

# Panasonic

AJ-LT85  
DVCPRO Laptop Editor  
(PAL:625)



DVCPRO

# Editing Capabilities That Go Anywhere, From the Field to the Production Room

Panasonic's new AJ-LT85 laptop editor combines two VTRs, two monitors and an editing controller in a single unit which — thanks to the DVCPRO format — is impressively powerful yet compact, lightweight and highly portable.

Take the AJ-LT85 with you to the field for on-site editing. Or use it for in-house production in the studio, where it connects with a host of external equipment, provides control over an external VTR via a 9-pin RS-422A, and allows editing with archived material recorded in other formats.

It also has time code input and output terminals for easy synchronised recording, and allows uploading and downloading of EDL data.

The result is a digital laptop editor with the power and flexibility to travel between the field, OB van, desktop and studio.



# EDITING FUNCTIONS



## DVCPRO's Superior Digital Quality

The DVCPRO format provides the exceptional picture quality of component digital recording, while two 16-bit digital audio channels with 48-kHz sampling provide a sound to match. Quality remains superb even after multiple generations of editing or dubbing.

## A Full 184 Minutes of Recording

The AJ-LT85 accommodates both TV program production and broadcasting needs with a maximum recording time of 184 minutes using the DVCPRO large cassette (AJ-5P92L). It also accepts medium DVCPRO cassettes from 12 to 66 minutes.

## Multi-Event Editing

The AJ-LT85 was designed for editing efficiency. Use VTR1 as a player and VTR2 as a recorder for quick, easy assemble and insert editing. The 100-event memory makes it easy to add the cuts you want, one after another. In insert editing mode, the video channel, two audio channels, and time code channels can each be selected separately.

## On-Screen Display of EDL Data

During multi-event editing, you can display the EDL on the monitor for easy checking. On-screen display also makes it easier to adjust many editing-related settings.

## Audio Dubbing, Split and "Swap" Editing

In insert editing mode you can add narration through the mic input. Split editing, in which the timing of the video and audio are shifted, can be done using either the video or the audio as reference. "Swap" editing lets you interchange and record two audio source channels.

## Time Code Reader, Tape Remaining Time Display

Each VTR features a built-in EBU time code generator and reader, making it possible to edit with exact, to-the-frame precision. CTL editing is also possible. Plus the counter can be switched to show the tape remaining time.

## Quick, Convenient Editing

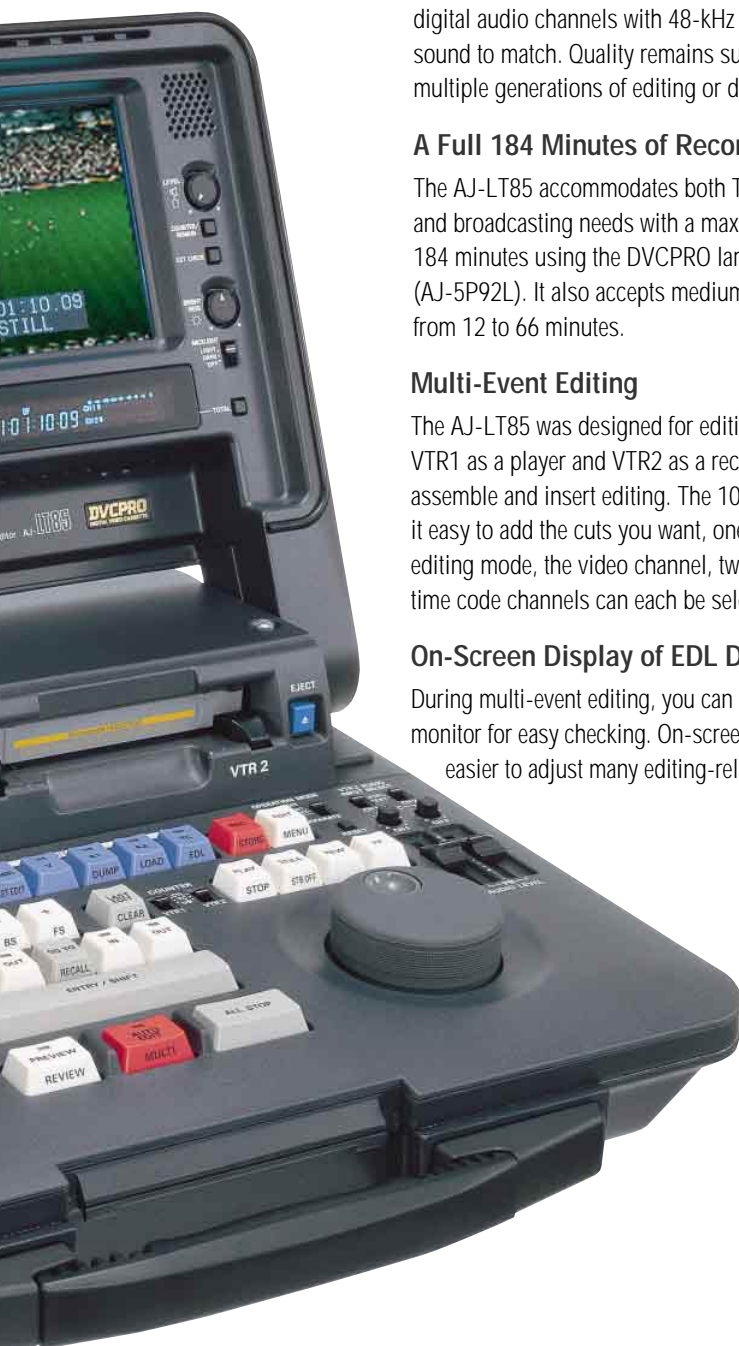
The AJ-LT85 comes equipped with a host of functions designed for quick, easy editing, including go to, trim (+/-), last edit, and preview/review. Each of the two VTR units has a search dial for forward or reverse searching at up to 32 times normal speed, adjustable in 19 steps.

## System Interfacing

Each of the AJ-LT85's VTR units is equipped with video and audio inputs/outputs and 9-pin (RS-422A) remote interfaces. The AJ-LT85 not only offers stand-alone editing, this full-fledged editing system also provides camera recording and dubbing.

## Control of an External VTR

Connect an external VTR via the 9-pin (RS-422A) remote terminal on the VTR1 side, and the AJ-LT85 can control it as the source VTR and edit from it on the VTR2 side. This greatly simplifies editing and dubbing from archived





# SYSTEM EXPANSION

material recorded in analogue component or other formats.

## Time Code Input/Output for Synchronised Recording

The AJ-LT85 is equipped with time code input and output terminals that let you synchronise to an external time code. This is especially important when recording simultaneously with multiple cameras.

\*The REF through OUT terminal is switched for use as a time code input terminal, and an on-screen setting switches the VIDEO MONITOR OUT terminal for use as a time code output terminal. Each of these terminals can be used for either purpose, but not both, at any one time.

## EDL Terminal for Uploading and Downloading

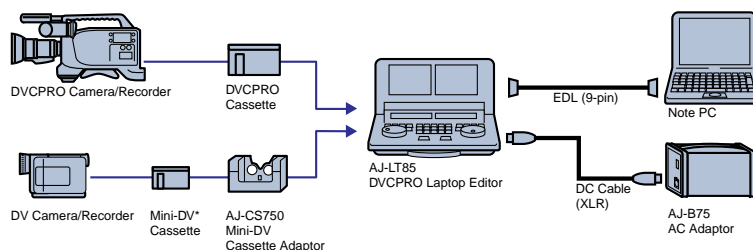
An EDL terminal (D-SUB 9-pin/male) lets the AJ-LT85 upload and download EDL data. This adds flexibility, making it possible to use data that has been rough-edited on the AJ-LT85 for final editing in the studio. It also lets you store EDL files on a personal computer.

## Additional Features

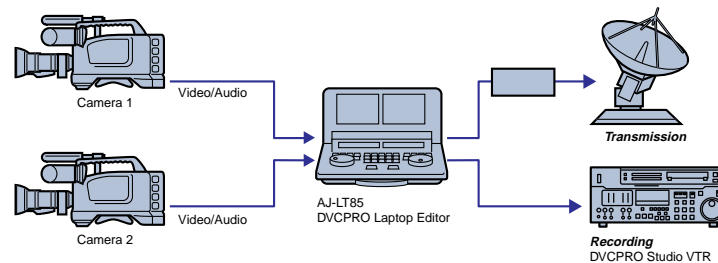
- Playback of tapes recorded in the DV format\*
- Independent Rec inhibit switches (VTR1/VTR2)
- Encoder control: Video level, black level, chroma phase, chroma level, system H, SC (fine/coarse)
- Colour framing synchronisation
- Independent audio Rec/Playback level control
- Input selector and external check buttons for quick source monitoring



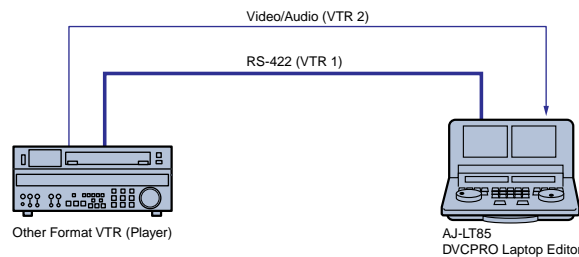
### The components of a news gathering and editing system



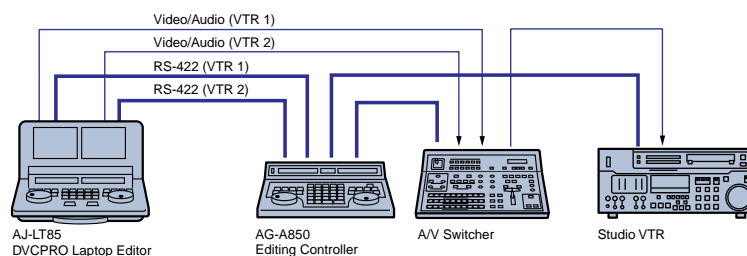
### A simultaneous recording and playback (transmission) system



### An editing system from archived material recorded in other format



### An A/B roll editing system featuring the AG-A850



\*The AJ-LT85 cannot record on DV cassettes, even with the AJ-CS750 cassette adaptor.

\*The AJ-LT85 cannot play back DV cassette tapes recorded in LP mode, or long-play Mini-DV cassette tapes (SP mode 80 minutes/LP mode 120 minutes), even with the AJ-CS750 cassette adaptor.

# PORTABILITY



## All-in-One Editing Package

The AJ-LT85 is a single compact package that features dual DVCPRO digital VTRs, two 6.5" LCD monitors, speakers, and an editing controller. An operator-friendly design helps make the AJ-LT85 easy to use, with all controls and indicators laid out in symmetrical rows.

## Compact and Portable

There's never been so much editing equipment in such a small package. The AJ-LT85's two VTRs, two monitors and editing controller weigh less than 12 kg combined, and the unit is about the same convenient, easy-to-carry size as an attache case.

## Lightweight Yet Durable

A casing made of tough aluminium diecast gives the AJ-LT85 the ideal combination of light weight and rugged durability. It also comes equipped with a rear panel protector to prevent damage to the terminals while the unit is in transport.

## 2-Way Power Supply, with Low Power Consumption

The versatile AJ-LT85 comes complete with a DC input terminal (XLR/11-16 V), while an optional AC adaptor (AJ-B75) lets you run it from an AC outlet. Driven by either battery, household power, it consumes only 12V/9A, even when you're using both VTRs and monitors.



# O P T I O N A L A C C E S S O R I E S



**AJ-B75**  
AC Adaptor  
• 12 V/9.5 A DC Output (4P XLR)  
• W x H x D: 93 x 140.5 x 329.0 mm  
• Weight: 3.0 kg (NET)



**AJ-SC75**  
Carrying Case



**DVCPRO Cassette Tape Line-Up**

| Model No. | Time     | Length |
|-----------|----------|--------|
| AJ-5P92L  | 184 min. | 377m   |
| AJ-P126L  | 126 min. | 259 m  |
| AJ-P94L   | 94 min.  | 194 m  |
| AJ-P66L   | 66 min.  | 137 m  |
| AJ-P34L   | 34 min.  | 72 m   |
| AJ-P66M   | 66 min.  | 137 m  |
| AJ-P46M   | 46 min.  | 96 m   |
| AJ-P33M   | 33 min.  | 70 m   |
| AJ-P24M   | 24 min.  | 51 m   |
| AJ-P12M   | 12 min.  | 27 m   |

AJ-CL12L/12M Cleaning Tape  
\*When using other DVCPRO (25Mbps) VTR, use a VTR supporting 184 minutes tape.



**QR-LT75**  
Anton/Bauer Battery Mount  
(provided by Anton/Bauer)



**QBH with Hytron 50 x 4**  
Anton/Bauer Battery Mount & 4 Battery Packs  
(provided by Anton/Bauer)



**AJ-CS750**  
Mini-DV Cassette Adaptor

## S P E C I F I C A T I O N S

| General                               |   |
|---------------------------------------|---|
| Power Requirement:                    | DC12 V  |
| Input Current:                        | 9A  |
| Format                                | DVCPRO<br>1/4" Digital compressed recording   |
| Recording Track                       | Digital Video<br>Digital Audio: 2CH<br>TC: REC in Sub-Code area<br>Cue: 1 Track<br>CTL: 1 Track |
| Tape Speed                            | 33.854 mm/s   |
| Tape                                  | 1/4-inch Metal Particle Tape  |
| Cassette Size                         | AJ-5P92L: 125 x 78 x 14.6 mm<br>AJ-P66M: 97.5 x 64.5 x 14.6 mm                                  |
| Recording/playback Time:              | Max 184 min. with AJ-5P92L<br>Max 66 min. with AJ-P66M  |
| FF/REW Time:                          | Within 3.5 min. using AJ-5P92L  |
| Editing Accuracy:                     | ±0 frame (with TC)  |
| Tape Timer Accuracy:                  | ±2 frame (continuous CTL use)   |
| Operating Temperature:                | 5 °C to 40 °C (41 °F to 104 °F)   |
| Operating Humidity:                   | 10 % to 85 % (non DEW)  |
| Weight:                               | 11.9 kg   |
| Dimensions (W x D x H):               | 424 x 435 x 120 mm  |
| Video                                 |   |
| Sampling Frequency:                   | Y: 13.5 MHz<br>C (PB/PR): 3.375 MHz   |
| Quantization:                         | 8 bits  |
| Error Correction:                     | Reed-Solomon Product Code   |
| • Analogue Composite In/Composite Out |   |
| Bandwidth:                            | Y: 25 Hz to 5.5 MHz (±1dB)<br>5.75 MHz (±3 dB)<br>Pb/Pr: 25 Hz to 1.3MHz (±1.0dB)               |
| K Factor:                             | less than 2%  |
| • Analogue Component In/Component Out |   |
| Bandwidth:                            | Y: 25 Hz to 5.5MHz (±1dB)<br>5.75 MHz (±3 dB)<br>Pb/Pr: 25 Hz to 1.3MHz (±1.0dB)                |
| S/N Ratio:                            | 53 dB   |
| K Factor:                             | Less than 2%  |

| Digital Audio                          |  |
|--|--|
| Sampling Frequency:                    | 48 KHz   |
| Quantization:                          | 16 bits  |
| Frequency Response:                    | 20Hz to 20kHz ±1 dB  |
| Dynamic Range:                         | more than 85 dB<br>(at 1 kHz, emphasis off, "A" weighted)  |
| Distortion:                            | less than 0.1 %<br>(at 1 kHz, emphasis off, reference level)   |
| Crosstalk:                             | less than -80 dB<br>(at 1 kHz, between any two channels)   |
| Wow & flutter:                         | Below measurable limit   |
| Headroom:                              | 18 dB  |
| Emphasis:                              | T1=50 µsec/T2=15 µsec (On/Off)   |
| Video Input Signal                     |  |
| Analogue Composite:                    | BNC x 2 (VTR1/VTR2), 75Ω   |
| Analogue Component:                    | BNC x 6 (Y, PB, PR, VTR1/VTR2), 75Ω<br>(Y in serves as a composite in, too.)   |
| Reference:                             | BNC x 2, Composite,<br>loop-through with 75 Ω Auto   |
| Video Output Signal                    |  |
| Analogue Composite:                    | BNC x 2 (VTR1/VTR2), 75Ω   |
| Analogue Component:                    | BNC x 6 (Y, PB, PR, VTR1/VTR2), 75Ω<br>(Y out serves as a composite out, too.)   |
| Monitor:                               | BNC x 2 (VTR1/VTR2), Composite, 75Ω,<br>1.0 Vp-p with OSD On/Off   |
| Processor adjustment range (Video Out) |  |
| Video gain:                            | ±3 dB  |
| Chroma gain:                           | ±3 dB  |
| Chroma Phase:                          | ±25 °  |
| Black Level:                           | ±70 mV   |
| Sync phase:                            | ±1.5 µsec  |
| SC phase:                              | ±360 °   |
| Audio Input Signal                     |  |
| Analogue Audio:                        | (VTR1): XLR x 2 (CH1/CH2), High Impedance, 4/0/-20 dBu<br>(VTR2, CH1): XLR, High Impedance 4/0/-20 dBu<br>(VTR2, CH2): XLR, High Impedance 4/0/-20/-50 dBu |

| Audio Output Signal  |  |
|--|--|
| Analogue Audio:  | XLR x 2 (CH1/CH2) x 2(VTR1/VTR2), Low Impedance, -20/0/+4 dBu  |
| Audio Monitor:   | XLR x 2 (VTR1/VTR2), 0dBu, Low Impedance, CH1/MIX/CH2 selectable (VTR1/VTR2 independent)                           |
| Headphone:   | M3/Stereo x 1, Max.-20dBu, Variable level control, 8 Ω, VTR1/MIX/VTR2 switchable (Speaker/Headphone in one-switch) |
| Others   |  |
| TC In:   | BNC x 1 (Reference In/Through Out switchable)  |
| TC Out:  | BNC x 2 (VTR1/VTR2/Video Monitor Out switchable)   |
| Remote In:   | RS-422A interface<br>D-sub 9-pin (Female) x 2 (VTR1/VTR2)  |
| EDL In, Out/AMU:   | RS-232C interface<br>D-sub 9-pin (Male)  |
| LCD Monitor  |  |
| LCD Display:   | 6.5" x 2 (VTR1/VTR2)   |
| Brightness Adjustment:   | VR x 2 (VTR1/VTR2)   |
| OSD Adjustment:  | COLOUR, CONTRAST (VTR1/VTR2 independent)   |
| LCD Unit On/Off:   | SW(Light/Dark/Off) x 2 (VTR1/VTR2)   |
| Speaker  |  |
| Built-in Speaker:  | x 2<br>VTR1/MIX/VTR2, CH1/MIX/CH2 switchable   |
| Display (FL x 2, VTR 1/VTR 2 independent)  |  |
| Counter (8-digit), Audio Level Meter (16-seg., 2-CH), Tape Direction, Servo Lock, DV, Rec Inhibit, TC, UB, CTL |  |

Weight and dimensions shown are approximate. Specifications are subject to change without notice. These products may be subject to export regulations.

# Panasonic

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