

BRC-Z700

Three 1/4-inch ClearVid CMOS sensors
SD/HD robotic camera



Overview

This compact robotic colour video camera system is specially designed for remote video shooting applications. With its high-accuracy and wide-range Pan/Tilt/Zoom capability, the BRC-Z700P precisely captures the pictures you require.

Picture quality is excellent with the BRC-Z700 employing three 1/4-type ClearVid CMOS image sensors, boasting a resolution of 1,120,000 total pixels. This camera is both High Definition and Standard Definition capable.

The BRC-Z700 is ideal for a variety of remote video shooting applications, such as auditoriums, teaching hospitals, corporate boardrooms, churches, sporting events, trade shows and concerts.

Excellent Picture Quality

The BRC-Z700 employs three 1/4-type CMOS image sensors, boasting a resolution of 1,120,000 total pixels. This camera incorporates a newly developed DSP to make effective use of the ClearVid CMOS Sensors, which have been developed using Sony advanced semiconductor technologies.

One of the advantages of the CMOS sensor is that vertical smear is minimized. The combination of the new DSP and the ClearVid CMOS Sensors allows the camera to achieve both higher resolution and higher sensitivity compared to cameras equipped with conventional CMOS sensors. Furthermore, the camera's "colour masking" function allows users to adjust specific colours in the image more precisely, while the "colour detail" function allows users to smooth over skin tones.

Flexible Installation - Ceiling Mount or Flat Surface

Because the BRC-Z700 has an "Image Flip" function, the unit can either be mounted on a ceiling using the supplied ceiling mount kit or placed on a flat surface to meet the user's installation and space requirements.

Easy-to-use and Ergonomically Designed Remote Control Unit

All camera settings, including the Pan/Tilt/Zoom functions and sixteen-preset patterns, can be controlled from the optional RM-BR300 Remote Control Unit. The ergonomic joystick design and feature-rich control panel provide superb operability in various remote-shooting applications.

High Performance Pan/Tilt/Zoom Mechanism

The BRC-Z700 covers a wide shooting range with its highly accurate Pan/Tilt mechanism. It has a very wide pan range of 340 degrees and a tilt range of 120 degrees. Both pan and tilt speeds are variable within the range of 0.22 to 60 degrees per second.

What's more, the BRC-Z700 has an extremely quiet motor that is capable of very precise movements. It is capable of capturing not only fast-moving objects, but also slow-moving objects without rocking vibration. For capturing small or distant objects, the BRC-Z700 incorporates a 20x optical auto-focus zoom lens.

Features

Versatile Video Outputs

The BRC-Z700 offers the following outputs as standard: HD Component (Y/Pb/Pr), RGB, Composite, Y/C. It can also accept the BRBK-HSD1 optional video card to provide HD-SDI and SD-SDI signals.

Optical Multiplex Unit (BRU-H700)

Users can transmit uncompressed digital data including external sync and camera control signals via the BRU-H700 optical multiplex unit. With only a single cable connection between the camera and the HD optical multiplex unit, the system is extremely easy to install. The maximum cable length between these units is 1,000 meters. The following optional interface cards can be used with the BRU-H700: HFBK-HD1, HFBK-SD1, HFBK-XG1, HFBK-TS1.

RS-232C/RS-422 Remote Control (VISCA protocol)

System integrators can easily configure complex systems with the BRC-Z700 because it is equipped with RS-232C/RS-422 interfaces supporting the VISCA protocol, which allows it to be controlled by external PCs and/or controllers. All local controls such as Pan/Tilt/Zoom, camera settings, and presets can be easily accessed, and up to seven cameras can be daisy-chained.

Sixteen Presets

Various camera settings such as Pan/Tilt/Zoom and focus can be configured for up to sixteen presets per camera

Multi-function IR Remote Commander Unit

Various camera settings such as Pan/Tilt/Zoom and focus can be configured for up to sixteen presets per camera

Specifications

Generic Specifications	
Signal systems	1080/59.94i, NTSC or 1080/50i, PAL (switchable)
Sync systems	Internal/External
Image device	1/4-type CMOS x 3
Total picture elements	Approx. 1.12 Megapixels
Effective picture elements	Approx. 1.07 Megapixels
Lens	20x optical zoom (80x with digital zoom), Carl Zeiss Vario-Sonnar T lens
Focal length	f=3.9 to 78 mm (F1.6 to F2.8)
Lens filter diameter	62 mm
Minimum object distance	10 mm (Wide, Limiter Off), 500 mm (Wide, Limiter On), 800 mm (Tele)

Horizontal viewing angle	1.8 to 55.2 degrees
Focusing system	Auto/Manual
Pan/Tilt angle	-170 to +170 degrees (Pan), -30 to +90 degrees (Tilt)
Pan/Tilt speed	0.22 to 60 degrees/s (Pan/Tilt)
Minimum illumination	6 lx (50 IRE, F1.6, +24 dB)
Video S/N ratio	50 dB
Shutter speed	1/10,000 to 1/60 s or 1/10,000 to 1/50 s
Gain	Auto/Manual (0 to 24 dB and Hyper Gain)
White balance	Auto1/Auto2/Indoor/Outdoor/One-push/Manual
Image stabilizer	On/Off (Optical)
Image flip	On/Off
Preset positions	16

Interfaces

HD video output	D-Sub 15 pin: Component (Y/Pb/Pr) or RGB, HD, VD or SYNC
SD video output	BNC: Composite, Mini DIN 4 pin : Y/C
External Sync input	BNC
Camera control	Mini DIN 8 pin: RS-232C (VISCA IN), Mini DIN 8 pin: RS-232C (VISCA OUT), Connector plug 9 pin: RS-422 (VISCA IN/OUT)

General

Operating temperature	0 to 40 degrees (32 to 104°F)
Storage temperature	-20 to 60 degrees (-4 to 140°F)
Power requirements	DC 10.8 to 13.2 V
Power consumption	Max 28.8 W (without optional cards)
Dimensions (W x H x D)	198 x 247 x 238 mm (7 7/8 x 9 3/4 x 9 3/8 inches)
Mass	4.5 kg (9 lb 15 oz)

Supplied Accessories

IR Remote Commander Unit
AC power adaptor

AC power cord

RS-422 connector plug

Ceiling bracket

Wire rope

Screws

Operating instructions

Generic Specifications

Related products



NXL-IP55

IP Live Production Unit

Gallery

