



# OPERATION INSTRUCTIONS FOR THE EQUALIZER® EZ8 REGISTER BOOSTER™

## READ AND SAVE THESE INSTRUCTIONS

### IMPORTANT NOTICE

MODEL: HC600

With the use of any electrical appliance, it is important to observe all basic precautions to minimize the risk associated with use, such as electrical shock, fire, or injury to persons. Read these instructions before using your Equalizer® EZ8 Register Booster™

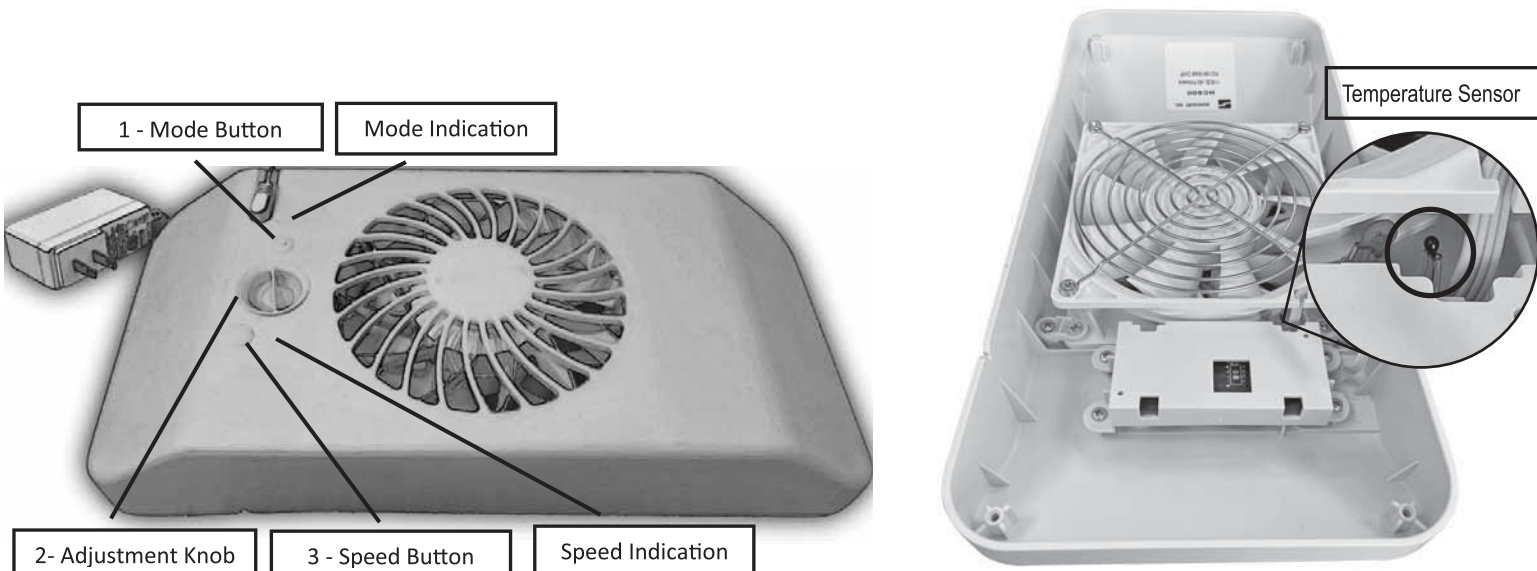
**NEVER EXPOSE YOUR EQUALIZER® EZ8 REGISTER BOOSTER™ TO TEMPERATURES OVER 140°F (60°C)**

### IMPORTANT WARNINGS

1. The Equalizer® EZ8 Register Booster™ will be as warm as the air that is delivered from the register of your forced air furnace and/or cooling system. The maximum temperature for the register is 140° Fahrenheit or 60° Centigrade. Your Equalizer® EZ8 Register Booster™ should never be exposed to higher temperatures or temperatures below freezing.
2. Do not in any way block the air grilles of the Equalizer® EZ8 Register Booster™.
3. Do not operate the Equalizer® EZ8 Register Booster™ with a damaged plug or cord, if the unit malfunctions, becomes noisy when operating, has been dropped or otherwise damaged, or if the housing is damaged or broken. Return the unit for inspection, replacement, or repair.
4. Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.
5. The Equalizer® EZ8 Register Booster™ should never be exposed to moisture. Do not use the unit in an open window, bathroom, laundry, or any other area where it may come in contact with water on the surface or excessive moisture in the airstream.
6. The Equalizer® EZ8 Register Booster™ is designed for indoor use only.
7. Never insert any object or allow any object to enter the Equalizer® EZ8 Register Booster™ through the bottom or top grilles, as this may damage the unit or cause it to malfunction.
8. Do not use the Equalizer® EZ8 Register Booster™ near flammables such as gasoline, paint, or natural gas.
9. The Equalizer® EZ8 Register Booster™ is intended for use as described in the instructions only. Other use may cause fire, electrical shock, damage to the unit, or injury to persons and will void any warranty by the manufacturer.
10. Do not use strong detergents or flammable liquids to clean the Equalizer® EZ8 Register Booster™.
11. THERE ARE NO SERVICEABLE PARTS INSIDE. Attempting to disassemble the unit will void any and all warranty.
12. To avoid serious injury, never operate the Equalizer® EZ8 Register Booster™ with the fan inlet guard removed.



### GENERAL SETUP

1. Allow the unit to acclimate to room temperature for at least one hour.
2. Prior to applying power, place or mount the unit over the register so that the small black temperature sensor underneath the unit is in the direct path of the air exiting the register boot.
  - a. Unit can be wall mounted with our wall mounting kit, HC6WK1 (sold separately).




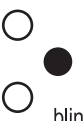
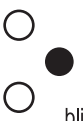



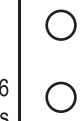

MODE BUTTON

The Equalizer® EZ8 Register Booster™ has 4 distinct operating modes that can be selected in order by pressing the mode button. The mode button is located above the adjustment knob on the front panel. Above the mode button, a colored light will remain lit while the unit is powered. No lights are lit when the unit is off.

Mode Button	Adjustment Knob		Speed Button
			
Off <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	N/A-Fan is always off	N/A-Fan is always off	Increase fan speed. Once highest speed is reached, pressing the button will start over from the lowest speed. Speed will be displayed next to the button. If fan is off, this will not turn it on.
Auto <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	N/A	N/A	
Fan <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	N/A-Fan is always on	N/A-Fan is always on	
Heat <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	Turn fan on/off at lower temperature	Turn fan on/off at higher temperature	
Cool <input type="radio"/> <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>			

SPEED BUTTON

The Equalizer® EZ8 Register Booster™ has 8 distinct fan speeds that can be selected by pressing the speed button. The speed button is located below the adjustment knob on the front panel. To the right of the speed button, lights will temporarily blink to indicate the new fan speed (see table below). CFM ratings listed below are Free Air CFM.

Speed 1 63 CFM	Speed 2 88 CFM	Speed 3 * 110 CFM	Speed 4 141 CFM	Speed 5 163 CFM	Speed 6 179 CFM	Speed 7 191 CFM	Speed 8 203 CFM
							

The Equalizer® EZ8 Register Booster™ should always be operated at the lowest speed capable of delivering a noticeable improvement in room comfort after several days of initial operation. This will ensure that the selected fan speed is appropriate for the application while emitting the least amount of noise.

\*We recommend starting at speed 3

AUTO MODE SETUP

When the orange Auto mode indicator light is lit, the Equalizer® EZ8 Register Booster™ will automatically turn the booster fan on when either the warm air from the furnace or the cool air from the air conditioner is detected. It will automatically sense the end of the conditioned air cycle, which can often be before the central blower stops. This mode requires no seasonal adjustments.

1. Follow the general setup procedures above.

2. Apply power, set to speed 3 and ensure the orange auto mode indicator light is lit.

3. The booster fan will turn on within a few minutes of the third or fourth cycle.

4. Allow 24 hours for optimal on/off operation. The unit will continue to monitor conditions/operation in an attempt to further optimize the booster fan performance. Leave the unit plugged in for a full 24 hours. If removed from power source the learned information will be lost and the unit will reset. The fan may miss a cycle or turn on outside of a cycle, but will continue to self correct.
- Auto   ☒ ☐ ☐ ☐

←

FAN MODE SETUP

When the green Fan mode indicator light is lit, the Equalizer® EZ8 Register Booster™ will run the fan continuously regardless of the temperature conditions. This mode is appropriate for general ventilation applications as well as forced air applications in which the air handler's blower is always running. Auto, Heat, and Cool modes often don't perform well under these circumstances.

1. Follow the general setup procedures above.

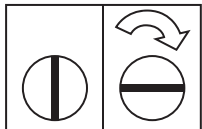
2. Apply power to the unit and press the mode button to select Fan Mode.
- Fan   ☐ ☒ ☐ ☐


←

### HEAT MODE SETUP

When the red Heat mode indicator light is lit, the Equalizer® EZ8 Register Booster™ will automatically turn the booster fan on when the warm air from the supply register rises above the temperature setpoint. It will turn off once the temperature falls below the setpoint. This mode is recommended for 'heating' season if Auto Mode is not appropriate for your application.


1. Follow the general setup procedures above.
2. Apply power to unit and press the mode button to select Heat.
3. Start with the adjustment knob fully clockwise.




4. After the start of the furnace cycle, allow approximately 45 seconds of central blower operation to occur before proceeding to the next step.
5. Slowly turn the knob counter-clockwise  until the booster fan turns on.
6. Once the next forced air cycle starts, observe the Equalizer® EZ8 Register Booster™ to ensure that the fan is turning on and off with the cycle in the way you want.

### HEAT MODE TROUBLESHOOTING

**1. The booster fan does not start soon enough or at all.**

Slowly move the adjustment knob counter-clockwise  to choose a lower setpoint. Observe the next furnace cycle to confirm your adjustments have been satisfactory. Repeat as necessary.

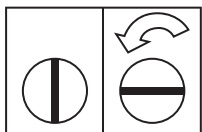
**2. The booster fan runs more than 5 minutes after the furnace cycle has ended.**


Slowly move the adjustment knob clockwise  to choose a higher setpoint. Observe the next furnace cycle to confirm your adjustments have been satisfactory. Repeat as necessary.

### COOL MODE SETUP

When the blue Cool mode indicator light is lit, the Equalizer® EZ8 Register Booster™ will automatically turn the booster fan on when the cool air from the supply register falls below the temperature setpoint. It will turn off once the temperature rises above the setpoint. This mode is recommended for 'cooling' season if Auto Mode is not appropriate for your application.


1. Follow the general setup procedures above.
2. Apply power to the unit and press the mode button to select Cool.
3. Start with the adjustment knob fully counter-clockwise.




4. After the start of the air conditioning cycle, allow approximately 45 seconds of central blower operation before proceeding to the next step.
5. Slowly turn the knob clockwise  until the booster fan turns on.
6. Once the next forced air system starts, observe the Equalizer® EZ8 Register Booster™ to ensure that the fan is turning on and off with the cycle in the way you want.

### COOL MODE TROUBLESHOOTING

**1. The booster fan does not start soon enough or at all.**

Slowly move the adjustment knob clockwise  to choose a higher setpoint. Observe the next A/C cycle to confirm your adjustments have been satisfactory. Repeat as necessary.

**2. The booster fan runs more than 7 minutes after the air conditioning cycle has ended.**

Slowly move the adjustment knob counter-clockwise  to choose a lower setpoint. Observe the next A/C cycle to confirm your adjustments have been satisfactory. Repeat as necessary.

### **GENERAL NOTES:**

1. It is always best to ensure that the unit is placed over the register such that the small black temperature sensor underneath the unit is in the direct path of the air exiting the register boot. This can be especially important when the register size (or opening) is considerably smaller than the footprint of the unit.
2. In heating and cooling modes, repeatedly pressing the mode button to leave the current mode and return to it will effectively "reset" the logic.
3. The Equalizer® EZ8 Register Booster™ is suitable for applications involving timers, switched outlets, or other devices that regulate the power to the unit. Both mode and fan speed selections will be maintained upon power loss.

### **GENERAL NOTES ABOUT FAN SPEEDS**

1. There are 8 fan speed settings that are incremented by momentarily pressing the speed button. Fan speed is displayed temporarily.
2. We recommend starting with fan speed 3.
3. Adjusting the fan speed, like all air-moving equipment, involves a trade-off between noise and performance.
  - a). A speed that is too low will be quieter, but may not deliver adequate airflow.
  - b). A speed that is too high will be louder and may 'over-condition' the space by drawing too much air from the branch duct.

### **CLEANING AND MAINTENANCE**

Before cleaning the Equalizer® EZ8 Register Booster™ disconnect the power cord from the outlet. Dust may be removed from the exterior surfaces using a soft cloth, the round brush attachment of your vacuum cleaner, or a cloth that has been lightly moistened with water and a mild, non-abrasive detergent. Take special care to avoid liquid entering the interior of the unit around buttons, knob, indicator lights, and power entry. Dust accumulation in the interior of the unit may be removed by using the small round brush attachment of your vacuum cleaner. Accumulation of dust in the interior will be minimized by regular replacement of your furnace filter as recommended by the manufacturer.

### **THREE YEAR LIMITED WARRANTY**

Subject to the following limitations, Suncourt Inc. (manufacturer) warrants that the Equalizer® EZ8 Register Booster™ will, for 3 (three) years from date of original retail purchase, but not exceeding 4 (four) years from date of manufacture, 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, well packaged to avoid damage in transit; 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 Equalizer® EZ8 Register Booster™. Ship unit to Suncourt Inc. only after obtaining a Return Goods Authorization (RGA) number. Returns without this RGA number will not be accepted. Actual product appearance may differ from illustrations. Suncourt reserves the right to modify any or all of its products' features, designs, components and specifications without notice.