

■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/Manual switchable	
Horizontal Resolution		850 TV Lines (Center)	
Minimum Illumination		3 lx (50 IRE, F1.6, +36 dB)	
S/N		54 dB	
Gain Selection		0,3,6,9,12,15,18 dB/AGC 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 Syncro-scan 60.24 Hz to 646.21 Hz	
Gamma		OFF,Low,Mid,High,Cinema	
White Balance		AWB A,AWB B,ATW	
Variable Chroma Levels		7 levels	
Scene Files		Full-Auto,Manual	
Color Bar		Full-Bar	
Output Format		HD: 1080/50i, 720/50p SD: 576/50i	
Video Output		HD/SD-SDI HD/SD analog component* Composite*	HDHDMI HD/SD analog component* Composite*
Interface	LAN	10BASE-T/100BASE-TX, IPv4	
	RS-422	AW-series protocol, plus selected third-party support*	
RJ45 x 1			
Synchronization System		Internal/External synchronization (BBS)	Internal synchronization
Rotation Range		Pan: -175 to +175 degrees, Tilt: -30 to +90 degrees	
Rotation Speed		Over 90 °/s (at maximum)	
Noise		NC35 (Moving normally), 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 +40 °C	
Operating humidity		20 % to 90 % (no condensation)	
Dimensions (W x H x D)		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

Video Format	HD (1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 720/59.94p, 720/50p) SD (480/59.94i, 576/50i)	BKGD	Wipe/DVE pattern	Wipe x 13
		FTB	Transition Type	Cut, Mix, Wipe (including DVE)
Video Processing	Y:Cb:Cr, 4:2:2 10 bit (8 bit for FMEM) RGB, 4:4:4 8 bit	KEYER	Selectable Materials	Black, White, CBGD, FMEM1, FMEM2
			Number of Keys	1
M/E	1 M/E		Key Type	Linear key, Luminance key, Chroma key
			Transition Type	Mix
Video Input	Standard: 4 SDI inputs (SDI-IN 1 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	PinP	Number of PinP	1
			Transition Type	Mix
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	AUX BUS	BUS Transition	Yes (Mix)
			Number of AUX BUS	1
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.	Input Function	Selectable Materials	SDI-IN1 to 4, DVI-IN, CBGD, BLACK, FMEM1, FMEM2, PGM, PVW, KOUT, CLN, MV
			BUS Transition	Yes (Mix)
Memory Function	Wipe Reset, PinP Preset Effect Dissolve Function		Frame Synchronizer	SDI-IN1 to 4, DVI-IN (DVI-IN is always-on)
			Freeze	SDI-IN1 to 4, DVI-IN
Interface	LAN TALLY/GPI		Dot by Dot	SDI-IN1 to 4
			Video Processing	SDI-IN1 to 4
Power Supply	DC12 V ±10 %, 2.5 A [TBD]		Up-converter	SDI-IN3, IN4
			Single Screen Display	SDI-IN3, IN4
Operating Temperature	0 °C to +40 °C		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.	SDI-OUT2,DVI-OUT (unshown on SDI-OUT1)
			MultiViewer	SDI-OUT2,DVI-OUT (unshown on SDI-OUT1)
Operating Humidity	10 % to 90 % (no condensation)		OSD	The MultiViewer frames are cleared when the borders between the OSD and the split-screen of MultiViewer cross.
			Audio Level Meter	SDI embedded audio 1 ch, 2 ch
Dimensions (W x H x D)	210 mm x 65 mm x 177 mm [TBD] (excluding protrusions)			
Weight	Approx. 1.4 kg [TBD] (without options)			
Standard Accessories	AC Adaptor, Power Cable			

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

- 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.

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Bulgaria	+359 2 946 0786
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Sweden	+46 (8) 680 26 41
Switzerland	+41 (0)41 259 96 32
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Thailand	+66 2 731 8888
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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**

50
Series

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



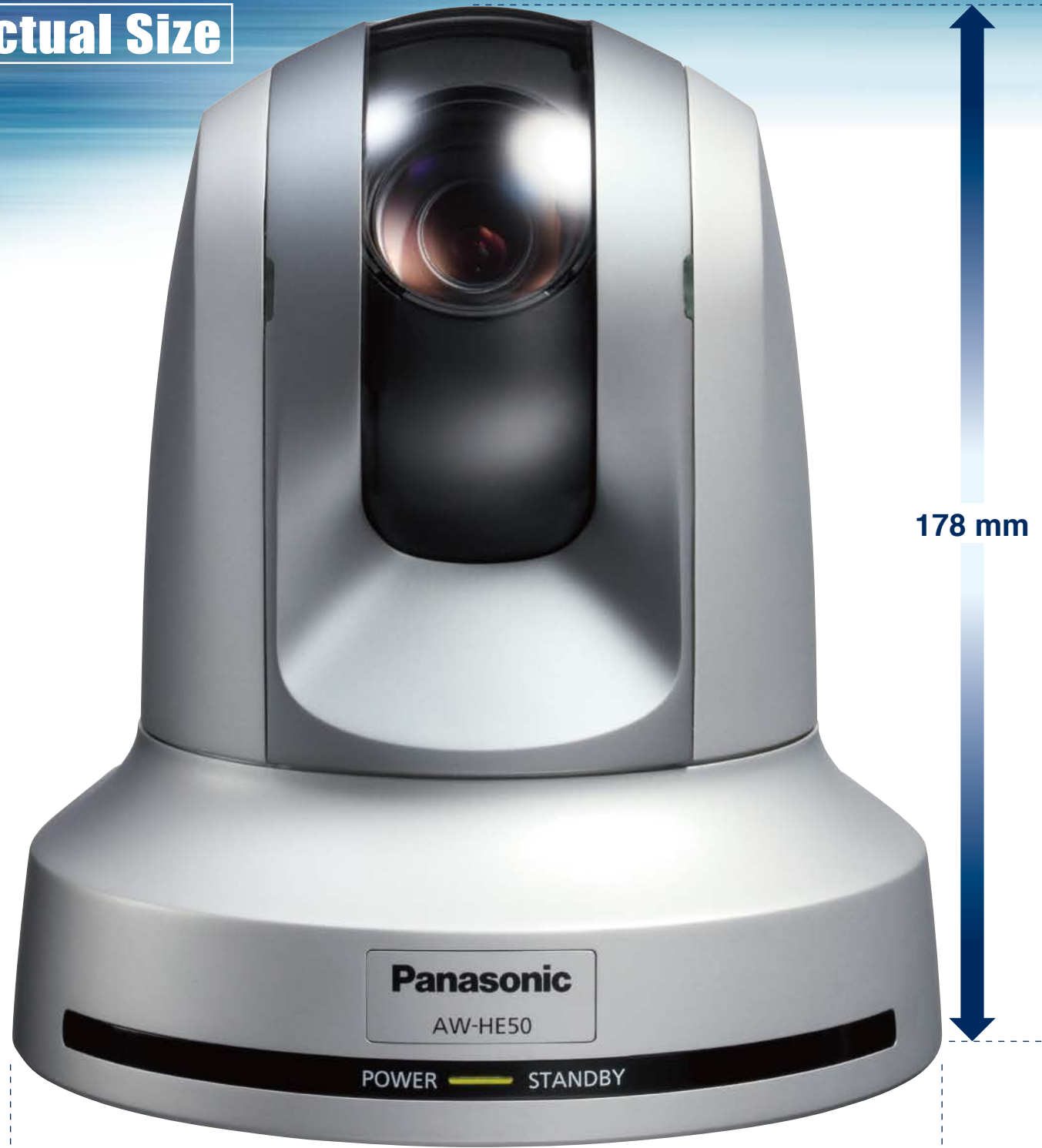
Remote Camera Controller
AW-RP50



Compact Live Switcher
AW-HS50



Actual Size



160 mm

178 mm

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

HD Integrated Camera
AW-HE50S **NEW**
[SDI Model]

HD Integrated Camera
AW-HE50H **NEW**
[HDMI Model]

Wireless Remote Controller (option)
AW-RM50
*Two AA size batteries required
(batteries not included)

Multi-interface Cable (option)
AW-CA20T6



HD 1080/50i, 720/50p

SD 576/50i

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

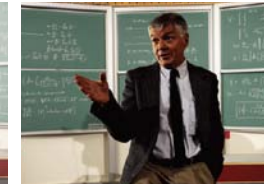
Innovative Features Deliver Realistic,
Production Quality HD Video

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.



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

Hybrid (2D/3D) Noise Reduction

The innovative Hybrid (2D/3D) 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



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

Flesh Tone Mode

Flesh Tone Mode produces a more pleasing and realistic picture.



Flesh Tone Mode:OFF



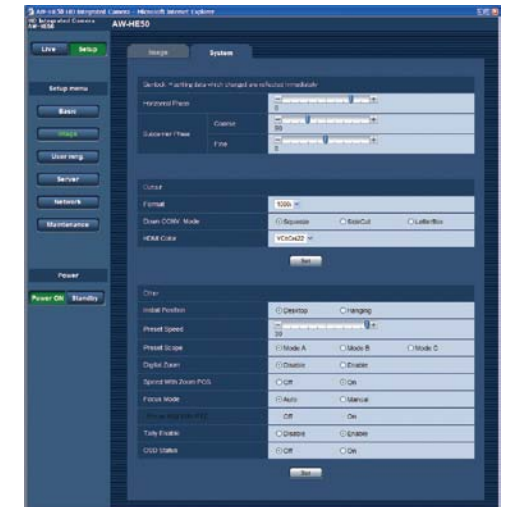
Flesh Tone Mode:ON

●The effectiveness may be affected by lighting, etc.

Setting camera menus with a PC

Camera menu 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

■ Rear
AW-HE50S



AW-HE50H



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

Remote Camera Controller AW-RP50 NEW

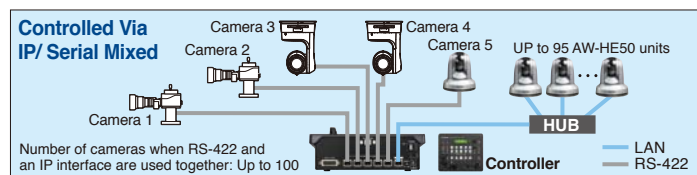
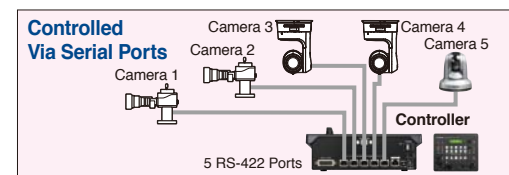
Simple to connect and operate, with both IP and Serial control functions

- 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.

Serial Control also Supported

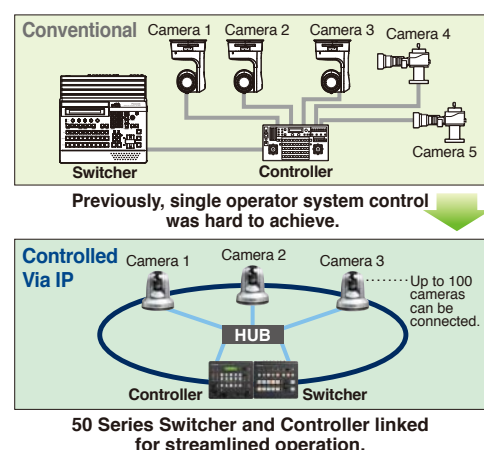
- Up to 5 existing Panasonic pan-tilt heads*, integrated cameras** and box cameras*** such as the AW-HE50S/H, etc. can be linked using the serial control (RS-422 protocol).

* 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.



AW-RP50 Main Specifications

Remote Camera Control	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 IP : Up to 100 cameras		TO PAN/TILT HEAD	RS422 (for Serial control)	RJ45 x 5
	Adjustment functions	Pan/Tilt (Joystick), Zoom (Seesaw Switch), Focus, Iris, Gain, Pedestal, Shutter, Detail, White Balance (Auto, Adjust R/B Gain), Black Balance (Auto, Adjust 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
Switcher Control	Connection	IP: 1	Power Supply	Operating Temperature	0 °C to 40 °C	
	Supported Switcher	AW-HS50		Operating Humidity	10 % to 90 % (no condensation)	
	Linkage	Camera Send, Tally Receive, Switcher BUS selection Pan/Tilt (Joystick) (PinP positioning etc...)		Dimensions (W x H x D)	210 mm x 65 mm x 177 mm [TBD] (excluding protrusions)	DC IN x 1
			Weight		Approx. 1.1 kg [TBD] (without options)	
			Standard Accessories		AC Adaptor, Power Cable	

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

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**



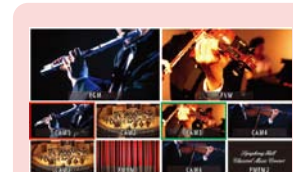
5 inputs and 3 outputs

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

H D	1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF 720/59.94p, 720/50p
S 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)



Audio Level Meter

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.

