IP-4042

8K Real-Time ROI Extractor

Capture Everything and Extract Multiple ROIs Live!

This ROI (region of interest) extractor combined with a fixed 8K camera provides you with greater freedom of production.

✓ Just one 8K camera and an ROI extractor will work like 4 HD cameras and operators
✓ Don't miss a thing! Shoot the entire scene and extract the best cuts in HD (2K) and maximize the potential of captured video0
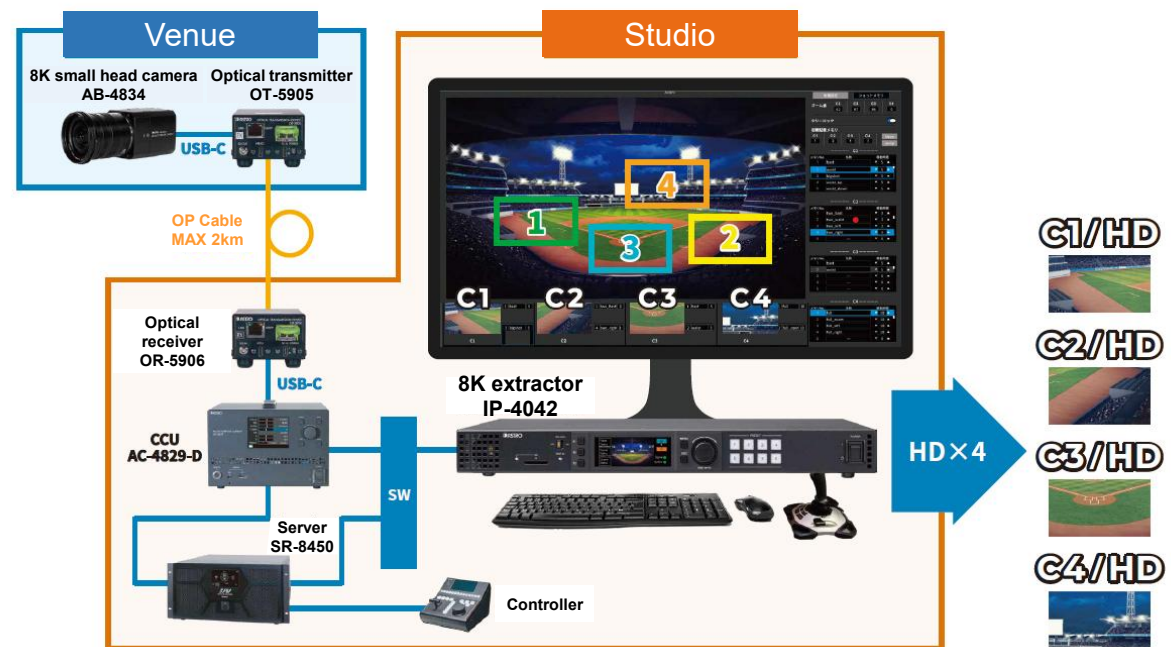
8K Compact Camera
AB-4834/AC-4829-D

✓ Compact camera head (430g)
✓ Features a global shutter
✓ Compatible with a wide range of commercially available L-mount lenses
✓ Allows remote lens operation via electronic control
✓ Transmits video up to 2km when combined with optical transmission devices (see below)

Optical Transmitter/Receiver
OT-5905/OR-5906

✓ Extends the distance between AB-4830 and AC-4829 up to 2 km

System Diagram

Venue

8K small head camera AB-4834 / Optical transmitter OT-5905

USB-C

OP Cable MAX 2km

Optical receiver OR-5906

USB-C

CCU AC-4829-D

Server SR-8450

SW

Studio

8K extractor IP-4042

C1 C2 C3 C4

Controller

HD×4

C1/HD
C2/HD
C3/HD
C4/HD

IP-4042 8K Realtime ROI Extractor

4 x HD cameras in one - redefining multi-camera production

This device extracts up to four sections from an 8K (7680 x 4320) or 4K (3840 x 2160) input video signal and outputs HD (1920 x 1080) video.

New Production Style Using Realtime Extraction

- ✓ Outputs four separate HD video signals extracted from 8K/4K input/footage
- ✓ Realtime pan and tilt
- ✓ Realtime zoom-in/zoom-out
- ✓ Enables extraction control via a dedicated application
- ✓ Supports cascade connection to expand output channels
- ✓ Compatible with external control via JSON format (API available)

SDI Input/Output Specifications

Items		Specifications				
		Resolution	Frame Rate	Pixel Depth	Port	SDI Format
Input Signal (through output)	8K	7680 x 4320	59.94p/60p/50p	YC_BC_R 4:2:2 10bit	BNC x 4 (12G)	12G-SDI Type1 2-Sample Interleave Division
	4K	3840 x 2160	59.94p/60p/50p	YC_BC_R 4:2:2 10bit	BNC x 1 (12G)	12G-SDI Type1 2-Sample Interleave Division
Output Signal	3G-SDI	1920 x 1080	59.94p/60p/50p	YC_BC_R 4:2:2 10bit	BNCx1 (3G)	3G-LEVEL.A (2.97Gbps) 3G-LEVEL.B (2.97Gbps)
	HD-SDI	1920 x 1080	59.94i/60i/50i	YC_BC_R 4:2:2 10bit	BNCx1 (1.5G)	HD-SDI (1.485Gbps)

Use Case Example: Horse Racing

- Using a broad view of the racetrack captured by a fixed 8K camera, you can track and extract multiple regions of interest (ROI) at the same time - such as two separate packs along the track - without the need for an additional camera.

- One of many potential applications is integrating this system with an AI tracker to automatically identify and extract images of any racehorse of interest.

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Use Case Example: Live Events
(Classical Music Concert)

Users can extract specific players, highlighting a featured performance -such as the brass section - from a video of the entire orchestra.
Presetting camera (extraction) positions based on the musical score enables timely and efficient operation, ensuring smooth transitions that follow the rhythm of the performance.