**Warning:** Do not use the support brackets to carry the SRG-4500. The brackets are not primarily designed for this purpose, and property damage or personal injury may result.

**To install the support brackets**
1. Select a mounting position that allows rear support bars to slide into slots of the brackets.
2. Choose the position that suits the cabinet depth and gives approximately a 0.5” projection beyond the previously mounted bracket.
3. Using four screws per bracket, attach both bars.
4. Mount the frame to the front rails of the rack cabinet using rack screws.
5. At the rear of the cabinet:
   a. Slide the bracket slots over the rear of the support bars.
   b. Secure to the cabinet rear rails with rack screws.

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**Specifications**

### Physical Specifications
- **Clearance**: 3.00” (75mm) Rear, 3.00” (75mm)
- **Height**: 1.71” (43.5mm)
- **Width**: 19.00” (482.5mm)
- **Depth**: 15.95” (405mm)
- **Temperature**: 0°C to +40°C (Op), -20°C to +60°C (Non-op), 0°C to +60°C (Rear)
- **Humidity**: 10% to 90% non-condensing
- **Power**: 65W 12VDC / 5.4A output

### Video Reference Inputs
- **Input Connector Type**: 2x75ohm BNC
- **Return Loss**: >30dB to 10MHz
- **Peak to Peak**: 1Vp-p (nominal), 2.5Vp-p (max.)
- **Sync**: >30dB to 10MHz
- **Impedance**: 75ohm
- **Connector**: MicroClasp™ 2mm
- **S/N Ratio**: >55dB
- **Burst**: <0.5°
- **Sync**: <1μs
- **Genlock Time Offset**: Full color range, ±0.5 degree of subcarrier

### Frequency Reference Inputs
- **Input Connector Type**: 1.5GHz SMC
- **Return Loss**: >30dB to 10MHz
- **Linearity**: ±5%
- **Pulse Types**: Burst Gate, Line Drive, Mixed Sync, PAL Square, Field Drive, Word Clock 41.768KHz
- **Rise and Fall Time**: 5ns > Rise/Fall < 44ns
- **Jitter**: <0.5° of carrier

### Analog Video Outputs
- **Connector Type**: 75ohm SMC
- **Impedance**: 75ohm
- **Return Loss**: >30dB to 10MHz
- **Sync**: >30dB to 10MHz
- **Burst Freq. Accuracy**: ±1Hz
- **Burst Freq. Linearity**: ±1μs
- **Sync Accuracy**: ±3%
- **SCH Phase Accuracy**: ±5%
- **Blanking Level**: ±50mV
- **Timing Offset**: Range Full color frame
- **Resolution (NTSC/PAL)**: ±3% of carrier
- **Resolution (Tri-Sync)**: ±5.5 degree of carrier
- **Resolution (Tri-BG)**: ±1748Hz

### LTC Outputs
- **Programmable Pulse Outputs**: 3 unbalanced SMC
- **Impedance**: 75ohm
- **Signal Amplitude**: 3.3V ±10% Balanced
- **Rise and Fall Time**: 8ns
- **Jitter**: 5ns > Rise/Fall < 44ns

### Cabling
- **GPS Input**: BNC, MicroClasp™, GPS
- **Black 1 Output**: Power, Differential balanced
- **TriBlack Outputs**: 100-BaseT, GbE, PB
- **SDI Outputs**: 100-BaseT, GbE, PTP
- **Ethemet**: 10/100/1000BaseT, 802.3u-1995, 802.3-1990, 802.3-2005
- **GPS Receiver Antenna Input**: 50 ohm, SMA

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**Note:** The SRG-4500 must have a warm-up period of at least 20 minutes. The SRG-4500 powers on automatically when the power supply is plugged in.
SRG-4500 Installation and Cabling

Installing the Breakout PCB

Balanced Audio/AES/LTC Outputs

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ground</td>
</tr>
<tr>
<td>2</td>
<td>Ground</td>
</tr>
<tr>
<td>3</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (+)</td>
</tr>
<tr>
<td>4</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (-)</td>
</tr>
<tr>
<td>5</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (+)</td>
</tr>
<tr>
<td>6</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (-)</td>
</tr>
<tr>
<td>7</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (+)</td>
</tr>
<tr>
<td>8</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (-)</td>
</tr>
<tr>
<td>9</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (+)</td>
</tr>
<tr>
<td>10</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (-)</td>
</tr>
<tr>
<td>11</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (+)</td>
</tr>
<tr>
<td>12</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (-)</td>
</tr>
<tr>
<td>13</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (+)</td>
</tr>
<tr>
<td>14</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (-)</td>
</tr>
<tr>
<td>15</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (+)</td>
</tr>
<tr>
<td>16</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (-)</td>
</tr>
<tr>
<td>17</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (+)</td>
</tr>
<tr>
<td>18</td>
<td>LTC1-4 AES1-8 DARS 0.4MHz (-)</td>
</tr>
<tr>
<td>19</td>
<td>AES2+</td>
</tr>
<tr>
<td>20</td>
<td>AES2-</td>
</tr>
<tr>
<td>21</td>
<td>AES3+</td>
</tr>
<tr>
<td>22</td>
<td>AES3-</td>
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<tr>
<td>23</td>
<td>DARS</td>
</tr>
<tr>
<td>24</td>
<td>AUD1+LEFT</td>
</tr>
<tr>
<td>25</td>
<td>AUD1-LEFT</td>
</tr>
<tr>
<td>26</td>
<td>AUD2+RIGHT</td>
</tr>
<tr>
<td>27</td>
<td>AUD2-RIGHT</td>
</tr>
<tr>
<td>28</td>
<td>Ground</td>
</tr>
<tr>
<td>29</td>
<td>Ground</td>
</tr>
<tr>
<td>30</td>
<td>Ground</td>
</tr>
</tbody>
</table>

AES/EBU Unbalanced Outputs

- Number of Outputs: 2 x AES3id audio, 1 x AES3id DARS
- Connector Type: BNC
- Impedance: 75Ω
- Signal Amplitude: 0.775V
- Rise and Fall Time: 5ns ± 10%
- Jitter: 8ps
- Frequency: 20Hz - 20kHz
- Pre-emphasis: None
- Interference: Programmable
- Resolution: 24bits

AES/EBU Balanced Outputs

- Number of Outputs: Up to 8 balanced AES3, 1 balanced DARS
- Connector Types: MicroClasp™ 2mm 10-pin (Molex #55859-1030) and Molex #51353-1000
- Impedance: Differential balanced line driver output
- Frequency: 20Hz - 20kHz
- Amplitude: -60dBFS to 0dBFS
- Pre-emphasis: None
- Interference: Programmable
- Resolution: 24bits

Set the IP Address

Note: You must set the IP address of the SRG-4500 from the front control panel after power up. Contact your facility Network Administrator for the required network settings.

To set the IP Address for the SRG-4500
1. Use the Rotary/Push Control dial on the front panel to display the Network Menu on the front control panel:
   - Operational Menu > System Menu > Network Menu.
2. Use the Rotary/Push Control dial to set the IP Address, Subnet Mask, Gateway, and MAC Address for the SRG-4500.
3. Use the Back button to return to the Operational Menu.

Having a problem? Call our free, 24-hour technical support hotline to speak with a live product specialist located right here in our facility.
Tel: (+1) 613-652-4886
Email: techsupport@rossvideo.com