

START HERE

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

A=A, b=B, c=C or c=c, d=D, E=E, F=F, G=G, H=H,
I=I, J=J, cA=K, L=L, P=M, n=N, o=O or o=o,
P=P, r=R, S=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.

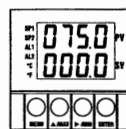
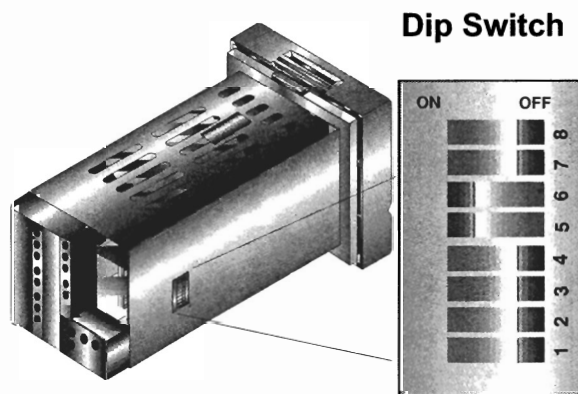
MIN causes the display to flash VALLEY with the corresponding value. Press again to go back to RUN mode.

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.

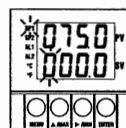
Thermocouple:

Press Front-Panel buttons as described below:



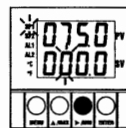
Step 1

When your meter is first powered up it will display the ambient temperature.



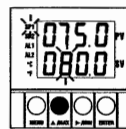
Step 2

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



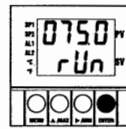
Step 3

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



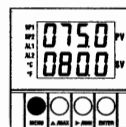
Step 4

To increment the flashing digit push MAX until desired value is displayed.



Step 5

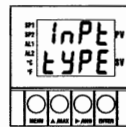
Set the SET POINT 1 to 5 degree higher than PV (top row display) and press ENTER to store, display flashes "run" in the SV display and return to run mode.



Step 6

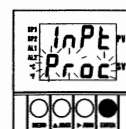
Notice that the new value for Set Point 1 is reflected in the SV window.

Press MENU 4 times to advance to INPUT TYPE.



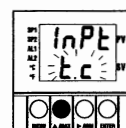
Step 7

Confirm that the display shows INPUT TYPE.



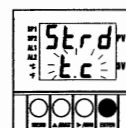
Step 8

Press ENTER to display Input, Process, RTD or Thermocouple. If flashing t.c. is displayed press MENU and proceed to step 11.



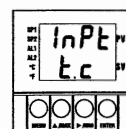
Step 9

Press MAX until a flashing t.c. for Thermocouple is displayed.



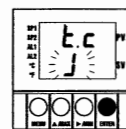
Step 10

Press ENTER to store Thermocouple Input. The controller will then automatically step to the next menu item.



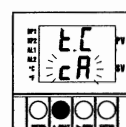
Step 11

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).



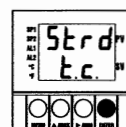
Step 12

Press ENTER to display flashing, previously selected Thermocouple type.



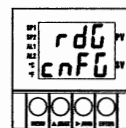
Step 13

Press MAX to sequence thru flashing Thermocouple types, (select cA -for type "K" CHROMEGA®/ALOMEGA®)
J K T E N DIN J R S B C
J cA t E n d n J r S b c



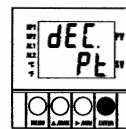
Step 14

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



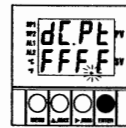
Step 15

The display shows Reading Configuration, which is the top menu for 4 submenus: Decimal Point, Degree Units, Filter Constant and Reading Scale and Offset.



Step 16

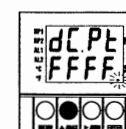
Press ENTER to show Decimal Point.



Step 17

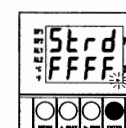
Press ENTER again to display the flashing decimal point position.

4



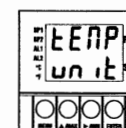
Step 18

Press MAX to select the decimal point position as shown.



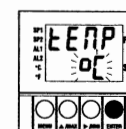
Step 19

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.



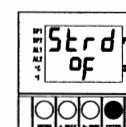
Step 21

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



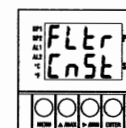
Step 22

Press MAX to select flashing Degree Unit as shown



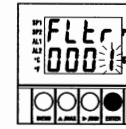
Step 23

Press ENTER to display momentarily that the Degree Unit has been stored and the controller will go automatically to the next menu item.



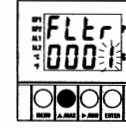
Step 24

Display shows Filter Constant.



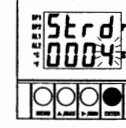
Step 25

Press ENTER to display the flashing, previously selected Filter Constant



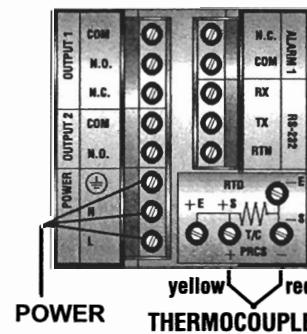
Step 26

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.



TYPICAL
THERMOCOUPLE
CONNECTION



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit should malfunction, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, 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 being 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 which wear are not warranted, including but not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY / DISCLAIMER language, and additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. P.O. number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. P.O. number to cover the COST of the repair/calibration,
2. Model and serial number of product, and
3. Repair instructions and/or specific problems relative to the product.

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.

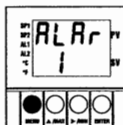
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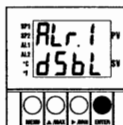
MQS12650/0899

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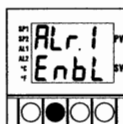
Step 28

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.



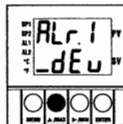
Step 29

Press ENTER to display flashing dSbL/EnbL.



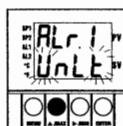
Step 30

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.



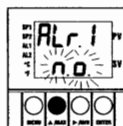
Step 31

If flashing "dFu" is displayed press MENU, otherwise press MAX until flashing dFu is shown. Now press ENTER to store and go to next menu item.



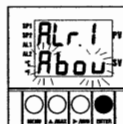
Step 32

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



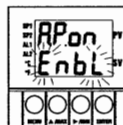
Step 33

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.



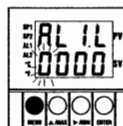
Step 34

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



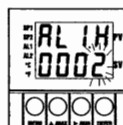
Step 35

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

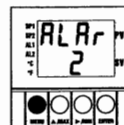
Press MENU to skip Alarm 1 LOW value. AL1.L is for below & AL1.H for above.



Step 37

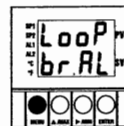
Pressing MIN & MAX to set the display to 0002. Press ENTER to save.

6



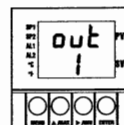
Step 38

Press MENU to go to the next menu item.



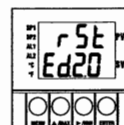
Step 39

Press MENU to go to the next menu item.



Step 40

Configure Out 1 as *ctrl/P Id, Actn/rUrS, Auto/dSbL, RdPt/EnbL, RntL/EnbL, Prop/0050, rEst/0 180, rAtE/0 180, 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.

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