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HITACHI
Broadcast and Professional Cameras

8K
Reference Information

SK-UHD8060B

Super Hi-Vision / UHD-2
SK-UHD8060B  8K Camera

33 MP Global Shutter, CMOS OPF Sensor
(Organic Photoconductive Film)

• Studio, EFP/ECC, Multi-format, UHD-2 Production Camera
• 3,000’ SMPTE fiber cable @ 40Gbps data rate
• Standard 4K studio viewfinder
8K CMOS OPF Sensor

Organic Photoconductive Film

8K camera sensors have been limited in dynamic range by the extremely small size of the pixels.

Using OPF enables a higher saturation charge, allowing improved High Dynamic Range.
SK-UHD8060B 8K Camera system

HITACHI’s 5th generation 8K camera

- High Dynamic Range
  - Switchable HLG curves
- Wide Color Gamut
  - ITU.R.BT 2020
- HFR at 120 fps
  - Reduces Motion Blur
HFR @ 120 Frames Per Second

- Early tests showed Motion Blur at 8K Resolution.
- SK-UHD8060B Camera acquisition frame rate is 120 fps
SK-UHD8060B Camera Design

- Operation similar to SK cameras
- 2 piece camera system
- CA w/ SMPTE fiber to CCU

- Camera and 8K recorder
- Store and Forward
- Recorder to CCU w/ fiber
8K Camera System Diagram
VF Adapter w/ 12” 4K OLED Viewfinder
SK-UHD8060B w/ SMPTE Fiber
SK-UHD8060B and 8K camcorder
Camera Head Adaptor Specifications

CA-UHF8060 Connections:

- HD-SDI Out
- 4K-VF Out
- 2 Ch. Intercom
- 2 MIC inputs
- Prompter power and Tally
SMPTE Fiber Transmission

- The camera signals are transmitted @ 40Gbps to the CCU.
- CCU processes 8 channels of 3G HD-SDI in parallel for 8K out.
- Multi format, simultaneous outputs
  - 2K Output HD-SDI (1080p60, 1080i)
  - 4K Output (Quad link SDI)
  - 8K Output (8X 3G SDI)
- Returns of 2K/4K
Camera Control Unit (Rear)

- **8K SDI OUT** via 3G-SDI x8 ch or HD-SDI x16 ch
- **4K 3G-SDI Quad-Link OUT X2**
- **2K SDI OUT X2**
- **4K RET IN 2ch**
- **2K RET IN 1~4**
- **2K SDI WFM/PIX**
- **REF1 (TRI-level sync)/ 2 (Black burst)**
- **2K RET IN 1&2**
- **FOCUS DEMAND**
- **REMOTE**
- **MIC OUT**
- **WFM CONTROL**
- **TALLY OUT**
- **TALLY Contact/Voltage SW**

SMPE311 fiber connector or SM Fiber Cable operation (Switchable Hybrid/SM Fiber)
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Hitachi website Video Gallery
https://www.hitachikokusai.com/AboutHitachiKokusai/VideoGallery/

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