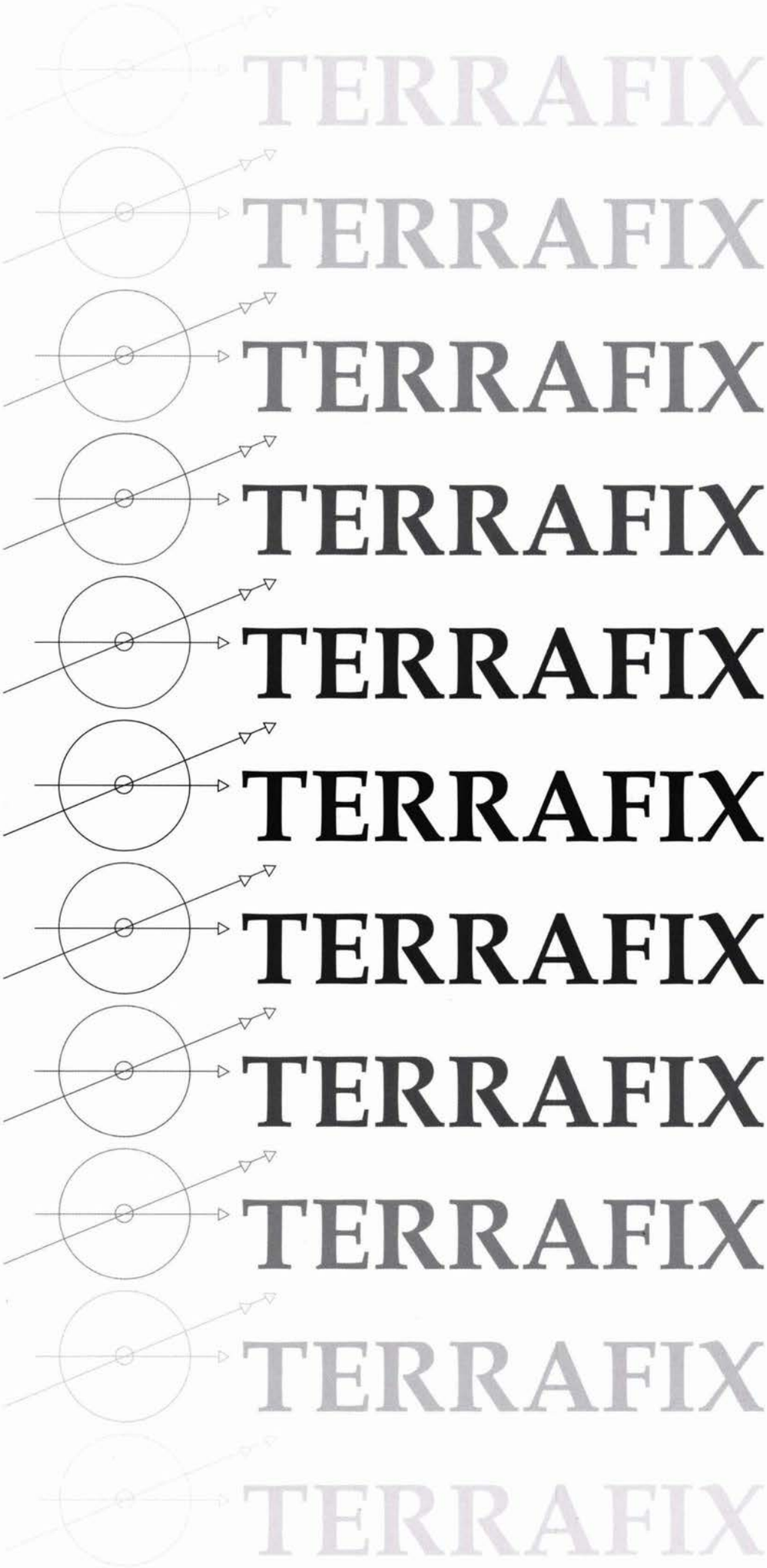
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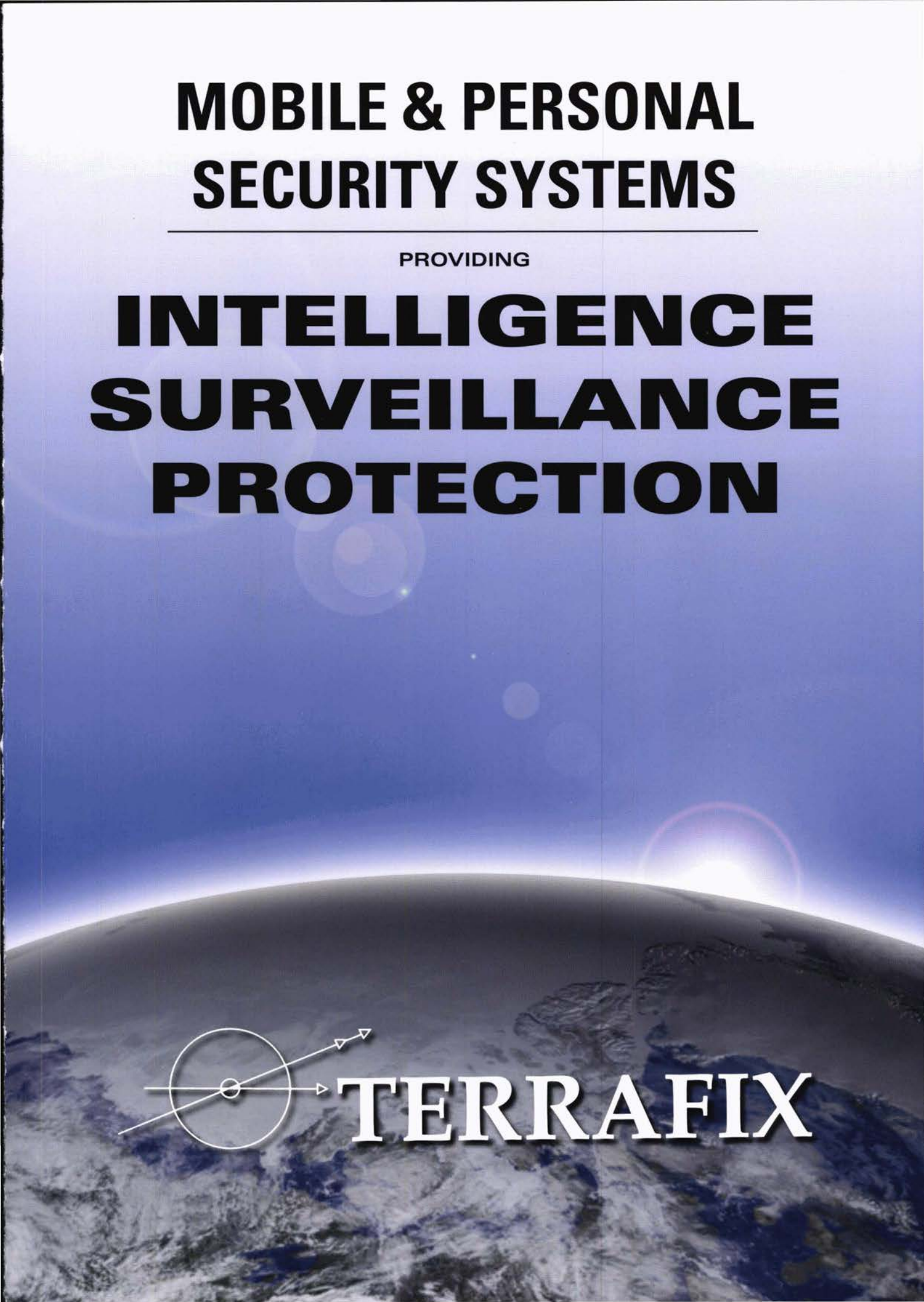
MOBILE & PERSONAL SECURITY SYSTEMS

PROVIDING

INTELLIGENCE SURVEILLANCE PROTECTION



TERRAFIX

Security Solutions

Terrafix design and develop bespoke vehicle and personal based systems. Over the years Terrafix have worked extensively in the security and police arena, supplying comprehensive information and surveillance systems.

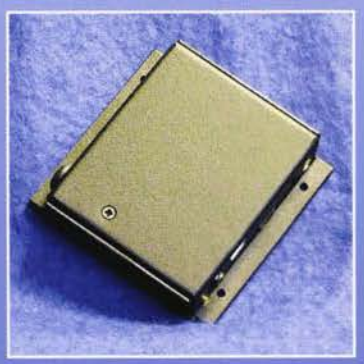
The Terrafix AnT is a micro tracking device that can be adapted to operate in a multitude of different variants combining the latest in data and communications technology. The utilisation of GPRS enables the user to operate and configure the AnT remotely and safely.

Using advanced technologies the AnT is a small, powerful, highly functional unit ideal for a range of different requirements:-

- **Bodyworn**
- **Personal Protection**
- **Mobile Based**

Supporting the AnT is an integrated communications system with specialist developed software packages to operate in all environments.

Robust, reliable, discreet and flexible in design Terrafix security systems offer the perfect powerful tool for users where information and intelligence is the key.



Vehicle Based System

The AnT can be packaged into a ruggedised waterproof case for mounting either permanently, or temporarily in or on a vehicle. A battery powered AnT is designed for quick deployment with complete operability from a remote location. The control system can set various power saving modes to maximise battery life and reducing the amount of time needed at a vehicle and so limit the chance of compromise.

The AnT can operate as a live tracking or logging device for intelligence gathering, incorporating various sensing methods to allow automatic activation on time, movement, placement or speed. Multiple configurations are available to make the AnT compatible with secure networks.

TERRAFIX

Personal Security

Personnel Protection

The AnT system can be utilised for personnel protection either for the protector or protected with the use of a variety of alarming sensors. The AnT can assist in providing a method of discreet monitoring which allows the charge/protected more flexibility of movement.

Small in size the AnT is ideal for situations where a discreet bodyworn device is needed, it can be housed into clothing, briefcases or any other form of packaging.

Providing both logging and real-time tracking functionality with additional inputs of audio and emergency button capability, the AnT is a highly adaptable device.

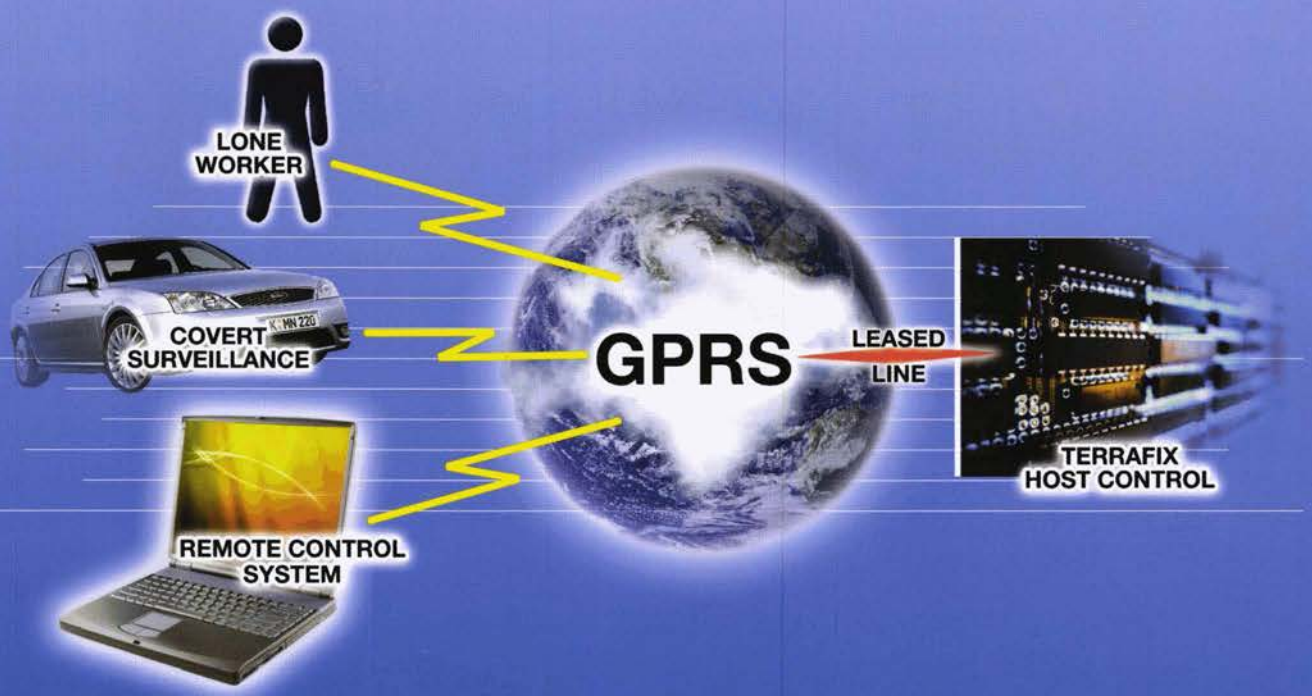
Terrafix Lone Worker AnT

A bodyworn unit which provides an automated protection system. The solution will give personnel confidence when working unaccompanied in hazardous or extreme conditions. Equipped with a variety of priority alarms ranging from 'man down' to automatic motion sensor.

The Lone Worker AnT can be used in conjunction with an RFID (Radio Frequency ID) tags. This expands the flexibility of the system by allowing the pooling of resources and offering a means of inexpensive personal issued tags.

Terrafix Managed Service

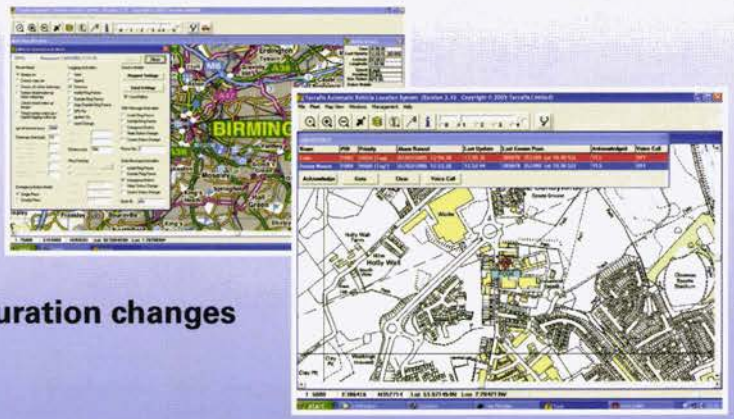
Terrafix offer a fully managed secure hosting service which allows the utilisation of a GPRS remote data system, without the expense of a direct leased connection.



Control Software - TACS

Terrafix AnT Control System (TACS) package provides the user with the complete control and management of the system. The Command and Mapping Application can be fully mobile on a laptop or based on a fixed PC. The software provides the user with the ability to:-

- **Alter polling rates**
- **Retrieve data**
- **Historical data analysis**
- **Sensor activation & control**
- **Real-time tracking**
- **Ring fencing**
- **Store & forward device configuration changes**
- **'Listen in'**
- **Multiple AnT control**



Additional System Components

The TMC 1450 (Terrafix Mobile Computer 1450) is a ruggedised touch screen tablet, which can be integrated into any security system.

The Ant Watcher, an application which works on any Windows Mobile Smartphone giving the ability for a user to monitor the effectiveness of deployment without a Laptop.

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CERTIFICATE NO: FM36024

TME

Terrafix Mobile Environment

The Terrafix Mobile Environment, an in-vehicle server providing a flexible, universal communications and system architecture aimed at the following markets:

Emergency services -
- A&E
- EPRF
- PTS

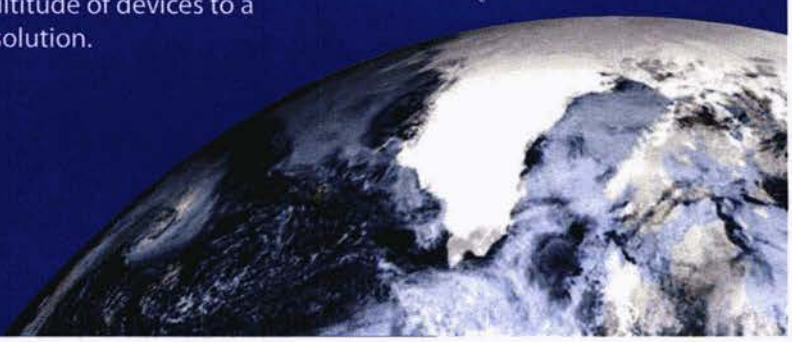
Police and Security Agencies -
- Surveillance
- Friendly force tracking
- Situation Awareness

The principle of TME is an architecture which supports a range of different devices and will include the design of applications which will provide a common range of functions irrelevant of the platform used.

The TME will include but will not be limited to:

- Apple
- Android
- Terrafix Bespoke
- Windows

The TVC 4000 will be the in-vehicle server generating the Terrafix Cloud, connecting a multitude of devices to a centralized intelligent transfer solution.



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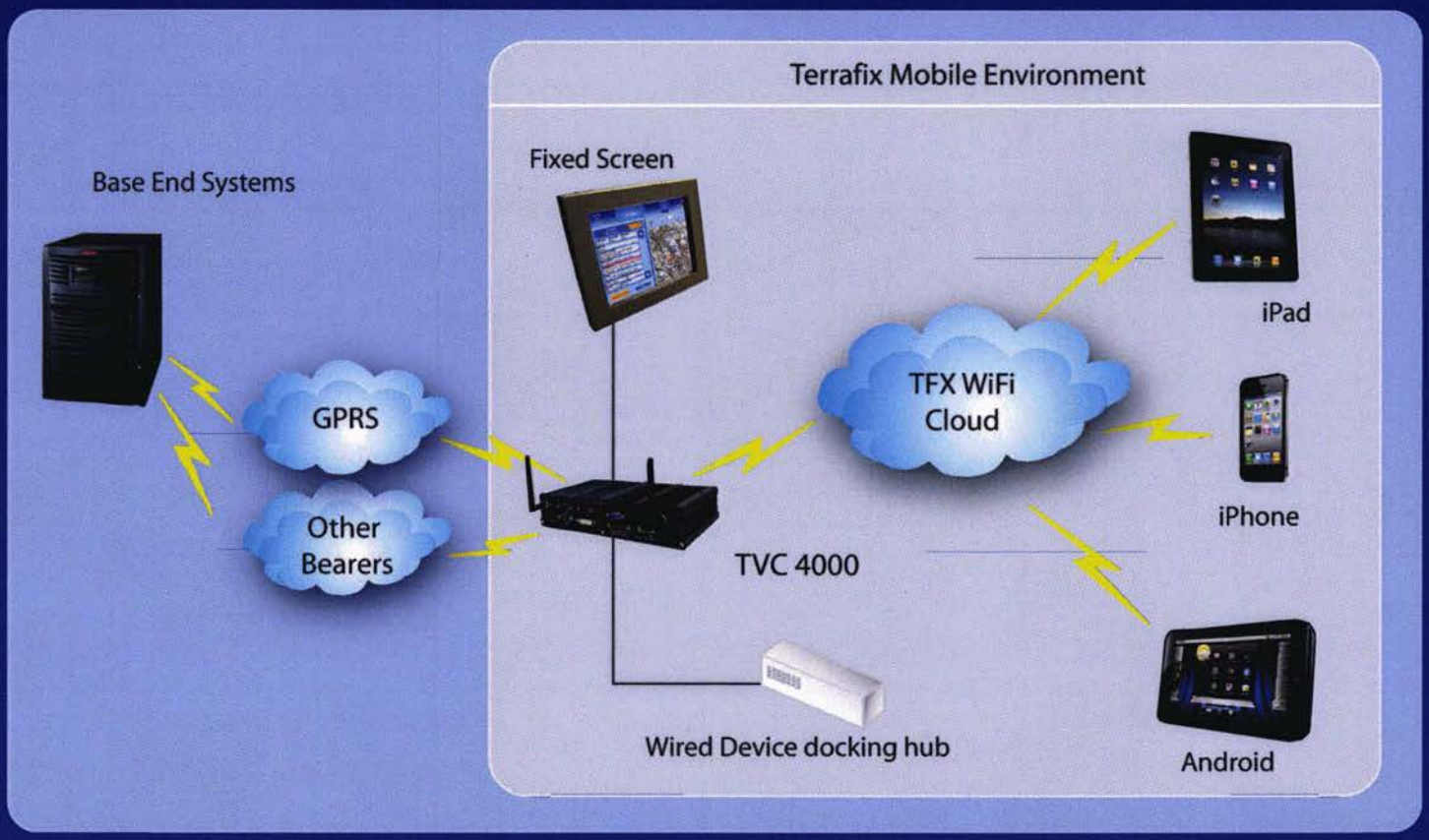

Benefits:

- All product/ devices will operate in a common way
- Intelligent Information Transfer
- Powerful, flexible architecture
- Backwardly compatible with existing Terrafix systems
- Expandable platform
- Modular
- Unlimited devices
- Multi- bearer

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SAMS
(Situation Awareness Mobile System)

Terrafix Situation Awareness Mobile System

Utilising the GPS in a variety of devices on multiple communications bearers, Terrafix have developed 'SAMS', Situation Awareness Mobile System.

'SAMS' provides the user with:

- full visuality of all assets
- administer control of the viewing platform
- enable grouping of assets
- improve operational efficiency
- manage assets more effectively

'SAMS' is an asset tracking and management system that provides a flexible system to work as a stand alone (GSM/ DMO - Direct Mode Operation) system, or a part of an infrastructure network (GPRS/ TMO - Trunk Mode Operation). It provides the user with a view of all the assets on the Terrafix mapping platform with levels of functional control.
The user can upgrade the system and go from 'seeing' the assets to 'controlling ' their assets with enhancement of the Configurational Manager application. This application allows the user to control who is capable of seeing groups of assets.

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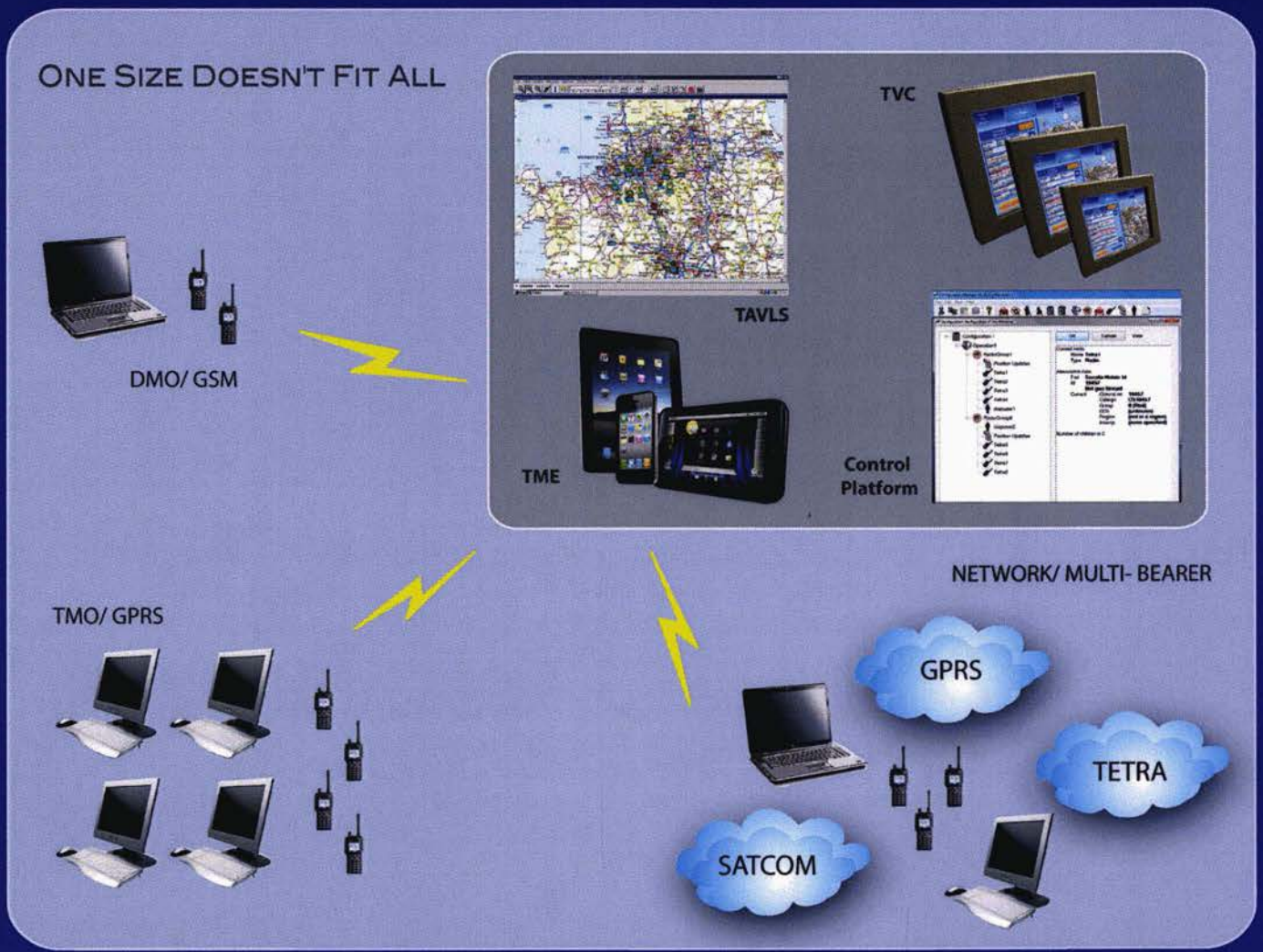
ONE SIZE DOESN'T FIT ALL

The Terrafix 'SAMS' System combines:

- Viewing/ Control Platform (Terrafix mapping)
- Google Earth Interface

With options to enhance with:

- Configuration Manager (Control Platform).
- Mobile Data Facility - TVC 4000, Android, Windows Mobile.
- Multi- Bearer Facility - providing multi- bearer capability, GPRS, Iridium Inmarsat D+.

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AnT 3

Terrafix Automatic nano Tracker3

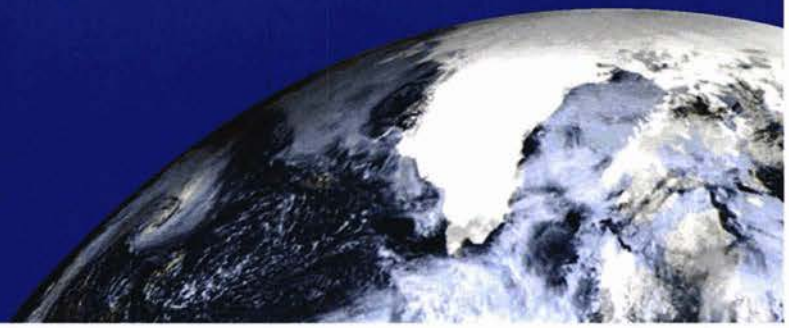
The Terrafix AnT³, a small waterproof discreetly designed device. AnT³ provides the user with a powerful tool for use in challenging locations where normal GPS receivers cannot operate, allowing for a highly covert installation in a multitude of different places such as:

- Cars
- Small containers
- Clothing

Utilising GPRS technology the AnT³ can be quickly deployed and still provide complete operability from a remote location, reducing time spent at a vehicle and limiting the chance of compromise, with the functionality of remote download.

AnT³ :

- OEM device size of 53mm x 48mm x 10mm
- **AnT³ enclosure is to at least specification IP66**
- Over -air real-time battery fuel gauge
- An internal GPRS/GSM modem
- Support for Multiple geo- fences
- Optional end-to-end encryption
- Can be used for both personnel and vehicle tracking
- Audio capability - earpiece and microphone
- Optional GPS aiding
- Integrated antennas



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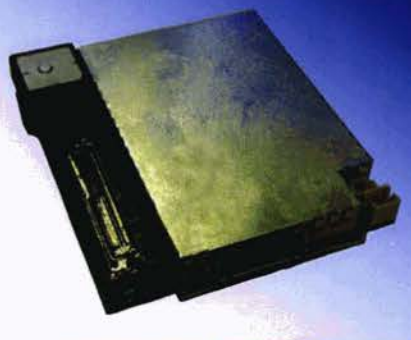

External Interface:

1 x USB (Host or Slave)
1 x Input (3V logic)
1 x Output (3V logic)
1 x Ignition Sense
1 x Audio (microphone)
1 x Charging point [Li-ION]
1 x DC input

OEM Unit Size (uncased):

Integrated Antenna: 53x46x10mm [24.000mm³]
External Antenna : 53x36x10mm [19.00mm³]

Weight: <50g

Temperature:

Operating: -20 to +70 °C
Storage: -40 to +85°C

Power Requirements

Battery Power: +3.2 to +4.5 Vdc

Power Consumption [typical]: [@3.7V]

Av. PMode 0 (no call): <370 mW (GPS, GPRS on)
Av. PMode 0 (call active): <1050mW (GPS, GPRS on)
Power Mode 1(sleeping): <15mW (GPS off, GPRS on)
Power Mode 2 (sleeping): < 2 mW (GPS, GPRS off)
Inactive: <1 mW

Backup Power :

GPS/RTC: < SuperCAP

Connectors:

Latching IO : USB, I/O, Ignition Sense, Audio
Charging, DC input
Battery Power: 2-w JST ZR series
Battery Fuel Gauge: 2-w JST SR series

GPS:

Channels: up to 50 [GPS L1 C/A] [Galileo
Accuracy:
Position <2.5m [CEP, 50%, -130dBm]
Velocity 0.1 m/s [50%@30 m/s]
DGPS/SBAS 2.0m CEP²
Heading 0.5° [50%@30 m/s]
Dynamic Capability:
Max. velocity 515m/s
Max. acceleration 4g
Time To First Fix:
Hot Start <1 sec
Warm Start 29 sec
Cold Start 29 secs, <1 sec aided
Aided Start <1 sec
Active Antenna
Power +3.3Vdc
Current 5 to 30mA
Sensitivity: -144 [cold], -160 [tracking] dBm

GSM/GPRS modem:

Frequency Band: 900/ 1800/ 1900 MHz
Transmit Power: Class 4 (2W) at GSM900
Class 1 (1W) at GSM1800
Class 1 (1W) at GSM1900
GPRS Data Rates: 85.6 kbps downlink (maximum)
42.8 kbps uplink (maximum)
Coding Schemes: CS-1, CS-2, CS-3 & CS-4
SIM Card:
Memory Card Antenna: 1x micro-SDcard
GSM/GPRS: Integrated [opt. ext. connectors]
GPS: Integrated [opt. ext. connectors]

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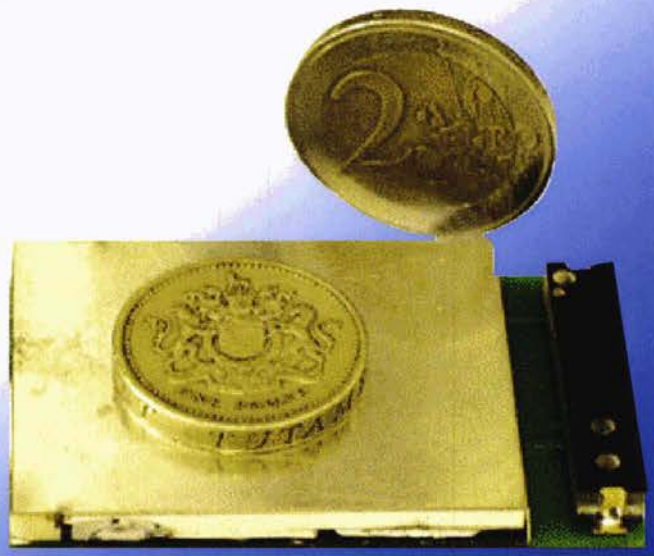
Covert Audio Listener

[OEM MODEL]

Terrafix covert GSM Listner



A Discrete surveillance device remote monitoring of live audio.

The Audio Listener consists of a dual-band GSM/GPRS cellular modem integrated with a highly sensitive on- board microphone and an on-board dual-band antenna. It operates in the 900/1800 MHz bands making it suitable for the use in the UK and across Europe.

An interface for an external microphone is provided allowing optimum microphone positioning, with the capability of switching between internal and external microphones using DTMF tones generated from a telephone keypad. [The microphone sensitivity may also be dynamically adjusted using DTMF tones.] *Option

The unit can be operated from a Lithium-ION or Lithium_Polymer rechargeable battery or via a DC input. Integration of a charging circuit within the unit allows for powering and charging the unit simultaneously . This provides the facility of running from a stable DC supply, whilst automatically swapping over to battery should the DC power be removed/cut.

The integrated antenna removes the need for cumbersome/fragile RF connectors, enabling a discrete compact solution. Integrated power modes (controllable over -air via Terrafix's SkyTAVLS [or SMS]*Option) allow for optimum battery life.

An on-board MCU minimises power consumption by putting the cellular modem into a sleep mode, whilst allowing for an automatic 'wake-up' on an incoming call. [Further sleep modes using the built -in RTC allowing programming of a 'wake-on-alarm', enabling optimum stand-by power where the unit is effectively off until the programmed date/time is reached.]

[A battery fuel gauge interface is provided. This allows remote monitoring of the remaining battery capacity/run-time. This data may be relayed via SMS updates to mobile phone or in real time over a GPRS connection to Terrafix SkyTAVLs.]

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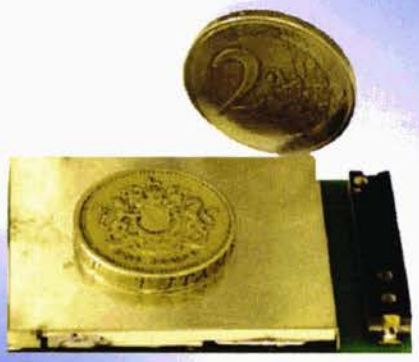
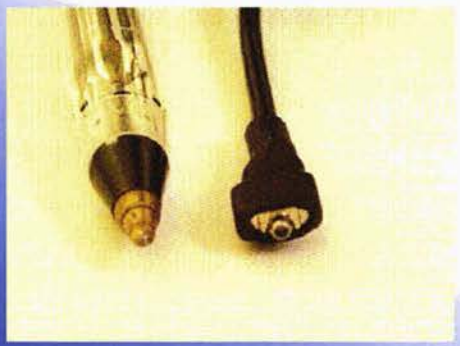


Interface:

1 x Microphone (on board)
1 x Microphone (off board)
1 x Battery power input
1 x DC/Li-ION charger input
1 x Ignition sense input
1 x On/Off input
1 x Serial RS232

Processor PCB Size:

55mm x 35mm x 6mm
Weight: <20g



Temperature:

Operating: -20 to +70°C
Storage: -40 to +85°C

Power Requirements & Consumption:

Battery Power: +3.2 to +4.5Vdc (@ 4.2V)
DC/Charger Power: +4.5 to + 6.5Vdc (@4.2V)
Power Mode 0 [no call] : <150mW (GSM waiting for call)
Power Mode 0 [call active] : <1150mW (call active)
Power Mode 1 [no call] : <15mW (GSM waiting for call)
Power Mode 1 [call active] : <1150mW (call active)
Power Mode 3 [sleep] : <1 mw (GSM off, call not possible)
Standby-time [Power Mode] : 16 days (using 1200mAh battery)
Talk-time : 4.5 hours (using 1200mAh)

Connectors:

Battery Power: 4-W JST 'ZR' series
DC/ Charger/ Ign: 3-W JST 'ZR' series
Ext. mic./ Serial: 6-W JST 'SR' series

GSM/GPRS modem:

Frequency Band 900 / 1800 MHz
Transmit Power: Class 4 (2W) at EGSM900
Class 1 (1W) at GSM1800
GPRS Data Rates: 85.6 kbps downlink (maximum)
42.8 kbps uplink (maximum)
Coding Schemes: CS-1, CS-2, CS-3 & CS-4

SIM:

SIM connector: mini-SIM
Antenna: 1 x Dual-band (on board)

The Design and specification may be subject to change without notice

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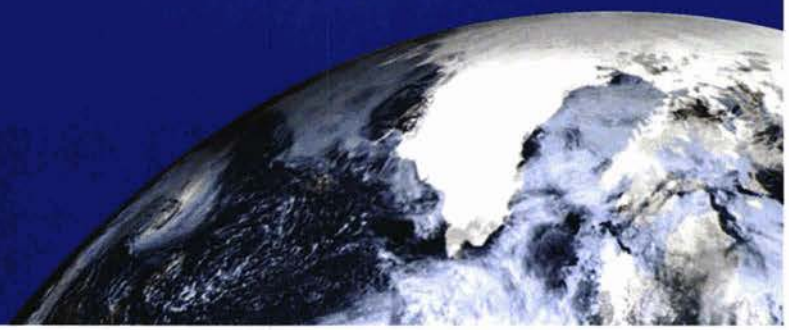
Personal Tracker
A fully portable Personal tracking unit

Terrafix Personal Tracker

Working alone in hazardous or threatening environments, the Terrafix Personal Tracker shows the location and status of the vulnerable staff automatically.

A small compact and flexible portable device, the Personal tracker provides the user with the piece of mind for situations where assistance may be required.

- Foot patrols & single crewed responders
- Agricultural and forestry workers
- Social workers
- District nurses
- Overt operations
- Mountain rescue
- Professionals visiting commercial & domestic premises



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Functionality

- Discreet and small in size
- Fully integrated - no external wires
- Internal battery providing a minimum of 12 hours real-time tracking
- Flexible and suitable for various applications
  ie - body worn such as belt, arm, pocket
  - vehicle based
- Additional emergency button/ microphone
- Configurable position updates
- Configurable over air

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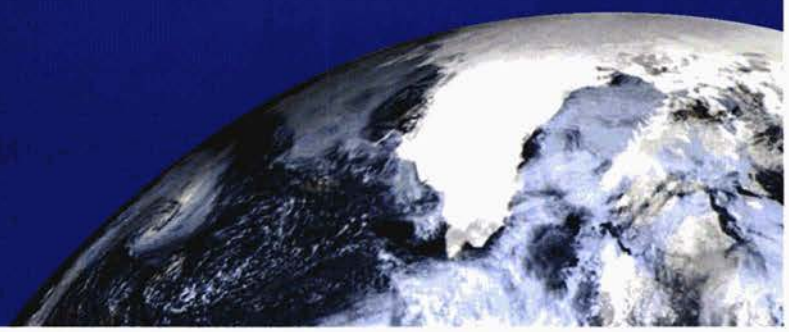
PDA Systems for Personnel & Vehicles

PSPV

GPS Smartphone/ PDA

- **Mobilise and track all resources**
- **Remote management capability**
- **In-vehicle Satellite Navigation with Automatic Routing**
- **Functionality emulates the Terrafix bespoke professional systems developed for:**
  - **Non Emergency Fleet**
  - **Permanent & voluntary on-duty staff**
  - **Rapid Response vehicles**
- **Log performance data for customer defined analysis**

With advances in technology, it is now possible to integrate a GPS receiver into a Mobile Phone or PDA. Using a specific Terrafix Application the device can provide the same functionality as the professional systems deployed in front line vehicles.



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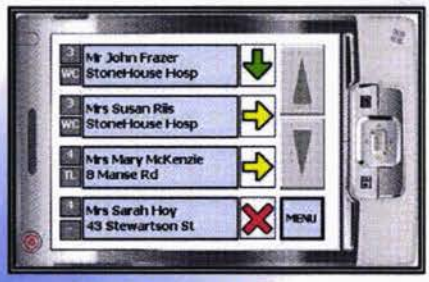
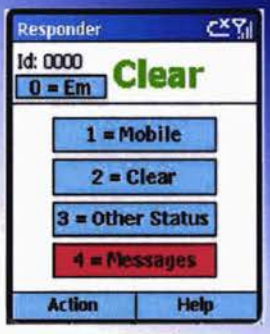


Run Details



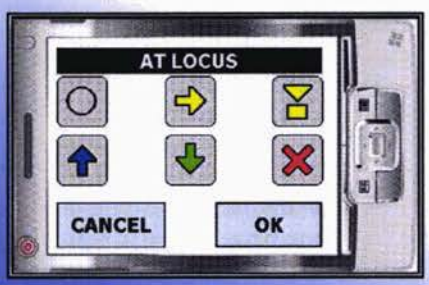
Status Screen

Patient Screen

Functions

Terrafix Responder

- Remote log on/ off duty with confirmation
- Automated despatch messaging from CAD identical to front line ambulances
- Manual acknowledgement of messages
- Book mobile, at scene etc
- Every message automatically acknowledged to the sender
- Interface to built in satellite navigation, i.e TOM TOM
- Emergency button
- Automatic switching between GSM & GPRS



Status Screen

Terrafix Non- Emergency Solution/ PTS

- Platform independent
- Automated scheduling to vehicle
- Dynamic schedule updates
- Manual acknowledgement of messages
- Integrated verification for log-on/ off
- Interface to the built in satellite navigation, i.e TOM TOM

System Requirements

The PSPV system will integrate seamlessly into any service which currently use Terrafix AVLS and Mobile Data Systems with a GPRS capability.

For customers who currently do not use Terrafix equipment, a Managed service is available which is hosted from the Terrafix premises. This service can be displayed on either a dedicated private GPRS network or via the internet on a secure client application.

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AnT Watcher

AnT Watcher

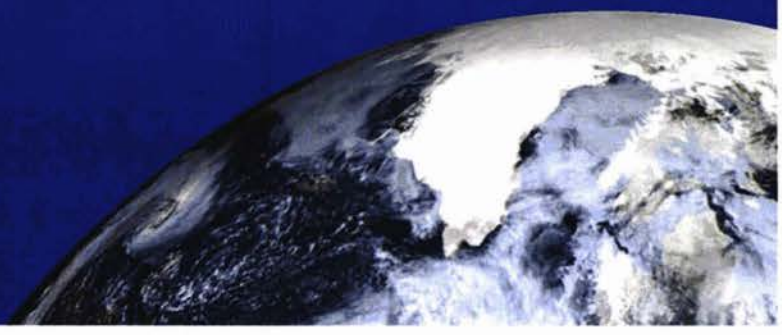
Typical Smartphone

The system that enables users of Terrafix AnTs & SuperAnTs, the ability to monitor and manage their units discreetly.

AnT Watcher a mobile phone based software system that provides a in-expensive enhancement to the Terrafix AnTs and SuperAnTs.

Using a Windows 'Smartphone', AnT Watcher offers the users ability to unobtrusively monitor and assess the functionality of any deployed AnT , but still providing standard mobile phone operability.

Utilising Smartphone technology and GPRS, AnT Watcher informs the user of the operability of the chosen unit, from how many satellites its seeing to the speed device is travelling at.



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100001/ 04.04.2011 Iss:2

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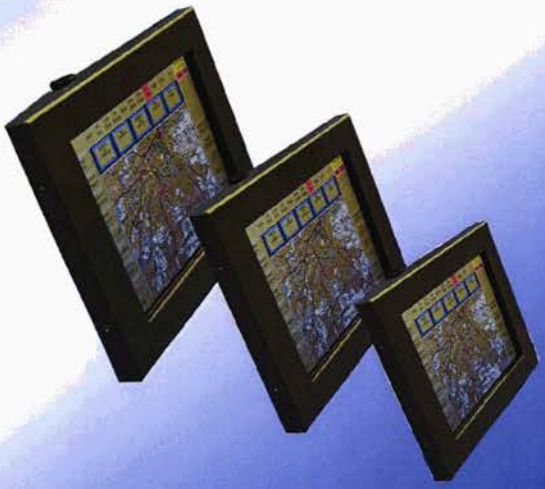
TVC 3000 (HD/F)

Terrafix Vehicle Computer



Flexible Screen Sizes

Combined Computing & Communications Unit

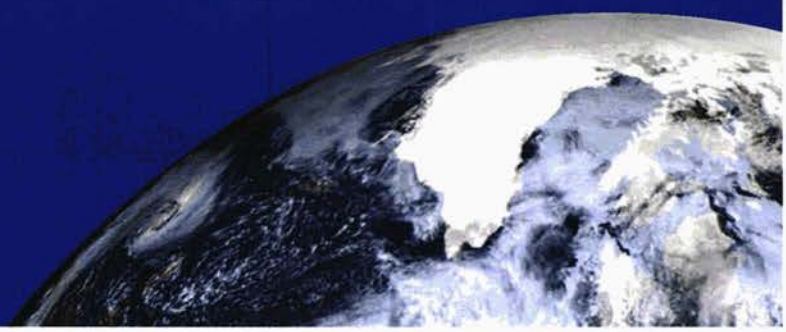
The TVC 3000 adding another level of flexibility to the Terrafix product range to cater for the ever increasing functionality and demands of modern Emergency Service.

- Expandable PC platform
- Variety of interface capability
- Communications Independent
- Dual Bearer
- Multi-screen Capability
- Application Independent

TVC 3000 a powerful in-vehicle computer with the full flexibility to attach different mobile screen sizes providing advanced processing, colour touch screen technology with low power consumption.

HD In built large capacity 'Hard Disk' to provide fully integrated mapping and Sat Nav option

F In built Flashdisk for customers who do not wish to use the integrated Sat Nav option



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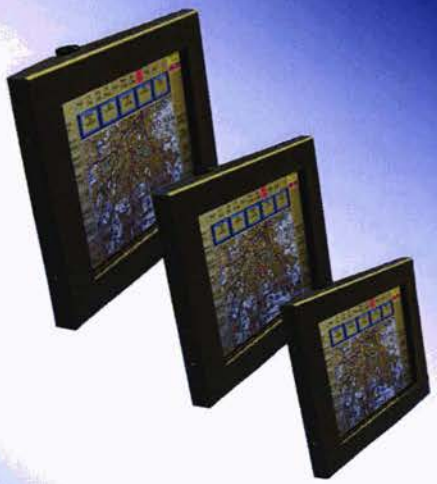

Basic Configuration

- AMD Geode LX800 processor operating at 500 MHz
- 500 Mbyte RAM
- 1 Gbyte Flash Memory
- Integrated Automotive Hard Disk in shock mount, 30Gbytes
- Windows XP embedded
- External ports:
  - 2 USB 2.0 ports
  - 6 Serial RS232
  - Opto-isolated Input/Output (6 of each)
  - 1 Fast Ethernet 10/100 Mbps
  - Display Interface video SVGA up to 1024 x 768 resolution
  - Audio In and Out
- Integrated GPRS/ EDGE/ 3G/ HSDPA modem (up to 3.6Mbps subject to network availability)
- Internal 16 channel GPS receiver
- External relay control for power management of other devices
- Internal battery for resilience against engine cranking etc
- Typical Power Consumption less than 20 watts including display
- CE and E marked

Options

- Remote TFT display with infra red touch screen 10.4in and 8.4in at SVGA (800 x 600) and 6.4in at VGA (640 x 480)
- Processor upgrade up to Intel Core Duo 1.66 GHz
- RAM upgrade up to 1Gbytes
- Wireless Keyboard and Mouse
- Hubs for additional USB 2.0 and Ethernet ports
- Wireless LAN IEEE 802.11G to Trust network at Ambulance Stations
- Wireless LAN IEEE 802.11g to in-vehicle devices
- Navigation and Routing applications, customised to Ambulance service driving
- Application support for Voice over IP supporting simultaneous voice and data communications

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RFID
(RADIO FREQUENCY ID)

Terrafix Asset Tracking

Terrafix have developed a unique system which uses the in-vehicle computing infrastructure (TVC) to manage assets.

The Terrafix solution uses RFID technology to automatically manage assets within a vehicle. A small tag is attached to the asset and sends a unique ID to a reader connected to the Mobile Data Terminal. The Software package is embedded into the MDT and alerts the operator of the current state, or any change of state of all assets assigned to the vehicle.

Benefits:

- Allows high value and critical business assets to be identified and located within defined areas.
- Assets can be associated with a vehicle in which they are deployed.
- The recognition of an asset within a defined area/ vehicle is automatic.
- When assets are removed from vehicle, ie left at the scene, a notification can be displayed locally and also reported to a central monitoring system.
- Interfaces can exist to other asset management tools and databases.
- Various sizes of TAG available to suit different equipment dimensions.
- Tag life of 5 years

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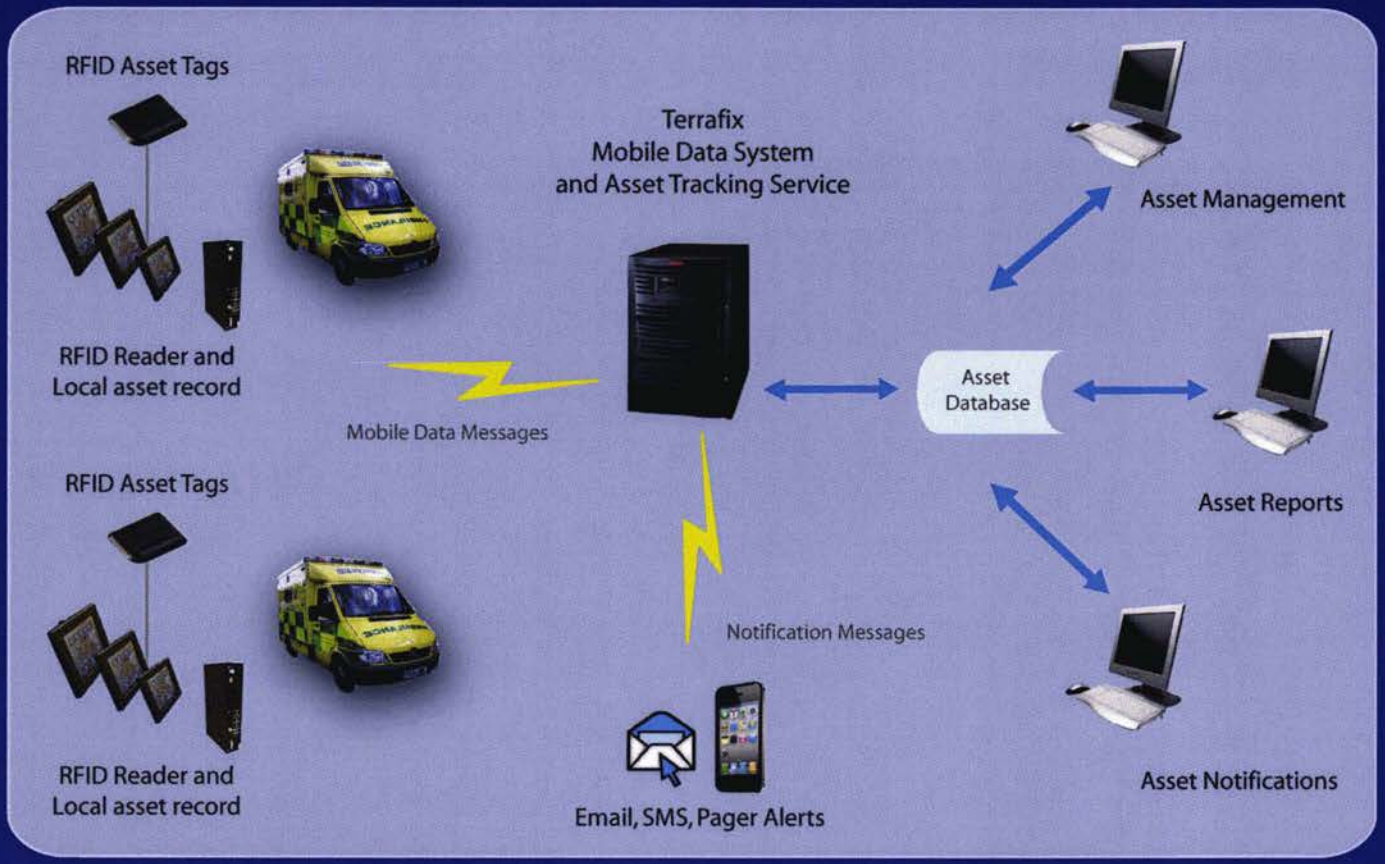

The Terrafix solution is not dependant on knowing what the asset is or the relevance of the equipment to the user or Service. It is business rule driven so that different assets can be tracked, monitored and reported in the most effective manner.

In summary, the Terrafix Asset Management System performs the following functions:

- Identifies which tags can be seen.
- Interfaces with the central control systems to associate tags with assets.
- Notifies the crew of the assets on board.
- Is able to present asset checklists for confirmation by the crew.
- Filters all visible tag information to identify assets associated with the vehicle or storage areas.
- Can report to the crew and centrally (eg. to a nominated manager) if the local asset register changes. This can be when assets are 'lost' which should be on-board, or when new assets are identified.

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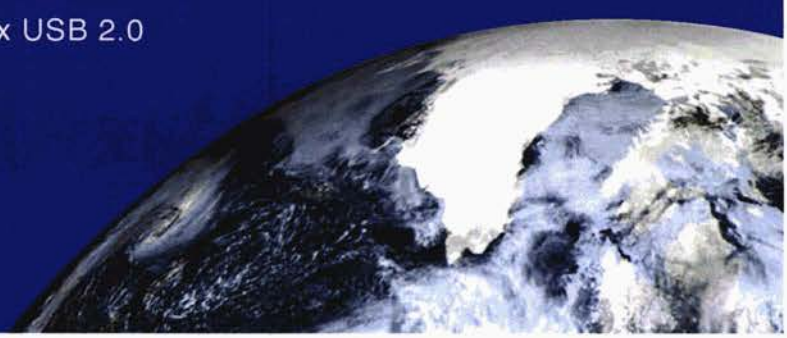
TMC 1450

Terrafix Mobile Computer 1450

The TMC 1450 is a Mobile Computer providing advanced processing, colour touch screen technology with low power consumption.

Current TMC 1450 Specification

Operating System	Windows XP Professional
Processor	Transmeta Crusoe TM5800
Wide Temp Hard Disk	1 EIDE 30Gbyte minimum
Display	SVGA Colour TFT
Touch Screen	Infra-red
Integral Interfaces	2 x USB 2.0



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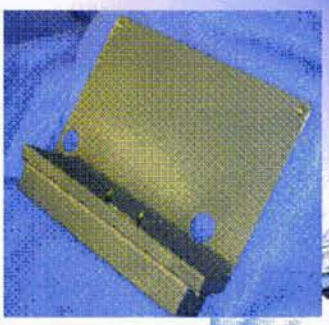

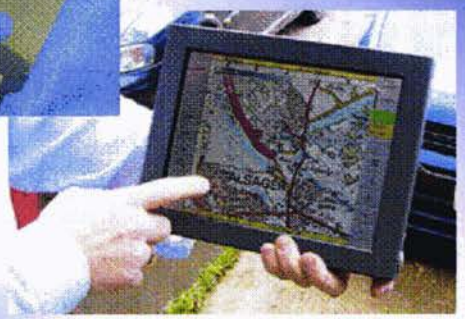

Operating Temp.	+5˚C TO + 40˚C
Size	Approx. 261(l) x 206(h) x 36(d) mm
Power	Vehicle supply nominal 12 volt via Docking Station. Back-up battery lifetime of up to 2 hours integral to TMC1450 provides shutdown protection.
Interface Unit	Providing power with no requirement for permanent protection
	1 x Serial
Docking Station	1 x Ethernet
	1 x RS232 — 1 x USB
	1 x Audio — 1 x Power In

Functions

Application functions:

- Map display
- Look-Ahead
- Find functions
- In-vehicle database management
- Customised applications for different operational environments
- Specialised databases
- Own position display
- Object Interrogation
- Incident/event logging
- Two-way data messaging
- Route Navigation (Audio & Visual)

Other additional functions

- Data messaging via communication links
- Internet access
- EPR

The TMC 1450 is easy to use and is integrated into a seamless user interface with standard emergency service command and control systems

Applications are bespoke to the user requirements.

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MERCURY

The Mercury SDR Group

Mercury SDR Group:

The Mercury group of Software Defined Radios from Terrafix Limited is an evolving set of flexible radio platforms for deployment in static, mobile and hand portable environments.

Flexible software and hardware modules of the group can be configured to support diverse roles such as communications, surveillance and electrical warfare.

Operational bands and waveforms are determined by the hardware and software module configuration, and this provides responsiveness to changing RF environments.

Software loads are available for various functions but other configurations can be developed on request.

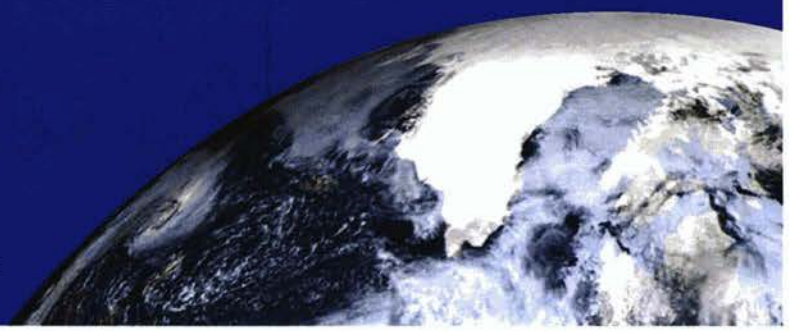
The radios support such functions as:

- Multiple waveforms
- Voice communication
- Interface to other networks
- Targeted transmissions
- Data communication
- Ad-hoc radio networking
- Navigation
- Scanning

Developments are in progress to provide advanced self-learning and other cognitive radio functions.

Application include:

- Enhanced situational awareness
- Emergency response support
- Surveillance
- Electronic Warfare



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GUARDIAN

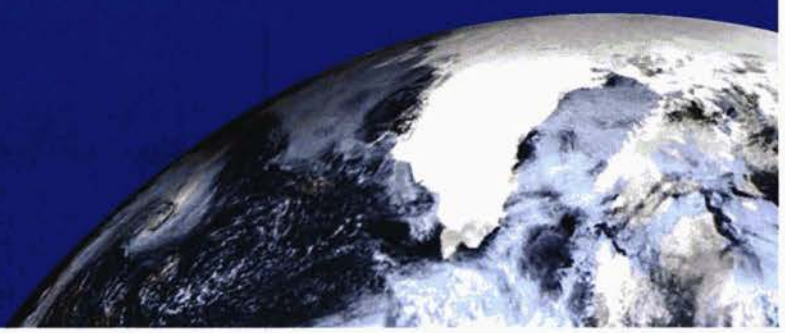
Guardian Iridium System

Designed and built by Terrafix, the Guardian Iridium System, combines the Terrafix AnT and GPS and an Iridium SBD modem.

The Guardian provides the user with AVL functionality in harsh environments where other forms of Infrastructure reliant data communication systems are not available.

The Guardians functionality includes:-

- GPS position updates to a base Control at a predefined rate
- Send and receive text messages
- Emergency activation
- Provide worldwide coverage
- Ruggedised housing suitable for harsh and abnormal operating environments
- Connection to other devices, i.e. laptop, PDA or messaging terminal



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Specification

- Combined GPS and Iridium 9601 SBD modem
- Position updates sent every 60 seconds in Normal Mode
- Position updates sent every 30 seconds in Emergency Mode
- 12- 24v vehicle supply
- Power consumption 2watt average
- Emergency button with Emergency Mode LED
- Emergency message Acknowledge
- From TX to arrive at base between 10 sec. - 20 sec.
- Operating temperature ¯20 °C to +60°C
- Ruggedised connectors
- Enclosure and connectors sealed IP65
- Dimensions: 178mm (l) x 77mm (d) x 56mm (h)
- Worldwide coverage

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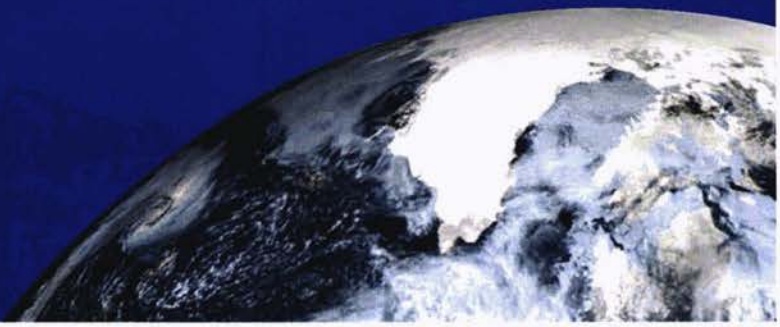
T.A.V.L.S

Terrafix Automatic Vehicle Location System

Mapping application for the management of mobile data.

Terrafix's Automatic Vehicle System, (TAVLS), provides geographic information and connects to the communications control server, to process and display all data received from the mobiles.

TAVLS the interface for providing the management to monitor and control any mobile related information.



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Mapping Station

TAVLS provides a full mapping system and can include any combination of the following mapping sources:

- NavTEQ, Andes, Ordinance Survey, Philips, Concept Streets, AA etc
- Aerial photogrammetry (ortho-rectified)
- Three dimensional mapping images

Features

The software application offers the user a multitude of functionality.

- Real-time tracking
- Historical data analysis
- Multiple map windows
- Geo Reference Link for multiple map windows
- Text messaging application
- Audit trails
- Isochrones
- Mobile database information - location, speed, direction, travel, time last update and so on
- Full suite of map controls such as zoom in/out

Fleet Management System

- Vehicle management and reporting system
- Data manipulation to provide simple information direct from database or complex algorithms supplied for specific reports
- Each system customised
- Outputs can be inclusion or exception
- Information is available on demand or can be automatically generated as designated time intervals and/or emailed to authorised recipients

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SEACHART MAPS

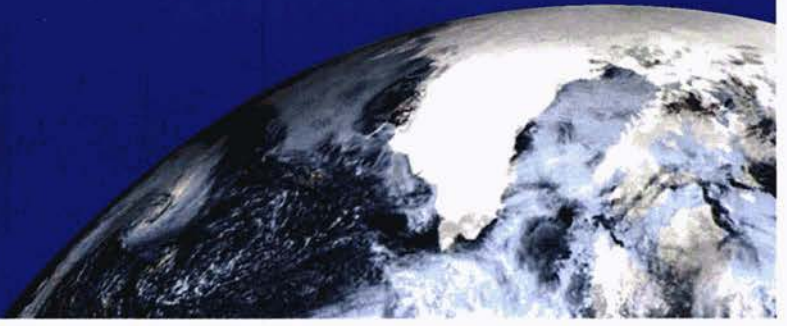
Terrafix Seachart Mapping

The Terrafix Integrated and Re-projected Mapping System is complied by the matching of Land Maps and Seacharts to provide users with seamless location tracking on land and offshore.

The UK Hydrographic Office Admiralty Raster Charts integrate seamlessly with 1:50000, 1:25000, 1:10000 OS Maps

The Seacharts will provide the users with: -

- Information - sandbanks, depths, wrecks, danger areas etc
- Position information on buoys, lighthouses
- Fully integrate with Global Positioning System (GPS)
- Seamless Hydrographic & Terrestrial Information



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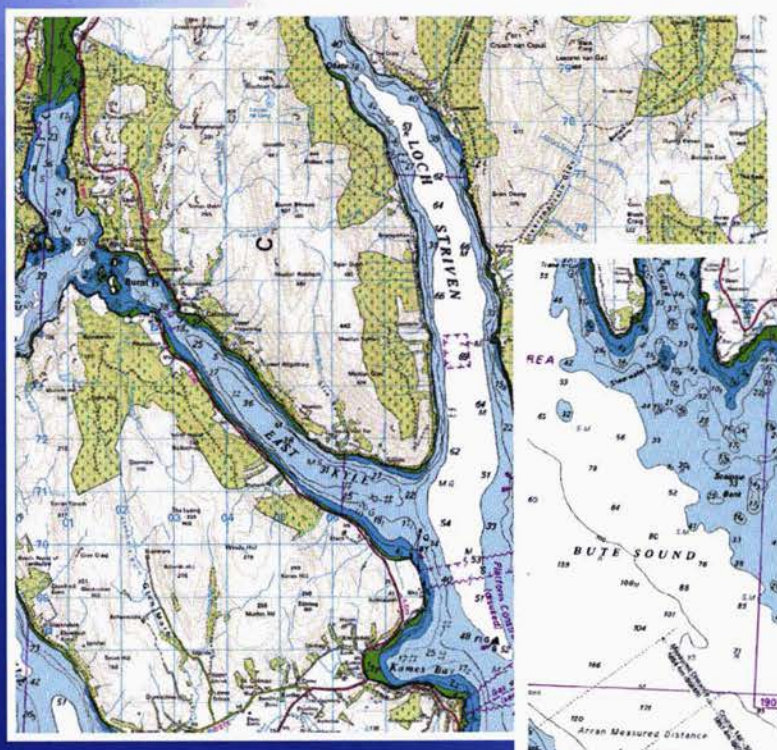

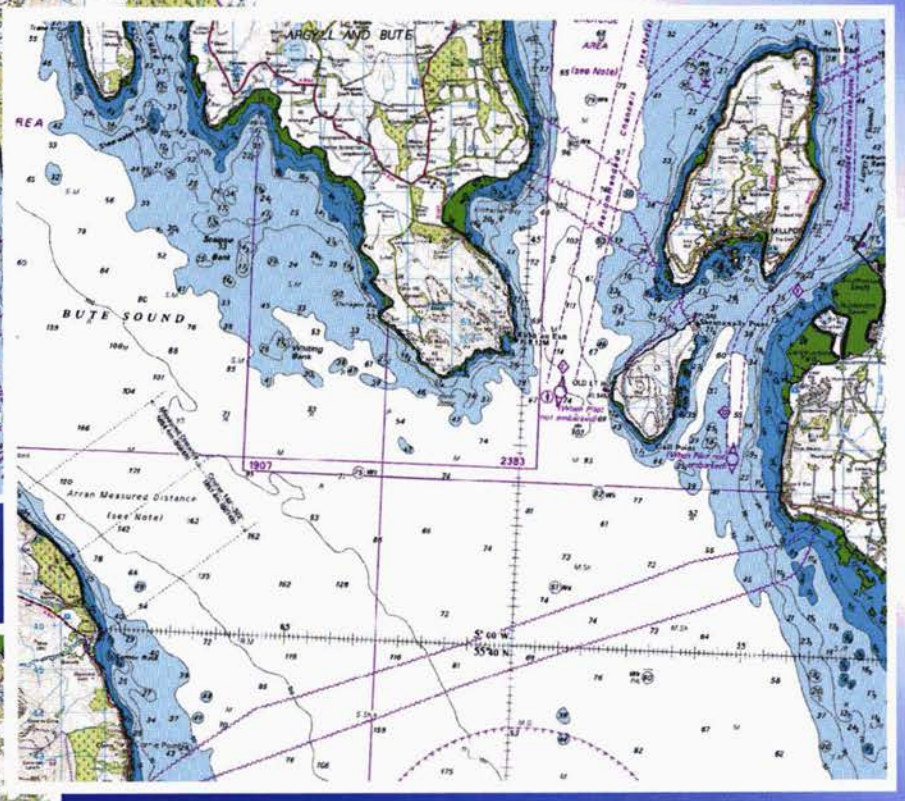

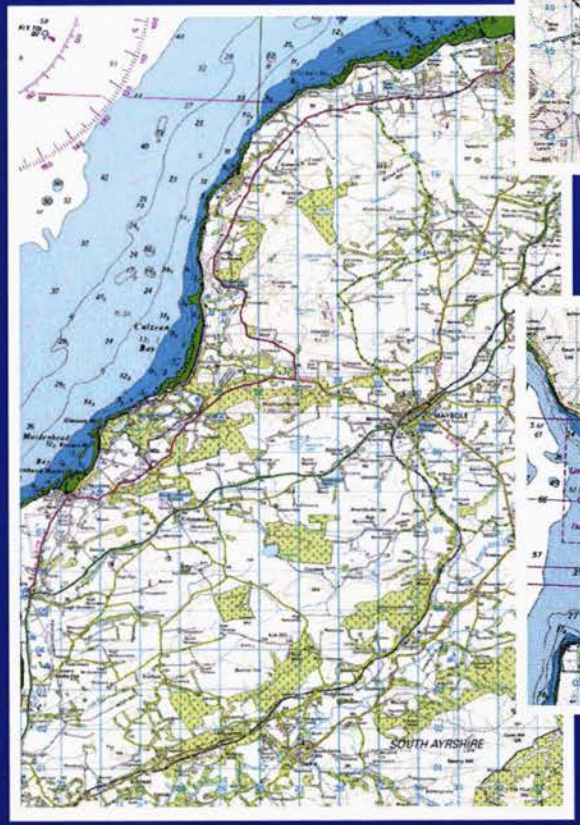

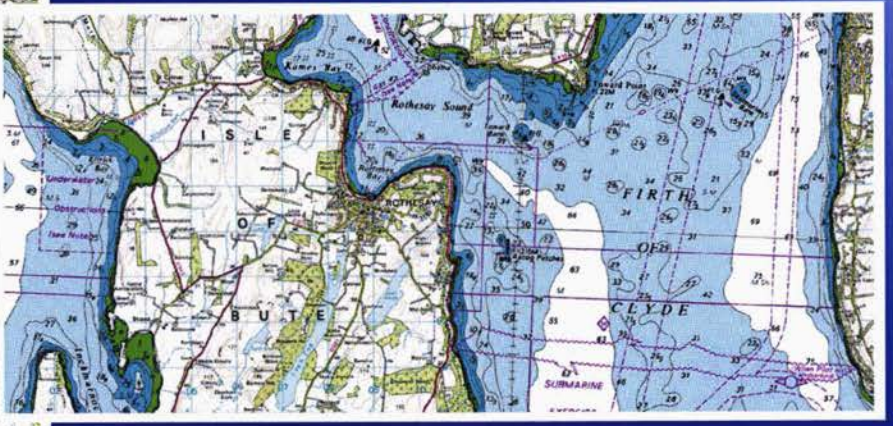

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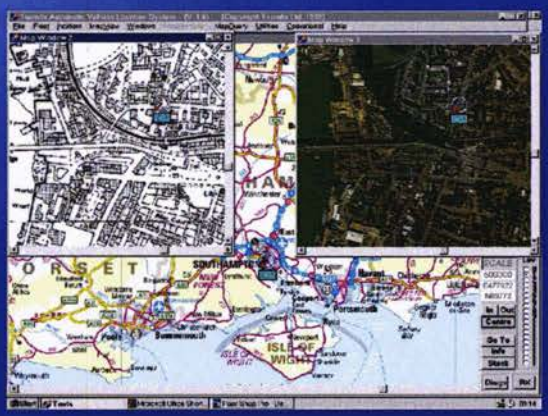
TERRAFIX MAPPING

Terrafix Mapping

Terrafix Geographical Information System uses all forms of mapping sources including Aerial Photogrammetry

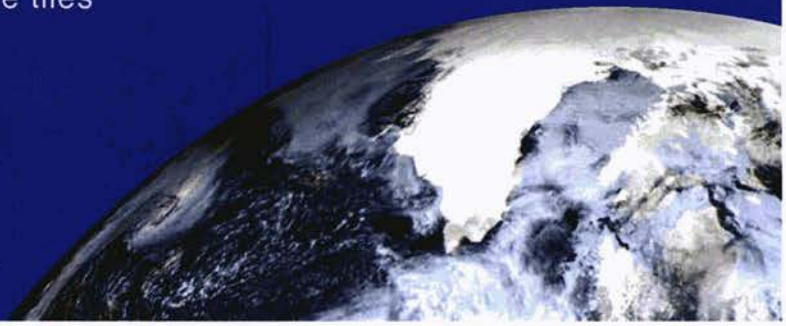
The Millennium Mapping Company became the first company to provide the complete large scale digital photographic map of the UK. Terrafix are the sole reseller of the photogrammetry of the emergency services.

All photographs have been correction ortho-rectified. This is achieved by computer processing to adjust for terrain variation, camera optical effects, ground control points, colour balancing and edge-matching therefore providing a seamless photographic map of the UK.



The use of aerial photogrammetry has many benefits they are:-

- Real geographical features, such as lakes, forests, mountains, rocks
- Sense of building height and type building, i.e single storey, towerblock
- Easily identifiable landmarks for guidance
- True width of the road rather than a representative width
- Junction details
- When used with other mapping source can highlight the changes, such as new housing estates, new roads, carparks
- Landing sites for helicopters
- Use on base station mapping terminals or mobile data terminals
- Available in 1km square tiles



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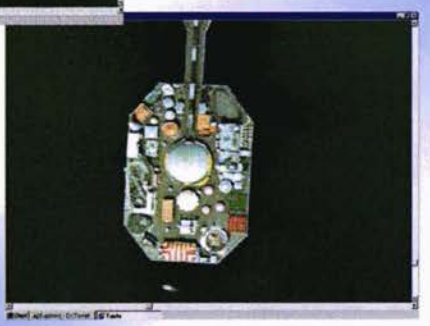

When incorporated into Terrafix's Geographical Information System the aerial photogrammetry enables the :-

- Overlay of vehicle positions and status
- Overlay of text data, eg. road numbers, house numbers, postcards
- Attach image and text files
- Can be mixed with other map sources, i.e Philips Ordnance Survey
- Overlay of route and isochronic data

Specifications

- High definition colour photos
- Each photograph has 24 bit colour and a resolution of 1200dp
- Max resolution of 25 cm on the ground
- Viewable at very large-scale 1:500, 1:1000, 1:2000 etc
- Seamless view of the UK
- The photography complies with the RICS specification required by professional users

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