RGB-144

RGBHV 1 X 4 X 4

BRIDGING DISTRIBUTION AMPLIFIER

FSR

Video Products Group

The First Configurable Distribution Amplifier!

DESCRIPTION

The RGB–144 is the world's first configurable Distribution Amplifier (D/A). Four independent 1 x 4 D/A's are integrated within the 3RU chassis. What makes the RGB-144 unique is the ability to bridge adjacent 1x4 blocks to make a larger D/A.

In it's default configuration, the RGB-144's four 1x4 D/A's operate independently. By simply flipping the bridge switches, adjacent 1x4 D/A's are bridged together and the input of the first block is sent to all of the bridged outputs allowing many different configurations to suit your signal distribution needs.

Possible configurations include four 1x4 D/A's, one 1x8 and two 1 x 4 D/A's, two 1x8 D/A's, one 1x12 and one 1x4 D/A's and one 1x16 D/A. To insure the highest possible signal quality, all outputs are fully buffered and the measured bandwidth from input to any output is greater than 350MHz with a flat signal response.

The RGB-144's universal sync inputs support both analog and TTL level sync of either polarity. Advanced sync detection circuitry accurately slices the input sync signal independent of amplitude and offset to provide a stable, jitter free output even in noisy environments.

The RGB-144's extended bandwidth makes it compatible with all computer video resolutions from workstations, PC's, notebooks, or Mac's as well as scalers and line doublers. In addition, each of the RGB inputs may be used independently or in concert to distribute composite, component, and S-video. A universal power supply extends the RGB-144's compatibility to the world.

FSR Inc.

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TECHNICAL SPECIFICATIONS

- 400 MHz video bandwidth
- Four bridgeable 1x4 D/A Blocks
- All outputs are fully buffered
- All metal enclosure
- Rack mount ears included
- Universal worldwide power supply

Video

Gain:	Unity (into 75 ohm load)
Bandwidth:	>400MHz (-3dB) measured from input connector to output connector within a block, all outputs connected.
	+0.1db/-0.5dB 175MHz measured from input connector to output connector within a block, all outputs connected.
	>350MHz (-3dB) measured from input to any output connector when fully bridged, all outputs connected.
	+0.1db/-0.5dB 150MHz measured from input connector to output connector when fully bridged, all outputs connected.
Differential Phase Error:	0.04 degrees (NTSC)
Differential Gain Error:	0.04% (NTSC)

Video Input — Each block (4 blocks total)

Number/Signal Type:	1 RGBHV, RGBS, RGsB, RsBsGs, component video, composite video, S-video
Connectors:	5 BNC Female
Min/Max Level:	±1.9V
Impedance:	75 ohm
Maximum DC offset:	±1.2V (with 0.7V p-p signal)

Video Output — Each block (4 blocks total)

Number/Signal Type:	4 Matching input type
Connectors:	5 BNC per output (20 total)
Min/Max Level:	±3.8V
Impedance:	75 ohm
DC offset:	±20 MV max

H&V Sync Inputs:

Type:	TTL on Analog sync positive or negative polarity (universal sync input)
Level:	0.7 - 2.5V p-p
Frequency:	50 Hz - 150 kHz on either sync channel
Impedance:	75 ohm
Max Input Voltage:	±4.3V
Max Rise/Fall Time:	No limit on input rise/fall time due to advanced sync detection circuitry
Propagation Delay:	From input to output within a single stage to stage delay 6ns/stage. Stage 1 11ns, Stage 2-4 15ns.

H&V Sync Outputs:

Level:	TTL sync, 2.0V p-p into 75 ohm load
Rise/Fall Time:	900ps into 75 ohm load
Max Propagation Delay:	15 ns (each block)
Output Impedance:	75 ohm

LIT 1082

GENERAL

Power AC input: 110/220 VAC, 50/60Hz
Mounting: Table top or rack mount rack
                    ears included
Enclosure Type/
Size: Metal, 3 RU high,19" wide

CONFIGURATION CHART

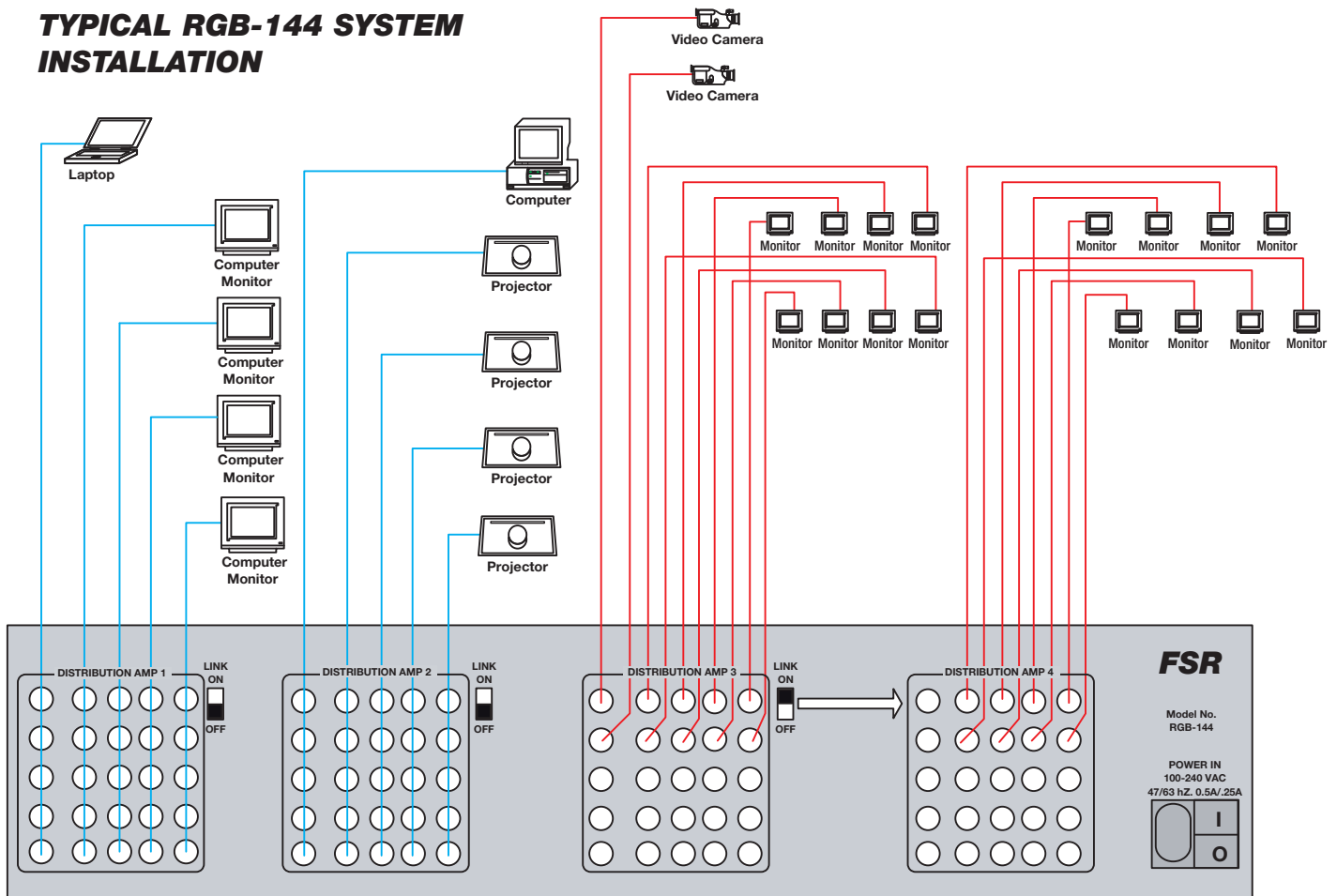| QTY	INPUT	OUTPUT
4	1	4
1	1	8
2	1	4
2	1	8
1	1	12
1	1	4
1	1	16

APPLICATIONS

• Boardrooms
• Live Event Productions
• Education
• Conferences Centers
• Rental Companies
• Video Conferencing
• and other complex Integration Systems not
  requiring a matrix switcher

APPROVALS

UL, cUL, FCC, and CE approvals applied for.

TYPICAL RGB-144 SYSTEM INSTALLATION

Specifications are subject to change without notice.

MADE IN THE USA   GREEN

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