AW-HE50 Main Specifications

	AW-HE50S (SDI Model)	AW-HE50H (HDMI Model)					
Image Elements	1/3-inch Full-HD MOS						
Lens	18x HD Zoom Lens F1.6 to 2.8 (f=4.7 to 84.6 mm,35 mm conversion: 36.9 mm to 664.5 mm)						
Focus	Auto/Manua	Auto/Manual switchable					
Horizontal Resolution	850 TV Lines (Center)						
Minimum Illumination	3 Ix (50 IRE, F1.6, +36 dB)						
S/N	54 dB						
Gain Selection	0,3,6,9,12,15,18 dB/AGC						
Gain Selection	0 dB,6 dB,12 dB,18 dB (Integral mode)						
Shutter Speed	Step 1/100,1/250,1/500,1/1000,1/2000,1/4000,1/10000						
Shutter Speed	Syncro-scan 60.24 Hz to 646.21 Hz						
Gamma	OFF,Low,Mid,High,Cinema						
White Balance	AWB A,AW	VB B,ATW					
Variable Chroma Levels	ls 7 levels						
Scene Files	Full-Auto, Manual						
Color Bar	Full-	-Bar					
Output Format	HD: 1080/50i, 720/50p SD: 576/50i						
	HD/SD-SDI	HDHDMI					
Video Output	HD/SD analog component*	HD/SD analog component*					
	Composite*	Composite*					
Interface LAN	10BASE-T/100BASE-TX, IPv4 RJ45 x						
RS-422	AW-series protocol, plus selected third-party support*						
Synchronization System	Internal/External synchronization (BBS)	Internal synchronization					
Rotation Range							
Rotation Speed	Over 90 °/s (at maximum)						
Noise	NC35 (Moving normaly), NC40 (When Preset recalled)						
Stopping Accuracy	PAN/Tilt ±0.3 °						
Power Supply	DC12 V ±10 %, 1.3 A	DC12 V ±10 %, 1.2 A					
Operating Temperature	0 °C to	0 °C to +40 °C					
Operating humidity	20 % to 90 % (no condensation)						
Dimensions (WxHxD)	160 mm x 178 mm x 166 mm [TBD] (excluding the cable cover and mounting brackets)						
Weight	Approx. 1.4 kg						
Standard Accessories	Mounting Bracket (for table or ceiling), Mounting Bracket (for main unit), Mounting Screws, AC Adaptor, Power Cable, Cable Cover						

●Be sure to use the included AC adaptor and power cable

*Breakout cable required

■ AW-HS50 Main Specifications

_ AW 110	oo man c	, peomoditions				
Video Format		HD (1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 720/59.94p, 720/50p)		BKGD	Wipe/DVE pattern	Wipe x 13
				DICOD	Transition Type	Cut, Mix, Wipe (including DVE)
		SD (480/59.94i, 576/50i)		FTB	Selectable Materials	Black, White, CBGD, FMEM1, FMEM2
Video Proces		Y:Cb:Cr, 4:2:2 10 bit (8 bit for FMEM)			Number of Keys	1
	ssing	RGB, 4:4:4 8 bit		KEYER	Key Type	Linear key, Luminance key, Chroma key
M/E		1 M/E			Transition Type	Mix
		Standard: 4 SDI inputs (SDI-IN 1 to 4)			Number of PinP	1
		Standard: 1 DVI-D input (DVI-IN)		PinP	Transition Type	Mix
		XGA (1024 x 768), WXGA (1280 x 768),			BUS Transition	Yes (Mix)
Video Input		SXGA (1280 x 1024), WSXGA+ (1680 x 10	050),		Number of AUX BUS	1
		UXGA (1600 x 1200), WUXGA (1920 x 120	00)			SDI-IN1 to 4, DVI-IN,
		Vertical frequency: 60 Hz				CBGD, BLACK,
		1080/50p, 1080/59.94p Standard: 2 SDI outputs (SDI-OUT1 to 2 each, 2 output distribution for SDI-OUT1)		AUX BUS	Selectable Materials	FMEM1, FMEM2,
						PGM, PVW, KOUT, CLN, MV
					BUS Transition	Yes (Mix)
		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			Frame Synchronizer	SDI-IN1 to 4, DVI-IN (DVI-IN is always-on)
Video Output	ıt			Input Function	Freeze	SDI-IN1 to 4, DVI-IN
					Dot by Dot	SDI-IN1 to 4
					Video Processing	SDI-IN1 to 4
					Up-converter	SDI-IN3, IN4
		1080/50p, 1080/59.94p				Single Screen Display
		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.]		Labels, Tally indication, Split-screen (the screen may
					MultiViewer	be split into 4, 5a/5b, 6a/6b, 9 and 10a/10b sections)
Frame Memo	ory					MV frames, Labels, Tally indications,
, , , , , , , , , , , , , , , , , , , ,		OSD, Frames, Labels, Tally indications, camera setting information, and Audio Level Meters for MultiViewer are not stored in the Frame Memory.		Output		camera setting information, and Audio Level Meters
						are not shown on SDI-OUT1.
		Wipe Reset, PinP Preset	·	Function		Single Screen Display
Memory Fun	iction	Effect Dissolve Function				SDI-OUT2,DVI-OUT (unshown on SDI-OUT1)
	LAN	10BASE-T/100BASE-TX (for IP control) RJ	J45 x 1		OSD	The MultiViewer frames are cleared
Interface		GPI INPUT x 5 channels D-	sub 15 pin	1		when the borders between the OSD
monace	TALLY/GPI	GPI OUTPUT x 7 channels (fe	emale) x 1			and the split-screen of MultiViewer cross.
Power Suppl	ly	DC12 V ±10 %, 2.5 A [TBD]	·		Audio Level Meter	SDI embedded audio 1 ch, 2 ch
Operating Te		0 °C to +40 °C				
Operating Humidity		10 % to 90 % (no condensation)		1		
Dimensions (WxHxD)		210 mm x 65 mm x 177 mm [TBD] (excluding protrusions)		1		

Approx. 1.4 kg [TBD] (without options)

- Specifications and functions are subject to change without notice.
- The image on the screen is a composite image. Composite images, photographs, and illustrations are included for reference use only.

[Countries and Regions]

Panasonic®

[oodination and	riogionoj				
Argentina	+54 1 308 1610	Italy	+39 02 67 88 449	Russia & CIS	+7 495 980 42 06
Australia	+61 2 9986 7400	Jordan	+962 585 9801	Saudi Arabia	+966 1 465 0709
Austria	+49 (0)611 235 401	Kazakhstan	+7 3272 980 891	Singapore	+65 6270 0110
Bahrain	+973 252292	Korea	+82 2 2106 6666	Slovak Republic	+421 (0)2 52 92 14 23
Belgium	+32 (0)2 481 04 57	Kuwait	+965 481 2123	Slovenia, Croatia	, Bosnia, Macedonia
Bulgaria	+359 2 946 0786	Lebanon	+961 1 216827		+44 (0)20 76 63 36 57
Brazil	+55 11 3889 4035	Malaysia	+60 3 5549 5422	South Africa	+27 11 313 1400
Canada	+1 905 624 5010	Mexico	+52 5 488 1000	Spain	+34 (93) 425 93 00
China	+86 10 6515 8828	Montenegro, Ser	bia	Sweden	+46 (8) 680 26 41
(Hong Kong	+852 2313 0888)	-	+41 (0)26 466 25 20	Switzerland	+41 (0)41 259 96 32
Czech Republic	+420 236 032 552/511	Netherlands	+31 73 64 02 577	Taiwan	+886 2 2227 6100
Denmark	+45 43 20 08 57	New Zealand	+64 9 272 0100	Thailand	+66 2 731 8888
Egypt	+20 2 23938151	Norway	+47 67 91 78 00	Turkey	+90 216 578 3700
Finland, Latvia, I	_ithuania, Estonia	Pakistan	+92 5370320 21	U.A.E.	+971 4 282201
	+358 (9)521 52 53	Panama	+507 229 2955	Ukraine	+380 44 4903437
France	+33 (0)1 49 46 43 59	Peru	+51 145 29470		+380 44 4903438
Germany	+49 (0)611 235 401	Philippines	+63 2 633 6162		[ext. 112]
Greece	+30 210 96 92 300	Poland	+48 (22)338 1100	U.K.	+44 (0) 1344 70 69 20
Hungary	+36 (1)382 60 60	Portugal	+351 21 425 77 04	U.S.A.	+1 201 348 5300
Indonesia	+62 21 385 9449	Puerto Rico	+1 787 750 4300		+1 800 528 8601
Iran	+98 212 2271463	Romania	+40 21 211 4855	Vietnam	+84 8 38370280

Panasonic ideas for life

PRELIMINARY 50 Hz 4/2010

HD Integrated Camera AW-HE50S/H

Compact Live Switcher AW-HS50

Remote Camera Controller AW-RP50



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





Compact Live Switcher AW-HS50



Rear AW-HE50S



AW-HE50H



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

HD Integrated Camera AW-HE50S

HD Integrated Camera AW-HE50H NEW [HDMI Model]

Wireless Remote Controller (option) AW-RM50

Multi-interface Cable (option) AW-CA20T6



1080/50i,720/50p

S D 576/50i

- 1/3-inch Full-HD MOS Sensor with 18x HD Optical Zoom & 10x Digital Zoom
- Innovative Features Deliver Realistic, **Production Quality HD Video**

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.



on the blackboard

DRS OFF: With the iris expanded, DRS OFF: With the iris contracted, DRS ON: Both highlights and this blown highlight appears

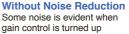


a blocked shadow appears shadows are clearly visible on the figure

Hybrid (2D/3D) Noise Reduction

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





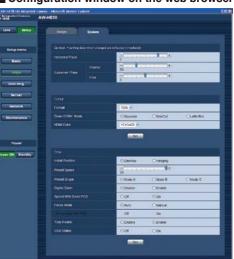


3D Noise Reduction Alone Afterimage and some loss of resolution is seen



The Hybrid (2D/3D) Clearer images in difficult conditions

- Setting camera menus with a PC
 - Camera menus can be set up via a web browser by connecting the AW-HE50S/H to a PC.
 - Configuration window on the web browser



Quick integration, thanks to simple connections, IP control, and included **Turn-lock mount**



Flesh Tone Mode

Flesh Tone Mode produces a more pleasing and realistic picture.



Flesh Tone Mode:OFF



 The effectiveness may be affected by liahtina, etc

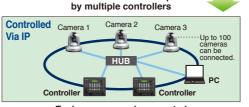
Small and Powerful: An Easy-to-Use Camera Controller with Great Features

AW-RP50 NEW

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 Ethernet hubs.
- 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.
 Various 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.

Conventional Camera 1 Camera 1 Camera 2 Camera 3 Camera 1 Camera 2 Camera 3 Camera 4 Camera 4 Controller Each camera could not be operated

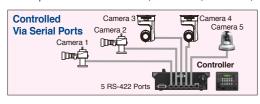


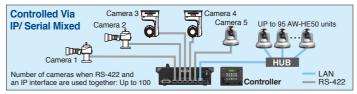
Each camera can be operated by multiple controllers

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).

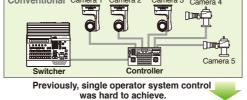
* Compatible models: AW-PH405, AW-PH400, AW-PH360, AW-PH650 ** Compatible model: AW-HE100 *** Compatible models: AK-HC1800, AK-HC1500, AW-HE870, AW-E860, AW-E750, AW-E655, AW-E650, AW-E350

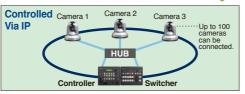




Linking the AW-HS50 to IP control enables highly efficient and stress-free operations

- The camera setting information (such as iris and gain) acquired by the unit is displayed through the AUX output of the switcher or on the split-screen of MultiViewer.
- Acquires 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.





50 Series Switcher and Controller linked for streamlined operation.

■ AW-RP50 Main Specifications

Remote Camera	Protocol	IPv4,RS422 (Panasonic AW series protocol)	Interface	LAN	10BASE-T/100BASE-TX (for IP control)	RJ45 x 1	
	Connection	Serial : Up to 5 cameras		TO PAN/TILT HEAD	RS422 (for Serial control)	RJ45 x 5	
		IP : Up to 100 cameras		TALLY/GPI	TALLY INPUT x 5 channels	D-sub 15 pin (female) x 1	
	Adjustment functions	Pan/Tilt (Joystick),Zoom (Seesaw Switch), Focus,			GPI INPUT x 4 channels		
Control					GPI OUTPUT x 4 channels		
			Operating Temprature	0 °C to 40 °C			
			Operating Humidity	10 % to 90 % (no condensation)			
	Connection	IP: 1	Power Supply	DC12 V ±10 %, 0.5 A [TBD] DC IN			
Switcher	Supported Switcher	AW-HS50	Dimensions (WxHxD)	210 mm x 65 mm x 177 mm [TBD] (excluding protrusions)			
Control	Linkage	Camera Send, Tally Receive, Switcher BUS selection	Weight	Approx. 1.1 kg [TBD] (without options)			
		Pan/Tilt (Joystick)(PinP positioning etc)	Standard Accessories	AC Adaptor, Power Cable			
					D 4 4b- :		

Be sure to use the included AC adaptor and power cal

Full rack size with the AW-RP50 and AV





V-HS50 positioned alongside each other



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

Compact Live Switcher

AW-HS50 NEW



• 5 inputs and 3 outputs

 Standard features include 5 inputs (4 HD/SD-SDI, 1 DVI-D) and 3 outputs (2 HD/SD-SDI, 1 DVI-D). 1080/59.94i,1080/50i, 1080/23.98PsF,1080/24PsF 720/59.94p,720/50p

SD

D 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, inputs, and more!

















Audio Level Meter Display Function

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

Bus Transition Functions

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

Frame Synchronizers on All Inputs

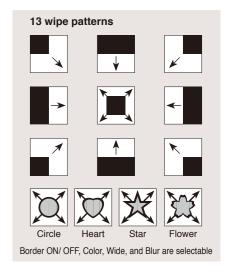
 Frame Synchronizer is embedded in all inputs. This enables asynchronous video signals to be switched without glitches. (SDI-IN1 to 4 10 bit, DVI-IN 8 bit)

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.



Audio Level Mete



210 mm

