## Specifications

ഹാരവ	Ctudia	Handy	Camera

AK-HC3800 Studio Han	
Power Supply:	12 V DC (during external power supply operation) 190 V DC (when CCU is connected)
Power Consumption:	25 W (during external power supply operation, camera only) 53 W (maximum power during external power supply
	operation when maximum power supplied for each
	output connector while all accessories are connected)
	60 W (maximum power when CCU is connected and
	maximum power supplied for each output connector
	while all accessories are connected)
Operating Temperature:	-10 °C to 45 °C (14°F to 113°F) Preheating required at temperatures below 0°C (32°F)
Storage Temperature:	-20 °C to 60 °C (-4°F to 140°F)
Operating Humidity:	10 % to 85 % (no condensation)
Weight:	Approx. 3.7 kg (approx. 8.16 lb)
Dimensions (W x H x D):	135 mm x 260 mm x 367.5 mm
	(5-5/16 inches x 10-1/4inches x 14-7/16 inches) excluding protrusions
Pickup Device:	2/3-type 2.2 million pixel IT, CCD x 3
System:	GBR pickup system
Color Separation Optical	system: f/1.4 prism
Optical Filter:	ND: Clear, 1/4, 1/16, 1/64
Lens Mount:	Bayonet type
Output standard:	SMPTE 292M
Sensitivity:	F11 (59.94 Hz) F12 (50 Hz)
Horizontal Resolution:	1100 TV lines
S/N:	60 dB or higher
Horizontal Frequency:	33.716 kHz, 1125 line frame (59.94 Hz) 28.125 kHz, 1125 line frame (50 Hz)
Vertical Frequency:	59.94 Hz or 50 Hz, interlace
MIC Input:	-60 dBu to 4 dBu (XLR 3-pin female x 2) Gain selected by camera menu
Intercom:	XLR 5-pin female x 1
	Input: -60 dBu to -20 dBu
	Output: 100 mW max.
HD SDI Output:	BNC x 2 (HD SDI 1/HD SDI 2)
	HD signal = $0.8 \text{ V [p-p]}$ , $75 \Omega$
	The HD SDI 2 signal output can be added to the regular images using the camera menu item setting
	and switched to the VF or RET image output.
Prompter Output:	BNC x 1, VBS signal = 1.0 V [p-p], 75 Ω
DC OUT:	12 V, MAX. 1A
RET CONTROL Terminal	: Round 6 pin x 1
VF:	Round 20 pin x 1, D-Sub 29 pin x 1
Power Switching:	CCU, OFF, EXT
USER 1/2/3:	Functions specified by menu items can be assigned to the switch.
RET A/B Selection:	For selecting the return signal
RET/PTT Switching:	RET, PPT
Gain Selection*1:	LOW, MID, HIGH
Output Selection*1:	CAM, BAR, TEST
White Balance Mode*1:	A, B, preset
Shutter Speed Selection*1	: 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000
Intercom:	MIC ON/OFF, receiving level, or PGM level
MIC Setting:	MIC power, MIC gain, MIC1 selection
*1: When the CCU is conne	cted, the selection functions cannot be used. Control is

<sup>\*1:</sup> When the CCU is connected, the selection functions cannot be used. Control is performed from the ROP.

## AK-HCU200 Camera Control Unit (CCU)

	milion Griff (GGG)
Power Supply:	100 V to 240 V AC, 50/60 Hz
Power Consumption:	170 W (Without CAMERA connected: 32 W)
Capacity for Supplying P	ower to a Camera: 190 V DC, 0.6 A
Operating Temperature:	0 °C to 40 °C (32 °F to 104 °F)
Operating Humidity:	10 % to 90 % (no condensation)
Dimensions (W x H x D):	424 mm × 88 mm × 400 mm (16-11/16 inches × 3-7/16 inches × 15-3/4 inches) Excluding protrusions
Weight:	Approx. 6.6 kg (approx. 14.6 lb)
Video Output:	HD SDI/SD SDI: 4 lines (2 lines shared with picture monitor output*2) Analog composite: 1 line (1 line shared with picture monitor output*2)
Return Input:	HD SDI/SD SDI: 2 lines (switched depending on the setting) VBS: 1 line
Prompter Input:	1 line, Analog composite
Reference Input:	1 line (1 loop-through line) Black burst/tri-level*3
Microphone Output:	2 lines (XLR, 3-pin, male), 0 dBm/600 Ω
Intercom:	XLR, 5-pin, female Input: -55 dBu to -10 dBu Output: 100 mW (max.)
COMMUNICATION:	Intercom input/output: 2 lines (1/ $2^{*2}$ ) (0 dBm, 600 $\Omega$ , RTS/4W*2) PGM: 1 line, input (0 dBm/600 $\Omega$ ) Tally input: Red, Green, 1 input each
ROP interface:	RS-422, 1 line, 12 V output
MSU interface:	RS-422, 1 line, GPI for control
LAN port:	1 line (10Base-T/100Base-TX, RJ45, crossover cable, category 5 or above) For computer connection

## **AK-HRP200G Remote Operation Panel (ROP)**

Power Supply:	12 V DC
Power Consumption:	4.2 W
Operating Temperature:	0 °C to 40 °C (32 °F to 104 °F)
Storage Temperature:	-20 °C to 60 °C (-4 °F to 140 °F)
Operating Humidity:	90 % or less
Dimensions (W x H x D):	92 mm x 308 mm x 55 mm
	(3-5/8 inches x12-1/8 inches x 2-3/16 inches)
	excluding protrusions
Weight:	Approx. 1.3 kg (approx. 2.87lb)
CCU Control:	Control signals (camera, CCU control)
	<ul> <li>Power supply (12 V DC)*4</li> </ul>
	Tally control signal
PREVIEW control:	Contact output
Maximum cable length:	50 m (164 ft)

<sup>\*4:</sup> Can be provided from CCU or AC adapter

## AK-HVF70G 17.8 cm (7 inch) LCD Color Viewfinder

Power Supply:	DC 12 V (supplied by the camera)
Power Consumption:	10 W
Operating Temperature:	0 °C to 45 °C (32 °F to 113 °F)
Storage Temperature:	–20 °C to 60 °C (–4 °F to 140 °F)
Operating Humidity:	10% to 85% (no condensation)
Dimensions (W x H x D):	243.5 mm x 212 mm x 172 mm (9-19/32 inches x 8-11/32 inches x 6-25/32 inches) (with hood attached) 243.5 mm x 212 mm x 85 mm (9-19/32 inches x 8-11/32 inches x 3-11/32 inches) (without hood)
Weight:	Approx. 1.6 kg (approx. 3.53 lb) (without hood)
Panel Size:	177.8 mm (7.0 inches)
Number of Pixels:	1024 x 600 (WSVGA)
Display Colors:	Approx. 16,200,000 colors
Operation Panel:	POWER switch x 1, MENU button x 1 SELECT dial x1, Function buttons x 3 Picture adjusting knobs x 3 ([BRIGHT], [CONTRAST], [PEAKING])
Connectors:	Camera I/F connector (D-Sub 29-pin x 1)

<sup>\*2:</sup> Depending on the setting, only one of them can be selected at one time.
\*3: The black burst signal and tri-level sync signal of the reference input are recognized automatically.