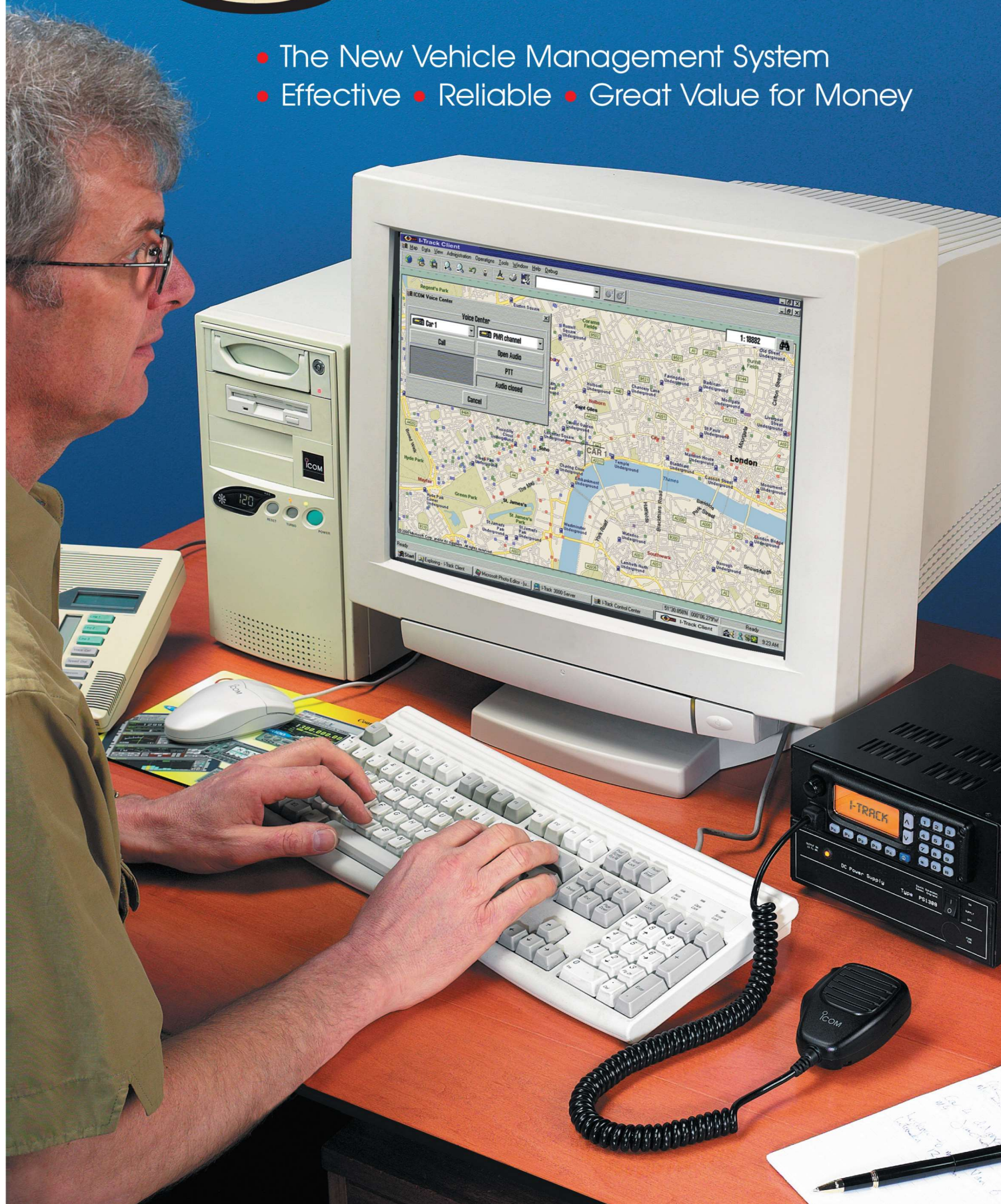




Vehicle Management

- The New Vehicle Management System
- Effective • Reliable • Great Value for Money





The I-Track vehicle management system allows any organisation to manage its vehicle fleet more efficiently and effectively. This system allows an operator based at HQ to monitor vehicle movements on a computer screen, retrieving vehicle history and verifying that vehicles are travelling along predefined routes.

In addition, because Icom radio technology is incorporated at the heart of I-Track, operators can also send radio communications, text and status messages. This creates a powerful two-way communication tool that is capable of enhancing an organisation's performance and productivity.

The Main Features of I-Track are:

- GPS Tracking of Vehicles - AVL (Automatic Vehicle Location).
- I-Track client program analyses vehicle movements and history.
- 2-way voice communications between IC-F1610 base-station and vehicle mobile.
- Status Messaging between IC-F1610 base and vehicle mobile.
- Text Messaging between IC-F1610 base and vehicle mobile.

The I-Track System comprises of:

- I-Track client program (supplied on CD).
- Microsoft® MapPoint Data (also supplied on CD).
- IC-F1610 transceiver programmed for base-station installation.
- IC-F1610 transceiver programmed for each mobile used.
- GPS receiver and antenna for each mobile.

The I-Track client program runs on a standard IBM® compatible personal computer. You can view data showing vehicle position and track its history overlaid on a Microsoft land cartography display. I-Track keeps an historical database of vehicle data, giving you the ability to review current and past vehicle movements and route activity for each vehicle. This data can be viewed as vehicle position tracks overlaid on a map or in tabular form using standard Windows® data viewing tools.

The I-Track client program allows you to:

- contact your driver via text messaging, status messaging or voice communications.
 - display current and past vehicle position tracks on screen.
 - view mobile positions and status data.
 - identify the vehicle position, speed and heading and identify whether a vehicle has gone off route.
 - set parameters for how and when communications with mobile vehicles will occur.
 - set the time period for automatic polling of all mobile units.
 - assign different access levels, e.g. administrator, normal user.
 - place landmarks on the cartography, e.g. Depots, Hospitals etc.
 - customise the set-up of your fleet so that each vehicle has a specific icon, colour and name attached to it.
 - display extra information pertinent to your line of business.
- For instance, a status message can be attached to an alarm to warn base if they are in trouble. (uses optional connector system).

The mapping software for I-Track is produced by Microsoft® and comprises of a client window with various mapping functions to show vehicle positions, status, direction and speed.

A range of scales is built into the mapping display to suit the users requirements and a zoom facility allows large-scale representation of specific areas. The maps themselves may be designed to meet individual requirements.

At the heart of I-Track is the ICOM IC-F1610 advanced fully-programmable transceiver. This allows I-Track to communicate with its counterpart IC-F1610 & GPS unit installed in every vehicle in your fleet. The IC-F1610 is a fully programmable transceiver and has a large alphanumeric screen that provides effective text messaging, status messaging as well as two-way radio communications.

Operation Modes:

- **Voice Communication** - select the mobile you want to call, press send, the mobile will respond to the FFSK (Fast Frequency Shift Keying) call for that vehicle.
- **Text messages** - can be transmitted with up to 95 characters at a time, so most addresses can be sent in a single message.
- **Status Messaging** - both driver and base can select from up to 23 predefined messages to communicate important information to each other. Status messages are fully programmable and quick and easy to use. Urgent messages can be accompanied by different beep alerts from that of the standard alert tone.

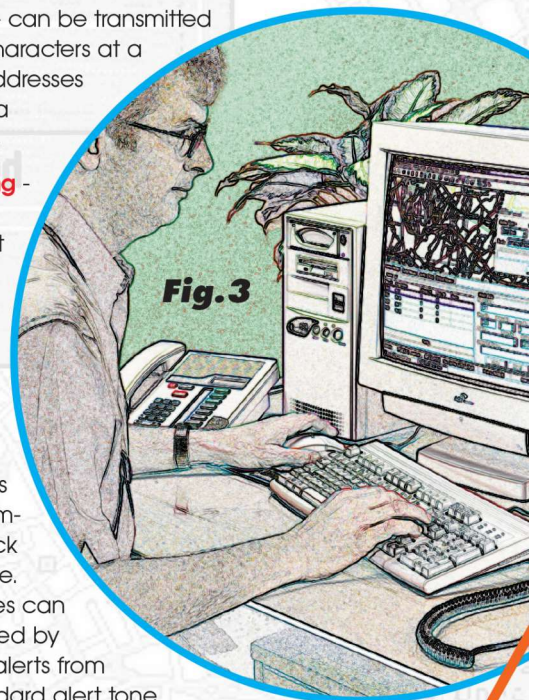


Fig. 3



Fig. 6

Fig. 1 - GPS satellite sends location data to vehicle-mobile (1 relayed back to base when polled (fig.3).

Base (Fig.3) and mobile (fig.7) are able to communicate by (fig.4), status messaging (fig.5) or 2-way speech (fig.6).

I-Track Benefits

Improved Vehicle Management

You will know where your high value loads are and whether they have deviated from a predefined path.

Cost Savings

I-Track offers combined voice & data at the fraction of the cost of other systems. No need for expensive phones or pagers. Once the system is set up, the only cost for users is electricity and a licence.

Fig.1

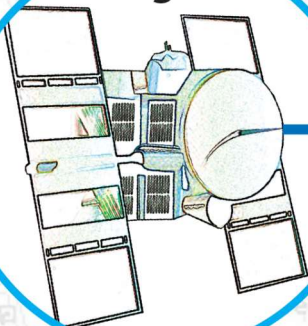


Fig.2

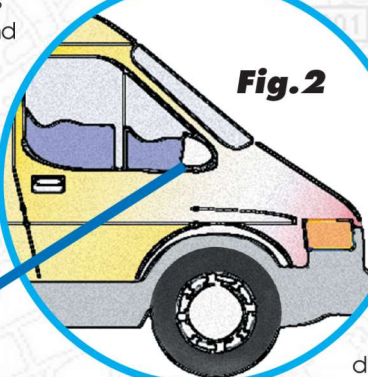


Fig.4



Fig.5

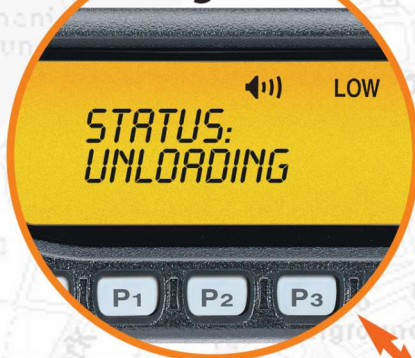
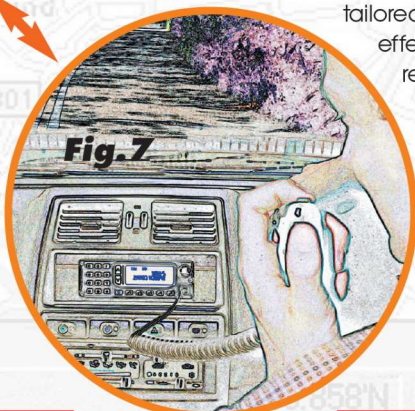


Fig.7



Easy to Use

The Windows software used means that the base HQ operator needs only a short training period. For the drivers, the IC-F1610 is also pure operational simplicity.

Improved Two-way Communications

I-Track uses 3 forms of communication. You make the most appropriate choice via voice, text and status messaging.

Improved Records

Because I-Track saves the full history of every vehicle's movements into a file, you will easily be able to settle any employee/customer disputes.

Constant Archiving

All vehicle positions are stored in the base station computer for incident analysis and personal training.

Swifter Response to your Customers' Demands

By sending simple text/status messages your drivers will receive information that may be of relevance to the planning of your whole day. By tracking vehicles on the mapping software, you can tell your customers where your operatives are how far away they are and communicate with the driver when problems arise.

Enables Better Route Planning

Analyse from historical data the quickest, shortest, most cost-effective route.

Increased Efficiency and Improved Security

Automatic information on vehicle location improves security for both drivers and goods. Better utilisation of vehicles and reductions in non-revenue mileage will also lead to improved productivity and profit.

Expandable

The system is easy to expand to incorporate additional vehicles and resources. Extra COM ports are available to allow organisations to upgrade their I-Track system for larger network coverage, e.g. two operators could conceivably control different fleets or different areas.

Simple installation and Easy Set-up

A choice of GPS units is provided and, for those who want extra security a tamper-proof version can be installed. The system is easy to expand to incorporate additional vehicles and resources.

Ideal for Countless Organisations

The I-Track vehicle management system offers significant benefits to a wide range of organisations. Each system is tailored and interfaced to provide the user with a cost-effective solution to navigational and fleet management requirements. It has hundreds of applications and is ideal for anyone wanting to manage their fleet of vehicles more efficiently and effectively.

Just 2 examples of the I-Track on-screen zoom facility...



Fig.2), this data is automatically

both ways using; text messaging



System Requirements

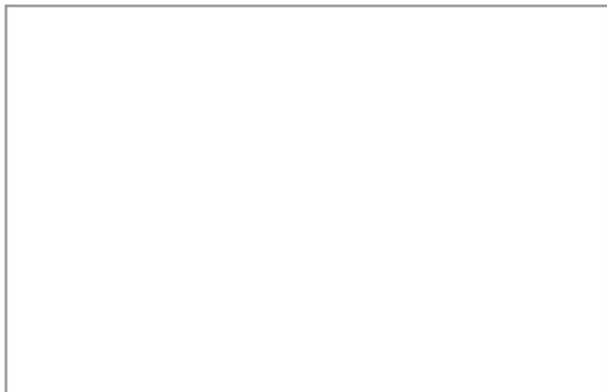
The Equipment you will need for I-Track consists of Four Integral Elements:

1. I-Track Client Program/I-Track Mapping software (supplied on CD).

PC Requirements:

- Supported Operating Systems: W/98, W/NT, W/2000.
 - Minimum CPU speed: 300 MHz.
 - RAM: 128 Mbytes minimum.
 - HDD: 2 Gbyte minimum.
 - COM ports: 1 minimum, 2 recommended.
 - Parallel ports: 1.
 - Network adapter 10/100 Mbps.
 - Graphic adapter supporting a resolution of 1024 x 768 16 bits (minimum), 1280 x 1024 16 bits recommended, 1600 x 1200 24 bits (optimum).
 - Monitor dimensions: 17" (minimum), 19" (recommended).
 - Audio adapter (recommended).
- ### **2. The Base-station** IC-F1610* with PS1308 Desktop Power Supply.
- IC-F1610 transceiver(s)* with customised software (specific to the base). SM-25 Desktop microphone option also available.
- ### **3. The Mobile Station:** IC-F1610*, multiples thereof.
- IC-F1610 transceiver(s)* with customised software (specific to the mobile).
- ### **4. GPS Receiver.** This is installed behind the IC-F1610 in the dashboard and is connected to a combined PMR/GPS antenna which is fixed to the roof. This ensures that the equipment is discrete and hidden. Alternatively a small, neat and unobtrusive combined GPS receiver antenna is also available.

* For full specifications ask for the IC-F1610 product brochure.



If you want more guidance on how I-Track can help your organisation, contact us at the following address...

Icom (UK) Ltd.

Sea Street, Herne Bay, Kent CT6 8LD.

Telephone: +44 (0)1227 741741. Fax: +44 (0)1227 741742. Telex: 317210 BUREAU G.

e-mail: sales@icomuk.co.ukor visit our website on www.icomuk.co.uk

Accessories:

I-Track 12-Channel GPS Receiver. Compact, overall dimensions: 128x31x67mm, Sirf Chipset.



SM-25 Desktop Microphone.



Other accessories include:

- Combination GPS/PMR Fixed Antenna.
- Dual-socket lead for IC-F1610.

Examples of those who can benefit from I-Track...

- Bus companies
- Councils
- Couriers
- Doctors On Call
- Farms
- Installers
- Service Engineers
- Refuse Collectors
- Taxi Fleets
- Cash in Transit
- Freight Carriers
- Skip Hirers
- Coach Companies
- Any vehicle-mobile fleet that is trying to achieve greater efficiency and savings.



IBM® Microsoft® Windows®
All copyright and trade marks acknowledged.