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

Step 11. Enter to the Thermocouple Type Input Submenu
Press a to display flashing, previously selected Thermocouple type.

Step 12. Scroll through available selection of TC types
Press a to sequence thru flashing thermocouple types, (select k-, for type “K” OMEGA®/ALPHA®)

Step 13. Store TC type
After you have selected the Thermocouple type press a to store your selection, the instrument automatically advances to the next menu item.

Step 14. Enter to Reading Configuration Menu
The display shows 
Configure 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 d to show 
Decimal Point.

Step 16. Display the Decimal Point position
Press a again to display the flashing Decimal Point position.

Step 17. Select the Decimal point position
Press a to select 
Decimal Point position.

Step 18. Store selected Decimal point position
By pressing a 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 
Temperature Unit.

Step 20. Display available Temperature Units
Press a to display the flashing Degree or °C.

Step 21. Scroll through Temperature Units selection
Press a to select 
Degree.

Step 22. Store the Temperature Unit
Press a 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 
Filter Constant.

Step 24. Display the Filter Constant value Submenu
Press a to display the flashing, previously selected Filter Constant.

Step 25. Scroll through available Filter Constants
Press a momentarily to store Filter Constant and the instrument will automatically go to the next menu item.

Step 26. Store the Filter Constant
Press a momentarily 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 
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 a to display flashing ON or OFF.

Step 29. Enable Alarm 1 Submenu
If Press a if OFF is displayed, press a until ON is displayed, then press a to store and go to the next menu item.

Step 30. Select the Deviation Control Type Submenu
Press a to display flashing, previously press a or press b to select flashing as shown. Now press a to store and go to next menu item.

Step 31. Select the Latched Type Submenu
Press a. If flashing UNLATCH is displayed press a, otherwise press a until DISPLAY is displayed. Press a to store and advance to next menu item.

Step 32. Select the Normally Open Type of Contact Closure Submenu
Press a. If flashing LNO Normally Open is displayed, press a or press b until UNLATCH is displayed. Press a to store and advance to next menu item.

Step 33. Select the Above Type of Active Submenu
Press a. If flashing ABOVE is displayed, press a, otherwise press a until DISPLAY is displayed. Press a to store and advance to next menu item.

Step 34. Enable Alarm 1 at Power On 
Press a. If flashing ON is displayed, press a or press b until OFF is displayed. Press a to store and advance to next menu item.

Step 35. Enter Alarm 1 High Submenu
Press a twice to skip 
Alarm 1 Low value. Press a for below & display for above.

Step 36. Set the Alarm 1 High value
Press a. Press a or press b until the set point to display is displayed. Press a to save.

Step 37. Enter the Alarm 2 Menu
The display will show 
For below & above the alarm high value.

Step 38. Configuration of Display Color Selection Submenu
Press a until the Display Color Selection menu appears on the Display. Colour 
Setting (green), WHITE (red), BLACK (blue) or 
AMBER (amber). Please refer to the operator’s manual if needed.

Step 39. Run a Test
Press a until reset the controller and return to 
MODE to display 
(MODE). Temperature (Ambient) today you are ready to test, as it rises 10°F higher than displayed.

Step 40. Test Run a Test
Press a to sequence thru Filter Constants 
MODE. Touch the tip of the Thermocouple to raise the temperature above the Alarm 2 High value 
, and 
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 and 
Display Color will change from Amber to Red. Annunciator “1” is turning on and off displaying output 1.

SPECIFICATION
Accuracy
0.5% rd. @ 10°C TC
0.3% rd. @ 25°C TC
0.1% rd. @ 50°C TC
Temperature Stability
±1°C @ 25°C (77°F)
±0.5°C process
Display
4-digit, 7-segment LED, 10 µm microprocessor
Input Types:
Thermocouple, RTD, Analog Voltage and Current
RTD (Ω):
100/500/1000 ohm 4 wire 4-wire @ 25°C (77°F)
10 µV/Ω process curve
Voltage: 0 to 100 mV, 0 to 1 V, 0 to 10 V
Current: 0 to 20 mA (4 to 20 mA)
Display Color Selection Menu
Press a to select Display Color.

WARNING: These products are not designed for use in, and should not be used in, patient-monitoring or life support systems. Use of these products in such systems is entirely at the risk of the user. OMEGA cannot accept any liability whatsoever for any damage, loss or injury resulting from the use of such equipment. OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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**SAFETY CONSIDERATION**

*This device is marked with the international Caution symbol.*

The instrument is a panel mount device protected in accordance with EN61010-1:2001. Remember that the unit has no power-on switch. Building installation should include a switch or circuit-breaker that must be compliant to IEC 947-1 and 947-3.

**SAFETY:**
1. Do not exceed voltage rating on the label located on the top of the instrument housing.
2. Always disconnect power before changing signal and power connected cables.
3. Do not use this instrument on a work bench without its case for safety reason.
4. 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 or cable.
- Use signal wire connections with twisted-pair cables.
- Install Ferrite Bead(s) on signal wire close to the instrument if EMC problems persist.

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**FLOW CHART**

1. **Panel Mounting Instruction:**
   - Using the dimensions from the panel cutout diagram shown above, cut an opening in the panel.
   - 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.
   - Slide the retainer over the rear of the case and tighten against the backside of the mounting panel.

2. **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.
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 only be installed by a specially trained electrician with corresponding qualifications. Failure to follow all instructions and warnings may result in injury!

**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).

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

**STEP 2. Enter Setpoint 1 Menu**

Press the SET button from run mode to get to SP1 Configuration Menu.

**Step 3. Enter the Setpoint 1 Value Submenu**

Press the SET button until desired value is displayed. To save a selected flashing display press T button.

**Step 4. Change the Setpoint 1 Value**

Press the SET button one more time to go back to RUN Mode.

**Step 5. Store the Setpoint 1 Value**

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

**Step 9. Scroll through available selection of Input Menu**

Press to enter Input Type Menu.