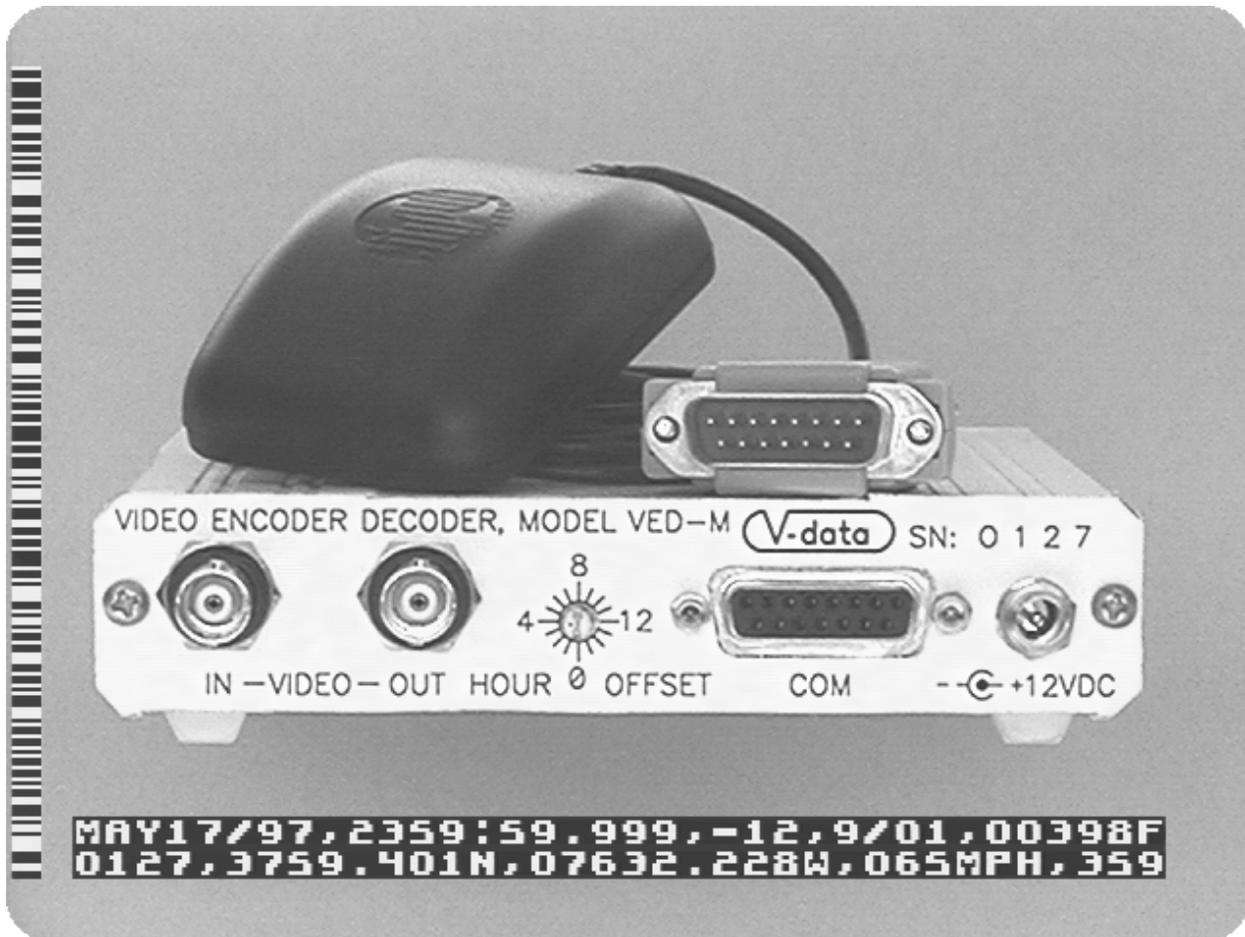


GPS ON VIDEO



Encode Mode

- Annotates Video with GPS data (SN, Lat, Long, Speed, Course, Date, Time, Hour Offset, Status, Alt.)
- Encodes Video with GPS data (Edge-coding is off screen in normal scan)
- Provides live GPS data to moving map program (using optional computer interface adapter cable)
- Precision millisecond time can be offset to local time worldwide
- Switch Select for Top/Bottom Display, Add/Sub Offset Hours, Kts/MPH/KmPH, Feet/Meters

Decode Mode

- Reads edge-coded GPS data from recorded Video in VCR play or pause, and outputs \$GPRMC message to moving map program (using optional computer interface adapter cable)

Prices (includes shipping)

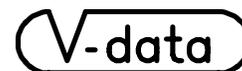
Video Encoder/Decoder, Model VED-M with DC cable	\$1375
Compatible 12 Channel GPS receiver, Model GPS-16	\$350
Computer Interface Adapter Cable	\$30
S-Video (YC) Adapter	\$60
AC Adapter (12 VDC Wall Transformer)	\$20

Other Products

GPS Receiver/IRIG-B Timecode Generator, Model GTP
 GPS or IRIG-B synchronized video sync generator, Model VSG
 Video Encoder/Decoder with IRIG-B input, Model VED-A

Terms

US: MasterCard/Visa or Net 30
 Export: To be managed through
 Export Trading Company



693 Melrose Road
 Lottsburg, VA 22511
 (804) 529-5950
vdata@crosslink.net

V-data Video Encoder/Decoder, Model VED-M Specifications

Physical: 5 ¼"W x 1 ¼"H x 8"L (13.3cm x 3.2cm x20cm), 1 ½ lb (680 g)

Extruded aluminum case with aluminum end panels.

Power: 9-16 VDC @ 70 ma without GPS receiver, 400 ma with GPS receiver,
2.1 mm jack, center pin positive, reverse polarity protected

Video In/Out: 1 V p-p into 75 ohms, BNC connectors, NTSC or PAL

COM Connector (DB15F) Pin Assignment:

1. Expansion I/O port
2. Expansion I/O port
3. Expansion I/O port
4. Pulse-per-second input from GPS receiver (optional for precision millisecond time)
5. Data input from GPS receiver (see receiver requirements below)
6. Data output to computer (live or playback GPS data)
7. Data input from computer (optional for GPS receiver setup or custom application)
8. Setup output to GPS receiver (optional for enabling/disabling messages or pulse-per-second)
9. +12 VDC power to expansion device, 100 ma maximum load
10. +12 VDC power to GPS receiver, 400 ma maximum load
11. +12 VDC power to differential corrections receiver, 200 ma maximum load
12. Ground for expansion device
13. Ground for computer
14. Ground for GPS receiver
15. Ground for differential corrections receiver

Internal Switches:

<u>Switch</u>	<u>On Position</u>	<u>Off Position</u>
1	Hour offset is -12 to 0 to +3	Hour offset is +12 to 0 to -3
2	Data display at bottom of screen	Data display at top of screen
3	Altitude in feet	Altitude in meters
4 (3 on)	Speed in MPH	Speed in knots
4 (3 off)	Speed in Km/H	Speed in knots

GPS receiver requirements: Receiver must output \$GPRMC message in RS-232 at 4800 baud, 8 data bits, 1 stop bit, no parity. \$GPGGA message output is optional to provide altitude and status. Pulse-per-second output is optional to provide milliseconds of time.

Recommended GPS receiver available from V-data: Model GPS-16, a WAAS 12 channel differential ready receiver with integral antenna, 16 feet of cable with RJ-45 plug connector, NMEA and pulse-per-second outputs, and a magnetic mounting base.

Time Display: Displayed date and time is UTC (GMT) time +/- the hour offset. When pulse-per-second output is available from the GPS receiver, precision millisecond time is sampled on the vertical sync and displayed on each video field. Otherwise time to the second is displayed.