

Official Worldwide Olympic Partner



60 Hz

PRELIMINARY

Multi-Purpose HD Box Camera

**AK-HC1800**

***High resolution, compact HD camera great for indoor/outdoor use, equipped with a newly developed 2.2-megapixel, 2/3-inch IT-3CCD***



***High resolution and operability optimal as a weather and information camera***

- **Equipped with a high resolution newly developed 2.2-megapixel, 2/3-inch IT-3CCD**  
With the uniquely developed CCD, Panasonic offers high sensitivity with reduced smear. Versatile in a wide range of applications such as broadcasting, the camera offers compatibility with myriads of video formats.
- **The Dynamic Range Stretch (DRS) function that optimally adjusts gamma correction**  
Optimally adjusts gamma correction in response to the varying degree of contrast. Reduces over and under exposure for high contrast images, i.e. outdoors.
- **Intelligent automatic adjust functions that reduces the necessity for operational maintenance**  
Realizes automatic white balance and gain control. The image is automatically adjusted depending on the subject and time of shoot, so there is little need for manned maintenance, and permits flexible operation.

## Features

### Newly developed 2.2-megapixel, 2/3-inch IT-3CCD

Panasonic has developed the 2.2-megapixel, 2/3-inch IT-3CCD that offers high sensitivity with reduced smear.

### High-Definition 1080/59.94i or 50i video output

The AK-HC1800 delivers detailed High-Definition 1080/59.94i or 50i images.

### A clear and crisp resolution with Panasonic's unique spatial offset technology and signal processing

Employs an advanced single-channel transfer system and spatial-offset processing unique to Panasonic. With an improved modulation depth for the high-bandwidth signal, Panasonic promises an exceptional resolution and reduced moire.

### 14-bit A/D converter, and the new 38-bit Digital Signal Processor (DSP)

With the newly developed LSI, Panasonic realizes versatile image processing offering high resolution images for a wide range of applications.

#### Dynamic Range Stretch (DRS) function

The new function, compatible gamma that optimally and in real-time adjusts the gamma correction, clearly reproduces high contrast images curtailing over and under exposure.

#### 12-vector variable matrix masking circuit

With the 12-vector variable matrix masking circuit, the camera will recognize each color individually permitting optimal saturation and hue.

#### Cine gamma curve

A film-like quality natural gradation expression and a rich color reproduction made possible with a custom gamma curve.

#### Color correction

Comes equipped with a hue preservation circuit that prevents color loss in brightly lit areas.

### Embedded with intelligent automatic adjust functions

#### Auto tracing white balance function

Automatically adjusts the white balance in even outdoor environments where the color temperature changes every second.

#### Automatic gain control\*

It not only has automatic iris control, but it also comes with a reduced shock, contiguous automatic variable gain control with a range of -6 dB to +72 dB. Moreover, the AGC allows you to choose between the normal mode, favor movement, favor clarity and user setup mode.

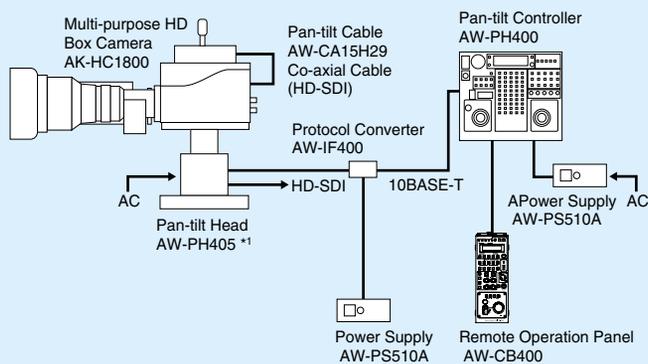
### Allowing you to build a flexible system

The light and compact, boxy AK-HC1800 allows you to build a flexible system in combination with a variety of Panasonic's indoor/outdoor pan-tilt systems. Because you can shoot remotely from various angles, it can be used for a multitude of applications such as a weather information camera, presenter link camera, and for sports event relays.

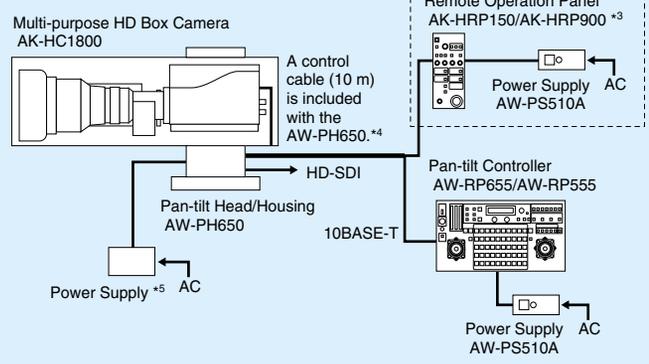
\*Conditions for automation of the AGC are as follows : (1) Automation can only function when the camera is used outdoors. (2) A photometry area excluding certain areas (i.e. sky) must be specified. (3) The automatic control will respond slowly, but it will perform quickly when the power is turned on or when the filter is to be changed. (4) The automatic control function will stop when the pan-tilt platform and lens are in use.

## System example

### Indoor pan-tilt system



### Outdoor pan-tilt system



\*1 Up to five Pan-tilt Head for one Pan-tilt Controller can be used. \*2 AW-RP655 can control an AK-HC1800 without AK-HRP150 or AK-HRP900. \*3 AK-HRP900 is not available in PAL (50 Hz) area. (Please ask to local Panasonic sales company for detail information.) \*4 An accessory cable may be used for the AK-HRP900. \*5 An AW-PH650 includes a power supply.

## Specifications

CCD	2/3" 2.2-megapixels IT-3CCD	M.T.F.	50 % (typ) (27.5 MHz)
Image sensing method	GBR image sensing method	Dynamic range	550 %
Total number of pixels	2 010(H) x 1 121(V)	Synchronize system	Internal and external synchronization (Tri-level SYNC/Black Burst)
Effective number of pixels	1 920(H) x 1 080(V)	Input	GENLOCK : BNC x 1, I/F : mini D-sub 15pin terminal
Optical prism	F1.4 Prism	Output	HD-SDI : BNC x 1
Optical filter	NDx : 100 %, 25 %, 6.3 %, 1.6 %	Input/output	Lens aperture connector, lens zoom focus connector
Lens mount	2/3" Bayonet mount	Interface	Asynchronous EIA-422
Output format	1080i/59.94i, 50i	Operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Sensitivity	F10 : 60 Hz (at 2 000 lx, 89.9 % white)	Storage temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Minimum illumination	0.02 lx	Power consumption	Approx. 17 W (DC12 V)
Gain	72 dB by using gain up circuit, CCD accumulation, and horizontal/vertical addition (minimum illumination: 0.02 lx)	Dimensions (W x H x D)	90 mm x 117 mm x 160 mm (3-9/16" x 4-5/8" x 6-5/16") (excluding protrusions)
S/N	60 dB (typ)	Weight	Approx. 1.5 kg (3.3 lbs)

# Panasonic

Panasonic Broadcast & Television Systems Co.

Unit of Panasonic Corporation of North America

[www.panasonic.com/broadcast](http://www.panasonic.com/broadcast)

Government Sales: phone: 201-348-7587

Headquarters: 3 Panasonic Way, 4E-7, Secaucus, NJ 07094; phone: 201-348-5300

Eastern Zone: 3 Panasonic Way, 4E-7, Secaucus, NJ 07094; phone: 201-348-7196

Western Zone: 3330 Cahuenga Blvd. West, Los Angeles, CA 90068; phone: 323-436-3608

Printed in Japan

AK-JABHC180008