

# STACK STACK STACK® DATA SHEET Pro-4 DVR

ST8383 PAL / NTSC

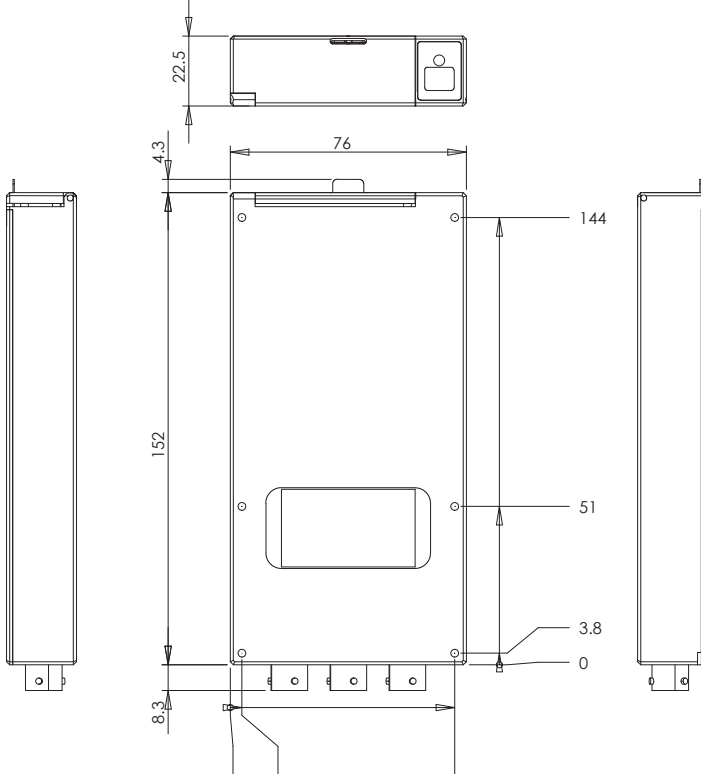
Stack's new range of Digital Video Recorders combine ruggedness, reliability and recording quality with a slim, lightweight design that's perfect for all motorsport competitors and trackday enthusiasts.

Stack's digital video recorders employ broadcast standard MPEG-2 video compression to record high quality real-time video and audio direct to a Compact Flash (CF) card. The card can be removed with ease and played on a PC or laptop using a standard media player application. Recordings can be archived direct to DVD for playback on either a PC or a DVD player.

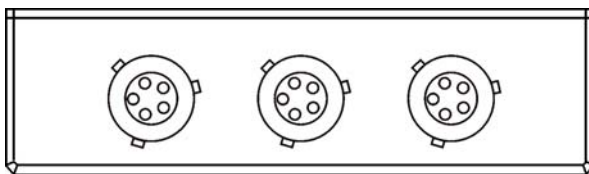
## Key Features

- Solid-state, no moving parts, ensuring reliable operation year after year
- 8 Fixed Bit-rates (1 Mbps Min. 12 Mbps Max.)
- Up to 4 camera inputs (composite PAL or NTSC).
- 11-140 Mins/Gbyte @ full resolution
- 0 to 60°C (32 to 140°F) operating temp. range
- 32 GB maximum card size
- 9 to 20V DC powered
- Waterproof
- Mil-type "AS" connectors
- External status LED
- Sealed memory card door (when closed)
- Real-Time date & time overlay
- GPS data overlay option (NMEA 0183 Interface)
- 3 axis G-sensor data overlay
- Motion-controlled (3-axis) recording control

## Dimensions



## Connectors



2 x 9W DDAS plus 1 x 5W AS

## Standard Components

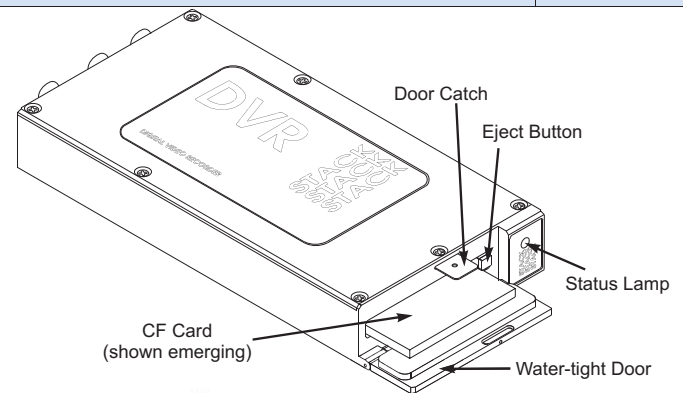
The PRO-4 DVR is supplied with the following standard components:

<b>PRO-4 DVR Module</b>	ST990063-3	1
<b>PRO-4 System Harness</b>	ST918101	1
<b>PRO-4 Input Harness</b>	ST918107	1
<b>PRO-4 Audio/Video Harness</b>	ST918114	1
<b>Switch &amp; LED Harness</b>	ST918105	1
<b>Configuration Software</b>	ST920039	1
<b>PRO-4 DVR User Guide</b>	ST542112	1
<b>PRO-4 Addendum</b>	ST542111	1

## Optional Components

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

<b>DVR to VS Adapter Harness</b>	ST900144
<b>Bullet Camera- PAL, 560 TVL, 0.1 Lux</b>	ST8393
<b>Bullet Camera- NTSC, 560 TVL, 0.1 Lux</b>	ST8394
<b>Microphone</b>	ST8397
<b>CAM plug to BNC &amp; Power lead</b>	ST918106
<b>GPS Receiver and Data Overlay Option</b>	ST8398
<b>1 GB Harsh Environment Compact Flash memory card</b>	ST390051
<b>2 GB Harsh Environment Compact Flash memory card</b>	ST390052
<b>4 GB Harsh Environment Compact Flash memory card</b>	ST390053
<b>8 GB Harsh Environment Compact Flash memory card</b>	ST390054
<b>16 GB Harsh Environment Compact Flash memory card</b>	ST390055



## Stack Pro-4 DVR Specifications

<b>GENERAL</b>	
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	2 x 9W DDAS, 1 x 5W AS
<b>ENVIRONMENTAL*</b>	
Operating Temperature Range	0 to 60°C (32 to 140°F)
Sealing	Waterproof
<b>STORAGE MEDIUM</b>	
Storage Medium	Compact Flash
Maximum Card Size	32GB
File Format	MPEG-2; Windows Media Player & DVD compatible
<b>RECORDING - VIDEO</b>	
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)	8 Fixed Bit-rates (1 Mbps Min. 12 Mbps Max.)
CF Record Time (at D1 Resolution)	11 to 140 Mins/Gbyte
<b>RECORDING - AUDIO</b>	
Number of channels	2
Input Level	Line Level +3 to -30dB
Input Impedance	> 10k Ohms
Audio Monitor Output	0dB (nominal)
Audio Monitor Output Impedance	<100 Ohms
<b>MISCELLANEOUS</b>	
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
<b>DATA OVERLAY</b>	
GPS/G-force Data Overlay	Option
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.



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