

Panasonic
ideas for life

50 Hz

4/2011

HD Integrated Camera **AW-HE50S/H**
Compact Live Switcher **AW-HS50**
Remote Camera Controller **AW-RP50**

50
Series

The Compact New 50 Series:
Production Quality Video
with IP Network Control

HD Integrated Camera
AW-HE50S/H



Remote Camera Controller
AW-RP50



Compact Live Switcher
AW-HS50



Panasonic

AW-HE50

POWER  STANDBY

Actual Size



178 mm

160 mm

■ Rear
AW-HE50S



AW-HE50H



Small and Versatile: 1/3 type Full-HD MOS Integrated Pan-Tilt/Cameras with Production Quality HD/SD Video

HD Integrated Camera **AW-HE50S**

[SDI Model] For indoor use

HD Integrated Camera **AW-HE50H**

[HDMI Model] For indoor use

HD 1080/50i, 720/50p

SD 576/50i

Wireless Remote Control
(option)

AW-RM50

("R6" or "LR6" battery x 2,
obtained separately)



Multi-interface Cable
(option)

AW-CA20T6

Direct ceiling mount bracket
(option)

WV-Q105



Upgrade Kit (option)

AW-HEF5S [for AW-HE50S]

AW-HEF5H [for AW-HE50H]

- R-Gain and G-Gain are adjustable independently.
- 16 axis Color Matrix setup function.
- 1080/25PsF is added in format selection.
- 1080/50p is added in format selection. (AW-HE50H only)

- 1/3 type Full-HD MOS Sensor with Optical 18x Zoom Lens & 10x Digital Zoom

- Innovative Features Deliver Realistic, Production Quality HD Video

- Camera, zoom lens, and pan-tilt in one smart, compact body

- The neutral form fitting in the ambience and the cable cover decreasing untidiness ensure the shooting without spoiling the ambience.

■ Adaptable to a wide range of locations



Education



Auditoriums / Legislative halls



Halls / Theaters

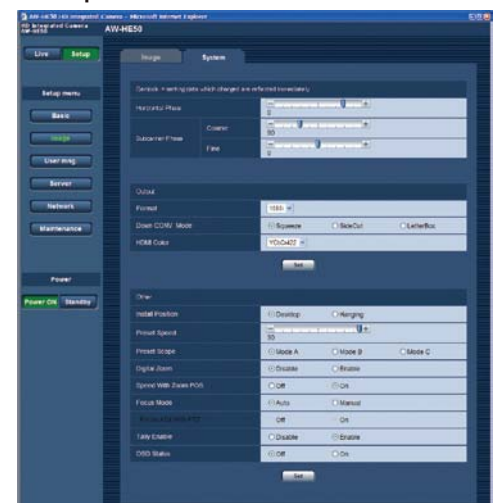


Business setting

- Setting camera menus with a PC

- Camera menus can be setup the web browser by connecting the AW-HE50S/H to a PC.

■ Setup window on the web browser



Dynamic Range Stretch (DRS)

The gamma curve and knee slope are optimized to match the contrast of each pixel in real time. This increases the dynamic range without affecting the normal pixels.



DRS OFF: With the iris expanded, this blown highlight appears on the blackboard



DRS OFF: With the iris contracted, a blocked shadow appears on the figure



DRS ON: Both highlights and shadows are clearly visible

New Hybrid Digital Noise Reduction (Hybrid DNR)

The innovative New Hybrid (2D/3D) Digital Noise Reduction function also suppresses afterimages, even in difficult lighting conditions.



Without Noise Reduction
Some noise is evident when gain control is turned up



3D Noise Reduction Alone
Afterimage and some loss of resolution is seen



New Hybrid Digital Noise Reduction
Clearer images in difficult conditions

- In addition to the AW-RP50, conventional camera controllers are connectable

- A maximum of five units can be operated by serial control from one of Panasonic's currently available controllers (AW-RP655 and AW-RP555). (It may be necessary to upgrade the version of the controller in order to support the unit. For details, please contact your distributor.)

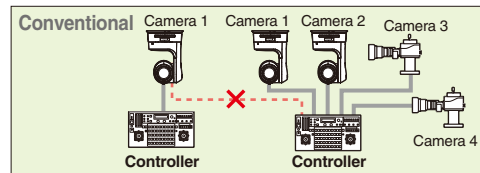
Small and Powerful: An Easy-to-Use Camera Controller with Great Features

Remote Camera Controller **AW-RP50**

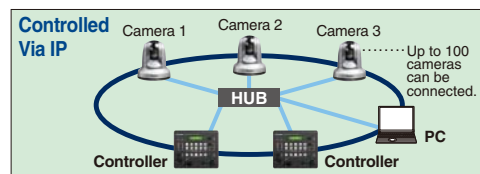


Simple to connect and operate, with both IP and Serial control functions

- Up to a hundred AW-HE50S/H units can be controlled via IP connections when using network hub (switching hub).
- IP addresses are automatically assigned to the AW-HE50S/H or AW-HS50 by the Automatic IP Address Setup function.
- One remote camera can be controlled simultaneously by up to five AW-RP50 units via an IP connection.
- Connection settings for the AW-RP50 can be configured with a PC. (configuration software supplied)
 - IP-control performance depends on network conditions.
 - Video signals cannot be transmitted via IP.
 - Connection is not available with using the public network.



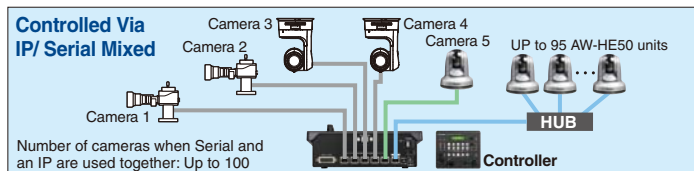
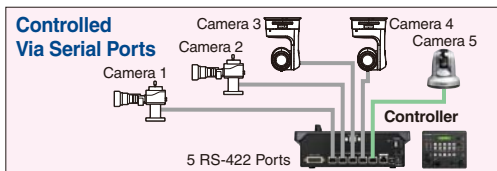
Each camera could not be operated by multiple controllers



Each camera can be operated by multiple controllers

Serial Control also Supported

- Up to 5 existing Panasonic pan-tilt heads*, integrated cameras** and box cameras*** such as the AW-HE50S/H, etc. can be linked using the serial control. (RS-422 protocol)
- * Compatible models: AW-PH360, AW-PH405, AW-PH400 (AW-IF400 is required), AW-PH650 ** Compatible model: AW-HE100
*** Compatible models: AK-HC1800, AK-HC1500, AW-HE870, AW-E860, AW-E750, AW-E655, AW-E650, AW-E350

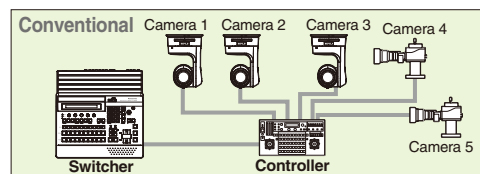


Number of cameras when Serial and an IP are used together: Up to 100

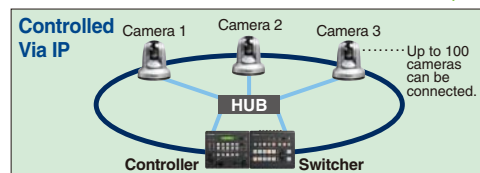
— RS-422 — LAN — Multi-interface Cable (AW-CA20T6)

Linking the AW-HS50 to IP control enables highly efficient and stress-free operations

- The camera setting information (such as iris and gain) caught by the unit is displayed through the AUX output of the switcher or on the split-screen of MultiViewer.
- Catches the ON AIR tally information of the switcher and lights the tally LED on the panel.
- Bus images can be changed by linking them to the camera selection (control bus targets : AUX, PVW, PinP, KEY-F).
- The switcher's MultiViewer screen can be changed to the camera image full screen with a one-touch button operation. (Control bus target : AUX only)
- Parameters such as the PinP position of the switcher can be changed with the pan/tilt lever.



Previously, single operator system control was hard to achieve.



50 Series Switcher and Controller linked for streamlined operation.

AW-RP50 Main Specifications

Remote Camera Control	Protocol	IPv4, RS-422 (Panasonic AW series protocol) Serial : Up to 5 cameras IP : Up to 100 cameras (Up to 100 when Serial and IP are used together)	Interface	LAN	10BASE-T/100BASE-TX (for IP control)	RJ45 x 1
	Connection			TO PAN/TILT HEAD	RS-422 (for Serial control)	RJ45 x 5
	Adjustment functions	Pan/Tilt, Zoom, Focus, Iris, Gain, Pedestal, Shutter, Detail, White Balance (Auto, R/B Gain), Black Balance (Auto, R/B Pedestal), Switch scene files		TALLY/GPI	TALLY INPUT x 5 channels GPI INPUT x 4 channels GPI OUTPUT x 4 channels	D-sub 15 pin (female) x 1
	Preset Memory	Up to 100 sets		Operating Temperature	0 °C to 40 °C	
Switcher Control	Connection	IP : 1	Operating Humidity	10 % to 90 % (no condensation)		
	Switcher supported	AW-HS50	Power Supply / Power Consumption	DC12 V ±10 % (AC adaptor provided), 0.5 A DC IN x 1		
	Linkage	Camera information display, Tally information imported, Bus material selection (AUX/PVW/PinP/KEY-F), Parameter Changes (Pan/Tilt lever, Zoom button)	Dimensions (W x H x D)	210 mm x 67 mm x 177 mm (excluding protrusions)		
			Weight	Approx. 1.1 kg		
		Standard Accessories		AC Adaptor		

● Be sure to use the included AC adaptor

177 mm

67 mm

Full rack size with the AW-RP50 and AW

Actual Size

Panasonic Remote Camera Controller AW-RP50



210 mm



-HS50 positioned alongside each other



210 mm



Small and Professional: A High-Performance HD/SD Live Switcher with Built-in MultiViewer



Compact Live Switcher AW-HS50

5 inputs and 3 outputs

- Standard features include 5 inputs (HD/SD-SDI x 4, DVI-D x 1) and 3 outputs (HD/SD-SDI x 2, DVI-D x 1).

HD 1080/59.94i, 1080/50i,
1080/24PsF, 1080/23.98PsF
720/59.94p, 720/50p

SD 480/59.94i, 576/50i

MultiViewer display functionality comes installed as standard

- The built-in MultiViewer can display up to ten image windows at one time on a single monitor, including program, preview, and inputs.

4 Split Pictures



5a Split Pictures



6a Split Pictures



10a Split Pictures



9 Split Pictures



5b Split Pictures



6b Split Pictures



10b Split Pictures



Audio Level Meter Display Function

- Embedded audio levels of SDI (group1/ 1 ch, 2 ch) inputs can be displayed.

Bus Transition Functions

- Cut and Mix transitions are available through AUX bus and PinP bus.



Audio Level Meter

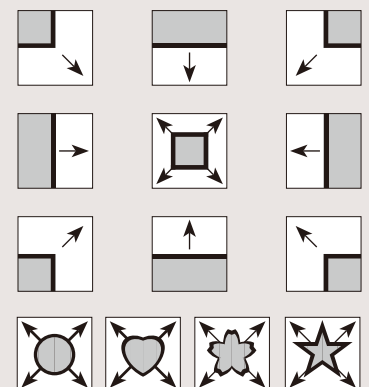
Frame Synchronizers on All Inputs

- Frame Synchronizer is embedded in all inputs. This enables asynchronous video signals to be switched without glitches. (SDI-IN1 to 4 10 bit, DVI-IN 8 bit)

More Powerful Features

- 2 Switchable Up-converters. (SDI-IN3,IN4)
- Color Correction on SDI Inputs (SDI-IN1 to 4) for convenient matching of video sources.
- Dot-by-Dot feature on 4 inputs (SDI-IN1 to 4) enables insertion of SD images into HD frames with virtually no image distortion.
- 13 wipe patterns, plus PinP, Chroma/Linear Key, Aux Bus.

13 wipe patterns



Border ON/ OFF, Color, Wide, and Blur are selectable



177 mm



67 mm

AW-HE50 Main Specifications

Imaging Sensors	1/3 type Full-HD MOS	Interface	LAN RS-422	10BASE-T/100BASE-TX, IPv4 AW-series protocol, plus selected third-party support*	RJ45 x 1
Lens	Motorized 18x zoom, f1.6 to 2.8 (f=4.7 to 84.6 mm, 35 mm equivalent: 36.9 mm to 664.5 mm)	Synchronization System		AW-HE50S: Internal/External synchronization (BBS) AW-HE50H: Internal synchronization	
Focus	Auto/Manual switchable	Rotation Range		Pan: ±175°, Tilt: +90° to -30°	
Horizontal Resolution	850 TV Lines Typ (Centre area)	Rotation Speed		Max. 90°/s or more	
Minimum Illumination	3 lx (50 IRE, F1.6, +36 dB)	Quietness		NC35 (at normal speed), NC40 (at fastest speed when preset)	
S/N	54 dB Typ	Power Supply / Power Consumption		AW-HE50S: DC12 V ±10% (AC adaptor provided), 1.3 A AW-HE50H: DC12 V ±10% (AC adaptor provided), 1.2 A	
Gain Selection	Auto, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 15 dB, 18 dB	Operating Temperature		0°C to 40°C	
Storage Mode	0 dB, 6 dB, 12 dB, 18 dB	Operating Humidity		20% to 90% (no condensation)	
Electronic Shutter Speed	Step 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 Syncro-scan 50.20 Hz to 538.51 Hz	Dimensions (W x H x D)		160 mm x 178 mm x 166 mm (excluding protrusions, cable cover, direct ceiling mount bracket)	
Gamma	Off, Normal (Low, Mid, High), Cinema	Weight		Approx. 1.4 kg	
White Balance	AWB A, AWB B, ATW	Standard Accessories		Mounting Bracket (for table or ceiling), Mounting Bracket (for main unit), Mounting Screws, AC Adaptor [BOX: (W x H x D) 120 mm x 35 mm x 60 mm, Cable: 120 cm (3.94 ft)], Power Cable (300 cm), Cable Cover	
Chroma Amount Variability	7 levels variability				
Scene File	FullAuto, Manual1, Manual2, Manual3				
Color Bar	FULL BAR				
Output Format	HD: 1080/50i, 720/50p SD: 576/50i				
Video Output	AW-HE50S: HD/SD-SDI, HD/SD analog component*, Composite* AW-HE50H: HDMI, HD/SD analog component*, Composite*				

*Be sure to use the included AC adaptor and power cable *Multi-interface Cable (AW-CA20T6) is required

AW-HS50 Main Specifications

Video Format	HD (1080/59.94i, 1080/50i, 1080/24PsF, 1080/23.98PsF, 720/59.94p, 720/50p) SD (480/59.94i, 576/50i)	BKGD	Wipe Pattern	Wipe x 13
Video Processing	Y:Cb:Cr, 4:2:2 10 bit (8 bit for FMEM) RGB, 4:4:4 8 bit	FTB	Transition Type	Cut, Mix, Wipe (including DVE)
M/E	1 M/E	KEYER	Selectable Materials	Black, White, CBGD, FMEM1, FMEM2
Video Input	Standard: 4 SDI inputs (SDI-IN1 to 4) Standard: 1 DVI-D input (DVI-IN) 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 1080/50p, 1080/59.94p ●Video output formats of the AW-HE50H are not supported. ●Analog input signals are not supported.	KEYER	Number of Keys	1
Video Output	Standard: 2 SDI outputs (SDI-OUT1 to 2 each, 2 output distribution for SDI-OUT1) Standard: 1 DVI-D output (DVI-OUT) 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 1080/50p, 1080/59.94p ●High-resolution multi view mode supported: Signals are also output with a high resolution even when SD has been selected as the system mode. ●Analog output signals are not supported.	PinP	Key Type	Linear key, Luminance key, Chroma key
Interface	LAN 10BASE-T/100BASE-TX (for IP control) RJ45 x 1 TALLY/GPI GPI INPUT x 5 channels D-sub 15 pin (female) x 1 GPI OUTPUT x 7 channels	PinP	Transition Type	Mix
Power Supply / Power Consumption	DC12 V ±10% (AC adaptor provided), 2.0 A	AUX BUS	Number of PinP	1
Operating Temperature	0°C to 40°C	AUX BUS	Transition Type	Mix
Operating Humidity	10% to 90% (no condensation)	AUX BUS	BUS Transition	Yes (Mix)
Dimensions (W x H x D)	210 mm x 67 mm x 177 mm (excluding protrusions)	Input Function	Number of AUX BUS	1
Weight	Approx. 1.4 kg	Input Function	Selectable Materials	SDI-IN1 to 4, DVI-IN, CBAR, CBGD, BLACK, FMEM1, FMEM2, PGM, PVW, KOUT, CLN, MV
Standard Accessories	AC Adaptor	Input Function	BUS Transition	Yes (Mix)
		Output Function	Frame Synchronizer	SDI-IN1 to 4, DVI-IN (DVI-IN is always-on)
		Output Function	Freeze	SDI-IN1 to 4, DVI-IN
		Output Function	Dot by Dot	SDI-IN1 to 4
		Output Function	Video Processing	SDI-IN1 to 4
		Output Function	Up-converter	SDI-IN3, IN4
		Output Function	MultiViewer	Single Screen Display Labels, Tally indication, Split-screen (the screen may be split into 4, 5a/5b, 6a/6b, 9 and 10a/10b sections) MV frames, Labels, Tally indications, camera setting information, and Audio Level Meters are not shown on SDI-OUT1.
		Output Function	OSD	Single Screen Display SDI-OUT2, DVI-OUT (unshown on SDI-OUT1)
		Output Function	Audio Level Meter	SDI embedded audio (group1/ 1 ch, 2 ch)
		Frame Memory		2 channels The image data in the Frame Memory is stored even when the power is off. ●Video processing for the Frame Memory is 8-bit. ●OSD, Frames, Labels, Tally indications, camera setting information, and Audio Level Meters for MultiViewer are not stored in the Frame Memory.
		Memory Function		PinP Preset ●Effect Dissolve Function

●Be sure to use the included AC adaptor

Please refer to the latest Information, etc. at panasonic web site.



<http://pro-av.panasonic.net/>

Panasonic®

Panasonic Corporation
Digital Imaging Business Group
2-15 Matsuba-cho, Kadoma, Osaka 571-8503
Japan
<http://pro-av.panasonic.net/>

[Countries and Regions]

Argentina	+54 1 308 1610
Australia	+61 2 9986 7400
Bahrain	+973 252292
Belgium	+32 (0) 2 481 04 57
Brazil	+55 11 3889 4035
Canada	+1 905 624 5010
China	+86 10 6515 8828
Hong Kong	+852 2313 0888
Czech Republic	+420 236 032 552/511
Denmark	+45 43 20 08 57
Egypt	+20 2 23938151
Finland, Latvia, Lithuania, Estonia	+358 (9) 521 52 53
France	+33 (0) 1 55 93 66 67
Germany, Austria	+49 (0)611 235 0
Greece	+30 210 96 92 300
Hungary	+36 (1) 382 60 60
India	+91 120 247 1000
Indonesia	+62 21 385 9449
Iran (Vida)	+98 21 2271463
(Panasonic Office)	+98 2188791102
Italy	+39 02 6788 367
Jordan	+962 6 5859801
Kazakhstan	+7 727 298 0891
Korea	+82 2 2106 6641
Kuwait	+96 522431385

Lebanon	+96 11665557
Malaysia	+60 3 7809 7888
Mexico	+52 55 5488 1000
Netherlands	+31 73 64 02 577
New Zealand	+64 9 272 0100
Norway	+47 67 91 78 00
Pakistan	+92 5370320 (SNT)
Palestine	+972 2 2988750
Panama	+507 229 2955
Peru	+51 1 614 0000
Philippines	+63 2 633 6163
Poland	+48 (22) 338 1100
Portugal	+351 21 425 77 04
Puerto Rico	+1 787 750 4300
Romania	+40 21 211 4855
Russia & CIS	+7 495 6654205
Saudi Arabia	+96 626444072
Singapore	+65 6270 0110
Slovak Republic	+421 (0) 2 52 92 14 23
Slovenia, Albania, Bulgaria, Serbia, Croatia, Bosnia, Macedonia, Montenegro	+36 (1) 382 60 60
South Africa	+27 11 3131622
Spain	+34 (93) 425 93 00
Sweden	+46 (8) 680 26 41
Switzerland	+41 (0) 41 259 96 32
Syria	+963 11 2318422/4

Taiwan	+886 2 2227 6214
Thailand	+66 2 731 8888
Turkey	+90 216 578 3700
U.A.E. (for All Middle East)	+971 4 8862142
Ukraine	+380 44 4903437
U.K.	+44(0)1344 70 69 13
U.S.A.	+1 877 803 8492
Vietnam	+848 38370280



JQA-0443



Factories of Systems Business Group have received ISO14001:2004-the Environmental Management System certification. (Except for 3rd party's peripherals.)