5

**CONFIGURING THE OUTPUT (continued)**

**MODE**

<table>
<thead>
<tr>
<th>Press</th>
<th>ENTER</th>
<th>MODE CONFIGURATION SUBMENU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5) Display shows "STORED" stored message momentarily and advances to "MODE" to allow user to select Output type as Voltage (0-10Vdc) or Current (4-20mA-dc) source.
6) Display shows "VOLT" (default) DC-Voltage output option or previous selection ("CURR") DC-Current output.

**OUT 1**

<table>
<thead>
<tr>
<th>Press</th>
<th>ENTER</th>
<th>TYPE CONFIGURATION SUBMENU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7) Display shows "OUT1TyPе Output Type Submenu.

8) Display shows "UNFIlt" Unfiltered option or previous selection.
9) Scroll and choose the following options for your choice of setting:

"UNFIlt" Transmits the unfiltered value of your signal input.
"FILTER" Transmits the filtered value of your signal input.
"PEAK" Displays the recorded Peak "Hi Rdg" Reading value(s).
"VALLEY" Displays the recorded Valley "Lo Rdg" Reading value(s).

**OUT 2**

<table>
<thead>
<tr>
<th>Press</th>
<th>ENTER</th>
<th>TYPE CONFIGURATION SUBMENU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10) Display shows "OUT 2" menu.

11) Display shows 1st digit of previous "READING 1" value.
12) Enter "READING 1" value.

Analog Output:
- 0.5 V, 1.3 V, 0-10 V, 0.2 mA, 4-20 mA level; 14-bit resolution; 0.1% accuracy; 6 msec step response.

Isolation:
- Power to Input / Analog, Comm, Ethernet, & Relay Output: 2500 Vac per min test.
- Ethernet to Inputs / Analog Outputs: 1500 Vac per min test.
- Between Inputs / Analog & Comm Outputs: 500 Vac per min test.

**SETTING OUTPUT SCALE & OFFSET**

<table>
<thead>
<tr>
<th>Press</th>
<th>ENTER</th>
<th>SCALE &amp; OFFSET CONFIGURATION SUBMENU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OUT 1 (READING 1)

<table>
<thead>
<tr>
<th>Press</th>
<th>MAX</th>
<th>MIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>14)</td>
<td>Display flashes 1st digit of previous &quot;OUT 1&quot; value.</td>
<td></td>
</tr>
<tr>
<td>15)</td>
<td>Enter &quot;OUT 1&quot; value. (Example: 0000.00)</td>
<td></td>
</tr>
<tr>
<td>16)</td>
<td>Display advances to &quot;READ 2&quot; Read 2 menu.</td>
<td></td>
</tr>
</tbody>
</table>

OUT 2 (READING 2)

<table>
<thead>
<tr>
<th>Press</th>
<th>MAX</th>
<th>MIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>17)</td>
<td>Display flashes 1st digit of previous &quot;OUT 2&quot; value.</td>
<td></td>
</tr>
<tr>
<td>18)</td>
<td>Enter &quot;OUT 2&quot; value. (Example: 9999.99)</td>
<td></td>
</tr>
<tr>
<td>19)</td>
<td>Display advances to &quot;OUT 2&quot; 2 output menu.</td>
<td></td>
</tr>
</tbody>
</table>

**OPERATION MANUAL**

**BEYOND THE NEW STANDARD FOR QUALITY**

**INF-B**

**Isolated Analog Output Option**

For immediate technical or application assistance please call: 1-800-NEWPORT

**Warranty/Disclaimer**

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FEATURES OVERVIEW
1. Precise analog levels are generated from digital code using a 14-bit DAC chip.
2. Voltage (to 10 V) is available at the same time as current (to 22 mA), but the total current draw should not exceed 24 mA.
3. Load resistance for the voltage output can be as low as 500 ohms (20 mA at 10 V out) when current output is not used.
4. Loop resistance for the current output can be as high as 600 ohms (12 volts compliance) with negligible current from the voltage output.
5. Both outputs are galvanically isolated from both power and measurement circuits of the meter.
6. Precision calibration is applied by the meter to either the voltage output or the current output (but not to both simultaneously). When both outputs are used simultaneously, the non-calibrated output is stable but does require external adjustment if fine-trimming is required.
7. Independent, 14-bit resolution Output Scales and Offset (OT.SC.OF) can convert a wide range of meter readings to the desired current or voltage output span.
8. The output resolution permits good accuracy for turn-down ratios (offset/span) as high as 100:1.
9. 50° to 104°F (10° to 40°C) accuracy within 0.1% after installation calibration.
10. 10% to 90% step response time is 6 milliseconds (plus filter delay, if any, programmed for the analog output).
11. Configurable so that output will track the PEAK or VALLEY measurement.

BOARD INSTALLATION
To install optional Analog Output printed circuit board:
1. Refer to “Revealing the Main Board” in Operator’s Manual Section 5.2.
2. Using figure below as a reference, insert analog option board(s) into J12 connector on the main board.

WARNING: Do not connect ac power to your meter until you have completed all input and output connections. Failure to do so may result in injury! This device must only be installed electrically by specially trained technician with corresponding qualifications.

LOCKOUT (ACCESS SECURITY) CONFIGURATION MENU
- To prevent unauthorized tampering with the setup parameters, this instrument provides protection by requiring the user to enter the ID (Access Security) Code before allowing access any locked menu item on Main menu.
- The locked menu will be skipped and invisible during Menu Navigation, however Display will show the locked setpoint and value but editing mode is disabled (first digit is not flashing).
- Whether multiple or single menu accessibility/restriction desired, there is only one ID code needed.

Figure 1. Board Installation

Figure 2. Analog Output Option Board Wiring Connection

LOCK (continued)
11) Scroll and select "ENABLE" to lockout "OUT.CNF" Output Configuration from any unauthorized modification or skip this menu, just Press 'RESET/ENTER'.

CONFIGURING THE OUTPUT
OUT.CNF ENTER OUTPUT CONFIGURATION MENU:
Press 'MENU'
1) 5 times or scroll though main Menu until Display shows "OUT.CNF" Output Configuration Menu.

ANA.OUT
Press 'RESET/ENTER'
2) Display shows "ANA.OUT" Analog Output Configuration submenu.
Press 'RESET/ENTER'
3) Display flashes "disABIL" (Default) or previous setting option.
4) Select "ENABLE" to setup Analog Output if your controller is equipped With the optional Analog Output board.

LOCK
Press 'RESET/ENTER'
8) Display shows "STOREd" stored message momentarily and then advances to the "LOCK" Lockout menu.

Press 'RESET/ENTER'
9) Display shows "SP1" Setpoint 1 submenu. Use 'MENU' button to regain accessibility or lockout the other following menu functions in the Main Menu:
- "SP1", "SP2", "SP3", "SP4", "RdG.CNF", "INP.CNF", "MP.S.C.OF.
- "OUT.CNF", "SP.CNF", "AL.CNF", "COMM" (If Communication Option Board installed), and "COLOR".

Press 'RESET/ENTER'
10) Display flashes "disABIL" disable option or previous setting.

P12 1

WARNING: Do not connect ac power to your meter until you have completed all input and output connections. Failure to do so may result in injury! This device must only be installed electrically by specially trained technician with corresponding qualifications.