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

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

Step 18. Store selected Decimal Point position
By pressing  momentarily, the selected Decimal position will be stored and the instrument will go to the next menu item.

Step 19. Enter to Temperature Unit Submenu
Display shows .

Step 20. Display available Temperature Units
Press  to display the flashing Degree B or .

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

Step 22. 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 23. Enter the Filter Constant Submenu
Display shows .

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

Step 25. Scroll through available Filter Constants
Press  to sequence thru Filter Constants D 001, D 005, D 006, D 010, D 012, D 016 and D 018.

Step 26. Store the Filter Constant
Press  momentarily to store . The instrument will automatically go to the next menu item.

Step 27. Enter Alarm 1 Menu
The display will show .

Step 28. Enter Alarm 1 Enable/Disable Submenu
Press  to display flashing 1 001.

Step 29. Enable Alarm 1 Submenu
If flashing 1 001 is displayed, press . If 1 001 is displayed, press  until 1 001 is displayed, then press  to store and go to the next menu item.

Step 30. Select the Deviation Control Type Submenu
Press  if flashing 1 ALR H is displayed, press , otherwise press  until 1 ALR H is displayed. Press  to store and advance to next menu item.

Step 31. Select the Latched Type Submenu
Press  if flashing 1 UNLT is displayed, press , otherwise press  until 1 UNLT is displayed. Press  to store and advance to next menu item.

Step 32. Select the Normally Open Type of Contact Closure Submenu
Press  if flashing 1 UNLT Normally Open is displayed, press , otherwise press  until 1 UNLT is displayed. Press  to store and advance to next menu item.

Step 33. Select the Above Type of Active Submenu
Press  if flashing 2 ABV Above is displayed, press , otherwise press  until 2 ABV Above is displayed. Press  to store and advance to next menu item.

Step 34. Enable Alarm 1 at Power On (1 001)
Press  if flashing 1 001 is displayed, press , otherwise press  until 1 001 is displayed. Press  to store and advance to next menu item.

Step 35. Enter Alarm 1 High Submenu
Press  twice to skip 1 ALR H Low value. Press  for below and  for above.

Step 36. Set the Alarm 1 High value (1 001)
Press  , Press  or  until value to set the display to 1 ALR H.

Step 37. Enter the Alarm 2 Menu
The display will show 2 ALR H 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  until the CHAR Display Color Menu appears on the Display. Configure 1 CHAR 2 CHAR 1 CHAR (green), 1 CHAR 2 CHAR 1 CHAR (red), 1 CHAR 2 CHAR 1 CHAR (amber). Please refer to the operator’s manual if needed.

For color change on Setpoints refer to Owners Manual Section 2.

Step 39. Run a Test
Press  until reset the controller and return to RUN Mode to display 1 ALR H (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 1 High value 1 001, and 1 ALR H 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 1 001 and Display Color will change from Amber to Red.

SPECIFICATION

Accuracy:
±0.5% of range + 0.5 °F ± 0.3 °C
Resolution:
0.1°F or 0.01°C
Temperature Sensitivity:
0.0°F/°C (RTD) 0.5°F/°C (0°C - 25°C) 50 µ°F/°C (32°F - 200°F)
Display:
-4 digit, 2 segment LED, 1.10 in (28 mm) (red with green, amber and programmable colors)
Thermocouple, RTD, Analog Voltage and Current

Input Types:
Thermocouple: K, J, T, E, R, S, B, N, L
RTD: (T 08) 100 Ω ± 0.02% of full range

Output Options:
0-10 VDC 4-20 mA 10:1 current/0:100 Style: 2-, 3-, or 4-wire; 0.00385 or 0.00392 curve

Weight:
2.4 lbs (1.1 kg)

Dimensions:
18.11” x 8.31” x 3.76” (101.6mm x 209mm x 95.3mm)

Power Consumption:
100/240 Vac ±10%, 50/60 Hz, 22.5 W

Options: Communication
-4/20 mA 0-10 VDC RS-232 RS-485

Options: Temperature Sensitivity
-0.05°C/°C TC @ 25°C (77°F); 50 ppm/°C process

Options: Resolution
-1°F/0.1°F; 10 µV process

Universal Temperature

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FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:
1. Purchase Order number under which the product was purchased
2. Serial number of the product
3. Repair instructions and/or specific problems relative to the product

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1. Purchase Order number to cover the cost of the repair or calibration
2. Model and serial number of the product
3. Repair instructions and/or specific problems relative to the product

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If the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA’s WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA’s control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and traces.

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2. Model and serial number of the product
3. Repair instructions and/or specific problems relative to the product

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e-mail: info@omega.com
**SAFETY CONSIDERATION**

- Do not exceed voltage rating on the label located on the back of the instrument housing.
- Always disconnect power before changing signal and power connections.
- Do not use this instrument in flammable or explosive atmospheres.
- 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 for EMC problems persist.

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**Mounting Big Display Through 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 to the next menu one step backward of 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 return to previous menu item.
  2. To direct the instrument to the next menu item.

- The display shows the previous selection of Setpoint 1.

- For Thermocouple Input

**Step 1.** Apply Power to the Instrument

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

**Step 2.** Enter Setpoint 1 Menu

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

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

- Press. Display shows the previous selection of Setpoint 1.

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

- 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 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 to store, display flashes message and advances to Configuration Menu.

**Step 6.** Enter 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.

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

- Press to show Input Type Menu.

**Step 10.** Enter to the Thermocouple Input Submenu

- Press to store Thermocouple Input. The display will stop flashing and show the top menu for Thermocouple types. If you press controller will step to next menu item (Skip to Step 14).

**Step 11.** Enter to the Thermocouple Type Input Submenu

- Press to display flashing, previously selected Thermocouple type.

**Step 12. Scroll through available selection of TC types

- Press to sequence thru flashing Thermocouple types, (select k - for type "K" CHROMEGA®/ALOMEGA®)

**Step 13. Store TC type

- After you have selected the Thermocouple type press to store your selection, the instrument automatically advances to the next menu item.

**Step 14. Enter to Reading Configuration Menu

- The display shows 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 to show Decimal Point.**