**OPERATION MANUAL**

**DISPLAY ABREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALR1</td>
<td>Alarm 1</td>
</tr>
<tr>
<td>OFF</td>
<td>Off</td>
</tr>
<tr>
<td>ON</td>
<td>On</td>
</tr>
<tr>
<td>A1Md</td>
<td>Alarm 1 Mode</td>
</tr>
<tr>
<td>A1LH</td>
<td>Alarm 1 High</td>
</tr>
<tr>
<td>HI-1</td>
<td>Alarm 1 High</td>
</tr>
<tr>
<td>LO-2</td>
<td>Alarm 2 Low</td>
</tr>
<tr>
<td>A2Md</td>
<td>Alarm 2 Mode</td>
</tr>
<tr>
<td>A2CR</td>
<td>Alarm 2 Color</td>
</tr>
<tr>
<td>A3R</td>
<td>Alarm 3 Red</td>
</tr>
<tr>
<td>RED</td>
<td>Red Color</td>
</tr>
<tr>
<td>AMR</td>
<td>Amber Color</td>
</tr>
<tr>
<td>AMGR</td>
<td>Amber Green</td>
</tr>
<tr>
<td>A1CR</td>
<td>Alarm 1 Color</td>
</tr>
<tr>
<td>GRN</td>
<td>Green Color</td>
</tr>
<tr>
<td>OTI</td>
<td>Output 1</td>
</tr>
<tr>
<td>LO</td>
<td>Low Value</td>
</tr>
<tr>
<td>HI</td>
<td>High Value</td>
</tr>
<tr>
<td>A2CR</td>
<td>Alarm 2 Color</td>
</tr>
<tr>
<td>A3R</td>
<td>Alarm 3 Red</td>
</tr>
<tr>
<td>RED</td>
<td>Red Color</td>
</tr>
<tr>
<td>AMR</td>
<td>Amber Color</td>
</tr>
<tr>
<td>AMGR</td>
<td>Amber Green</td>
</tr>
<tr>
<td>Data Flow Mode</td>
<td></td>
</tr>
<tr>
<td>HOST</td>
<td>Host Mode</td>
</tr>
<tr>
<td>SLAV</td>
<td>Slave Mode</td>
</tr>
<tr>
<td>INFORM</td>
<td>Interface</td>
</tr>
<tr>
<td>dRNP</td>
<td>DRP with Input Value</td>
</tr>
<tr>
<td>dRTR</td>
<td>DRP with Read Value</td>
</tr>
<tr>
<td>dRTW</td>
<td>DRP with Total Value</td>
</tr>
<tr>
<td>PEAK</td>
<td>Peak Value</td>
</tr>
<tr>
<td>VALL</td>
<td>Valley Value</td>
</tr>
<tr>
<td>RUNC</td>
<td>Run Mode</td>
</tr>
<tr>
<td>RUN</td>
<td>Run Mode</td>
</tr>
<tr>
<td>OVLd</td>
<td>Overload</td>
</tr>
<tr>
<td>Store</td>
<td>Stored Message</td>
</tr>
</tbody>
</table>

**SPECIFICATION**

**Temperature Stability:**
- 50 ppm/°C

**Display:**
- 4-digit, 7-segment LED, 101.6mm (4.00")

**Supported Protocols:**
- TCP/IP, ARP, HTTPGET

**Transfer speed (Baud rate):**
- 20,000, 1200, 4800, 9600, 19200 bps

**Operating Temperature:**
- 0 to 50°C

**Storage Temperature:**
- -20 to 60°C

**Relative Humidity:**
- 10% to 90%

**Power Supply:**
- 110-240 Vac ±10%, 50/60 Hz, 22.5 W

**Panel Color:**
- Amber Color (AMbR)

**Dimensions:**
- (18.11" x 8.31" x 3.76")

**Weight:**
- 2.46 lbs (1.12 kg)

**Placement:**
- Panel Cutout: 414.3 L x 179.4 W mm (16.31" L x 7.06" W)

**Input Overload:**
- 30 VDC, 50 VA, 60 Hz

**Process Value:**
- -999 to 9999

**Alarm Values:**
- Alarm 1 Low Value: -999 to 9999
- Alarm 1 High Value: -999 to 9999
- Alarm 2 Low Value: -999 to 9999
- Alarm 2 High Value: -999 to 9999

**WARNING:**
- This device is marked with the international caution symbol. It is important to read the instructions before installing or connecting the device as the guide indicates its proper usage.

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**Additional Information:**
- For technical assistance or service inquiries, please contact Newport Electronics, Inc. at Tel: 1-800-639-7678 or www.newportUS.com.

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Mounting Big Display on Bail:
1. Mark the location of mounting screws on the flat surface.
2. Be sure to leave enough room around the bail 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 knobs at each end of the mounting brackets.

**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**
   - The Half-duplex 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.

   - Connections to the computer are optional.
   - To enter the Menu, the user must first press **Menu** button.
   - Use this button to advance/navigate to the next menu item. The user can navigate through all the top level menu by pressing **Menu**.
   - While a parameter is being modified, press **Enter** to escape without saving the parameter.
   - Press the up or **Down** 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 **Enter** causes the display to return to the PEAK value several times before returning to the Run Mode.
   - In the top menu press **Down** to cause the display to return to the Run Mode.
   - Press **Reset** to return to 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 Color 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.

   - The iLD44-EI features a large three color programmable display with the capability to change color every time an Alarm is triggered.
   - Whenever EMC is an issue, always use shielded cables.
   - Use signal wires connections with twisted-pair cables.
   - Install Ferrite Bead(s) on signal wire close to the instrument if EMC problems persist.

   **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 seal between the bezel and the front of the panel.
   4. Align back cover to Big Display and reinstall screws.

   **Disconnection Notice:**
   - Be sure to leave enough room around the bail to allow for removal and rotation of the display.
   - 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.

   **COMMUNICATIONS**

   - DC Power IN
   - AC Power 100 - 240 Vac

   **OPERATIONS**

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

   2. **Valley Value (Display on Host Mode)**
      - Press **Menu** to request ‘Valley’ value.
      - RS-485 Mode, will send: *01X03 (Interface DRNT), or *01X04 (Interface DRNP)

   3. **Process Value (Display on Host Mode)**
      - Press **Menu** to request ‘Process’ value.

   4. **Write alphanumeric characters to the Big Display**

   5. **Display Color Setup (Alarm Setup)**

   - The instrument is a panel mount device protected in accordance with Class III of IEC 1010.
   - Whenever EMC is an issue, always use shielded cables.
   - Use signal wires connections with twisted-pair cables.
   - Install Ferrite Bead(s) on signal wire close to the instrument if EMC problems persist.

   **Example 1:**
   - Alarm 2 setup: "NO.CR"=Green
   - In the Run Mode pressing **Menu** causes the display to flash the PEAK value several times before returning to the Run Mode.
   - In the top menu press **Menu** to cause the display to return to the Run Mode.
   - Press the down **Menu** button to scroll through submenu selections. When a numerical value is displayed press this key to decrease value of a parameter that is currently being modified.
   - In the Run Mode pressing **Menu** causes the display to return to the PEAK value several times before returning to the Run Mode.
   - In the top menu press **Menu** to cause the display to return to the Run Mode.
   - Press **Reset** to return to 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 Color 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.

   **Configuration**

   **Button Functions in Configuration Mode**

   - **Menu** button to select or change parameters.
   - **Menu** button to advance/navigate to the next menu item.
   - **Menu** button to escape without saving the parameter.
   - **Menu** button to increase value of a parameter that is currently being modified.
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