Panasonic

BUSINESS

P2HD

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

HD COLOR VIEWFINDER

P2HD

*The microphone and battery pack shown in the photo are optional accessories.

The Ultra **Light** Weight **3MOS** Shoulder Camera Recorder

AVC ULTRA **AVC INTRA** **AVC LongG** **AVC Proxy** **P2** **SDXC** **HDMI**
HIGH-DEFINITION MULTIMEDIA INTERFACE

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.

** For details, refer to "Notes Regarding Network Functions" on the back page.
*1: For a 2/3-type shoulder-type HD camera-recorder with three sensors (as of June 2015).
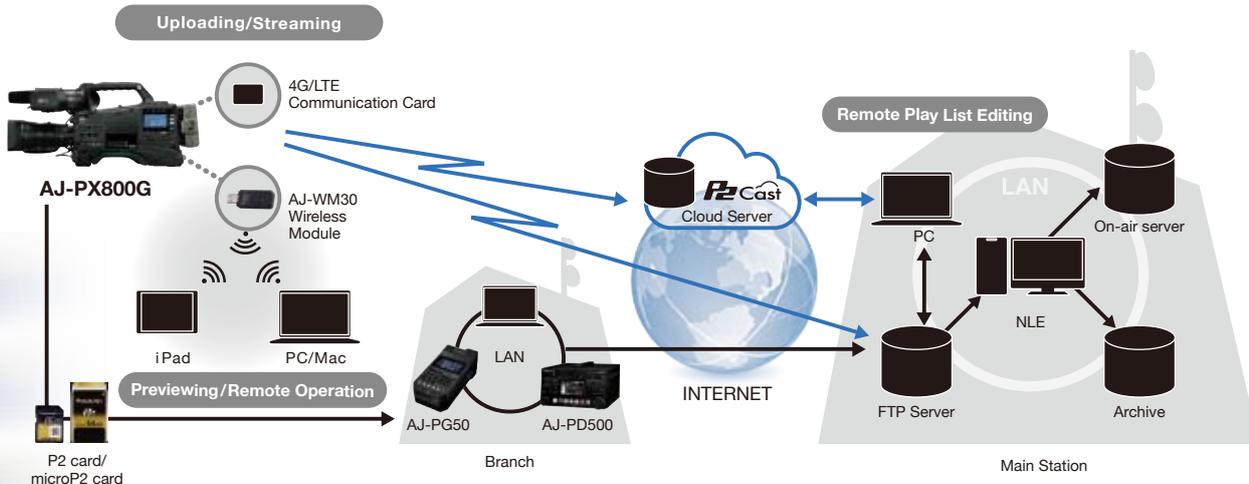*2: Not all AVC-ULTRA formats will be supported.
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Ultra-high Speed

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

Uploading/Streaming

4G/LTE Communication Card

AJ-PX800G

AJ-WM30 Wireless Module

iPad PC/Mac

Previewing/Remote Operation

P2 card/ microP2 card

LAN

AJ-PG50 AJ-PD500

Branch

INTERNET

P2 Cast Cloud Server

Remote Play List Editing

LAN

PC

On-air server

NLE

FTP Server Archive

Main Station

●**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*:** 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/)

** For details, refer to "Notes Regarding Network Functions" on the back page. *This service is not available in some areas.
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• Apple App Store and iPad are service marks or trademarks of Apple Inc. registered in the United States and other countries.

Recording Codecs and Video Formats

Codec								720				480	576
	60i	50i	30pN*1	24pN*2/23.98PsF	25pN*3	60p	50p	30pN	24pN	25pN	60i	50i
AVC-Intra100	√	√	√	√	√	√	√	√	√	√	–	–
AVC-Intra50	√	√	–	–	–	√	√	–	–	–	–	–
AVC-LongG50	√	√	√	√	√	√	√	–	–	–	–	–
AVC-LongG25	√	√	√	√	√	√	√	–	–	–	–	–
AVC-LongG12	√	√	√	√	√	√	√	–	–	–	–	–
DVCPRO HD	√	√	–	–	–	√	√	–	–	–	–	–
DVCPRO 50	–	–	–	–	–	–	–	–	–	–	√	√
DVCPRO	–	–	–	–	–	–	–	–	–	–	√	√
DV	–	–	–	–	–	–	–	–	–	–	√	√

*1: 1080/29.97p over 59.94p output *2: 1080/23.98p over 59.94p output *3: 1080/25p over 50p output

AVC-Proxy Recording Modes and Recording Signals

Recording Mode*4	Video			Audio		
	Resolution	Codec	Bit Rate	Codec	CH	Bit Rate/1 CH
AVC-G6 2CH MOV	1080i mode: 1920 x 1080 720p mode: 1280 x 720	H.264 High Profile	6 Mbps*5	AAC-LC	2 CH	64 kbps
SHQ 2CH MOV	960 x 540	H.264 High Profile	3500 kbps	Linear PCM	2 CH	768 kbps
HQ 2CH MOV	1080i mode: 640 x 360	H.264 High Profile	1500 kbps	AAC-LC	2 CH	64 kbps
LOW 2CH MOV	1080i mode: 480 x 270 480-59.94i mode: 352 x 240 (SIF_NTSC) 576-50i mode: 352 x 288 (SIF_PAL)	H.264 Baseline Profile	800 kbps	AAC-LC	2 CH	64 kbps

*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.

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.
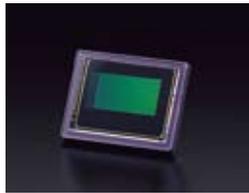
2.2 megapixel 2/3 type 3MOS image sensor

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.

Ultra-high Quality

The recorder section offers AVC-ULTRA multi-codec recording capability and 2 slots for P2 cards.

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 Long G 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.

AVC Proxy Low-bit-rate, high-resolution, high-soundquality proxy video (Quick Time/H.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. Proxy data is low-resolution video and audio data with time code, metadata, and other management data in a file format.
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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*[1] modes support 24bit/48kHz/4CH digital audio recording*[2]. Audio source for each channel can be selected for each channel, choosing from mic-in, line-in and wireless receiver.

*1: The AVC-LongG12 mode does not support 24 bit digital audio recording.
*2: The audio signal can be played back by using 24 bit digital audio equipment. For details, refer to "Note Regarding 24 bit Audio" on the back page.

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:**[1] 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:**[1] 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:**[2] Up to 100 memos can be posted onto a clip as bookmarks.
• **Shot Marker:**[2] 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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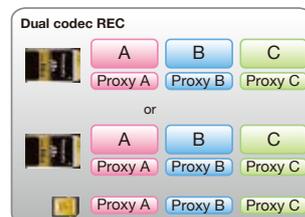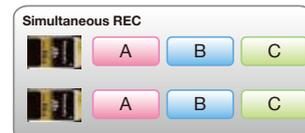
Ultra-high Speed

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/clip information, displays and allows editing of metadata, and enables addition/deletion of shot marks and text memos.[1]
- **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.
*1: Some functions are not supported by some devices.
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Full-HD Streaming Supported**

Full-HD (1920 × 1080) proxy video can be streamed via a network connection (wired LAN, wireless LAN, 4G/LTE network) while recording mainstream video onto a memory card. The video can be received and playback on a PC or Mac.
"QoS[1]" 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[2] to a broadcast station from the field.

** For details, refer to "Notes Regarding Network Functions" on the back page.
*1: 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/>.
*2: The video and audio signals arrive with a delay. The latency varies depending on the network environment and the hardware/software environment of the PC, server, etc.

Streaming Mode Specifications

Mode	Resolution	Frame Rate	Bit Rate	Codec[1]
AVC-G6	1920 x 1080[2]	30 fps/25 fps	6 Mbps	H.264 High Profile
	1280 x 720[3]	60 fps/50 fps		
HQ	640 x 360	30 fps/25 fps	1,500 kbps	
LOW	480 x 270	30 fps/25 fps	800 kbps	H.264 Baseline Profile
AVC-G (QoS)	1920 x 1080[2]	30 fps/25 fps	Variable depending on the communication band, Maximum 9 Mbps	H.264 High Profile
	1280 x 720[3]	60 fps/50 fps		
SHQ (QoS)	960 x 540	30 fps/25 fps	Variable depending on the communication band, Maximum 6 Mbps	H.264 High Profile

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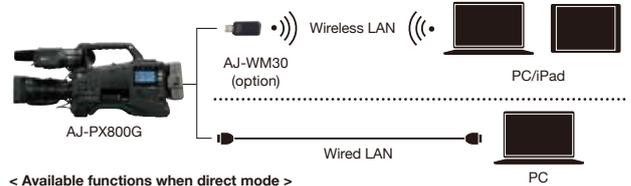*2: When only the record signal is 1080/59.94i or 1080/50i.
*3: When only the record signal is 720/59.94p or 720/50p.

Recording Format and Streaming Output

Recording Signal	Recording Codec	HD Streaming Mode AVC-G6, AVC-G (QoS)	SD Streaming Mode HQ, LOW, SHQ (QoS)
1080/59.94i 1080/50i 720/59.94p 720/50p	AVC-Intra100	✓	✓*
	AVC-Intra50	—	✓*
	AVC-LongG50	✓	✓*
	AVC-LongG25	✓	✓*

"✓" are supported, and "—" are not supported. * [LOW] cannot be selected when 720 mode.

Camera Remote/Playlist Editing (Wireless LAN, Wired LAN)

< Available functions when direct mode >

- Proxy Data Playback
- REC Start/Stop
- Metadata/Text Memo Input
- Thumbnail Display
- Playlist Editing
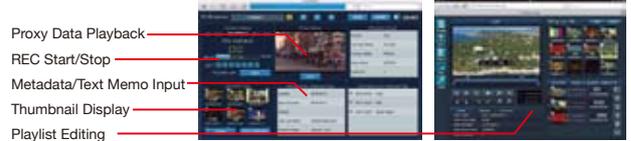
File Upload/Streaming (Wireless LAN, 4G/LTE, Wired LAN)
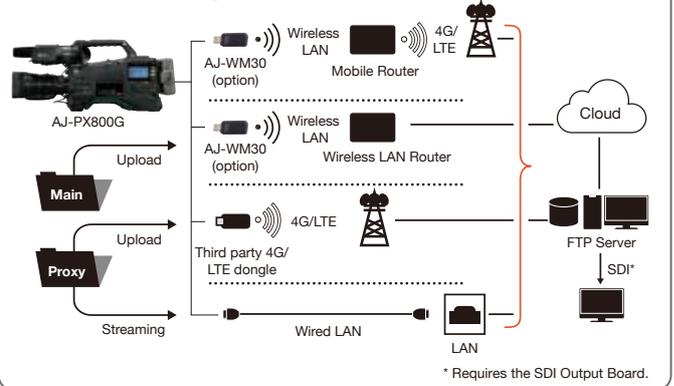
* Requires the SDI Output Board.

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.
* Contract with LiveU is required separately. For details, contact LiveU: http://www.liveu.tv
Contact: info_us@liveu.tv (US & Americas), info@liveu.tv (International)
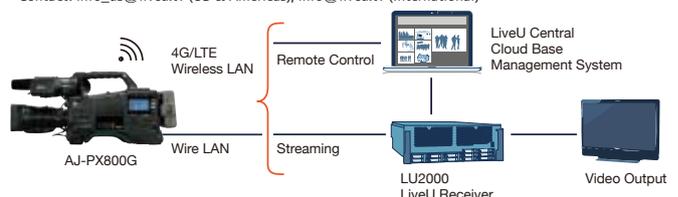
HD SDI IN/OUT, HDMI OUT and Other Interfaces HƆMI

• 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

Thumbnail View

Preview View

picture simulated

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) × 267 mm (H) × 350 mm (D) (5-21/32 inches × 10-1/2 inches × 13-25/32 inches) Body only, excluding protrusion

Camera Unit

Pickup Device:	2/3 type 2.2 million pixels, MOS × 3
Lens Mount:	2/3 type bayonet
ND Filter:	1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
Gain Setting:	NORMAL mode: −3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 15 dB, 18 dB, 21 dB, 24 dB, 27 dB, 30 dB HIGH SENS mode: −6 dB, −3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 15 dB, 18 dB, 21 dB, 24 dB, 27 dB, 30 dB
Super Gain (S.GAIN):	Selectable from 30 dB, 36 dB, 42 dB
Shutter Speed:	60i/60p mode: 1/60 (OFF) sec., 1/100 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec., 1/2000 sec. 30p mode: 1/30 (OFF) sec., 1/50 sec., 1/60 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec. 24p mode: 1/24 (OFF) sec., 1/50 sec., 1/60 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec. 50i/50p mode: 1/50 (OFF) sec., 1/60 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec., 1/2000 sec. 25p mode: 1/25 (OFF) sec., 1/50 sec., 1/60 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec.
Synchro Scan Shutter:	60i/60p mode: 1/60.0 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. 50i/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:	60i/60p mode: 1/15 sec., 1/30 sec. 30p mode: 1/15 sec. 24p mode: 1/12 sec. 50i/50p mode: 1/12.5, 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: F9 (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, 1080/23.98psF, 720/59.94p, 480/59.94i, 1080/50i, 720/50p, 576/50i
Recording Format:	AVC-Intra100/AVC-Intra50/AVC-LongG50/AVC-LongG25/ AVC-LongG12/DVCPRO HD/DVCPRO50/DVCPRO/DV formats switchable
Recording Video Signal:	1080/59.94i, 1080/29.97pN, 1080/23.98pN, 720/59.94p, 720/29.97pN, 720/23.98pN, 480/59.94i, 480/29.97p, 1080/50i, 1080/25pN, 720/50p, 720/25pN, 576/50i, 576/25p

Recording/Playback Time*:		16GB × 1	32GB × 1	64GB × 1
	AVC-Intra100:	Approx. 16min.	Approx. 32min.	Approx. 64min.
	AVC-Intra50:	Approx. 32min.	Approx. 64min.	Approx. 128min.
	AVC-LongG50:	Approx. 32min.	Approx. 64min.	Approx. 128min.
	AVC-LongG25:	Approx. 64min.	Approx. 128min.	Approx. 256min.
	AVC-LongG12:	Approx. 120min.	Approx. 240min.	Approx. 480min.
	DVCPRO HD:	Approx. 16min.	Approx. 32min.	Approx. 64min.
	DVCPRO 50:	Approx. 32min.	Approx. 64min.	Approx. 128min.
	DVCPRO/DV:	Approx. 64min.	Approx. 128min.	Approx. 256min.

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:	AVC-Intra100/AVC-LongG50/AVC-LongG25/AVC-LongG12/ DVCPRO HD: Y: 74.1758 MHz, P_B/P_R: 37.0879 MHz (59.94 Hz) Y: 74.2500 MHz, P_B/P_R: 37.1250 MHz (50 Hz) DVCPRO50: Y: 13.5 MHz, P_B/P_R:6.75 MHz DVCPRO: Y: 13.5 MHz, P_B/P_R: 3.375 MHz
Quantizing:	AVC-Intra100/AVC-Intra50/AVC-LongG50/AVC-LongG25: 10 bit AVC-LongG12/DVCPRO HD/DVCPRO50/DVCPRO/DV: 8 bit
Video Compression Format:	AVC-Intra100/AVC-Intra50: MPEG-4 AVC/H.264 Intra Profile AVC-LongG50/AVC-LongG25/AVC-LongG12: MPEG-4 AVC/H.264 DVCPRO HD/DVCPRO50/DVCPRO: DV-Based Compression DV: DV Compression

Digital Audio

Recording Audio Signal:	AVC-Intra100/AVC-Intra50: 48 kHz/16 bit, 4CH and 48 kHz/24 bit, 4CH switch AVC-LongG50/AVC-LongG25: 48 kHz/24 bit, 4CH AVC-LongG12/DVCPRO HD/DVCPRO50/DVCPRO/DV: 48 kHz/16 bit, 4CH
Headroom:	18 dB/20 dB (switchable with menu)

Proxy

Video Compression Format:	H.264/AVC Baseline Profile, H.264/AVC High Profile
Audio Compression Format:	AAC-LC, Linear PCM

Approx. Recording Time*: (1 GB)		
	AVC-G6 2CH MOV:	Approx. 13 min.
	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):	BNC×1 1.5 G HD SDI: 0.8 V [p-p], 75 Ω SD SDI: 0.8 V [p-p], 75 Ω
MON OUT:	BNC×1 (Can be switched to HD SDI/SD SDI/analog composite on SmartUI.) 1.5 G HD SDI: 0.8 V [p-p], 75 Ω SD SDI: 0.8 V [p-p], 75 Ω Composite: 1.0 V [p-p], 75 Ω
HDMI OUT:	HDMI×1 (HDMI type A terminal, not compatible with VIERA Link)

Audio Input/Output

Audio IN:	XLR (3 pin) × 2 LINE/MIC (switch selection) LINE: 0 dBu MIC: −50 dBu/−60 dBu (menu selection), +48 V ON/OFF (switch selection)
MIC IN:	XLR (3 pin) ×1, +48 V supported (selectable menu) −40 dBu/−50 dBu/−60 dBu (selectable menu)
Wireless IN:	25 pin, D-SUB, −40 dBu, 2CH supported
Audio OUT:	Pin jack x 2 (CH1, CH2), Output level: 600 Ω, 316 mV
Phones OUT:	3.5 mm diameter stereo mini jack ×1
Speaker:	20 mm diameter, round x 1

Other Input/Output

GENLOCK IN:	BNC×1, 1.0 V [p-p], 75 Ω
TC IN/OUT:	BNC×1, IN/OUT switch selection IN: 0.5 V [p-p] to 8 V [p-p], 10 kΩ OUT: 2.0 ±0.5 V [p-p], Low impedance
DC IN:	XLR×1, 4 pin, DC 12 V (DC 11.0 V to 17.0 V)
DC OUT:	4 pin, DC 12 V (DC 11.0 V to 17.0 V), maximum output current 1.5 A
REMOTE:	10 pin
Lens:	12 pin
VF:	20 pin
LAN:	100BASE-TX/10BASE-T
USB2.0 (host):	Type A connector, 4 pin
USB2.0 (device):	Type B connector, 4 pin
USB2.0 (sub host):	Type A connector, 4 pin (exclusively for wireless module AJ-WM30)

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

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
AJ-P2E032FG
Memory Card
(P2 card F series)

AJ-PCD2G
USB2.0
Memory Card Drive

AU-XPD1
USB 3.0/2.0
Memory Card Drive

microP2 Card

AJ-P2M032AG
AJ-P2M064AG
Memory Card
"microP2 card"

AJ-P2AD1G
Memory Card Adapter

AJ-MPD1G
Memory Card Drive
"microP2 drive"

SD/SDHC/SDXC
Memory Card

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

SHAN-RC700
Rain Cover
*Not available in some area

P2 Viewer Plus
Viewing Software[2]
Compatible with both Windows/Mac OS.

AJ-SK001G (for P2 Viewer plus)
Ingesting Function Software Key[2]

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[1]
(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.

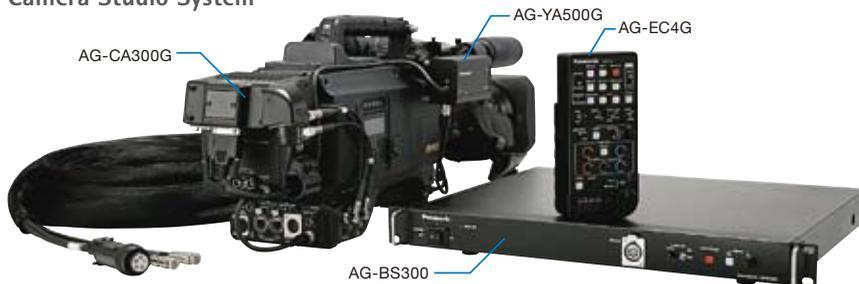**AJ-PS003G**
Software Key
for AVC-LongG P2 file export.

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

Other Manufacturers' Products

Anton/Bauer
Dionic Battery

Camera Studio System

AG-CA300G
AG-YA500G
AG-EC4G
AG-BS300

AJ-RC10G

BNC cables transmit degradation-free HD digital images up to 100 meters
(328 feet) in addition to giving you full remote control.

AG-CA300G
Camera Adapter

AG-BS300
Base Station

AG-YA500G
VF Interface Box

AG-EC4G
Extension Control Unit

AJ-RC10G
RCU (Remote Control Unit)
with 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]
V2PCS25-5CFWCE-SF-SC (25 meters/82 feet)
V2PCS50-5CFWCE-SF-SC (50 meters/164 feet)
V2PCS100-5CFWCE-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

*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/).

Please refer to the latest Non-linear Compatibilty Information,P2 Support, Download and Service Information, etc. at the following Panasonic web site.

http://pro-av.panasonic.net/

Notes Regarding the Handling of P2 Files Using a PC

Mounting and Transferring Files
The PC must be installed with the included P2 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 from a Panasonic website. Visit <http://pro-av.panasonic.net/en/download/>

Preview and Nonlinear Editing
To preview (play) 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/partners.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/>. For operating requirements and details of other P2 editing software, visit the website of the relevant software manufacturer.

** Notes Regarding Network Functions
•For 4G/LTE connection: 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/sales_o/p2/server/4glte.html>.
•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/>. Some functions are not supported by some devices.
•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 application software, 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 by 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 recording (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.

*"P2HD", "AVC-Intra", "AVC-LongG", "AVC-Proxy", "DVCPRO HD", "DVCPRO 50" and "DVCPRO" logos are registered trademarks of Panasonic Corporation. SDHC logo and SDXC logo are trademarks of SD-3C, LLC. Quick Time is a trademark of Apple, Inc., registered in the U.S. and other countries.

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Factories of AVC Networks Company have received ISO14001:2004-the Environmental Management System certification. (Except for 3rd party's peripherals.)

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