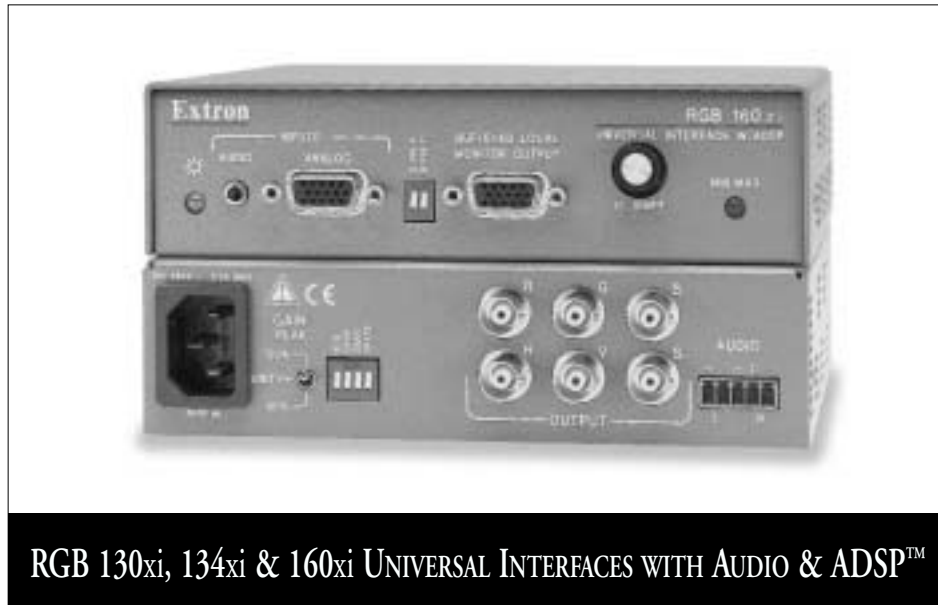


# Extron® Electronics

INTERFACING, SWITCHING AND DISTRIBUTION



RGB 130xi, 134xi & 160xi UNIVERSAL INTERFACES WITH AUDIO & ADSP™

300 MHz (-3dB) video bandwidth

ADSP™ - Advanced Digital Sync Processing

Active audio interfacing

Level/peaking

Simultaneous RGBS/HV output

RGsB output

Centering controls

Optional mounting kits

International internal power supply

75 ohm termination (RGB 130xi, RGB 134xi)

Dual video outputs (RGB 134xi)

Female 15-pin HD input (RGB 160xi)

Buffered 15-pin local monitor output (RGB 160xi)

ID bit termination (RGB 160xi)



## DESCRIPTION



RGB 130xi

The RGB 130xi, RGB 134xi, and RGB 160xi are universal, analog computer-video interfaces with 15-130 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, UXGA, Mac, Sun, and SGI, and they output simultaneous composite and separate horizontal/vertical sync. Sync on green is also available with the flip of a switch. Sync processing is accomplished through Extron's Advanced Digital Sync Processing ADSP™ technology. ADSP provides all-digital processing of sync signals, eliminating compatibility issues encountered when using analog sync processing with digital display devices (DLP, LCD, plasma, etc.).

In addition to these features, the RGB 134xi, adds the convenience of two sets of six BNC outputs. This allows for multiple displays without the need for a distribution amplifier. The RGB 160xi takes the functionality of the RGB 130xi and adds a female 15-pin HD input and buffered local monitor output. Buffered local monitor output 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 130xi, RGB 134xi, and RGB 160xi 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. The through-desk mounting kit makes inputs and centering controls easily accessible, while the power, balanced audio, and video output cables are hidden away behind the mounting surface.



RGB 134xi

## FEATURES

- **High performance compatibility** – Provides a 15-130 kHz horizontal frequency range and 300 MHz of RGB video bandwidth.
- **Built-in Advanced Digital Sync Processing (ADSP)** – All-digital sync modification process ensures flawless operation with any LCD, DLP, plasma, or other digital display device.
- **Two optional mounting kits** – Allow for installation under flat surfaces, as well as through them. Under-desk kit part number: 70-077-01, through-desk kit part number: 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 as buffered, 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 130xi and RGB 134xi for use with Extron buffered monitor breakout cables.
- **Termination** – The RGB 130xi and RGB 134xi provide 75 ohm termination for use with laptops and non-terminated monitor breakout cables. The RGB 160xi provides termination for pins 4 and 11 on its 15-pin HD input, ensuring that machines which 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

Gain .....	Unity, (0.725V p-p) 50% peaking, (0.75V p-p) 100% peaking
Bandwidth .....	300 MHz (-3dB)

## Video input

Number/signal type .....	1 analog RGBHV, RGBS, RGSB, RsGsBs
Connectors	
RGB 130xi, RGB 134xi.....	1 9-pin D male
RGB 160xi .....	1 15-pin HD female
Minimum/maximum levels ..	Analog—0.3V to 1.5V p-p with no offset at unity gain
Impedance	
RGB 130xi, RGB 134xi.....	75 ohms or Hi Z, switchable (set to 75 ohms if no local monitor is connected)
RGB 150xi .....	75 ohms
Horizontal frequency .....	Autoscan 15 kHz to 130 kHz
Vertical frequency.....	Autoscan 30 Hz to 120 Hz
Return loss .....	-30dB @ 5 MHz
Maximum DC offset .....	4.0V

## Video output

Number/signal type	
RGB 130xi, RGB 160xi.....	1 analog RGBHV, RGBS, RGSB
RGB 134xi .....	2 analog RGBHV, RGBS, RGSB
Connectors	
RGB 130xi, RGB 160xi.....	6 BNC female
RGB 134xi.....	2 x 6 BNC female
RGB 160xi.....	1 15-pin HD female local monitor buffered output
Minimum/maximum levels ..	Analog—0.7V to 0.75V p-p with 0.70V p-p input
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 .....	2V to 5.5V p-p with $\pm$ 0.2VDC offset (max.)
Output level .....	4V to 5V 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

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

## Audio input

Number/signal 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
Maximum level .....	+8.5dBu,(unbalanced) at stated %THD+N

## Audio output

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

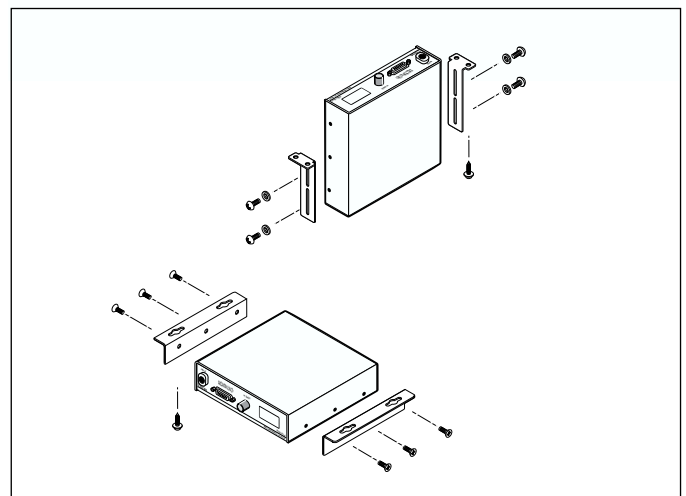
## General

Power .....	100VAC to 240VAC, 50/60 Hz, 15 watts, internal, auto-switchable
MBC power jack .....	9.0VDC, 150 mA
Temperature/humidity .....	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing Operating +32° to +104°F (0° to +40°C) / 10% to 90%, non-condensing
Rack mount .....	No
Furniture mount .....	Yes, with optional kits, #70-077-01 and #70-077-02
Enclosure type .....	Metal
Enclosure dimensions	
RGB 130xi, RGB 160xi.....	1.75" H x 6.4" W x 6.0" D 4.5 cm H x 16.2 cm W x 15.2 cm D (Depth excludes connectors.)
RGB 134xi.....	1.75" H x 8.7" W x 6.0" D 4.5 cm H x 24.1 cm W x 15.2 cm D (Depth excludes connectors.)
Shipping weight	
RGB 130xi, RGB 160xi.....	3 lbs (1.4 kg)
RGB 134xi.....	5 lbs (2.3 kg)
Vibration .....	ISTA/NSTA 1A in carton (International Safe Transit Association)
Approvals .....	UL, CE, FCC Class A
MTBF .....	30,000 hours
Warranty .....	2 years parts and labor

## Part Numbers

RGB 130xi.....	60-290-01
RGB 134xi.....	60-291-01
RGB 160xi.....	60-378-01

## MOUNTING BRACKETS



# ACCESSORIES

## Mounting kits:

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

## Monitor breakout cables: RGB 130xi and RGB 134xi:

- 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.

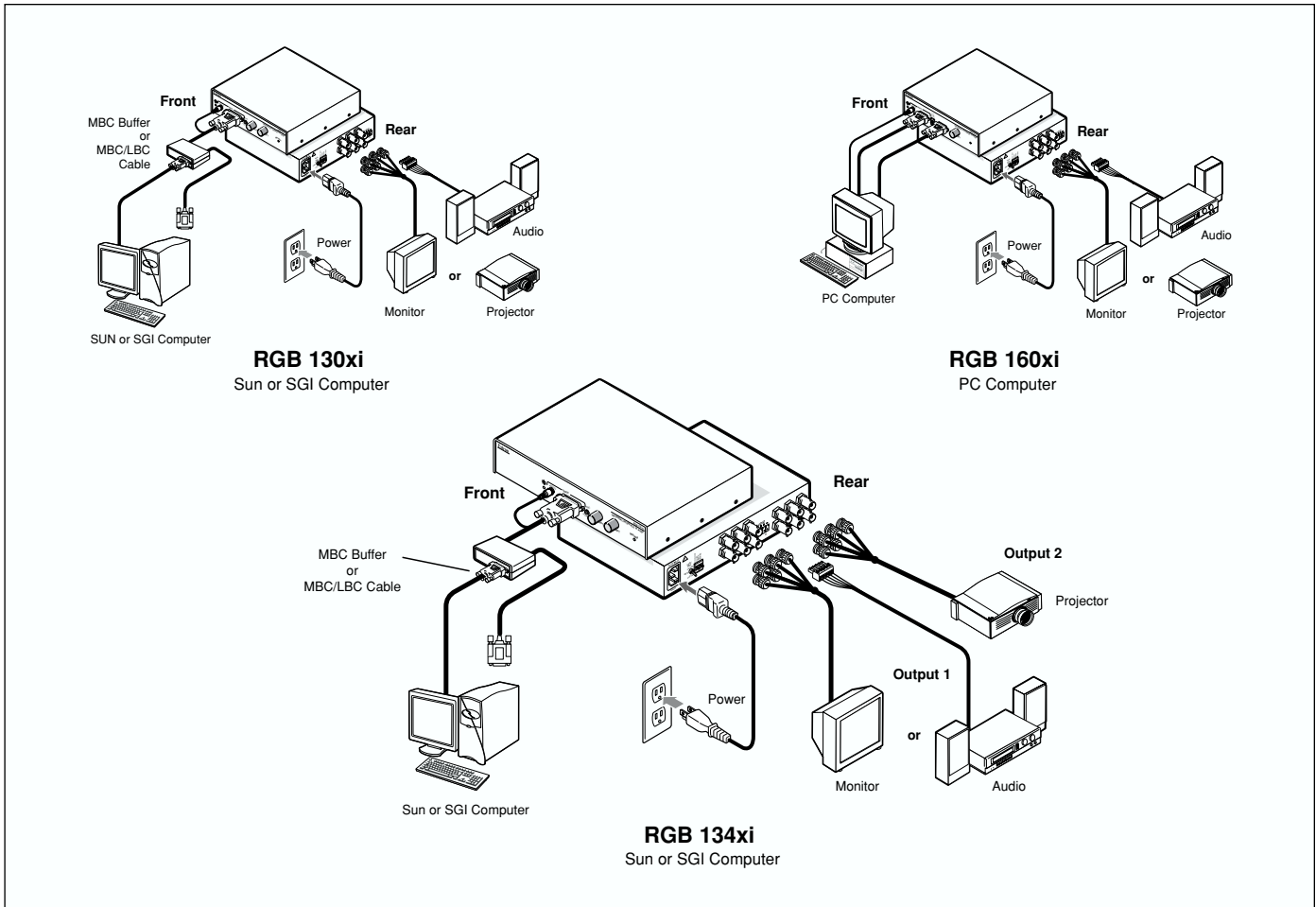
- LBC 90 VGA HR 3'A ..... 26-502-01
- LBC 90 VGA HR 6'A ..... 26-502-02
- LBC 90 VGA HR 12'A ..... 26-502-03

- LBC VGA HR 6' ..... 26-224-01
- LBC VGA HR 6' A ..... 26-441-02
- LBC Mac HR 6' ..... 26-363-01
- 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 160xi:

- VGA M6' MHR ..... 26-238-01
- VGAM 3' MHRA ..... 26-490-01
- VGAM 6' MHRA ..... 26-490-02
- VGAM 12' MHRA ..... 26-490-03
- VGAM 90 HRA 6' ..... 26-510-02
- Mac 15-pin HD F Adapter kit with Audio ..... 70-156-01
- 13W3 15-pin HD F Adapter kit with Audio ..... 70-157-01

## APPLICATION DIAGRAM



Extron Electronics, USA  
1230 South Lewis Street, Anaheim, CA 92805  
800.633.9876 714.491.1500 FAX 714.491.1517  
USA

Extron Electronics, Europe  
Beeldschermweg 6C, 3821 AH Amersfoort  
+31.33.453.4040 FAX +31.33.453.4050  
The Netherlands

Extron Electronics, Asia  
135 Joo Seng Rd. #04-01, PM Industrial Bldg.  
+65.383.4400 FAX +65.383.4664  
Singapore 368363

Extron Electronics Information  
ExtronWEB™: www.extron.com  
ExtronFAX™: 714.491.0192  
24-hour access—worldwide!