IN1502

two input video scaler

- Scales composite video and S-video sources
- 16 selectable RGB output rates from 640x480 to 1366x768
- Auto-switching between inputs
- RS-232 and contact closure remote control
- Frame rate conversion
- 3:2 NTSC and 2:2 PAL pulldown detection

The Extron IN1502 is a video scaler that provides simple, high performance conversion of composite video and S-video sources for compatibility with high resolution RGB displays. It has been designed with integrator-friendly features for use in corporate, education, and medical environments.
The IN1502 Two Input Video Scaler provides high performance scaling of composite video and S-video signals. A host of integrator friendly features, including input source autoswitching, comprehensive picture controls, and RS-232 control make the IN1502 ideal for integrated systems in corporate, education, and medical environments where simple conversion of standard definition NTSC and PAL video to high resolution RGB video is desired. The IN1502 employs sophisticated video processing, including DMI™ - Dynamic Motion Interpolation, to create a single, optimally scaled output to match the native resolution of the display. A total of 16 selectable output resolutions are available from 640x480 to 1366x768 resolution.

Convenient control of the IN1502 is available via the front panel, RS-232 and contact closure, or the optional IR 901 remote control. The IN1502 is housed in a rack-mountable 1U, half rack width enclosure and is equipped with an internal power supply.

**FEATURES**

- Scales composite video and S-video sources
- 16 selectable RGB output rates from 640x480 to 1366x768
- Autoswitching between inputs - Can automatically switch between input sources upon detection of active sync signals.
- DMI™ - Dynamic Motion Interpolation – DMI technology is an advanced motion detection and compensation method used to deliver the best aspects of still and motion video.
- Picture controls for brightness, contrast, color, tint, detail, and horizontal and vertical positioning and sizing
- Frame rate conversion – Provides frame rate conversion of the incoming video signal to the selected output refresh rate.
- 3:2 NTSC and 2:2 PAL pulldown detection
- Quad standard video decoding – Uses a digital, four-line adaptive comb filter to decode NTSC 3.58, NTSC 4.43, PAL, and SECAM for integration into systems worldwide.
- LCD menu display – Provides easy menu access and navigation for simplified set-up.
- Front panel security lockout
- RS-232 and contact closure control
- Optional IR 901 handheld IR remote control
- Rack-mountable 1U, half rack width metal enclosure
- Internal international power supply

**APPLICATION DIAGRAM**

![Diagram of IN1502 Video Scaler configuration]

**SPECIFICATIONS**

**VIDEO INPUT**

- Number/signal type: 1 s-video
- Connectors: 1 female 15-pin HD
- Nominal level: 0 Vp-p for RGB
- Minimum/maximum levels: Analog: 0.0 V to 0.7 Vp-p with no offset
- Impedance: 75 ohms
- Horizontal frequency: NTSC 3.58, NTSC 4.43, PAL, SECAM
- Vertical frequency: NTSC 3.58, NTSC 4.43, PAL, SECAM
- Resolution range: NTSC 3.58, NTSC 4.43, PAL, SECAM
- Return loss: < -25 dB at 5 MHz
- DC offset (max. allowable): 1.5 V

**VIDEO PROCESSING**

- Decoder: 9 bit digital
- Digital sampling: 24 bit, 8 bits per color; 13.5 MHz standard
- Colors: 16.78 million

**VIDEO OUTPUT**

- Number/signal type: 1 scaled RGBHV, RGBS
- Connectors: 1 female 15-pin HD
- Nominal level: 0 Vp-p for RGB
- Minimum/maximum levels: 0 V to 0.7 Vp-p
- Impedance: 75 ohms
- Scaled resolutions: 640x480, 800x480, 48x480, 852x480, 1024x768, 1280x768, 1360x768, 1400x768, 1536x768, 1600x768, 1920x1080

**SYNC**

- Output type: RGBHV, RGBS
- Standards: NTSC 3.58, NTSC 4.43, PAL, SECAM
- Input level: 0 V to 1.0 Vp-p
- Output level: TTL: 5.0 Vp-p, unbalanced
- Input impedance: 75 ohms
- Output impedance: 75 ohms
- Max input voltage: 5 Vp-p
- Max. propagation delay: 20 ns
- Polarity: Negative

**CONTROL/REMOTE — DECODER/SCALER**

- Serial control port: RS-232, 9-pin female D connector
- Baud rate and protocol: 9600 baud, 8 data bits, 1 stop bit, no parity
- Serial control pin configurations: 1 = input 1 select (contact closure)
- 2 = RX
- 3 = RX
- 4 = input 3 select (contact closure)
- 5 = GND
- 9-pin female D connector (same as RS-232)
- Contact closure pin configurations: See in pins 1, 4, and 5 above.
- IR controller module: Extron IR 901 (optional)
- Program control: Extron's Simple Instruction Set (SIS™)

**GENERAL**

- Power: 100 VAC to 240 VAC, 50/60 Hz, 30 watts
- Internal, auto-switchable
- Enclosure type: Metal
- Enclosure dimensions: 17.5 x 9.5 x 2" (1U high, half rack wide)
- Product weight: 3.5 lbs (1.5 kg)
- Shipping weight: 6 lbs (3 kg)
- Vibration: ISTA 1A in carton (International Safe Transit Association)
- Compliances: CE, FCC Class A, VCCI, AS/NZS, ICES

**Model**

**Description**

- IN1502 Two Input Video Scaler
- IR 901 DVS/QSD/IN1502 Remote Control

**Part Number**

- 60-726-01
- 70-152-01

Specifications are subject to change without notice.