Panasonic

Lumix BS1H

Key Features of Cinema Cameras

Budget			Sensor	Look	D-Range	Resolution	Format	Others
		VariCam Pure	Super 35mm	V-Log V-Gamut	HDR	4K	V-RAW	Expandability
20K USD	VARICAM	VariCam 35					ALL-Intra Long GOP Proxy	
		VariCam LT						
	EVA1	AU-EVA1						
5K USD		S1H	FF			6K 4K	ALL-Intra Long GOP	Mobility
	LUMIX	BS1H						
		BGH1	MFT	V-Log L	Hybrid Log Gamma	4K		
		GH5/GH5S						

Development Background

Market Environment	The growth of the live-streaming market and changes in viewing habits
High Praise for BGH1	Wide range of applications including live streaming, multiple camera control, remote control and filmmaking
User Needs	Needs that have come to light from interviews regarding the BGH1 - Full-frame, IP streaming, RAW video data output, etc.

Advanced Live & Cinema Camera that Meets Market Demands

Full-frame Box-Style Live & Cinema Camera

LUMIX BS1H

MOUNT

1 : Video Performances with Cinema Quality

6K 24p / 5.9K 30p 10-bit	C4K/4K 60p/50p 10-bit	C4K/4K 30p/25p 4:2:2 10-bit
RAW Video Data Output (ATOMOS Ninja V / Blackmagic Video Assist 12G HDR)		
24.2MP Full-frame Sensor	Dual Native ISO	14+ stops of V-Log/V-Gamut

2 : Pursuing Usability in Video Production

Ethernet / PoE+ compatible	Remote Control with LUMIX Tether for Multicam
USB/LAN Tethering	IP Streaming with PC (RTP/RTSP protocol)
Simultaneous HDMI/SDI Output	Genlock IN / Timecode IN/OUT

3 : Flexible Expandability

Ultra Compact & Lightweight	Unlimited Rec Time	Dimensions and SDK Released
Power Supply Options (AC Adaptor / Battery* / PoE+)		Remote Socket (General-use)

*Sold separately.

・ The L-Mount Trademark is a registered Trademark of Leica Camera AG.

Full-frame Sensor in Compact Box-Style Body

LUMIX S1H

Sensor	FF
W	151.0 mm
H	114.2 mm
D	110.4 mm
Weight*	1,052 g

* Body only.

LUMIX BS1H

Sensor	FF
W	93.0 mm
H	93.0 mm
D	78.8 mm
Weight*	585 g

* Body only.

LUMIX BGH1

Sensor	MFT
W	93.0 mm
H	93.0 mm
D	78.0 mm
Weight*	545 g

* Body only.

Full-frame Sensor in Ultra-Compact Box

Z CAM E2-F6 (FF)
122.25 mm

BS1H (FF)
78.8 mm

RED KOMODO (S35)
105.2 mm

Z-CAM F6-E2

Sensor	FF
W	91.02 mm
H	99.2 mm
D	122.3 mm
Weight*	1,090 g

* Body only.

LUMIX BS1H

Sensor	FF
W	93.0 mm
H	93.0 mm
D	78.8 mm
Weight*	585 g

* Body only.

RED KOMODO

Sensor	Super35
W	111.4 mm
H	95.0 mm
D	105.2 mm
Weight*	952 g

* Body only.

Expanding Expressions

BGH1   **BS1H**

S1H   **BS1H**

COMBINATION OF BOX-STYLE CAMERAS
LIVE STREAMING + CINEMA QUALITY

**Adding higher image quality and cinematic bokeh effect
to live streaming**

- Full-frame sensor for beautiful bokeh and higher image quality in low-light conditions (BS1H)

- Heat management = Unlimited recording

- High degree of freedom of wiring with LAN cable and SDI cable

- Multiple control by LUMIX Tether for Multicam via LAN w/PoE+

- High-precision synchronization with Genlock and Timecode

- Efficient workflow - Accessory sharing, unified image rendering performance and VariCam Look

COMBINATION OF FULL-FRAME CAMERAS
FILMMAKING + SPECIAL EQUIPMENT

**Unique image expression
that cannot be achieved with handheld cameras**

- Compact box design that can be stored in any space (BS1H)

- Compact size that doesn't get in the way of performers or framing (BS1H)

- Multiple remote control for low budget small-scale shooting (BS1H)

- Versatile shooting with unified image rendering performance (gimbal, drone, in-vehicle) (BS1H)

- Efficient post-production with timecode and VariCam Look

- Heat management = Unlimited recording

Feature Comparison 1/2

		S 1 H	B S 1 H	B G H 1
Image Sensor		FF 24.2MP	FF 24.2MP	MFT 10.2MP
ISO		Dual Native ISO	Dual Native ISO	Dual Native ISO
Body I.S.		5-axis / 6-stop	-	-
Log Recording		V-Log / 14+ Stops	V-Log / 14+ Stops	V-Log L / 13 Stops
Codec		MOV / MP4 / AVCHD	MOV / MP4	MOV / MP4
Recording Time Limit		Unlimited	Unlimited	Unlimited
4:2:2 10-bit	C4K / 4K	29.97p / 25.00p / 24.00p / 23.98p	29.97p / 25.00p / 24.00p / 23.98p	29.97p / 25.00p / 24.00p / 23.98p
	FHD	59.94p / 50.00p / 29.97p / 25.00p / 24.00p / 23.98p	59.94p / 50.00p / 29.97p / 25.00p / 24.00p / 23.98p	59.94p / 50.00p / 29.97p / 25.00p / 24.00p / 23.98p
4:2:0 10-bit	6K	24.00p / 23.98p	24.00p / 23.98p	-
	5.4K	29.97p / 25.00p	29.97p / 25.00p	-
	5.9K	29.97p / 25.00p / 24.00p / 23.98p	29.97p / 25.00p / 24.00p / 23.98p	-
	C4K / 4K	59.94p* / 50.00p*	59.94p* / 50.00p*	59.94p / 50.00p
Anamorphic*	4K (4:2:2 10-bit)	29.97p / 25.00p / 24.00p / 23.98p	29.97p / 25.00p / 24.00p / 23.98p	29.97p / 25.00p / 24.00p / 23.98p
	4K (4:2:0 10-bit)	50.00p	50.00p	50.00p
	4K (4:2:0 8-bit)	50.00p / 29.97p / 25.00p / 24.00p / 23.98p	50.00p / 29.97p / 25.00p / 24.00p / 23.98p	59.94p / 50.00p / 29.97p / 25.00p / 24.00p / 23.98p
VFR	C4K / 4K (up to 30p)	2fps - 60fps	2fps - 60fps	2fps - 60fps
	4K-A (up to 30p)	2fps - 50fps	2fps - 50fps	2fps - 60fps
	FHD	2fps - 180fps	2fps - 180fps	2fps - 240fps
HFR		119.88p / 100.00p / 48.00p / 47.95p	119.88p / 100.00p / 48.00p / 47.95p	-
HDMI Output	RAW	ATOMOS Ninja V Blackmagic Video Assist 12G HDR	ATOMOS Ninja V Blackmagic Video Assist 12G HDR	ATOMOS Ninja V
	C4K/4K 60p/50p 4:2:2 10-bit	C4K/4K 60p/50p 4:2:2 10-bit HDMI Output with Simultaneous 4:2:0 10-bit Internal Rec	C4K/4K 60p/50p 4:2:2 10-bit HDMI Output with Simultaneous 4:2:0 10-bit Internal Rec	C4K/4K 60p/50p 4:2:2 10-bit HDMI Output with Simultaneous 4:2:0 10-bit Internal Rec
	C4K/4K 30p/25p 4:2:2 10-bit	C4K/4K 30p/25p 4:2:2 10-bit HDMI Output with Simultaneous 4:2:2 10-bit Internal Rec	C4K/4K 30p/25p 4:2:2 10-bit HDMI Output with Simultaneous 4:2:2 10-bit Internal Rec	C4K/4K 30p/25p 4:2:2 10-bit HDMI Output with Simultaneous 4:2:2 10-bit Internal Rec

* When set to S35mm and PIXEL/PIXEL.
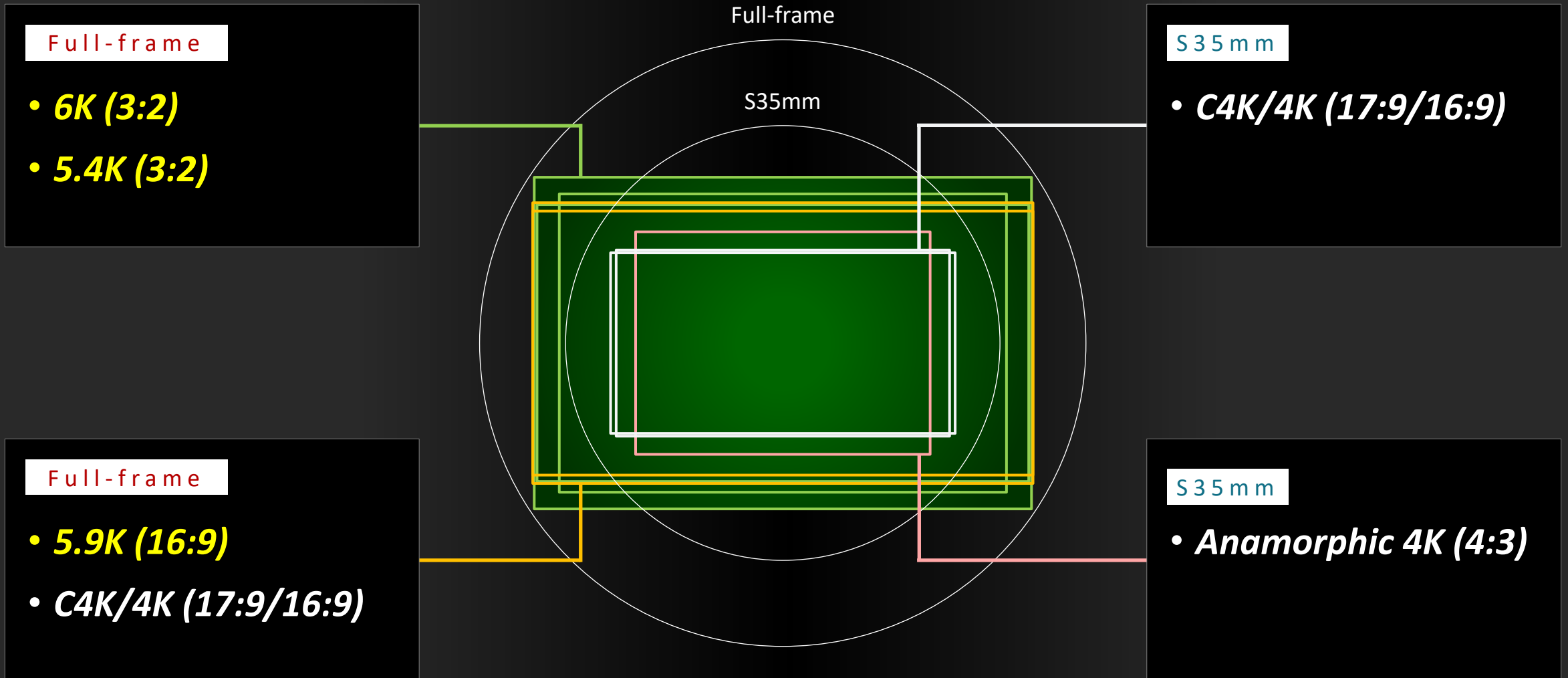
Feature Comparison 2/2

		S 1 H	B S 1 H	B G H 1
Cooling Fan		Yes	Yes	Yes
Photo Style	Cinelike D / Cinelike V	Cinelike D2 / Cinelike V2	Cinelike D2 / Cinelike V2	Cinelike D2 / Cinelike V2
	Like709 (& Knee)	Yes	Yes	Yes
	V-Log / V-Log L	V-Log	V-Log	V-Log L
	HDR Video	Like2100 (HLG)	Like2100 (HLG)	Hybrid Log Gamma
Control Monitor for Video		Sec/ISO, Angle/ISO, Sec/dB	Sec/ISO, Angle/ISO, Sec/dB	Sec/ISO, Angle/ISO, Sec/dB
Tally Light		Yes	Yes	Yes
IN/OUT	Genlock IN	-	Yes	Yes
	Timecode IN/OUT	Yes (via BNC converter cable)	Yes	Yes
	Remote Socket	Φ2.5mm	Φ2.5mm (General-use)	Φ2.5mm (General-use)
	HDMI	Type-A	Type-A	Type-A
	SDI	-	Yes	Yes
	USB	USB3.1 Type-C (PD)	USB3.1 Type-C	USB3.1 Type-C
	Card Slot	Slot 1 / 2 : SD UHS-II U3 (Vide grade 90)	Slot 1 / 2 : SD UHS-II U3 (Vide grade 90)	Slot 1 / 2 : SD UHS-II U3 (Vide grade 90)
	Mic Socket	Φ3.5mm	Φ3.5mm	Φ3.5mm
	Headphone Socket	Φ3.5mm	Φ3.5mm	Φ3.5mm
	XLR audio input	DMW-XLR1 (sold separately) High-res Audio (48kHz/24bit, 96kHz/24bit)	DMW-XLR1 (sold separately) High-res Audio (48kHz/24bit, 96kHz/24bit)	DMW-XLR1 (sold separately) High-res Audio (48kHz/24bit, 96kHz/24bit)
Network	Wi-Fi / Bluetooth	Wi-Fi 2.4GHz / Bluetooth v4.2	Wi-Fi 2.4GHz / Bluetooth v4.2	Wi-Fi 2.4GHz / Bluetooth v4.2
	Ethernet	-	Yes	Yes
	Live Streaming	-	Wired / RTP・RTSP	Wired / RTP・RTSP
	Tether Control	LUMIX Tether	LUMIX Tether for Multicam (Up to 12 Cameras*)	LUMIX Tether for Multicam (Up to 12 Cameras*)
Power		Li-ion Battery Pack (7.4V) (bundled)	AC Adaptor (12V, 3A) (bundled) Li-ion Battery Pack (7.28V) (sold separately) PoE+ (IEEE802.3at compliant) (sold separately)	AC Adaptor (12V, 3A) (bundled) Li-ion Battery Pack (7.28V) (sold separately) PoE+ (IEEE802.3at compliant) (sold separately)

* Operation may become unstable depending on the connection environment and the performance of computer.

Video Performances
with Cinema Quality

Panasonic

Recording Formats (MOV)

								HLG	VFR	59.94Hz	50.00Hz	24.00Hz	
MOV	Full-frame	**6 K**	**5952 x 3968 (3:2)**	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	-	23.98p	-	24.00p	
		5 . 4 K	**5376 x 3584 (3:2)**	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	-	29.97p	25.00p	-	
		5 . 9 K	**5888 x 3312**	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p	
		C4K 4K	4096 x 2160 3840 x 2160	4:2:2 10-bit	ALL-Intra	H.264	400Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p	
				4:2:2 10-bit	LongGOP	H.264	150Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p	
				4:2:0 8-bit	LongGOP	H.264	100Mbps	-	-	29.97p / 23.98p	25.00p	24.00p	
		FHD	1920 x 1080	4:2:2 10-bit	ALL-Intra	H.264	200Mbps	Yes	-	59.94p / 29.97p / 23.98p	50.00p / 25.00p	24.00p	
				4:2:2 10-bit	LongGOP	H.264	100Mbps	Yes	-	59.94p / 29.97p / 23.98p	50.00p / 25.00p	24.00p	
				4:2:0 8-bit	LongGOP	H.264	100Mbps	-	Yes	59.94p / 29.97p / 23.98p	50.00p / 25.00p	24.00p	
				4:2:2 10-bit	ALL-Intra	H.264	100Mbps	Yes	-	59.94i	50.00i	-	
				4:2:2 10-bit	LongGOP	H.264	50Mbps	Yes	-	59.94i	50.00i	-	**Unlimited Rec Time**
	S35mm PIXEL/PIXEL	C4K 4K	4096 x 2160 3840 x 2160	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	-	59.94p	50.00p	-	
				4:2:0 8-bit	LongGOP	H.264	150Mbps	-	-	59.94p	50.00p	-	
				4:2:2 10-bit	ALL-Intra	H.264	400Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p	
				4:2:2 10-bit	LongGOP	H.264	150Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p	
				4:2:0 8-bit	LongGOP	H.264	100Mbps	-	Yes	29.97p / 23.98p	25.00p	24.00p	
		Anamorphic 4K	3328 x 2496 (4:3)	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	-	-	50.00p	-	
				4:2:0 8-bit	LongGOP	H.264	150Mbps	-	-	-	50.00p	-	
				4:2:2 10-bit	ALL-Intra	H.264	400Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p	
				4:2:2 10-bit	LongGOP	H.264	150Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p	
				4:2:0 8-bit	LongGOP	H.264	100Mbps	-	Yes	29.97p / 23.98p	25.00p	24.00p	
		FHD	1920 x 1080	4:2:2 10-bit	ALL-Intra	H.264	200Mbps	Yes	-	59.94p / 29.97p / 23.98p	50.00p / 25.00p	24.00p	
				4:2:2 10-bit	LongGOP	H.264	100Mbps	Yes	-	59.94p / 29.97p / 23.98p	50.00p / 25.00p	24.00p	
				4:2:0 8-bit	LongGOP	H.264	100Mbps	-	Yes*	59.94p / 29.97p / 23.98p	50.00p / 25.00p	24.00p	
				4:2:2 10-bit	ALL-Intra	H.264	100Mbps	Yes	-	59.94i	50.00i	-	
				4:2:2 10-bit	LongGOP	H.264	50Mbps	Yes	-	59.94i	50.00i	-	
	Full-frame	FHD	1920 x 1080	4:2:0 10-bit	LongGOP	HEVC	150Mbps	Yes	HFR	119.88p	100.00p	48.00p	
				4:2:0 10-bit	LongGOP	HEVC	100Mbps	Yes		47.95p	-	-	
	S35mm PIXEL/PIXEL	C4K	4096 x 2160	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes		47.95p	-	48.00p	
		4K	3840 x 2160	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	HFR	47.95p	-	48.00p	
		Anamorphic 4K	3328 x 2496 (4:3)	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes		47.95p	-	48.00p	
		FHD	1920 x 1080	4:2:0 10-bit	LongGOP	HEVC	150Mbps	Yes		119.88p**	100.00p**	48.00p	
				4:2:0 10-bit	LongGOP	HEVC	100Mbps	Yes		47.95p	-	-	

*Only when Super 35mm is selected at 59.94/50.00p. **Only when Super 35mm is selected.

Recording Formats (MP4)

								HLG	VFR	59.94Hz	50.00Hz	24.00Hz	
MP4	Full-frame	4K	3840 x 2160	4:2:0 10-bit	LongGOP	HEVC	72Mbps	Yes	-	29.97p / 23.98p	25.00p	-	Unlimited Rec Time
				4:2:0 8-bit	LongGOP	H.264	100Mbps	-	-	29.97p / 23.98p	25.00p	-	
		FHD	1920 x 1080	4:2:0 8-bit	LongGOP	H.264	28Mbps	-	-	59.94p	50.00p	-	
				4:2:0 8-bit	LongGOP	H.264	20Mbps	-	-	29.97p	25.00p	-	
				4:2:0 8-bit	LongGOP	H.264	24Mbps	-	-	23.98p	-	-	
	S35mm PIXEL/PIXEL	4K	3840 x 2160	4:2:0 10-bit	LongGOP	HEVC	100Mbps	Yes	-	59.94p	50.00p	-	
				4:2:0 10-bit	LongGOP	HEVC	72Mbps	Yes	-	29.97p / 23.98p	25.00p	-	
				4:2:0 8-bit	LongGOP	H.264	100Mbps	-	-	29.97p / 23.98p	25.00p	-	
		FHD	1920 x 1080	4:2:0 8-bit	LongGOP	H.264	28Mbps	-	-	59.94p	50.00p	-	
				4:2:0 8-bit	LongGOP	H.264	20Mbps	-	-	29.97p	25.00p	-	
				4:2:0 8-bit	LongGOP	H.264	24Mbps	-	-	23.98p	-	-	

Panasonic

High Resolution RAW Video Output up to 5.9K

ProResRAW
by Apple ATOMOS
RECORDER
NINJA V 4K HDR

Blackmagic RAW
by lackmagicdesign
Blackmagic Video Assist
12G HDR 7"/ 5"

*Selectable recording mode depends on the firmware version of Atomos Ninja V.
*Please refer to the Atomos website for the information on the corresponding firmware version of Atomos Ninja V.
*Software that supports Apple ProRes RAW is required to edit RAW video recorded with NINJA V. Apply the LUT (Look up table) available on the following customer supports site to make the same color grading as V-Log/V-Gamut
https://panasonic.jp/support/global/cs/dsc/download/lut/s1h_raw_lut/

*Selectable recording mode depends on the firmware version of Blackmagic Video Assist 12G HDR.
*Please refer to the Blackmagic Design website for the information on the corresponding firmware version of Blackmagic Video Assist 12G HDR.
*DaVinci Resolve or DaVinci Resolve Studio is required to play back and edit Blackmagic RAW data. DaVinci Resolve Studio is required to deliver projects using Blackmagic RAW data in resolutions over 3840x2160.
*All functions may not be available depending on the situation.

					59.94Hz	50.00Hz	24.00Hz
Full-frame	**5.9K**	16:9	5888 x 3312	12-bit	29.97p / 23.98p	25.00p	-
Super 35mm	**4K**	17:9	4128 x 2176	12-bit	59.94p / 29.97p / 23.98p	50.00p / 25.00p	-
	Anamorphic 4K	4:3	3536 x 2656	12-bit	29.97p / 23.98p	50.00p / 25.00p	-

·All functions may not be available depending on the situation.

Additional Convenience for RAW Workflow

Providing two alternatives for RAW workflow from the launch timing, the BS1H corresponds more to the wide-ranging creative needs

Format	How to Record	Post-production

RECORDER

NINJA V

ProRes RAW

by Apple / ATOMOS

Apple **Final Cut Pro** — Mac

grass valley **EDIUS** — Mac / Windows

Adobe **Premiere** — Mac / Windows

XML etc.

Blackmagic design Products

Blackmagic RAW

by lackmagicdesign

BM Video Assist 12G HDR, 7"/5"

Blackmagic design **DaVinci Resolve** — Mac / Windows

10-bit HDMI Output & Simultaneous Internal Rec

OUTPUT ONLY

Setting		HDMI Output		SDI Output	
Resolution	Displayed pixels	Resolution	Displayed pixels	Resolution	Displayed pixels
6K 3:2	5952 x 3968	**4K** 16:9	3240 x 2160*	**FHD** 16:9	1620 x 1080*
5.4K 3:2	5376 x 3584	**4K** 16:9	3240 x 2160*	**FHD** 16:9	1620 x 1080*
5.9K 16:9	5888 x 3312	**4K** 16:9	3840 x 2160	**FHD** 16:9	1920 x 1080
C4K 17:9	4096 x 2160	**C4K** 17:9	4096 x 2160	**FHD** 16:9	1920 x 1012*
4K 16:9	3840 x 2160	**4K** 16:9	3840 x 2160	**FHD** 16:9	1920 x 1080
4K-A 4:3	3328 x 2496	**4K** 16:9	2880 x 2160*	**FHD** 16:9	1440 x 1080*
FHD 16:9	1920 x 1080	**FHD** 16:9	1920 x 1080	**FHD** 16:9	1920 x 1080
Bit Depth		Bit Depth		Bit Depth	
4:2:2 10-bit		4:2:2 10-bit		4:2:2 10-bit	
4:2:0 10-bit					
4:2:0 8-bit		4:2:2 8-bit		4:2:2 8-bit	
Frame Rate		Frame Rate		Frame Rate	
60p / 50p / 30p / 25p / 24p		60p / 50p / 30p / 25p / 24p		60p / 50p / 30p / 25p / 24p	
HFR 120p / 100p / 48p		60p / 50p / 24p		60p / 50p / 24p	

INTERNAL REC WITH OUTPUT

| Setting		Internal Rec		HDMI Output		SDI Output	
Resolution	Displayed pixels	Resolution	Displayed pixels	Resolution	Displayed pixels	Resolution	Displayed pixels
6K 3:2	5952 x 3968	**6K** 3:2	5952 x 3968	**4K** 16:9	3240 x 2160*	**FHD** 16:9	1620 x 1080*
5.4K 3:2	5376 x 3584	**5.4K** 3:2	5376 x 3584	**4K** 16:9	3240 x 2160*	**FHD** 16:9	1620 x 1080*
5.9K 16:9	5888 x 3312	**5.9K** 16:9	5888 x 3312	**4K** 16:9	3840 x 2160	**FHD** 16:9	1920 x 1080
C4K 17:9	4096 x 2160	**C4K** 17:9	4096 x 2160	**C4K** 17:9	4096 x 2160	**FHD** 16:9	1920 x 1012*
4K 16:9	3840 x 2160	**4K** 16:9	3840 x 2160	**4K** 16:9	3840 x 2160	**FHD** 16:9	1920 x 1080
4K-A 4:3	3328 x 2496	**4K-A** 4:3	3328 x 2496	**4K** 16:9	2880 x 2160*	**FHD** 16:9	1440 x 1080*
FHD 16:9	1920 x 1080	**FHD** 16:9	1920 x 1080	**FHD** 16:9	1920 x 1080	**FHD** 16:9	1920 x 1080
Bit Depth		Bit Depth		Bit Depth		Bit Depth	
4:2:2 10-bit		4:2:2 10-bit		4:2:2 10-bit		4:2:2 10-bit	
4:2:0 10-bit		4:2:0 10-bit					
4:2:0 8-bit		4:2:0 8-bit		4:2:2 8-bit		4:2:2 8-bit	
Frame Rate		Frame Rate		Frame Rate		Frame Rate	
60p / 50p / 30p / 25p / 24p		60p / 50p / 30p / 25p / 24p		60p / 50p / 30p / 25p / 24p		60p / 50p / 30p / 25p / 24p	
HFR 120p / 100p / 48p		HFR 120p / 100p / 48p		60p / 50p / 24p		60p / 50p / 24p	

* The number of pixels displayed on the monitor.

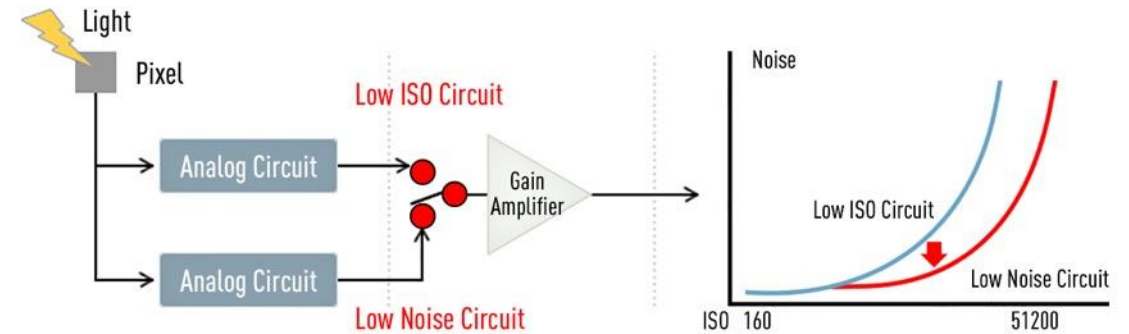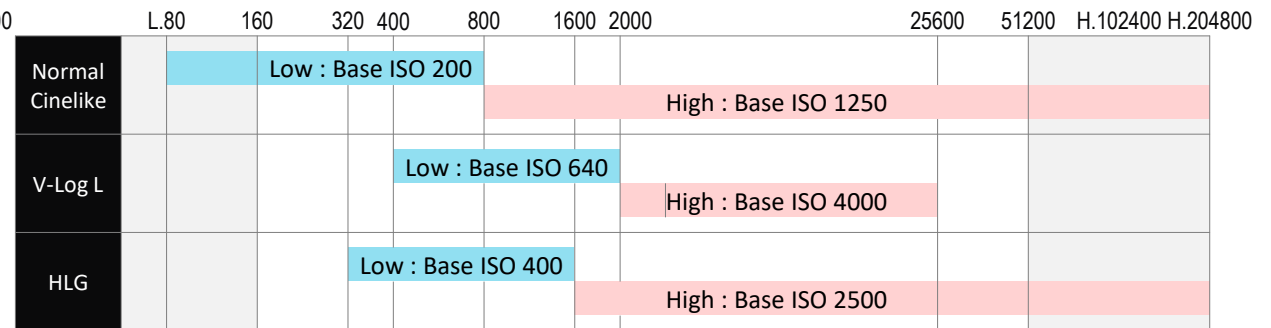# Super High Sensitivity Shooting with Low Noise

Single Native ISO
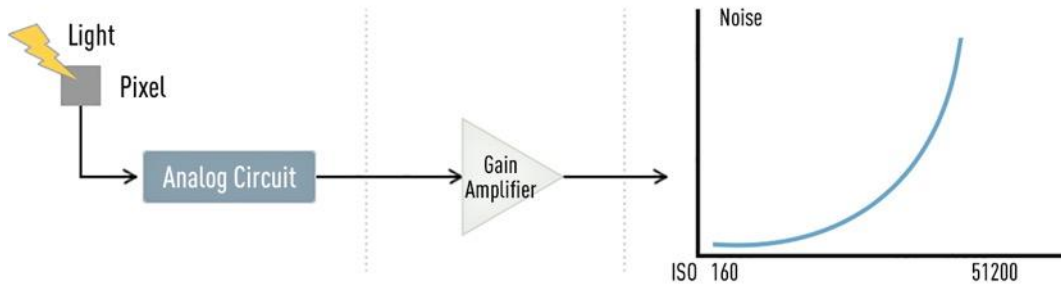
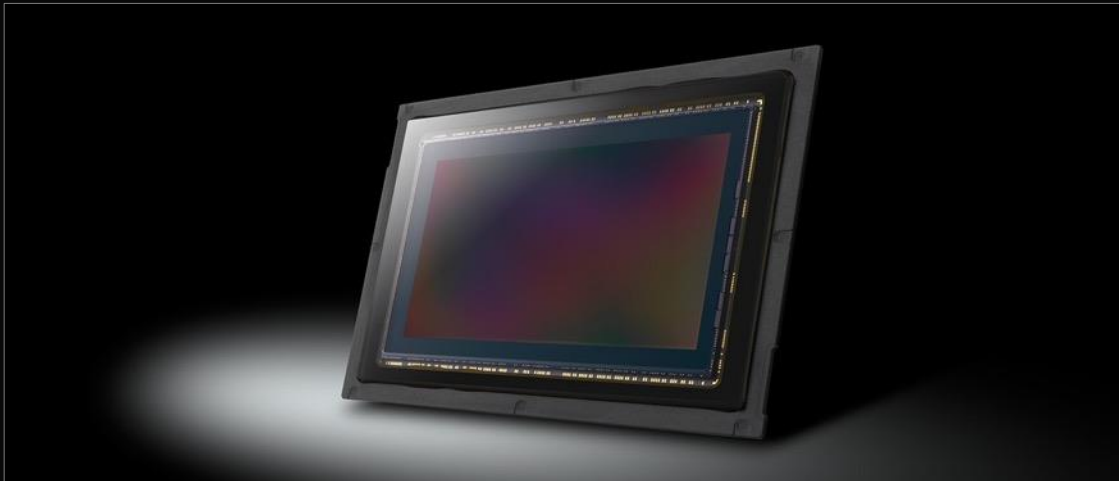Noise increases as sensitivity rises.
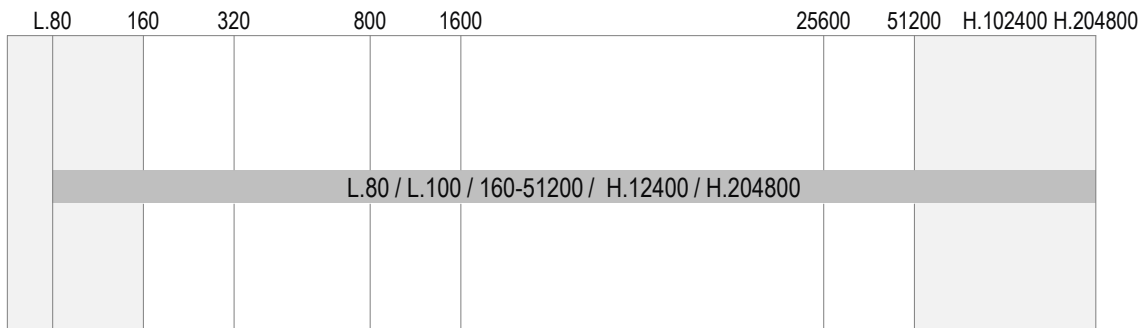
Dual Native ISO

Two dedicated circuits are provided for each pixel.
Sensitivity is set prior to the gain amplifier ▶ High Sensitivity Noise is Reduced.

L.80	160	320	800	1600	25600	51200	H.102400 H.204800

L.80 / L.100 / 160-51200 / H.12400 / H.204800

	L.80	160	320 400	800	1600 2000	25600	51200	H.102400 H.204800
Normal Cinelike		Low : Base ISO 200			High : Base ISO 1250			
V-Log L			Low : Base ISO 640		High : Base ISO 4000			
HLG			Low : Base ISO 400		High : Base ISO 2500			

Panasonic

Overwhelmingly Picture Quality
24.2MP Sensor X Venus Engine

High Image Quality

- 24.2MP Sensor with Low Pass Filter
- ISO100-51200 / EX.50-204800
- Dual Native ISO technology
- A rich dynamic range and natural, high-resolution rendering
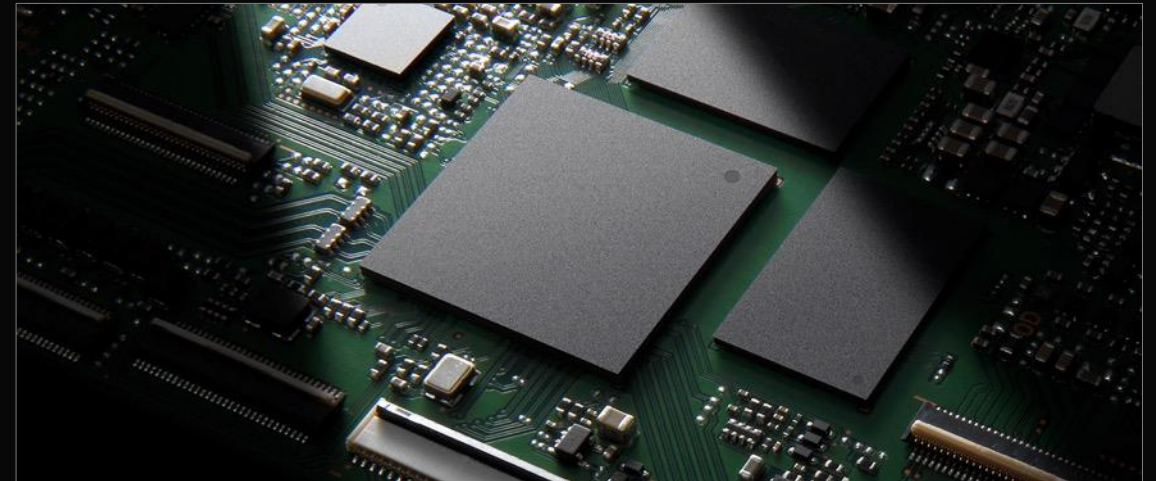
High-Speed Processing

- 10-bit C4K/4K 59.94p/50.00p video (S35mm)
- 4:2:2 10-bit internal video recording (C4K/4K 30p/25p/24p)
- VFR (C4K/4K 2fps-60fps / FHD 2fps-180fps)
- Deep Learning technology

# 14+ stops of V-Log and V-Gamut "Cinema VariCam Look"

- Offering compatibility with Cinema VariCam Look, 14+ stops of dynamic range, and a very wide color spectrum, V-Log and V-Gamut come preinstalled.

- Footage from VariCam series cameras can be seamlessly included in the edit.

V-Log View Assist

- LUT files can be import from SD card and applied to the video.

- HDMI/SDI output of LUT-applied image is possible.

	V-Log			
Input Reflection [%]	IRE [%]	Stop	10-bit Code Value	12-bit Code Value
0	7.3	-	128	512
18	42	0.0	433	1732
90	61	2.3	602	2408
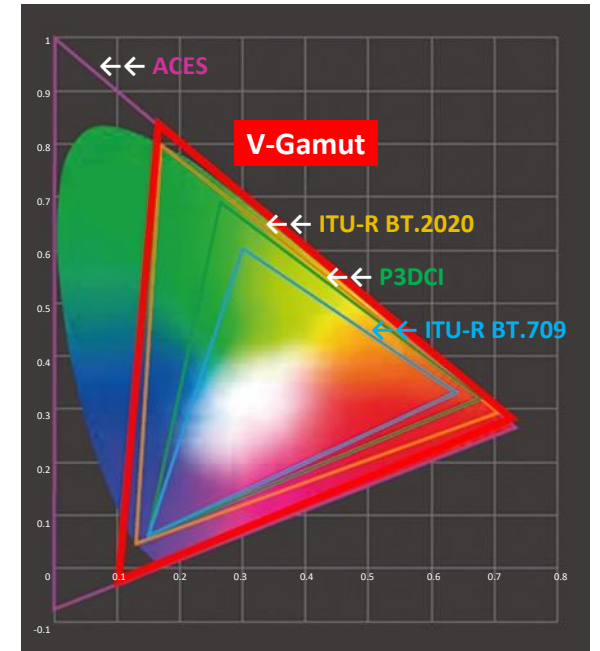
V-Gamut (Color Gamut)

The color gamut is wide. The monitor covers the entire display for precise color reproduction.

* The V-Log curve characteristics comply with "V-Log/V-Gamut REFERENCE MANUAL Rev.1.0
When luminance is to be displayed by stop units, this camera calculates IRE 42% to 0 stop.

Panasonic

4-perf Anamorphic meets the demand for cinema use
equivalent

Fitting perfectly within the image circle of a S35mm lens is our 4 Perforation Anamorphic mode.
This allows for the use of all the classic and modern Anamorphic lenses that have been in use for over 60 years with frame-rates up to 50p for gorgeous motion footage.

MOV, S35mmPIXEL/PIXEL

					HLG	VFR	59.94Hz	50.00Hz	24.00Hz
3328 x 2496 (4:3)	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	-	47.95p (HFR)	50.00p	-
	4:2:0 8-bit	LongGOP	H.264	150Mbps	-	-	-	50.00p	-
	4:2:2 10-bit	ALL-Intra	H.264	400Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p
	4:2:2 10-bit	LongGOP	H.264	150Mbps	Yes	-	29.97p / 23.98p	25.00p	24.00p
	4:2:0 8-bit	LongGOP	H.264	100Mbps	-	Yes	29.97p / 23.98p	25.00p	24.00p

Anamorphic Desqueeze Display

■ HDMI*/SDI output of desqueezed images in cinescope size is possible.
* Playback only.

■ Magnification rate is also selectable from *1.30x, 1.33x, 1.5x, 1.8x or 2.0x*.

RECORDING 4:3 (1:1.33)

POST PRODUCTION 2.39:1 / 2.35:1
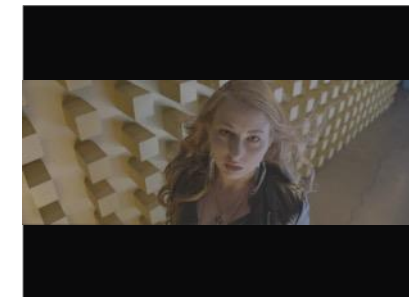
Unique expressions that can be realized with the camera itself

Container	Format	Mode	FPS	30x	25x	15x	12x			2x		1x				2x		3x		4x		5x		6x		7x		7.5x
MOV	C4K / 4K	S35mm	30p	-	-	2	-	-	-	15	26	30p	32	34	45	-	60	-	-	-	-	-	-	-	-	-	-	-	-
			25p	-	-	-	2	12	-	21	23	25p	27	30	37	-	-	60	-	-	-	-	-	-	-	-	-	-	-
			24p	-	-	-	2	12	20	22	-	24p	26	28	36	-	48	60	-	-	-	-	-	-	-	-	-	-	-
	4K-A	PIXEL/PIXEL	30p	-	-	2	-	-	-	15	26	30p	32	34	45	50	-	-	-	-	-	-	-	-	-	-	-	-	-
			25p	-	-	-	2	12	-	21	23	25p	27	30	37	-	50	-	-	-	-	-	-	-	-	-	-	-	-
			24p	-	-	-	2	12	20	22	-	24p	26	28	36	-	48	-	-	-	-	-	-	-	-	-	-	-	-
	FHD	Full-frame S35mm	60p	2	-	-	-	-	30	56	58	60p	62	64	90	-	120	150	180*	-	-	-	-	-	-	-	-	-	-
			50p	-	2	-	-	-	25	46	48	50p	52	54	75	-	100	-	150	180*	-	-	-	-	-	-	-	-	-
			30p	-	-	2	-	-	15	26	28	30p	32	34	45	-	60	75	90	105	120	135	150	165*	180*	-	-	-	-
			25p	-	-	-	2	12	-	21	23	25p	27	30	37	-	50	62	75	87	100	-	125	-	150	-	175*	180*	-
			24p	-	-	-	2	12	20	22	-	24p	26	28	36	-	48	60	72	84	96	108	120	132	144	156*	168*	-	180*
		PIXEL/PIXEL	30p	-	-	2	-	-	-	15	26	30p	32	34	45	-	60	-	-	-	-	-	-	-	-	-	-	-	-
			25p	-	-	-	2	12	-	21	23	25p	27	30	37	-	-	60	-	-	-	-	-	-	-	-	-	-	-
			24p	-	-	-	2	12	20	22	-	24p	26	28	36	-	48	60	-	-	-	-	-	-	-	-	-	-	-

QUICK (30x, 25x, 15x, 12x, 2x) — 1x — SLOW (2x, 3x, 4x, 5x, 6x, 7x) — 7.5x

*Angle of view narrows if you select a frame rate with a number of frames 151 or more.

Background Rapidly Moves

Actions Look Comical

Music Promotion Videos

Satisfy Pro-Users

HFR recording for slow-motion videos with audio

	Audio Recording	AF	Recording Bitrate	Footage
VFR	**No**	**No**	**8-bit**	**Slow or Fast**
HFR	**Yes**	**Yes**	**10-bit**	**Same Time Axis**

The LUMIX BS1H support HFR (High Frame Rate) recording.
In post-production, the frame rate can be changed and slow-motion video produced. Different from VFR (variable frame rate) capture, HFR (high frame rate) recording includes audio and autofocus.

								HLG	59.94Hz	50.00Hz	24.00Hz
MOV	Full-frame	FHD	1920 x 1080	4:2:0 10-bit	LongGOP	HEVC	150Mbps	Yes	*119.88p*	*100.00p*	*48.00p*
				4:2:0 10-bit	LongGOP	HEVC	100Mbps	Yes	*47.95p*	-	-
	S35mm PIXEL/PIXEL	C4K	4096 x 2160	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	*47.95p*	-	*48.00p*
		4K	3840 x 2160	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	*47.95p*	-	*48.00p*
		Anamorphic 4K	3328 x 2496 (4:3)	4:2:0 10-bit	LongGOP	HEVC	200Mbps	Yes	*47.95p*	-	*48.00p*
		FHD	1920 x 1080	4:2:0 10-bit	LongGOP	HEVC	150Mbps	Yes	*119.88p**	*100.00p**	*48.00p*
				4:2:0 10-bit	LongGOP	HEVC	100Mbps	Yes	*47.95p*	-	-

*Only when Super 35mm is selected.

Panasonic

HDR High Dynamic Range

HDR is an image display technology that provides a wider brightness range (dynamic range) than conventional SDR.
HDR renders more natural and true-to-life images without compromising the gradation in bright image areas or dark image areas.
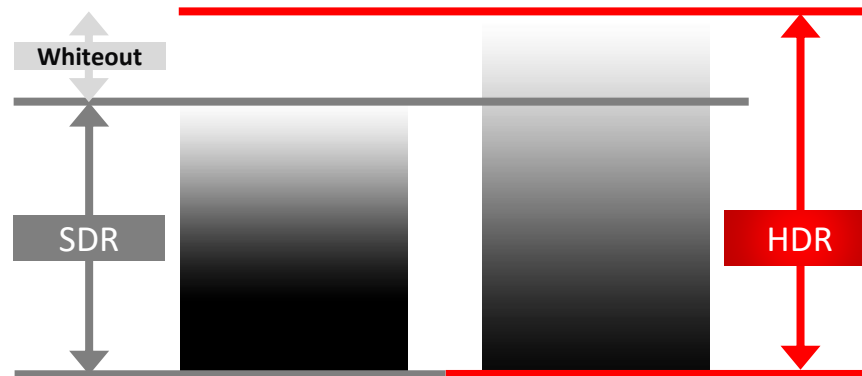
SDR

HDR

* Simulated image

* Simulated image

With SDR, expression is limited for strong sun rays and parts with dark shadows.

Whiteout

SDR

HDR

With its wider brightness range, HDR simultaneously renders brighter and darker areas.

LUMIX introduces Hybrid Log Gamma for HDR video recording

HLG View Assist

It is possible to simulate the image that would be displayed on an HLG-compatible monitor.

| AUTO (HDMI only) |
| --- |
| Applies the effect of [MODE2] when the camera is connected to a device that does not support HDR (HLG format). |
| MODE1 |
| Converts with an emphasis on Bright Areas such as sky. |
| MODE2 |
| Converts with an emphasis on the Brightness of a Main Subject. |
| OFF |
| No data conversion. * HLG images appear darker on devices that do not support the HLG format. |

Panasonic

Filtering

Applies filtering by condition to narrow down various Rec Quality setting options.
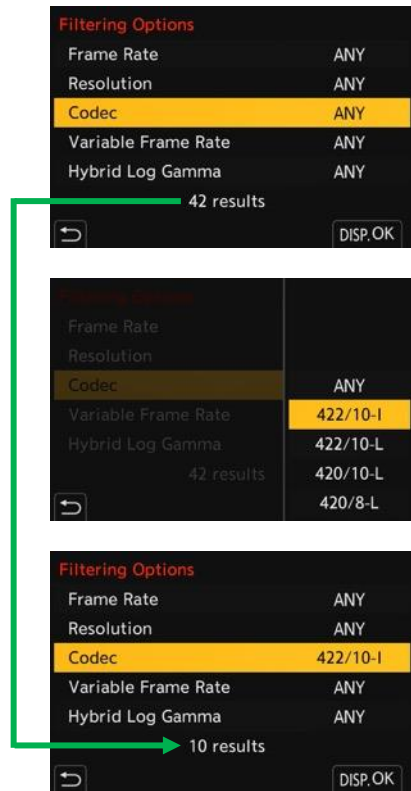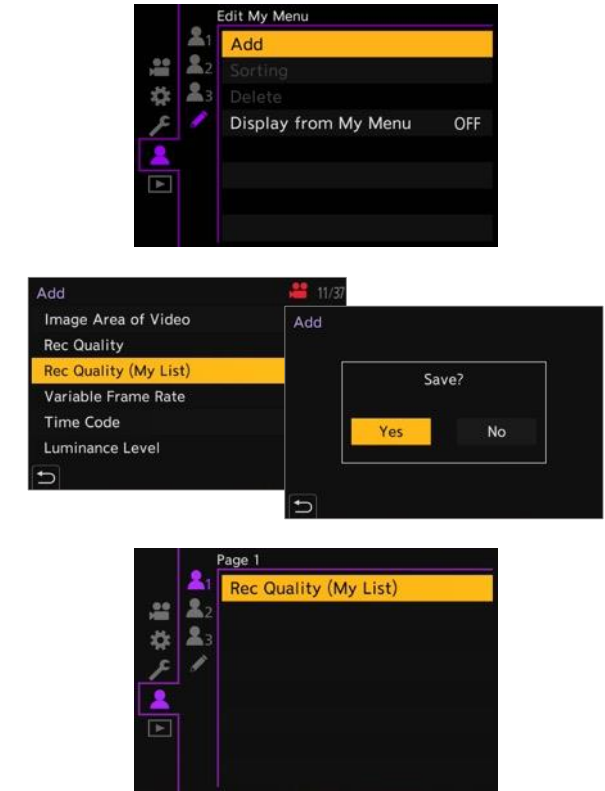

My List of Rec Quality

You can register frequently used combinations for quick recall.
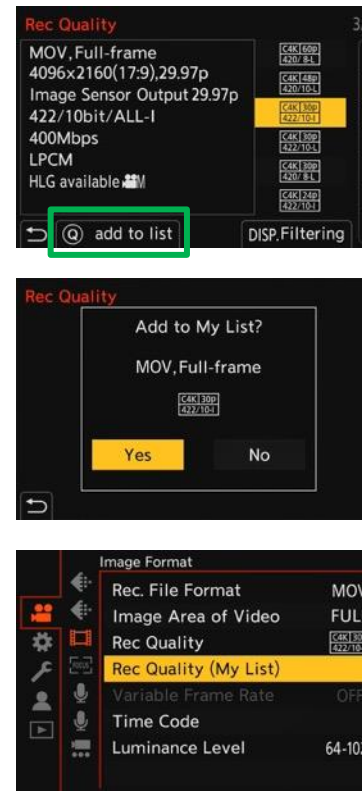
My Menu

Aggregate the frequently used settings to "My Menu" to call them out quickly.

Panasonic

Boost I.S. (Video) function

Lenses with O.I.S.	LUMIX S Series Lenses with O.I.S.
Lens O.I.S. Use normal O.I.S. functions for regular handheld shooting or telephoto shooting.	**Boost I.S. (Video) function** Boost I.S. (Video) is effective if you want to take <u>a handheld shot at a fixed angle</u>. Maintain a stable structure.

Panasonic

Frame Indicator

A red border surrounds the frame as you record, helping you avoid mistakes such as forgetting to press the record button. (ON/OFF selectable)

Red REC Frame Indicator

Blue frame can be displayed to indicate streaming operation. (ON/OFF selectable)
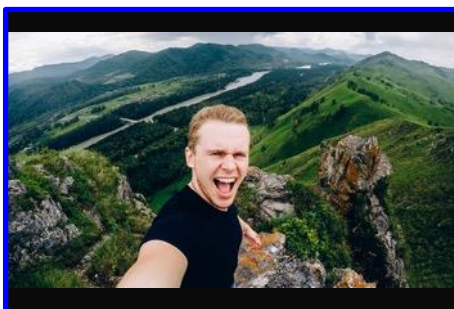
Streaming Blue Frame Indicator

Frame Marker

From anamorphic videos to vertical videos for social media. Shoot while imaging the angle of view when cropping in post-production.

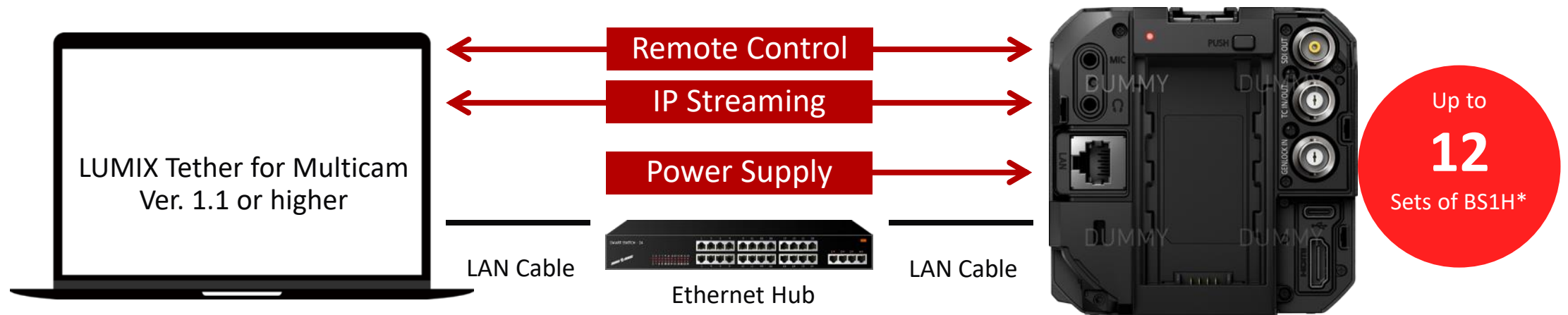| Frame Aspect		Frame Color	Frame Mask
2.39 : 1	CinemaScope		100%
2.35 : 1			75%
2.00 : 1	Scope		50%
1.85 : 1	VistaVision for USA		25%
16 : 9	High definition		OFF
4 : 3	35mm silent film		
5 : 4			
1 : 1	Social Media		
4 : 5			
9 : 16			

Vertical Position Information

The camera detects the vertical orientation of video. Users can select whether to add or not add the vertical position information of video from the menu.

Ethernet Compatible

Both control and power supply are possible with a single LAN cable

Remote Control

IP Streaming

Power Supply

LUMIX Tether for Multicam Ver. 1.1 or higher

LAN Cable

Ethernet Hub

LAN Cable

Up to **12** Sets of BS1H*

Remote Control

Remote control of up to 12 sets of BS1H* with LUMIX Tether for Multicam ver. 1.1 or higher

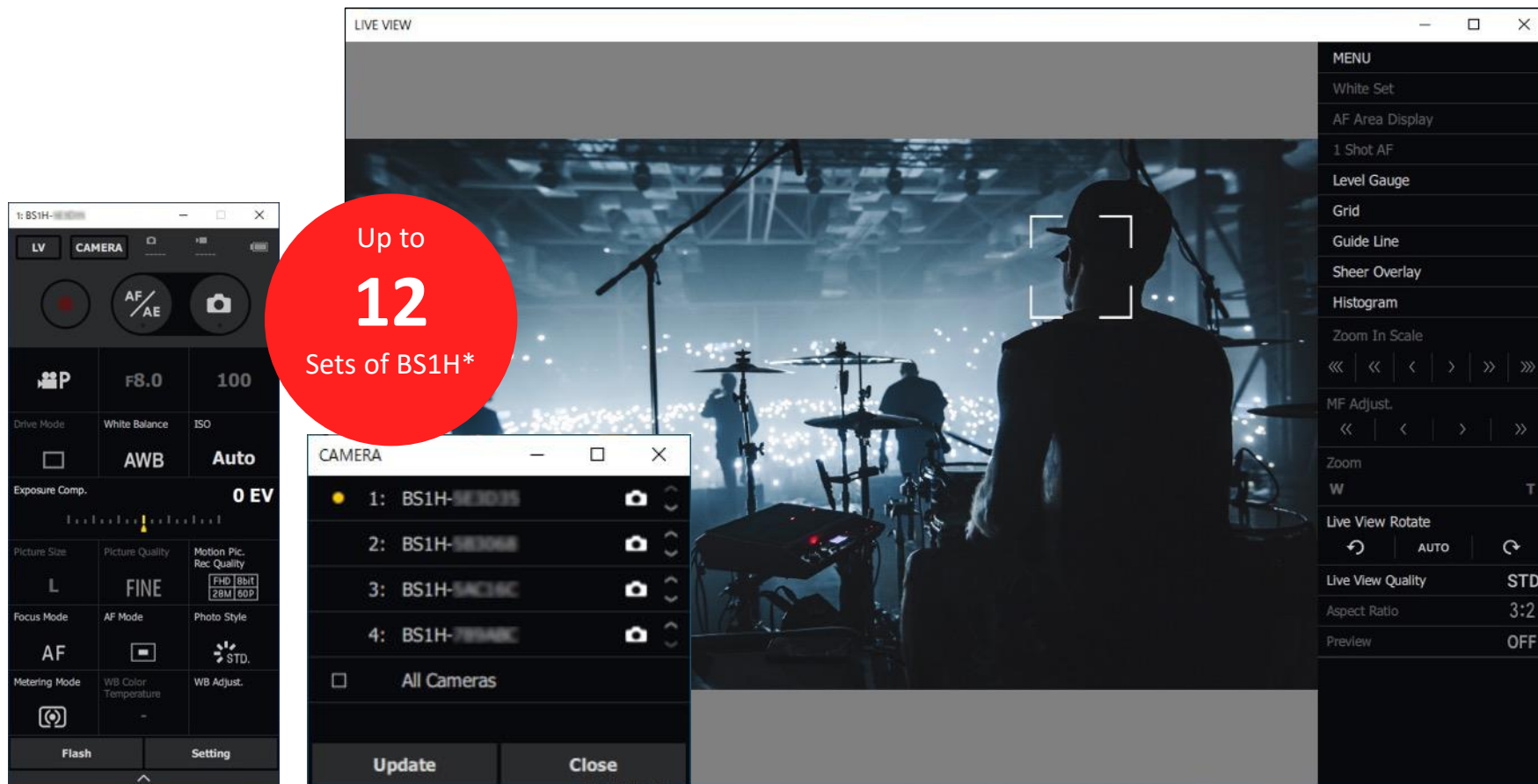SDK for camera control via USB/LAN will be provided for free
https://panasonic.jp/support/global/cs/soft/tool/sdk.html

IP Streaming

IP streaming (RTP/RTSP protocol) to the social media platform over the Internet with PC connection through LAN cable
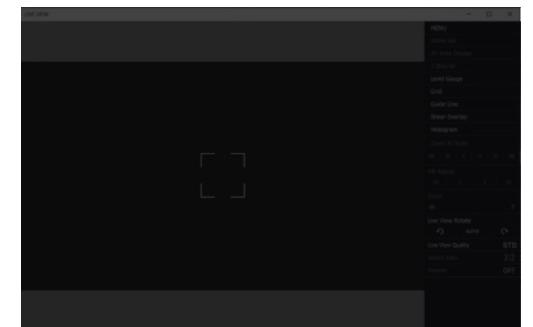
Power Supply

PoE+ (IEEE802.3at compliant)

Panasonic

* Operation may be unstable depending on the connection environment and performance of the connected PC.

Remote Control with LUMIX Tether for Multicam *Ver. 1.1 or higher*

Up to **12** Sets of BS1H*

- Monitoring
- Remote Control
- Multiple Camera Control
- Still Image Shooting

Live views cannot be displayed while streaming.**

*Operation may become unstable depending on the connection environment and the performance of computer.
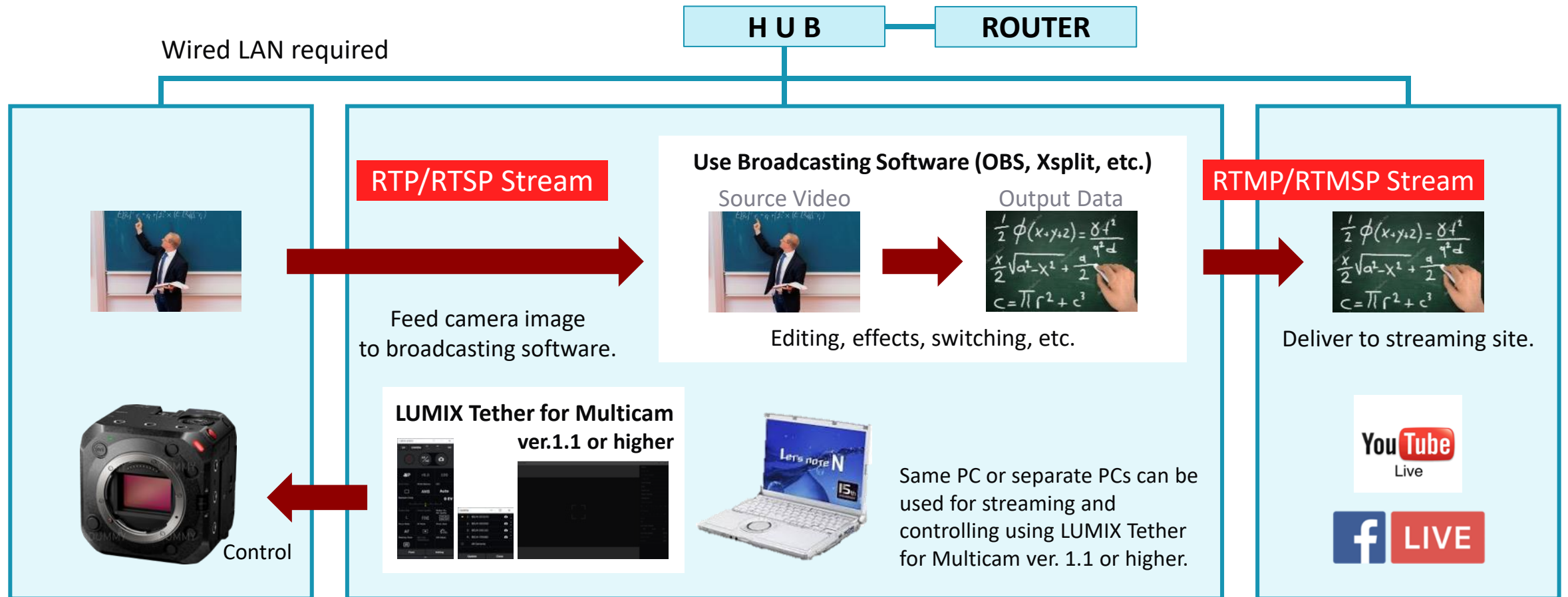** When streaming is stopped, all functions of LUMIX Tether for Multicam become available for use.
** If LUMIX Tether for Multicam is set to still image mode, streaming function cannot be used.

Panasonic

Live Streaming with 4K 60p/50p in H.265

Connection System	Wired LAN
Protocol	RTP/RTSP
Timecode IN/OUT	YES
Start Time Scheduling	YES

YouTube recommended

4K 3840 x 2160	60p/50p	H.265	50Mbps	25Mbps	AAC	20-51Mbps
		H.264	50Mbps	25Mbps	AAC	
	30p/25p	H.265	25Mbps	12.5Mbps	AAC	13-34Mbps
		H.264	25Mbps	12.5Mbps	AAC	
FHD 1920 x 1080	60p/50p	H.265	20Mbps	16Mbps	AAC	4.5-9Mbps
		H.264	16Mbps	8Mbps	AAC	
	30p/25p	H.265	12Mbps	6Mbps	AAC	3-6Mbps
		H.264	6Mbps	3Mbps	AAC	
HD 1280 x 720	60p/50p	H.264	6Mbps		AAC	2.25-6Mbps
	30p/25p	H.264	4Mbps		AAC	1.5-4Mbps

The H.265 realizes half the bitrate while keeping the image quality the same as H.264, which means it can provide 2x higher quality image at the same bitrate as H.264. Streaming in ultra high definition 4K at low bitrate is possible even in the cases where the bandwidth is not broad enough. H.264 prioritizes streaming performance.

·Performs the same way as ordinary video recording, except for VFR. ·HDMI/SDI output used for pre-confirmation of the field of view displays the image with the resolution / frame rate set in the streaming video image quality. (When the streaming video image quality is set to 720p, resolution is 1080p.) ·Network function operates as a static IP address or DHCP client during streaming.

Panasonic

IP Streaming

H U B ── **ROUTER**

Wired LAN required

RTP/RTSP Stream

Use Broadcasting Software (OBS, Xsplit, etc.)

Source Video

Output Data

RTMP/RTMSP Stream

Feed camera image to broadcasting software.

Editing, effects, switching, etc.

Deliver to streaming site.

LUMIX Tether for Multicam ver.1.1 or higher

Same PC or separate PCs can be used for streaming and controlling using LUMIX Tether for Multicam ver. 1.1 or higher.

Control

You Tube Live

facebook LIVE

Simultaneous Use *POSSIBLE*	Simultaneous Use *NOT POSSIBLE*
Live streaming and remote control of LUMIX Tether for Multicam ver. 1.1 or higher (exposure setting, streaming image quality, etc.) via wired LAN.	Live streaming and SD recording. Live streaming and remote control of LUMIX Sync app.

Simultaneous HDMI and SDI Output

SDI Cable →

↑ **HDMI Cable**
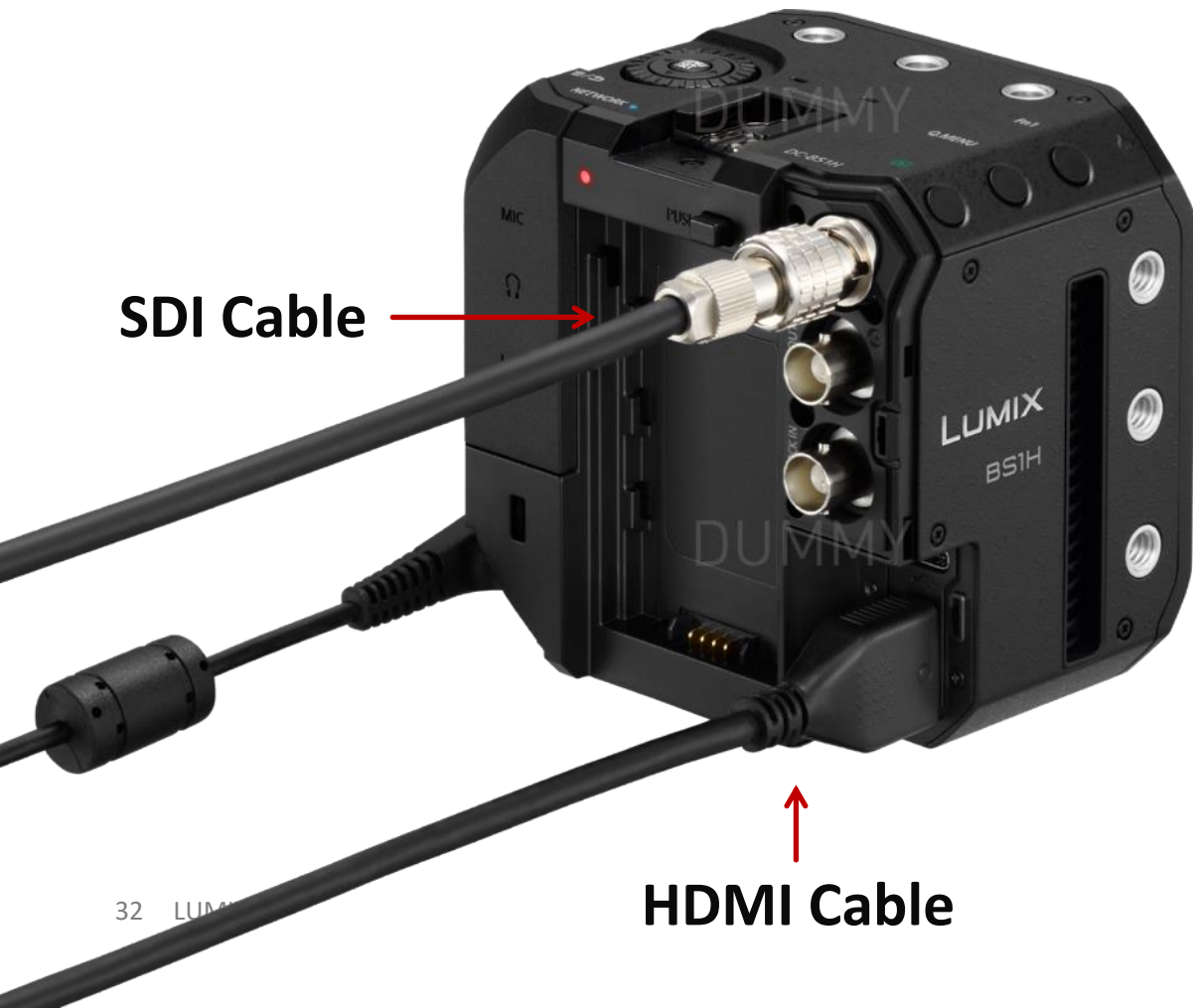
	HDMI	SDI
	HDMI Type A	3G-SDI
Supported Formats (BS1H)	**4K 60p/50p** **4:2:2 10-bit**	Up to FHD 60p/50p 4:2:2 10-bit
Cable Lock	Not So Good	**Good (BNC Terminal)**
Cable Length	Within 10m	**Up to 100m**
Usage	**External Recorder**	**External Monitor**
	Simultaneous Output is Possible *When recording. Not possible during playback.*	

Panasonic

USAGE CASE 1 - MULTIPLE CAMERAS

Timecode

Timecode Generator

or

Synchronizes Each Camera

TC → Camera 1
TC → Camera 2
TC → Camera 3
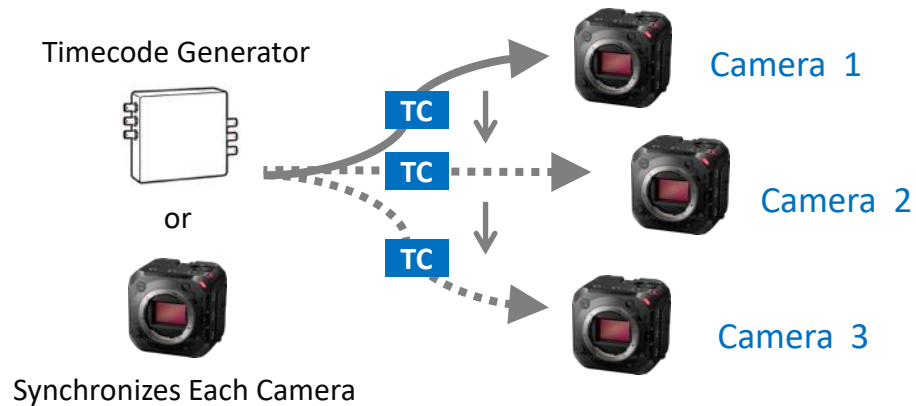
Camera 1	1	2	3	4
Camera 2	1	2	3	4
Camera 3	1	2	3	4

Easy to handle in editing because time information is embedded directly in the video.

USAGE CASE 2 - MULTIPLE CAMERAS

Genlock and Timecode

Timecode Generator

Genlock (Sync) Generator

TC GL → Camera 1
TC GL → Camera 2
TC GL → Camera 3
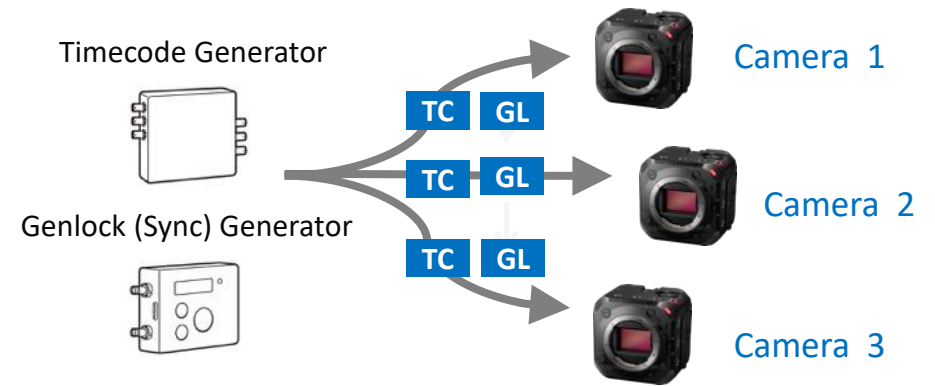
Camera 1	1	2	3	4
Camera 2	1	2	3	4
Camera 3	1	2	3	4
Genlock Signal				

Perfect synchronization of multiple cameras for live sports and other challenging applications.

Panasonic

Wi-Fi & Bluetooth & LUMIX Sync App

Easy Connection

High-speed connection to
a smartphone.

High-speed image transmission
via a wireless router.

Monitoring & Remote Control

You can use your smartphone or tablet as
an external monitor or remote control.
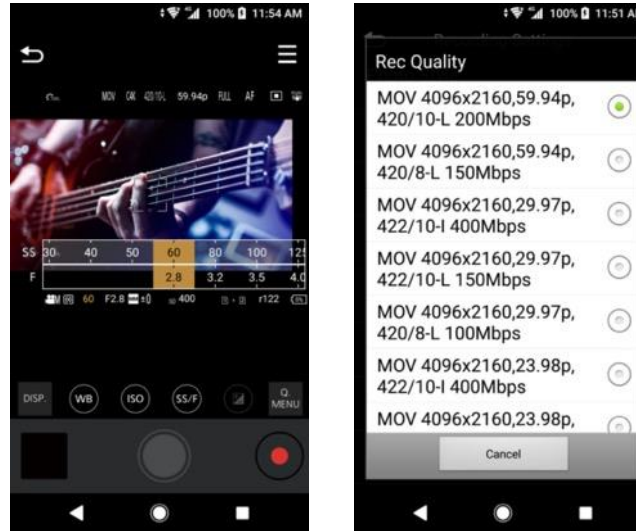
Copy Settings

You can use LUMIX Sync to copy
settings from one camera (BS1H)
to another (BS1H),
which is useful when managing
multiple cameras in a shoot.

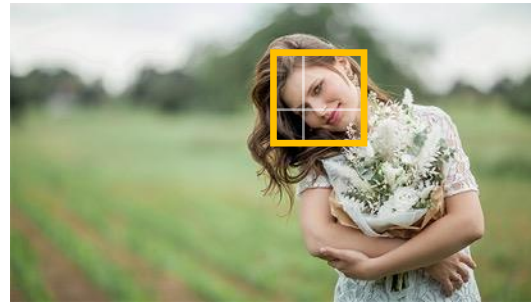* Copying must done between cameras
of the same model.
Cannot be shared with the BGH1.

Panasonic

Video Autofocus Featuring Deep Learning Technology

Excellent Tracking Performance

High-precision Face/Eye Recognition

Recognition Performance for Small Subjects

Quickly recognize the face and eyes of moving subjects

Precise eye recognition even when the face is tilted

Keeps focusing on the face even when the person moves out of the center

Precise face/eye recognition even if the subject is small

Quickly recognize the human body of moving subjects

Precise eye recognition even when the face is turning around

The frame does not move backwards.
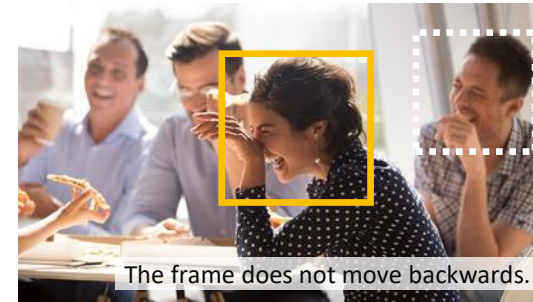
Keeps focusing on the main subject even if the unintentional subject is framed in

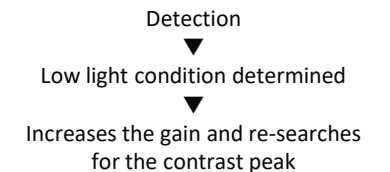Precise human body recognition even if the subject is small

Accurate Focusing Even in Low-Contrast / Low-Light Situations

-3EV

At ISO100, F1.4, AFS.
10% contrast target.

Low Contrast Situations

-6EV

At ISO100, F1.4, AFS.
100% contrast target.

Low Light Situations

Accurate focusing even when shooting low-contrast scenes with fog or mist.

Detection
▼
Low contrast condition determined
▼
Re-searches for the contrast peak
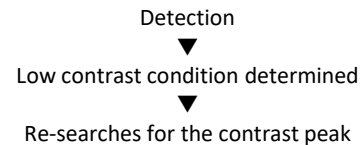
Low Light AF supporting -6EV.
Accurate focusing is possible even in low lighting conditions *with no light sources except starlight*.
No need to use flash or AF assist lamp.

Detection
▼
Low light condition determined
▼
Increases the gain and re-searches for the contrast peak

Panasonic

Heat Management = Unlimited Recording

Cooling Fan

The rise in the camera's temperature can be suppressed with the cooling fan and can be used for an unlimited time within the guaranteed operating temperature range.
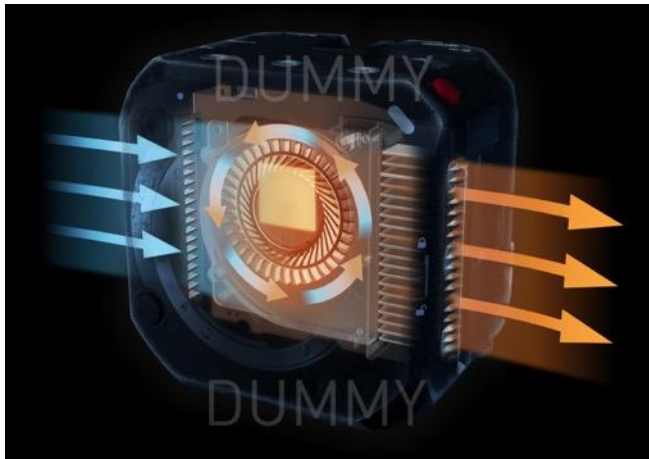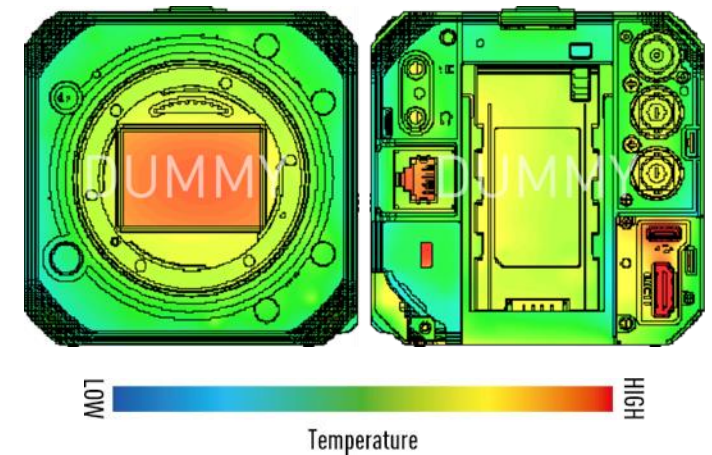

Compact, Durable Body

The minimal metal exterior provides uniform heat dissipation. The aluminum and magnesium alloy body frame offers heat dissipation, light weight of 585g, and durability. The result is superior functionality and a compact body.
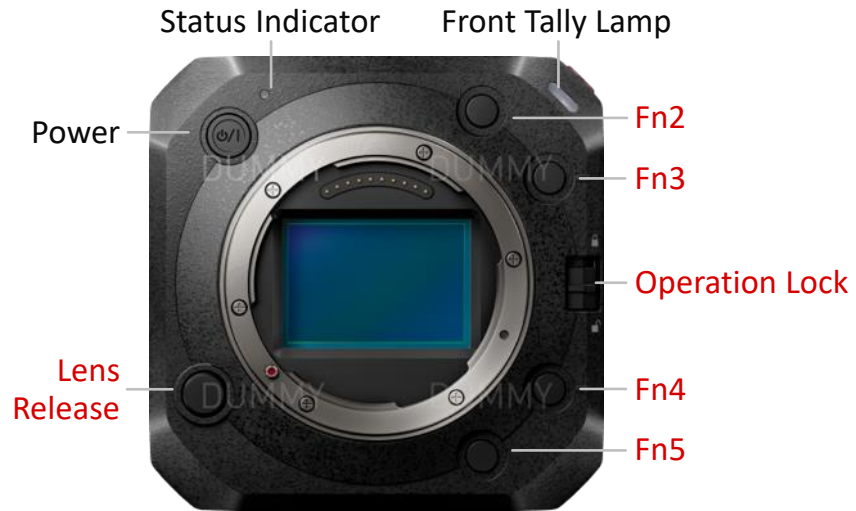

Heat Simulation

Thermal simulation and iterant testing with actual cameras are carried out.
The heat generated up to the limit of thermal capacity can be efficiently dispersed and makes it possible to combine the full-frame sensor, and a highly compact body.
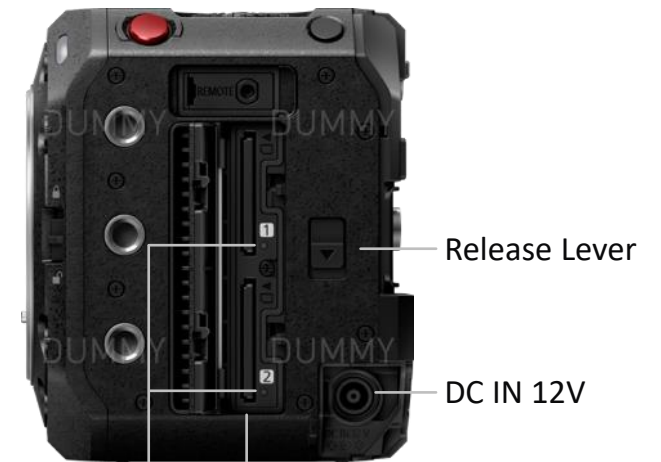

LOW   HIGH
Temperature

Panasonic

Main Parts and Controls

Stereo Microphone

Video Rec.

Control Dial
Cursor Buttons
Menu/Set

Delete / Cancel

Fn1

Q.MENU

Playback

Network Connection Lamp   Hot Shoe

Front design changed from BGH1

Status Indicator   Front Tally Lamp

Power

Fn2

Fn3

Operation Lock

Lens
Release

Fn4

Fn5

LUMIX
BS1H

Rear Tally Lamp   Battery Release

Mic

Headphone

LAN

Security Slot

SDI OUT

TC/IN OUT

Genlock IN

USB

HDMI

Tripod Mount

Release Lever

DC IN 12V

Card Access Light 1 / 2   Card Slot 1 / 2

Front / Rear Tally Lamp

Operation Lock Switch NEW

The new operation lock switch can freeze the operation of buttons and dials to prevent unintentional operation.
The parts to be disabled can be set separately.

- Playback button
- Q.MENU button
- Delete / Cancel button
- Cursor / MENU/SET button
- Control dial
- Video rec. button
- Fn button (Fn1)
- Fn button (Fn2)
- Fn button (Fn3)
- Fn button (Fn4)
- Fn button (Fn5)
- S Series Lens (focus ring only)

*The operation parts to be locked by "Lens" differ depending on the lens.
The lens switch will not be locked.

Panasonic

Three Types of Power Sources

Bundled **AC Adapter**	• Long time shooting • Shooting with sets
Third-party **PoE+**	• Long time shooting • Remote shooting
Sold Separately **Battery Pack**	• Handheld shooting • Drones Battery Pack : AG-VBR59 / 89G / 118G * Max 11800mAh, can be used for approx. 12 hours. Battery Charger : AG-BRD50

Priority when multiple power supplies are connected simultaneously.
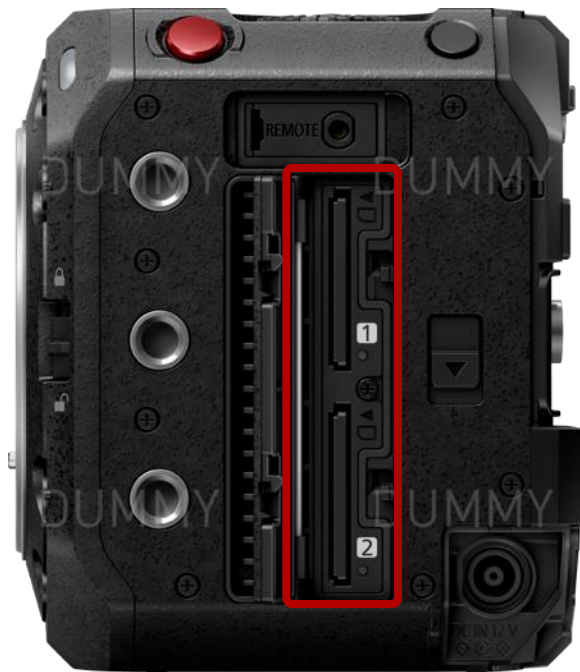1. AC adaptor   2. PoE+   3. Battery

Bundled Cable Lock Band

- HDMI/USB/DC can be wired together on the back.
- Prevents accidental cable disconnection during shooting.
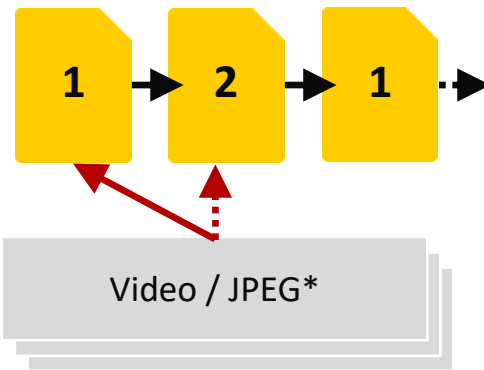- Attachable without using a screwdriver.
- Flexible material.

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Double SD Slot & UHS-II / V90 Compatibility

Larger Capacity	Backup	Efficient File Arrangement
Relay Rec	**Backup Rec**	**Allocation Rec**
The recoding media switches automatically and seamlessly.	Identical data is recorded onto cards in both slots.	You can select "slot 1" or "slot 2" to record each data.
1 → 2 → 1 →	1 = 2	1 2
Video / JPEG*	Video / JPEG*	Video JPEG*
	Folder & file number being the same.	
Support **HOT SWAP** in video recording.		
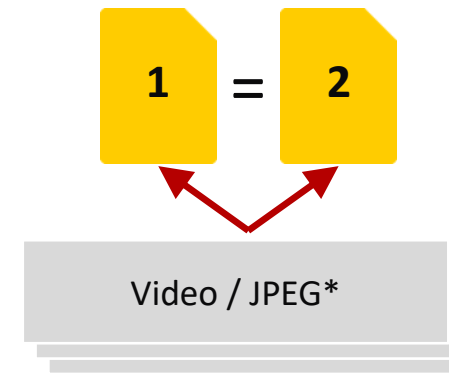
*Tethered photo shooting with LUMIX Tether for Multicam software

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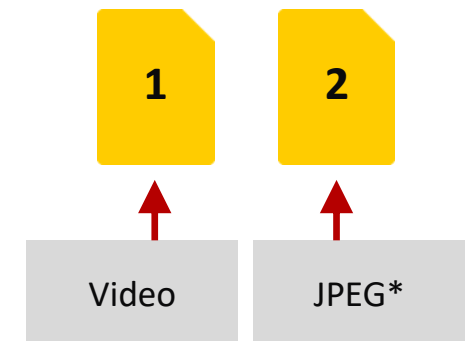
Focus on the Feelings of the Creators

You can set the coordination between the focus ring operation and the amount of focus movement when using supported lenses.
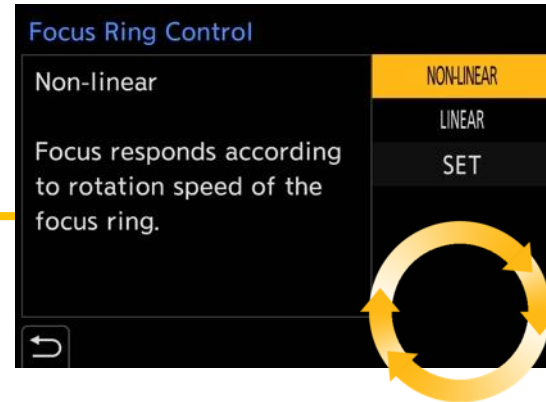
NONLINEAR	
PHOTO	**ROTATION SPEED**

This setting accelerates the focus movement in accordance with the speed of the focus ring rotation.
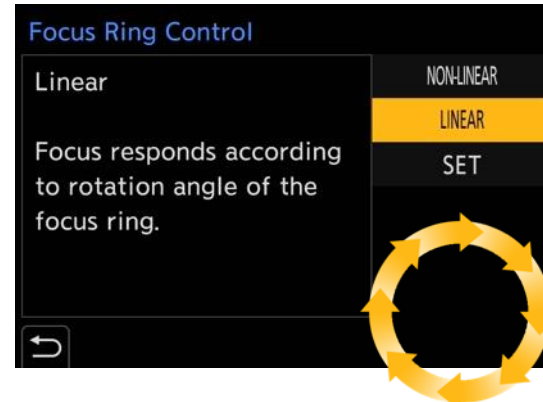
LINEAR	
VIDEO	**ROTATION ANGLE**

This setting moves the focus at a constant speed in accordance with the rotating angle of the focus ring.

SET
L U M I X   O N L Y

You can set the focus ring rotating angle when [Linear] is selected.

Up to 1080°

✓ Intuitive mechanical-like focus adjustment is possible
✓ Good compatibility with follow focus

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LUMIX S Lens Roadmap

16mm   24mm   35mm   50mm   70mm   85mm   105mm   200mm   280mm   400mm

LARGE-APERTURE WIDE FIXED FOCAL LENGTH

★ 24mm F1.8

★ 35mm F1.8

LUMIX S PRO Certified by LEICA
LUMIX S PRO 50mm F1.4

LUMIX S 50mm F1.8

LUMIX S 85mm F1.8

★ LARGE-APERTURE WIDE ZOOM

LUMIX S PRO Certified by LEICA
LUMIX S PRO 24-70mm F2.8

LUMIX S PRO Certified by LEICA
LUMIX S PRO 70-200mm F2.8 O.I.S.   280mm*   400mm**

LUMIX S PRO Certified by LEICA
LUMIX S PRO 16-35mm F4

LUMIX S
LUMIX S 24-105mm F4 MACRO O.I.S.

LUMIX S PRO Certified by LEICA
LUMIX S PRO 70-200mm F4 O.I.S.   280mm*   400mm**

LUMIX S
LUMIX S 20-60mm F3.5-5.6

LUMIX S
LUMIX S 70-300mm F4.5-5.6 MACRO O.I.S.

★ To be released in the future. As of October 2021.   * When the teleconverter DMW-STC14 is attached.   ** When the teleconverter DMW-STC20 is attached.

XLR Microphone Adaptor for Professional Video Production

- Input: Analog, XLR Jack x 2 terminals
- Output: Digital, Fs = 48k or 96kHz, Bit depth = 16 or 24-bit

Shoe Mount **For mounting microphone holder or LED light, etc.**

XLR Jack (2 Terminals)

Physical switches / dials for easy setup and checking.

Cable Clamp

Shoe Connector

Openable Cover
The setup status of the control panel can be checked through this clear cover.

- For recoding high-grade stereo surround with attached XLR microphone (2ch).
- High-res sound recording in 96kHz/24bit.
- Good for lip-sync recording.
- DC power is supplied by the camera body via a shoe connector.

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Compatible with LANC Remote Control

REMOTE terminal

Equipped with a REMOTE terminal (2.5mm super mini jack) for remote operation of iris, focus, zoom and REC start/stop. * A wired remote controller (commercially available) is required.

Major Remote Controller (Operation Checked *Out of Warranty)					
	Libec ZFC-L	Libec ZC-LP	Manfrotto MVR901EPLA	Manfrotto MVR901ECLA	VariZoom VZ-STEALTH
REC START/STOP	Yes	Yes	Yes	Yes	Yes
FOCUS　※Only MF mode	Yes	-	Yes	Yes	Yes
REC Tally	-	-	Yes	Yes	Yes
IRIS　※Only A or M mode	-	-	Yes	-	-
Power ON	-	-	-	-	-

*The DMW-RS2 is not supported. *It may not work with some lenses.
*Although it is compatible, because we have not confirmed the operation or conducted a technical test, we cannot officially say that it is compatible.

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Small Rig	TILTA	ZACUTO	8Sinn

Not compatible with BS1H

110.9 x 74.7 x 108.7mm
268g

111 x 63.8 x120.9mm
230g

- Mount adapter
- cannot be attached.

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*Although it is compatible, because we have not confirmed the operation or conducted a technical test, we cannot officially say that it is compatible.

Superior in Workflow - Easy Handling and High Versatility

		BS1H	Z CAM E2-F6
Shipping / Price		November 2021 / EUR 3790	November 2019 / EUR 4790
Image Sensor		FF 24.2MP	FF 26MP
ISO		Dual Native ISO	Dual Native ISO
Workflow		VariCam Look (V-Log/V-Gamut) 14+ Stops	ZRAW, Z-log2, 15 Stops
Codec	Internal Recording	6K 24p 4:2:0 10-bit (H265) (3:2) 5.9K 30p 4:2:0 10-bit (H265) (16:9)	6K 60p 4:2:0 10-bit (H265) (2.4:1) 4K 120p 4:2:0 10-bit (H265) (2.4:1)
	HDMI Output	C4K/4K 60p/50p 4:2:2 10-bit	4K 60p/50p 4:2:2 10-bit
	RAW Data Output	ProRes RAW / Blackmagic RAW	ProRes RAW
	IP Streaming	4K 60p/50p (RTP / RTSP)	Same as Internal Recording (SRT / RTMP / RTMPS)
Lens AF Control		Dedicated Lens Control with Deep Learning Technology	-
Interface	Ethernet / PoE+	Yes / Yes	Yes / -
	Genlock IN	BNC	10-pin LEMO
	Timecode IN/OUT	BNC	External LTC (Linear Time Code)
	Remote Socket	Φ2.5 (General-use)	Φ2.5 (General-use)
	HDMI / SDI	Type-A / 3G-SDI	Type-A / -
	USB	USB3.1 Type-C	USB3.0 Type-C / USB HOST
	Card Slot	Slot 1 / 2 : SD UHS-II U3 (Vide grade 90)	CFast 2.0 x 1
	Audio	Φ3.5 DMW-XLR1 (sold separately)	Φ3.5 5-pin LEMO XLRmini
	eND	-	Yes (Optional Adapter EF/PL)
	DC IN/OUT	Yes	Yes
Battery		AG-VBR118 (11800mAh) (sold separately)	Sony NP F (8,800mAh) (sold separately)
LCD / Viewfinder		- / -	Yes / -
Size (Approx.)	Dimensions	93.0 x 93.0 x 78.8 mm	91.2 x 99.2 x 122.25 mm (EF)
	Weight	585g	1.090g (EF)

BS1H
78.8 mm

Z CAM E2-F6
122.25 mm

AG-BRD50 Double Charger

AG-VBR59 Battery

- EMBARGO 7th of OKT 17:00

- First shipment END NOV

- SDS PRO

RRP	DEMO
39 990 SEK	15% OFF
39 990 NOK	1+1
27 990 DKK	
3790 EUR	

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