



# **itx** **X** **Series** **AVL**

*Automatic Vehicle Location and Alarm*

**iTX Series** © **iTX1200 AVL** <http://www.fikogroup.com/ufdex.cfm>  
Preliminary Information - Jan. 2010 (updated from 28th Nov. 2005)

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## **iTX Series an AVL system for Vehicle tracking using GPS and GSM**

Embedded AVL system using ATMEL and ARM microcontrollers

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## iTX Series an AVL system for 2010 technologies

**T**echnologies are changing over time while new technologies are replacing the old once. Since the Internet boom, we can say there has not been many "new" inventions, but in fact there is one product group that has seen a massive 220% increase over the past year and this is In-Vehicle GPS navigation systems that soon comes as standard for every car make and models.

As world-wide map databases grows and are getting better, larger and more detailed, it enables a whole new world of navigation including more sophisticated systems. In the near future most of company vehicles (as well as private cars) will be fitted with Automatic Vehicle Locator ("AVL") or "Automatic Vehicle Location" technologies with or without integrated GPS moving map display. Such system comprising several components, but at a very basic installation, nothing more is required then two single engine, a GPS and a GSM that integrates firmware for AVL applications.

Fiko Group of Companies has over the past 8 years worked on its comprehensive "WAY"-brand where WAY simply stands for Where Are You? – The WAY system has several components that can be combined into a comprehensive and complete stand-alone or PC-based AVL tracking system.

Our WAY iTX1200 AVL is our GPS/GSM tracking and alarm device that may be used as an independent unit or could in fact be connected to other µFDEX (micro Fiko Data Exchange) enabled products such as;

**WAY AudioMaster 44** – an digitally controlled audio unit with 4 audio inputs for i.e. your iPod MP3 Player, Radio etc. and 4 low-level audio outputs (L/R Front and L/R Rear) – All functions like Volume, Treble, Bass, Fade and Gain may be controlled from any electronics, microcontroller or CPU (i.e. Windows or Linux)

**WAY Ballet ePC** – a PC-based In-Vehicle Computer System that contains all necessarily interfaces and Power Supply.

**WAY Grafiko 640** – an embedded 6.4" display with anodised aluminium frame. This display to be connected Ballet ePC or a full PC system to be used in vehicles.

Our WAY original branding products allow any company or you to know where vehicles are in real-time or last known position, which can also be viewed in Google Earth. There is several reasons for implementing such system and one such reasons are to address problems with car theft, tow-away for un-legal or expired parking, vehicle used for private use by employees (if legal monitor fuel used after working hours), "drive off" during working hours and more.



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See if your company fits one or more of these points and if it does, it's worth investing in our low-cost WAY iTX Series AVL system that would pay for itself in no-time;

1. Your driver always seems to use longer time for deliveries than what you think is necessarily. (*the iTX system has live time and distance tracking*)
2. The driver works always "overtime" due to "heavy traffic" and you like to reduce such overtime pay. (*the iTX system has minimum speed alarm based on time intervals and this can be set remotely*)
3. You suspect your driver of doing business on side at a reduced rate. (*the iTX system works 24h and the vehicle can be tracked with positioning, time and speed at any time of the day*)
4. You like to see if your driver is speeding – and you like to keep all speed fines out. (*the iTX system has speed alarm*)
5. The driver uses company vehicle after-hours, but you don't want to pay fuel for private use. (*the iTX system has time tracking and may have fuel consumption tracking as option*)
6. Vehicle are "disappearing" during working hours and you need to know where it is. (*the iTX system has "ping" function to know where the vehicle is*)
7. Reduce maintenance cost of repair, oil change, tires, brakes and clutches. (*the iTX system can log maintenance data and give warnings when it's due. By tracking the vehicles, the drivers will know that they are "seen" and will use the vehicle less for private issues*)
8. Your car has car-alarm but what does it help if the car is stolen outside your reach of hearing. (*the iTX system has built in vehicle alarm that will send you Longitude/Latitude SMS if the alarm is activated or the vehicle is moving*)
9. Your driver does not know the area and can't find where to deliver the goods. (*with the iTX system you can guide the driver to find it's way as you see on the map where the driver is*)
10. Your driver needs to pick-up a new parcel but he has left for delivering other goods. (*with the iTX system you see where the drivers are and can arrange pick-ups based on the vehicle closest to your new customer or office*)
11. You urgently need to get hold of your driver but do not know his phone number. (*the iTX system works also as a mobile phone so you can call the car*)
12. Your driver had an accident and needs help but he can't explain where she/he is. (*the iTX*



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*system as built in alarm buttons and when pushed and SMS alarm with Longitude and Latitude information will be sent direct to the map system for localisation)*

13. Thorough and up-to-date vehicle history that can tell exactly when a unit needs to be serviced. *(the iTX system may record when service is needed)*

14. You don't trust your driver and want to know what he/she says while driving. *(the iTX system as "SPYCALL" function and you can listen/record what said in the vehicle without the driver knowing.)*

All 14 points from the previous and this page are very good reasons why you should implement WAY iTX Series AVL technologies from Fiko Technologies into your company and to know the whereabouts of your valuable assets. It's known that time is money and money does not grow on trees so investing few hundred Euro can in fact make it look like that money are in fact growing on trees.

Fiko Group of Companies has also several WAY software packages to help you going. Our GIVE WAY software is a small but useful mobile phone, AVL and GPS- system that works with our iTX Series. You may run this software in your notebook or at office on your PC. GIVE WAY is good as AVL control and to vehicles from home or office.

Our GIVE WAY Station, is a more comprehensive software aimed on tracking several vehicles in one time where all vehicles are depicted as icons on the screen. GIVE WAY Station has also Fleet management functions as well as full GSM/SMS capabilities. Installing WAY iTX Series, maybe with our WAY Ballet ePC and Grafiko 640, the system can be used as much as amazing 97% of the time, WAY iTX Series can make a huge difference in companies' costs, vehicle and driver productivity.

### **So why can WAY iTX Series make the big different in improve vehicle productivity?**

Because you know in real-time where your vehicles are, you can in fact redirect and manage any driver and vehicle to any new location based on their closest access point. This is a big saving for any company that operates several vehicles because sending our a driver to make a special or additional trip to get the job done cost at least 60 Euro per hour – few "trip savers" would in fact mean you got the WAY iTX Series for free.

Because you can visually see the planned and actual route taken on a map like Google Earth within GIVE WAY or GIVE WAY Station, you can in fact improve your work assignment by as much as 10-25 %. By using our software, you know the estimated run rate - how long it will take to have the work done - so you can keep the vehicle and the driver busy.



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By implementing our WAY Ballet ePC you get a perfect integration between the WAY iTX1200 AVL and a PC-based moving map display. – No doubt about it, WAY iTX1200 AVL are not only good for the company, but also for the drivers.

Because the WAY Ballet PC is a full embedded 3.5" 1 GHz PC, you can run any Linux or Windows-based software on it. However our GIVE WAY software are all Windows-based – but because you can use the GIVE WAY to transfer data via GSM, you can in fact collect any data from the vehicle without having to wait till the driver are back at office as it's happening remotely. Many companies are doing i.e. deliveries today and invoicing tomorrow, but by using our Ballet ePC and its software or even Microsoft Office, the head office can get live data from the drivers as the goods was delivered... down to last second. In the same way the driver can receive data from the office like i.e. stocks or other customer related information. So now suddenly, all the office work that your office staff did 100%, can be shared with the drivers and you get a more automated, faster and precise data handling for invoicing, stock control etc.

Take instances a company that is delivering groceries to shops and restaurants. They can in fact do ALL invoice work and send this via GPRS as they go, or drive and do not need to show up at office at day end. Not only do they get the work done, they also save on fuel, especially if they also use the vehicle for private-use. WAY iTX Series allows the office staff and drivers to work together to deal with many issues throughout the day.

Many people are seeing vehicle tracking as people tracking, but we believe it's wrong to think in this way. AVL is actually a tool with many business benefits, not only for the companies, but also for the drivers as implementing this technology will actually reduce costs, boost productivity and give a far better office morale.

To know more about our WAY – Where Are You? - Automatic Vehicle Locator or Automatic Vehicle Location, please visit one of our websites at: <http://www.fikogroup.com>

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