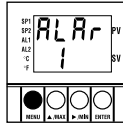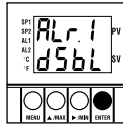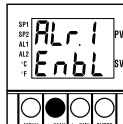## 5

Step 28
The display will show the top menu for Alarm 1. In the following steps we are going to enable Alarm 1 , Unlatch, Normally Open, Active Above, enable at power on and +2°F deviation i.e. PV>SV +2°F will activate Alarm 1.
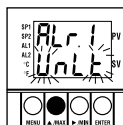
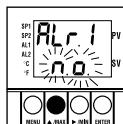**Step 29**
Press ENTER to display flashing dSbL/EnbL.

Step 30
If flashing "EnbL" is displayed, press MENU, otherwise press MAX until Enbl is displayed, then press ENTER to store and go to the next menu item.
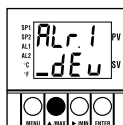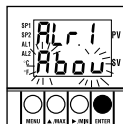
Step 31
If flashing "_dEu" is displayed press MENU, otherwise press MAX until flashing dEu is shown. Now press ENTER to store and go to next menu item.
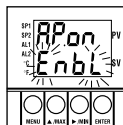
Step 32
If flashing "UnLt" is displayed, press MENU, otherwise press MAX until Unlt is displayed. Press ENTER to store and advance to next menu item.
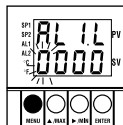
Step 33
If flashing "n.o."(normally open) is displayed, press MENU, otherwise press MAX until "n.o." is displayed. Press ENTER to store and advance to next menu item.

Step 34
If flashing "Abou" is displayed, press MENU, otherwise press MAX until Abou is displayed. Press ENTER to store and advance to next menu item.

Step 35
If flashing "EnbL" is displayed, press MENU, otherwise press MAX until "EnbL" is displayed. Press ENTER to store and advance to next menu item.
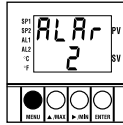
Step 36
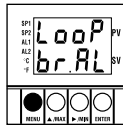Press MENU to skip Alarm 1 LOW value. AL1.L is for below & AL1.H for above.

Step 37
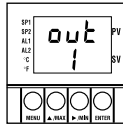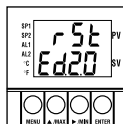Pressing MIN & MAX to set the display to 0002. Press ENTER to save.

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Step 38
Press MENU to go to the next menu item.

Step 39
Press MENU to go to the next menu item.

Step 40
Configure Out 1 as ctrL/P Id, Actn/rUrS, AUto/dSbL, AdPt/EnbL, AntL/EnbL, ProP/0050, rESt/0180, rAtE/0 18.0, cYc/00 10 and dPnG/0003. Please refer to the operator's manual if needed.

Step 41
Press MENU until reset the controller and return to RUN mode to display 0075/0080. Now you are ready to control a heater at 5 °F higher than PV display. SP1 is turning on and off. Touch the tip of the thermocouple to raise the temperature above the alarm high 0082, and a few seconds later AL1 will turn on.

Note ☞
Refer to User's Guide for details on ID Number setup.

It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.
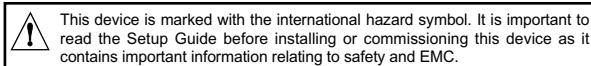
⚠ This device is marked with the international hazard symbol. It is important to read the Setup Guide before installing or commissioning this device as it contains important information relating to safety and EMC.

WARNING: These products are not designed for use in, and should not be used for, patient connected applications.

The information contained in this document is believed to be correct but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

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MQS12650/1006

QUICK START

MICROMEGA®
CN77000 Series Controller

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ΩOMEGA®

OMEGAnet® On-Line Service www.omega.com	Internet e-mail info@omega.com

Note☞ Free configuration software is available from **the website listed in this manual or on the CD-ROM enclosed with your shipment**.

Seven segment LED's can not display every letter of the alphabet. Please refer to this list:

R=A, b=B, c=C or c=c, d=D, E=E, F=F, G=G, H=H, I=I, J=J, cR=K, L=L, Γ=M, n=N, o=O or o=o, P=P, r=R, 5=S, t=T, U=U or u=u, v=V, Y=Y

MENU Mode: (Configuration)

Flashing display in MENU mode means you can make your selection by pressing the **MAX** button. If the flashing display is not a four digit value, the **MIN** button will always direct the controller one step backward of the top menu item. The second push on the **MIN** button will reset the controller except after the setpoint and the alarms, that will go to the RUN mode without resetting the controller. The **MENU** button will always sequence the controller thru the menu items.

*The **ENTER** button has two functions:*
1. to save a selected flashing display
2. to direct the controller to the next submenu level.

RUN Mode:

MAX causes the display to flash the PEAK with the corresponding value. Press again to go back to RUN mode.
MIN causes the display to flash VALLEY with the corresponding value. Press again to go back to RUN mode.
ENTER causes causes flashing PEAK or VALLEY to reset corresponding values.
Pressing ENTER twice will cause the display to flash StbY and put the controller into **standby,** which disables all outputs and alarms. Press enter one more time to go back to RUN mode.
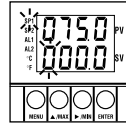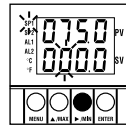
Dip Switch
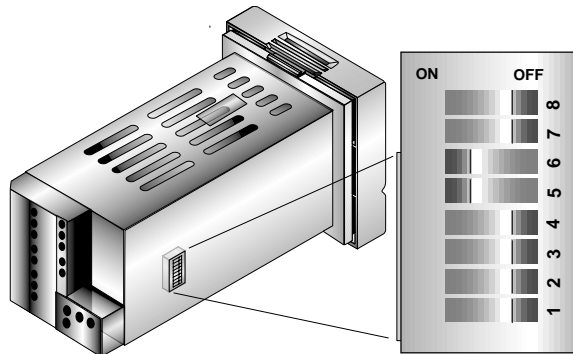
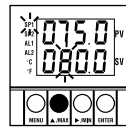**Thermocouple:** Press Front-Panel buttons as described below:
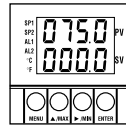
Step 1
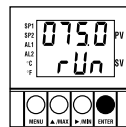When your meter is first powered up it will display the ambient temperature.

Step 2
Press MENU 1 time from run mode to get to SET POINT 1.

Step 3
Press MIN to select the next digit. The selected digit will be flashing as shown.

Step 4
To increment the flashing digit push MAX until desired value is displayed.
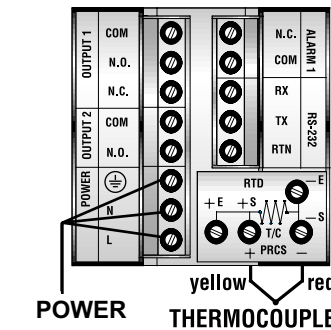
Step 5
Set the SET POINT 1 to 5 degree higher than PV (top row display) and press ENTER to store, display flashes "run" in the SV display and return to run mode.
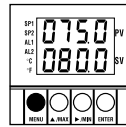
Step 6
Notice that the new value for Set Point 1 is reflected in the SV window.
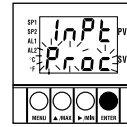Press MENU 4 times to advance to INPUT TYPE.
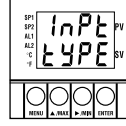
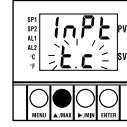**Step 7**
Confirm that the display shows INPUT TYPE.
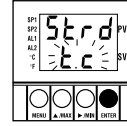
TYPICAL THERMOCOUPLE CONNECTION

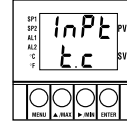**POWER**

THERMOCOUPLE "K"

Step 8
Press ENTER to display Input, Process, RTD or Thermocouple. If flashing tc is displayed press MENU and proceed to step 11.
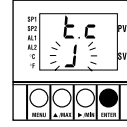
Step 9
Press MAX until a flashing $tc.$ for Thermocouple is displayed.

Step 10
Press ENTER to store Thermocouple Input. The controller will then automatically step to the next menu item.
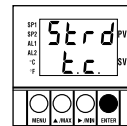
Step 11
The display will stop flashing and show the top menu for Thermocouple types. If you press MENU controller will step to next menu item (Skip to Step 15).
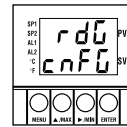
Step 12
Press ENTER to display flashing, previously selected Thermocouple type.
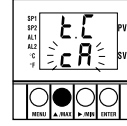
Step 13
Press MAX to sequence thru flashing Thermocouple types, (select cR -for type "K" CHROMEGA®/ALOMEGA®)
J K T E N DIN J R S B C
J cR t E n dnJ r 5 b c

Step 14
After you have selected the Thermocouple type press ENTER to store your selection, the controller automatically advances to the next menu item.

Step 15
The display shows Reading Configuration, which is the top menu for 4 submenues: Decimal Point, Degree Units, Filter Constant and Reading Scale and Offset.
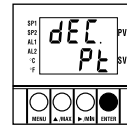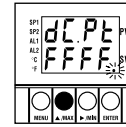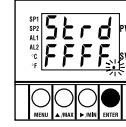
Step 16
Press ENTER to show Decimal Point.
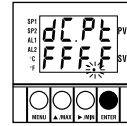
Step 17
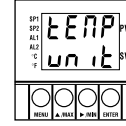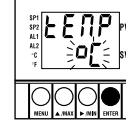Press ENTER again to display the flashing decimal point position.

Step 18
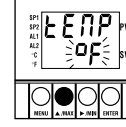Press MAX to select the decimal point position as shown.

Step 19
By pressing ENTER momentarily the decimal point position will be stored and the controller will go to the next menu item.
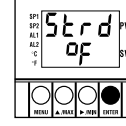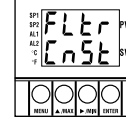
Step 20
Display shows Temperature Unit.

Step 21
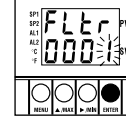Press ENTER to display the flashing Degree °F or °C.

Step 22
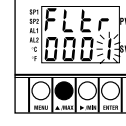Press MAX to select flashing Degree Unit as shown

Step 23
Press ENTER to display momentarily that the Degree Unit has been stored and the controller will go automatically to the next menu item.
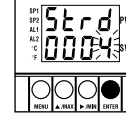
Step 24
Display shows Filter Constant.

Step 25
Press ENTER to display the flashing, previously selected Filter Constant

Step 26
Press MAX to sequence thru Filter Constants 1, 2, 4, 8, 16, 32, 64 and 128

Step 27
Press ENTER momentarily to store Filter Constant and the controller will automatically go to the next menu item.