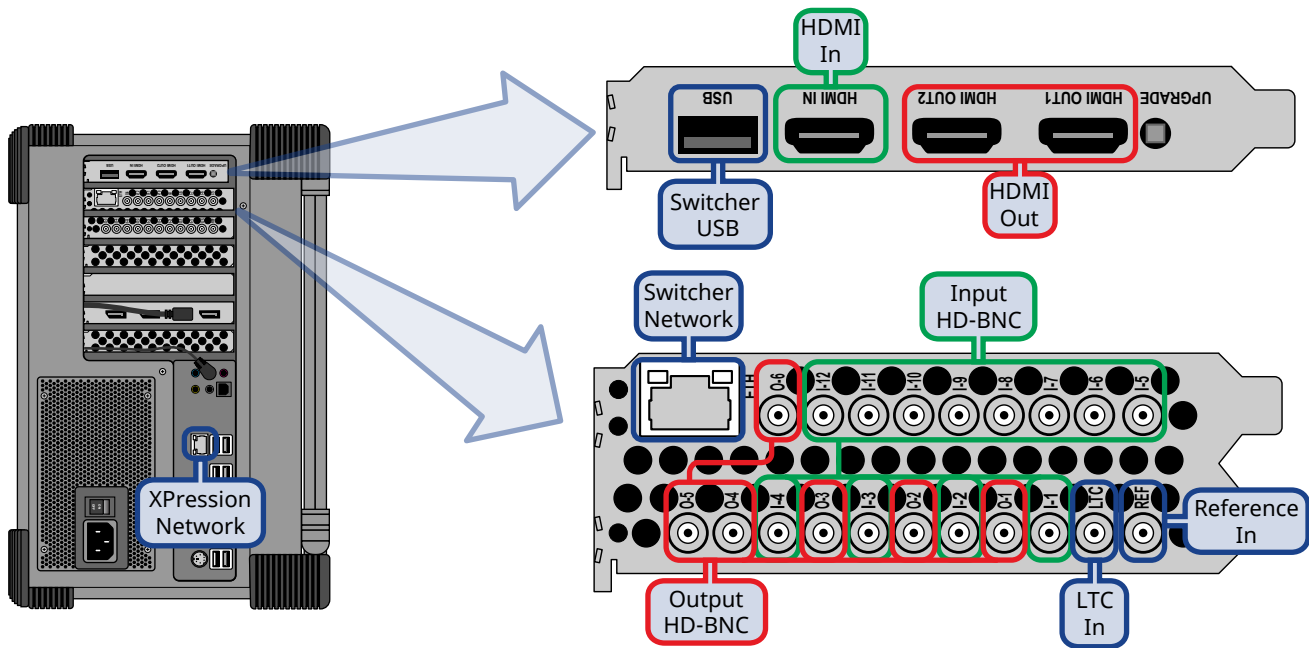


Ports and Connectors



- Notes:**
- IN1 loops to OUT1 and IN3 loops to OUT3 in bypass mode when the switcher sub-system is not running. (Cable length depends on the equipment you are using.)
 - MultiViewer outputs are only available on OUT5 and 6.
 - HDMI audio is not supported.
 - HDMI output formats are the same as the switcher is operating in. No format conversion is applied to the output except for the MultiViewer that can be 1080p.
 - The ethernet port on the right at the back of the server has be set to the default IP address for XPression. The other port is set to DHCP.
 - The Switcher USB port is connected to the switcher sub-system and not available to the Windows OS.
 - HD-BNC connectors conform to the Amphenol™ RF High Density Cable specification (8.8mm center to center). Other cable connectors may not fit.

Specifications

Video Input Formats	Default Values
480i 59.94Hz	Switcher IP 192.168.0.123
576i 50Hz	XPression IP 192.168.0.113
720p 59.94Hz	FTP User name user
720p 50Hz	FTP Password password
1080i 59.94Hz	
1080i 50Hz	
1080pSF 23.98Hz	
1080pSF 25Hz	
1080pSF 29.97Hz	
1080p 25Hz	
1080p 29.97Hz	
1080p 50Hz Level A	
1080p 59.94Hz Level A	

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

Temperature
Operating: 0 - 50°C (32 - 122°F)
Storage: -20 - 60°C (-4 - 140°F)

Power Consumption
PC 185W 1.54A 120V
Audio Breakout 45W 3.75A 12V

Input Voltages
All 100 - 120V~
220 - 240V~
47-63Hz

Video Input Specifications
Equalization >50m @ 3Gb/s
(Belden 1694 cable) >100m @ 1.5 Gb/s
>300m @ 270 Mb/s (5°-40°C)
Impedance 75 ohm, terminating
Video Inputs, SDI SMPTE 259M/292M
(non-looping)
Video Inputs, HDMI HDMI 1.4
High Speed Cable (Max 10m)
Ref Inputs (75 ohm, SD — analog black
terminated) HD — tri-level sync

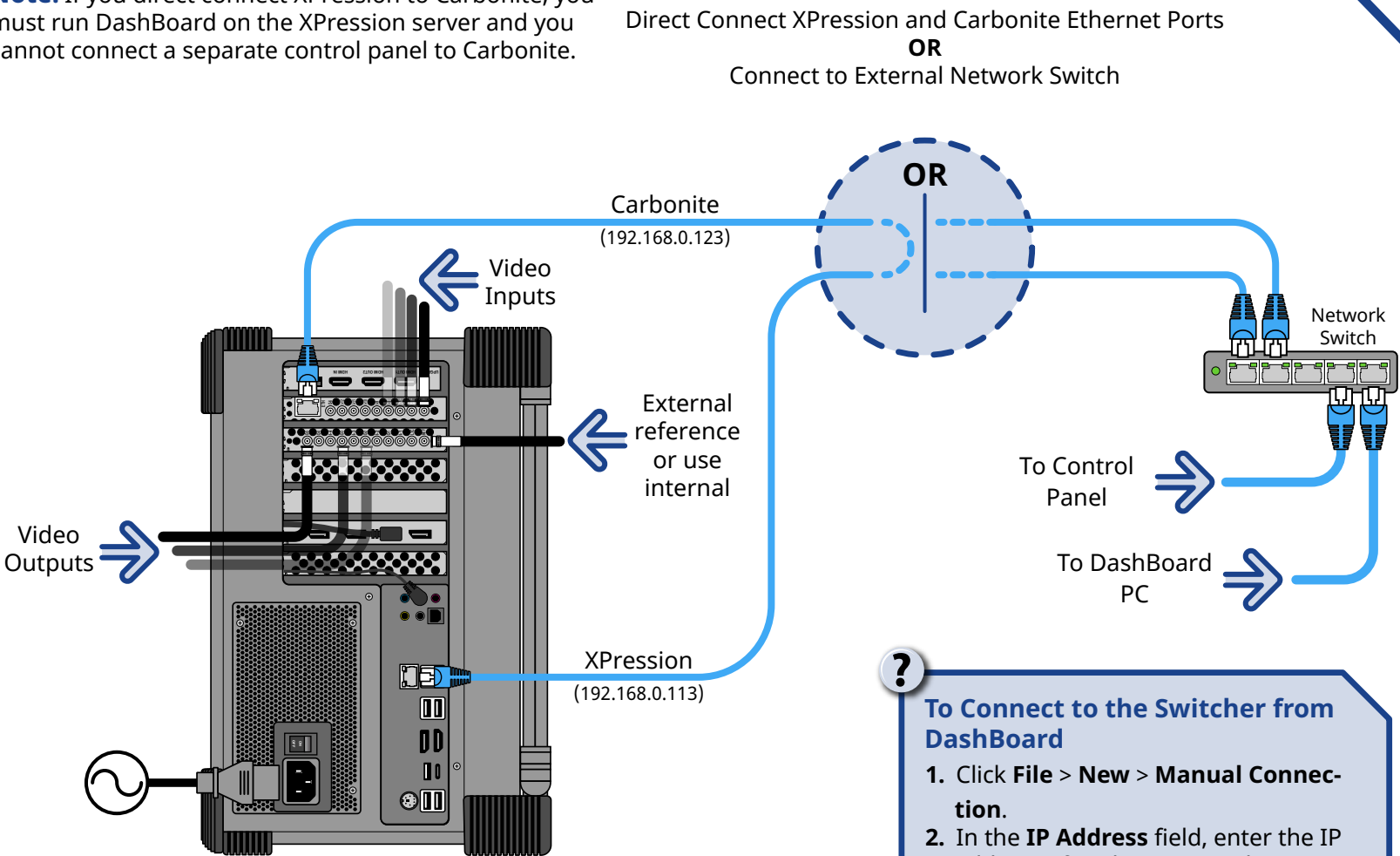
Video Output Specifications
Return Loss >15dB 5Mb/s to 1.5Gb/s
(w/o bypass) >10dB 1.5Gb/s to 3Gb/s
Return Loss >13dB 5Mb/s to 1.5Gb/s
(w/ bypass) >10dB 1.5Gb/s to 3Gb/s
Rise & Fall Time 800ps +/- 10% (SD)
240ps +/- 10% (HD)
Signal Level 800mV +/- 10%
DC Offset 0 Volts
Overshoot < 10%
SDI HD Mode 10-bit SMPTE-292M
HDMI HDMI 1.4
High Speed Cable

Analog Audio Input Specifications
Input Impedance XLR: 2K ohm
¼" Jack: 10K ohm
Maximum Level +24dBu
Frequency Response ±0.3dB (22Hz to
20kHz @ Fs = 48kHz)
Signal to Noise Ratio -95dB
"A" weighting -98dB
CCITT weighting -107dB
THD >93dB or <0.002%
Amplitude Linearity <0.8dB @ -100dBFS
Crosstalk -94dB

Analog Audio Output Specifications
Maximum Level +24dBu
Frequency Response ±0.4dB (22Hz to
20kHz @ Fs = 48kHz)
Signal to Noise Ratio -103dB
THD >93dB
Amplitude Linearity <0.3dB @ -100dBFS
Crosstalk -106dB (20Hz to
20kHz)

Power and Control Cabling

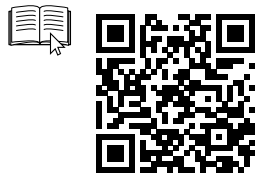
Note: If you direct connect XPression to Carbonite, you must run DashBoard on the XPression server and you cannot connect a separate control panel to Carbonite.



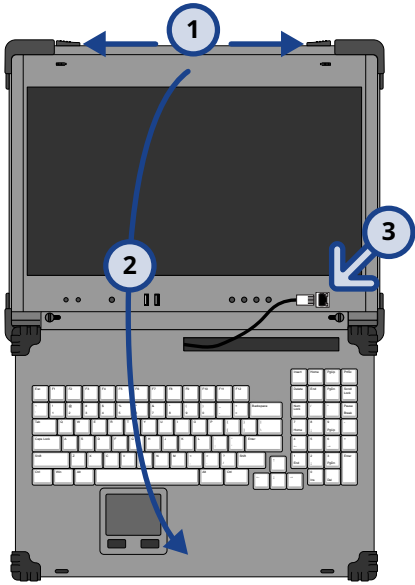
Note: It is recommended that you always connect the AC Power Cord to the device before connecting to Mains Power.

Direct Connect XPression and Carbonite Ethernet Ports
OR
Connect to External Network Switch

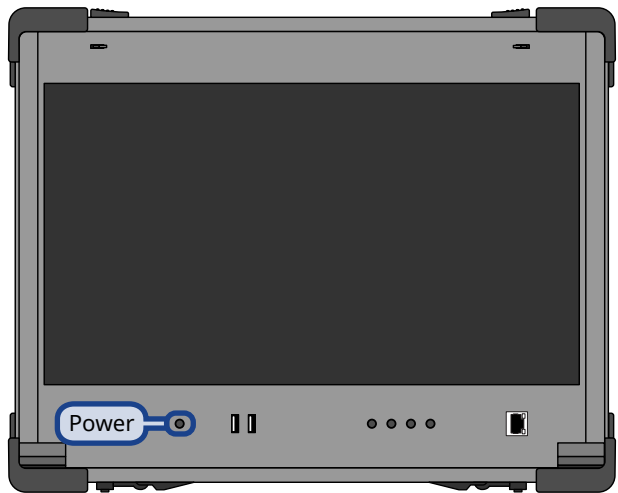
- To Connect to the Switcher from DashBoard**
1. Click **File > New > Manual Connection**.
 2. In the **IP Address** field, enter the IP address of Carbonite, not the IP address of XPression.
 3. Click **Detect Settings**.
 4. Click **Finish**.



Operation

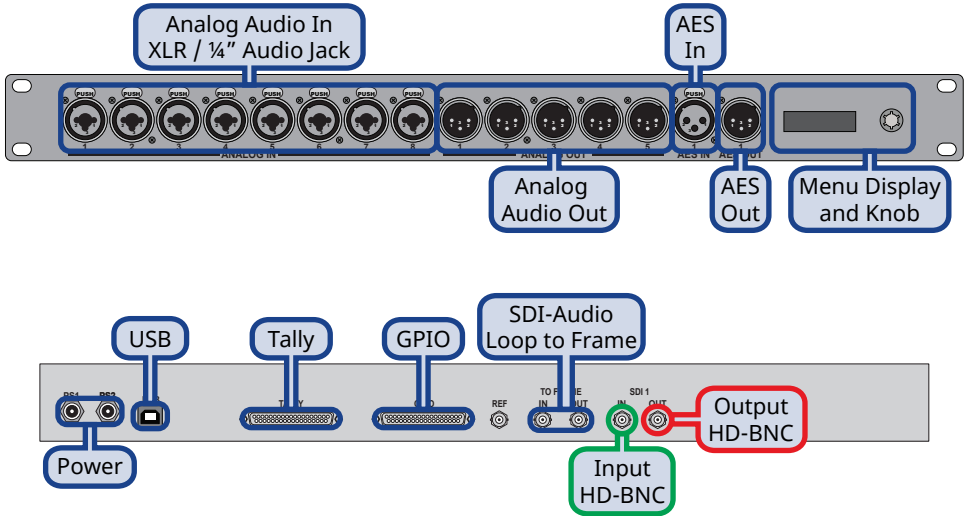


Tip: Push the levers in to detach the keyboard. (optional)



Flip feet out for a better viewing angle.

Audio Breakout Module (ABM)



Tally (female DB25)

Pin	Tally	Pin	Tally
1	1	14	14
2	2	15	15
3	3	16	16
4	4	17	17
5	5	18	18
6	6	19	19
7	7	20	20
8	8	21	21
9	9	22	22
10	10	23	23
11	11	24	24
12	12	25	Common
13	13		

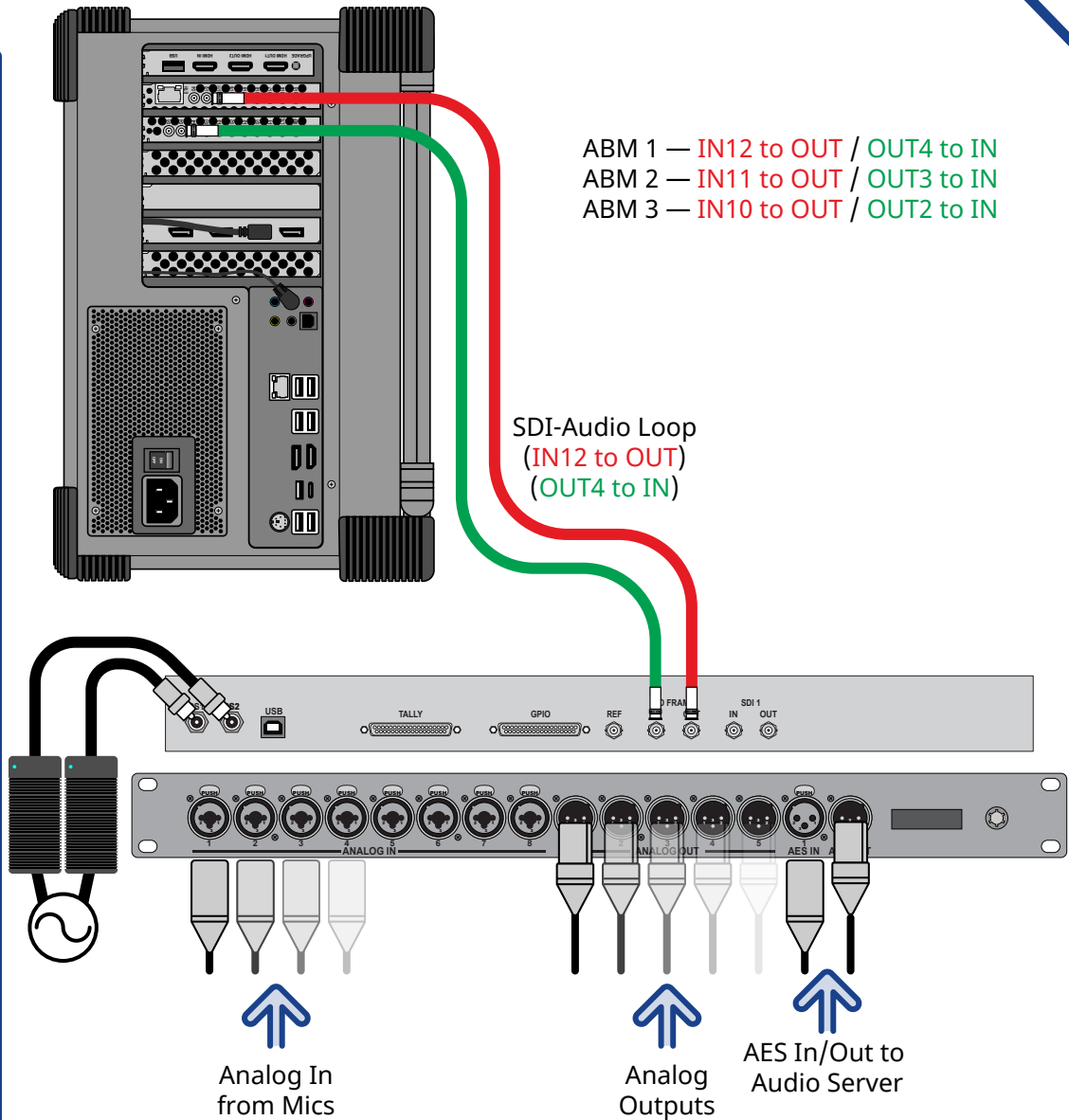
GPI I/O (female DB25)

Pin	GPI	Pin	GPI
1	I/O 1	14	I/O 14
2	I/O 2	15	I/O 15
3	I/O 3	16	I/O 16
4	I/O 4	17	I/O 17
5	I/O 5	18	I/O 18
6	I/O 6	19	I/O 19
7	I/O 7	20	I/O 20
8	I/O 8	21	I/O 21
9	I/O 9	22	I/O 22
10	I/O 10	23	I/O 23
11	I/O 11	24	I/O 24
12	I/O 12	25	Ground
13	I/O 13		

Notes:

- All digital audio must be reference locked (timed) to the same reference that the switcher subsystem is using. This includes both SDI embedded audio and AES audio inputs on the 1RU Audio Breakout Module.
- The SDI-Audio Loop HD-BNCs are for passing embedded audio to and from the audio mixer.
- The SDI1 In and Out HD-BNCs replace the HD-BNCs on the server that are used by the Audio Breakout Unit.
- The REF input is not available at this time.

Power and Cabling



ABM 1 — IN12 to OUT / OUT4 to IN
ABM 2 — IN11 to OUT / OUT3 to IN
ABM 3 — IN10 to OUT / OUT2 to IN

Important: Ensure that Phantom Power is turned off for the Analog Input unless you are connecting a microphone that requires phantom power. Connecting the line out from an audio device to the analog input with phantom power on could damage the audio device and/or the 1RU Audio Breakout Module. For added safety, a TRS phone connector should be used for line in audio sources.



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

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

ROSS