

Panasonic

AG-DVC80

Mini-DV Camera-Recorder (NTSC)



LEICA
DICOMAR

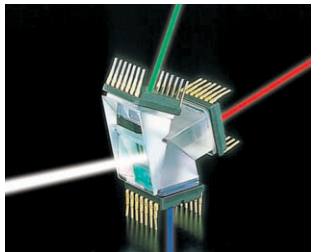
Mini DV Digital
Video
Cassette



The Easy-Handling DV Camera for Active Field Acquisition

Built to meet the demands of fast-moving fieldwork, the AG-DVC80 packs the versatility, imaging and operating ease of bulkier and heavier replaceable-lens cameras into a compact, lightweight, quick-handling unit of outstanding mobility. It offers the highest level of sensitivity in its class, with high S/N and wide-screen versatility, assuring you of superb, broadcast-quality pictures. The rugged diecast magnesium chassis and professional DV mechanism stand up to the challenges of the field to deliver excellent long-term reliability. And when it comes to mobility, the AG-DVC80 truly excels, with a cam-driven zoom and other manual controls, plus a design that enables both low- and high-angle shooting, and a ready-to-roll weight of only 4 lbs (1.8 kg)*. It also provides plenty of system interface functionality, including XLR audio input, SMPTE time code recording and an IEEE1394 interface. This handy DV camera-recorder may not make every field job a picnic, but it'll sure take you a long way in that direction.

*Camera-recorder with DV cassette tape and supplied batteries. Shown with optional microphone.



410,000-Pixel, 3CCD Image System Provides F11 Sensitivity for Superior Image Quality

Panasonic designed the AG-DVC80 to deliver the highest sensitivity and picture quality in its class. At its heart is a 3CCD RGB system comprising three 1/3-inch, 410,000-pixel progressive CCDs developed

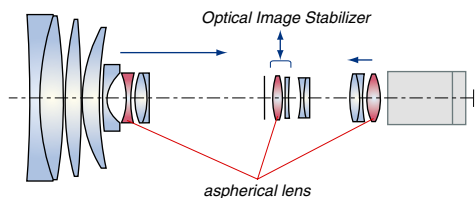
especially for broadcast and professional applications. The new on-chip lens design achieves high F11 sensitivity, allowing the AG-DVC80 to record in light as dim as below three lux, for example, in nighttime news gathering. Picture quality is outstanding, with a high S/N ratio that means less noise in darker parts of the image and low smear that allows shooting in sunlight or under bright spotlights.

Wide-Angle/Zoom Lens Answers Professional Needs

Previous handheld video cameras lacked sufficient wide-angle capabilities for professional applications. To make up for this shortcoming, videographers often had to carry a big, heavy wide-angle conversion lens. The AG-DVC80 eliminates this problem with a newly developed zoom lens that also covers the wide-angle range that professionals need most. Extending all the way to 4.5mm (equivalent to 32.5mm on a 35mm lens), the lens captures wide-angle shots for news close-ups, recording in small rooms, and self-recorded interviews. And because there's no need to carry around a wide-angle conversion lens, you get the full benefit of the handheld camera's outstanding mobility.

Superb Image Rendering with the Leica Dicomar™ Lens

The AG-DVC80's Leica Dicomar™ lens incorporates the optical technology of Leica Camera AG, creator of many world-renowned cameras and lenses. This fine lens system employs 15 lens elements in 11 groups, including three aspherical lenses, to render sharp, crisp images with subtle nuances and remarkable shading. A Leica multi-coating process is also applied to the lenses to reduce flare and ghosts. The Leica Dicomar™ lens is manufactured under a quality control process authorized by Leica Camera AG. It meets the strict Leica quality standards for resolution, contrast and other characteristics.



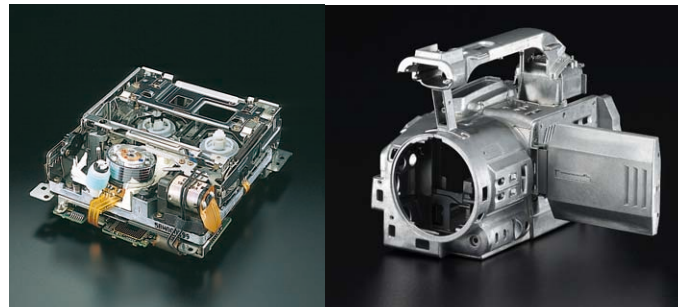
*Leica is a registered trademark of Leica Microsystems IR GmbH. Dicomar is a registered trademark of Leica Microsystems IR GmbH.

Optical Image Stabilizer Compensates for Hand Shaking

The AG-DVC80's OIS compensates for the slight hand shaking that occurs when shooting with a handheld camera. A gyrosensor detects hand shake and sends signals to a linear motor, which adjusts the lens to compensate. Because this process takes place prior to the CCD image capture rather than in the downstream electronic processing, the OIS virtually eliminates any effect of hand shake on resolution and screen angle. The OIS is also extremely effective in dim lighting and when zooming. Because the processing is done in real-time at 480 operations/sec, there are virtually no unnatural afterimages or visible interpolation effects.

Fast, Smooth, Cam-Driven Manual Zoom

The AG-DVC80 is the first DV handheld camera to be equipped with the cam-driven manual zoom ring found on most professional cameras with interchangeable lenses. The AG-DVC80's knob configuration and tactile sensitivity replicate the familiar look and feel of a professional lens. Its lens provides quick, nimble zooming with a multi-speed servo-driven zoom plus three speed handle zoom. Select the zoom method that best suits the task at hand.



Professional-Grade Chassis and DV Mechanism

The AG-DVC80 chassis is diecast from a durable magnesium alloy, to protect the mechanism and circuitry from the rigors of the field and ensure optimal reliability. Developed specifically for the AG-DVC80, the DV mechanism itself is far more advanced and reliable than those used in home DV cameras and recorders. Its sturdy loading system allows quick tape changes. And to minimize dropout and head clogging, it incorporates the same forward cleaning head and automatic head cleaning function found in our DVCPRO models.

Manual/Auto Focus

Enjoy fast, sharp focusing either manually or automatically. In manual mode, the focus ring provides the same responsive control as conventional professional cameras with interchangeable lenses. In auto mode you get the kind of sharp, instant focusing needed in news gathering or when shooting at a high or low angle. When set to the infinity position, the focal distance is immediately prepared for the next manual focus. Pressing the Push Auto button while in manual mode temporarily activates auto focus.

Scene File Dial for Quick, Easy Camera Setup

Set this dial for any of a variety of shooting conditions, and later you can instantly retrieve the settings. Six files are provided (F1 to F6). You can freely change any of the six file names and their settings.

User1/User2 Buttons for Customized Operation

The AG-DVC80 provides two user buttons, each of which can be assigned any one of the nine functions described below. The assigned functions can then be accessed at the touch of a button. This lets you customize the AG-DVC80 for quicker, easier, more versatile operation.

• Assignable Functions

COLOR BAR	Display/hide the SMPTE color bar
SPOTLIGHT	Turn auto iris spotlight correction ON/OFF
BACKLIGHT	Turn auto iris backlight correction ON/OFF
BLACKFADE	Fade out to a black screen (linked with audio)
WHITEFADE	Fade out to a white screen (linked with audio)
MODECHECK	Display camera settings in viewfinder/monitor
ATW	Turn auto tracking white balance function ON/OFF
ATWLOCK	Lock/unlock white balance in ATW operation
GAIN 18dB	Switch the gain to +18 dB

3-Position White Balance with Auto Tracking White Function

One press of the AWB button is all it takes to adjust the white balance and black balance. There are three white balance values to select from: one that's preset, and two (A, B) that you can set and save in memory. The auto tracking white balance (ATW) function can also be assigned to any of the three positions. The ATW mode supports fast, active shooting by adjusting the white balance in real-time as lighting conditions change.

Auto Button for Instant, Easy Shooting

Just press the Auto button to turn on Auto Iris, Auto Gain, Auto Tracking White Balance, and Auto Focus — and you're quickly ready to shoot. You can also customize the Auto button by removing functions and setting the gain to any value desired. With this new Auto function, the AG-DVC80 gives you the best of both worlds — the speed and ease of automatic operation, and the precision of manual control.

Gain, Iris, Shutter Speed, ND Filter

- **Gain:** Increases gain up to 18 dB. The selector has three positions: L is fixed at 0 dB; M and H can be set to 0, +3, +6, +9, or +12 dB.
- **Iris:** Allows smooth, gradual manual or auto iris adjustment. The iris dial allows adjustment even when in Auto mode. Either backlight compensation or spotlight compensation can be added to the auto iris adjustment.
- **Shutter:** Maximum shutter speed is 1/2,000 sec. When a computer monitor is being recorded, a synchro scan function matches the shutter speed to the monitor to help eliminate the moving bar.
- **ND filter:** Two ND filters (1/8 ND, 1/64 ND) are built-in and easily accessible.

New Lightweight Design with Balanced Grip

The AG-DVC80 introduces a new design that ends the contradiction between a compact, lightweight body and a stable, secure hold. The center of balance is located precisely at the handgrip. Because there's no need for a wide-angle conversion lens, the weight balance is ideal for comfortable shooting. The AG-DVC80's short body and light weight — it weighs just 4 lb (1.8 kg) in operating condition* — means free, easy maneuverability. Plus, the low-center-of-gravity design and new skeleton lens hood greatly improve forward vision.

*Camera-recorder with DV cassette tape and supplied battery.

Large Audio Dials and Flexible Input Selection

The AG-DVC80 has the same kind of large level-adjustment dials as DVCPRO camera-recorders. This practical new design incorporates professional operating features, such as blind touch and easy visibility, that have been refined over years of use on location. A switch lets you select built-in mic, input 1, or input 2 for the audio input of both left and right channels. Input mic level (-50 dB/-60dB) can be selected from the menu while an ALC circuit helps keep peaks from distorting.

Large Viewfinder and LCD Monitor

The large-diameter viewfinder tilts upward a full 100°. You can move the viewfinder away from your eye and still see it clearly, making it easy to adopt a comfortable shooting stance with unobstructed forward vision. The 3.5-inch color LCD shows your subject in sharp, vivid detail and greatly simplifies menu settings. It rotates a full 270° for shooting at a wide variety of angles and easy self-recording.

XLR Audio Input with +48-V Phantom Power Supply

In addition to built-in stereo microphones, the AG-DVC80 is equipped with two XLR audio input terminals with a 48-V phantom power supply for broadcast use. The terminals are positioned low on the camera to minimize the possibility of the cables being snagged when a hand mic is in use. Both input 1 and input 2 can be switched between line and mic.



Recessed Trigger and Zoom Control on Upper Handle Grip

In addition to the lens grip, the upper part of the handle grip contains both the Rec Start/Stop button and a lens zoom control. This design assures easy shooting even at low angles or when using a tripod. The zoom speed can be set to any of three speeds or off.

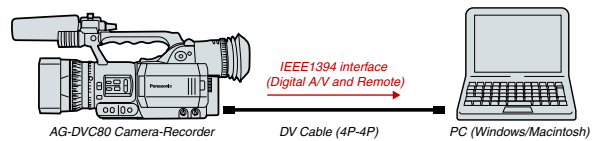


Built-In SMPTE Time Code Generator/Reader

The AG-DVC80 records an SMPTE-compliant VTC onto the sub-code area of the tape. Select from DF/NDF and Free Run/Rec Run modes, and use preset or regen. User bits (UB) are also provided, letting you record your choice of date, time, TC value, frame rate, or user data.

IEEE 1394 DV Interface

The AG-DVC80 comes equipped with an IEEE 1394-compliant 4-pin DV terminal that makes it easy to upload data to a PC and dub onto a DV recorder.



Support Functions for Greater Convenience

- **End search:** Automatically searches for the last recorded portion of the tape. Convenient when preparing to start the next recording.
- **Zebra display:** Shows you an overexposure warning on the EVF and LCD monitor. Select any level from 80%, 85%, 90%, 95% and 100%.
- **Rec check:** Plays back the last portion of a recorded passage for easy checking.
- **Index:** Enables marking while recording. Convenient for searching after recording.
- **Tally lamps:** Provided on the unit's front and rear menu switchable.
- **Audio dubbing:** Allows voice-over recording on a recorded tape via an external mic.
- **Line recording:** Lets you record a video signal input from an external source.
- **Unlike consumer DV camcorders,** the audio is locked to the video with a PLL circuit.



Switches and connectors are arranged to allow easy use of the AG-DVC80's many functions, and a host of bundled accessories and available options prepare it for action just about anywhere.



Front view (with lens hood removed)



Rear view (with terminal cover removed)



Side view (with LCD monitor open)



Side view (with terminal cover removed)

AG-DVC80 Standard Accessories



Optional Accessories



AG-DVC80 Specifications

[GENERAL]

Supply Voltage:	DC 7.2/7.9 V
Power Consumption:	6.8 W (when viewfinder is used) 7.8 W (when LCD monitor is used) 9.2 W (max.)
Operating Temperature:	32°F to +104°F (0°C to +40°C)
Operating Humidity:	10% to 85% (no condensation)
Weight:	3.652 lb (1.66 kg) 4.034 lb (1.83 kg) with battery and cassette
Dimensions (WxHxD):	5-1/2" x 6-5/16" x 14-3/8" (139 x 160 x 364 mm)

[CAMERA]

Pick-up Device:	1/3-inch interline transfer type CCD x 3
Picture Elements:	Total: 410,000 pixels Effective: 380,000 pixels (horizontal pixel shift system)
Lens:	Leica DICOMAR lens with optical image stabilizer, motorized/manual mode switching, 10x zoom F 1.6 (f = 4.5 to 45 mm) (35 mm equivalent: 32.5 to 325 mm)
Filter Diameter:	72 mm
Optical Color Separation:	Prism system
Optical Filter:	ND Filters, 1/8ND, 1/64ND
Gain Selection:	0, +3, +6, +9, +12, +18 dB
Shooting Mode:	60i (525i) interlaced fields
Preset Shutter Speeds:	1/60 (OFF), 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 sec.
Synchro Scan Shutter:	1/60.3 to 1/250.0 sec.
Sensitivity:	F11.0 at 2000 lux
Minimum Luminance:	3 lux (F 1.6, 18 dB gain, 50 IRE video output)

[VTR]

Recorded Audio Signals:	PCM digital recording 16 bits: 48 kHz/2 channels, 12 bits: 32 kHz/4 channels
Recording Tracks:	Digital video, audio signals: helical track Time code: helical track (sub-code area)
Tape Speed:	SP mode: 18.812 mm/sec., LP mode: 12.555 mm/sec.
Recording Time:	SP mode: 60 minutes, LP mode: 90 minutes (when AY-DVM63 is used)
Tape Used:	6.35 mm wide metal tape
FF/Rew Time:	Approx. 85 sec. (when AY-DVM60 is used)

[VIDEO]

Sampling Frequencies:	Y: 13.5 MHz, PB/PR: 3.375 MHz
Quantizing:	8 bits
Video Compression System:	DCT + variable length code
Error Correction:	Reed-Solomon product code

[AUDIO]

Sampling Frequency:	48 kHz/32 kHz
Quantizing:	16 bits/12 bits
Frequency Characteristics:	20 Hz to 20 kHz
Wow & Flutter:	Below measurable limits

[CONNECTORS]

VIDEO IN/OUT:	RCA x 1, analog composite input/output 1.0 Vp-p, 75Ω (input/output automatically switched)
S-VIDEO IN/OUT:	DIN 4 pin x 1, Y/C separate signal input/output Y: 1.0 Vp-p, C: 0.286 Vp-p, 75Ω (input/output automatically switched)
AUDIO IN/OUT:	RCA x 2 (CH1, CH2) Input: 316 mV, high impedance Output: 316 mV, 600Ω (input/output automatically switched)
DV:	4-pin, digital input/output IEEE 1394 standard
MIC/LINE INPUT:	XLR (3 pins) x 2 (CH1, CH2) LINE/MIC switching, high impedance LINE: 0 dBu MIC: -50 dBu/+60 dBu (menu selection)
DC INPUT:	7.9 V
PHONES:	Stereo (3.5 mm diameter), 77 mV, 32Ω
CAM REMOTE:	Mini jack (2.5 mm diameter)

[EQUIPMENT]

LCD Monitor:	3.5-inch LCD color monitor, 200,000 pixels
Viewfinder:	0.44-inch LCD color viewfinder, 180,000 pixels
Internal Microphone:	Stereo microphone
Internal Speaker:	20mm round shape, volume - or +

[AC ADAPTER]

Power Source:	110/120/220/240 V AC, 50/60 Hz
Power Consumption:	18 W
Weight:	0.35 lb (0.16 kg)
Dimensions (WxHxD):	2-13/16" x 1-13/16" x 4-5/8" (70 x 44.5 x 116 mm)

*The specifications given above were measured by playing back tapes recorded by the AG-DVC80 on standard VTRs. Weight and dimensions shown are approximate. Specifications are subject to change without notice.

Mini DV Cassette Tape



AY-DVM63PQ	Professional Series Tape
AY-DVM63MQ	Master Series Tape
AY-DVMCL	Cleaning tape

*Please do not use 80 minutes miniDV cassette tapes

Panasonic

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