

Active Thermal Management

The trusted name in thermal protection

Installation instructions for the Cool-line I & II® ventilator with wood grille

NOTE: The Active Thermal Management Cool-line ventilation system, when supplied with a wood grille, must be ordered in either intake or exhaust mode; it cannot be field changed, as the grilles are substantially different. As an exhaust device, it can be mounted above a source of heat, such as a flat-panel display which has been enclosed in a wall cavity or cabinet to move heated air out of the enclosure. *Fresh air must be allowed to enter the enclosure to replace the heated air if the ventilation scheme is to be effective.*

If ordered as an intake device, it can be mounted where fresh air is to enter an enclosure; its linear design will allow "toe kick" mounting in many applications. *When used as an intake device, heated air must have an opening through which to leave the enclosure.*

Regardless of the mode of operation, active intake/passive exhaust, or active exhaust/passive intake, air must be able to both enter and leave the enclosure with a minimum of restriction for effective cooling. An air inlet or exhaust opening improperly located or too small will prevent the Cool-line from operating efficiently.

A quick overview of the installation process:

- 1. The fan assembly is located at the point where heated air is to be exhausted from the enclosure or fresh air is to be introduced as discussed above.
- 2. The control unit is mounted in a convenient location.
- 3. The fan wire is connected to the control unit.
- 4. The temperature sensor(s) are positioned where they will sense air and/or equipment temperatures.
- 5. The power supply's output lead is plugged into the control unit and the power supply is plugged into a convenient source of 120 volt 60Hz power.
- 6. The completed installation is tested.

Detailed instructions:

Note: Do not plug the power supply into an outlet until directed to do so.

1. Locations low and forward in the enclosure are generally preferred for intake-mode systems, while high locations to the rear are best for exhaust-mode systems; the optimum arrangement is that in which air enters and passes by the heat-generating equipment on its way to the exhaust point. Avoid locating the inlet too close to the exhaust as room air may enter and be immediately exhausted without cooling the enclosure and equipment. Cut a rectangular hole 2 1/8" x $14 \frac{3}{4}$ " (single fan model) or 2 1/8" x $28 \frac{1}{4}$ " (dual fan model). Insert the fan assembly from the outside of the enclosure; details how to retain the assembly (screws, etc.) will vary depending on the degree of rear access and panel material and thickness. Be careful not to damage the fan housing or motor.

2. Mount the control unit at a convenient location. While mounting the control unit in a location close enough to the power supply, the heat-producing equipment, and the fans is easiest, the fan and thermistor wires can be lengthened if necessary.

3. The fan wire may be extended using any appropriate 2 conductor cable (20 gauge minimum) if necessary.

4. The thermal sensor controls the operation of the fans. To extend the sensor wires, use any 2 conductor low-voltage wire; note that the sensor has no polarity.

5. The Cool-line is powered by a wall-type power supply. Do not plug it into a switched outlet; use an AC outlet which is always on to allow the fans to run after the other equipment has been turned off. If possible, use an outlet on the same circuit that powers the equipment producing the most heat. If this circuit should fail, the ventilation will cease, but the heat source(s) will also turn off. If the Cool-line is powered from a different circuit, it is possible that that circuit could lose power while the equipment in the enclosure continued to produce heat.

6. Plug the power supply into a live outlet. Plug the power supply output lead into the control box. The green LED will light to indicate that power is present. As the temperature at the thermal sensor rises past approximately 85 degrees (F), the fans will begin to turn at a moderate speed and the yellow led will light. Fan speed will increase if the temperature increases 5 degrees. A red LED will then indicate that the fans are turning at full speed.

When the enclosure temperature falls, the fans will slow down, stopping when the temperature falls below approximately 84 degrees Fahrenheit.

Please note: It is increasingly common for fans to remain on continuously, due to the heat given off by satellite receivers, cable boxes, and DVRs, <u>even when these</u> <u>devices are not is use.</u>

Warranty

Active Thermal Management ("ATM") warrants all of its products sold after October 1, 2017 against defects in materials and workmanship for a period of five years. (Products sold before that date are warranted for a period of one year.) We will repair or replace, at our option, any ATM product which exhibits a defect in materials or workmanship in that time period. The product must be properly packaged and returned prepaid with an ATM return authorization number clearly written on the outside of the shipping carton and with a copy of the bill of sale or ATM invoice to verify the original purchase date.

Our warranty does NOT apply to:

- 1. Shipping damage, either concealed or visible. Claims must be filed with the carrier.
- 2. Damage caused by improper installation or improper electrical voltage.
- 3. Any product which has been modified, unless authorized by ATM.
- 4. Damage caused by corrosion, abrasion, immersion, or severe temperatures.
- 5. Products which have been subject to abuse, misuse, abnormal usage, or accident.
- 6. Products purchased from unauthorized resellers.

Products or subassemblies which are beyond repair may be replaced with refurbished units. Replaced units or subassemblies will be warrantied for the balance of the original warranty period and may have minor cosmetic blemishes.

These warranties give you specific legal rights, and are subject to any applicable consumer protection legislation. You may also have additional rights which vary from state to state.

No other warranties, expressed, implied, or written, shall apply to this product. ATM will not be responsible for any consequential or incidental damages, loss of property, revenues, or profit, cost of removal, installation, or reinstallation, personal injury, or for any breach of warranty, regardless of how caused.