

Panasonic
ideas for life

AG-HMC151
Memory Card Camera-Recorder

AVCCAM



* Memory card
not included



Bundled* with
EDIUS Neo 2 Booster
nonlinear editing software

* Limited time offer. The package
model number is AG-HMC151EU.

AVCHD

DOLBY
DIGITAL
STEREO CREATOR

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

LEICA
DICOMAR

SD
HC



AVCCAM 3-Year Warranty Repair Program*

* AG-HMC151 users qualify for a 3-year warranty on repairs.
Visit the website for details: <www.panasonic.biz/sav/pass_e>



High Image Quality and Advanced Functions in an AVCCAM Camcorder with Easy Mobility and Solid- State Reliability

AG-HMC151 features highly-acclaimed functions for the popular AG-DVX100 Series of DV-tape based camcorders to tapeless HD recording. Using the cost-saving AVCHD format to record onto SDHC or SD Memory Card media, the AG-HMC151 produces exceptional images and responds to creative production needs. It also features a 28mm (35mm equivalent) wide-angle lens — widest in a professional camera of this class — and a 1/3 inch 16:9 progressive CCD. It further enhances image quality by adding a higher-quality PH mode to the clean, extended-time recording abilities of the AVCHD format. The AG-HMC151 handles full pixel (1920 x 1080/1280 x 720) 24p, 25p, and 30p progressive recording, and includes cinelike gamma and other versatile functions to meet the special needs of creative image production.



SD Memory Card Recorder: Lower Operating Costs, Better for the Environment

SD Reduces Total Cost of Ownership

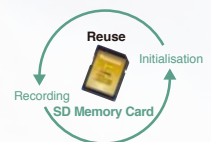
- (1) Faster, easier editing because digitisation is not necessary
- (2) Lower media costs because memory cards are reusable
- (3) Lower maintenance costs because there is no moving mechanism

By reducing editing, media and maintenance costs, AVCCAM can help improve your bottom line. Users can also take advantage of a special 3-year free-repair service program that Panasonic offers for AVCCAM equipment.



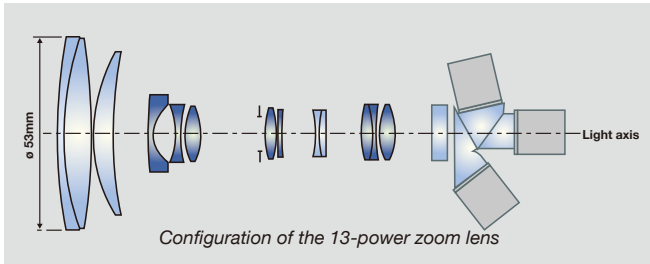
The SD Memory Card Helps Preserve the Environment with Its Reusability and Low Power Consumption

The SDHC/SD Memory Card media for the AVCCAM camcorder is totally free from abrasion and dropout. There is no drive mechanism required, as there is for tape and disc-based recorders, so power consumption is low and size and weight are reduced. Malfunctions are less likely to occur, and there is no need to replace heads or transport components. This translates into lower costs and easier maintenance, greater energy savings, and less waste when the unit is eventually disposed of. All of these features help to conserve the environment.



A Camera Block with the Same Design as P2 HD Broadcast Systems Boosts the Quality of HD Images

28mm Wide-Angle, 13X Zoom Leica Dicomar® HD Lens



The wide-angle zoom lens that became so popular in the HVX200 Series has been downsized, lightened, and further widened in this 13X zoom lens. The new lens structure combines 13 lens elements in 10 groups, with 3 aspherical lenses. The diameter of the front lens element has been reduced from 67 to 53.2 mm, while still achieving a 28mm wide angle (35mm equivalent), the widest of the class.*

The new lens covers most shooting situations without requiring a wide-angle conversion lens. Its minimum object distance (MOD) of about 0.6 meter at the telephoto setting helps to maximize the handheld camcorder's inherent mobility.

The same cam-driven zoom ring that was so popular in previous models ensures accurate zooming. The Leica Dicomar lens incorporates Leica optical technology and know-how throughout. A multi-coating process minimizes flare and ghosting. This results in sharp, crisp, beautifully rendered images with delicate nuances and exceptional shading.

*HD camcorders with integrated lens and 1/3 inch CCD, as of Jan. 2010 (according to a Panasonic survey)

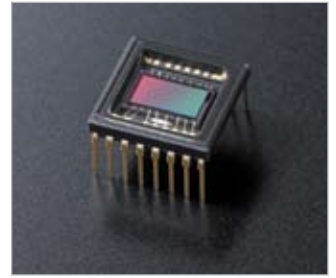


Image of an angle of view equivalent to 32.5 mm

Image of an angle of view equivalent to 28 mm

New Progressive CCD Raises Sensitivity and Lowers Noise and Smear

The 1/3 inch 16:9 progressive CCD on the AG-HMC151 further raises image quality. It combines a significantly improved S/N ratio and better low-light performance than previous models. Backed by a high-performance digital signal processor, the CCD brings higher quality to HD images to meet the demands of broadcasters and high-end video producers.



High-Resolution Native Progressive 1080/50p* Scan

Progressive to interlace conversion, cross conversion and down conversion all start with the 1080/50p scan. That initial 1080p native progressive scan offers the highest level of vertical resolution possible at this level of camera. Keep in mind that the camera does not record this signal but uses it as a basis for all captures. The result is an HD or SD recording with a level of image quality that cannot be matched by electronically processed scans.

* In 50Hz mode.

DSP with 14 Bit A/D Conversion and 19 Bit Processing

The digital signal processor developed for the AG-HMC151's video signals uses 14 bit A/D conversion and 19 bit inner processing to attain unprecedented accuracy. It is from this capture that all other signals are made. The DSP performs a variety of adjustments, including eight types of gamma settings, for each of the R, G and B channels. It also converts the signals to HD or SD format. With a performance equivalent to the processors used in many higher-end HD cameras, this DSP delivers beautiful images in all video formats.



Optical Image Stabilizer (OIS)

Panasonic's advanced OIS dramatically reduces the blurring caused by hand-held camera work. Optical processing with an automatic correction function helps assure consistently clear, sharp images.

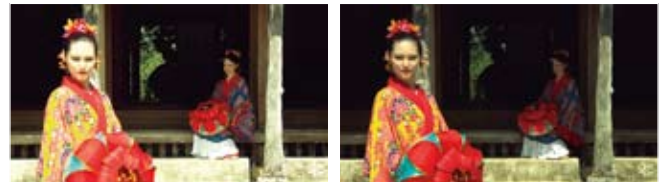
Dynamic Range Stretch (DRS)

In scenes with mixed contrast, such as when panning from indoors to outdoors, the DRS function automatically suppresses blocked shadows and blown highlights. A gamma curve and knee slope are estimated to match the contrast of each pixel, and applied in real time. When dark, bright, and intermediate shades are all contained in the same scene, this produces excellent gradation for each shade and minimizes blocked shadows and blown highlights. The images that result are enhanced by a visually wide dynamic range.



7-Mode Gamma for Richer Gradation

Drawing on technologies developed for the VariCam, Panasonic has equipped the AG-HMC151 with advanced gamma functions that address seven different shooting scenarios and enhance your creative abilities. This includes the cinelike gamma, which produces the characteristic warm tone of film recordings.



AG-HMC151 Gamma Modes

HD NORM:	Suitable for HD recording
LOW:	Works to flatten out a high contrast scene
SD NORM:	Normal setting for SD (this was available in the DVX100 series)
HIGH:	Provides more contrast and color gradation
B.PRESS:	Provides more contrast and blacks in low contrast scenes
CINE-LIKE-D:	The Cine-Like mode shifted to prioritize dynamic range
CINE-LIKE-V:	The Cine-Like mode shifted to prioritize contrast

Advanced Image Adjustments Built-In

- Matrix setting including a Cinelike mode
- Adjustable H detail level, V detail level, detail coring and skin detail
- Adjustable chroma level, chroma phase, color temp and master pedestal
- Knee point settings: Auto, Low, Mid and High
- User files (with sets of camera settings) can be transferred to an SD Memory Card and shared with other cameras



Shown above is a sample of operation styles.

AVCHD

Comparison of HD Recording Formats

	HDV	AVCHD
Pixel (H x V)	1440 x 1080	1920 x 1080
Compression Method	MPEG-2	MPEG-4 AVC/H.264

AVCHD Format for High-Quality, Efficient HD Recording

Panasonic AVCCAM camcorders use the AVCHD format for tapeless recording with high image quality and low bit rates. This format complies with the latest H.264 motion image compression standard, and employs the High Profile standard to improve compression efficiency. Featuring twice the compression efficiency of HDV (MPEG-2), the AG-HMC151 achieves extended HD recording. The following four new technologies make this possible.



Sample comparison: When a flash causes large contrast differences and reduces depth perception, HDV shows considerable block noise, while AVCHD in the PH mode minimize break-up.

MPEG-4 AVC/H.264 Technologies

Intra-Frame Prediction

This process generates predictive pixels based on the adjacent pixels within each frame. It then selects the optimal predictive mode. The generated predictive image is subtracted from the original input image, and the residual data is compressed and recorded at a low bit rate. The entire process is conducted within the frame, so prediction accuracy remains high even with fast-motion images.

Variable Block Size Motion Compensation

In contrast with MPEG-2, in which inter-frame compression based on the correlation between adjacent frames uses fixed blocks of 16 x 16 pixels, AVCHD divides the blocks into multi-sizes as small as 4 x 4 pixels. In this method, it is able to use large blocks to process images that show only slight changes on the screen, and smaller blocks to process images that have considerable change. This raises the

accuracy of motion compensation to boost the quality of fast-motion images while increasing compression efficiency.

Loop Filter Prevents the Propagation of Compression Distortion

Because MPEG-2 uses a decoding image that contains compression-induced block distortion as a reference image for motion compensation, it exhibits residual distortion — even within the same frame — when a large amount of block distortion is generated. MPEG-4 AVC/H.264 detects block distortion in the decoding image and removes it with a context-adaptive filter that functions according to the degree of distortion. This prevents the propagation of block distortion by keeping the reference image clean at all times.



MPEG-2

MPEG-4 AVC/H.264

New CABAC Entropy Encoding

The AVCHD format uses CABAC (Context Adaptive Binary Arithmetic Coding) for its variable-length encoding. Compared with the variable-length encoding of MPEG-2, in which the compression efficiency is greatly affected by subject type, CABAC provides lossless compression with constantly high efficiency and no distortion for virtually all subject types. Because MPEG-2 compresses and converts data according to the standard's fixed conversion rules, the compression efficiency may drop for image types other than those that were considered when the standard was established. In place of fixed conversion rules, CABAC provides the best possible conversion method by constantly optimizing and automatically tracking the image that is being processed, in parallel with the compression process.

MPEG-2 (fixed block size)
Blocks of the same size are used to process parts both with and without motion.

16x16

MPEG-4 AVC/H.264 (variable block size)
Block size is precisely varied to match the size of the moving part contained in each block.

16x16 16x8 8x16 8x8

8x8 8x4 4x8 4x4

Recording Format*1	50 Hz	59.94 Hz	Recording Mode	Image Size (H x V)	Bit Rate (Average)	Max. Recording Time with a 32GB SDHC Memory Card
1080	1080/50i	1080/60i	PH Mode	1920 x 1080 1280 x 720	Approx. 21 Mbps (Average), Max 24Mbps	Approx. 180 minutes
1080 (only PH mode)	1080/25p (over 50i)	1080/30p (over 60i) 1080/24p (Native)*2	HA Mode	1920 x 1080	Approx. 17 Mbps	Approx. 240 minutes
720 (only PH mode)	720/50p 720/25p (over 50p)	720/60p 720/30p (over 60p) 720/24p (Native)*2	HG Mode	1920 x 1080	Approx. 13 Mbps	Approx. 320 minutes
			HE Mode	1440 x 1080	Approx. 6 Mbps	Approx. 720 minutes

*1: 24p=23.98p, 30p=29.97p, 60p=59.94p and 60i=59.94i *2: In the Native mode, AG-HMC151 record only active frames.

*Important notice: Either 50Hz contents or 59.94Hz contents can be recorded on a single SD Memory Card. It's impossible to record both on a single SD Memory card. If the system frequency of the camera is changed, the SD Memory Card need to be changed or formatted with the current SYSTEM FREQ settings. When an SD Memory Card is formatted, all data recorded on the card will be erased and will not be restorable. Save all important data to your computer.



Large-Capacity SDHC Memory Cards Enable Extended-Time Recording

SDHC Memory Cards are available with up to 32 GB of memory. Combined with a maximum data transfer speed of 22 MB/s,* this makes PC data transfers easy and effortless. SDHC Memory Cards also feature excellent durability, with an operating temperature range of -25° to 85°C. Using the high compression efficiency of the AVCHD format, up to 720 minutes** of HD data can be recorded onto a single SDHC Memory Card.

* Data transfer speed varies depending on the usage of SD devices. The speed given here is the maximum speed according to Panasonic specifications.

** In HE (extended time) mode using a 32-GB SDHC Memory Card. A Class 4 or higher SDHC or SD Memory Card is required for PH and HA mode recording. Use a Class 2 or higher SDHC or SD Memory Card for other modes. (Panasonic SDHC Memory Cards are recommended.)

Professional PH Mode — High-End Standard for the AVCHD Format

The AG-HMC151 features the image-enhancing PH mode that Panasonic developed exclusively for AVCCAM camcorders. Designed for professional image production, this mode lets you record 1080p or 720p progressive images in addition to 1080i from the AG-HMC151's 1920 x 1080 full pixel HD images. The multi-slice feature of the PH mode also helps to speed up processing by nonlinear editors that are equipped with multi-core CPUs, by using parallel processing to take full advantage of the CPU power.

Professional-Level Audio with XLR Line/Mic In

The AG-HMC151 comes equipped with a built-in stereo microphone and with XLR-type audio input terminals (2 channels, mic/line switchable, +48V compatible) on the rear panel. You can switch audio channels 1 and 2 separately to either line or front mic input, which is especially useful when recording interviews or narration.

SMPTE Time-Code Generator/Reader

The built-in SMPTE time-code generator/reader lets you select the Drop Frame/Non-Drop Frame (in 59.94Hz mode only) and Free Run/Rec Run modes, preset and regenerate. User bits are also provided.

Fast Scene Searches with Thumbnail View

Image data is recorded as a file for each scene. Thumbnail images and file information are automatically attached to each file to enable smooth, easy confirmation and deletion of files displayed on the LCD monitor.

Versatile Solid-State Recording Functions

- Shot mark: Allows convenient OK or NG marking, and can be added to each clip during or after recording.
- Pre-rec: While in standby mode, you can continuously store, and subsequently record, up to 3 seconds. This helps to ensure that you always get the shot you want.
- Index: Scenes can be marked with up to 100 index flags per clip.
- Rec check: You can check the end of the most recently recorded clip with one-touch ease.
- Last clip delete: Only the most recently recorded clip is deleted with this one-touch function, adding practical convenience to everyday operation. It can be assigned as a User button function if desired.
- Time stamp: The date and time can be stamped onto recorded images. Commonly used for recording evidentiary depositions and procedures.



Time stamp



Compact, Lightweight and Perfectly Balanced

The super-compact AG-HMC151 weighs only 3.7 pounds 1.7 kg. It combines small size and light weight with an ideal balance — the center of gravity is in the hand grip — to bring exceptional comfort and maneuverability to handheld recording. The zoom lens further enhances shooting ease and convenience, letting the AG-HMC151 handle a wide range of applications without requiring a conversion lens.

Superb Mobility for Low-Angle Shots and Interviews

- The upper part of the handle grip contains both the Rec Start/Stop button and a lens zoom control (with three speeds). This design assures easy shooting even at low angles.
- The LCD monitor mirror mode is convenient when shooting interviews.



13X Cam-Driven Optical Zoom and 10X Digital Zoom

The cam-driven (mechanical) manual zoom ring provides the same fast, precise zooming and feeling as cameras with interchangeable lenses. The servo-driven zoom also allows slow zooming. The AG-HMC151 is equipped with a digital zoom that instantly magnifies the image by any of three fixed values — 2X, 5X or 10X. Use it together with the 13X optical zoom lens, and you get super-telephoto magnification equivalent to a 130X zoom, without the drop in light intensity that happens when using a lens extender.



Wide Tele (13X optical zoom) 13X optical zoom X 10X digital zoom (130X)

Manual Focus and Aperture Control

The manual focus ring, which gives you a level of operating ease that approaches an interchangeable lens, can be used to control the aperture too, by switching the Focus Ring (Focus/Iris) selector. You can also add backlight correction or spotlight correction to the auto aperture function.

New Focus Assist Functions

A new focus assist function with HD compatibility has also been added to the AG-HMC151. This is in addition to a center zoom function that enlarges the center of the frame, and a histogram display. You can select from three display modes: center zoom, histogram, or combined center zoom and histogram. And the Push Auto button temporarily activates the AF system for quick focusing in manual mode.



Focus assist (combined mode)

Simplified Waveform and Vectorscope Display

The AG-HMC151 has waveform and vectorscope display functions as well. A single touch of the WFM key displays the waveform and vectors of the captured video signal on the LCD monitor.



Waveform Monitoring(WFM)



VECTOR (Vectorscope)

Scene File Dial

Set this dial for instant recall of an entire set of shooting conditions. Six preset files are provided, and you can change any of the six file names and their settings as desired. You can also store the settings to an SD Memory Card, and load them when desired.

File Description

F1: —	Standard settings
F2: FLUO.	Indoor shooting under fluorescent lights
F3: SPARK	Provides for Extra Color & Detail
F4: B-STR	Enhanced gradations of luminance in low light scenes
F5: CINE V	Cine-Like setting shifted to prioritize contrast
F6: CINE D	Cine-Like setting shifted to prioritize dynamic range

*The recording image format is not affected when the F5 or F6 file is selected. The 25p/24p/30p recording mode must be set separately.



Three User Buttons

The AG-HMC151 allows 11 functions (listed below) to be assigned to the User buttons. The three buttons are arranged in a group for easy use. Assigned functions can be accessed at the touch of a button.

Assignable Functions

Spotlight:	Automatic aperture correction for scenes with spotlights
Backlight:	Automatic aperture correction for scenes with backlighting
Black Fade:	Fade-in/fade-out from and to black
White Fade:	Fade-in/fade-out from and to white
ATW:	ATW (auto-tracking white balance) on/off
ATW Lock:	ATW lock on/off
Gain:	18 dB gain on/off
D. Zoom:	Digital zoom (2X, 5X, 10X)
Index:	Scene indexing
Shot Mark:	Adds shot marks to the clip
Last Clip Delete:	Deletes the recently recorded clip

Gain Selector and ND Filter

The gain selector has three positions: L is fixed at 0 dB; and M and H can be set to 0, 3, 6, 9, or 12 dB. 18dB can also be accessed as a User button function. Three ND filters (1/4 ND, 1/16 ND, and 1/64 ND) are built-in.

Slow-Speed, Synchro or High-Speed Shutter

The shutter speed can be freely selected, from the minimum 1/12* second for Slow-Speed to the maximum 1/2000 second for High-Speed. The Synchro Scan function is ideal for recording images from monitors.

*In 50Hz mode. When set to 59.94Hz mode, minimum slow-shutter is 1/15 second.

HDMI Digital HD Output Terminal

The AG-HMC151 is equipped with a next-generation HDMI (High Definition Multimedia Interface) output terminal for digital transferring of high-quality HD video and audio signals.

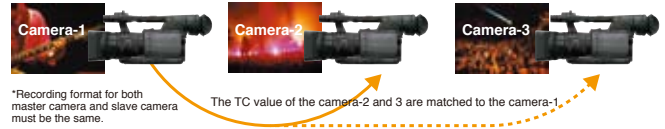
*A separately purchased cable may be required for connecting the AG-HMC151 to a professional monitor.

PC Connection via USB 2.0

The standard USB terminal (Type mini B) allows the AG-HMC151 to connect to a PC in device mode. This lets a Windows PC installed with the provided AVCCAM Viewer software to upload, copy, and write HD video files, as well as transfer them to AVCHD-compatible editing software for HD production.

TC Set and User File Copy with Multi-Cameras

Connecting two AG-HMC151 cameras with a RCA cable allows the slave camera to synchronize with the master camera, which enables time-code-matched editing with multiple cameras for "TC synchro editing."



SD Down-Conversion Output (Composite/Component)

The AG-HMC151 is equipped with both composite (RCA) and component (Mini D4) video outputs, allowing HD images to be down-converted and output as SD images while they are being recorded or played. At the same time, a 16:9 or 4:3 aspect ratio can be selected for side crop, letterbox, or squeeze images. Audio output (RCA, 2 channels) enables a wide variety of applications, such as viewing on an external monitor or SD dubbing.



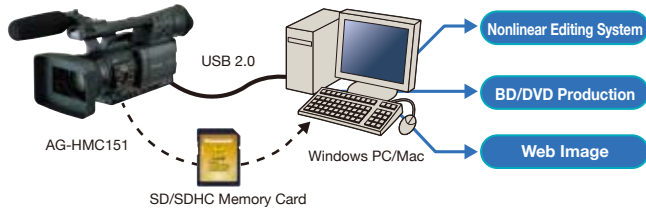
Other Professional Features

- White balance: Three values (A/B/Presets) of white balance with the auto tracking white function.
- Mode check: Displays a list of the camera settings on the viewfinder and monitor.
- Zebra: Select any two levels from among 50% to 105%, in 5% steps.
- Center marker: Provides an accurate numeric display of the brightness at screen center.
- Tally lamps: Provided on the unit's front and rear.
- Remote: Controls zoom, rec, focus and aperture. Allows use of any camera remote controller that is compatible with the AG-DVX100 or AG-HVX200.
- Color bar signal output.



The AVCHD Format Enables Smooth Production and Easy Internet Distribution. Tapeless Design Means Lower Total Costs

Unlike tape, AVCHD files require no digitising*1 and can be directly and quickly transmitted*2 to an HDD in a Windows PC/Mac. This makes it easier to use motion images in new IT applications*3, like content production, Internet distribution and source material archiving. AVCHD's direct editing also saves you time and effort in TV program production. And AVCHD means lower costs for both media and equipment maintenance.



- 1: Editing may require conversion to an intermediate codec, depending on the editing software. The conversion speed will vary depending on the hardware specifications of the Windows PC or Mac, the software used for converting, and the file format being converted.
- *2: Maximum speed: 22 MB/s (Using a Class 10 SDHC Memory Card. Speed depends on the hardware specifications of the Windows PC or Mac). Some computers may not recognise the SDHC Memory Card. If that occurs, use an SDHC Memory Card Reader.
- *3: AVCHD-compatible software is required. The minimum system requirements for using the software must also be satisfied.

Load Data to a Windows PC/Mac or Write It to a Blu-ray Disc with AVCCAM Viewer (Download it for Free)

AVCCAM Viewer *1 for Windows PC/Mac*2 makes it easy to preview AVCCAM files and other AVCHD motion images, still image and meta-data, with very simple operation. Files can be played from an SD Memory Card, Blu-ray Disc, or hard disk, and saved to a PC (hard disk) from an SD Memory Card or Blu-ray Disc. Files can also be copied or deleted, meta-data can be displayed, and data can be written to an SD Memory Card or Blu-ray Disc*3.



[Windows PC]

- CPU: Intel® Core™2 Duo (2.4 GHz or faster)
- OS: Microsoft® Windows7(32bit), Windows Vista® SP1(32bit), Windows® XP SP2 or later (32bit)
- RAM: 1024 MB or more for Windows Vista®, 512 MB or more for Windows® XP (1024 MB or more recommended)

[Mac]

- CPU: Intel® Core™2 Duo 2.6 GHz or faster
- OS: Mac OS X 10.6 (Snow Leopard) / 10.5 (Leopard) / 10.4 (Tiger)
- RAM: 1024 MB or more (2048 MB or more recommended)

- *1: AVCCAM Viewer software can be downloaded for free from the following Panasonic website. PASS registration is required. For details, please visit the following website and click on "Support and Downloading Information."
<<https://eww.pavc.panasonic.co.jp/pro-av/support/desk/e/download.htm>>
- *2: Copying and playing data on Blu-ray Disc (BD-RE Ver3.0) are not supported by Mac OS X 10.4 (Tiger).
- *3: Do not insert a disc [DVD (AVCHD)] produced with the provided HD Writer 2.5E software into a device that does not support the AVCHD standard. If it is inserted into such a device, the disc may not eject. Also, do not play the disc with a device that does not support the AVCHD standard.

Copying onto BD/DVDs with DVD Recorder

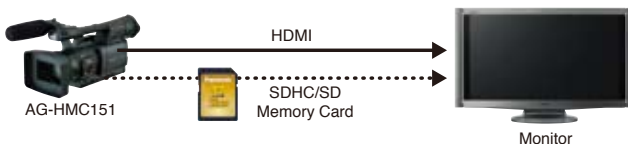
You can easily copy AVCHD data onto the built-in HDD of a Panasonic DVD recorder. You can also copy HD images onto a BD or DVD.



*Needs to be compatible with AVCHD. DVD recorder is not available in some areas.

HD Playback on a Monitor

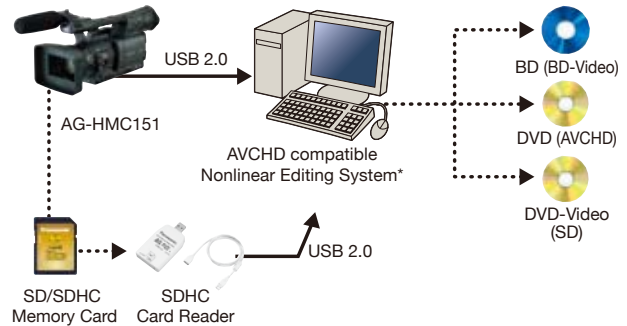
Full-HD images recorded in AVCHD can be previewed on a monitor.



*Needs to be compatible with AVCHD playback. Use an HDMI cable with Type A terminal. (Not compatible with VIERA Link)

AVCHD Nonlinear Editing

Compatibility with existing HD editing environments AVCHD files can be transferred at high speed by using the USB 2.0 interface to connect the AG-HMC151 or an SDHC Memory Card reader to a Windows PC/Mac. This dramatically improves productivity when compared with the time-consuming task of digitising.



*New AVCHD transcoder software is available for free downloading on the following website.
<<https://eww.pavc.panasonic.co.jp/pro-av/support/desk/e/download.htm>>

Bundled*1 with EDIUS Neo 2 Booster Nonlinear Editing Software*2 (Windows PC only)

This software makes it simple and easy to edit full-HD images, and also lets you burn Blu-ray and DVD discs.



Features

- The EDIUS Neo 2 Booster allows for real-time, native editing of AVCHD video.
- Without special hardware, AVCHD codec engine can process more than 3 real-time streams simultaneously. (tested with an Intel® Core™ i7 CPU system)
- It supports Windows® 7.

[PC Minimum System Requirements]

- Intel or AMD CPU 3.0 GHz or faster. (Multiple CPUs or multi-core CPUs are recommended. SSE2 and SSE3 instruction sets supported. Intel Core 2 Duo or faster required for real time AVCHD editing - Core i7 recommended.)
- OS: Microsoft® Windows® 7 (32-bit/64-bit) (Home Premium/Professional/Ultimate) Microsoft® Windows Vista® SP1 (32-bit/64-bit) (Home Basic/Home Premium/Business/Ultimate), Windows® XP SP2 or above (32-bit) (Home/Professional)
- RAM: 1 GB or more (2 GB or more recommended)

- *1: Limited time offer. The package model number is AG-HMC151EU
- *2: Only the EDIUS Neo 2 Booster install disc is bundled with this package. The Bonus Content CD is not included with the bundle version. Also, PASS registration is required to install the software.

For more details, please visit the following website:
<<http://pro-av.panasonic.net/>>
(Starting AVCCAM EDIUS Neo 2 Booster Bundle Sales)
For details about EDIUS Neo 2 Booster, please visit:

<http://www.grassvalley.com/products/edius_neo_2_booster>

Options



VW-VBG260
Battery Pack
• 7.2V 2,640mAh
(Supplied with the AG-HMC151)



VW-VBG6
Battery Pack
• 7.2V 5,800mAh



AG-MC200G
XLR microphone
•Sensitivity: •40 •3.5 dB (0 dB=1V/Pa, 1kHz) •Maximum Input level: 127 dB (1000Hz, Distortion within 1%) •S/N: More than 69 dB



SDHC memory card



BT-LH2550
25.5" HD/SD LCD monitor



BT-LH1760
17" 100Hz/120Hz
HD/SD LCD monitor



BT-LH1710
17" HD/SD LCD monitor



BT-LH900A
8.4" HD/SD LCD monitor



BT-LH80WU
7.9" HD/SD LCD monitor

*An HDMI-DVI-D conversion connector is required to connect the AG-HMC151 to the BT-LH2550/LH1760/LH1710 monitor. For all other monitors, a D-Terminal component (Y/Pb/Pr BNC terminal) conversion cable is required.

Specifications

[GENERAL]

Power Supply:	DC7.2V (using with battery), 7.3V (using with AC adaptor)
Power Consumption:	9.8W (when recording)
Operating Temperature:	0°C to 40°C
Operating Humidity:	10% to 80% (No condensation)
Weight:	Approx. 1.7 kg camcorder only Approx. 1.98 kg including SD memory cards, supplied battery, and microphone
Dimensions:	154 (W) mm × 164 (H) mm × 397 (D) mm, excluding the projection part

[CAMERA]

Pick-up Device:	3CCD (1/3 inch interline transfer type, and progressive modes supported)
Lens:	LEICA DICOMAR lens with optical image stabilizer, motorized/manual mode switching 13× zoom, F1.6 — 3.0 (f=3.9mm to 51mm/35mm equivalent: 28mm to 368mm)
Optical Color Separation:	Prism system
ND Filter:	1/4, 1/16, 1/64
Gain Selection:	50i/50p/60i/60p mode: 0/3/6/9/12/18 dB, (0dB fixed in slow shutter mode) 25p/30p/24p mode: 0/3/6/9/12 dB, (0dB fixed in slow shutter mode)
Shutter Speed: (Preset)	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. 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. 25p mode: 1/25 sec., 1/50 (OFF) sec., 1/60 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec. 30p mode: 1/30 sec., 1/50 (OFF) sec., 1/60 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec. 24p mode: 1/24 sec., 1/50 (OFF) sec., 1/60 sec., 1/120 sec., 1/250 sec., 1/500 sec., 1/1000 sec.
Shutter Speed: (Synchro Scan)	50i/50p mode: 1/50.0 sec. to 1/248.9 sec. 60i/60p mode: 1/60.0 sec. to 1/249.8 sec. 25p mode: 1/25.0 sec. to 1/248.9 sec. 30p mode: 1/30.0 sec. to 1/249.8 sec. 24p mode: 1/24.0 sec. to 1/249.8 sec.
Slow Shutter Speed:	50i/50p mode: 1/12 sec. and 1/25 sec. 25p mode: 1/12 sec. 60i/60p mode: 1/15 sec. and 1/30 sec. 30p mode: 1/15 sec.
Minimum Luminance:	3 lx (when F1.6, 12dB of gain and 1/25 or 1/24 sec. of shutter speed)
Digital Zoom:	2x/5x/10x (in 1080/50i, 720/50p, 1080/60i or 720/60p video format)
Filter Diameter:	72 mm

[Recording]

Recording Format:	AVCHD
Compression Method:	MPEG-4 AVC/H.264
Recording Media*:	SD Memory Card : 512MB, 1GB, 2GB (FAT12, FAT16) SDHC Memory Card : 4GB, 6GB, 8GB, 12GB, 16GB, 32GB (FAT32)
Recording Video Format: (50 Hz mode)	PH mode: 1080/50i, 1080/25p (over 50i), 720/50p and 720/25p (over 50p) HA, HG and HE mode: 1080/50i only
Recording Video Format: (59.94 Hz mode)	PH mode: 1080/60i, 1080/30p (over 60i), 1080/24p (native), 720/60p, 720/30p (over 60p) and 720/24p (native) HA, HG and HE mode: 1080/60i only
Transmission Rate:	PH mode: approx. 21 Mbps (VBR, max 24 Mbps) HA mode: approx. 17 Mbps (VBR) HG mode: approx. 13 Mbps (VBR) HE mode: approx. 6 Mbps (VBR)

[Video System]

Video Signals:	1080/50i, 720/50p, 1080/60i, 720/60p
HDMI Output:	HDMI × 1, 1080/50i, 720/50p, 1080/60i, 720/60p, 480/60p and 576/50i (Not compatible with VIERA Link)
Component Output:	Mini-D × 1, Y: 1.0 Vp-p, 75 Ω, Pb/Pr: 0.7 Vp-p, 75 Ω
Composite Output:	Pin jack × 1, 1.0 Vp-p, 75 Ω

[Audio System]

Compression Method:	Recording/Playback: Dolby Digital/2 ch
Sampling Frequency:	48 kHz
Quantization:	16 bit
Compression Bit-Rate:	PH mode: 2 CH 384 kbps, HA, HG and HE mode: 2 CH 256 kbps

[Audio IN/OUT]

XLR Input:	XLR (3 pins) × 2 (INPUT1, INPUT2), LINE/MIC selectable, High impedance LINE: 0 dBu, MIC: -50 dBu/-60 dBu (selectable in menu)
Internal Microphone:	Stereo microphone
Line Output:	Pin jack × 2 (CH1, CH2), Output: 316 mV, 600 Ω
HDMI Output:	2 ch (Linear PCM), 5.1 ch
Headphone:	Stereo mini jack (3.5 mm diameter) × 1
Built-in Speaker:	20 mm (round) × 1

[Other Connectors]

USB:	Type mini B connector (compliant with USB ver. 2.0)
Camera Remote:	Super Mini jack (2.5mm diameter) × 1, for zoom and rec start/stop operations Mini jack (3.5mm diameter) × 1, for focus and iris controls
TC PRESET IN/OUT : (also used for VIDEO OUT)	IN: 1.0 to 4.0 Vp-p, 10 kΩ OUT: 2.0±0.5 Vp-p, low impedance

[Monitor]

LCD Monitor:	3.5 inches, LCD color monitor, 210,000 pixels
Viewfinder:	0.44 inches, LCD color viewfinder, 235,000 pixels

[Standard Accessories]

AC adapter/charger, 2640mAh battery pack, AC cord, DC cord, Wireless remote controller with button-type battery, Microphone holder, Eye cup, Shoulder Belt, Component video cable, PIN-BNC conversion plugs, Ferrite core, Binder, CD-ROM
The following accessories are attached to the unit. Lens hood cap and INPUT 1/2 terminal cover

*SD/SDHC Memory card (8MB to 32GB) can be used for storing/reading scene file and user file, and reading metadata.
Weight and dimensions shown are approximate. Specifications are subject to change without notice.

P2 Asset Support System The member's service program

Providing necessary information when you need it

P2 Asset Support System assists your P2HD use by providing extended warranty repairs & various technical information (update notices, operation guides, etc.) upon registration.

Free registration, no membership fees

3-year extended warranty repairs

Exclusive offer for P2HD !

Maximum 3-year extended warranty repairs are applied for P2HD models after registration.

Several other services are also provided to members.



Latest news only for you

In the member's web site, information is selected and presented for your models only. To be alerted to new firmware information and other releases, an email newsletter can be subscribed to.

Document library

You can filter through and find various technical information (operation guides, technical descriptions, etc.) quickly from the library.

Manage your equipment

You can easily know the update status and past service history of each unit, and can leave comments in free text as memos about your equipment.

1st year	2nd year	3rd year
Basic warranty*1	AVCCAM Extended warranty repair**2	

* Not all models are eligible for extended warranty coverage.

* Please note that this extended warranty is not available in some countries/region see website below for the details.

*1: The basic warranty period may vary depending on the country/region see enclosed warranty card for warranty coverage.

*2: Not all repair work is covered by this extended warranty see enclosed warranty card for warranty coverage.

The maximum warranty period may be adjusted depending on the number of hours the device has been used.

Details and user registration: http://panasonic.biz/sav/pass_e

Please refer to the latest Non-linear Compatibility Information, AVCHD Support and Download and Service Information, etc. at panasonic web site.



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

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