

DISPLAY ABBREVIATIONS

ALR1	Alarm 1 Status	ON	Alarm 1 set On
ALR2	Alarm 2 Status	ON	Alarm 2 set On
A1M	Alarm 1 Mode	A1H	Alarm 1 High
A1L	Alarm 1 Low	-999.	Alarm 1 Low Value
A1H	Alarm 1 High	-999.	Alarm 1 High Value
A1LH	Alarm 1 Low/High	-9999	Alarm 1 triggered
A1HL	Alarm 1 High/Low	RED	Red Color
A1M2	Alarm 2 Mode	ON	Alarm 2 set On
A2M	Alarm 2 Mode	A2H	Alarm 2 High
A2L	Alarm 2 Low	-999.	Alarm 2 Low Value
A2H	Alarm 2 High	-999.	Alarm 2 High Value
A2LH	Alarm 2 Low/High	-9999	Alarm 2 triggered
A2HL	Alarm 2 High/Low	RED	Red Color
LO-2	Alarm 2 Low	ON	Alarm 2 set On
HI-2	Alarm 2 High	A2H	Alarm 2 High
A2CR	Display color when Alarm 2 triggered	RED	Red Color
GRN	Green Color	RED	Red Color
AMBR	Amber Color	UNLA	Unlatched
OUT	Alarm Latched/Unlatched selection	RED	Red Color
LATCH	Latched	SLAV	Slave Mode
NO.CR	Display Color in Normal condition	300..	Baud Rate Value
GRN	Green Color	..19200	Baud Rate Value
AMBR	Amber Color	7E1	7 Bit, Even, 1 Stop Bit
MOIE	Data Flow Mode	8 Bit, No parity, 1 Stop Bit	7 Bit, Even, 1 Stop Bit
HOS1	Host Mode	1 Stop Bit	1 Stop Bit
BAUD	Baud Rate	1 Stop Bit	1 Stop Bit
FORM	Data Format	Standard	Standard
701	7 Bit, Odd, 1 Stop Bit	485	RS-485 Standard Address Value
8N1	8 Bit, No parity, 1 Stop Bit	0000.	Address Value
COMM	Communication	..0099	Address Value
232	RS-232 Standard	VALL	Valley Value
Addr	Device Address	RUN	Run Mode
Miscellaneous:		STOR	Stored Message
PEAK	Peak Value		
PROC	Process Value		
OVLD	Input Overload		

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.

- In the examples for RS-485 it is assumed that the device address is 01.
- 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 **to request "Display on Host Mode"**
 a) RS-232 Mode, will send: *X01
 b) RS-485 Mode, will send: *01X01

MODE

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 f)
 b) RS-485 Mode, will send: *01X02 (or *01X03 f)

Valley Value (Display on Host Mode)

- Press **to request "Valley" value:**
 a) RS-232 Mode, will send: *X03 (or *X04 f)
 b) RS-485 Mode, will send: *01X03 (or *01X04 f)
f = 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 "A1H", Alarm High Value "HI-1"=400, Alarm Color "A1CR"=Amber
 Alarm 2 setup: "ON", Alarm Mode High "A2H", Alarm High Value "HI-2"=200, Alarm Color "A2CR"=Red
 Normal Color: "NO.CR"=Green
 Display colors change sequences:

0 **GREEN** | **RED** | **AMBER** | **AMBER**
 HI-2 = 200 HI-1 = 400

Example 2:

- Alarm 1 setup: "ON", Alarm Mode Low "A1LO", 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:

0 **AMBER** | **RED** | **GREEN** | **GREEN**
 LO-1 = 100 LO-2 = 300

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:

0 **AMBER** | **RED** | **GREEN** | **RED** | **AMBER**
 LO-1 = 100 LO-2 = 150 HI-2 = 200 HI-2 = 250

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:**
 Data Format: 701-7 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
 or RS-485 Menu selectable
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

- 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

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 information accompanying 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/EMC regulations that apply to OMEGA. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE marking to every appropriate device upon certification.
 The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. reserves the right to alter specifications without notice.

TRADEMARK NOTICE:

Ω, **OMEGA.com**, **Ω-OMEGA**, and **Ω** are Trademarks of OMEGA ENGINEERING, INC.

OPERATION MANUAL



RD4 / RD6 Remote Display



OMEGA's On-Line Service
www.omega.com
Internet e-mail
info@omega.com

Servicing North America:

- USA:**
 One Omega Drive, P.O. Box 4047
 Stamford CT 06807-0047
 TEL: (203) 359-1660 FAX: (203) 359-7700
 e-mail: info@omega.com
- Canada:**
 976 Berger
 1000 Avenue des Pins
 TEL: (514) 955-6928 FAX: (514) 955-6886
 e-mail: info@omega.ca

For immediate technical or application assistance:

- USA and Canada:**
 Sales Service: 1-800-938-6342 / 1-800-TC-OMEGA®
 Customer Service: 1-800-622-2378 / 1-800-622-BEST™
 Engineering Service: 1-800-972-9438 / 1-800-USA-WHEN®
 TEL: (001) 800-TC-OMEGA® FAX: (001) 203-359-7803
 EN: (001) 203-359-7803
 e-mail: espanol@omega.com
- Mexico and Latin America:**
 Tel: (001) 800-TC-OMEGA® FAX: (001) 203-359-7807
 EN: (001) 203-359-7803
 e-mail: info@omega.com

Servicing Europe:

- Belgium:**
 Postbus 6034, 1180 LA Anstelveen, The Netherlands
 Toll Free in Benelux: 0800 0993344
 TEL: +31 20 3472121 FAX: +31 20 6434643
 e-mail: sales@omgasing.nl
- Czech Republic:**
 Fyristas 184, 733 01 Kavina
 TEL: +420 59 6031114
 e-mail: info@omgasing.cz
- France:**
 11, rue Jacques Cartier, 78280 Guyancourt
 TEL: +33 1 61 37 29 00 FAX: +33 1 36 57 54 27
 Toll Free in France: 0800 466 342
 e-mail: info@omgasing.fr

Germany/Austria:

- Daimlerstrasse 26, D-7532, Deckenpfronn, Germany
 TEL: +49 7058 9388-0 (800 639 7676)
 FAX: +49 7058 9388-29
 e-mail: info@omega.de
- United Kingdom:**
 One Omega Drive
 River Bend Technology, Centre
 Northbank, Irlam, Manchester M44 5BD United Kingdom
 TEL: +44 161 777 8611 FAX: +44 161 777 6622
 e-mail: sales@omega.co.uk

