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®")

J K T E N DIN J R S B C - Display

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 submenu: Decimal Point, Degree Units, Filter Constant and Input/Reading Submenus.

Step 15. Enter to Decimal Point Submenu
Press to show Decimal Point.

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

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

Step 18. Store selected Decimal point position
By pressing 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 to display the flashing Degree 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 Filter Constant Submenu.

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

Step 25. Scroll through available Filter Constants

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

Step 27. 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 020.0, and above Setpoint 1 Value will activate Alarm 1.

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, displayed is pressed, otherwise press until is displayed. 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 to the Alarm 2 Menu
The display will show the top menu for Alarm 2. Repeat steps 29 and 30 to set for Alarm 2 the same conditions as for Alarm 1.

Step 32. Configuration of Display Color Selection

Step 33. Run a Test
Press until reset the controller and return to RUN Mode to display °C/°F (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 turn on, and Display Color will change from Green to Amber. Continue touching the tip to raise the temperature above the Alarm 1 value and Display Color will change from Amber to Red.

SPECIFICATION

-5°C to +5°C Comp.: 0.60% input, process typical

-Resolution: 1.31’; 10’; process

-Storage Temperature: 0.0°C to 60°C (32°F to 140°F)

-Display: 4-digit, 9-segment LED, with red, green and amber programmable colors

-Input Type: Thermocouple, RTD, Analog Voltage and Current

-TC: (ITS-90)

-J, K, T, E, R, S, B, C - TC types

-RTD: (ITS-68)

-100 / 500 / 1000 ohm Pt sensor

-Voltage: 90 – 240 Vac @ 3 A Resistor Load, +0.2 VDC / 100 ohm for Digital Display

-Current: 0 to 20 mA (4 to 20 mA)

-Excitation: 24 Vdc @ 25 mA

-Line Voltage/Power: 0 to 20 mA(4 to 20 mA) Connected applications.

-Resolution: 0.020.0

-Options: Communication

-Display:

-RS-232 / RS-485

-Excitation: 24 Vdc @ 25 mA

-Weight: 225 g

-Approvals:

-Weight:

-USA:

-ISO 9001 Certified

-Canada:

-ISO 9001 Certified

-UK:

-ISO 9001 Certified

-Approvals:

-Weight:

-USA:

-ISO 9001 Certified

-Canada:

-ISO 9001 Certified

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-ISO 9001 Certified

-Canada:

-ISO 9001 Certified

-UK:

-ISO 9001 Certified

-Approvals:
### Disassembly Instruction:

If necessary, the board assembly may be removed from the front of the case housing.

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

1. Remove the board assembly from the case by pulling at the sides of the bezel.
2. The bezel along with the board assembly will un latch from the case housing.

### Warning:

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 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.

### Panel Mounting Instruction:

1. Using the dimensions from the panel cutout diagram shown above, cut an opening in the panel.
2. Remove sleeve from the rear of the case by removing thumbsnaps.
3. 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.
4. Slip the sleeve over the rear of the case.
5. Tighten the thumbsnaps to hold the unit firmly in the panel.

### 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 is not powered-on switch. Building installation should include a switch or circuit-breaker that must be compliant 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 atmospheres.
- Do not expose this instrument to rain or moisture.

### OPERATION - (For Thermocouple Input)

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/series or on the CD-ROM enclosed with your shipment.

**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**

Set the Setpoint 1 to 10 degree higher than Process value (SP1 = 85) and press to store, display flashes until desired value is displayed.

**Step 3. Change the Setpoint 1 Value**

Press or until desired value is displayed.

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

Press to store, display flashes until message and advances to Configuration Menu.

**Step 7. Enter the Input Type Menu**

Press to enter Input Type Menu.

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

Press until a flashing for Thermocouple is displayed.

**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 a controller will step to next menu item (Skip to Step 11).

**Step 11. Enter to the submenu items of Input Menu**

Press to display Input Process, RTD or Thermocouple. If flashing message will display until desired value is displayed. Press to store.

**Step 12. 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 a controller will step to next menu item (Skip to Step 14).

**Step 14. Enter to the Configuration Menu**

Press to enter Configuration Menu.

**Step 15. Enter to the Configuration Menu**

Press to enter Configuration Menu.