Panasonic CONNECT



2ME Live Switcher

AV-HS6000

The main unit is equipped with an abundance of inputs and outputs for great system integration that includes 32 SDI and 2 DVI inputs plus 16 SDI outputs. 4 DVEs per ME enable diverse transitions when producing creative video in demanding fast-paced situations. Three types of control panels can be used. C1 and C2 panels offer 24 XPT buttons and 4 pages and allow easy switching among 96 total crosspoints. The compact panel C4 is 30% shorter than the C1/C2 version and offers an easier integration into small studios and OB Vans.

Key Features

- 34 inputs (SDI X32, DVI×2) and 16 SDI outputs; all inputs have built-in frame synchronizers
- Simultaneous output in both 1080p and 1080i formats
- 4 independent MultiViewer displays; Single MultiViewer can display a maximum of 16 video sources
- Equipped with real-time high-quality chroma keying that employs Primatte® algorithms / Standard 1 channel, expandable up to 4 channels
- The switcher can be set by the 10,1-type touch-operated Menu Panel AV-HS60C3G (optional) or by a PC monitor and USB mouse

4K PROFESSIONAL

Panasonic CONNECT






AV-HS6000

https://ap.connect.panasonic.com/vn/vi/av-hs6000

Mainframe -> Model No.	AV-HS60U2P/E
Mainframe -> General -> Power Supply	AC 100 V to 240 V, 50 Hz/60 Hz (supports redundant power supply)
Mainframe -> General -> Power Consumption	110 W
Mainframe -> General -> Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Mainframe -> General -> Operating Humidity	10 % to 90 % (no condensation)
Mainframe -> General -> Storage Temperature	0 °C to 40 °C (32 °F to 104 °F)
Mainframe -> General -> Storage Humidity	10 % to 90 % (no condensation)
Mainframe -> General -> Weight	Approx. 13.5 kg (29.7 lbs.) (excluding accessories)
Mainframe -> General -> Dimensions	W 482 mm x H 399 mm x D 418 mm (18-31/32 inches x 5-3/16 inches x 16-15/32 inches) (excluding protrusions)
Mainframe -> Video Terminal -> SDI IN	During Standard mode Standard 32 lines • Connector: BNC x 32 • SDI IN 27, SDI IN 28, SDI IN 21, SDI IN 32、SDI IN 32 terminals are equipped with up-converters, • SDI IN 25 to SDI IN 32 terminals are equipped with color correctors. HD-SDI SEMPTE 292M (BTQ-004) standard compliant • 0.8 V [p-p] ± 10 % (75 Ω) • Automatic equalizer 100 m (328 ft) (when 1.5 Gbps/5C-FB cable is used) SD-SDI SEMPTE 259M standard compliant • 0.8 V [p-p] ± 10 % (75 Ω) • Automatic equalizer 200 m (656 ft) (when 5C-2V cable is used) During 3G mode 16 lines • Connector: BNC x 16 (only the odd numbered terminals can be used) • The even numbered terminals , .. cannot be used. • , .. , and terminals are equipped with color correctors During 4K mode 4K signal x 8 lines • Connector: BNC x 32 (3G-SDI x 4 SQD/2SI) • Can use the 4K signal in SQD format and 2SI format 3G-SDI 3G serial digital, SMPTE424M standard compliant • 0.8 V [p-p] ± 10 % (75 Ω) • Automatic equalizer 100 m (328 ft) (when 3 Gbps/5C-FB cable is used) • 3G-SDI Level B 3G-SDI Level A (FS ON)

Mainframe -> Video Terminal -> SDI OUT	During Standard mode 16 lines (2 distributed outputs per line) • Connectors: BNC x 32 • ME1PGM, ME1PVW, ME1CLN, ME1KEYPVW, ME2PGM, ME2PVW, ME2CLM, ME2KEYPVW, DSKPGM1, DSKPGM2, DSKPVW1, DSKPVW2, DSK1CLN, DSK2CLN, DSK3CLN, DSK4CLN, SEL KEYPVW, MV1 to MV4, and AUX1 to AUX16 can be assigned. HD-SDI SMPTE292M (BTQ S-004) standard compliant • Output level: 0.8 V [p-p] ± 10 % SD-SDI SMPTE259M standard compliant • Output level: 0.8 V [p-p] ± 10 % During 3G mode 3G-SDI output: 8 lines (2 distribute outputs per line) HD-SDI output: 2 lines (2 diestbute outputs per line) • Connector 3G-SDI: BNC x 16 (odd numbered terminals only) HD-SDI: BNC x 4 (and terminals only) • 3G-SDI signal is output from the even numbered terminals. - No signal is output from the , ... terminals. - The HD-SDI signal converted to the 1080i format is output from the and terminals. This signal is converted to the 1080i format by decimating the 1080p signal from the and terminals. • and terminals are equipped with color correctors. The same color corrector setting is also applied to and terminals. • ME1PGM, ME1PVW, ME1CLN, ME1KEYPVW, ME2PGM, ME2PVW, ME2CLM, DSKPGM1, DSKPGM2, DSKPVW1, DSKPVW2, DSK1CLN, DSK2CLN, SEL KEYPVW, MV1 to MV4, and AUX1 to AUX8 can be assigned. During 4K mode 4K signal output: 3 lines (2 distribute outputs per line) 2K signal output: 2 lines (2 distribute outputs per line) • Connector 3G-SDI (for 4K signal): BNC x 24 (terminal number 1 to 12) 3G-SDI (for 2K signal): BNC x 4 (terminal number 13 and 15) HD-SDI (for 2K signal): BNC x 4 (terminal number 14 and 16) • The 4K signal is output in SQD format. • The HD-SDI signal converted to the 1080i format is output from the and
Mainframe -> Video Terminal -> DVI-D IN	2 lines Digital RGB: XGA (1024 x 768), WXGA (1280 x 768), SXGA (1280 x 1024), WSXGA+(1680 x 1050), UXGA (1600 x 1200), WUXGA (1920 x 1200) Vertical frequency: 60 Hz Video format inputs: 1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p • Connectors: DVI-D x 2 • The terminals do not support HDCP. • The DVI-I connector cable cannot be used. • For the DVI-D connector cable, use a cable with a length of up to 5 m. (16.4 ft) • / terminals cannot be used during 3G mode and 4K mode
Mainframe -> Video Terminal -> Video Format	SD: 480/59.94i, 576/50i HD: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 1080/24PsF, 1080/23.98PsF, 1080/25PsF, 1080/29.97PsF, 3G: 1080/59.94p, 1080/50p 4K: 2160/59.94p, 2160/50p (SQD)
Mainframe -> Video Terminal -> Signal Processing	[Y:PB:PR] 4:2:2 10 bit [R:G:B] 4:4:4 8 bit
Mainframe -> Video Terminal -> ME Number	2 ME
Mainframe -> Synchronous Terminal -> REF Terminal	• Connectors: BNC • Same field frequencies as those of the system formats supported In Genlock mode: Black burst or Tri-level Sync input signals (with loop-through) • If the loop-through output is not used, provide a 75 Ω termination • In the 1080/24PsF and1080/23.98PsF formats, only Genlock mode supported • In the 1080/23.98PsF format, black burst signals with10 Field ID (SMPTE318M standard compliant) or Try-level with 10 Sync signals supported • In the 1080/24PsF format, Tri-level Sync signals supported In internal sync mode: Black burst output signal x 2
Mainframe -> Synchronous Terminal -> LTC IN Terminal	This is the LTC (linear time code) input terminal. • Connector: BNC • Impedance: 1 kΩ • Level: 1 to 2 V [p-p]
Mainframe -> Synchronous Terminal -> Video Delay Time	During Standard mode 1 line (H): When the frame synchronizer is set to "Off" and the up-converter is set to "Off" 2 field (V): When the frame synchronizer is set to "On" and the up-converter is set to "On" • When the signals have passed through PinP, DVE, MultiView, down-converter, or DVI-IN, a maximum delay of 1 frame is applied in each case. During 3G mode 2 line (H) When the frame synchronizer is set to "Off" 2 frame (V) When the frame synchronizer is set to "On" • Maximum of 2 frame delay is added to each when passed through PinP, DVE, or MultiVIew.
Mainframe -> Control Terminal -> LAN Terminal	Compatible with 100Base-TX and AUTO-MDIX (For IP control) • Connection cable: LAN cable (CAT5e), max. 100 m (328 ft), STP (Shielded Twisted Pair) cable recommended • Connector: RJ-45

Mainframe -> Control Terminal -> PANEL Terminal	Compatible with 100BASE-TX and AUTO-MDIX (For Control Panel AV-HS60C2/AV-HS60C4 connection) • Connection cable (supplied with AV-HS60C2/AV-HS60C4): LAN cable (CAT5e), straight cable, STP (Shielded Twisted Pair), 10 m (32.8 ft) • Connector: RJ-45
Mainframe -> Control Terminal -> COM1 (M) / COM2(M) / COM3 (M) Terminals	RS-422 Control Terminal For master connection for controlling external devices • Connector: D-sub 9-pin (female) x 3, inch screw
Mainframe -> Control Terminal -> COM4 (M/S) Terminal	RS-422 Control Terminal For master/slave connection for controlling external devices • Connector: D-sub 9-pin (female), inch screw • Switchable between master connection and slave connection via menu
Mainframe -> Control Terminal -> GPI IN Terminal	GPI IN: 18 inputs, general-purpose, photocoupler sensing ALARM OUT: 1 output, open collector output (negative logic) • Connector: D-sub 25-pin (female), inch screw
Mainframe -> Control Terminal -> GPI OUT1 / GPI OUT2 terminal	GPI OUT: 48 outputs, selected from general purpose, tally Open collector output • Connector: D-sub 25-pin (female) x 2, inch screw
Control Panel -> Model No.	AV-HS60C2P/E, AV-HS60C4P/E
Control Panel -> General -> Power Supply	AC 100 V to 240 V, 50 Hz/60 Hz (supports redundant power supply)
Control Panel -> General -> Power Consumption	40 W
Control Panel -> General -> Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Control Panel -> General -> Operating Humidity	10 % to 90 % (no condensation)
Control Panel -> General -> Storage Temperature	0 °C to 40 °C (32 °F to 104 °F)
Control Panel -> General -> Storage Humidity	10 % to 90 % (no condensation)
Control Panel -> General -> Weight	AV-HS60C2P/E: Approx. 13.9 kg (30.6 lbs.) (excluding accessories) AV-HS60C4P/E: Approx. 15.0 kg (33.0 lbs.) (excluding accessories)
Control Panel -> General -> Dimensions	AV-HS60C2P/E: W 980 mm x H 153.4 mm x D 267 mm (38-19/32 inches x 6-1/32 inches x 10-1/2 inches) (excluding protrusions) AV-HS60C4P/E: 656 mm×160 mm×400 mm (25-53/64 inches×6-19/64 inches×15-3/4 inches) (excluding protrusions)
Control Panel -> Control Terminal -> Mainframe Terminal	Compatible with 100Base-TX and AUTO-MDIX (For Mainframe AV-HS60U2 connection) Connection cable (supplied with AV-HS60C2): LAN cable (CAT5e), Straight cable, STP (Shielded Twisted Pair), 10 m (32.8 ft) • Connector: RJ-45 When connected to the terminal, no video will be displayed on the Menu Panel AV-HS60C3G.
Control Panel -> Control Terminal -> MENU PANEL Terminal	Used only for the Menu Panel AV-HS60C3G • Connector: DVI-D • Cannot be connected to DVI-D monitor. • Cannot be used concurrently with a DVI-D monitor connected to the terminal. Select with the display selector switch.
Control Panel -> Control Terminal -> DVI-D Terminal	Used for displaying menus to the DVI monitor • Connector: DVI-D • Monitor resolution: 1366 x 768 compatible monitor • Cannot be used concurrently with the <MENU PANEL> terminal. Select with the display selector switch.
Control Panel -> Control Terminal -> USB Terminal	For DVI monitor menu operation • Connector: USB (type A, female) • Cannot be used for the Menu Panel AV-HS60C3G.
Control Panel -> Control Terminal -> Display Selector Switch	Switch for selecting <MENU PANEL> terminal or <DVI-D> terminal
Control Panel -> Control Terminal -> COM1 (M) Terminal	RS-422 Control Terminal For master connection for controlling external devices • Connector: D-sub 9-pin (female), inch screw
Control Panel -> Control Terminal -> COM2 (RS-232) Terminal	RS-232 Control Terminal For external device control connections • Connector: D-sub 9-pin (male), inch screw
Control Panel -> Control Terminal -> GPI I/O Terminal	GPI IN: 8 inputs, general-purpose, photocoupler sensing ALARM OUT: 1 output, open collector output (negative logic) GPI OUT: 10 outputs, selected from general purpose, tally Open collector output • Connector: D-sub 25-pin (female), inch screw
Control Panel -> Control Terminal -> ME Number	2 ME
Menu Panel -> Model No.	AV-HS60C3G
Menu Panel -> General -> Power Supply	DC 12 V/0.54 A (Supplied from AV-HS60C2/AV-HS60C4 using the supplied cable)
Menu Panel -> General -> Power Consumption	6.48 W
Menu Panel -> General -> Ambient Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Menu Panel -> General -> Ambient Operating Humidity	10 % to 90 % (no condensation)
Menu Panel -> General -> Storage Temperature	0 °C to 40 °C (32 °F to 104 °F)
Menu Panel -> General -> Storage Humidity	10 % to 90 % (no condensation)

Menu Panel -> General -> Weight	Approx. 1.7 kg (3.7 lbs.) (excluding accessories)
Menu Panel -> General -> Dimensions	W 290 mm x H 177 mm x D 46.1 mm (11-13/32 inches x 6-31/32 inches x 1-13/16 inches) (excluding protrusions) 4RU
Menu Panel -> Control Terminal -> Control Panel Terminal	Used only for the Control Panel AV-HS60C2/AV-HS60C4 • Connectors: DVI-D • Because an independent signal format is used, DVI-D source cannot be displayed. • Cannot be used concurrently with a DVI-D monitor connected to the terminal of the Control Panel AV-HS60C2/AV-HS60C4. Set the display selector switch of the Control Panel AV-HS60C2/AV-HS60C4 to the <MENU PANEL> terminal side.
Storage Module -> Model No.	AV-HS60D1G
Storage Module -> General -> Weight	Approx. 7.0 g (0.3 oz.)
Storage Module -> General -> Dimensions	H 29.85 mm x W 4.0 mm x D 50.8 mm (1-3/16 inches x 5/32 inches x 2 inches)