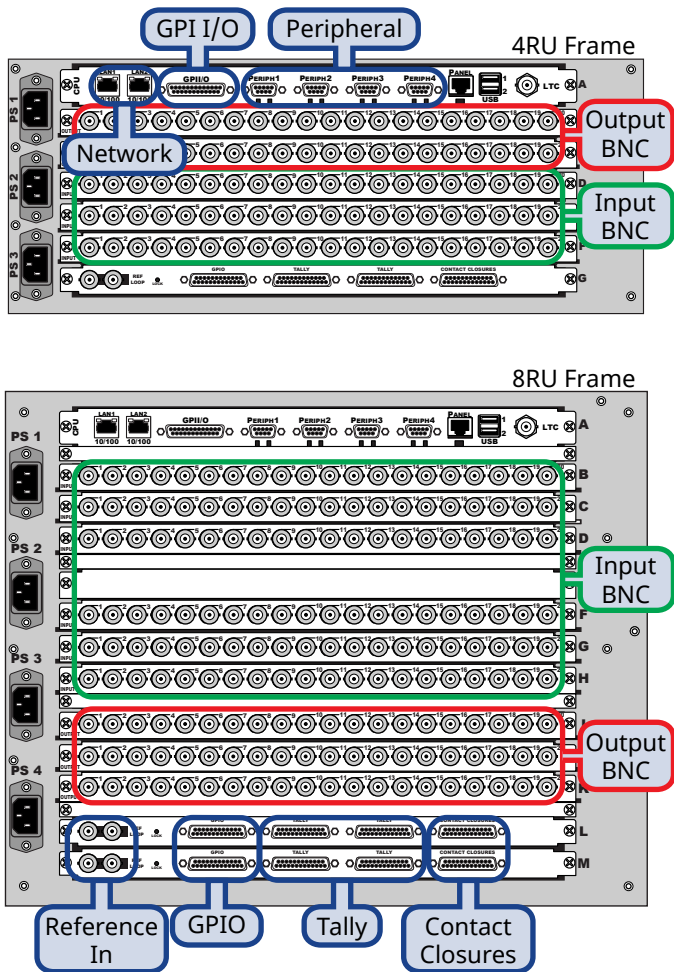


Video I/O and Ports



GPI I/O - CPU
(female DB25)

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

GPIO - Ref/Tally
(female DB25)

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

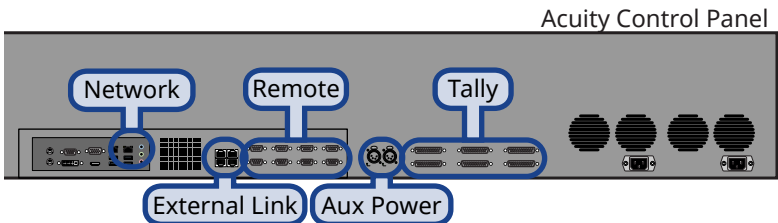
Tally Port 1 - Panel/Frame
(female DB25)

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

Contact Closure
(female DB25)

Pin	CtCl	Pin	CtCl
1	1 Out	14	1 Comn
2	2 Out	15	2 Comn
3	3 Out	16	3 Comn
4	4 Out	17	4 Comn
5	5 Out	18	5 Comn
6	6 Out	19	6 Comn
7	7 Out	20	7 Comn
8	8 Out	21	8 Comn
9	9 Out	22	9 Comn
10	10 Out	23	10 Comn
11	11 Out	24	11 Comn
12	12 Out	25	12 Comn
13	n/c		

Note: Each Tally port starts where the previous one left off. So Pin 1 on Port 2 is Tally 19, Pin 2 is Tally 21 and so on.



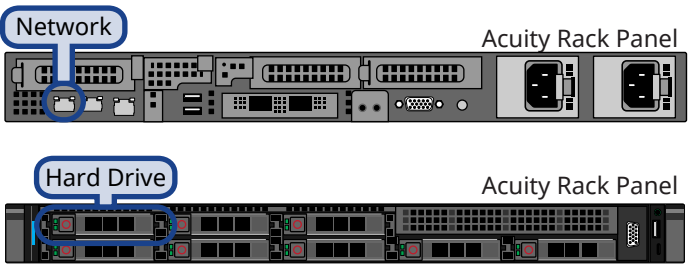
NOTICE Only connect certified Ross equipment with Ross provided cables to the Auxiliary Power port.

Peripheral
(female DB9)

Pin	RS-232	RS-422
1	n/c	Odd/Even Tx+
2	Rx	TxA (Tx-)
3	Tx	RxB (Rx+)
4	Ground	Ground
5	Ground	Ground
6	n/c	Odd/Even Tx-
7	n/c	TxB (Tx+)
8	n/c	RxA (Rx-)
9	n/c	5V 1K Pull-up

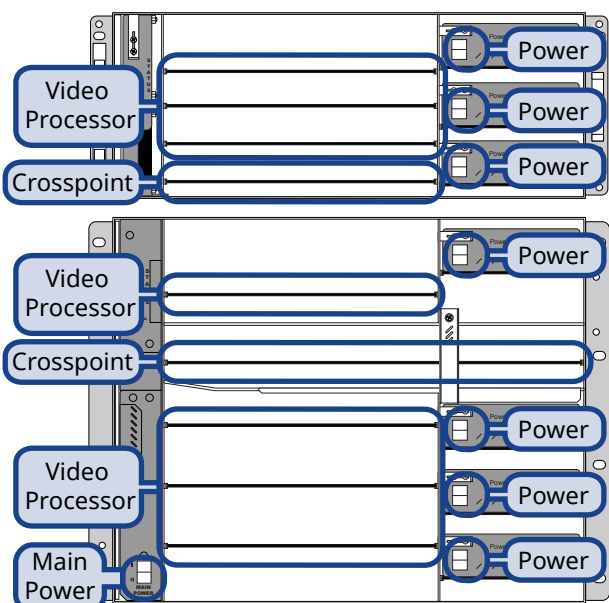
Remote
(female DB9)

Pin	RS-232	RS-422
1	n/c	n/c
2	Tx	RxA (Rx-)
3	Rx	TxB (Tx+)
4	Ground	Ground
5	Ground	Ground
6	n/c	n/c
7	n/c	RxB (Rx+)
8	n/c	TxA (Tx-)
9	n/c	n/c

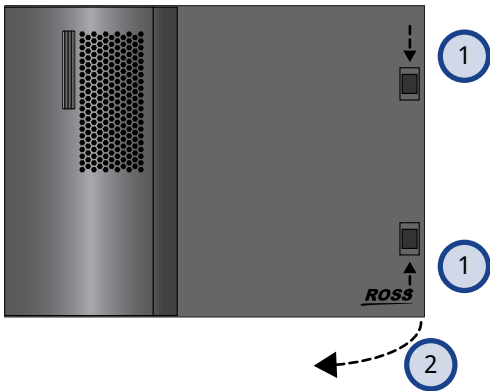


Note: The Acuity Rack Panel ships with a static IP address (192.168.0.129) as default.

Power Switches and Frame Boards



Frame Door Opening



Specifications

Default Values	
Frame IP (LAN1)	192.168.1.1
Acuity Panel IP	192.168.1.2
CB Panel IP	192.168.0.129
User name	user
Password	password
Video Formats	
480i 59.94Hz	
576i 50Hz	
720p 59.94/50Hz	
1080i 60/59.94/50Hz	
1080pSF 24/23.98Hz	
1080p 24/25/29.97/59.94/50Hz	
UHDTV1 (2SI) 60/59.94/50Hz	

Input Reference Formats	
480i 59.94Hz	
576i 50Hz	
720p 59.94/50Hz	
1080i 60/59.94/50Hz	
1080p 24Hz	
1080pSF 24/23.98Hz	

Input Voltages	
Panel	90V~250V AC
47~63Hz	
Frame	100 - 120V~
220 - 240V~	
47 - 63Hz	
9A 650W	
(Canada 120V~ Only)	

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

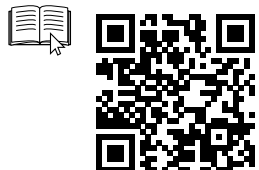
Max Power (Full Load)	
Acuity 4	526W
Acuity 3M	340W
Acuity 3	379W
Acuity 2X	289W
Acuity 2M	247W
Acuity 1S	159W
CB1	25W
CB2	35W
8RU	1,412W
4RU	1,022W

Weights	
Acuity 4	103lb (46.7kg)
Acuity 3M	74lb (33.6kg)
Acuity 3	75lb (34.0kg)
Acuity 2X	62lb (28.1kg)
Acuity 2M	57lb (25.9kg)
Acuity 1S	48lb (21.8kg)
CB1	13lb (5.90kg)
CB2	20lb (9.07kg)
8RU	92lb (41.7kg)
4RU	59lb (26.8kg)

Video Input Specifications	
Equalization	>40m @ 12Gb/s
(Belden 1694A cable)	>50m @ 3Gb/s
	>75m @ 1.5 Gb/s
	>150m @ 270 Mb/s (5°-40°C)
Impedance	75 ohm, terminating
Video Inputs, SDI	SMPTE 259M/292M/424M/ST-2082 (non-looping)
Reference Inputs (non-terminating, looping)	SD — analog black
	HD — tri-level sync

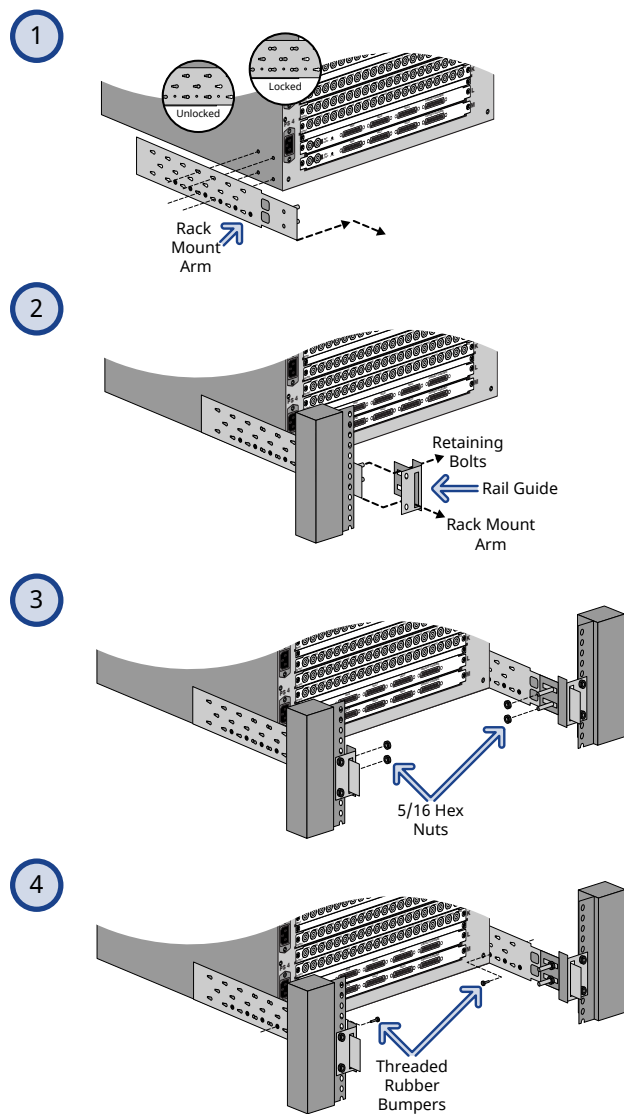
Video Output Specifications	
Return Loss	>4dB 6GHz to 12GHz
	>7dB 3GHz to 6GHz
	>10dB 1.485MHz to 3GHz
	>15dB 5MHz to 1.485GHz
Timing Jitter	UHD - <8.0UI
	HD - <1UI
	SD - <0.2UI
Alignment Jitter	UHD - <0.3UI
	HD - <0.2UI
	SD - <0.2UI
	UHD - <10% amplitude
Rise and Fall Times	HD - <240ps
	SD - 450ps to 700ps

Video Output Specifications	
Signal Level	800mV ± 10%
DC Offset	0 volts
Overshoot	<8%
Video Outputs (serial digital)	UHD - SMPTE 2082-1:2015 (Amendment 1:2016)
	HD - 10-bit SMPTE 292M/424M
	SD - 10-bit SMPTE 259M-C



Rack Mounting

- NOTICE** Maintain the following minimum dimensions within the equipment rack:
- 3 inches of clearance on both the right and left-hand sides of the switcher frame with unrestricted vertical airflow.
 - 2RU of space, or the equivalent, for intake air at the bottom of the rack.
 - 4RU of space, or the equivalent, for exhaust air at the top of the rack (open equipment rack top for example).



Power and Cabling

- CAUTION!** Only use the cables provided to connect your Acuity Auxiliary Control Panel or Touchscreen display to the Auxiliary Power module.
- Note:** It is recommended that you use a 10/100mbps switch to connect the control panel to the frame.
- Note:** It is recommended that you always connect the AC Power Adapter to the device before connecting to Mains Power.
- Note:** For UHDTV1 video formats (2SI 3G and 12G), input and output BNCs are grouped into sets of four (1-4, 5-8, 9-12, 13-16, 17-20).

Note: Do not connect a monitor to the VGA or Display Ports during normal operation. Only connect a monitor to the VGA port during BIOS upgrade.

Touchscreen (4820AR-241-01)

To OSD Remote

To Auxiliary Control Panel on External Row

Ethernet

Note: The ethernet 2 port is not available at this time.

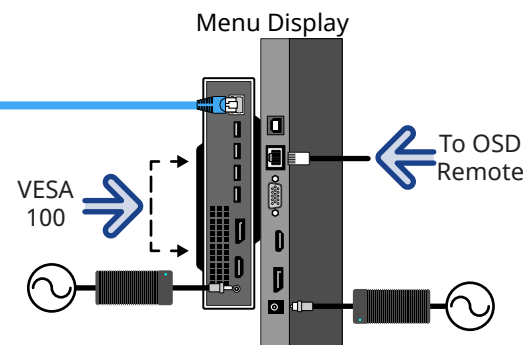
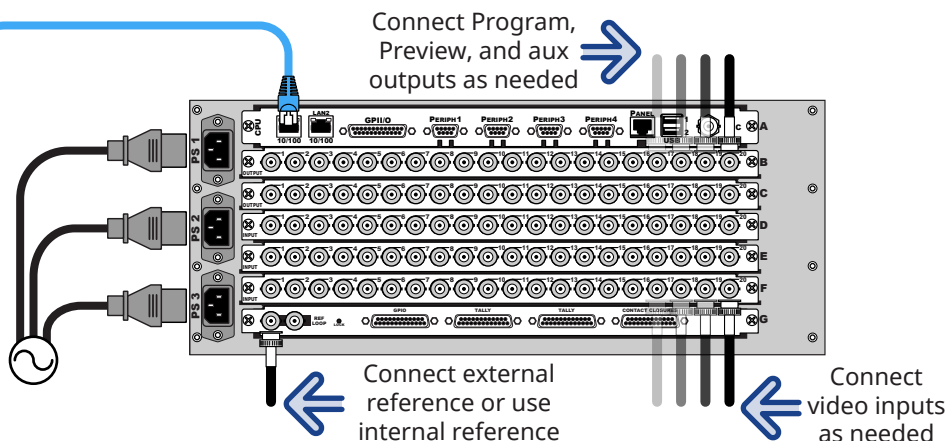
Acuity Control Panel

Auxiliary Control Panel

To more Auxiliary Control Panels or SideBoxes

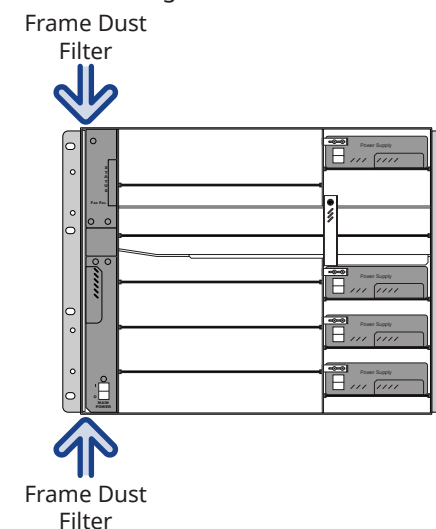
To control panel

Mains Power



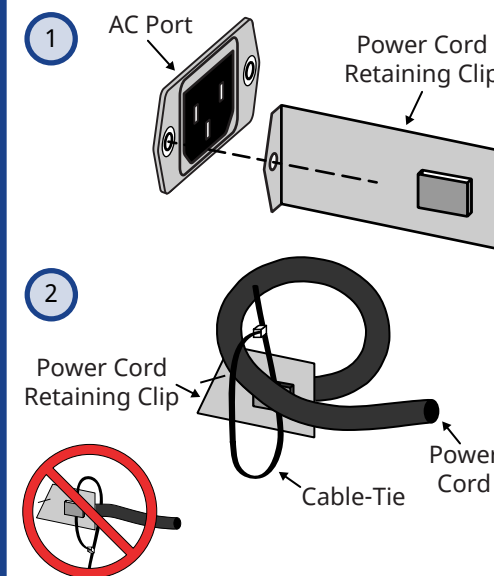
Frame Dust Filter

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.



Power Cord Retaining Clip

Note: The Power Cord Retaining Clip must be installed onto the Power ports on the back of the control panel to reduce cable tension and prevent accidental power loss.



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 (North America): 1-844-652-0645
Tel (International): +800 1005 0100
Email: techsupport@rossvideo.com

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