DISPLAY ABBREVIATIONS

ALR1  Alarm 1 Status
OFF  Alarm 1 set Off
ON  Alarm 1 set On
A1Md  Alarm 1 Mode
A1L  Alarm 1 Low
A1H  Alarm 1 High
LO-1  Alarm 1 Low Value
HI-1  Alarm 1 High Value
A1CR  Display color when Alarm 1 triggered
GRN  Green Color
RED  Red Color
AMR  Alarm Mode
ALR2  Alarm 2 Status
OFF  Alarm 2 set Off
ON  Alarm 2 set On
A2Md  Alarm 2 Mode
A2L  Alarm 2 Low
A2H  Alarm 2 High
LO-2  Alarm 2 Low Value
HI-2  Alarm 2 High Value
A2CR  Display color when Alarm 2 triggered
GRN  Green Color
RED  Red Color
AMR  Alarm Mode
MODE  Data Flow Mode
HOST  Host Mode
SLAV  Slave Mode
BAUD  Baud Rate
9600  Baud Rate Value
19200
FORM  Data Format
TOI  7 Bit, Odd, 1 Stop Bit
TEI  7 Bit, Even, 1 Stop Bit
SN  8 Bit, No parity, 1 Stop Bit
COMM  Communication Standard
RS-485 Standard
RS-485 Standard
addr  Device Address
NO.  Address Value
0000  Address Value
0000
INF  Interface Device
dRIN  DRIN with Temperature Input
dRNP  DRIN with Process Input
PEAK  Peak Value
VALL  Valley Value
PROC  Process Value
RUN  Run Mode
OVLd  Input Overload
STOR  Stored Message

SPECIFICATION

Temperature Stability:  
-50°C to +70°C (14°F to 148°F)
Display:  
4-digit, 7-segment LED, 57 mm (2.2")
with red, green and amber programmable colors.
Alarm:  
Alarm 1 & 2 programmable. Latch/Unlatch, High, Low, High/Low
Protection:  
Alarm 1 & 2 programmable, Latch/Unlatch, High, Low, High/Low
SERIAL INTERFACE
Communication Standard:  
RS-485, RS-422 or RS-232
Transfer speed (Baud rate):  
300, 600, 1200, 2400, 4800, 9600, 19200
Data Format:  
7O1-7 bit, Odd, 1 stop bit
8N1-8 bit, No parity, 1 stop bit
Multi-Point Address (RS-485):  
0 to 199
Flow Control:  
No flow control
Screw terminals for RS-232/485/422 interface

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

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For contact details of our local sales and service offices in Benelux, please refer to the "Contact Information" section of our website.

WARRANTY/DISCLAIMER
OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of
four (4) additional years from the date of purchase. In addition to OMEGA’s standard warranty period, OMEGA
Engineering will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is determined to be defective, OMEGA will repair or replace it as it shall choose, at OMEGA’s
expense. The decision of OMEGA as to whether the unit is defective shall be final.

Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

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

This device is marked with the international caution symbol. It is important to read the Setup Guide before installing or commissioning this device, as the guide contains important information relating to safety and EMC.
Mounting Big Display on Bail:
1. Use the big display template to mark the location of mounting screws on the flat surface.
2. Be sure to leave enough room around the bail (as noted on the template drawing) to allow for removal and rotation of the display.
3. The display can be rotated for the best viewing angle.

Disassembly Instruction:
Warning: Disconnect all ac power from the unit before proceeding.
1. Remove all wiring connections from the rear of the instrument, by unscrewing the power and input connectors.
2. Remove six screws at the back of the display and back cover.
3. Remove the Big Display from the panel.
4. To remove the Big Display from the bail, unscrew the two nuts at each end of the mounting brackets.

Mounting Big Display Through Panel:
1. Using the panel cutout diagram shown above, cut an opening in the panel.
2. Remove six screws at the back of Big Display to remove back cover.
3. Insert the unit into the opening from the front of the panel, so the gasket seats between the bezel and the front of the panel.
4. Align back cover to Big Display and reinstall screws.

WIRING
The RS-422 standard (point-to-point) allows a single device to be connected to the Big Display using a three-wire connection (full duplex).

2. Wiring RS-485 Interface.
The RS-485 standard (multipoint) allows a computer, one or more devices and Big Displays (up to 32) to be connected using a two-wire connection (half-duplex) plus a common wire to connect to the shield of the cable. It is recommended to use shielded cable with one twisted pair for EMI noise protection.

OPERATIONS
1. Peak Value (Display in Host Mode)
Press [DOWN] button to request "Peak" value:
- RS-232 Mode, will send: *01X03 (Interface DRNT), or *01X04 (Interface DRNP)
- RS-485 Mode, will send: *01X02 (Interface DRNT), or *01X03 (Interface DRNP)

2. Valley Value (Display on Host Mode)
Press [UP] button to request "Valley" value:
- RS-232 Mode, will send: *01X01
- RS-485 Mode, will send: *01X04 (Interface DRNP)

3. Process Value (Display on Host Mode)
Press [MENU] button to request "Process" value:
- RS-232 Mode, will send: *01X00
- RS-485 Mode, will send: *02X04

4. Write alphanumeric characters to the Big Display from the computer (Display in Slave Mode)
- Single Big Display (RS-232) write 4 characters, then CR (carriage return)
- Multiple Big Display (RS-485) write * device address (2 digit), CR, 4 characters, then CR

5. Display Color Setup (Alarm Setup)
This menu allows the user to select the color of the display in normal conditions and when an alarm is triggered. If user wants the Display to change color every time when both Alarm 1 and Alarm 2 are triggered, the colon will be set in such a way that Alarm 1 is always on the top of Alarm 2 value, otherwise the Alarm 1 will overwrite value of Alarm 2 and Display color would not change when Alarm 2 is triggered.

Example 1:
Alarm 1 setup: "ON", Alarm Mode High 'A1HI', Alarm High Value 'HI-1=400', Alarm Color 'A1CR'=Amber
Alarm 2 setup: "ON", Alarm Mode High 'A2HI', Alarm High Value 'HI-2=200', Alarm Color 'A2CR'=Red
Normal Color: "NO.CR"=Green
Display colors change sequences:

Example 2:
Alarm 1 setup: "ON", Alarm Mode Low 'A1LO', Alarm Low Value 'LO-1=100', Alarm Color 'A1CR'=Amber
Normal Color: "NO.CR"=Green
Display colors change sequences:

Example 3:
Alarm 1 setup: "ON", Alarm Mode Low/High 'A1LH', Alarm Low Value 'LO-1=100', Alarm High Value 'HI-1=250', Alarm Color 'A1CR'=Amber
Normal Color: "NO.CR"=Green
Display colors change sequences:

CONFIGURATION
Button Functions in Configuration Mode
- To enter the Menu, the user must first press [UP] button. Use this button to advance/navigate to the next menu item. The user can navigate through all the top level menus by pressing this button.
- While a parameter is being modified, press [DOWN] button to escape without saving the parameter.
- [UP] button to scroll through submenu selections. When a numerical value is displayed press this key to increase value of a parameter that is currently being modified.
- In the Run Mode pressing [MENU] button causes the display to flash the PEAK value several times before returning to the Run Mode.
- In the top menu press [DOWN] button causes the display to return to the Run Mode.
- Press this button to access the submenus from a Top Level Menu item.
- Press this button to store a submenu selection or after entering a value - the display will flash a [DOWN] message to confirm your selection.