## **Panasonic**



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

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



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.



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\*3 and 4G/LTE network connections,\*4 enabling on-site preview, uploading data to a server and streaming. The AJ-PX800G is a single-package solution for virtually all broadcasting needs.

<sup>\*1:</sup> For a 2/3-type shoulder-type HD camera-recorder with three sensors (as of August 2014).

<sup>\*2:</sup> Not all AVC-ULTRA formats will be supported.

<sup>\*3:</sup> For a wireless LAN connection, the AJ-WM30 Wireless Module is required.

<sup>\*4: 4</sup>G/LTE module is required from a third party. Availability of this function may vary depends on areas. For details, please visit Panasonic website (http://pro-av.panasonic.net/)

The use of DCF Technologies is under license from Multi-Format, Inc.

## 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.

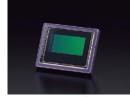
\*For a 2/3 type shoulder-type HD camera-recorder with three sensors (as of August 2014).

#### 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 huttons
- 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.

An intra-frame compression method that is highly suited to image production, AVC-Intra100/50.

An inter-frame compression method that achieves highquality 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.

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 page 5.

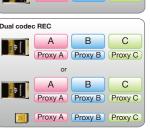
#### Two Slots for Versatile Recording Option

- 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 Network Functions\*1

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. The AJ-PX800G gives you a ready-to-use, cost-effective IT solution.

- 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.\*2
- Camera Remote: Allows confirmation of camera status and thumbnails and enables remote camera control (recording, time code setting, and user hits)
- Playlist Editing (direct mode): 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. The results can be saved together with the edited playlist, then played out of the camera and/or copied using a web application.
- File Transfer: The FTP client function lets you transfer clips from the camera-recorder to a network.
- \*1: For the OS, browser, device compatibility information, see "Service and Support" on the Panasonic website (http://pro-av.panasonic.net/).
- \*2: Some functions are not supported by some devices.
- The use of DCF Technologies is under license from Multi-Format, Inc.

#### 4G/LTE\* Network Connectivity

The AJ-PX800G can send data directly to a network server via FTP allowing broadcast stations to edit recorded data immediately at the editing desk.

\*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/)

#### Video Streaming Capability

The AJ-PX800G is capable of proxy image streaming via a wired LAN, wireless LAN, 4G/LTE\*. It enables live streaming while recording images onto a memory card.

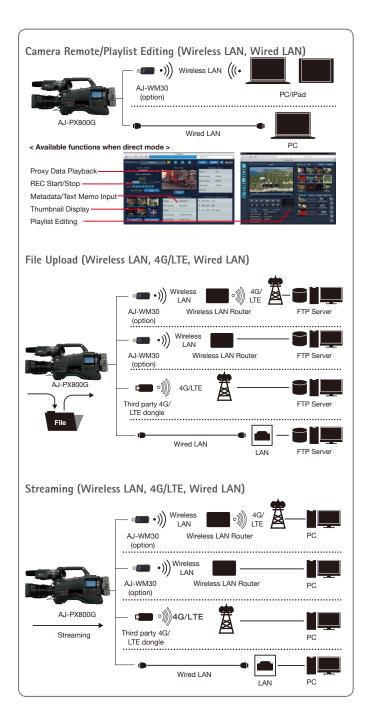
\*Live streaming is not possible while dual codec recording.

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#### HD SDI IN/OUT, HDMI OUT and Other Interfaces HDMI

- 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 or AJ-RC10G Remote Control Unit.\*
- 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.

<sup>\*</sup> Only functions that are supported by the AJ-PX800G can be controlled.

### **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 AJ-P2E016FG Memory Card (P2 card F series)



AJ-PCD2G USB2.0 Memory Card Drive



AU-XDG1 NEW USB 3.0/2.0 Memory Card Drive



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 Ultra Light



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)



AJ-RC10G

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)

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

#### 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. For the latest information on 24 bit compatible P2 equipment and P2 Viewer Plus, see "Support & Download" on the Panasonic web page http://pro-av.panasonic.net/

<sup>\*1:</sup> 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" on the Panasonic web site (http://pro-av.panasonic.net/en/sales\_o/p2/p2viewerplus/).

## Specifications

General	20 - 21/(			
Power:	DC 12 V (11.0 V to 17.0 V)  22 W (when the optional board AG_YA600G is installed)			
Power Consumption:	22 W (when the optional board AG-YA600G is installed) 0°C to 40°C (32°F to 104°F)			
Operating Temperature:				
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)			
Difficitions.	$(5-21/32 \text{ inches} \times 10-1/2 \text{ inches} \times 13-25/32 \text{ inches})$			
	Body only, excluding protrusion			
Camera Unit				
Pickup Device:	2/3 type 2.2 million pixels, MOS × 3			
Lens Mount:	2/3 type bayonet			
CC Filter:	A: 3200 K, B: 4300 K, C: 5600 K, D: 6300 K			
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,			
C C-:- (C CAIN).	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.			
	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., 1/100 sec., 1/120 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., 1/100 sec., 1/120 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 Illumin				
	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 Record	er			
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/			
Recording Format:	AVC-LongG12/DVCPRO HD/DVCPRO50/DVCPRO/DV			
Recording Format:				
-	formats switchable			
Recording Format:  Recording Video Signal:	formats switchable 1080/59.94i, 1080/29.97pN, 1080/23.98pN,			
-	formats switchable 1080/59.94i, 1080/29.97pN, 1080/23.98pN, 720/59.94p, 720/29.97pN, 720/23.98pN, 480/59.94i, 480/29.97p			
Recording Video Signal:	formats switchable 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 Video Signal:	formats switchable  1080/59.94i, 1080/29.97pN, 1080/23.98pN, 720/59.94p, 720/29.97pN, 720/23.98pN, 480/59.94i, 480/29.97p1080/50i, 1080/25pN, 720/50p, 720/25pN, 576/50i, 576/25p  16GB × 1 32GB × 1 64GB × 1			
Recording Video Signal:	formats switchable  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  16GB × 1 32GB × 1 64GB × 1  AVC-Intra100: Approx. 16min. Approx. 32min. Approx. 64min.			
Recording Video Signal:	formats switchable  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  16GB x 1 32GB x 1 64GB x 1 AVC-Intra100: Approx. 16min. Approx. 32min. Approx. 64min. AVC-Intra50: Approx. 32min. Approx. 128min.			
-	formats switchable  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  16GB × 1 32GB × 1 64GB × 1  AVC-Intra100: Approx. 16min. Approx. 32min. Approx. 32min. Approx. 128min.  AVC-LongG50: Approx. 32min. Approx. 64min. Approx. 128min.  AVC-LongG50: Approx. 32min. Approx. 64min. Approx. 128min.			
Recording Video Signal:	formats switchable  1080/59.94i, 1080/29.97pN, 1080/23.98pN, 720/59.94p, 720/29.97pN, 720/23.98pN, 480/59.94i, 480/29.97p1080/50i, 1080/25pN, 720/50p, 720/25pN, 576/50i, 576/25p  16GB × 1 32GB × 1 64GB × 1 AVC-Intra100: Approx. 16min. Approx. 32min. Approx. 64min. Approx. 128min. AVC-LongG50: Approx. 32min. Approx. 64min. Approx. 128min. AVC-LongG52: Approx. 46min. Approx. 128min. AVC-LongG12: Approx. 120min. Approx. 240min. Approx. 256min. Approx. 240min. Approx. 480min. A			
Recording Video Signal:	formats switchable  1080/59.94i, 1080/29.97pN, 1080/23.98pN, 720/59.94p, 720/29.97pN, 720/23.98pN, 480/59.94i, 480/29.97p1080/50i, 1080/25pN, 720/50p, 720/25pN, 576/50i, 576/25p  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. AVC-LongG12: Approx. 120min. Approx. 128min. AVC-LongG12: Approx. 120min. Approx. 240min. Approx. 480min. DVCPRO HD: Approx. 16min. Approx. 32min. Approx. 64min. Approx. 64min. Approx. 480min. Approx. 64min. A			
Recording Video Signal:	formats switchable  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  16GB × 1 32GB × 1 64GB × 1 AVC-Intra100: Approx. 16min. Approx. 32min. Approx. 32min. Approx. 32min. AVC-LongG50: Approx. 32min. Approx. 64min. AVC-LongG50: Approx. 32min. Approx. 64min. AVC-LongG25: Approx. 64min. Approx. 128min. AVC-LongG12: Approx. 120min. Approx. 240min. Approx. 256min. AVC-LongG12: Approx. 16min. Approx. 240min. Approx. 480min. DVCPRO 50: Approx. 32min. Approx. 64min. Approx. 32min. Approx. 32min. Approx. 64min. Approx. 258min. Approx. 32min. Approx. 32min. Approx. 32min. Approx. 32min. Approx. 128min. Approx. 32min. Approx. 32min. Approx. 32min. Approx. 32min. Approx. 128min. Approx. 128min.			
- Recording Video Signal: Recording/Playback Time*:	formats switchable  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  16GB × 1  AVC-Intra100: Approx. 16min. Approx. 32min. Approx. 64min. AVC-longG50: Approx. 32min. Approx. 64min. Approx. 128min AVC-LongG55: Approx. 32min. Approx. 64min. Approx. 128min AVC-LongG12: Approx. 64min. Approx. 128min. AVC-LongG12: Approx. 120min. Approx. 240min. Approx. 480min DVCPR0 HD: Approx. 16min. Approx. 32min. Approx. 480min. Approx. 480min.			

Digital Video Sampling Frequency:	AVC-Intra100/AVC	-LongG50/AVC-LongG25/AVC-LongG12/	
sampling frequency.	DVCPRO HD: Y: 74.1758 MHz, Pb/Pr: 37.0879 MHz (59.94 Hz) Y: 74.2500 MHz, Pb/Pr: 37.1250 MHz (50 Hz)		
		3.5 MHz, PB/Pr:6.75 MHz 3.5 MHz, PB/Pr: 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.26 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/DVCPR050/DVCPR0/DV:		
Haadraami	48 kHz/16 bit, 4CH  18 dB/20 dB (switchable with menu)		
Headroom:	18 dB/20 dB (SWITC	enable with menu)	
Proxy	LL 2C4/AVC Deselle	- D	
Audio Compression Format:		e Profile, H.264/AVC High Profile	
Approx. Recording Time*:			
(1 GB)	SHQ 2CH MOV:	Approx. 25 min.	
	HQ 2CH MOV:	Approx. 78 min.	
	LOW 2CH MOV:	Approx. 135 min.	
Ihese are reference values for differ depending on the scene		sing the Panasonic products. The recording time ma	
Video Input/Output			
SDI OUT/IN (option):	BNC×1		
	1.5 G HD SDI: SD SDI:	0.8 V [p-p], 75 Ω 0.8 V [p-p], 75 Ω	
MON OUT:	BNC×1 (Can be switched to 1.5 G HD SDI: SD SDI: Composite:	HD SDI/SD SDI/analog composite on SmartUI. 0.8 V [p-p], 75 $\Omega$ 0.8 V [p-p], 75 $\Omega$ 1.0 V [p-p], 75 $\Omega$	
HDMI OUT:	· · · · · · · · · · · · · · · · · · ·	pe A terminal, not compatible with VIERA Link	
Audio Input/Output			
Audio IN:	XLR (3 pin) × 2		
	LINE/MIC (switch s	election) O dBu	
	MIC:	–50 dBu/–60 dBu (menu selection),	
		+48 V ON/OFF (switch selection)	
	MIC IN:	XLR × 1, 5 pin	
MIC IN:	XLR (3 pin) ×1, +48 V supported (selectable menu)		
	-40 dBu/-50 d	dBu/–60 dBu (selectable menu)	
	-40 dBu/-50 d 25 pin, D-SUB, -40	dBu/–60 dBu (selectable menu) ) dBu, 2CH supported	
Audio OUT:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d	JBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV	
Audio OUT: Phones OUT:	-40 dBu/-50 d 25 pin, D-SUB, -4d Pin jack x 2 (CH1, d 3.5 mm diameter s	JBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1	
Wireless IN: Audio OUT: Phones OUT: Speaker:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d	JBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1	
Audio OUT: Phones OUT: Speaker: Other Input/Output	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, re	iBu/-60 dBu (selectable menu)  o dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  bund x 1	
Audio OUT: Phones OUT: Speaker: Other Input/Output GENLOCK IN:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, rd BNCx1, 1.0 V [p-p]	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  pund x 1  I, 75 Ω	
Audio OUT: Phones OUT: Speaker: Other Input/Output GENLOCK IN:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, re BNC×1, 1.0 V [p-p] BNC×1, IN/OUT sw IN: 0.5 V [p-p] to 8	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  bund × 1  I, 75 Ω  itch selection  V [p-p], 10 kΩ	
Audio OUT: Phones OUT: Speaker: Other Input/Output GENLOCK IN: TC IN/OUT:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, re BNC×1, 1.0 V [p-p] BNC×1, IN/OUT sw IN: 0.5 V [p-p] to 8 OUT: 2.0 ±0.5 V [p	IBu/–60 dBu (selectable menu)  o dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  pund x 1  I, 75 Ω  itch selection	
Audio OUT: Phones OUT: Speaker: Other Input/Output GENLOCK IN: TC IN/OUT: DC IN:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, re BNC×1, 1.0 V [p-p] BNC×1, 1N/OUT sw IN: 0.5 V [p-p] to 8 OUT: 2.0 ±0.5 V [p XLR×1, 4 pin, DC 1	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack x1  ound x 1  I, 75 Ω  itch selection  I V [p-p], 10 kΩ  I-p], Low impedance  2 V (DC 11.0 V to 17.0 V)	
Audio OUT: Phones OUT: Speaker: Other Input/Output GENLOCK IN: TC IN/OUT:  DC IN: DC OUT:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, re BNC×1, 1.0 V [p-p] BNC×1, 1N/OUT sw IN: 0.5 V [p-p] to 8 OUT: 2.0 ±0.5 V [p XLR×1, 4 pin, DC 1	IBu/–60 dBu (selectable menu)  o dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  bund × 1  , 75 Ω  itch selection  it V [p-p], 10 kΩ  i-p], Low impedance	
Audio OUT: Phones OUT: Speaker:  Other Input/Output GENLOCK IN: TC IN/OUT:  DC IN: DC OUT: REMOTE:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, r  BNC×1, 1.0 V [p-p] BNC×1, IN/OUT sw IN: 0.5 V [p-p] to 8 OUT: 2.0 ±0.5 V [p XLR×1, 4 pin, DC 1 4 pin, DC 12 V (DC	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack x1  ound x 1  I, 75 Ω  itch selection  I V [p-p], 10 kΩ  I-p], Low impedance  2 V (DC 11.0 V to 17.0 V)	
Audio OUT: Phones OUT: Speaker:  Other Input/Output GENLOCK IN: TC IN/OUT:  DC IN: DC OUT: REMOTE: Lens:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, r  BNC×1, 1.0 V [p-p] BNC×1, IN/OUT sw IN: 0.5 V [p-p] to 8 OUT: 2.0 ±0.5 V [p XLR×1, 4 pin, DC 1 4 pin, DC 12 V (DC 1 10 pin	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack x1  ound x 1  I, 75 Ω  itch selection  I V [p-p], 10 kΩ  I-p], Low impedance  2 V (DC 11.0 V to 17.0 V)	
Audio OUT: Phones OUT: Speaker:  Other Input/Output GENLOCK IN: TC IN/OUT:  DC IN: DC OUT: REMOTE: Lens:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, n BNCx1, 1.0 V [p-p] BNCx1, IN/OUT sw IN: 0.5 V [p-p] to 8 OUT: 2.0 ±0.5 V [p XLRx1, 4 pin, DC 1 4 pin, DC 12 V (DC 1 10 pin	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  pund x 1  I, 75 Ω  itch selection  IV [p-p], 10 kΩ  -p], Low impedance  2 V (DC 11.0 V to 17.0 V)  I1.0 V to 17.0 V), maximum output current 1.5 A	
Audio OUT: Phones OUT: Speaker:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, r  BNC×1, 1.0 V [p-p] BNC×1, IN/OUT sw IN: 0.5 V [p-p] to 8 OUT: 2.0 ±0.5 V [p XLR×1, 4 pin, DC 1 4 pin, DC 12 V (DC 1 10 pin 12 pin 20 pin	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  pund x 1  I, 75 Ω  itch selection  IV [p-p], 10 kΩ  -p], Low impedance  2 V (DC 11.0 V to 17.0 V)  I1.0 V to 17.0 V), maximum output current 1.5 A	
Audio OUT: Phones OUT: Speaker:  Other Input/Output GENLOCK IN: TC IN/OUT:  DC IN: DC OUT: REMOTE: Lens: VF: LAN: USB2.0 (host):	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, d 3.5 mm diameter s 20 mm diameter, n BNCx1, 1.0 V [p-p] BNCx1, IN/OUT sw IN: 0.5 V [p-p] to 8 OUT: 2.0 ±0.5 V [p XLRx1, 4 pin, DC 1 4 pin, DC 12 V (DC 1 10 pin 12 pin 20 pin 100BASE-TX/10BA	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  bund x 1  I, 75 Ω  itch selection  IV [p-p], 10 kΩ  -p], Low impedance  2 V (DC 11.0 V to 17.0 V)  11.0 V to 17.0 V), maximum output current 1.5 A	
Audio OUT: Phones OUT: Speaker:  Other Input/Output GENLOCK IN: TC IN/OUT:  DC IN: DC OUT: REMOTE: Lens: VF: LAN:	-40 dBu/-50 d 25 pin, D-SUB, -40 Pin jack x 2 (CH1, 4 3.5 mm diameter s 20 mm diameter, re  BNCx1, 1.0 V [p-p] BNCx1, 1N/OUT sw IN: 0.5 V [p-p] to & OUT: 2.0 ±0.5 V [p XLRx1, 4 pin, DC 1 4 pin, DC 12 V (DC 1 10 pin 12 pin 20 pin 100BASE-TX/10BAS Type A connector, 4 Type B connector, 4	IBu/–60 dBu (selectable menu)  O dBu, 2CH supported  CH2), Output level: 600 Ω, 316 mV  tereo mini jack ×1  bund x 1  I, 75 Ω  itch selection  IV [p-p], 10 kΩ  -p], Low impedance  2 V (DC 11.0 V to 17.0 V)  11.0 V to 17.0 V), maximum output current 1.5 A	

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

<sup>\*</sup> 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.



### P2 Asset Support System

The free member's service program for P2HD/AVCCAM

#### Extensive information for video professionals



No purchase necessary Information services for members

- The latest technical information
- FAQs, user's voices
- Tool download

#### Always the best performance

Additional content with product registration

- Firmware, utility downloads
- Quick inspection, service history
- Newsletters

#### Contact us through PASS

Direct answers to your inquiries. Sign up now (no purchase necessary)

http://panasonic.biz/sav/pass\_e



content may depend on country/region and model.

\* A maximum 5 year or pre-specified hours of operation from the date of purchase, whichever comes first.

\* Not all repair work is covered by this extended warranty program.

Informative product-related content also available with equipment registration.

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



#### 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/ and click "P2 Support and 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/. For operating requirements and details of other P2 editing software, visit the website of the relevant software manufacturer.

#### **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.

\*"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.

Lebanon

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