



BRC Series

Color Video Cameras

BRC-H900 BRC-H700
BRC-Z700 BRC-Z330
BRC-300

APPLICATIONS

Corporate/Boardroom

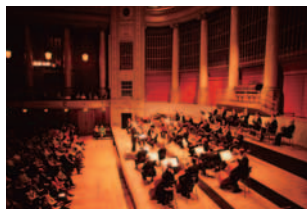
BRC Series cameras are excellent for various business communication applications, such as videoconferencing, corporate training, and transmission of managers' regular speeches. Since each of the cameras in this series has particular strengths and advantages, there is scope to select the right camera for every different application. To quickly



re-use a camera after someone else has been using it, simply touch a button on the supplied controller - this recalls pre-specified positions for capturing speech and switching scenes.

Auditorium/Concert Hall

With pan/tilt movement, the wide shooting range of a single camera can capture an entire live performance, including audience shots. This capability means that, with the BRC Series, fewer cameras and camera operators are required, resulting in huge cost savings. These cameras make it easy to get close shots of performers from locations that are typically



difficult for a camera operator to reach. Additionally, each camera's compact size and quiet movement mean audiences aren't distracted from the performance.

City Council

Remotely controlled by the RM-BR300, BRC Series cameras quickly move to capture the required action at council meetings or in trials. Each camera contributes to simplified and streamlined operation by offering multiple presets which pre-define P/T/Z positions.



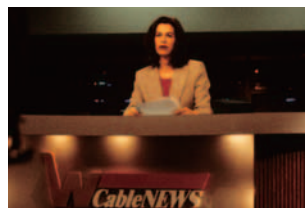
Sports Events

By pre-installing cameras in high positions, you can obtain extensive views of each sporting event, and capture shots at unique angles, typically very difficult to achieve with conventional shooting. Also, optical fiber connection max. 2,000 m achieves long-distance data transfer and enables single-operator broadcasting.



Studio

The BRC Series is also ideal for use in the broadcast industry. The BRC-H900, BRC-H700, BRC-Z700, and BRC-Z330 can output HD-SDI signals*1 - a necessity for highly demanding broadcasters who seek uncompromising picture quality. With flexible installation, these cameras can be painlessly integrated into a working studio with tripods or ceiling brackets. For the wide angles required in studio shooting, wide conversion lenses are available*2. And there are



numerous other camera benefits, including quiet and smooth P/T/Z movement, a tally indicator, cost-efficiency, and more.

*1 The BRC-H700, BRC-Z700, and BRC-Z330 require optional video cards.

*2 Wide conversion lenses are available for the BRC-Z700 and BRC-300.

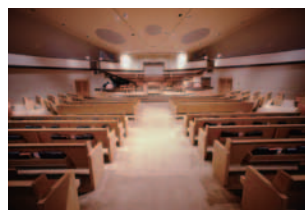
Education

By deploying BRC Series cameras, teachers can offer students new educational opportunities anytime and anywhere. With the real-time distribution of lectures and other educational content, academic institutions can deliver e-learning classes, and professors can usefully share their opinions and collaborate via networked communication.



House of Worship

By using a large screen in combination with highly sensitive BRC Series cameras, clear video images can be delivered with accurate color reproduction. Attendees can become more involved in the service and follow ongoing events better than ever before. With a variety of peripheral components, a range of user-friendly systems can be designed to suit the size and budget of every organization.



The BRC Series consists of five Pan/Tilt/Zoom (P/T/Z) cameras – the BRC-H900, BRC-H700, BRC-Z700, BRC-Z330, and BRC-300. They offer wide and smooth pan/tilt/zoom capabilities together with exceptional picture quality from SD to Full HD images. You can remotely control these cameras using the RM-BR300 Remote Control Unit. As a flagship model, the BRC-H900 delivers greatest sensitivity (F10) and horizontal resolution (more than 1,000 TV lines in HD-SDI output) to meet the needs of highly quality-conscious applications. The BRC Series is perfect for a variety of remote video shooting applications, and each camera integrates easily into a wide range of systems. These features enable more and more users to enjoy the benefits of BRC Series cameras, particularly in education, broadcast, bridal, and corporate applications. And with their advanced remote capabilities, these cameras also enable a reduction in manned operation.

PRODUCTS OVERVIEW

	BRC-H900	BRC-H700	BRC-Z700	BRC-Z330	BRC-300
					
Image Sensor	1/2-type Exmor CMOS x 3	1/3-type IT CCD x 3	1/4-type CMOS x 3	1/3-type CMOS	1/4.7-type CCD x 3
Signal System	1080i/59.94, 720p/59.94, 1080i/50, 720p/50, NTSC, PAL	1080i/59.94, 1080i/50	1080i/59.94, 1080i/50, NTSC, PAL	1080i/59.94, 720p/59.94, 1080i/50, 720p/50, NTSC, PAL	NTSC
Sensitivity	F10	NA			
Minimum Illumination	4 lx (50IRE, F1.9, +24 dB)	6 lx (50IRE, F1.6, +24 dB)	6 lx (50IRE, F1.6, +24 dB)	6 lx (50IRE, F1.6, +24 dB)	7 lx (25IRE, F1.6, +18 dB)
Advanced Color Adjustment	✓				
HD Video Output	HD/SD-SDI	✓	Option	Option	Option
	Component, RGB	✓	✓	✓	✓
SD Video Output	Composite, Y/C	✓	✓	✓	✓ (NTSC)
Optical Zoom (Digital Zoom)	14x	12x (4x)	20x (4x)	18x (4x)	12x (4x)

KEY FEATURES

Superb Picture Quality

Thanks to Sony's reputable image sensor technology, BRC Series remote cameras deliver exceptionally high picture quality to meet demanding live production requirements. The BRC-H900 offers excellent performance at minimum illumination (as low as 4 lux) and therefore offers visibility in dark environments*.

* At 50IRE, F1.9, +24 dB.

Silent & Smooth Pan/Tilt/Zoom Mechanism

BRC Series remote cameras can be operated with silent and smooth Pan/Tilt/Zoom motion from remote locations*. Also the silent mechanism enables the unit to be installed in noise-conscious environments.

* Ranging from 0.22° to 60° per second for the BRC-H900 and BRC-Z700.

Flexible Installation

In addition to typical desktop installation, BRC Series cameras can be mounted on the ceiling. With a use of a tripod and tripod screw, these cameras are also suitable for mobile applications, such as live events. Also thanks to their compact design, these cameras can be installed in locations that are usually too small for camera operators and larger cameras.

Advanced Color Adjustment

The BRC-H900 is equipped with a variety of picture adjustment features, including color, gamma, black, and knee settings. These feature-rich color adjustment functions allow fine tuning to meet professional demands.

Tally Lamp

All BRC Series cameras are equipped with a tally lamp. Additionally, the BRC-H900 has a second tally lamp – one on the front and one on the rear, offering wider visibility.

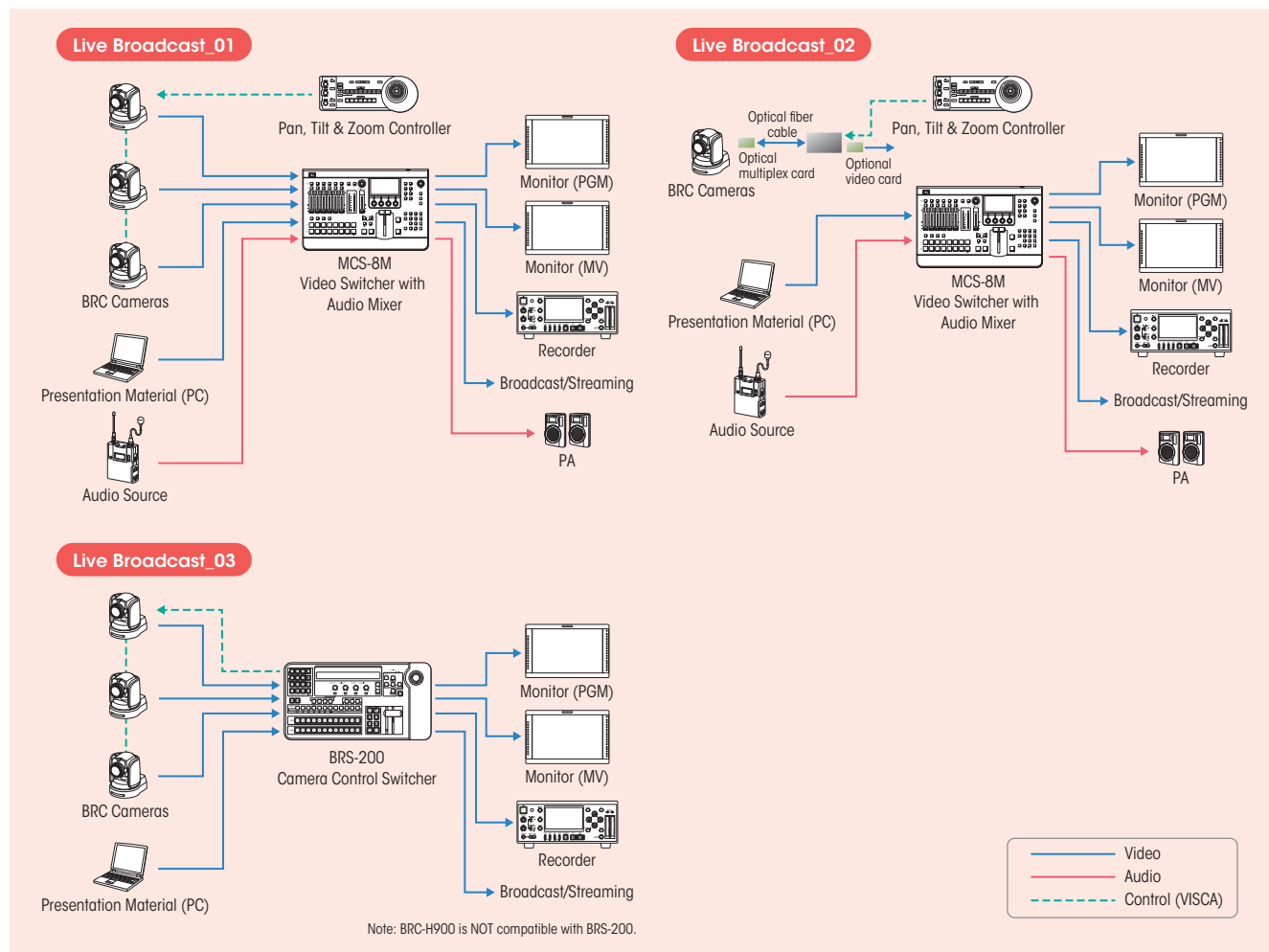
SYSTEM CONFIGURATION

You can configure a variety of systems to meet your application needs by choosing HD and/or SD components. Users can choose either HD or SD system components.

	BRC Simple System				
	BRC-H900	BRC-H700	BRC-Z700	BRC-Z330	BRC-300
Wide Conversion Lens	—	—	VCL-HG0862*	—	VCL-0737W
Optional Video Card (inserted to the BRC Series)	BRBK-HSD2 HD/SD-SDI	HFBK-HD1 HD-SDI, HD Component (Y/Pb/Pr), RGB	BRBK-HSD1 HD-SDI, SD-SDI	BRBK-HSD2 HD/SD-SDI	BRBK-301 Composite, Y/C, SD Component (Y/Cb/Cr), RGB
		HFBK-SD1 SD-SDI, Composite, Y/C, SD Component (Y/Cb/Cr), RGB		BRBK-HD2 HD-SDI (Discontinued)	BRBK-302 SD-SDI
	BRBK-SA1 Analog SD Output Card	HFBK-TS1 i.LINK (HDV)		BRBK-SA1 Analog SD Output Card	BRBK-304 i.LINK (DV)
		HFBK-XG1 WXGA, XGA, VGA			
Remote Control units	RM-BR300 BRS-200**				

* The lens hood supplied with the VCL-HG0862K cannot be used.

** BRS-200 is not compatible with BRC-H900



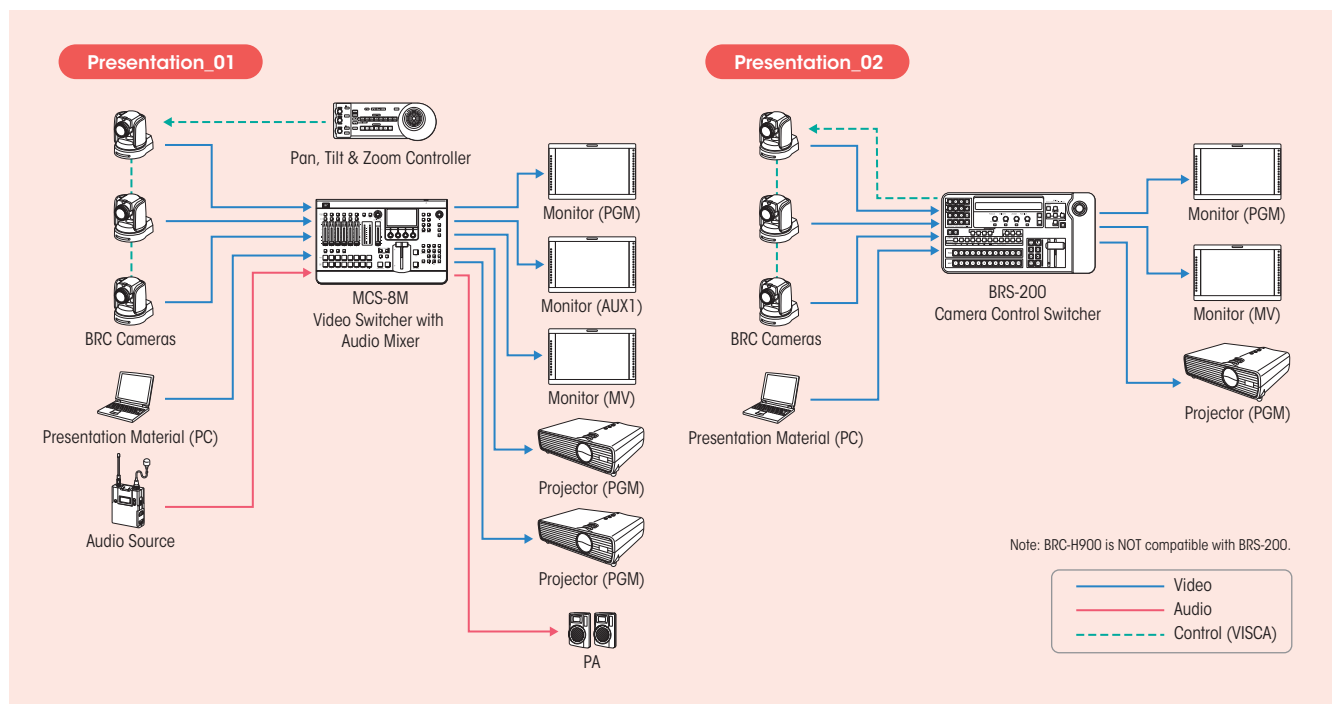
	BRC and BRU System				
	BRC-H900 	BRC-H700 	BRC-Z700 	BRC-Z330 	BRC-300 
Wide Conversion Lens	—	—	VCL-HG0862 ¹ 	—	VCL-0737W 
Optical Multiplex Card (inserted to the BRC Series)	BRBK-SF1	BRBK-H700	BRBK-MF1	BRBK-SF1	BRBK-303
Optical Fiber Cable	CCFC-S200 	CCFC-M100HG 		CCFC-S200 	CCFC-M100HG 
Optical Multiplex Unit	BRU-SF10 ² 	BRU-H700 ³ 		BRU-SF10 	BRU-300 
Optional Video Card (inserted to the BRC Series)	BRBK-HSD2 HD/SD-SDI	HFBK-HD1 HD-SDI, HD Component (Y/Pb/Pr), RGB	BRBK-HSD2 HD/SD-SDI	BRBK-301 Composite, Y/C, SD Component (Y/Cb/Cr), RGB	
		HFBK-SD1 SD-SDI, Composite, Y/C, SD Component (Y/Cb/Cr), RGB			
	BRBK-SA1 Analog SD Output	HFBK-TS1 i.LINK (HDV)	BRBK-SA1 Analog SD Output	BRBK-302 SD-SDI	
		HFBK-XG1 WXGA, XGA, VGA		BRBK-304 i.LINK (DV)	
Remote Control units	RM-BR300  BRS-200 ⁴ 				

¹ The lens hood supplied with the VCL-HG0862K cannot be used.

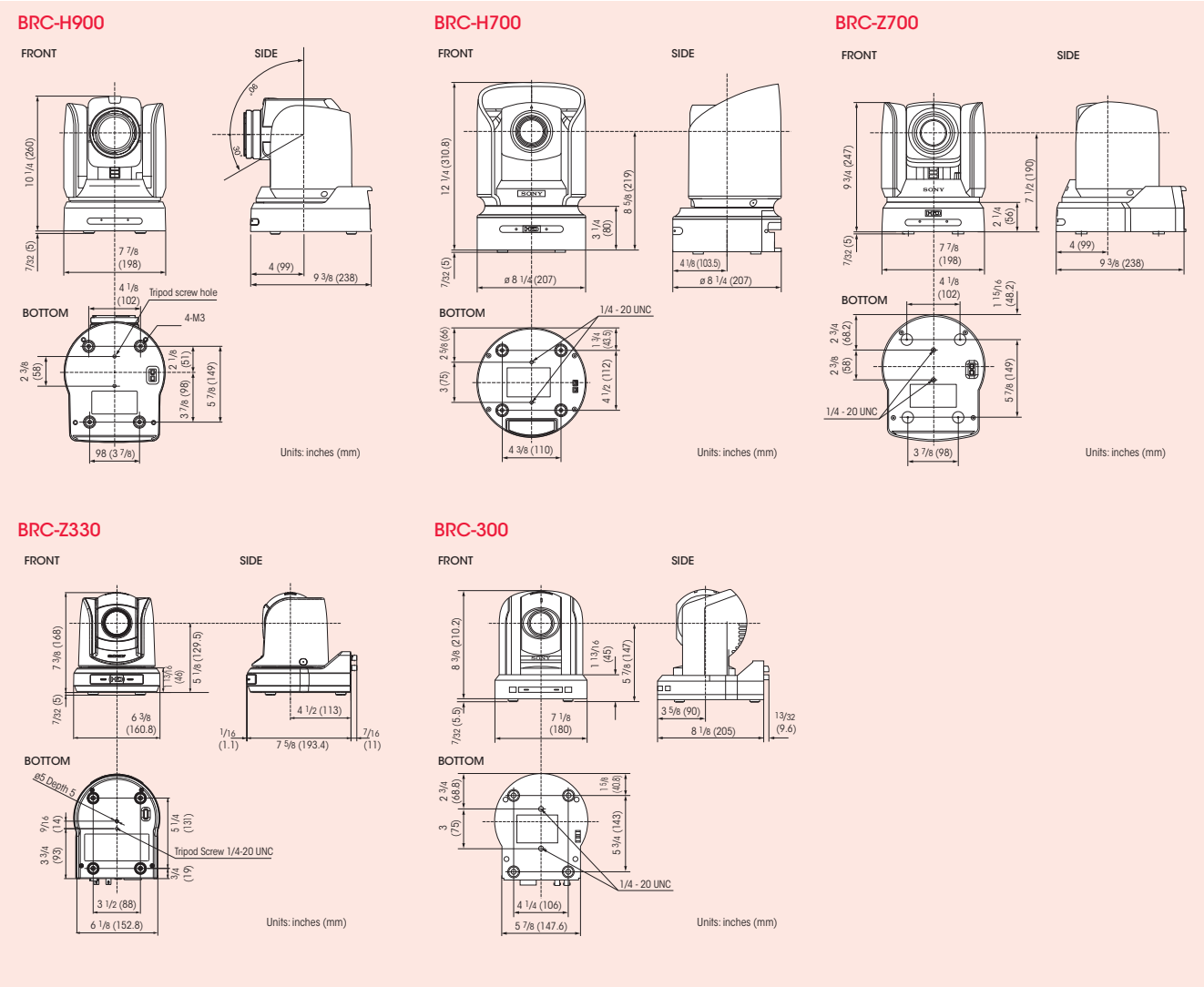
² Max fiber connection for BRU-SF10: 6400 feet.

³ Max fiber connection for BRU-H700 and BRU-300: 3400 feet.

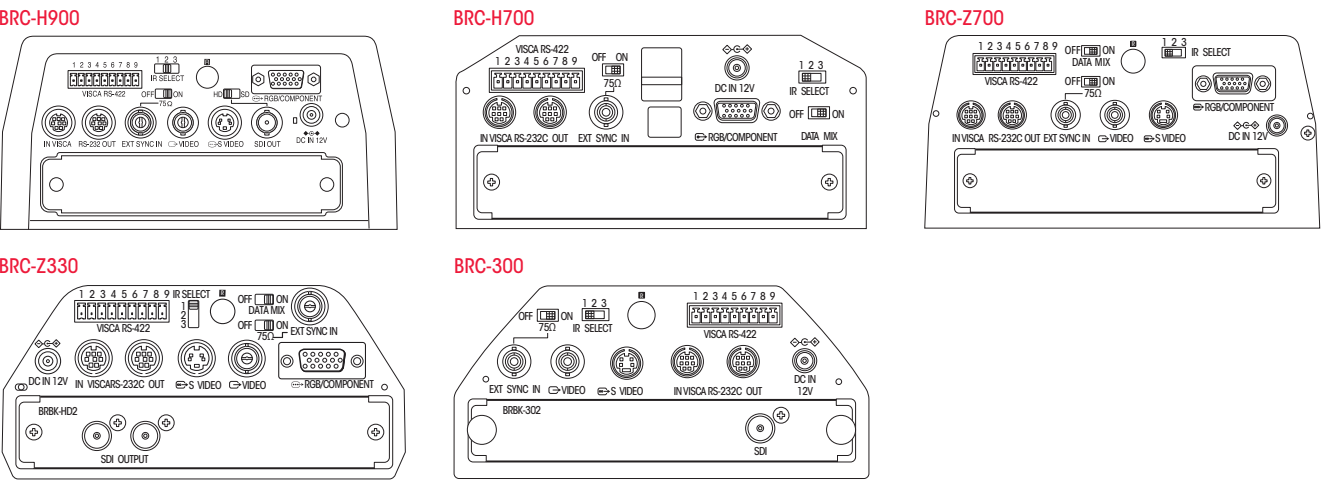
⁴ BRS-200 is not compatible with BRS-200.



DIMENSIONS



REAR PANELS



OPTIONAL ACCESSORIES

					
BRC-H700 BRBK-H700 HD Optical Multiplex Card	BRC-H700 BRU-H700 HFBK-HD1 HD Interface Board	BRC-H700 BRU-H700 HFBK-SD1 SD Interface Board	BRC-H700 BRU-H700 HFBK-XG1 XGA Interface Board	BRC-H700 BRU-H700 HFBK-TS1 i.LINK (HDV) Interface Board	BRC-Z700 BRBK-MF1 HD Optical Multiplex Card
					
BRC-Z700 BRBK-HSD1 HD/SD-SDI Output Card	BRC-300 BRBK-303 SD Optical Multiplex Card	BRC-300 BRU-300 BRBK-301 Analog RGB Component Card	BRC-300 BRU-300 BRBK-302 SDI Card	BRC-300 BRU-300 BRBK-304 DV Card	BRC-H900 BRC-Z330 BRU-SF10 BRBK-HSD2 HD/SD-SDI Output Card
					
BRC-H900 BRC-Z330 BRU-SF10 BRBK-SA1 Analog SD Output Card	BRC-H900 BRC-Z330 BRBK-SF1 HD Optical Multiplex Card	BRC-H700 BRC-Z700 BRU-H700 HD Optical Multiplex Unit	BRC-H900 BRC-Z330 BRU-SF10 HD/SD Optical Multiplex Unit	BRC-300 BRU-300 SD Optical Multiplex Unit	
					
BRC-H700 BRC-Z700 BRC-H900 BRC-Z330 CCFC-M100HG Optical Fiber Cable 2-core Multi-mode Optical Fiber Cable (100 m long), Extension Plug Included	BRC-H900 BRC-Z330 CCFC-S200 Optical Fiber Cable Single mode Optical Fiber Cable (200 m long), Extension Plug Included	CCMC-9DS* RGB/Component, Y/C Cable (9-pin D-sub)	CCXC-9DBS* RGB/Component, VBS Cable (9-pin D-sub)	BRC-Z700 VCL-HG0862 VCL-HG0862K** Wide Conversion Lens	BRC-300 VCL-0737W Wide Conversion Lens

*These cables are for use with the BRBK-301 or HFBK-SD1. **The lens hood supplied with the VCL-HG0862K cannot be used.

PERIPHERAL EQUIPMENTS



BRS-200
Remote Camera
Operating Switcher

- Live Production and Presentation Switcher for HD or SD Systems
- Multi Viewing Function
- Rich Selection of Inputs and Outputs
 - Standard: SDI input x 4 / output x 4, DVI-I output x 1
 - With option: SDI input x 8 / output x 4, DVI-I input x 1 / output x 2
- BRC Series Camera Control Capability

Note: BRC-H900 is NOT compatible with BRS-200.



RM-BR300
Remote Control Unit

- Easy Operation of Versatile Camera Adjustments
- The VISCA™ RS-232C/RS-422 Communication Interfaces Allow High-speed, Long-distance Communication
- A Tally Lamp Input/Contact Output Terminal Allows Connection of a Video Switcher
- Preset Feature to Save Camera Settings up to 16 positions*

* For the BRC-300, 6 positions can be saved.

SPECIFICATIONS

	BRC-H900	BRC-H700	BRC-Z700	BRC-Z330	BRC-300
Camera					
Image Sensor	1/2-type Exmor CMOS x3	1/3-type IT CCD x3	1/4-type CMOS x3	1/3-type CMOS	1/4.7-type IT Advanced HAD CCD x3
Image Sensor (Number of Effective Pixels)	Approx. 2.07 Megapixels	Approx. 1.07 Megapixels	Approx. 1.04 Megapixels	Approx. 2.16 Megapixels	Approx. 1.02 Megapixels
Signal System	60 Hz: 1080/59.94i, 720/59.94P, NTSC 50 Hz: 1080/50i, 720/50P, PAL	60 Hz: 1080/59.94i 50 Hz: 1080/50i	60 Hz: 1080/59.94i, NTSC 50 Hz: 1080/50i, PAL	60 Hz: 1080/59.94i, 720/59.94P, NTSC 50 Hz: 1080/50i, 720/50P, PAL	NTSC
Sensitivity	F10	NA			
Minimum Illumination (50IRE)	4 lx (50IRE, F1.9, +24 dB)	6 lx (50IRE, F1.6, +18 dB)	6 lx (50IRE, F1.6, +24 dB)		NA
Minimum Illumination (25IRE)	NA				7 lx (25IRE, F1.6, +18dB)
Horizontal Resolution	>1,000 TV line (in HD-SDI output) (center)	NA			
S/N Ratio	50 dB				
Gain	Auto/Manual (-3 dB to +24 dB)	Auto/Manual (0 dB to +18 dB and Hyper Gain)	Auto/Manual (0 to +24 dB and Hyper Gain)	Auto/Manual (-3 dB to +24 dB and Hyper Gain)	Auto/Manual (-3 dB to +18 dB, 3 dB steps) switchable
Shutter Speed	1/8,000 s to 1/60 s or 1/8,000 s to 1/50 s	1/10,000 s to 1/60 s or 1/10,000 s to 1/50 s			NTSC: 1/10,000 s to 1/4 s
Exposure Control	Auto, Manual, Priority mode (shutter priority & iris priority), Back light, Spot light	Auto, Manual, Priority mode (shutter priority, Gain priority & iris priority), EV compensation		Auto, Manual, Priority mode (shutter priority, Gain priority & iris priority), EV compensation, Color AE	Auto, Manual, Priority mode (shutter priority & iris priority), Bright, spot AE
Color AE Function	No			Off/Narrow/STD/Wide switchable in menu	No
White Balance	Auto/Indoor/Outdoor/One-push/Manual		Auto 1/Auto 2/Indoor/Outdoor/One-push/Manual		Auto/Indoor/Outdoor/One-push/Manual
Optical Zoom	14x	12x	20x	18x	12x
Digital Zoom	—	4x	4x	4x	4x
Focusing System	Auto/Manual				
Horizontal Viewing Angle	59.6° (Wide-end)	60.3° (Wide-end)	55.2° (Wide-end)	55.1° (Wide-end)	4:3 mode: 37.8° 16:9 mode: 45.4° (Wide end)
Focal Length	f=5.8 mm to 81.2 mm F1.9 (Wide), F2.8 (Tele)	f=4.5 mm to 54 mm F1.6 (Wide), F2.8 (Tele)	f=3.9 mm to 78 mm F1.6 (Wide), F2.8 (Tele)	f=4.6 mm to 82.8 mm F1.6 (Wide), F2.2 (Tele)	f=3.6 mm to 43.2 mm F1.6 (Wide), F2.8 (Tele)
Minimum Object Distance	800mm	500 mm (Wide) 800mm (Tele)	10 mm (Wide, Limiter Off) 500 mm (Wide, Limiter On) 800 mm (Tele)	100 mm (Wide, Limiter Off) 500 mm (Wide, Limiter On) 1,500 mm (Tele)	300 mm (Wide) 800 mm (Tele)
Pan/Tilt Angle	Pan: ±170° Tilt: +90°/-30°			Pan: ±175° Tilt: +90°/-30°	Pan: ±170° Tilt: +90°/-30°
Pan/Tilt Speed	Pan: 0.22° to 60°/s Tilt: 0.22° to 60°/s	Pan: 0.25° to 60°/s Tilt: 0.25° to 60°/s	Pan: 0.22° to 60°/s Tilt: 0.22° to 60°/s	Pan: 0.25° to 60°/s Tilt: 0.25° to 60°/s	Pan: 0.25° to 60°/s Tilt: 0.25° to 60°/s
Preset Position	16				6
Image Stabilization	On/Off (Optical)	On/Off (Optical)	On/Off (Optical)	No	No
Image Flip	On/Off	On/Off	On/Off	On/Off	On/Off
ND Filter	No	Off/ND1/ND2	No	Off/ 1/4 / 1/16 switchable in menu	No
Gamma	STD1/STD2/STD3/STD4/CINE1/CINE2/CINE3/CINE4	Normal/Cinema	Normal/Cinema	Normal/Cinema	No
Interface					
HD Video Output	HD/SD-SDI (switchable) Component (Y/Pb/Pr) or RGB, HD, VD or SYNC	Component (Y/Pb/Pr) or RGB, HD, VD or SYNC			—
SD Video Output	Composite, Y/C	No	Composite, Y/C		VBS, 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				DC 12 V
Power Consumption	Max 28.8 W (without optional cards)	Max 24 W (without optional cards)	Max 28.8 W (without optional cards)	Max 18 W (without optional cards)	21.6 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)	7 7/8 x 10 1/4 x 9 3/8 inch (198 x 260 x 238 mm)	8 1/4 x 12 1/4 x 8 1/4 inches (207 x 310.8 x 207 mm)	7 7/8 x 9 3/4 x 9 3/8 inches (198 x 247 x 238 mm)	6 3/8 x 7 3/8 x 7 5/8 inches (160.8 x 186 x 193.4 mm)	7 1/8 x 8 3/8 x 8 1/8 inches (180 x 210.1 x 205 mm)
Weight	11 lb 0.37 oz (5.0 kg)	9 lb 15 oz (4.5 kg)	9 lb 15 oz (4.5 kg)	4 lb 4 oz (1.9 kg)	5 lb 8 oz (2.5 kg)
Supplied Accessories	IR Remote Commander® Unit (1), AC power adaptor (1), AC power cord (1), RS-422 connector plug (1), Ceiling bracket (2), Wire rope (1), Screws (M3 x 8) (7), Screws (M4 x 8) (1), Operating instructions (1)				IR Remote Commander Unit (1), AC power adaptor (1), AC power cord (1), RS-422 connector plug (1), Ceiling bracket (2), Wire rope (1), Screws (7), Operating instructions (1)

	BRU-H700	BRU-SF10	BRU-300
Interfaces			
Optical fiber connector	LC Duplex Fiber Connector		—
HD video output	D-Sub 15 pin: Component (Y/Pb/Pr) or RGB, HD, VD or SYNC		—
SD video output	—		BNC: Composite (NTSC), Mini DIN 4 pin: Y/C
External sync input	BNC		
External sync output	BNC		
Audio line output	Phono jack x2 (L/R)		—
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)		
Optional card slots	2 slots		2 slots (When both slots are used simultaneously, the interface cards must be of two different types.)
General			
Operating temperature	32 °F to 104 °F (0 °C to 40 °C)		
Storage temperature	-4 °F to +140 °F (-20 °C to +60 °C)		
Power requirements	AC 100 V to 240 V (50/60 Hz)	DC 12 V	AC 100 V to 240 V (50/60 Hz)
Power consumption	Max. 10 W (without optional cards)	Max. 15.6 W (without optional cards)	Max. 9 W (without optional cards)
Dimensions (W x H x D)	8 3/8 x 3 1/2 x 9 1/2 inches (210 x 86 x 240 mm)		8 3/8 x 3 1/2 x 8 3/8 inches (212 x 88 x 210 mm)
Weight	5 lb 5 oz (2.4 kg)	4 lb 7 oz (2.0 kg)	4 lb 10 oz (2.1 kg)
Supplied accessories	AC power cord, RS-422 connector plug, RS-232C cable (3 m, Mini DIN 8 pin), Operating instructions	AC adaptor, Power cord, DC-cord secure connection attachment, RS-232C connecting cable, RS-422 connector plug, Operating Instructions	AC power cord, RS-422 connector plug, RS-232C cable (3 m, Mini DIN 8 pin), Operating instructions

	HFBK-HD1	HFBK-SD1	HFBK-XG1	HFBK-TS1	BRBK-MF1	BRBK-HSD1	
Video output	D-Sub 15 pin: Component (Y/Pb/Pr) or RGB, HD, VD or SYNC BNC x2: HD-SDI	D-Sub 9 pin: Component (Y/Pb/Pr) or RGB, Composite or Y/C, SYNC BNC: Composite BNC: SD-SDI	D-Sub 15 pin: RGB, HD, VD (WXGA/XGA/VGA)	i.LINK 6 pin: HDV OUT (IEEE1394 S100)	LC Duplex Fiber Connector	BNC x2: HD-SDI or SD-SDI	
Audio line input	—	—	—	Phono jack x2 (L/R)	Phono jack x2 (L/R)	—	
	BRBK-303	BRBK-301	BRBK-302	BRBK-304	BRBK-HSD2	BRBK-SA1	BRBK-SF1
Video output	LC Duplex Fiber Connector	D-Sub 9 pin: Component (Y/Pb/Pr) or RGB, Composite or Y/C, SYNC	BNC: SD-SDI	i.LINK 6 pin: DV OUT (IEEE1394 S100)	BNC x3, HD-SDI or SD-SDI	BNC x1: VIDEO, Mini DIN 4pin x1: S VIDEO, D-sub 9pin x1: RGB/SYNC	LC Duplex Fiber Connector
Audio line input	—	—	—	—	—	—	Phono jack x2 (L/R)

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