

# DIGITAL TEMP<sup>o</sup> ALERT™

Thank you for your purchase of the Winland Digital Temp-Alert. Your new Digital Temp-Alert high/low temperature sensor provides a continuous digital readout of the air temperature surrounding the sensor probe. The Digital Temp-Alert is capable of monitoring any temperature range from  $-30^{\circ}$  to  $+220^{\circ}$  F ( $-34^{\circ}$  to  $+105^{\circ}$  C) in standard units and  $-67^{\circ}$  to  $+300^{\circ}$  F ( $-55^{\circ}$  to  $+150^{\circ}$  C) in units equipped with Winland's optional sensing probes. This unit is one of the most reliable and quickest responding temperature sensors on the market today. The removable sensing probe accurately measures temperatures up to five hundred feet away from the control console. If either of the preset temperature limits are exceeded, the Digital Temp-Alert will provide you with a relay output alarm condition. This relay output may be used to activate virtually any type of remote device you're linked to, such as alarm systems, dialers, wireless transmitters, etc.

## Additional Features Include:

1. Capability of successfully monitoring freezers with defrost cycles. This may be accomplished by immersing the special Winland liquid resistant sensor probe into a container of glycerin or actually placing it into a sample of the medium being frozen. By following this procedure, the unit will not false alarm during routine defrost cycles.
2.  $\pm 1.8^{\circ}$  F accuracy and virtually instant response to temperature changes.

## OPERATION

For proper operation, the Digital Temp-Alert control console must be located in an area where the temperature range is within  $+32^{\circ}$  to  $+130^{\circ}$  F ( $0^{\circ}$  to  $+54^{\circ}$  C). Temperatures outside this range could cause the unit to malfunction. Temperatures below  $+32^{\circ}$  F ( $0^{\circ}$  C) may be measured by using the

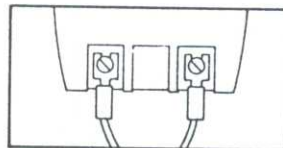
removable sensor in conjunction with an extension cable (not supplied). The sensor probe can then be directly placed in the area needing to be monitored. Using the sensor probe in this manner makes it possible to monitor the full range of temperatures from  $-30^{\circ}$  to  $+220^{\circ}$  F ( $-34^{\circ}$  to  $+105^{\circ}$  C) with standard units, and from  $-67^{\circ}$  to  $+300^{\circ}$  F ( $-55^{\circ}$  to  $+150^{\circ}$  C) in units equipped with Winland's optional sensor probes. The maximum distance the sensor probe may be located from the console will vary with each installation. However, it has been tested and approved for temperature monitoring in distances up to 500 feet away from the control console. The accuracy of a remote installation should initially be verified by an independent thermometer.

**NOTE: Do not immerse the remote sensor probe in any type of liquid. This will result in damage to the sensing element. Winland offers Digital Temp-Alert sensors which are specifically designed for this particular application.**

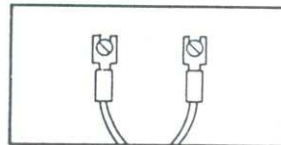
## INSTALLATION

Using the attached template, mark the position of the screw holes on the wall. Drive the mounting screws into the wall allowing approximately 3/16" between the screw head and the wall. Engage key slots on the back of the Digital Temp-Alert case with the screw heads and press down. Connect to power source.

## AC/DC POWER REQUIREMENTS



AC TRANSFORMER  
8 to 14 volts RMS  
50-60 Hertz



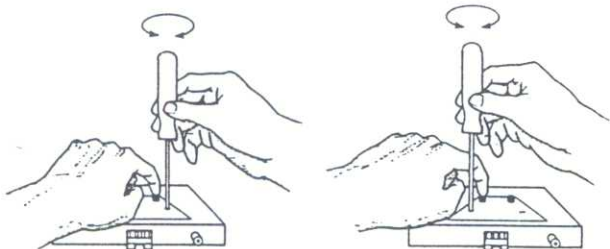
DC  
8 to 14 VDC  
at 125 mA minimum

AC — Input wires to the AC transformer are interchangeable.

DC — Red input wire to (+) positive and black input wire to ground or (-) negative side of the power supply.

## SET TEMPERATURE LIMITS

A small pocket screwdriver with a common or straight slot blade will be required.



To set the high or low temperature limit, insert the screwdriver through the appropriate adjustment hole on the faceplate and engage the adjusting screw. Press and continue to hold the corresponding set button while turning the limit adjustment screw. When the desired temperature is displayed release the set button. This will "lock-in" the setting. Repeat this procedure for setting the other limit.

The high and low limits can be set to any temperature in the operating range of  $-30^{\circ}$  to  $+220^{\circ}$  F ( $-34^{\circ}$  to  $+105^{\circ}$  C). In applications where the user needs an extension of either of these two temperature limits, there are optional Winland sensor probes available.

To insure proper operation of the Digital Temp-Alert, a minimum temperature span of four degrees should be left between the high and low limits. EXAMPLE: To maintain the minimum required temperature span between the lower and upper limits at an ambient room temperature of  $+32^{\circ}$  Fahrenheit, the lower temperature limit would have to be set at  $+30^{\circ}$  F and the upper temperature limit at  $+34^{\circ}$  F. (For centigrade  $-2^{\circ}$  and  $+2^{\circ}$ .)

**NOTE:** The temperature limit adjustment screws on the Digital Temp-Alert are very precise, and as a result, a slight turn on an adjustment screw will move the corresponding temperature limit several degrees. In order to best reach the exact temperature which is desired as a limit, it is best to turn the adjustment screw very slightly once the unit is displaying within five degrees of the desired temperature.

## REMOVING THE PROBE

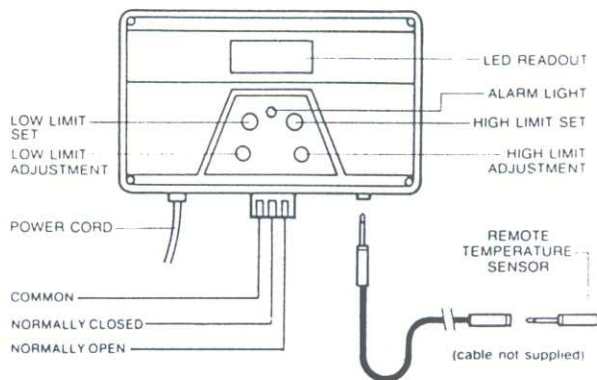
Winland stocks 25' and 50' extension cables. When using any extension cable, be sure to seal the joint where the probe plugs into the extension to prevent moisture shorting. If you want to build an extension cable yourself, use 18 to 24 gauge twisted pair and a male and female mini-jack plug.

## RECALIBRATION

Vibration during shipping and handling can cause the DTA-1 to come out of proper calibration. Simple field calibration instructions are available from Winland.

## RELAY OUTPUT TERMINAL

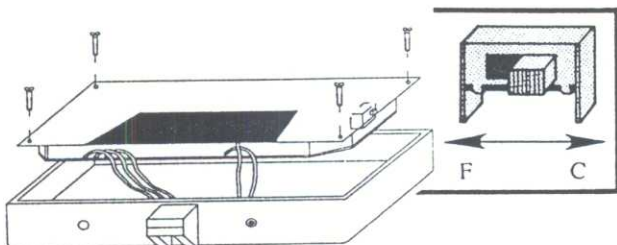
Relay contacts are accessible on the terminal block. The unit is considered in normal condition when power is applied and temperature is within preset limits. The unit will switch to alarm condition when the temperature limits are exceeded, or if the sensor probe should become disconnected from the control console. If this happens the display will show three dashes.





## FAHRENHEIT/CENTIGRADE

The Digital Temp-Alert is designed to readout in either Fahrenheit or centigrade. All units are shipped from the factory in the Fahrenheit position. To switch to centigrade, simply remove the 4 corner screws and carefully lift out the faceplate. Next, identify the black switch located in the right side of the unit between the faceplate and circuit board. Switch to the right position. Replace the faceplate and corner screws



**WARNING:** Do not over tighten the screws or the faceplate may crack.

**CAUTION:** When inside the Digital Temp-Alert make sure nothing else is altered.

### DIGITAL TEMP-ALERT ACCESSORIES

Part No.	Description
1024	Special Low temp./liquid resistant sensor (-67° to +220°F)
1025	Special High temp./sensor (-67° to +302°F)
1033	Sensor extension cable 25 feet
1034	Sensor extension cable 50 feet
1035	110 VAC — 12 VAC 20VA Transformer

## ONE YEAR LIMITED WARRANTY

Winland, Inc. warrants that each product of its manufacture is free from defects in material and factory workmanship, when properly installed and operated under normal conditions according to the manufacturer's instruction.

Manufacturer's obligation under this warranty is limited to correcting, without charge, at its factory any part or parts thereof which shall be returned to the factory, by the original retail purchaser, transportation charges prepaid, within one year after purchase and which upon examination shall disclose to the manufacturer's satisfaction to have been originally defective. Correction of such defects by repair to, or supplying of replacements for defective parts shall constitute fulfillment of all obligations to purchaser. Repair service performed by the manufacturer after one year from date of purchase will be for a reasonable service charge.

This warranty shall not apply to any of the manufacturer's products which have been subject to misuse, negligence or accident or which shall have been repaired or altered outside of the manufacturer's factory. Warranty is void if housing or cover is removed.

Manufacturer shall not be liable for loss, damage, or expense directly or indirectly from the use of its product or from any other cause.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE EXCLUDED, AS ARE ALL OTHER REPRESENTATIONS TO THE USER—PURCHASER, AND ALL OTHER OBLIGATIONS OR LIABILITIES, INCLUDING LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES, ON THE PART OF THE MANUFACTURER OR THE SELLER.

No person, agent or dealer is authorized to give any warranties on behalf of the manufacturer nor to assume for the manufacturer any other liability in connection with any of its products.