

# Specifications — System 8 Plus Switcher

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## Video

Gain .....	0 dB, unity
Bandwidth .....	300 MHz (-3 dB)
Differential phase error .....	0.01° at 3.58 MHz and 4.43 MHz
Differential gain error .....	0.01% at 3.58 MHz and 4.43 MHz
Crosstalk .....	-35 dB @ 10 MHz (typical)
Isolation .....	-55 dB @ 10 MHz (typical)

## Video input

Number/signal type .....	8 or 10 RGBHV, RGBS, RGsB, S-video, or NTSC/PAL composite video
Connectors .....	(8 or 10) x 5 BNC female
Nominal level .....	1 V <sub>p-p</sub> for Y of S-video and for composite video 0.7 V <sub>p-p</sub> for RGB 0.3 V <sub>p-p</sub> for C of S-video
Minimum/maximum levels .....	Analog: 0.3 V to 2 V <sub>p-p</sub> TTL: up to 5 V <sub>p-p</sub>
Impedance .....	75 ohms (deselected inputs)
Horizontal frequency .....	15 kHz to 150 kHz
Vertical frequency .....	30 Hz to 150 Hz
Return loss .....	<-25 dB @ 10 MHz

## Video output

Number/signal type .....	1 RGBHV, RGBS, RGsB, or 1 S-video (NTSC/PAL), or 1 composite video (NTSC/PAL)
Connectors .....	5 BNC female (RGBHV/RGBS/RGsB) 2 BNC female (S-video) 1 BNC female (composite video)
Nominal level .....	1 V <sub>p-p</sub> for Y of S-video and for composite video 0.7 V <sub>p-p</sub> for RGB 0.3 V <sub>p-p</sub> for C of S-video
Minimum/maximum levels .....	0.3 V to 2.0 V <sub>p-p</sub>
Impedance .....	75 ohms
Return loss .....	-30 dB @ 5 MHz
DC offset .....	None
Switching type .....	Triple-Action™; 0 s to 7.5 s, adjustable

## Sync

Input type .....	RGBHV, RGBS, RGsB
Output type .....	RGBHV, RGBS, RGsB
Standards .....	NTSC and PAL
Input level .....	0.5 V to 5 V <sub>p-p</sub>
Output level .....	0.5 V to 5 V <sub>p-p</sub> , unterminated
Input impedance .....	510 ohms (deselected inputs)
Output impedance .....	75 ohms
Max input voltage .....	5 V <sub>p-p</sub>
Input sensitivity .....	5 V <sub>p-p</sub>
Polarity .....	Positive or negative (follows input)

## Audio

Gain .....	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response .....	20 Hz to 20 kHz, ±0.05 dB
THD + Noise .....	0.015% @ 20 Hz to 20 kHz, worst case
S/N .....	>95 dB at maximum output

Crosstalk .....	<-85 dB @ 20 Hz to 20 kHz, fully loaded
Stereo channel separation .....	>60 dB @ 20 Hz to 20 kHz
CMRR .....	>60 dB @ 60 kHz

## Audio input

Number/signal type .....	System 8 PLUS: 8 stereo, balanced/unbalanced System 10 PLUS: 10 stereo, balanced/unbalanced
Connectors .....	(8 or 10) 5 mm captive screw connectors, 6 conductor
Impedance .....	>10k ohms unbalanced, 20k ohms balanced, AC coupled
Nominal level .....	-20 dBV (100 mV), -10 dBV (316 mV), 0 dBu (0.775 V), or +4 dBu (1.23 V), configurable

**NOTE** 0 dBu = 0.775 V<sub>rms</sub>, 0 dBV = 1 V<sub>rms</sub>, 0 dBV ≈ 2 dBu  
+4 dBu and 0 dBu are professional audio line level standards.  
-10 dBV and -20 dBV are semiprofessional, computer audio, and consumer audio standards.

Maximum level .....	+13.2 dBu, (balanced or unbalanced) at 1%THD+N
Input gain adjustment .....	-95 dB to 0 dB, adjustable per input

## Audio output

Number/signal type .....	1 stereo, balanced/unbalanced
Connectors .....	(1) 5 mm captive screw connector, 6 pole 2 BNC female
Impedance .....	50 ohms unbalanced, 100 ohms balanced
Gain error .....	±0.2 dB channel to channel
Maximum level (Hi-Z) .....	> +19.2 dBu, balanced or unbalanced at 1%THD+N
Maximum level (600 ohm) .....	> +19.2 dBm, balanced or unbalanced at 1%THD+N

## Control/remote — switcher

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 ...	2 = TX, 3 = RX, 5 = GND
Remote key pad control .....	(1) 25-pin D female
IR controller module .....	IR-201 (optional), part #70-142-01; or IR-301 (optional), part #70-143-01
Program control .....	Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™)

## Control — projector

Projector control port .....	(1) 15-pin HD female
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## General

Power .....	90 VAC to 260 VAC, 50/60 Hz, 10 watts, internal, autoswitchable
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
Rack mount .....	Yes, with attached rack ears
Enclosure type .....	Metal
Enclosure dimensions .....	5.25" H x 17.5" W x 9.6" D (3U high, full rack wide) 13.3 cm H x 44.4 cm W x 24.4 cm D (Depth excludes connectors. Width excludes rack ears.)
Product weight .....	12.7 lbs (5.8 kg)
Shipping weight .....	19 lbs (9 kg)
DIM weight (International) .....	25 lbs. (12 kg)
Vibration .....	ISTA 1A in carton (International Safe Transit Association)
Listings .....	UL, CUL

# Specifications — System 8 Plus Switcher (continued)

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Compliances .....	CE
MTBF .....	30,000 hours
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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