Temperature Control for Research and Industry

HT-120
Over Temperature Limit Controller
User’s Manual

KEM Scientific, Inc.
Instruments for Science from Scientists
Warranty

J-KEM Scientific, Inc. warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 12 months from date of purchase. If the unit should malfunction, it must be returned to the factory for evaluation. If the unit is found to be defective upon examination by J-KEM, it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive current, heat, moisture, vibration, corrosive materials, or misuse. Components which wear or are damaged by misuse are not warranted. This includes contact points, fuses and solid state relays.

THERE ARE NO WARRANTIES EXCEPT AS STATED HEREIN. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL J-KEM SCIENTIFIC, INC. BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES. THE BUYER'S SOLE REMEDY FOR ANY BREACH OF THIS AGREEMENT BY J-KEM SCIENTIFIC, INC. OR ANY BREACH OF ANY WARRANTY BY J-KEM SCIENTIFIC, INC. SHALL NOT EXCEED THE PURCHASE PRICE PAID BY THE PURCHASER TO J-KEM SCIENTIFIC, INC. FOR THE UNIT OR UNITS OF EQUIPMENT DIRECTLY AFFECTED BY SUCH BREACH.

Service

J-KEM Scientific maintains its own service facility and technical staff to service all parts of the controller, usually in 24 hours. For service, contact:

J-KEM Scientific, Inc.
6970 Olive Boulevard
St. Louis, MO 63130
(314) 863-5536
FAX (314) 863-6070
Web site: http://www.jkem.com
E-Mail: jkem911@jkem.com

When calling with a technical question, please have the controller’s serial number available.
Over Temperature Limit Controller Operating Instructions

J-KEM’s Over Temperature Monitor is an ON/OFF style temperature controller which is useful for its simplicity of operation. That means the controller is ON when below the entered temperature and OFF when above it. The controller also has a Latching feature which requires that the power switch be turned off for three seconds and back on again to reset. The controller will turn OFF permanently the first time the reaction reaches the entered temperature and the alarm will sound.

This controller can also be programmed as an Under Temperature Limit Controller or as a Band Alarm Controller (monitors both high and low temperature limits). Contact J-KEM for assistance.

Instrument Setup

1) Plug the power cord from the piece of equipment that’s being monitored into the 120Vac power receptacle on the back of the HT-120.

2) Attach a thermocouple to the thermocouple receptacle on the back of the HT-120, then place the temperature measuring end of the thermocouple into the instrument or solution to monitor.

3) Enter the over temperature limit into the digital meter as outlined below.

![Diagram](image)

To enter a set point (i.e., the desired temperature). Hold in the * button and simultaneously press the UP key to increase or the DOWN key to decrease the set point. The set point can be seen at anytime by holding in the * key. The set point appears as a blinking number in the display.

4) Apply power to the instrument being monitored.

5) The digital meter continuously displays the sensed temperature. If the sensed temperature from the monitored instrument reaches the over temperature programmed into the meter, power is disconnected from the monitored instrument until the controller is reset by turning power off for three seconds.

Specifications:

- 120 VAC; 60 Hz
- 15 amps; 1800 watts