

Thank you for purchasing the Thermalarm from Control Products. The Thermalarm is an easy to use, mechanical temperature alarm that provides both a high and low temperature alarm set-point and accurate temperature indication.

**TAI-3000M (30° to 90°F/-1° to 32°C)**

**TAI-3000ML (-1° to 60°F/-23° to 16°C)**

The Thermalarm features a normally open dry contact that will close upon the temperature exceeding the high or low temperature alarm set-points. This contact acts like a single pull, single throw switch. The alarm contact output can be used to trigger the alarm dialer on our Deluxe FreezeAlarms or to turn on a siren, bell or light if used in conjunction with a 6 or 12 volt power source.



## OPERATION

### *Placement of the Thermalarm:*

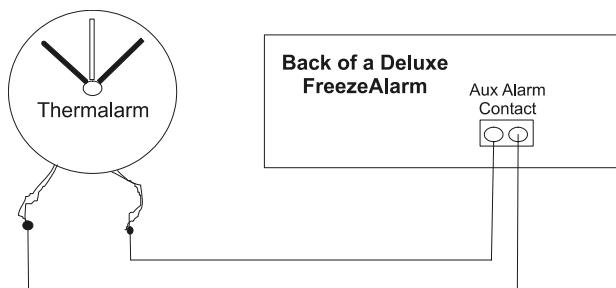
The Thermalarm's temperature sensor is included in the unit, so placement of the Thermalarm should be at the site where you wish to monitor the temperature. Mount the Thermalarm vertically using #6 screws or double stick tape.

### *Setting the Temperature Alarm Set-Points:*

To set the temperature alarm set-points, move the red "set" hands by moving the red knobs at the bottom of the unit to the desired high and low set-point making sure the temperature indicating hand (black) is between the two red set hands. You should have a five to ten degree difference between the normal temperature and your alarm set-points.

### *Connecting Thermalarm to a FreezeAlarm or other Normally Open Dry Contact:*

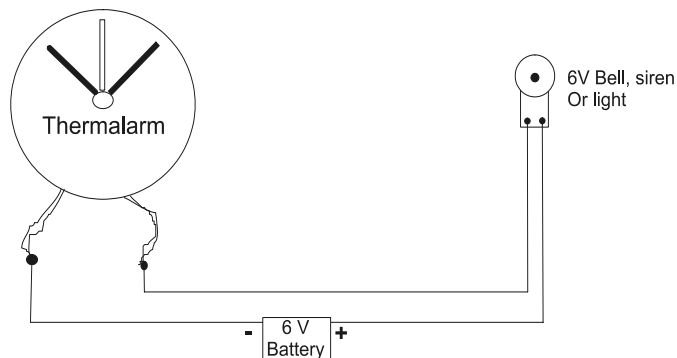
Using the Thermalarm as an auxiliary temperature alarm sensor for your Freeze or HeatAlarm is easy.



Your Thermalarm comes with two pairs of wires coming out of the bottom of the unit. Take one pair and connect that to another single wire that goes to one of the Auxiliary Alarm Contacts on the back of your FreezeAlarm. Repeat for the other pair of wires coming from the Thermalarm.

FreezeAlarm calls you, you will not know if this is a high or low temp alarm nor will you be able to get a temperature read from the Thermalarm via the telephone. You can only get a temperature reading from your FreezeAlarm over the phone.

Make sure you either solder the connections or use wire nuts to ensure the connection is good. You use pairs of wires for both the high and low temperature set-points. Note that when the



### *Using Thermalarm to turn on a light, bell or siren:*

The Thermalarm is designed to operate a 6V to 12V (AC or DC) system at a maximum current of 0.5 amperes. If the current draws more than 0.5 amperes or 10 watts of power, a relay or contactor must be used. **UNDER NO CIRCUMSTANCES SHOULD THIS INSTRUMENT BE CONNECTED TO A 110V CIRCUIT!** See diagram at left.

### ***To Monitor only a Temperature Rise or a Temperature Fall:***

If you wish to monitor only a temperature rise or fall, you will connect only one wire from each pair of wires to your FreezeAlarm, HeatAlarm or to your power source for your bell, siren or light. The wires are not identified as the low or high set-point contacts, so trial and error is required to determine the proper set of wires to connect. If you wish to monitor a freezer that will be normally colder than  $-10^{\circ}\text{F}/-23^{\circ}\text{C}$ , you must only use one wire from each pair of wires. The unit will continue to operate at temperatures below  $-10^{\circ}\text{F}/-23^{\circ}\text{C}$ , but if you hook up both wires from each pair, your unit will always be in a low temp alarm. It is not recommended you place your Thermalarm in areas with temperatures above  $100^{\circ}\text{F}/38^{\circ}\text{C}$ .

### ***Testing your Thermalarm:***

To assure complete reliability, it is essential that your system be checked frequently. This may be accomplished by moving the set hands to the position of the temperature indicating hand. If the alarm system does not trigger the light or FreezeAlarm, check all wiring to make sure that the connections are right and that the battery (if using one) is charged. After testing, return the hands to the desired settings.

## SPECIFICATIONS

<b>Dimensions:</b>	4 1/2" diameter with two sets of 7 1/2" two-pair wire leads.
<b>Temperature Range:</b>	For the TAI-3000M: $30^{\circ}$ to $90^{\circ}\text{F}/-1^{\circ}$ to $32^{\circ}\text{C}$ For the TAI-3000ML: $-10^{\circ}$ to $60^{\circ}\text{F}/-23^{\circ}$ to $16^{\circ}\text{C}$
<b>Accuracy:</b>	$\pm 3^{\circ}\text{F}/\text{C}$
<b>Ambient Temperature Range for Operation:</b>	For the TAI-3000M: $20^{\circ}$ to $100^{\circ}/-7^{\circ}$ to $38^{\circ}\text{C}$ For the TAI-3000ML: $-20^{\circ}$ to $70^{\circ}\text{F}/-34^{\circ}$ to $21^{\circ}\text{C}$
<b>Mounting Options:</b>	Unit is best operated in the vertical position, mounted using #6 screws (not included) or with double stick tape in appropriate conditions.

## LIMITED WARRANTY

**Warrantor:** Dealer, Distributor, Retailer, Manufacturer

**Warranty and Remedy:** One Year Limited Warranty – Control Products, Inc. warrants its products to be free from defects in material and workmanship under normal use for one year, and is not responsible for consequential damages or installation costs of any nature. In the event that the Product does not conform to this Warranty at any time during the period of one year from original purchase date, Warrantor will repair the defect and return it to you at no charge. **IMPORTANT:** The Warranty is limited to replacement of the Product ONLY.

This Warranty shall terminate and be of no further effect at the time the Product is 1) damaged by extraneous causes such as fire, water, lightning, etc., or not maintained as reasonable and necessary; 2) modified; 3) improperly installed; 4) repaired by someone other than the Warrantor; 5) used in a manner or purpose for which the Product was not intended.

WARRANTORS' OBLIGATION UNDER THIS WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT ONLY. THIS WARRANTY DOES NOT COVER PAYMENT OR PROVIDE FOR THE REIMBURSEMENT OF PAYMENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

It must be clear that the Warrantors are not insuring your premises or guaranteeing that there will not be damage to your person or property if you use this Product. The Warrantors shall not be liable under any circumstances for damage to your person or property or some other person or that person's property by reason of the sale or use of this Product, or its failure to operate in the manner in which it is designed. The Warrantors' liability, if any, shall be limited to the original cost of the Product only. Use of this product is at your own risk. If you are not comfortable with our Limited Warranty, or completely satisfied with the Product, we encourage you to return the unused Product for a full refund. Thank you for your understanding.

## CONTACTING US

Technical Support	952-947-9098 (for technical questions on using the product or to resolve a problem)
Customer Service	800-853-8244 (for returning any product or for repair information)
On the Web	<a href="http://www.controlproductsonline.com">www.controlproductsonline.com</a>
Email:	<a href="mailto:customerservice@controlproductsinc.com">customerservice@controlproductsinc.com</a> or <a href="mailto:technicalsupport@controlproductsinc.com">technicalsupport@controlproductsinc.com</a>
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