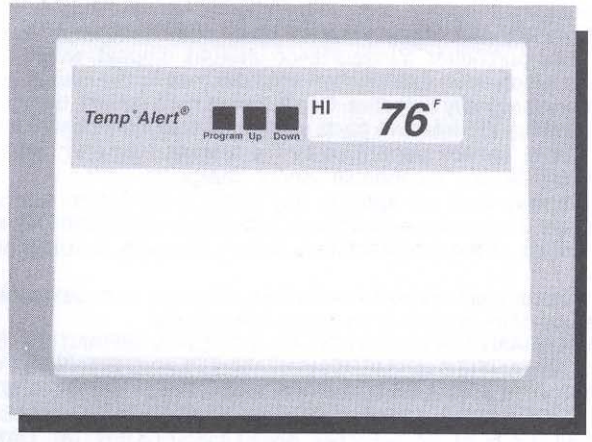
Mfg. in U.S.A. by:

WINLAND ELECTRONICS, INC.
1950 Excel Drive
Mankato, Minnesota, 56001 U.S.A.
Phone: (507) 625-7231
Fax: (507) 625-5135

TEMP°ALERT®

INSTALLATION/OWNERS MANUAL



Electronic Temperature Alarm with Dual Relay Outputs

MODEL NUMBER: UTA-1

Booklet PN #Z1940
Rev D

Temp°Alert® model UTA-1

Thank you for purchasing Winland's Temp°Alert® model UTA-1. The Temp°Alert® provides reliable monitoring of areas where high & low temperature limits are critical. UTA-1 measures temperatures from -67° to +300° F (-55° to 150° C). The UTA-1 includes a built-in temperature sensor with a range of +32° to 130° F. Use Winland's optional temperature probes when monitoring extreme temperatures, coolers & freezers, or for remote sensing. If temperatures rise above or fall below your preset limits, UTA-1 will provide a relay output to trip alarms, a dialer, horn, etc. Your package should contain the UTA-1 console, two mounting screws and two wall anchors.

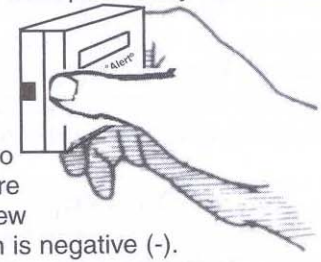
STEP 1: SELECTING A LOCATION

Select a site for the UTA-1 console. Sensor cable lengths and power source locations should be considered. Maximum cable run for the temperature sensor is 500 feet. Make sure you keep the remote probe (optional) and control console well clear of windows, doors, or heat sources that could cause an inaccurate reading of air temperature.

STEP 2: OPENING THE CASE

Decide on the best location, turn the unit so that the front is facing you. Next turn the unit 90° to expose the left end of the case. Note that the left end has been tooled with a single attachment hole whereas the right end has not. To open the case press hard on the center of the left end (see drawing)

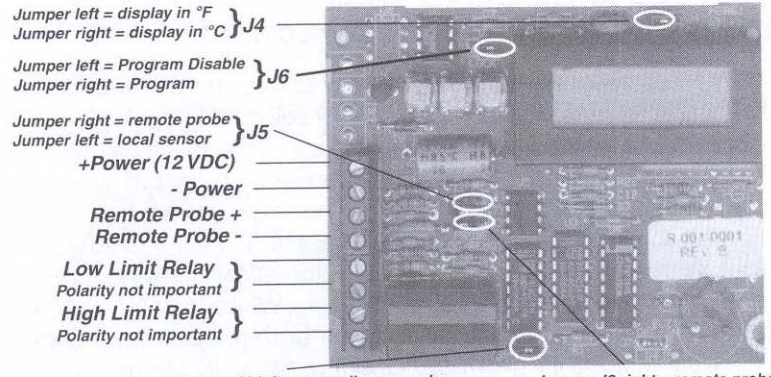
of the front plate with your thumb to disengage the case locking pin. Then separate the two halves by pulling the front plate away from the back plate.



To open the case squeeze firmly on the end with your thumb and pull front face plate away from the back plate

STEP 3: POWER CONNECTION

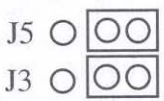
Connect 12 VDC power into the top two positions on the terminal block. Be sure to observe proper polarity. The top screw is positive (+) and the second position is negative (-).



STEP 4: SELECTING LOCAL OR REMOTE TEMP. MONITORING

The UTA-1 includes a built-in temperature sensor (for local temp. sensing) with a range of +32° to +130°F. For extended range, coolers & freezers, or remote sensing Winland offers four types of optional sensors (PN #'s 1106, 1107, 1108, & 1109). To read and display temperature from the remote probe move jumper J3 and jumper J5 to the right position.

IMPORTANT:



JUMPER POSITION FOR REMOTE SENSOR

STEP 5: FORM A RELAY OUTPUT CONNECTIONS

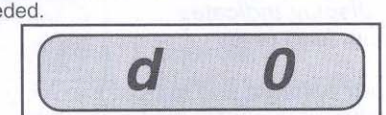
The UTA-1 has separate Form A (normally closed) relays for both the high and low alarm outputs. These relays can be selected to operate together in one of two modes: Mode #1 (Normally Open) - The relays are normally off and energize when an alarm condition is present (jumper J1 in the "LEFT" position) or Mode #2 (Normally Closed) - The relays are normally energized and turn off when an alarm condition is present (jumper J1 in the "RIGHT" position). With in Mode #2 the relays will automatically provide a relay trip if power is ever cut to the UTA-1 control console. Which ever mode you select (Mode #1 or Mode #2) it will be the same for **both** relays. That is both relays will either be in Mode #1 (Normally Open) or Mode #2 (Normally Closed).

STEP 6: ENTERING PROGRAM MODE: TIME DELAY, HI & LO LIMIT

After power is applied to the unit wait 6-10 seconds for the UTA-1 to stabilize. The LCD should automatically display the correct temperature reading. The temperature which is indicated is being measured by the built-in temperature sensor. This sensor has a range of +32° to +130° F. For connecting Winland's optional remote temperature probes refer to Step # 4.

Note: Before trying to program the UTA-1, check jumper J6 and make sure it is in the "right" position. When you are done making adjustments to the settings, and you exit the programming mode, J6 can now be moved to the "left" position. This disables the program button and thus makes the unit tamper resistant. To enter the programming mode press and release the Program button (If the LCD display does not change try it again but press and release the program button more slowly). You will know when you are in the program mode because the LCD will prompt you for the time delay setting by illuminating a small case letter "d" and a corresponding number anywhere from 0 to 99. The default value is zero. This number represents the amount of time in minutes the control unit will wait before going into alarm condition once either the high or low temperature set points are exceeded.

Example: Time Delay set to a value of zero minutes.

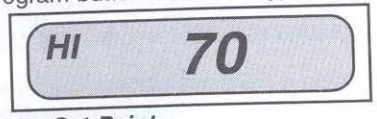


If you wish to simply accept this value press the program button again to move onto the next stage of the programming sequence. To select a time value other than zero press and hold the up bottom until the value appears on the LCD screen. This feature is helpful when monitoring difficult applications requiring alarm delays such as freezers with defrost cycles.

Setting the High Temperature Alarm Set Point

When you have completed entering or skipping the time delay value press the program button again and release. The LCD display will prompt you to enter the value for the High temperature set point by illuminating the letters "HI" and a number showing the current setting (If the LCD display does not change try it again but press and release the program button more slowly).

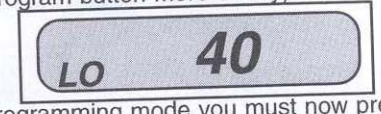
Example: Display indicates the High temp. limit is 70°



Setting the Low Temperature Alarm Set Point

When you have completed entering the high temperature set point press the program button again and release. The LCD display will prompt you to enter the value for the Low temperature set point by illuminating the letters "LO" and a number showing the current setting (If the LCD display does not change try it again but press and release the program button more slowly).

Example: Display indicates the LO temp. limit is 40°

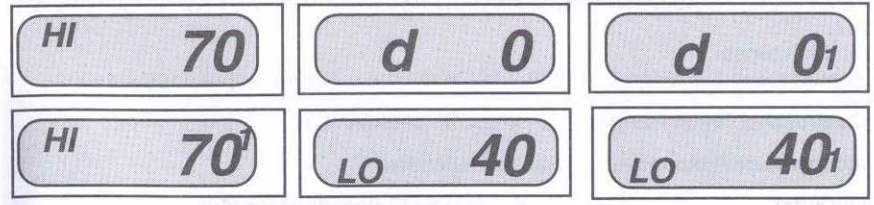


To ***save your settings*** and exit programming mode you must now press and release the program button once more. If you do not exit programming mode correctly the unit will auto exit after one minute and your new settings will be lost. The LCD should now display the current temperature.
Now to check the HI limit setting simply press the UP botton and to check the LOW limit setting press the DOWN button.

Problem: Console displays a reading which is slightly off of reference thermometer.

Possible Cause: The display should be within ± 2°F with a remote senor and within ± 3°F with the built-in sensor. If the UTA-1 must match a reference temperature the following offset procedure may be used.

NORMAL PROGRAM MODE OFFSET PROGRAM MODE



With display showing the actual temperature and allowed to stabilize for several minutes. Press and hold down the "DOWN" button and momentarily press and release the Program button. A "1" will appear on the far side of the LCD display. If the "1" fails to appear repeat the step several times if necessary and hold the Program button down longer until "1" does appear. Release the down button after the "1" appears.

Now press the program button several times (if necessary) until both the "HI" and "LO" LCD messages appear. Then press the up or down buttons until the desired offset is obtained. Example: Setting an offset of "- 2" will lower an initial temperature reading of 76° to 74°. To exit the offset program mode use the same method as to enter it or else turn off power to the unit for several seconds. When unit is re-powered, all settings will be retained.

SPECIFICATIONS

Temperature/RH Range with built-in sensor: 32° to 130°F (0° to 54° C) **Accuracy:** ± 3°F
Temp. Range & Accuracy with optional probes: -67° to 300°F (-55° to 150° C) ± 5% RH
for HA-3 sensor
Accuracy: ±1.8°F for probes 1106, 1107 and 1108. ±.5°F for probes 1109 & 1109A

Control Unit Temp. Range:	32° to 130°F (0° to 54° C)
Temperature Response:	Sensor Dependent
Outputs:	Form A (normally closed) relays (500 mA)
Input Voltage:	12 VDC (<100 mA)
Mounting:	Surface Mount
Dimensions:	4.5" X 3.25" X .75"
Product Weight:	8 ounces
Warranty:	One year limited warranty

Important: To insure proper operation be sure to test the unit weekly.

ONE YEAR LIMITED WARRANTY

Winland Electronics, 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 obligation to purchaser. Repair service performed by the manufacture 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 the manufacturer any other liability in connection with any of its products.

Important: To insure proper operation be sure to test the unit weekly.