

# Specifications

## IN1606

### Video input

Number/signal type.....	2 RGB, RGBcvs, component video (YUVi or YUVp/HDTV), S-video, composite video 4 HDMI digital video (HDCP compliant)
Connectors.....	2 female 15-pin HD 4 female HDMI
Equalization .....	Automatic
Input cable length .....	Up to 75' (22.9 m) for all supported input rates
Nominal level.....	1 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB and for R-Y and B-Y of component 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 at unity gain
Impedance.....	75 ohms
Horizontal frequency .....	15 kHz to 100 kHz
Vertical frequency.....	24 Hz to 75 Hz
Resolution range.....	640x480 to 1600x1200 and 1920x1200* NTSC, PAL, SECAM, 480i, 480p, 576i, 576p, 720p, 1080i, 1080p, and 2k *reduced blanking
Return loss .....	>30 dB @ 5 MHz
DC offset (max. allowable).....	1.5 V

### Video processing

Decoder.....	12 bit digital (3D-adaptive comb filter)
Analog sampling .....	12 bits per color; 13.5 MHz standard (video) 170 MHz standard (RGB)
Digital pixel data bit depth.....	8, 10, or 12 bits per channel; 165 MHz pixel clock (HDMI)
Colors.....	1 billion (10 bit processing)

### Video output

Number/signal type.....	2 HDMI (HDCP)
Connectors.....	2 female HDMI
HDMI peripheral device power .....	200 mA per output
Scaled resolution .....	640x480 <sup>6,8,9</sup> , 800x600 <sup>6,8,9</sup> , 852x480 <sup>6,8,9</sup> , 1024x768 <sup>6,8,9</sup> , 1024x852 <sup>6,8,9</sup> , 1024x1024 <sup>6,8,9</sup> , 1280x768 <sup>6,8,9</sup> , 1280x800 <sup>6,8,9</sup> , 1280x1024 <sup>6,8,9</sup> , 1360x765 <sup>6,8,9</sup> , 1360x768 <sup>6,8,9</sup> , 1365x768 <sup>6,8,9</sup> , 1365x1024 <sup>6,8,9</sup> , 1366x768 <sup>6,8,9</sup> , 1400x1050 <sup>6,8</sup> , 1440x900 <sup>6,8,9</sup> , 1600x900 <sup>6,8</sup> , 1600x1200 <sup>6,8</sup> , 1680x1050 <sup>6,8</sup> , 1920x1200 <sup>6,8</sup> HDTV 480p <sup>7,8</sup> , 576p <sup>6</sup> , 720p <sup>3,4,5,6,7,8</sup> , 1080i <sup>6,7,8</sup> , 1080p <sup>1,2,3,4,5,6,7,8</sup> , 2048x1080 <sup>1,2,3,4,5,6,7,8</sup> <sup>1</sup> = at 23.98 Hz, <sup>2</sup> = at 24 Hz, <sup>3</sup> = at 25 Hz, <sup>4</sup> = at 29.97 Hz, <sup>5</sup> = 30 Hz, <sup>6</sup> = at 50 Hz, <sup>7</sup> = at 59.94 Hz, <sup>8</sup> = at 60 Hz, <sup>9</sup> = at 75 Hz

### Sync

Input type .....	RGBHV, RGBS, RGsB, RGBcvs, bi-level or tri-level component video
Input standards.....	NTSC 3.58, NTSC 4.43, PAL, SECAM
Input level .....	2.75 V to 5.0 Vp-p for RGBHV or RGBS 0.6 Vp-p for component video with tri-level sync 0.3 Vp-p for component video with bi-level sync or RGsB
Input impedance.....	Horizontal: 510 ohms Vertical: 510 ohms
Max. input voltage.....	5.0 Vp-p

## Audio

Gain.....	Unbalanced output: -6 dB; balanced output: 0 dB
Frequency response .....	20 Hz to 20 kHz, $\pm 0.5$ dB
THD + Noise .....	<0.1%, 20 Hz to 20 kHz at nominal level
S/N.....	>90 dB at maximum balanced output (unweighted)
Crosstalk .....	$\leq -80$ dB @ 1 kHz, fully loaded
Stereo channel separation.....	>80 dB @ 1 kHz
Bass .....	+12 dB to -24 dB @ 100 Hz
Treble.....	+12 dB to -24 dB @ 8 kHz

## Audio input

Number/signal type.....	6 stereo Line balanced or unbalanced 2 mono Mic/Line balanced or unbalanced (with available phantom power) 4 stereo, de-embedded from HDMI (PCM only)
Connectors.....	(6) 3.5 mm, 5 pole captive screw connectors for Line (2) 3.5 mm, 3 pole captive screw connector for Mic/Line 4 female HDMI type A
Impedance.....	>10k ohms unbalanced, >20k ohms balanced
Nominal level.....	Line inputs: +4 dBu, -10 dBV, adjustable Mic/line inputs: -60 dBV, +4 dBu, -10 dBV, adjustable
Maximum level .....	+21 dBu at rated THD+N when gain is set to 0 dB
CMRR.....	>80 dB @ 1 kHz
Input gain adjustment.....	Line inputs: -18 dB to +24 dB, 0.1 dB steps, adjustable per input Mic/line inputs: -18 dB to +60 dB, 0.1 dB steps, adjustable per input LPCM-2Ch: -18 dB to +24 dB, 0.1 dB steps, adjustable per input
DC phantom power .....	+48 VDC $\pm 10\%$ (can be switched on or off per Mic/line input)

## Audio output

Number/signal type.....	1 balanced or unbalanced stereo (variable) 1 balanced or unbalanced stereo; can be configured as stereo or two independently mixed mono channels 2 HDMI embedded
Connectors.....	(2) 3.5 mm captive screw connectors, 5 pole 2 female HDMI
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Gain error.....	$\pm 0.5$ dB channel to channel
Maximum level (Hi-Z).....	>+21 dBu, balanced; >+15 dBu, unbalanced
Output volume range .....	0 to -100 dB in 0.1 dB steps

## Control/remote

Serial control port.....	1 bidirectional RS-232: 1 rear panel 3.5 mm captive screw connector, 3 pole
Baud rate and protocol .....	9600, 8 data bits, 1 stop bit, no parity (default)
USB control ports .....	1 front panel female mini USB B
USB standards .....	USB 2.0, high speed
Ethernet control port .....	1 female RJ-45 connector
Ethernet data rate .....	10/100Base-T, half/full duplex with autodetect
Ethernet protocol .....	ARP, ICMP (ping), IP, TCP, DHCP, HTTP, Telnet
Program control.....	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™) Microsoft® Internet Explorer®, Telnet

## General

Power supply .....	Internal Input: 100-240 VAC, 50-60 Hz
Power consumption	
Full load.....	26 watts
Power save mode .....	<14 watts
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
Cooling .....	Passive, side and top vents
Thermal dissipation	
Full load.....	68.7 BTU/hr
Power save mode .....	45.4 BTU/hr
Mounting	
Rack mount.....	Yes, with included, pre-installed brackets
Enclosure type .....	Metal
Enclosure dimensions .....	1.72" H x 19.0" W x 9.5" D (1U high, full rack wide) (4.4 cm H x 48.3 cm W x 24.1 cm D) (Depth excludes connectors and knobs. Width excludes rack ears.)
Product weight .....	4.9 lbs (2.2 kg)
Shipping weight .....	6.7 lbs (3.0 kg)
DIM weight .....	7.1 lbs (3.2 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
Environmental.....	Complies with the appropriate requirements of RoHS, WEEE.
Warranty .....	3 years parts and labor

**NOTE:** All nominal levels are at  $\pm 10\%$ .

**NOTE:** Specifications are subject to change without notice.

8.1-060515-D10