



The CCU supports UHD and HD simultaneous output while still having a compact size. HD mode enables output in 240p, 180p and 120p during normal filming.

## AK-UCU600

With the AK-UCU600 Camera Control Unit (CCU), uncompressed longdistance transmission of 4K/HD video signals via optical fiber is supported. The AK-HRP1000GJ/1005GJ Remote Operation Panels (ROP) are equipped with a color LCD display that provides excellent visibility and functions for quick response. This system achieves high-quality video and excellent operability. In cases where power is supplied by the CCU, it is possible to transmit at a long distance of up to approx. 2,000 m between the camera and the CCU. The distance can be extended up to 10,000 m by providing a local power supply at the camera head and using general-purpose single mode optical fiber. Between the CCU and the ROP, in addition to a dedicated serial line, IP connection via LAN cable is also supported.

### Key Features

Contains a dual UHD 12G-SDI system, and supports 3G-SDI quad link and two-sample interleave

Optical fiber transmission of uncompressed video signals over a distance of approx. 2,000 m between camera and CCU

Supports TICO over SDI (4K over 3G-SDI) output (4K signal can be transferred by a conventional 3G-SDI cable)

Supports HDR/SDR simultaneous output and HDR BT2020/B709 simultaneous output

Supports IP streaming (100 Base-T)





## AK-UCU600

<https://ap.connect.panasonic.com/id/en/ak-ucu600>

<b>Camera Control Unit (CCU) -&gt; General</b>	AK-UCU600PJ/AK-UCU600PSJ 100 V - 120 V AC, 50 Hz/60 Hz
<b>-&gt; Power Supply</b>	AK-UCU600EJ/AK-UCU600ESJ 100 V - 240 V AC, 50 Hz/60 Hz
<b>Camera Control Unit (CCU) -&gt; General</b>	500 W (Without camera connected: 90 W)
<b>-&gt; Power Consumption</b>	
<b>Camera Control Unit (CCU) -&gt; General</b>	240 V AC (tolerance: 5 %), 1.46 A, 50 Hz / 60 Hz
<b>-&gt; Capacity for Supplying Power to a Camera</b>	
<b>Camera Control Unit (CCU) -&gt; General</b>	0 °C to 40 °C (32 °F to 104 °F)
<b>-&gt; Operating Temperature</b>	
<b>Camera Control Unit (CCU) -&gt; General</b>	10 % to 90 % (no condensation)
<b>-&gt; Humidity</b>	
<b>Camera Control Unit (CCU) -&gt; General</b>	Approx. 8.9 kg (19.6 lb)
<b>-&gt; Weight</b>	
<b>Camera Control Unit (CCU) -&gt; General</b>	W 424 mm x H 88 mm x D 401 mm (16-5/8 inches x 3-7/16 inches x 15-13/16 inches)
<b>-&gt; Dimensions</b>	(excluding protrusions)
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; Video Output</b>	3G/HD-SDI:5 lines (embedded audio is supported only for HD signals)
	12G/6G/3G/HD-SDI:2 lines
	HD-SDI:1 line (shared with picture monitor output)
	Analog composite:2 lines (1 line shared with picture monitor output <sup>*1</sup> )
<b>Camera Control Unit (CCU) -&gt; Input/Output</b>	HD-SDI 1 line (HD TRUNK output)
	3G/HD-SDI 1 line (TICO output)
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; Return Input</b>	3G-HD/HD/SD-SDI 4 lines (RET1 input has active-through output)
	Analog composite 1 line
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; Prompter Input</b>	HD-SDI 1 line (with active-through output)
	Analog composite 2 lines (through output of 1 and input of 2 share the connector <sup>*1</sup> )
	It is not terminated when the unit is turned OFF. No through output.
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; Reference Input</b>	BB (black burst) / tri-level <sup>*3</sup> : 1 line
	(automatic termination, connect to upper connector; BB signal and tri-level <sup>*3</sup> signal automatically recognized, with loop-through output)
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; Microphone Output</b>	0 dBm/600 Ω, 2 lines (XLR, 3-pin, male)
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; Communication</b>	Intercom input/output (ENG / PROD, 0 dBm, 600 Ω (4 W) / 1 V [p-p], 200 Ω (RTS), 4 W / RTS / CLRCOM):2 lines <sup>*1</sup>
	PGM input (0 dBm/600 Ω):2 lines <sup>*1</sup>
	Tally input (red, green, yellow):1 input each
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; AUX</b>	WFM control
	6-bit (open collector output <sup>*1</sup> , terminal shared with camera microphone gain setting <sup>*1</sup> )
	Camera microphone gain setting input
	5-bit (photo-coupler input <sup>*1</sup> , terminal shared with WFM control <sup>*1</sup> )
	Down-conversion system setting input 2-bit (photo-coupler input)
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; TRUNK</b>	RS-422 / RS-232C 2 lines
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; ROP</b>	RS-422
	1 line, 16 V DC output (only one of this and FRONT/REAR ROP can be selected at one time via the menu or the [ROP FRONT/REAR] selection switch on the front panel)
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; MSU</b>	RS-422 1 line, GPI for control
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; LAN TRUNK</b>	LAN connection with camera side via an optical cable <sup>*4</sup>
	1 line, 100BASE-TX, 1000BASE-T
<b>Camera Control Unit (CCU) -&gt; Input/Output -&gt; LAN</b>	Personal computer connection for distribution via the Web <sup>*4</sup>
	1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer)
<b>IP/12G/3G Interface Kit AK-NP600G -&gt; General -&gt; Operating Temperature</b>	->0 °C to 40 °C (32 °F to 104 °F)
<b>IP/12G/3G Interface Kit AK-NP600G -&gt; General -&gt; Operating Humidity</b>	->10% to 90% (no condensation)
<b>IP/12G/3G Interface Kit AK-NP600G -&gt; General -&gt; Weight</b>	->Approx. 284 g (0.63 lbs) (including radiator fins)
<b>IP/12G/3G Interface Kit AK-NP600G -&gt; General -&gt; Dimensions</b>	->W 175.5 mm x H 28.8 mm x D 138.5 mm
	(6-29/32 inches x 1-1/8 inches x 5-7/16 inches)

<b>IP/12G/3G Interface Kit AK-NP600G</b> - BNC x 1, 12G / 6G / 3G / 1.5G HD SDI: 0.8 V [p-p], 75 Ω
> <b>Input/Output</b> - > < <b>UHD/HS/HD SDI</b>
<b>OUT1</b> > terminal
<b>IP/12G/3G Interface Kit AK-NP600G</b> - BNC x 1, 12G / 6G / 3G / 1.5G HD SDI: 0.8 V [p-p], 75 Ω
> <b>Input/Output</b> - > < <b>UHD/HS/HD SDI</b>
<b>OUT2</b> > terminal
<b>IP/12G/3G Interface Kit AK-NP600G</b> - BNC x 1, 3G / 1.5G HD SDI: 0.8 V [p-p], 75 Ω
> <b>Input/Output</b> - > < <b>UHD/HS/HD SDI</b>
<b>OUT3</b> > terminal
<b>IP/12G/3G Interface Kit AK-NP600G</b> - BNC x 1, 3G / 1.5G HD SDI: 0.8 V [p-p], 75 Ω
> <b>Input/Output</b> - > < <b>UHD/HS/HD SDI</b>
<b>OUT4</b> > terminal
<b>IP/12G/3G Interface Kit AK-NP600G</b> - BNC x 1, 1.5G HD SDI when HD TRUNK, 3G / 1.5G HD SDI when TICO: 0.8 V [p-p], 75 Ω
> <b>Input/Output</b> - > < <b>HD TRUNK/TICO</b>
<b>OUT</b> > terminal
<b>IP/12G/3G Interface Kit AK-NP600G</b> - BNC x 1, 1.5G HD SDI: 0.8 V [p-p], 75 Ω
> <b>Input/Output</b> - > < <b>HD SDI/PROMPT</b>
<b>IN</b> > terminal
<b>IP/12G/3G Interface Kit AK-NP600G</b> - SFP+ x 1, 10GBASE-LR
> <b>Input/Output</b> - > < <b>SFP+1</b> > slot
<b>IP/12G/3G Interface Kit AK-NP600G</b> - SFP+ x 1, 10GBASE-LR
> <b>Input/Output</b> - > < <b>SFP+2</b> > slot
<b>IP/12G/3G Interface Kit AK-NP600G</b> - RJ-45 x 1
> <b>Input/Output</b> - > < <b>LAN2</b> > terminal
<b>IP/12G/3G Interface Kit AK-NP600G</b> -> Pillar (M3 x H20) x 1, Options rear panel x 1, Power cable x 1, Heat-transfer sheet x 1,
<b>Bundled Items</b> askets x 2
<b>Footnote Description</b>

Depending on the setting, only one of them can be selected at one time.

For details on output formats, please see the "Supported formats".

The BB (black burst) signal and tri-level sync signal of the reference input are recognized automatically.

IP video cannot be transmitted when [CCU MODE] is set to [2160/23.98p], [2160/23.98PsF], [1080/23.98p], or [1080/23.98PsF].