

# VIKING

# TECHNICAL Practice

**TELECOM SOLUTIONS FOR THE 21ST CENTURY**

**PI-1**

**Universal Telecom/  
Paging Interface**

March 8, 2006

## Interface Your Paging System with Nearly Any Phone System!



Viking's Universal Telecom/Paging Interface allows you to provide paging from nearly any phone system instead of from a microphone. You can also provide background music and electronic night bell over the audio system.

The **PI-1** features a built-in voice activated (VOX) or AC ring activated relay which provides D.P.D.T. contacts for muting background music during paging or to provide an electronic night bell. These contacts are necessary when interfacing with systems such as Panasonic, South Western Bell, Intertel, etc., which do not provide a paging contact closure.

In the event a paging port is not available, the **PI-1** can provide talk battery to allow connection of the public address system to an unused trunk input on the phone system.

The electronic night bell feature is activated by a standard ringing analog PABX/KSU station circuit or by a common audible contact closure provided by an electronic key system.

## Features

- Floating 600 ohm output
- Selectable 12V DC talk battery for interfacing with unused trunk ports
- Paging port interface
- Ringing analog line input for night bell
- Contact closure input for night bell
- Normally open and normally closed VOX activated contacts for cutting out background music
- Adjustable VOX contact time-out
- Adjustable ring volume

## Applications

- Integrate your public address system with nearly any phone system
- Cut out background music during paging
- Electronic night bell from ringing line or contact closure

## Specifications

**Power:** 120V AC/12V DC 500mA, UL listed adapter provided  
**Dimensions:** 133mm x 89mm x 44mm (5.25" x 3.5" x 1.75")  
**Shipping Weight:** .45 kg (1 lb)  
**Environmental:** 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity  
**Relay Contacts:** 30V DC@1A, 110V DC@0.3A, 125V AC @0.5  
**Maximum Ring Output:** 490mV AC RMS no load, 150mV AC RMS@600 ohms  
**VOX Minimum Audio Signal to Activate Relay:** 50mV AC RMS@1K Hz  
**Talk Battery:** 12V DC

[info@vikingelectronics.com](mailto:info@vikingelectronics.com)

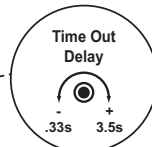
<http://www.vikingelectronics.com>

# Installation

**Ring Volume Control** - The ringing (warble) output volume is adjustable as shown to the right. Minimum: 0mV RMS, maximum: 490mV RMS.



**Time Out Delay** - The voice activated contact closures (terminal screws 3, 4, 5 and jack pins 2, 3, 4) on the PI-1 have a selectable time out delay.

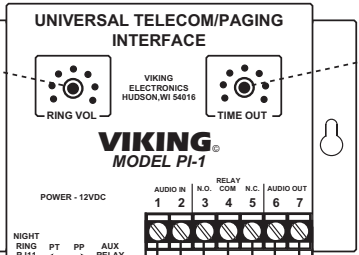


This adjusts the time between the last word and the relay releasing (contact closure). Minimum: 0.33 seconds, maximum: 3.5 seconds.

12V DC Adapter (included)

To Contact Closure (for optional warble)

Ring Analog PABX/KSU Station

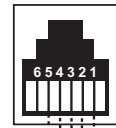


**Paging Amplifier** - Floating 600 ohm output, connect to input of paging amplifier.

**Background Music Source** (not included)

**Unused Trunk Input or Paging Output** - Connect to a page port output or an unused C.O. line input (trunk port)

**Auxiliary Relay Jack** - The auxiliary modular relay jack is a second set of contacts that work in conjunction with terminal screws 3, 4 and 5. A regulated 12V DC output is provided to operate external relays or other devices.



+12V DC  
Normally Closed  
Common  
Normally Open  
Ground

Switch	Talk Battery	For Use With
PP	OFF	Paging output of PABX/KSU
PT	ON	Unused trunk input of PABX/KSU

# Operation

When voice is detected on the "AUDIO IN" circuit, the PI-1 opens the normally closed contacts and closes the normally open contacts allowing background music source to be interfaced without interfering with paging. Depending on the selectable time-out delay, the music source will come back between .33 and 3.5 seconds after the last word. A floating 600 ohm output is provided to interface with most standard public address systems.

The PI-1 will also produce a 600 ohm night bell warble from a contact closure or a ringing analog PABX/KSU station. This warble volume can be adjusted using the RING VOL potentiometer as shown above.

**IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, PLEASE CONTACT: VIKING TECHNICAL SUPPORT AT (715) 386-8666**

Our Technical Support Department is available for assistance Monday 8am - 4pm and Tuesday through Friday 8am - 5pm central time. So that we can give you better service, before you call please:

1. Know the model number, the serial number and what software version you have (see serial label).
2. Have your Technical Practice in front of you.
3. It is best if you are on site.

## RETURNING PRODUCT FOR REPAIR

The following procedure is for equipment that needs repair:

1. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (RA) number. The customer MUST have a complete description of the problem, with all pertinent information regarding the defect, such as options set, conditions, symptoms, methods to duplicate problem, frequency of failure, etc.
2. Packing: Return equipment in original box or in proper packing so that damage will not occur while in transit. Static sensitive equipment such as a circuit board should be in an anti-static bag, sandwiched between foam and individually boxed. All equipment should be wrapped to avoid packing material lodging in or sticking to the equipment. Include ALL parts of the equipment. C.O.D. or freight collect shipments cannot be accepted. Ship cartons prepaid to: Viking Electronics, 1531 Industrial St, Hudson, WI 54016
3. Return shipping address: Be sure to include your return shipping address inside the box. We cannot ship to a PO Box.
4. RA number on carton: In large printing, write the R.A. number on the outside of each carton being returned.

## RETURNING PRODUCT FOR EXCHANGE

The following procedure is for equipment that has failed out-of-box (within 10 days of purchase):

1. Customer must contact Viking's Technical Support at 715-386-8666 to determine possible causes for the problem. The customer MUST be able to step through recommended tests for diagnosis.
2. If the Technical Support Product Specialist determines that the equipment is defective based on the customer's input and troubleshooting, a Return Authorization (R.A.) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the R.A. number, return the approved equipment to your distributor, referencing the R.A. number. Your distributor will then replace the product over the counter at no charge. The distributor will then return the product to Viking using the same R.A. number.
4. The distributor will NOT exchange this product without first obtaining the R.A. number from you. If you haven't followed the steps listed in 1, 2 and 3, be aware that you will have to pay a restocking charge.

## WARRANTY

Viking warrants its products to be free from defects in the workmanship or materials, under normal use and service, for a period of one year from the date of purchase from any authorized Viking distributor or 18 months from the date manufactured, whichever ever is greater. If at any time during the warranty period, the product is deemed defective or malfunctions, return the product to Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI., 54016. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (R.A.) number.

This warranty does not cover any damage to the product due to lightning, over voltage, under voltage, accident, misuse, abuse, negligence or any damage caused by use of the product by the purchaser or others.

Viking's sole responsibility shall be to repair or replace (at Viking's option) the material within the terms stated above. VIKING SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND INCLUDING INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING DIRECTLY OR INDIRECTLY FROM ANY BREACH OF ANY WARRANTY EXPRESSED OR IMPLIED, OR FOR ANY OTHER FAILURE OF THIS PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXCLUDED BEYOND THE ONE YEAR DURATION OF THIS WARRANTY. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

**Product Support Line...715.386.8666**

**Fax Back Line...715.386.4345**

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