

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 images 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

Camera

Image Sensor	1/4-type CMOS x3
--------------	------------------

Image Sensor	
--------------	--

(Number of Effective Pixels)	Approx. 1.04 Megapixels
Image Sensor (Total Number of Pixels)	Approx. 1.12 Megapixels
Signal System	50 Hz: 1080/50i, PAL
Sensitivity	F5.6 (Not to be published)
Minimum Illumination (50IRE)	6 lx (50 IRE, F1.6, +24 dB)
Horizontal Resolution	700 TV line (Analog) (Not to be published)
S/N Ratio	50 dB
Gain	Auto/Manual (0 to +24 dB and Hyper Gain)
Shutter Speed	1/10,000 s to 1/60 s or 1/10,000 s to 1/50 s
Exposure Control	Auto, Manual, Priority mode (shutter priority, Gain priority & iris priority), EV compensation
Color AE Function	No
White Balance	Auto1/Auto2/Indoor/Outdoor/One-push/Manual

Optical Zoom	20x
Digital Zoom	4x
Focusing System	Auto/Manual
Horizontal Viewing Angle	55.2°(Wide-end)
Focal Length	F1.6 (Wide), F2.8 (Tele) f = 3.9 mm to 78 mm
Minimum Object Distance	800 mm (Tele) 500 mm (Wide, Limiter On) 10 mm (Wide, Limiter Off)
Pan/Tilt Angle	Tilt: +90°/-30° Pan: ±170° Tilt: 0.22° to 60°/s Pan: 0.22° to 60°/s
Pan/Tilt Speed	Pan: 0.22° to 60°/s
Preset Position	16

Camera Features

Auto ICR	No
Wide-D	No
Image Stabilization	On/Off (Optical)

Image Flip	On/Off
ND Filter	No
Color Gain	-7, -6, -5, -4, -3, -2, -1, 0, +1, +2, +3, +4, +5, +6, +7
Color Hue	No
Color Matrix	ON/OFF
Color Detail	Off/Narrow/STD/Wide switchable in menu
Skintone Detail	No
Gamma	Normal/Cinema
Gamma Level	NA
Black	NA
Black Gamma	NA
Knee Point	No
Knee Slope	NA
Knee Sat Level	NA
Auto Focus Assist Function	On/Off
Flicker Cancel	On/Off

B&W	On/Off
-----	--------

Color Bar	On/Off
-----------	--------

Interface

HD Video Output	Component (Y/Pb/Pr) or RGB, HD, VD or SYNC
-----------------	--

SD Video Output	Composite, Y/C
-----------------	----------------

Camera Control Interface	RS-232C/RS-422 (VISCA)
--------------------------	------------------------

External Sync. Input	Yes
----------------------	-----

General

Power Requirements	DC 10.8 V to 13.2 V
--------------------	---------------------

Power Consumption	Max 28.8 W (without optional cards)
-------------------	-------------------------------------

Operating Temperature	32 °F to 104 °F 0 °C to 40 °C
-----------------------	----------------------------------

Storage Temperature	-4 °F to +140 °F -20 °C to +60 °C
---------------------	--------------------------------------

Dimensions (W x H x D) *[1]	7 7/8 x 9 3/4 x 9 3/8 inches 198 x 247 x 238 mm
--------------------------------	--

Mass	9 lb 15 oz 4.5 kg
Optional Card Slot?	Yes
Body Color	White
Size of Screw Hole for Tripod	1/4-20UNC
Mountable Angle	±15°
Ceiling Mount	Yes
Supplied Accessories	Wire rope (1) Screws(M4 x 8) (1) Screws(M3 x 8) (7) RS-422 connector plug (1) Operating instructions (1) IR Remote Commander Unit (1) Ceiling bracket (2) AC power cord (1) AC power adaptor (1)

Notes

Note	*[1] The values for dimensions are approximate.
------	---

Gallery

