

STACK STACK STACK® DATA SHEET PRO-4 DVL



Stack's new range of Digital Video-Loggers (DVLs) can be used as a conventional DVR to record video and audio. Now they can also record data as well as video, in one compact unit, for the ultimate in Synchronized Video-Logging!

Stack DVLs can be connected directly to any Stack Dash Display or Data logging system by CAN Bus. Up to 128 channels of data, including GPS and the internal 3-axis g-sensor channels, can be recorded with the video and audio.

Stack's PRO-4 and CLUBMAN-3 multi-camera DVLs are the most robust available. The slim, lightweight, waterproof design makes them the perfect solution for all motorsport and trackday applications.

Key Features

- NEW! CAN bus interface for direct connection to Dash Displays and Logging Systems or ECUs.
- NEW! Video-Logging with synchronized recording of vehicle data channels
- Solid-state, no moving parts, ensuring reliable operation year after year.
- Fully waterproof.
- Records MPEG2 video to removable CF card, playable on PC or burn directly to DVD.
- Multiple (3 or 4) fully configurable camera inputs.
- 720x576 resolution @ 25 fps (PAL) or 720x480 @ 30 fps (NTSC).
- Widescreen 16:9 and standard 4:3 aspect ratios.
- GPS, g-sensor and vehicle data overlays.
- User configurable bit-rate up to 20 Mbps (up to 50Mbps Broadcast quality option available).
- Best video image quality in the business.
- Over 9 hours of high quality, full resolution recording (subject to CF card size).
- 2 channel audio recording.
- Automatic record start/stop using built-in 3-axis g-sensor.
- 9-20V DC powered, 5 Watts, suitable for all motorsport applications.

Standard Components

The PRO-4 DVL is supplied with the following standard components:

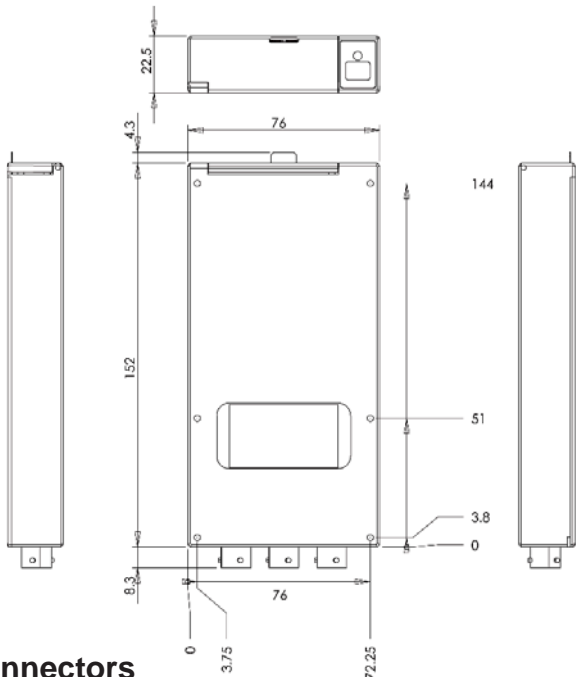
PRO-4 DVL Module	ST990063-3
PRO-4 System Harness	ST918XXX
PRO-4 Input Harness	ST918107
PRO-4 Audio/Video Harness	ST918114
Switch & LED Harness	ST918105
Configuration Software & DataPro Analysis Software	ST920039
PRO-4 DVL User Guide	ST542112
PRO-4 Addendum	ST542111

Optional Components

PRO-4 DVLs may be supplied with the following optional components:

Bullet Camera- PAL, 560 TVL, 0.1 Lux	ST8393
Bullet Camera- NTSC, 560 TVL, 0.1 Lux	ST8394
Microphone	ST8397
CAM plug to BNC & Power lead	ST918106
GPS Receiver (5Hz)	STST995
2GB Ruggedised High-Speed Metal Housing (-40°C to +85°C)	ST390052
4GB Ruggedised High-Speed Metal Housing (-40°C to +85°C)	ST390053
8GB Ruggedised High-Speed Metal Housing (-40°C to +85°C)	ST390054
16GB Ruggedised High-Speed Metal Housing (-40°C to +85°C)	ST390055
32GB Ruggedised High-Speed Metal Housing (-40°C to +85°C)	ST390056
8GB High-Speed Commercial Grade (+10°C to +60°C)	ST390064
16GB High-Speed Commercial Grade (+10°C to +60°C)	ST390065
32GB High-Speed Commercial Grade (+10°C to +60°C)	ST390067

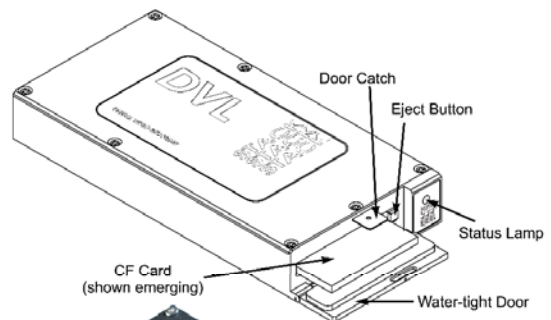
Dimensions



Connectors



3 x 9W DDAS



Stack PRO-4 DVL Specifications

GENERAL	
Mechanical Size	151 x 76 x 21mm
Finish	Hard Anodised Al
Weight	380g without card
Operating Voltage Range	9V to 20V DC
Power Consumption:	~5W
Connectors	3 x 9W DDAS
ENVIRONMENTAL*	
Operating Temperature Range	0 to 70°C (32 to 146°F)
Sealing	Waterproof
STORAGE MEDIUM	
Storage Medium	Compact Flash
Maximum Card Size	32GB
File Format	MPEG-2; Windows Media Player & DVD compatible, with optional metadata stream.
RECORDING - VIDEO	
Number of video inputs	4
Video Standards Supported	PAL/NTSC
Video input multiplexing options	Any format of 1 to 4 cameras on one screen (with programmable scale, mirror, crop and position)
Composite Video Input	Composite 1V pk-pk
Video Frame Rate	PAL 25fps; NTSC 30 fps
Video Monitor Output	1 V pk-pk Composite
Compression Format	MPEG-2
Resolutions Supported	16:9 Widescreen, D1; 2/3D1; 1/2D1, SIF
Quality - bitrate (at D1 resolution)	10 Fixed Bit-rates (1 Mbps Min. 20 Mbps Max.)
CF Record Time (at D1 Resolution)	7 to 140 Mins/Gbyte
RECORDING - AUDIO	
Number of channels	2
Input Level	Line Level +3 to -30dB; optional mic power
Input Impedance	> 10k Ohms
Audio Monitor Output	0dB (nominal)
Audio Monitor Output Impedance	<100 Ohms
INTERFACES	
CAN Bus Interface	Configurable for Stack Dash Display and Data Logging Systems
GPS Interface	1-20Hz (NMEA 0183 Interface)
MISCELLANEOUS	
G-sensor auto stop/start recording	Yes
Power up to Record start time	<20 Sec
Record Switch to Record start/stop time (in powered up state)	<0.1 Sec
Lost recording time between 2GB files	None
Max video loss if power lost while recording	<last 1 Sec.
Configuration	Via USB
DATA OVERLAY	
GPS/G-force Data Overlay	Up to 128 channels, from any input source
Real-time Performance Data Overlay	Expansion System Option (requires Stack Display/Steering Wheel System)

*Specifications quoted dependent on use of appropriate CF cards and are guaranteed only with Stack supplied Harsh Environment cards.



Goldstar Onboard
 Unit 1 Wither Rise, Oakley, Basingstoke
 RG23 7BP UK
 Tel: +44(0)1256 783532
 Email: info@goldstaronboard.com
 Web: www.goldstaronboard.com

In the interests of continuous product improvement, we reserve the right to alter without notice the specifications and features described in this leaflet.

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