Panasonic CONNECT



4K/12G-SDI compatible, compact Live Switcher.

AV-UHS500

The 4K Live Switcher is easy to use in a variety of applications, such as event staging, broadcast at stations and OB vans, lectures at universities, conference halls and so on, demonstrating incredible performance in live video production on the field.

Key Features

- Versatile 12G-SDI/3G-SDI/HDMI interface support
- UHD/HD multi-format support Expanded functions with two optional unit slots
- Standard number of inputs/outputs: 8 inputs / 7 outputs
- Maximum number of inputs/outputs (with optional boards):Maximum 16 inputs/Maximum 15 outputs
- Five keyers for excellent image effects

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AV-UHS500

https://ap.connect.panasonic.com/ph/en/av-uhs500

Live Switcher -> General -> Power Supply	AC 100 V to 240 V, 50 Hz/60 Hz
Live Switcher -> General -> Power Consumption	1.5 A
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. 7 kg (Approx.15.4 lb)
Live Switcher -> General -> Dimensions	W 440 mm x H 170 mm x D 360 mm (17-5/16 inches x 6-11/16 inches x 14-3/16 inches) (excluding protrusions)
Live Switcher -> General -> ME Number	1ME
Live Switcher -> Video Terminal -> SDI IN	8 lines (plus another maximum of 8 lines when using the OPTION unit) • Connectors: BNC x 8 • Color space conversion function • Frame synchronizer function • Connectors to equipped with simple format converters. • Connectors to equipped with up-converters. • Connectors to equipped with color correctors. * SDI IN 1/2 excludes HDMI IN 1/2. [12G-SDI] SMPTE ST 2082-10 standard complied with [3G-SDI] 3G-SDI, SMPTE292 standard complied with (Compatible with Level-A/Level-B) [HD-SDI] HD-SDI, SMPTE292M standard complied with
Live Switcher -> Video Terminal -> HDMI IN	2 lines (plus another maximum of 6 lines when using the OPTION unit) 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 Hz, 2160p/59.94 Hz, 2160p/50 Hz, 2160p/29.97 Hz, 2160p/25 Hz, 2160p/24 Hz, 2160p/23.98 Hz PC format inputs: 4K (3840 x 2160, 60 Hz), WQHD (2560 x 1440, 60 Hz), WUXGA (1920 x 1200, 60 Hz), UXGA (1600 x 1200, 60 Hz), 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 • Scaler, Frame synchronizer and Color space conversion function • Connectors: HDMI x 2 • This connector does not support the CPRM technologies. * HDMI IN 1/2 excludes SDI IN 1/2.
Live Switcher -> Video Terminal -> SDI OUT	5 lines (plus another maximum of 8 lines when using the OPTION unit) • Connectors: BNC x 5 • Down-converter to 1080p, Color space conversion function • PGM, PVW, CLN, ME PGM, MV1 to MV2, AUX1 to AUX4, Key Out can be assigned. [12G-SDI] SMPTE ST 2082-10 standard complied with [3G-SDI] SMPTE292 standard complied with (Compatible with Level-A) [HD-SDI] SMPTE292M standard complied with
Live Switcher -> Video Terminal -> HDMI OUT	2 lines (plus another maximum of 6 lines when using the OPTION unit) • Connectors: HDMI x 2 • Not support Scaler (Only system format is available) • Color space conversion function • PGM, PVW, CLN, ME PGM, MV1 to MV2, AUX1 to AUX4, Key Out can be assigned.
Live Switcher -> Video Terminal -> Signal Formats	2160/59.94p, 50p, 29.97p, 25p, 24p, 23.98p, 1080/59.94p, 50p, 29.97p, 29.97PsF, 25p, 25PsF, 24p, 24PsF, 23.98p, 23.98PsF, 59.94i, 50i 720/59.94p, 50p
Live Switcher -> Video Terminal -> Signal Processing	[R: G: B] 4: 4: 4 8 bit / 4: 2: 2 10 bit (Only for HDMI) [Y: Cb: Cr] 4: 2: 2 10 bit
Live Switcher -> Synchronous Terminal -> REF Terminal Reference Input/ BB Outputs	In Genlock mode: Black burst or Tri-level Sync input signals (with loop-through) • Loop-through output is performed in external sync mode. • If loop-through output is not going to be used, provide a 75 Ω termination. • Connectors : BNC x 2 • Same field frequencies as those of the system formats supported. • With the 24.00p format, Black Burst input signal is not supported. • With the 1080/23.98PsF format, black burst with 10 Field ID (SMPTE318M standard met) or Trilevel Sync signals supported. • BB signals are output from two connectors in the internal sync mode.

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 down-converter are operating • When the signals have passed through PinP, DVE, multi view, down-converter or HDMI IN, a maximum delay of 1 frame is applied in each case.
Live Switcher -> Control Terminal -> LAN Terminal	Compatible with 1000BASE-TX and AUTO-MDIX (For IP control) • Connecting cable: LAN cable (CAT5e), max. 100 m (328 ft), STP (Shielded Twisted Pair) cable recommended • Connectors : RJ-45
Live Switcher -> Control Terminal -> TALLY GPI Terminal	INPUT: 8 inputs general-purpose, photocoupler sensing OUTPUT: 19 outputs; selected from R/G tally, general-purpose ALARM: 1 output, open collector output (negative logic)
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> General -> Power Supply	DC 12 V Supplied by AV-UHS500
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> General -> Power Consumption	AV-UHS5M1G/AV-UHS5M2G: 15 W 1.2 A AV-UHS5M3G/AV-UHS5M4G: 16 W 1.3 A AV-UHS5M5G/AV-UHS5M6G: 14 W 1.1 A
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> General -> Operating Temperature	10 % to 90 % (no condensation)
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> General -> Operating Humidity	0 °C to 40 °C (32 °F to 104 °F)
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> General -> Storage Temperature	10 % to 90 % (no condensation)
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> General -> Storage Humidity	0 °C to 40 °C (32 °F to 104 °F)
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> General -> Weight	AV-UHS5M1G/AV-UHS5M2G: Approx. 371 g (Approx. 0.82 lbs.) AV-UHS5M3G/AV-UHS5M4G: Approx. 353 g (Approx. 0.78 lbs.) AV-UHS5M5G: Approx. 345 g (Approx. 0.76 lbs.) AV-UHS5M6G: Approx. 353 g (Approx. 0.78 lbs.)
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> General -> Dimensions	AV-UHS5M1G/AV-UHS5M2G: W 112 mm x H 42 mm x D 167 mm (4-13/32 inches x 1-21/32 inches x 6-9/16 inches) (excluding protrusions) AV-UHS5M3G/AV-UHS5M4G/AV-UHS5M5G/AV-UHS5M6G: W 112 mm x H 42 mm x D 166 mm (4-13/32 inches x 1-21/32 inches x 6-17/32 inches) (excluding protrusions)
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> SDI Input Unit AV-UHS5M1G -> SDI IN 1 to SDI IN 4 Terminals	4 lines • Connectors: BNC x 4 • Frame synchronizer function • Up-converter fitted. • Color space conversion function • Color corrector fitted. [12G-SDI] 12G Serial digital, SMPTE ST 2082-10 standard complied with • 0.8 V [p-p] ± 10 % (75 Ω) • Automatic equalizer 80 m (when the cable is used) [3G-SDI] 3G Serial digital, SMPTE292 standard complied with (Level-A/Level-B) • 0.8 V [p-p] ± 10 % (75 Ω) • Automatic equalizer 100 m (when the cable is used) [HD-SDI] HD Serial digital, SMPTE292M standard complied with • 0.8 V [p-p] ± 10 % (75 Ω) • Automatic equalizer 100 m (when the cable is used)
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> SDI Input Unit AV-UHS5M2G -> SDI OUT 1 to SDI OUT 4 Terminals	4 lines • Connectors: BNC x 4 • Down-converter • Color space conversion function • PGM, PVW, CLN, ME PGM, MV1 to MV2, AUX1 to AUX4, Key Out can be assigned. [12G-SDI] 12G Serial digital, SMPTE ST 2082-10 standard complied with 0.8 V [p-p] ± 10 % (75 Ω) [3G-SDI] 3G Serial digital, SMPTE292 standard complied with (Level-A) 0.8 V [p-p] ± 10 % (75 Ω) [HD-SDI] HD Serial digital, SMPTE292M standard complied with 0.8 V [p-p] ± 10 % (75 Ω)

Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> SDI Input Unit AV-UHS5M3G -> HDMI IN 1 to HDMI IN 3 Terminals	3 lines 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 Hz, 2160p/59.94 Hz, 2160p/50 Hz, 2160p/29.97 Hz, 2160p/25 Hz, 2160p/24 Hz, 2160p/23.98 Hz PC format inputs: 4K (3840 x 2160, 60 Hz), WQHD (2560 x 1440, 60 Hz), WUXGA (1920 x 1200, 60 Hz), UXGA (1600 x 1200, 60 Hz), 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 3 • Frame synchronizer function • Color corrector fitted. • Scaler and Color space conversion function • This connector does not support the CPRM technologies.
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> SDI Input Unit AV-UHS5M4G -> HDMI OUT 1 to HDMI OUT 3 Terminals	3 lines Mode: Fit-V, Fit-H, Full, Full-90 %, Full-80 % Size: Auto, WQHD (2560 x 1440, 60 Hz), WUXGA (1920 x 1200, 60 Hz), UXGA (1600 x 1200, 60 Hz), WSXGA+ (1680 x 1050, 60 Hz), SXGA (1280 x 1024, 60 Hz), WXGA (1280 x 768, 60 Hz), XGA (1024 x 768, 60 Hz), Native Color: Auto, RGB, YUV444, YUV422 • Connectors: HDMI x 3 • PGM, PVW, CLN, ME PGM, MV1 to MV2, AUX1 to AUX4, Key Out can be assigned. • Scaler and Color space conversion function
Option Unit AV-UHS5M1G / AV-UHS5M2G / AV-UHS5M3G /AV-UHS5M4G / AV-UHS5M5G / AV-UHS5M6G -> SDI Input Unit AV-UHS5M5G -> LAN 1 and LAN 2 Terminals	Supported formats NDI® High Bandwidth/NDI® HX [*1] Input Maximum 4 lines Possible input formats • When system format is 4K NDI® High Bandwidth: 2160/59.94p, 2160/50p, 2160/29.97p, 2160/25p, 2160/24p, 2160/23.98p • When system format is 2K [*1] [*2] [*3] [*4] NDI® High Bandwidth: 1080/59.94p, 1080/50p, 1080/29.97p, 1080/25p, 1080/24p, 1080/23.98p, 720/59.94p, 720/50p NDI|HX: 1920/1080p, 1280/720p [*5] Output Maximum 2 lines Possible output formats • When system format is 4K NDI® High Bandwidth: 2160/59.94p, 2160/50p, 2160/29.97p, 2160/25p, 2160/24p, 2160/23.98p • When system format is 2K [*1] [*4] NDI® High Bandwidth: 1080/59.94p, 1080/50p, 1080/29.97p, 1080/25p, 1080/24p, 1080/23.98p, 720/59.94p, 720/50p • PGM, PVW, CLN, ME PGM, AUX1 to 4, MV1 and 2, and Key Out can be allocated to the output.
Footnote Description	1. Support for NDI®HX is input only. Only NDI® High Bandwidth is supported for output. 2. When the system format is 2K, mixed input of NDI® High Bandwidth and NDI®|HX is possible. 3. P/I conversion is possible for input when the system format is 2K. 4. Not available when the system format is Psf. 5. The frame rate for NDI®|HX depends on the system format.