

# 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)
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## Input connectors

3G-SDI	SMPTE ST424/425 Level-A/B, 2.970 Gbps/2.967 Gbps
HD-SDI	SMPTE ST292, 0.8 Vp-p, 75 $\Omega$ , 1.485 Gbps/1.4835 Gbps
REFERENCE IN	BNC (x1) HD: SMPTE ST274, tri-level sync, 0.6 Vp-p, 75 $\Omega$ SD: Black burst (NTSC: 0.286 Vp-p, 75 $\Omega$ /, PAL: 0.3 Vp-p, 75 $\Omega$ )
TIMECODE INPUT BNC (x1)	0.5 Vp-p to 5 Vp-p, 10 k $\Omega$
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

3G SDI OUTPUT (SLOT1 LIVE)	BNC (x8) 3G-SDI: SMPTE ST424/425 Level-A/B, 0.8 Vp-p, 75 $\Omega$ , 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 $\Omega$ , 2.970 Gbps/2.967 Gbps HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 $\Omega$ , 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 $\Omega$ , 2.970 Gbps/2.967 Gbps HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 $\Omega$ , 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 $\Omega$ , 1.485 Gbps/1.4835 Gbps
HD SDI OUTPUT (SLOT3 REPLAY)	BNC (x1) HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 $\Omega$ , 1.485 Gbps/1.4835 Gbps
REFERENCE OUT	BNC (x1) HD: SMPTE ST274, tri-level sync, 0.6 Vp-p, 75 $\Omega$ SD: Composite sync, 0.3 Vp-p, 75 $\Omega$ , HD SYNC/SD SYNC selectable
NMI-LAN (SLOT1 LIVE)	SFP+ (x2), 10G BASE-** (using SFP+ transceiver module) NMI-LAN (SLOT1 REPLAY) NMI-LAN (SLOT2)

## Output connectors

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



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