Panasonic
ideas for life

AJ-**SDC905**

2/3" IT-3CCD DVCPRO50 Camera-Recorder
(PAL:625)

DVCPRO **50**

Wide 2/3" CCD for High Sensitivity and High Image Quality

The AJ-SDC905 features a 2/3" 600,000-pixel 3CCD imaging system and an F13 lens with high sensitivity. You can shoot in light as low as 0.01 lux with minimal smear. With 750 lines of resolution and a 62-dB S/N, the AJ-SDC905 meets virtually any recording need. It has built-in versatility with menu selectable 16:9 or 4:3 aspect ratios and a choice between DVCPRO and DVCPRO50 recording modes.

Digital Super Gain (cumulative mode)

The AJ-SDC905 features an easy-to-use, pushbutton super gain function with a maximum gain of +48 dB. In addition, digital super gain (in cumulative mode) allows an extra gain of +20 dB (at 5 fps).

Unlike conventional gain adjustment, digital super gain is virtually noise-free*, so picture quality is preserved intact. With super gain and digital super gain, the AJ-SDC905 allows ultra-high-sensitive shooting at up to +68 dB.

Gain Up Image

*At maximum gain (+68 dB) there may be a slight amount of noise.

Digital Super Gain Image

12-Bit A/D Signal Processing Circuit

The AJ-SDC905 features a new DSP circuit that uses 12-bit rather than conventional 10-bit processing for A/D conversion. This achieves better overall picture quality, with finer gradation and improved colour expression.

With the new AJ-SDC905, Panasonic introduces a 2/3" 600,000-pixel 3CCD DVCPRO50 camera-recorder that brings both high quality and high cost-performance to applications from news gathering and sports coverage to content production.

The AJ-SDC905's 3CCD camera system combines with a 12-bit digital signal processor to deliver a superior picture and sound quality professionals need. A host of features enhance recording quality and convenience, including a digital super gain function that boosts sensitivity and a prerecording function that helps prevent missed shooting opportunities.

This sets the AJ-SDC905 apart from any other camcorder in its league by being the first to offer DVCPRO50 over a IEEE1394 interface. This is a perfect compliment to the growing number of PC-based operations in the brodacast and production industry.

12-Axis Independent Matrix Colour Correction

This advanced function within the DSP circuit allows correction in specific colour regions without changing the overall colour tone. Combined with chroma detail and skin detail controls, this gives you finer control in creating images.

Before

After
(correction in cyan colour region)

Four User Scene Files

Store specific camera settings in memory, then retrieve them when needed for quick, easy setup. Four files with settings can be stored in the camera's memory. Files can also be copied onto an SD Memory Card or MultiMediaCard, allowing storage of up to eight files.

Customized User Buttons and Menu

Three user buttons are provided. Assign a function to each, and then you can select those functions with pushbutton ease. You can also customize the on-screen menu with the items you use most often, then display them by simply pressing a button.

Auto Tracking White Balance

The white balance is automatically adjusted, in real time, as the lighting changes. It is easy to get natural colour even when shooting scenes with difficult lighting conditions, such as when following a subject walking from indoors to outdoors.

Digital Zoom

This new support function lets you digitally zoom the viewfinder image to two times its normal size for easier focusing.

Marker Selector

Press this button when using the wide viewfinder to display the 4:3 (side clop) screen marker for easy confirmation.

Synchro-Scan Electronic Shutter

The electronic shutter has speeds of 1/60, 1/120, 1/250, 1/500 1/1000 and 1/2000 sec, plus synchro-scan capability (1/50.4 to 1/248 sec).

One ND/CC Filter Wheel

This simply designed, four-position (3200K, 5600K+1/8ND, 5600K, 5600K+1/64ND) optical filter allows quick, on-location adjustment to the light source.

DVCPRO50 Recorder with Outstanding Quality

DVCPRO50/DVCPRO Switchable Recording

The AJ-SDC905 can record in either the DVCPRO50 or DVCPRO format. In DVCPRO50 mode you can record 33 minutes of high-quality 4:2:2 pictures onto a compact 1/4-inch cassette tape. In DVCPRO mode the recording time is doubled*. Emphasize either picture quality or recording time, depending on your needs. Giving you both quality and versatility, this single, all-purpose unit answers the call, in applications from ENG to EFP.

*When recording in DVCPRO50 mode on a DVCPRO cassette tape, the actual recording time will be half the time indicated on the cassette label.

Two-Channel Digital Audio

The AJ-SDC905 can record full 48-kHz/16-bit digital audio on two channels. You can freely select the audio source for each channel, choosing from mic, line or wireless receiver.

Locking Audio Dial

You can lock the audio level dial for the mic/line input on the rear panel by simply pressing it. Once you've set the dial where you want it, lock it in place to prevent mistakes.

Interval REC

The interval REC function (by frame) is ideal for time lapse recording, such as in environmental, scientific or industrial applications calling for observation or surveillance.

Time Code Recording

The built-in SMPTE time code generator/reader lets you select FREE RUN/REC RUN, or user bits. Time Code can also be superimposed onto the camera's video output during playback.

Prerecording Function

The prerecording function allows the AJ-SDC905 to catch sudden, spontaneous scenes you might otherwise miss. When the camera is in standby mode, this function continually caches in memory, up to 6 seconds (presettable) of the most recent video and audio material entering the camera. When you press the REC button, that material is recorded onto the tape before real-time recording begins.

Pre-Pecording Circuit

| Image | → | Camera | → | Pre-Recording Memory | → | VTR |

Pre-Pecording Action

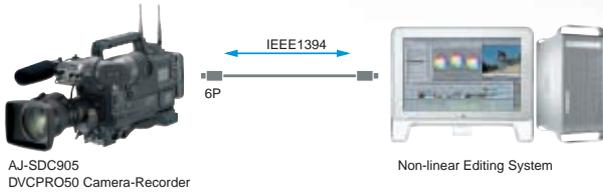REC START   REC PAUSE

Memory

Recording

← Max 6 sec. →

Quick Response

The AJ-SDC905 enters standby mode about three seconds after you switch on the power, and recording begins about 0.5* sec after you press the REC button. The tape loads and unloads quickly, for fast changes.

*About 2 sec when the unit is in power save mode.

IEEE 1394 Digital Interface

The AJ-SDC905's DVCPRO terminal complies with the IEEE 1394 digital interface standard. Use it to upload recorded materials, including DVCPRO50 data, directly to a nonlinear editor or server. The AJ-SDC905 works as both player and recorder. This makes it easy to use the AJ-SDC905 in PC-based operations.

IEEE1394
6P

AJ-SDC905
DVCPRO50 Camera-Recorder

Non-linear Editing System

Side Operation and LCD Panel

Front Operation

Rear Side Connectors

Rear Connectors

Low Power Consumption and Power Save Mode

The AJ-SDC905 consumes only 25 W when recording. An Anton/Bauer battery (Hytron50) provides about 120 minutes of continuous recording or playback. A power save mode with a tape protection function extends operating time even further.

Lightweight, Well Balanced Body

Use of the DVCPRO format helped us make the AJ-SDC905 body small in size and light in weight. Feedback from ENG professionals helped us give it a natural shoulder-fitting form, perfectly placed centre of gravity, good visibility to the front and sides, and properly positioned switches with ergonomic shapes. An easy slide mechanism in the shoulder pad improves operability. In standard operating condition the entire unit weighs just 5.1 kg (body 4.1 kg; approx.).

Slot-In Wireless Receiver

For even greater mobility in news gathering applications, the AJ-SDC905 can be integrated with an optional wireless receiver.

GPS Unit

Mount the optional AJ-GPS900G GPS unit, and the AJ-SDC905 can record real-time position data (latitude, longitude, and altitude) onto the tape, conforming to UMID standards.

Simple Camera Remote

Connecting the optional AJ-EC3E Extension Control Unit (ECU) allows remote camera setup and image adjustment while viewing the image on a monitor, as well as remote rec start, stop, and review.

Additional Camera Features

• One-touch camera status report
• Built-in gen-lock function
• Phantom power supply (for 48V phantom mic)

Additional VTR Features

• One-touch rec review function
• Colour playback capability
• Compatible with a variety of battery systems
• Equipped with Anton/Bauer gold mount plate
• Built-in monitor speaker
• Video In capability

Standard Accessories

• Shoulder strap
• Anton/Bauer gold mount plate (installed)

26-pin Multi-Cable Camera Remote System

Developed specifically for DVCPRO camera recorders, this simple, easy-to-use camera remote system brings outstanding cost-performance to a wide range of applications.
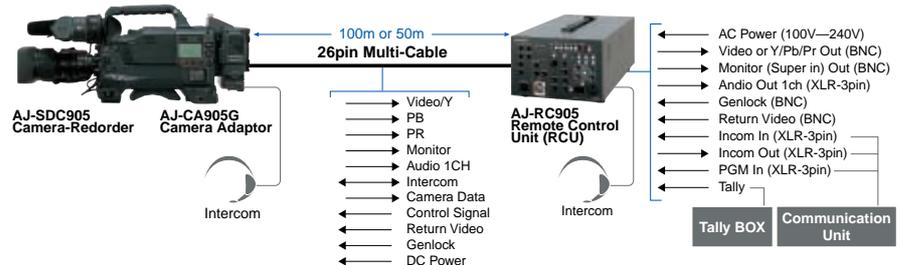
Easily Detachable Camera Adaptor

The compact, lightweight AJ-CA905G camera adaptor mounts to the rear of the DVCPRO camera recorder. It attaches and detaches quickly and easily, giving you smooth, swift switching between stand-alone and remote operation. An Anton QR Gold Mount on the adaptor's rear allows battery drive when power supply from a cable is difficult.

Remote Operation from Up to 100 m

The 26-pin multi-cable comes in lengths of 50 meters and 100 meters. You can send component video signals and audio signals from the camera to a remote control unit up to 100 meters away, or send control signals from the remote unit to the camera recorder. An intercom function is also provided.
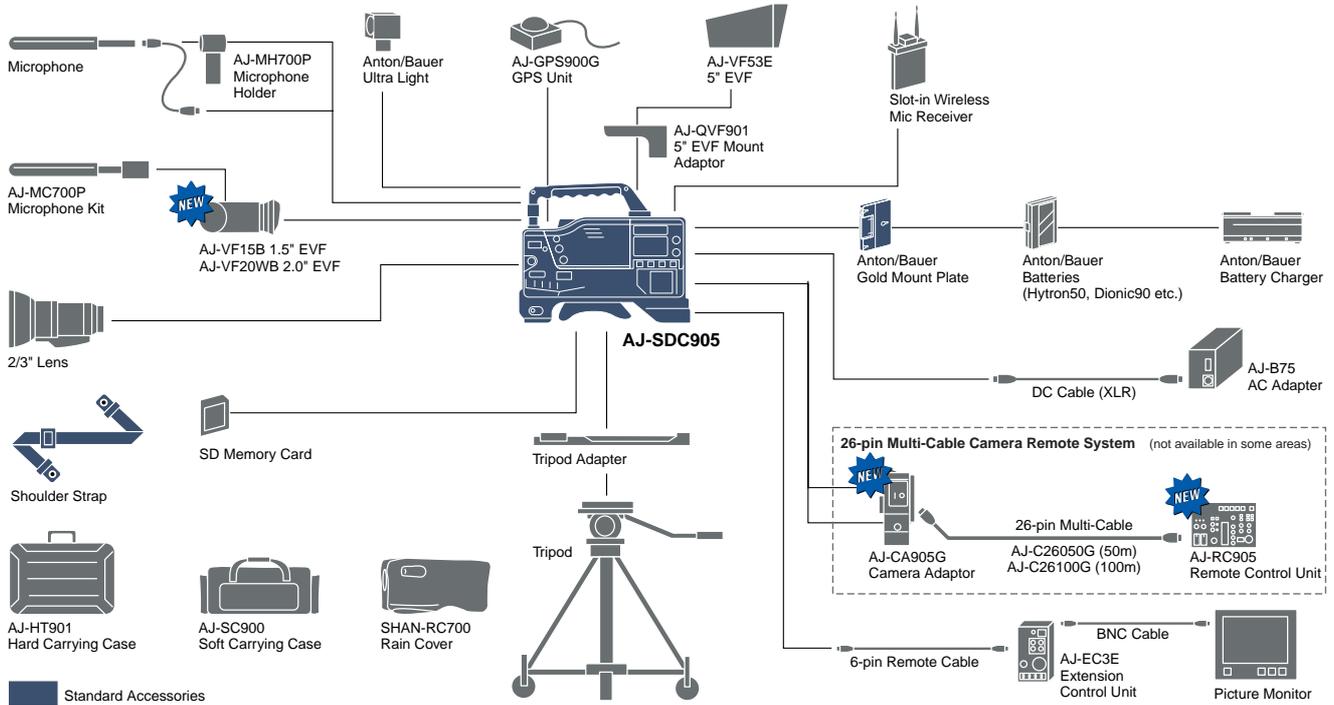
Half-Rack Size Remote Control Unit

The compact AJ-RC905 remote control unit provides the composite monitor output (video output: component signal) commonly used on monitor TVs. From the unit's front panel it's possible to adjust image-quality settings, control VTR operation, change camera recorder menu settings, and make system signal adjustments.

AJ-SDC905 Camera-Reorder — **AJ-CA905G Camera Adaptor** — 100m or 50m — **26pin Multi-Cable** — **AJ-RC905 Remote Control Unit (RCU)**

Video/Y, PB, PR, Monitor, Audio 1CH, Intercom, Camera Data, Control Signal, Return Video, Genlock, DC Power

Intercom

AC Power (100V—240V), Video or Y/Pb/Pr Out (BNC), Monitor (Super in) Out (BNC), Andio Out 1ch (XLR-3pin), Genlock (BNC), Return Video (BNC), Incom In (XLR-3pin), Incom Out (XLR-3pin), PGM In (XLR-3pin), Tally

Tally BOX — Communication Unit

* This Remote System is not available in some areas.

Optional Accessories

DVCPRO 50

- Microphone
- AJ-MH700P Microphone Holder
- Anton/Bauer Ultra Light
- AJ-GPS900G GPS Unit
- AJ-VF53E 5" EVF
- Slot-in Wireless Mic Receiver
- AJ-MC700P Microphone Kit
- AJ-QVF901 5" EVF Mount Adaptor
- **NEW** AJ-VF15B 1.5" EVF / AJ-VF20WB 2.0" EVF
- 2/3" Lens
- AJ-SDC905
- Anton/Bauer Gold Mount Plate
- Anton/Bauer Batteries (Hytron50, Dionic90 etc.)
- Anton/Bauer Battery Charger
- DC Cable (XLR)
- AJ-B75 AC Adapter
- Shoulder Strap
- SD Memory Card
- Tripod Adapter
- Tripod

26-pin Multi-Cable Camera Remote System (not available in some areas)
- **NEW** AJ-CA905G Camera Adaptor
- 26-pin Multi-Cable AJ-C26050G (50m) AJ-C26100G (100m)
- **NEW** AJ-RC905 Remote Control Unit

- AJ-HT901 Hard Carrying Case
- AJ-SC900 Soft Carrying Case
- SHAN-RC700 Rain Cover
- 6-pin Remote Cable
- AJ-EC3E Extension Control Unit
- BNC Cable
- Picture Monitor

■ Standard Accessories

AJ-VF20WB
2" EVF 16:9/4:3 switchable

AJ-VF15B
Hight Grade 1.5" EVF for 4:3

AJ-VF53E
5" Viewfinder

AJ-QVF901
5" EVF Moumt Adaptor

Canon 2/3" Lens

Fujinon 2/3" Lens

AJ-MC700P
Microphone Kit

AJ-MH700P
Microphone Holder

DINIC 90
AntonBauer Battery Pack

TITAN 70
AntonBauer AC Adaptor/Battery Charger

AJ-B75
AC Adaptor

SHAN-TM700
Tripod Adaptre

AJ-GPS900G
GPS Unit

SD Memory Card

AJ-EC3E
Extension Control Unit

AJ-SC900
Soft Carrying Case
(Not available in some area)

AJ-HT901
Hard Carrying Case
(Not available in some area)

SHAN-RC700
Rain Cover (Not available in some area)

DVCPRO M-size Video Cassettes

Model No.	Time (DVCPRO50)	Time (DVCPRO)	Length
AJ-P66MP	33 minuttes	66 minuttes	137 m
AJ-P46MP	23 minuttes	46 minuttes	96 m
AJ-P33MP	16 minuttes	33 minuttes	70 m
AJ-P24MP	12 minuttes	24 minuttes	51 m
AJ-P12MP	6 minuttes	12 minuttes	27 m
AJ-CL12MP	Cleaning Tape		

GENERAL

Power Supply:	DC 11V to 17V
Power Consumption:	25W (without VF)
Operating Humidity:	10% to 85%
Operating Temperature:	0°C to +40°C
Storage Temperature:	–20°C to +60°C
Weight:	About 4.1 kg
Dimensions (W x H x D):	129 x 204 x 313 mm
Continuous Rec Time:	About 120 min. with Anton/Bauer Hytron 50

CAMERA SECTION

CCD Elements:	2/3″ IT CCD (x 3)
Picture Elements:	600,000 pixels
Optical Filters:	1: 3200K, 2: 5600K+1/8ND, 3: 5600K, 4: 5600K+1/64ND
Quantization:	12 bits
Sampling Frequency:	18 MHz
Programmable Gain:	–3/ 0/+3/+6/+9/+12/+15/+18/+21/+24/+27/+30 dB
Super Gain:	+30/+36/+42/+48 dB
Digital Super Gain:	+6/+12/+20 dB
Sensitivity:	F13.0 at 2000 Lux, 89.9% reflect
Minimum Illumination:	0.01 Lux at F1.4, +48 dB +20 dB Gain
Shutter Speed:	1/60, 1/120, 1/250, 1/500, 1/1000 and 1/2000 sec.
Syncro Scan Shutter:	1/50.4 to 1/248 sec.
Video S/N:	62 dB (typical)
Horizontal Resolution:	750 TV lines at centre
Vertical Resolution:	450 TV lines, 500 TV lines (Super V mode)
Registration Error:	Less than 0.05% (whole zone, without lens distortion)
Optical System:	F 1.4 prism system
Lens Mount:	2/3″ bayonet type

VTR SECTION

Tape:	1/4″ DVCPRO M-size cassette tape
Tape Speed:	67.708 mm/s (DVCPRO50), 33.854 mm/s (DVCPRO)
Max Rec Time:	33 min (DVCPRO50), 66 min (DVCPRO) using AJ-P66MP
FF/REW Time:	About 1.5 min. (using AJ-P66MP)

VIDEO

Sampling Frequency:	Y: 13.5 MHz, PB/PR: 6.75 MHz
Quantization:	8 bits
Error Correction:	Reed Solomon Product Code
Compression Method:	DCT and Variable-length Coding
Compression Ratio:	3.3:1 (DVCPRO50), 5:1 (DVCPRO)
Bit Rate:	50 Mbps (DVCPRO50), 25 Mbps (DVCPRO)
Band Width*(DVCPRO50):	Y: 25Hz to 5.75MHz, +1.0/–3dB PB/PR: 25Hz to 2.75MHz, +1.0/–3dB
S/N Ratio*:	More than 55 dB

AUDIO

Sampling Frequency:	48kHz (sync. with video)
Quantization:	16 bits
Frequency Response*:	20Hz to 20kHz, ±1.0dB (reference level)
Dynamic Range*:	More than 85dB (1kHz, AWTD)
Distortion*:	Within 0.1% (1kHz, reference level)
Wow & Flutter*:	Below measurable limit
Head Room*:	18 dB

INPUT

Audio IN:	XLR-3 x 2 (CH1, CH2), LINE/MIC/MIC+48V switchable, LINE: 0/+4 dBu, MIC: –60/–50 dBu, MIC+48V: Phantom +48V, –60/50 dBu
MIC IN:	XLR x 1, balanced, 3 kΩ –50/–40 dBu selectable, Phantom +48V (On/Off)
Wireless IN:	25P D-sub, –40 dBu
Genlock IN:	BNC x 1, 1.0Vp-p 75Ω
TC IN:	BNC x 1, 0.5 to 8.0Vp-p, high impedance

OUTPUT

Video OUT:	BNC x 1, 1.0Vp-p 75Ω
Audio OUT:	XLR-5 x 1 (CH1/CH2, CH3/CH4 selectable) 0dBu/+4dBu selectable, balanced, low impedance
TC OUT:	BNC x 1, 2.0Vp-p, low impedance
Phones:	Stereo mini jack x 2

OTHERS

DVCPRO:	6P x 1, IEEE 1394 digital interface
DC IN:	XLR-4 x 1, DC11V to 17V
DC OUT:	4P x 1, DC11V to 17V, 100 mA
Lens:	12P x 1
ECU:	6P x 1, for AJ-EC3E
EVF:	20P x 1
GPS:	6P x 1, for AJ-GPS900G

*The specifications given above were measured by playing back tapes recorded by this unit on standard DVCPRO50 VTRs
Weight and dimensions shown are approximate.
Specifications are subject to change without notice.
These products may be subject to export regulations.

[Countries and Regions]

Argentina	+54 1 308 1610	Kazakhstan	+7 3272 504 777	Spain	+34 (93) 425 93 00
Australia	+61 2 9887 6222	Kuwait	+965 481 2123	Sweden	+46 (8) 680 26 41
Austria	+43 (0)1 610 80 773	Lebanon	+961 1 216827	Switzerland	+41 (0)41 259 96 32
Bahrain	+973 252292	Malaysia	+60 3 5549 5422 (PSE)	Thailand	+66 2 731 8888
Belgium	+32 (0)2 481 04 57		+60 3 5546 7000 (PM)	Turkey	+90 216 578 3700
Bulgaria	+359 2 946 0786	Montenegro, Serbia*		U.A.E.	+971 4 282201
China	+86 10 6515 8828		+41 (0)26 466 25 20	Ukraine	+380 44 4903437
(Hong Kong)	+852 2313 0888)	Netherlands	+31 73 64 02 577		+380 44 4903438
Czech Republic	+420 236 032 552/511	New Zealand	+64 9 272 0100		[ext. 112]
Denmark	+45 43 20 08 57	Norway	+47 67 91 78 00	U.K	+44 (0) 1344 70 69 20
Egypt	+20 2 3938151	Pakistan	+92 5370320 21		
Finland, Latvia, Lithuania, Estonia*		Philippines	+63 2 633 6162		
	+358 (9)521 52 53	Poland	+48 (22)338 1100		
France	+33 (0)1 49 46 43 59	Portugal	+351 21 425 77 04		
Germany	+49 (0)611 235 401	Romania	+40 21 211 4855		
Greece	+30 210 96 92 300	Russia & CIS	+7 095 258 42 06		
Hungary	+36 (1)382 60 60	Saudi Arabia	+966 1 465 0709		
Indonesia	+62 21 801 5666	Singapore	+65 6270 0110		
	+62 21 385 9449	Slovak Republic	+421 (0)2 52 92 14 23		
Iran	+98 21 2271463	Slovenia, Croatia, Bosnia, Macedonia*			
Italy	+39 02 67 88 449		+44 (0)20 76 63 36 57		
Jordan	+961 6 586 1914	South Africa	+27 11 313 1400		

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UKAS ENVIRONMENTAL MANAGEMENT 051