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 display flashing Thermocouple types, (see "k-1 for type "K" CHROMEL-ALUMEL"").

J  K  T  E  N  D  J  R  S  B  C  D  

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 the "Thermocouple 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 display reading.

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

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

Step 18. Store selected Decimal Point 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 °C Temperature Unit.

Step 20. Display available Temperature Units Press to display the following menu items.

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 to 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 Press to scroll through the available Filter Constants, 0.0128, 0.016, 0.025, 0.032, 0.040, 0.063, 0.080, 0.125 and 0.160.

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 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 Value +2°F will activate Alarm 1.

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

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

Step 30. Select the Deviation Control Type Submenu Press to display flashing, previously selected Deviation Control Type, otherwise press until flashing is shown. Now press to store and go to next menu item.

Step 31. Select the Latched Type Submenu Press to display flashing, previously selected Latched type, otherwise press until flashing is displayed. Press to store and advance to next menu item.

Step 32. Select the Normally Open Type of Contact Submenu Press to display flashing, previously selected Normally Open, otherwise press until flashing is displayed. Press to store and advance to next menu item.

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

Step 34. Enable Alarm 1 at Power On Press to enable Alarm 1 at Power On.

Step 35. Enter Alarm 1 High Submenu Press twice to skip Alarm 1 Low value. Press to save.

Step 36. Set the Alarm 1 High value (RNDH) Press to enter the high value alarm. Press to set value to set the display to °C. Press to save.

Step 37. Enter the Alarm 2 Menu The display will show 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. Skip the Loop Break Time Menu Press to go to the next menu item. Note: 

Step 39. Configuration the Output 1 Menu Set Alarm 1 Disabled (Step 29) to be able to Enable Output 1.

Step 40. Configuration of Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 41. Configuration of Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 42. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 43. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 44. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 45. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 46. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 47. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 48. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 49. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 50. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 51. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 52. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 53. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 54. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 55. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 56. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 57. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 58. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 59. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.

Step 60. Display Color Selection Menu Press until the "Display Color Selection Menu" appears on the Display. Choose color (red), yellow (red), blue (red) or amber. Please refer to the operator's manual if needed.
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.newportUS.com 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 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.

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.

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 \( \mathcal{C} \) one time from run mode to get to \( \mathcal{S} \) Setpoint 1.

Step 3. Enter the Setpoint 1 Value Submenu
Press \( \mathcal{D} \). Display shows the previous selection of Setpoint 1.

Step 4. Change the Setpoint 1 Value
Press \( \mathcal{D} \) until desired value is displayed.

Step 5. Store the Setpoint 1 Value
Set the Setpoint 1 to 10 degree higher than Process value (SP1 = 50) and press \( \mathcal{D} \) to store, display flashes \( \mathcal{S} \) and advances to \( \mathcal{S} \) 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 \( \mathcal{D} \) to store.

Step 7. Enter the Input Type Menu
Press \( \mathcal{E} \) to enter \( \mathcal{E} \) Input Type Menu.

Step 8. Enter to the submenu items of Input Menu
Press \( \mathcal{D} \) until a flashing \( \mathcal{D} \) is displayed, press \( \mathcal{D} \) to enter \( \mathcal{D} \) Input Type Menu.

Step 9. Scroll through available selection of Input Menu
Press \( \mathcal{D} \) until the desired value is displayed.

Step 10. Enter to the Thermocouple Input Submenu
Press \( \mathcal{D} \) until a flashing \( \mathcal{D} \) for Thermocouple is displayed. The controller will step to next menu item (Skip to Step 14).

FLOW CHART

It is required that you put the controller in Standby Mode for any configuration changes other than Setpoints and Alarms.

Underline denotes factory default setup