

RGB 190FV RGB 192V

UNIVERSAL ANALOG
COMPUTER-VIDEO INTERFACES
WITH DDSP™

- ▶ 300 MHz (-3 dB) RGB video bandwidth
- ▶ Compatible with computer-video resolutions up to QXGA
- ▶ Buffered local monitor output
- ▶ DDSP™ - Digital Display Sync Processing
- ▶ Two-position level/peaking control
- ▶ Horizontal shift control
- ▶ Active PC audio to balanced audio interfacing
- ▶ Selectable stereo or summed mono audio output
- ▶ Includes under-desk mounting kit
- ▶ 1" high, compact metal enclosure
- ▶ Energy-efficient external universal power supply included



RGB 190FV



RGB 192V

The Extron RGB 190FV and RGB 192V are universal, analog computer-video interfaces with DDSP™. They allow computer-video resolutions up to QXGA to be converted for output to projectors and flat panel displays. These interfaces are ideal for smaller classrooms, auditoriums, and conference rooms.



Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron **RGB 190FV** and **RGB 192V** are universal, analog computer-video interfaces with DDSP™. They allow computer-video resolutions up to QXGA to be converted for output to projectors and flat panel displays. The RGB 192V also accepts unbalanced computer stereo audio and outputs balanced, line level stereo or mono audio. Extron Digital Display Sync Processing or DDSP technology allows the sync signal to pass through without altering sync pulse or width.

The RGB 190FV and RGB 192V interfaces feature level and peaking control, horizontal shift control, and a buffered local monitor output with ID bit termination. Level and peaking compensate for signal loss due to long cable runs. Horizontal shift allows the image to be adjusted to the left or right when timing differences between source resolutions and refresh rates cause a display to position images in different places.

The RGB 190FV and RGB 192V ship with a 6' (1.8 m) 15-pin HD video, PC audio cable and a 6' (1.8 m) 15-pin HD video cable respectively. Both interfaces are housed in 1" high, compact metal enclosures that easily mount on furniture using the provided under-desk mounting kit.

The RGB 190FV and RGB 192V are ideal for use in applications that require signal amplification and sync processing to ensure compatibility between many different types of displays and computer-video signal sources found in classrooms, auditoriums, and conference rooms.

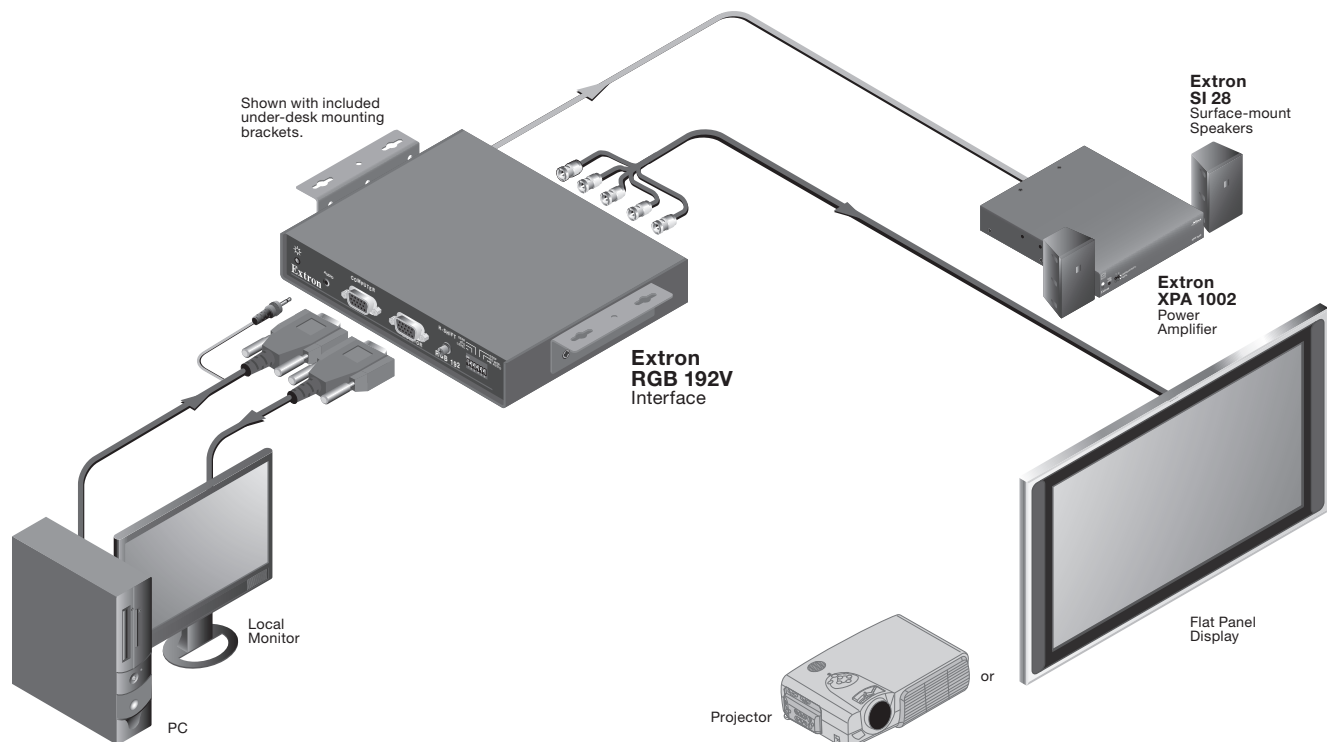
COMMON FEATURES

- ▶ **300 MHz (-3 dB) RGB video bandwidth**
- ▶ **Compatible with computer-video resolutions up to QXGA**
- ▶ **Buffered local monitor output** – Enables local viewing of the computer source.
- ▶ **DDSP™ - Digital Display Sync Processing** – Allows the sync signal to pass through without altering sync pulse or width. Disables other sync processing features such as horizontal and vertical centering.
- ▶ **Two-position level/peaking control** – Boosts and equalizes video signals to compensate for signal loss and high frequency attenuation that occur in long cable runs.
- ▶ **Horizontal shift control** – Shifts the displayed image left or right on the display screen. Also called "horizontal centering".
- ▶ **Includes under-desk mounting kit, part # 70-077-01**
- ▶ **Energy-efficient external universal power supply included, replacement part # 70-775-01** – Provides worldwide compatibility, low power consumption, and reduced operating costs.

RGB 192V UNIQUE FEATURES

- ▶ **Active PC audio to balanced audio interfacing** – Converts computer-generated, unbalanced audio to balanced line level stereo audio for output on a captive screw connector.
- ▶ **Selectable stereo or summed mono audio output**

APPLICATION DIAGRAM

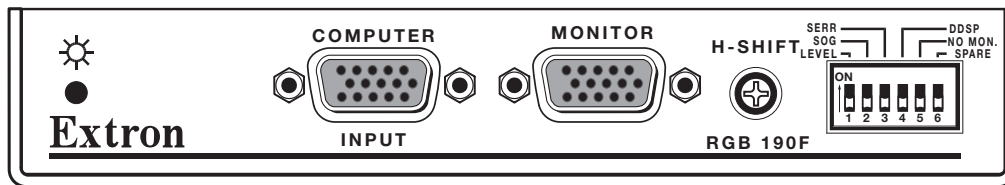


SPECIFICATIONS

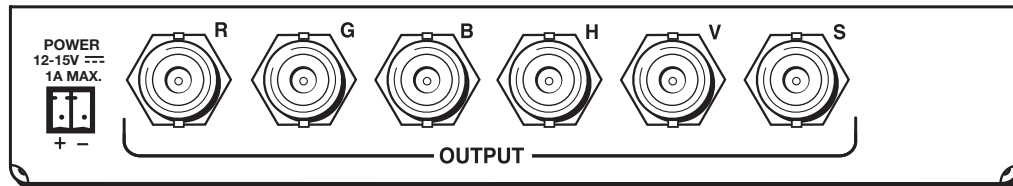
| VIDEO | |
|------------------------------|--|
| Gain | Unity (0.7 V), (0.8 V) 15% with 3 dB peaking |
| Max. rise/fall time | 1.5 ns |
| Bandwidth | 300 MHz (-3 dB) |
| VIDEO INPUT AND LOOP THROUGH | |
| Number/signal type | 1 analog VGA-QXGA, RGBHV, RGBS, RGsB 1 buffered local monitor loop-through identical to the input |
| Connectors | 1 female 15-pin HD (input) 1 female 15-pin HD (loop-through) |
| Nominal level | 0.7 Vp-p for RGB |
| Minimum/maximum levels | Analog: 0.3 V to 1.45 Vp-p with no offset at unity gain |
| Impedance | 75 ohms |
| Horizontal frequency | 15 kHz to 130 kHz |
| Vertical frequency | 30 Hz to 170 Hz |
| Return loss | <-41 dB @ 5 MHz |
| DC offset (max. allowable) | 4 V |
| VIDEO OUTPUT | |
| Number/signal type | 1 RGBHV, RGBS, RGsB |
| Connectors | 6 female BNC |
| Nominal level | 0.7 Vp-p for RGB |
| Minimum/maximum levels | 0.7 V to 0.8 Vp-p (switch selectable) with peaking |
| Impedance | 75 ohms |
| Return loss | -45 dB @ 5 MHz |
| DC offset | ±5 mV with input at 0 offset |
| SYNC | |
| Input type | RGBHV, RGBS, RGsB (does not strip sync from video) |
| Output type | RGBHV at all times, RGBS at all times, RGsB (switch selectable) |
| Input level | 2.0 V to 5.5 Vp-p with ±0.2 VDC offset (max.) |
| Output level | 4.0 V to 5.0 Vp-p, unterminated |
| Input impedance | 510 ohms |
| Output impedance | 75 ohms |
| Max. propagation delay | 57 ns |
| Max. rise/fall time | 4 ns |
| Polarity | RGBHV input: positive or negative (follows input) RGBS, RGsB input: negative |
| AUDIO – RGB 192V ONLY | |
| Gain | Unbalanced output: 0 dB; balanced output: +6 dB |
| Frequency response | 20 Hz to 20 kHz, ±0.05 dB |
| THD + Noise | 0.03% @ 1 kHz, 0.3% @ 20 kHz at nominal level |
| S/N | >90 dB at maximum output (14 dBm), balanced, unweighted |
| Crosstalk | <-90 dB @ 1 kHz |
| Stereo channel separation | >90 dB @ 1 kHz to 20 kHz |

| AUDIO INPUT – RGB 192V ONLY | | |
|---|--|-------------|
| Number/signal type | 1 stereo or mono, unbalanced | |
| Connectors | (1) 3.5 mm mini stereo audio jack (tip, ring, sleeve) | |
| Impedance | >10k ohms unbalanced, DC coupled | |
| Nominal level | -10 dBV (316 mVrms, -7.78 dBu) | |
| Maximum level | +9.5 dBu, (unbalanced) at 1% THD+N | |
| NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu | | |
| AUDIO OUTPUT – RGB 192V ONLY | | |
| Number/signal type | 1 buffered stereo or mono, balanced/unbalanced | |
| Connectors | (1) 3.5 mm captive screw connector, 5 pole | |
| Impedance | 50 ohms unbalanced, 100 ohms balanced | |
| Gain error | ±0.1 dB channel to channel | |
| Maximum level (Hi-Z) | >+14 dBm, balanced at 1% THD+N | |
| Maximum level (600 ohm) | >+9 dBm, balanced at 1% THD+N | |
| GENERAL | | |
| External power supply | 100 VAC to 240 VAC, 50-60 Hz, external; to 12 VDC, 1 A, regulated, included | |
| Power input requirements | 12 VDC, 0.35 A | |
| Cooling | Convection, no vents | |
| Temperature/humidity | Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing | |
| Mounting | Furniture mount Yes, with included under-desk mounting kit | |
| Enclosure type | Metal | |
| Enclosure dimensions | 1.0" H x 5.7" W x 4.5" D (2.5 cm H x 14.5 cm W x 11.4 cm D) (Depth excludes connectors.) | |
| Product weight | 0.9 lbs (0.4 kg) | |
| Shipping weight | 3 lbs (2 kg) | |
| Vibration | ISTA 1A in carton (International Safe Transit Association) | |
| Regulatory compliance | Safety CE, c-UL, UL EMI/EMC CE, C-tick, FCC Class A, ICES, VCCI MTBF 30,000 hours | |
| Warranty | 3 years parts and labor | |
| NOTE: All nominal levels are at ±10%. | | |
| Model | Version Description | Part number |
| RGB 190FV | Computer-Video Interface | 60-486-61 |
| RGB 192V | Computer-Video Interface with Audio | 60-486-01 |

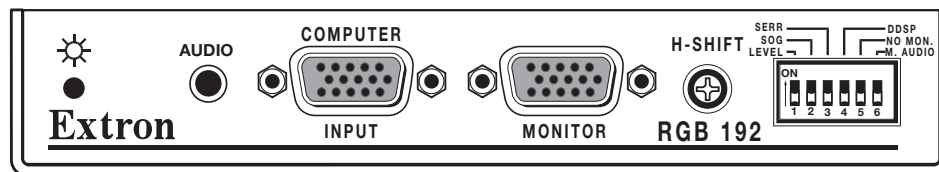
PANEL DRAWINGS



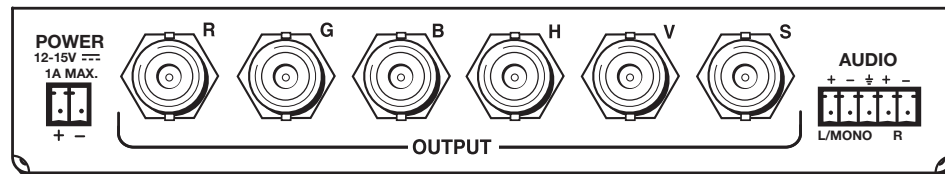
RGB 190FV - Front



RGB 190FV - Back



RGB 192V - Front



RGB 192V - Back



Extron USA - West
Headquarters
+800.633.9876
Inside USA / Canada Only
+1.714.491.1500
+1.714.491.1517 FAX

Extron USA - East
+800.633.9876
Inside USA / Canada Only
+1.919.863.1794
+1.919.863.1797 FAX

Extron Europe
+800.3987.6673
Inside Europe Only
+31.33.453.4040
+31.33.453.4050 FAX

Extron Middle East
+971.4.2991800
+971.4.2991880 FAX

Extron Asia
+800.7339.8766
Inside Asia Only
+65.6383.4400
+65.6383.4664 FAX

Extron Japan
+81.3.3511.7655
+81.3.3511.7656 FAX

Extron China
+400.883.1568
Inside China Only
+86.21.3760.1568
+86.21.3760.1566 FAX