The AUX Series accessory provides a second fixed HV output in addition to the adjustable main high-voltage power-supply output. This second output is set for a specific fixed voltage at the factory. The AUX output is achieved by adding a daughter board inside either 1/16A to 6A or 1/16C to 6C high-voltage power supplies.

This AUX board is encapsulated with the main high voltage power supply. All of the advantages of the base power supply remain. Typical applications include the following: Bipolar outputs, ionization/strike, trigger coils, pulse generator or amplifiers, tube elements such as G1, G2, cathode, and spark gap initiator.

• Adds a second + or - HV output
• Fixed regulated output
• Encapsulated with A or C Series HVPS
• Creates a 4.9 in³ dual-output supply

HIGH VOLTAGE AUX OUTPUT
The AUX output is a non-isolated, unipolar output. Positive or negative output must be specified. The polarity of this AUX is not dependent on the polarity of the base HVPS.

Full capability is available over an input range of 12 to 15VDC ±10% for 4W units and 24 to 28VDC ±5% for 20W/30W units. The AUX fixed output is fully functional when the main output voltage is adjusted from 100% to 75%. As the main output is adjusted from 75% to 50% the AUX output current is reduced from 100% to 0%. The manufactured tolerance on the fixed output is ±5%. Line regulation error is < 0.1%; load regulation error is < 0.1% per 100uA. The output has a temperature co-efficient of ±0.11% per °C.

Fixed outputs available are:
- 47V @ 2mA
- 94V @ 2mA
- 141V @ 2mA
- 188V @ 2mA
- 235V @ 2mA
- 282V @ 2mA
- 329V @ 2mA
- 450V @ 1mA
- 600V @ 1mA
- 750V @ 1mA
- 900V @ 1mA
- 1050V @ 1mA

Note: Specified AUX output should be <40% of the main output.

The AUX HV output connection is via an additional pair of standard .025in (0.635mm) square IDC pins. These pins can be used for PCB mounting or direct wiring. High voltage connector and cable options are available.

CONSTRUCTION
Epoxy-filled DAP box, certified to ASTM-D-5948
Plastic box

TOLERANCE
Overall ±0.050” (1.27)
Pin to Pin ±0.015” (0.38)
Mounting hole location ±0.025” (0.64)

NOTES
20W and 30W versions are an additional 0.062” (1.57) in height.
-M equipped units are an additional 0.030” (0.76) for each dimension.
Contact UltraVolt’s Customer Service Department for drawings of models equipped with -E or -H options.

Specifications subject to change without notice.
### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Type</th>
<th>Main Output Power</th>
<th>AUX Output Voltage</th>
<th>Option (Case)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 62 VDC Main Output</td>
<td>4 Watts Output</td>
<td>2mA @ 47, 94, 141, 188, 235, 282, 329</td>
<td>6AUX or 6CAUX</td>
</tr>
<tr>
<td>0 to 125 VDC Main Output</td>
<td>1/16AUX or 1/16CAUX</td>
<td>-VVV</td>
<td>-VVV</td>
</tr>
<tr>
<td>0 to 250 VDC Main Output</td>
<td>1/4AUX or 1/4CAUX</td>
<td>1mA @ 450, 600, 750, 900, 1050</td>
<td>-VVV</td>
</tr>
<tr>
<td>0 to 500 VDC Main Output</td>
<td>1/2AUX or 1/2CAUX</td>
<td>1mA @ 450, 600, 750, 900, 1050</td>
<td>-VVV</td>
</tr>
<tr>
<td>0 to 1,000 VDC Main Output</td>
<td>1AUX or 1CAUX</td>
<td>1mA @ 450, 600, 750, 900, 1050</td>
<td>-VVV</td>
</tr>
<tr>
<td>0 to 2,000 VDC Main Output</td>
<td>2AUX or 2CAUX</td>
<td>1mA @ 450, 600, 750, 900, 1050</td>
<td>-VVV</td>
</tr>
<tr>
<td>0 to 4,000 VDC Main Output</td>
<td>4AUX or 4CAUX</td>
<td>1mA @ 450, 600, 750, 900, 1050</td>
<td>-VVV</td>
</tr>
<tr>
<td>0 to 6,000 VDC Main Output</td>
<td>6AUX or 6CAUX</td>
<td>1mA @ 450, 600, 750, 900, 1050</td>
<td>-VVV</td>
</tr>
</tbody>
</table>

### CONSTRUCTION

Epoxy-filled DAP box, certified to ASTM-D-5948
Aluminum box, Chem film per MIL-A-8625 Type II (Anodizing)

### TOLERANCE

Overall ±0.025” (0.64)
Pin to Pin ±0.015” (0.38)
Mounting hole location ±0.025” (0.64)

*Optional boosted current monitor available. Contact the factory for more details.*

### CONNECTIONS

<table>
<thead>
<tr>
<th>PIN</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Input-Power Ground Return</td>
</tr>
<tr>
<td>2</td>
<td>Positive Power Input</td>
</tr>
<tr>
<td>3</td>
<td>Jout Monitor</td>
</tr>
<tr>
<td>4</td>
<td>Enable/Disable</td>
</tr>
<tr>
<td>5</td>
<td>Signal Ground Return</td>
</tr>
<tr>
<td>6</td>
<td>Remote Adjust Input</td>
</tr>
<tr>
<td>7</td>
<td>+5VDC Reference Output</td>
</tr>
<tr>
<td>8</td>
<td>HV Ground Return</td>
</tr>
<tr>
<td>9</td>
<td>HV Ground Return or Eout Monitor (-YS only)</td>
</tr>
<tr>
<td>10 &amp; 11</td>
<td>HV Output</td>
</tr>
<tr>
<td>12 &amp; 13</td>
<td>AUX HV Output</td>
</tr>
</tbody>
</table>

All grounds joined internally. Power-supply mounting points isolated from internal grounds by >100kΩ, .01μF / 50V (Max) on all models except -M (20W and above), -M-E, -M-C, and -M-H configurations which are 0Ω.

### Example:

2AUX-P4-N450-C

**Type**

**Voltage**

**Model**

**Main Output Polarity**

**Option (Case)**

**AUX Output Voltage**

**AUX Output Polarity**

**Main Output Power**

Popular accessories ordered with this product include CONN-KIT-F and BR-1 mounting bracket kit.