

BPU-4800

4K / HD baseband processor unit
and UHFR server for HDC-4800
system camera



Overview

Capture 4K / HD Ultra High Frame Rate (UHFR) slo-mo for sports and other live action

A perfect complement for the HDC-4800, the BPU-4800 combines baseband processing and UHFR server functions in a single, compact rack-mounting unit. The BPU-4800 handles recording and playback of all your UHFR content, with no need for a separate server dedicated for ultra slo-mo, giving up to four hours 4K UHFR storage. Integration with the PWS-4500 through the real-time Share Play network also allows fast, seamless highlight editing. Record full-resolution 4K Ultra HD images from the HDC-4800 at up to 8x or Full HD at 16x to reveal split-second action. The unit also allows you to create a powerful replay server system, plus gives you Full HD cutout and zoom capabilities.

This product contains pre-installed software and requires the purchase of licence keys to activate some functions.

Features

Every split-second of sporting action, captured in 4K

You can capture the dynamic excitement of live sports in 4K ultra slo-mo with the BPU-4800, the dedicated baseband processor unit for the HDC-4800 system camera. You can record breathtaking 4K Ultra HD images at up to 8x (479.52 fps) or 4x

(239.76 fps) slow motion*1 and Full HD at up to 16x (959.04 fps) or 8x (479.52 fps) slow motion*2.

*1 Optional SZC-4008 software is required

*2 Optional SZC-2016 software is required.

Efficient file sharing over IP networking with Share Play function

The Share Play function can be utilised when the system is configured with the PWS-4500 server connected to the HDC-4800 together with the BPU-4800 via the network. Once clips have been recorded by the BPU-4800, the Share Play function enables these clips to be shared among all connected PWS-4500 servers. This delivers a more efficient workflow. For example, PWS-4500 server operators and highlight operators can view the clips in the BPU-4800, and can playback and output any of these clips from their own local server. There is no need to push or pull clips between different servers.

Simultaneous 4K HFR data and high-quality XAVC recording*3

The BPU-4800 allows 4K HFR data and simultaneous high-quality XAVC recording – with up to four hours record time and no need for a separate record/playback server.

*3 Optional software is required.

Replay function

Using just the HDC-4800 and BPU-4800 along with control devices*4, you can create a powerful replay server system with intuitive GUI operation that includes slow-replay control, highlight editing, and touch-panel capabilities.

*4 The PWSK-4403 Control Panel, the PWS-100PR1 Production Control Station and the PWS-110MG1 Media Gateway Station are required for the replay system.

HD cutout function

Powerful processing allows a Full HD high frame rate (HFR) image to be cut out from a 4K picture in real time. During replay, any portion of the captured image can be cropped to provide a close-up HD HFR image. This gives directors a powerful editorial tool to enrich live sports coverage with detailed analysis of the action.

4K fibre transmission up to 2,000m as standard

The BPU-4800, configured with the HDC-4800 system camera and HDCU-2000 camera control unit can operate across standard SMPTE fibre cables for distances up to 2,000m.

Specifications

General

| | |
|------------------------|--|
| Power requirement | 100 V to 127 V/200 V to 240 V AC, 50/60 Hz |
| Current consumption | 4.5 A (max) |
| Operating temperature | 5 °C to 40 °C (41 °F to 104 °F) |
| Storage temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
| Mass Approx. | 16.5 kg (36 lb 6.0 oz) |
| Dimensions (W x H x D) | 424 x 132 x 410 mm (16 3/4 x 5 1/4 x 16 1/4 inches) |

Input/output connectors

| | |
|--------------------------|---|
| CAMERA | Optical/electrical multi-connector (LEMO 3K.93C connector) (x1) |
| CCU | Optical/electrical multi-connector (LEMO 3K.93C connector) (x1) |
| REMOTE (RCP/CNU) | 8-pin multi-connector (x1) |
| LAN | 8-pin (x1) |
| SHARE PLAY | 1/2 SPF+ (x2) |
| REMOTE 1/2 | RJ-45 (x1) |
| GPIO (25P) | 25-pin D-Sub, female (x1) |
| NETWORK1 to 2 RJ-45 (x2) | 1000BASE-T |
| MAINTENANCE | USB (x1) |
| NETWORK SFP+ (x1) | 10GBASE-SR/LR (Add-in Card) |

Input connectors

| | |
|---|---|
| AC IN 100 V to 127 V/200 V to 240 V AC (x2) | SDI1, SDI2 BNC (x2) |
| 3G-SDI | SMPTE ST424/425 Level-A/B, 2.970 Gbps/2.967 Gbps |
| HD-SDI | SMPTE ST292, 0.8 Vp-p, 75 Ω, 1.485 Gbps/1.4835 Gbps |

| | |
|----------------------------------|---|
| REFERENCE IN | BNC (x1) HD: SMPTE ST274, tri-level sync, 0.6 Vp-p, 75 Ω SD: Black burst (NTSC: 0.286 Vp-p, 75 Ω/, PAL: 0.3 Vp-p, 75 Ω) |
| TIMECODE INPUT BNC (x1) | 0.5 Vp-p to 5 Vp-p, 10 kΩ |
| DIGITAL AUDIO (AES/EBU) INPUT | BNC (x4) CH 1/2 to CH 7/8, AES/EBU format, unbalanced |
| Note | When connecting devices for AES/EBU signal input/output, use a cable whose length is less than 300 meters (984 feet). |

Output connectors

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|------------------------------------|---|
| 3G SDI OUTPUT (SLOT1 LIVE) | BNC (x8) 3G-SDI: SMPTE ST424/425 Level-A/B, 0.8 Vp-p, 75 Ω, 2.970 Gbps/2.967 Gbps |
| 3G/HD SDI OUTPUT (SLOT1 REPLAY) | BNC (x8) 3G-SDI: SMPTE ST424/425 Level-A/B, 0.8 Vp-p, 75 Ω, 2.970 Gbps/2.967 Gbps HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 |

| | |
|------------------------------------|---|
| | Ω, 1.485 Gbps/1.4835 Gbps 3G-SDI/HD-SDI selectable |
| 3G/HD SDI OUTPUT (SLOT2 REPLAY) | BNC (x2) 3G-SDI: SMPTE ST424/425 Level-A/B, 0.8 Vp-p, 75 Ω, 2.970 Gbps/2.967 Gbps HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 Ω, 1.485 Gbps/1.4835 Gbps, 3G-SDI/HD-SDI selectable |
| HD SDI OUTPUT (SLOT3 LIVE) | BNC (x1) HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 Ω, 1.485 Gbps/1.4835 Gbps |
| HD SDI OUTPUT (SLOT3 REPLAY) | BNC (x1) HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 Ω, 1.485 Gbps/1.4835 Gbps |
| REFERENCE OUT | BNC (x1) HD: SMPTE ST274, tri-level sync, 0.6 Vp-p, 75 Ω SD: Composite sync, 0.3 Vp-p, 75 Ω, HD SYNC/SD SYNC selectable |
| NMI-LAN (SLOT1 LIVE) | SFP+ (x2), 10G BASE-** (using SFP+ transceiver module) |
| | NMI-LAN (SLOT1 REPLAY) NMI-LAN (SLOT2) |
| TIMECODE OUTPUT | BNC (x1) |

1.5 Vp-p, low impedance

DIGITAL AUDIO
(AES/EBU)

OUTPUT BNC (x4), CH 1/2 to CH
7/8, AES/EBU format, unbalanced

Supplied accessories

Number plates (1 set), Before Using
this Unit (1), Operating Instructions
(CD-ROM) (1), Cable, RJ45-DSUB,
Part No. 1-848-424-12 (SONY) (1)

Related products



HDC-4800

UHFR 4K/HD Camera
System



SZC-4008

4K HFR 8x slo-mo
support software for
BPU-4800 baseband
processor unit



SZC-2016

HD HFR 16x slo-mo
support software for
BPU-4800 baseband
processor unit



PWS- 110MG1

Short-depth Media
Gateway Workstation



PWS- 110PR1

Short-depth
Production Control
Workstation



PWS- 100MG1

Media Gateway
Workstation



PWS- 110CM1

Content Management
Station



NXLK- IP40F

SDI-IP converter
board with 3G-SDI
and SFP+ ports

Gallery

