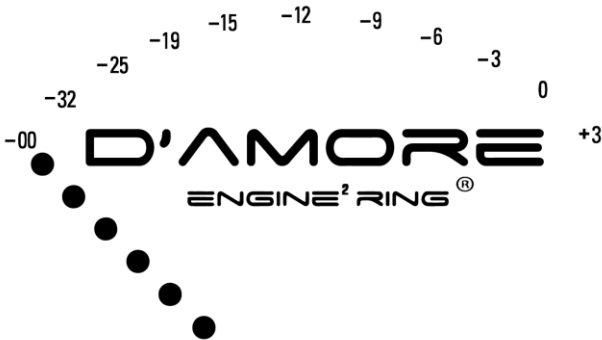


SMD

TM-1

Temperature Monitor / Fan Controller



Congratulations on your purchase of this high quality temperature meter / fan controller. It is designed to be used with automobiles, motorcycles, golf carts, ATVs, side by sides, mining rigs, gaming computers, or any place a 12V system thermometer and/or fan controller is wanted.

Operation: The TM-1 provides a real-time display of the temperature of the remote thermal sensor. It is internally calibrated and will not become ill calibrated by vibration. The TM-1 has an adjustable fan temperature "turn -on" set point, and will drive a fan or fans requiring up to 5 Amps DC.

Variable Speed Fan Drive: When the temperature of the thermal sensor reaches the Set Point (adjustable) the fan(s) will be driven at 10% power. As the temperature of the thermal sensor increases the fan power will increase by 3% per °F (5% per °C) until fan power reaches 100%.

Relay Drive: Can be modified to drive a relay to run bigger fans in an ON or OFF fashion, no variable speed.

Specifications:

Display Range = 30 - 220°F or 5 - 100°C
Fan Controller Set Point = 40 - 200°F or 10 - 90°C
Maximum Fan Load = 5 Amps DC
Fully Variable Fan Drive System (PWM)
Remote Wired sensor with 17 feet of cable

Installation:

1. Unsnap the four tabs, one at time by pressing them toward display while lifting the display away from the mounting plate.
2. Using the mounting plate as a template, place the flat surface of the mounting plate against the FLAT surface that it will be mounted to and mark the two screw holes and the slot for the wiring. Drill the two screw holes with a 3/32" drill bit. Drill the hole for the wires with a 5/16" drill bit.
3. Mount plate to vehicle. MUST be mounted on a flat surface or distortion of plate will occur and face will not snap on properly. If no flat surface is available it can be mounted with a high quality automotive grade tape such as VHB tape by 3M™.

4. Bring the display toward the mounted plate, pass the wires and sensor through the 5/16" hole.

5. Make the following electrical connections:

B+ Power Wire = **RED**

(MUST USE 5A FUSE INLINE with this wire or damage could occur, warranty will be void)

Turn On Trigger = **WHITE**

Ground = **BLACK**

Separate 16AWG FAN + = **GREY**

Separate 16AWG FAN - = **BLACK**

6. The remote sensor can be left in open air to measure the temperature of the air anywhere you choose. It can also be attached with a **cyanoacrylate glue** to an amplifier heat-sink, subwoofer magnet, or any surface that you would like to know the temperature of.

Adjusting of Set Point:

1. With unit powered on and case not snapped together, locate a mini-screwdriver and the adjustment potentiometer on the circuit board. **Use caution! Do not touch any of the circuitry with the adjusting screwdriver other than the potentiometer.**

2. Gently turn potentiometer fully clockwise until LED on display begins flashing. Unit has now entered setup mode. Once this mode is activated you have 20 seconds to make the adjustment.

3. Adjust the potentiometer until the LED illuminates the temperature that you would like the fan(s) to start to work. (This will be the temperature at which the fan(s) run at 10% power. The TM-1 will increase fan power by 3% per °F (5% per °C) as measured temperature increases beyond set point.

4. Wait until the 20 seconds have elapsed and LED should stop flashing. TM-1 has now exited Set Mode and is displaying the real time temperature of the sensor.

5. Snap the case together.

Limited Warranty

D'Amore Engineering warrants this product to be free of defects in materials and workmanship for a period of one year. Warranty does not apply to misuse, abuse, neglect, accident, improper use, etc

This warranty is not transferrable and applies only to the original purchaser from an authorized D'Amore Engineering dealer. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction, D'Amore Engineering will (at its discretion) repair or replace the defective product with new or remanufactured product at no charge. Damage caused by the following is not covered under warranty: accident, misuse, abuse, product modification or neglect, unauthorized repair attempts, misrepresentations by the seller. This warranty does not cover incidental or consequential damages. Cosmetic damage due to accident or normal wear and tear is not covered under warranty.

Any applicable implied warranties are limited in duration to the period of one year beginning with the date of the original purchase. No warranties shall apply to this product thereafter. Some states do not allow limitations on implied warranties; therefore these exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**To obtain service worldwide please e-mail D'Amore
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