Step 10. Enter to the Thermocouple Input Submenu
Press \( \text{PR} \) to store Thermocouple input. The display will stop flashing and show the top menu for Thermocouple types. If you press \( \text{PR} \) controller will step to next menu item (Skip to Step 14).

Step 11. Enter to the Thermocouple Type Input Submenu
Press \( \text{PR} \) to display Thermocouple types, (select \( \text{k} \) for type “K” CHROMEGA®)

Step 12. Scroll through available selection of TC types
Press \( \text{PR} \) to sequence thru flashing Thermocouple types, (select \( \text{k} \) for type “K” CHROMEGA®)

Step 13. Select the Deviation Control Type Submenu
Press \( \text{PR} \) to display flashing Deviation, or press \( \text{PR} \) until flashing \( \text{FLS} \) is displayed, otherwise press \( \text{PR} \) until flashing \( \text{VTU} \) is displayed. Press \( \text{PR} \) to store and advance to next menu item.

Step 14. Enter to Reading Configuration Menu
The display shows \( \text{RDG} \) Reading Configuration, which is the top menu for 4 submenus, Decimal Point, Degree Units, Filter Constant and Input/Reading Submenus.

Step 15. Enter to Decimal Point Submenu
Press \( \text{PR} \) again to display the flashing Decimal Point position.

Step 16. Display the Decimal Point position
Press \( \text{PR} \) to select \( \text{DP} \) Decimal Point.

Step 17. Select the Decimal Point position
Press \( \text{PR} \) to select \( \text{DP} \) Decimal Point position.

Step 18. Store selected Decimal Point position
By pressing \( \text{PR} \) momentarily the Decimal Point position will be stored and the instrument will go to the next menu item.

Step 19. Enter to Temperature Unit Submenu
Display shows \( \text{TU} \) Temperature Unit.

Step 20. Display available Temperature Units
Press \( \text{PR} \) to display the flashing Degree Unit.

Step 21. Scroll through Temperature Units selection
Press \( \text{PR} \) to select \( \text{T} \) Degree.

Step 22. Store the Temperature Unit
Press \( \text{PR} \) to display momentarily that the Degree Unit has been stored and the instrument will go automatically to the next menu item.

Step 23. Enter the Filter Constant Submenu
Display shows \( \text{FLR} \) Filter Constant Submenu.

Step 24. Display the Filter Constant Value Submenu
Press \( \text{PR} \) to display the flashing, previously selected Filter Constant.

Step 25. Scroll through available Filter Constants
Press \( \text{PR} \) to sequence thru Filter Constants 0001, 0002, 0003, 0004, 0005, 0006, 0007, 0008.

Step 26. Store the Filter Constant
Press \( \text{PR} \) to store Filter Constant and the instrument will automatically go to the next menu item.

Step 27. Enter Alarm 1 Menu
The display will show \( \text{ALR1} \) the top menu for Alarm 1. In the following steps we are going to enable Alarm 1, Deviation, Unlatch, Normally Open, Active Above, Enable at power on and +2°F High Alarm i.e. Process Value > Setpoint 1 Value +2°F will activate Alarm 1.

Step 28. Enter Alarm 1 Enable/Disable Submenu
Press \( \text{PR} \) to display flashing \( \text{ENBL} \) / \( \text{UNLT} \).

Step 29. Enable Alarm 1 Submenu
If Press \( \text{PR} \) if \( \text{ENBL} \) is displayed, press \( \text{PR} \) until \( \text{ENBL} \) is displayed, then press \( \text{PR} \) and store to and go to the next menu item.

Step 30. Select the Deviation Control Type Submenu
Press \( \text{PR} \) to display flashing Deviation, or press \( \text{PR} \) until flashing \( \text{VTU} \) is displayed. Now, press \( \text{PR} \) to store and go to next menu item.

Step 31. Select the Latched Type Submenu
Press \( \text{PR} \) if flashing \( \text{LATCH} \) is displayed press \( \text{PR} \), otherwise press \( \text{PR} \) until flashing \( \text{LATCH} \) is displayed. Press \( \text{PR} \) to store and advance to next menu item.

Step 32. Select the Normally Open Type of Contact Submenu
Press \( \text{PR} \). If flashing \( \text{UND} \) is displayed, press \( \text{PR} \), otherwise press \( \text{PR} \) until flashing \( \text{UND} \) is displayed. Press \( \text{PR} \) to store and advance to next menu item.

Step 33. Select the Above Type of Active Submenu
Press \( \text{PR} \). If flashing \( \text{ABOv} \) above is displayed, press \( \text{PR} \), otherwise press \( \text{PR} \) until flashing \( \text{ABOv} \) is displayed. Press \( \text{PR} \) to store and advance to next menu item.

Step 34. Enable Alarm 1 at Power On
If \( \text{PR} \) is pressed, the display will show flashing \( \text{ALR1} \). Press \( \text{PR} \) to store \( \text{ALR1} \) Low value, \( \text{ALR2} \) is for below \( \text{ALR1} \) for above.

Step 35. Enter Alarm 1 High Submenu
Press \( \text{PR} \) twice to skip \( \text{ALR1} \) Alarm 1 Low value. \( \text{ALR2} \) is for \( \text{ALR1} \) above.

Step 36. Set the Alarm 1 High value
Press \( \text{PR} \) Press \( \text{PR} \) or \( \text{PR} \) until value to set display to \( \text{ALR1} \). Press \( \text{PR} \) to save.

Step 37. Enter the Alarm 2 Menu
The display will show \( \text{ALR2} \) the top menu for Alarm 2. Repeat steps from 28 to 36 to set for Alarm 2 the same conditions as for Alarm 1.

Step 38. Configuration of Display Color Selection
Press \( \text{PR} \) until the \( \text{DSPL} \) Display Color Selection menu appears on the Display Color (\( \text{RED} \) / \( \text{GRN} \) / \( \text{BLU} \) / \( \text{AMR} \) / \( \text{NBR} \)). Please refer to the operator’s manual if needed.

Step 39. Run a Test
Press \( \text{PR} \) until reset the controller and return to RUN mode to display \( \text{ALR1} \) Ambient Temperature). Now you are ready to observe temperature as it rises 10°F higher than displayed. Touch the tip of the Thermocouple to raise the temperature above the Alarm 2 High value, \( \text{ALR2} \) will turn on, and Display Color will change from Green to Amber. Continue touching the tip to raise the temperature above the Alarm 1 High value \( \text{ALR1} \) and Display Color will change from Amber to Red.
This Quick Start Reference provides information on setting up your instrument for basic operation. The latest complete Communication and Operational Manual as well as free Software and ActiveX Controls are available at www.omega.com/specs/iseries or on the CD-ROM enclosed with your shipment.

SAFETY CONSIDERATION

This device is marked with the international Caution symbol.

The instrument is a panel mount device protected in accordance with EN 61010-1:2001, electrical safety requirements for electrical equipment for measurement, control and laboratory. Remember that the unit has no power-on switch. Building installation should include a switch or circuit-breaker that must be complaint to IEC 947-1 and 947-3.

SAFETY:

- Do not exceed voltage rating on the label located on the top of the instrument housing.
- Always disconnect power before changing signal and power connections.
- Do not use this instrument on a work bench without its case for safety reasons.
- Do not operate this instrument in flammable or explosive atmosphere.
- Do not expose this instrument to rain or moisture.

EMC:

- Whenever EMC is an issue, always use shielded cables.
- Never run signal and power wires in the same conduit.
- Use signal wire connections with twisted-pair cables.
- Install Ferrite Bead(s) on signal wire close to the instrument if EMC problems persist.

Disassembly Instruction:

If necessary, the unit may be removed from the panel and operated.

**Warning:** Disconnect all ac power from the unit before proceeding.

1. Make sure the AC power is disconnected.
2. Remove all wiring connections from the rear of the meter.
3. To remove power and input connectors bend the side panel detents on the case outward to release the connectors, then pull connectors from the meter.
4. To remove meter from the case, squeeze left and right sides of the bezel to release, then pull from case.

WIRING

Wire the instrument according to the figure shown below.

**Warning:** Do not connect ac power to your device until you have completed all input and output connections. This device must only be installed by a specially trained electrician with corresponding qualifications. Failure to follow all instructions and warnings may result in injury!

Panel Mounting Instruction:

1. Using the dimensions from the panel cutout diagram shown above, cut an opening in the panel.
2. Insert the unit into the opening from the front of the panel, so the gasket seals between the bezel and the front of the panel.
3. Slide the retainer over the rear of the case and tighten against the backside of the mounting panel.

### CONFIGURATION

**MENU Mode:**

- Flashing display in MENU Mode means you can make your selection by pressing button. If the flashing display is not a four digit value, pressing button will always direct the instrument one step backward of the top menu item.
- The first push on the button will reset the instrument except after the setpoint and the alarms, that will go to the RUN Mode without resetting the instrument. The button will always sequence the instrument thru the menu items.

The button has two functions:

1. To save a selected flashing display.
2. To direct the instrument to the next submenu level.

**RUN Mode:**

- causes the display to flash the PEAK with the corresponding value.
- Press again to go back to RUN Mode.
- causes the display to flash VALLEY with the corresponding value.
- Press again to go back to RUN Mode.
- causes flashing PEAK or VALLEY to reset corresponding values.

**FLOW CHART**

- Connect the main power connections as shown in the figure below.

- Output 1 and 2 are for -AL Limit Alarm Option only.

### SAFETY:

- Always disconnect power before changing signal and power connections.
- Do not connect ac power to your device until you have completed all input and output connections. This device must only be installed by a specially trained electrician with corresponding qualifications. Failure to follow all instructions and warnings may result in injury!

### EMC:

- Whenever EMC is an issue, always use shielded cables.
- Never run signal and power wires in the same conduit.
- Use signal wire connections with twisted-pair cables.
- Install Ferrite Bead(s) on signal wire close to the instrument if EMC problems persist.

### PANEL MOUNTING INSTRUCTIONS:

1. Using the dimensions from the panel cutout diagram shown above, cut an opening in the panel.
2. Insert the unit into the opening from the front of the panel, so the gasket seals between the bezel and the front of the panel.
3. Slide the retainer over the rear of the case and tighten against the backside of the mounting panel.

FUSE Connector | Output Type | For 115Vac | For 230Vac | DC
---|---|---|---|---
FUSE 1 | Fuse 1 | Relay | 3 A(T) | 3 A(T)
FUSE 2 | Output 2 | Relay | 3 A(T) | 3 A(T)
FUSE 3 | Power | N/A | 100 mA(T) | 100 mA(T)
FUSE 4 | Power | N/A | 600 mA(T) | 600 mA(T)

Output 1 and 2 are for -AL Limit Alarm Option only.

### TABLE:

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<th>REFERENCE</th>
<th>ID FULL</th>
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<td>T.ç</td>
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</tbody>
</table>

### OUTPUT:

- Press button to enter Configuration Menu.
- Press button to display Input: Process, RTD or Thermocouple.
- If flashing button is displayed press button and proceed to Step 11.

### OPERATION:

- **Step 1:** Apply Power to the Instrument
  - When your device is first powered up it will display the ambient temperature (assume 72°F).
- **Step 2:** Enter Setpoint 1 Menu
  - Press button until desired value is displayed.
- **Step 3:** Change the Setpoint 1 Value
  - Set the Setpoint 1 to 10 degree higher than Process value (SP1 = 85) and press button to store, display flashes message and advances to Configuration Menu.
- **Step 4:** Enter the Input Type Menu
  - Press button and proceed to Step 11.
- **Step 5:** Enter to the submenu items of Input Menu
  - Press button to display Input: Process, RTD or Thermocouple.
- **Step 6:** Enter the Input Type Menu
  - Press button and proceed to Step 11.
- **Step 7:** Scroll through available selection of Input Menu
  - Press button until a flashing message is displayed.