

Video Inputs/Outputs/Reference

x36 Frame

Input BNCs

Output BNCs

Linear Timecode Input

AES Audio Outputs

MultiViewer Out (2)

Output BNCs

Reference In

Reference Out

x36+ Frame

Input BNCs

MultiViewer Out (3)

Output BNCs\*

Linear Timecode Input

AES Audio Outputs

MultiViewer Out (2)

Output BNCs

Reference In

Reference Out

Power Switch, USB Port, and Diagnostics

Power Switch

DashBoard Display

(rear)

Power

Power

Carbonite Black Frame (Interior front)

USB

Status LEDs

DIP Switches

Power Switch

Carbonite Black 1S

Power Switch

Power

Frame Ports and Pinouts

Tally

Panel

Network

Power

GPI I/O

Serial

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

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)		

Notes:

The number of available input and output BNCs depends on the frame you ordered.

The 2 base MultiViewers are assigned to outputs 1 and 2, but can be re-assigned to outputs 3 and 4, 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.

AES Audio and LTC Ports

Linear Timecode Input

AES Audio Outputs

LTC -

LTC +

AES-

AES+

GND

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

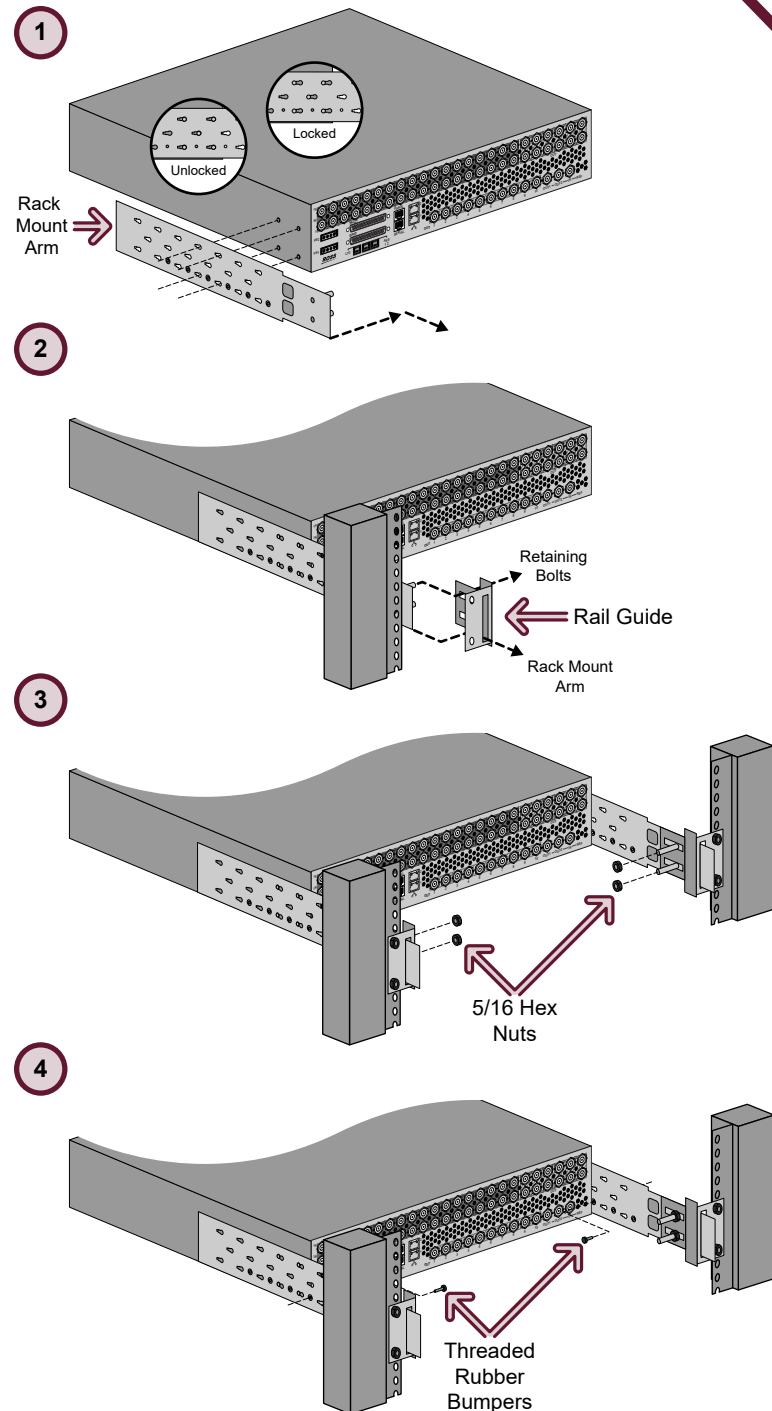
AES Output Specifications

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

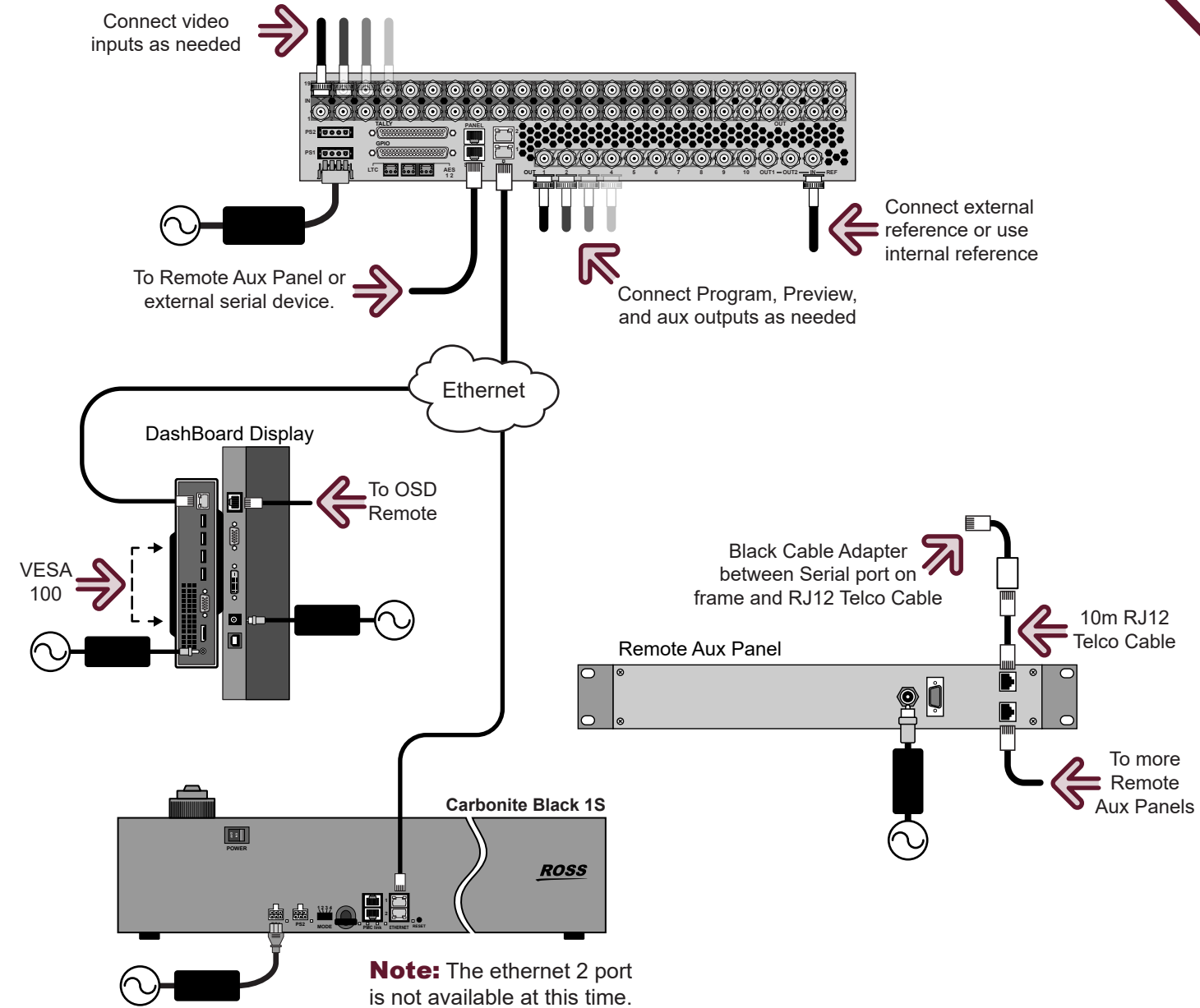
**Note:** The tally pin must be connected to the proper common to complete the circuit. For example, tally 6 on pin 7 must be connected to the common on pin 31.



### Rack Mounting

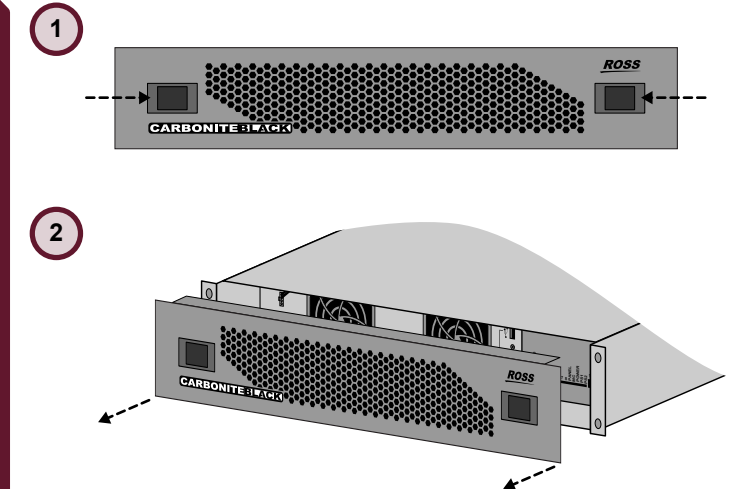


### Power and Control Cabling



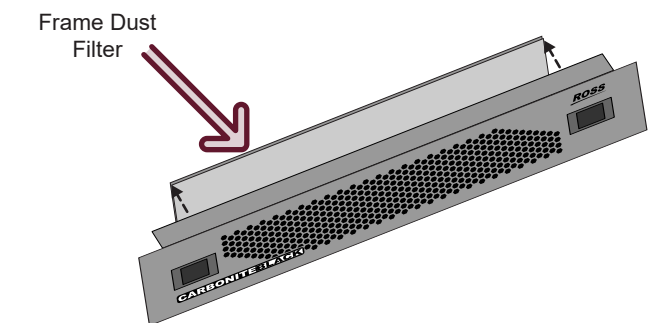
**Note:** It is recommended that you always connect the AC Power Adapter to the device before connecting to Mains Power.

### 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.

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