■ Specifications

Mainframe AV-HS60U2P/E

Power Supply	AC100 V to 240 V, 50 Hz/60 Hz (AV-HS60U2 supports redundant power supply)
Power Consumption	110 W
Ambient Operating Temperature	0°C to 40°C (32°F to 104°F)
Operating Ambient Humidity	10% to 90% (no condensation)
Storage Temperature	0°C to 40°C (32°F to 104°F)
Storage Humidity	10% to 90% (no condensation)
Weight	Approx. 13.5 kg (29.7 lbs.)(excluding accessories)
Dimensions (WxHxD)	482 mm×132 mm×418 mm (18-31/32 inches×5-3/16 inches×16-15/32 inches)(excluding protrusions)

Video Terminal

SDI IN 1 to SDI IN 32 Terminals	During Standard mode 32 lines • Connectors: BNCx32 • SDI IN 27, SDI IN 28, SDI IN 31, SDI IN 32 terminals are equipped with up-converters. • SDI IN 25 to SDI IN 32 terminals are equipped with color correctors.	
	HD-SDI	SMPTE292M (BTA S-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	SMPTE259M 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×16 (only the odd numbered terminals can be used) • The even numbered terminals <SDI IN 2>, <SDI IN 4> ... <SDI IN 32> cannot be used. • <SDI IN 25>, <SDI IN 27>, <SDI IN 29>, and <SDI IN 31> 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)
DVI-D IN 1 to DVI-D IN 2 Terminals	2 lines Digital RGB:XGA (1024×768), WXGA (1280×768), SXGA (1280×1024), WSXGA+ (1680×1050),UXGA (1600×1200), WUXGA (1920×1200) 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×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) • <DVI-D IN1>/<DVI-D IN2> terminals cannot be used during 3G mode and 4K mode.	
SDI OUT 1 to SDI OUT 16 Terminals	During Standard mode 16 lines (2 distributed outputs per line) • Connectors: BNCx32 • ME1PGM, ME1PVW, ME1CLN, ME1KEYPVW, ME2PGM, ME2PVW, ME2CLN, ME2KEYPVW, DSKPGM1, DSKPGM2, DSKPVW1, DSKPVW2, DSK1CLN, DSK2CLN, DSK3CLN, DSK4CLN, SEL KEYPVW, MV1 to MV4, and AUX1 to AUX16 can be assigned.	
	HD-SDI	SMPTE292M (BTA 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 distribute outputs per line) • Connector 3G-SDI: BNC×16 (odd numbered terminals only) HD-SDI: BNC×4 (<SDI OUT 14> and <SDI OUT 16> terminals only) • 3G-SDI signal is not output from the even numbered terminals. - No signal is output from the <SDI OUT 2>, <SDI OUT 4> ... <SDI OUT 12> terminals. - The HD-SDI signal converted to the 1080i format is output from the <SDI OUT 14> and <SDI OUT 16> terminals. This signal is converted to the 1080i format by decimating the 1080p signal from the <SDI OUT 13> and <SDI OUT 15> terminals. • <SDI OUT 13> and <SDI OUT 15> terminals are equipped with color correctors. The same color corrector setting is also applied to <SDI OUT 14> and <SDI OUT 16> terminals. • ME1PGM, ME1PVW, ME1CLN, ME1KEYPVW, ME2PGM, ME2PVW, ME2CLN, DSKPGM1, DSKPGM2, DSKPVW1, DSKPVW2, DSK1CLN, DSK2CLN, SEL KEYPVW, MV1 to MV2, and AUX1 to AUX8 can be assigned.	

SDI OUT 1 to SDI OUT 16 Terminals	During 4K mode 4K signal output: 3 lines (two distribute outputs per line) 2K signal output: 2 lines (two 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 <SDI OUT 14> and <SDI OUT 16> terminals. This signal is converted to the 1080i format by decimating the 1080p signal output from the <SDI OUT 13> and <SDI OUT 15> terminals. • ME1PGM, ME1PVW, ME1CLN, ME1KEYPVW, ME2PGM, ME2PVW, ME2CLN, DSKPGM1, DSKPGM2, DSKPVW1, DSKPVW2, DSK1CLN, DSK2CLN, SEL KEYPVW, MV1 to MV2, and AUX1 to AUX8 can be assigned.	
	3G-SDI	3G serial digital, SMPTE424M standard compliant • Output level: 0.8 V [p-p] ±10% • 3G-SDI Level B Mapping
Signal Formats	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 <Level B>
	4K	2160/59.94p, 2160/50p(SQD)
Signal Processing	Y:P$_B$:P$_R$	4:2:2 10 bit
	R:G:B	4:4:4 8 bit
ME Number	2 ME	

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 and 1080/23.98PsF formats, only Genlock mode supported • In the 1080/23.98PsF format, black burst signals with 10 Field ID (SMPTE318M standard compliant) or Tri-level Sync signals supported • In the 1080/24PsF format, Tri-level Sync signals supported In internal sync mode: Black burst output signal ×2	
LTC IN Terminal	This is the LTC (linear time code) input terminal. • Connectors: BNC • Impedance: 1 kΩ • Level: 1 to 2 V [p-p]	
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", or 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.	

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
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
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
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
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
GPI OUT1/GPI OUT 2 terminal	GPI OUT: 48 outputs, selected from general purpose, tally Open collector output • Connector: D-sub 25-pin (female) x 2, inch screw
Accessories	• AC cable AV-HS60U2P: 2 cables AV-HS60U2E: 4 cables • Rack-mounted rear panel support bracket • Screws for the rack-mounted rear panel support bracket: 8 screws • Operating Guide for the AV-HS6000 series (Excerpted Version)

Control Panel AV-HS60C2P/E

Power Supply	AC100 V to 240 V, 50 Hz/60 Hz (AV-HS60C2 supports redundant power supply)
Power Consumption	40 W
Operating Ambient Temperature	0°C to 40°C (32°F to 104°F)
Operating Ambient Humidity	10% to 90% (no condensation)
Storage Temperature	0°C to 40°C (32°F to 104°F)
Storage Humidity	10% to 90% (no condensation)
Weight	Approx. 13.9 kg (30.6 lbs.) (excluding accessories)
Dimensions (WxHxD)	980 mm×153.4 mm×267 mm (38-19/32 inches×6-1/32 inches×10-1/2 inches) (excluding protrusions)

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 <LAN> terminal, no video will be displayed on the Menu Panel AV-HS60C3G.
MENU PANEL Terminal	Used only for the Menu Panel AV-HS60C3G • Connector: DVI-D • Because an independent signal format is used,cannot be displayed on a DVI-D monitor. • Cannot be used concurrently with a DVI-D monitor (computer) connected to the <DVI-D> terminal. Select with the display selector switch.
DVI-D Terminal	Used for displaying menus to the DVI monitor • Connector: DVI-D • Monitor resolution: 1366×768 compatible monitor • Cannot be used concurrently with the <MENU PANEL> terminal. Select with the display selector switch.
USB Terminal	For DVI monitor menu operation • Connector: USB (type A, female) • Cannot be used for the Menu Panel AV-HS60C3G.
Display Selector Switch	Switch for selecting <MENU PANEL> terminal or <DVI-D> terminal
COM1(M) Terminal	RS-422 Control Terminal For master connection for controlling external devices • Connector: D-sub 9-pin (female), inch screw
COM2(RS-232) Terminal	RS-232 Control Terminal For external device control connections • Connector: D-sub 9-pin (male), inch screw
GPI I/O Termina	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
ME Number	2 ME
Accessories	• AC Cable AV-HS60C2P: 2 cables AV-HS60C2E: 4 cables • LAN Cable: 1 cable (used to connect with the Mainframe AV-HS60U2) • Switch blank cap (large): 24 caps • Switch blank cap (small): 12 caps

Control Panel AV-HS60C4P/E

Power Supply	AC100 V to 240 V, 50 Hz/60 Hz (Supports redundant power supply)
Power Consumption	40 W
Operating Ambient Temperature	0°C to 40°C (32°F to 104°F)
Operating Ambient Humidity	10% to 90% (no condensation)
Storage Temperature	0°C to 40°C (32°F to 104°F)
Storage Humidity	10% to 90% (no condensation)
Weight	Approx. 15.0 kg (33.0 lbs.) (excluding accessories)
Dimensions (WxHxD)	656 mm×160 mm×400 mm (25-53/64 inches×6-19/64 inches×15-3/4 inches) (excluding protrusions)

Control Terminal

Mainframe Terminal	Compatible with 100Base-TX and AUTO-MDIX (For Mainframe AV-HS60U2 connection) Connection cable (supplied with AV-HS60C4): LAN cable (CAT5E), Straight cable, STP (Shielded Twisted Pair), 10 m (32.8 ft) • Connector: RJ-45 When connected to the <LAN> terminal, no video will be displayed on the Menu Panel AV-HS60C3G.

MENU PANEL Terminal	Used only for the Menu Panel AV-HS60C3G • Connector: DVI-D • Because an independent signal format is used,cannot be displayed on a DVI-D monitor. • Cannot be used concurrently with a DVI-D monitor connected to the <DVI-D> terminal. Select with the display selector switch.
DVI-D Terminal	Used for displaying menus to the DVI monitor • Connector: DVI-D • Monitor resolution: 1366×768 compatible monitor • Cannot be used concurrently with the <MENU PANEL> terminal. Select with the display selector switch.
USB Terminal	For DVI monitor menu operation • Connector: USB (type A, female) • Cannot be used for the Menu Panel AV-HS60C3G.
Display Selector Switch	Switch for selecting <MENU PANEL> terminal or <DVI-D> terminal
COM1(M) Terminal	RS-422 Control Terminal For master connection for controlling external devices • Connector: D-sub 9-pin (female), inch screw
COM2(RS-232) Terminal	RS-232 Control Terminal For external device control connections • Connector: D-sub 9-pin (male), inch screw
GPI I/O Termina	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
ME Number	2 ME
Accessories	• AC Cable: 2 cables • LAN Cable: 1 cable (used to connect with the Mainframe AV-HS60U2) • Switch blank cap (large): 16 caps • Switch blank cap (small): 8 caps

Menu Panel AV-HS60C3G

Power Supply	DC12 V/0.54 A (Supplied from AV-HS60C2/AV-HS60C4 using the supplied cable)
Power Consumption	6.48 W
Operating Ambient Temperature	0°C to 40°C (32°F to 104°F)
Operating Ambient Humidity	10% to 90% (no condensation)
Storage Temperature	0°C to 40°C (32°F to 104°F)
Storage Humidity	10% to 90% (no condensation)
Weight	Approx. 1.7 kg (3.7 lbs.) (excluding accessories)
Dimensions (WxHxD)	290 mm×177 mm×46.1 mm (11-13/32 inches×6-31/32 inches×1-13/16 inches) (excluding protrusions) 4RU

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 <DVI-D> 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.
Accessories	• Connecting cable (with ferrite core) for the Control Panel AV-HS60C2 /AV-HS60C4 : 1cable • Bracket for mounting the Control Panel AV-HS60C2/AV-HS60C4 • Screws for the bracket for mounting the Control Panel AV-HS60C2 /AV-HS60C4 : 6 screws

Storage Module AV-HS60D1G

Weight	Approx. 7.0 g (0.3 ozs.)
Dimensions (WxHxD)	29.85 mm×4.0 mm×50.8 mm (1-3/16 inches×5/32 inches×2 inches)
Accessories	• AV-HS60D1 Installation Guide

Due to device characteristics, the storage module AV-HS60D1G is subject to data damage and overwriting restrictions.
Backup of important data is recommended.
*Specifications are subject to change without notice.