AJ-CX4000GJ NEW Memory Card Camera Recorder

2/3-type Lens | Large size 4K 1 MOS | 24 bit Audio
expressP2 card slot x 1 | microP2 card slot x 2 | Network

Next-Generation ENG Shoulder Camcorder Supporting 4K/HDR and IP Connection

- Depth of field secured with the B4 lens mount and 2/3-in. image circle.
- Two filter wheels (ND and CC).
- Includes a newly developed large 4.4K image sensor. Sampling exceeding 4K is used to achieve a resolution of 2000 TV lines.
- F10 (60 Hz)/F11 (50 Hz) sensitivity in High Sens. mode.
- Supports HDR (High Dynamic Range)*1 image acquisition and outputs SDR*2 while acquiring HDR.
- Multi-formats: MOV (4K/HD) and P2 MXF*3 (HD only).
- New HEVC Codec 100 Mbps mode for ENG (4K 60p 4:2:0 10-bit).
- Four-channel 24-bit LPCM audio recording.
- The express P2 card offers ultra high speed offloading.
- Lower running cost media: microP2 card/SDXC memory card.
- Light weight: 7.5 lbs./3.4kg (body only) and excellent weight balance.
- Offers the Direct Streaming function compatible with RTSP, RTMP and RTMPS.*4
- 4K 60p/50p 4:2:2 10-bit output via 12G-SDI out and HDMI out.
- Newly developed built-in LCD monitor of HD720p resolution with touch panel function.
- Newly developed High-contrast monochrome OLED display for the timecode and audio level indicator.
- Includes various network connections: Gigabit Ethernet with locking connector, wireless LAN (option) and USB 3.0 connector.
- ND/HX compatibility (requires license purchase).*5
- Wireless remote from an ROP App (iOS/Android).*6

AG-CX350 NEW Memory Card Camera Recorder

Integrated Lens System (Optical 20x Zoom) | 1.0-type MOS
24 bit Audio | SD Memory Card Slot x 2 | Network

High-End Handheld Camcorder Supporting 4K/HDR, IP Control and Streaming.

- Wide angle 24.5 mm, 20x optical zoom lens with three manual rings.
- New high-definition, high-sensitivity 1.0-type 15M MOS sensor.
- Supports HDR (High Dynamic Range)*1 image acquisition and outputs SDR*2 while acquiring HDR.
- New HEVC Codec 100 Mbps mode for ENG (4K 60p 4:2:0 10-bit).*3
- Multi-formats: MOV (4K/HD), AVCCHD (HD/SD) and P2 MXF*3 (HD).
- Variable frame rate up to 120 fps (100 fps) of FHD, 60 fps (50 fps) of 4K.
- New microdrive focus unit provides a high-speed, high-precision Intelligent AF.
- Advanced hand-shake correction with ball OIS system, and 5-axis Hybrid Image Stabilizer. (FHD only)
- Two memory card slots boost recording reliability: Background Recording, Relay Recording, Simultaneous Recording.
- Offers the Direct Streaming function compatible with RTSP, RTMP and RTMPS.*4
- ND/HX compatibility (requires license purchase).*5
- Broadcast-grade picture adjustment functions, such as 16-axis independent color correction.
- Parallel output of SDI, HDMI and LCD and individual HDR/SDR setting.
- Four-channel 24-bit LPCM Audio recording.
- Simultaneous display on high-brightness, high-definition LCD and high-resolution OLED EVF.
- Wireless remote from an ROP App (iOS/Android).*6

*1: The HLG specification was developed jointly by Japanese broadcaster NHK and the BBC in the UK. It is defined in ARIB STD-B67 and ITU Rec. 2100.
*2: SDR image is output with monitor gamma. *3: To be supported within 2019. *4: P2 Network Setting Software is required for using the RTMP and RTMPS functions. See the “Connectivity-verified live video services” section for live video streaming services with confirmed compatibility.
New CX Series Delivers Next-Generation Creativity and Connectivity

HDR (High Dynamic Range) Image

4K/HDR Image Acquisition

Equipped with a new, high-definition, high-sensitivity MOS sensor, the CX Series supports multi-formats, such as 4K (UHD: 3840×2160), FHD, HD, and SD. It also features HLG (Hybrid Log Gamma)\(^*1\) to support HDR (High Dynamic Range) image acquisition. When shooting in HLG, it can be used to monitor and output SDR images.

Easy IP Connection, NDI|HX Compatibility

The CX Series is the industry’s first camcorder to support NDI | HX.\(^*5\) Equipped with an NDI | HX mode, it allows video transmission and camera control via IP connection, without using an external converter. When connected to a system configured with PTZ cameras, it enables end-to-end video production of live events and web distribution.

**RTSP/RTMP/RTMPS-Compatibe HD Streaming**

HD streaming is possible while images are being acquired,\(^*7\) and RTSP, RTMP and RTMPS streaming methods are compatible.\(^*4\) Facebook, YouTube, and other streaming services are also supported. This allows the CX Series to be used for live coverage of concerts and sports events as well as for live streaming of breaking news. Multicast streaming is also supported.\(^*3\)

**MOV/P2 MXF File Formats Supported**

The CX Series records MOV files that are highly compatible and easy to use. It also supports the MXF P2 file format for broadcasting, enabling AVC-Intra or AVC-LongG HD recording.\(^*3\)

**10-bit 4:2:2 Recording or New HEVC Codec**

The CX Series is capable of recording in various formats at different compression rates (see the table below). It can record high-image-quality 10-bit 4:2:2, 4K 30p/25p, and HD 60p/50p. The new HEVC Codec achieves high-quality 4K 60p/50p, 10-bit 4:2:0 at a bit rate of 100 Mbps for playback using the free VLC Media Player or QuickTime Player on a notebook PC or MacBook.\(^*8\)

---

\(^*5\): 4K image output not supported in NDI | HK mode. To use this function, an activation keycode from NewTek is required. Keycodes can be purchased from the following website: http://newtek.com/ndi_key.\(^*6\): iPad: iOS 9 or later is supported. Android devices: Android 5.0 or later is supported. Wireless module (sold separately; AJ-WM50/WMS50G or recommended third-party Wi-Fi dongle) is required.\(^*7\): There are some conditions under which streaming is not possible, such as when recording in UHD format or using NDI/HX mode. Please see the Operating Instruction Manual for details.\(^*8\): To be supported within 2019, AVC-Intra200/100/50 codec will be supported in the future. Use a microP2 card for recording in P2 format.\(^*9\): Playback may lack smoothness depending on the PC environment, such as storage and memory devices.
### CX series Recording Format

<table>
<thead>
<tr>
<th>Recording Format</th>
<th>Pixels</th>
<th>Color Sampling</th>
<th>Bit Depth</th>
<th>Bit Rate</th>
<th>File Format</th>
<th>VFR**</th>
<th>Audio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MOV (HEVC)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UHD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEVC LongGOP 200M</td>
<td>3840 x 2160</td>
<td>4:2:0</td>
<td>10 bit</td>
<td>200 Mbps (VBR)</td>
<td>59.94p, 50p</td>
<td>1 to 60 fps [50 fps] (Max. 200 Mbps)</td>
<td>16 bit LPCM</td>
</tr>
<tr>
<td>HEVC LongGOP 150M</td>
<td>3840 x 2160</td>
<td>4:2:0</td>
<td>10 bit</td>
<td>150 Mbps (VBR)</td>
<td>59.94p, 50p</td>
<td>1 to 30 fps [25 fps]</td>
<td>16 bit LPCM</td>
</tr>
<tr>
<td>HEVC LongGOP 100M*2</td>
<td>3840 x 2160</td>
<td>4:2:0</td>
<td>10 bit</td>
<td>100 Mbps (VBR)</td>
<td>29.97p, 25p, 23.98p</td>
<td>1 to 30 fps [25 fps]</td>
<td>16 bit LPCM</td>
</tr>
<tr>
<td><strong>MOV (AVC)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FHD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>422ALL-I 200M</td>
<td>1920 x 1080</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>200 Mbps (VBR)</td>
<td>59.94p, 50p</td>
<td>1 to 60 fps [50 fps] (Max. 200 Mbps)</td>
<td>24 bit LPCM</td>
</tr>
<tr>
<td>422ALL-I 100M</td>
<td>1920 x 1080</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>100 Mbps (VBR)</td>
<td>29.97p, 25p, 23.98p, 59.94i, 50i</td>
<td>1 to 60 fps [50 fps] (Max. 400 Mbps)</td>
<td>24 bit LPCM</td>
</tr>
<tr>
<td>422LongGOP 100M</td>
<td>1920 x 1080</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>100 Mbps (VBR)</td>
<td>29.97p, 25p, 23.98p, 59.94i, 50i</td>
<td>1 to 60 fps [50 fps] (Max. 200 Mbps)</td>
<td>24 bit LPCM</td>
</tr>
<tr>
<td><strong>AVCHD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>1920 x 1080</td>
<td>4:2:0</td>
<td>8 bit</td>
<td>25 Mbps (VBR)</td>
<td>59.94p, 50p</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>PH</td>
<td>1920 x 1080</td>
<td>4:2:0</td>
<td>8 bit</td>
<td>21 Mbps (VBR)</td>
<td>23.98p, 59.94i, 50i</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>HA</td>
<td>1920 x 1080</td>
<td>4:2:0</td>
<td>8 bit</td>
<td>17 Mbps (VBR)</td>
<td>59.94i, 50i</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>HD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM</td>
<td>1280 x 720</td>
<td>4:2:0</td>
<td>8 bit</td>
<td>8 Mbps (VBR)</td>
<td>59.94p, 50p</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>SA</td>
<td>720 x 480 (59.94i)</td>
<td>720 x 576 (50i)</td>
<td>4:2:0</td>
<td>8 bit</td>
<td>9 Mbps (VBR)</td>
<td>59.94i, 50i</td>
<td>—</td>
</tr>
<tr>
<td><strong>P2*1 (MXF)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FHD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVC-Intra422*1</td>
<td>1920 x 1080</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>200 Mbps (CBR)</td>
<td>59.94p, 50p</td>
<td>—</td>
<td>24 bit LPCM</td>
</tr>
<tr>
<td>AVC-LongG50*1</td>
<td>1920 x 1080</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>50 Mbps (VBR)</td>
<td>59.94i, 50i</td>
<td>—</td>
<td>24 bit LPCM</td>
</tr>
<tr>
<td>AVC-LongG25*1</td>
<td>1920 x 1080</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>25 Mbps (VBR)</td>
<td>59.94p, 50p, 59.94i, 50i</td>
<td>—</td>
<td>24 bit LPCM</td>
</tr>
<tr>
<td>AVC-LongG12*1</td>
<td>1920 x 1080</td>
<td>4:2:2</td>
<td>8 bit</td>
<td>12 Mbps (VBR)</td>
<td>59.94p, 50p, 59.94i, 50i</td>
<td>—</td>
<td>16 bit LPCM</td>
</tr>
<tr>
<td><strong>HD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVC-LongG50*1</td>
<td>1280 x 720</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>50 Mbps (VBR)</td>
<td>59.94p, 50p</td>
<td>—</td>
<td>24 bit LPCM</td>
</tr>
<tr>
<td>AVC-LongG25*1</td>
<td>1280 x 720</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>25 Mbps (VBR)</td>
<td>59.94p, 50p</td>
<td>—</td>
<td>24 bit LPCM</td>
</tr>
<tr>
<td>AVC-LongG12*1</td>
<td>1280 x 720</td>
<td>4:2:2</td>
<td>8 bit</td>
<td>12 Mbps (VBR)</td>
<td>59.94p, 50p</td>
<td>—</td>
<td>16 bit LPCM</td>
</tr>
</tbody>
</table>

*1: To be supported within 2019.
*2: VFR is supported only in Progressive mode. Square brackets [ ] indicate a system frequency of 50.00 Hz.
As of August, 2019

Cinema Camera
Professional Camera Recorder
CX series
P2HD series
LCD Monitor

CX series Options

AG-CX350 Options

AG-VBR118G
Battery Pack (11,800 mAh)

AG-VBR89G
Battery Pack (8,850 mAh)

AG-VBR59
Battery Pack (5,900 mAh)

AG-BRD50
Battery Charger

VW-VBD58
Battery Pack (5,800 mAh)

AG-B23
Battery Charger

AG-MC200G
XLR Microphone

AJ-P2M064BG
Memory Card
“microP2 card B series”

SDXC/SDHC/SD Memory Card**

AG-WM50
AJ-WM50G NEW
Wireless Module**

Connection Confirmed
Wireless Module**
(including third-party products)

*1: UHS Speed Class 3 (U3) SD memory card is necessary for video recording of 100 Mbps or more. UHS Speed Class 3 (U3) SDXC memory card of 64 GB or more is necessary for video recording of UHD2160/59.94p/50.00p 150 Mbps.

AG-CX350 Available Battery Pack

<table>
<thead>
<tr>
<th>Battery</th>
<th>Voltage and Capacity</th>
<th>Charge timea</th>
<th>Continuous shooting timea</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG-VBR59 (Bundled)</td>
<td>7.28 V, 5900 mAh/43 Wh</td>
<td>Approx. 3 hours 20 min.</td>
<td>Approx. 2 hours 50 min.</td>
</tr>
<tr>
<td>AG-VBR89G</td>
<td>7.28 V, 8850 mAh/64 Wh</td>
<td>Approx. 4 hours</td>
<td>Approx. 4 hours 15 min.</td>
</tr>
<tr>
<td>AG-VBR118G</td>
<td>7.28 V, 11800 mAh/86 Wh</td>
<td>Approx. 4 hours 40 min.</td>
<td>Approx. 5 hours 40 min.</td>
</tr>
<tr>
<td>VW-VBD58</td>
<td>7.2 V, 5800 mAh/42 Wh</td>
<td>Approx. 5 hours 20 min.</td>
<td>Approx. 2 hours 40 min.</td>
</tr>
</tbody>
</table>

*1: When using bundled battery charger. *2: “Continuous shooting time” is when you use this machine in the following condition [Menu setting is factory preset, Have LCD monitor and grip attached, No cable is connected to outputs]. Under other conditions, continuous shootable time becomes shorter.

AG-CX350 Available Memory Card

<table>
<thead>
<tr>
<th>Format</th>
<th>Memory Card Type</th>
<th>Bit Rate / Recording Function</th>
<th>Speed Class</th>
</tr>
</thead>
</table>
| MOV    | SDXC memory card/microP2 card B series | 400 Mbps
MicroP2 card A series (64 GB) | Video Speed Class V60 or faster |
|        |                  | 200 Mbps
HD ALL-I VFR mode | Video Speed Class V30 |
|        |                  | 150 Mbps
UHS Speed Class 3 or faster |
|        |                  | 100 Mbps
FHD LongG VFR mode |
|        |                  | 50 Mbps
Video Speed Class V10 |
|        |                  | All                            | Speed Class 10 or faster |
|        |                  | All P2 recording modes      | Speed Class 4 or faster |

*To be supported within 2019.
CX series Specifications

AG-CX350

General

Power: DC 7.2V (when the battery is used) DC 12V (when the AC adaptor is used)

Power Consumption: 17 W (when the LCD monitor is used), 11.5 W (1080i/522AL-L100M recording, when the LCD monitor is used, no external device connection)

Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F)

Operating Humidity: 10 % to 80 % (no condensation)

Weight: Body: approx. 1.9 kg (4.19 lb) (body only, excluding lens hood, battery, and accessories) Shooting: approx. 2.3 kg (5.07 lb) (including lens hood, battery, and microphone holder)

Dimensions: 180 mm (W) x 173 mm (H) x 311 mm (D) (7-1/8 inches x 6-13/16 inches x 12-1/4 inches) (excluding protrusion and eye cup)

Camera Unit

Pickup Device: 1.0-type (effective size) MOS solid state image sensor

Effective Pixels: 15,030,000 pixel

Lens: Optical image stabilizer lens, optical 20x motorized zoom F value: F2.8 to F4.5 Focal length: f=8.8 mm to 176 mm 35 mm equivalent: 24.5 mm to 490 mm Filter Diameter: 67 mm ND Filter: Clear, 1/4, 1/16, 1/64 IR Filter: Incorporates the ON/OFF control function Shortest Shooting Distance (M.O.D.): Approx. 10 cm (W), 1.0 m (T) from the front lens

Gain Setting: L/M/H selector switch -3 dB to 18 dB (Adjustable in 1 dB steps) 24dB, 30 dB, 36 dB switched when assigning [S. Gain] to the USB button

Color Temperature Setting: ATW, ATW LOCK, A ch, B ch, preset 3200 K/preset 5600 K/var (2000 K to 15000 K)

Shutter Speed:

When [SYSTEM MODE] = 59.94 Hz
- When [SYSTEM MODE] = 59.94 Hz
- 1/24 sec. (when the L梭 is used)

When [SYSTEM MODE] = 50.00 Hz

Shutter Speed: (Slow Shutter)

When [SYSTEM MODE] = 59.94 Hz
- 23.98p mode: 1/1 sec., 1/2 sec., 1/4 sec., 1/6 sec., 1/12 sec.

When [SYSTEM MODE] = 50.00 Hz

Shutter Open Angle: 3.0 deg to 180.0 deg to 360.0 deg (in 0.5 deg steps)

VFR Recording Frame Rate:

When [SYSTEM MODE] = 59.94 Hz
- 1, 2, 4, 6, 9, 12, 15, 18, 20, 21, 22, 24, 25, 26, 27, 28, 30, 32, 34, 36, 40, 44, 48, 54, 60 (fps)

When [SYSTEM MODE] = 50.00 Hz
- 1, 2, 4, 6, 9, 12, 15, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 32, 34, 37, 42, 45, 48, 50 (fps)

Super Slow Recording:

When [SYSTEM MODE] = 59.94 Hz
- 1920 x 1080 (FHD): shooting frame rate 120 fps

When [SYSTEM MODE] = 50.00 Hz
- 1920 x 1080 (FHD): shooting frame rate 100 fps

Sensitivity:

When [HIGH SENS.] mode
- F12 (2000 lx, 3200 K, 89.9 % reflect, 2160/59.94p, 1080/59.94i)
- F13 (2000 lx, 3200 K, 89.9 % reflect, 2160/50p, 1080/50i)

Horizontal Resolution:

2000 TV or higher (UHD: center) 1000 TV or higher (FHD: center)

i.Zoom: x 32 (FHD), x 24 (UHD)

Digital Zoom: x 2 x 5 x 10

Lens Hood: Hood with lens cover

Memory Card Recorder

Recording Media:
- SDHC memory card (4 GB to 32 GB), SDXC memory card (32 GB to 128 GB)
- UHS-I/UHS-II UHS Speed Class3 supported, Video Speed Class V90 supported, microSD card (A series, B series)
- Please see page for the "Available Memory Card" table.

Recording Slot:
- microSD/SDXC UHS-II card slot x 2

Recording Pixels:
- 3840 x 2160 (UHD), 1920 x 1080 (FHD), 1280 x 720 (HD), 720 x 480(SD), 720 x 576 (SD)

System Frequency: 59.94 Hz/50.00 Hz

Recording File Format:
- MOV (AVC), MOV (HEVC), AVCHD, P2 MKF

Recording Format:
- Please see page 35 for the "Recording Format" table.

Recording Time:
- Please see page 38 for the "Recording Format" table.

2 Slot Functions:
- Relay Rec, Simultaneous Rec, Background Rec

Special Recording Functions:
- Pre Rec, Interval Rec, Time Stamp

Digital Video

Quantization:
- MOV: 4:2:2 10 bit/4:2:0 8 bit/4:2:0 10 bit (HEVC)
- AVCHD: 4:2:0 8 bit P2
- 4:2:2 10 bit/4:2:0 8 bit (AVC-LongG12)

Video Compression Format:
- MOV: H.264/MPEG-4 AVC High Profile, H.265/MPEG-H HEVC Main10 Profile
- AVC-LongG12/
- MPEG-4 AVC/H.264 High Profile

Digital Audio

Recording Audio Signal:
- MOV: 48 kHz/24 bit, 2 ch, Linear PCM
- AVCHD: 48 kHz/16 bit, 2 ch, Dolby Audio
- P2: 48 kHz/24 bit, 4 ch, Linear PCM (In AVC-LongG12, 48 kHz/16 bit, 4 ch)

Headroom: 12 dB/18 dB/20 dB switchable (menu)
## Live Streaming
Video Compression Format:
H.264/MPEG-4 AVC Main Profile, High Profile

Video Resolution:
• 1920 x 1080 (FHD), 1280 x 720 (HD), 640 x 360, 360 x 180

Streaming Method: Unicast, Multicast

Frame Rate:
System frequency = 59.94 Hz: 30 fps, 60 fps
System frequency = 50.00 Hz: 25 fps, 50 fps

Bit Rate:
24 Mbps, 20 Mbps, 16 Mbps, 14 Mbps, 8 Mbps, 6 Mbps, 4 Mbps, 3 Mbps, 2 Mbps, 1.5 Mbps, 1 Mbps, 0.7 Mbps, 0.5 Mbps

Audio Compression Format:
AAC-LC, 48 kHz/16 bit, 2 ch

Network Protocol: RTSP/RTP/RTMP/RTMPS

## Video Output
SDI OUT:
• BNC x 1, SDI REC REMOTE supported
• HD: 0.8 V [p-p], 75 Ω, SD: 0.8 V [p-p], 75 Ω
• Output format (4:2:2:10 bit):
  - 1920 x 1080: 59.94p, 50p, 59.94i, 50i, 29.97PsF, 25PsF, 23.98PsF
  - 1280 x 720: 59.94p, 50p
  - 720 x 480: 59.94i, 50i

HDMI OUT:
• HDMI 1, Type A, HDMI REC REMOTE supported
• VIERA Link not supported
• Output format (4:2:2:10 bit):
  - 3840 x 2160: 59.94p, 50p, 29.97p, 25p,
  - 23.98p
  - 25p, 23.98p
  - 1920 x 1080: 59.94p, 50p, 59.94i, 50i, 29.97p, 25p,
  - 1280 x 720: 59.94p, 50p
  - 720 x 480: 59.94p, 50i, 29.97p

VIDEO OUT:
• 3.5 mm diameter mini jack, composite 1.0 V [p-p], 75 Ω

## Audio Input/Output
Built-in Microphone:
Stereo microphone

Input 1/2:
• XLR (3-pin) x 2 (INPUT1, INPUT2)
• Input high impedance,
• LINE/MIC/MIC+48V (switchable SW)
• MIC: –40 dBu/–50 dBu/–60 dBu (switchable menu)
• LINE: +4 dBu/0 dBu (switchable menu)

SDI OUT:
• Linear PCM 4 ch

HDMI OUT:
• Linear PCM 2 ch

Headphone:
• 3.5 mm diameter stereo mini jack x 1

AV OUT:
• 3.5 mm diameter stereo mini jack x 1
• Output level: 600 Ω, 316 mV

Speaker:
• 20 mm diameter, round x 1

## Recording Time

<table>
<thead>
<tr>
<th>Recording Format</th>
<th>64 GB Memory Card</th>
<th>128 GB Memory Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOV (AVC, HEVC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UHD</td>
<td>400 Mbps</td>
<td>Approx. 20 min.</td>
</tr>
<tr>
<td></td>
<td>200 Mbps</td>
<td>Approx. 40 min.</td>
</tr>
<tr>
<td></td>
<td>150 Mbps</td>
<td>Approx. 55 min.</td>
</tr>
<tr>
<td></td>
<td>100 Mbps</td>
<td>Approx. 1 hour 20 min.</td>
</tr>
<tr>
<td></td>
<td>100 Mbps</td>
<td>Approx. 2 hours 40 min.</td>
</tr>
<tr>
<td></td>
<td>50 Mbps</td>
<td>Approx. 2 hours 40 min.</td>
</tr>
<tr>
<td>FHD</td>
<td>50 Mbps</td>
<td>Approx. 5 hours 20 min.</td>
</tr>
<tr>
<td></td>
<td>25 Mbps</td>
<td>Approx. 5 hours 20 min.</td>
</tr>
<tr>
<td></td>
<td>21 Mbps</td>
<td>Approx. 6 hours</td>
</tr>
<tr>
<td></td>
<td>17 Mbps</td>
<td>Approx. 8 hours 30 min.</td>
</tr>
<tr>
<td></td>
<td>8 Mbps</td>
<td>Approx. 17 hours 10 min.</td>
</tr>
<tr>
<td></td>
<td>9 Mbps</td>
<td>Approx. 16 hours 30 min.</td>
</tr>
<tr>
<td></td>
<td>200 Mbps</td>
<td>Approx. 32 min.</td>
</tr>
<tr>
<td></td>
<td>50 Mbps</td>
<td>Approx. 2 hours 8 min.</td>
</tr>
<tr>
<td></td>
<td>25 Mbps</td>
<td>Approx. 4 hours 16 min.</td>
</tr>
<tr>
<td></td>
<td>12 Mbps</td>
<td>Approx. 8 hours</td>
</tr>
</tbody>
</table>

*To be supported within 2019.

## Other Input/Output

TC IN/OUT:
• BNC x 1, Used as the input and output terminals
  (switchable menu)
• Input: 1.0 V to 4.0 V [p-p] 10 KO
• Output: 2.0 V ± 0.5 V [p-p] low impedance

REMOTE:
• 2.5 mm diameter super mini jack

LAN:
• RJ-45: 1000BASE-T/1000BASE-T/100BASE-T
• NDI | HX supported*
• To use this function, an activation keycode from
  NewTek is required. Keycodes can be purchased from
  the following website: http://newtek.com/ndi

USB 2.0 HOST:
• Type-A, 4-pin (5 V, 0.5 A) for Wireless Module (option)

USB 3.0 DEVICE:
• USB 3.1 GEN1 Type-C
• USB Mass storage function
• No USB bus power function

DC IN 12V:
• DC 12 V EIAJ Type 4

## Monitor/Viewfinder

LCD Monitor:
• 3.5 type TFT LCD color monitor (3:2),
  approx. 1,620,000 dots, Touch panel
  video display (16:9) area: approx. 1,370,000 dots

Viewfinder:
• 0.39 type OLED (organic EL display),
  approx. 2,360,000 dots,
  video display (16:9) area: approx. 1,770,000 dots

## Included Accessories

Battery (AG-VBR59), Battery charger (AG-BRD50), AC adaptor, AC cable, Microphone holder kit, Shoulder strap, Eye cup, Lens hood*, Grip belt* and Operating instructions (Items marked by an asterisk (*) come already attached to the camera)

*To be supported within 2019.