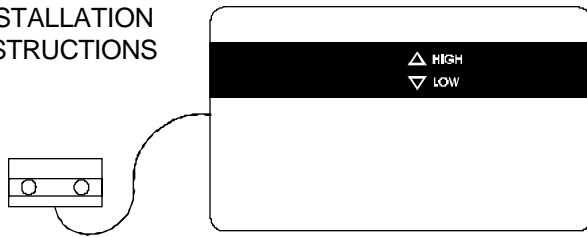




# INTELLITEMP T-1000

## INSTALLATION INSTRUCTIONS



The IntelliTemp Model T-1000 is designed to continually monitor, and provide an accurate measurement of, the ambient temperature.

The T-1000 allows the user to set high and low temperature parameters. If the ambient temperature rises above, or falls below the set parameters, the IntelliTemp will signal a control panel or other monitoring device (via Form-A relays). Separate LEDs indicate whether the unit was tripped by temperatures above or below the set parameters.

The Model T-1000 features a bright, three-digit display unit, which can be set to display the temperature in degrees Fahrenheit or Celsius.

The T-1000 also includes a remote temperature probe, which can be used to monitor remote locations<sup>1</sup> while keeping the display unit in a convenient viewing location. If local<sup>2</sup> temperature monitoring is desired, the remote temperature probe can be installed inside the display unit.

<sup>1</sup>Up to 100' from the display unit.

<sup>2</sup>Monitors the ambient temperature surrounding the display unit.

## FEATURES

- Attractive, compact design
- Bright 3-digit display
- Remote or local temperature sensing
- Low current consumption
- High and low temperature setting
- Displays degrees Fahrenheit or Celsius
- Accurate sensing within  $\pm 2^\circ \text{F}$  ( $\pm 1.1^\circ \text{C}$ )

## MOUNTING LOCATION

The T-1000 is designed to be wall mounted in an environment where the temperature ranges between 32° to 140° Fahrenheit (0° to 60° Celsius).

To monitor temperatures beyond this range, use the remote temperature probe. The temperature probe is designed to monitor a temperature environment between -40° to 140° Fahrenheit (-40° to 60° Celsius).

The temperature probe comes with 15 feet of two-conductor cable, and can be mounted at any desired location. The cable can be lengthened (up to 100 feet) with any 22 AWG twisted pair wire.

**Important:** If it is necessary to install more than one T-1000, make sure that the serial numbers on the back of each temperature probe and display unit match.

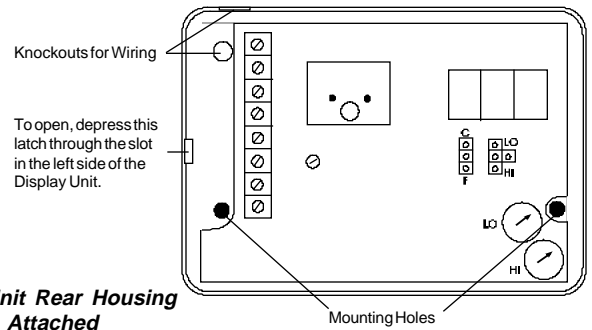
## MOUNTING PROCEDURE

To open the display unit, insert a flat tip screwdriver into the slot on the left side of the front housing, and depress the latch. Gently pull apart the front and rear housings.

Inside the rear housing, you'll find the display unit printed circuit board (PCB) and two mounting holes.

## Mounting Procedure (Continued)

Use the rear housing as a template to mark the mounting holes on the mounting surface. Drill the holes in the wall, and use two of the screws provided to secure the display unit to the wall. Refer to Figure 1.



**Figure 1**  
Display Unit Rear Housing with PCB Attached

**Note:** It is **not** necessary to remove the PCB from the rear housing before mounting.

## Using the temperature probe remotely:

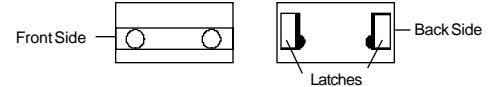
If using the temperature probe remotely, use the two remaining screws or double-sided foam tape to mount the probe at the desired location.

The cable between the temperature probe and the main display unit can be lengthened up to 100 feet, using 22 AWG twisted pair wire.

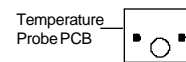
## Using the temperature probe locally:

To use the temperature probe locally, install the temperature probe PCB onto the display unit PCB. To do this, perform the following steps:

1. Push in the latches on the back side of the temperature probe housing, with a flat-tip screwdriver. Separate the front and rear housings.



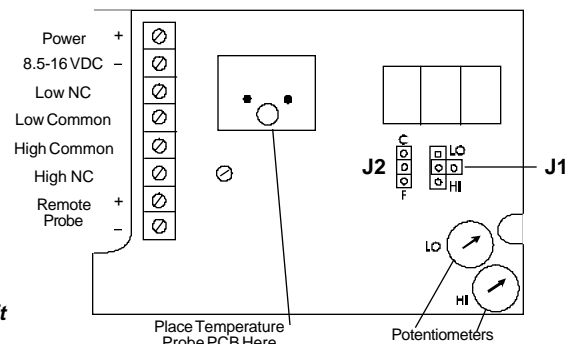
2. Gently pull the PCB from the rear housing.
3. Using a pair of wire cutters, cut off the plastic wire tie securing the cable to the PCB. As close as possible, cut off the red and black wires from the back side of the PCB.



4. Position the temperature probe PCB as shown above. Place it on the display unit PCB pins, where specified in Figure 2. Push the temperature probe PCB down the pins to fit against the display unit PCB.

## WIRING

Observing the proper polarity, wire the T-1000 as shown in Figure 2 below. Do not leave excess wire inside of the unit.



**Figure 2**  
Display Unit PCB

## Wiring (Continued)

Refer to Figure 2.

The HIGH and LOW relay outputs can be combined, or used separately (if two monitoring loops are available).

To connect the relays to a single monitoring loop, place a wire jumper between the two common terminals. Connect the remaining NC terminals to the monitoring loop.

To use the temperature probe remotely, connect the red wire to the (+) input and black wire to the (-) input.

**Note:** Wire connection to the terminal strip is not necessary for local temperature monitoring (when the temperature probe PCB is installed on the display unit PCB).

## TEMPERATURE ADJUSTMENT

To set the HIGH and LOW temperature parameters, perform the following steps: (Refer to Figure 2.)

1. Remove the front housing of the T-1000 display unit.
2. To set the HIGH temperature parameter, remove the horizontal **J1** jumper, and replace it vertically to cover the middle pin and the pin labeled "HI."
3. With a screwdriver, turn the potentiometer labeled "HI" until the desired "high" parameter appears on the temperature display.
4. To set the LOW temperature parameter, remove the **J1** jumper, and replace it vertically to cover the middle pin and the pin labeled "LO."
5. With a screwdriver, turn the potentiometer labeled "LO" until the desired "low" parameter appears on the temperature display.

**Note:** The two trip temperatures must be at least 2 degrees (Fahrenheit) above and below the ambient temperature.

6. When both the HIGH and LOW temperature parameters have been set, replace the jumper **J1** back in its original position (horizontally over the middle and side pins).
7. Replace the display unit front housing.

## TEMPERATURE DISPLAY

The T-1000 can display the temperature in degrees Fahrenheit or Celsius. It is factory-set to display the temperature in degrees Fahrenheit.

To change the display to degrees Celsius, perform the following steps (refer to Figure 2):

1. Remove the front housing of the T-1000 display unit.
2. Remove jumper **J2** and place it to cover the middle pin and the pin labeled "C".
7. Replace the display unit front housing.

## SPECIFICATIONS

*Input voltage:* 8.5 - 16 VDC

*Input current:* 35 mA

*Operating temperature:* 32° - 140° F (0° to 60° C)

*Temperature sensing range:* Local: 32° to 140° F (0° to 60° C)

Remote: -40° to 140° F (-40° to 60° C)

*Accuracy:* ±2° Fahrenheit (±1.1° Celsius)

*Display:* Three 7-segment displays

*Alarm LEDs:* 2 red LEDs indicating HIGH or LOW alarm

*Relays:* 2 Form-A relays

*Relay contact rating:* 30 VDC, 100 mA

**Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

### LIMITED WARRANTY

Seller warrants its products to be in accordance with its own plans and specifications and to be free from defects in materials and workmanship under normal use and service for **18 months** from the date stamp control on the product; or for products not having an IntelliSense Systems date stamp, for **12 months** from the date of original purchase, unless the installation instructions or catalogue sets forth a shorter period, in which case the shorter period shall apply.

Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor, any part which is proved not in compliance with Seller's specifications or proves defective in materials or workmanship under normal use and service. This warranty is void if the product is altered or improperly repaired or serviced by anyone other than IntelliSense factory service: 2171 Watterson Trail, Louisville, KY, 40299.

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**IntelliSense**<sup>TM</sup>  
2171 Watterson Trail  
Louisville, KY 40299

TEL: (502) 266-5019  
(800) 437-2002  
FAX: (502) 266-5259

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