Timespace V400

DRIVING SECURITY

HD IP Cameras

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 with analogue and HD 1080P cameras.

Maximum recording storage time is available using the latest industry standard H.264 video compression to capture crystal-clear HD footage on removable hard disk cartridges up to 4TB. 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 enables the system to gracefully shutdown and download status information and footage via depot based WiFi.

Industry-leading PCLink viewing software is compatible with all Timespace recorders and displays the V400 inbuilt G-sensor and optional GPS data, providing map location incident analysis and download via LANLink.

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

Using watermarking with SHA-256 authenticated digital signature, embedded vehicle CAN data 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 analogue video inputs plus single IP camera input
- 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 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

Bridge Alert System

CANLink data recording

Performance

Standard	V400-08 PAL/NTSC	V400-12 PAL/NTSC	V400-16 PAL/NTSC
Video recording global image rate	100 IPS	150 IPS	200 IPS
Analogue 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)
IP Camera Resolution	1080P	1080P	1080P
Image rate Min – Max	1 – 25 IPS	1 – 25 IPS	1 – 25 IPS
Image bit rate	8 MB/Sec	8 MB/Sec	8 MB/Sec
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 capacity options	500GB, 1TB, 2TB, 4TB	500GB, 1TB, 2TB, 4TB	500GB, 1TB, 2TB, 4TB
Solid State Disk	500GB, 1TB or 2TB	500GB, 1TB or 2TB	500GB, 1TB or 2TB
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
Alarm output	4	4	4

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
• 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

• 25 IPS 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

	V400-08	V400-12	V400-16
Analogue Camera	3 pin XLR	3 pin XLR	3 pin XLR
IP Camera	RJ45	RJ45	RJ45
Video out (Main and Aux)	3 pin XLR	3 pin XLR	3 pin XLR
Audio microphone in	6 way Molex Mini	6 way Molex Mini	6 way Molex Mini
Audio line out	Fit Jr Plug	Fit Jr Plug	Fit Jr Plug
Timespace Reviewer	RJ45	RJ45	RJ45
LAN 1 WLAN / 3G	RJ45	RJ45	RJ45
LAN 2 TfL IBUS	RJ45	RJ45	RJ45
GSM / GPS / RS232	18 way Molex Mini Fit Jr Plug	18 way Molex Mini Fit Jr Plug	18 way Molex Mini Fit Jr Plug
Alarm inputs	10 way Molex Mini Fit Jr Plug	10 way Molex Mini Fit Jr Plug	10 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 and in sleep 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
Maximum external monitor surge	6A at 12V for 20ms
Weight – including removable cartridge and mounting bracket	2.61Kg

Regulatory Approvals

CE Mark
E Mark
VCA CoP approval
R118 (Fire Retardancy)
RoHS
WEEE

Timespace Technology Ltd reserves the right to amend product specifications without notice and without incurring obligation.

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