• The number of available input and output BNCs depends on the frame you ordered.
• The 2 base MultiViewers are fixed to outputs 1 and 2, respectively.
• The 3 additional MultiViewers on the x36+ frame are fixed to outputs MV3-5.
• Only Media-Store audio can be output on the AES audio outputs. Audio is not embedded in the MultiViewer output.
• Output BNCs* 11-22 on the x36+ frame have dedicated format converters and color correctors for each BNC.

**Video Inputs/Outputs/Reference**

<table>
<thead>
<tr>
<th>Video Inputs/Outputs/Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>x36 Frame</td>
</tr>
<tr>
<td>Linear Timecode Input</td>
</tr>
<tr>
<td>AES Audio Outputs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Video Inputs/Outputs/Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>x36 Frame</td>
</tr>
<tr>
<td>Linear Timecode Input</td>
</tr>
<tr>
<td>AES Audio Outputs</td>
</tr>
</tbody>
</table>

**Power Switch, USB Port, and Diagnostics**

- **Carbonite Black Frame (interior front)**
- **Dashboard Display**
- **Status LEDs**
- **Power Switch**
- **DIP Switches**

**Specifications**

- **SDI Input Formats**
  - 480i 59.94Hz
  - 576 50Hz
  - 720p 59.94Hz
  - 720p 50Hz
  - 1080i 59.94Hz
  - 1080i 50Hz
  - 1080p 59.94Hz
  - 1080p 50Hz
  - 1080p 24P 59.94Hz
  - 1080p 25P 50Hz
  - 1080p 24P 50Hz
  - 1080p 25P Level A
  - 1080p 59.94Hz Level A

- **Input Voltages**
  - 1080i 59.94Hz: ±4.8V, differential (femal RJ-45)
  - 1080p 50Hz: ±5.0V, differential
  - 1080p 24P 50Hz: ±5.0V, differential
  - 1080p 25P 50Hz: ±5.0V, differential

- **Power Consumption**
  - CB8: 24W, 20.2A, 12V
  - CB1: 28W, 2.17A, 12V
  - CB1S: 25W, 2.5A, 12V
  - CB2: 39W, 2.5A, 12V
  - CB2S: 45W, 3.8A, 12V
  - CB15: 15W, 6.7A, 12V
  - x3 Frame: 150V, 3.75A, 45V
  - x35 Frame: 100V, 3.75A, 45V

- **Video Input Specifications**
  - **Equalization**
    - Using active cable (1464 cables, >10m at 1.5GHz)
    - >96dB at 10X
  - **Impedance**
    - 75 ohm, terminating
  - **Video Inputs, SDI**
    - SMPTE 2029AM/250M serial digital (non-looping)
  - **Reference Inputs**
    - Standard Definition — analog black (non-terminating, looping)
    - HD Definition — high-level sync

- **Video Output Specifications**
  - **Audio Depth**
    - -23dB at 1.0GHz
  - **Rise and Fall Time**
    - 50ps (<10%)
  - **Video Files**
    - 250ps (<10%)
  - **Signal Level**
    - 800mV <10% (100Ω)
  - **DC Offset**
    - 0 Vpp
  - **Overload**
    - 0.15 X
  - **HD Mode**
    - 10-bit SMPTE-292M serial digital
  - **AES Output Specifications**
    - Audio Depth: 34 dBc in HD
    - Channels: 1 Stereo Pair
    - File Format: Multichannel Waveform
    - Audio Files
    - Impedance: 110 Ohms, differential
    - Swing: 0.15 Vpp
    - Rise and Fall Times: 20ns (typical)
    - Sample Rate: 48kHz
    - Sample Rate: 48kHz

**Note:** The Panel port is used to connect to the Carbonite control panels.

**Important Safety Instructions** in your User manual.
Installation and Cabling

Power and Control Cabling

- **Note:** UltrachromeHR is an optional configuration of the switcher that turns it into a dedicated chroma keyer that supports the Ross UltrachromeHR signal format.

- **Note:** It is recommended that you always connect the AC Power Adapter to the device before connecting to Mains Power.

Frame Door Opening

1. Frame Door Opening
2. Frame Dust Filter

Frame Dust Filter

- **Note:** The Dust Filter located inside the frame door should be kept clean and free of dust buildup to ensure proper cooling of the frame. Always ensure that the Dust Filter is covering all the holes in the door.

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