### DISPLAY ABBRIVATIONS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALR1</td>
<td>Alarm 1 Status</td>
<td>ON</td>
</tr>
<tr>
<td>OFF</td>
<td>Alarm 1 set Off</td>
<td>ON</td>
</tr>
<tr>
<td>A1Md</td>
<td>Alarm Mode</td>
<td>ON</td>
</tr>
<tr>
<td>A1L1</td>
<td>Alarm Low</td>
<td>ON</td>
</tr>
<tr>
<td>A1H1</td>
<td>Alarm High</td>
<td>ON</td>
</tr>
<tr>
<td>HI-1</td>
<td>Alarm 1 High</td>
<td>OFF</td>
</tr>
<tr>
<td>A1CR</td>
<td>Display Color when Alarm 1 triggered</td>
<td>Red</td>
</tr>
<tr>
<td>AMCR</td>
<td>Alarm 2 Color</td>
<td>Red</td>
</tr>
<tr>
<td>AM2</td>
<td>Alarm 2 Status</td>
<td>OFF</td>
</tr>
<tr>
<td>A2Md</td>
<td>Alarm Mode</td>
<td>OFF</td>
</tr>
<tr>
<td>A2L1</td>
<td>Alarm Low</td>
<td>OFF</td>
</tr>
<tr>
<td>A2H1</td>
<td>Alarm High</td>
<td>OFF</td>
</tr>
<tr>
<td>LO-2</td>
<td>Alarm 2 Low</td>
<td>LOW</td>
</tr>
<tr>
<td>HI-2</td>
<td>Alarm 2 High</td>
<td>HIGH</td>
</tr>
<tr>
<td>A2CR</td>
<td>Display Color when Alarm 2 triggered</td>
<td>Red</td>
</tr>
<tr>
<td>GRN</td>
<td>Green Color</td>
<td>Red</td>
</tr>
<tr>
<td>AM1</td>
<td>Amber Color</td>
<td>Red</td>
</tr>
<tr>
<td>OUL</td>
<td>Alarm Latched/Unlatched</td>
<td>Unlatched</td>
</tr>
<tr>
<td>LAIC</td>
<td>Latched</td>
<td>UNL</td>
</tr>
<tr>
<td>GRN2</td>
<td>Green Color</td>
<td>Red</td>
</tr>
<tr>
<td>AM2</td>
<td>Amber Color</td>
<td>Red</td>
</tr>
<tr>
<td>MODE</td>
<td>Data Flow Mode</td>
<td>Slave</td>
</tr>
<tr>
<td>HOST</td>
<td>Host Mode</td>
<td>SLAV</td>
</tr>
<tr>
<td>BAUD</td>
<td>Baud Rate</td>
<td>19200</td>
</tr>
<tr>
<td>FORM</td>
<td>Data Format</td>
<td>7E1</td>
</tr>
<tr>
<td>DRTY</td>
<td>DR DY</td>
<td>7E1</td>
</tr>
<tr>
<td>SNAP</td>
<td>8 Bit, No parity, 1 Stop Bit</td>
<td>1 Stop Bit</td>
</tr>
<tr>
<td>COMM</td>
<td>Communication Standard</td>
<td>RS-485 Standard</td>
</tr>
<tr>
<td>ADDR</td>
<td>Device Address</td>
<td>0000..0999</td>
</tr>
<tr>
<td>INF</td>
<td>Interface Device</td>
<td>DR DY</td>
</tr>
<tr>
<td>DRTP</td>
<td>DR TP</td>
<td>DR DY</td>
</tr>
<tr>
<td>MIS</td>
<td>Miscellaneous</td>
<td>DR TP</td>
</tr>
<tr>
<td>PEAK</td>
<td>Peak Value</td>
<td>VALL</td>
</tr>
<tr>
<td>VALL</td>
<td>Valley Value</td>
<td>SUN</td>
</tr>
<tr>
<td>HVAC</td>
<td>Process Value</td>
<td>SUN</td>
</tr>
<tr>
<td>OVLD</td>
<td>Input Overflow</td>
<td>STORE</td>
</tr>
</tbody>
</table>

### FLOW CHART

Below is a flowchart showing how to navigate through all menus by pressing the buttons.

### SPECIFICATION

#### Temperature Stability:
50 °C ± 2°C

#### Display:
4-digit, 7-segment LED, 31.2mm (2.25") with red, green and amber programmable colors.

#### Alarm:
1 & 2 programmable, Latched/Unlatched, High, Low, High/Low

#### Standards Compliance:
IEC60950-1:2010

#### Supported Protocols:
TCP/IP, HTTP/GET

### SERIAL INTERFACE

#### Communication Standard:
RS-485, RS-422

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

#### Data Format:
7E1-7E2-7E3-7E4, 1 stop bit, 7E1-7E2, even, 1 stop bit, N8-1-1, no parity, 1 stop bit

#### Multicast Address (RS485):
0 to 199

#### Flow Control:
No Flow control

#### Interface:
RS485/422 Interface

### NETWORK INTERFACE

#### Power Supply:
100-240V AC, 50/60Hz, 22.5 W

#### Operating Temperature:
-20 to 70°C

#### Storage Temperature:
-20 to 85°C

#### Relative Humidity:
0 to 85%

### Protection:
RS485, RS422

### SIZE/DIMENSIONS

298L x 137W x 73D mm

### WEIGHT

1.50 kg (3 lbs)

### APPROVALS

CE per EN60601-1, EN55022-2, EN61010-1

### WARNING

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

### TRADEMARK NOTICE

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### WARRANTY/DISCLAIMER

NEWPORT Electronics, Inc. warrants this unit to be free of defects in materials and workmanship for a period of one (1) year.

NEWPORT will, at its discretion, either repair or replace, free of charge, any product determined by NEWPORT to be defective in material or workmanship for a period of five (5) years.

### RETURN REQUEST/INQUIRIES

Direct all warranty and repair requests/inquiries to the NEWPORT Customer Service Department. BEFORE contacting NEWPORT:

1. Purchase Order number under which the product was PURCHASED, COST the repair, and 1. Purchase Order number to cover the product under warranty, and 3. Repair instructions and/or specific and 3. Repair instructions and/or specific

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### CONTACT INFORMATION

For immediate technical or application assistance please call:

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ILD24-EI Big Display with Embedded Ethernet

DESCRIPTION:
The ILD24-EI is a 4-digit master/slave display providing remote readout from instruments such as programmable controllers, digital panel meters and other instruments with serial or Ethernet output. Communication interfaces supported are Ethernet and RS-485 standards. RS-485 is programmable through front panel buttons.

The ILD24-EI features a large three color programmable display with the capability to change color every time an Alarm is triggered.

The latest complete Operational Manuals as well as free Software and ActiveX Controls are available at: www.newportUS.com or on the CD-ROM enclosed with your shipment.

SAFETY:
• The instrument is a panel mount device protected in accordance with Class III of IEC 1010.

EMC:
• Whenever EMC is an issue, always use shielded cables.
• Never run signal and power wires in the same conduit.
• Use signal wire connections with twisted-pair cables.
• Install Ferrite Bead(s) on signal wire close to the instrument if necessary.
• Never run signal and power wires in the same conduit.
• Use signal wire connections with twisted-pair cables.
• Install Ferrite Bead(s) on signal wire close to the instrument if necessary.
• Ensure proper grounding to prevent EMI interference.

WIRING

1. Wiring Ethernet Interface
The embedded Ethernet Server is designed to connect industrial devices with serial interfaces to the Ethernet network using TCP/IP Protocol.

2. Wiring RS-485 Interface
This 4-wire standard (multi-point) 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.

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 Instructions:
Warning: Disconnect all ac power from the unit before proceeding.
1. Remove all wiring connections from the rear of the instrument, 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 knobs 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 seals between the bezel and the front of the panel.
4. Align back cover to Big Display and reinstall screws.

3. Process Value (Display on Host Mode)
Press d to request “Process” value.

4. Write alphanumeric characters to the Big Display

5. 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 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 overrule value of Alarm 2 and Display color would not change when Alarm 2 is triggered.

Example:
Alarm 1 setup: *01X01 (Interface DRNT), or *01X02 (Interface DRNP)
Alarm 2 setup: *01X03 (Interface DRNT), or *01X04 (Interface DRNP)

Display colors change sequences:

<table>
<thead>
<tr>
<th>Green</th>
<th>Red</th>
<th>Amber</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>400</td>
</tr>
</tbody>
</table>

OPERATIONS

1. Peak Value (Display in Host Mode)
Press a to request “Peak” value:
RS-485 Mode, will send: *01X02 (Interface DRNT), or *01X03 (Interface DRNP)

2. Valley Value (Display on Host Mode)
Press b to request “Valley” value.

3. Process Value (Display on Host Mode)
Press c to request “Process” value.

4. Write alphanumeric characters to the Big Display

5. Display Color Setup (Alarm Setup)