ACO-4500 Installation and Cabling

Rack Mounting

Rear Support Brackets

Warning: Do not use the support brackets to carry the ACO-4500. The brackets are not primarily designed for this purpose, and property damage or personal injury may result.

To install the support brackets

1. Select a mounting position that allows rear support bars to slide into slots of the brackets.
2. Choose the position that suits the cabinet depth and gives approximately a 0.5" projection beyond the previously mounted bracket.
3. Using four screws per bracket, attach both bars.

Cabinet Front Vertical Mounting Rail

Cabinet Rear Vertical Mounting Rail

Rear Support Bar

ACO-4500

0.500"

4. Mount the frame to the front rails of the rack cabinet using rack screws.
5. At the rear of the cabinet:
   a) Slide the bracket slots over the rear of the support bars.
   b) Secure to the cabinet rear rails with rack screws.

BNC Cabling

Channels 7-12

Channels 1-6
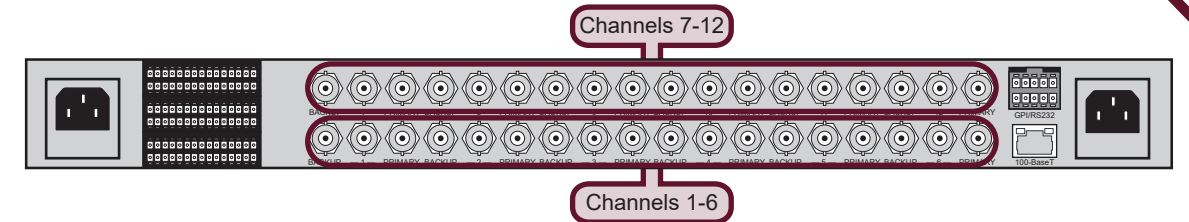
Communications Cabling

Ethernet
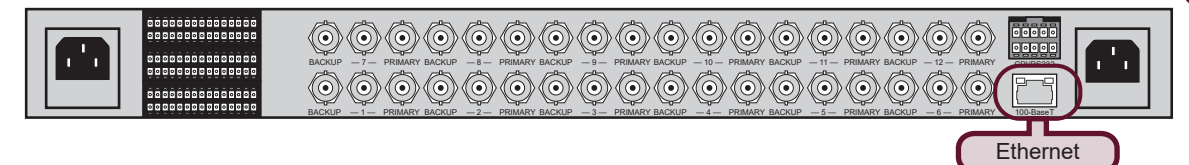
Note: The GPI/RS-232 port is not implemented.

Power Connections
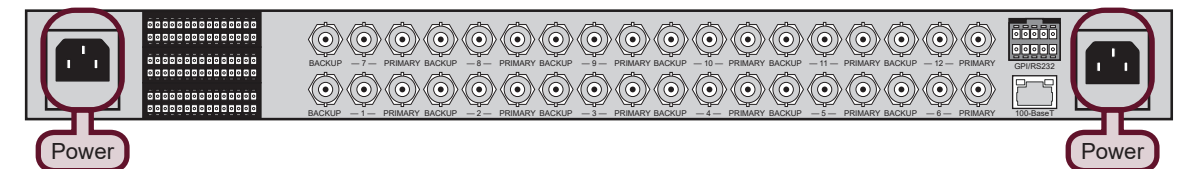
Note: The ACO-4500 powers on automatically when the power supply is plugged in.

Power   Power

Specifications

Physical Specifications

Clearance	Side: 2.00" (50mm)
	Rear: 3.00" (75mm)
Height	1.71" (43.5mm)
Width	19.00" (482.5mm)
Depth	15.95" (405mm)
Temperature	Op: 0°C to +40°C
	Non-op: -20°C to +60°C

BNC Channels (Per Channel)

Connector Type	3 x 75ohm BNC
Return Loss	>20dB to 1GHz
	>14dB to 3GHz
Max. Switched Voltage	30V DC (30V AC)
Max. Switched Current	0.5A
Relay Switch Time	Set time: max. 3.5ms
	Release time: max. 2.5ms
	Set/Release time: max. 10mS
Insertion Delay	<1ns

Ethernet Interface

Connector Type	RJ45 - 8P8C
IEEE Standards Compliance	802.31-1990,
	802.3u-1995,

AC Power Source

Operational Voltage Range	120-230VAC 50-60Hz
Absolute Limits Voltage Range	90-264VAC, 47-63Hz
Operational AC Current (each PSU)	<130mA @ 230VAC
	<200mA @ 120VAC
Surge Current (each PSU)	<40A @ 230VAC
	<20A @ 120VAC
Power Consumption (dual PSU)	46VA (21W)
	Single output, AC-DC

Balanced (Unmonitored Channels, Relay)

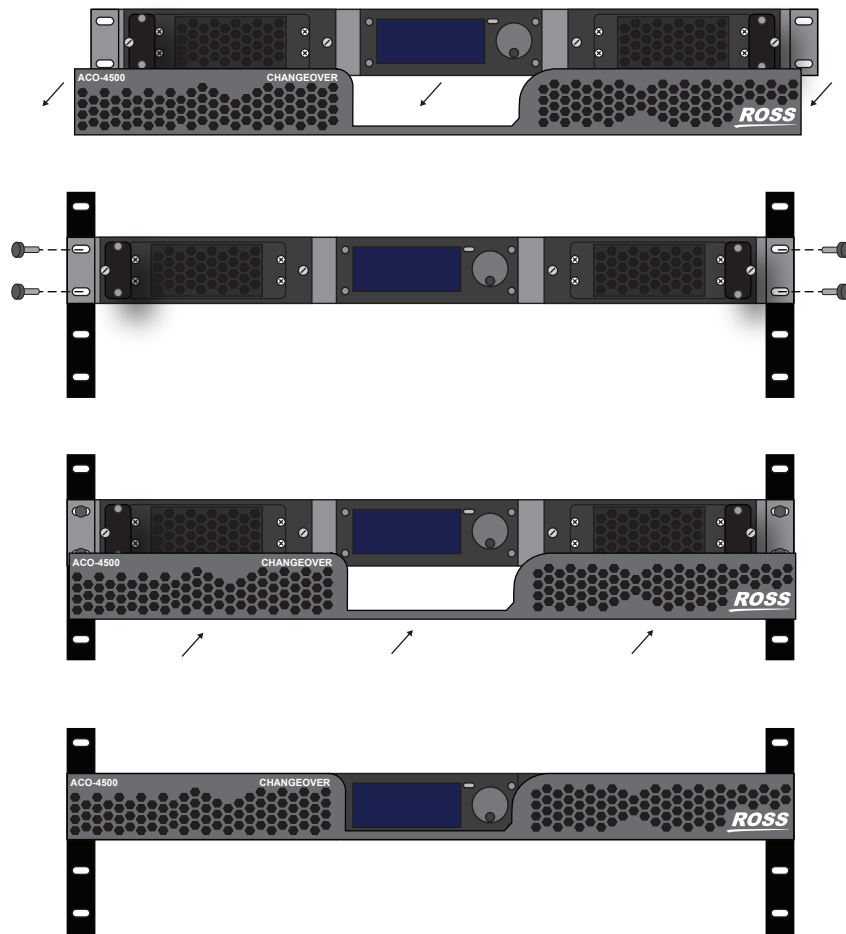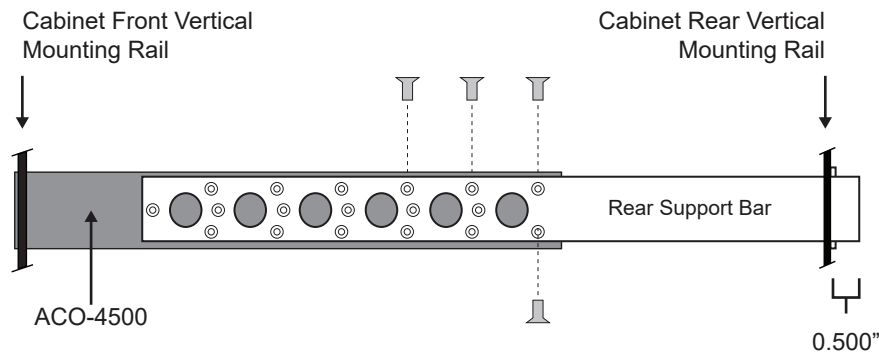|	
Connector Type	MicroClasp™ 2mm
Return Loss	>17dB to 50MHz
	>4dB to 270MHz
Max. Switched Voltage	48 V DC (24V AC)
Max. Switched Current	1A
Relay Switch Time	Set time: max. 3ms
	Release time: max. 2ms
	Set/Release time: min. 9mS
Insertion Delay	<1ns

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⚠ CAUTION

Before you set up and operate your ACO-4500, refer to the "Important Regulatory and Safety Notices to Service Personnel" document that was included with your unit. It is also recommended to refer to the *ACO-4500 User Manual* which is available for download from our website.

Connecting an SRG-4500

To Backup SRG-4500
ACO-4500 Output
To Primary SRG-4500

ACO-4500 Connector

30 28 26 24 22 20 18 **16** 14 12 10 8 6 4 **2**

29 27 25 23 21 19 17 **15** 13 11 9 7 5 3 1

Balanced Connectors

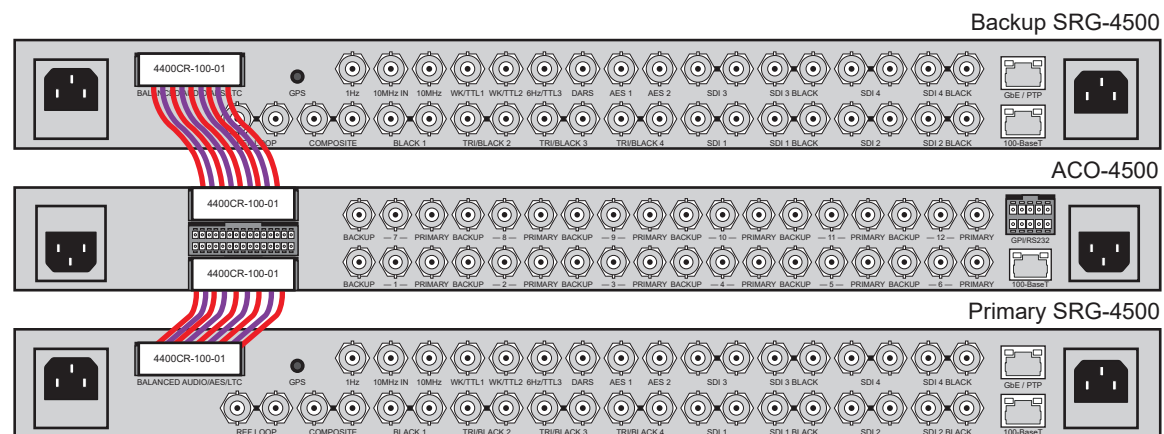| Pin		Signal/Function	Pin		Signal/Function
1		Ground	17	+	LTC1-4/AES1-8/DARS/2.048MHz
2		Ground	18	-	
3	+	LTC1-4/AES1-8/DARS/2.048MHz	19	+	AES2
4	-		20	-	
5	+	LTC1-4/AES1-8/DARS/2.048MHz	21	+	AES1
6	-		22	-	
7	+	LTC1-4/AES1-8/DARS/2.048MHz	23	+	DARS
8	-		24	-	
9	+	LTC1-4/AES1-8/DARS/2.048MHz	25	+	AUD1 LEFT
10	-		26	-	
11	+	LTC1-4/AES1-8/DARS/2.048MHz	27	+	AUD2 RIGHT
12	-		28	-	
13	+	LTC1-4/AES1-8/DARS/2.048MHz	29	+	Ground
14	-		30	-	Ground
15	+	LTC1-4/AES1-8/DARS/2.048MHz			
16	-				

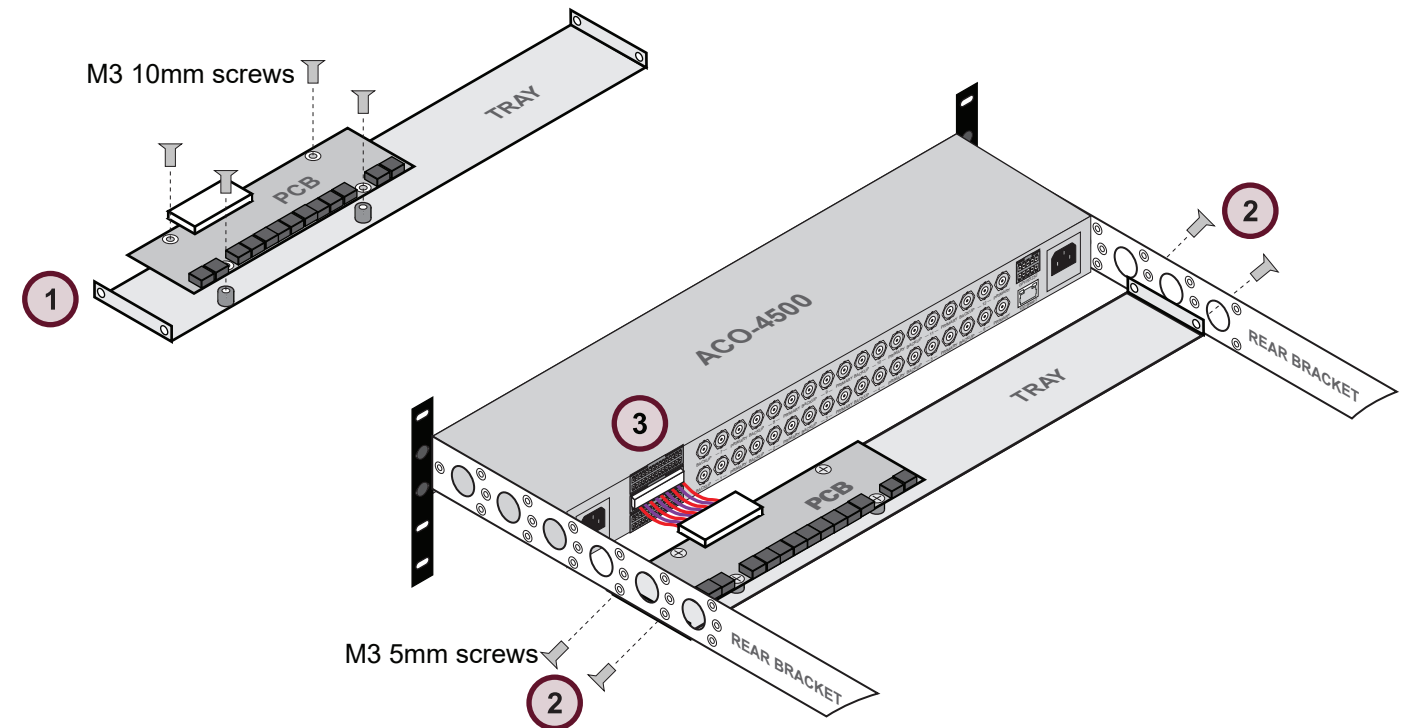### To connect the Primary SRG-4500 to the ACO-4500

1. Connect one end of an Interface Cable (PN 4400CR-100-01) to the **BALANCED** connector on the Primary SRG-4500 rear panel.
2. Connect the other end of the same Interface Cable to the **bottom** 30-pin connector on the ACO-4500 rear panel.

To connect the Backup SRG-4500 to the ACO-4500

1. Connect one end of an Interface Cable (PN 4400CR-100-01) to the **BALANCED** connector on the Backup SRG-4500 rear panel.
2. Connect the other end of the same Interface Cable to the **top** 30-pin connector on the ACO-4500 rear panel.

Backup SRG-4500
4400CR-100-01

ACO-4500
4400CR-100-01
4400CR-100-01

Primary SRG-4500
4400CR-100-01

Installing the Breakout PCB

M3 10mm screws
TRAY
PCB

REAR BRACKET
ACO-4500
TRAY
PCB
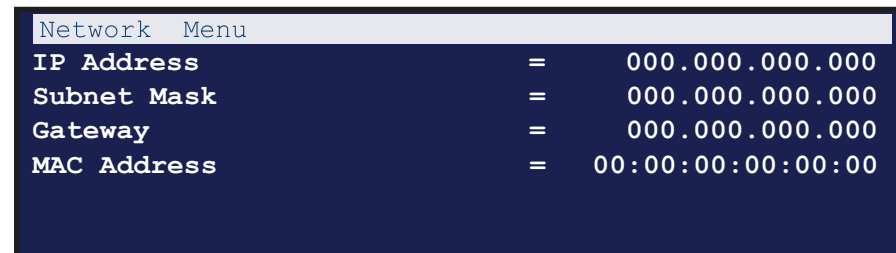REAR BRACKET

M3 5mm screws

① ② ② ③

Set the IP Address

Note: You must set the IP address of the ACO-4500 from the front control panel after power up. Contact your facility Network Administrator for the required network settings.

To set the IP Address for the ACO-4500

1. Use the **Rotary/Push Control** dial on the front panel to display the **Network Menu** on the front control panel: Operational Menu > System Menu > Network Menu.

```
Network  Menu
IP Address                  =    000.000.000.000
Subnet Mask                 =    000.000.000.000
Gateway                     =    000.000.000.000
MAC Address                 =    00:00:00:00:00:00
```

2. Use the **Rotary/Push Control** dial to set the IP Address, Subnet Mask, Gateway, and MAC Address for the ACO-4500.
3. Use the **Back** button to return to the Operational Menu.

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