

provida 4000

Mobile Speed Enforcement and Video Surveillance





Market Leading Innovation

provida 4000

ProVida is the world's leading speed enforcement and mobile surveillance brand with over 4,000 systems sold worldwide

For over 20 years the ProVida brand has remained the global leader in mobile speed enforcement and in-car video surveillance, with thousands of systems actively used by police forces in over 20 countries.

The ProVida system calculates the average speed of a moving vehicle between two defined points and records the video with overlay text displaying the target vehicle average speed, patrol vehicle actual speed, time and date providing evidential proof of either a speeding or road traffic offence.

ProVida can be used from a moving or stationary patrol vehicle, with the target vehicle travelling in the same direction, in front of or behind the patrol vehicle.

Unlike a radar based system, ProVida can be used to calculate a vehicles average speed without the need to be in (or close to) the line of travel of the target vehicle

The video can be displayed on an existing in car monitor, combined with an in car ANPR display or on a stand alone monitor. Video can be stored on the optional ProVida HDR or any other recording device.



ProVida 4000 Monitor Display

ProVida 4000 consists of three main parts:

- ProVida 4000 modular unit
- A colour zoom camera
- ProVida Remote Control Unit

ProVida 4000 allows for versatility and flexibility when fitting into a vehicle where there is restricted space. The main modular unit and optional Hard Disc Recorder can be fitted out of view with the complete system controlled via the remote control unit fitted to the dashboard or central console.





System Design

Product Overview

The ProVida 4000 has been designed to comply with the latest UK Home Office Manual Distance/Time Speedmeter Handbook , Publication No 55/04.

As was the case with the previous ProVida 2000 system the new ProVida 4000 HOTA approved device has been designed to be able to be used as a stand alone Visual Average Speed Computer And Recorder (VASCAR) system, utilising the optional Hard Disc Recorder or to be integrated into an existing or new ANPR traffic vehicle. To date ProVida 4000 systems have been integrated to operate with a number of in car mobile data terminals as well as tablet based solutions.

ProVida 4000 keeps with the modular design of the traditional ProVida 2000 system, allowing for a full range of system and upgrade options, ranging from a simple non-video speed measurement system to solutions encompassing multiple cameras, video recording and Automatic Number Plate Recognition (ANPR). The manual speed measurement activation is done using the traditional "Police Pilot" button configuration which will be familiar to existing operators of the ProVida 2000 system, thus minimising the training requirements for current users.



ProVida 4000 "Police Pilot"

Quality Assurance

Petards quality systems are accredited to: BS EN ISO 9001:2008 (FM21102) BS EN ISO 14001:2004 (EMS 534323) PAS 99:2012 (IMR 534323)

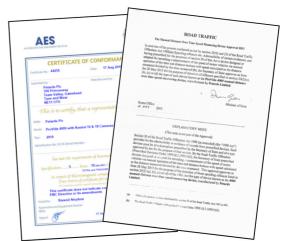


ProVida 4000 Components

System Approvals

ProVida 4000 systems are approved to the following standards:

- Home Office Manual Distance/Time Speedmeter Handbook , Publication No 55/04.
- The Road Vehicles (Construction and Use) Regulations 1986, Regulation 109 Compliant
- AES Specification 5, Issue 10, Tetra and Tracker







Speed Measurement

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ProVida 4000 accurately measures the average speed of a vehicle utilising a time over distance speed calculation

The ProVida 4000 system calculates the average speed of a vehicle by measuring the time it has taken for a vehicle to travel a measured or known distance.

The system constantly displays and records the speed of the patrol vehicle by taking an odometer feed via the CAN bus interface, thereby providing speed information during a high speed pursuit, without the need to use the ProVida handset.



ProVida 4000 overlays all the required speed information onto the video image to provide secure evidential video. The system is suitable for use in both single and twin crewed vehicles.

The user operates the system by use of a multi-functional remote control unit (RCU) that consists of:

- LCD Display
- Police Pilot
- Recorder Controls
- Camera Controls

The colour coded Police Pilot buttons used to start and stop the time and distance counters as well as reset the system are designed to minimise the user interaction allowing the drivers focus to be on the pursuit of suspect vehicles whilst carrying out a speed measurement.

The front facing kestrel camera has a 10x optical zoom lens and a built-in switchable microphone to allow in car audio recordings to be made.

To ensure a valid speed measurement the ProVida system requires to be calibrated in the vehicle at regular intervals.









Speed Measurement

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Speed Display

The speed measurement data is displayed on the in car monitor, as shown below. This information is also shown on the LCD display of the RCU handset, thus enabling a single crewed user to view the speed measurement details in compliance with Regulation 109 of The Road Vehicles (Construction and Use) **Regulations** 1986

Once a speed measurement has been completed the speed display on both the monitor and RCU will flash, indicating a valid measurement has been made.



ProVida 4000 Display Information

Date

- s: Average speed
- d: Elapsed distance
- t: Elapsed time
- Time
- **Operating Mode**
- Frame Counter
- Camera zoom

Product Support

Petards offer full product support, training and maintenance packages, details of which are available on request.

In addition Petards offer technical support during a prosecution to the police authority should any case be challenged in a court of law.

User Training

A range of training packages are available ranging from new user, user refresher, train the trainer and maintainer courses.

Training packages can be tailored to suit the individual end user and would consist of both classroom and in -car sessions.

Training sessions are carried out at the users location utilising their installed devices.







Video Surveillance

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ProVida 4000 also provides evidential video evidence of other road traffic offences

In addition to providing evidential video in support of speeding offences the ProVida system can continuously record surveillance video to support other traffic offences, such as dangerous driving, high speed pursuit, hard shoulder violation and collisions.

The ProVida 4000 displays the patrol vehicle speed, the calculated average speed of the target vehicle, the date and the time on the monitor as well as on the video recordings providing secure evidence of a wide range of driving violations from speed monitoring, hard shoulder violations dangerous driving and driving without due care and attention.



Speed Monitoring



Hard Shoulder Violation



The ProVida Hard Disc Recorder stores encrypted, watermarked video files onto a removable cartridge (or SD card in the case of the X300 HDR).

Stored video files are accessible via the dedicated PCLink software that consists of applications that allow video Playback, Multi camera Live View, Configuration and Download of recorded files on the removable hard disk cartridge via a USB cable or docking station to a PC.

Recorded files are in a proprietary XBA file format to ensure sensitive evidence can only be viewed by authorised personnel and can be easily copied as a standard AVI file for burning to a disc.



ProVida 2000 Motorbike

ProVida is also available, in its ProVida 2000 version as a motorbike system, with specifically designed switches and 3.5" LCD monitor suitable for handlebar mounting.



System Specification

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Product Codes



ProVida 4000 Specification

None

K10

K18 Bulle

Power supply voltage	10.5 - 15V DC	<u>X</u>
Power consumption	35W	P P
Operating temperature	- 5°C - +50°C	C
Real time clock drift	< +/- 1 min / year.	N
Time accuracy	< 200 PPM ± 10ms	C D
Time resolution	10ms	R
Speed resolution	1 mph	Н
Speedometer range	0 –200 mph	
Speed accuracy	< 1 mph over full range	<u>x</u>
Loudspeaker output Cameras	1.0 W	P P
Kestrel 10	10x optical /4 x digital zoom Horizontal Resolution >460 TVL Range 3 - 40m	O N C D R
Kestrel 18	18x optical /12x digital zoom Horizontal Resolution >450 TVL	Н

Range 3 - 50m

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HDR Specification (Optional)

X200 HDR

Power supply voltage 12V DC Power consumption 0.6A Operating temperature + 5°C - +4 0°C Max Frame Rate 25ips PAL Compression MPEG format 720 X 288 (PAL) frame size D1 option pixels Low, Medium, High Resolution Hard Disc Options 500 GB (SATA) 120GB, 240GB, 500GB (SSD)

K300 HDR

Power supply voltage Power consumption Operating temperature 0°C - + 50°C Max Frame Rate Compression D1 option pixels Resolution Hard Disc Options

10 - 15V DC 0.85A 25ips PAL MPEG format 720 X 576(PAL) frame size Low, Medium, High 500GB, 1TB, 2TB (SATA) 120GB, 240GB, 500GB (SSD)



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