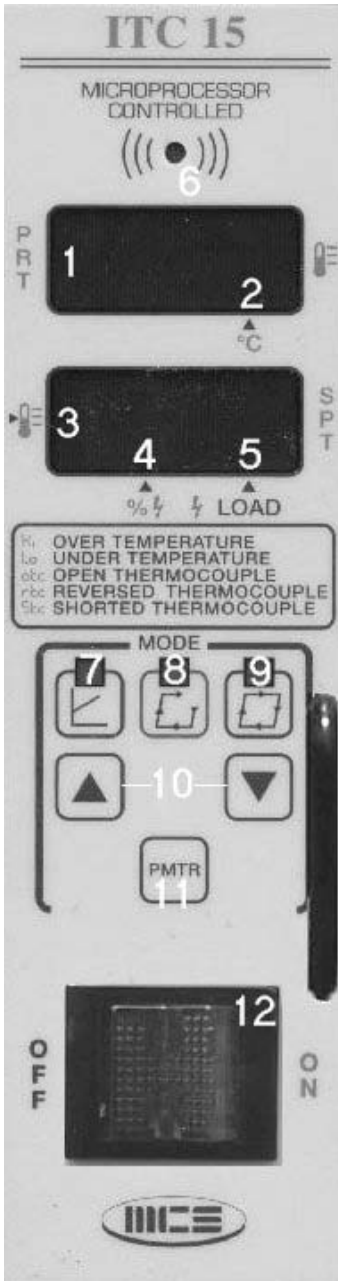


ITC-15

Temperature controller Operator's Guide



BASIC OPERATION

1. Turn power Switch on.
2. The normal operating modes are Ramp Start and Closed loop which are automatically selected on power up. Select Manual mode if needed, once selected the controller will power up in Manual mode until Ramp Start or Closed loop is selected.
3. Select setpoint temperature (or % power in manual mode) by using the up / down keys.
4. After making any changes to modes or the setpoint wait for 'str' to appear on the display. This indicates that the changes have been put into the non-volatile memory. The module will now remember these settings each time it is powered up.

CONTROLS AND DISPLAYS

1. Upper digital display
2. Decimal point
3. Lower digital display
4. Decimal point
5. Decimal point
6. Audible alarm
7. Ramp Start switch
8. Open loop switch
9. Closed loop switch
10. Up / Down keys
11. Parameter keys
12. Power switch

Displays: • Process temperature
• Error Conditions

Indicating unit is displaying temperature in °C

Displays the present setpoint

Indicates that the display is showing percent power (Manual mode)

Power to heater indicator

Use parameter #2 to turn ON or OFF

Press to enter Ramp Start mode. LED lights to indicate that the unit is in Ramp Start mode. When the controller detects that the heater temperature is below 212° F or 100° C, it automatically initializes Ramp Start mode at cold start up. The unit will enter Automatic mode after Ramp Start expires. (5 min.)

Press to enter Manual mode. LED lights when the unit is in Manual mode. For 100% power to the heater press and hold the open loop switch.

Press to enter Automatic mode. LED lights when unit is in Automatic mode. For 100% power to the heater press and hold the closed loop switch.

Used to change the following:

- Setpoint (Automatic mode / Ramp Start mode)
- Percentage of power applied to the heater (Manual mode)
- To change the values in the parameters mode.

Used to select parameters* (see reverse side)

Controls power to the module. **MUST BE SET TO OFF BEFORE INSERTING OR REMOVING MODULE.**

ITC-15 PARAMETER CHART

(Default value in parenthesis)

PO1	TEMPERATURE DISPLAY MODE	°C OF (°F)
PO2	AUDIBLE ALARM	(ON) OR OFF
PO3	OUTPUT TYPE	(F2y) – FUZZY, Pid – PID TYPE A
PO4	TOH TIME	0 – 255 SECONDS (120)
PO5	TSH TIME	0 – 99 SECONDS (15)
PO6	KEYPAD LOCKOUT	LOC – locked / (uLC) unlocked

KEYPAD LOCKOUT

Keypad lockout, when set to LOC will not allow changes in setpoint or operating modes. (See parameter #6 in the parameter chart.)

HOW TO CHANGE PARAMETERS (PROGRAMMING MODE)

To select and change a parameter.

1. Press the parameter key until the upper display shows the parameter that you want to change. (PO1 – PO6)
2. Use the up and down keys to change the parameter settings. (lower display)
3. Repeat steps 1 & 2 as needed.
4. To store the new settings, continue pressing the parameter key until you are out of the programming mode and 'str' has appeared on the upper display.

ERROR CODES

(Flashes on the display when an error is detected)

otc	Indicates Open thermocouple
rtc	Indicates Reversed thermocouple
stc	Indicates Shorted thermocouple
HI	Indicates Over temperature
LO	Indicates Under temperature
tSH	Triac Shorted. When the module detects an uncontrolled rise in temperature for longer than the time selected in the PO5 parameter it will indicate a 'tSH' error and the controller will shut off power to the heater.
toH	Open heater or open triac. When the unit detects an under temperature condition for longer than the time selected in the PO4 parameter, the unit will indicate a 'toH' error.

J2 JUMPER SELECTION

Note: The purpose of the J2 jumper is to prevent damage to the connector when the controller is accidentally inserted into a mainframe with the power switch in the ON position. This feature will not work in old MCS Or non-MCS mainframes. The controller will not supply power to the heater and will display a 'toH' error if the wrong jumper position is selected.

Settings

J2			
<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 10px; height: 15px;"> </td> <td style="width: 10px; height: 15px;"> </td> </tr> </table>			1 1&2 non-MCS or old MCS mainframes
	2		
	3 2&3 MCS mainframes		

J2 is located next to the connection fingers of the controller exposed for the user.