

Specifications

SW2/4/6/8/12 VGA Ars Switchers

Video

Gain.....	Unity
Bandwidth	350 MHz (-3 dB)
Crosstalk	-68 dB @ 10 MHz

Video input

Number/signal type	2, 4, 6, 8, or 12 (depending on the model) VGA-QXGA RGBHV, RGBS, RGsB, RsGsBs computer video, and HDTV component video
Connectors	2, 4, 6, 8, or 12 female 15-pin HD

NOTE: ID bits (on pins 4, 11, 12, 15) are routed from input 1 to the output (for 2, 4, and 6-input models) or to output 1 (for 8- and 12-input models).

Nominal level	1.0 Vp-p for Y of component video 0.7 Vp-p for RGB and for R-Y and B-Y of component video
Minimum/maximum levels.....	Analog: 0.3 V to 1.5 Vp-p with no offset
Impedance	75 ohms
Horizontal frequency	15 kHz to 145 kHz
Vertical frequency.....	30 Hz to 170 Hz
Return loss	-40 dB @ 5 MHz
Input coupling.....	DC

Video output

Number/signal type	
SW2/4/6 VGA Ars	1 VGA-QXGA RGBHV, RGBS, RGsB, RsGsBs computer video, and HDTV component video (follows input type)
SW8/12 VGA Ars	2 VGA-QXGA RGBHV, RGBS, RGsB, RsGsBs computer video, and HDTV component video (follows input type)
Connectors	
SW2/4/6 VGA Ars	1 female 15-pin HD
SW8/12 VGA Ars	2 female 15-pin HD
Nominal level	1.0 Vp-p for Y of component video 0.7 Vp-p for RGB and for R-Y and B-Y of component video
Minimum/maximum levels.....	0.3 V to 1.5 Vp-p (follows input)
Impedance	75 ohms
Return loss	-43 dB @ 5 MHz
DC offset	±5 mV with input at 0 offset

Sync

Input type	RGBHV, RGBS, RGsB, RsGsBs, bi-level and tri-level sync
Output type	RGBHV, RGBS, RGsB, RsGsBs, bi-level and tri-level sync (follows input)
Input level	1.0 V to 5.0 Vp-p
Output level	TTL: 5.0 Vp-p, unterminated
Input impedance	510 ohms
Output impedance	75 ohms

Max. propagation delay	
SW2/4/6 VGA Ars	47 ns
SW8/12 VGA Ars	54 ns
Max. rise/fall time	
SW2/4/6 VGA Ars	4.2 ns
SW8/12 VGA Ars	4.7 ns
Polarity	Positive or negative (follows input)

Audio

Gain	
SW2/4/6 VGA Ars	Unbalanced output: +6 dB; balanced output: +12 dB
SW8/12 VGA Ars	Unbalanced output: +0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ± 0.05 dB
THD + Noise	0.01% @ 1 kHz at nominal level
S/N	>90 dB at maximum output (unweighted)
Crosstalk	
SW2/4/6 VGA Ars	-45 dB @ 20 kHz, -72 dB @ 1 kHz or below 60 Hz
SW8/12 VGA Ars	-45 dB @ 1 kHz, fully loaded
Stereo channel separation	
SW2/4/6 VGA Ars	>80 dB @ 20 Hz to 20 kHz
SW8/12 VGA Ars	>80 dB 1 kHz

Audio input

Number/signal type	2, 4, 6, 8, or 12 (depending on the model) stereo, unbalanced
Connectors	2, 4, 6, 8, or 12 (depending on the model) female 3.5 mm stereo mini jacks; tip (L), ring (R), sleeve (Gnd)
Impedance	>10k ohms unbalanced, DC coupled
Nominal level	-10 dBV (316 mV)
Maximum level	
SW2/4/6 VGA Ars	+16 dBV, (unbalanced) at 1% THD+N
SW8/12 VGA Ars	+14 dBV, (unbalanced) at 1% THD+N
Input gain adjustment	SW 6 VGA A only: -15.0 dB to +9.0 dB, adjustable per input

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV \approx 2 dBu

Audio output

Number/signal type	
SW2/4/6 VGA Ars	1 stereo, balanced/unbalanced
SW8/12 VGA Ars	2 stereo, balanced/unbalanced
Connectors	
SW2/4/6 VGA Ars	(1) 3.5 mm captive screw connector, 5 pole
SW8/12 VGA Ars	(2) 3.5 mm captive screw connectors, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Nominal level	
SW2/4/6 VGA Ars	+4 dBu (1.23 V), balanced -4 dBV (0.63 V), unbalanced
SW8/12 VGA Ars	+4 dBu (1.23 Vrms), balanced -10 dBV (316 mVrms), unbalanced
Variable output's volume range	SW8/12 VGA Ars only: 0 to 100 (-84 dB to 0 dB), default = 100 = 0 dB
Gain error	SW8/12 VGA Ars only: ± 0.1 dB channel to channel
Maximum level (Hi-Z)	+28 dBu, balanced; +20 dBV, unbalanced at 1% THD+N
Maximum level (600 ohm)	+21 dBm, balanced; +18 dBm, unbalanced at 1% THD+N

Control/remote — switcher

Serial control port	
SW2/4/6 VGA Ars	RS-232, female 9-pin D connector (shared with contact closure)
SW8/12 VGA Ars	RS-232, female 9-pin D connector
Baud rate and protocol.....	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configurations	2 = Tx, 3 = Rx, 5 = GND
Contact closure	SW2/4/6 VGA Ars only: female 9-pin D connector (shared with RS-232)
Contact closure pin configuration...	SW2/4/6 VGA Ars only: 1 = input 1, 4 = input 2, 6 = input 3, 7 = input 4, 8 = input 5, 9 = input 6; active when a pin momentarily shorts to ground
"Show Me" contact closure	Pin 5 of each VGA input connector. The input is active (selected) when pin 5 momentarily goes to ground.
Program control	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™)

General

Power	100 VAC to 240 VAC, 50-60 Hz, 10 watts, internal
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, no vents
Mounting	
Rack mount	
SW2/4/6 VGA Ars	Yes, with optional 1U rack shelf
SW8/12 VGA Ars	Yes, with included bracket kit
Furniture mount	Yes, with optional under-desk or through-desk mounting kit
Enclosure type.....	Metal
Enclosure dimensions	
SW2/4/6 VGA Ars	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.)
SW8/12 VGA Ars	1.75" H x 17.5" W x 9.5" D (1U high, full rack wide) (4.4 cm H x 44.4 cm W x 24.1 cm D) (Depth excludes connectors)
Product weight	
SW2/4/6 VGA Ars	2.5 lbs (1.1 kg)
SW8/12 VGA Ars	6.3 lbs (2.9 kg)
Shipping weight	
SW2/4/6 VGA Ars	5 lbs (3 kg)
SW8/12 VGA Ars	11 lbs (5 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
Compliances.....	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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