

# 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.



# Extron® Electronics

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# DESCRIPTION

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.

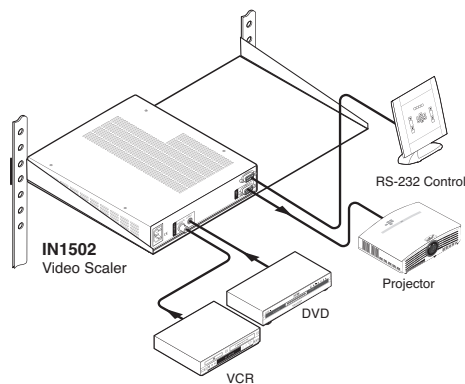
The IN1502 employs sophisticated video processing, including DMI™ - Dynamic Motion Interpolation, to create a single, optimally scaled output to match the native resolution of the display. A total of 16 selectable output rates are available from 640x480 to 1366x768 resolution.

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



# SPECIFICATIONS

VIDEO INPUT	
Number/signal type .....	1 S-video 1 composite video
Connectors .....	(1) 4-pin mini DIN female (S-video) 1 BNC female (composite video)
Nominal level .....	1 Vp-p for Y of S-video and for composite video 0.3 Vp-p for C of S-video
Minimum/maximum levels .....	Analog: 0.0 V to 1.0 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 @ 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 .....	0.7 Vp-p for RGB
Minimum/maximum levels .....	0.0 V to 0.7 Vp-p
Impedance .....	75 ohms
Scaled resolutions .....	640x480 <sup>1,2</sup> , 800x600 <sup>1,2</sup> , 848x480 <sup>1,2</sup> , 852x480 <sup>1,2</sup> , 1024x768 <sup>1,2</sup> , 1280x768 <sup>1,2</sup> , 1360x768 <sup>1,2</sup> , 1366x768 <sup>1,2</sup> <sup>1</sup> = at 50 Hz <sup>2</sup> = at 60 Hz

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, unterminated
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 = TX 3 = RX 4 = input 2 select (contact closure) 5 = GND
Contact closure.....	9-pin female D connector (same as RS-232 connector)
Contact closure pin configurations.....	See 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, autoswitchable
Rack mount .....	Yes, with optional rack shelf, part #60-190-01
Enclosure type .....	Metal
Enclosure dimensions .....	1.75" H x 8.75" W x 9.5" D (1U high, half rack wide) 4.4 cm H x 22.2 cm W x 24.1 cm D (Depth excludes connectors and knobs. Width excludes rack ears.)
Product weight .....	3.3 lbs (1.5 kg)
Shipping weight .....	6 lbs (3 kg)
Vibration .....	ISTA 1A in carton (International Safe Transit Association)
Listings .....	UL, CUL
Compliances.....	CE, FCC Class A, VCCI, AS/NZS, ICES
NOTE: All nominal levels are at ±10%.	

Model	Description	Part Number
IN1502	Two Input Video Scaler.....	60-726-01
<b>Optional Accessory</b>		
IR 901	DVS/QSD/IN1502 Remote Control.....	70-152-01

Specifications are subject to change without notice.



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