

# Timespace V400

DRIVING SECURITY



The Timespace V400 provides users with an innovative solution for vehicle CCTV, the culmination of many years' experience in developing reliable, high performance and cost-effective vehicle CCTV digital recorders for use on public transport.

Maximum recording storage time is available using the latest industry standard H.264 video compression to capture crystal clear footage on removable HD cartridges up to 1TB. The combination of fully suspended hard disk for shock protection and dual recording capability to SD card ensures critical video footage is always available.

Built to last, the V400 uses industry proven power and signal connectors with short circuit protected camera inputs, whilst the inbuilt timer shutdown with hibernate mode using Wi-Fi option wake on LAN provides an efficient solution for uploading incident footage and system software updates.

Industry leading PCLink viewing software is compatible with all Timespace recorders and displays the V400 inbuilt G-sensor and optional GPS data, providing dynamic map location to assist with driver training and to improve passenger comfort.

Using watermarking with SHA-256 authenticated digital signature, embedded vehicle data (indicators, brakes etc.) and GPS, date, time, speed and location, the V400 recorder footage meets the evidential requirements when needed for court proceedings.



## Recording Performance

- 8, 12 or 16 independent video channels with up to 200ips
- Selectable image rates for each camera up to 25ips
- 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 setting for each camera to ensure maximum resolution and storage in excess of 240 hours.

## Connectivity

- Live view output for remote security monitoring at control centre, with PTZ capability
- SMS or Wi-Fi alert to control centre from driver's panic button or extreme G-force event
- Quick and easy incident footage upload and system performance monitoring via Wi-Fi or 3G
- Transport for London diagnostic reporting with dual 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 giving reliable recording performance and maximum up-time
- 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 from X100, X200, X300 and V400 recorders with one software suite
- Reviewer compatibility with other Timespace recorders for easy configuration and set-up.



**TIMESPACE**

# Timespace V400

## DRIVING SECURITY



Stand alone recorder



Live view using reviewer or video out to monitor



Review recordings directly from a removable cartridge



Multi-channel live view and wireless download of recordings

### Performance

	V400-08	V400-12	V400-16
<b>Standard</b>	<b>PAL</b>	<b>PAL</b>	<b>PAL</b>
Video recording global image rate	100 ips	150 ips	200 ips
Video inputs	8	12	16
Image rates Min – Max selectable by camera	1 – 25 ips	1 – 25 ips	1 – 25 ips
Image Resolution (pixels)	2CIF – 720 x 288	2CIF – 720 x 288	2CIF – 720 x 288
Image bit rate – quality setting	6 (TfL setting VHigh)	6 (TfL setting VHigh)	6 (TfL setting VHigh)
Audio microphone input	2	2	2
Audio line out	2	2	2
Video out Main / Aux – Configurable	2	2	2
Video Streaming Live view – multi channel	25 ips	25 ips	25 ips
SD Card recording rate – multi channel	25 ips	25 ips	25 ips
Hard disk cartridge option (GB)	250, 500, 750 or 1TB	250, 500, 750 or 1TB	250, 500, 750 or 1TB
SD card capability	4-32GB	4-32GB	4-32GB
G Sensor	3 axis	3 axis	3 axis
Alarm input	10 selectable	10 selectable	10 selectable
	2V – 24V Level	2V – 24V Level	2V – 24V Level
Alarm output	4 (Logic output)	4 (Logic 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
- Vehicle data recording
- 7 day programmable timer recording
- Local set-up and configuration using optional Timespace reviewer
- Remote control via RS232 interface
- Timer shutdown for power saving wake up on motion for security
- Hibernate with wake up on LAN
- Low temperature sensor and heater
- PTZ camera control for remote viewing
- Short circuit protection – video inputs
- Multi ranging PSU with power monitoring diagnostics

### PCLink

- Remote set-up via LAN or Wi-Fi connection
- File download via Ethernet (FTP)
- PC Multi Cam LiveView, playback, via optional Wi-Fi or 3G router
- Image search by time/date or file name – PCLink
- Quick review alarm event footage markers

### Security Features

- Proprietary single file video format XBA
- User and Admin password protected functions
- Each image watermarked (SHA-2 AES Authentication – 256 bit)
- Embedded camera number, date and time in each image
- 12 user programmable embedded characters per channel

### Optional Features

- 25ips global SD memory backup – SDHC 4GB up to 32GB (24 hours loop recording at 25ips super, to SD card No Audio)
- File download via SD card
- CAN bus interface (software option)
- IBIS communication interface (software option)
- Wi-Fi / 3G / GPRS router

### Connections / Interfacing

	V400-08	V400-12	V400-16
Camera	3 pin XLR	3 pin XLR	3 pin XLR
Video out (Main and Aux)	3 pin XLR	3 pin XLR	3 pin XLR
Audio microphone in	6 way Molex Mini Fit Jr Plug	6 way Molex Mini Fit Jr Plug	6 way Molex Mini Fit Jr Plug
Audio line out	RJ45	RJ45	RJ45
Timespace reviewer	RJ45	RJ45	RJ45
LAN 1 WLAN/3G	RJ45	RJ45	RJ45
LAN 2 TfL IBUS	18 way Molex Mini Fit Jr Plug	18 way Molex Mini Fit Jr Plug	18 way Molex Mini Fit Jr Plug
GSM/GPS/RS232	10 way Molex Mini Fit Jr Plug	10 way Molex Mini Fit Jr Plug	10 way Molex Mini Fit Jr Plug
Alarm inputs	18 way Molex Mini Fit Jr Plug	18 way Molex Mini Fit Jr Plug	18 way Molex Mini Fit Jr Plug
Alarm/LED output – Configurable	18 way Molex Mini Fit Jr Plug	18 way Molex Mini Fit Jr Plug	18 way Molex Mini Fit Jr Plug
Power input	5 pin XLR	5 pin XLR	5 pin XLR
Power output	12V and 5V 18 way Molex Mini Fit Jr Plug	12V and 5V 18 way Molex Mini Fit Jr Plug	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	11 – 50V DC polarity protected
Continuous power – without reviewer	12W
Continuous power – cameras on (typical)	33W
Continuous power – without reviewer hibernate mode	0.5W
Maximum current – start-up	1.9A with camera and reviewer
Continuous power (maximum)	80W Ancillary equipment dependent
Power up time to recording	20 seconds
External power output	5V DC 2A / 12v 2A
Video out – Main / Aux power output	12V 2A per monitor
Weight – including removable cartridge and mounting bracket	2.61Kg

### Regulatory Approvals

CE Mark  
89/336/EEC Generic  
95/54/EC Commercial Vehicles  
ISO 9001; 2008  
RoHS  
WEEE



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