Panasonic CONNECT



Conveniently Compact Switcher Achieves High-quality Video

AV-HSW10

IP Live Switcher with intuitive and compact design takes online communication one level higher.

Key Features

- Diverse Interfaces to Suit Wide-ranging Needs
- Diverse Keyers for More Attractive Video
- Multiviewer With 10 Selectable Patterns
- Remote Control With Software Control Panel

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https://latam.connect.panasonic.com/br/pt/produtos/broadcast-proav/av-hsw10

Live Switcher -> General -> Power Supply	16 V Dedicated Adaptor
Live Switcher -> General -> Power Consumption	3.0 A (48 W)
Live Switcher -> General -> Operating Temperature	0°C to 40 °C (32 °F to 104 °F)
Live Switcher -> General -> Operating Humidity	10 % to 90 % (no condensation)
Live Switcher -> General -> Storage Temperature	0 °C to 40 °C (32 °F to 104 °F)
Live Switcher -> General -> Storage Humidity	10 % to 90 % (no condensation)
Live Switcher -> General -> Weight	Approx. 1.8 kg (Approx.3.96 lb)
Live Switcher -> General -> Dimensions	W 254 mm x H 67 mm x D 175 mm (10 inches x 2-5/8 inches x 6-7/8 inches) (excluding protrusions)
Live Switcher -> General -> ME Number	1 ME
Live Switcher -> Video Terminal -> SDI IN	4 lines • Connectors: BNC x 4 • Equipped with frame synchronizer • Connectors and have simplified format simple format converters, and have high-performance format converters. • Connectors to are equipped with simplified format converters. * SDI IN 1 excludes HDMI IN1. [3G-SDI] 3G-SDI, SMPTE424 standard complied with (Compatible with Level-A/Level-B) ・0.8 V [p-p] ± 10 % (75 Ω) ・Automatic equalizer 100 m (when using a cable) [HD-SDI] HD-SDI, SMPTE292M standard ・0.8 V [p-p] ± 10 % (75 Ω) ・Automatic equalizer 100 m (when using a cable)
Live Switcher -> Video Terminal -> HDMI IN	2 lines, HDMI 1.4b compatible Video format inputs: 720p/59.94 Hz, 720p/50 Hz, 1080i/59.94 Hz, 1080i/50 Hz, 1080p/59.94 Hz, 1080p/50 Hz, 1080p/29.97 Hz, 1080p/25 Hz, 1080p/24 Hz, 1080p/23.98 PC format inputs: WSXGA+ (1680 x 1050, 60 Hz), SXGA (1280 x 1024, 60 Hz), WXGA (1280 x 768, 60 Hz), XGA (1024 x 768, 60 Hz) Mode: Full/Fit-H/Fit-V • Connectors: HDMI x 2 • Equipped with frame synchronizer and simplified color corrector. • The HDMI IN connector has scaler function. • This connector does not support the HDCP technologies. * HDMI IN 1 excludes SDI IN 1.
Live Switcher -> Video Terminal -> SDI OUT	2 lines • Connectors: BNC x 2 • PGM, PVW, CLN, MV, AUX1/2, and Key Out can be assigned. [3G-SDI] 3G-SDI, SMPTE424M standard complied with (Compatible with Level-A) ・0.8 V [p-p] ± 10 % (75 Ω) [HD-SDI] HD-SDI, SMPTE292M standard ・0.8 V [p-p] ± 10 % (75 Ω)
Live Switcher -> Video Terminal -> HDMI OUT	1 line, HDMI 1.4b compatible • Connector: HDMI x 1 • Equipped with scaler function. Mode: Fit-V, Fit-H Full, Full-90%, Full-80% • PGM, PVW, CLN, MV, AUX1/2, and Key Out can be assigned.
Live Switcher -> Video Terminal -> LAN	Compatible with 1000Base-T and AUTO-MDIX (for IP signal transmission/control) • Connecting cable: LAN cable (Category 5e or more), max. 100 m (328 ft), STP (Shielded Twisted Pair) cable recommended • Connector: RJ-45 IP input signal: Assigned to IN 6 to 9. • IN 6, IN 7: Selectable from SRT/NDI|HX (version1/version2). • IN 8, IN 9: Dedicated to High Bandwidth NDI input. Supports NDI α channel input. Used as a pair with IN 9 in this case. ・IN6 to 9: High Bandwidth NDI x4 can be selected by changing to firmware that supports NDI HB mode. *For H.264, the AV-HSW10 supports input up to Level 4.2. For H.265, the AV-HSW10 supports input up to Level 5.1 (Main tier) and Level 4.1 (High tier). IP output signal: Assigned to OUT 4 and OUT 5. • OUT 4, OUT 5: Selectable from SRT/High Bandwidth NDI/RTMP. • PGM, PVW, CLN, MV, AUX1/2, Key Out can be assigned. • Equipped with scaler function and i/p conversion function. *1 • IN6 to IN9: When using firmware in NDI HB mode, only the High Bandwidth NDI of OUT4 is enabled. • Possible output formats: 1920 x 1080/60fps, 50fps, 30fps, 25fps, 24fps, 1280 x 720/60fps, 50fps *For H.264, the AV-HSW10 outputs at Level 4.2. For H.265, the AV-HSW10 outputs at Level 5 (Main tier).

Live Switcher -> Video Terminal -> USB	Connector for outputting UVC/UAC Assigned to OUT 6. • Connector: USB3.2 Gen1 Type-C, No USB bus power functionality • PGM, PVW, CLN, MV, AUX1/2, and Key Out can be assigned. • Equipped with scaler function and i/p conversion function. *1 • Possible output formats: 1920 x 1080/60fps, 50fps, 30fps, 25fps, 24fps, 1280 x 720/60fps, 50fps, 30fps, 25fps, 24fps
Live Switcher -> Video Terminal -> Signal Formats	3G-SDI 1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 1080/59.94i, 50i, 720/59.94p, 50p NDI® High Bandwidth 1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 720/59.94p, 50p NDI® HX 1080/60p, 50p, 30p, 25p, 24p 720p/60p, 50p USB 1080/60p, 50p, 30p, 25p, 24p *1 720p/60p, 50p, 30p, 25p, 24p
Live Switcher -> Video Terminal -> Signal Processing	[R:G:B] 4:4:4 8bit / 4:2:2 10bit (when HDMI) [Y:Cb:Cr] 4:2:2 8bit (when NDI® High Bandwidth/UVC) [Y:Cb:Cr] 4:2:0 8bit (when NDI® HX/SRT/RTMP) [Y:Cb:Cr] 4:2:2 10bit
Live Switcher -> Audio Terminal -> AUDIO IN	L/1 and R/2 • Connector: Pin jacks • Equipped with embedded functionality to each output. • Equipped with delay/level adjustment function.
Live Switcher -> Audio Terminal -> AUDIO OUT	Connector for headphone monitor • Connector: Φ3.5 mm TRS • Equipped with output volume adjustment function.
Live Switcher -> Synchronous Terminal -> REF Terminal Reference Input/ BB Outputs	In Genlock mode: Selectable from BB (black burst), Tri-level Sync, and internal synchronization • Loop-through output is performed in BB mode and Tri-level Sync mode. • If loop-through output is not going to be used, provide a 75 Ω termination. • Connectors: BNC×2 • Same field frequencies as those of the system formats supported. • For 23.98 Hz and 24 Hz, only Tri-level input or internal synchronization is supported.
Live Switcher -> Synchronous Terminal -> Video Delay Time	1 line (H) When the frame synchronizer setting is [Off] and neither the up-converter nor the down-converter is operating 1 frame (F) When the frame synchronizer setting is on and the up-converter and downconverter are operating • When the signals have passed through PinP, multi view, down-converter or HDMI IN/OUT, a maximum delay of 1 frame is applied in each case.
Live Switcher -> Control Terminal -> LAN Terminal	Compatible with 1000Base-T and AUTO-MDIX (For IP control) • Connecting cable: LAN cable (Category 5e), max. 100 m (328 ft), STP (Shielded Twisted Pair) cable recommended • Connector: RJ-45
Live Switcher -> Control Terminal -> TALLY GPI Terminal	INPUT: 5 inputs, general-purpose, photocoupler sensing OUTPUT: 8 outputs, selected from R/G tally, general-purpose ALARM: 1 output, open collector output (negative logic) • Connectors: D-Sub 15pin
Live Switcher -> Control Terminal -> USB Terminal	• Connector: USB2.0, Type-A, with USB bus power functionality Use a USB memory to save and load configuration files and still data, and perform firmware updates.
Live Switcher -> Audio	IN: RCA x 2, OUT: 3.5 mm TRS
Live Switcher -> Frame Synchronizer	All inputs
Live Switcher -> CC/UC/DC (Input)	i/P converter, DC/UC (1080-720P), CC
Live Switcher -> Keyer	2 (PinP, Linear key, Luminance key, Chroma key*2)
Live Switcher -> AUX	2
Live Switcher -> Genlock	BB or Tri-level (Input/through output)
Live Switcher -> PTZ Link	RP Link (AW-RP60/ RP150), TSL5.0
Live Switcher -> VMEM	Still x 2
Live Switcher -> Shot MEM	Max. 12 presets
Footnote Description	1. Planned support with a firmware update