Panasonic

BUSINESS

AJ-PX800G
Memory Card Camera Recorder “P2 cam”

AJ-PX800GH
Bundled with AG-CVF15G Color LCD Viewfinder

AJ-PX800GF
Bundled with AG-CVF15G Color LCD Viewfinder and FUJINON 16x Auto Focus Lens

The Ultra Light Weight 3MOS Shoulder Camera Recorder

*The microphone and battery pack shown in the photo are optional accessories.
The world’s lightest\(^*1\) 2/3 type shoulder-type HD camera-recorder with three image sensors revolutionizes news gathering with high mobility, superb picture quality and network functions.

Ultra-high Speed,
Ultra-high Quality and
Ultra-light Weight

The AJ-PX800G is a new-generation camera-recorder for news gathering. It is network connectable and provides superb picture quality, high mobility and excellent cost-performance. Weighing only about 2.8 kg (main unit), the AJ-PX800G is the world’s lightest\(^*1\) shoulder-type camera-recorder equipped with three MOS image sensors for broadcasting applications. It also supports AVC-ULTRA multi-codec recording.\(^*2\) The picture quality and recorded data rate can be selected from one of the AVC-ULTRA family of codec’s (AVC-Intra/AVC-LongG) according to the application. Along with a Low-rate AVC-Proxy dual-codec recording ideal for network-based operation and off-line editing. Built-in network functions support wired LAN, wireless LAN\(^*\) and 4G/LTE network connections,\(^*\) enabling on-site preview, uploading data to a server and streaming. The AJ-PX800G is a single-package solution for virtually all broadcasting needs.

\(^{*1}\) For details, refer to “Notes Regarding Network Functions” on the back page.
\(^{*2}\): Not all AVC-ULTRA formats will be supported.
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Ultra-high Speed

Innovating Workflows with Network Functions** and AVC-ULTRA Codecs

(For details, see page 5.)

Recording Modes and Recording Signals

<table>
<thead>
<tr>
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<th>Video</th>
<th>Codec</th>
<th>Bit Rate/1 CH</th>
</tr>
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<tbody>
<tr>
<td>AVCHD G6 2CH MOV</td>
<td>1080i mode: 1920 x 1080</td>
<td>H.264 High Profile</td>
<td>6 Mbps*5</td>
</tr>
<tr>
<td>AVCHD SHQ 2CH MOV</td>
<td>1080i mode: 1280 x 720 H.264 High Profile</td>
<td>6 Mbps*5</td>
<td></td>
</tr>
<tr>
<td>AVCHD HQ 2CH MOV</td>
<td>1080i mode: 1280 x 720 H.264 High Profile</td>
<td>6 Mbps*5</td>
<td></td>
</tr>
<tr>
<td>AVCHD LOW 2CH MOV</td>
<td>480-59.94i mode: 352 x 240 (SIF_NTSC)</td>
<td>H.264 Baseline Profile</td>
<td>800 kbps</td>
</tr>
</tbody>
</table>

*4: Some recording modes are not supported depending on the main recording format.

*5: For 720/30pN, 720/24pN or 720/25pN, the bit rates become 3 Mbps.

Acquisition --> Automatic Uploading

Recorded clips (proxy or actual files) are uploaded directly from the AJ-PX800G to a network. The new Rec During Upload function automatically uploads files to a network server in the background while recording.

Full-HD Streaming

On-air streaming (via the internet) is possible while recording mainstream video onto a memory card, using only the AJ-PX800G. This QoS (Quality of service) mode allows proxy images in Full-HD resolution to be streamed at a low bit rate by optimizing the bit rate to match the network condition.

Preview and Remote

Wireless connection is supported via a wireless LAN. Clips recorded by a PC/Mac, tablet device or smartphone can be previewed and metadata can be checked and edited. P2 ROP App for iPad is also provided for multifunctional camera remote operation.

Cloud Solution

Even smoother operation is possible by using a cloud service. Proxy files that are automatically uploaded to a cloud server can be edited (remote playlist editing) from a network, and only the necessary data can be sent from the AJ-PX800G to an ingest server.

P2 Cast*: P2 Cast is the cloud service Panasonic provides for broadcast and production use. For details, please go to Panasonic web page (http://pro-av.panasonic.net/)
Ultra-light Weight

The AJ-PX800G offers high mobility thanks to the world’s lightest* weight. The camera section features three sensors, and provides high picture quality and advanced functions to respond to broadcasting needs.

The 2/3 type Shoulder-type Model
The AJ-PX800G is the world’s lightest* in its class at approximately 2.8 kg (6.2 lb) for the main unit. This compact body provides superb mobility. It is also designed with excellent forward visibility.

*For a 2/3 type shoulder-type HD camera-recorder with three sensors (as of June 2015).

2/3 type Interchangeable Lenses
The 2/3 type bayonet mount interchangeable lens system lets you choose from a variety of 2/3 type zoom lenses for broadcasting and other professional uses from third-party manufacturers. Select the lens type and performance level that meets your needs.

High Sensitivity and Low Noise with 2/3 type 3MOS Image Sensors
The 2.2 megapixel 2/3 type 3MOS (RGB) image sensors offer full-pixel HD (1920 x 1080) resolution, F12 (59.94 Hz) or F13 (50 Hz) sensitivity and low noise with an S/N of 62 dB. It also achieves rich gradation and vibrant color reproduction.

High-Quality Image Processing and Versatile Image Settings
• CAC (Chromatic Aberration Compensation): When using a CAC compatible lens, the small amount of circumjacent chromatic aberration (circumjacent blur) that is not corrected by the lens is compensated by this process.
• DRS (Dynamic Range Stretcher): Suppresses blocked shadows and blown highlights to achieve a visually wide dynamic range.
• Advanced Flash Band Compensation (FBC): High-precision flash band detection and compensation.
• Gamma: Selectable from 7 modes of gamma curves.
• Digital image settings: H Detail, V Detail, Detail Coring, Skin Tone Detail, Chroma Level, Chroma Phase, Master Pedestal, Knee, Matrix (NORM1/NORM2/FLUO/CINE-LIKE), High Color, White Clip.

Professional Shooting Functions
• Scan Reverse: Displays/records images in vertically or horizontally inverted orientation.
• Digital Zoom: 2x/4x digital zoom.
• Shutter: Slow shutter, synchro scan function.
• Optical ND Filters: Four-position (CLEAR, 1/4 ND, 1/16 ND, 1/64 ND).

Versatile Shooting Assist Functions
• User Interface "SmartUI": User Interface consists of a LCD display and multiple switches. Multiple function can be set easily with minimum operation.
• Focus Assist: "EXPAND" for center zoomed image and "Focus-in-Red" can be displayed on viewfinder.
• Focus Bar: Focus level shown as bar.
• Scene Files/User Files: Scene files let you select either of six preset files from the menu on SmartUI according to the shooting situation and up to eight settings can be stored onto an SD memory card. Up to eight camera setting status can be stored to an SD memory card.
• Gain: Three-position gain selector with a maximum gain value of +42 dB. (Super gain)
• User Buttons: Frequently used functions can be assigned to the User buttons.
• Shockless White Balance: To enable smooth White Balance mode switching.
• AWB: Auto White Balance with auto tracking white function.
• Audio input level adjustment (front) can be switched on/off and allocated to desired channels.
• WFM/VectorScope: Simplified waveform and vectorscope display.
• Zebra: Select any two levels from 0% to 109% in 1% steps.
• Mode check: Displays a list of the camera settings.
• Y-GET: Measures brightness at center and displays numerical data.
• The optional CVF15G Color HD Viewfinder, when opened, serves as an LCD monitor.
• Marker Display: Displays a center marker, safety zone marker and frame marker.
AVC-ULTRA Codec Supported as Standard
From mastering to streaming, the image quality and bit rate can be selected to match the application. Panasonic’s professional A/V codec family, AVC-ULTRA, is provided as standard to meet the particular needs of broadcasting and video production.

- **AVC-Intra**: An intra-frame compression method that is highly suited to image production, AVC-Intra100/50.
- **AVC-LongG**: An inter-frame compression method that achieves high-quality HD recording at a low bit rate. Ideal for providing on-air content direct from the shooting location and for workflows using content transferred over the internet. Three bit rates are available: AVC-LongG50/25/12 Mbps. AVC-LongG25 provide 10 bit/4:2:2 quality at a bit rate of approximately 25 Mbps.

Low-bit-rate, high-resolution, high-soundquality proxy video (Quick Time/ft.264) is also recorded with the actual data. Also includes metadata for efficient offline editing.

* Proxy data cannot be recorded when using the Loop Rec or Interval Rec function.

HD/SD Multi Format/Multi Codec
The AJ-PX800G supports 59.94 Hz/50 Hz switching for convenient use in productions headed for global use, and records 1080/60i,* 50i, 24p,* 25p, 30p* and 720p HD/SD multiple format.

DVCPRO HD/DVCPRO50/DVCPRO/DV recording is also supported.

* 60i, 60p, 24p and 30p are actually 59.94i, 59.94p, 23.98p and 29.97p.

High-Quality 24 Bit Four Channel Audio Recording
AVC-Intra and AVC-LongG** modes support 24bit/48kHz/4CH digital audio recording*: Audio source for each channel can be selected for each channel, choose from mic-in, line-in and wireless receiver.

*1: The AVC-LongG12 mode does not support 24 bit digital audio recording.

Two Slots for Versatile Recording Option

- Using Memory Card Adapter AJ-P2AD1G, microP2 card can be used.
- **Simul Rec**: Records simultaneously onto two P2 cards.
- **Dual-codec recording**: Records a low-rate AVC-Proxy file while recording main data in AVC-Intra/AVC-LongG.
- **Hot-Swap Rec**: Thanks to the two card slots, you can hot-swap P2 cards for continuous non-stop recording.
- **One-Clip rec mode**: Records up to 99 consecutive cuts as a single clip.
- **Loop rec**: Repeatedly re-records while maintaining a recording of the most recent, pre-determined period.
- **Pre-rec**: Continuously stores footage prior to pressing Rec Start for recovery if desired.
- **Interval rec**: Automatically records intermittently based on a set interval and recording time.
- **One-shot rec**: A frame-shot recording function useful for producing animations.
- **Text Memo**: Up to 100 memos can be posted onto a clip as bookmarks.
- **Shot Marker**: Used to mark clips as OK, NG, etc.
- **Metadata**: Data with information such as operator’s name, shooting location, and text memos can be added via an SD memory card.
- **Rec Check**: This lets you run a quick playback check of the clip—end you have just recorded.

*1: Not available in 24p, 25p and 30p recording modes.
*2: Shot marker and text memo cannot be used in loop rec, interval rec, or one-shot rec.

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Ultra-high Speed

Network connectivity achieves a faster news workflow. It supports wired LAN, wireless LAN and 4G/LTE networks.

Wired/Wireless LAN, 4G/LTE Network Functions**

The standard LAN (Ethernet) port allows network connection via a wired LAN. When the optional AJ-WM30 Wireless Module is installed, the AJ-PX800G gains wireless LAN (IEEE 802.11g/n) connectivity, enabling access to the following functions from a network-connected PC/Mac, tablet device or smartphone. 4G/LTE connection is also possible.

- **Proxy Preview**: Plays back proxy files (AVC-Proxy), downloads file/capture information, displays and allows editing of metadata, and enables addition/deletion of shot marks and text memos.*
- **Camera Remote**: Easy remote operation is possible from various devices by using a web app. The iPad app (available free of charge from the Apple App Store, P2 ROP) enables multifunctional remote operation equivalent to ECU. (See page 6 for details.)
- **Playlist Editing**: Playlists can be created using proxy video with a PC/Mac or tablet. The workflow can be streamlined to be faster by rough editing on location, and then transferring the content files.
- **File Transfer**: When connected via wired/wireless LAN or 4G/LTE, the FTP client function lets you transfer clips from the camera recorder to a network. Recording and playback are possible during file transfer.

** For details, refer to “Notes Regarding Network Functions” on the back page.

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Full-HD Streaming Supported**

Full-HD (1920 x 1080) proxy video can be streamed via a network connection (wired LAN, wireless LAN, 4G/LTE network) when recording mainstream video onto a memory card. The video can be received and playback on a PC or Mac.

“QoS” stands for Quality of Service. Using this function, bitrate is optimized to match the network condition and continue streaming distribution even when the communication bandwidth is reduced.

This provides solutions for a variety of situations such as news acquisition, while recording mainstream video, video for newsflash can be streamed live* to a broadcast station from the field.

** For details, refer to “Notes Regarding Network Functions” on the back page.

* Some functions are not supported by some devices.

** For details, refer to “Notes Regarding Network Functions” on the back page.

### Streaming Mode Specifications

<table>
<thead>
<tr>
<th>Mode</th>
<th>Resolution</th>
<th>Frame Rate</th>
<th>Bit Rate</th>
<th>Codec**</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVC-G (QoS)</td>
<td>1920 x 1080</td>
<td>30 fps/25 fps</td>
<td>6 Mbps</td>
<td>H.264 High Profile</td>
</tr>
<tr>
<td></td>
<td>1280 x 720</td>
<td>60 fps/50 fps</td>
<td>1,500 kbps</td>
<td></td>
</tr>
<tr>
<td>HQ</td>
<td>640 x 360</td>
<td>30 fps/25 fps</td>
<td>800 kbps</td>
<td>H.264 Baseline Profile</td>
</tr>
<tr>
<td>LOW</td>
<td>480 x 270</td>
<td>30 fps/25 fps</td>
<td>Variable depending on the communication band</td>
<td>H.264 High Profile</td>
</tr>
<tr>
<td>AVC-G</td>
<td>1920 x 1080</td>
<td>30 fps/25 fps</td>
<td>Variable depending on the communication band, Maximum 9 Mbps</td>
<td>H.264 High Profile</td>
</tr>
<tr>
<td></td>
<td>1280 x 720</td>
<td>60 fps/50 fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HQ (QoS)</td>
<td>960 x 540</td>
<td>30 fps/25 fps</td>
<td>Variable depending on the communication band, Maximum 6 Mbps</td>
<td>H.264 High Profile</td>
</tr>
</tbody>
</table>

* The audio codec is AAC LC 2ch in all streaming modes.
*1: When only the record signal is 1080i/59.94i or 1080/50i.
*3: When the connection signal is 720/59.94p or 720/50p.

### Transferring Recorded Clips Automatically: Rec During Uploading Function

The Rec during Uploading function*, which automatically and sequentially transfers recorded clips to an FTP server or cloud service, has also been newly added. Uploading is done in the background, and recording/playback continues during the transfer. In addition to allowing the camera operator to concentrate on shooting without any concerns about uploading, this also boosts the levels of safety and immediacy. The transfer status can be checked on the LCD monitor or viewfinder. If the network is disconnected during transfer, or the power of the camera is turned off, transfer resumes when the connection or power is recovered. Manual transfer of up to 100 registered clips is also possible.

* During simultaneous recording, only recorded clips in slot 1 is automatically transferred. Clips of interval recording, loop recording, one-clip recording or one-shot recording are not transferred automatically. The streaming function are disabled, while using the Rec during Uploading function.

### Direct Connection to The LiveU Video Uplink Solution**

The AJ-PX800G supports direct connection to the LiveU Central management platform using public networks, such as 4G/LTE, wireless LAN or wired LAN. There is no need for special uplink equipment. This enables both live previews on the reception side, and on-air streaming.

** For details, refer to “Notes Regarding Network Functions” on the back page.

* Contact with LiveU is required separately. For details, contact LiveU: http://www.liveu.tv

## Recording Format and Streaming Output

### Recording Signal and Recording Codec

<table>
<thead>
<tr>
<th>Recording Signal</th>
<th>Recording Codec</th>
<th>HD Streaming Mode</th>
<th>SD Streaming Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1080/59.94i</td>
<td>AVC-Intra100</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>1080/50i</td>
<td>AVC-Intra50</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>720/59.94p</td>
<td>AVC-LongG50</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>720/50p</td>
<td>AVC-LongG25</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* ✓ are supported, and ✗ are not supported. * 1080/59.94i cannot be selected when 720/50p.
HD SDI IN/OUT, HDMI OUT and Other Interfaces

- **Supports SDI OUT for feed and backup recording with optional SDI IN for line recording.**
- **HDMI OUT:** This terminal allows digital A/V output to a wide range of HD devices.
- **MON OUT:** This terminal outputs HD SDI, down-converted SD SDI, or VBS.
- **Aspect conversion:** Aspect ratio of down conversion signal can be selected from Side Crop, Letter Box or Squeeze mode.
- **TC IN/OUT:** A built-in SMPTE time code generator/reader. IN/OUT selectable by menu settings.
- **GENLOCK IN:** For synchronized recording with a multi-camera system.
- **USB 2.0:** Equipped with both HOST (for connection to an HDD) and DEVICE (for connection to a PC/Mac) terminals.
- **UniSlot®** compatible wireless receiver slot (two channels).
- **XLR audio input:** Two channel mic/line inputs supporting 48-V phantom power supply.
- **Audio output terminals (pin jacks), two channels.**
- **Multiple battery support, including Anton Bauer.**

*UniSlot® is a trademark of Ikegami Tsusinki Co., Ltd.

Camera Remote System Compatibility*

- **10 pin Remote Terminal:** Camera remote operation is enabled with the optional AG-EC4G Extension Remote Control Unit, AJ-RC10G Remote Control Unit or AK-HRP200G Remote Operation Panel.
- **Camera Studio System:** The optional camera extension system (AG-CA300G Camera Adapter and AG-BS300 Base Station) supports low-cost studio integration.
- **Wired LAN remote:** A wired LAN connection allows the camera to be remotely controlled. Remote operation, including fine menu settings, is possible by using the optional AK-HRP200G Remote Operation Panel for studio cameras.

* Only functions that are supported by the AJ-PX800G can be controlled.

The P2 ROP App for Wireless Control** using iPad*

The P2 ROP App (downloadable free of charge from the Apple App Store) for iPad is available. It enables iPad to control functions/setting of the AJ-PX800G Camera Recorder remotely via wireless connection. P2 ROP App can control variety of settings similar to those of the AG-EC4G Extension Control Unit controls, including picture quality settings and REC start/stop. Easy-to-see value display and easy-to-operate up/down touch keys provide settings and adjustments. Proxy browser is also built into the app so that operator can adjust the setting while checking recorded clips with thumbnail and previewing. Metadata can also be displayed and edited on iPad to support post production work.

** For details, refer to “Notes Regarding Network Functions” on the back page.

* It supports to iOS7.1 and iOS8.1.

* Apple App Store and iPad are service marks or trademarks of Apple Inc. registered in the United States and other countries.

*P2 ROP App* Control from iPad

** P2 ROP App** Control from iPad

Thumbnail View

Preview View

picture simulated
As of June, 2015

Specifications

General

Power: DC 12 V (11.0 V to 17.0 V)
Power Consumption: 22 W (when the optional board AG-YA600G is installed)
Operating Temperature: 0°C to 40°C (32°F to 104°F)
Operating Humidity: 10% to 85% (relative humidity)
Storage Temperature: -20°C to 60°C (-4°F to 140°F)
Weight: Approx. 2.8 kg (6.2 lbs.) (body only, excluding the battery and accessories)
Dimensions: 144 mm (W) x 267 mm (H) x 350 mm (D)
(5-7/16 inches x 10-1/2 inches x 13-25/32 inches)
Body only, excluding protrusion

Camera Unit

Pickup Device: 2/3 type 2.2 million pixels, MOS x 3
Lens Mount: 2/3 type bayonet
ND Filter: 1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
Super Gain (S.GAIN): Selectable from 30 dB, 36 dB, 42 dB

Shutter Speed: 60/60p mode: 1/60 (OFF) sec., 1/100 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec.
30p mode: 1/30 (OFF) sec., 1/60 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec.
50/50p mode: 1/50 (OFF) sec., 1/100 sec., 1/250 sec., 1/500 sec., 1/1000 sec.

Synchro Scan Shutter: 60/60p mode: 1/50.0 sec. to 1/250.0 sec.
30p mode: 1/30.0 sec. to 1/250.0 sec.
24p mode: 1/24.0 sec. to 1/250.0 sec.
50/50p mode: 1/50.0 sec. to 1/250.0 sec.
25p mode: 1/25.0 sec. to 1/250.0 sec.

Slow Shutter Speed: 60/60p mode: 1/15 sec., 1/30 sec.
30p mode: 1/15 sec.
24p mode: 1/12 sec.
50/50p mode: 1/12.5 sec., 1/12.5 sec.
25p mode: 1/12.5 sec.

Shutter Open Angle: 3.0 deg to 360.0 deg (in 0.5 deg steps, angle display)

Sensitivity: NORMAL mode:
P9 (2000 lx, 3200 K, 89.9% reflection, 1080/59.94i)
F10 (2000 lx, 3200 K, 89.9% reflection, 1080/50i)
HIGH SENS mode:
F12 (2000 lx, 3200 K, 89.9% reflection, 1080/59.94i)
F13 (2000 lx, 3200 K, 89.9% reflection, 1080/50i)

Minimum Subject Illumination: Approx. 0.22 lx (HIGH SENS MODE, F1.4, +42 dB (S.GAIN))

Image S/N: 62 dB (standard)
Horizontal Resolution: 1000 TV or higher (center)

Memory Card Recorder

Recording Media: P2 card (for microP2 card: adaptor is required)
System Format: 1080/59.94i, 1080/29.97p, 720/59.94p, 480/59.94i, 1080/50i, 720/50p, 576/50i
Recording Format:
Recording Video Signal:
1080/59.94i, 1080/29.97p, 720/59.94p, 720/29.97p, 576/50i
480/59.94i, 480/29.97p, 1080/50i, 1080/25p, 720/50p, 720/25p, 576/50i

Recording/Playback Time*:
1668 x 1
3216 x 1
64GB x 1

AVC-Intra100:
Approx. 16 min.
Approx. 32 min.
Approx. 64 min.
Approx. 128 min.

AVC-Intra50:
Approx. 32 min.
Approx. 64 min.
Approx. 128 min.

AVC-LongG50:
Approx. 64 min.
Approx. 128 min.
Approx. 256 min.

AVC-LongG12/DVCPRO HD:
Approx. 16 min.
Approx. 32 min.
Approx. 64 min.

DVCPRO 50:
Approx. 32 min.
Approx. 64 min.
Approx. 128 min.

DVCPRO/DV500:
Approx. 16 min.
Approx. 32 min.
Approx. 64 min.
These are reference values for continuous recording using the Panasonic products. The recording time may differ depending on the scene or the number of clips.

Digital Video

Sampling Frequency:
Y: 74.3200 MHz, Pb/Pq: 37.1250 MHz (50 Hz)
DVCPRO50: Y: 15.35 MHz, Pb/Pq: 7.675 MHz
DVCPRO: Y: 15.35 MHz, Pb/Pq: 3.375 MHz

Quantizing:
AVC-Intra100/AVC-Intra50/AVC-LongG50/AVC-LongG25:
MPEG-4 AVC/H.264 Intra Profile
AVC-LongG12/DVCPRO HD/DVCPRO50/DVCPRO/DV500: 8 bit

Video Compression Format:
AVC-Intra100/AVC-Intra50:
MPEG-4 AVC/H.264 Intra Profile
MPEG-4 AVC/H.264 Intra Profile

Low SENS mode:
480/59.94i, 480/29.97p, 480/23.98p
1080/59.94i, 1080/29.97p, 1080/23.98p

Digital Audio

Recording Audio Signal:
AVC-Intra100/AVC-Intra50:
48 kHz/16 bit, 48 kHz/24 bit, 48 kHz switch
48 kHz/24 bit, 48 kHz/16 bit

Approx. Recording Time (1 GB):
SHQ 2CH MOV: Approx. 25 min.
HQ 2CH MOV: Approx. 78 min.
LOW 2CH MOV: Approx. 135 min.

These are reference values for continuous recording using the Panasonic products. The recording time may differ depending on the scene or the number of clips.

Video Input/Output

SDI OUT/IN (option): BNCx1
1.5 G SDI SDI:
0.8 V [p-p], 75 Ω
SDI:
0.8 V [p-p], 75 Ω
MON OUT:
0.8 V [p-p], 75 Ω

Audio Input/Output

Audio IN:
XLR (3 pin) x 2 LINE/MIC (switch selection)
LINE: 0 dBu
MIX: -50 dBu/-60 dBu (menu selection), +48 V ON/OFF (switch selection)

MIC IN:
XLR (3 pin) x 1, +48 V supported (selectable menu)
-40 dBu/-50 dBu -60 dBu (selectable menu)

Audio OUT:
Pin jack x 2 (CH1, CH2), Output level: 600 Ω, 316 mV

Phones OUT:
3.5 mm diameter stereo mini jack x 1

Speaker:
20 mm diameter, round x 1

Other Input/Output

GENLOCK IN:
BNCx1, 1.0 V [p-p], 75 Ω
TC IN/OUT:
BNCx1, IN/OUT switch selection
IN: 0.5 V [p-p] to 8 V [p-p], 10 kHz
OUT: 2.0 ±0.5 V [p-p], Low impedance

DC IN:
XR (3 pin) x 1
+48 V supported (selectable menu)
-40 dBu/-50 dBu -60 dBu (selectable menu)

USB2.0 (sub host): Type A connector, 4 pin
USB2.0 (device): Type B connector, 4 pin
LAN:
100BASE-TX/10BASE-T
USB2.0 (host): Type A connector, 4 pin
USB2.0 (device): Type B connector, 4 pin

Included Accessories

Shoulder strap, Mount cap

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

* Time shown above is when you record a series of 1 shot to a P2 card. Depending on numbers of shots you record, the time will get shorter than the number shown above.
**Options**

As of June, 2015

**AG-CVF10G**  
Color HD View Finder  
Open one way for LCD monitor viewing

**AG-CVF15G**  
Color HD View Finder  
Open two ways for LCD monitor viewing

**AJ-MC700P**  
Microphone Kit

**AG-MC200G**  
XLR Microphone

**SHAN-TM700**  
Tripod Adaptor

**AG-YA600G**  
HD/SD SDI Input Board

**AJ-WM30**  
Wireless Module

**AK-HRP200G**  
Remote Operation Panel

**AJ-P2E064FG**  
Memory Card (P2 card F series)

**AJ-P2E032FG**  
Memory Card

**AJ-PCD2G**  
USB2.0 Memory Card Drive

**AU-XPD1**  
USB 3.0/2.0 Memory Card Drive

**AJ-P2M032AG**  
Memory Card “microP2 card”

**AJ-P2M064AG**  
Memory Card

**AJ-P2AD1G**  
Memory Card Adapter

**AJ-MPD1G**  
Memory Card Drive “microP2 drive”

**AJ-SC900**  
Soft Carrying Case  
*Not available in some area*

**SHAN-RC700**  
Rain Cover  
*Not available in some area*

**AJ-SK001G** (for P2 Viewer plus)  
Ingesting Function Software Key*

**P2 Viewer Plus**  
Viewing Software*

Compatible with both Windows/Mac OS.

**AJ-SK001G** (for P2 Viewer plus)  
The ingesting function copies all clips on P2 cards to a storage medium, such as an HDD. During ingesting, the clips are verified for secure copying, with log files created.

**Avid NLE Plug-In Software**  
(Avid Media Composer v6.5 or later)

**AJ-PS001G**  
Software Key for AVC-Proxy re-link.

**AJ-PS002G**  
Software Key for AVC-Intra50/100 P2 file export.

**AJ-PS003G**  
Software Key for AVC-LongG P2 file export.

**AJ-PS004G**  
Software Key for AVC-LongG file import to edit.

**AJ-SK001G** (for P2 Viewer plus)  
Ingesting Function Software Key*

**AJ-SK001G** (for P2 Viewer plus)  
The ingesting function copies all clips on P2 cards to a storage medium, such as an HDD. During ingesting, the clips are verified for secure copying, with log files created.

**Other Manufacturers’ Products**

**Anton/Bauer**  
Dionic Battery

**Camera Studio System**

**AG-CA300G**  
Camera Adapter

**AG-BS300**  
Base Station

**AG-YA500G**  
VF Interface Box

**AG-EC4G**  
Extension Control Unit

**AJ-RC10G**  
RCU (Remote Control Unit)  
10 meters (32 feet) remote control cable

**AJ-C10050G**  
Remote Control Cable  
50 meters / 164 feet

**Bound Cable for Camera Studio System**  
(between AG-BS300 and AG-CA300G)

[Canare]  
V2PC525-5CFWCE-SF-SC (25 meters/82 feet)  
V2PC550-5CFWCE-SF-SC (50 meters/164 feet)  
V2PC5100-5CFWCE-SF-SC (100 meters/328 feet)

**Power Cable for Camera Studio System**  
(between AG-BS300 and AG-CA300G)

[Canare]  
DC50V10-CE01PS-SC (50 meters/164 feet)  
DC100V10-CE01PS-SC (100 meters/328 feet)

Canare Electric Co., Ltd.  
http://www.canare.co.jp/oversea/mainmenu.html

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*1: For information on purchasing software keys, see “Service and Support” on the Panasonic web site (http://pro-av.panasonic.net/).

*2: For P2 Viewer Plus download and operating requirement information, see “P2 Viewer Plus” on the Panasonic web site (http://pro-av.panasonic.net/en/sales_o/p2/p2viewerplus/).
Notes Regarding the Handling of P2 Files Using a PC

Mounting and Transferring Files
The P2 card must be installed with the included driver in order to recognize, copy and transfer P2 files. This driver is also necessary when using the PC card slot and when handling P2 files stored on a hard-disk device, such as P2 store. For other operating requirements, refer to the P2 installation manual. The P2 driver and the P2 installation manual can be downloaded free of charge from a Panasonic website. Visit <http://pro-av.panasonic.net/en/download/>.

Preview and Nonlinear Editing
To preview/pause P2 files on a PC, it is necessary to install P2 Viewer Plus software (downloadable for free, for Windows and Mac), both from Panasonic, or P2-compatible editing software available from other companies (for details, visit http://pro-av.panasonic.net/en/sales_o/p2/editor/articles.html). Note that each software places specific requirements on the operating environment, and the operating environment must meet additional requirements to play and edit HD content on Windows PCs and Macs. For P2 Viewer Plus download and operating requirement information, visit <http://pro-av.panasonic.net/en/download/>.

** Notes Regarding Network Functions

• For 4G/LTE connections: 4G/LTE module is required from a 3rd party. Availability of this function may vary depends on areas. For details, please visit Panasonic website <http://pro-av.panasonic.net/en/download/>.
• For wireless LAN connection: Wireless module (optional, AJ-WM30) is required. For the OS, browser, device compatibility information, see “Service and Support” on the Panasonic website <http://pro-av.panasonic.net/>.
• For iPad remote control: The P2 ROP App (downloadable free of charge from the Apple App Store) is required. For details, please visit Panasonic website <http://pro-av.panasonic.net/>.
• For streaming: Transfers only to a designated server (one server). The proxy image cannot be recorded while streaming. The streaming function cannot be used together with dual codec recording and simultaneous recording, or with the Rec during Uploading function. For details on downloading and the operating environment of video streaming compatible applications, please refer to the Panasonic website <http://pro-av.panasonic.net/en/sales_o/p2/aj-px800g>. For streaming, 4G/LTE USB modem and PC must be able to access directly each other with Public IP (Global IP). Please contact your provider to get Public IP (Global IP). To display the streaming video using P2 browser, player is required. (VLC MEDIA PLAYER for Windows PC, QuickTime Player for Mac.) P2 Streaming Receiver software (Windows only, not supported by Mac; available free of charge) is required for receiving the QoS mode. Please visit Panasonic website <http://pro-av.panasonic.net/en/download/>.

Precautions When Using SD Memory Cards
On the Memory Card Camera Recorder, use SD memory cards that conform to the SD standard, SDHC standard, or the SDXC standard. When performing proxy rendering (extra-cost option), use SDHC memory cards, SDXC memory cards, or Panasonic SD memory cards with the class description of class2 or higher. The MMC (Multi Media Card) cannot be used. Be sure to format cards on the Memory Card Camera Recorder before use. In this Memory Card Camera Recorder, memory card of the capacity of SD (8 MB to 2 GB), SDHC (4 GB to 32 GB), and SDXC (32 GB to 128 GB) can be used.

Note Regarding 24 bit Audio
Clips recorded using 24 bit audio must be played back with 24 bit compatible P2 equipment or the P2 Viewer Plus. If clips are played back with equipment not compatible with 24 bit audio, the clip number will be indicated in red and the clips will not be played back.

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