

2640

Airborne Digital VCR



Features

- Miniature
- Ruggedised
- Front Loading Mini DV Video/Audio Recorder
- NVIS A Backlight
- Front Panel & Multiple Remote Controls With EOT Warning
- Multideck Controller Provides 2 Deck 'Cascade' or 'Instant Reply'
- 2630 & 2656 Remote Control for Record/Stop With EOT Warning
- Shock & Vibration, Water & Dust Resistant
- Built In Perfect Slow Motion Replay
- Extended Temperature Range
- Output For Remote Indication of RECORD & EOT

Description

The 2640 mini DV VCR is the successor to the popular 2604 VCR used by Police and Rescue helicopters, and incorporates many new features. A new tactile keyboard has legends for day time use and fully backlit for night time operation. An optional NVIS A filter can be installed for NVG compatibility. It fits in a standard Dzus rack (1/2 ARINC). The optional remote controller can be fitted away from the VCR for use by a second observer. A new single button hand controller for RECORD/STOP includes an indicator to show RECORD and the End of Tape.

An optional Multi-Deck Controller organises the control of 2 VCR decks. The 2 VCRs can be operated in together in 'Cascade' mode or 'Instant Replay' (IR) mode.

In IR mode, one deck will always record the output from the on board camera system. The other deck can be rewound and replayed at any time without affecting the evidential recording on the first deck.

Logic lockouts prevent the observer overwriting the evidential recording. The evidential recorder continues to record the output for the on board camera, whilst the observer can rewind and replay the tape showing the evidence being jettisoned.

In cascade mode, the 2 VCRs act sequentially, with the second tape automatically starting 1 minute before the first tape ends. Logic in the Multi Deck controller prevents the operator rewinding the tapes. By changing tapes, this system will record indefinitely.

The VCR uses mini DV cassettes and has a recording time of up to 1 ½ hrs in standard play depending on tape length. Twin audio tracks enable stereo recording or radio and intercom commentaries to be recorded. The front panel is hinged to allow access for cassette exchange and ejection. An internal light assists the operator during tape changes at night. The front panel is 'O' ring sealed against the VCR body and is dust and water resistant.

A back illuminated, tactile front panel enables the button legends to be read at night and is run from the cockpit instrument dimming circuit. 28vdc or 5v ac backlight options are available.

The 2640 is operated from the 28vdc aircraft supply.

A range of accessories including a time/date generator, and audio record inhibit are available and special to purpose modifications to the standard product can be undertaken.

Options

- NVIS compatible illumination
- 28v dc or 5v ac backlight

Accessories

- MultiDeck controller & Remote controller

Specifications

Physical

Overall Size:	146mm (W) x 76mm (H) x 170mm (D)
Weight:	900gms
Mounting:	½ ARINC, 4 dzus fasteners

Power

Normal Operation:	28vdc, 420mA
With Heaters On:	28vdc, 1200mA
Backlight Supply:	28vdc, 43mA (optional 5vac, 110mA)

Controls

Standard Front Panel Controls:	On/Off, Stop, Rewind, Play, Forward, Record, Pause, Slow, Mode (Full or Salve)
Standard Front Panel Indicators:	On, Record, Full Mode, End of Tape, Slave, Dew
Remote Panel Control:	On/Off, Record (Full or Multideck), Rewind, Pause, Play, Stop, Fast Fwd, SloMo
Remote Panel Indicators:	On, Record, End of Tape, Record MD, Slave

Environmental: Designed to Meet

EMC:	Def. Stan 59-41 Class A tests, 14KHz – 1GHz DRE01 – E field emissions DRE02 – H field emissions DRS01 – H field susceptibility DRS02 – E field susceptibility
Temperature:	Def. Stan 00-35, (Part 3)/2 test CL1, CL4. -25°C to +60°C
Shock:	Def. Stan 00-35, (Part 3)/1 test M12s
Vibration:	Def. Stan 00-35, (Part 3)/2 test M1

Electronic

Recording System:	2 head, helical scanning	
Audio Recording System:	Rotary head PCM	Normal operation no heaters:
Quantisation:	12 bit (Fs 32KHz, stereo 1, stereo 2)	Normal operation with heaters on:
	16 bit (Fs 48KHz, stereo)	Backlight supply
Video Signal:	PAL colour, CCIR. (NTSC option), YC option, DV in/out option	
Cassette Type:	Mini DV	
Tape Speed:	SP 18.33 mm/sec	
Recording/play back Time:	84 minutes SP (Nominal dependant upon cassette capacity)	

Input/Output Connectors

Video In:	BNC
Video Out:	BNC
Stereo Audio In/Out:	10 pin LEMO type 2B
Power:	5 pin LEMO type 2B
Aux Out:	4 pin LEMO type 1B
Remote/Multideck:	19 pin LEMO type 2B