

Extron Electronics

INTERFACING, SWITCHING AND DISTRIBUTION

300 MHz (-3dB) Video
Bandwidth

ADSP™ - Advanced Digital
Sync Processing

Audio Interfacing

Level/Peaking

Simultaneous RGBS/HV
output

RGsB output

Centering Controls

Optional Mounting Kits

Internal power supply

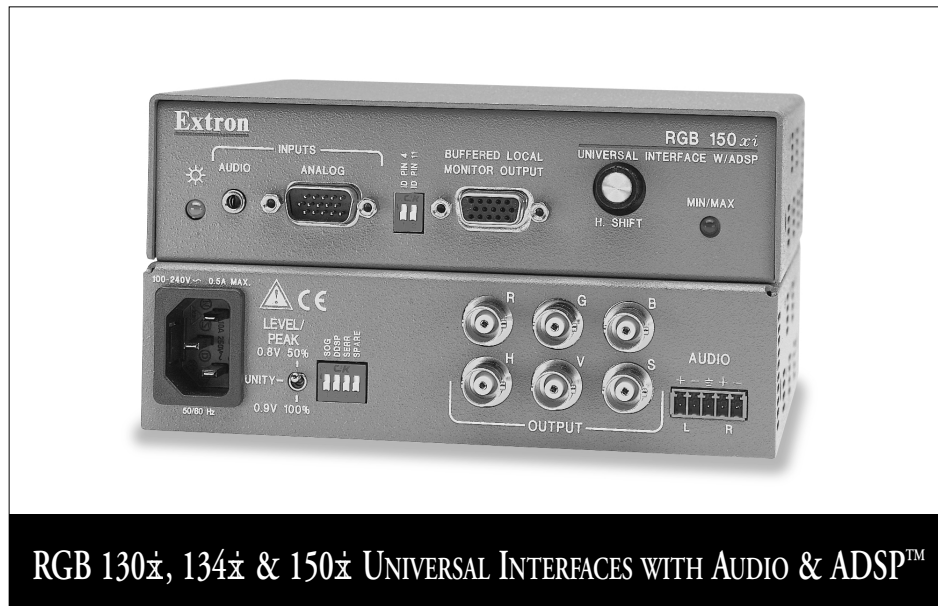
75 Ohm Termination
(RGB 130 $\times$, RGB 134 $\times$)

Dual Video Outputs
(RGB 134 $\times$)

15-Pin HD input
(RGB 150 $\times$)

Buffered 15-pin local
monitor output
(RGB 150 $\times$)

ID bit Termination
(RGB 150 $\times$)



RGB 130 $\times$, 134 $\times$ & 150 $\times$ UNIVERSAL INTERFACES WITH AUDIO & ADSP™



APPLICATIONS



RGB 130x

The RGB 130x, RGB 134x, and RGB 150x are universal analog computer-video interfaces with 15-150 kHz scanning ranges and 300 MHz (-3dB) of RGB bandwidth. All three are compatible with nearly every computer and display signal, including VGA, SVGA, XGA, SXGA, Mac, SUN and SGI, and output simultaneous composite and separate horizontal/vertical sync. Sync on green is also available at the flip of a switch. Sync processing is accomplished through Extron's ADSP™ Advanced Digital Sync Processing technology. ADSP provides all-digital processing of sync signals, eliminating incompatibility issues encountered when using analog sync processing with digital display devices (DLP, LCD, Plasma, etc.).

In addition to these features, the RGB 134x, which replaces Extron's RGB 124, adds the convenience of two sets of six BNC outputs. This allows for multiple displays without the need for a distribution amplifier. The RGB 150x takes the functionality of RGB 130x (which replaces Extron's RGB 120p) and adds a 15-pin HD input and buffered local monitor output. The latter allows for the connection of the computer's local monitor without any reduction of signal quality or integrity. All three incorporate active PC audio interfacing, an internal power supply, and image centering features.

Optional, detachable mounting kits give the RGB 130x, RGB 134x, and RGB 150x remarkable flexibility. The under-desk mounting kit allows each interface to be mounted under any flat surface, such as a desk, podium, table, cabinet, wall, etc. Select the through-desk mounting kit so that inputs and centering controls are easily accessed, while the power, balanced audio, and video output cables are hidden away behind the surface being penetrated.



RGB 134x

FEATURES

- **High performance compatibility** – Provides a 15-150 kHz horizontal frequency range and 300 MHz of RGB video bandwidth.
- **Built-in Advanced Digital Sync Processing (ADSP™)** – All digital sync modification process insures flawless operation with any LCD, DLP, plasma or other digital display device.
- **Two optional mounting kits** – Allows for installation under flat surfaces, as well as through them. Under-desk kit part #70-077-01, through-desk kit part #70-077-02.
- **Image centering** – Allows the input signal to be shifted on the presentation device for a properly centered image.
- **Level/Peaking** – Three level/peaking modes are available to compensate for fuzzy images and streaking associated with cable resistance and system bandwidth losses.
- **Balanced audio conversion** – Unbalanced computer-generated audio is input via a 3.5 mm mini jack and output buffered as balanced line-level audio
- **Simultaneous separate and composite sync output** – Six BNC connectors allow for composite and separate horizontal and vertical sync without switches or other configuration. Sync on green is also available.
- **Buffered MBC support** – Nine volt power socket is available from the front panel of the RGB 130x and RGB 134x for use with Extron buffered monitor breakout cables.
- **Termination** – The RGB 130x and RGB 134x provide 75 ohm termination for use with laptops and non-terminated monitor breakout cables. The RGB 150x provides termination for pins 4 and 11 of its 15-pin HD input, insuring that machines that require local monitors to operate will do so.
- **Durable, compact metal enclosure** – Metal enclosure provides durability for use in rental, corporate, or any professional A/V application.
- **LED Indicators** – A two color LED indicates power and video signal detection, while a second red LED indicates minimum/maximum image shift.

SPECIFICATIONS

Video input

Number/type	1 analog RGBHV, RGBS, RGsB, RsGsBs
Connectors	RGB 130 $\times$, RGB 134 $\times$: 1 9-pin D male, MBC/LBC cable or buffer RGB 150 $\times$: 1 15-pin HD male
Nominal level(s)	Analog – 0.3V to 1.5V p-p
Maximum level(s)	Analog – 1.5V p-p
Impedance	RGB 130 $\times$, RGB 134 $\times$: 75 ohms or HI Z, switchable set to 75 ohms if no local monitor connected), RGB 150 $\times$: 75 ohms
Horizontal Frequency	Autoscan 15 kHz to 150 kHz
Vertical frequency	Autoscan 30 Hz to 120 Hz
Return loss.....	-30dB @ 5 MHz
Maximum DC offset.....	4.0V

Video throughput

Gain	Unity (0.7V), 15% with 3dB peaking (0.8V) 30% with 6dB peaking (0.9V)
Bandwidth	300 MHz (-3dB)

Video output

Number/type/format	1 analog RGBHV, RGBS, RGsB
Connectors	RGB 130 $\times$: 6 BNC female RGB 134 $\times$: 2 x 6 BNC female RGB 150 $\times$: 6 BNC female, 1-15 pin HD buffered local monitor output
Nominal level	0.7Vp-p, 0.8Vp-p, 0.9V p-p
Impedance	75 ohms
Return loss.....	-30dB @ 5 MHz

Sync

Input type	RGBHV TTL ($\pm$), RGBS TTL ($\pm$), RGsB 0.3V (-), RsGsBs 1.3V (-)
Output type.....	RGBHV ($\pm$), RGBS($\pm$), RGsB (-)
Input level	2.0V to 5.5V p-p with $\pm$ 0.3VDC offset (max.)
Output level	4.0V to 5.0V p-p
Input impedance	10 kohms
Output impedance	75 ohms
Max. propagation delay	48 nS
Max. rise/fall time	3.5 nS
Polarity	RGBHV when RGBHV is input, polarity follows input; otherwise negative RGBS, RGsB negative

Audio input

Number/type	1 PC level stereo, unbalanced
Connectors	1 3.5 mm stereo jack, 2 channel; tip (L), ring (R), sleeve (ground)
Impedance	10 kohms, DC coupled

SPECIFICATIONS (Cont.)

Minimum level	100mV
Maximum level	+8.5dBu, (unbalanced) @ stated %THD+N

Audio throughput

Gain	Unbalanced 0dB, balanced +6dB
Frequency response	$\pm$ 0.05dB @ 20 Hz to 20 kHz
THD + Noise	0.03% @1 kHz, 0.3% @ 20 kHz at rated maximum output drive
S/N	>90dB, output 14dBu, balanced
Stereo channel separation	>95dB @ 1 kHz to 20 kHz

Audio output

Number/type	1 stereo (2 channel), balanced/unbalanced
Connectors	3.5 mm stereo captive screw terminal, 5 conductor, for left and right output
Impedance	50 ohms, unbalanced, 100 ohms balanced
Gain error	$\pm$ 0.1dB channel to channel
Drive (600 ohm)	> +14dBu, balanced at stated %THD+N

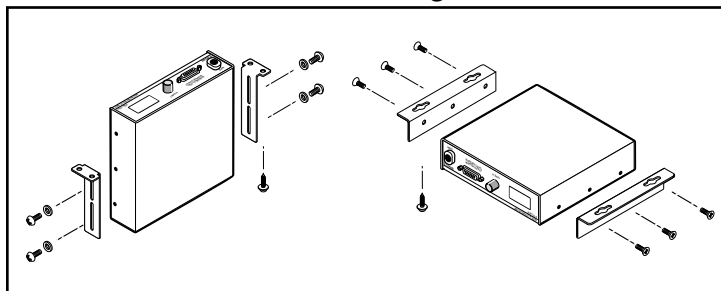
General

Power.....	100VAC to 240VAC, 50/60 Hz, 15 Watts, internal, auto-switchable
MBC power jack	9.0V DC, 150 mA
Temperature/humidity	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing
Rack mount.....	No
Enclosure type	Metal
Enclosure dimensions	RGB 130 $\times$, RGB 150 $\times$: 1.7" H x 6.35" W x 6.13" D, 4.3 cm H x 16.1 cm W x 15.6 cm D RGB 134 $\times$: 1.7" H x 9.5" W x 6.13" D, 4.3 cm H x 24.1 cm W x 15.6 cm D
Shipping weight	6 lbs (2.7 kg)
Vibration	NSTA 1A in carton
Approvals.....	UL, CE, FCC Class A
MTBF	30,000 hours
Warranty	2 years parts and labor

Part Numbers

RGB 130 $\times$	60-290-01
RGB 134 $\times$	60-291-01
RGB 150 $\times$	60-293-01

Thunder™ Mounting Brackets



PART NUMBERS

Thunder™ Mounting kits:

Under desk mounting kit.....	70-077-01
Through desk mounting kit.....	70-077-02

Monitor breakout cables: RGB 130x and RGB 134x:

MBC VGA/XGA HR	26-162-01
MBC Mac/Quadra	26-018-01
MBC SUN Sparc HR	26-424-01
MBC SGI/13W3 HR	26-425-01

Laptop breakout cables:

Laptop breakout cables are available in 3', 6' and 12' lengths with or without audio. Contact Extron for the specific cable for your application.

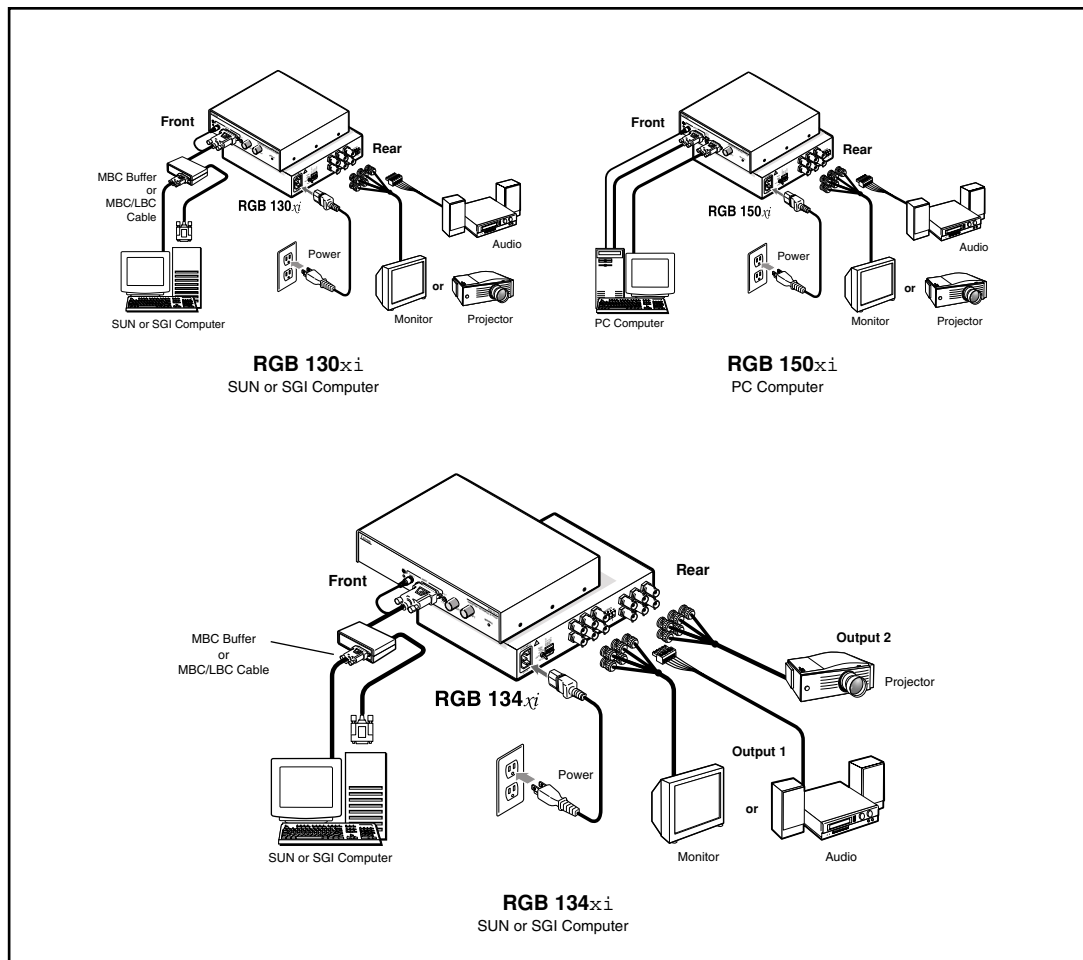
LBC VGA HR 6'	26-224-01
LBC Mac HR 6'	26-363-01

LBC SUN HR 6' (61 kHz)	26-413-01
LBC SUN HR 6' (71 kHz)	26-413-02
LBC SUN HR 6' (81 kHz)	26-413-03
LBC VGA HR 6' A	26-441-02
LBC Mac HR 6' A	26-442-02
LBC SUN HR 6' A (61 kHz)	26-443-02
LBC SUN HR 6' A (71 kHz)	26-444-02
LBC SUN HR 6' A (81 kHz)	26-445-02

Signal input cable kits for RGB 150x:

VGA 6' HR	26-112-15
VGA 3' HR A	26-491-01
VGA 6' HR A	26-491-02
VGA 12' HR A	26-491-03
Mac Adapter kit.....	70-078-01
Mac Adapter kit with Audio	70-078-02
13w3 Adapter cable kit	70-079-01
13w3 Adapter cable kit with Audio	70-079-02

APPLICATION DIAGRAM



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