RGB-144

RGBHV 1 X 4 X 4

BRIDGING DISTRIBUTION AMPLIFIER

FSR

Video Products Group

RGB-144

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 measured from input connector to output connector within a block.*
	>350MHz measured from input to any output when fully bridged.
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:	*2.5V p-p into 75 ohm load*
Rise/Fall Time:	*900ps into 75 ohm load*
Output Impedance:	*75 ohm*

GENERAL

Power AC input:	*110/220 VAC, 50/60 Hz*
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

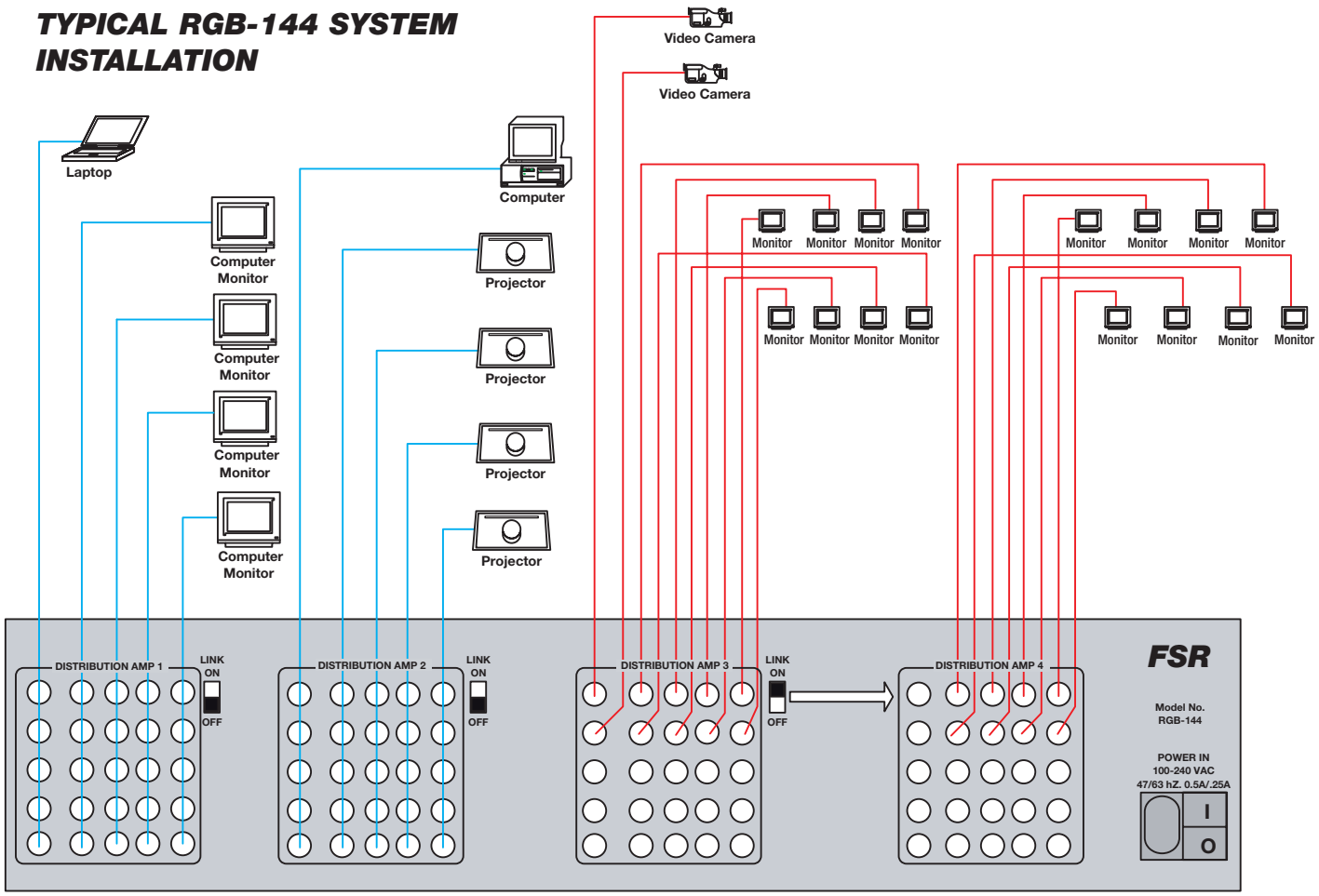
APPLICATIONS

- *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



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