

digiTRK

User Guide



Key Features

- A fresh and simple approach to vehicle tracking
- Allows you to track all your vehicles on one platform
- Sends live tracking data to compatible web services
- Powerful, intelligent and accurate tracking

digiTRK Overview

digiTRK has been created as a simple tracking device for any vehicle that is not fitted with a Tachograph. For HGV we already have the highly acclaimed and successful **digiDL** which can combine remote download and tracking and now if you want to track your vans or even cars and plant machinery you can do so, all on the same platform as your trucks.

digiTRK communicates with **digicentral** servers and can pass data to any telematics system using web services.

The **digiTRK** is all about power, accuracy and ease of maintenance. The 32-bit processor makes light work of data and the onboard storage ensures that everything is recorded even if signal is lost. Our tracking is intelligent so that the frequency of tracking points is varied dependent on many factors.

digiTRK connects to any digicentral server where all devices (including remote download) can be monitored. digicentral also manages all of the GPS data and any proprietary data and forwards in real time to any compatible web service. digiTRK can therefore be integrated with existing services.

Please Note:

The **digiTRK** is currently not compatible with hybrid or electric vehicles.



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digiTRK Connections



GSM	GSM Antenna connector	
GPS	GPS Antenna connector	
USB	USB Mini connector for programming	
AUX (6 pin)	Connectivity for peripherals	
PWR (4 pin)	Power connection	
4 X LEDS	See Page 6 for detailed functions	
SIM Slot	Slot for standard SIM Card. Micro and Nano Sims must be in a standard holder.	

SIM Card

Simply open the SIM slot cover and insert SIM card until you hear or feel a click. To remove simply push SIM back in until you hear or feel a click. Micro and Nano SIMs must be in a holder.

Device Installation

Device Placement

There are a couple of factors to consider when choosing where to place the **digiTRK** in a vehicle.

- Firstly, the device will need to be within 70cm of a power source unless a power cable extension is purchased (the **digiTRK** is wired into the main vehicle cabling for power).
- Secondly you should consider placement of the GPS/GSM antenna as it will be most effective in maintaining good GPS connection when in view of the sky.

Please refer to pages 14 and 15 for additional troubleshooting should the **digiTRK** BLUE Led remain flashing when the ignition is ON.

Powering the digiTRK

To power the **digiTRK**, use the power cable supplied. The open end should be connected to the vehicle with a power source of between 12V-24V. This should be done by an approved fitter. Once connected, simply plug the other end into the PWR socket on the device.

Attaching the GSM and GPS Cables

The GSM and GPS cables should be labelled. Simply screw these on to the corresponding socket, turning clockwise.



digiTRK LED Indicators



LED	ON	OFF	Flash
Р	Power On	Power Off	(Fast) No vehicle registration entered ¹
- 1	Ignition On	Ignition Off	Fast: Ignition Off Every 30s: Ignition Off ²
W	Comms okay	No Comms	Slow: GPRS negotiation. Fast: no server ³
G	GPS connected	GPS not connected	GPS Lock pending⁴

¹ The **digiTRK** needs to have a vehicle registration number assigned to it using the **digiconnect** software. If the device has not been assigned a registration number, the red light will flash consistently.

²When the ignition is off, the device will stay on for a short period of time before powering off (in order not to drain the vehicle battery). It will then periodically (every 30 seconds) power on to check the status of the device.

digiTRK LED Indicators

³ IMPORTANT! - **digiTRK** placement information: please make sure you do not place the **digiTRK** too close to other comms devices. Preferably place the unit flat and the with the antenna in view of the sky. Please refer to pages 14 and 15 for additional troubleshooting should the **digiTRK** BLUE Led remain flashing when the ignition is ON.

⁴In order for the device to communicate it's GPS position to a central server the SIM and server settings will need setting up using **digiconnect** (see page 11).



digiconnect Software Installation

digiconnect Windows® Software v5.00 onwards

Minimum Recommended PC Specification

Processor: Intel P4 1.4GHz, AMD Athlon 1.4 GHz

Memory: 512Mbytes Hard disk: 40 Gbytes

Video Resolution: 1024 x 768

Operating Systems: Windows 7 / Windows 8 / Windows 10

<u>Please note:</u> You will either need a **digiDL** Configuration Kit with Tachosys product code DDLCK or a 24v power supply and mini USB cable for desktop setup.

Important: do not connect any of the cabling provided in the digiDL Configuration kit with the **digiTRK** before commencing the software installation.

Installing the digiconnect Windows® Software

- Insert the flash drive provided in the digiDL product family configuration kit into your PC. Within the flash drives home folder, double click the 'setup' file. Windows will ask you to verify that you are happy to proceed. (Alternatively, download the digiconnect software from our website https://tachosys.com/Downloads/Software).
- 2. Select the language required and click OK. This will initiate installation.
- 3. Click 'Next' when prompted.
- 4. Read the terms of the Licence Agreement then click on the 'I accept the terms in the Licence agreement' option and then click 'Next'. If you choose to not accept the terms, the installation will be terminated.
- 5. Choose the folder in which you wish the software program files to be installed. The default folder is the standard location for Windows® programs. Click 'Next'.
- 6. Click 'Install' to begin the actual installation. This may take several minutes.
- 7. Finally leave the box labelled 'Launch digiconnect' ticked and click 'Finish'.
- 8. The application will display any connected device(s).
- 9. The Options screen allows you to customise your installation.

Connecting digiTRK to a PC

Connecting the digiTRK to your PC

- 1. You will need to power the **digiTRK** using the power supply in your configuration kit.
- Connect the standard USB cable supplied in the digiDL configuration kit (A
 to Mini) to a free USB socket on your PC. Connect the other end of the
 USB cable to the USB socket on the digiTRK.
- 3. Once all connections are made, simply open **digiconnect** and you should see the **digiTRK**, along with its configuration options as shown below (see below).
- 4. If you are having problems connecting to your **digiTRK** then repeat the steps above.

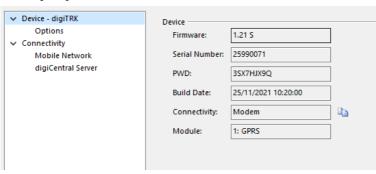




digiconnect - Device Configuration

Device Configuration Window

Configure digiTRK (25990071)



1.	Firmware	Version of firmware on device	
2.	Serial Number	Unique to each device.	
3.	PWD	Used as a means of security between the device and the digicentral server. ¹	
4.	Build Date	Date and time of when device was built	
5.	Connectivity	Will be via Modem for digiTRK	
6.	Module	Module type	

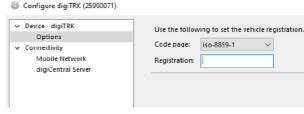
¹ Please note that PWD (password) is a unique string which is used by your service provider or on your own **digicentral** account for initial registration of the device. It avoids communication by random devices with **digicentral**. Coupled with our encryption it provides added security.



digiconnect - Device Configuration

Setting a Vehicle Registration

Under the 'Options' tab you can set the vehicle registration that device is connected with.



The standard 'Code' option is 'iso-8859-1'. Do

not change this unless you are certain. Then simply enter the vehicle registration number into the 'Registration' box. Click Apply/OK.

Network and Server Connectivity



The image above shows the mobile network (GPRS) settings for digiTRK.

- 1. To view and configure the mobile network (GPRS) settings, select the 'Mobile Network' option on the left of the screen.
- Enter the APN, User and Password appropriate to your service provider.
 Many of the standard APN settings can be found online.
- 3. If your SIM has a PIN enter it in the PIN field.
- 4. Click the 'Apply' or 'OK' button to save the settings.
- 5. In the 'digiCentral Server' option on the left of screen, enter the Host name or IP address of your **digicentral** server. This will either be provided by your analysis provider or will match your own **digicentral** server settings.

digiconnect - Device Configuration

- 6. The PORT Number should be left as 4616 unless you are hosting your own digicentral server and have changed the default PORT.
- 7. If your GPRS settings and Hostname are correct and the device is correctly registered on **digicentral** then the "W" BLUE LED should shine solid blue.

Please note that if the BLUE LED is not solid then you do not have connection to the server and you should call the provider you are trying to connect to. A slow flashing Blue LED indicates no connection to GPRS a faster flash at around twice per second indicates that the device is not registered on a **digicentral** server or your **digicentral** server settings are incorrect.



The 'Current Status' option back in the **digicannect** main menu is for use when contacting a member of the Tachosys support team.



In the main **digiconnect** menu you are also given the option to factory reset your **digiTRK**.

This will clear the configuration, remove the vehicle registration, reset remote authentication, as appropriate for the device. All files and/or logs will be deleted



The option to change firmware should only be used if instructed by our support team and requires firmware files specific to the **digiTRK**.



digicentral overview

Overview of digicentral Web

digicentral can receive data from any Tachosys product using various communication methods.

The great thing about **digicentral** is that it can be integrated with other systems and it therefore means that the customer's data goes straight from the vehicle to their chosen analysis system.



If a company wishes to use a stand alone analysis solution there are providers who will be happy to host the **digiTRK** units at a small annual cost per unit.

To find out more about **digicentral**, please download the **digicentral** user guide from www.tachosys.com or contact Tachosys directly.



Troubleshooting

Connectivity issues

- Blue LED Flashing once per second

A SIM card is present however the unit is unable to initiate communication with the GPRS network. Initially check all of your GPRS settings (see Page 19). If the unit still fails to connect first try repowering the unit. If the unit still fails then you can view the status of connectivity in the **digicannect** Current Status window. The code displayed will show the stage of connection.

You must make sure that the SIM card is not PIN locked and that the contract allows you to pass Internet data. This is often termed 'data enabled SIM'.

- Blue LED flashing twice per second

Indicates that the device has connected to internet but is not registered on a **digicentral** server or your **digicentral** server settings are incorrect.

- Blue LED is OFF but the ignition is ON

If the ignition is ON and the Blue LED disappears after a few minutes or more then try moving the unit away from any other communication sources. Examples would be things like online weighing, tracking, or onboard computers. Such devices can interfere with each others signals.

- Green LED flashing or OFF

If the green LED is flashing or off, this indicates that the ignition is off. If the ignition is on and the green light remains flashing this may indicate a fault in the wiring of the power cable.



Troubleshooting

Correct positioning of your digiTRK

If the Blue LED is flashing and you know that all APN Settings and server settings are correct then try temporarily moving the **digiTRK** away from other sources towards the confines of the vehicle cabin. In theory, if your problem is reception then the Blue LED should now go solid.

Now the challenge is to find a position where the **digiTRK** is far enough away from the source of interference.

To assist with positioning of the **digiTRK** we produce a 1 metre in line extension cable with code DDL-TCX. These cables can be daisy-chained to create yet more length if required.

Such occurrences are rare but with vehicles becoming busier with comms equipment positioning needs to be more carefully considered.





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