

Panasonic



35






VARICAM

35


4K
PROFESSIONAL

Create Emotion

The VariCam® 35 — Changing the Way Emotion is Created

The VariCam line of cameras has been used on a wide variety of movies, commercials, and TV programs, and is renowned for its color reproduction, look, and for bringing progressive workflows to the production industry.

Now the VariCam 35 has arrived. Drawing on the traditions of the original VariCam line, VariCam 35 helps its users create emotion with its amazing latitude, wide color gamut, and 4K resolution. It also revolutionizes workflow with the addition of dual-codec recording, in-camera color grading, and a modular design.

The feature-rich VariCam 35 is ready to create emotion for your next project.



Cinematic Images at 4K Resolution, and Revolutionary VariCam Workflows



4K Images with the VariCam Look

- Newly developed super35mm sensor ideal for 4K (4096 x 2160) and UHD (3840 x 2160) shooting.
- Wide dynamic range 14+ stops of latitude.
- Dual native ISO at ISO 800 and 5000 keeping S/N and dynamic range.
- V-Gamut: wide color gamut.
- V-Log: tuned for emotional images.
- V-709: cinematic tuned Rec 709.
- Built-in ND filters (0.6ND, 1.2ND, 1.8ND, CLEAR).
- Built-in low-pass filter tuned for 4K and UV/IR-cut filter.

Revolutionary Dailies in Camera

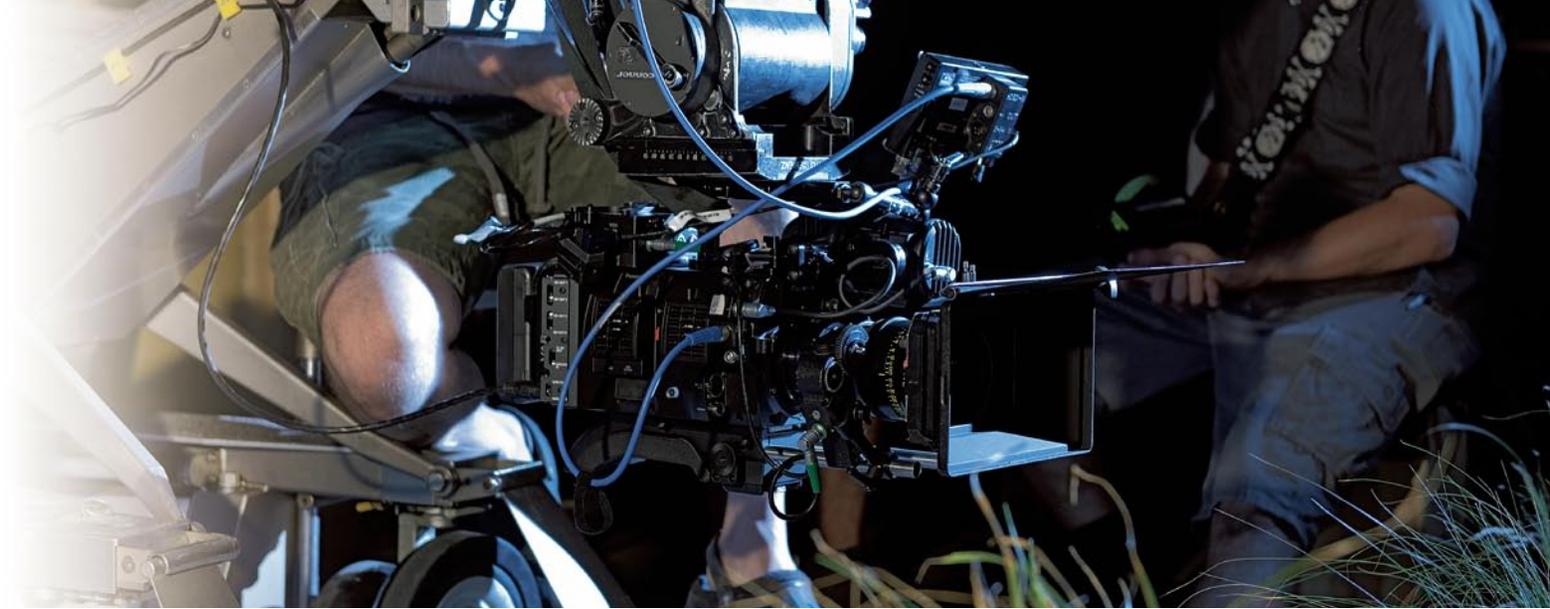
- **In-camera Color Grading**
Color grading function (CDL/3D LUT) allows on-set color grading using control panel or 3rd party software. CDL/3D LUT files is recorded together with clip.
- **Double Recorder**
Records ungraded 4K master with grading information and graded HD images simultaneously.
- **Dual Codec Recording**
Simultaneously records in two different formats, codecs and selectable from V-Log/V-709/Grading.

Multiple Codec, Multiple Outputs

- Supports AVC-Intra4K for 4K and UHD recording.
- Supports AVC-Intra2K for 2K recording.
- AVC-Intra100, AVC-Intra200*1 and Apple ProRes for HD recording.
- Records 24 bit/48 kHz sampling, four channel high-quality digital audio and metadata.
- Variable frame rate recording in the range of 1 fps to 120 fps.
- Allows cable-less docking of a Codex V-RAW Recorder.*1*2
- Provided with 3G-SDI 4K QUAD (BNC x 4) output, Monitor output x 3 and AUDIO (XLR x 2) input.



*1: To be supported by firmware upgrade. For details, please visit Panasonic website. (<http://pro-av.panasonic.net/>) *2: Codex V-RAW Recorder is the product of Codex. ProRes is licensed from Apple Inc. Apple ProRes codec from Atomos under license. Atomos is trademark and copyright of Atomos Global Pty. Ltd. The use of DCF Technologies is under license from Multi-Format, Inc.



Large-diameter EVF



Detachable control panel



Installation of control panel



Flat top body and handle with screw holes

Newly Developed EVF and Control Panel

EVF (AU-VCVF1G)

- High-resolution 0.7 type (1280 x 720 pixels) OLED panel shows a wide field angle with viewfinder magnification of 0.78x.
- Large-diameter 38 mm eyepiece lens offer comfortable viewing with minimum vignetting.
- Optical zoom and advanced focus assist function.

Control Panel (on AU-VREC1G)

- Detachable control panel for enhanced camera flexibility.
- 3.5 type LCD display panel for live preview.
- Direct access to frequently used menu.

Modularity

- Modular structure with independent camera head and recorder module. Dockable camera head is interchangeable with the VariCam HS.
- Flat top and bottom panels for easy installation of various plates.
- Mounting holes provided on both sides and handle for convenient mounting of accessories.
- Shoulder mount module (AU-VSHL1G) can be moved in a range of 110 mm in the front and back direction to accommodate a diversity of lenses.

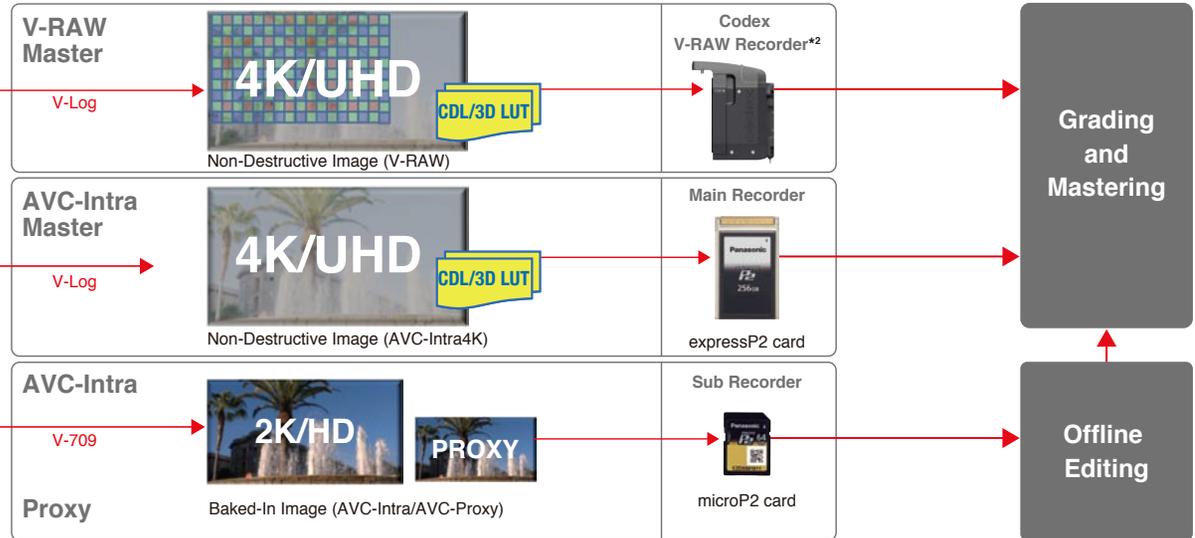
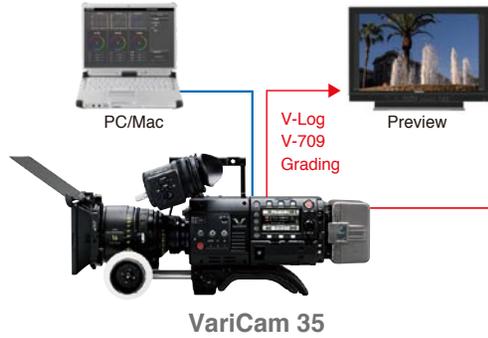
Durability and Reliability

- The lens mount section is made of stainless steel, and designed to prevent flange back deviation due to temperature changes.
- Body made of strong and rigid aluminum alloy.
- Cooling system designed for effective dissipation of heat from the circuitry section.

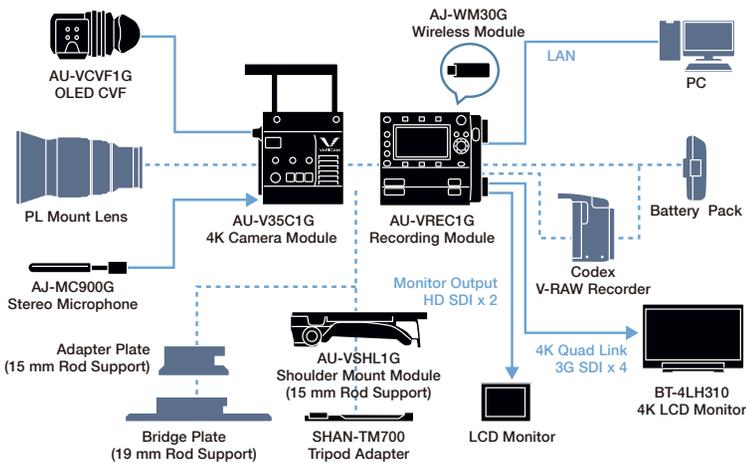
VARICAM 35 WORKFLOW*1

In Camera Color Grading

Remote operation by control panel or 3rd party software



VARICAM 35 MODULAR SYSTEM



AU-V35C1G
4K Camera Module



AU-V23HS1G
2/3 type HD Camera Module



AU-VREC1G
Recording Module



AU-VCVF1G
Electronic HD Color View Finder



AU-VSHL1G
Shoulder Mount Module



AJ-WM30G
Wireless Module



AU-XP0256AG
Memory Card "expressP2 card" (256 GB model)



AU-XPD1
Memory Card Drive "expressP2 drive"

*1: This chart shows an example of the workflow using VariCam 35. *2: Codex V-RAW Recorder is a product of Codex. This will be available in the near future and supported by VariCam 35 by firmware upgrade. For details, please visit Panasonic website (<http://pro-av.panasonic.net/>).

VARICAM 35 SPECIFICATIONS*1

As of February 2015

General (Combination of AU-V35C1G and AU-VREC1G)

Power:	DC 12 V (11.0 V – 17.0 V)
Power Consumption:	69 W (Body only) 99 W (With all optional accessories connected and maximum power supplied from each output terminal)
Operating Temperature:	0°C to 40°C
Operating Humidity:	10% to 85% (Relative humidity)
Storage Temperature:	–20°C to 60°C
Weight:	Approx. 5.0 kg (Body only)
Dimensions (W x H x D) :	179 mm x 230.5 mm x 347 mm (7-1/16 inches x 9-1/16 inches x 13 -21/32 inches) (Body only, excluding protrusion)

Camera Module (AU-V35C1G)

Pickup Device:	super35 mm MOS 8.9 million pixels
Lens Mount:	35 mm PL mount
Optical Filter:	ND filter: 1: CLEAR, 2: 0.6 ND 3: 1.2 ND, 4: 1.8 ND
Gain Settings:	[ISO] mode: ISO 800 to 12800 [dB] mode: 0 to 24 dB (3 dB step)
Shutter speed:	[deg] mode: 1.0 to 358 deg (0.5 deg step) [sec] mode: 1/24 to 1/250 (When 24p mode)

Recording Module (AU-VREC1G) When used with AU-V35C1G Memory Card Recorder

Recording Media:	expressP2 card, P2 card, microP2 card
Recording Resolution:	4096 x 2160, 3840 x 2160, 2048 x 1080, 1920 x 1080
Recording Framerate:	Maximum 4K/UHD 100p/120p, HD 100p/120p
System Frequency:	59.94p, 50p, 29.97p, 25p, 24p, 23.98p
Recording Format:	Main Recorder: AVC-Intra4K444, AVC-Intra4K422, AVC-Intra4K-LT, AVC-Intra2K422, AVC-Intra100, ProRes 422 HQ Sub Recorder: AVC-Intra2K422, AVC-Intra100, AVC-LongG50, AVC-LongG25
Recording Video Signal:	4096 x 2160/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 3840 x 2160/59.94p, 50p, 29.97p, 25p, 23.98p 2048 x 1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 1920 x 1080/59.94p, 50p, 29.97p, 25p, 23.98p
Recording Time: (Main Codec)	When expressP2 card 256 GB is used*2 Approx. 45 min. (AVC-Intra4K444, 24p) Approx. 90 min. (AVC-Intra4K422, VFR OFF, 24p) Approx. 36 min. (AVC-Intra4K422, VFR ON, 50p/59.94p) Approx. 32 min. (AVC-Intra4K-LT VFR ON, 100fps/120fps) Approx. 64 min. (AVC-Intra100, VFR ON, 100fps/120fps) Approx. 60 min. (ProRes 422 HQ, VFR ON, 60fps)
Recording Time: (Sub Codec)	When microP2 card 64 GB is used*2 Approx. 64 min. (AVC-Intra2K422, 25p/29.97p) Approx. 64 min. (AVC-Intra100, 25p/29.97p) Approx. 128 min. (AVC-LongG50, 25p/29.97p) Approx. 256 min. (AVC-LongG25, 25p/29.97p)

Digital Video

Quantizing:	12 bit(AVC-Intra4K444), 10 bit (Other than AVC-Intra4K444)
Video Compression Format:	AVC-Intra4K444, AVC-Intra4K422, AVC-Intra4K-LT, AVC-Intra2K422, AVC-Intra100: MPEG-4 AVC/H.264 Intra Profile AVC LongG50, AVC LongG25: MPEG-4 AVC/H.264 ProRes 422 HQ

Digital Audio

Recording Audio Signal:	48 kHz/24 bit, 4 ch Head room 18 dB/20 dB menu switchable
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Proxy

File Format:	MOV
Video Compression Format:	H.264/AVC High Profile
Audio Compression Format:	LPCM
Recording Time (1 GB)*2:	Approx. 25 min.

Video Input/Output

SDI OUT:	HD (1.5G)/3G-SDI, 0.8 V[p-p], 75 Ω (1 set, 4 pieces)
MON OUT1:	HD (1.5G)/3G-SDI, 0.8 V[p-p], 75 Ω
MON OUT2:	HD (1.5G)/3G-SDI, 0.8 V[p-p], 75 Ω
VF SDI:	HD (1.5G)/3G-SDI, 0.8 V[p-p], 75 Ω

Audio Input/Output

AUDIO IN (CH1/CH2):	XLR x 2, 3 pin, LINE/MIC/MIC+48 V/AES switchable
MIC IN:	XLR x 1, 5 pin
PHONES:	Stereo mini jack
Speaker:	20 mm diameter, round x 1

Other Input/Output

GENLOCK IN:	HD (1.5G)/3G-SDI, 0.8 V[p-p], 75 Ω
TC IN/OUT:	BNC x 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 4 pin, DC 12 V (DC 11.0 V to 17.0 V)
DC OUT/RS:	4 pin, DC 12 V (DC 11.0 V to 17.0 V), maximum output current 1.0 A
DC OUT:	2 pin, DC12 V (DC 11.0 V to 17.0 V), maximum output current 1.0 A
LENS:	12 pin x 1, 4 pin x 2
VF:	14 pin
LAN:	100BASE-TX/10BASE-T
USB2.0 (device) :	Type B connector, 4 pin
USB2.0 (host) :	Type A connector, 4 pin
EXT:	50 pin (for external recording only) *3

Control Panel

Display Panel:	LCD, 3.5-type QHD color monitor Approx. 1.56 million dots
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Electronic HD Color View Finder (AU-VCVF1G)

Display Panel:	OLED, 0.7-type, Approx. 2.76 million dots
Signal Input:	1080/59.94p, 1080/50p

*1: Specification is as of February 2015. Specification subject to change upon firmware upgrade. For the latest specification, please visit Panasonic website. (<http://pro-av.panasonic.net/>) *2: These are reference values for continuous recording. The recording time may differ depending on the scene or the number of clips *3: This will be supported by firmware upgrade. For details, please visit Panasonic website. (<http://pro-av.panasonic.net/>)

ProRes is licensed from Apple Inc. Apple ProRes codec from Atomos under license. Atomos is trademark and copyright of Atomos Global Pty. Ltd.

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JQA-0443



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