

Panasonic
ideas for life

AW-E650
1/2" 3CCD Convertible Camera

AW-E350
1/3" 3CCD Convertible Camera

High Sensitivity, High Performance 3CCD Convertible Color Camera



AW-E650



AW-E350

Super high sensitivity and excellent

Panasonic's high-quality 3-CCD convertible cameras offer excellent system expandability for various camera shootings.

- Panasonic's exclusive clean 3D-DNR (Digital Noise Reduction) technology produces super crisp images.
- Newly developed 12 bit A/D DSP creates excellent image quality.
- 12 vector color matrix masking for fine color adjustment
- Chroma detail and dark detail correction
- Feature cards make the camera compatible for a wide range of use.
Two feature cards can be installed in the camera by using the optional additional card adaptor (AW-EX100).



AW-E650

- 1/2" 3-CCD high image quality
 - Horizontal resolution: 850lines
 - Signal to noise ratio: 67dB (DNR on) NTSC, 65dB (DNR on) PAL
 - High sensitivity: 2000lx, F14
 - Minimum illumination: 0.005 lx, 0.00005 lx (2 seconds CCD charge accumulation)
 - Compact size, light weight and low power consumption
- Size: 3-5/16" X 3-1/32" X 6-15/16"
(84W X 77H X 177D mm)
Weight: 1.9 lbs (0.86kg) Power: 12V DC, 12.6W



AW-E350

- 1/3" 3-CCD C-mount lens camera
 - Horizontal resolution: 850lines
 - Signal to noise ratio: 65dB (DNR on) NTSC, 63dB (DNR on) PAL
 - Minimum illumination: 0.015 lx, 0.00015 lx (2 seconds CCD charge accumulation)
 - Compact size, light weight and low power consumption
- Size: 3-5/16" X 3-1/32" X 6-1/8"
(84W X 77H X 156D mm)
Weight: 1.5 lbs (0.7kg) Power: 12V DC, 11.3W

Feature Cards



Studio camera system card
 • Output: Y/C, VBS
 • 5-inch EVF (Zebra, safety zone, and center marker included), and intercom input and output, and tally output compatible



Connecting card for Contact-type pan-tilt head
 • When WV-CB550 is used, panning, tilting, zooming, and focusing are possible. With a fixed-type camera, zooming and focusing are possible.



Digital connecting card for video equipment with SDI input jack
 • Output: Serial digital interface (SMPTE259M [4:2:2 SDI])
 • Zoom/focus of MD lens can be controlled by the controller WV-CB550.



Studio and SDI Cards integrated into one.
 • SDI Output: SMPTE259M compatible
 • Viewfinder connector mounted
 • Intercom jack and intercom audio volume mounted on the EVF interface bracket
 • EVF interface bracket included

Note:
 *Option cards AW-PB304/306/307/309/310 can not be used for AW-E650/E350.
 *Option cards AW-PB301/302/303 are not required for AW-E650/E350 because functions of these cards are included in AW-E650/E350.

Additional Card Adaptor



AW-EX100
 • Maximum two feature cards can be inserted in the camera by using optional feature card box AW-EX100 with AW-E650 and AW-E350.

picture quality 3-CCD camera

PERIPHERALS

Camera Remote Controllers



**Remote Control Unit
WV-RC7000A**

- Component, Y/C and composite
- Multi-core/Single co-axial (w/AW-ML600)
- Max.300m to camera w/viewfinder



**Remote Control Unit
WV-RC550**

- Y/C and composite
- Multi-core
- Max.100m to camera w/viewfinder



**Remote Control Box
WV-CB700A**

- Composite
- 10P control cable
- Max.10m



**Remote Control Box
WV-CB550**

- Composite
- Camera, pan-tilt control
- Max.300m (Belden8281)



**Multiplex Adaptor
AW-ML600**

- Composite
- Single co-axial cable
- Max.300m (Belden8281)

AC Adaptors

AW-PS301
Power:AC120V(NTSC), 220-240V(PAL)
Approx.34-44VA
For AW-RP301/305/501/505 and others

AW-PS505
Power:AC120V(NTSC),220-240V(PAL)
Approx. 77VA
For AW-E650/E350 and others

AW-PS300/AW-PS600
For AW-PH300A, PH350/AW-PH600




Pan-tilt heads/Controllers



**Indoor Pan-tilt Head
AW-PH350**

- 50 preset memories
- Composite/Component/SDI



**Multi-function Controller
AW-RP605**

- Full camera control



**Indoor Pan-tilt Head
AW-PH300A**

- 50 preset memories
- Composite



**Outdoor Pan-tilt Head/Housing
AW-PH600**

- 50 preset memories
- Composite/Component/SDI



**Indoor Pan-tilt Head
AW-PH500**

- Max. load: 15kg



**Control Panels
AW-RP501**

- One camera/pan-tilt

AW-RP505

- Five camera/pan-tilts

AW-RP301

- One pan-tilt

AW-RP305

- Five pan-tilt heads



**Multi-port hub unit
AW-HB505**

- Max. 5 pan-tilt systems




**Dial Up Adaptor
AW-DU600**

- Modem required
- Directly controllable pan-tilt/lens
- Up to 5 cameras

Live Switcher

AW-SW350


- 5 inputs w/5 frame synchronizers
- 9 types of wipe/3 types of soft edge
- Luminance key
- Still video capture



Signal Converter

AW-EX500

- 1 analog input (composite, Y/C component) and SDI
- R/G/B, SDI, SVGA, WEB, DV-DCPRO output by option card
- An additional card adaptor attachable
- Output: video (composite, component, RGB, Y/C-D-sub connector)



Lenses



<For AW-E655>
16XMD Lens **AW-LZ16MD73**
16XStudio Lens **AW-LZ16ST73**



<For AW-E750>
17XMD Lens **AW-LZ17MD9**
17XStudio Lens **AW-LZ17ST9**

Controllers

MD Lens
AW-LK30

1/2" Studio Lens
AW-LK50

2/3" Studio Lens
WV-LK36



Viewfinder

5" B/W viewfinder
WV-VF65B

Viewfinder mounting bracket
AW-Q40

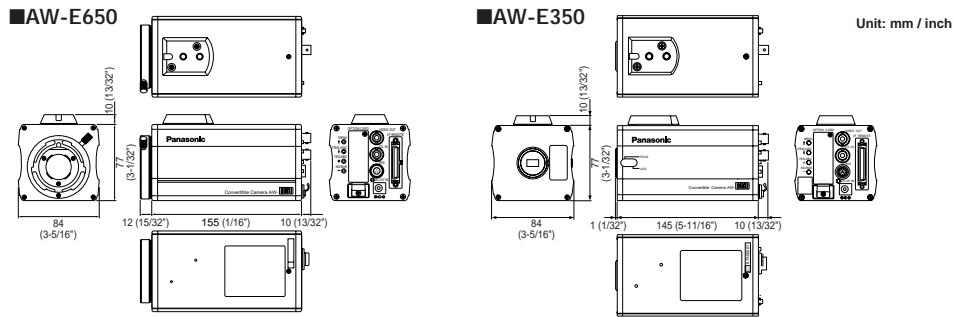


Cable list

Name	Number	Connection apparatus		Length	Note
Coaxial cable with special connector	AW-CA1T1	AW-PH600		1m	For SDI connection
DC power cable	AW-CA4T1	AW-PS505	AW-E350 etc. AW-SW350	3m	
Power cable	AW-CA8U30	AW-PS600	AW-PH600	30m	
Camera control cable for video signal	AW-CA16U10 / 20 / 30	AW-PH600	VTR, AW-RP501, AW-HB505 etc.	10m, 20m, 30m	VBS output, Component output, Camera Control
Pan-tilt control cable	AW-CA24U10 / 20 / 30	AW-PH600	AW-RP501, AW-CA26U15 etc.	10m, 20m, 30m	
Cable joint adaptor	WV-CA26T26	AW-E650 / E350	AW-CA26U15 etc.		Connects AW-CA50A26 to longer lengths
Studio cable (26P-26P)	WV-CA26U15 / 30 / 100	AW-E650 / E350	WV-RC550, WV-RC700A	15m, 30m, 100m	
RCB cable	AW-CA50T10	AW-E650 / E350	WV-CB700A	5m	Camera - RCB
For RCB cable extension	AW-CA50B10	AW-E650 / E350	AW-CA10B02 etc.	5m	Camera - RCB extension cable
RCB extension cable	WV-CA10B02 / 25 / 50	AW-CA50B10	WV-CB700A	2m, 25m, 50m	10P-10P
Lens extension cable	AW-CA12T12A		AW-E650 etc.	0.15m	12P-12P
RCU cable	AW-CA50A26	AW-E650 / E350	WV-RC550 etc.	15m	
RGB cable	AW-CA50T6	AW-E650 / E350	Monitor, VTR etc.	5m	BNC x 5 + S terminal
For RGB extension cable	WV-CA9T5 / 9	AW-EX500	Monitor etc.	5m	D-sub 9pin-BNC x 5 / D-Sub 9pin - D-sub 9pin
Contact type Pan-tilt head cable	AW-CA12T11	AW-PB308	WV-RC100	25m	
For WV-CB550 cable	AW-CA50TBNC	AW-E650 / E350	WV-CB550	2m	BNC coaxial cable is required.
Pan-tilt cable (for pan-tilt control panel)	AW-CA50T15, AW-CA50A15	AW-E650 / E350	AW-PH300A, AW-PH600	0.4m	Control panel, Composite signal / RS-232C (PC), Composite signal
	AW-CA50C15, AW-CA50D15		AW-PH600		Control panel, Component signal / RS-232C (PC), Composite signal
Pan-tilt cable	AW-CA50T29, AW-CA50C29	AW-E650 / E350	AW-PH350		Composite (T29) / Component (C29)
RS-232C pan-tilt cable	AW-CA28T9	AW-PH300A	PC	5m	Pan-tilt head is controlled by PC
RS-232C camera control cable	AW-CA50T9	AW-E650 / E350	PC	10m	Pan-tilt head is controlled by PC

RATINGS (NTSC [PAL])

		AW-E650	AW-E350
Image elements		1/2" IT type 3-CCD	1/3" IT type 3-CCD
Pixels	Total elements	Approx. 410,000 [470,000]	
	Effective elements	Approx. 380,000 [440,000]	
Imaging area		6.4HX4.8V (equivalent to 1/2")	4.8HX3.6V (equivalent to 1/3")
Scanning System		2:1 interlaced NTSC system [2:1 interlaced PAL system]	
Scanning Frequency		Horizontal=15.734kHz, Vertical=59.94Hz [Horizontal=15.625kHz, Vertical=50Hz]	
Lens mount		1/2" Standard Bayonet Mount	1/3" C Mount
Synchronize system		Internal/external synchronization	
Standard Illumination		2000 lx, F14	2000 lx, F9.5
Minimum Illumination		0.005 lx (F1.4) 0.00005 lx (F1.4) (2 sec.CCD accumulation)	0.015 lx (F1.4) 0.00015 lx (F1.4) (2 sec.CCD accumulation)
Signal-to-noise Ratio		67 dB (DNR on) [65 dB (DNR on)]	65 dB (DNR on) [63 dB (DNR on)]
Horizontal Resolution		850 lines	
Registration		0.05%	
Image Enhancer		Horizontal/vertical	
White Balance		A/B 2 memory AWC, ATW	
Black Balance		Self-adjusting	
Color Bar		SMPTE color bar (setup 0/7.5IRE) [EBU colour bar]	
Shutter Speed		OFF, 1/100 [1/120], 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 Synchro-scan ELC	
Gain		Manual: max. 72dB (0 to 30 dB in steps, Night Eye/H, Digital Gain 0 to 30 dB in 6 dB steps) Auto: max. 42dB (AGC 0 to 30 dB, Night Eye/H)	
Iris		Auto (Manual by RCU control)	
Video Output		Composite: 1 Vp-p/75 ohm (BNC, 50P connector) YC: Y 1Vp-p, C 0.286Vp-p [0.3Vp-p] (50P connector) Component: Y 1.0Vp-p, Pr/Pb 0.7Vp-p, RGB 0.7Vp-p/75 ohm (50P connector)	
Power		DC 12V	
Power Consumption		Approx. 11.8W	Approx. 11.3W
Operating Temperature		14 °F ~ 113F (-10 °C ~ +45 °C)	
Weight		Approx. 1.9 lbs (0.86kg)	Approx. 1.5 lbs (0.7kg)
Dimensions		3-5/16" X 3-1/32" X 6-15/16" (84W X 77H X 177D mm)	3-5/16" X 3-1/32" X 6-1/8" (84W X 77H X 156D mm)



Specifications are subject to change without notice.

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