

DISPLAY ABBREVIATIONS

ALR1	Alarm 1 Status		
OFF	Alarm 1 set Off	ON	Alarm 1 set On
A1Md	Alarm 1 Mode		
A1LO	Alarm 1 Low	A1HI	Alarm 1 High
A1LH	Alarm 1 Low/High		
LO-1	Alarm 1 Low	-999.. ..9999	Alarm 1 Low Value
HI-1	Alarm 1 High	-999.. ..9999	Alarm 1 High Value
A1CR	Display color when Alarm 1 triggered		
GRN	Green Color	REd	Red Color
AMbR	Amber Color		
ALR2	Alarm 2 Status		
OFF	Alarm 2 set Off	ON	Alarm 2 set On
A2Md	Alarm 2 Mode		
A2LO	Alarm 2 Low	A2HI	Alarm 2 High
A2LH	Alarm 2 Low/High		
LO-2	Alarm 2 Low	-999.. ..9999	Alarm 2 Low Value
HI-2	Alarm 2 High	-999.. ..9999	Alarm 2 High Value
A2CR	Display color when Alarm 2 triggered		
GRN	Green Color	REd	Red Color
AMbR	Amber Color		
Out	Alarm Latched/Unlatched selection		
LAtC	Latched	UNLA	Unlatched
NO.CR	Display Color in Normal condition		
GRN	Green Color	REd	Red Color
AMbR	Amber Color		
MOdE	Data Flow Mode		
HOSt	Host Mode	SLAV	Slave Mode
bAUd	Baud Rate	300.. ..19200	Baud Rate Value
FORM	Data Format		
7O1	7 Bit, Odd, 1 Stop Bit	7E1	7 Bit, Even, 1 Stop Bit
8N1	8 Bit, No parity, 1 Stop Bit		
COMM	Communication Standard		
232	RS-232 Standard	485	RS-485 Standard
AddR	Device Address	0000.. ..0099	Address Value
Miscellaneous:			
PEak	Peak Value	VALL	Valley Value
PRoc	Process Value	RUN	Run Mode
OVld	Input Overload	StOR	Stored Message

OPERATIONS

In **Slave Mode** the Remote Display will wait for commands and data from the Serial Bus.

In **Host Mode** the Remote Display will send data automatically and continuously into the Serial Bus.

When used in **RS-485 Mode**, the device must be accessed with an appropriate **Address Value**.

Latched Mode: Alarm remains latched until reset. To reset already latched alarm select any menu items and then press "up" or "down" button.

- Note** 1. In the examples for RS-485 it is assumed that the device address is 01.
2. Decimal Point over 2 digits (ex:0.001) not recommended for RD4.

Write alphanumeric characters to the Remote Display from the computer (Display in Slave Mode)

- Single Remote Display: (RS232) write 4(6) characters, then CR (carriage return)
- Multiple Remote Display: (RS485) write *, device address (2 digit), CR, 4(6) characters, then CR
- How to display time format or colon ":", ex: 12:30, from keyboard enter: 1230!

Host mode uses Newport product protocols

Process Value (Display on Host Mode)

Press **▲** to request "Process" Value.
a) RS-232 Mode, will send: *X01
b) RS-485 Mode, will send: *01X01

Note If the RD4/RD6 is used with an iDRN/iDRX product, the meter will display Valley or Peak value depending on the jumper position on J14.

J14-1 Closed: factory default position
J14-1 Open: applies only for iDRN/iDRX-PR/-ST/-FP models
J14-2 and J14-3: Do not remove, for factory use only.

Peak Value (Display on Host Mode)

Press **▲** to request "Peak" value:
a) RS-232 Mode, will send: *X02 (or *X03 **†**)
b) RS-485 Mode, will send: *01X02 (or *01X03 **†**)

Valley Value (Display on Host Mode)

Press **▼** to request "Valley" value.
a) RS-232 Mode, will send: *X03 (or *X04 **†**)
b) RS-485 Mode, will send: *01X03 (or *01X04 **†**)
† = if connected with iDRN/iDRX-PR/-ST/-FP models

Display Color Setup (Alarm Setup)

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

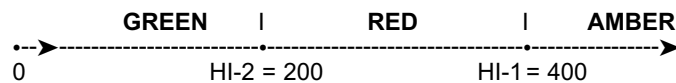
Example 1:

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:



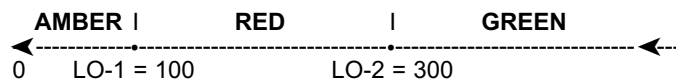
Example 2:

Alarm 1 setup: "ON", Alarm Mode Low/High "A1LH", Alarm Low Value "LO-1"=100, Alarm Color "A1CR"=Amber

Alarm 2 setup: "ON", Alarm Mode LO "A2LO", Alarm High Value "LO-2"=300, Alarm Color "A2CR"=Red

Normal Color: "NO.CR"=Green

Display colors change sequences:



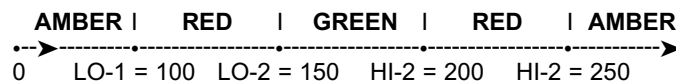
Example 3:

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

Alarm 2 setup: "ON", Alarm Mode Low/High "A2LH", Alarm Low Value "LO-2"=150, Alarm High Value "HI-2"=200, Alarm Color "A2CR"=Red

Normal Color: "NO.CR"=Green

Display colors change sequences:



Display Color Change (by serial communication)

Using Microprocessor Version 1.6 and above, while in Slave mode, with alarms disabled. ~~~R to turn the display Red.

~~~G to turn the display Green.

~~~O to turn the display Amber.

SPECIFICATION

Display:

RD4: 4-digit, 9-segment LED, 21 mm (0.83")

RD6: 6-digit, 9-segment LED, 17 mm (0.67")

with red, green and amber programmable colors.

Alarm: Alarm 1 & 2 programmable Latch/Unlatch, High, Low, High/Low

Serial Input: Serial ASCII RS-232 or RS-485 Menu selectable

Input levels: RS-232 and RS-485 Standard Voltage levels.

Baud Rate: 300, 600, 1200, 2400, 4800, 9600, 19200

RS-485 address: 0 to 99

Data Format: 7O1-7 bit, Odd, 1 stop bit

7E1- 7 bit, even, 1 stop bit

8N1 - 8 bit, No parity, 1 stop bit.

Power Supply: 10 to 36 VDC (2 W) or AC adapter 120/240 VAC to 12 VDC (200 mA).

Operating Temperature: 0 to 50°C

Storage Temperature: -20 to 85°C

Relative Humidity: 0 to 85 %

Protection:

NEMA-4x (IP65) front Bezel only.

Dimensions: 48 H x 96 W x 38 D mm (1.89" x 3.78" x 1.5")

Panel Cutout:

1.772" (45 mm) x 3.622" (92 mm)

Approvals: CE per EN61010-1:2001

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

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.

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.

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- Purchase Order number to cover the COST of the repair,
- Model and serial number of product, and
- Repair instructions and/or specific problems relative to the product.

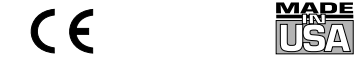
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OPERATION MANUAL



RD4 / RD6 Remote Display



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