Ikegami image

Ikegami

HUNGRY FOR DETAILS

IKEGAMI IS A LEADING MANUFACTURER of specialized cameras, image processing and transmission equipment. Ikegami was founded in 1946 in Tokyo, Japan. Today around 800 employees are working in 3 factories and 9 sales and service organizations all over the world.

Ikegami has consistently created the most advanced products in all image processes, namely image, transmission, processing, recording and display. Ikegami Electronics (Europe) GmbH in Neuss, Germany, was founded in 1970 and it is the sales and service organization for Europe and Africa.

Ikegami has an office in the UK, a regional office in Dubai and works with distributors, system integrators and dealers throughout Europe, Middle East & Africa.

EMMY AWARDS

1981 Development of Digital Computers for automatic adjustment of colour studio cameras

1983 Development of the EC-35 Electronic Cinematography Camera

1994 Development of Skin-Tone Detail, Edge Control Enhancement Technology

2010 Development and Production of Portable Tapeless Acquisition

BROADCAST SYSTEMS

Reduced

Superior camera technology provides exceptional wide colour space and the depth of field for studio and outdoor productions

REVIVE COLOURS AND EMOTIONS

10
BROADCAST

NEW UHK-430

4K HDR

UNICAM XE

4K Ultra High Definition 3CMOS Digital Camera System

- 2/3-inch 3 CMOS native 4K sensor
- Conventional B4 mount lenses
- No colour aliasing due to 3 chip technology
- Flexibility with swappable optical blocks
- 16 axis colour corrector and focus assist powered by Next-Generation High-Speed Video Processor Asic AXII
- Future expandibility
- 4K/2K simulcast operation
- Various interfaces like Quad 3G-SDI,12G SDI, VoIP, Gigabit ethernet data trunk
- Wide colour space and HDR

- Compact, lightweight and userfriendly
- 40 Gb/s transmission via SMPTE Hybrid Fibre Cable up to 4 km
- RGB 4:4:4 for high quality Chroma keying

First in Ikegami's next-generation Unicam XE series, the UHK-430 employs three newly-developed 4K-native 2/3 inch CMOS sensors which provide full 3840 x 2160 ultra-high definition resolution plus the depth of field required for studio and outdoor production. The camera is equipped with a B4 bayonet mount compatible with 2/3 inch HD lenses. An optional SE-U430 expander accommodates large studio or OB lenses.

UNICAM XE

RELATED ITEMS:
CCU-430 | VFL-201D | VFL-701D | VFE-741D | OCP-300 | MCP-300 | SE-U430 | T-430

Ikegami

RATINGS / PERFORMANCE UHK-430		
Image Sensor		2/3-inch 3CMOS native 4K
Scanning System	3840 x 2160	59.94 p / 50 p, 3840 x 2160 px
	1920 x 1080	119.88 p / 100 p / 59.94 p / 50 p / 29.97 p / 25 p / 23.98 p
Sensitivity		F11 @ 4K / 50 p, F11 @ HD / 50 i, F10 @ 4K / 60 p, F10 @ HD / 59.54 i at 2000 lx (White reflection 89.9 %)
S/N Ratio		Full-HD 62 dB (typ.)
Limiting Resolution		2000 TV lines (typ.) 4K / 60 p, 1000 TV lines (typ.) HD
ND Optical Filter Disc		Clear, 1/4, 1/8, 1/16, 1/64
CC Optical Colour Compensation		3200 K, 4300 K, 6300 K; Cross, Option
Modulation Index		35% (typ.) @ 4K / 60 p, 60% (typ.) @ HD
DC Utility Power output		UHK-430M: HR10A-4pin (x1): DC 12 V 1.0 A(max); UHK-430S: D-Tap (x1) DC12 V 1.5 A (max)
Dimensions / Weight		W 148.5 mm x H 243 mm x D 340 mm, 4.6 kg
Power Consumption		55 W

NEW UHK-435
4K HDR

UNICAM **XE**

4K Ultra High Definition 3CMOS Digital Studio Box Camera System

- 2/3-inch 3 CMOS native 4K sensor
- Conventional B4 mount lenses
- No colour aliasing due to 3 chip technology
- Future expandibility
- 16 axis colour corrector and focus assist
- Ultra wide-bandwidth fibre transmission
- 4K/2K simulcast operation and HD cut out of the 4K picture

- Various interfaces like Quad 3G-SDI, 12G SDI, VoIP, Gigabit ethernet data trunk
- Wide colour space and HDR

The UHK-435 is the world's first 2/3-inch 3-CMOS sensor 4K/HD studio camera. It captures the extended depth of field required for studio and outdoor production and can be used with B4 bayonet-mount large studio or OB lenses. The camera delivers wide dynamic range and wide colour gamut, fully supporting HLG (Hybrid Log-Gamma) conforming to HDR International Standard (ITU-R BT). UNICAM XE series peripherals such as the CCU-430 camera control unit, VFL-701 D 7-inch full HD LCD viewfinder and 7.4-inch OLED viewfinder are fully compatible with the UHK-435. The viewfinder can be positioned close to the extended line of the optical axis. Interfaces are available for a wide range of signal protocols including Quad 3G-SDI, 12G SDI and IP.

Backside Panel

RELATED ITEMS:
CCU-430 | VFL-701D | VFE-741D | OCP-300 | MCP-300

RATINGS / PERFORMANCE UHK-435		
Image Sensor		2/3-inch 3CMOS native 4K
Scanning System	3840 x 2160	59.94 p / 50 p
	1920 x 1080	119.88 p / 100 p / 59.94 p / 50 p / 29.97 p / 25 p / 23.98 p
Sensitivity		F11 @ 4K / 50 p, F11 @ HD / 50 i, F10 @ 4K / 60 p, F10 @ HD / 59.54 i at 2000 lx (White reflection 89.9 %)
S/N Ratio		Full-HD 62 dB (typ.)
Limiting Resolution		2000 TV lines (typ.) 4K / 60 p, 1000 TV lines (typ.) HD
ND Optical Filter Disc		Clear, 1/4, 1/8, 1/16, 1/64
CC Optical Colour Compensation		3200 K, 4300 K, 6300 K; Cross, Option
Modulation Index		35 % (typ.) @ 4K / 60 p, 60 % (typ.) @ HD
DC Utility Power output		(Option)
Dimensions / Weight (T.B.A.)		W 315 mm x H 328.5 mm x D 398 mm, 17 kg

NEW CCU-430

4K HDR

UNICAM XE

The CCU-430 enables full control of the UHK-430 4K camera including optional 12G-SDI connectivity. CCU and camera can be connected up to 4km via SMPTE hybrid camera cable carrying full-bandwidth video, audio, control data and camera power. Where local power is available for the camera, the CCU-430 can be linked up to 10km via dark fibre. A 40 Gbps optical transceiver delivers the full 4K RGB 4:4:4 colour space needed to create very high quality chroma key overlays. Expansion modules are available to accommodate signal protocols such as Quad-link 3G-SDI, 10/25Gbps VoIP, or Gigabit Ethernet in addition to 12G-SDI.

RELATED ITEMS:
UHK-430 | VFL-701D | VFE-741D | VFL-201D | SE-U430 | OCP-300 | MCP-300

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RATINGS / PERFORMANCE CCU-430		
Digital Video Input	Return Video Input [BNC]	4x 3G-SDI or HD-SDI (3G-SDI Level-A/B)
	HD QTV Input [BNC] (Prompter)	2x HD-SDI (SMPTE 292M)
Analog Input	Reference Input [BNC Loop through]	Tri level sync (SMPTE 274) Black Burst Signal (NTSC/PAL)
Digital Video Output Format	4K Quad Link Output	2CH 8 Output (3G/HD-SDI), 3840x2160 px, 3G-SDI (Square Division or 2SI Division Level A/B), 59.94P, 50P, 29.97P, 25P,24P,23.98P, HD-SDI (Square Division), 29.97P/PsF, 25P/PsF,24P/PSF,23.98P/PsF
Remote	Remote (CP/Ethernet)	2x Remote CP connector (ICCP); 1x LAN RJ-45 (Not Supporting with PoE)
	Ext. Remote	D-sub 15P, Female
	Mic. Remote	ch1/ch2 independent control
	Power Remote	HR05-R8F, Female, CCU POWER ON/OFF control
Output Signals	HDTV Output [BNC]	2CH 8 Output (3G/HD-SDI), Down-converted (1080 p/1080 i/720 p) 3G-SDI (SMPTE 424/425 Level-A/B), 1920x1080:59.94 P, 50 P, 29.97 P/PsF, 25 P/PsF, 24 P/PsF, 23.98 P/PsF, 1920x1080:59.94 I, 50 I HD-SDI (SMPTE 292 M), 1920x1080:59.94 I, 50 I, 1920x1080:29.97 P/PsF, 25 P/PsF, 24 P/PsF, 23.98 P/PsF, 1280x720:59.94 P,50 P HIGH SPEED, 1920x1080:119.88 P, 1920x1080:100 p
	Monitor Output [BNC]	2CH 2 Output (VF or PM Assignable); HD-SDI (SMPTE 292 M)
	HD Trunk Video Output [BNC]	1x HD-SDI (SMPTE 292 M)
	Analog Output	SYNC OUTPUT [BNC]: 1x Tri level sync (SMPTE 274)
	Digital Audio Output	1x AES/EBU format [BNC] (SMPTE 276 M)
	Analog Audio Output	+4 dBs / 0 dBs; 2 x XLR-3 (2 CH)
	Tally Out	PRC05-RB5F1, Female; Red/Green/Yellow
	Communication	D-sub 25 P, Female, INTERCOM, PROD/ENG, 4 W/RTS/CC, PROGRAM AUDIO 3 systems, TALLY IN, Red/Green/Yellow
DC Utility Power output	UHK-430	UHK-430 M: HR10 A-4pin (x1): DC 12 V 1.0 A (max) UHK-430S: D-Tap (x1) DC 12 V 1.5 A (max)
	SE Interface	QR/P4 24pin (x1)
	DC Input	XLR 4pin (x1)
	USB Port	USB2.0 Type-A
Data Trunk #1		D-sub 9 P, Female, RS-422
Gigabit Ethernet Trunk		LAN RJ-45 (1000BASE-T) (VTP CAT.5e)
I/F	D-sub 15P, Female	DATA TRUNK #2 (RS-422), Incom control, PREVIEW contact, System Control Head Power on IND, DC 12 V, 500 mA OUTPUT
AC Inlet		AC INLET / FUSE / MAIN POWER SWITCH / Noise Filter
Inlet	SE interface Inlet	QR/P4 24 pin (x1) C
	DC input	XLR 4 pin (x1)
	USB Port	USB2.0 Type-A
Dimensions / Weight		W 483 mm x H 133 mm x D 449 mm / 19 kg

4K Camera Control Unit

- Ultra wide-bandwidth fibre transmission
- 4K/2K simulcast operation
- Various interfaces like Quad 3G-SDI, 12G SDI, VoIP, Gigabit ethernet data trunk
- Wide colour space and HDR

- Compact, lightweight and userfriendly
- 16 axis colour corrector and focus assist powered by Next-Generation High-Speed Video Processor Asic AXII

Multi-Video Interface

- Switchable 4K or HD signal output
- Various interfaces like Quad 3G-SDI level A/B, 12G SDI, VoIP (10Gbps/ 25Gbps), Gigabit Ethernet Data Trunk
- Built-in 4 x 3G-SDl standard 4K output

(switchable quad link square division/ 2 sample interleave division)
- With option board, 4K, HD and HD cut-out signals from native 4K are available simultaneously

Ultra wide-bandwidth 40gbps fibre transmission

| Uncompressed R:G:B 4:4:4 |
| Trunk Video (HD-SDI) |
| Return Video 4 channels (HD-SDI) |
| Monitor Video (HD-SDI) |
| Viewfinder Video (HD-SDI) |
| QTV (prompter) 2 channels (HD-SDI) |
| GbE Data Trunk Line |
| Data Trunk(RS422) 2 Channels |
| Audio 4 Channels |
| Return PGM Audio 3 Channels |
| Intercom (Producer) |
| Intercom(Engineering) |

Up to 10 km single mode fibre/
4 km on SMPTE hybrid fibre cable

Ethernet camera control

The system supports Ethernet based control allowing customers to choose the camera control system based on their needs. Ikegami's command control protocol is also supported.

Gigabit Ethernet Trunk

The built-in network trunk allows data transmission between camera and CCU at up to 1Gbps (1000BASE-T). It makes communication with various IP-based products possible utilizing the camera's transmission system.

Built-in 40Gbps optical transceiver delivers full bandwidth of 4K resolution signals transmission between camera and CCU enabling full colour space in 4K, RGB 4:4:4; to create super high quality chroma key signals. Simultaneous output of HD QTV x 2 lines, HD and RET x 2 lines is possible at the camera head. 4 BNC outputs on the backside of the main unit are configurable. The high bandwidth is a perfect basis for professional chroma key compositing of two images or video streams together based on colour hue (chroma range).

HD Out Board
for Simultaneous HD/4K (option)

This board can be installed on the top
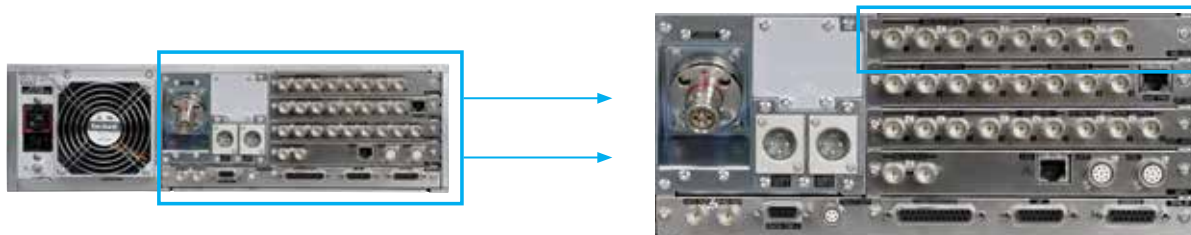
12G-SDI Out Board (option)

12G-SDI is ideal for outside broadcast applications as all data are transmitted along a single channel, eliminating potential timing issues which can occur in parallel-cable quad-link delivery.

NEW SE-U430

The SE-U430 System Expander enables the use of a large studio viewfinder and studio lenses with the UHK-430, converting the portable camera into a full facility studio camera. Installation of the camera into the SE-U430 is very easy, and conversion back to portable configuration is quick for maximum operating flexibility. The camera can be slide back by releasing the lens lock while maintaining the optical axis of the lens and camera . This makes the swapping of large lenses very easy.

System Expander

UNICAM XE

- Portable Lens also can be attached
- Improved lens swap mechanism

RATINGS / PERFORMANCE	
Dimensions	W 333 x H 329.5 x D 403 mm
Weight	SE-U430: Approx. 12.5 kg LS-U430: Approx. 2.9 kg
Ambient Temperature	-20 °C to +45 °C
Ambient Humidity	30 % to 90 % (non-condensing)
Power for lens	DC 12 V 3.0 A
Power for script lighting	DC 12 V 1 A

RELATED ITEMS:
UHK-430
VFL-701D
VFE-741D
CCU-430

NEW VFL-201D

The VFL-201D is a 2-inch LCD Viewfinder developed for UHK-430. It uses a QHD LCD Panel with the resolution of 960 horizontal pixels and 540 vertical pixels, and allows full colour and high resolution video monitoring. They apply the new Focus Assist function that supports accurate focusing in both 4K and HD modes. The digital interface allows access to the camera menu from the Viewfinder.

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2-inch LCD Colour Viewfinder

UNICAM XE

- Bidirectional Digital I/F
- Function Switch
- Preset Mode
- Peaking Function
- Y TALLY
- Various Marker Functions
- Shadow Function

RATINGS / PERFORMANCE	
Power Supply	DC 12 V (DC + 10.5 V to + 18 V) 4 W
Ambient Humidity	20 % to 85 % (non-condensing)
Dimensions / Weight	W 215 x H 72 x D 156 mm - Approx. 780 g or less
Screen	155.52 mm × 87.48 mm LCD H 1920 x V 1080
Screen Brightness	220 cd/m^2 or more
Colour	16.77 Million (RGB 8 bit/ea)
Contrast Ratio	200:1 (typical)
Angle of visibility	Vertical 45 ° and horizontal 45 °

RELATED ITEMS:
UHK-430
VFL-701D
VFE-741D
CCU-430

VFE-741D

NEW

7.4-inch OLED Colour Viewfinder

UNICAM XE

- ■ Digital I/F
- ■ Picture in Picture Display
- ■ Peaking Function
- ■ Camera No. Display TALLY (Option)
- ■ Y TALLY
- ■ Various Marker Functions
- ■ Shadow Function
- ■ High response and high contrast

The VFE-741D is a OLED Viewfinder with digital I/F, employing a 7.4-inch QHD OLED Panel, achieving high resolution, high brightness, and high contrast. They apply the new Focus Assist function that supports accurate focusing in both 4K and HD modes. The digital interface allows access to the camera menu from the viewfinder. Picture-in-picture, WFM, and Vector scope functions are built into this viewfinder.

RATINGS / PERFORMANCE	
Power Supply	DC12 V (DC + 10.5 V to + 18 V) 20 W
Ambient Humidity	20 % to 85 % (non-condensing)
Dimensions / Weight	W 235 x H 143.5 x D 76.5 mm - Approx. 1.6 kg (VF body + cable)
Screen	164.160 mm×92.340 mm OLED H 960 x V 540
Screen Brightness	350 cd/m^2 or more
Colour	1.07 Billion (RGB 10 bit/ea)
Contrast Ratio	100000:1 (typical)

RELATED ITEMS:
UHK-430
VFL-701D
VFL-201D
CCU-430
SE-U430

VFL-701D

NEW

7-inch LCD Colour Viewfinder

UNICAM XE

- ■ Digital I/F
- ■ Picture in Picture Display
- ■ Peaking Function
- ■ Camera No. Display TALLY (Option)
- ■ Y TALLY
- ■ Various Marker Functions
- ■ Shadow Function
- ■ Full HD resolution

The VFL-701D is 7-inch Multi-Format LCD Viewfinder with digital I/F. It features compact, light weight and low power consumption design.It employs 7-inch FHD LCD Panel, achieving wide viewing angle. They apply the new Focus Assist function that supports accurate focusing in both 4K and HD modes. The digital interface allows access to the camera menu from theviewfinder. Picture-in-picture, WFM, and Vector scope functions are built into this viewfinder.

RATINGS / PERFORMANCE	
Power Supply	DC12 V (DC +10.5 V to +18 V)
Ambient Humidity	20 % to 85 % (non-condensing)
Dimensions / Weight	W 235 x H 143.5 x D 76.5 mm - Approx. 1.5 kg (VF body + cable)
Screen	155.52 mm x 87.48 mm LCD H 1920 x V 1080
Screen Brightness	400 cd/m2 or more
Colour	16.77 Million (RGB 8 bit/ea)
Contrast Ratio	1000:1 (typical)
Angle of Visibility	Vertical 80° and horizontal 80°

RELATED ITEMS:
UHK-430
VFL-201D
VFE-741D
CCU-430
SE-U430

HDK-97ARRI

Super 35mm 3G Multi-Format HDTV CMOS Camera System

- ■ Super 35 mm CMOS Large Sensor
- ■ Full compatibility with all Unicam HD Systems
- ■ PL Lens Mount
- ■ Docking style Camera Head
- ■ Standard B4 Lens mountable
- ■ Custom Gamma Correction

- ■ Motorized ND-Filter
- ■ ARRI and Ikegami Collaboration
- ■ Superior real time processing and image controls
- ■ Shallow depth of field
- ■ High Sensitivity – Low Noise – Expanded dynamic Range – Superior Resolution
- ■ Supports all existing HDTV Formats

The HDK-97ARRI offers a unique convergence of attributes, designed with the latest innovations. The ARRI Large-format front end is famed for its film-like, organic look characterized by extended, clean highlights, an extremely low noise floor, natural skin tones, excellent colour separation and cinematic depth-of field. Employing large pixels and a custom-designed read-out architecture, this definitely acclaimed 35 mm CMOS Sensor demonstrates exceptional dynamic range. In addition, ARRI's stainless steel lens mount system ensures super stable flange focal depth between lens and sensor.

RATINGS / PERFORMANCE

Image Sensor		Super 35 mm ALEV III CMOS Sensor RGB Bayer pattern color filter array
Scanning System		Multi-Format
Sensitivity		T11 at 1080 p / 29.97, T12 at 1080 p / 25 * Theoretical value, T10 at 1080 p / 23.98 with 1/48 sec Shutter
S/N Ratio		64 dB (1080 i)
Limiting Resolution		1000 TV lines (1080 i)
ND Optical Filter Disc		Clear, 6.2 %
Electrical Colour Compensation		3200 K, 4300 K, 5600 K, 6300 K, 8000 K; Variable ECC: 2000 K to 20000 K
Electrical Gain		-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB
Electrical Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 or variable Shutter
Gamma		OFF, 0.35, 0.4, 0.45, Cine 1,2, Custom 1 to 5
Dynamic Range		1200 % *at Custom Gamma 1200 % mode
Output Format	with FA-97A & CCU-980 or CCU-970 or BS-98	1080 p / 59.94 / 29.97, 1080 p / 50 /25, 1080 i / 59.94 / 50 1080 psf / 29.97, 1080 psf / 25, 1080 p / 23.98 1080 psf / 23.98, 1080 pd / 23.98, 720 p / 59.94 / 50 576 i 50 YPbPr 4:2:2, 480 i 59.94 YPbPr 4:2:2 (Option Board)
Input Signals (FA-97A)	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
	Video Trunk	HD-SDI BNC 1 ch (factory option, available only when operated in 1.5 G)
Output Signals (FA-97A)	3G-SDI / HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option)
	Q-TV	75 Ω VBS 2 ch (2nd channel is option, and 1 ch only in 720 p/50 Hz)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight		W 180.7 x H 299 x D 476.6 mm (excluding VF) / approx. 9.5 kg (Head + FA)
Operating Temperature		-20 °C to +45 °C
Relative Humidity		30 % to 90 % (non-condensing)
Operating Voltage		DC +11 to 16 V * DC input cable should be less than 3 m
Power Consumption		Less than 80 W (in 1080 p/59.94, 50), less than 75 W (in 1080 p/29.97, 25)

RELATED ITEMS:
FA-97A | CA-75HD | CCU-980 | CCU-970 | BS-98 | BSF-55 | VFE-740HD
VFE-740HD | VFL-P700 | VFL-200HD | CSU-110 | MCP-300 | OCP-300

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HDK-970A

HDK-970A/970AP is a top of the line in 16-Bit Full Digital 3G HDTV Studio/EFP Camera System. It combines the highest picture quality, functionality and reliability. The camera supports 3G-HDSDI 1080p (59.94/50 Hz) wide-band video processing as a standard feature for the highest picture quality. Both the single and dual link output are available in connection with CCU-970 and BS-97 Camera Control Units and Base Stations. Integrating Ikegami's advanced picture processing technology with digital processing technology maximizes the effect of 16-Bit A/D conversion, increasing gradation in dark areas where the processing is performed for more natural reproduction of dark colours.

RELATED ITEMS:
FA-97A | CCU-980 | CCU-970 | BS-98 | BSF-55 | VFE-740HD | CSU-110
MCP-300 | OCP-300

16-Bit Full Digital 3G HDTV Multi-Format 3CCD Camera System

- Video processing Technology to maximize the Benefit of 16-Bits
- Newly developed 2.3 Megapixel progressive Sensors
- Newly developed FPGA
- 3 Gbps high bit-rate Video Output

- Native support for 23.98 P Formats
- Custom Gamma Function
- Variable Colour Depth Function
- Lens Aberration Correction Function
- Sophisticated Camera Control Panel System
- Compatibility with all Unicam HD Systems

RATINGS/PERFORMANCE

Image Sensor		2/3-inch 2.3 Megapixel Progressive CCD
Scanning System		Multi-Format
Optical System		2/3-inch, RGB 3CCD, f 1.4
Sensitivity		F10 (1080/59.94 i), F11 (1080/50 i) typical at 2000 lx
S/N Ratio / Limiting Resolution		62 dB (1080 i) / 1000 TV lines (1080 i)
ND Optical Filter Disc		CAP, 100 %, 25 %, 6.2 %, 1.6 % (Optional AA-OLPF exchangeable to any position)
Optical Filter Disk		CROSS, 3200 K, 4300 K, 6300 K, 8000 K (Optional AA-OLPF exchangeable to any position)
Electrical Colour Compensation		5600 K
Electrical Gain / Electrical Shutter		-3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB / 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Digital Extender		1.5 X, 2 X, 3 X, 4 X
Output Format	with CCU-980 or CCU-970 or BS-98	1080 p 50 / 59.94 YPbPr 4:2:2; 720 p 50 / 59.94 YPbPr 4:2:2; 1080 i 50 / 59.94 YPbPr 4:2:2; 1080 i 50 / 59.94 RGB 4:4:4; 1080 i 100 / 119.88 YPbPr 4:2:2 (Option); 1080 psf 25 / 29.97 YPbPr 4:2:2; 1080 p 25 / 29.97 YPbPr 4:2:2 (Option); 1080 p 23.98 RGB 4:4:4 (HDK-970AP only); 1080 psf 23.98 RGB 4:4:4 (HDK-970AP only); 1080 p 23.98 YPbPr 4:2:2 (HDK-970AP only); 1080 psf 23.98 YPbPr 4:2:2 (HDK-970AP only); 576 i 50 YPbPr 4:2:2 & 480 i 59.94 YPbPr 4:2:2 (Option Board)
Input Signals	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
	Video Trunk	HD-SDI BNC 1 ch (available only when operated in 1.5 G)
Output Signals	3G-SDI / HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option)
	Q-TV	75 Ω VBS 2 ch (2nd channel is option, and 1 ch only in 720 p/50 Hz)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight		W 315 x H 462 x D 517 mm (excluding lens) / approx. 24 kg
Operating Temperature		-20 °C to +45 °C
Relative Humidity		30 % to 90 % (non-condensing)
Operating Voltage		AC 100 / 110 / 117 / 220 / 240 V ±10%
Power Consumption		Approx. 100 W (1080 p Format)

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BROADCAST

HDK-97A

The HDK-97A/97AP is a top of the line in 16-Bit Full Digital 3G HDTV companion Camera System. It combines the highest picture quality, functionality and reliability. The Camera supports 3G-HDSDI 1080p (59.94/50Hz) wide-band video processing as a standard feature for the highest picture quality. Both the single and dual link output are available in connection with CCU-970 and BS-97 Camera Control Units and Base Stations. Integrating Ikegami's advanced picture processing technology with digital processing technology maximizes the effect of 16-Bit A/D conversion, increasing gradation in dark areas where the processing is performed for more natural reproduction of dark colours.

RELATED ITEMS:
TA-97 | FA-97A | CA-75HD | CCU-980/M | CCU-970/M | BS-98 | BSF-55
VFE-740HD | VFL-P700 | VFL-200HD | CSU-110 | MCP-300
OCP-300 | SE-H750

16-Bit Full Digital 3G HDTV Portable Multi-Format 3CCD Camera

- High End 2K Progressive 3CCD 16-Bit Full Digital Portable Camera
- Superior 2/3-inch 2.3 Megapixel 3CCD Sensor
- High Sensitivity – Low Noise – Expanded dynamic Range – Superior Resolution
- High-speed 16-Bit A/D Conversion
- Newly developed 38-Bit FPGA digital Signal Process
- Ikegami Lens Aberration Correction ILAC
- Supports all existing HDTV Formats
- Compact Docking Style Camera Body
- Full Compatibility with all Unicam HD Systems

RATINGS/PERFORMANCE

Image Sensor		2/3-inch 2.3 Megapixel Progressive CCD
Scanning System		Multi-Format
Optical System		2/3-inch, RGB 3CCD, f 1.4
Sensitivity		F10 (1080/59.94 i), F11 (1080/50 i) typical at 2000 lx
S/N Ratio / Limiting Resolution		62 dB (1080 i) / 1000 TV lines (1080 i)
ND Optical Filter Disc		CAP, 100 %, 25 %, 6.2 %, 1.6 % (Optional AA-OLPF exchangeable to any position)
Optical Filter Disk		CROSS, 3200 K, 4300 K, 6300 K, 8000 K (Optional AA-OLPF exchangeable to any position)
Electrical Colour Compensation		5600 K
Electrical Gain / Electrical Shutter		-3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB / 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Digital Extender		1.5 X, 2 X, 3 X, 4 X
Output Format	with FA-97A & CCU-980 or CCU-970 or BS-98	1080 p 50 / 59.94 YPbPr 4:2:2; 720 p 50 / 59.94 YPbPr 4:2:2; 1080 i 50 / 59.94 YPbPr 4:2:2 1080 i 50 / 59.94 RGB 4:4:4; 1080 i 100 / 119.88 YPbPr 4:2:2 (Option); 1080 psf 25 / 29.97 YPbPr 4:2:2; 1080 p 25 / 29.97 YPbPr 4:2:2 (Option); 1080 p 23.98 RGB 4:4:4 (HDK-97AP only); 1080 psf 23.98 RGB 4:4:4 (HDK-97AP only); 1080 p 23.98 YPbPr 4:2:2 (HDK-97AP only); 1080 psf 23.98 YPbPr 4:2:2 (HDK-97AP only); 576 i 50 YPbPr 4:2:2 & 480 i 59.94 YPbPr 4:2:2 (Option Board)
Input Signals (FA-97A)	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
	Video Trunk	HD-SDI BNC 1ch (factory option, available only when operated in 1.5 G)
Output Signals (FA-97A)	3G-SDI/HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option)
	Q-TV	75 Ω VBS 2 ch (2nd channel is option, and 1 ch only in 720 p/50 Hz)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight		W 138.5 x H 270 x D 337 mm (Head + FA or TA) / approx. 4.6 kg (Head + FA, excluding VF)
Operating Temperature		-20 °C to +45 °C
Relative Humidity		30 % to 90 % (non-condensing)
Operating Voltage		DC +11 to 16 V
Power Consumption		Approx. 60 W (without FA / 1080 p Format)

Ikegami

HDK-790GX

16-Bit Full Digital HDTV Interlace 3CCD Studio/EFP Camera

- 2/3-inch 2.3 Megapixel AIT CCD
- Newly developed FPGA with advanced full Digital Process ASIC
- Advanced Features made possible with digital Technology
- Digital Extender

- Built-in Triple Layer Filter (ND / EFF / ECC)
- 2 Channels Q-TV
- HD-SDI Trunk
- Lens Aberration Correction Function
- Camera Operator Assist Functions

The HDK-790GX is a state of the art full digital HDTV Camera with superior picture quality and high reliability for studio and field HD production. It reproduces the outstanding performance of Ikegami's obsolete EX-series and adds new features and accessories associated with the Unicam HD.

RELATED ITEMS:
FA-97A | CCU-980 | CCU-970 | BS-98 | BSF-55 | VFE-740HD
CSU-110 | MCP-300 | OCP-300

RATINGS / PERFORMANCE

Image Sensor		2/3-inch 2.3 Megapixel AIT CCD
Scanning System		1080 i 50 / 59.94 YPbPr 4:2:2; 1080 psf 25 / 29.97 YPbPr 4:2:2
Optical System		2/3-inch, RGB 3CCD, f 1.4
Sensitivity		F10 (1080/59.94 i), F11 (1080/50 i) typical at 2000 lx
S/N Ratio / Limiting Resolution		60 dB (1080 i) / 1000 TV lines (1080 i)
ND Optical Filter Disc		CAP, 100 %, 25 %, 6.2 %, 1.6 % (Optional AA-OLPF exchangeable to any position)
Optical Effect Filter Disc		Clear, Cross, Snow, Fog, Clear (Optional AA-OLPF exchangeable to any position)
Electrical Colour Compensation		3200 K, 4300 K, 5600 K, 6300 K, 8000 K variable
Electrical Gain		-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB, +18 dB
Electrical Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Accumulation		1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1 s
Gamma / Digital Extender		OFF, 0.35, 0.4, 0.45 / 1.5 X, 2 X, 3 X, 4 X
Output Format	with CCU-980 or CCU-970 or BS-98 or BSF-55	1080 i 50 / 59.94 YPbPr 4:2:2; 1080 psf 25 / 29.97 YPbPr 4:2:2; 576 i 50 YPbPr 4:2:2; 480 i 59.94 YPbPr 4:2:2 (Option Board); 1080 i 50 / 59.94 YPbPr 4:2:2; 1080 psf 25 / 29.97 YPbPr 4:2:2; 576 i 50 YPbPr 4:2:2; 480 i 59.94 YPbPr 4:2:2
Input Signals	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
	Video Trunk	HD-SDI BNC 1 ch (available only when operated in 1.5 G)
Output Signals	3G-SDI / HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option)
	Q-TV	VBS signal 1 ch (2 ch as option with applicable CCU)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight		W 315 x H 328 x D 398 mm (Head + FA or TA) / approx. 24 kg
Operating Temperature		-20 °C to +45 °C
Relative Humidity		30 % to 90 % (non-condensing)
Operating Voltage / Power Consumption		AC 100/110/117/220/240 V ±10 % / Approx. 75 VA

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BROADCAST

HDK-79GX

16-Bit Full Digital HDTV Portable Interlace 3CCD Studio/EFP Camera

- 2/3-inch 2.3 Megapixel AIT CCD
- High Sensitivity – Low Noise – Expanded dynamic Range – Superior Resolution
- Newly developed 38-Bit FPGA & advanced ASIC digital Signal Process
- High-speed 16-Bit A/D Conversion
- Ikegami Lens Aberration Correction: ILAC
- Compact Docking Style Camera Body
- Full Compatibility with all Unicam HD Systems

The HDK-79GX is a state of the art Full Digital HDTV Portable Camera with superior picture quality and high reliability for studio and field HD production. It reproduces the outstanding performance of Ikegami's obsolete EX-series and adds new features and accessories associated with the Unicam HD.

RELATED ITEMS:

TA-97 | FA-97A | FA-55 | CA-75HD | CCU-980/M | CCU-970/M | BS-98
BSF-55 | VFE-740HD | VFL-P700 | VFL-200HD | CSU-110
MCP-300 | OCP-300 | SE-H750

Ikegami

RATINGS / PERFORMANCE		
Image Sensor		2/3-inch 2.3 Megapixel AIT CCD
Scanning System		1080 i 50 / 59.94 YPbPr 4:2:2; 1080 psf 25 / 29.97 YPbPr 4:2:2
Optical System		2/3-inch, RGB 3CCD, f 1.4
Sensitivity		F10 (1080/59.94 i), F11 (1080/50 i) typical at 2000 lx
S/N Ratio / Limiting Resolution		60 dB (1080 i) / 1000 TV lines (1080 i)
ND Optical Filter Disc		CAP, 100 %, 25 %, 6.2 %, 1.6 % (Optional AA-OLPF exchangeable to any position)
Optical Effect Filter Disc		Clear, Cross, Snow, Fog, Clear (Optional AA-OLPF exchangeable to any position)
Electrical Colour Compensation		3200 K, 4300 K, 5600 K, 6300 K, 8000 K variable
Electrical Gain		-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB, +18 dB
Electrical Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Accumulation		1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1 s
Gamma / Digital Extender		OFF, 0.35, 0.4, 0.45 / 1.5 X, 2 X, 3 X, 4 X
Output Format	with FA-97A & CCU-980 or CCU-970 or BS-98	1080 i 50 / 59.94 YPbPr 4:2:2, 1080 psf 25 / 29.97 YPbPr 4:2:2, 576 i 50 YPbPr 4:2:2, 480 i 59.94 YPbPr 4:2:2 (Option Board)
	with FA-55 & BSF-55	1080 i 50 / 59.94 YPbPr 4:2:2, 1080 psf 25 / 29.97 YPbPr 4:2:2, 576 i 50 YPbPr 4:2:2, 480 i 59.94 YPbPr 4:2:2
Input Signals (FA-97A / FA-55)	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
Output Signals (FA-97A / FA-55)	HD SDI	Serial Digital 75 Ω 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option for only FA-97A)
	Q-TV	VBS signal 1 ch (2 ch as option with applicable CCU)
	AUX-Out	VBS signal 1 ch (QTV-1, QTV-2 or Main video selectable by menu) * Available with FA-55 only. * QTV-2 can not be selected if BS/CCU does not support 2 ch of Q-TV
	DC-Out	+12 V DC 500 mA
Dimensions / Weight		W 138.5 x H 270 x D 337 mm (Head + FA or TA) / approx. 4.6 kg (Head + FA, excluding VF)
Operating Temperature		-20 °C to +45 °C
Relative Humidity / Operating Voltage		30 % to 90 % (non-condensing) / DC +11 to 16 V
Power Consumption		Approx. 20 W (without FA)

NEW HDK-73 HDR

3-CMOS HDTV CAMERA SYSTEM - HDR READY

- ■ Newly Developed High Performance Full HD 2/3-inch CMOS Sensors
- ■ Native Multi-format
- ■ Advanced Full Digital DSP
- ■ Lens Aberration Correction Function
- ■ HDR (High Dynamic Range)

- ■ Two HD-SDI Outputs from the Camera Head
- ■ Quick EZ Focus Assist Function
- ■ RET and QTV Channels
- ■ Advanced Digital Detail
- ■ Dockable Camera Body
- ■ Moire Reduction Filter (Factory Option)

The HDK-73 is a cost-efficient docking-style camera system with F13 high sensitivity 2/3-inch CMOS sensors delivering high picture quality in either 1080i or 720p. The camera can be configured for studio or remote operation via a light weight 1.5RU fibre base station, as well as self-contained operation for wireless or onsite recording applications. Fibre configurations include a choice of OpticalCon links (up to 350m) or SMPTE copper/fibre hybrid cable (up to 1km) including power from the base station. Both fibre solutions support long distance transmission (more than 8km) using a pair of SM fibres, with power provided locally for the camera head. Included in the HDK-73 are new key features such as Ikegami's Quick EZ Focus assist and CAC chromatic aberration correction. Also included is HLG hybrid log gamma for HDR picture origination. Control of the HDK-73 is provided using a range of control panels from the simple joystick OCP-10 to the advanced touch screen OCP-300. Control panels can be connected directly to the base stations. Assignable Ethernet connection is also available on this camera. These factors combine to make the HDK-73 ideal for an extensive range of applications both in the studio and in the field.

RELATED ITEMS:
FA-97A | FA-55 | FA-300 | CA-75HD | CCU-980 | CCU-970
BS-98 | BSF-55 | BSF-300 | VFE-740HD | VFL-P700 | VFL-200HD | CSU-110
BSH-300 | MCP-170 | OCP-300/100/10 | SE-H750

RATINGS / PERFORMANCE

Image Sensor		2/3-inch 2.6 million pixel CMOS sensors
Scanning System		1080 i 50/ 59.94 YPbPr 4:2:2, 720 p 50/ 59.94 YPbPr 4:2:2
Optical System		2/3-inch, R,G,B 3 prism, F 1.4
Sensitivity		F13 at 2000 lx 1080/50 i (Typical)
S/N Ratio		60 dB or more (in 1080/50 i)
Limiting Resolution		1000 TV lines (in 1080/50 i)
Modulation Depth		60 % at 800 TV lines (in 1080/50 i)
ND Optical Filter Disc		1/100 %, 2/25 %, 3/6.2 %, 4/1.6 %
Electrical Colour Compensation		A/3200 K, B/4300 K, C/6300 K, D/8000 K
Electrical Gain		-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB, +18 dB
Electrical Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Output Format	with FA-97A & CCU-980 or CCU-970 or BS-98	1920 x 1080/59.94 i, 50 i, 1280 x 720/59.94 p, 50 p 720 x 580/59.9 i (NTSC), 720 x 576/50 i (PAL)
	with FA-55 & BSF-55 or FA-300 & BSF-300	1920 x 1080/59.94 i, 50 i, 1280 x 720/59.94 p, 50 p 720 x 580/59.9 i (NTSC), 720 x 576/50 i (PAL)
Input Signals	External Sync	SYNC 0.6 Vp-p ±6 dB 75 Ω BNC CN 1ch (BB/PS Signal)
	Audio	-60 dB to +4 dB (Variable) / -20 dB (Fixed) XLR CN 2ch (600 Ω Balanced)
	Intercom	XLR Type or 110 Type CN 2ch
Output Signals (FA-55 / FA-300)	HD SDI	Serial Digital 75 Ω, BNC, 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch
	Q-TV	VBS signal, BNC, 1 ch
	AUX-Out	with FA-55: VBS signal, BNC, 1 ch (QTV-1, QTV-2 or Main video selectable by menu) with FA-300: VBS signal 1 ch (QTV-1 or Main video selectable by menu)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight		W 138.5 x H 270 x D 337 mm / approx. 4.6 kg (Camera Head + FA, excluding VF)
Operating Temperature		-20 °C to +45 °C
Relative Humidity		30 % to 90 % (non-condensing)
Operating Voltage		DC +11 to 16 V
Power Consumption		BSF-55: approx. 44 W (BS only) Power for HDK-73 and FA-55 without VF: approx. 70 W BSF-300: approx. 44 W (BS only) Power for HDK-73 and FA-300 without VF: approx. 70 W

HDK-5500

The HDK-5500 is a 3CMOS Camera, adapting Ikegami's leading Camera and digital technology, achieving super high sensitivity and a high picture quality. Incorporating 1.3 Megapixel super high sensitivity CMOS Sensor allows sufficient sensitivity for shooting without using any lights even under moonlight conditions. It can be used for variety of purposes such as observation of nature, various documentaries and real-time reports.

Example of application

RELATED ITEMS:

TA-97 | FA-97A | FA-55 | CA-75HD | CCU-980/M | CCU-970/M | BS-98
BSF-55 | VFE-740HD | VFL-P700 | VFL-200HD
OCP-300/100/10 | SE-H750

Ikegami

Ultra Low-Light High Sensitivity 3CMOS HDTV Portable Camera

- 2/3-inch1.3 Megapixel Super High Sensitivity 3CMOS Sensor
- Sensitivity: F22/2000 lx (S/N: 56 dB)
- Output Video Format: 1080/59.94i, 1080/50 i (HD-SDI)
- Lens Mount: B4 (BTA) Type
- Analog / Serial I / F Lens Support

- Minimum Illumination: 0.001 lx or less (60 frame)
- Camera Operator Assist Functions
- Docking style Camera Body

RATINGS/PERFORMANCE

Image Sensor		2/3-inch 1.3 Megapixel CMOS
Scanning System		1080 i 50 / 59.94 YPbPr 4:2:2
Optical System		2/3-inch, RGB 3CMOS, f 1.4
Sensitivity		F 22 or more at 2000 lx
S/N Ratio		56 dB (1080 i)
Limiting Resolution		700 TV lines (1080 i)
ND Optical Filter Disc		100 %, 25 %, 6.2 %, 1.6 %
Electronic Colour Compensation		3200 K, 4300 K, 6300 K, 8000 K variable
Electrical Gain		-6 dB, 6 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB, 54 dB, 60 dB, 66 dB, 72 dB, 78 dB
Electric Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Minimum Illumination		0.001 lx
Input Signals (FA-55)	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1ch (BB/PS Signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2ch (600 Ω balanced)
	Intercom	ENG/PRD/PGM 4-wire/RTS/clearcom XLR 7 or 5 pin
Output Signals (FA-55)	HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor HD-SDI	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch
	Q-TV	75 Ω VBS 1 ch (2nd Q-TV: factory option)
	AUX-Out	VBS signal 1 ch (QTV-1, QTV-2 or Main video selectable by menu) * Available with FA-55 only * QTV-2 can not be selected if BS/CCU does not support 2 ch of Q-TV
	DC-Out	+12V DC 500 mA
Dimensions / Weight		W 138.5 x H 270 x D 337 mm / approx. 4.5 kg (Head & Adaptor)
Operating Temperature		-20°C to +45°C
Relative Humidity		30 % to 90 % (non-condensing)
Operating Voltage		DC +11 to 16 V
Power Consumption		Approx. 20 W (without FA-55)

HC-HD300

Newly developed 1/3-inch 3CMOS HDTV Camera HC-HD300 with the concept of "The Broadcast quality" following the highest picture quality, functionality and reliability of Ikegami's superb broadcasting top end camera UnicamHD HDK Series. HC-HD300 will be suitable for the usage at CATV/satellite broadcasting, educational and video production in enterprises.

Neutrik Connector

PSU-300

RELATED ITEMS:
FA-55 | FA-300 | CA-75HD | BSF-55 | VFL-P700
VFL-200HD | BSH-300 | OCP-100/10

Professional High Performance 3CMOS Full Digital Portable Camera

- 1/3-inch 2.5 Megapixel 3CMOS Sensor
- Sophisticated Picture Quality
- Supports 1080i & 720p 4:2:2 HDTV Formats
- Compact Docking Style Camera Body
- Full Compatibility with all Unicam HD Systems
- Flexible Integration: Neutrik optical CON DUO Connector for hybrid Cables

RATINGS / PERFORMANCE

Image Sensor		1/3-inch 2.5 Megapixel CMOS
Scanning System		720 p 50 / 59.94 YPbPr 4:2:2 / 1080 i 50 / 59.94 YPbPr 4:2:2
Optical System		1/3-inch, RGB prism, f 1.4
Sensitivity		F10 (1080 / 59.94 i) / F11 (1080 / 50 i) typical at 2000 lx
S/N Ratio		58 dB (1080 i)
Limiting Resolution		1000 TV lines (1080 i)
ND Optical Filter Disc		ND 100 %, 25 %, 6,20 %, 1,6 %
Electronic Colour Compensation		CC 3200 K, 4300 K, 6300 K, 8000 K
Electronic Colour Compensation		variable
Electrical Gain		-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB, +18 dB
Electric Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Transmission Interface FA-300		Neutrik optical CON DUO, maximum distance 250 m
Output Format (with FA-300 & BSF-300)		1080 i 50 / 59.94 YPbPr 4:2:2
Input Signals (FA-300)	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS Signal)
	Audio	-60dB to +4dB (variable) / -20dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR 7 or 5-pin
Output Signals (FA-300)	HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor HD-SDI	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch
	Q-TV	75 Ω VBS 1 ch
	AUX-Out	VBS signal, BNC type 1 ch (Q-TV-1, Q-TV-2 or Main video selectable by menu)
	DC-Out	+12V DC 500 mA
Dimensions / Weight		W 138.5 x H 270 x D 337 mm (excluding VF), approx. 4.5 kg (Head & Adaptor)
Operating Temperature		-20 °C to +45 °C
Relative Humidity		30 % to 90 % (non-condensing)
Operating Voltage		DC +11to16V
Power Consumption		Approx. 13 W (without FA-300)

FA-97A

3G fibre adaptor for Unicam enables 1080 progressive, 1080/100i double speed and full colour 4:4:4 transmission.

3G HDTV Fibre Adaptor

RATINGS/PERFORMANCE		
Input Signals	External Sync	SYNC 0.6 Vp-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS Signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR CN 2 ch (600 Ω balanced)
	Video Trunk	Serial Digital 75 Ω BNC 1 ch (Option)
	Intercom	XLR Type or 110 Type CN 2 ch
Output Signals	3G-SDI/HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Analog Video	R, G, B D-Sub CN 1 ch (for System Expander)
	Q-TV	VBS signal 1 ch
	HD Q-TV*	Serial Digital 75 Ω BNC 1 ch (Option)
	Monitor Video (1.5G)	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD Q-TV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option) *Optional HD Q-TV (Trunk) module should be installed in CCU
	Intercom	0 dBs 4 ch (ENG / PROD / PGM1 / PGM2) XLR Type or 110 Type CN

RELATED ITEMS:
HDK-97ARRI
HDK-970A
HDK-97A
HDK-79GX
HDK-73
HDK-5500
CCU-980/M
CCU-970/M
BS-98

FA-55

1.5G transmission fibre adaptor for Unicam HD which make it possible to migrate HDTV environment by affordable cost.

HDTV Camera Fibre Adaptor

RATINGS/PERFORMANCE		
Input Signals	External Sync	SYNC 0.6 Vp-p ±6 dB 75 Ω BNC 1 ch
	Audio	-60dB to +4dB (variable) / -20dB (fixed) 2 ch (600 Ω balanced)
	Intercom	XLR Type or 110 Type CN 2 ch
Output Signals	HD-SDI	Serial Digital 75 Ω 1 ch
	Analog Video	R, G, B D-Sub CN 1ch (for System Expander)
	AUX-Out	VBS signal 1 ch (QTV-1, QTV-2 or Main video selectable by menu)
	Q-TV	VBS signal 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch
	Intercom	0 dBs 4 ch (ENG / PROD / PGM1 / PGM2) XLR Type or 110 Type CN
	DC-Out	+12VDC 500 mA (max.) 4-pin type 1 ch

RELATED ITEMS:
HDK-79GX
HDK-73
HDK-5500
HC-HD300
CCU-980/M
CCU-970/M
BS-98
BSF-55

Ikegami

FA-300

1.5G transmission Fibre Adaptor for Unicam HD with limited cable length by affordable cost.

1.5G HDTV Affordable Fibre Adaptor

RATINGS / PERFORMANCE		
Transmission Interface		Neutrik optical CON DUO, maximum distance 250 m
Output Format	HDTV	1080 i 50 / 59.94 YPbPr 4:2:2 / 720 p 50 / 59.94 YPbPr 4:2:2
	SDTV	576 i 50 YPbPr 4:2:2 & 480 i 59.94 YPbPr 4:2:2
Input Signals	External Sync	SYNC 0.6Vp-p ±6 dB 75 Ω BNC type 1 ch
	Audio	-60 dB to +4 dB (variable) / -20dB (fixed) XLR type 2 ch (600 Ω balanced)
	Intercom	XLR type or 110 type 2 ch
Output Signals	HD-SDI	BNC type 1 ch
	AUX-Out	VBS signal, BNC type 1 ch (QTV-1 or Main video selectable by menu)
	Monitor Video	HD-SDI, BNC type 1 ch (VF, RET or Main video selectable by menu)
	DC-Out	+12 VDC 500 mA (max.), 4-pin type 1 ch

RELATED ITEMS:
HDK-73
HC-HD300
BSF-300

TA-97

Compression free analogue HD triax Transmission Adaptor for Unicam HD.

HDTV Analogue Triax Transmission Adaptor

RATINGS / PERFORMANCE		
Output Format		1080 i or 720 p (59.94 Hz or 50 Hz)
Input Signals (with HDK-55)	External Sync	BB/PS 0.6 Vp-p ±6 dB 75 Ω BNC CN 1 ch
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR CN 2 ch (600 Ω balanced)
	Intercom	Intercom 2 ch XLR-5 or 7-Pin, ENG & PROD Line
Output Signals (with HDK-55)	HD-SDI	BNC 1 ch
	Analog Video	R,G,B D-Sub CN 1 ch (for System Expander)
	Q-TV	VBS BNC 1 ch (Q-TV / Mon HD-Y video selectable)
	Monitor Video	SDI BNC 1 ch (VF / RET / Main video selectable)
Transmission Length (Main Line / RET Signal)		75 m to 500 m diameter 9.2 mm by BELDEN 150 m to 1000 m diameter 13.2 mm by BELDEN 75 m to 750 m diameter 8.8 mm by FUJIKURA 150 m to 1350 m diameter 14.5 mm by FUJIKURA

RELATED ITEMS:
HDK-97A
HDK-79GX
HDK-73
HDK-5500
CCU-980M
CCU-970M

CA-75HD
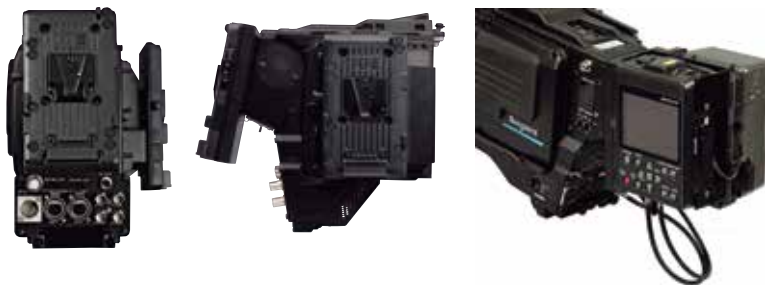
Camera Adaptor for Unicam series HD camera.

Stand-alone Camera Adaptor

RATINGS / PERFORMANCE		
Input Signals	External Sync	BNC x 1 (BB or 3 state SYNC)
	Audio	AUDIO IN XLR 3 pin x 2; LINE =+4 dB, MIC= -60 dB, +48 V on / off; Input level VR x 2; Input limitter on / off
	HD-SDI Return	BNC x 1
	Remote Control	8-pin remote control for Ikegami remote panels
	DC-Power	DC Power V mount plate x 2, DC in XLR 4 pin
Output Signals	HD-SDI	HD-SDI out x 2
	Audio	Embedded audio CH 1/2
	DC-Out	DC OUT +12 V XLR 4 pin (F) x 1 DC OUT +12 V mini 4-pin x 2 DC OUT 12 V CAMTAP x 1; USB 5 V 2 A x 2
Power Requirement		DC12 V (10.8 to 18 V)
Ambient Temperature		-20 °C to +45 °C
Dimension / Weight		W 160 x H 235 x D 240 mm / 2.0 kg

RELATED ITEMS:
HDK-97ARRI
HDK-97A
HDK-79GX
HDK-73
HDK-5500
HC-HD300

WA-97

WA-97 is a full integrated wireless camera adaptor for Unicam HD. COFDM technology and Diversity reception enables multi-path free, stable & relia-ble communication. Bi-directional remote control communication ensures complete and rugged remote operation. Genlock junction between receiveing-basestation and camera head ensures a steady and low latency at any time. Optional build in hassle free 2-Way intercommunication possible.

Ikegami

Radiocam HDTV Wireless Adaptor for Unicam HD

- ■ DVBT compliant, COFDM 2k Standard
- ■ MPEG2 4:2:2P@ML/HL - H.264 optional
- ■ Genlock Transmission
- ■ Low Latency; Full Remote Control

RATINGS / PERFORMANCE	
Applicable Cameras	HDK-97ARRI, HDK-97A/C, HDK-79GX & HDK-55
Transmission Frequency	1.95 GHz - 2.65 GHz, 3.5 / 5 / 7 GHz band optional
EIRP	Selectable output power 10 - 100 - 400 mW as standard. Different power radiation upon request.
Encoding	MPEG-2 SP@HL 4:2:2, H.264 optional
Modulation	COFDM, DVB-T (8 MHz, 2 k Mode) QPSK/16 QAM/64 QAM, Guard interval
Transmission Range	500 m with standard setup and components
Remote Control Receiver	UHF (433 / 434 MHz or 455 / 465 MHz), other bands upon request
Intercom Receiver	Red on air tally - Green flashing warning tally
Tally	W 125 x H 270 x D 337 mm
Battery Clip	IDX V-Mount, different mounts on request
Weight	Approx. 9 kg (with HDK-97A Head)

RELATED ITEMS:
HDK-79GX
HDK-97A
HDK-73
HDK-5500
BSW-970
ODU-890
IDU-890

BSF-55

Description?

The BSF-55 is newly designed in compact size of 1.5 RU height with 19 inch rack mount width, transmitting uncompressed high quality pictures. HDTV (1080 i 50/60, 720 p50/60, 1080 psF25) and SDTV (625 i 50, 575 i 60) formats are supported simultaneously in both, digital and analogue domain.

HDTV Fibre Base Station

RATINGS / PERFORMANCE

Input Signals	Genlock	PS 1 Vp-p or Tri-level / 75 Ω bridged / VBS / BBS 75 Ω bridged VBS / BBS 75 Ω bridged
	Return Video	BNC 2 ch single end input SDI & BNC 2 ch single end input VBS
	Q-TV	VBS BNC 1 ch
	Intercom	Select from 4-wire / Clearcom / RTS
	PGM Sound / Tally	2-LINE / R, G
Output Signals	HD/SD-SDI	BNC 4 ch - 4 x HD or 2 x HD & 2 x SD or 4 x SD
	VBS	BNC 2 ch
	PM HD / SD-SDI	BNC 1 ch Select from HD / SD
	SD	BNC 1 ch Select from R, G, B, Y, VBS
	WFM	BNC 1 ch Select from HD-SDI / SD-SDI
	Intercom	Select from 4-wire / Clearcom / RTS
	MIC	0 dBs / +4 dBs 2 ch Low impedance
	Tally	R, G
Dimensions / Weight		W 483 x H 66.4 x D 405 mm / approx. 7 kg

RELATED ITEMS:
HDK-97ARRI
HDK-970A
HDK-97A
HDK-790GX
HDK-79GX
HDK-73
HDK-5500
FA-55

BSF-300

The BSF-300 is newly designed affordable Base Station transmitting uncompressed high quality pictures over short distances. HDTV (1080 i 50/60, 720 p50/60, 1080 psF25) and SDTV (625 i 50, 575 i 60) formats are supported simultaneously in both, digital and analogue domain.

RELATED ITEMS:
HDK-73 | HD-HC300 | FA-300

Affordable HDTV Fibre Base Station

RATINGS / PERFORMANCE

Output Format	HDTV	1080 i 50/59.94 YPbPr 4:2:2/720p 50/59.94 YPbPr 4:2:2
	SDTV	576 i 50 YPbPr 4:2:2 & 480 i 59.94 YPbPr 4:2:2
Input Signals	Genlock	PS 1Vp-p or Tri-level/75 Ω bridged VBS/BBS 75 Ω bridged
	Return Video HD/SD	BNC 2 ch Select from HD-SDI / SD-SDI
	Return Video SD (Opt.)	BNC 2 ch VBS
	Q-TV	BNC 1 ch VBS
	Intercom	Select from 4-wire / Clearcom / RTS
	PGM / Tally	2-LINE / R, G
Output Signals	3G / Dual link / HD-SDI	BNC 4ch - 4 x HD or 2 x HD & 2 x SD or 4 x SD
	SD-SDI (option)	BNC 2 ch
	PM	BNC 1 ch Select from HD-SDI / SD-SDI / VBS
	WFM	BNC 1 ch Select from HD-SDI / SD-SDI
	Intercom	Select from 4-wire / Clearcom / RTS
	MIC	0 dBs /+4 dBs 2 ch Low impedance
	Tally	R, G
Dimensions / Weight		W 483 x H 66.4 x D 405 mm / approx. 7 kg

- Neutrik optical CON DUO fibre 1.5G Transmission
- Maximum Distance 350 m
- Single fibre Mode up to 10 km
- HD / SD / VBS Return Video × 4
- BBS or Tri-Level Genlock
- Compression and delay free Technology
- Low Voltage Power Transmission

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BROADCAST

CCU-980/M **4K**

The CCU980 is a full rack size Hybrid 4K Camera Control Unit. It supports not only Ikegami's conventional one-by-one ICCP control or Arcnet based network control systems, but also an Ethernet based control systems, allowing customers to choose the camera control system based on their needs. CCU980M is capable for HD triax transmission to work with Unicam HD (+TA-97).

Hybrid 4K Camera Control Unit

- ■ **Support of 3G-SDI/HD-SDI/SD-SDI**
- ■ **Frame Synchronizer for Return Signal**
- ■ **4 channels of Return Video Input**
- ■ **Embedded Audio available as Standard**
- ■ **Ethernet Port available**

RATINGS / PERFORMANCE

Input Signals	Genlock		Tri-level sync or BBS 75 Ω BNC x2 (Loop Through), (HDTV/SDTV automatic detection), SUB REF: 10 Field ID 75 Ω BNC x2 (Loop Through)
	Return Video		3G / HD / SD-SDI BNC 4 ch single end input 2 ch Active-Through (Menu Selection)
	Q-TV	SD	VBS BNC 2 ch
		HD	HD-SDI BNC 1 ch
	Intercom		Select from 4-wire / Clearcom / RTS
	PGM Sound		2-LINE
	Audio Trunk		Option
	Tally		R, G, Y
Output Signals	3G/Dual Link/HD-SDI		BNC 4 ch / Select from 3G-SDI / DUAL-LINK / HD-SDI
	4K		1920 x 1080 Progressive Square Division 3G/HD-SDI 75 Ω BNC 4 ch
	Sync. Signal		BNC 1 ch select from HDTV (tri-level 0.6 Vp-p) / SDTV (HV 2 Vp-p)
	Trunk Video-Out		HD-SDI BNC 1 ch (only in 1.5 G mode)
	Intercom		Select from 4-wire / Clearcom / RTS
	MIC		0 dBs standard 2 channels Low impedance
	Tally		R, G, Y
Dimensions / Weight			W 483 x H 133 x D 454 mm / approx. 28 kg

RELATED ITEMS FOR CCU-980:
HDK-97ARRI | HDK-970A | HDK-97A | HDK-790GX | HDK-79GX
HDK-5500 | FA-97A | FA-55 | BS-98

RELATED ITEMS FOR CCU-980M:
HDK-97A | HDK-79GX | HDK-73 | HDK-5500 | TA-97 | FA-97A | FA-55

Ikegami

BS-98 **4K**

Hybrid 4K Base Station

- ■ Support of 3G-SDI/HD-SDI/SD-SDI
- ■ Frame Synchronizer for Return Signal
- ■ 4 channels of Return Video Input
- ■ Embedded Audio available as Standard

- ■ Ethernet Port available

The BS-98 is a half rack size Hybrid 4K Base Station. It supports not only Ikegami's conventional one-by-one ICCP control or Arcnet based network control systems, but also an Ethernet based control system, allowing customers to choose the camera control system based on their needs.
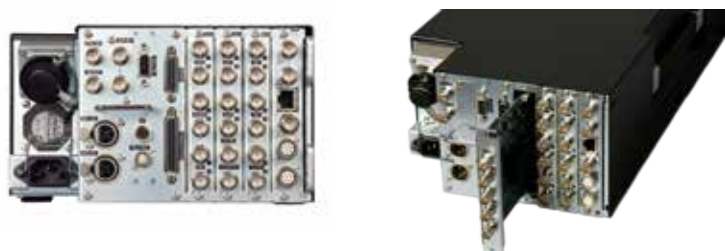
RATINGS / PERFORMANCE

Input Signals	GENLOCK		Tri-level sync or BBS 75 Ω BNC x2 (Loop Through), (HDTV/SDTV automatic detection), SUB REF: 10 Field ID 75 Ω BNC x2 (Loop Through)
	Return Video		3G / HD / SD-SDI BNC 4 ch single end input 2 ch Active-Through (Menu Selection)
	Q-TV	SD	VBS BNC 2 ch
		HD	HD-SDI BNC 1 ch
	Intercom		Select from 4-wire / Clearcom/RTS
	PGM Sound		2-LINE
	Audio Trunk		Option
	Tally		R, G, Y
Output Signals	3G/Dual Link/HD-SDI		BNC 4 ch / Select from 3G-SDI / DUAL-LINK / HD-SDI
	4K		1920 x 1080 Progressive Square Division 3G/HD-SDI 75 Ω BNC 4 ch 3G/HD-SDI 75ΩBNC 4ch
	Sync. Signal		BNC 1 ch Select from HDTV (tri-level 0.6 Vp-p) / SDTV (HV 2 Vp-p)
	Trunk Video		HD-SDI BNC 1 ch (Only in 1.5 G mode)
	Intercom		Select from 4-wire/Clearcom/RTS
	MIC		0 dBs standard 2 channels Low impedance
	Tally		R, G, Y
Dimensions / Weight			W 218 x H 125 x D 457 mm / approx. 9 kg
Power Consumption			approx. 110VA (CCU only)

RELATED ITEMS:
HDK-97ARRI | HDK-970A | HDK-97A | HDK-790GX | HDK-79GX
HDK-73 | HDK-5500 | FA-97A | FA-55 | CCU-980

Everytime we reflect ourselves we see an image

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BROADCAST

VFE-740HD

The VFE-740HD is a OLED Colour Viewfinder, employing a 7.4-inch QHD OLED Panel, achieving high resolution, high brightness, high contrast and wide viewing angle. Its true colour reproduction and fine gradation provide optimum monitoring. Especially its superb quick motion response is helpful when shooting sports etc.

7.4-inch Multi-Format OLED Viewfinder

- Multi-Format 3G high grade OLED
- Perfect viewing Angle
- Moiré free QHD Resolution
- Latency free Response
- Dot-by-Dot Function

RATINGS / PERFORMANCE	
Power Supply	DC 12 V (DC +10.5 V ~ +18 V) 18 W
Ambient Humidity	20 % to 85 % (non-condensing)
Dimensions / Weight	W 235 x H 143.5 x D 76.5 mm - 1.5 kg (VF body + cable)
Input Signals	Analog RGB / YPbPr signal (VF Cable) / 3G & 1.5G HD-SDI BNC x1 - 75 Ω
Screen	132.76 mm x 74.80 mm OLED H 960 x V 540
Screen Brightness	350 cd / m^2 or more
Colour	1.07 Billion (RGB 10 bit / ea)
Contrast Ratio	100000 : 1 (typical)
Angle of Visibility	Up-and-Lower 176°, Right-and-Left 176°

RELATED ITEMS:
HDK-97ARRI
HDK-970A
HDK-97A
HDK-790GX
HDK-79GX
HDK-73
HDK-5500
SE-H750

VFL-P700

VFL-P700 is a Multi-Format HDTV Viewfinder in compact, small and light weight design. It employs a 7-inch LCD Panel with 800 by 480 dots achieving high contrast, high quality and good angle of view.

7-inch Multi-Format LCD Viewfinder / Monitor

- Multi-Format Support
- De-Embedded analogue Audio Output
- Vectorscope / Waveform Display
- HD-SDI / SD-SDI Input and Output
- Dot-by-Dot Function
- Various Display Marker

RATINGS / PERFORMANCE	
Power Supply	DC 12 V to 12 W
Ambient Humidity	30 % to 85 % (non-condensing)
Dimensions / Weight	W 195 x H 153 x D 50 mm - 1 kg (VF body + cable)
Input Signals	YPbPr signal BNC x 3 / HD / SD-SDI BNC x 2 - 75 Ω
Screen	152.4 (H) x 91.4 (V) mm - 800 (H) x 480 (V) dot
Tally Input	TALLY IN 1: G / R - TALLY IN 2: R only
MON Speaker	Build-in x 1
Audio Output	XLR 3-pin (Male) x 2 - Output level : -20 dBu
Headphone Output	Ø 6.3 Stereo Jack x 1

RELATED ITEMS:
HDK-97ARRI
HDK-97A
HDK-79GX
HDK-73
HDK-5500
SE-H750

Ikegami

VFL-200HD

VFL-200HD is a 2-inch LCD Viewfinder developed for the Unicam HD Camera Series. The Viewfinder uses a QHD LCD Panel with the resolution of 960 horizontal pixels and 540 vertical pixels, and allows full colour and high resolution video monitoring. The Viewfinder is compatible with the functions and operations of the obsolete Ikegami 2-inch CRT Viewfinder. It adds new features identically to the large colour LCD Viewfinder range.

2-inch Multi-Format Colour LCD Viewfinder

- Compact and high Resolution Viewfinder
- QHD 960 x 540 LCD Panel
- Highest Image Quality
- Input Signal Format auto Detection
- Build-in Heater for the Operation in low Temperature Condition
- Dot-by-Dot Display
- Peaking Function
- Various Marker Functions

RATINGS / PERFORMANCE	
Power Supply	DC12 V (DC 10.5 to 18 V) 4.1 W
Temperature / Humidity	-20 °C to 45 °C / 90 % or less (non-condensing)
Dimensions / Weight	W 15 mm x H 7 mm x D 56 mm - 670 g
Input Signals	Analogue YPbPr signal (VF Cable) - 75 Ω
Screen	2-inch TFT active matrix Non-interlace / 960 (H) X 540 (V)
Brightness / Contrast	220 cd / m^2
Contrast Ratio	250 : 1
Colour Depth	TN 16.777.216
Viewing Angle	Vertical 70° and horizontal 70°

RELATED ITEMS:
HDK-97ARRI
HDK-97A
HDK-79GX
HDK-73
HDK-5500

Unicam with VFE-740HD

Unicam with VFL-P700

Unicam with VFL-200HD

SE-H750

State-of-the-Art System Expander

- **Newly developed cable less Structure**
- **No optical Axis Error**
- **Portable Lens also can be attached**

RATINGS/PERFORMANCE

Utility Power Output	Power for script lighting	DC 12 V 0.5 A
	Power for miscellaneous use (with CCU-970/M)	AC 220 V 1.0 A
	Power for lens	DC 12 V 3.0 A
Output Signals	VF VIDEO	1.0 Vp-p 75 Ω, 1 ch or 3 ch
	Ambient Temperature	-20 °C to +45 °C
	External Dimensions	W 403 ±5 x H 279.5 ±5 x D 333 mm
	Weight	16.5 kg (incl. Lens supporter)

The SE-H750 System Expander enables the use of large Viewfinders and full studio lenses with the entire Unicam HD range. It converts HDK-97A, HDK-79GX, and HDK-55 into a full facility Studio Camera. Installing a Camera into the SE-H750 is very easy and hassle free due to the movable Viewfinder attachment. Cable is unnecessary for connection, it's all part of the highly sophisticated mechanisms.

RELATED ITEMS:
HDK-97A | HDK-79GX | HDK-73 | HDK-5500

Ikegami

OCP-300

Ethernet Capable Operation Control Panel

- New control Panel System
- Ethernet/Arcnet/ICCP Multi-Network Control System
- Supports up to 48 total Cameras
- Touch Screen LCD Panel Interface
- POE + Support (require POE + HUB)
- Can also be setting for conventional One-by-One Camera Control

Three different control architectures are supported by the new OCP-300 Operation Control Panel and BSH-300 Ethernet / ICCP command converter, each with a wide range of camera control capability. The OCP-300 supports not only Ikegami's conventional one-by-one ICCP control and Arcnet based control systems, but also an Ethernet based control system, allowing customers the flexibility to choose the camera control system based on their needs. The OCP-300 includes a touch screen LCD with rotary encoders, and SD Memory Card slot for full camera setup and filing capability. The control depth feature allows the selection of basic, complete and customized operating access. The OCP-300 also supports PoE, powering over Ethernet, so separate power supplies are not necessary. The BSH-300 is used for converting command between Ethernet and ICCP, allowing previous control panels such as the OCP-200 and MCP-200, to be integrated into the Ethernet network system.

OCPs

CCUs

Ethernet or ICCP Connection

RELATED ITEMS:
UHK-430 | HDK-97ARRI | HDK-970A | HDK-97A
HDK-790GX | HDK-79GX | HDK-73 | HDK-5500 | HDL-45E | HDL-F30
HDL-23 | HDL-4500 | BSW-970

RATINGS / PERFORMANCE	
Dimensions	102 x 354 x 129 mm / 4.0 x 13.9 x 5.1-inch, include joystick knob
Weight	1,5 kg (3.3 lbs) approx.

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BROADCAST

BSH-300

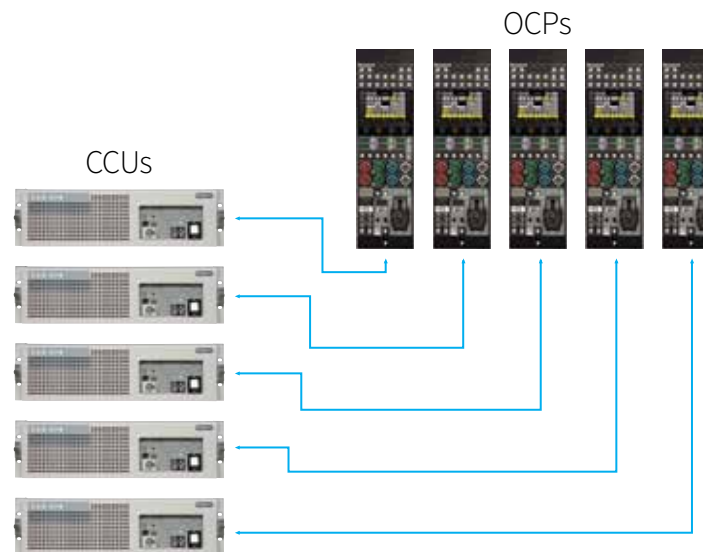OCP-300   BSH-300

(Type A)
up to 6 OCP

(Type B)
up to 6 BS

(Type C)

Three different control architectures are supported by the new OCP-300 Operation Control Panel and BSH-300 Ethernet/ICCP command converter, each with a wide range of camera control capability. The OCP-300 supports not only Ikegami's conventional one-by-one ICCP control and Arcnet based control systems, but also an Ethernet based control system, allowing customers to choose the camera control system flexibly based on their needs. The OCP-300 is equipped with a touch screen LCD with rotary encoders, and SD Memory Card slot for full camera set-up and filing capability. The control depth feature allows the selection of basic, complete and customized operating access. The OCP-300 also supports PoE, powering over Ethernet, so separate power supplies are not necessary. The BSH-300 is used for converting command between Ethernet and ICCP, allowing previous control panels such as the OCP-100 and MCP-200 to be integrated into the Ethernet network system.

Ikegami

Sophisticated Camera Control Panel System

- ◼ **Ethernet/Arcnet/ICCP Multi-Network Control System**
- ◼ **Supports up to 48 total Cameras**
- ◼ **Touch Screen LCD Panel Interface**

- ◼ **POE + Support (require POE + HUB)**
- ◼ **Conventional One-by-One Camera Control Support**
- ◼ **Joystick and VR Type available**
- ◼ **Multi Camera Operation Option**

There are three types of BSH-300: Type-A, Type-B and Type-C, each with a different type and number of connectors

OCP-10/OCP-300   MCP-300

CCU970/980

POE + SWITCH

MCP-200

BSH-300 (Type B)   BSH-300 (Type C)

Conventional OCP-100/200

POV Camera

BSH-300 (Type A)

ETHERNET BASED CAMERA CONTROL SYSTEM
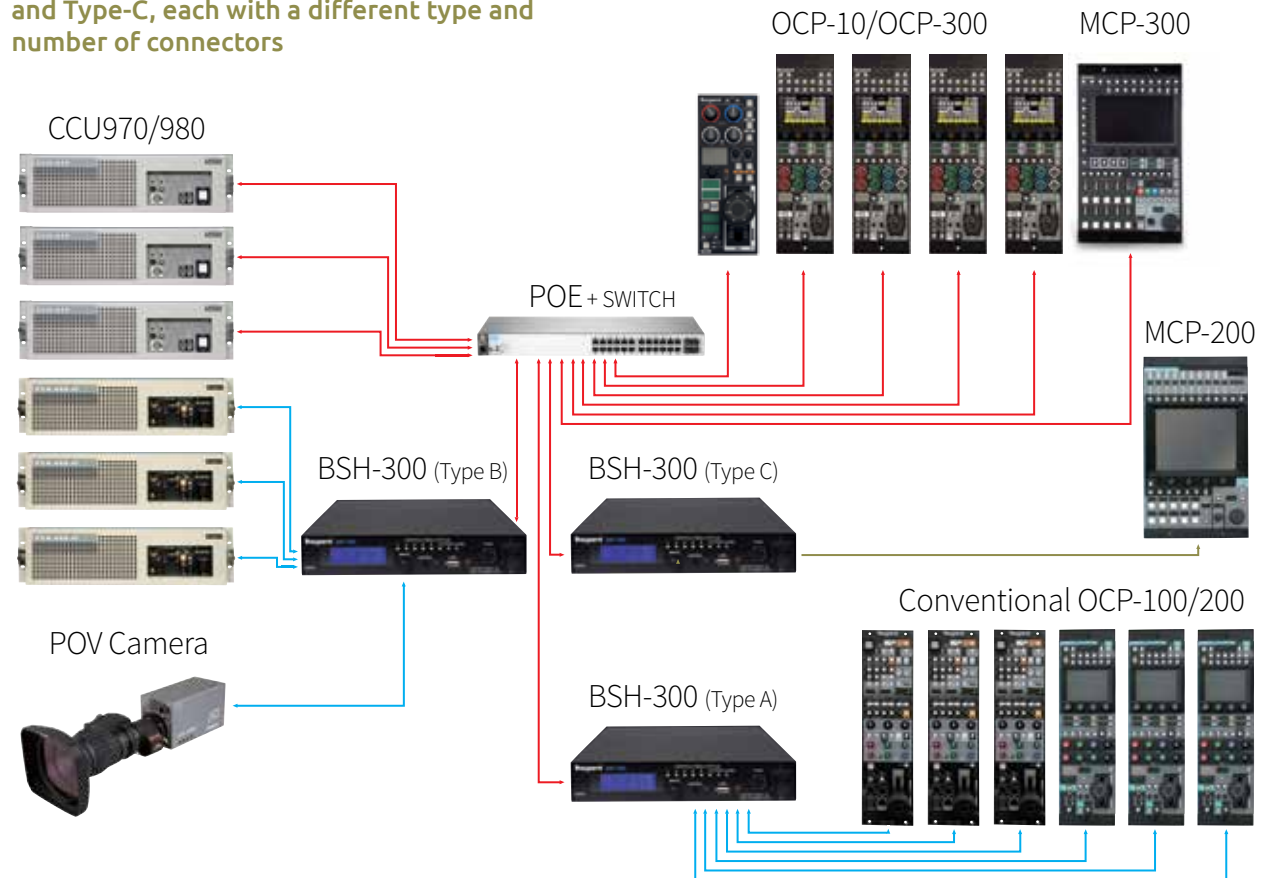
BSH-/CPH-200E

ARCNET based Network Control Panel &Base Station Hub

- ■ **Arcnet Support with Redundancy**
- ■ **8-Control Panel Ports**
- ■ **6CCU/Base Station Ports**
- ■ **Daisy Chain coaxial Network up to 500 m**

RATINGS/PERFORMANCE	
Power (BSH)	AC 100 to 240 V 1.5 to 0.8 A /60 Hz
Operating Temperature	0 °C to +45 °C
Storage Temperature	-25 °C to +60 °C
Ambient Humidity	30 % to 90 % (non-condensing)
External Dimensions	W 217 x H 38.6 x D 400 mm
Weight	2.6 kg

RATINGS/PERFORMANCE	
Power (CPH)	AC 100 to 240 V 1.5 to 0.8 A 50/60 Hz (The power supply to the control panel is contained)
Operating Temperature	0 °C to +45 °C
Storage Temperature	-25 °C to +60 °C
Ambient Humidity	30 % to 90 % (non-condensing)
External Dimensions	W 217 x H 38.6 x D 400 mm
Weight	2.8 kg

CPH-200E/BSH-200E

ARCNET/ICCP Command Converter

— Coax Cable
— CP Cable
— MCP Cable
— LAN Cable
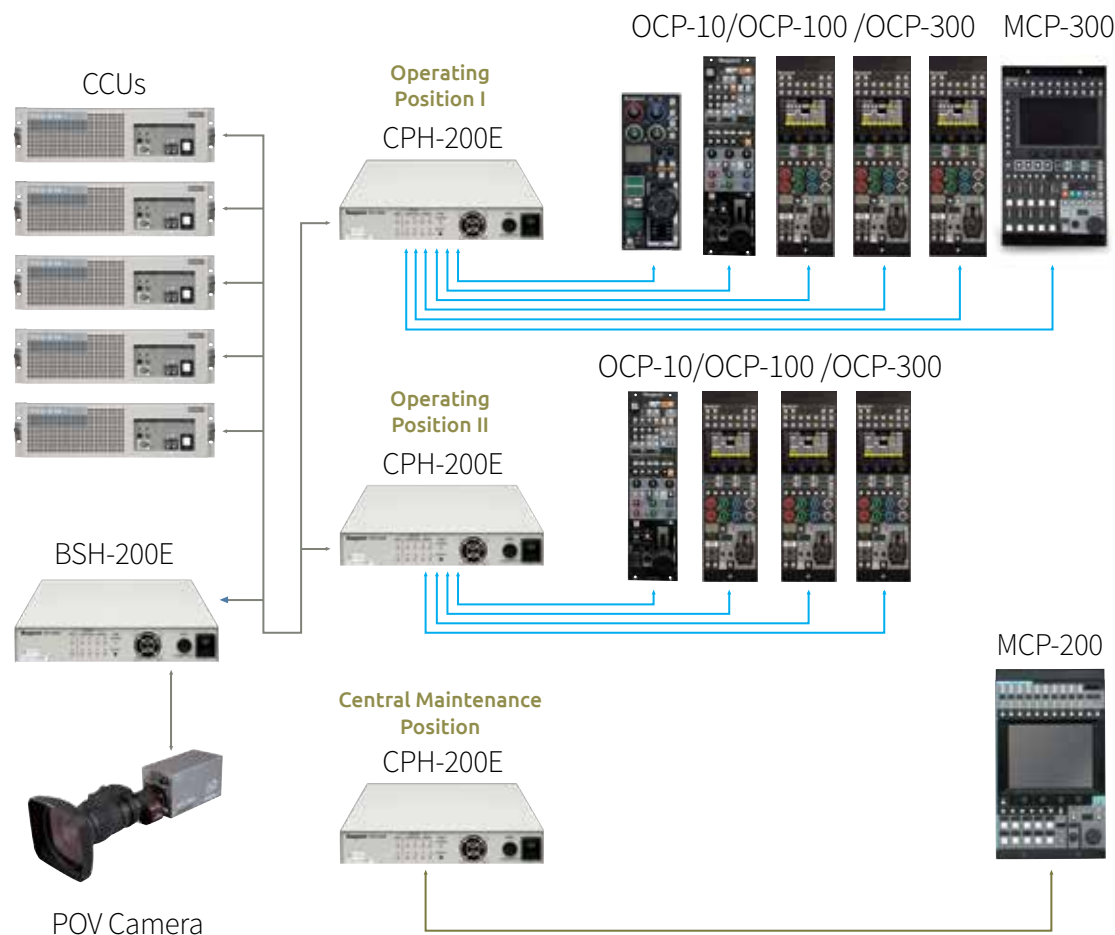
ARCNET BASED CAMERA CONTROL SYSTEM

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BROADCAST

MCP-300

The MCP-300 is a newly designed network master control panel for use with not only Ikegamis conventional ICCP control and Arcnet based control, but also Ethernet based control, allowing customers the flexibly to choose the camera control system based on their needs. As a master control panel, it provides simultaneous operation for up to 10 cameras, moreover up to 100 cameras can be selected (10 cameras x 10 groups). The MCP-300 also supports PoE, Powering over Ethernet, so a separate power supply is not necessary.

Network Master Control Panel

- **Ethernet / Arcnet / ICCP Multi-Network Control System**
- **Large Touch Screen LCD**
- **Illuminated Control Panel**
- **User Customize Functions**
- **Character Output Function (Option)**

RATINGS / PERFORMANCE	
Power Requirement	DC+12V (+10 to +18V)
Power Consumption	13W (Standard)
Cable Length (max.)	10m (MCP Cable without DC IN) 30m (MCP Cable with DC IN) 100m (LAN Cable, CAT5e or higher)
Operating Temperature	0°C to +45°C (+32°F to +113°F)
Storage Temperature	-25°C to +60°C (-13°F to +140°F)
Operating Humidity	30% to 90% (non-condensing)
Dimensions	W204 x H354 x D79.4mm (W8.03 x H13.94 x D3.13inch)
Weight	Approx. 2.6 kg (5.73 lbs)

RELATED ITEMS:
UHK-430
HDK-97ARRI
HDK-970A
HDK-97A
HDK-790GX
HDK-79GX
HDK-73

MCP-200

The MCP-200 is a Arc-net based control panel system offered as an alternate to the traditional Ikegami style control panels. The Arc-net system allows any OCP-200 to control any camera with assignment set at the OCP itself. System wiring is simplified with control of up to 96 cameras via a single coax cable between CCU locations and video control locations.

ARCNET based Network Master Control Panel

- **Arcnet / ICCP Multi-Network Control System**
- **Supports up to 96 total Cameras**
- **7,5-inch Large Touch Screen LCD Panel Interface conventional One-by-One CSU Support**

RATINGS / PERFORMANCE	
Power Consumption	+11 V to +16 V
Operating Temperature	0°C to +45°C
Storage Temperature	-25°C to +60°C
Ambient Humidity	30% to 90% (non-condensing)
External Dimensions	W 204 x H 354 x D 83.2 mm
Weight	Approx. 2.4 kg

RELATED ITEMS:
UHK-430
HDK-97ARRI
HDK-970A | HDK-97A
HDK-790GX | HDK-79GX
HDK-73

Ikegami

OCP-100

Conventional Operational Control Panel

- Traditional Control Conception (ICCP)
- Direct button Operation
- Single Cable Connection with Power Supply
- Dedicated to operate HDK-79GX & HDK-55
- New Functionality like variable
  Colour Temperature

RELATED ITEMS:
HDK-79GX | HDK-5500 | HC-HD300
BSW-970
HDL-F30 | HDL-23 | HDL-4500 | HDK-73

RATINGS / PERFORMANCE	
Voltage	DC +11 to +16 V rating DC +12 V
Wattage	Approx. 3.2 W
Dimensions (WHD)	92.2 x 177.5 x 355.5 mm
Weight	Approx. 2.1 kg

MCP-170

Conventional Master Control Panel

- Traditional Control Conception (ICCP)
- Direct button Operation
- Single Cable Connection with Power Supply
- For control up to 40 Cameras

RELATED ITEMS:
BSW-970

RATINGS / PERFORMANCE	
Power Supply Voltage	+12 V (+11 V to +16 V)
Operating Temperature	0°C to +45°C
Operating Humidity	30 % to 90 %
Dimensions	W 182 x H 341 x D 55 mm
Weight	Approx. 1.7 kg

Everytime we reflect ourselves we see an image

CSU-110

Conventional Camera Select Unit

- Traditional Control Conception (ICCP)
- 8 Ports per Unit
- Cascading for up to 40 Camera Control
- Video Router Capability

RATINGS / PERFORMANCE	
Power Supply Voltage	AC 100 V to 240 V 0.3 to 0.2 A 50 Hz / 60 Hz
Power Consumption	Approx. 25 VA (when operating 1 MCP)
Operating Temperature	0 °C to +45 °C
Operating Humidity	30 % to 90 %
Dimensions	W 483 x H 88 x D 472 mm
Weight	Approx. 11 kg

OCP-10

OCP-10 is a Miniature Operational Control Panel with essential functions for basic camera operation in a smart shape. It utilizes direct ICCP connection as well as Ethernet network support (optional). Whenever size matters, OCP-10 is the perfect fit.

Rear connectors

Network Miniature Operational Control Panel

- Small, compact, light weight
- Essential Camera Controls
- Tally In/Out
- ICCP & Ethernet Connection (optional)
- Full Menu Access

RATINGS / PERFORMANCE	
Power Requirements	DC +9.0 to +18.0 V (nominal DC +12 V) approx. 5.5 W
Temperature / Humidity	0 °C to +40 °C / 30 % to 90 % (non-condensing)
Dimensions / Weight	W 60 x H 160 x D 160 mm / approx. 950 g
Switches	Menu, Function 1, Function 2, Scene File, Knob Free, ABB, AWB, Call, Auto Iris, Iris Full, Enable
Controlls	R & B Gain, Function Control 1 & 2, Function Select, Master Pedestal, Iris, Iris Range, Iris Sensitivity

RM-51A

The RM-51A is a remote controller with essential functions for basic camera operation in a compact shape.

ICCP Miniature Remote Controller

- Small, compact, light weight
- Essential Camera Controls
- Menu Access
- Tally In/Out
- ICCP Connection

RATINGS / PERFORMANCE	
Power Requirements	DC +9.0 to +18.0 V (nominal DC +12 V), approx. 3.6 W
Temperature / Humidity	0 °C to to +40 °C / 30 % ~ 90 % (non-condensing)
Dimensions / Weight	W 90.7 x H 76.9 x D 151 mm / approx. 450 g
Switches	Menu, Digital Extender, Scene File, Black Stretch, ABB, AWB, AVC, Auto Iris, Filter Hold, Bar
Controlls	R & B Gain, DTL, R-G-B-Master Flare or R-G-B Pedestal, Master Pedestal, Iris

Ikegami

HDL-45E/E1

3CCD Multiple-purpose HDTV Camera System

- 2/3-inch 2.3 Megapixel AIT CCD
- 14-Bit A/D Conversion
- Low Noise Gain up
- Built-in Servo Filter / ECC (Electronic Colour Compensation) Filter
- Fully compatible with Unicam HD Product Range

- Advanced Full Digital Processing ASIC
- Light weight and compact
- ATW (Auto Tracking White balance) Function
- Digital Extender
- AVC (Auto Video Level Control) Function
- 23.95/24psF optionally available (HDL-45E1)

The HDL-45E/E1 is a 3CCD multi-purpose HDTV Camera achieving superb picture quality, high stability and excellent reliability with the incorporation of Ikegami's cutting edge digital technologie. The Camera provides superior picture with newly developed 2/3-inch 2.3 Megapixel AIT CCD, digital processing LSI (ASIC) and the latest 14-bit A/D Converters. With its compact one-piece form, this Camera is suitable for various applications such as a weather camera, news flash camera, POV camera, etc. The HDL-45E1 adds support for the 1080/24psF and 1080/23.98psF formats.

Example of application

RELATED ITEMS:
BSH-300 | OCP-300/100/10 | RM-51A

RATINGS / PERFORMANCE

Image Sensor		2/3-inch, 2.3 Megapixel AIT CCD
Scanning System	HDL-45E	1080 i 50 / 59.94 YPbPr 4:2:2, 1080 psf 25 / 29.97 YPbPr 4:2:2
	HDL-45E1	1080 i 50 / 59.94 YPbPr 4:2:2, 1080 psf 25 / 29.97 YPbPr 4:2:2, 1080 p 24 / 23.98 YPbPr 4:2:2
Optical System		2/3-inch, RGB 3CCD, f 1.4
Sensitivity		F11 (1080/59.94 i), F12 (1080/50 i) typical at 2000 lx
S/N Ratio		56 dB (1080i)
Limiting Resolution		1000 TV lines (1080i)
ND Optical Filter Disc		100 %, 25 %, 6.2 %, 1.6 %
Electrical Colour Compensation		3200 K / 5600 K selectable
Electrical Gain		-6,-3, 0, +3,+6,+9,+12,+18,+24,+30,+36,+42,+48,+54 dB -6,-3, 0, +3,+6,+9,+12 dB for 1080 psf
Electrical Shutter		1/100, 1/120, 1/250, 1/500,1/1000, 1/2000
Accumulation		1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1 s, 2 s, 4 s
External Sync		SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS Signal)
Output Signals (Digital)		HD-SDI × 2 ch (SMPTE 292 M, 75 BNC Connector, UP CN BOX type: 1 ch)
Output Signals (Analog)		G,B,R / Y,Pb,Pr selectable 1 ch (Multi-pin Connector)
Dimensions / Weight		W 90 x H 103 x D 180 mm / approx. 1.7 kg
Operating Temperature		-10 °C to +45 °C
Relative Humidity		30 % to 90 % (non-condensing)
Storage Temperature		-20 °C to +60 °C
Operating Voltage		DC+11 to +16 V
Power Consumption		Approx. 22 W

HDL-4500

Super High Sensitivity 3CMOS HDTV Camera System

- Sensitivity: F22 / 2000 lux (S /N: 56 dB)
- Advanced Full Digital Processing LSI (ASIC)
- Built-in Servo Filter / ECC (Electronic Colour Compensation) Filter
- Colour Corrector + Custom Colour Effect
- Two HD-SDI Outputs
- Full Remote Control

- ATW (Auto Tracking White balance) Function
- Digital Extender
- Frame Accumulation
- Column Adding
- ENG Style Operation (Option)
- AVC (Auto Video Level Control) Function

The HDL-4500 is a three CMOS Camera, belonging to Ikegami's leading camera and digital technology, achieving super high sensitivity and a high quality picture. 1.3 Megapixel High-speed Multi-sampling type super high sensitivity CMOS Sensor allows sufficient sensitivity for shooting without using any lights even under moonlight conditions. With its compact one-piece form, the camera is suitable for various POV applications such as a traffic and weather camera, as well as a wide range of surveillance applications.

Example of application

RELATED ITEMS:
BSH-300 | OCP-300/100/10 | RM-51A

Ikegami

RATINGS / PERFORMANCE

Image Sensor	2/3-inch, 1.3 Megapixel CMOS
Scanning System	1080 i 50 / 59.94 YPbPr 4:2:2
Optical System	2/3-inch, RGB 3CMOS, f 1.4
Sensitivity	F22 or more at 2000 lx at 2000 lx
S/N Ratio	56 dB (1080i)
Limiting Resolution	700 TV lines (1080i)
ND Optical Filter Disc	100 %, 25 %, 6.2 %, 1.6 %
Electrical Colour Compensation	3200 K / 5600 K selectable
Electrical Gain	0 dB, -6 dB, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB, 54 dB, 60 dB, 66 dB, 72 dB, 78 dB
Electrical Shutter	1/100, 1/120, 1/250, 1/500,1/1000, 1/2000
Gamma	OFF, 0.35, 0.40, 0.45
Minimum Illumination	0.001 lx (theoretical value) / F 1.4 +78 dB [gain up, 100 % video level]
Digital Extender	1.5 X, 2 X, 3 X, 4 X, 6 X, 8 X, 10 X
External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS Signal)
Output Signals (Digital)	HD-SDI × 2 ch (SMPTE 292M, 75 BNC Connector, UP CN BOX type: 1 ch)
Output Signals (Analog)	G,B,R / Y,Pb,Pr selectable 1ch (Multi-pin Connector)
Dimensions / Weight	W 90 x H 103 x D 180 mm / approx. 1.8 kg
Operating Temperature	-10 °C to +45 °C
Relative Humidity	30 % to 90 % (non-condensing)
Storage Temperature	-20 °C to +60 °C
Operating Voltage	DC +11 to +16 V
Power Consumption	18 W or less

HDL-F3000

Ultra Low-light Multi-Purpose Compact Camera

- ■ **Extreme Starlight Vision**
- ■ **Clear Image**
- ■ **Multi format**
- ■ **Quality Picture under any Illumination**
- ■ **Compact & Light Camera Head**

The HDL-F3000 is a high sensitivity compact two-piece separate optics camera for gyro-stabilized gimbal applications. Equipped with 2/3-inch 2.6 megapixel CMOS sensors, it achieves a minimum illumination of 0.007 lux, with image enhancement features that include haze removal, backlight comp, and digital zoom. The HDL-F3000 operates in 1080i, 720p, and 30p formats. Equipped with 2/3-inch 2.6 megapixel CMOS sensors, it achieves a minimum illumination of 0.0068 lux, with image enhancement features that include haze removal, backlight comp, and digital zoom (0.000057 lx with frame accumulation ON).

Example of application

RELATED ITEMS:
OCP-100 | OCP-300 | OCP-10 | RM-51A

RATINGS / PERFORMANCE

Image Sensor		Three 2/3-inch 2.6million pixel CMOS
Scanning System		1080/59.94i, 1080/50i, 1080/29.97psF, 1080/25psF, 720/59.94psf, 720/50p
Lens Mount		BTA S-1005B
Electronic Colour Compensation		3200 / 4300 / 6300 / 8000K
Operating Temperature	Camera Head	-20 °C to +45 °C
	CCU	-10 °C to +45 °C
Storage Temperature	Camera Head	-30 °C to +60 °C
	CCU	-20 °C to +60 °C
Dimensions	Camera Head	W 100 x H 123 x D 80 mm
	CCU	W 120 x H 105 x D 180 mm
Weight	Camera Head	Approx. 1.0kg
	CCU	Approx. 1.5kg
S/N Ratio		64dB or more(1080/59.94i with NR ON)
Limiting Resolution		1000 TV lines
GAIN		-6,-3, 0,+3,+6,+9,+12,+18,+24,+30,+36,+42,+48,+54,+60,+66,+72dB
GAMMA		OFF, 0.35, 0.40, 0.45
Electronic Shutter		1/100, 1/120, 1/250, 1/500,1/1000, 1/2000, 1/4000, 1/10000(Variable Shutter available)
Frame Accumulation		1/30, 1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1, 2
Digital Extender		x1.1 to 10.0
Power Consumption	Camera Head	Approx. 9.8W
	CCU	Approx. 23W
Output Signal		2ch HD-SDI(SMPTE292M)
External Sync Input	HDTV	PS 1Vp-p, Sync 0.6Vp-p
	SDTV	VBS 1Vp-p, BBS 0.3Vp-p

HDL-23

Ultra Compact 3G HDTV 3CMOS Camera System

- ■ 1/3-inch Progressive 3CMOS Sensor
- ■ Multiple Output Interfaces
- ■ Multi-Format Support
- ■ 3G 1080P50 capable
- ■ Compact & small
- ■ Camera Head Size: W 34 x H 40 x D 40 mm

The HDL-23 is a subminiature HDTV Camera with progressive 3CMOS Sensor, providing native 1080p/50 HDTV picture with superb colour reproduction.

RATINGS / PERFORMANCE	
Scanning System	1920 x 1080 progressive
Optical System	1/3-inch 3CMOS Sensor
Lens Mount	C-Mount
Power Requirement	+12 V DC
Power Consumption	Approx. 20 W
Remote Control	Ikegami standard OCPs (OCP-200 / OCP-100 / RM-51A)
Ambient Temperature	0 °C to +40 °C
Max. Cable Length	15 m (standard: 5 m)
Dimensions	Head: W 34 x H 40 x D 40 mm approx. CCU: W 170 x H 58 x D 200 mm approx.
Weight	Head: Less than 0.1 kg CCU: Less than 3 kg
Performance	
Sensitivity	F10 at 2000 lx, 3200 K
SNR	54 dB
Limiting Resolution	1000 TVL
Output Signals	
HD-SDI	1080 i / 50 Hz, 59.94 Hz 0.8 Vp-p / 75 Ω x 2 ch
DVI	1920 x 1080 p / 50 Hz, 59.94 Hz x 1 ch
HDMI (Option)	1920 x 1080 p / 50 Hz, 59.94 Hz x 1 ch
SD-VBS	1.0 Vp-p / 75 Ω x 1 ch
SD-Y/C	Y : VS1.0 Vp-p / 75 Ω x 1 ch C : 0.286 Vp-p / 75 Ω
IP Stream Output (Option)	
Network Mode	10 Base-T or 100 Base-TX
Motion Picture (H.264) Profile	Data rate: 512 k - 12 M bps Frame rate: 25/ 12/ 8/ 5/ 3/ 2/1 fps
Still Picture (JPEG)	1920 x 1080 or 1280 x 720 pixels

RELATED ITEMS:
BSH-300 | OCP-300/100/10 | RM-51A

Ikegami

iHTR Series

Video Packetizing Optical Multiplex Fibre Transmission

- Non compression long distance Hybrid Camera cable
- High resolution, Real time, Super low delay rate (< 200 µs)
- Multi-Format Support (HD-SDI, SD-SDI)
- 3G/HD-SDI with Embedded Audio
- Up to 8 multiplexed HD-SDI sources on two fibre cores
- Remote Power Supply with SMPTE transmission up to 40 km

- Up to 8 HD-SDI inputs or outputs selectable per unit
- Ethernet/Serial (Bi-directional operation)
- Loop Operation up to 8 devices for 8 x 10 km Ring Video Network

Real Time Long Distance Transmission with no Compression for High Bit Rate Video Signals. The device provides 10 km (6.25 miles) transmission distance, multiplexing up to 20 Gbps of multiple format video. (20 Gbps require 2 x SFP Transceiver Module, 2-core fiber cable) It achieves effi- cient use of optical fiber by using Ikegami's original multiplex method. Supports various video interfaces by selecting the plug-in unit to be in- stalled in rear of the device. The HD-SDI plug-in interface also supports input and output for 3G and DVB-ASI. (3G, DVB-ASI are optional) With chain or loop connection, the distribution and switching of high bit rate video signals is easily achieved with simple cabling and switch setting. Super low transmission delay provides smooth remote camera control.

RATINGS/PERFORMANCE

|	
Optical Transmission Rate	10.3125G bps Bi-directional – Due to 64b/66b encoding for 10.3125 Gbps there are potential error patterns
Optical Transceiver	SFP+ unit Max. 2 sets
Multiplex Technology	Ikegami original optical packet multiplexing
Coding Technology	64b/66b
Fiber Cable / Fiber Connector	Singlemode optical fiber / LC type
Max. Transmission Distance	420 km (recommended Opt. transceiver)
Optical Loss Budget	Approx. 5 dB (1310 nm wave length, with recommended Opt. transceiver)
Video Transmission Channels	Max. 12 ch uncompressed HD-SDI (Optical fiber 2 cores)
Topology	Point to Point, Single direction or Bidirectional/Cascade unidirectional connection (max. 8 stations in the network), Loop connection (max. 8 stations in the network)
Expansion Slot	2 slots (Hot-swap not supported)
LAN Port	100 BASE-TX (2-point Bridged)
	100 BASE Duplex
System Set-Up	by PC with dedicated application software
Transmission Setting	Broadcast distribution
Video Transmission Delay	Less than 200 µsec (8x HD-SDI in Loop connection) Disconnection of the cables / Power cycle affects the actual latency.
Rated Power Input	DC12V +/- 10% (Battery operation not supported)
Power Consumption	Approx. 30 W (with 2x HD-SDI input cards)
Operating Temperature	0°C to 40°C
External Dimensions	181 mm (W) x 44 mm (H) x 255 mm (D) excl. protrusions
Weight	Approx. 1.8 kg (configured with 2x IF cards)
Accessories	Blank panels (for Expansion slot), Optical ports protecter

iHTR Series

Video Packetizing Optical Multiplex Fibre Transmission

| ACCESSORIES			
	Part Nr.	**Name**	**Function**
	iHTR-100A	HTR Main Unit	1RU size, with 2x I/F board-slot
	iHTR-B151A	HD-SDI 4 Input Board (2ch input for 3G-SDI)	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94
	iHTR-B152A	HD-SDI 4 Output Board (2ch output for 3G-SDI)	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94
	iHTR-B155A	HD-SDI 2 Input / 2 Output Board with RS-422/232C connectors, and uninterupted switching function	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94, and RS-435, RS-232C serial communication.
	iHTR-B156A	HD-SDI 2 Input / 2 Output Board	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94
	iHTR-B157A	HD-SDI 2 Input / 2 Output Board with RS-422/232C connectors	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94, and RS-435, RS-232C serial communication.
	iHTR-101	HTR Power Supply	AC Power Box for iHTR-100
	iHTR-102	HTR Power Supply & Hybrid Fibre Cable Adaptor	AC Power Box for iHTR-100 with LEMO/TAJIMI fibre optics cable adaptor
	iHTR-103	HTR DC Power Transmission Adaptor	Power Box & Power Transmitter to iHTR-104 with LEMO/TAJIMI Fibre Optics Cable CN
	iHTR-104	HTR DC Power Receiving Adaptor	Power Box & Power Transmitter to iHTR-103 with LEMO/TAJIMI Fibre Optics Cable CN
	iHTR-105	HTR Power Supply & SC Fibre Cable Adaptor	AC Power Box for iHTR-100 with SC fibre optics cable adaptor
	iHTR-B112	Optical Transceiver	iSFP+ Optical Transceiver (1-core bidirectional 20km)
	iHTR-B113	Optical Transceiver	iSFP+ Optical Transceiver (1-core bidirectional 40km)
	iHTR-B131	HTR Protect Suit	For Connector/Cable Protection and Mobile Use
	iHTR-B135	1U rack mount adaptor	iSFP
	iHTR-B136	2U rack mount adaptor with slide rail	iSFP

Ikegami

Optical-Fibre Camera Cable Operation for Live Broadcasting Event

Camera cable adaptor with power supply, transmit DC power via optical camera cable. 6x video source and 2x return videos can be transmited by one cable.
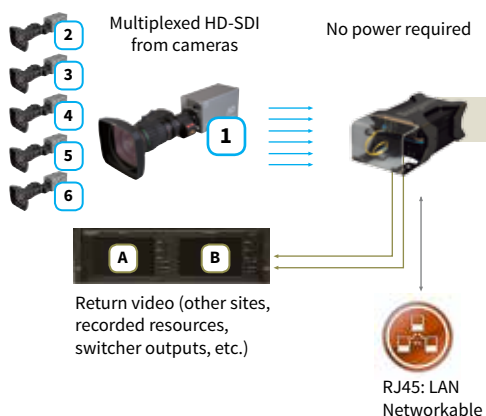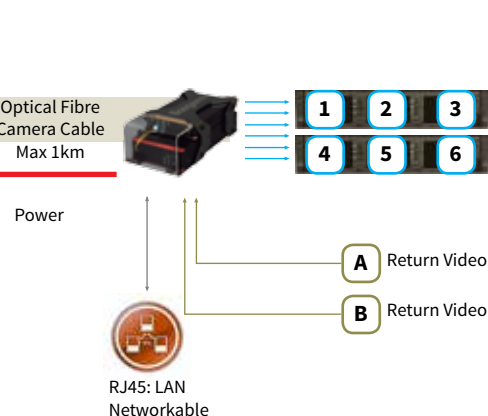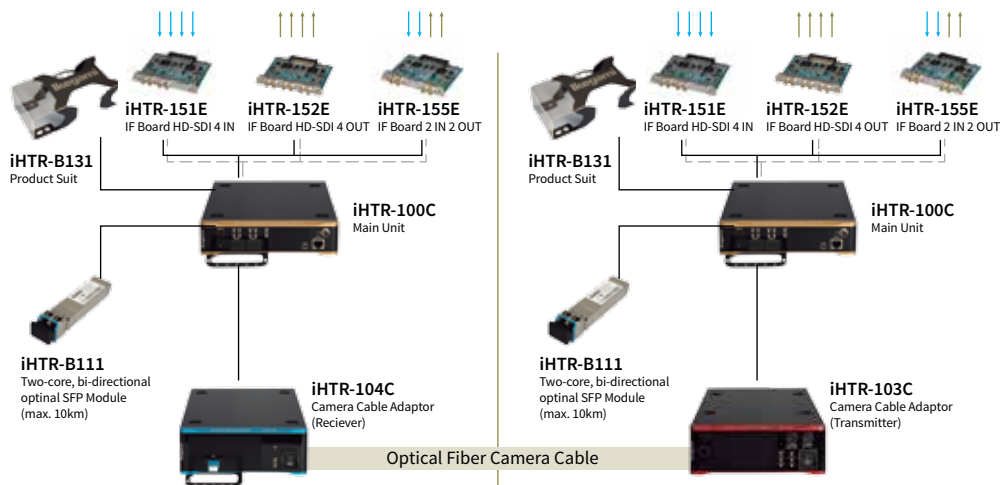
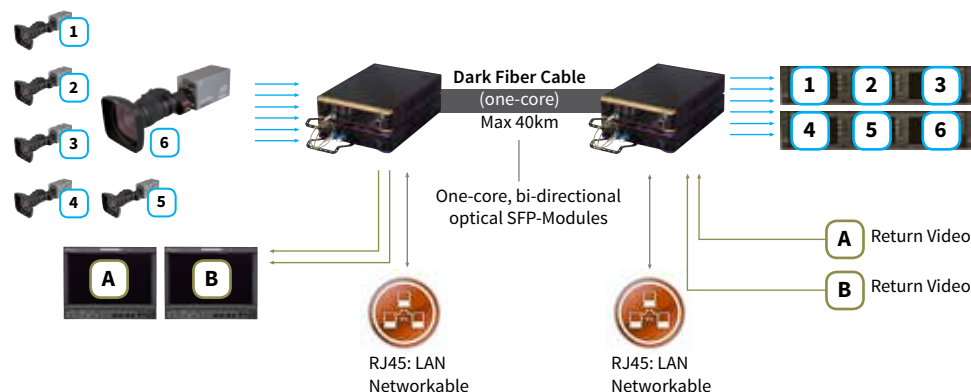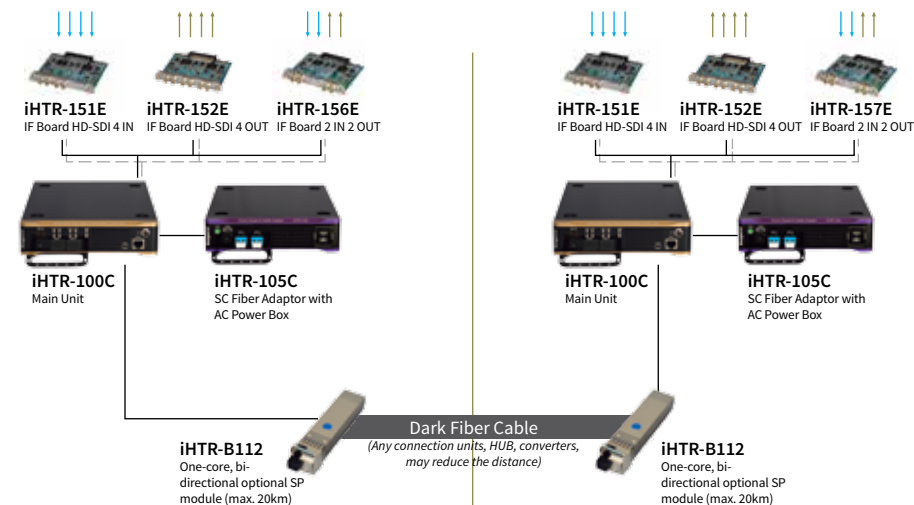## For Multiple Real-time Video Transmission from Remote Location

One optical fiber line can transmit 6x video sources and 2x return videos.

Field. Stage, etc.

Multiplexed HD-SDI from cameras

No power required

2 3 4 5 6 1

Optical Fibre Camera Cable
Max 1km

Power

1 2 3
4 5 6

A Return Video

B Return Video

A B

Return video (other sites, recorded resources, switcher outputs, etc.)

RJ45: LAN Networkable

RJ45: LAN Networkable

OB Van, etc. (Control site)

Multiplexed HD-SDI signals from camera

1 2 3 6 4 5

Dark Fiber Cable (one-core)
Max 40km

One-core, bi-directional optical SFP-Modules

1 2 3
4 5 6

A Return Video

B Return Video

A B

RJ45: LAN Networkable

RJ45: LAN Networkable

Configurations

iHTR-151E
IF Board HD-SDI 4 IN

iHTR-152E
IF Board HD-SDI 4 OUT

iHTR-155E
IF Board 2 IN 2 OUT

iHTR-B131
Product Suit

iHTR-100C
Main Unit

iHTR-B111
Two-core, bi-directional optinal SFP Module (max. 10km)

iHTR-104C
Camera Cable Adaptor (Reciever)

Optical Fiber Camera Cable

iHTR-151E
IF Board HD-SDI 4 IN

iHTR-152E
IF Board HD-SDI 4 OUT

iHTR-155E
IF Board 2 IN 2 OUT

iHTR-B131
Product Suit

iHTR-100C
Main Unit

iHTR-B111
Two-core, bi-directional optinal SFP Module (max. 10km)

iHTR-103C
Camera Cable Adaptor (Transmitter)

Configurations

iHTR-151E
IF Board HD-SDI 4 IN

iHTR-152E
IF Board HD-SDI 4 OUT

iHTR-156E
IF Board 2 IN 2 OUT

iHTR-100C
Main Unit

iHTR-105C
SC Fiber Adaptor with AC Power Box

iHTR-B112
One-core, bi-directional optional SP module (max. 20km)

Dark Fiber Cable
(Any connection units, HUB, converters, may reduce the distance)

iHTR-151E
IF Board HD-SDI 4 IN

iHTR-152E
IF Board HD-SDI 4 OUT

iHTR-157E
IF Board 2 IN 2 OUT

iHTR-100C
Main Unit

iHTR-105C
SC Fiber Adaptor with AC Power Box

iHTR-B112
One-core, bi-directional optional SP module (max. 20km)

Everytime we reflect ourselves we see an image

BSW-970

This outperforming 6-way diversity base station BSW-970 is engineered for mobile and stationary requirements. The internal decoder provides many professional features like ASI, SDI, HD-SDI, component or composite and analog / embedded audio outputs with an end-to-end low delay.It features a genlock link to the wireless camera to ensure a fixed and stable latency. Full duplex camera remote control is integrated as well as 4 wire intercom. The performance and reliability is proven by its use in the most challenging environments around the world. For many users, the BSW-970 provides the hassle free use of wireless camera systems.

RELATED ITEMS:

WA-97 | BDC-2006 | VLA-1903 | Data-TX | OCP-300/100 | MCP-200/170 | BSH-300 CPH/BSH-200

Radiocam HDTV Wireless Base Station 6-Way Diversity

- **Integrated 6 times HDTV Diversity Receiver**
- **DVBT compliant, COFDM 2k Standard**
- **High Performance FFT-MRC Diversity**
- **MPEG2 4:2:2P@ML/HL - H.264 optional**
- **Low Latency**
- **Genlock Transmission**
- **Full Remote Control**
- **ASI In/Out/Switch**

RATINGS/PERFORMANCE

Inputs/Outputs	
	6 x UHF input 70 to 860 MHz BNC (f)75 Ω
	Genlock in external Genlock Tri-Level BNC (f) 75 Ω
	CVBS Output, Analog Video PM Output BNC (f) 75 Ω
	HD-SDI Output BNC (f) 75 Ω with embedded audio
	ASI Output BNC (f) 75 Ω
	ASI Input BNC (f) 75 Ω
	Audio Output, 2 x Analogue Audio Output 600 Ω Sub-D9/XLR3
	Data Output TTL BNC (f) 75 Ω
	ICCP Remote Control Input / Output
	Tally Input / Output Power / Make
	Intercom Input / Output Analogue 600 Ω
	AC Input Neutrix PowerCon
Technical Characteristics	
	Frequency 2.10 - 2.70 GHz (factory option 3.5/5.0/7.0 GHz Band)
	Channel Bandwidth 6.7 or 8 MHz
	Demodulation Autodetect FEC and Guard interval
	Decoding MPEG-2 4:2:2 422P@ML/HL (factory option H.264)
	Control Color LCD Touch Panel with Spectrum Analyser
	Power Input 100 to 240 VAC (50 to 60 Hz), <100 W
	Temperature 0 °C to +40 °C / Humidity 5 % to 95 %
	Dimensions (W x D x H) 485 x 400 x 88.9 mm
	Weight 6.25 kg

Ikegami

ODU-890

Fibre Outdoor Unit

- **1000m Extension SMPTE Hybrid Cable**
- **Fibre Connector Lemo 3K.93C (SMPTE311M)**
- **UHF Remote Control TX**
- **Tripod Mount**

The Fibre Outdoor Unit features a 2 times diversity receiver with integrated downconverter in a compact, weatherproof housing that can be mounted on, or close to the venue. The integrated UHF data transmitter allows full remote control over the wireless camera. Via SMPTE hybrid camera cables the unit can be extended up to 1000 m form indoor devices.
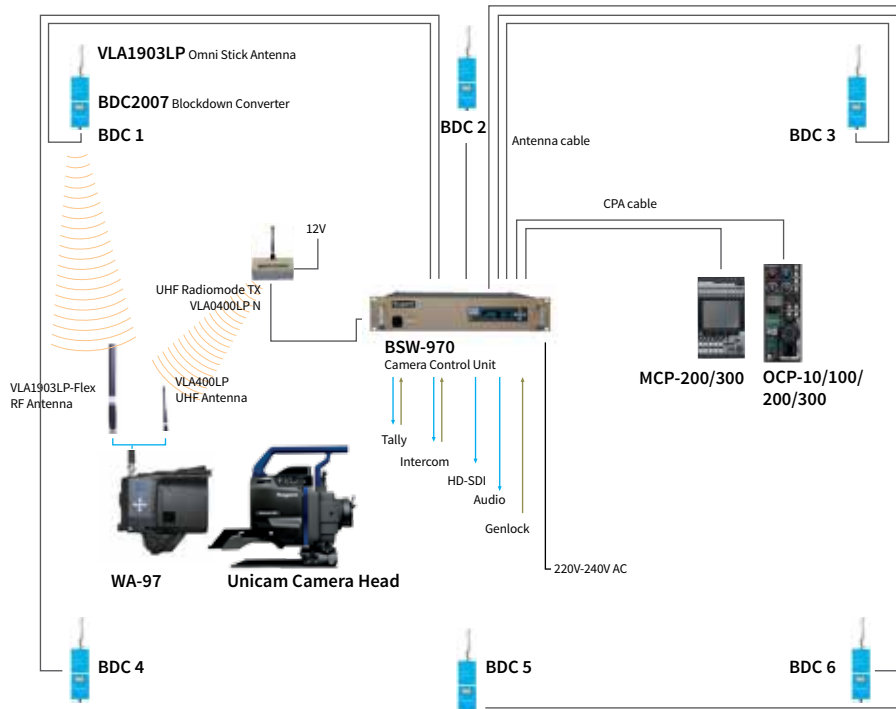
IDU-890

Fibre Indoor Unit

- **1000m Extension SMPTE Hybrid Cable**
- **Fibre Connector Lemo 3K.93C (SMPTE311M)**
- **UHF Remote Control TX**
- **Tripod Mount**

Rear connectors

The Fibre Indoor Unit is the complementary part to the Outdoor Unit. It receives the ASI Transport Stream generated by the ODU. Besides the ASI signal, the remote control data and the power supply for the outdoor unit are also transmitted via the hybrid fiber cable. By using the inbuilt display and the keyboard, the frequency of the ODU can be directly set from the indoor unit.
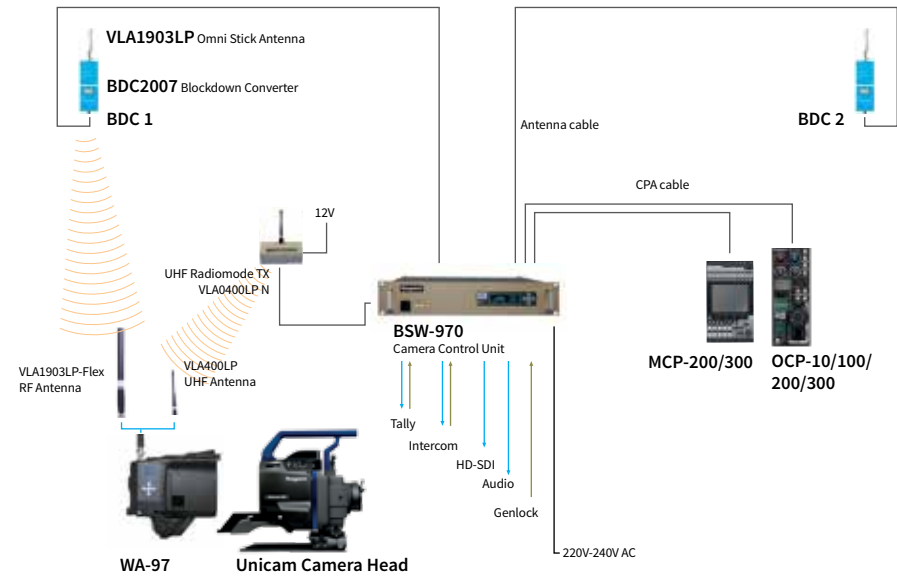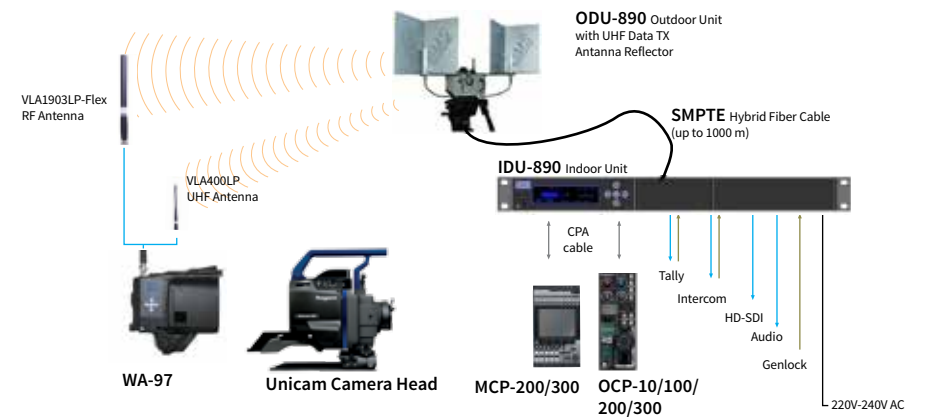
Everytime we reflect ourselves we see an image

48

BROADCAST

BSW-970: 6x diversity

VLA1903LP Omni Stick Antenna

BDC2007 Blockdown Converter

BDC 1

BDC 2

Antenna cable

BDC 3

12V

CPA cable

UHF Radiomode TX
VLA0400LP N

VLA1903LP-Flex
RF Antenna

VLA400LP
UHF Antenna

BSW-970
Camera Control Unit

MCP-200/300 **OCP-10/100/200/300**

Tally

Intercom

HD-SDI

Audio

Genlock

220V-240V AC

WA-97   **Unicam Camera Head**

BDC 4

BDC 5

BDC 6

BSW-970: 2x diversity

VLA1903LP Omni Stick Antenna

BDC2007 Blockdown Converter

BDC 1

Antenna cable

BDC 2

CPA cable

12V

UHF Radiomode TX
VLA0400LP N

VLA1903LP-Flex
RF Antenna

VLA400LP
UHF Antenna

BSW-970
Camera Control Unit

MCP-200/300 **OCP-10/100/200/300**

Tally

Intercom

HD-SDI

Audio

Genlock

220V-240V AC

WA-97   **Unicam Camera Head**

Indoor/Outdoor Unit

ODU-890 Outdoor Unit
with UHF Data TX
Antanna Reflector

SMPTE Hybrid Fiber Cable
(up to 1000 m)

VLA1903LP-Flex
RF Antenna

IDU-890 Indoor Unit

VLA400LP
UHF Antenna

CPA
cable

Tally

Intercom

HD-SDI

Audio

Genlock

WA-97   **Unicam Camera Head**   **MCP-200/300** **OCP-10/100/200/300**

220V-240V AC

Ikegami

Our reflection creates the perfect image

Ikegami image

www.ikegami.eu

Ikegami