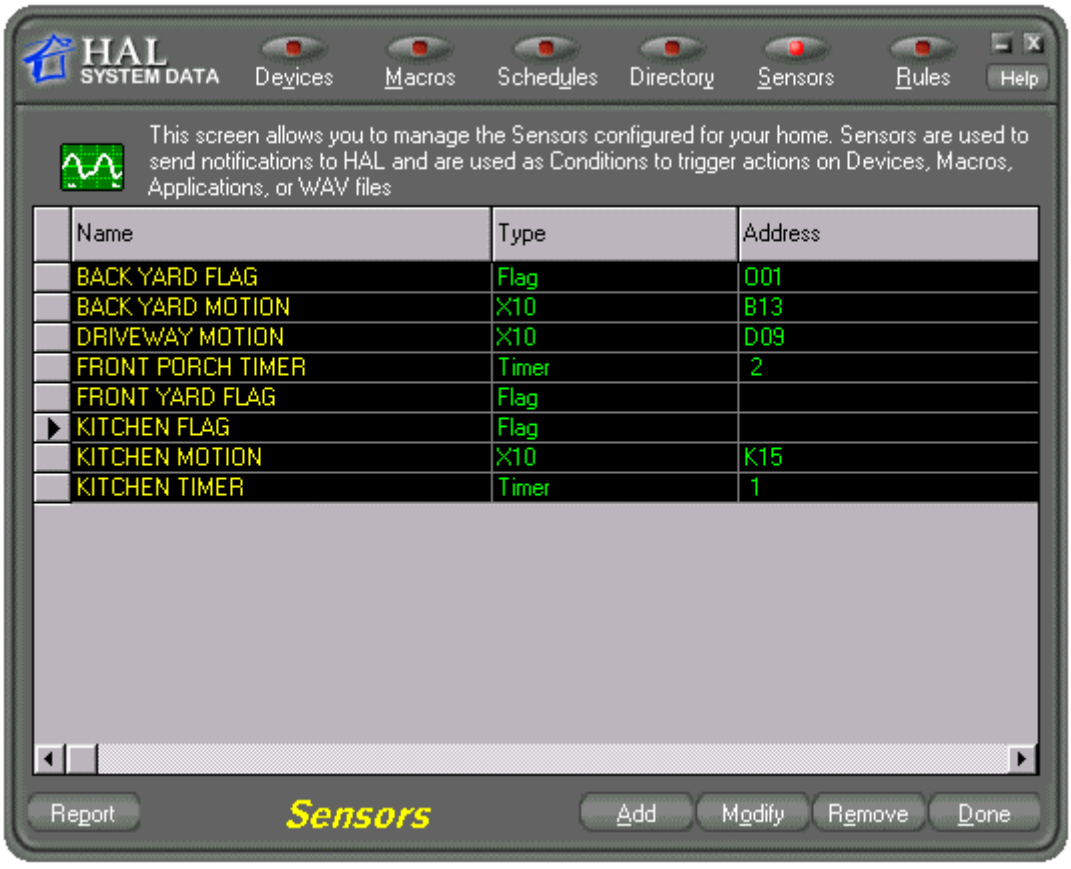
To open this screen, right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN or go to **Start**… **Programs**… **HALdeluxe**… **HAL Data Environment**. When the *HAL System Data* screen appears, click on the SENSORS button.

This screen is for adding, deleting, and modifying sensors in HAL. Sensors must be created in this screen before they can be used in rules or macros.

Information in the grid below is for demonstration purposes only. The actual information that appears depends on the sensors that you add to the system (see *Add a Sensor* below).

To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width. Use the slide bar at the bottom of the screen to scroll through the columns.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).




**Name**

This is the name assigned to the sensor when it was created.

**Type**

This is the type of sensor that was created. Flags, X-10 sensors, and timers can be created in HALdeluxe.

**Address**

The house and unit code assigned to an X-10 sensor or the number that HAL assigned to a timer (this field is blank for flags).

**Report**
Generates a printable screen with the list of sensors and their settings.

**Add**
Click to add a sensor (see below).

**Modify**
Click on the name of the sensor to select it, then click this button to modify it.

**Remove**
Click on the name of the sensor to select it, then click this button to delete it

**Done**
Saves the settings and closes the screen.

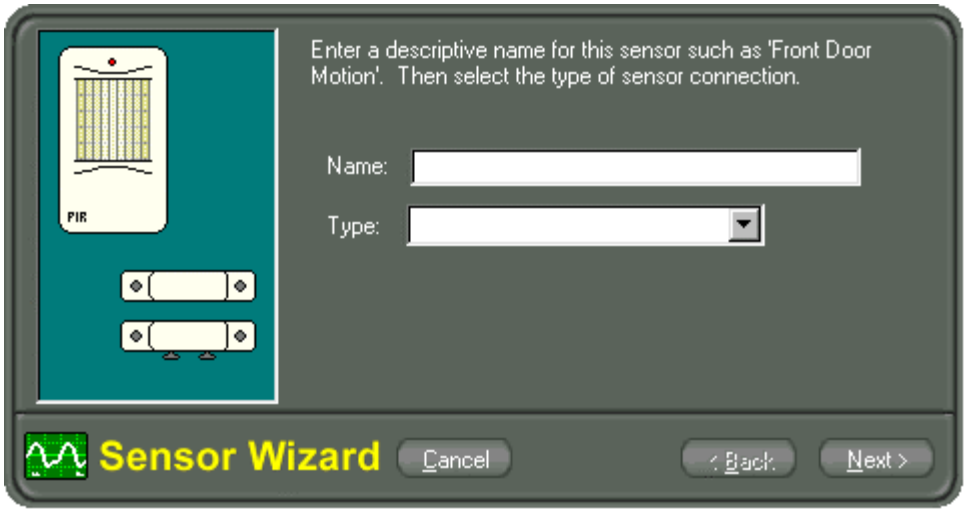
**Help**
Click this button to open the Online Help Guide to this section.

*Related Topics*

pg. 156 Use a flag, sensor, or timer to trigger a Rule
172 Create a flag
173 Create a timer
173 Create an X-10 sensor

## Add a Sensor

Click ADD at the bottom of the *System Data Sensors* screen (see page 170). The *Sensor Wizard* screen appears.




**Name**
Type a name for the sensor, such as "Front Door Motion". The name is restricted to 25 characters including spaces.

**Type**
Choose from the drop-down menu the type of sensor being added. The types of sensors available in HALdeluxe are Flags, Timers, and X10 Sensors (see below).

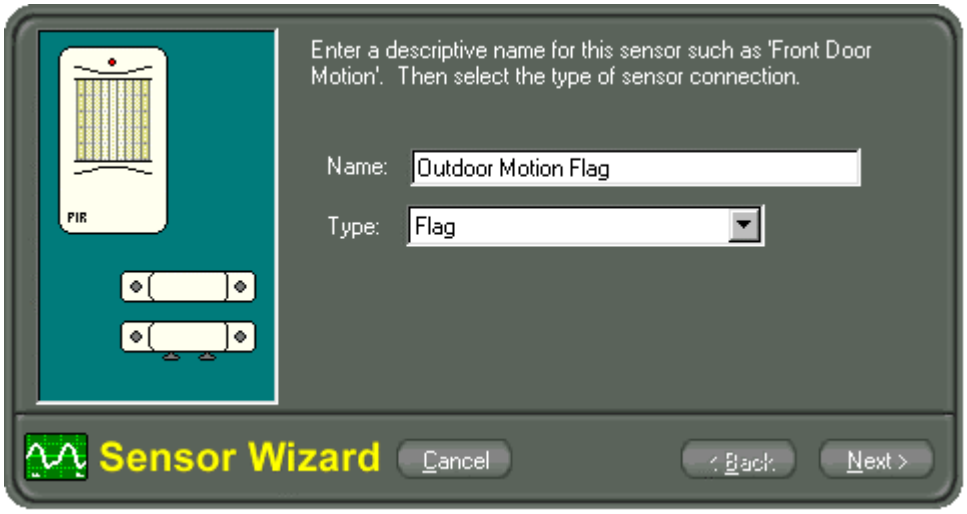
**Cancel**
Closes the screen without saving the settings.

**Back**
Inactive in this screen.

**Next**
Proceeds to the next screen. Which screen appears next depends on which option was selected in the *Type* field (see the next few pages).

## Create a Flag

Click ADD in the *System Data Sensors* screen (see page 170). The *Sensor Wizard* will appear. Type a name for the flag and choose FLAG from the drop-down "Type" menu.



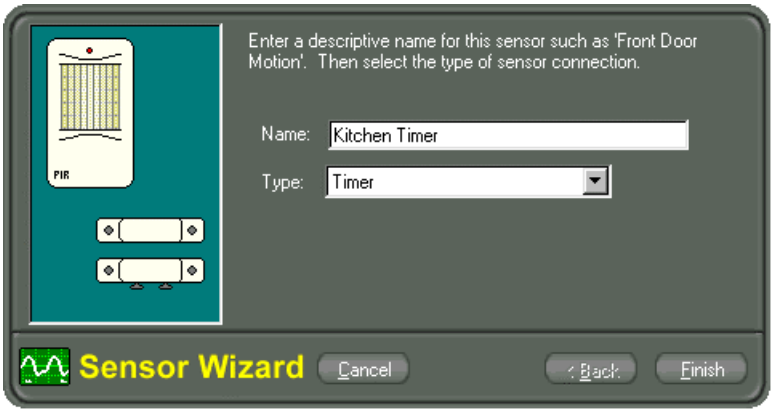

Click NEXT to continue.

Select the starting value for the flag as either TRUE or FALSE and select whether the flag's status will be saved or reset to its default value when the program is shut down. Upon startup, the flag will be set to this value.


Click FINISH to save the flag and close the *Sensor Wizard* screen.

## Create a Timer

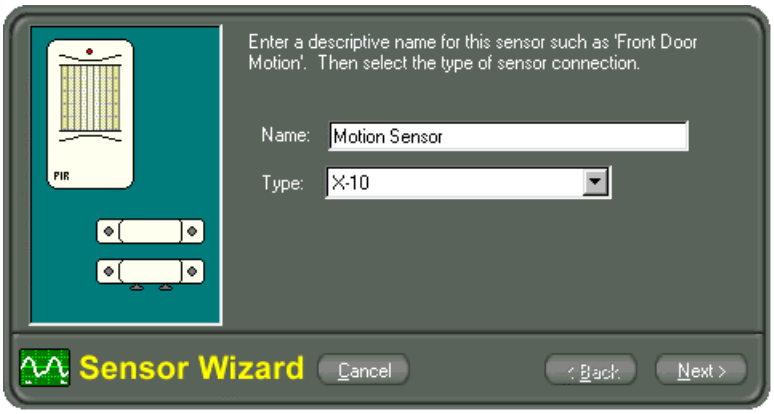
Click ADD in the *System Data Sensors* screen (see page 170). The *Sensor Wizard* will appear. Type a name for the timer and choose TIMER from the drop-down "Type" menu.




Click FINISH to save the timer and close the *Sensor Wizard* screen.

## Create an X-10 Sensor

Click ADD in the *System Data Sensors* screen (see page 170). The *Sensor Wizard* will appear. Type a name for the X-10 sensor and choose X10 from the drop-down "Type" menu.

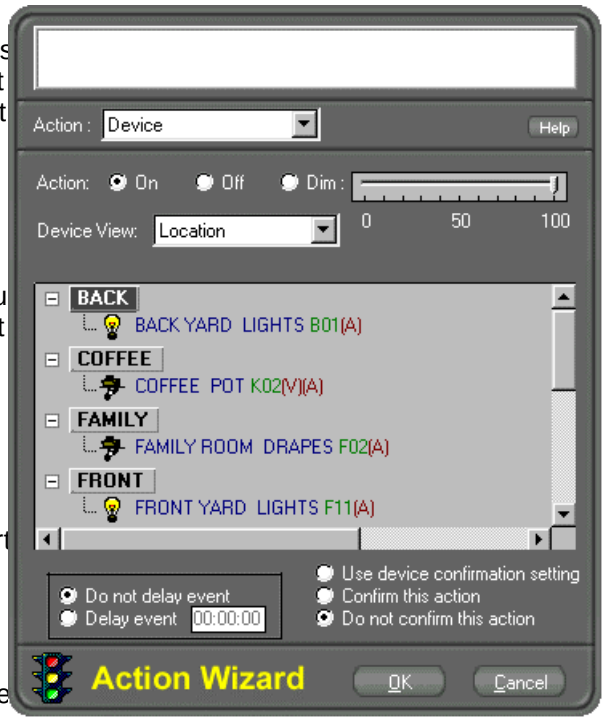



Click NEXT to continue. Click on the dials to set the X10 address that will be sent when the sensor is activated.


Click FINISH to save the X10 sensor and close the *Sensor Wizard* screen.

# ACTION WIZARD SCREEN

The *Action Wizard* screen is used throughout *System Data* as part of rules, macros, and schedules. It cannot be accessed directly; it can only be accessed when creating or modifying rules, macros, and schedules. The items within the *Action Wizard* screen are the same no matter which *System Data* screen was used to launch it.




**Display**

The first field displays the action's settings as it's currently configured -- how long the action will wait before it runs, what type of action it is, and what the action will affect (device, file, macro, etc.).

**Action**

Choose from the drop-down menu the type of action wanted. The *Action Wizard* screen changes according to the action selected. The menu defaults to *Device* since X-10 devices are the most frequent objects of macros, rules, and schedules. ***See the next few pages for screen shots and descriptions of the possible actions available in HAL.***

**Delay/Do Not Delay…**

Choose whether this action should start immediately (*Do not delay event*) or whether it should pause a specified amount of time before running (*Delay event*). If "Delay event" is chosen, then type the amount of time (in hours: minutes: seconds) that HAL is to wait before carrying out the action.

**Confirmations**

Select whether or not HAL is to confirm this action. In other words, choose whether or not HAL will say anything after this action has completed, such as *I "have turned off the living room lights."* Use device confirmation settings means that HAL will use whatever confirmation options were selected when the device was created (this option is only available if DEVICE was selected in the *Action* field). Confirm this action means that HAL will give verbal confirmation after carrying out the action. Do not confirm this action means that HAL won't say anything after it's carried out the action.

**Help**

Click this button to open the Online Help Guide for more information on this screen.

**Ok**

Saves the settings and closes the screen.

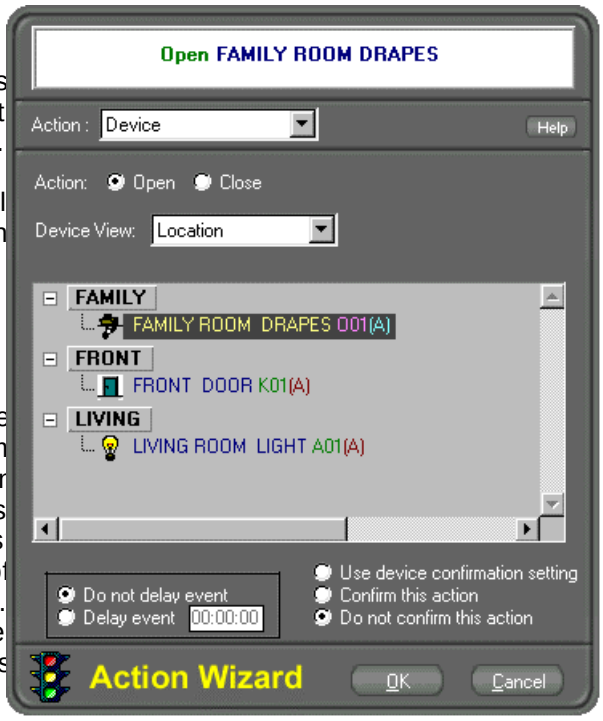
**Cancel**

Closes the screen without saving the settings.

*Related Topics*

pg. 150 Create macros
156 Create rules
165 Create schedules

## Action: Device




The default choice that appears every time the *Action Wizard* screen is opened. A list of installed devices is displayed in the middle of the screen. Click to select the device to be used in the rule, macro, or schedule. Next to *Device Action*, choose what action the device is to perform. The options next to "Device Action" will change depending on if the device is one that turns on or off, can be dimmed, or opens or closes.

Devices are created in the *System Data Devices* screen (see page 139).

A device with a red "V" in parentheses after the device name indicates that the option to have HAL confirm verbal commands for this device was selected when the device was created. A red "A" in parentheses indicates that the option to have the device's actions confirmed was selected. Devices could have one of those indicators, both of them, or neither of them. These confirmations will be overridden if one of the first two confirmation options are selected in this screen.

*See the note on page 145 for information on using the OPEN/CLOSE and LOCK/UNLOCK commands with HAL.*

## Action: Flag

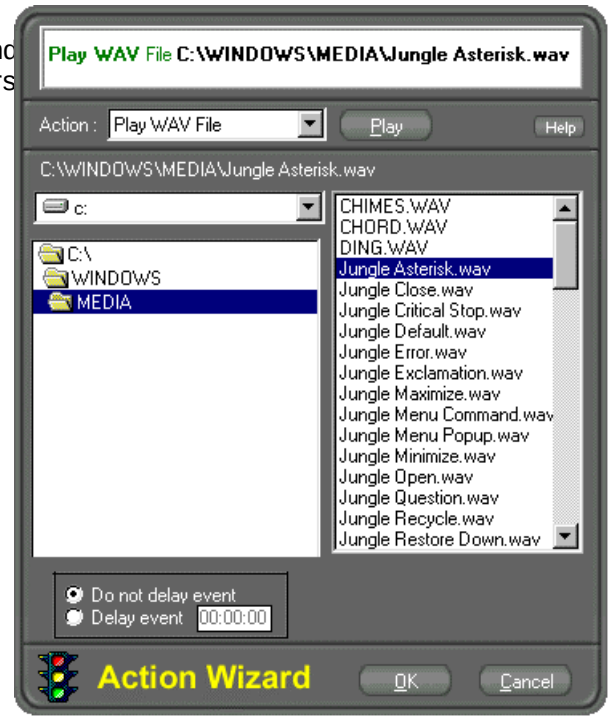

Set a logical flag's value to either TRUE or FALSE. Flags can be utilized by Rules as part of the evaluated conditional phrase. For example, an exterior motion detector could change the status of a logical flag to *True* when someone walks around the house. A condition could then be triggered which would say the phrase "*Someone was lurking around the house while you were away*" if the flag's status was *True*.

Flags are created in the *System Data Sensors* screen (see page 172).

## Action: Play WAV File

Opens a screen with a standard tree list of files and folders on the computer. Navigate through the folders and select the WAV file to be used.

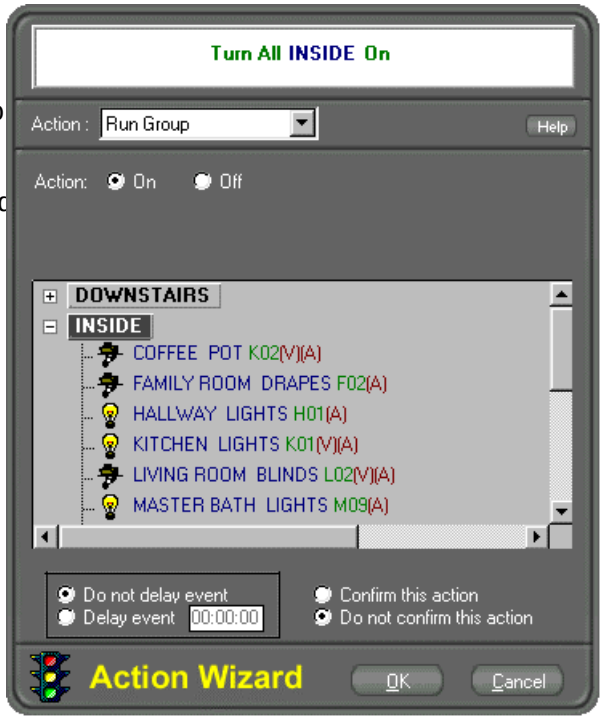
Click PLAY to hear the WAV file.




## Action: Run Group

Select an entire group of devices for use in a rule, macro, or schedule. Devices aredisplayed by group name. Click on the plus (+) icon to expand the list to view the devices assigned to that group.

Devices are assigned to groups when they're created or modified in *System Data Devices* (page144).

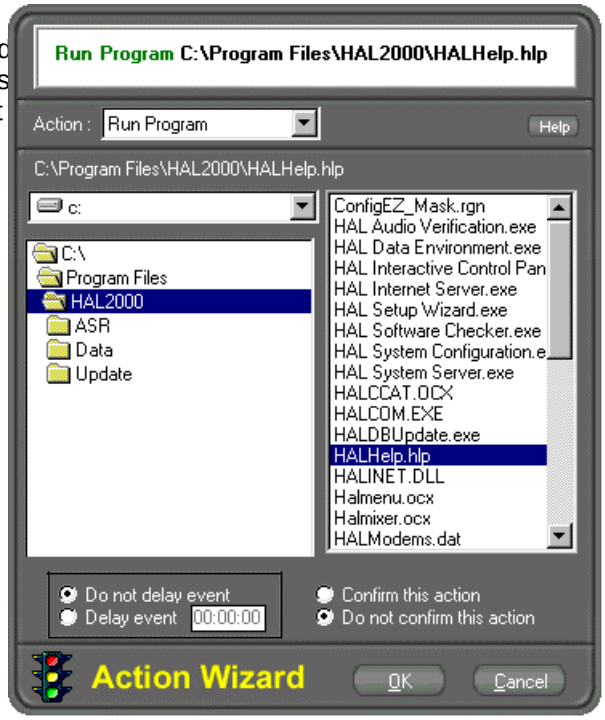


## Action: Run Macro

This screen displays a list of the macros previously created in *System Data Macros* (see page 150). Select the macro to be used. Click the plus (+) icon to view the actions for that macro.


## Action: Run Program

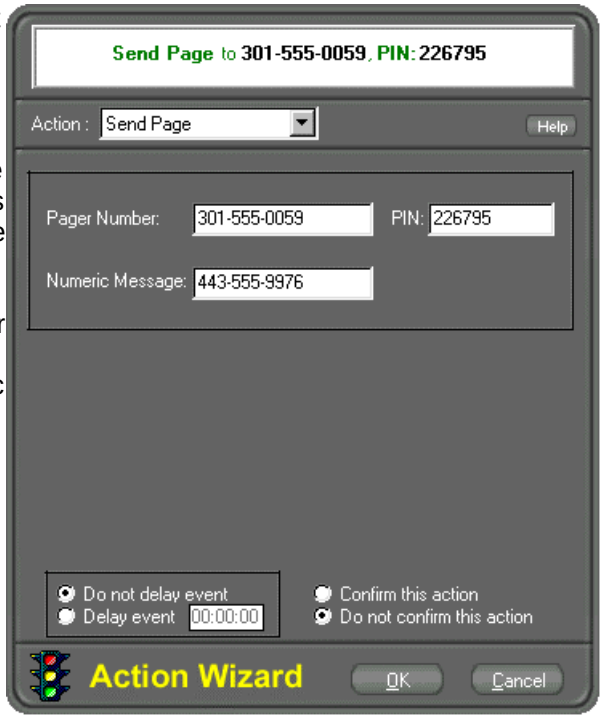
Opens a screen with a standard tree list of files and folders on the computer. Navigate through the folders and select the program to be run. Any data file that has a program associated with it can be run.



## Action: Send Page

Type the phone number of the pager that you want HAL to call. Type a PIN number if that pager requires it. The number in the *Numeric Message* field is the number that will display in the pager.

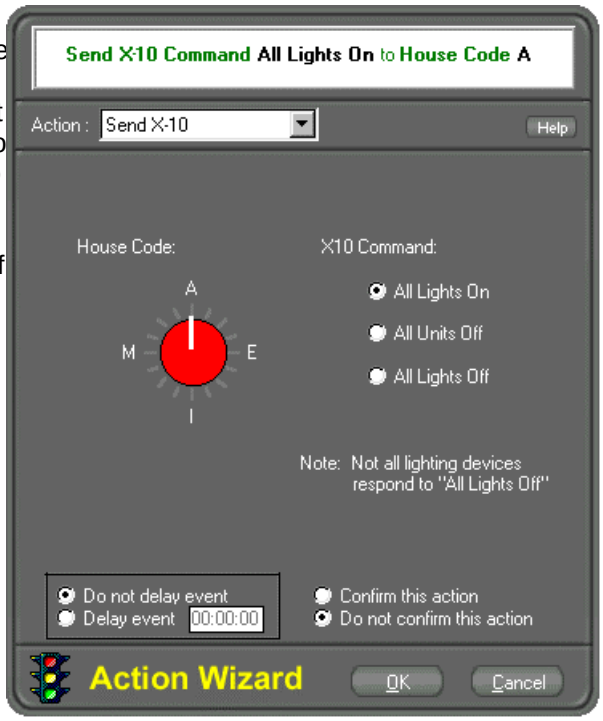
When paging some individuals, a pause may be necessary before the PIN number is entered. This pause is to allow time for the paging system to answe the phone and request the PIN number. If this individual's paging systems use PIN numbers and requires a pause, then add one or more commas after the pager number or before the PIN number (e.g. 3015554694,, 22689 or 3015554694 ,,22689). Eac comma is equal to about a two-second pause. Some trial-and-error may be required to achieve the best timing.




## Action: Send X-10

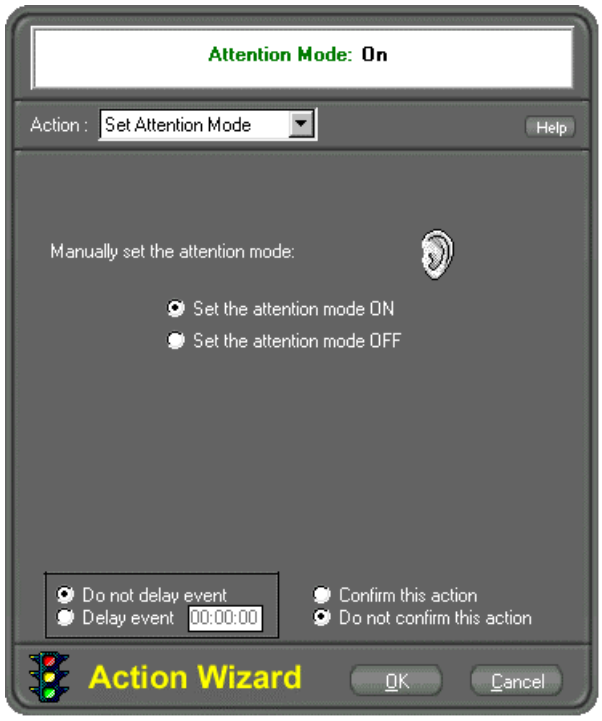
Turn the dial to select which house code is to be affected. Choose whether all of the *lights* assigned to that house code are to turn on or turn off or select whether all *devices* assigned to that house code are to turn off. "Lights" are any lights connected to a lamp module or an X-10 dimmable light receiver. "Units" refers to all X-10 devices, whether they're lamp modules, appliance modules, or other types of receivers.

NOTE: Not all X-10 modules will support all of these options.



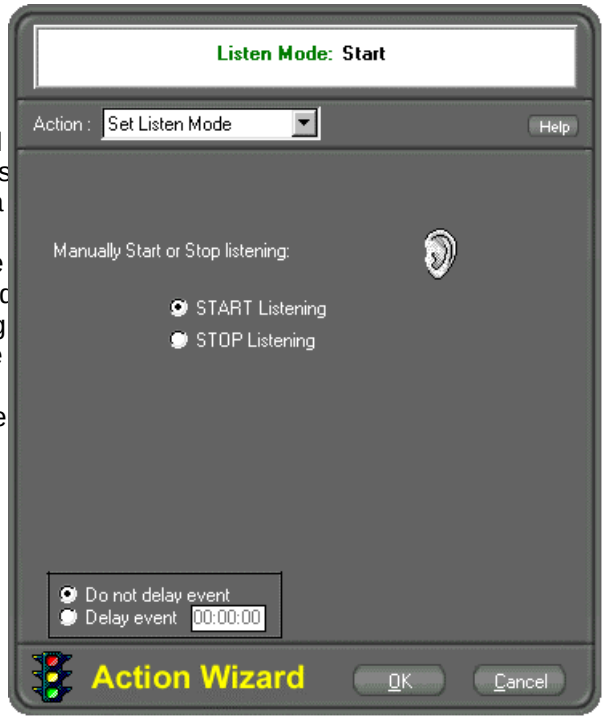
## Action: Set Attention Mode

Enables or disables HAL's attention word mode (see *Personal Assistant Configuration* on page 95 for more information on the attention word mode).

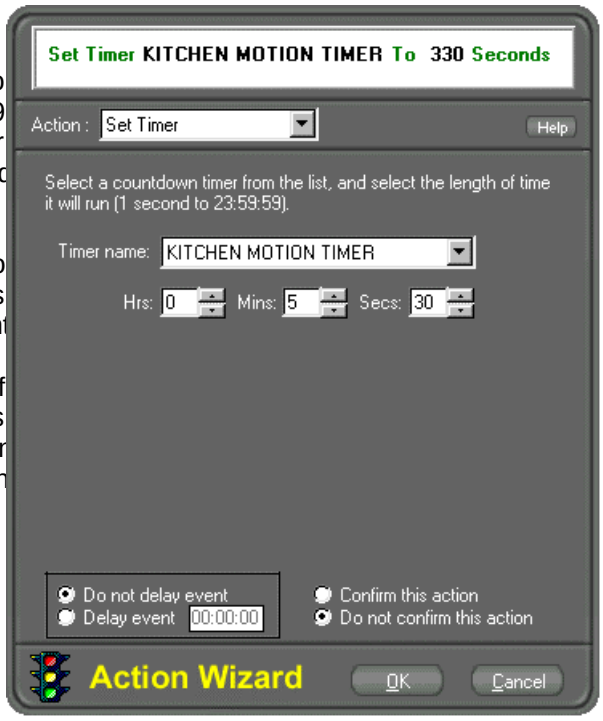



## Action: Set Listen Mode

Activates or deactivates HAL's listening mode. When used in a house with relay-switched microphones and speakers, an X-10 controller in each room could be configured to trip a rule in HAL which would turn off all the microphones and speakers except for the ones located in that particular room. With such a configuration, a dialog could be initiated with HAL that would only be heard in one room. Another use for the Listen Mode action would be to make a customized stop-listening function. For example, instead of using "Goodbye", "Thank you", or "That's all" to disengage the listening mode, a macro could be created that would turn off listening mode when the phrase "Be quiet" is spoken.



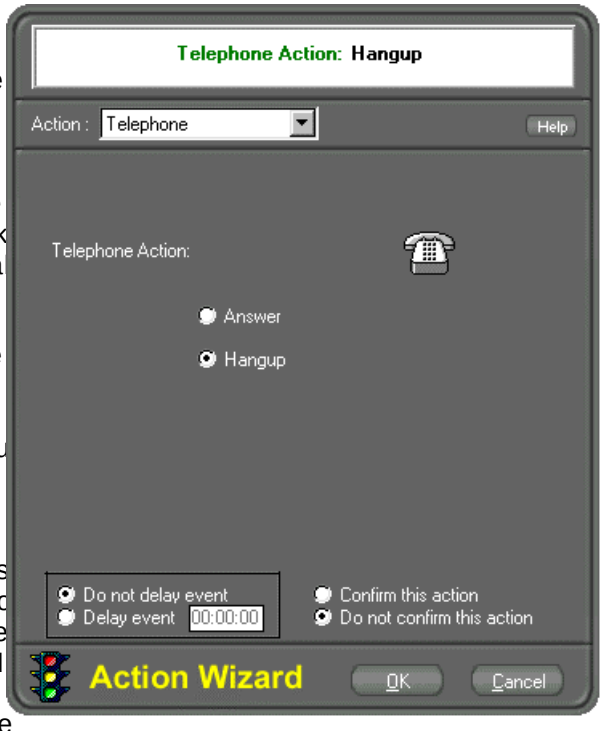
## Action: Set Timer




Select from the drop-down menu the name of the timer to be started. Set the amount of time the sensor counts down from (up to 23 hours, 59 minutes, and 59 seconds). Timers are countdown clocks. For example, a motion sensor in the kitchen is activated when someone walks into the room and the kitchen lights turn on. A five-minute timer is started. If the timer counts down to zero and there has been no further movement in the room, then the kitchen lights turn off. If the motion sensor detects movement before the timer reaches zero, then the timer resets and again starts to count down from five minutes. If HAL is shut down while timers are running or if there is a power outage, then all the timers will reset on program startup to their start times and will only begin counting down when triggered by a macro or condition.

Timers are created in the *System Data Sensors* screen (173).

## Action: Telephone

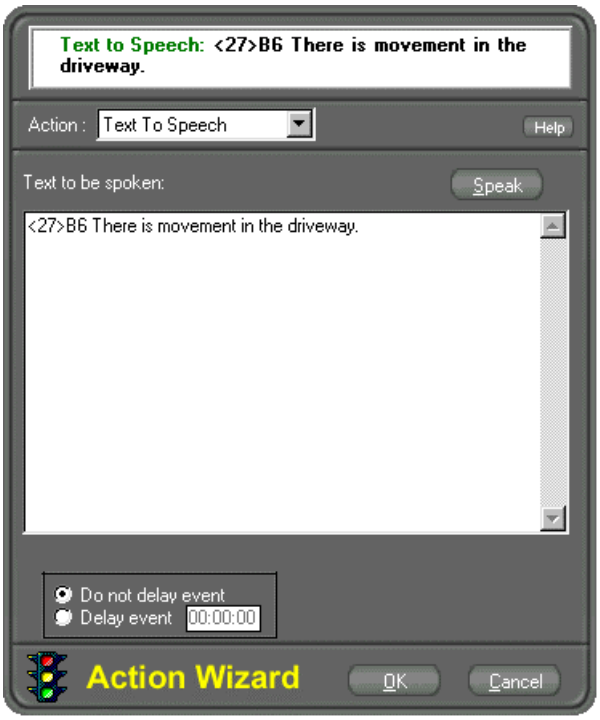



The "Answer" action will have HAL answer an incoming phone call in speakerphone mode (see page 21). For instance, you could create a macro with a recognition phrase of "Pick up the phone." When the phone rings, you can get HAL's attention and say "Pick up the phone." HAL will then answer the phone in speakerphone mode, which means that you can talk to the caller through the computer instead of an actual telephone.

The "Hangup" action causes HAL to hang up the phone line, releasing it for incoming calls. For example, if you have open-air microphones and talk-back speakers installed throughout the house, you could tell HAL to "Call John Smith." HAL would call that person and you could speak to him through the open-air microphones (your whole house is turned into a giant speakerphone). However, because HAL is passing the call along the system and not "listening" to it, there's no way to verbally tell HAL to hang up the phone (some modems may recognize dial tone and hang up automatically). That's where this action comes in. Create a sensor and a rule that will activate this action when the sensor is triggered (recognizes the signal). For example, assign a button to an X10 controller that will send a particular X10 code, which you have programmed HAL to use to issue the "Hangup" action. When you're done speaking into the microphone, press the button on the X10 controller. The controller will send the signal, the sensor will recognize the signal and trigger the rule, and the rule's action will hang up the phone.

## Action: Text-to-Speech

Type text that HAL will announce during a rule, macro, or schedule. Go to the *Text-to-Speech Codes* section (see page 213) for information on special codes that can be incorporated into the text (such as the **<27>B** code shown).



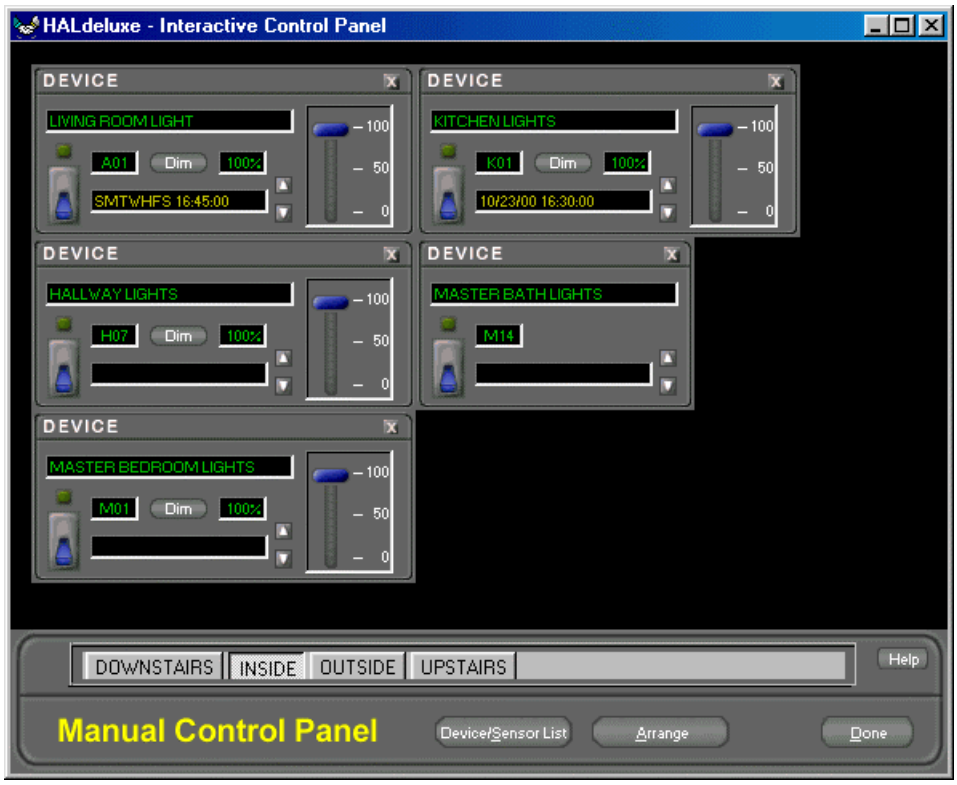
## CHAPTER 8
# Manual Device Control

The *HAL Manual Control Panel* is for manually controlling devices from the computer screen rather than by voice. This screen also shows the status of the X-10 sensors connected to the computer. The actual information that appears depends on the devices and sensors that have been added to the system (see Chapter 7, *Automating Your Home*).

To open the *Manual Control Panel*, right-click in the ear icon and select OPEN MANUAL CONTROL PANEL from the pop-up menu, or go to **Start**… **Programs**… **HALdeluxe**… **HAL Interactive Control Panel**.

# MANUAL CONTROL PANEL

To reposition a panel, click on it and drag it to a new position.




**Panels**

The panels that appear in this screen represent the devices and sensors that have been added to the system (see Chapter 7,*Automating Your Home*). For more information on the buttons and fields in these panels, see*The Panels* below.

**Groups** (Downstairs, Inside, Outside, Upstairs…)

The actual group names displayed here depend on what groups were created in the*Device Wizard* screen (see page 144). To view the devices associated with a particular group, click on that group name. Devices that weren't assigned to a group can be viewed by double-clicking on that device name in the *Device List* (see below).

**Device/Sensor List**

Click this button to open a second screen that displays information about the devices and sensors (see *The Device/Sensor List* below).

**Help**

Click this button to open the Online Help Guide for more information on this screen.

**Arrange**

Click to have the system arrange the panels so that none are overlapping. If more panels are opened than can be viewed in the screen, then scroll bars will appear at the right and bottom of the screen.

**Done**

Saves the settings and closes the screen.

*Related Topics*

pg. 110 Set up HAL to control X-10 devices
139 Create devices
144 Assign devices to groups
171 Create sensors
184 The panels
186 The *Device/Sensor List* screen

# THE PANELS

The HAL *Manual Control Panel* (see above) displays a panel for each device and sensor that was created in HAL (see Chapter 7).

## The Sensor Panel

This type of panel is for observing the status of the sensors in the system and will appear in the main *Manual Control Panel* when you double-click on the sensor name in the *Sensor List* screen (see *The Device/Sensor List* screen below). The panel will appear in the *Manual Control Panel* and the *Sensor List* screen will disappear.

**Name**

The name assigned to the sensor is listed in the first field (the sensor name in the panel to the right is "Kitchen Motion"). The name is assigned when the sensor is created or modified in *System Data Sensors* (see page 173).


**Power**

The green light just below the sensor name turns on when the sensor is activated.

**Address**

The field to the right of the power light displays the X-10 address that the sensor will transmit when it's been activated.

## The X-10 Panel

This type of panel is for manually controlling an X-10 device connected to the system. X-10 devices are displayed in the *Manual Control Panel* by group -- to view the devices assigned to a particular group, click on that group's name at the bottom of the *Manual Control Panel*. Devices that are not assigned to groups can be viewed by double-clicking on the device's name in the *Device List* screen (see *The Device/Sensor List* screen below). The panel for that device will appear in the *Manual Control Panel* and the *Device List* screen will disappear.

**Name**

The name assigned to the device is listed in the first field (the device name in the panel to the right is "Living Room Light"). The name is assigned when the device is created or modified in the *System Data Devices* screen (see page 139).


**Power**

Turn the device on or off by clicking on the blue lever on the left side of the panel. The indicator above the lever lights up when the device is on.

**Address**

The field to the right of the power light displays the X10 address assigned to this device.

**Dim**

Click DIM to dim the light to the level displayed in the field to the right of the *Dim* button. To adjust the level displayed, move the blue lever on the right side of the panel. The light will dim to the specified level using the method selected during configuration (see *System Data Devices* on page 140). If the dim option was not selected when this device was created, then the dim options will not be available in the panel for this device.

**Schedule**

If this device is part of a schedule (see page 163), the day or date and time that the device is scheduled to run will appear in the bottom field. Use the arrow keys to the right of this field to scroll through the different schedules to which this device is assigned.

*Related Topics*


pg. 47 Schedule devices by voice
110 Set up HAL to control devices
139 Create devices
144 Assign devices to groups
165 Schedule devices from the computer
173 Create sensors

## THE DEVICE/SENSOR LIST

These screens list the devices and sensors configured in the system.

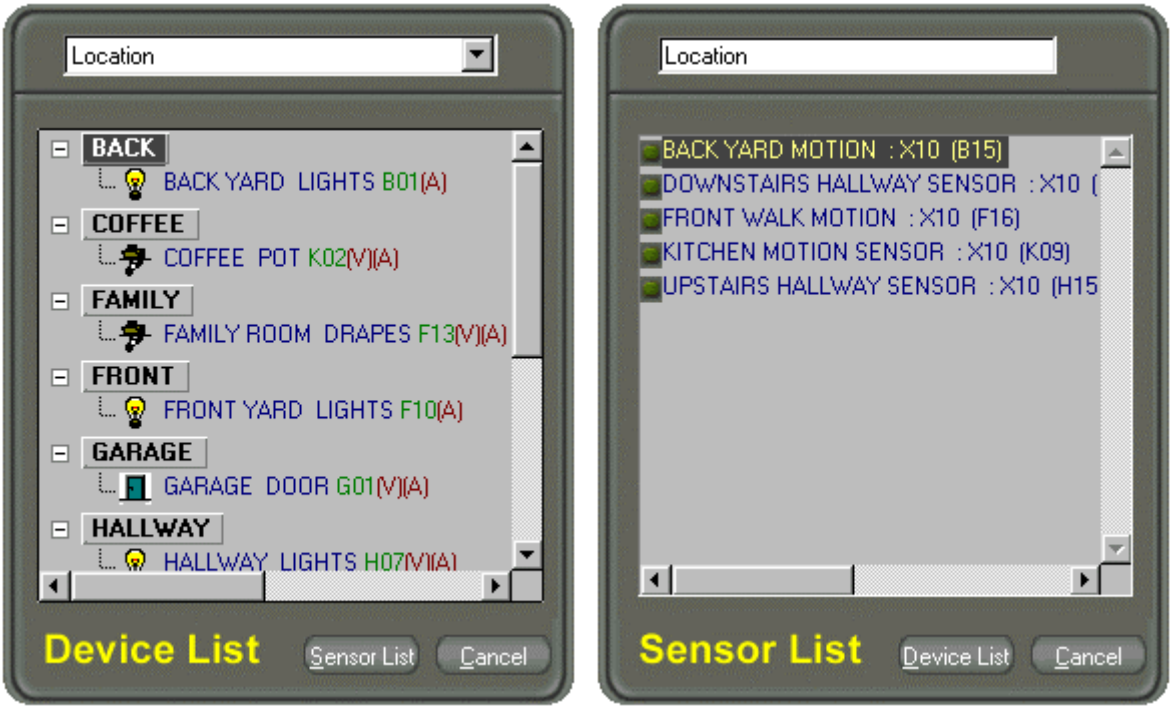
To open this screen, right-click in the ear icon and select OPEN MANUAL CONTROL PANEL from the pop-up menu or go to **Start**... **Programs**... **HALdeluxe**... **HAL Interactive Control Panel**. When the *Manual Control Panel* appears, click on the DEVICE/SENSOR LIST button.

Click on SENSOR LIST and DEVICE LIST to switch between the screens.

Double-click on an entry to view the control panel for that device or sensor (the *Device/Sensor List* screen disappears and the selected panel appears in the *Manual Control Panel*).

Use the drop-down menu in the *Device List* screen to have the devices listed by location, X10 address, device type, or group name.

Information in the screen below is for demonstration purposes only. The actual information that appears depends on the devices and sensors that have been added to the system (see Chapter 7, *Automating Your Home*).




*Related Topics*


pg. 47 Schedule devices by voice
110 Set up HAL to control devices
139 Create devices
144 Assign devices to groups
165 Schedule devices from the computer
173 Create sensors

## CHAPTER 9
# HAL's Virtual Telephone

The *HAL Phone Pad* allows control of telephony functions from the computer screen. The *Phone Pad* is also where voice mailboxes are created and modified.

To open this screen, left-click on the phone icon or right-click on it and select PHONE PAD from the pop-up menu.

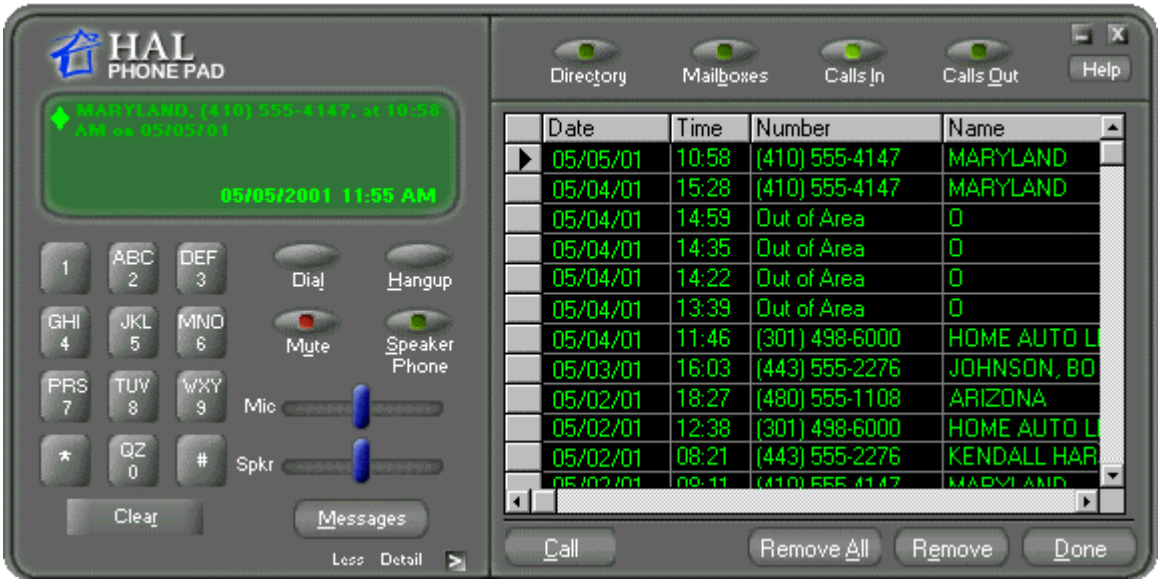
## CALLS IN

To open this screen, left-click on the phone icon or right-click on it and select PHONE PAD from the pop-up menu. When the *Phone Pad* appears, click on the CALLS IN button.

This screen displays all of the calls that have come into the system. If Caller ID isn't available on the phone line, then the *Number* and *Name* grids will be blank. If Caller ID is available but only includes number identification, then the *Number* screen will indicate the number of incoming calls, but the *Name* field will be blank.

Right-click on an entry in this screen to add it to HAL's Directory (the *Directory Edit* screen will appear -- see page 194).

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).




**Dial**

Enter a number to be dialed by clicking on the numbers in this keypad or by using the numbers on the computer keyboard, then click this button to start dialing.

**Clear**

Clears numbers from the *Phone Pad* display screen.

**Hangup**

Click to disconnect a phone call.

**Speakerphone**

Click to turn on HAL's speakerphone feature (button will light up). Click it again to turn it off (light will turn off). Go to the *Getting Started* section on page 21 for more information on using the speakerphone and on how to set it up.

**Mics** and **Spkr**

The sliders are for use with HAL's speakerphone feature. The "mic" slider affects the volume going into the microphone connected to the modem and the "spkr" slider affects the volume coming out of the speaker connected to the modem. If the speakerphone feature is not set up properly, then these slide bar have no affect.

**Messages**
Opens the *Messages* screen (see page 199).

**Mute**
When the speakerphone is engaged, clicking this button will temporarily disable the microphone so that the person on the other end of the phone can't hear you.

**Less Detail**
Click on the arrow to collapse the *Phone Pad* so that only the keypad section is visible (the arrow changes to MORE DETAIL). Click the arrow again to expand the *Phone Pad*.

**Call**
Highlight an entry in the grid and click this button to have HAL dial that number.

**Remove All**
Click this button to remove all of the entries from the grid.

**Remove**
Highlight an entry in the grid and click this button to delete it.

**Done**
Closes the *Phone Pad*.

**Help**
Click to open the Online Help Guide to this screen.

*Related Topics*

pg. 21 Set up HAL's Speakerphone Feature
47 Record a customized greeting for a specific caller
106 Set up HAL to track Caller ID information

# CALLS OUT

To open this screen, left-click on the phone icon or right-click on it and select PHONE PAD from the pop-up menu. When the *Phone Pad* appears, click on the CALLS OUT button.

This screen keeps track of phone calls placed by HAL. For instance, if you select a name from the *Phone Pad Directory* screen (see page 192) and click DIAL in the keypad, then the date and time the call was placed, the number that was called, and the name that was called are listed in this screen. Go to Chapter 3 for information on verbally telling HAL to place a call.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Dial**
Enter a number to be dialed by clicking on the numbers in this keypad or by using the numbers on the computer keyboard, then click this button to start dialing.

**Clear**
Clears numbers from the *Phone Pad* display screen.

**Hangup**
Click to disconnect a phone call.

**Speakerphone**
Click to turn on HAL's speakerphone feature (button will light up). Click it again to turn it off (light will turn off). Go to the *Getting Started* section on page 21 for more information on using the speakerphone and on how to set it up.

**Mics** and **Spkr**
The sliders are for use with HAL's speakerphone feature. The "mic" slider affects the volume going into the microphone connected to the modem and the "spkr" slider affects the volume coming out of the speaker connected to the modem. If the speakerphone feature is not set up properly, then these slide bar have no affect.

**Messages**
Opens the *Messages* screen (see page 199).

**Mute**
When the speakerphone is engaged, clicking this button will temporarily disable the microphone so that the person on the other end of the phone can't hear you.

**Less Detail**
Click on the arrow to collapse the *Phone Pad* so that only the keypad section is visible (the arrow changes to MORE DETAIL). Click the arrow again to expand the *Phone Pad*.

**Call**
Highlight an entry in the grid and click this button to have HAL dial that number.

**Remove All**
Click this button to remove all of the entries from the grid.

**Remove**
Highlight an entry in the grid and click this button to delete it.

**Done**
Closes the *Phone Pad*.

**Help**
Click to open the Online Help Guide to this screen.

*Related Topics*

pg. 21 Set up HAL's Speakerphone Feature
47 Tell HAL to call someone in the Directory
98 Set up HAL to use telephones
194 Add information to the Directory

# PHONE PAD DIRECTORY

To open this screen, left-click on the phone icon or right-click on it and select PHONE PAD from the pop-up menu. When the *Phone Pad* appears, click on the DIRECTORY button.

The Directory information displayed in this screen is also displayed in the *System Data Directory* screen (see page 146).

Information in the grid below is for demonstration purposes only. The actual information that appears depends on the directory information that you add to the system (see *Add Information to the Directory* below).

Click on a column heading to sort the list by the information in that column. To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).


**Dial**
Enter a number to be dialed by clicking on the numbers in this keypad or by using the numbers on the computer keyboard, then click this button to start dialing.

**Clear**
Clears numbers from the *Phone Pad* display screen.

**Hangup**
Click to disconnect a phone call.

**Speakerphone**
Click to turn on HAL's speakerphone feature (button will light up). Click it again to turn it off (light will turn off). Go to the *Getting Started* section on page 21 for more information on using the speakerphone and on how to set it up.

**Mics** and **Spkr**
The sliders are for use with HAL's speakerphone feature. The "mic" slider affects the volume going into the microphone connected to the modem and the "spkr" slider affects the volume coming out of the speaker connected to the modem. If the speakerphone feature is not set up properly, then these slide bar have no affect.

**Messages**
Opens the *Messages* screen (see page 199).

**Mute**
When the speakerphone is engaged, clicking this button will temporarily disable the microphone so that the person on the other end of the phone can't hear you.

**Less Detail**
Click on the arrow to collapse the *Phone Pad* so that only the keypad section is visible (the arrow changes to MORE DETAIL). Click the arrow again to expand the *Phone Pad*.

**Call**
Highlight an entry in the grid and click this button to have HAL dial that number.

**Add**
Click this button to add information to the Directory (see below).

**Modify**
Click this button to open the *Directory Edit* screen to modify information in the Directory (see below).

**Remove**
Highlight an entry in the grid and click this button to delete it.

**Done**
Closes the *Phone Pad*.

**Help**
Click to open the Online Help Guide to this screen.

*Related Topics*


pg. 21 Set up HAL's Speakerphone Feature
47 Tell HAL to call someone, ask for Directory information, or leave custom greetings
98 Set up HAL to use telephones
146 The *System Data Directory* screen

## Add Information to the Phone Pad Directory

To open this screen, left-click on the phone icon or right-click on it and select PHONE PAD from the pop-up menu. When the *Phone Pad* appears, click on the DIRECTORY button then click on the ADD or MODIFY button. The *Directory Edit* screen will appear.


Fill in the information and click OK to save the entry (you can also add an entry to the Directory by right-clicking on an entry in the *Calls In* screen -- see page 188).

When paging some individuals, a pause may be necessary before the PIN number is entered. This pause is to allow time for the paging system to answer the phone and request the PIN number. If this individual's paging system uses PIN numbers and requires a pause, then add one or more commas after the pager number or before the PIN number (e.g. 3015554694,, 22689 or 3015554694 ,,22689). Each comma is equal to about a two-second pause. Some trial-and-error may be required to achieve the best timing. (See *Paging Configuration* on page 102 for information on specifying the numeric message to send with the page and go to *Syntax* on page 71 for information on verbally telling HAL to page someone.)

When a customized greeting is recorded for this Directory entry, then the square next to the specified phone number will be enabled. A customized greeting is a special message that plays when HAL receives a phone call from a specific phone number (this feature requires Caller ID on the phone line). Click the RECORD button next to one of the location fields to record a customized greeting that will be played when someone calls HAL from the phone number entered for that location (a checkmark next to a location indicates that a customized greeting is enabled for that location). Click the ERASE button to clear the customized greeting – that caller will now hear the standard greeting when he or she calls in. Go to Chapter 3 for information on verbally recording and erasing customized greetings.

*Related Topics*

pg. 47 Verbally leave a custom greeting for a specific caller
146 The *System Data Directory* screen

# MAILBOXES

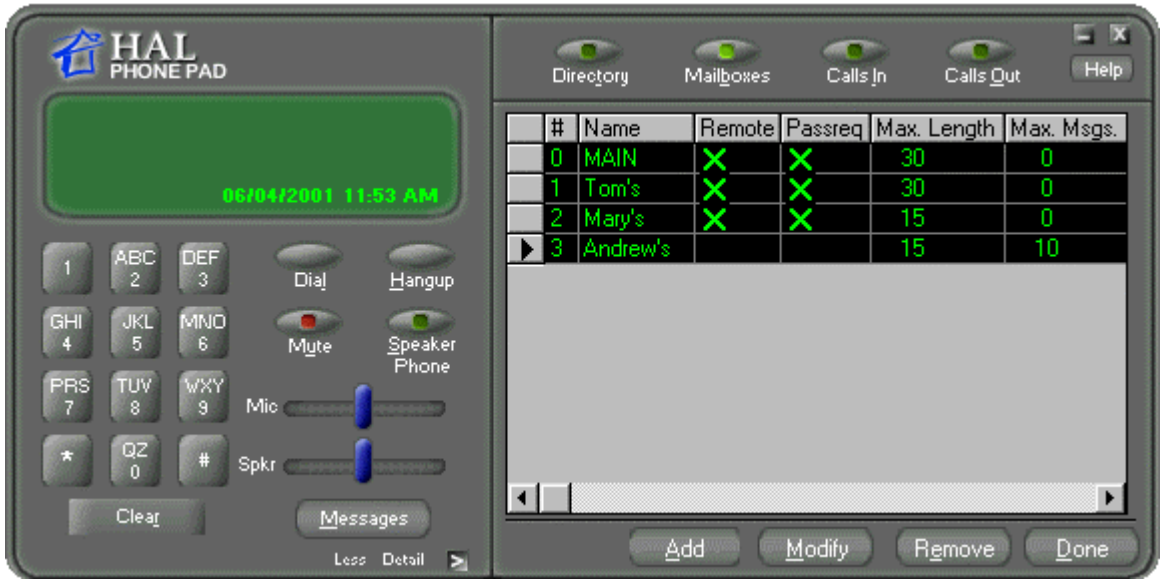
To open this screen, left-click on the phone icon or right-click on it and select PHONE PAD from the pop-up menu. When the *Phone Pad* appears, click on the MAILBOXES button.

This screen lists the mailboxes that are available to record incoming voice messages.

Information in the grid below is for demonstration purposes only. The actual information that appears depends on the mailbox information that is added to the system (see *Add a Mailbox* below). The "main" mailbox is created automatically and will record the message if a caller does not specify which mailbox the message is for or if there are no other mailboxes in the system (answering machine features must be enabled in order to record voice mail messages - see *Telephone Configuration* on page 100).

Click on a column heading to sort the list by the information in that column. To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width.

Click on a button at the top of the screen to go to the screen for that topic (see the rest of this chapter for explanations of those screens).




**Dial**

Enter a number to be dialed by clicking on the numbers in this keypad or by using the numbers on the computer keyboard, then click this button to start dialing.

**Clear**

Clears numbers from the *Phone Pad* display screen.

**Hangup**

Click to disconnect a phone call.

**Speakerphone**

Click to turn on HAL's speakerphone feature (button will light up). Click it again to turn it off (light will turn off). Go to the *Getting Started* section on page 21 for more information on using the speakerphone and on how to set it up.

**Mics** and **Spkr**
The sliders are for use with HAL's speakerphone feature. The "mic" slider affects the volume going into the microphone connected to the modem and the "spkr" slider affects the volume coming out of the speaker connected to the modem. If the speakerphone feature is not set up properly, then these slide bar have no affect.

**Messages**
Opens the *Messages* screen (see page 199).

**Mute**
When the speakerphone is engaged, clicking this button will temporarily disable the microphone so that the person on the other end of the phone can't hear you.

**Less Detail**
Click on the arrow to collapse the *Phone Pad* so that only the keypad section is visible (the arrow changes to MORE DETAIL). Click the arrow again to expand the *Phone Pad*.

**Add**
Click this button to add a mailbox (see below).

**Modify**
Highlight a mailbox to select it and click this button to modify its settings.

**Remove**
Highlight a mailbox to select it and click this button to delete it.

**Done**
Closes the *Phone Pad*.

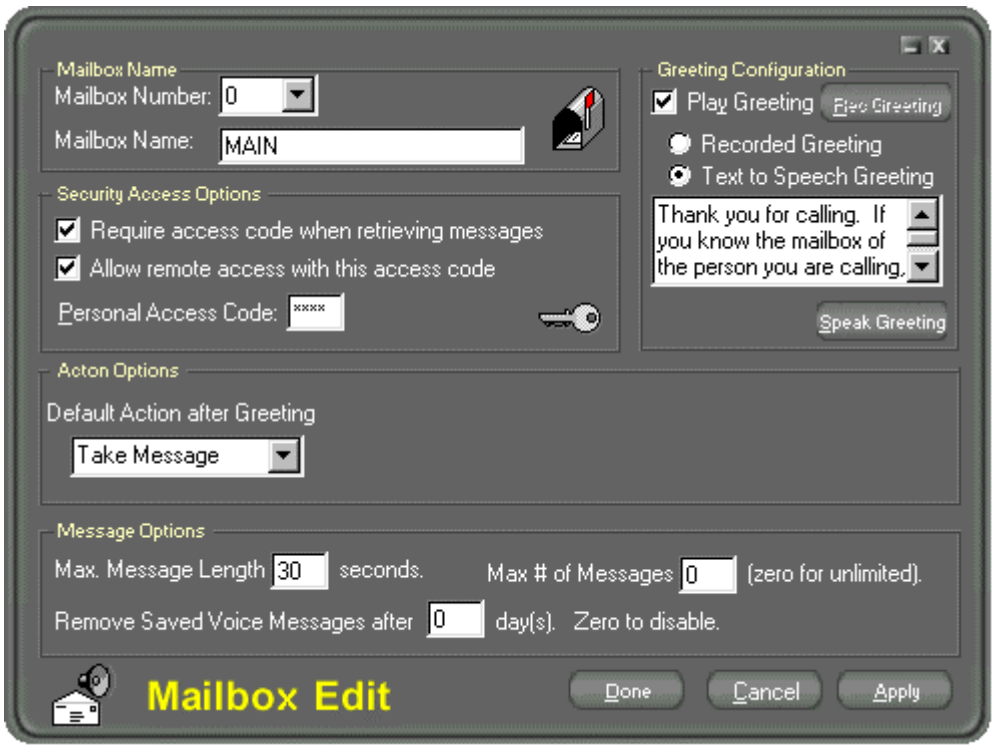
**Help**
Click to open the Online Help Guide to this screen.

*Related Topics*


pg. 38 The phone icon
47 Retrieve messages by voice
98 Set up HAL to use telephones
197 Create mailboxes
199 The *Messages* screen

## Add/Edit a Mailbox

To open this screen, left-click on the phone icon or right-click on it and select PHONE PAD from the pop-up menu. When the *Phone Pad* appears, click on the MAILBOXES button then on the ADD or MODIFY button.




**Mailbox Number**

Assign a number to this mailbox by selecting a number from the drop-down menu. This number will be used in the *Messages* screen (see page 199) to indicate which messages were recorded in this mailbox.

**Mailbox Name**

Type a name for the mailbox in this field. This name will be used when retrieving messages by voice (see Chapter 3).

**Require access code when retrieving messages**

Enable this option to require the access code below to be entered before HAL will play any of the messages for this mailbox. If this option is enabled then you can't verbally retrieve voice messages from the microphone -- you must use a local (house) or remote telephone to retrieve them (messages can also be played back from the *Messages* screen -- see page 199).

**Allow remote access with this access code**

Enable this option if you want to be able to access HAL remotely using this access code. At least one access code has to be assigned to one of the mailboxes to allow for remote interaction with HAL.

**Personal Access Code**

Type a four (4) digit code for this mailbox. HAL will ask for this access code if one or both of the options above are enabled. At least one mailbox has to have an assigned access code to allow for remote interaction with HAL. An access code for the main mailbox will have been entered when *HAL Setup Wizard* was run if the option for remote accessibility was selected at that time (see page 24 for more information on the *HAL Setup Wizard*).

**Play Greeting**
Enable this option if you want HAL to play a greeting when someone calls in.

**Rec Greeting**
Click this button if "Recorded Greeting" is selected below. The *Recorder* screen will appear. Click RECORD to record a message by speaking into a microphone connected to the computer.

**Recorded Greeting/Text to Speech Greeting**
Select RECORDED GREETING if you want callers to hear a greeting in your voice when they select this mailbox. Select TEXT TO SPEECH GREETING if you want callers to hear HAL read the text typed into the field below.

**Text to Speech Script**
Type text that HAL is to read to callers when they select this mailbox. This field can be edited when the "Text to Speech Greeting" is selected above.

**Speak Greeting**
Click this button to hear HAL read the text in the field above.

**Default Action after Greeting**
Choose from the drop-down menu what you want HAL to do with the incoming call after HAL has played the greeting for the caller. The possible choices are:

TAKE A MESSAGE
HAL records a message from the caller.

HANGUP
HAL hangs up the phone without recording a message from the caller.

TRANSFER TO MAILBOX
HAL transfer the caller to another mailbox. Choose from the drop-down box that appears the mailbox to which HAL will transfer the call. The action selected in that mailbox will determine what next happens to this call.

RUN PROGRAM
HAL will run an external program.

**Max. Message Length**
Type in this field the maximum recording time for incoming messages.

**Max. # of Messages**
Type in this field the maximum number of messages that HAL will record in this mailbox. Enter zero (0) to allow an unlimited number of messages.

**Remove Saved Voice Messages after…**
Type in this field the number of days a message will stay on the system before HAL will automatically delete it. Enter zero (0) to disable automatic deletion of messages (messages can be deleted manually from the *Messages* screen -- see page 199).

**Done**
Saves the settings and closes the screen.

**Cancel**
Closes the screen without saving the settings.

**Apply**
Saves the settings without closing the screen.

*Related Topics*

pg. 38 The phone icon
47 Retrieve messages by voice
98 Set up HAL to use telephones
199 The *Messages* screen

## MESSAGES

This screen lists the voice mail and E-mail messages that have been recorded or downloaded.

To open this screen, right-click on the phone icon and select MESSAGES from the pop-up menu. This screen can also be opened from within the *Phone Pad* screen by clicking on the MESSAGES button.

The screen opens to voice mail messages. To view E-mail messages, click on E-MAIL at the bottom of the screen.

Information in the grid below is for demonstration purposes only. The actual information that appears depends on the voice mail and E-mail messages that the system has recorded or downloaded.

To adjust the column width of the entries, move the cursor over the end line of the field whose length is to be altered. The cursor will change to a vertical bar with two arrows. Drag the line to adjust the column width. Use the slider bar at the bottom of the screen to scroll through additional information.

**Voice Mail Messages Screen**

**Mailbox**
The number indicates in which mailbox a message was recorded.

**Date** and **Time**
These columns display the date and time that a voice mail message was recorded.

**Phone Number**
The telephone number of the caller as recorded by Caller ID. This function requires Caller ID as part of the telephone service. This field will be blank if Caller ID is not available.

**Caller**
The name of the caller as recorded by Caller ID. This function requires Caller ID as part of the telephone service. This field will be blank if Caller ID is not available or if the Caller ID service does not include name recognition.

**Message File**
This is the name that the voice message was saved to in the HAL program folder. When a voice message is deleted from this screen, the associated file is deleted from the HAL program folder.

**Help**
Open the Online Help Guide for more information on this screen.

**Play**
Click here to play the selected voice mail message.

**Stop**
Click here to stop the playback of the selected message.

**Next**
Click here to advance to the next message, then click PLAY to hear it.

**Previous**
Click here to go to the previous message, then click PLAY to hear it.

**Delete**
Click here to delete the selected message.

**Save**
Click here to save the selected message (it will move to the "Saved" section of the *Messages* screen).

**Voice Mail/E-mail**
Select which type of message information is to be displayed in the grid.

**New Messages/Saved Messages**
Select whether new or saved voice messages are to be displayed in the grid.

**Done**
Click here to close the *Messages* screen.

## E-mail Messages Screen

The information in this screen as well as the content of each message can be viewed in the *Internet* screen (see page 120). Any attachments that were downloaded with an E-mail message can also be opened from that screen.


**Date** and **Time**
These columns display the date and time that E-mail messages were received by your Internet Service Provider's (ISP) mail server.

**From**
This is the name of the person or company that sent the message.

**E-mail Address**
This is the E-mail address from which that person or company sent the message.

**Subject**
This is the text that was entered into the "subject" field of the E-mail message.

**Help**
Open the Online Help Guide for more information on this screen.

**Play**
Click here to have HAL read the E-mail message. HAL will not read or automatically display the content of attachments that were downloaded with the E-mail message. To view attachments, go to the *Internet* screen (see page 120).

**Stop**
Click here to stop the playback of the selected message.

**Next**
Click here to advance to the next message, then click PLAY to hear it.

**Previous**
Click here to go to the previous message, then click PLAY to hear it.

**Delete**
Click here to delete the selected message.

**Save**
Click here to save the selected message (it will move to the "Saved" section of the *Messages* screen).

**Voice Mail/E-mail**
Select which type of message information is to be displayed in the grid.

**New Messages/Saved Messages**
Select whether new or saved E-mail messages are to be displayed in the grid.

**Done**
Click here to close the *Messages* screen.

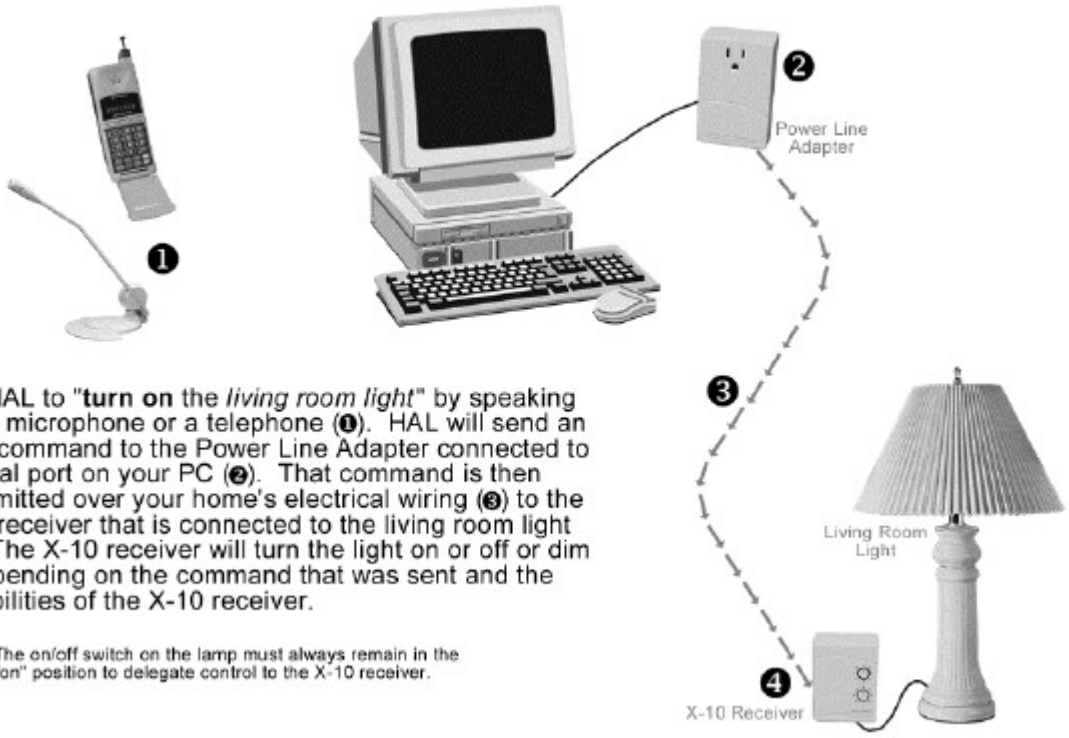
*Related Topics*


pg. 38 The phone icon
47 Retrieve voice and E-mail messages by voice
82 Set up HAL to retrieve E-mail messages
98 Set up HAL to use telephones
120 View E-mail messages in the *Internet* screen
197 Create mailboxes

## CHAPTER 10
# Interfaces

# ABOUT X-10

X-10 is the technology that enables controllers like HAL to send and receive signals over standard home power lines. Using the X-10 protocol, HAL can communicate with any electrical outlet in the home.




Tell HAL to "**turn on** the *living room light*" by speaking into a microphone or a telephone (❶). HAL will send an X-10 command to the Power Line Adapter connected to a serial port on your PC (❷). That command is then transmitted over your home's electrical wiring (❸) to the X-10 receiver that is connected to the living room light (❹). The X-10 receiver will turn the light on or off or dim it, depending on the command that was sent and the capabilities of the X-10 receiver.

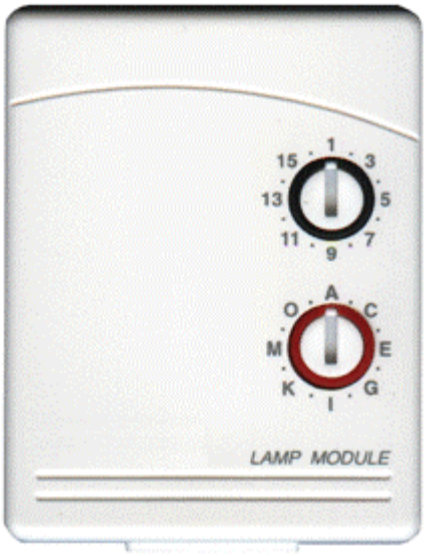
NOTE: The on/off switch on the lamp must always remain in the "on" position to delegate control to the X-10 receiver.

## X-10 Receivers

X-10 receivers come in several forms. They may be as simple as a lamp module that plugs into an electrical outlet or an X10 receiver outlet that replaces a standard outlet. You can control overhead lights by replacing the existing light switch with an X10 receiver switch. X10 receivers are available from resellers and from the HAL website (www.AutomatedLiving.com).

## X-10 Addressing

X-10 differentiates devices by the address assigned to each device. The address is made up of a *House* code and a *Unit* code. The house code is a letter between A and P. The unit code is a number between 1 and 16. For instance, a lamp module set to a house code of B and a unit code of 14 is said to have an address of B14. There are a total of 256 unique addresses that can be created.



## X-10 Sensors

HALdeluxe supports X-10 sensors. An X-10 sensor in HAL can respond to any device that has the ability to send an X-10 signal when it's activated. For instance, suppose a motion sensor is programmed to send an X-10 signal of F-05 "on". Within HAL, you could create a sensor called "Outside Motion Sensor" and specify that it will receive an X-10 signal of F-05 "on". When that motion sensor is activated (senses movement) it sends an X-10 signal throughout the house. When HAL receives the signal it recognizes the F-05 address and acts accordingly. If the panel for that sensor is visible in the *Manual Control Panel* (see page 182), then the power light for that sensor will turn on. The sensor could also be used to trigger a Rule (see page 154). Sensors are created in the *System Data Sensors* screen (see page 173).

## X-10 Syntax

Go to Chapter 3 for information on what commands can be issued and what questions can be asked that relate to X-10 devices.

*Related Topics*


pg. 17 Connect HAL to a Power Line Adapter and Lamp Module
47 Control X-10 devices by voice
110 Set up HAL to control X-10 devices
139 Create devices
173 Create sensors
174 Use devices in macros, rules, and schedules
156 Use sensors to trigger rules
182 Control X-10 devices from the computer

# MANUFACTURERS OF COMPATIBLE INTERFACES

Listed below are *some* manufacturers of X-10 compatible devices. Some of the products manufactured by these companies are available for purchase from HAL's website (www.AutomatedLiving.com).

NOTE: Some X-10 compatible devices have thermostat or security capabilities that are not supported in HALdeluxe, but are supported in HAL2000.

**Leviton Manufacturing Company Inc.**

Manufactures: X-10 devices and X-10 infrastructure (electrical) devices.

Website: www.leviton.com

Sales: 800-323-8920

**Powerline Control Systems (PCS)**

Manufactures: X-10 compatible products including lighting controls and switched receptacles.

Specific Models: MM2 Multi-Modules
SmartSwitch
LM4L/S-2000
LM1L/S-2000
LM4A/S-20

Website: www.pcslighting.com

Sales: 818-701-9831

**X-10 Pro**

Manufactures: X-10 devices and X-10 infrastructure (electrical) devices.

Specific Models: PSC05
Two-way X-10 interface with full support for Preset Dim commands and transmission of Extended Data commands (requires two-way X-10 interface connector).

Website: www.x10pro.com

**X-10 U.S.A.**

Manufactures: X-10 devices and X-10 infrastructure (electrical) devices.

Specific Models: CM11
X-10 computer interface that allows the computer to send and receive X-10 signals

HD11
(manufactured for IBM) X-10 computer interface that allows the computer to send and receive X-10 signals

Website: www.x10.com

Sales: 800-675-3044

# RESELLERS OF COMPATIBLE INTERFACES

The companies below sell products that are compatible with HAL. Go to HAL's website for the list of HAL-compatible interfaces with links to the manufacturers' website. HAL-compatible interfaces are also available for purchase from HAL's website (www.AutomatedLiving.com).

**Home Controls Inc.**
www.homecontrols.com
800-266-8765

**iAutomate.com**
www.iautomate.com
800-741-6790

**RadioShack.com**
www.radioshack.com (Plug 'n Power series)
800-877-0072

**SmartHome.com**
www.smarthome.com
800-762-7846

**Worthington Distribution**
www.worthdist.com
800-282-8864

## CHAPTER 11
# Miscellaneous Information

# USING AMERICA ONLINE (AOL) WITH HAL

This section explains how to setup HAL and AOL to work together to download information from the Internet at user-specified intervals. Failure to follow the steps explained below may prevent HAL from automatically connecting to the Internet.

## Set-up Process

1. Install AOL 6.0, if you're not already using it.
2. Set "America Online" as the default connection in the Dial-Up Networking area of Windows® (this is generally done automatically when you install AOL; see Windows Help for more information if necessary).
3. Save the User/Screen Name and a password for automatic connection to AOL -- see below.
4. Turn off the AOL sounds ("Welcome", "Goodbye", "You've got mail", etc.) - see below.
5. Set up HAL to access the Internet through your AOL connection.

### SAVING USER/SCREEN NAME AND PASSWORD

You must "store" your password in AOL so that HAL can log in to AOL for you. If this isn't done, then every time HAL tries to connect to the Internet you must be sitting in front of the computer so that you can enter your username and password.

To store your password:

- Sign-on to AOL with the screen name whose password you're going to store.
- On the Settings menu, click PREFERENCES.
- In the Preferences window, click PASSWORDS.
- Type your password in the box and select the SIGN ON check box.
- Log off from AOL.

To store passwords for Automatic AOL:

- On the **Settings** menu, click PREFERENCES.
- In the "Communications" section of the *Preferences* window, click AUTO AOL.
- Click SELECT NAMES.
- Select the screen names you want Automatic AOL to use.
- Type passwords for the screen names you selected.

**TURN OFF AOL'S SOUNDS**

If you do not turn off AOL's sounds, then you'll be hearing them every time HAL connects to AOL even in the middle of the night.

- On the **Settings** menu, click PREFERENCES.
- In the "Organization" section of the *Preferences* window, click TOOLBAR&SOUND.
- Go to SOUND PREFERENCES.
- Disable the option "Enable AOL sounds such as the Welcome greeting and Instant Message chimes" (the box should be unchecked).

**SET UP HAL TO ACCESS THE INTERNET THROUGH YOUR AOL CONNECTION**

You can set up this feature through the *HAL Setup Wizard* (see page 24) or from the *Internet Configuration* screen (see page 79).

- If running the *HAL Setup Wizard*, proceed through the screens until you reach the one with the yellow subtitle "How do you connect to the Internet?". If going through the *Internet Configuration* screen, click on the "Connection" button at the top of the screen, if it's not already visble.
- Select the option "Use a Dial-Up Connection". If running the *HAL Setup Wizard*, click NEXT to bring up the next screen.
- Select the dial-up connection titled "America Online". (If you renamed this dial-up connection after AOL was installed, then you need to re-name the connection to "America Online".)
- If running the *HAL Setup Wizard*, proceed through the rest of the screens until the last one, then click FINISH and start HAL. If going through the *Internet Configuration* screen, click DONE then shut down HAL and restart it.

## Known Issues

- If you login to AOL on a different machine using the same screen name and password that HAL uses at the same time that HAL is connected to AOL, then AOL will display an error message and break the connection, causing the HAL Internet Server to freeze.
- HAL is not able to download E-mail from your @aol.com account but it can download from other mail servers (see *E-mail Configuration* on page 82 for more information).

# HAL AND PBX PHONE SYSTEMS

A PBX phone system acts as a switchboard by allowing multiple incoming phone lines to be directed to different extensions and by giving local phones access to different outgoing phone lines. For instance, an incoming call can be routed to a person at one extension while two other people at two other extensions each place outgoing calls. With PBX systems, an additional digit, such as "9", must sometimes be pressed before an outgoing call can be placed (see the PBX system's literature for its requirements). PBX phone systems are generally installed in businesses, but are sometimes used in private residences.

There are basically two different ways to connect HAL to a PBX phone system. The first setup allows HAL to use the phone line at the same time that someone else is using the phone line. The second setup allows either HAL *or* another extension to be used, but not simultaneously. There are advantages and disadvantages for each option.

## To Use HAL and Another Phone Line

This method will be preferred by most home automation installers.

### Advantage

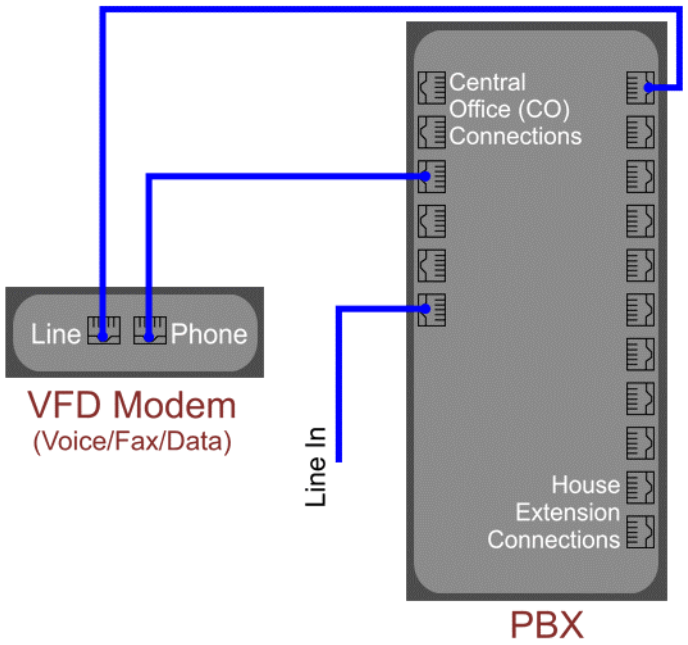
- Allows communication with HAL over the phone even when a phone line is already in use

### Disadvantage

- If the PBX doesn't pass Caller ID information through the PBX extensions, a separate Caller ID device will need to be connected to the Central Office (CO) lines to be monitored via a "Y" telephone adapter

### Installation

Connect the voice/fax/data (VFD) modem line input (telco) to one of the PBX extensions, and program the extension to ring when HAL is to answer the phone (from more than one CO input as well). Connect the VFD modem line output (phone set) to one of the PBX CO line inputs. The PBX extension connected to the other side of the VFD modem will provide dial tone for the CO input.



## To Use HAL or the Phone Line

### Advantages

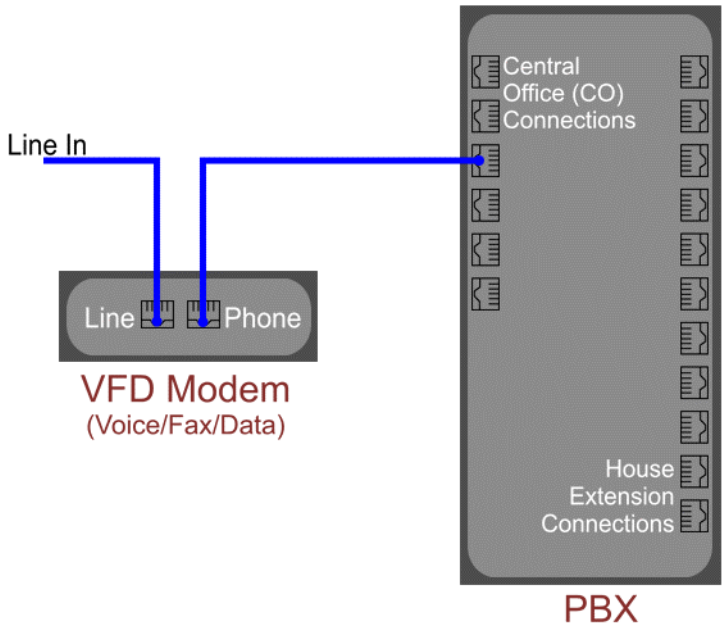
- Works well if the PBX doesn't have any additional Central Office (CO) inputs
- Works well if the PBX doesn't pass Caller ID information through the extensions and there isn't a separate external Caller ID device
- Works well if call services provided by the phone company are being used that can't be achieved through the PBX

### Disadvantages

- Can't speak with HAL while the phone line is in use
- PBX may not know when the phone line is in use by HAL
- Call features of the PBX can't be used by HAL

### Installation

Connect the incoming phone line to the line input (telco) of the voice/fax/data (VFD) modem. Connect the line output (phone set) of the VFD modem to the PBX's CO line input.




*Related Topics*


pg. 9 HAL-compatible modems
18 Set up the In-House Phone Interaction Feature
21 Set up HAL's Speakerphone Feature
98 Set up HAL to use telephones

# TEXT-TO-SPEECH CODES

Certain areas of HAL allow you to type text that HAL will read back at a later time. These are called *text-to-speech scripts*. In additional to the text that you type into these scripts, there are also codes that can be inserted into the scripts. There are two types of codes that are available: information codes and behavior codes. *Information* codes prompt HAL to fill in missing information. *Behavior* codes modify HAL's speech. The codes are explained below, along with examples to show how the codes can be incorporated into text-to-speech scripts. (Text-to-speech scripts can be used in rules, macros, or schedules - go to the *Action Wizard* screen on page 174 for details.)

NOTE: The information that HAL provides is dependent on the information available on the user's computer and may not match what's written in the examples.

## Information Codes

These codes begin with a less-than sign (<) and end with a greater-than sign (>).

### Caller ID Codes

Use the <CALLERID> code to have HAL read the name and number of the last caller and the time and date of that call. Caller ID with name and number identification must be available on the phone line for this code to work.

**Example**: `The last call was from <CALLERID>`

**HAL will say**: *The last call was from **Smith, John at 1:32pm on Thursday, April 12, 2001***

Use the <CALLERIDNAME> code to have HAL fill in the name of the last caller. Caller ID with name identification must be available on the phone line for this code to work.

**Example**: `<CALLERIDNAME> called.`

**HAL will say**: ***Smith, John** called*

Use the <CALLERIDNUM> code to have HAL fill in the number of the last call. Caller ID with number identification must be available on the phone line for this code to work.

**Example**: `The last call was dialed from <CALLERIDNUM>.`

**HAL will say**: *The last call was dialed from **800-935-5313**.*

### Date Code

Use the <DATE> code to have HAL fill in the current date.

**Example**: `Today's date is <DATE>.`

**HAL will say**: *Today's date is **Tuesday, June 13, 2000**.*

**E-mail Codes**

Use the <NUMEMAIL> code to have HAL read the number of E-mail messages downloaded.

**Example**: `<NUMEMAIL> E-mail messages have been downloaded.`

**HAL will say**: ***Five*** *E-mail messages have been downloaded.*

**News Codes**

Use the codes below to have HAL read the news headlines and/or stories that it has downloaded from the Internet. After HAL reads a headline or story, it will pause so that you can give it additional commands (the additional commands are the same ones that you can use when verbally requesting news information – see *Syntax* on page 47 for more information).

Use the <NEWSHEADLINE x> code to have HAL read the specified news headline. Replace "x" with the number corresponding to that headline (possible values are 1 to 10).

**Example**: `The headline of story number five is <NEWSHEADLINE 5>.`

**HAL will say**: *The headline of story number five is (**headline**)…*

Use the <NEWSHEADLINE ALL> code to have HAL read all of the news headlines.

Use the <NEWSSTORY x> code to have HAL read the specified news story. HAL will read the headline for that story and then the story itself. Replace "x" with the number corresponding to that story (possible values are 1 to 10).

**Example**: <NEWSSTORY 1>

**HAL will say**: ***Headline: (headline). Story: (story)***

Use the <NEWSSTORY ALL> code to have HAL read all of the news stories.

**Sports Codes**

To have HAL read the sports scores for a particular team, use the code <SPORTS LEAGUE TEAM DATE>, where "team" is the name of a team as it's shown in the *Internet* screen (see page 124).

*"League" choices*: MLB, MLS, NBA, NFL, NHL
*"Date" choices*: Yesterday, today, today-1, today-2, today-3, today-4, Sunday, Monday, Tuesday, etc.

**Example**: `In sports yesterday, <SPORTS MLB BALTIMORE YESTERDAY> <SPORTS NBA WASHINGTON TODAY-1> <SPORTS NHL DETROIT SUNDAY>`

**HAL will say**: *In sports yesterday, **Tampa Bay beat Baltimore 7 to 4**, **Cleveland beat Washington 106 to 98**, **Los Angeles beat Detroit 2 to 1***

Use the <SPORTS LEAGUE TEAMALL DATE> code to have HAL read the sports scores for all teams in the specified league.

**Stocks Codes**

Use the <STOCKS xxxx> code to have HAL read the stock information for a particular stock. Replace "xxxx" with the stock's symbol.

**Example**: `Here is the latest stock information on XYZ Corp. <STOCKS XYZ>`

**HAL will say**: *Here is the latest stock information on XYZ Corp.* ***XYZ is currently at 47.125 on volume of 2,787,500.***

Use the <STOCKS ALL> code to have HAL read the stock information for all of the configured stocks.

**Time Code**

Use the <TIME> code to have HAL fill in the current time.

**Example**: `The current time is <TIME>.`

**HAL will say**: *The current time is* ***2:45pm****.*

**Traffic Codes**

Use the <TRAFFIC xxxx> code to have HAL read the traffic information for a specific route. Replace "xxxx" with that route's English name.

**Example**: `The traffic report for I-295 is <TRAFFIC B W PARKWAY>.`

**HAL will say**: *The traffic report for I-295 is* ***Southbound traffic on the B W Parkway is****…*

Use the <TRAFFIC FAVORITES> code to have HAL read the traffic information for all of the routes selected during configuration (see page 88).

**TV Listings Codes**

To have HAL read what's on a specific channel at a specified time, use the code <TVLIST CHANNEL TIME>, where "channel" is the abbreviation for the channel as it's shown in the *Internet* screen (see page 130).

**Example**: `Showing at eight tonight, <TVLIST NBC 8PM> <TVLIST CBS 20:00> <TVLIST HBO 8:00PM>`

**HAL will say**: *Showing at eight tonight,* ***Dateline NBC is on NBC at 8pm****,* ***The King of Queens is on at CBS at 8pm****,* ***Pale Rider is on HBO at 8pm***

Use the <TVLIST CHANNEL NOW> code to have HAL announce what's currently airing on a specific channel.

**Example**: `<TVLIST HBO NOW>`

**HAL will say**: ***Ghostbusters is on HBO at 12:26pm***

## Voice Mail Codes

Use code <NUMVMAILx> to have HAL verbally indicate the number of voice mail messages waiting in the specified mailbox. Replace "x" with the number corresponding to that mailbox (see *Phone Pad Mailboxes* on page 195).

**Example**: `There are <NUMVMAIL4> voice mail messages for Jack.`

**HAL will say**: *There are **seven** voice mail messages for Jack.*

Use code <VOICEMAIL NEW x> to have HAL play the new voice mail messages in the specified mailbox. Replace "x" with the number corresponding to that mailbox.

**Example**: `The new messages for Mary are <VOICEMAIL NEW 3>.`

**HAL will say**: *The new messages for Mary are **message recorded on**…*

Use code <VOICEMAIL SAVED x> to have HAL play the saved voice mail messages for the specified mailbox. Replace "x" with the number corresponding to that mailbox.

Use code <VOICEMAIL ALL x> to have HAL play all of the voice mail messages (new and saved) for the specified mailbox. Replace "x" with the number corresponding to that mailbox.

## Weather Codes

Use the <WEATHER x> code to have HAL fill in the weather forecast for the specified day. Replace "x" with one of these variables: TODAY, TOMORROW, MONDAY, MON, TUESDAY, TUE, WEDNESDAY, WED, THURSDAY, THU, FRIDAY, FRI, SATURDAY, SAT, SUNDAY, or SUN.

**Example**: `The weather forecast for tomorrow is <WEATHER TOMORROW>`

**HAL will say**: *The weather forecast for tomorrow is **high 86 degrees…***

## Behavior Codes

These codes all begin with <27> and some -- but not all -- start and end with a back slash (\ ). Many of these codes will continue to affect HAL's speech after the script runs, unless HAL is shut down and restarted or another script with a different code runs. To prevent HAL's voice from being modified globally, include additional code(s) at the end of the script to return HAL to its previous settings (see the examples below).

### Character

Use the <27>\chr=x\ code to specify the type of voice HAL should use. Replace "x" with one of the choices below. This code can be used anywhere in the script and will affect all the words typed after the code.

**Character choices** (use in place of "x"):
normal, noprosody, monotone, computer, whisper, excited, calm, singing, loud

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, type the code again but this time use "normal" in place of "x". If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code -- the change is not noticed until the next time HAL speaks.

**Example**: `There is <27>\chr=whisper\ movement in the driveway. <27>\chr=normal\`

### Gender

Use the <27>Sf1 code to have HAL speak in a female voice or <27>Sm1 to have HAL speak in a male voice. These codes will override whatever gender is set in the *Personal Assistant Configuration* screen (see page 95).

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, add the code of whichever gender HAL was originally programmed to use. The example below shows how to have HAL read a script in a male voice and then switch back to using a female voice. If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code -- the change is not noticed until the next time HAL speaks.

**Example**: `<27>Sm1 There is movement in the driveway. <27>Sf1`

### Pitch

Use the <27>Ix code to change the pitch of HAL's voice, where "x" represents a number between one (1) and nine (9). These numbers correlate to the hash marks below the pitch lever in the *Personal Assistant Configuration* screen (see page 95), with one (1) being the mark on the far left and nine (9) being the mark on the far right.

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, type the code again but replace "x" with whatever number corresponds to the original pitch setting. If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code - the change is not noticed until the next time HAL speaks.

**Example**: `<27>I2 There is movement in the driveway. <27>I5`

**Rate**

Use the <27>Rx code to change how fast HAL talks, where "x" represents a number between one (1) and nine (9). These numbers correlate to the hash marks below the rate lever in the *Personal Assistant Configuration* screen (see page 95), with one (1) being the mark on the far left and nine (9) being the mark on the far right.

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, type the code again but replace "x" with whatever number corresponds to the original setting. If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code- the change is not noticed until the next time HAL speaks.

**Example**: `<27>R3 There is movement in the driveway. <27>R6`

**Rate and Pitch**

Use the <27>Sx code to change HAL's rate and pitch settings simultaneously. "X" represents a number between one (1) and nine (9). Using some of the numbers may make it sound as though HAL has switched from a female voice to a male voice or vice versa, but in actuality the gender hasn't changed.

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, use the code <27>S1 to switch HAL back to using the settings in the *Personal Assistant Configuration* screen (see page 95). If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code- the change is not noticed until the next time HAL speaks.

**Example**: `<27>S3 There is movement in the driveway. <27>S1`

**Volume**

Use the <27>Vx code to change how loud HAL talks, where "x" represents a number between one (1) and nine (9). These numbers correlate to the hash marks below the volume lever in the *Personal Assistant Configuration* screen (see page 95), with one (1) being the mark on the far left and nine (9) being the mark on the far right.

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, type the code again but replace "x" with whatever number corresponds to the original setting. If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code- the change is not noticed until the next time HAL speaks.

**Example**: `<27>V9 There is movement in the driveway. <27>V7`

**Inserting a Pause**

Use the <27>Hx code to have HAL pause when it reads the script. "X" represents the length of time in milliseconds -- that HAL is to pause (between 1 and 10,000,000 milliseconds).

**Example**: `There is movement <27>H500 in the driveway.`

**Inserting Beep Tones**

Use the <27>Bx code to have HAL insert a "beep" tone when it reads a text-to-speech script. "X" is a number from zero (0) to nine (9) that represents the frequency (pitch) of the tone. How long the tone plays depends on the value set for HAL's rate of speech (the default length is determined by the rate set in the *Personal Assistant Configuration* screen [page 95]). To hear a short tone, use the rate code (see above) to set speech rate to "9". To hear a long tone, set the rate to "1".

NOTE: Include a second rate code after the code for the beep tone, but use this second rate code to reset HAL's rate of speech to what it was originally. If a second rate code isn't used, then the rest of the script (and everything else in HAL) will be read at the rate set in the first rate code. The first example below shows how to insert a beep tone that lasts the default length of time. The second example shows how to change the length of the tone by setting a different rate for the tone (note the second rate code which resets the rate of speech for the rest of the script).

**Example 1**: `There is movement <27>B6 in the driveway.`

**Example 2**: `There is movement <27>R2 <27>B6 <27>R7 in the driveway.`

**Inserting DTMF Tones**

Use the <27>Tx code to have HAL insert a DTMF tone when it reads a text-to-speech script. (DTMF tones are the sounds you hear when you press buttons on a touch-tone phone.) "X" represents a specific button on a telephone keypad:

- for numbers, use "0" to "9"
- for the extra buttons on military phones, use "A" through "D"
- for the star (*) key, use "E"
- for the pound (#) key, use "F"

**Example**: `<27>T1 <27>T0 <27>TF Attention. There is movement in the driveway.`

**Articulation Mode**

Use the <27>Af code to have HAL speak in *fluent* speech mode or <27>Ap to have HAL use *precise* speech mode. Fluent speech mode sounds more natural and precise speech mode articulates words more clearly. For instance, "I am" sounds closer to "I'm" when using fluent speech mode, but is pronounced as "I am" when precise speech mode is used.

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, type the code again but replace "x" with whatever letter corresponds to the original setting. If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code- the change is not noticed until the next time HAL speaks.

**Example**: `<27>Ap There is movement in the driveway. <27>Af`

## Read Mode

Use the <27>Mx code to change how HAL reads the text in the script, where "x" should be replaced with one of the codes below. HAL is set with a default of "2".

**Read mode choices** (use in place of "x"):
0 - the text is spelled one letter at a time
1 - the text is read one word at a time (staccato fashion)
2 - the text is read one sentence at a time

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, use the code <27>M2 to switch HAL back to its default mode. If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code- the change is not noticed until the next time HAL speaks.

**Example**: `It's time to give the dog a <27>M0 bath <27>M2`

## Spelling Mode

Use the <27>\spell=on\ code to have HAL spell out the text. This is similar to setting the read mode to "0", except that this code also announces spaces (read mode "0" goes from letter to letter and ignores spaces).

NOTE: When a script using this code runs, it affects HAL's speech throughout the program until HAL is restarted or another script changes the setting. To prevent this type of global change, use the code <27>\spell=off\ to turn off spelling mode. If this second code is the last thing in the script, then the switch will occur silently because there is no text after the last code- the change is not noticed until the next time HAL speaks.

**Example**: `It's time to give the dog a <27>\spell=on\bath<27>\spell=off\`

## Sentence Continuation

Use the <27>C code to force HAL to continue reading past a period if that period is not being used to indicate the end of a sentence, such as periods used to indicate abbreviations.

**Example**: `He lives at 180 Magnolia Pkwy. <27>C in the garden district.`

**Setting Part-of-Speech**

The <27>@x code is used for words whose pronunciation differs depending on what part-of-speech is being applied to the word. For instance, the word *record* can be pronounced one of two ways, depending on if it's being used as a noun ("he broke the land speed record") or a verb ("please record that show"). "X" should be replaced with one of the codes below. (By default, HAL will read a word using the most common pronunciation of that word).

**Part-of-speech choices** (use in place of "x"):
- N - noun
- J - adjective
- A - adverb
- V - verb
- R - past participle
- @ - for selecting an alternative pronunciation without specifying part-of-speech (see *Example 2* below)

**Example 1**: `Turn the <27>@N record over so that we can <27>@V record the other side.`

**Example 2**: `There's so much bass in that song that it's about to shake the stuffed <27>@@ bass from the wall.`

**Specifying End-of-Message**

Use the <27>E code to indicate to HAL when the end of a sentence has been reached. This is useful in situations where HAL doesn't realize that an abbreviated word is also the end of the sentence.

**Example**: `Welcome to the U.S. <27>E Is this your first time here?`

## Combining Codes

Text-to-speech codes can be used in various combinations. In some cases, however, one code could cancel out another code. For instance, a rate code will override the rate set in a rate and pitch code if the rate code is typed *after* the rate and pitch code (e.g. <27>S4 <27>P9). If the rate code is typed *before* the rate and pitch code (e.g. <27>P9 <27>S4), then the rate code is cancelled out (ignored).

NOTE: Any number of information and behavior codes can be used in one text-to-speech script, but the system may pause longer than desired when it encounters multiple codes grouped together. Separate multiple codes whenever possible to improve read-back performance.

**Example**: `<27>\char=whisper\ Good morning. It is <27>S3 <TIME> <27>S1 on <27>S7 <DATE>. <27>S1 <27>\char=normal\`

**Example**: `There are <NUMVMAIL3> voice mail messages and <NUMEMAIL> messages for John.`

**Example**: `<27>Sm1 <27>\char=monotone\ <27>R3 Attention. Your actions are being recorded on closed-circuit TV. <27>H1000 Attention. Your actions are being recorded on closed-circuit TV. <27>R6 <27>\char=normal\ <27>Sf1`

## CHAPTER 12
# How Do I…

## How Do I… Setup

**How do I set up HAL to control electrical (X-10) devices?**

1. Connect HAL to a Power Line Adapter (see page 17).
2. Connect electrical devices to X-10 compatible receivers, such as a Lamp or Appliance Module (see page 203).
3. Configure HAL to control X-10 devices (see page 110).
4. Name the electrical devices in HAL (see page 139).

**How do I set up house phones to work with HAL?**

You must have a HAL-compatible modem (see page 9) in order to talk to HAL using phones within the house.

If you wish to use just one phone in the house to talk to HAL, simply plug that phone into the "Phone" jack on the modem. To talk to HAL, pick up the handset for that phone and press the attention key (the default attention key is the pound [#] key). HAL will say "*Yes?*" to indicate that it's listening. You can now give HAL commands through that phone (see Chapter 3).

If you wish to use *any* phone in the house to talk to HAL, you will need to redirect wires at the telephone junction box outside the house so that the phone lines go to HAL before they continue to the other phones in the house. Go to the *In-House Phone Interaction Feature* on page 18 for more information on this setup.

**How do I set it up so that I can use HAL and the computer as a speakerphone?**

Go to the *Speakerphone Feature* on page 21 for more information (including a diagram) on setting up HAL's speakerphone.

**How do I connect HAL to my PBX phone system?**

Go to *HAL and PBX Phone Systems* on page 211 for more information (including a diagram) on setting up HAL to work with a PBX system.

**How do I make sure HAL starts automatically if my computer reboots?**

Programs that have been added to the Windows® StartUp group will start automatically whenever the computer boots up or restarts. When HAL was installed, there was an option for selecting whether or not to add HAL to the StartUp group. If you enabled that option (put a checkmark in the field), then HAL is already set up to automatically start whenever the computer boots up or restarts. If this option was not selected during installation, or if HAL's shortcut was accidentally deleted from the StartUp group, then follow the steps below to set up this option.

NOTE: If HAL hasn't been registered yet, then when the program starts up it will stop at the registration screen and wait for you to click LATER or for you to enter a registration code and click OK. The software will not continue loading until one of these actions is taken. Once HAL has been registered, this screen will no longer appear and HAL will start without interruption.

**Long version**:

1. Go to **Start**... **Programs**... **Windows Explorer** to start that program.

2. In the Windows Explorer screen, click the plus (+) symbol next to the letter of the hard drive on which Microsoft® Windows is installed, or double-click on the name of that hard drive (generally the "C" drive). If Windows Explorer is in "Folders" view, then a list of folders will appear below the name of the hard drive and in the window to the right of the main list. If Explorer is not in "Folder" view, then the list of folders will replace the existing list.

3. Click on the plus (+) symbol next to the WINDOWS folder or double-click on its name. Another folder list will replace this list or will appear below the Windows folder (if in "Folders" view).

4. Click on the folder named START MENU (if in "Folders" view) or double-click on that folder name (if not in "Folders" view).

5. Right-click to bring up a menu with additional options (if in "Folders" view, right-click in the window space to the right of the folder names). Click NEW then SHORTCUT.

6. In the *Create Shortcut* screen, type **C:\PROGRAM FILES\HAL\HAL SYSTEM SERVER.EXE**.

   NOTE: If HAL was installed to a location other than the default location of "C:\Program Files\HAL", type that location in place of the location indicated. If unsure of that location, click BROWSE and navigate through the folders on the computer until you find HAL's folder. Double-click on the file "HAL System Server.exe" to have the full path name appear in the *Create Shortcut* screen.

7. Click NEXT in the *Create Shortcut* screen.

8. Type a name for this shortcut, such as "HALdeluxe" or "HAL".

9. Click FINISH to save the shortcut and close the *Create Shortcut* screen. A new shortcut is visible in the *Start Menu* folder in Windows Explorer. Now whenever the computer boots up or restarts, HAL will automatically start. Close Windows Explorer.

**Quick version**:

1. Right-click on the Windows® system tray and click PROPERTIES from the menu that appears. The *Taskbar Properties* screen will appear.

2. Click on the tab "Start Menu Programs".

3. Click on the button ADVANCED. Windows Explorer will open to the "Start Menu" folder.

4. Go to **Start**... **Programs**... **HALdeluxe**.

5. *Right*-click on HAL SYSTEM SERVER.EXE and drag it to the "Start Menu" folder in the Windows Explorer screen. A pop-up menu will appear. Click CREATE SHORTCUT(S) HERE. A shortcut called "HAL System Server.exe" will appear in the "Start Menu" folder.

6. Close Windows Explorer then click OK or CANCEL in the *Taskbar Properties* screen. Now whenever the computer boots up or restarts, HAL will automatically start.

**How do I set up HAL to use two different modems, one for retrieving Internet information and one for telephony features (recording voice mail messages, phone interaction, etc.)?**

(This feature is mainly for those users who have two phone lines.)

1. Run the *HAL Setup Wizard* (see page 24).

2. When you get to the screen where HAL asks you how you wish to connect to the Internet, select the option "Phone Line Modem." When you click NEXT, another screen will appear, asking you to select an Internet connection. Select which dial-up configuration you want HAL to use when it connects to the Internet. (For information on creating a dial-up connection method, see Windows® Online Help.)

3. When you get to the screen where HAL asks what voice modem you're going to use, select the modem that HAL will use for its telephony features, such as recording voice mail messages.

4. Click on the option "My Telephone and Internet use the same modem (phone line)" to disable that option (checkmark disappears).

5. Continue advancing through the *HAL Setup Wizard* until the last screen. Click FINISH.

6. Start HAL.

When HAL connects to the Internet, it will use the modem that is selected in the dial-up connection method specified in Step 2. When you interact with HAL through local (house) or remote phones, or when HAL answers and places calls, it will use the modem that was specified in Step 3.

If you don't disable the "My Telephone and Internet use the same modem (phone line)" option in the *HAL Setup Wizard* (in can also be disabled from the *Internet Configuration* screen), then HAL will use the modem specified in Step 2 to answer the phone or place calls. This means that while HAL is connected to the Internet it won't be able to answer or place calls and you won't be able to interact with HAL through telephones. With this option disabled, HAL will be able to download information from the Internet at the same time that it is recording a voice message, because the two modems are performing different functions.

**How do I import names, addresses, and phone numbers from another program into HAL's Directory?**

Information from another address book-type program can be imported into HAL's Directory so long as the information can be exported from that program to a CSV formatted file (data fields are separated by commas) containing ASCII text. The file can then be imported by going to the *System Data Directory* screen and clicking the IMPORT button (see page 146).

The data fields in the CSV file must have titles that match the ones listed below. The data can be in any order, but the titles **must** match and the first line of the CSV file **must** list the data fields in the order in which the data is written in the file being imported.

Imported data field titles:

FIRSTNAME, LASTNAME, COMPANY, STREET, CITY, STATE, ZIP, PHONE, WORKPHONE, CELLPHONE, FAXPHONE, PAGER, PIN

## How Do I… Voice Interaction

### How do I get HAL's attention so that I can talk to it?

Use any of these methods to get HAL's attention:

- Left-click on the ear icon (see page 36)
- Say the attention word, if HAL is set to use the attention word (see page 95)
- Have an action in a rule, macro, or schedule put HAL into listening mode (see page 174)
- Pick up a local (house) phone and press the attention key (see page 98 for information on the attention key)
- Dial in from a remote phone and press the attention key when the main greeting begins to play

### How do I access my house from a remote location and give it commands?

A "remote" phone is any touch-tone phone that's not on the same phone system as HAL.

> NOTE: A HAL-compatible modem (see page 9) is recommended for interaction with HAL from remote telephones.

1. Using any remote touch-tone phone, dial the phone number to which HAL is connected.
2. When HAL begins playing the main greeting for the voice messaging system, press the attention key (see page 98) on the telephone keypad. (The default attention key is the pound [#] key.)

   > NOTE: If HAL's answering machine feature is disabled, then HAL will still pick up the phone after the number of rings specified in the *Telephone Configuration* screen (see page 100).

3. HAL will ask for a pass code. Using the keypad on the remote telephone, enter the four (4) digit pass code for one of the mailboxes (see page 197).
4. HAL will say "*Yes?*" to indicate that it's listening. You can now give HAL commands (see page 47).

### How do I set it up so that I can talk to HAL from any room in the house?

There are two ways that you can set it up so that you can talk to HAL from any room in the house. You can one or both of these methods.

*House Phone Method*:

With this method, you can talk to HAL from any room in the house that has a phone connected to the same phone line that HAL uses. You could then pick up the handset of any house phone and press an attention key to put HAL into listening mode. This method requires a HAL-compatible modem and requires a modification to the wiring setup of the telephone junction box outside your home. Go to *House Phone Interaction* on page 18 for information on setting up this method of interaction.

*Whole-House Microphone Network*:

With this method, you can talk to HAL through microphones installed throughout the house. The microphones would be connected to a central mixer whose output would be connected to the computer on which HAL is installed. This method may require the assistance of a qualified audio technician and is easier to implement in new homes as they're being constructed. For more information on setting up a whole-house microphone network, go to the HAL website at www.AutomatedLiving.com

**How do I change the default attention word?**

1. Right-click on the ear icon and select OPEN SYSTEM SETTINGS (or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**).

2. In the *HAL Configuration* screen, double-click on PERSONAL ASSISTANT (see page 95).

3. Click with the left mouse button in the white field to the left of the "Speak Word" button.

4. In place of "Computer", type one or more words that will be the new attention word or phrase.

5. Click SPEAK WORD to hear HAL say the new attention word or phrase. Since HAL pronounces text phonetically, the word or phrase may need to be typed differently in order for HAL to pronounce it correctly. For instance, HAL pronounces the name "Gina" as "jin a". To get HAL to pronounce it correctly, the word has to be typed as "Geena".

6. Click APPLY or DONE to save the new attention word or phrase.

## How Do I... Device Control

**How do I control a light or appliance (like a coffeemaker) by voice?**

1. Set up HAL to control electrical devices (see the first *How Do I... Setup* topic on page 223).

2. Get HAL's attention (see page 45).

3. Give HAL commands (see page 47).

**How do I control a light or appliance from the computer?**

1. Right-click on the ear icon and select OPEN MANUAL CONTROL PANEL (or go to **Start**... **Programs**... **HALdeluxe**... **HAL Interactive Control Panel**). The *HAL Manual Control Panel* screen (see page 183) will appear.

2. If the light or appliance you want to control is not visible in the *Manual Control Panel* when it appears, then click on its group name, which appears near the bottom of the screen. When you click on a group name, all of the lights and appliances that were assigned to that group in the *Device Wizard* (see page 144) will appear in the *Manual Control Panel* screen.

   NOTE: If the light or appliance you want to control wasn't assigned to a group, you can still control it through the *Manual Control Panel*. To call up the panel for that light or appliance, click on DEVICE/SENSOR LIST at the bottom of the screen. The *Device List* screen will appear with a list of all of the devices that have been added to the system. Find the light or appliance you want and double-click on its name. The *Device List* screen will disappear and the panel for that light or appliance will appear in the *Manual Control Panel*.

3. Click on the blue lever on the left side of the light or appliance's panel to turn it on or off. If the device is a light, you can dim it by sliding the blue bar on the right side of the panel and then clicking on the DIM button.

   NOTE: You will not be able to dim the light if that feature wasn't enabled when the light was created (see page 140). The light will dim using the method selected when it was created.

**How do I schedule a light or appliance to turn on or off when I'm not home?**

**From the computer**:

1. Set up HAL to control electrical devices (see the first *How Do I... Setup* topic on page 223).
2. Right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN (or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**).
3. Click on SCHEDULES at the top of the *HAL System Data* screen (see page 163).
4. Click on ADD to start the *Schedule Wizard*. Fill in the information on each screen (go to page 165 for more information on manually creating schedules).
5. When done, click FINISH to create the schedule and close the *Schedule Wizard* screen.

**By voice**:

Go to page 47 for information on verbally scheduling a light or appliance.

**How do I have several lights turn off with only one command?**

1. Set up HAL to control electrical devices (see the first *How Do I... Setup* topic on page 223).
2. Right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN (or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**).
3. Click on MACROS at the top of the *HAL System Data* screen (see page 149).
4. Click ADD at the bottom of the screen or ADD MACRO on the left side of the screen. The *Macro Add Wizard* will appear (see page 150). Fill in the information in that screen (go to page 150 for more information on creating macros).
5. Click OK to save the information and close the *Macro Add* screen.
6. Click ADD ACTION. The *Action Wizard* screen will appear (see page 174). Select an action to be carried out. Click OK to save the action and close the *Action Wizard* screen.
7. Repeat Step 6 to add additional actions to the macro.
8. Tell HAL to run that macro (see page 47) or start the macro as an action in a rule, schedule, or other macro (see page 174).

**How do I set it up so that the front porch lights turn on when someone approaches the house?**

Setting up this type of automation can get very complicated and involved. Follow the steps below to set it up. An explanation of how it all goes together is included after the last step.

1. Install an X-10 motion sensor in a location where it can detect someone approaching the house. Set an address on the sensor. (Install the sensor and set the address according to the instructions included with the sensor.)

NOTE: To minimize the chances of "false triggers", aim the sensor at an area where the sensor will less likely detect false or erroneous movement. For instance, installing the sensor above or to the side of the front door and aiming it at the top step of the porch instead of aiming it down the sidewalk will decrease the chances that an animal or blowing leaves or something similar will trip the sensor by mistake.

2. Plug an X-10 wireless receiver into a standard outlet and set it to the same house code that the X-10 sensor is set to (other wireless devices can use this same wireless receiver, as long as those devices are set to the same house code).

3. Set up HAL to control electrical devices (see the first *How Do I... Setup* topic on page 223).

4. Right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN (or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**).

5. Create a device called "Front Porch Lights" (go to page 139 for more information on creating devices).

6. Click on SENSORS at the top of the *HAL System Data* screen (see page 170).

7. Click ADD to open the *Sensor Wizard* screen (see page 171). Type a name for the sensor, such as Front Motion Sensor. Leave the *Type* field set to X-10. Click NEXT to continue to the next screen. In the second screen, set the X10 address on the screen to match the X-10 address that was set on the sensor. Click FINISH to create the sensor and close the *Sensor Wizard* screen.

8. Click ADD to open the *Sensor Wizard* screen again. This time select TIMER from the *Type* field and type a name for the timer, such as Front Motion Timer. Click FINISH to save the timer and close the *Sensor Wizard* screen (the reason for this timer is explained below).

9. Click ADD to open the *Sensor Wizard* screen one more time. This time select FLAG from the *Type* field and type a name for the flag, such as Front Motion Flag. Click NEXT. In the next screen, set the "Default Value" to FALSE and select YES to have the flag's settings saved when HAL shuts down. Click FINISH to save the flag and close the *Sensor Wizard* screen (the reason for this flag is explained below).

10. Click on RULES at the top of the *HAL System Data* screen (see page 154).

11. Click ADD at the bottom of the screen or ADD RULE on the left side of the screen to open the *Rule Add Wizard* screen (see page 156). Give the Rule a name, such as **Front Walk - Light**. Click OK. The *Conditions Wizard* screen appears (see page 156). Select TRIGGER EVENT then click NEXT to continue.

12. Select SENSOR from the drop-down "Condition" field. Select from the list the sensor you created previously ("Front Motion Sensor"). Make sure it's set to ON then click OK to add the condition to the Rule and close the *Conditions Wizard* screen.

13. Click ADD CONDITION to open the *Conditions Wizard* screen again. Select SECONDARY CONDITION then click NEXT to continue. Select FLAG in the *Condition* field then select from the drop-down menu the name of the flag you created previously ("Front Motion Flag"). Set it to FALSE then click OK to add the condition to the Rule and close the *Conditions Wizard* screen.

14. Click ADD ACTION on the left side of the screen. The *Action Wizard* screen will appear (see page 174). In the *Action* drop-down menu, select FLAG (the *Action Wizard* screen will change). Select from the drop-down menu the name of the flag you created previously ("Front Motion Flag") and enable the option "Set to TRUE". Click OK to save the action and close the *Action Wizard* screen.

15. Click ADD ACTION to open the *Action Wizard* screen again. This time select DEVICE from the *Action* drop-down menu. Left-click on the device that you created previously ("Front Porch Lights") to select it. Set its action to ON. Click OK to save the action and close the *Action Wizard* screen.

16. Click ADD RULE to create another Rule, but call it **Front Walk - Timer Set**. Click OK. The *Conditions Wizard* screen appears again. Select TRIGGER EVENT then click NEXT to continue. Select the sensor that was created previously ("Front Motion Sensor") and set it to ON. Click OK to add the condition to the Rule and close the *Conditions Wizard* screen.

17. Click ADD ACTION to open the *Action Wizard* screen. Select SET TIMER from the *Action* drop-down menu. Select the timer that you created previously ("Front Motion Timer"). Use the arrow keys to set what the timer is to count down from, such as 30 seconds or one minute. Click OK to add the action and close the *Action Wizard* screen.

18. Click ADD RULE to create another Rule, but call it **Front Walk - Timer Off**. Click OK. The *Conditions Wizard* screen appears again. Select TRIGGER EVENT then click NEXT to continue. Select EXPIRED TIMER from the *Condition* field then select the timer that was created previously ("Front Motion Timer"). Click OK to save the condition and close the *Conditions Wizard* screen.

19. Click ADD ACTION to open the *Action Wizard* screen. Select DEVICE from the *Action* drop-down menu. Left-click on the device that you created previously ("Front Porch Lights") to select it. Set its action to OFF. Click OK to save the action and close the *Action Wizard* screen.

20. Click ADD ACTION to open the *Action Wizard* screen again. Select FLAG from the *Action* drop-down menu. Select the flag that you created previously ("Front Motion Flag") and enable the option "Set to TRUE." Click OK to save the action and close the *Action Wizard* screen.

**How It Looks:**

Here is how the *HAL System Data - Rules* screen will appear after following the steps above:

```
Front Walk - Light
    IF:
        FRONT MOTION Sensor On (TE)
        AND FRONT MOTION Flag Is False (SC)
    THEN:
        Set Flag FRONT MOTION To True
        Turn On FRONT PORCH LIGHTS

Front Walk - Timer Set
    IF:
        FRONT MOTION Sensor On (TE)
    THEN:
        Set Timer FRONT MOTION To 30 Seconds

Front Walk - Timer Off
    IF:
        FRONT MOTION Timer Has Expired (TE)
    THEN:
        Turn Off FRONT PORCH LIGHTS
        Set Flag FRONT MOTION To False
```

**How It Works:**

When someone walks up the front porch steps, the FRONT MOTION SENSOR detects the movement and sends an X-10 signal, which HAL receives. If the FRONT MOTION FLAG is false, then the FRONT MOTION FLAG will be set to "true" and the FRONT PORCH LIGHTS will turn on. At the same time, the FRONT MOTION TIMER will start counting down from 30 seconds. If the FRONT MOTION SENSOR detects more movement then it will reset the timer to 30 seconds and the timer will begin the countdown again. (The FRONT PORCH LIGHTS will not turn on again because the FRONT MOTION FLAG has been

set to "true" and the *Front Walk - Light* Rule requires that flag to be "false"). If the FRONT MOTION TIMER reaches zero (0), then it means that the FRONT MOTION SENSOR is no longer detecting movement, so the FRONT PORCH LIGHTS will turn off and the FRONT MOTION FLAG will be set to "false".

**Variations:**

The steps above can be modified significantly, depending on what you want to have done. For instance, if you don't want the front porch lights to come on unless it's actually dark out, then you could add a condition to the *Front Walk - Light* Rule that specifies that the time of day must be between 7:00pm and 11:30pm. You could also add an action to that same Rule that will have HAL announce over the speakers that someone is approaching the front door.

**Warning:**

When creating automation sequences of this nature, be sure to ***test your Rules thoroughly***. Make sure that you haven't missed any steps and that there are no "loops" in the automation. For instance, if you didn't use the timer and flag above, then the front porch lights would receive the ON command repeatedly as the visitor moved through the sensor's range, because every step that person took would trigger the sensor. The constant transmission of the X-10 signal to turn on the front porch lights could prevent other X-10 signals from being sent or received. Likewise, if you did have HAL set up to tell you that someone was approaching the house, then HAL would repeat that sentence over and over and over again until the visitor moved beyond the range of the sensor, which would be the only way to get HAL out of that loop.

## How do I have lights turn on automatically when I enter a room?

For this example, assume that you want to have the living room lights turn on when you enter that room.

1. Install an X-10 motion sensor in a location where it can detect someone entering the room. Set an address on the sensor. (Install the sensor and set the address according to the instructions included with the sensor.)

2. Plug an X-10 wireless receiver into a standard outlet and set it to the same house code that the X-10 sensor is set to (other wireless devices can use this same wireless receiver, as long as those devices are set to the same house code).

3. Set up HAL to control electrical devices (see the first *How Do I... Setup* topic on page 223).

4. Right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN (or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**).

5. In the *System Data Devices* screen, click on ADD to create a device called "Living Room Lights" (go to page 139 for more information on creating devices).

6. Click on SENSORS at the top of the *HAL System Data* screen (see page 170).

7. Click ADD to open the *Sensor Wizard* screen (see page 171). Type a name for the sensor, such as Living Room Motion Sensor. Leave the *Type* field set to X-10. Click NEXT to continue to the next screen. In the second screen, set the X-10 address on the screen to match the X-10 address that was set on the sensor. Click FINISH to create the sensor and close the *Sensor Wizard* screen.

8. Click on RULES at the top of the *HAL System Data* screen (see page 154).

9. Click ADD at the bottom of the screen or ADD RULE on the left side of the screen to open the *Rule Add Wizard* screen (see page 156). Give the Rule a name, such as **Living Room Motion**. Click OK. The *Conditions Wizard* screen appears (see page 156). Select TRIGGER EVENT then click NEXT to continue.

10. Select SENSOR from the drop-down "Condition" field. Select from the list the sensor your created previously ("Living Room Motion Sensor"). Make sure it's set to ON then click OK to add the condition to the Rule and close the *Conditions Wizard* screen.

11. Click ADD ACTION on the left side of the screen. The *Action Wizard* screen will appear (see page 174). Left-click on the device that you created previously ("Living Room Lights") to select it. Set its action to ON. Click OK to save the action and close the *Action Wizard* screen.

**How It Looks:**

Here is how the *HAL System Data - Rules* screen will appear after following the steps above:

Living Room Motion
IF:
LIVING ROOM MOTION Sensor On (TE)
THEN:
Turn On LIVING ROOM LIGHTS

**How It Works:**

It's simple -- when you walk into the living room, the LIVING ROOM MOTION sensor detects the movement and sends an X-10 signal. That X-10 signal triggers the *Living Room Motion* Rule, which will turn on the lights in the living room.

**Variations:**

Additional conditions and actions can be added to the Rule, depending on what you want to do. For instance, you could also have HAL announce how many voice mail or e-mail messages have been received or have it announce the time and date.

**Warning:**

When creating automation sequences of this nature, be sure to ***test your Rules thoroughly***. Make sure that you haven't missed any steps and that there are no "loops" in the automation. For instance, if you turned off the lights in the living room because you're watching a moving and don't want the lights to come on when someone else enters the room, then you could create a special flag that would override the original Rule.

**How do I have lights turn off automatically after I've left a room?**

The steps for setting up this automation are the same steps used for the topic "*How do I set it up so that the front porch lights turn on when someone approaches the house?*" (see above). The only differences would be where the sensor is located and the names that you give the sensor, flag, timer, and Rules. When you exit the room, the sensor will no longer detect movement so it won't reset the timer. When the timer expires, the light will shut off.

**How do I get lights to come on automatically at dusk?**

1. Set up HAL to control electrical devices (see the first *How Do I... Setup* topic on page 223).

2. Right-click on the ear icon and select OPEN SYSTEM SETTINGS (or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**).

3. Double-click on LOCATION in the *HAL Configuration* screen. The *Location Configuration* screen appears (see page 94). In the "Local Latitude/Longitude" field, select the city closest to your location or select USER DEFINED and then type your latitude and longitudinal coordinates in the indicated field. Click DONE to save the settings and close the *Location Configuration* screen. Click DONE again to close the *HAL Configuration* screen.

4. Right-click on the ear icon and select SHUT DOWN HAL. Click YES in the dialog box that appears. When HAL has completely shut down, restart it. (Shutting down and restarting HAL is necessary for computing new sunrise and sunset times based on your location.)

5. Right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN (or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**).

6. Click on SCHEDULES at the top of the *HAL System Data* screen (see page 163).

7. Click on ADD to start the *Schedule Wizard* (see page 165). Fill in the information on each screen. On the last screen, select the option "Sunrise/Sunset" instead of "Start/End Time". In the bottom half of the screen, select the option SUNSET and select AT from the drop-down menu.

8. When done, click FINISH to create the schedule and close the *Schedule Wizard* screen.

**How do I have the same lights turn on at different times, depending on which "mode" I've set the house to ("Vacation Mode", "At Work Mode", "Night Mode", etc.)?**

Setting up this type of automation takes a lot of steps initially, but once it's set up you only need to remember what "modes" you've programmed.

The steps below demonstrate how to set up a "Normal Mode" and a "Vacation Mode". In "Normal Mode", the front porch lights will turn on at dusk and turn off at 10:00pm, and the living room lights will turn on at 5:15pm, but won't be turned off automatically (the living room lights will be turned off verbally or manually when you go to bed). When the house is in "Vacation Mode", the living room lights will turn on at 5:15pm and turn off at 11:30pm, and the front porch lights will turn on at dusk and turn off at 5:00am the next morning.

1. Set up HAL to control electrical devices (see the first *How Do I... Setup* topic on page 223).

2. Right-click on the ear icon and select OPEN SYSTEM SETTINGS (or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**).

3. Double-click on LOCATION in the *HAL Configuration* screen. The *Location Configuration* screen appears (see page 94). In the "Local Latitude/Longitude" field, select the city closest to your location or select USER DEFINED and then type your latitude and longitudinal coordinates in the indicated field. Click DONE to save the settings and close the *Location Configuration* screen. Click DONE again to close the *HAL Configuration* screen.

4. Right-click on the ear icon and select SHUT DOWN HAL. Click YES in the dialog box that appears. When HAL has completely shut down, restart it. (Shutting down and restarting HAL is necessary for computing new sunrise and sunset times based on your location.)

5. Right-click on the ear icon and select OPEN AUTOMATION SETUP SCREEN (or go to **Start**... **Programs**... **HALdeluxe**... **HAL Data Environment**).

6. Create devices called "Front Porch Lights" and "Living Room Lights" (go to page 139 for more information on creating devices).

7. Click on SENSORS at the top of the *HAL System Data* screen (see page 170).

8. Click ADD to open the *Sensor Wizard* screen (see page 171). Type Normal Mode in the *Name* field and select FLAG from the *Type* field. Click NEXT. In the next screen, set the "Default Value" to FALSE and select YES to have the flag's settings saved when HAL shuts down. Click FINISH to save the flag and close the *Sensor Wizard* screen.

9. Repeat Step 8, but this time create a flag called Vacation Mode.

10. Click on MACROS at the top of the *HAL System Data* screen (see page 149).

11. Click ADD at the bottom of the screen or click ADD MACRO on the left side of the screen. The *Macro Add Wizard* appears (see page 150). For the Macro name, type Normal. For the recognition phrase, type Set the house to normal. Click OK to create the Macro and close the *Macro Add* screen.

12. Click ADD ACTION. The *Action Wizard* screen appears (see page 174). Select FLAG from the *Action* drop-down menu (the *Action Wizard* screen will change). Select NORMAL MODE from the *Flag Name* drop-down menu and select the "Set to True" option. Click OK to save the action and close the *Action Wizard* screen.

13. Click ADD ACTION to open the *Action Wizard* screen again. Select FLAG from the *Action* drop-down menu and select VACATION MODE from the *Flag Name* drop-down menu. Select the "Set to False" option. Click OK to save the action and close the *Action Wizard* screen.

14. Repeat Step 11, but name the Macro Vacation and set its recognition phrase to Set the house to vacation.

15. Repeat Step 12, but select VACATION MODE from the *Flag Name* menu.

16. Repeat Step 13, but select NORMAL MODE from the *Flag Name* menu.

17. Click on RULES at the top of the *HAL System Data* screen (see page 154).

18. Click ADD at the bottom of the screen or click ADD RULE on the left side of the screen. The *Rule Add Wizard* screen appears (see page 156). Type **Normal Mode - Living Room On**. Click OK. The *Conditions Wizard* screen appears (see page 156). Select TRIGGER EVENT then click NEXT to continue. Select TIME in the *Condition* drop-down menu. Drag the arrow until the time indicated is 17:15. Click OK to save the condition and close this screen.

19. Click ADD CONDITION. The *Conditions Wizard* screen appears again. Select SECONDARY CONDITION then click NEXT to continue. Select FLAG from the *Condition* drop-down menu. Select NORMAL MODE from the drop-down menu and set it to TRUE. Click OK to save the settings and close the *Conditions* screen.

20. Click ADD ACTION. The *Action Wizard* screen appears. Select DEVICE from the *Action* drop-down menu. Left-click on LIVING ROOM LIGHTS to select it. Set its action to ON. Click OK to save the action and close the *Action Wizard* screen.

21. Click ADD at the bottom of the screen or click ADD RULE on the left side of the screen. The *Rule Add Wizard* screen appears. Type **Normal Mode - Front Porch On**. Click OK. The *Conditions Wizard* screen appears. Select TRIGGER EVENT then click NEXT to continue. Select SUNRISE/SUNSET from the *Condition* drop-down menu. Select SUNSET on the right side of the screen. Click OK to save the condition and close this screen.

22. Click ADD CONDITIONS. The *Conditions Wizard* screen appears again. Select SECONDARY CONDITION then click NEXT to continue. Select FLAG from the *Condition* drop-down menu. Select NORMAL MODE from the drop-down menu and set it to TRUE. Click OK to save the settings and close the *Conditions* screen.

23. Click ADD ACTION. Select DEVICE from the *Action* drop-down menu in the *Action Wizard* screen. Left-click on FRONT PORCH LIGHTS to select it. Set its action to ON. Click OK to save the action and close the *Action Wizard* screen.

24. Repeat Steps 18-20, but this time name the Rule **Normal Mode - Front Porch Off**, select the *Time* condition and set it to 22:00, and set the device action to OFF.

25. Repeat the steps above to set up everything for the Vacation Mode.

**How It Looks:**

Here is how the *HAL System Data - Macros* screen will appear for the two Macros:

NORMAL - (Set the house to normal)
Set Flag NORMAL MODE To True
Set Flag VACATION MODE To False

VACATION - (Set the house to vacation)
Set Flag VACATION MODE To True
Set Flag NORMAL MODE To False

Here is how the *HAL System Data - Rules* screen will appear after following the steps above:

Normal Mode - Living Room On
IF:
Time is 17:15 (TE)
NORMAL MODE Flag Is True (SC)
THEN:
Turn On LIVING ROOM LIGHTS

Normal Mode - Front Porch On
IF:
Time is Sunset (TE)
NORMAL MODE Flag Is True (SC)
THEN:
Turn On FRONT PORCH LIGHTS

Normal Mode - Front Porch Off
IF:
Time is 22:00 (TE)
NORMAL MODE Flag Is True (SC)
THEN:
Turn Off FRONT PORCH LIGHTS

Vacation Mode- Living Room On
IF:
Time is 17:15 (TE)
VACATION MODE Flag Is True (SC)
THEN:
Turn On LIVING ROOM LIGHTS

Vacation Mode- Living Room Off
IF:
Time is 23:30 (TE)
VACATION MODE Flag Is True (SC)
THEN:
Turn Off LIVING ROOM LIGHTS

Normal Mode- Front Porch On
IF:
Time is Sunset (TE)
VACATION MODE Flag Is True (SC)
THEN:
Turn On FRONT PORCH LIGHTS

Normal Mode- Front Porch Off
IF:
Time is 05:00 (TE)
NORMAL MODE Flag Is True (SC)
THEN:
Turn Off FRONT PORCH LIGHTS

**How It Works:**

When you run the Macro called "Normal", the NORMAL MODE FLAG is set to "true" (the VACATION MODE FLAG is set to "false" as a precaution). Because this flag is "true", only the Rules that rely on that flag being "true" will run, so the living room lights will turn on at 5:15 (17:15 in military time) and the front porch lights will turn on at dusk and turn off at 10:00pm. When you run the Macro called "Vacation", the VACATION NORMAL FLAG is set to "true". Only the Rules that rely on that flag being "true" will run, so the living room lights will turn on at 5:15pm and turn off at 11:30pm, and the front porch lights will turn on at dusk and turn off at 5:00am the next morning.

Go to page 47 for information on starting Macros by voice. Go to *Create a Macro* on page 150 for information on setting the three-digit code that you can use to start Macros when interacting with HAL by telephone.

## How Do I... Voice Mail

**How do I modify the settings for the voice mailbox?**

1. Left-click on the phone icon or right-click on it and select PHONE PAD.
2. Click on MAILBOXES (see page 195).
3. Click on a mailbox to highlight it, then click on MODIFY.
4. Change the settings in the *Mailbox Edit* screen (see page 197).
5. Click OK to save the changes.

**How do I change the type of greeting HAL will use for incoming calls?**

1. Left-click on the phone icon or right-click on it and select PHONE PAD.
2. Click on MAILBOXES (see page 195).
3. Click on a mailbox to highlight it, then click on MODIFY.

   NOTE: To change the first greeting that a caller hears, modify the main mailbox.

4. In the *Mailbox Edit* screen (see page 197), select RECORDED GREETING if you want callers to hear a recorded greeting using your voice or select TEXT TO SPEECH GREETING to have HAL say a text message as the greeting.
5. If "Recorded Greeting" is selected, click EDIT GREETING to record a greeting using your voice by speaking into a microphone connected to the computer.

   If "Text to Speech Greeting" is selected, click in the field below that option and type the text that HAL will read. Click SPEAK GREETING to hear HAL read that text.
6. Click OK to save the changes and close the *Mailbox Edit* screen.

**How do I record my own greeting for the voice mailbox?**

1. Left-click on the phone icon or right-click on it and select PHONE PAD.
2. Click on MAILBOXES (see page 195).
3. Click on a mailbox to highlight it, then click on MODIFY.
4. In the *Mailbox Edit* screen (see page 197), enable the PLAY GREETING field.
5. Select RECORDED GREETING.
6. Click EDIT GREETING to open the *Recorder* screen.
7. Click RECORD and record a voice greeting by speaking into a microphone connected to the computer.
8. Click OK to save the recording and close the *Recorder* screen.
9. Click OK to save the changes and close the *Mailbox Edit* screen.

**How do I add a mailbox to HAL's answering machine?**

1. Left-click on the phone icon or right-click on it and select PHONE PAD.
2. Click on MAILBOXES (see page 195).
3. Click ADD. The *Mailbox Edit* screen appears (see page 197). Fill in the information in the screen. Click DONE to save the mailbox and close the *Mailbox Edit* screen.

**How do I retrieve my messages from a remote location?**

In order to do this, HAL's telephone services have to be enabled (see page 98) and at least one mailbox must be set up with a personal access code (see page 97).

1. Using any remote touch-tone phone, dial the phone number to which HAL is connected.

2. When HAL begins playing the main greeting for the voice messaging system, press the attention key on the telephone keypad. (The default attention key is the pound [#] key.)

   NOTE: If HAL's answering machine feature is disabled, then HAL will still pick up the phone after the number of rings specified in the *Telephone Configuration* screen (see page 98).

3. HAL will ask for a pass code. Using the keypad on the remote telephone, enter the four (4)-digit pass code for one of the mailboxes.

4. HAL will indicate how many voice messages have been recorded for the main mailbox and how many have been recorded in the mailbox whose pass code was used to access the system. (If the pass code for the main mailbox was used, then HAL will only indicate how many messages there are for the main mailbox.) HAL will then say "*Yes?*" to indicate that it's in listening mode and waiting for commands.

5. Ask HAL for your voice mail messages (see page 47).

## How Do I... Internet

**How do I set up HAL to connect to the Internet?**

For information on setting up HAL to connect to the Internet, go to *Internet Configuration* (see page 79). Once HAL has downloaded information from the Internet, you can ask it to read that information to you (see page 47) or you can view them in text displays (see page 119).

**How do I get HAL to download my E-mail messages so that it can read them to me on command?**

For information on setting up HAL to download E-mail messages, go to *E-mail Configuration* (see page 82). Once HAL has downloaded E-mail messages, you can ask it to read the messages to you (see page 47) or you can view them in a text display (see page 120).

**How do I setup HAL to download news headlines?**

For information on setting up HAL to connect to the Internet, go to *Internet Configuration* (see page 79). HAL will download the top United States and world news stories. Once HAL has downloaded the information, you can ask it to read news headlines and stories to you (see page 47) or you can view the information in a text display (see page 122).

**How do I select the teams whose sports scores I want to ask for by name?**

For information on setting up HAL to download sports information, go to *Sports Configuration* (see page 84). When you ask a generic sports question, such as "What were yesterday's baseball scores?", HAL will read the scores for all teams in the specified sport. If you want to be able to ask for a particular team's score, you must first select that team in the *Sports Configuration* screen. If you want to be able to ask for any team's score, simply select every team in every sport in that screen (all team names are selected by default). Go to page 47 for information on how to ask HAL to read sports scores to you.

Sports scores for all teams in all of the sports can be viewed in text form in the *Internet* screen (see page 124).

**How do I tell HAL which stocks I want it to track?**

For information on setting up HAL to download stock information, go to *Stocks Configuration* (see page 86). Once HAL has downloaded stock information, you can ask it to read that information to you (see page 47) or you can view the information in a text display (see page 126).

**How do I have HAL download traffic information?**

For information on setting up HAL to download traffic information, go to *Traffic Configuration* (see page 88). Once HAL has downloaded the information, you can ask it to read that information to you (see page 47) or you can view the information in a text display (see page 128).

**How do I set up HAL to download TV listings for cable channels or my satellite program provider?**

For information on setting up HAL to download TV listings, go to *TV Listings Configuration* (see page 90). Once HAL has downloaded the information, you can ask it to read that information to you (see page 47) or you can view the information in a text display (see page 130).

**How do I get HAL to download the weather forecast for my city?**

For information on setting up HAL to download the weather forecast for your location, go to *Weather Configuration* (see page 92). Once HAL has downloaded the information, you can ask it to read that information to you (see page 47) or you can view the information in a text display (see page 134).

## CHAPTER 13
# Glossary

Listed in this chapter are some terms that are used in relation to HAL or to home automation in general.

**Action**

Any action that HAL is programmed to perform as part of a rule, macro, or schedule. Actions are programmed in the *Action Wizard* screen (see page 174), which is displayed when adding or modifying a rule, macro, or schedule.

**ASR**

The initials stand for Automatic Speech Recognition. This is the part of HAL's program that evaluates incoming audio to determine if that audio contains a valid command or question for HAL. If the ASR parameters are "loose", then HAL will be more likely to accept phrases that don't exactly match the syntax that HAL is expecting to hear, but it may then be so sensitive that it tries to interpret more than it should. If the ASR parameters are "tight", then HAL will be more likely to reject phrases that don't exactly match the syntax, but it may also be harder to get its attention or to get it to respond. The ASR parameters should be set for the best response in each environment. For more information on the ASR parameters and on how to set them, go to *Voice Recognition Configuration* (see page 106).

**Attention Word**

A word or phrase used to put HAL into active listening mode. The attention word is spoken into the computer's microphone or a microphone that's part of a network. The ENABLE ATTENTION WORD option must be selected in the ear icon menu in order for this feature to work. HAL is set with a default attention word of "Computer", which can be changed in the *Personal Assistant Configuration* screen (see page 95).

**Attention Word Mode**

This means that HAL is "listening" to the audio coming into the computer through the microphone(s) and is waiting to hear the attention word. When HAL hears the attention word, it will go into active listening mode. The attention word mode is enabled when the ENABLE ATTENTION WORD option is selected in the ear icon menu. HAL automatically enters attention word mode every time the program is started. To change this default setting, go to *Personal Assistant Configuration* (see page 95).

Processor usage is heavier when HAL is in attention word mode or listening mode, but HAL won't respond to verbal commands through the computer's microphone or through a microphone network unless it's in one of those two modes (local and remote telephone interaction is not affected). If you won't be putting HAL into active listening mode by using an attention word, we recommend disabling the attention word mode (change its default setting, see above). This means that HAL will have to be put into active listening mode manually (see page 45) before commands can be issued through microphones.

**Automatic Mixer**

A hardware device that combines audio inputs (usually microphones) into one output, which can then be plugged into HAL. Each audio input in the automatic mixer has gating, which when set up with priorities, makes it possible for one microphone to be active when it's being spoken into and for other microphones to be temporarily disabled so that their audio can't be forwarded through the mixer. This is necessary to prevent HAL from receiving overlapping audio commands, which would interfere with recognition (HAL has trouble following simultaneous commands from different inputs, just as people have trouble following more than one conversation at a time). A mixer without gating or input switching is still a mixer, but it isn't an automatic mixer.

**Caller ID**

An optional service that telephone companies can add to incoming phone line(s). Caller ID service indicates the phone number from which the caller is dialing. The Caller ID "name" option also indicates the name associated with that phone number (a Caller ID display box is required for viewing this information). HAL can act as a Caller ID display (see the *Phone Pad* and *Messages* screens in Chapter 9) and can also announce Caller ID information over the computer's speakers (see *Telephone Configuration* on page 106).

**Compressor**

A hardware or software device that modulates the sound level so that it's consistent - sort of an automatic volume control. In other words, if someone shouts, the audio level is lowered. If someone whispers then it's raised. That way the audio going into devices or software programs (like HAL) is always within a certain range, which may help in the operation of those devices or programs.

**Concatenated Speech**

also *Concatenated Text-to-Speech*. A type of text-to-speech where the computer generates speech by assembling bits and pieces of voice recordings of real people. In other words, it doesn't sound like a computer talking. It's one of the most natural (human) sounding forms of text-to-speech available. This option is not currently available in HALdeluxe.

**Condition**

A condition is used by itself or with other conditions to trigger a Rule. Go to *System Data Rules* (see page 154) for more information.

**Context Mode**

In some cases, HAL must be put into a specific *context mode* before commands or questions relating to a specific feature can be issued to or asked of HAL. These context modes are entered with the syntax "Open [mode]", where [mode] is replaced with the name of the specific context mode. For instance, before the user can ask what the latest news headlines are, the phrase "Open News" must be said. Once in that context mode, commands relating to other parts of the system can't be given until the context mode has been exited. In order words, after saying "Open News", commands to turn on a light will be ignored by HAL. To command other parts of the system, the specific context mode must be exited. This can be done by saying "Close" or "Close [mode]" or by entering a different context mode ("Open Directory", "Open Schedule", etc.). Go to page 47 for more information. The context modes currently in HAL are:

| | |
|---|---|
| Directory | Messaging (voice mail, E-mail) |
| News | Portfolio (stocks) |
| Schedule | Sports |
| Traffic | TV Listings |

**Continuous Speech Dictation**

This is a type of speech recognition where the program recognizes words that are spoken in a normal conversational manner (one sentence after another without pausing). HAL doesn't use this form of speech recognition.

**Continuous Speech Recognition**

This is a type of speech recognition where the program recognizes words that are spoken in a normal conversational manner (up to one sentence at time). This is the type of speech recognition that HALdeluxe uses.

**Concatenated Text-to-Speech**

see *Concatenated Speech*

**Device**

1. (Physical device) Hardware that can be connected to HAL in some manner so that HAL can control it, such as an X-10 lamp module. See the HAL website at www.AutomatedLiving.com for the list of devices that are supported by HAL.

2. (Virtual device) A name that's created in HAL and used as a reference for all or part of a hardware device. An example of controlling an entire hardware device would be to create a device called *living room light* that's used to control the light connected to an X-10 lamp module. An example of controlling part of a hardware device would be to connect one or more lights to each of the buttons on an X-10 compatible wall switch and creating different names to refer to the light(s) that correspond to each button. Devices are created in the *System Data* screen (see page 137).

**DTMF**

The initials stand for Dual-Tone MultiFrequency. This refers to the tones that a telephone generates when its buttons are pressed.

**Environment**

Refers to the ambient noise of the location from which a user is interacting with HAL. ASR parameters can be adjusted for each interaction type (microphone, local handset, and remote phone). For instance, if a user is trying to interact with HAL through the computer's microphone in a room that has a lot of ambient noise, then the ASR parameters for the microphone can be adjusted to compensate for the louder environment.

**Event**

see *Schedules*

**Flag**

Flags can be used to trigger rules and the status of a flag can be set as part of an action. Flags are generally used as program "markers" that require an outside source to set the mark. For instance, a flag called "intruder" could be created with a default state of *false*. When an outside motion sensor directed to the backyard detects movement, the sensor sends a signal to HAL. Within HAL, a rule keeps track of that sensor, and when its status changes, then HAL changes the status of the "intruder" flag to *true*. Another rule could be created that watches the "intruder" flag. When that flag's status is changed to *true*, then HAL could be programmed to read a text-to-speech script that says something like "*There is movement in the backyard*."

Flags must be created in the *System Data Sensors* screen (see page 172) before they can be used in rules, macros, or schedules.

**Gate**

This refers to a hardware or software device that prevents audio from passing through it unless that audio is above a certain volume level. This is a recommended feature for any mixer that's being used as part of a microphone network (a mixer with this feature is referred to as an *Automatic Mixer*).

**Input**

In general (in relation to HAL), "input" refers to anything that sends data of any type to HAL. Speaking into the computer's microphone is a type of input. In most cases, the term "input" is used to refer to a specific piece of hardware that is connected to HAL in some manner and is sending it data, such as an X-10 lamp module or an X-10 appliance module.

*Analog Input*

This refers to the type of input that has variable ranges, such as the temperature range of a thermostat or the different dim levels of a light.

*Digital Input*

This refers to the type of input that only has two states, such as on/off, high/low, open/close, etc.

**Limiter**
see *Compressor*

**Listening Mode**

*Active Listening Mode*
This means that HAL is "listening" to the audio coming into the computer through a microphone or a telephone (local or remote) and is trying to determine if that audio contains commands or questions for HAL. When HAL enters active listening mode, it says "*Yes?*" and moving sound waves appear next to the ear icon. HAL will enter active listening mode if it's in attention word mode and hears the attention word or if you left-click on the ear icon. Rules, macros, and schedules can also be programmed to put HAL into active listening mode (see page 174).

It's recommended that HAL be taken out of active listening mode when there's no ongoing verbal interaction. HAL can be taken out of active listening mode by saying "Goodbye", "Thank you", or "That's all" or by left-clicking on the ear icon. Rules, macros, and schedules can also be programmed to take HAL out of active listening mode.

*Idle Listening Mode*
This is when HAL is in attention word mode. HAL won't respond to any commands or queries through microphones until it enters *active* listening mode (interacting through a local or remote handset automatically puts HAL into active listening mode).

**Local Handset**
This refers to any telephone that's on the same phone system as HAL. If HAL is installed in a home, then this could refer to all of the telephones in the house or to one telephone that's plugged into the modem that HAL uses. Users can interact with HAL by picking up a local handset and pressing the pound (#) key. For more information on setting up this feature, go to *In-House Phone Interaction Feature* on see page 18.

**Macro**
This is a series of actions that are carried out when HAL hears a single command or programmed phrase, or when specific numbers are pressed on a local or remote handset. For information on programming macros, go to *System Data Macros* (see page 149).

**Mailbox**
also *Voice Mailbox*. HAL can act as an answering machine with up to ten (10) mailboxes that can be created by the user and that can be accessed manually from the *Messages* screen (see page 199) or verbally from a telephone (local or remote) or microphone (see page 47). HAL is shipped with a default mailbox already configured, but the answering machine must be enabled before it can accept messages. Mailboxes are added and edited from within the *Phone Pad* screen (see page 197) and answering machine properties are set in the *Telephone Configuration* screen (see page 100).

**Microphone**
This refers to any microphone that's plugged into the computer and that can be used as an input device for communicating with HAL. The microphone could be a standard computer microphone that's connected directly to the computer or it could refer to a microphone that's part of a network.

**Microphone Network**
This refers to a series of microphones installed throughout the house. If all of the microphones are connected to an automatic mixer, then the output of that mixer can be plugged into HAL. This type of setup allows users to interact with HAL from any room in the house where a microphone is installed.

Contact a qualified audio technician in your area for assistance with purchasing and installing this type of system.

**Mixer**
see *Automatic Mixer* and *Software Mixer*

**Mode**
1. Synonymous with *Macro*. This word is part of the syntax used to activate a macro.

2. see *Context Mode*

3. see *Attention Word Mode* and *Listening Mode*

**Modem**
The device a computer uses to transmit and receive data over the telephone line. Although most voice/fax/data (VFD) modems will support HAL's Internet features, not all of them will support HAL's telephony features, especially the ability to interact with HAL through the local handset. Go to *HAL-Compatible Modems* on page 9 for information on modems that support all of HAL's features.

HAL has control of the modem if its telephony features are enabled (see *Telephone Configuration* on page 98) and when it's downloading information from the Internet (see *Internet Configuration* on page 79). HAL can release the modem if other applications need it, but doing so will disable HAL's telephony features until control of the modem is returned to HAL.

**On-Hook**
This typically refers to when a telephone's handset is in its base or a cordless phone is turned off and the phone line is not in use. This definition is virtually the same when it's used in relation to HAL, except that it also refers to when HAL is not actively using the phone line.

**Off-Hook**
This typically refers to when a telephone's handset is not in its base or a cordless phone is turned on and the phone line is in use. This term also refers to when HAL is using the phone line. HAL will use the phone line when one of the telephony features is active (e.g. HAL is recording a voice message) or if information is being downloaded from the Internet through a dial-up connection.

**Output**
In general (in relation to HAL), "output" refers to anything that receives data of any type from HAL, such as an X-10 lamp module that receives commands to turn a light on or off. In most cases, the term "output" is used to refer to a specific piece of hardware that is connected to HAL in some manner and that is receiving data from HAL.

**PBX**
The initials stand for Private Branch eXchange. A PBX phone system acts as a switchboard by allowing multiple incoming phone lines to be directed to different extensions and by giving local phones access to different outgoing phone lines. For instance, an incoming call can be routed to a person at one extension while two other people at two other extensions each place outgoing calls. With PBX systems, an additional digit, such as "9", must sometimes be pressed before an outgoing call can be placed (see the PBX system's literature for its requirements).

Go to page 211 for instructions on connecting a PBX phone system to HAL.

**Recognition Phrase**

This is a phrase that can be used to launch a macro. The recognition phrase is programmed in the *Macro Add* screen (see *System Data Macros* on page 149).

**Relay**

A relay is a type of output. Relays are contact closures – when a relay receives a command to power a device ("turn on", "open", etc.), the relay's contacts are connected ("closed") so that an electrical current flows through it. When the relay receives a power-down command ("turn off", "close", etc.), the relay's contacts separate so that the electrical current is interrupted. Standard light switches and garage door openers are types of relays.

**Remote Phone**

also *Remote Handset*. Refers to any phone that's not on the same phone system as HAL, such as a cell phone, a pay phone, a friend's phone, a phone on an airplane, etc. Some voice/fax/data (VFD) modems will allow interaction with HAL from a remote phone, but a HAL-compatible modem (see page 9) is recommended for many of the other telephony features.

**Rule**

A rule refers to an If/Then statement that can be programmed to evaluate one or more conditions and to carry out a set of actions if all of the conditions of that rule are met. Go to *System Data Rules* (see page 154) for more information.

**Schedule**

This term may be used differently in other home automation products, but in HAL it refers to the ability to have an action run automatically (it doesn't need a verbal command to start). Actions can be scheduled to run once, multiple times, or repeatedly (every day, every Monday, etc.). Schedules can be programmed verbally (see page 47) or manually (see page 165).

**Sensor**

1. (Physical device) Hardware that connects in some manner to HAL and that conveys status changes as they occur. For instance, a motion sensor will send a signal to HAL when it registers some type of movement within its range. HALdeluxe only supports X10 sensors.

2. (Virtual device) A name that's created in HAL and used to reference a physical sensor or a flag or timer. When the status of a physical sensor changes (e.g. from "no motion" to "motion") it sends a signal to HAL. This signal can be used to trigger a rule in HAL, such as having the outside lights turn on when the front door motion sensor detects movement. Sensors, Flags, and Timers are created in the *System Data* screen (see page 171).

**Software Mixer**

This refers to the graphic interface for the sound card where the levels of the different audio inputs and outputs are combined and set. This screen can be opened by right-clicking on the speaker icon in the Windows® system tray and selecting OPEN VOLUME CONTROLS, or by going to **Start**… **Programs**… and navigating to the *Volume Control* program (generally in the *Accessories* group).

**Speech Recognition**

This is a type of speech recognition where the program recognizes words that are spoken in a staccato (slow) fashion. HAL doesn't use this form of speech recognition.

**State**

This is the current condition of a device or the condition that the device should be in after following a particular command. Examples of some device states are "on", "off", "open", "close", "lock", "unlock", etc. What state the device can be set to depends on what type of device it is and on what it was programmed in HAL.

**Syntax**

This refers to the pattern that verbal commands must follow. HAL's syntax is based on normal conversation patterns, so there should be no need to memorize specific commands. For information on how to talk to HAL and for explanations of the syntax, go to Chapter 3.

**Synthetic Text-to-Speech**

A type of text-to-speech (TTS) where the computer generates speech by translating written words into sound. This method of TTS sounds like a computer talking (few inflections), but the speech is continuous, not robotic (slow). This is the type of TTS that's shipped with HAL.

**Telephony**

Traditionally, this referred to the process of translating sound into an electronic signal that was then sent over a phone line to another device that translated the signal back to sound. In other words, it referred to the basic operation of a telephone. Nowadays this term applies to any type of process that translates sound to an electronic signal that is then transmitted in some manner (phone line, Internet, E-mail, etc.) to another device that translates the signal back to sound.

In HAL, we use the term *telephony* to refer to HAL's ability to be the "telephone" for the computer and the house. In other words, not only can HAL place and answer calls and record voice mail messages, but it also allows users to interact with and control HAL from local handsets and remote phones (some functions may require a HAL-compatible modem).

**Text-to-Speech**

also *TTS*. This term refers to HAL's ability to talk by translating written words into sound. The words that are translated are part of HAL's program and/or text that the user types in, such as names selected for devices, scripts typed for actions, information downloaded from the Internet, and any other place in the program where the user entered text. HALdeluxe is shipped with *Synthetic Text-to-Speech*.

**Text-to-Speech Codes**

A HAL-specific code that is typed in a text-to-speech script to control HAL's behavior or to request specific information that isn't known ahead of time or is dependent on when the script is run. Go to page 213 for descriptions of the available codes and on how to use them.

**Text-to-Speech Script**

A text-to-speech script is an action that can be run from a macro, rule, or schedule (see page 174). HAL reads the text and/or text-to-speech codes that the user enters.

**Timers**

Timers are countdown clocks that are created in the *System Data Sensors* screen (see page 173) and that can be used in a Rule. For instance, a rule is triggered when a motion sensor detects movement. When that happens, the rule turns on a light and starts a timer that counts down from a specific time, such as five minutes. Each time the sensor detects movement, it resets the timer and it begins to count down again. Another rule monitors that timer; if it reaches zero then it shuts off the light that the first rule turned on.

**Trigger**

In HAL, this refers to any event, action, or change of status that starts a rule, macro, or schedule. A motion sensor detecting movement could trigger a rule, for example, or saying a macro's recognition phrase could trigger that macro. Schedules are triggered when the computer's clock reaches a certain time.

**TTS**

The initials stand for Text-to-Speech

**Voice Recognition**

This refers to the process of how HAL understands and responds to verbal commands. How well HAL can understand is determined by various factors, such as the type and quality of hardware being used (microphones, sound cards, etc.), the amount of ambient noise in the environment, and several other factors, all of which have an affect on HAL's voice recognition. Adjusting HAL's ASR parameters will improve voice recognition in most cases (see *Voice Recognition Configuration* on page 106 for more information).

**WAV File**

This is the type of audio format that HAL uses and allows to be played from or through it. Audio files of this type have the extension .wav. HAL automatically converts WAV files of different quality settings to its preferred quality setting so that they can be played over telephones as well as the computer's speakers. If you prefer to convert the files instead of letting HAL do it, then set them to a "telephone" quality setting of 8,000 Hz, 16 bit, mono.

**X-10 Technology**

Technology that allows compatible controllers to send and receive signals over the standard power lines. Go to Chapter 10, *Interfaces*, for more information on X-10 technology.

CHAPTER 14

# Technical Support and Other Help

# CONTACTING TECHNICAL SUPPORT

For information on Technical Support's hours and contact information, go to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe Support**.

# TROUBLESHOOTING

Go to the HAL website (www.AutomatedLiving.com) for additional troubleshooting tips and frequently asked questions (FAQs) relating to this topic. If the problem you're having is not addressed below or on the website, then contact the Technical Support department for further assistance (see above).

## System Functions

**HAL won't start.**

Cause: *Not enough RAM available for running HAL.* Other programs may be tying up too much RAM or may not "release" the RAM after being shut down. HAL requires a minimum of 64MB of RAM to run.
Solution: Shut down any programs that aren't being used. If HAL still won't start, then shut down all programs and reboot the computer.

Cause: *Registration period timed out.* After installation, HAL must be registered within 30 days or it will stop functioning. After the 30 days, HAL won't advance past the registration screen until it's been registered.
Solution: Register HAL.

**The registration screen keeps appearing, even though I already registered the software.**

Cause: *Wrong button pressed during registration*. If, after entering the registration number, you clicked LATER instead of REGISTER. As a result, you inadvertently continued with the 30-day grace period instead of actually registering HAL.
Solution: Re-register HAL. *Make sure to press REGISTER after entering the registration number.*

Cause: *Hardware changes*. Once registered, HAL should not bring up the registration screen again. However, changing some hardware components on the computer, such as a motherboard, hard drive, etc., may cause HAL to believe that it's being installed on a different computer, which is a violation of the License Agreement.
Solution: Re-register HAL.

**HAL Setup didn't detect my modem.**

Cause: *The modem isn't connected properly*.
Solution: Make sure that the modem is installed as per the modem manufacturer's instructions.

Cause: *The driver for the modem wasn't installed correctly or is out-of-date or the wrong version*. If the correct modem driver isn't being used, then the computer and HAL won't recognize the modem.
Solution: Install the correct modem driver. Consult the modem manufacturer's documentation or website for the correct driver.

**HAL Setup didn't detect my power line adapter.**

Cause: *The hardware isn't connected properly*. HAL can't find the power line adapter if it's not connected properly to the computer.
Solution: Go to page 17 for instructions on properly connecting the power line adapter to HAL.

## Interacting with HAL

**The HAL screens don't look right -- the text overlaps lines and buttons and the background borders look like they're in the wrong places.**

Cause: *The system is set to use large fonts*. Windows® can be set to use small fonts, large fonts, or specially sized fonts for displaying text on your monitor. "Small" fonts are actually normal size and are based on the resolution of your monitor. "Large" fonts are actually 125% larger than normal. HAL is not designed to work with those large fonts, so when the system is set to use them, HAL's screens are not rendered correctly.
Solution: Set the system to use small (normal size) fonts:

1. Shut down all open applications, including HAL.
2. Go to **Start**... **Settings**... **Control Panel**.
3. Double-click on DISPLAY. The *Display Properties* screen will appear.
4. Click on the tab labeled SETTINGS.
5. Click on the button labeled ADVANCED.
6. Select SMALL FONTS from the "Font Size" drop-down menu.
7. Click OK to save the settings and close the *Advanced* screen.
8. Click CLOSE to save the settings and close the *Display Properties* screen.
9. Restart the computer so that the new font size will take affect, then start HAL.

**I'm trying to talk to HAL through a microphone, but it's not working.**

Cause: *HAL wasn't put into listening mode*. HAL isn't responding because it doesn't know that you want to talk to it.

Solution: Verify that HAL is in listening mode. If HAL doesn't say "*Yes?*" and there are no sound waves moving next to the ear icon, then HAL isn't in listening mode so it doesn't know that you're talking to it.

- Left-click on the ear icon to put HAL into listening mode. Try issuing commands (see page 47).
- If you're using an attention word to get HAL's attention, then make sure that:
  1. The attention word mode is enabled (see page 86).
  2. Make sure you're saying the right attention word and/or that you're saying it as HAL expects it to be said. To double-check, go to the *Personal Assistant Configuration* screen (see page 95) and look at what is assigned for the attention word. Click the SPEAK WORD button to hear how HAL expects that attention word to be pronounced.

If you're doing everything above but HAL still doesn't respond, then make sure that there isn't a problem with the microphone or sound card (see below).

Cause: *Microphone is bad, of poor quality, or not installed correctly*. If the microphone doesn't work or if it's of poor quality, then there may be no audio going into HAL from the microphone or the audio could be of such poor quality that HAL can't understand what you're saying.

Solution: Determine if there is a problem with the microphone. Run the Microsoft Sound Recorder program by going to **Start**… **Run**… Type **sndrec32** and click OK. The *Sound Recorder* screen will appear. Click the record icon (circle), say a few sentences into the microphone, then click the stop icon (square). Click the play icon (right arrow).

- If you don't hear what you just recorded, then the microphone may not be working or isn't installed properly. Make sure that the microphone is installed correctly (consult the computer's or microphone's documentation for information on installing the microphone). If the microphone is installed correctly but there's no audio, then install a new microphone.
- If you can hear what you recorded, but the audio is scratchy, intermittent, or otherwise difficult to understand, then the microphone may be going bad or is of poor quality. Replace the microphone and re-run the Sound Recorder program to see if the audio has improved.

Cause: *Sound card not working or not installed properly*. If the sound card isn't installed properly, then audio may not be going into the sound card or the audio may be intermittent.

Solution: First determine if there is a problem with the sound card. Run the Sound Recorder program (see above). If you don't hear your test recording, but you can hear other sound files (music CDs, MP3 files), then the problem could be a bad sound card or a bad microphone. If replacing the microphone doesn't solve the problem, then install a new sound card.

Cause: *HAL isn't running or the computer's power management is enabled*. If HAL isn't running or the computer's power management is enabled (hard drive spins down when not in use), then HAL can't control lights or appliances, download information from the Internet, answer phone calls, respond to verbal commands, or anything else.

NOTE: A computer consumes very little energy and can be left on all the time. Computer monitors do not need to be turned on when HAL is running, unless the computer's microphone is part of the monitor or powered by the monitor, in which case the monitor only needs to be on when you're interacting with HAL through that microphone.

Solution: If HAL isn't running, then start it by double-clicking on its desktop icon, if available, or by going to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe**.

Disable the computer's power management if it's enabled. To disable it, go to **Start**... **Settings**... **Control Panel**. When the *Control Panel* screen appears, double-click on POWER MANAGEMENT. In the *Power Management* screen, set the field "Turn off hard disks" to NEVER. If the computer's microphone is part of the monitor or draws power from the monitor and you want to be able to talk to HAL at anytime through the monitor, then you must set the field "Turn off monitor" to NEVER. If the computer's microphone isn't connected to the monitor in any way, then you can set the "Turn off monitor" field to any option.

**I'm trying to talk to HAL through a house phone, but it's not working.**

Cause: *HAL isn't set up to work with telephones*.
Solution: Right-click on the ear icon and select OPEN SYSTEM SETTINGS. In the *HAL Configuration* screen (see page 77), double-click on TELEPHONE. In the *Telephone Configuration* screen (see page 98), make sure that HAL is enabled to use telephones, that the correct modem is selected, and that the correct COM Port is specified.

Cause: *The modem is not HAL-compatible*. Most modem manufacturers do not include the feature where the modem can detect when a phone on the same line as the modem has been picked up. In other words, the modem can only detect when someone calls into the modem from a remote phone, not when someone picks up a regular phone in the house. If the modem being used with HAL isn't compatible, then you can only use remote phones to interact with HAL (and microphones, of course).
Solution: Install a HAL-compatible modem. (The list of HAL-compatible modems is listed on HAL's website at www.AutomatedLiving.com)

Cause: *The phone line is not correctly connected to the modem*.
Solution: Make sure that the phone line from the telephone jack is connected to the LINE input of the modem, and that the PHONE output is connected to the local (house) telephone. (The hook up is slightly different if every phone in the house is being set up to work with HAL. Go to *House Phone Interaction Feature* on page 18 for more information.)

Cause: *Incorrect attention key was used or not used at all*.
Solution: When you picked up the house phone, you either didn't press an attention key or you pressed the wrong one. The default attention key is the pound [#] key, but if a different attention key was selected in the *Telephone Configuration* screen (see page 98), then the pound [#] key will no longer work.

Cause: *HAL isn't running or the computer's power management is enabled*. If HAL isn't running or the computer's power management is enabled (hard drive spins down when not in use), then HAL can't control lights or appliances, download information from the Internet, answer phone calls, respond to verbal commands, or anything else.

NOTE: A computer consumes very little energy and can be left on all the time. Computer monitors do not need to be turned on when HAL is running, unless the computer's microphone is part of the monitor or powered by the monitor, in which case the monitor only needs to be on when you're interacting with HAL through that microphone.

Solution: If HAL isn't running, then start it by doubleclicking on its desktop icon, if available, or by going to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe**.

Disable the computer's power management if it's enabled. To disable it, go to **Start**... **Settings**... **Control Panel**. When the *Control Panel* screen appears, doubleclick on POWER MANAGEMENT. In the *Power Management* screen, set the field "Turn off hard disks" to NEVER. If the computer's microphone is part of the monitor or draws power from the monitor and you want to be able to talk to HAL at any time through the monitor, then you must set the field "Turn off monitor" to NEVER. If the computer's microphone isn't connected to the monitor in any way, then you can set the "Turn off monitor" field to any option.

**I said the attention word, but HAL's not responding.**

Cause: *The wrong attention word was said or it was mispronounced*.
Solution: Double-check that the correct attention word was used and that it was said correctly. Go to the *Personal Assistant Configuration* screen (see page 95) and look at what's entered for the attention word. Click the SPEAK WORD button to hear HAL read the attention word. How HAL reads the attention word is how HAL expects to hear that word. For example, HAL pronounces the word "Gina" as "jin a". You would also have to say "Gina" as "jin a" in order for HAL to respond. (Change the spelling of the word from "Gina" to "Geena" to get HAL to pronounce it correctly.)

Cause: *The attention word mode is disabled*. If HAL's attention word mode is disabled, then you can't get HAL's attention by saying the attention word.
Solution: Right-click on the ear icon and verify that ENABLE ATTENTION WORD is selected (the square next to the option is blue, not gray). If it's not selected, then leftclick on that option to enable it.

Cause: *Microphone is bad, of poor quality, or not installed correctly*. If the microphone doesn't work or if it's of poor quality, then there may be no audio going into HAL from the microphone or the audio could be of such poor quality that HAL can't understand what you're saying.
Solution: Determine if there is a problem with the microphone. Run the Microsoft Sound Recorder program by going to **Start**... **Run**... Type **sndrec32** and click OK. The Sound Recorder screen will appear. Click the record icon (circle), say a few sentences into the microphone, then click the stop icon (square). Click the play icon (right arrow).

- If you don't hear what you just recorded, then the microphone may not be working or isn't installed properly. Make sure that the microphone is installed correctly (consult the computer's or microphone's documentation for information on installing the microphone). If the microphone is installed correctly but there's no audio, then install a new microphone.

- If you can hear what you recorded, but the audio is scratchy, intermittent, or otherwise difficult to understand, then the microphone may be going bad or is of poor quality. Replace the microphone and rerun the Sound Recorder program to see if the audio has improved.

Cause: *Sound card not working or not installed properly.* If the sound card isn't installed properly then audio may not be going into the sound card or the audio may be intermittent.

Solution: First determine if there is a problem with the sound card. Run the Sound Recorder program (see above). If you don't hear your test recording, but you can hear other sound files (music CDs, MP3 files), then the problem could be a bad sound card or a bad microphone. If replacing the microphone doesn't solve the problem, then install a new sound card.

Cause: *HAL isn't running or the computer's power management is enabled*. If HAL isn't running or the computer's power management is enabled (hard drive spins down when not in use), then HAL can't control lights or appliances, download information from the Internet, answer phone calls, respond to verbal commands, or anything else.

> NOTE: A computer consumes very little energy and can be left on all the time. Computer monitors do not need to be turned on when HAL is running, unless the computer's microphone is part of the monitor or powered by the monitor, in which case the monitor only needs to be on when you're interacting with HAL through that microphone.

Solution: If HAL isn't running, then start it by doubleclicking on its desktop icon, if available, or by going to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe**.

Disable the computer's power management if it's enabled. To disable it, go to **Start**... **Settings**... **Control Panel**. When the *Control Panel* screen appears, doubleclick on POWER MANAGEMENT. In the *Power Management* screen, set the field "Turn off hard disks" to NEVER. If the computer's microphone is part of the monitor or draws power from the monitor and you want to be able to talk to HAL at any time through the monitor, then you must set the field "Turn off monitor" to NEVER. If the computer's microphone isn't connected to the monitor in any way, then you can set the "Turn off monitor" field to any option.

## Device Control

**It's taking HAL at least five (5) seconds to dim a light.**

Cause: *The device was configured to brighten the light fully to turn on or dim* (see the *Device Wizard* on page 140). If you tell HAL to dim a light and it was configured to use the *brighten the light fully to turn on or dim* method, then HAL will send multiple "bright" signals to the light to make sure that the light is at 100% luminance. Once it's sure that the light is at 100%, *then* it will dim the light to the level specified. Because it takes time for the multiple "bright" commands and the actual dim command to be sent, there will be a noticeable delay before the action is completed.

Solution: Select the *turn the light off before dimming* method for dimming lights instead of the *brighten the light fully to turn on or dim* method. The *turn the light off before dimming* method is significantly faster because it only sends three commands. The first command shuts the light off. The next command turns the light on to 100% and the last command dims the light to the requested level. Why isn't there a method to turn the light on to 100% and then dim the light, therefore taking only two steps? Because one constraint of the X-10 system is that if a light is already dimmed, then telling it to turn on has no effect -- the light stays at the current dim level.

> NOTE: Some X-10 compatible light receivers use the *Preset Dim* or *Extended Code* methods for dimming lights. These methods have a greater range of control and allow for exact dimming of the light and don't need to be reset between dim commands. For instance, if a light is at 30% and it's told to dim to 75%, the light will go directly to the correct level of luminance, without shutting off or turning all the way on. If the light receiver you're using uses either of these methods for dimming, then specify that method in the *Device Wizard* screen for that device.

**I told HAL to dim a light to a certain level, but it doesn't seem to be at the level I requested.**

Cause: *HAL wasn't configured to reset the light before it dims it*. The X-10 protocol has 16 dim levels, or about one (1) dim level per six percent (6%) of luminance. Dim level 16, for instance, is equal to 96% luminance and dim level 4 is equal to 24% luminance. The X-10 protocol dims lights by subtracting the target dim level from the current dim level. For instance, if a light is at 100% luminance (essentially level 16) and it's told to dim to 25% luminance (level 4), then an X-10 signal is sent commanding the light to drop 12 dim levels (16-4 = 12). The problem is that the X-10 signal to drop 12 levels is sent regardless of whether the light was completely on (level 16) or if it was already dimmed. In other words, if the light is at 50% to begin with, it will still be told to drop 12 levels. Because 50% is about level 8, then dropping 12 levels will actually turn the light off.

Solution: Modify that device so that it resets the light to 100% luminance before it sends the dim command. The light will always dim to the correct level because it's always starting from the same point (100% luminance). Dimming options are set in the *Device Options* screen (see page 142).

**I asked HAL the status of a device, but it says that information is unavailable.**

Cause: *The device is not connected to a two-way X-10 receiver that has the status request feature*.

Solution: Replace the existing X10 receiver with one that is two-way and has the ability to transmit its status.

Cause: *The power line adapter/connector being used with HAL does not accept status information*.

Solution: Some power line connectors like the TW523 or PSC05 can send extended data information, but can't receive that information. Use a CM11, HD11, or comparable model instead. The CM11 and others like it can not only transmit extended code data, but they can also receive it.

**I told HAL to turn a light on, but it didn't work.**

Cause: *The wrong name was used for controlling that light*.

Solution: Double-check that you're using the correct name for the device and try again. You can verify the name of the device from the *System Data Devices* screen (see page137).

Cause: *The light is a lamp and it's turned off at the base*.

Solution: If the light is a lamp, make sure that the lamp itself is in the "on" position. The lamp should always be in the "on" position (the X-10 module, receptacle, or wall switch that the lamp is connected to will control when the light is on, off, or dimmed).

Cause: *The light is already on, but dimmed*. X-10 dims lights based on relative values. For instance, if a light was dimmed to 60%, then that level becomes the new "top" level. In other words, the 60% level is treated as if it were now 100%. When you tell HAL to turn the light "on", you're telling HAL to set the light to 100%, but X-10 states that the light is already at 100%, so nothing happens.

Solution: Modify that device so that it resets the light to 100% luminance before it sends the dim command (telling the light to turn on is the same as telling it to dim to 100%). Dimming options are set in the *Device Options* screen (see page142).

Cause: *HAL's listening mode "timed out"*. If HAL doesn't hear any commands within a set time period, then HAL will ask, "Are you still there?" If you don't answer "yes", then HAL will say "Goodbye" and stop listening. Time out periods can be set for interacting with HAL through microphones and remote phones and can be changed from the *Voice Recognition Configuration* screen (see page 106).
Solution: Get HAL's attention again.

Cause: *The light bulb is out*. X-10 devices, unfortunately, can't tell when a light bulb is dead.
Solution: Replace the light bulb.

Cause: *The wrong address was selected when the device was created in HAL*.
Solution: Modify the device so that the address displayed in the *Device Wizard* screen (see page 140) matches the address set on the X-10 module, light switch, or receptacle.

Cause: *"Noise" on the electrical wiring in the home is interfering with X-10 signals*. Some lights or appliances, such as some televisions or fluorescent lights, may generate "noise" that interferes with signals sent over the power line.
Solution: There are several modules or devices that you can use to block the "noise" from the light or appliance. A television, for example, could be plugged into an X-10 Noise Block. Several of these types of devices are available for purchase from the HAL website (www.AutomatedLiving.com) or from other home automation manufacturers or resellers.

Cause: *The X-10 signal can't reach the device for which it's intended*. An X-10 signal sent from the computer might not be able to reach a device that's on the other side of the house and one or more floors up or down. This may occur if the house is larger than 3,000 square feet.
Solution: Install a Power Line Signal Amplifier with Coupler. This device connects to the home's circuit breaker and works by amplifying the X-10 signals so that they reach the farthest corners of your home. This device is available for purchase from the HAL website (www.AutomatedLiving.com) or from other home automation manufacturers or resellers.

Cause: *There may be a problem with the power line adapter*. The power line adapter is what HAL transmits X-10 signals through. If the power line adapter is defective, then HAL's signals won't be sent.
Solution: Replace the power line adapter (available for purchase from the HAL website [www.AutomatedLiving.com] or from other home automation manufacturers or resellers).

Cause: *HAL isn't running or the computer's power management is enabled*. If HAL isn't running or the computer's power management is enabled (hard drive spins down when not in use), then HAL can't control lights or appliances, download information from the Internet, answer phone calls, respond to verbal commands, or anything else.

NOTE: A computer consumes very little energy and can be left on all the time. Computer monitors do not need to be turned on when HAL is running, unless the computer's microphone is part of the monitor or powered by the monitor, in which case the monitor only needs to be on when you're interacting with HAL through that microphone.

Solution: If HAL isn't running, then start it by doubleclicking on its desktop icon, if available, or by going to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe**.

Disable the computer's power management if it's enabled. To disable it, go to **Start**... **Settings**... **Control Panel**. When the *Control Panel* screen appears, doubleclick on POWER MANAGEMENT. In the *Power Management* screen, set the field "Turn off hard disks" to NEVER. If the computer's microphone is part of the monitor or draws power from the monitor and you want to be able to talk to HAL at any time through the monitor, then you must set the field "Turn off monitor" to NEVER. If the computer's microphone isn't connected to the monitor in any way, then you can set the "Turn off monitor" field to any option.

**I tell HAL to turn a light or appliance on, but it only seems to work some of the time.**

Cause: *HAL's listening mode "timed out".* If HAL doesn't hear any commands within a set time period, then HAL will ask, "Are you still there?" If you don't answer "yes", then HAL will say "Goodbye" and stop listening. Time out periods can be set for interacting with HAL through microphones and remote phones and can be changed from the *Voice Recognition Configuration* screen (see page 106).
Solution: Get HAL's attention again.

Cause: *"Noise" on the electrical wiring in the home is interfering with X-10 signals*. Some lights or appliances, such as some televisions or fluorescent lights, may generate "noise" that interferes with signals sent over the power line.
Solution: There are several modules or devices that you can use to block the "noise" from the light or appliance. A television, for example, could be plugged into an X-10 Noise Block. Several of these types of devices are available for purchase from the HAL website (www.AutomatedLiving.com) or from other home automation manufacturers or resellers.

Cause: *The X-10 signals are only travelling on both "legs" of the home's electrical wiring when one or more two-phase devices are turned on*. There are two "legs" to a house's electrical wiring, each "leg" being 120V. Some appliances, such as dryers, hot water heaters, etc., draw power from both legs (240V). In some cases, X-10 signals are only able to travel between both legs when one of these large appliances is turned on. The appliance, in effect, creates a "bridge" between the two legs and the X-10 signals travel across this "bridge".
Solution: Install a Power Line Signal Bridge or a Power Line Signal Amplifier with Coupler. Either of these devices can be installed so that a permanent bridge is created between the two legs.

Cause: *There may be a problem with the power line adapter*. The power line adapter is what HAL transmits X-10 signals through. If the power line adapter is defective, then HAL's signals won't be sent or are sent intermittently.
Solution: Replace the power line adapter (available for purchase from the HAL website [www.AutomatedLiving.com] or from other home automation manufacturers or resellers).

**HAL didn't run a scheduled event.**

Cause: *The event was created after its start time*. In other words, if you created the event at 4:00pm but said you wanted it to run daily at 2:00pm, then HAL will wait until the next day before running the event.
Solution: Wait until the next day or change the start time for the event to a time of day that hasn't been passed yet.

Cause: *The scheduled event affects a light or appliance and the light or appliance is turned off at the base*. HAL ran the scheduled event, but because the light or appliance was turned off it didn't receive the command. In other words, if a lamp is physically turned "off" then HAL can't control it.

Solution: Make sure that the light or appliance is in the "on" position. The X10 module, receptacle, or wall switch that the light or appliance is connected to will control when the light or appliance is actually on, off, or dimmed (if applicable).

Cause: *Some of HAL's files may have been corrupted*. System crashes, hard drive problems, viruses, and rebooting the computer without shutting down HAL may cause relevant files to be damaged.

Solution: Contact Technical Support for information on repairing or replacing the damaged files.

Cause: *HAL isn't running or the computer's power management is enabled*. If HAL isn't running or the computer's power management is enabled (hard drive spins down when not in use), then HAL can't control lights or appliances, download information from the Internet, answer phone calls, respond to verbal commands, or anything else.

> NOTE: A computer consumes very little energy and can be left on all the time. Computer monitors do not need to be turned on when HAL is running, unless the computer's microphone is part of the monitor or powered by the monitor, in which case the monitor only needs to be on when you're interacting with HAL through that microphone.

Solution: If HAL isn't running, then start it by doubleclicking on its desktop icon, if available, or by going to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe**.

Disable the computer's power management if it's enabled. To disable it, go to **Start**... **Settings**... **Control Panel**. When the *Control Panel* screen appears, doubleclick on POWER MANAGEMENT. In the *Power Management* screen, set the field "Turn off hard disks" to NEVER. If the computer's microphone is part of the monitor or draws power from the monitor and you want to be able to talk to HAL at any time through the monitor, then you must set the field "Turn off monitor" to NEVER. If the computer's microphone isn't connected to the monitor in any way, then you can set the "Turn off monitor" field to any option.

## Internet

**I can't connect to the Internet through a dial-up connection when HAL is running.**

Cause: *HAL has control of the modem.* If you set up HAL to connect to the Internet through a dial-up connection and you have only one modem, then be aware that HAL will be in control of that modem. HAL has to have control of the modem so that it can answer the phone and record voice messages (if enabled), so that you can interact with HAL through the telephone when you want, and so that it can automatically connect to the Internet for downloading information. This means that if you wish to browse the Internet when HAL is *not* connected to the Internet, then you must get control of the modem so that you can dial out to the Internet or have HAL make the connection for you.

Solution: There are three ways that you can connect to the Internet when HAL is running:

1. Right-click on the ear icon and select CONNECT TO INTERNET. HAL will connect to the Internet using the dial-up connection that it's set up to use (see *Internet Configuration* on page 79). Once HAL has established a connection to the Internet, you can launch a web browser or any other Internet-related program. The option in the ear icon will change to DISCONNECT FROM INTERNET-- click that option when you want to log off the Internet.

2. Right-click on the ear icon and select VIEW INTERNET INFORMATION. When the *Internet* screen appears (see page 119), click on the MONITOR DOWNLOAD button. When the *Update* screen appears, click on the CONNECT button to have HAL connect to the Internet using the dial-up connection that it's set up to use. Once HAL has established a connection to the Internet, you can launch a web browser or any other Internet-related program. When you're done, click DISCONNECT to have HAL log off the Internet and return control of Internet access to HAL.

3. Right-click on the phone icon and select RELEASE MODEM. A red X will appear over the phone icon. HAL is no longer in control of the modem, so it won't be able to connect to the Internet on its own and it won't be able to receive or place calls. You can now connect to the Internet through the dial-up connection so that you can browse the Internet. To return control of the modem to HAL so that it can automatically download information from the Internet and place and receive calls, right-click on the phone icon and select ACTIVATE MODEM. The red X will disappear from the phone icon and the modem will return to HAL's control.

**I asked HAL for information from the Internet, but it said that there was no information available.**

Cause: *HAL Internet services are enabled, but it hasn't downloaded information yet.*
Solution: Wait for HAL to automatically connect to the Internet at the next scheduled time. At that point it will download information, which you can then ask about. The next time that HAL is set to connect to the Internet is displayed in the *Internet Update* screen (see page 132). You can also click the UPDATE button in the *Internet* screen to have HAL immediately connect to the Internet and download information.

Cause: *The Internet topic that you asked about isn't enabled and/or set up correctly.*
Solution: Right-click on the ear icon and select OPEN SYSTEM SETTINGS (or go to **Start**... **Programs**... **HALdeluxe**... **HAL System Configuration**). In the *HAL Configuration* screen (see page 77), double-click on INTERNET. In the *Internet Configuration* screen (see page 79), click on the topic in which you're interested. Make sure that HAL is enabled to download information for that topic and that it has all of the information it needs in order to download it

(fill in all relevant fields). Click DONE to save the settings and close the *Internet Configuration* screen. Click DONE to close the *HAL Configuration* screen. If necessary, shut down HAL and restart it (HAL will tell you if this is necessary).

Cause: *There was a problem when HAL tried to download information*. If HAL connects to the Internet through a dial-up connection and the phone line is busy, for example, then HAL won't be able to connect to the Internet.

Solution: HAL will make three (3) attempts to connect to the Internet. If it's not able to make a connection during one of those attempts, then the system will stop trying and will wait until the next scheduled download time to try again. You can wait for HAL to automatically connect to the Internet or you can manually download the information by clicking on UPDATE in the *Internet* screen (see page 119).

**I can't play music CDs, MP3 files, or voice chat over the Internet when HAL is running.**

Cause: *The sound card is not able to allow two programs to access the sound card at the same time*.

Solution: Right-click on the ear icon and select ENABLE ATTENTION WORD. The blue square next to that option should change to a gray square, indicating that this option has been disabled. With this option disabled, you will not be able to put HAL into listening mode by saying the attention word programmed in the *Personal Assistant Configuration* screen (see page 95). However, because HAL is no longer actively listening for the attention word, it is no longer using the sound card. You can now start a music CD or play an MP3 file or something similar. When you wish to interact with HAL, you will need to stop that program (stop it, not necessarily close it). You can then left-click on the ear icon to get HAL's attention. Once you're done interacting with HAL, left-click on the ear icon to take HAL out of listening mode, then resume playing the music file or related program.

Solution: Replace the sound card with a full duplex capable sound card. Full duplex sound cards are capable of having more than one program access the sound card at the same time. With this type of sound card on your system, you can interact with HAL even while you're playing a music CD or MP3 file.

## Phone Control

**HAL isn't answering the phone when I call in.**

Cause: *Telephone services weren't enabled*. If telephone services weren't enabled, then HAL won't answer the phone, it won't place calls, it won't announce or log Caller ID information, it won't allow local interaction (through house phones), or any other feature that uses the telephone. (If HAL is configured to connect to the Internet through a dial-up connection, then HAL will take control of the modem and the phone line only when it's scheduled to download information from the Internet.)

Solution: Enable telephone services in the *Telephone Configuration* screen (see page 98).

Cause: *The wrong type of modem is connected to HAL*. Not all modems have the ability to answer incoming calls or to accept voice interaction on those calls. Data modems, for instance, are designed for Internet access and possibly for receiving and transmitting faxes, but are not voice compatible.

Solution: Install a HAL-compatible modem or a voice-capable modem. (Only HAL-compatible modems will support *all* of HAL's telephony features. Most voice-capable modems do not have the ability to allow you to interact with HAL through house phones.)

Cause: *The modem was released from HAL's control*. If HAL doesn't have control of the modem, then it can't answer the phone. It's the same as if the telephone services weren't enabled. A red X will be visible on the phone icon to indicate that HAL doesn't have control of the modem.

Solution: Right-click on the phone icon and select ACTIVATE MODEM. The red X will disappear from the phone icon to indicate that HAL has control of the modem.

Cause: *HAL isn't running or the computer's power management is enabled*. If HAL isn't running or the computer's power management is enabled (hard drive spins down when not in use), then HAL can't control lights or appliances, download information from the Internet, answer phone calls, respond to verbal commands, or anything else.

NOTE: A computer consumes very little energy and can be left on all the time. Computer monitors do not need to be turned on when HAL is running, unless the computer's microphone is part of the monitor or powered by the monitor, in which case the monitor only needs to be on when you're interacting with HAL through that microphone.

Solution: If HAL isn't running, then start it by doubleclicking on its desktop icon, if available, or by going to **Start**... **Programs**... **HALdeluxe**... **HALdeluxe**.

Disable the computer's power management if it's enabled. To disable it, go to **Start**... **Settings**... **Control Panel**. When the *Control Panel* screen appears, doubleclick on POWER MANAGEMENT. In the *Power Management* screen, set the field "Turn off hard disks" to NEVER. If the computer's microphone is part of the monitor or draws power from the monitor and you want to be able to talk to HAL at any time through the monitor, then you must set the field "Turn off monitor" to NEVER. If the computer's microphone isn't connected to the monitor in any way, then you can set the "Turn off monitor" field to any option.

# USING HAL IN OTHER COUNTRIES

While the information in this help guide is intended to serve all of our customers, some information (power supplies, interfaces, legal notices and other issues) refers to standards in North America, specifically the United States. For customers in countries other than the United States, contact a local home automation supplier for information specific to your country.

# UPDATING AND UPGRADING HAL

## Updates

Software updates within the same version number (1.0.0 to 1.99.99) are offered free to registered users for download via Home Automated Living's website (www.AutomatedLiving.com). Updates to a version with a different prefix number (1.x.x to 2.x.x) will be available for a fee, which is determined when that type of update is released.

## Upgrades

Information about upgrade paths to other HAL products is available at the website. Here are some of the features you'll get when you upgrade to **HAL2000**:

*All the features of HALdeluxe, plus…*

**Thermostat Control:**

- Ability to interface with compatible thermostats
- Adjust the temperature in the house by voice
- Schedule thermostat(s) to switch modes (heat, cool, off)* or raise or lower the temperature at specific times
- Ask the status of the thermostat

**Infrared Control:**

- Ability to interface with compatible infrared controllers
- Control TVs, VCRs, stereos, DVD players, and other infrared devices by voice
- Have infrared devices turn on at specific times and perform certain actions, such as having a VCR turn on at 8:00pm, turn to a specific channel, and record a program

**Inputs and Outputs Control:**

- Ability to connect to home automation controllers that have analog inputs and/or digital inputs and outputs (relays)*
- Ability to have sensors connected to home automation controllers trigger Rules in HAL
- Connect devices (such as garage door openers, sprinkler systems, speakers, and more) to the home automation controllers and control them by voice and from the computer
- Schedule those devices to turn on or off at specific times or other actions that the devices may be capable of doing*

**Security Control:**

- Ability to connect to compatible security systems
- Arm and disarm the security system or specific zones* of that security system by voice
- Have HAL inform you when the security system has been triggered

**Additional Interface Control:**

- Ability to connect tocompatible on-screen display devices so that date, time, and Caller ID information can be displayed on a TV
- Ability to connect to compatible weather stations, so that you can check current weather conditions by voice

**Additional Features:**

- Add items to HAL's shopping list-- items can be read back and printed out on command
- Have HAL remind you of important dates, such as anniversaries, birthdays, meetings, etc.
- Interface to Microsoft® Outlook™ for contact and calendar information

* Depending on the features of that interface

## CHAPTER 15
# Home Automation Resources

For those new to home automation, we've listed in this chapter some magazines and websites to help learn about automating homes and the home automation industry itself. For related books, we suggest doing a search for "home automation" on the Amazon.com website.

## Magazines

| | |
|---|---|
| *Builder* | 800-829-9127 |
| *C. E. Pro* (formerly *H. A. Pro*) | 800-375-8015 |
| *Electronic House* | 800-375-8015 |
| *Home Automator* | 800-253-5460 |
| *Home System Installer* | 303-470-4445 |
| *Popular Home Automation* | 800-375-8015 |

## Internet

CEBus Industry Council (www.cebus.org)

Electronic House Online (www.electronichouse.com)

Home Toys Home Automation Library (www.hometoys.com)

Home Automation Index (http://my.ohio.voyager.net/~dhoehnen/ha/list.html)

Popular Home Automation (www.pophome.com)

X-10 (www.x10.com)

# Index

## D



## E



## F



## G



## H

## I



## K



## L



## M

## N



## O



## P



## R



## S

## *T*

## U



## V



## W



## X