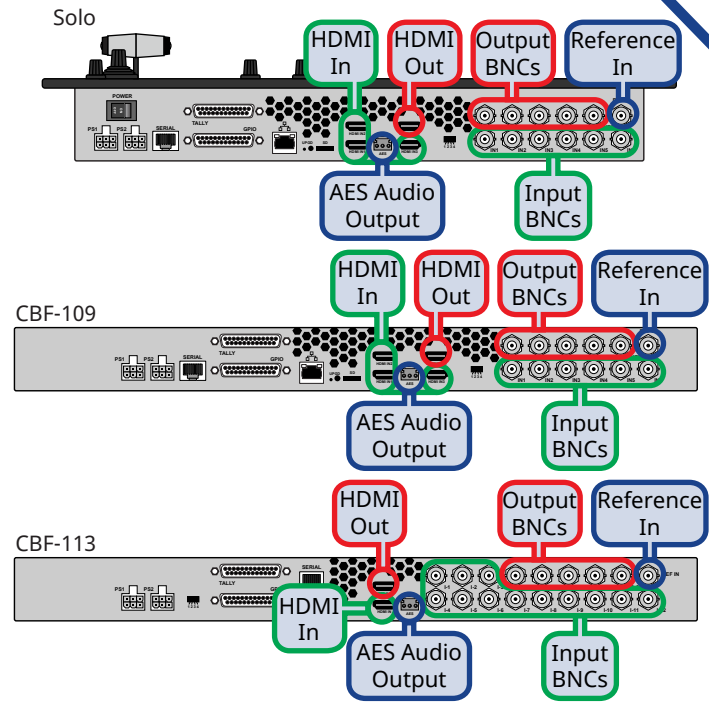


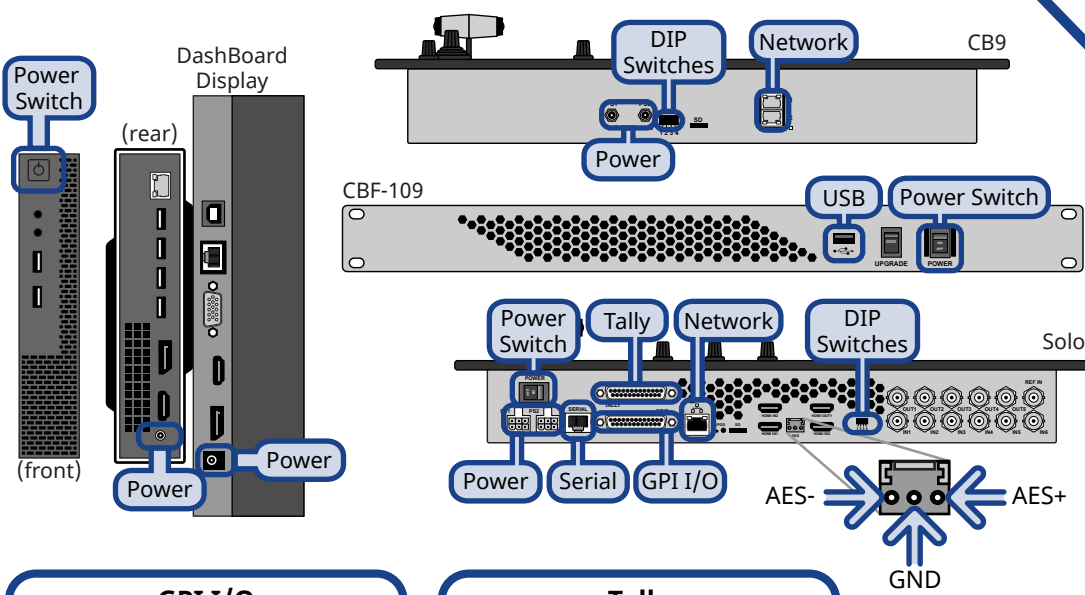


Caution: Before you set up and operate your switcher, see the "Important Safety Instructions" in your Setup manual.

Video Inputs/Outputs/Reference



Ports, Pinouts, and Diagnostics



GPI I/O (female DB25)

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

Tally (female DB25)

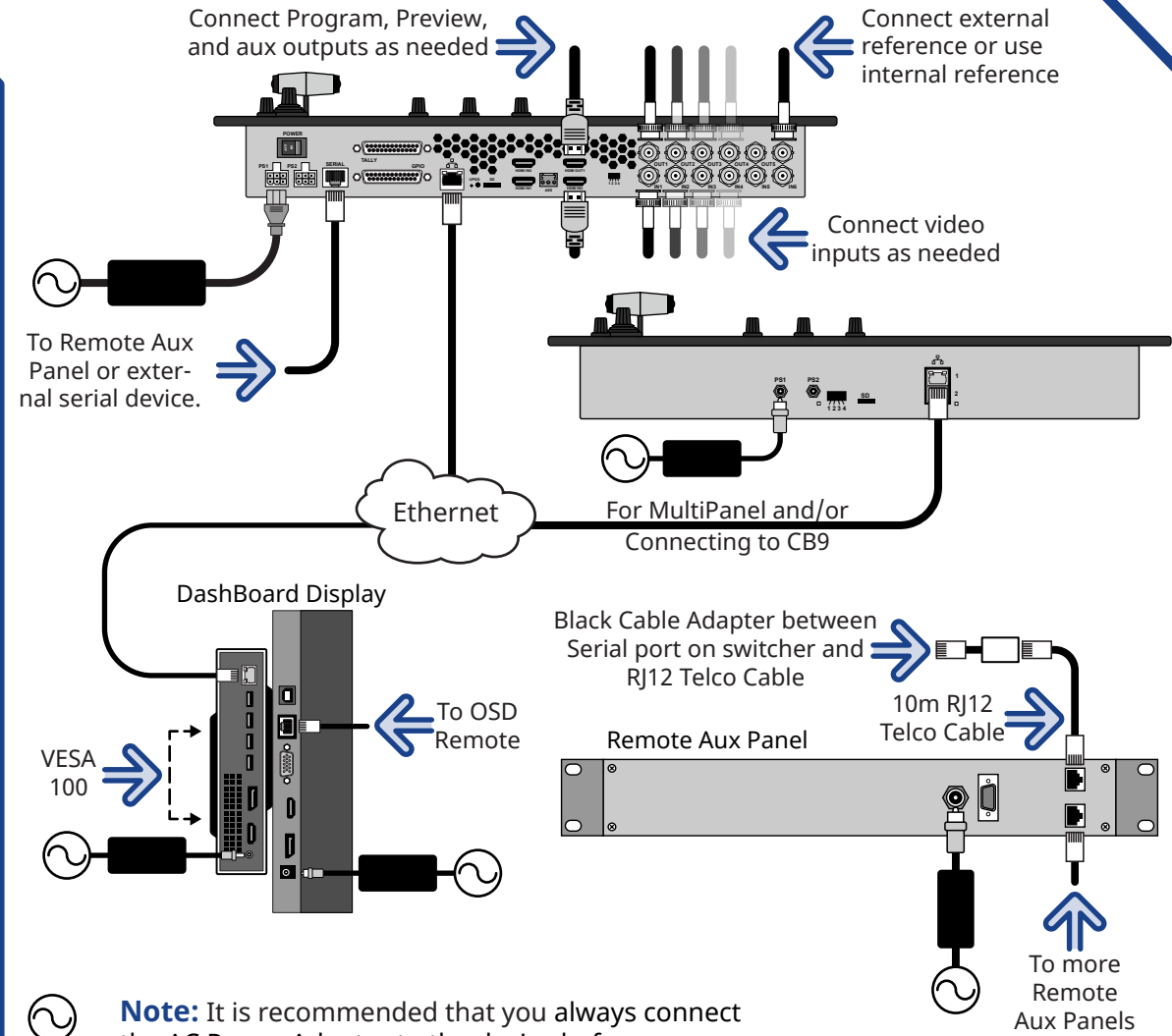
Pin	Tally	Pin	Tally
1	Tally 1	14	Tally 14
2	Tally 2	15	Tally 15
3	Tally 3	16	Tally 16
4	Tally 4	17	Common
5	Tally 5	18	Common
6	Tally 6	19	Common
7	Tally 7	20	Common
8	Tally 8	21	Common
9	Tally 9	22	Common
10	Tally 10	23	Common
11	Tally 11	24	Common
12	Tally 12	25	Common
13	Tally 13		

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: Carbonite Black Solo and CBF-109 use the PSU-12V9A-6PIN power supply.

Power and Cabling



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

Notes:

- The MultiViewer is assigned to output BNC 5 or HDMI Out.
- Only Media-Store audio can be output on the AES audio output. Audio is not embedded in the MultiViewer output.
- HDMI output formats are the same as the switcher is operating in. No format conversion is applied to the output.

Specifications

HDMI Input Formats

VGA	640x480 (4:3)
SVGA	800x600 (4:3)
XGA	1024x769 (4:3)
SXGA	1280x1024 (5:4)
720p	1280x720 (16:9)
1080i	1920x1080 (16:9)
1080p	1920x1080 (16:9)

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	25Hz
1080p	50Hz Level A
1080p	59.94Hz Level A

Default Values

Frame IP	192.168.0.123
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

Solo	57W 4.75A 12V
CBF-109	45W 3.75A 12V
CBF-113	48W 4.00A 12V
CB9	24W 2.00A 12V

Input Voltages

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

Video Input Specifications

Equalization (using 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 serial digital (non-looping)
Video Inputs, HDMI	HDMI 1.4 High Speed HDMI Cable (Max 10m)
Reference Inputs (non-terminating, looping)	Standard Definition — analog black 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%
SDI HD Mode	10-bit SMPTE-292M serial digital
HDMI	HDMI 1.4 High Speed HDMI Cable

AES Output Specifications

Audio Depth	24-bit in HD 20-bit in SD
Channels	1 Stereo Pair Multi-Channel
File Format	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

