Step 28. Select Latch Type Submenu
Press to display flashing ( ). If flashing is displayed, press, if is displayed, press until is displayed, then press to store and go to the next menu item.

Step 29. Select the Above Type of Active Submenu
Press. If flashing is Above is displayed, press, otherwise press until is pressed. Press to store and advance to next menu item.

Step 30. Select the Deadband Value Submenu
Press. The display will show, otherwise press or. Press to store and advance to next menu item.

Step 31. Enter the Alarm 2 Menu
The display will show ( ). Repeat steps from 29 and 30 set for Alarm 2 the same conditions as for Alarm 1.

Step 32. Configuration of Display Color Selection
Press until the ( ) Display Color Selection Menu appears on the Display. Choose , or . Please refer to the operator’s manual if needed.

Step 33. Run a Test
Press until press the controller and return to RUN Mode to display (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 value , and AL2 will press to select . Continue touching the tip to raise the temperature above the Alarm 1 value , and Display Color will change from Green to Red.

Step 34. Enter to Reading Configuration Menu
After you have selected the Thermocouple type press to show the top menu for Thermocouple types. If you press , if until is displayed, press and . Press until the selected Thermocouple type. Accuracy: 0.5°C temp; +0.04°C/°C RTD; 0.05°C/°C TC @ 25°C (77°F); 50 ppm/°C process

Display: 4-digit, 6-segment LED, 10.2 mm (0.4”) with green and amber programmable colors
Input Types:
Thermocouple, RTD, Analog Voltage and Current

Step 35. Enter to Decimal Point Submenu
Press to display flashing ( ).

Step 36. Display the Degree position
Press again to display the flashing Degree position.

Step 37. Select the Degree position
Press to select the Degree Degree position.

Step 38. Store selected Decimal position
By pressing momentarily the Decimal position will be stored and the instrument will go to the next menu item.

Step 39. Enter to Temperature Unit Submenu
Display shows ” ( ).

Step 40. Display available Temperature Units
Press to display the flashing Degree or .

Step 41. Scroll through Temperature Units selection
Press to select Degree.

Step 42. Store the Temperature Unit
Press to display momentarily that the Degree Unit has been stored and the instrument will go automatically to the next menu item.

Step 43. Enter to Filter Constant Submenu
Display shows flashing ( ).

Step 44. Display the Filter Constant Value Submenu
Press to display the flashing, previously selected Filter Constant.

Step 45. Scroll through available Filter Constants
Press to sequence thru Filter Constants: , , , , and .

Step 46. Store the Filter Constant
Press momentarily to sequence thru Filter Constant and the instrument will automatically go to the next menu item.

Step 47. Enter Alarm 1 Menu
Press until the ( ) Alarm 1 Menu appears on the Display. In the following steps we are going to Disable Latch, Active Above, Deadband 0.02, and above Setpoint 1 Value will activate Alarm 1.
**Disassembly instruction:**

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

**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. To remove power and input connectors squeeze top and bottom of the case near the connector site for release. Then pull connectors from the meter.
3. To remove meter from the case, squeeze top and bottom 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 be only installed by a specially trained electrician with corresponding qualifications. Failure to follow all instructions and warnings may result in injury!

**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 from the top menu item. The second 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. Press one more time to go back to RUN Mode.

**FLOW CHART**

**OPERATION** (For Thermocouple Input)

Step 1. Apply Power to the Instrument

When your device is first powered up it will display the ambient temperature (assume 75°F).

Step 2. Enter Setpoint 1 Menu

Press one time from run mode to get to Setpoint 1 Menu.

Step 3. Enter the Setpoint 1 Value Submenu

Press. Display shows the previous selection of Setpoint 1.

Step 4. Change the Setpoint 1 Value

- Press . Display shows the previous selection of Setpoint 1.
- Press again to go back to RUN Mode.
- Press again to go back to RUN Mode.
- Press until desired value is displayed.

Step 5. Store the Setpoint 1 Value

Press. Set the Setpoint 1 to 10 degree higher than Process value (SP1 = 85) and press to store, display flashes message and advances to Setpoint 2 Menu.

Step 6. Store the Setpoint 2 value

Repeat steps 3 and 4. Set the Setpoint 2 to 5 degree higher than Process value (SP2 = 80) and press to store, display flashes message and advances to Configuration Menu.

Step 7. Enter the Input Type Menu

Press to enter Input Type Menu.

Step 8. Enter to the submenu items of Input Menu

Press to display Input, Process, RTD or Thermocouple. If flashing is displayed press and proceed to step 11.

Step 9. Scroll through available selection of Input Menu

Press until a flashing is for Thermocouple is displayed.

---

**SAFETY CONSIDERATION**

This device is marked with the international Caution symbol.

**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 reason.
- Do not operate this instrument in flammable or explosive atmospheres.
- 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.

**MOUNTING**

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.

---

This Quick Start Reference provides instructions 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.newporus.com or on the CD-ROM enclosed with your shipment.