

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 mmx132 mmx418 mm (18-31/32 inchesx5-3/16 inchesx16-15/32 inches)(excluding protrusions)

Video Terminal

SDI IN 1 to SDI IN 32 Terminals	During Standard mode 32 lines <ul style="list-style-type: none"> <li>Connectors: BNCx32</li> <li>SDI IN 27, SDI IN 28, SDI IN 31, SDI IN 32 terminals are equipped with up-converters.</li> <li>SDI IN 25 to SDI IN 32 terminals are equipped with color correctors.</li> </ul>	
	HD-SDI	SMPTE292M (BTA S-004) standard compliant <ul style="list-style-type: none"> <li>0.8 V [p-p]±10% (75 Ω)</li> <li>Automatic equalizer 100 m (328 ft) (when 1.5 Gbps/5C-FB cable is used)</li> </ul>
	SD-SDI	SMPTE259M standard compliant <ul style="list-style-type: none"> <li>0.8 V [p-p]±10% (75 Ω)</li> <li>Automatic equalizer 200 m (656 ft) (when 5C-2V cable is used)</li> </ul>
	During 3G mode 16 lines <ul style="list-style-type: none"> <li>Connector: BNCx16 (only the odd numbered terminals can be used)</li> <li>The even numbered terminals &lt;SDI IN 2&gt;, &lt;SDI IN 4&gt; ... &lt;SDI IN 32&gt; cannot be used.</li> <li>&lt;SDI IN 25&gt;, &lt;SDI IN 27&gt;, &lt;SDI IN 29&gt;, and &lt;SDI IN 31&gt; terminals are equipped with color correctors.</li> </ul>	
DVI-D IN 1 to DVI-D IN 2 Terminals	During 4K mode 4K signal x 8 lines <ul style="list-style-type: none"> <li>Connector: BNC x 32 (3G-SDI x 4 SQD/2SI)</li> <li>Can use the 4K signal in SQD format and 2SI format</li> </ul>	
	3G-SDI	3G serial digital, SMPTE424M standard compliant <ul style="list-style-type: none"> <li>0.8 V [p-p]±10% (75 Ω)</li> <li>Automatic equalizer 100 m (328 ft) (when 3 Gbps/5C-FB cable is used)</li> <li>3G-SDI Level B</li> <li>3G-SDI Level A (FS ON)</li> </ul>
	2 lines Digital RGB:XGA (1024x768), WXGA (1280x768), SXGA (1280x1024), WSXGA+ (1680x1050),UXGA (1600x1200), WUXGA (1920x1200) Vertical frequency: 60 Hz Video format inputs: 1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p <ul style="list-style-type: none"> <li>Connectors: DVI-Dx2</li> <li>The terminals do not support HDCP.</li> <li>The DVI-I connector cable cannot be used.</li> <li>For the DVI-D connector cable, use a cable with a length of up to 5 m.(16.4 ft)</li> <li>&lt;DVI-D IN1&gt;/&lt;DVI-D IN2&gt; terminals cannot be used during 3G mode and 4K mode.</li> </ul>	
SDI OUT 1 to SDI OUT 16 Terminals	During Standard mode 16 lines (2 distributed outputs per line) <ul style="list-style-type: none"> <li>Connectors: BNCx32</li> <li>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.</li> </ul>	
	HD-SDI	SMPTE292M (BTA S-004) standard compliant <ul style="list-style-type: none"> <li>Output level: 0.8 V [p-p]±10%</li> </ul>
	SD-SDI	SMPTE259M standard compliant <ul style="list-style-type: none"> <li>Output level: 0.8 V [p-p]±10%</li> </ul>
	During 3G mode 3G-SDI output: 8 lines (2 distribute outputs per line) HD-SDI output: 2 lines (2 distribute outputs per line) <ul style="list-style-type: none"> <li>Connector</li> <li>3G-SDI: BNCx16 (odd numbered terminals only)</li> <li>HD-SDI: BNCx4 (&lt;SDI OUT 14&gt; and &lt;SDI OUT 16&gt; terminals only)</li> <li>3G-SDI signal is not output from the even numbered terminals.</li> <li>No signal is output from the &lt;SDI OUT 2&gt;, &lt;SDI OUT 4&gt; ... &lt;SDI OUT 12&gt; terminals.</li> <li>The HD-SDI signal converted to the 1080i format is output from the &lt;SDI OUT 14&gt; and &lt;SDI OUT 16&gt; terminals. This signal is converted to the 1080i format by decimating the 1080p signal from the &lt;SDI OUT 13&gt; and &lt;SDI OUT 15&gt; terminals.</li> <li>&lt;SDI OUT 13&gt; and &lt;SDI OUT 15&gt; terminals are equipped with color correctors. The same color corrector setting is also applied to &lt;SDI OUT 14&gt; and &lt;SDI OUT 16&gt; terminals.</li> <li>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.</li> </ul>	

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) <ul style="list-style-type: none"> <li>Connector</li> <li>3G-SDI (for 4K signal): BNC x 24 (terminal number 1 to 12)</li> <li>3G-SDI (for 2K signal): BNC x 4 (terminal number 13 and 15)</li> <li>HD-SDI (for 2K signal): BNC x 4 (terminal number 14 and 16)</li> <li>The 4K signal is output in SQD format.</li> <li>The HD-SDI signal converted to the 1080i format is output from the &lt;SDI OUT 14&gt; and &lt;SDI OUT 16&gt; terminals. This signal is converted to the 1080i format by decimating the 1080p signal output from the &lt;SDI OUT 13&gt; and &lt;SDI OUT 15&gt; terminals.</li> <li>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.</li> </ul>	
	3G-SDI	3G serial digital, SMPTE424M standard compliant <ul style="list-style-type: none"> <li>Output level: 0.8 V [p-p] ±10%</li> <li>3G-SDI Level B Mapping</li> </ul>
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:Pb:Pr	4:2:2 10 bit
	R:G:B	4:4:4 8 bit
ME Number	2 ME	

Synchronous Terminal

REF Terminal	<ul style="list-style-type: none"> <li>Connectors: BNC</li> <li>Same field frequencies as those of the system formats supported</li> <li>In Genlock mode: Black burst or Tri-level Sync input signals (with loop-through)</li> <li>If the loop-through output is not used, provide a 75 Ω termination.</li> <li>In the 1080/24PsF and 1080/23.98PsF formats, only Genlock mode supported</li> <li>In the 1080/23.98PsF format, black burst signals with 10 Field ID (SMPTE318M standard compliant) or Tri-level Sync signals supported</li> <li>In the 1080/24PsF format, Tri-level Sync signals supported</li> <li>In internal sync mode: Black burst output signal x2</li> </ul>	
LTC IN Terminal	This is the LTC (linear time code) input terminal. <ul style="list-style-type: none"> <li>Connectors: BNC</li> <li>Impedance: 1 kΩ</li> <li>Level: 1 to 2 V [p-p]</li> </ul>	
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"
	<ul style="list-style-type: none"> <li>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.</li> </ul>	
	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]	
<ul style="list-style-type: none"> <li>Maximum of 2 frame delay is added to each when passed through PinP, DVE, or MultiView.</li> </ul>		

Control Terminal

LAN Terminal	Compatible with 100Base-TX and AUTO-MDIX (For IP control) <ul style="list-style-type: none"> <li>Connection cable: LAN cable (CAT5E), max. 100 m (328 ft), STP (Shielded Twisted Pair) cable recommended</li> <li>Connector: RJ-45</li> </ul>
PANEL Terminal	Compatible with 100Base-TX and AUTO-MDIX (For Control Panel AV-HS60C2/AV-HS60C4 connection) <ul style="list-style-type: none"> <li>Connection cable (supplied with AV-HS60C2/AV-HS60C4): LAN cable (CAT5E), straight cable, STP (Shielded Twisted Pair), 10 m (32.8 ft)</li> <li>Connector: RJ-45</li> </ul>
COM1(M)/COM2(M)/COM3(M)Terminals	RS-422 Control Terminal <ul style="list-style-type: none"> <li>For master connection for controlling external devices</li> <li>Connector: D-sub 9-pin (female) x 3, inch screw</li> </ul>
COM4(M/S) Terminal	RS-422 Control Terminal <ul style="list-style-type: none"> <li>For master/slave connection for controlling external devices</li> <li>Connector: D-sub 9-pin (female), inch screw</li> <li>Switchable between master connection and slave connection via menu</li> </ul>
GPI IN Terminal	GPI IN: 18 inputs, general-purpose, photocoupler sensing ALARM OUT: 1 output, open collector output (negative logic) <ul style="list-style-type: none"> <li>Connector: D-sub 25-pin (female), inch screw</li> </ul>
GPI OUT1/GPI OUT 2 terminal	GPI OUT: 48 outputs, selected from general purpose, tally Open collector output <ul style="list-style-type: none"> <li>Connector: D-sub 25-pin (female) x 2, inch screw</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>AC cable AV-HS60U2P: 2 cables</li> <li>AV-HS60U2E: 4 cables</li> <li>Rack-mounted rear panel support bracket</li> <li>Screws for the rack-mounted rear panel support bracket: 8 screws</li> <li>Operating Guide for the AV-HS6000 series (Excerpted Version)</li> </ul>

## 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 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
ME Number	2 ME

Accessories	<ul style="list-style-type: none"> <li>• AC Cable AV-HS60C2P: 2 cables</li> <li>• AV-HS60C2E: 4 cables</li> <li>• LAN Cable: 1 cable (used to connect with the Mainframe AV-HS60U2)</li> <li>• Switch blank cap (large): 24 caps</li> <li>• Switch blank cap (small): 12 caps</li> </ul>
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## 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.
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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 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
ME Number	2 ME

Accessories	<ul style="list-style-type: none"> <li>• AC Cable: 2 cables</li> <li>• LAN Cable: 1 cable (used to connect with the Mainframe AV-HS60U2)</li> <li>• Switch blank cap (large): 16 caps</li> <li>• Switch blank cap (small): 8 caps</li> </ul>
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## 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.
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Accessories	<ul style="list-style-type: none"> <li>• Connecting cable (with ferrite core) for the Control Panel AV-HS60C2 /AV-HS60C4 : 1 cable</li> <li>• Bracket for mounting the Control Panel AV-HS60C2/AV-HS60C4</li> <li>• Screws for the bracket for mounting the Control Panel AV-HS60C2 /AV-HS60C4 : 6 screws</li> </ul>
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## 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
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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.