

Ikegami



MKC-

Native 4K Medical Grade Camera

X800



MKC-X800 is the beginning of Ikegami's new camera generation for 4K resolution. MKC-X800 is a 4K-native progressive-scan 1-CMOS model with an ultra-compact head designed to be operated from a remote CCU. Features include ultra-high resolution, sophisticated GUI and single cable 4K output.

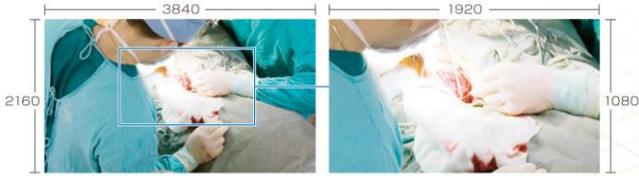
Value for the New Generation

Excellent Image Quality with 4K Native Sensor

The 4K native 4K sensor provides excellent video image quality. It produces superb resolution (1800TVL horizontal resolution) and low picture noise (58dB S/N).

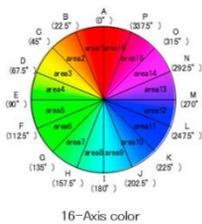
HD cut-out

Magnified but still FHD quality. The HD cut-out function provides magnified FHD images from original 4K images without any degradation.

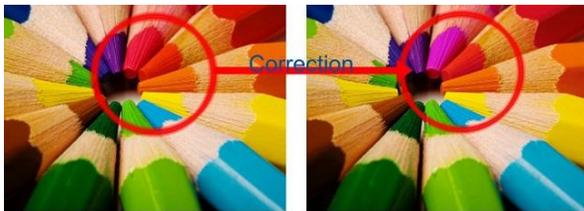


16-Axis Color Correction

The color correction function enables precise color adjustment. 16 axes of the color gamut can be fine tuned in both hue and saturation.



16-Axis color

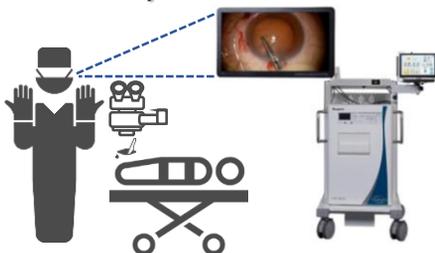


Original

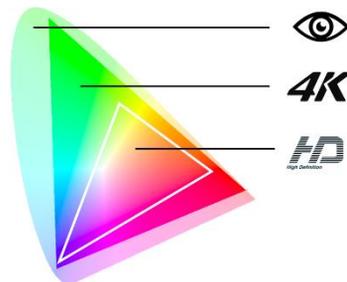
Corrected by color matrix

Extra-Value in 4K image

- Ultra high resolution
- Suitable for heads-up surgery with large size monitor. (Realistic performance with 4K resolution)

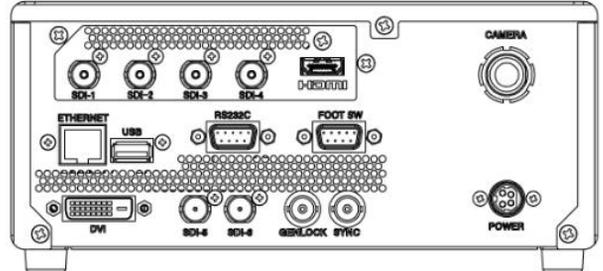


- Wide color gamut
- Higher color reproductivity displaying, for example, very fine detail such as small veins to help specify the blood point.



Various Image Outputs

MKC-X800 provides various 4K outputs as 12G-SDI (or 3G-SDI x4) or HDMI2.0. 4K and HD(1080p/1080i) images can be output simultaneously. It also matches the existing HD system.



*MKC-X800 Rear Panel

3D Master-Slave Control for Heads-up Surgery

By setting up two cameras as master and slave, the slave camera will automatically follow the control of master camera. This function is ideal for use in a heads-up surgery system.

Multi-Language Support

As a state-of-the-art global medical device, the camera's GUI and OSD menu both support English, German, French and Spanish multi-language.

Name-Editable Scene File

4 scene files are provided to store pre-set memories of various control functions for convenient use. The name of each scene file is editable by touch panel operation.



Touch Panel and Sophisticated GUI

Ikegami has developed a sophisticated and user-friendly new GUI design for the CCU (Camera Control Unit) touch panel. The GUI provides easier understanding and easier operation.

Compact and Lightweight Camera Head

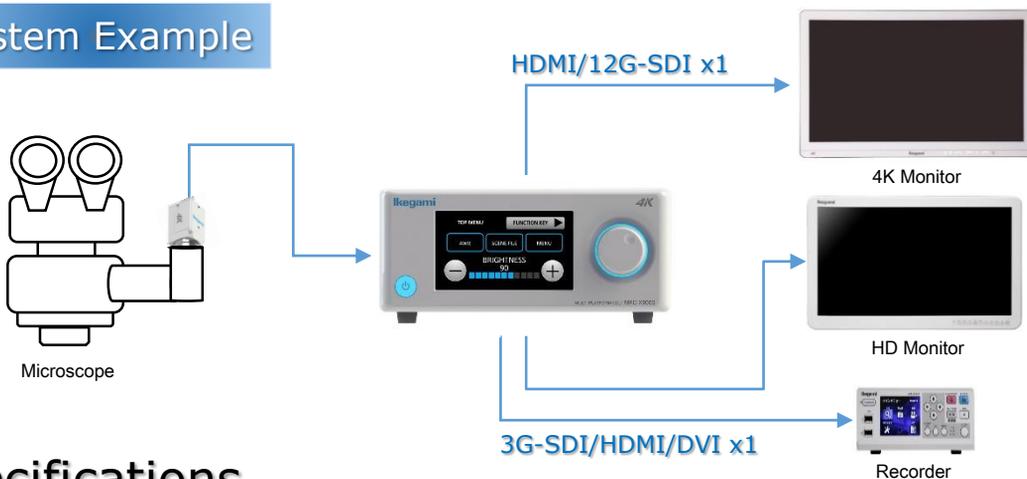
The MKC-X800 has a very compact and lightweight 4K native camera head.



Antibacterial Coating

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

System Example



Specifications

Image Pickup Device	1/2.52 inch 4K native sensor	Power Consumption	33W or less
Lens Mount	C-mount	Weight Head	100g or less
Effective Pixels	3840 x 2160	CCU	3.0kg or less
Sensitivity	F5.6	Dimensions Head	27.5 x 28.0 x 50.0mm
S/N Ratio	58dB	CCU	210 x 88 x 274mm
Resolution	1800TVL	Functions	Auto Functions (Gain, White balance, Shutter, Knee), Slow Shutter, High Sensitivity Mode(Pixel mix, Line mix, Pixel/Line mix) Detail Enhancement, 16-Axis Color Correction, Digital zoom (Max. x4), Flip & Mirror, e.t.c.
Output Signal	4K: HDMI2.0 , 12G-SDI or 3G-SDI x4 HD: 3G-SDI, DVI, HDMI		
Input Signal	RS-232C, Foot Switch		
Camera Cable	5m, 5+10m		

Newly Designed OEM Module

Ikegami provides a newly designed CCU to drive a 4K native 1-CMOS head. Also available are several different 4K and HD heads such as the 3-CMOS 4K and a unique 4-CMOS 2K camera head for ICG applications.

Compact Size

Very compact new processing board plus compact and lightweight camera head, saving space in integrated solutions.

Technical Support

Based on the cutting-edge image technologies, Ikegami has started to work for medical device in 1973. We will provide expert technical support for OEM partners based on our abundant experience.

Selectable Output Board

The camera control unit (CCU) can deliver output formats such as Quad 3G, 12G-SDI and HDMI 2.0 by selecting optional video output I/F boards, enabling various system applications with peripheral devices.

Saving design Resources

The unique board drives several different camera heads (4K native 1-CMOS, 4K 3-chip, and 2K 4-chip RGB+IR), making each control unit suitable for multiple applications.

Other Features / Functions

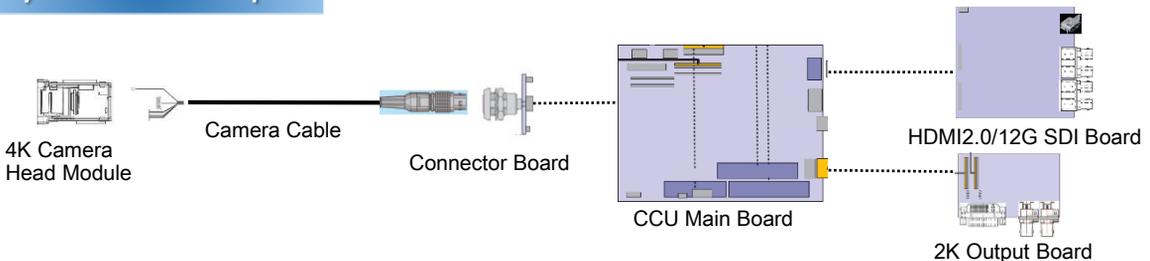
Customizable camera cable	External sync function	High Sensitivity Mode	Flip & mirror
External command control	Easy update with USB (Option)	3D support	Multi-language support

Why 4K in Endoscopy?

The ultra high resolution of 4K images enables doctors to move the camera away from the affected part, delivering two major benefits.

1. The viewing angle of the operation is enlarged which increases the probability of seeing the affected area.
2. Keeps the tip of lens clean, simplifying the process of lens cleaning and saving surgery time.

System Example



Design and specifications are subject to change without notice.

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