

DV400 High Resolution DV Video Recorder



The DV400 video recorder is an advanced DV system designed for high resolution, direct recording from Head-Up Display cameras and multifunction displays on board military aircraft and other harsh environment applications. Digital video format offers up to 500 lines of horizontal resolution and significantly higher S/N ratio, to provide stunning video performance. The DV400 utilises internal shock mounts, therefore there is no requirement for an external tray. The insertion option allows IRIG B time and 2 discrete inputs insertion into the video image. The DV400 is a compact and cost effective fully qualified system for civil or military applications.

Operating Principle

The video recorder is equipped with a DV mounting plate and can record composite PAL, Y/C PAL or RGB video images.

FireWire® digital video interface (IEEE1394) edits between two digital VCR with no generation loss. The FireWire® interface allows for direct communication between your VCR and your PC.

System

Video recording system :

Two rotary heads, Helical scanning system.

Audio recording system :

Rotary heads, PCM system.

Quantisation : 12 bits (Fs 32kHz, stereo 1, stereo 2),
or 16 bits (Fs 48kHz, stereo).

Usable cassette :

Mini DV cassette with logo.

Tape speed :

SP : Approx. 18.83 mm/s.

LP : Approx. 12.57 mm/s.

Recording/playback time :

SP mode : 80 minutes (DVM80)

LP mode : 120 minutes (DVM80).

Fastforward/rewind time :

Approx. 3 min 20 s (DVM80).

Video functions :

Short circuit on the video outputs : unlimited time.

Remote control :

LANC (Control-L) link used for controlling video equipment and peripherals.

Record, Play and Video Input format selection are remotely controlled by 0-28 V discrete inputs.

Test :

Power ON and Recording indications.



Input/Output Signals

Video features

Analog RGB, PAL Y/C, PAL composite or Black and White 625 lines, 50 fields per second video signals.
Numeric DV signal : FireWire® (IEEE1394) interface.

Audio features

- 327 mV (at output impedance less than 1 kohm)

Control signals

- LANC : Control-L control link.
- Discrete : 0-28V

Environmental specifications

Power supply

- Voltage range : 18 V to 32 V.

Temperature

- Operating temperature : -10°C to +60°C.

Random vibrations

- MIL-STD-810E, Method 514-4, category 5.

Constant acceleration

- MIL-STD-810E, Method 513-4.

Ambient pressure

- MIL-STD-810E, Method 500-3

Mechanical shock

- MIL-STD-810E, Method 516-4.

Electromagnetic compatibility

- MIL-STD-461B and MIL-STD-462.

Storage / Overload instructions

Storage temperature

-30°C to +70°C

Power supply

- Polarity reversal : unlimited time span.

General features

Mechanical specifications

- Housing dimensions : L150 - W160 - H73 (mm).
- Mass : < 2 kg.
- Mounting : ARINC or angle brackets.
- Internal Shock absorbers.

Electrical specifications

Power : 28V DC (18 to 32 V).
Maximum power drain : < 20 W.

Connector

MIL C 24 308 D-Sub hybrid connector.

7/ Application

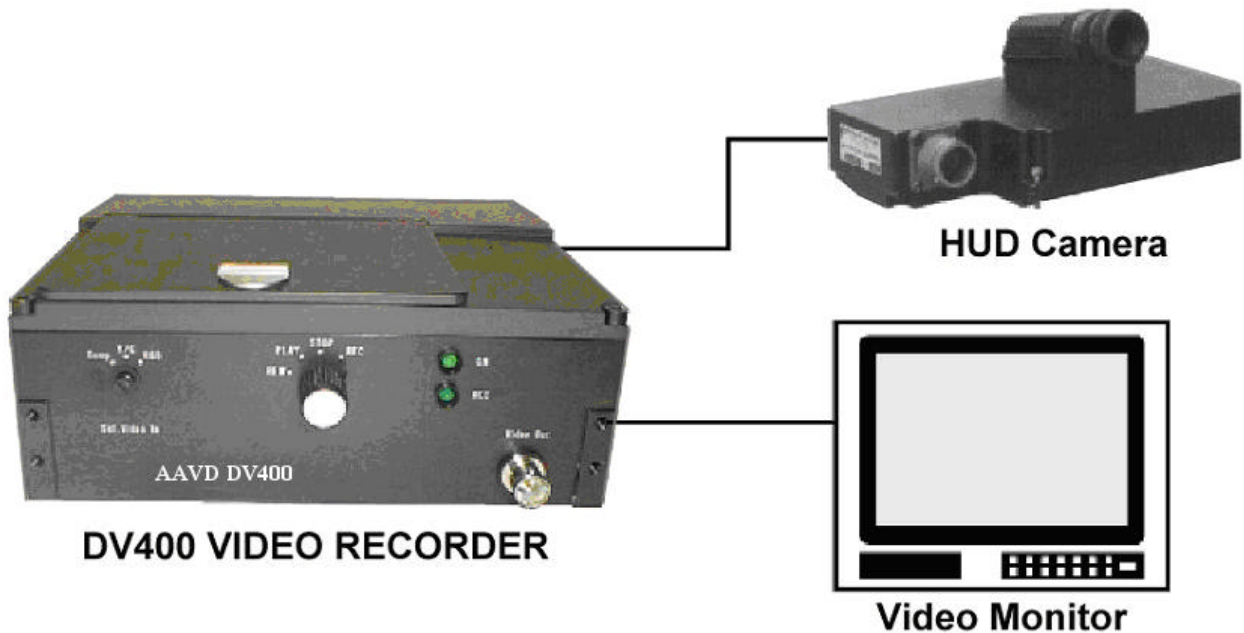


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