



1080p HDR studio camera system

AK-HC3900

Designed for broadcasting, event and is equipped with a large sensor for high sensitivity and video quality. By combining with AK-HCU250PJ/PSJ/ HCU250EJ/ESJ Camera Control Unit (CCU) and the AK-HRP250GJ Remote Operation Panel (ROP), it is possible to construct a long-distance optical Fiber transmission studio camera system at low cost.

Key Features

Includes a large 4K-CMOS sensor, and achieves a high sensitivity ofF10 (2000 lx) and low noise with an S/N ratio of 62 dB (when using the High Sense Mode).

Includes CAC (Chromatic Aberration Compensation), skew reduction, and DRS (Dynamic Range Stretcher) functions.

Includes Digital Extender function (2x).

Supports HDR/BT.709 in HD mode as standard and HDR/BT.2020 in 4K mode. *When 4K upgrade kit is installed on AK-HC3900G and the AK-HCU250

4K upgrade enables 4K video to be output with a horizontal resolution of 2,000 TV lines. *When 4K upgrade kit is installed on AK-HC3900G and the AK-HCU250

Panasonic CONNECT









AK-HC3900

https://latam.connect.panasonic.com /mx/es/productos/broadcast-yproav/ak-hc3900

	DC 12 V (when using an external power supply)
	DC 190 V (when AK-HCU250PJ/HCU250PSJ/HCU250EJ/ HCU250ESJ is connected)
General -> Power Consumption	82 W (maximum, when connecting to an external 12 V and including supply to an
	externally connected devices)
	92 W (maximum, when AK-HCU250PJ/HCU250PSJ/HCU250EJ/ HCU250ESJ is connected
General -> Operating Temperature	and including supply to an externally connected devices) −10 °C to 45 °C (14 °F to 113 °F)
deneral -> Operating temperature	(Preheating required under a temperature 0°C (32 °F) or below)
General -> Operating Humidity	85% or less (relative humidity)
General -> Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
General -> Weight	Approx. 4.0 kg (8.80 lbs.) (body only, excluding the accessories)
General -> Dimensions	W151 mm x H 267 mm x D 369 mm
	(5-31/32 inches x 10-17/32 inches x 14-17/32 inches) (excluding protrusions)
Camera Unit -> Pickup Device	11.14 million pixels, MOS Sensor
Camera Unit -> Optical Filter -> ND	Clear, 1/4, 1/16, 1/64
Camera Unit -> Lens Mount	2/3-type bayonet
Camera Unit -> Sensitivity	wo shooting modes
,	[HIGH SENS] F10 (59.94 Hz)/F11 (50 Hz)
	[NORMAL] F6 (59.94 Hz)/F7 (50 Hz) 2000 lx, 3200 K, when white reflectivity is 89.9%
Camera Unit -> Horizontal Resolution	-2000 TV lines or above (center, when using AK-HUC01)
> 4K	
Camera Unit -> Horizontal Resolution > HD	-1000 TV lines or above (center)
Camera Unit -> S/N	62 dB or above
Camera Unit -> Horizontal Modulation	n50% or above (27.5 MHz)
Camera Unit -> Gain Switching -> HIGH SENS	-6, -3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36
Camera Unit -> Gain Switching -> NORMAL	-6, -3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36
Camera Unit -> Shutter Speed -> [59.94i]/[59.94p] mode	1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000
Camera Unit -> Shutter Speed -> [50i]/[50p] mode	1/60, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000
Camera Unit -> Shutter Speed -> [29.97p] mode	1/48, 1/50, 1/60, 1/96, 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000
· · ·] 1/48, 1/50, 1/60, 1/96, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000
Camera Unit -> Shutter Speed ->	1/48, 1/50, 1/60, 1/96, 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000
[23.98p] mode	
	1920 x 1080/59.94p/50p/29.97p/25p/23.98p
	1920 x 1080/59.94p/50p/29.97p/25p/23.98p *when using AK-HUC01
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Camera Unit Video Input/Output - > < HD-SDI1 >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω
Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1
Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω VBS signal 1 V [p-p], 75 Ω XLR x 1, 3-pin (female)
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 >	*when using AK-HUC01 $3840 \times 2160/59.94p/50p/29.97p/25p/23.98p$ BNC x 1 $3G/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$ BNC x 1 $3G/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$ BNC x 1 $800000000000000000000000000000000000$
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 >	*when using AK-HUC01 $3840 \times 2160/59.94p/50p/29.97p/25p/23.98p$ BNC x 1 $3G/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$ BNC x 1 $3G/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$ BNC x 1 $80/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$ BNC x 1 $80/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$: VBS signal 1 V [p-p], $80/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$: VBS signal 1 V [p-p], $80/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$: VBS signal 1 V [p-p], $80/1.5G\text{-SDI: }0.8 \text{ V [p-p], }90/1.5G\text{-SDI: }0.8$
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal	*when using AK-HUC01 $3840 \times 2160/59.94p/50p/29.97p/25p/23.98p$ BNC x 1 $3G/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$ BNC x 1 $3G/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$ BNC x 1 $3G/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$ BNC x 1 $Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G\text{-SDI: }0.8 \text{ V [p-p], }75 \Omega$: VBS signal 1 V [p-p], 75Ω : VBS signal 1 V [p-p], 75Ω 3 XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω VBS signal 1 V [p-p], 75 Ω XLR x 1, 3-pin (female) // switchable : 0 dBu :-60 dBu, -40 dBu, or -20 dBu menu can be selected XLR x 1, 3-pin (female)
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω : VBS signal 1 V [p-p], 75 Ω : VBS signal 1 V [p-p], 75 Ω XLR x 1, 3-pin (female) // switchable : 0 dBu :-60 dBu, -40 dBu, or -20 dBu menu can be selected XLR x 1, 3-pin (female) // switchable
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω : VBS signal 1 V [p-p], 75 Ω XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC 1 > Terminal	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω *VBS signal 1 V [p-p], 75 Ω *XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC > Terminal Audio Input/Output - > < MIC > Terminal	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω *VBS signal 1 V [p-p], 75 Ω *XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected *XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC > Terminal Audio Input/Output - > < OPT FIBER > Terminal	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω *VBS signal 1 V [p-p], 75 Ω *XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected *XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected
[23.98p] mode Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC > Terminal Audio Input/Output - > < MIC > Terminal Other Input/Output - > < OPT FIBER > Terminal Other Input/Output - > < LENS > Terminal	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω *VBS signal 1 V [p-p], 75 Ω *XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected *XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Audio Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC > Terminal Audio Input/Output - > < OPT FIBER > Terminal Other Input/Output - > < LENS > Terminal	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu : 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω VBS signal 1 V [p-p], 75 Ω XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected XLR x 1, 5-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected IXLR x 1, 5-pin, female type Optical composite connector x 1
Camera Unit Video Input/Output - > < HD-SDI1 > Terminal Video Input/Output - > < HD-SDI2 > Terminal Video Input/Output - > < AUX > Terminal Video Input/Output - > < MIC 2 > Terminal Audio Input/Output - > < MIC > Terminal Audio Input/Output - > < MIC > Terminal Other Input/Output - > < OPT FIBER > Terminal Other Input/Output - > < LENS >	*when using AK-HUC01 3840 x 2160/59.94p/50p/29.97p/25p/23.98p BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω BNC x 1 Functions as terminal/ terminal by switching the setting in the menu: 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω VBS signal 1 V [p-p], 75 Ω XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected XLR x 1, 3-pin (female) // switchable : 0 dBu : -60 dBu, -40 dBu, or -20 dBu menu can be selected IXLR x 1, 5-pin, female type Optical composite connector x 1

Other Input/Output - > < LAN > Terminal

RJ-45 x 1