TA44

SINGLE SET POINT TEMPERATURE ALARM
WITH DIGITAL DISPLAY
AND REMOTE WIRELESS ALARM

MADE IN THE USA ★

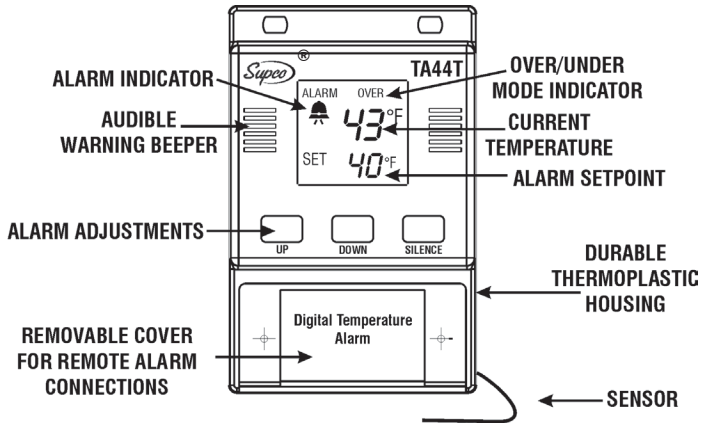CE ®

Sealed Unit Parts Co., inc.

TA44

Single Set Point Temperature Alarm With Digital Display
and Remote Wireless Alarm

Designed specifically for...

• REFRIGERATORS • FREEZERS • ENVIRONMENTAL CHAMBERS
...or any area where temperature change is critical.

The TA44T Temperature Alarm is a single point or threshold type of temperature alarm.
This type of temperature alarm monitors the temperature at the sensor probe tip and when this temperature passes above (or below) the set point, the unit will execute a preset operation.

DISPLAY
The unit's display shows the current temperature, the alarm set point temperature, the alarm state, and the mode of operation of the unit (over temperature or under temperature alarm).

When the probe temperature reaches the set point, the unit will display its state as follows:
- • In delayed alarm state the ALARM icon and the Bell will flash.
- • In the alarm state the ALARM icon and the Bell will remain solid. The Bell clapper will flash. Audible alarm will sound and the N.O. relay contacts will close. The unit will transmit an alarm code to the wireless receiver, causing the remote receiver to activate its audible alarm.
- • If the Silence button is pressed during alarm condition, the audible alarm will turn off and the N.O. relay contacts will open. The Silence button on the TA44T does not turn off the audible alarm on the remote receiver. To turn off the audible alarm on the remote receiver, push the remote receiver's Silence button.

NOTE: This unit also has a concealed slide switch that allows for the alarm to be activated immediately when the temperature has met the alarm threshold, if desired.

1

INSTALLATION AND REMOTE ALARM OPERATION

The TA44T may be mounted to any flat surface, in any position, using the two holes provided at the top of the case or with the supplied adhesive pads. Avoid mounting in areas of excessive humidity or temperatures outside the operating range of the TA44T.

The R10 receiver can be located up to 500 ft (150 m) from the transmitter. This is a line of sight distance. This distance can change if there are obstacles between the transmitter and the receiver. To test that the receiver receives alarm messages from the transmitter, press and hold the Silence button on the transmitter, while not in alarm condition. While the Silence button on the transmitter is held, the receiver should sound the audible alarm. When the Silence button is released, the audible alarm on the receiver should turn off.

When the R10 receiver sounds an alarm, this alarm can be silenced by pressing the silence button on the receiver. When the receiver received the No Alarm signal from the transmitter, the silence state is reset, and the receiver returns to normal operation.

SENSOR EXTENSION

The TA44T sensor probe is designed to measure air temperature and may be mounted in any convenient location in the area to be monitored. The sensor probe may be extended up to 200 feet with any 24AWG stranded wire.

RELAY CONTACTS

The TA44T may be connected to a remote alarm accessory, using the relay contacts provided under the Switch Cover. Connections are provided for Normally Open or Normally Closed Dry Contacts. Dry Contacts mean that no electrical power is supplied to the contacts and power for a remote alarm or other device must be supplied externally. When an alarm occurs the N.O. relay contacts will close and remain closed as long as the alarm condition exists. The relay contacts will open if the user hits the Silence Alarm button.
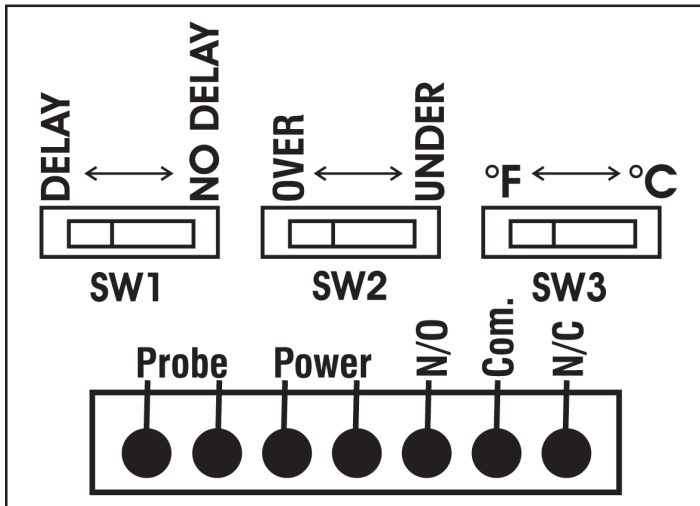
OPERATION

Plug the TA44T into a 120VAC outlet and verify that the display shows the current temperature and the Alarm set point. If the display is not on, the TA44T is not receiving power and is not operating. For continued protection, this requires immediate attention.

Locate the R10 in the desired location. Plug the TA44R into a 120VAC outlet and verify that the power light is ON. Test the remote receiver audible alarm as outlined above in the **INSTALLATION AND REMOTE ALARM OPERATION** section.

Set the temperature alarm threshold to the temperature the TA44T must respond to, using the Up and Down buttons. Typical values will be between 35 to 45 degrees for a refrigerator and 0 to 15 degrees for a freezer. The setting of this adjustment will depend on the type of protection the TA44T is being used for and it is up to the judgment of the user to select an appropriate alarm temperature.
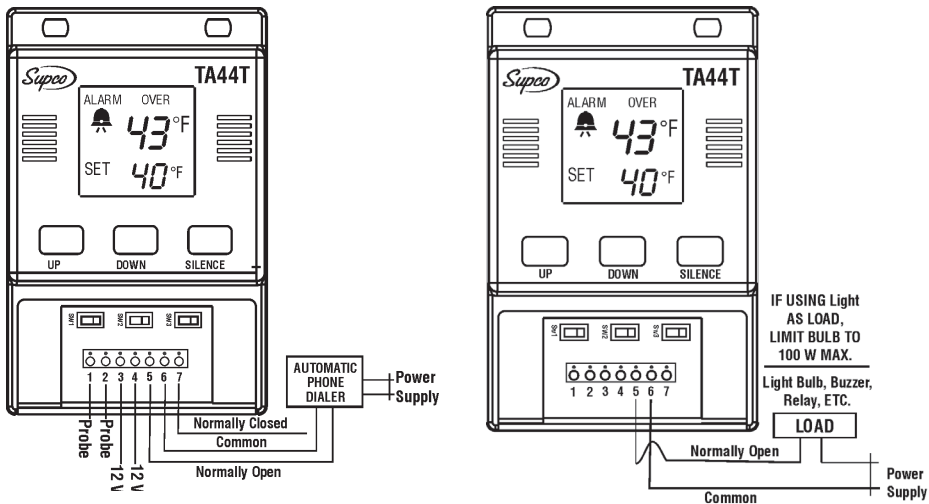
Terminal Board

Locate SW1, the switch on the left hand side. Note the lettering above this switch (DELAY – NO DELAY). Setting this switch to DELAY will cause the TA44T to blink the ALARM and BELL ICONS when the Sensor temperature passes the threshold set by the Front Panel Adjustment. When approximately one hour has passed and the Sensor temperature has remained past the threshold set by the Front Panel Adjustment, the TA44T will sound the audible alarm, close the N.O. relay contacts, and transmit the alarm code to the remote receiver. Should the temperature return to its normal value before this period has elapsed, the one-hour delay will be reset. Setting this switch to NO DELAY will cause the TA44T to sound an immediate alarm, close the N.O. relay contacts, display the ALARM and BELL ICONS (Solid), and send an alarm code to the remote receiver, when the temperature passes the threshold set by the Front Panel Adjustment. Should the temperature return to its normal value, the TA44T will automatically reset, and send a no alarm code to the remote receiver.

Locate the terminal strip below the switches. This is where sensor probe, power supply and remote alarm are connected to the TA44T. The TA44T comes from the factory with the power supply and sensor probe attached. Note the 3 unused terminals on the right. These are the relay contacts for use with external devices, such as remote alarms or automatic dialers. Since each installation has different requirements, it is suggested you consult the instructions supplied with any remote device prior to making any connections to the TA44T. Note the 5 Amp 120VAC rating of the relay contacts. PERMANENT DAMAGE will result if these limits are exceeded.

TYPICAL CONNECTIONS ARE SHOWN IN THE DRAWING

USING MULTIPLE TRANSMITTERS AND RECEIVERS
Every TA44T transmitter and R10 receiver come preconfigured with a standard alarm transmit code. This means that if multiple TA44T units are installed at a location, if any of them generates an alarm, every R10 receiver at the same location will sound an alarm. When more than one TA44T is installed at a location, it may be desirable for one or more transmitters to transmit a unique alarm code, triggering different R10 receivers.

4

To change the alarm transmit code on the TA44T transmitter follow the steps below:
1. Make sure an alarm condition is not present.
2. Press and hold both the UP and DOWN buttons for about 5 seconds, until the unit displays.
3. Let go of the buttons. The unit displays Pr, indicating that a new, random, alarm code has been programmed into the unit.

To restore the unit to the factory default code, follow the steps below.
1. Make sure an alarm condition is not present.
2. Press and hold both the UP and DOWN buttons for about 5 seconds, until the unit displays - - .
3. Continue holding the UP and DOWN buttons for 5 seconds more, until the unit displays dF, indicating that factory default code has been restored.
4. Let go of the buttons.

Once the TA44T transmitter has been programmed with a new code, one or more R10 receivers have to be programmed with this code to receive the alarm message.
To synchronize the R10 receiver code to the TA44T transmitter code follow the steps below.
1. Make sure an alarm condition is not present. If possible, turn off any other TA44T transmitters operating at the location.
2. On the R10 receiver, press and hold the Silence button until the Power and Alarm indicators start to flash.
3. Let go of the Silence button.
4. On the TA44T transmitter press the SILENCE button for about 1 second and then release it. The Power and Alarm indicators on the R10 should stop flashing and the Alarm indicator will turn off.

The R10 receiver is now matched to the transmitter. To test communication, press and hold the SILENCE button on the TA44T transmitter. The R10 should sound an alarm. Release the SILENCE button on the TA44T transmitter. The R10 alarm should go off.   If the test has failed, repeat the synchronization procedure, from step 1.

PART NUMBERS

TA44T	Temperature alarm base unit with wireless transmitter.
R10	Remote alarm wireless receiver.

ACCESSORIES

SW25	25' Extension Wire
SW50	50' Extension Wire
SW75	75' Extension Wire
SW100	100' Extension Wire
ADTA	Phone Dialer

SPECIFICATIONS

Power	12 V Adapter 120 VAC with 6 ft. cable included
Probe	Precision Thermistor with 6 ft. cable (20540)
Alarm Adjustment Range	-40°F to 160°F (-40° to 71°C)
Temperature Accuracy	+/- 2°F (+/- 1°C)
Temperature Units	°F or °C, User Selectable
Remote Connections	Screw type,120VAC, 5 Amps.
Unit Operating Temperature Range	-10°F to +130°F (-23°C to +54°C)
Mounting	Flat Surface, external holes provided
Dimensions	4.9" x 3.1" x 1.5" (12.4cm x 7.9cm x 3.8cm)
Case	Hi Impact Thermoplastic

NOTE:
This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.
The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

TA44 WARRANTY
LIMITED TO ONE YEAR FROM DATE OF PURCHASE
Sealed Unit Parts Co., Inc. warrants its products to be free from defects in materials and workmanship under normal use and service. Sealed Unit Parts Co., Inc. will repair or replace without charge any such products it finds to be so defective on its return to Sealed Unit Parts Co., Inc. The foregoing is in lieu of all other expressed or implied warranties, including those of merchantability or fitness for a particular purpose. The foregoing is also the purchaser's sole remedy and is in lieu of all other guarantees, obligations or liabilities or any consequential or incidental damages attributable to negligence or strict liability.

6

SEALED UNIT PARTS CO., INC.
2230 Landmark Place, Allenwood, NJ 08720 USA
Phone: (732) 223-6644 Fax: (732) 223-1617
www.supco.com • info@supco.com

P/N22147

REV. 03162012