

Specifications

Annotator Series

Video input

Number/signal type	2 RGBHV, RGBS, RGsB, component video (Y, R-Y, B-Y; progressive or HD) 1 RGBHV, RGBS, RGsB, component video (Y, R-Y, B-Y; interlaced, progressive, HD), S-video, composite video 1 component video (Y, R-Y, B-Y; interlaced), S-video, composite video 1 S-video, composite video 1 single link DVI-D 1 optional SDI, HD-SDI
Connectors	2 female 15-pin HD: RGBHV, RGBS, RGsB, component video 5 female BNC: RGBHV, RGBS, RGsB, component video, S-video, composite video 3 female BNC: component video, S-video, composite video 2 female BNC: S-video, composite video 1 female DVI-I: DVI-D 1 female BNC: optional SDI, HD-SDI
Nominal level	1 Vp-p for Y of component video and S-video, and for composite video 0.8 Vp-p for SDI 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 2.0 Vp-p with no offset
Impedance	75 ohms
Horizontal frequency	Autoscan 15 kHz to 100 kHz
Vertical frequency	Autoscan 24 Hz to 120 Hz
Resolution range	640x480 to 1920x1200*, 480i, 480p, 576i, 576p, 720p, 1080i, and 1080p, digitized pixel for pixel; higher resolutions are undersampled. *Reduced blanking
Return loss	<-30 dB @ 5 MHz
DC offset (max. allowable)	0.5 V

Video processing

Digital sampling	30 bit, 10 bits per color; 13.5 MHz standard (video), 165 MHz standard (RGB, YUVp, DVI)
Colors	1 billion, 1024 per color channel
Encoder (for scan converted output)	10 bit digital
Horizontal filtering (for scan converted output)	3 levels
Vertical filtering (for scan converted output)	3 levels
Encoder filtering (for scan converted output)	3 levels

Video output

Number/signal type	2 buffered scaled RGBHV, RGBS, RGsB, or HD component video (Y, R-Y, B-Y) 1 MTP 1 optional output in one of the following formats: <ul style="list-style-type: none">• single link DVI-I (for unique scaled output)• DVI-D• 3G/HD-SDI• interlaced RGsB, component video, S-video, composite video
Connectors	6 female BNC: RGB or component video 1 female 15-pin HD: RGB or component video 1 female RJ-45: output to an MTP device 1 slot for an optional output card with one of the following options: <ul style="list-style-type: none">• 1 female DVI-I (analog and digital, unique scaled output)• 1 female DVI-I (digital output)• 1 female BNC (3G/HD-SDI output)• 3 female BNC (interlaced RGsB, component, S-video, composite video output)
Nominal level	1 Vp-p for Y of component video and S-video, and for G of RGsB 0.8 Vp-p for SDI 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	0.0 V to 1.0 Vp-p
Impedance	75 ohms
Scaled resolution	640x480 ^{5,8,9} , 800x600 ^{6,8,9} , 852x480 ^{6,8,9} , 1024x768 ^{6,8,9} , 1024x852 ^{6,8,9} , 1024x1024 ^{6,8,9} , 1280x768 ^{6,8,9} , 1280x800 ^{6,8,9} , 1280x1024 ^{6,8,9} , 1360x765 ^{6,8,9} , 1360x768 ^{6,8,9} , 1365x768 ^{6,8,9} , 1365x1024 ^{6,8,9} , 1366x768 ^{6,8,9} , 1400x1050 ^{6,8} , 1440x900 ^{6,8,9} , 1600x1200 ^{6,8} , 1680x1050 ^{6,8} , 1920x1200 ^{6,8} HDTV: 480p ^{7,8} , 576p ⁶ , 720p ^{3,4,5,6,7,8} , 1080i ^{6,7,8} , 1080p ^{1,2,3,4,5,6,7,8} , 1080p CVT ⁸ , 2048x1080 ^{1,2,3,4,5,6,7,8} SDTV: NTSC, PAL (with optional scan converter output card) ¹ = 23.98 Hz, ² = 24 Hz, ³ = 25 Hz, ⁴ = 29.97 Hz, ⁵ = 30 Hz, ⁶ = 50 Hz, ⁷ = 59.94 Hz, ⁸ = 60 Hz

Sync

Input type	RGBHV, RGBS, RGsB, RGBcV, and component video (tri-level or bi-level)
Output type	RGBHV, RGBS, RGsB, and component video (tri-level or bi-level)
Standards	NTSC 3.58, NTSC 4.43, PAL, SECAM Optional SDI/HD-SDI: SMPTE 259M-C, SMPTE 292M
Input level	2.75 V to 5.0 Vp-p for RGBHV or RGBS 0.6 Vp-p for component video tri-level sync 0.3 Vp-p for component video bi-level sync or RGsB
Output level	5.0 Vp-p for RGBHV or RGBS 0.6 Vp-p for component video tri-level sync 0.3 Vp-p for component video bi-level sync or RGsB
Input impedance	Horizontal: 75 ohms Vertical: 510 ohms
Output impedance	75 ohms
Polarity	Positive or negative (selectable)

Control/remote— signal processor

Serial control port	2 RS-232/RS-422, female 9-pin D connectors (rear panel) 1 RS-232, 2.5 mm mini stereo jack (front panel)
Baud rate and protocol	9600 (default), 19200, 38400, 115200 baud, adjustable; 8 data bits, 1 stop bit, no parity
Serial control pin configurations	
9-pin D connector	RS-232: 2 = Tx, 3 = Rx, 5 = GND RS-422: 2 = Tx-, 3 = Rx-, 5 = GND, 7 = Rx+, 8 = Tx+
2.5 mm mini stereo jack	Tip = Tx, ring = Rx, sleeve = GND

Ethernet control port.....	1 RJ-45 female connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	ARP, ICMP (ping), IP, TCP, UDP, DHCP, HTTP, SMTP, Telnet
Ethernet default settings	Link speed and duplex level = autodetected IP address = 192.168.254.254 Subnet mask = 255.255.0.0 Gateway = 0.0.0.0 DHCP = off
Web server.....	Up to 200 simultaneous sessions 40 MB nonvolatile user memory
Program control	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™) Microsoft® Internet Explorer®, Telnet

Control/remote — annotation

Number/signal type	20 USB devices (via hubs) 2 serial devices 1 PS/2 mouse 1 PS/2 keyboard
Connectors	2 USB type A 2 RS-232, female 9-pin D (shared with standard control) 2 female PS/2

General

Power supply.....	Internal Input: 100-240 VAC, 50-60 Hz
Power consumption	30 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.....	Convection, vented on sides and top
Thermal dissipation	97 BTU/hr
Mounting	
Rack mount.....	Yes, with included brackets.
Furniture mount	Yes, with optional under-desk or through-desk mounting kit
Enclosure type.....	Metal
Enclosure dimensions	1.7" H x 17.5" W x 12.0" D (1U high, full rack wide) (4.3 cm H x 44.4 cm W x 30.5 cm D) (Depth excludes connectors and knobs.)
Product weight.....	6.8 lbs (3.1 kg)
Shipping weight.....	11 lbs (5 kg)
DIM weight.....	12 lbs (6 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
Warranty.....	3 years parts and labor

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.

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