H91-23 INVERTER CONVERTER

USERS GUIDE
The H91-23 Inverter Converter is used to convert any DC voltage signal of +/-3.40, to +/-30 Volts to either a +/-5, +/-12, or +/-24 volt signal. In addition, the H91-23 includes selectable debounce time constants of 1 millisecond, 10 milliseconds and 25 milliseconds for converting signals generated by devices that might have switch bounce so the output will only respond once to each input. The output voltage will remain on for the duration that the corresponding input voltage is present.

Before using the H91-23, be sure the power supply is connected to the H91-23 and a main voltage.

**OUTPUT POLARITY SELECTION**
Select the output polarity by pressing the “OUT/COM” button.
- Green LED - The voltage on the output connector will be Signal Positive or Common Negative (The Out connector will provide the voltage and the Com connector is ground or zero volts).
- Amber LED - The voltage on the output connector will be Signal Negative or Common Positive (Out connector is ground or zero volts and the Com connector will provide the voltage).

**OUTPUT VOLTAGE SELECTION**
Press the “VOLTS” button to advance through the voltage options:
- Green LED - Output voltage is 5 Volts
- Amber LED - Output voltage is 12 Volts
- Red LED - Output voltage will be 24 volts

**SIGNAL INVERSION SELECTION**
Use the “IN/OUT” button to select the state of the output voltage.
- Green LED – Non Inverting (when voltage of input signal is between 5 and 30 volts the output signal will be present).
- Amber LED – Inverted (when voltage of input signal is at zero volts the output signal will be present).

**TIME DEBOUCE SELECTION**
Use the “Time” button to select the Debounce time constant
- Green LED – 1 millisecond
- Amber LED – 10 milliseconds
- Red LED – 25 milliseconds
- LED OFF – Debounce is off

The COMMON of the input signals can be connected inside the unit using the dipswitch on the side. All channels with the switch active will have the commons tied together.

The inputs are considered active when there is a presence of at least 3V across the input terminals of a given channel. It is not necessary that the inputs be of the same voltage.
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Number of Channels:</td>
<td>Eight</td>
</tr>
<tr>
<td>Input Voltage:</td>
<td>3.40 to 30 Volts</td>
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<tr>
<td>Output Voltage:</td>
<td>5, 12, or 30 Volts (selectable)</td>
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<tr>
<td>Output Voltage Polarity:</td>
<td>Positive or Negative (selectable)</td>
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<tr>
<td>Output Current:</td>
<td>300 milliamps per channel (max)</td>
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<tr>
<td>Input Integration Time:</td>
<td>Off, 1, 10 or 25 milliseconds (selectable)</td>
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<tr>
<td>Dimensions:</td>
<td>7.125 inches (L) x 3.875 inches (W) x 1.375 inches (H)</td>
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