

Switchers

PS120 DATA SHEET

5 X 1 MULTI-FORMAT AUTO-SWITCHER WITH PROXIMITY SENSOR, ETHERNET, RS232, AND CLOUD CONTROL

Elegant yet incredibly powerful, the PS120 is an under-table mountable 3-HDMI, 1-VGA, and 1-USB-C input to 1 HDMI output auto-sensing, auto-switching switcher. CEC display control automatically turns the display on when a person connects to the system and shuts off the display when disconnected. Further enhancing display control is a proximity sensor that shuts the system down when the room is vacated.

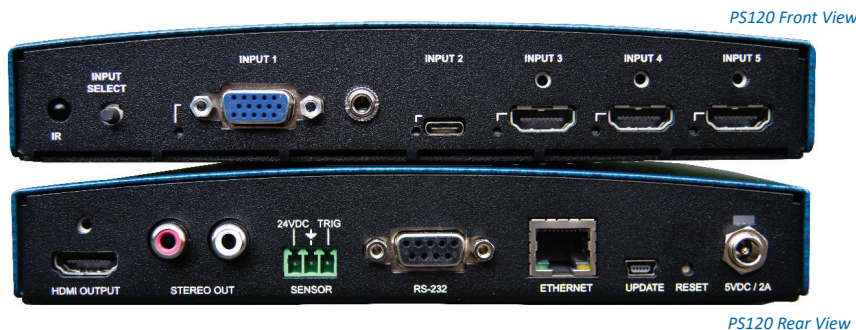
The PS120 is an AV-integrated IoT device. When connected to an internet-connected LAN, the PS120 uses advanced encryption technology to connect to Cloud Control, a PS-engineered Amazon AWS MQTT service for external management, control, and performance measurement. Cloud Control is an essential tool for help desk administrators for 1 to 10,000 local or distributed campus-wide management of multimedia rooms.



COMMON APPLICATIONS

The PS120 was defined from the very beginning for classrooms and small conference rooms where computers and mobile devices attach to a single high resolution display.

The key design attributes of the PS120 are (a) automation and (b) maintainability. Automation makes multimedia spaces usable. The PS120 automatically turns on the display, negotiates resolutions, and routes the video signal. Cloud Control will not only allow the PS120 to be reset from across the world but provide critical usage statistics so administrators can manage their multimedia resources effectively.



PS120 Front View

PS120 Rear View

FEATURES

USB TYPE C Today's classrooms frequently using Google Chromebooks, Samsung Galaxy Notebooks, and other devices using the USB 3.x Type C connector. This connector is used for high resolution video displays and power. When connected the PS120 routes the high resolution image from the device to the display while simultaneously providing up to 30 watts of power for very quick charging.

CLOUD CONTROL The PS120 is compatible with Cloud Control, an Amazon AWS MQTT service developed by PS for use with its AV integrated line of IoT switchers. Cloud Control allows administrators to manage a single PS120 or thousands of PS120 devices at multiple locations.

UHD The PS120 supports HDTV and VESA resolutions - including 4K@30 and 1080p@60.

AUTO-SWITCHER The PS120 has a unique auto-sense, auto-switch feature that automatically switches to the source when a new source is connected to the system. For example, when a person connects to any of the 5 HDMI inputs, that person's laptop image immediately appears on the display.

DISPLAY ON/OFF A significant feature of the PS120 is the ability to automatically turn on the display when someone connects ones laptop, computer, or iPad then automatically shut off the display when the presentation is over and everyone has disconnected from the PS120. This communication method does not require any programming and communicates with the display through the HDMI cable.

PROXIMITY SENSOR A passive infrared proximity sensor and pre-terminated cable ships with each PS120. This sensor detects when everyone has left the room and shuts down the display after a predetermined period of time extending display life and saving power.

DRAG N DROP FIRMWARE UPDATES Using the PS120's USB Mini-B port connected to a Window-based computer, firmware updates are as easy and as quick as dragging and dropping a file into a directory or folder.

TECHNICAL DATA

HDMI INPUT

Format:	(3) HDMI Type A, female, V1.4b, 19-pin 300 MHz TMDS clock frequency, 3.4 Gbps per channel
Signal:	0.5-1.5Vp-p, DDC Lines: 5 Vp-p, TTL
Impedance:	100 Ohm
Audio Format:	High Bit Rate (HBR), Dolby® TrueHD™, DTS-HD Master Audio™, THX® Media Director™
HDMI Input Resolutions, HDTV:	480i@29.97/30/60/199.88/120Hz, 480p@59.94/119.88/120/240Hz, 576p@50/100/200Hz, 720p@50/59.94/60/100/119.8 8/120Hz, 1080i@25/29.97/30/50/59.94/60Hz, 1080p@23.976/24/29.97/30/50/59.94/60Hz, 3840x2160@30Hz (4K/2K), 3840x2160@60Hz (4K/2K @ 4:2:0)
HDMI Input Resolutions, PC:	640x350@85Hz, 640x480@60/67/73/75/85Hz, 720x400@85, 800x600@56/60/72/75/85Hz, 832x624@75Hz, 852x480@60Hz, 1024x576@60Hz, 1024x768@42/60/70/75/85Hz, 1152x864@75Hz, 1152x870@75Hz, 1280x768@60/75/85Hz, 1280x960@60/85Hz, 1280x1024@60/75/85Hz, 1360x768@60Hz, 1365x1024@60/75Hz, 1400x768@60Hz, 1400x1050@60Hz, 1440x960@72Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@60Hz, 1920x1200@60Hz
HDCP	HDCP V1.4

VGA INPUT

Format:	(1) HD15, RGBHV, 15-pin, female
Signal:	0.5-1.5Vp-p
Impedance:	75 Ohm

AUDIO INPUT, L/R

Format:	(1) 3.5mm, Mini Audio Jack (TRS), unbalanced stereo, female
Freq Resp:	20 Hz to 20 kHz, +/- 0.05 dB
THD+N:	0.01% @ 1kHz at nominal level
Sig/Noise:	> 90 dB at Vin = 0V, A-Weighted
Impedance:	> 10k Ohms, unbalanced, AC coupled
Nom Level:	-10 dBV (316 mVrms)
Max Level:	+6 dBV (2 Vrms), unbalanced at 1% THD+N

USB INPUT

Format:	(1) USB Type C, female, USB 3.0 Video / Power Only USB Type C Alt Mode (DisplayPort) up to 4K@30. Power to 30W: (5V @ 3A, 9V @ 3A, 15V @ 2A, and 20V @ 1.5A)
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HDMI OUTPUT

Format:	(1) HDMI Type A, female, HDMI V1.4b 10.2 Gbps (3.4 Gbps per ch), 300 MHz Bandwidth
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ETHERNET

Format:	(1) RJ-45, female
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RS-232

Format:	(1) DB-9, female
Baud:	115200 baud, 8 data bits, 1 stop bit, no parity

USB

Format:	(1) USB Type B, Mini
Type:	USB 2.0, high speed
	USB-CDC (remote serial port connectivity)
	USB-MSD (firmware upload configuration)

ENCLOSURE

Dimensions:	187 x 127 x 32 mm, (7.4" x 5.0" x 1.24")
Weight:	0.41 kg, (0.9 lbs)
Power (External):	Input: 100-240 VAC, 50-60 Hz Output: 24 VDC, 1.5A, 35 Watts
Material:	Steel, Black Matte Finish on Base, Blue/Black on Cover

CERTIFICATIONS

Safety:	CE
Environ:	CE, RoHS

ENVIRONMENTAL

Storage Temp:	-20° C to 70° C (-4° F to 140° F)
Storage Humidity:	10% to 90%, non-condensing
Operating Temp:	0° C to 70° C (32° F to 158° F)
Operating Humidity:	10% to 90%, non-condensing
ESD Protection:	17kV (Air-Gap Discharge) 12kV (Contact Discharge)

WARRANTY

Coverage:	1 Year, Parts & Factory Labor
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Note: All nominal levels are at +/-10%. Specifications are subject to change without notice.