Specifications < Tentative >

General

Power:	DC 7.2 V (when the battery is used) DC 12 V (when the AC adaptor is used)
Power Consumption:	T. B. D.
Operating Temperature:	0 °C to 40 °C (32 °F to 104 °F)
Operating Humidity:	10 % to 80 % (no condensation)
Weight:	Approx. 2.7 kg (5.9 lbs.) (body only, excluding lens hood, battery, and accessories)
Dimensions:	181 mm(H) x 216 mm(W) x 374 mm (D) (excluding protrusion) (7-1/8 inches x 8-1/2 inches x 14-23/32 inches)

Camera Unit

Pickup Device:	4/3-type MOS
Effective Pixcels:	1549 megapixel (FHD), 871 megapixel (UHD/59.94p), 1289 megapixel (UHD/29.97p), 1335 megapixel (4K/24p)
Lens:	Optical image stabilizer lens, motorized/manual mode switching, 13x zoom F2.8 to F4.5 (f=12.8 mm to 167 mm) 35 mm equivalent: 28.0 mm to 365.3 mm (FHD)
Filter Diameter:	72 mm
ND Filter:	OFF, 1/4, 1/16, 1/64
Shortest Shooting Distance: (M.O.D.)	Approx. 1.0 m from the front lens
Gain Setting:	L/M/H selector switch 0 dB to 24 dB (in 1 dB steps) (When assigning [S.GAIN] to the USER button: Switching between 30 dB and 36 dB)
Color Temperature Setting:	ATW, ATW LOCK, Ach, Bch, preset 3200 K/preset 5600 K/VAR (2000 K to 15000 K)
Shutter Speed:	When [SYSTEM MODE] = 59.94 Hz ●60i/60p mode: 1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec., 1/250., 1/350., 1/500 sec., 1/750 sec., 1/1000 sec.,1/1500 sec.,1/2000 sec.,1/3000 sec., 1/4000 sec.,1/8000 sec. ●30p mode: 1/30 sec.,1/50 sec.,1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec.,1/4000 sec., 1/8000 sec. ●24p mode: 1/24 sec., 1/48 sec., 1/50 sec., 1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec. When [SYSTEM MODE] = 50 Hz ●50i/50p mode: 1/50 sec., 1/60 sec., 1/100 sec., 1/125 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec. ●25p mode: 1/25 sec., 1/50 sec., 1/60 sec., 1/100 sec., 1/125 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec.
Slow Shutter Speed:	When [SYSTEM MODE] = 59.94 Hz ●60i/60p mode: 1/2 sec., 1/4 sec., 1/8 sec., 1/15 sec., 1/30 sec. ●30p mode: 1/2 sec., 1/4 sec., 1/8 sec., 1/15 sec. ●24p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec. When [SYSTEM MODE] = 50 Hz ●50i/50p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec., 1/25 sec. ●25p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec.
Synchro Scan Shutter:	When [SYSTEM MODE] = 59.94 Hz ●60i/60p mode: 1/60.0 sec. to 1/249.8 sec. ●30p mode: 1/30.0 sec. to 1/249.8 sec. ●24p mode: 1/24.0 sec. to 1/249.6 sec. When [SYSTEM MODE] = 50 Hz ●50i/50p mode: 1/50.0 sec. to 1/250.0 sec. ●25p mode: 1/25.0 sec. to 1/250.0 sec.
Shutter Open Angle:	5.0 deg to 180.0 deg to 360.0 deg (in 0.5 deg steps, angle display)
VFR Recording Frame Rate:	When [SYSTEM MODE] = 59.94 Hz ●60p mode: 2, 15, 30, 40, 55, 58, 60, 62, 65, 75, 90, and 120 (frames per second) ●30p mode: 2, 15, 26, 28, 30, 32, 34, 45, 60, 75, 90, and 120 (frames per second) ●24p mode: 2, 12, 18, 20, 22, 24, 26, 28, 30, 36, 48, 60, 72, 84, 96, and 120 (frames per second) When [SYSTEM MODE] = 50 Hz ●50p mode: 2, 12, 25, 33, 45, 48, 50, 52, 55, 62, 75, 100, and 120 (frames per second) ●25p mode: 2, 12, 21, 23, 25, 27, 30, 37, 50, 62, 75, 100, and 120 (frames per second)
Minimum Subject Illumination:	0.2 lx (F2.8, gain 18 dB, [1/2S.], Manual slow shutter, [HIGH SENS.] mode)
Horizontal Resolution:	1000 TV or higher (center)
Digital Zoom:	x2/x5/x10
Lens Hood:	Hood with lens cover

Memory Card Recorder

Recording Media:	SDHC memory card (4 GB to 32 GB), SDXC memory card (48 GB to 128 GB), UHS-I supported *When recording video images at 100 Mbps or higher, an SD memory card compatible with UHS Speed Class 3 (U3) is required.
Recording Slot:	Slot x 2
System Format:	59.94 Hz (NTSC) / 50 Hz (PAL)
Video Recording Format:	Recording Format: MOV, MP4, AVCHD Recording Mode: *Please see the Video record mode table.
Still Picture Recording Format:	JPEG (DCF/Exif2.2) supported 8.8M: 4096 x 2160 (17:9), 8.3M: 3840 x 2160 (16:9), 2.1M: 1920 x 1080 (16:9), 0.9M: 1280 x 720 (16:9), 0.2M: 640 x 360 (16:9), 0.3M: 640 x 480 (4:3)

Digital Video

External Output Video Signal:	8 bit 4:2:2/10 bit 4:2:2 (switchable menu) *HDMI output of UHD/59.94p/50.00p becomes 8 bit 4:2:0. Also, when 10 bit 4:2:2 is selected, recording is not possible with the main unit.
Recording Video Signal:	8 bit 4:2:0
Video Compression Format:	MPEG-4 AVC/H.264 High Profile (MOV/MP4/AVCHD)

Digital Audio

Recording Audio Signal:	48 kHz/16 bit, 2 CH
Audio Compression Format:	LPCM (MOV/MP4) Dolby Digital (AVCHD)
Headroom:	12 dB/18 dB/20 dB (switchable menu)

Dual Codec

File Format:	MOV, MP4
Video Compression Format:	MPEG-4 AVC/H.264 High Profile
Audio Compression Format:	LPCM
Recording Format:	When [Dual Codec] = FHD 50 Mbps [Main Recording Side] Recording mode = MOV/MP4 ●UHD/29.97p/25.00p/23.98p 100 Mbps [Sub Recording Side] Recording mode = Same as the recording mode of the Main Recording Side ●FHD/29.97p/25.00p/23.98p 50Mbps When [Dual Codec] = FHD 8Mbps [Main Recording Side] Recording mode = MOV/MP4 ●UHD/29.97p/25.00p/23.98p 100 Mbps ●FHD/59.94p/50.00p/29.97p/25.00p/23.98p 200 Mbps ●FHD/59.94p/50.00p 100 Mbps [Sub Recording Side] Recording mode = MOV ●FHD/59.94p/50.00p/29.97p/25.00p/23.98p 8 Mbps

Video Input/Output

SDI OUT:	BNC x1, 0.8 V [p-p], 75 Ω, 3 G/1.5 G HD-SDI, SD-SDI supported Output format: 1080/59.94p LEVEL-A/50.00p LEVEL-A, 1080/29.97PsF/25.00PsF/24.00PsF/23.98PsF, 1080/59.94i/50.00i, 720/59.94p/50.00p, 480/59.94i, 576/50.00i
VIDEO OUT:	BNC x 1, Composite 1.0 V [p-p], 75 Ω
HDMI OUT:	HDMI x 1 (HDMI type A terminal, not compatible with VIERA Link) Output format: 2160/59.94p/50.00p/29.97p/25.00p/24.00p/23.98p, 1080/59.94p/50.00p/29.97p/25.00p/24.00p/23.98p/59.94i/50.00i, 720/59.94p/50.00p, 480/59.94p, 576/50.00p

Audio Input

Built-in Microphone:	Supports stereo microphone
XLR IN:	XLR (3 pin) x 2 (INPUT1, INPUT2) Input high impedance, LINE/MIC/MIC+48 V (switchable SW) LINE: 4 dBu/0 dBu (switchable menu) MIC: -40 dBu/ -50 dBu/ -60 dBu (menu)

Audio Output

SDI OUT:	2 CH (LPCM) switchable gain: 0 dB/-6 dB/-12 dB
HDMI OUT:	2 CH (LPCM)
Audio OUT:	3.5 mm diameter stereo mini jack x 1, Output level: 600 Ω, 316 mV
Headphone:	3.5 mm diameter stereo mini jack x 1
Speaker:	20 mm diameter, round x 1

Other Input/Output

CAM REMOTE:	2.5 mm diameter super mini jack x1 (ZOOM, S/S) 3.5 mm diameter mini jack x1 (FOCUS, IRIS)
TC PRESET IN/OUT:	BNC x 1, Used as the input and output terminals, IN/OUT switch selection Input: 1.0 V to 4.0 V [p-p], 10 kΩ Output: 2.0 V ±0.5 V [p-p], low impedance
USB 3.0 HOST:	Standard-A connector, 9 pin USB hard disk connected function*, Bus power supply *A USB hard disk of 32 GB or less, or exceeding 2TB, cannot be used.
USB 3.0 DEVICE:	Micro-B connector, 10 pin, Mass storage function (read only)
DC IN 12 V:	DC 12 V (11.4 V to 12.6 V), EIAJ type 4

Monitor/Viewfinder

LCD Monitor:	4.3 type HD color monitor (Approx. 2760000 dots)
Viewfinder:	0.39 type OLED (organic EL display) (Approx. 2360000 dots, video display area: Approx. 1770000 dots)

Included Accessories

Battery (VW-VBD58), Shoulder strap, Battery charger, Microphone holder, AC adaptor,
Screw for microphone holder (12 mm), Power code x 2, Eye cup, Lens hood,
INPUT terminal cap, CD-ROM (Operating Instructions)

Weight and dimensions are approximate. Specifications are subject to change without notice.

Video Record Mode

Recording Mode	System Frequency (59.94 Hz)			System Frequency (50 Hz)		
	Recording Format	Bit Rate		Recording Format	Bit Rate	
MOV/MP4	4K	4096 x 2160/24.00p	100 Mbps	4K	4096 x 2160/24.00p	100 Mbps
	UHD	3840 x 2160/59.94p	150 Mbps	UHD	3840 x 2160/50.00p	150 Mbps
		3840 x 2160/29.97p/23.98p	100 Mbps		3840 x 2160/25.00p	100 Mbps
	FHD	1920 x 1080/59.94p/29.97p/23.98p (ALL-I)	200 Mbps	FHD	1920 x 1080/50.00p/25.00p (ALL-I)	200 Mbps
		1920 x 1080/59.94p	100 Mbps		1920 x 1080/50.00p	100 Mbps
		1920 x 1080/59.94p/29.97p/23.98p/59.94i	50 Mbps		1920 x 1080/50.00p/25.00p/50.00i	50 Mbps
AVCHD	PS	1920 x 1080/59.94p	25 Mbps	PS	1920 x 1080/59.00p	25 Mbps
	PH	1920 x 1080/59.94i/23.98p	21 Mpbs	PH	1920 x 1080/50.00i/25.00p	21 Mpbs
	HA	1920 x 1080/59.94i	17 Mbps	HA	1920 x 1080/50.00i	17 Mbps
	HE	1440 x 1080/59.94i	5 Mbps	HE	1440 x 1080/50.00i	5 Mbps
	PM	1280 x 720/59.94p	8 Mbps	PM	1280 x 720/50.00p	8 Mbps
	SA	720 x 480/59.94i SIDE CROP/ LETTERBOX/ SQUEEZE	9 Mbps	SA	720 x 576/50.00i SIDE CROP/ LETTERBOX/ SQUEEZE	9 Mbps