DVR3-240
Digital Video & Data Recorder with 4 camera inputs

ST9373 PAL/NTSC

Overview

Stack's new range of Digital Video Recorders (DVRs) can be used as a conventional DVR to record video and audio. They can also record data as well as video, in one compact unit, for the ultimate in Synchronized Video-Logging.
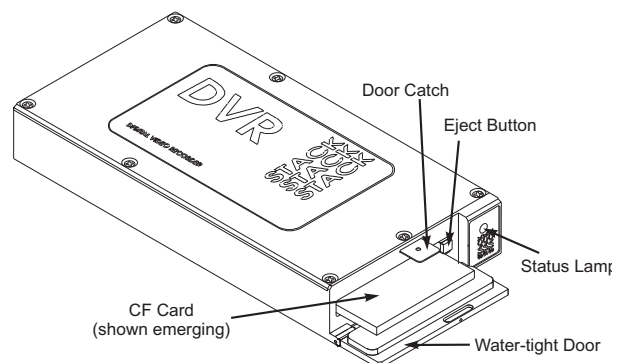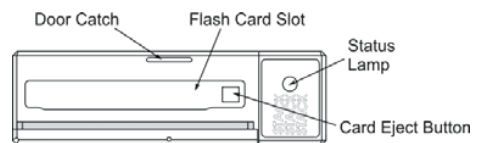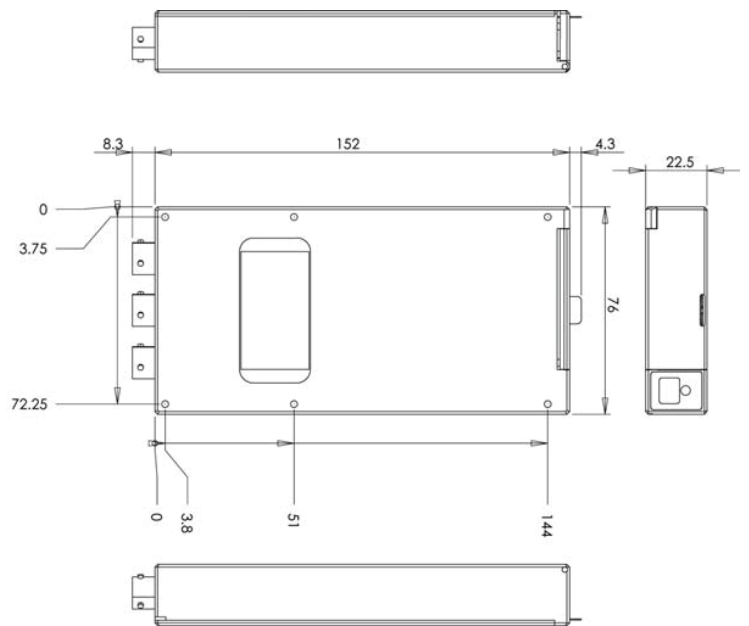
Stack DVRs can be connected directly to any Stack Dash Display or Data logging system by CAN Bus. Up to 128 channels of data, including GPS and the internal 3-axis G-sensor channels, can be recorded together with high quality MPEG-2 video and audio direct to a Compact Flash (CF) card. The video and data recordings can be analysed together in the supplied Stack DataPro analysis software. Video recordings can also be played back by any PC media player or archived and viewed on a DVD player.

Stack's range of DVRs combine ruggedness, reliability and recording quality with a slim, lightweight design that's perfect for all harsh environment applications.

Highlights

■   Video-Logging with synchronized recording of vehicle data channels.
■   CAN bus interface for direct connection to Dash Displays and Logging Systems or ECUs.
■   Data recording of up to 128 data channels at 1-500Hz sampling rates.
■   Solid-state, no moving parts, ensuring reliable operation year after year.
■   User configurable bit-rate up to 20 Mbps.
■   Up to 4 fully configurable inputs.
■   16:9 Widescreen or 4:3 screen ratios.
■   0 to 70ºC (32 to 158ºF) operating temperature range.
■   128GB maximum card size.
■   Over 36 hours of high quality, full resolution recording (subject to CF card size).
■   9 to 20V DC powered (20V-50V DC option).
■   Fully sealed to IP67.
■   Mil-type "AS" connectors.
■   External status LED.
■   Sealed memory card door (when closed).
■   Real-Time date & time overlay.
■   3 axis g-sensor data overlay.
■   GPS data overlay option (NMEA 0183 Interface).
■   Continuous Loop Recording modes.
■   Event Recorder mode, with pre- and post-trigger record periods.
■   Automatic "Alarms" start/stop recording using built-in g-sensor or any data channel.
■   Connectors: 3 x 9W DDAS.

Dimensions

Specifications: DVR3-240

RECORDING - VIDEO

Number of camera inputs	4
Video input multiplexing options	Any format of 1 to 4 cameras on 1 screen
Video Standards Supported	PAL/NTSC
Composite Video Input	Composite 1V pk-pk
Video Frame Rate	30 fps (NTSC); 25 fps (PAL)
Video Monitor Output	1 V pk-pk Composite
Compression Format	MPEG-2 MP@ML compression Program Stream
Resolutions Supported	PAL: 720x576; 720x400; 480x576; 352x576, 352x288 NTSC: 720x480; 720x400; 480x480; 352x480; 352x240
Quality - bitrate	User configurable bit-rate up to 20 Mbps
CF Record Time	7 -140 Mins/Gbyte

RECORDING - AUDIO

Number of audio channels	2
Input Level	Mic or Line Level +3 to -30dB
Active Gain Control (AGC)	Yes
Compression Format	MPEG1 Layer II, 2 ch. 16 bit, 48 kHz

RECORDING - DATA

Data Recording	128 data channels at 1-500Hz sampling rates

DISK INTERFACE

Disk Interface	Compact Flash; FAT32
Maximum Card Size	128GB
Maximum File Size	2GB
File Format	MPEG-2; Windows Media Player & DVD compatible

MISCELLANEOUS

Power up to Record start time	<20 Sec
Record Switch to Record start/stop time	<0.1 Sec (in ready to record state)
Lost recording time between 2GB files	None
Max video loss if power lost while recording	<last 1 Sec
Brownout Protection option	No
Configuration	Via USB
Real-Time Date & Time Overlay	1 Sec resolution
GPS Data Overlay (option)	1-20 Hz
3 axis G-sensor Data Overlay	12.5 Hz
GPS Receiver Interface (option)	1-20 Hz (NMEA 0183 Interface)
CAN-bus Interface (option)	Yes (up to 1 Mbps)
Continuous Loop Recording	Yes
Event Recording Mode	Yes
Pre-trigger Period	0 - 60 Mins
Post-trigger Period	0 - 24 Hours
Event Counter Data Overlay Option	Yes

ENVIRONMENTAL*

Operating Temperature Range	0C to +70ºC (32 to 158ºF)
Storage Temperature Range	
Sealing	IP67
Humidity	0-100% RH Condensing
Vibration	
Radiated Emissions	
Shock	
Radiated Immunity	
Conducted Immunity	

GENERAL

Mechanical Size	151 x 76 x 21mm
Finish	Hard Anodised Aluminium
Weight (without memory card)	300g
Operating Voltage Range	9V to 20V DC (20V-50V DC option)
Reverse/Over-voltage Protection	
Power Consumption (@ 12VDC)	~5W
Standby Battery	Life > 5 Years
Connectors	3 x 9W DDAS

Standard Components

The DVR3-240 is supplied with the following standard components:

DVR3-240 Module	ST99006X	1
Power Lead	ST918078	1
System Harness	ST918118	1
Video Input Harness	ST918107	1
Monitor Harness	ST918114	1
Switch & LED Harness	ST918105	1
Configuration Software	ST920039	1
DataPro Software	ST920033	1
DVR3 User Guide	ST542103	1

Optional Components

The DVR3-240 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 and Data Overlay Option (5Hz)	ST8398
2GB Ruggedised High-Speed Metal Housing (-40ºC to +85ºC) CF Card	ST390052
4GB Ruggedised High-Speed Metal Housing (-40ºC to +85ºC) CF Card	ST390053
8GB Ruggedised High-Speed Metal Housing (-40ºC to +85ºC) CF Card	ST390054
16GB Ruggedised High-Speed Metal Housing (-40ºC to +85ºC) CF Card	ST390055
32GB Ruggedised High-Speed Metal Housing (-40ºC to +85ºC) CF Card	ST390057
8GB High-Speed Metal Housing (+10ºC to +60ºC) CF Card	ST390064
16GB High-Speed Metal Housing (+10ºC to +60ºC) CF Card	ST390065
32GB High-Speed Metal Housing (+10ºC to +60ºC) CF Card	ST390067
128 Channel Sync-Video Metadata Recorder option	ST8336-PIN
GPS Data Overlay option (20Hz)	ST9398

Note

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

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