

Medical Grade 3CMOS Full HD Camera
High Sensitivity Model & 4K Output

MKC-704KHD



Full HD / 4K Resolution & High Sensitivity

ABOUT 4K

4K (3840x2160) delivers four times as much detail as Full HD (1920x1080), providing high quality images as real as seen by the human eye. Especially on a big screen, it reproduces images superior to Full HD.



Full HD / 4K Output with High Sensitivity

When providing full HD (1920 x 1080) & 4K (3840 x 2160) signal output, the MKC-704KHD has a sensitivity of F17 at 2000 lx(LINE MIX On).

*Note: The trade off is some loss in resolution when using line mix.

Various Image Outputs

The CCU(camera control unit) outputs digital HD signals (HD-SDI and DVI), as well as, a 4K signal. By the internal down converter, composite signals(VBS, Y/C(S-VIDEO)) can be also output.

Compact and Lightweight Camera Head

The compact and lightweight camera head is ideal for use in applications with limited space such as on a surgical microscope.



Antibacterial Coating

The camera head and CCU (camera control unit) are coated to improve infection control.

Remote Control

By connecting an optional foot switch to the remote control terminal, external control is available for various functions including flip and turn function and scene file function.

Flip and Turn Function

The captured images can be flipped horizontally and vertically by the digital processing to correct TV images against the optical inversion caused by optical instruments. Remote control is available via an external optional unit such as a foot switch.

Image Correction Function

Image detail, resolution and modulation depth are significantly improved by special image-correction.

Dynamic Contrast Correction (DCC)

The gradation-corrector achieves a higher contrast image without halation or black defects. It also improves contrast in the detail area.

Scene File

4 scene files are provided to keep pre-set memories of various control functions for convenient use. Scene file data can be saved into and loaded from a USB memory.

Function Switch

Four switches are available on the CCU to custom assign to control functions important to the user.



Specifications

Rating		
Optics	RGB prism	
Image Pickup Device	1/3-inch, CMOS x 3	
Lens Mount	C-Mount	
Output Signals	4K	3G-SDI (Level A) x 4 BNC 1ch 3840 x 2160p
	HDTV	HD-SDI 2ch 1920 x 1080i/p
		DVI 1ch 1920 x 1080i/p
SDTV	composite(VBS) 1ch Y/C(S-VIDEO) 1ch	
External Reference	HDTV Tri-Sync 1ch	
Remote Input	parallel 4 points 1ch D-Sub 9pin	
	Available to assign 4 motions from scene file switching/ image flip and turn/fluorescent video shooting/ ICG mode/electronic zoom(IN/OUT)/brightness correction	
Camera Cable (option)	Multi-core cable 5m, 7m, 5m + 10m	
Dimensions / Weight	Camera Head	W34 x H40 x D40mm[W1.33 x H1.57 x D1.57 inch] (excluding protrusions) / 100g (0.22lb) or less
	Camera Control Unit	W210 x H80 x D270mm[W8.26 x H3.14 x D10.62 inch] (excluding protrusions) / 3kg(6.61lb) or less
Power Requirement	AC 100V to 230V ±10% 50/60 Hz	
Power Consumption	50VA	
Safety Approval	EN60601-1, ANSI/AAMI ES60601-1	

Function		
Electronic Shutter (Rolling Shutter)	Manual	1/100 to 1/10000
	Auto	1/100 to 1/10000
	Slow	1/4, 1/8, 1/15, 1/30 field/sec
Gain	-9dB to 24dB (3dB steps)	
Automatic Functions	Auto White Balance Auto Gain Control Auto Iris Control Auto Knee	
Image Correction Functions	Shading Correction, DTL Correction, Flare Correction, Contrast Correction	
Auto Iris Sample Area	Narrow / Middle / Full / Circle / USER	
Image Flip and Turn	Horizontal, Vertical	
Scene File	4 files (by CCU front switch) Setting data can be stored in USB memory	
H/V Centering	Built-in	
Digital Zoom	1.1x -4x	
ICG Mode	Available by function key or optional foot switch	
Fluorescent Mode	Available by function key or optional foot switch	
Color Bar	Built-in	
Color Correction (paint)	R-channel / B-channel Correction available via CCU front control	
Brightness Adjustment	Available via CCU front control	
Freeze Function	Built-in (Controlled by CCU front switch or optional foot switch), still image / live image can be exchanged	
Image Level Indicator	7 steps (by LED display on CCU)	

Performance	
Resolution	1000 TV Line
S/N Ratio	58dB (Gamma/Detail OFF)
Sensitivity	2000 lx F17 /3200K (LINE MIX ON)

Panel



Design and specifications are subject to change without notice.

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