



## **INSTALLATION INSTRUCTIONS FOR ZONEMASTER™ READ AND SAVE THESE INSTRUCTIONS**

### **IMPORTANT SAFETY INSTRUCTIONS**

For general ventilation control use only.

Do not use to control the flow of hazardous, corrosive, flammable or explosive materials and vapors.

Never expose this product to temperatures exceeding 140°F (60°C).

Always leave this product accessible for maintenance, cleaning and repair.

Before installing or servicing this product, switch power off at the service panel and lock service to prevent power from being switched on accidentally.

Suncourt® Inc. assumes no responsibility for the installation of the ZoneMaster™.

Suncourt® does not provide electrical connection information beyond what is provided herein.

If in doubt, contact a competent contractor.

For your safety and protection follow all instructions and adhere to applicable building and electrical codes.

### **WARNING**

To reduce the risk of fire, electric shock or injury to persons, observe all instructions. The ZoneMaster™ has been designed to operate on 24 Volt AC, 60 Hz. The only 110/120 Volt AC connection needed is for the power supply Transformer.

Before installing the Transformer, confirm that the electric power is off at the junction box where you will be making the Transformer 110/120 Volt connections. Observe the following clearance to combustible materials or surfaces: For both the Transformer and the Damper electric motor: a minimum of 4" (10 cm) is required.

### **IMPORTANT NOTES**

The following will be required to complete the installation: • A standard low voltage Heat-Cool wall thermostat, designed for gas furnaces. • Electrical wire, 2-conductor, 20 Gauge (CL-2 or Bell Wire) to connect the Transformer to the Damper via the wall thermostat. If the total length of wire exceeds 80 feet (25 m), use 18 Gauge wire. • A cover plate with knockout for the electrical box that the Transformer will be mounted on. • If you are mounting the Damper between floor joists in flexible duct, you will need two duct supports. • Duct tape.

### **BENEFITS**

The ZoneMaster™ will allow you to individually control the temperature of a room in your home. e.g. An unused room does not have to be heated or cooled to the same temperature as the remainder of the home. In the winter you may want a bedroom a little cooler than the rest of the home. The baby's room you may want a little warmer than the rest of the home in the summertime. You control your comfort and save significantly on energy use.

### **INSTALLATION INSTRUCTIONS**

Consult the Wiring Diagram when planning the installation. Begin by determining the location of the Damper, the thermostat and the Low Voltage Transformer. Then determine the route you will be running the wires from the Transformer to the thermostat and onwards to the Damper. Once you have this planned, proceed as follows.

### **DAMPER UNIT INSTALLATION**

For *metal duct*, remove a 6" (15 cm) section of duct at an existing joint so you will have one crimped duct end and one straight duct end. Slide the Damper unit in place so that the ends are inserted at least 1" (2.5 cm) at each end. The Damper is non-directional so it may be installed facing either direction of the airflow. Rotate the Damper so that you can easily access the electric terminal block. Complete the installation by securing the Damper with the #6 sheet metal screws supplied. Then wrap each joint with a good quality duct tape to avoid air leakage.

For *flexible duct*, cut the flexible duct and slide the ends over the ends of the Damper unit. You will need to support the Damper with a couple of standard duct supports available at Home Centers. Finish the installation by wrapping a good quality duct tape over the seams at both ends of the Damper to minimize air leaks.

### **THERMOSTAT INSTALLATION: (THERMOSTAT NOT INCLUDED)**

Mark the location of the thermostat mounting hole in the back plate of the thermostat and install the fastening hardware normally supplied with the thermostat. Do not mount the thermostat on an outside wall. Locate the thermostat approximately 5' (1.5 m) above the floor and away from drafts and direct sunlight. DO NOT screw the thermostat to the wall at this time.

### Transformer installation:

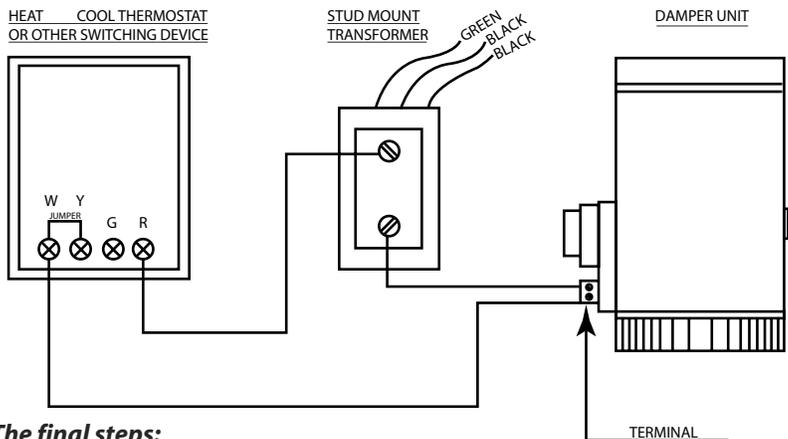
**IMPORTANT WARNING:** Locate the breaker on your house power panel that controls the 110/120 Volt AC supply to the wires in the junction box that you selected to mount the Transformer on. Use a voltage detector, voltmeter or other suitable instrument to make sure that all power to that junction box is OFF. Identify an existing wiring junction box near the location desired. Verify that the correct wires are available in this box. There needs to be: Black wire (line or hot), White wire (neutral) and a Green or bare copper wire (ground). The cover plate of that junction box must have a "knockout". This "knockout" must be removed to make the hole for the stud of the Transformer to mount through. Thread the Transformer leads through the hole and securely mount the Transformer to the cover plate. Tighten the nut snug only.

**WARNING: Over-tightening will break the plastic stud of the Transformer. DO NOT connect the Transformer wires at this time.**

### Low voltage wiring:

Refer to the wiring diagram below for electrical connections. It is recommended that you leave at least 1' (30 cm) of slack wire at each component wired to ease future servicing.

## WIRING INSTRUCTIONS FOR ZONE MASTER™ DAMPERS



1. Run one wire from either Transformer low voltage terminal to either terminal on the Damper.
2. Run one wire from the other Transformer low voltage terminal to the terminal marked "R" on the thermostat.
3. Run one wire from the other terminal on the Damper to the terminal marked "W" on the thermostat.
4. Connect the terminals "W" and "Y" on the thermostat together with a short piece of wire (jumper).

**THE WIRING IS NOT POLARITY SENSITIVE**  
**CONNECT EITHER SCREW ON TERMINAL**  
**BLOCK OR TRANSFORMER.**

### The final steps:

Screw the thermostat to the wall.

Connect the Transformer 110/120 Volt wires inside the junction box. **See IMPORTANT WARNINGS above !**

Connect the GREEN wire from the Transformer to the GREEN or bare copper wire inside the junction box.

Connect either of the BLACK wires of the Transformer to the WHITE wire inside the junction box.

Connect the remaining BLACK wire of the Transformer to the BLACK wire inside the junction box.

Place the cover (with the Transformer mounted to it) on the junction box, making sure that no wires are pinched between the cover and the junction box.

Now review your installation. If you are positive that everything has been installed safely and securely, you may turn on the breaker on your house power panel.

## MAINTENANCE

Suncourt® recommends that you clean your damper at regular intervals to keep it free from lint, dust and debris. The damper must never be exposed to temperatures over 140°F (60°C).

## OPERATING INSTRUCTIONS

1. Set the switch on the thermostat marked 'ON-AUTO', 'ON-OFF-AUTO', 'ON-OFF' or similar wording, to the 'ON' position.
2. Heating Season: Set the thermostat to 'HEAT'. Then adjust the thermostat to the chosen temperature (e.g. 55°F).  
As long as the temperature in the room is 55°F or higher, the damper will be closed. If the temperature in the room falls below 55°F, the damper will open.
3. Cooling Season: Set the thermostat to 'COOL'. Then adjust the thermostat to the chosen temperature (e.g. 85°F).  
As long as the temperature in the room is 85°F or lower, the damper will remain closed. If the temperature in the room goes higher than 85°F, the damper will open.

## THREE (3) YEAR WARRANTY

Subject to the following limitations, Suncourt® Inc. (manufacturer) warrants that the ZoneMaster™ will, for 3 (three) years from date of original retail purchase, remain free from appearance of defects in workmanship or materials. This warranty is subject to the following limitations: (a) manufacturer's liability is limited to the replacement or repair of the unit, as decided by the manufacturer; (b) a defective unit must be returned, prepaid, with proof of purchase, to the point of purchase or as instructed below; and (c) this warranty does not apply to defects resulting from the alteration, abuse, accidental damage, unauthorized repair or misuse of the unit. This warranty is given in lieu of all other warranties, guarantees and conditions on manufacturer's part, and the manufacturer shall have no tortious or other liability in respect to this ZoneMaster™.