Timespace V500

HD IP Cameras

The V500 is the latest vehicle CCTV digital recorder developed and manufactured by Timespace Technology Ltd. in the UK.

Building on the proven V400 platform, the V500 hybrid recorder offers 16 channels of analogue (SD) video plus 8 channels of 1080P (HD) video.

Built-in 'Power Over Ethernet' (POE) and industry standard connectors enables quick and reliable installation, and with 4 programmable video outputs, the V500 is an ideal CCTV recorder for integration into a wide range of vehicles.

Industry-leading PCLink viewing software is compatible with all Timespace recorders and seamlessly displays all cameras, G sensor and optional GPS mapping data, providing built-in real-time map location incident analysis.

Optional integration with Bridge Alert provides early warning of low bridges and monitoring of Bridge Alert operation.

The V500 is compatible with Timespace's PCLink and LANLink software, and the Timespace WiFi100 router, quickly and reliably downloads incident footage via date / time or GPS location requests.

With watermarking, SHA-256 authentication, embedded vehicle CAN data and GPS, date, time, speed and location, the V500 recorder footage meets evidential requirements when needed for court proceedings.

	V400	V500
Analogue Cameras	8 or 12 or 16	16
Images per seconds (IPS)	100 or 150 or 200	200
IP Cameras	1	8
Power over Ethernet	-	All 8 IP channels
Ethernet PSU	-	40 Watt
Video Outputs	2	4
Short Circuit Protection	Passive (Polyfuse)	Active

Recording Performance

- 16 independent analogue video inputs plus 8 IP camera inputs
- 200 IPS global with selectable image rates for each camera up to 25 IPS
- H.264 compression offering excellent image quality to meet the Transport for London bus CCTV recording specification
- Dual recording from one or more cameras up to 25 IPS to SDHC card for added footage security in extreme G-force events
- Selectable compression settings for each camera to ensure maximum resolution and storage.

Connectivity

- Separate analogue and IP Camera sockets
- Integrated Bridge Alert and alarm inputs
- Quick and easy incident footage upload and system performance monitoring via WiFi / mobile networks / Timespace LANLink
- Transport for London diagnostic reporting via LAN ports.

Physical Characteristics

- Compact size with any axis quick-release mounting for ease of installation in the most difficult locations
- Fully suspended hard disk for long and reliable operating life
- Lockable recording media cartridge for security and reliable operation
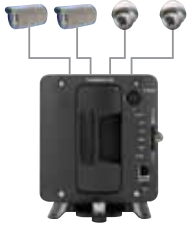- Industry-proven integral power and video connectors.

Compatibility

- XBA file compatible with PCLink software, allowing full function review of all Timespace recorders with one software suite
- Reviewer compatibility with other Timespace recorders for easy configuration and set-up.

TIMESPACE

Timespace V500

DRIVING SECURITY

Stand alone recorder

Live view using Reviewer or video out to monitor

Review recordings directly from a removable cartridge

WiFi 100
Multi-channel live view and wireless download of recordings

Bridge Alert System

CANLink data recording

Performance

	V500-24
Standard	**PAL/NTSC/IP**
Video recording global image rate (analogue only)	200 IPS
Analogue video inputs	16
Image rates Min – Max	1 – 25 IPS
Image Resolution (pixels)	2CIF – 720 x 288
Image bit rate – quality setting	6 (TfL setting VHigh)
IP video inputs	8
IP Camera Resolution	1080P
Image rate Min – Max	1 – 25 IPS
Image bit rate IP Cameras (global)	24 Mbits/Sec
Audio microphone input	2
Audio line out	2
Video out Main / Aux 1-3 – Configurable	4
Video Streaming Live view – multi channel	25 IPS
SD Card recording rate – multi channel	25 IPS (analogue only)
Hard disk capacity options	500Gb, 1TB or 2TB
Solid State Disk	500GB, 1TB
SD card capability	4-32GB
G Sensor	3 axis
Alarm input	10 selectable 2V – 24V Level
Alarm output	4 (Logic output)

General Features

- Auto record on power-up or single button start / stop recording
- Recorder status indicators (6 LEDs)
- Simultaneous record, live view and file download
- H.264 (MPEG-4 Part 10) compression
- Removable suspended hard disc media cartridge – lockable
- Simple, intuitive menu system with help screens
- Optional embedded GPS for position & speed
- Normal and alarm triggered recording
- 7 day programmable timer recording
- Local set-up and configuration using Timespace Reviewer
- Remote control via RS232 interface
- Power-saving shutdown with wake-up on alarm, timer or motion
- Low temperature sensor and heater
- Short circuit protection – video inputs
- Multi ranging PSU with power monitoring diagnostics
- Integration with Timespace LANLink fleet management software
- GSensor-triggered alarms for automatic downloads

PCLink / LANLink

- Remote set-up and download via LAN, WiFi or mobile networks
- PC Multi Cam LiveView, playback, via optional WiFi or mobile router
- Image search by time / date or file name – PCLink
- Quick review alarm event footage markers
- Face-blurring tool
- View vehicle CAN data in sequence with video footage
- Camera and DVR health check via simple traffic-light colour indicators

Security Features

- Proprietary single file video format XBA
- Each image watermarked (SHA-2 AES Authentication – 256 bit)
- Embedded camera number, date and time in each image

Optional Features

- 25IPS global SD memory card back up (analogue only) – SDHC 4GB up to 32GB
- File download via SD card
- Bridge Alert
- WiFi / mobile router
- CANLink data recording (view in sequence with recorded footage)
- RTSP streaming (enabled via LANLink)
- MediaLink

Connections / Interfacing

	V500-24
Analogue Camera	3 pin XLR
IP Camera	Neutrik RJ45
Neutrik RJ45 POE (LAN / TfL IBUS / IP Cameras)	8 port Neutrik RJ45 POE
Video out (Main and Aux 1-3)	2x 3 pin XLR, 2x 4 way Molex
Audio microphone in	6 way Molex Mini
Audio line out	6 way Molex Mini
Timespace Reviewer	RJ45
IBUS & COMMS	Neutrik RJ45
GPS / RS232	18 way Molex Mini Fit Jr Plug
Alarm inputs	10 way Molex Mini Fit Jr Plug
Alarm / LED output – Configurable	18 way Molex Mini Fit Jr Plug
Power input	5 pin XLR
Power output	12V and 5V 18 way Molex Mini Fit Jr Plug

Physical Characteristics

Enclosure	Extruded Aluminium, with moulded end caps
Dimensions (mm)	292(l) x 132(w) x 143(h) including mounting plate
IP rating	IP50
Operating temperature range (temperature sensor and heater function enabled)	-10 to 50 °C
Humidity	10 – 90% r.h., non condensing
Mounting options with quick release bracket	Screw-mounted any axis orientation
Power supply input	12 – 40V DC polarity protected
Continuous power – without Reviewer	12W
Continuous power – cameras on (typical)	33W
Continuous power – without Reviewer and in sleep mode	0.5W
Maximum current – start-up	1.9A with camera and Reviewer
Continuous power (maximum)	80W Ancillary equipment dependent
POE Camera continuous power (maximum)	40W IP camera dependent
Power up time to recording	20 seconds
External power output	5V DC 2A / 12v 2A
Video out – Main / Aux 1-3 power output	12V 2A per monitor
Weight – including removable cartridge and mounting bracket	3.15kg

Regulatory Approvals

CE Mark (EN55032:2012, EN55024:2010)
E Mark
ISO 9001:2008
RoHS
WEEE