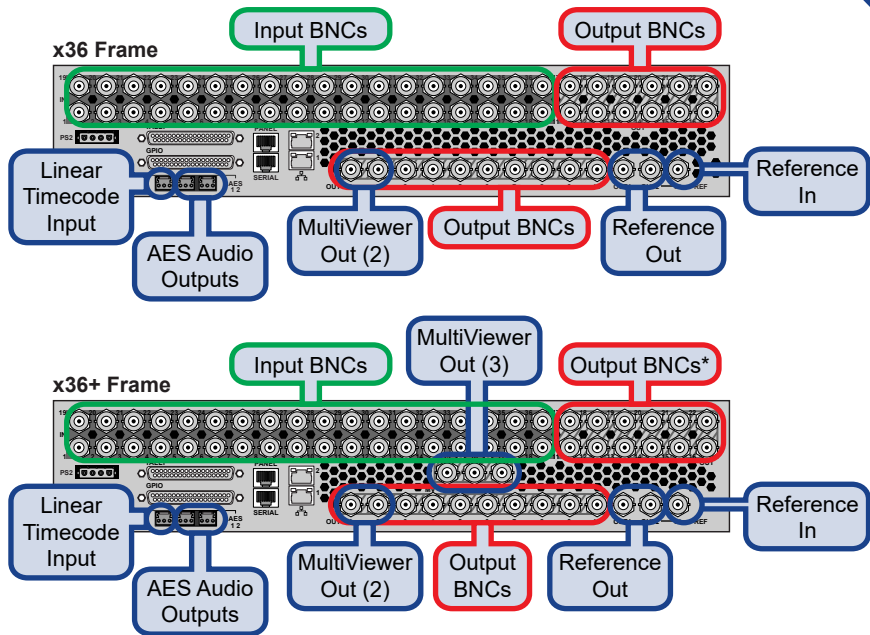




**Caution:** Before you set up and operate your server, see the "Important Safety Instructions" in your User manual.

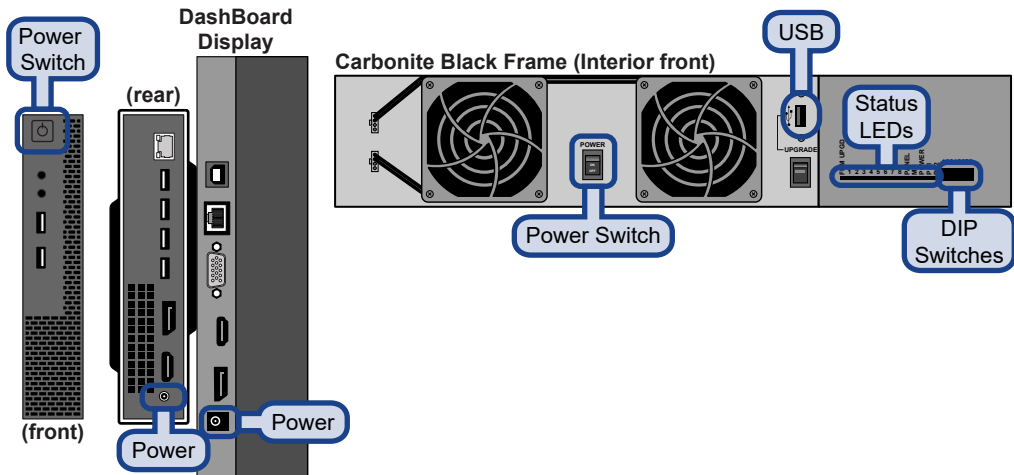
Video Inputs/Outputs/Reference



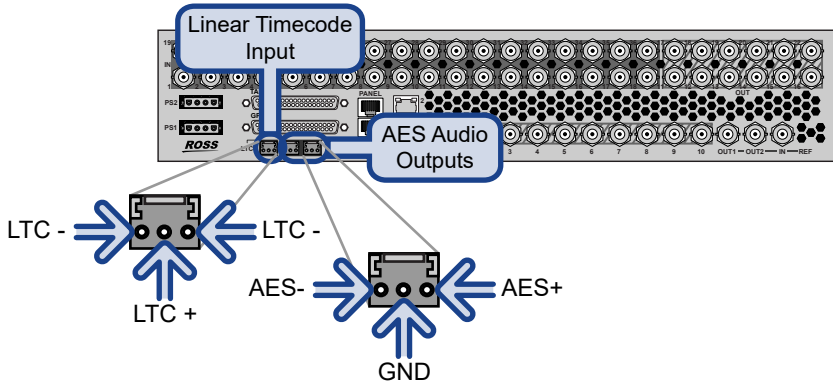
Notes:

- 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.

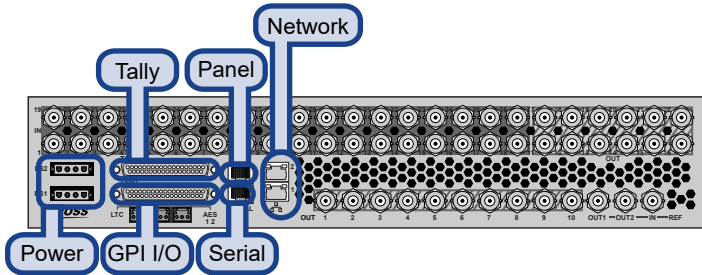
Power Switch, USB Port, and Diagnostics



AES Audio and LTC Ports



Frame Ports and Pinouts



Serial  
(female RJ-45)

| Pin | RS-422 |
|-----|--------|
| 1   | Tx+    |
| 2   | Tx-    |
| 3   | Rx+    |
| 4   | n/c    |
| 5   | n/c    |
| 6   | Rx-    |
| 7   | Ground |
| 8   | Ground |

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

GPI I/O  
(female DB37)

| Pin | Signal     | Pin | Signal     |
|-----|------------|-----|------------|
| 1   | GPI I/O 1  | 20  | GPI I/O 20 |
| 2   | GPI I/O 2  | 21  | GPI I/O 21 |
| 3   | GPI I/O 3  | 22  | GPI I/O 22 |
| 4   | GPI I/O 4  | 23  | GPI I/O 23 |
| 5   | GPI I/O 5  | 24  | GPI I/O 24 |
| 6   | GPI I/O 6  | 25  | Ground     |
| 7   | GPI I/O 7  | 26  | GPI I/O 25 |
| 8   | GPI I/O 8  | 27  | GPI I/O 26 |
| 9   | GPI I/O 9  | 28  | GPI I/O 27 |
| 10  | GPI I/O 10 | 29  | GPI I/O 28 |
| 11  | GPI I/O 11 | 30  | GPI I/O 29 |
| 12  | GPI I/O 12 | 31  | Ground     |
| 13  | GPI I/O 13 | 32  | GPI I/O 30 |
| 14  | GPI I/O 14 | 33  | GPI I/O 31 |
| 15  | GPI I/O 15 | 34  | GPI I/O 32 |
| 16  | GPI I/O 16 | 35  | GPI I/O 33 |
| 17  | GPI I/O 17 | 36  | GPI I/O 34 |
| 18  | GPI I/O 18 | 37  | --         |
| 19  | GPI I/O 19 |     |            |

Tally  
(female DB37)

| Pin | Tally                 | Pin | Tally                |
|-----|-----------------------|-----|----------------------|
| 1   | Common (2-6, 20-25)   | 20  | Tally 18             |
| 2   | Tally 1               | 21  | Tally 19             |
| 3   | Tally 2               | 22  | Tally 20             |
| 4   | Tally 3               | 23  | Tally 21             |
| 5   | Tally 4               | 24  | Tally 22             |
| 6   | Tally 5               | 25  | Tally 23             |
| 7   | Tally 6               | 26  | Tally 24             |
| 8   | Tally 7               | 27  | Tally 25             |
| 9   | Tally 8               | 28  | Tally 26             |
| 10  | Tally 9               | 29  | Tally 27             |
| 11  | Tally 10              | 30  | Tally 28             |
| 12  | Tally 11              | 31  | Common (7-12, 26-30) |
| 13  | Tally 12              | 32  | Tally 29             |
| 14  | Tally 13              | 33  | Tally 30             |
| 15  | Tally 14              | 34  | Tally 31             |
| 16  | Tally 15              | 35  | Tally 32             |
| 17  | Tally 16              | 36  | Tally 33             |
| 18  | Tally 17              | 37  | Tally 34             |
| 19  | Common (13-18, 32-37) |     |                      |

**Note:** The tally pin must be connected to the proper common to complete the circuit. For example, tally 6 on pin 7 must be connected to the common on pin 31.

Specifications

SDI Input Formats

|                       |
|-----------------------|
| 480i 59.94Hz          |
| 576i 50Hz             |
| 720p 59.94Hz          |
| 720p 50Hz             |
| 1080i 59.94Hz         |
| 1080i 50Hz            |
| 1080pSF 23.98Hz       |
| 1080pSF 25Hz          |
| 1080pSF 29.97Hz       |
| 1080p 29.97Hz         |
| 1080p 50Hz Level A    |
| 1080p 59.94Hz Level A |

Default Values

|                 |               |
|-----------------|---------------|
| Frame IP (LAN1) | 192.168.0.123 |
| Frame IP (LAN2) | 0.0.0.0       |
| FTP User name   | user          |
| FTP Password    | password      |

Tally Rating

|                  |                     |
|------------------|---------------------|
| Input Voltage:   | 24VAC (rms) / 40VDC |
| Maximum Current: | 120mA               |
| Impedance:       | < 15 ohms           |

Temperature

|            |                         |
|------------|-------------------------|
| Operating: | 0 - 40°C (32 - 104°F)   |
| Storage:   | -20 - 85°C (-4 - 185°F) |

Power Consumption

|             |      |       |     |
|-------------|------|-------|-----|
| CB9         | 24W  | 2.0A  | 12V |
| CB1         | 25W  | 2.1A  | 12V |
| CB1S        | 30W  | 2.5A  | 12V |
| CB2         | 35W  | 2.9A  | 12V |
| CB2S        | 45W  | 3.8A  | 12V |
| CB3S        | 65W  | 5.4A  | 12V |
| CB3X        | 80W  | 6.7A  | 12V |
| x36 Frame   | 120W | 2.5A  | 48V |
| x36+ Frame  | 180W | 3.75A | 48V |
| x36+12G Frm | 206W | 4.3A  | 48V |

Input Voltages

|             |             |
|-------------|-------------|
| Panel/Frame | 100 - 120V~ |
|             | 220 - 240V~ |
|             | 47-63Hz     |

Video Input Specifications

|                            |                                              |
|----------------------------|----------------------------------------------|
| Equalization               | >100m at 1.5 Gb/s                            |
| (using Belden 1694 cable)  | >300m at 270 Mb/s (5°-40°C)                  |
| Impedance                  | 75 ohm, terminating                          |
| Video Inputs, SDI          | SMPTE 259M/292M serial digital (non-looping) |
| Reference Inputs           | Standard Definition — analog black           |
| (non-terminating, looping) | High Definition — tri-level sync             |

Video Output Specifications

|                    |                                  |
|--------------------|----------------------------------|
| Return Loss        | < -23dB at 1.5GHz                |
|                    | < -18dB at 3GHz                  |
| Rise and Fall Time | 800ps +/- 10% (SD)               |
|                    | 240ps +/- 10% (HD)               |
| Signal Level       | 800mV +/- 10%                    |
| DC Offset          | 0 Volts                          |
| Overshoot          | < 10%                            |
| HD Mode            | 10-bit SMPTE-292M serial digital |

AES Output Specifications

|                        |                        |
|------------------------|------------------------|
| Audio Depth            | 24-bit in HD           |
|                        | 20-bit in SD           |
| Channels               | 1 Stereo Pair          |
| File Format            | Multi-Channel Waveform |
|                        | Audio File             |
| Impedance              | 110 Ohms, differential |
| Min/Max Output Voltage | 1.5/6V peak-to-peak    |
| Swing                  |                        |
| Rise and Fall Times    | 20ns (typical)         |
| Sample Rate            | 48kHz                  |
| Synchronization        | Locked to Video        |

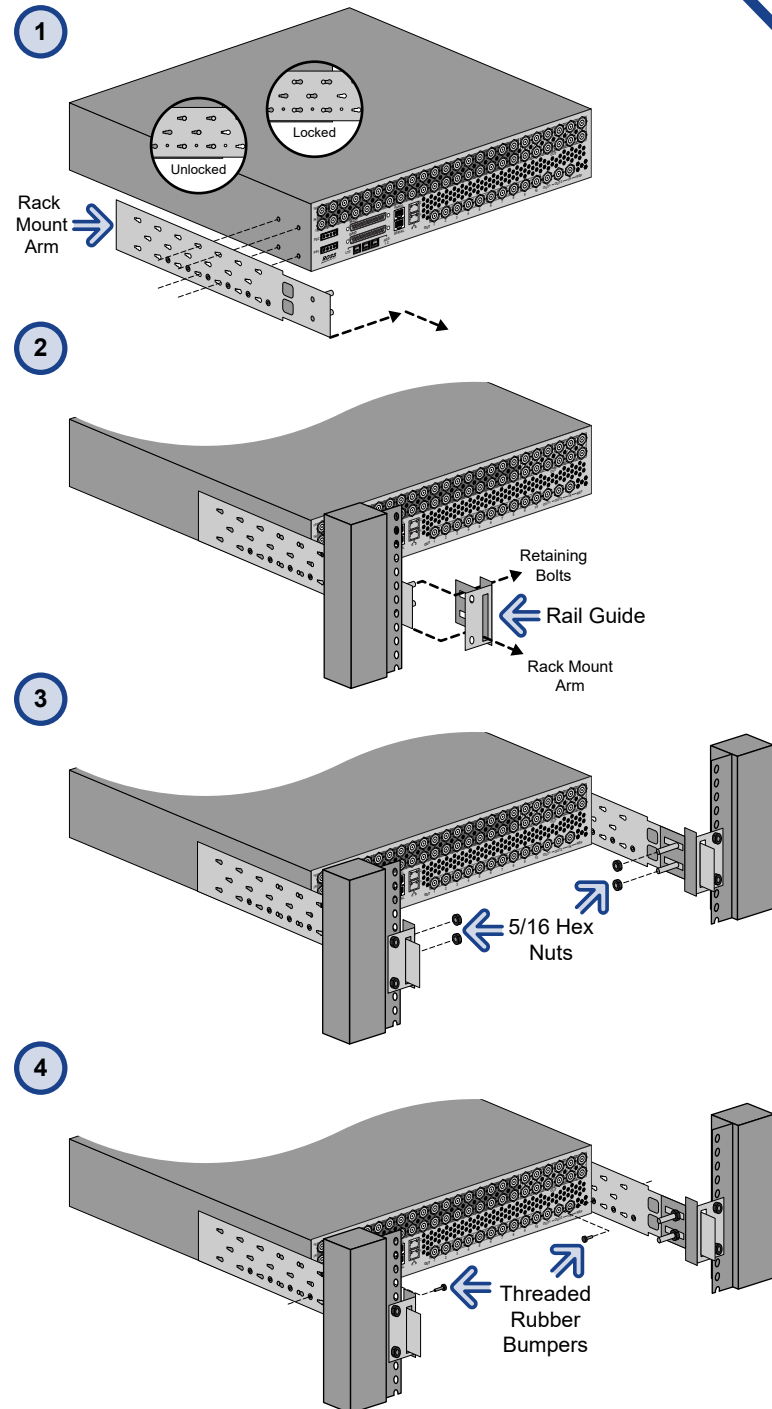




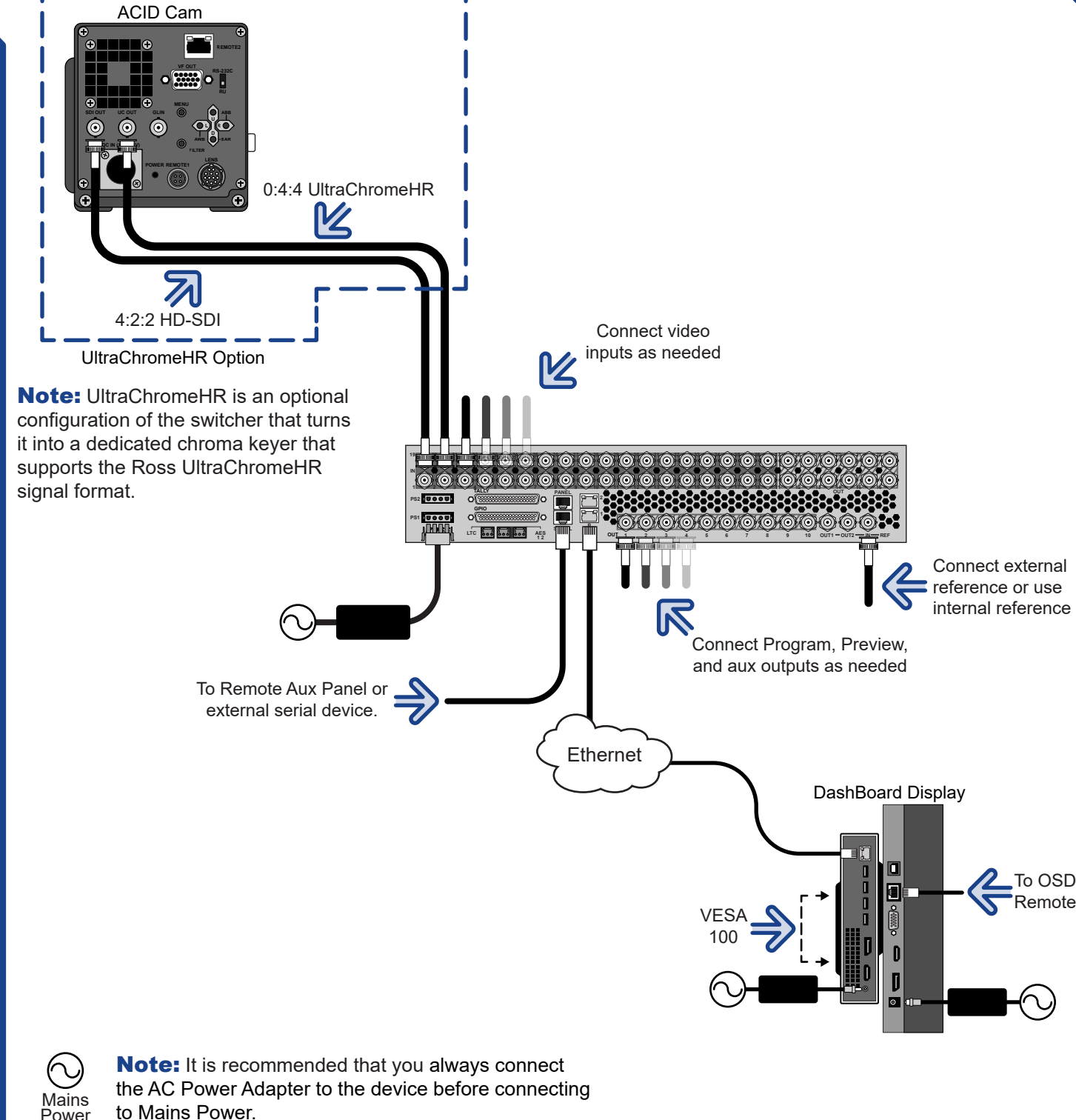
**Caution:** Before you set up and operate your server, see the "Important Safety Instructions" in your User manual.

## Installation and Cabling

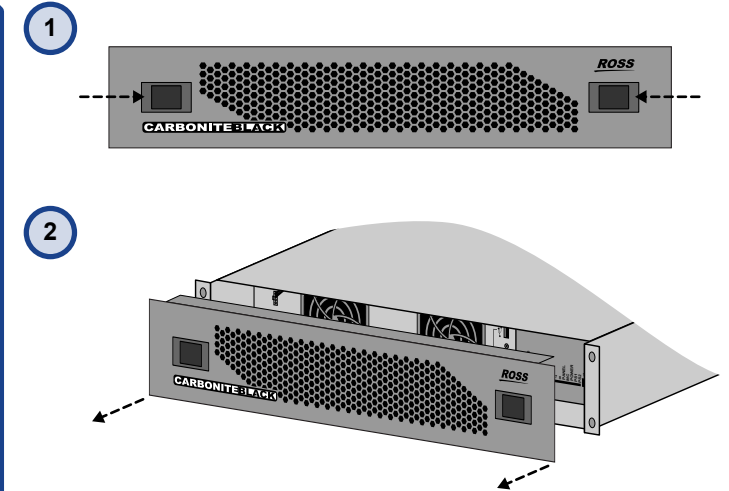
### Rack Mounting



### Power and Control Cabling

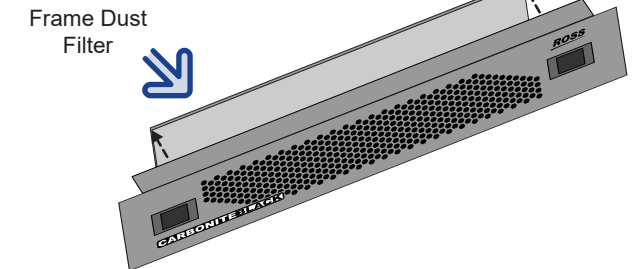


### Frame Door Opening



### Frame Dust Filter

Remove frame door before cleaning the 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