

## BRC-H800

Premium Full HD PTZ Camera with 12x optical zoom and uncompromising broadcast picture quality



### Overview

**Remotely capture broadcast quality Full HD images with smooth, silent PTZ and excellent low-light sensitivity.**

The BRC-H800 remote camera combines uncompromising broadcast picture quality and smooth, silent PTZ operation with the flexibility of 3G-SDI and HDMI connections.

Designed for unattended operation, this compact but powerful robotic camera is an ideal complement to other broadcast cameras for capturing images in hard-to-reach or unobtrusive positions. It's equally at home in TV newsrooms, remote studios and on-air suites, auditoriums, houses of faith, courtrooms, classrooms, or sports stadiums. It's also particularly suited to efficient multi-camera set-ups, under the control of a single operator.

The 1.0-type Exmor R CMOS image sensor captures crisp, low-noise Full HD images at 60p, with excellent low-light sensitivity. The large image sensor also allows the creation of beautiful 'bokeh' effects with a shallow depth of field to suit any artistic intention.

Speedy, near-silent PTZ operation with 12× optical zoom accommodates wide-angle scenes and tightly framed close-ups,

with Clear Image Zoom 24× (HD) extending this range even further without visible loss of resolution. In Tele Convert Mode, 24× zoom can be further doubled to 48× without losing HD resolution.

Broadcast-friendly features include dual tally lamps for on-air operation, while operational flexibility is enhanced with options for ceiling, table-top, or tripod mounting. There's also a broad range of video interfacing and remote control possibilities—plus support for PoE+ and genlock—for smooth integration into any broadcast, professional, or corporate AV environment.

The BRC-H800/1 and the BRC-H800/WPW are the US/Canada models which are bundled with the AC-UES1230MT AC power supply and cord. In all other regions the AC power supply and cord are sold separately.

Available in black as BRC-H800 and in white as BRC-H800/W (color availability may vary by country).

## Features

### **Enhanced Pan/Tilt/Zoom (PTZ) operation**

Accurately re-frame shots or track moving subjects with smooth, speedy, near-silent remote control of pan, tilt and zoom functions. There's also low-speed zoom and a slow pan/tilt mode for precise, judder-free camera movements. PTZ Trace Memory allows a sequence of camera movements to be memorized and followed whenever required. PTZ Motion Sync smoothly blends separate pan, tilt and zoom movements for seamless, professional-looking transitions. Upto 100 preset positions for pan/tilt/zoom operations.

### **Broadcast quality Full HD 60p images**

The camera's large, back-illuminated 1.0-type Exmor R CMOS sensor delivers uncompromised broadcast quality color pictures

in detail-packed Full HD 60p, capable of capturing sports and other fast-moving action.

### **Cinematic 24p pictures**

The camera can also operate in 24p mode, for video footage with a rich, filmic look.

### **High quality 12x optical zoom and 24x(HD) with Clear Image Zoom**

The high quality Zeiss Vario-Sonnar T lens with 12x optical zoom range covers wide angle shots as well as tight close-ups. Clear Image Zoom\* expands this range to 24x (HD) without sacrificing detail. In addition, the Tele Convert Mode can double this range again, up to 48x zoom while maintaining a 1920x1080 resolution.

\*Clear Image Zoom is a Sony original intelligent interpolation, which analyzes the input image and increases the resolution of the image.

### **Excellent low light sensitivity**

The BRC-H800 can capture crisp, low noise color video images in light levels as low as 1.7lx, making it an ideal choice for dimly lit live hall and theater

### **Flexible installation**

Integration is simplified in a wide range of environments, with PoE+ (Power over Ethernet) to reduce cabling requirements and VISCA control over IP.

### **Remote operation**

Pan/tilt/zoom and other camera settings can be controlled using the supplied IR remote commander, or with the optional RM-IP500 Remote Control Unit that can control multiple cameras.

### **RCP/MSU Connectivity**

In a studio environment, BRC-H800 can be controlled via Sony's Remote Control Panel RCP-1500/1501/1530 and MSU-

1000/1500. Connection can be made over IP networks.

\*The compatibility is described in the Remote Camera System Guide.

### **Genlock**

Genlock simplifies integration with other systems in multi-camera broadcast environments.

### **Versatile video outputs**

Enjoy greater installation flexibility in professional broadcast and AV environments with 3G-SDI (x2) and HDMI video outputs.

### **Front and rear tally lamps**

Ideal for on-air broadcast use, the BRC-H800 features dual tally lamps on the front and rear of the camera body. Brightness of the front tally lamp can be adjusted in two steps.

### **Always up to date**

New camera functionality and performance improvements can be added via firmware updates over IP

### **Simplified construction of VR/AR systems\***

Real-time camera tracking data (pan/tilt/zoom/focus/iris) can be output from the camera over IP network in free-d\* protocol. It can construct VR/AR system without additional tracking system, easy and cost effective solution.

\*VR: Virtual Reality, AR: Augmented Reality

\*free-d is an industry-standard protocol for transmitting camera tracking data.

## Specifications

### Camera

1.0-type back-illuminated Exmor R

Image Sensor	CMOS sensor
Image Sensor (Number of Effective Pixels)	Approx. 14.2 Megapixels
Image Sensor (Total Number of Pixels)	Approx. 20.4Megapixels
Signal System	1080/59.94p,1080/59.94i,720/59,94p, 1080/50p,1080/50i, 720/50p, 1080/23.98p
Minimum Illumination (50IRE)	1.7 lux (50IRE, F2.8, 1/30s, Max.Gain)
Horizontal Resolution	850 TV line (in 3G-SDI output) (center)
Gain	Auto/Manual (-3dB to +33dB)
Shutter Speed	1/10000s to 1/8 (59.94/29.97) 1/10000s to 1/6 (50/25/23.98)
Exposure Control	Auto, Manual, Priority mode (shutter priority, iris priority, gain priority), Back light, Spot light
White Balance	Auto1/Auto2/One Push/Indoor/Outdoor/Manual
Optical Zoom	12x

Clear Image Zoom	2x
Digital Zoom	No
Tele Convert Mode	Off, 2x *1920x1080 only
Focusing System	Auto/Manual
Horizontal Viewing Angle	Typ. 64.6° (Wide-end)
Focal Length	f=9.3 to 111.6mm F2.8(Wide) ,F4.5(Tele)
Minimum Object Distance	1000mm(Tele) 80mm (Wide)
Pan/Tilt Angle	Pan: $\pm 170^\circ$ Tilt: $+90^\circ/-30^\circ$
Pan/Tilt Speed	Pan: 0.3° to 60°/s*1 0.05° to 60°/s*2 0.02° to 60°/s*3  Tilt: 0.3° to 60°/s*1 0.05° to 60°/s*2 0.02° to 60°/s*3

\*1 When P/T SPEED TYPE setting is NORMAL

\*2 When P/T SPEED TYPE setting is Extd. RANGE (Requires firmware V2.10)

\*3 When P/T SPEED TYPE setting is Extd. STEP (Requires firmware V2.10)

Pan/Tilt Slow Mode	Yes
Pan/Tilt Operation Noise	NC30 or less* *Sony measurement conditions
Preset Position	100
PTZ Trace Memory	16
PTZ Motion Sync	Yes
Camera tracking data output	Yes (Requires firmware V2.10)

## Camera Features

Day/Night Yes

Visibility Enhancer Yes

Image Flip On/Off

Picture Profile Preset	Yes
ND Filter	Off, 1/4, 1/16, 1/64 switchable in menu
Color Gain	Yes (15 step)
Color Hue	Yes (15 step)
Color Matrix	Off/Standard/High Saturation/FL light/MOVIE/STILL/CINEMA/PRO/ITU709/BW
Gamma	Standard/Straight/MOVIE/STILL/CINE1/CINE2/CINE3/
Gamma Level	Yes (15 step)
Black Level	Yes (97 step)
Black Gamma	Yes (15 step)
Knee Point	Yes (13 step)
Knee Slope	Yes (15 step)
Flicker Cancel	On/Off



## Interface

4K Video Output	No
HD Video Output	3G-SDI x2 and HDMI
HDMI Color Space	YCbCr, 4:2:2 RGB, 4:4:4
Camera Control Interface	VISCA RS-422 RJ45(In/Out) VISCA over IP RJ45
External Sync. Input	BNC, 75Ω, HD 3-level sync, SD Black Burst
Power Connector Type	IEC60130-10 (JEITA standard RC-5320A) TYPE4

## General

Power Requirements	DC 10.8V to 13.2V, PoE+ (IEEE802.3at compliant)
Power Consumption	DC12 V:19.0W (Max) PoE+:23.0 W (Max)
Operating Temperature	0 °C to 40 °C 32 °F to 104 °F  -20 °C to +60 °C

Storage Temperature	-4 °F to +140 °F
Dimensions (W x H x D)*1	Approx. 198 x 260 x 238mm (without projecting object) Approx. 7 7/8 x 10 1/4 x 9 3/8 inch (without projecting object)
Mass	Approx. 4.3kg Approx. 9 lb 7.7oz
Optional Card Slots	Not needed
Body Color	Black and White
Size of Screw Hole for Tripod	1/4-20UNC x2
Mountable Angle	Less than $\pm 15$ degrees
Ceiling Mount	Yes
Supplied Accessories	IR Remote Commander Unit (1) Ceiling bracket (2) Wire rope (1) Screws(M3 x 8) (7) Screws(M4 x 8) (1) HDMI cable fixing plate (1)

## Related products



### MCX-500

Multi-Camera Live Producer



### RM-IP500

PTZ Camera Remote Controller



### RM-IP10

IP remote control panel for BRC cameras



### RCP-1500

Joystick type of Remote Control Panel for HDC/HSC/HXC series cameras. 4 units in 19-inch EIA rack.



### RCP-1530

Joystick type of Remote control panel for HDC/HSC/HXC series cameras. 5 units in 19-inch EIA rack.



### AWS-750

Anycast Touch portable live content producer



### RCP-3100

Joystick-type remote control panel for HDC/HSC/HXC series cameras. 5 units in 19-inch EIA rack.



### REA-C1000 Edge Analytics Appliance

Edge Analytics Appliance



### HXC-FB80

Three 2/3-inch Exmor™ CMOS sensor HD color studio camera



### HXC-P70

Affordable, three 2/3-inch Exmor CMOS sensor, full HD/SD compact system camera with direct optical fiber cable connection



### RCP-3500

Remote-control panel for HDC/HSC/HXC series cameras



### RCP-3501

Remote-control panel for HDC/HSC/HXC series cameras



### MSU-3000

Master setup unit, multi-camera remote control panel for



### MSU-3500

Master setup unit, multi-camera remote control panel for



### BRC-AM7

Premium PTZ Auto Framing Camera with AI Analytics, 4K 60p,

system cameras  
(horizontal type)

system cameras  
(vertical type)

20x optical zoom.  
High interoperability  
with other  
production systems

## Gallery



