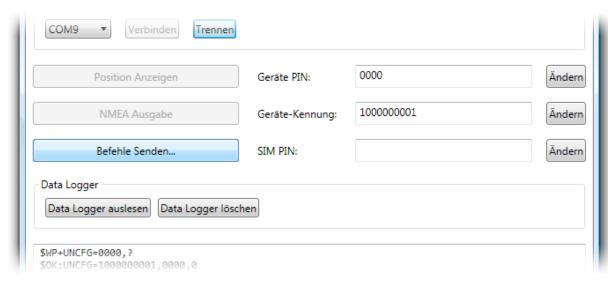


# **Manual for TK5000**







# EG-Konformitätserklärung

nach Annex IV of the R&TTE Directive 1999/5/EC EU Identification Number 0681

Die unterlagenbevollmächtigte Person ist Der Hersteller / Inverkehrbringer / Bevollmächtigte

Incutex Germany GmbHIncutex Germany GmbHNeuburger Strasse 39Neuburger Strasse 3986167 Augsburg86167 AugsburgDeutschlandDeutschland

erklärt hiermit, dass folgendes Produkt: TK5000

den Bestimmungen der (den) oben gekennzeichneten Richtlinie(n) - einschließlich deren zum Zeitpunkt der Erklärung geltenden Änderungen - entspricht.

Folgende harmonisierte Normen wurden angewandt:

Radio :EN 301511 V9.0.2 (03/2003), 3GPP TS 51.010-1 V7.b.0 (09/2008)

EMC :EN 301489-1/7 V1.3.1 (11/2005)

Safety :EN 60950-1:2006 Health :EN 50360, EN 62311

Folgende nationalen Normen und Vorschriften wurden angewandt:

Annex IV of the R&TTE Directive 1999/5/EC

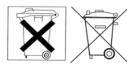
Augsburg, 20 März 2010 Geschäftsführer / M.Nechwatal

## **Batterieverordnung**

Im Zusammenhang mit dem Vertrieb von Batterien oder mit der Lieferung von Geräten, die Batterien enthalten, ist der Verkäufer verpflichtet, Sie auf folgendes hinzuweisen:

Machinet T

Sie sind zur Rückgabe gebrauchter Batterien als Endnutzer gesetzlich verpflichtet. Sie können Batterien nach Gebrauch an den Verkäufer oder in den dafür vorgesehenen Rücknahmestellen (beispielsweise in Kommunalen Sammelstellen oder im Handel) unentgeltlich zurückgeben. Sie können die Batterien auch per Post an den Verkäufer zurücksenden. Der Verkäufer erstattet Ihnen auf jeden Fall das Briefporto für den Rückversand Ihrer Altbatterie.



Das Symbol der durchgekreuzten Mülltonne bedeutet, dass die Batterie nicht in den Hausmüll gegeben werden darf.

Pb = Batterie enthält mehr als 0,004 Masseprozent Blei

Cd = Batterie enthält mehr als 0,002 Masseprozent Cadmium

Hg = Batterie enthält mehr als 0,0005 Masseprozent Quecksilber.

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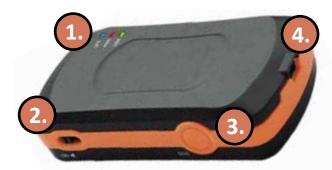
### 1. Hardware

The GPS Tracker TK5000 can be used for mobile and permanent installations. Applications, data and accessories, visit our website or online store.

Note: Please read the instructions at least once.

# 1.1 Hardware description

- 1. Status LEDs (GPS, Power, GSM)
- 2. ON / OFF switch
- 3. SOS button
- 4. MINI USB port



### 1.2 Insert SIM card

You need a SIM card for using the tracker, if the positions shall be transmitted in real time. You can use any SIM card. Disable the PIN code of the SIM card before using. You can **disable the PIN request** with your phone. For more details, see the manual of your mobile.

- A. Remove the cover bolts on the bottom
- B. slide the SIM card holder to "open" and fold up
- C. Insert SIM card and pay attention to the edge
- D. fold down SIM card holder and slide to "lock"



## 1.3 Battery

Charge the battery vial USB port (see 2.). You can do it by using the AC charger or cigarette lighter charging cable. If the battery is fully charged, the Power LED is glowing in solid red. Charging takes about 4-6 hours.

Don't short or damage the battery mechanically! Explosion hazard!



### 4. LED Status

The LEDs on the top of the tracker indicates its status. Depending on the blinking interval you can see if the tracker has received GPS or if the battery is full, for example. If the tracker is connected to the PC, no LED status can be determined.

LED	Status	Blinkverhalten
	power save mode	OFF
l GPS	GPS error	150ms ON / 150ms OFF
(blue)	GPS GPS positioning	50ms ON / 450ms OFF
(10.00)	GPS signal OK	50ms ON / 2000ms OFF
	power save mode	50ms ON / 6000ms OFF
DOWED	battery charging	1000ms ON / 1000ms OFF
POWER	battery fully charged	LED permanently ON
(red)	battery almost empty	50ms ON / 450ms OFF
	normal	50ms ON / 2000ms OFF
	power save mode	OFF
	SIM-PIN error / locked	150ms ON / 150ms OFF
GSM	no SIM-card	OFF
(green)	GPRS connection	50ms ON / 200ms OFF /50 ms ON 1700ms OFF
(8.36)	normal	50ms ON / 2000ms OFF
	GSM is searched	50ms ON / 450ms OFF

If the tracker is connected to the PC, the LED status can NOT be determined.

# 4.1 LED status (motion alarm)

In connection with the motion alarm the Tracker displays the following flashing behavior:

Status	LED	Blinkverhalten
	GPS	OFF
activated	Power	50ms ON / 50ms OFF / 50ms ON / 6000ms OFF
	GSM	OFF
	GPS	OFF
triggered	Power	1000ms ON / 2000ms OFF
	GSM	OFF
	GPS	all for 5000ms ON
sends alarm	Power	
	GSM	

How to set the motion alarm, you can find in the log description (English) or in the PC software (GPS Tool) in "send commands ..."



## 3. Hardware accessories

There are many accessories for the TK5000, that extend the scope of use.

- external battery packs up to 365 days of standby
- · waterproof containers such as boxes and bags
- · additionally charging cable for fixed installation in the vehicle
- GPS Tracking portal for real-time tracking and route functions



For more information and prices please visit our website or write an e-mail to us.

### 5. User Information

Please note these instructions in order to maximize the life span of the tracker.

- keep the device dry. Water, etc. can destroy the device
- avoid the use and storage in dusty places
- don't use it at very hot or very cold places
- Clean the device with a dry cloth. No chemicals
- do not paint or paste it. Do not disassemble or convert the tracker
- use only batteries and chargers of the manufacturer
- don't remove the antenna and don't use any other



## 2. Quick Start Guide

Note: After completing the quick-start guide the tracker is ready to use and you can check the position by calling it.

We ask you to read the manual completely once at least to get an overview of. Then you can use the quick start guide:

- 1. Disable the PIN code of the SIM card (see 2.1)
- 2. Insert the SIM card into the Tracker (see 2.1)
- 3. Insert the battery and charge it (see 2.2)
- 4. turn the tracker on and wait one minute
- **5.** Send the following SMS with your own mobile phone number to the Tracker:

## \$WP+COMMTYPE=0000,1,+4417911111

#### Instead of +4917911111 enter your mobile number including country code!

If everything is correct, you will receive back a confirmation from the tracker via SMS with \$ OK! COMMTYPE = 1, +44 ...... When you don't get back anything or a \$ = ERR then check again if you have written the command correctly in the SMS.

Note: You can find detailed information in the manual on the CD.

**6.** Send the following SMS with your own phone number to the Tracker:

# \$WP+CITRACK=0000,+4417911111,,,,,129

#### Instead +4917911111 enter your mobile number including country code!

The characters ",,,,, 129" must also be unchanged in the SMS.

If everything is correct, you will receive a confirmation from the Tracker via SMS with \$ OK! CITRACK = 1, +44 ...... . When you don't get back anything or a \$ = ERR then check again if you have written the command correctly in the SMS.

Note: You can find detailed information in the manual on the CD.

#### **7.** The tracker is now ready for use.

You can now call the tracker with your mobile number and receive a text message seconds later. You can now enter the coordinates in Google Maps or click on the link directly (see 4.)



# 2.1 meaning of the coordinates SMS (Google Maps)

After you have called the tracker, you will receive the following SMS:

100000001,20100905153657,10.881185,48.377615,0,226,7,0,34

<u>Meaning:</u> Device ID,Date-Time(yyyy-mm-dd-hh-mm-ss),longitude(long),latitude(lat), speed,heading,altitude,satellite,event id

You can click the Google link, or manually type the following: Go to the website and first enter http://maps.google.de/ "Lat" data and then separated by a space the "long" data. The other data such as speed, time, etc., are irrelevant to the tracking.



r. B. "Am Markt 46, Siegburg" oder "Hotels Hannover"

48.377615 010.881185

Maps-Suche

Karte durchsuchen

Branchen suchen

Route berechnen

After entering, click on "**Search Maps**". Now you will see the map with the exact position of the GPS tracker.







### 6. Commands

There are a variety of commands for the GPS Tracker TK5000 available, which are constantly being expanded through firmware updates. Therefore please visit our website regularly.

#### **CAUTION:**

All commands can be sent via USB, SMS and GPRS to the device.

## 6.1 Configuration via USB

For the configuration via USB, you must first install the USB drivers on your system. For an installation instruction, see 3.0 Then you can use the GPS tool. Details in 4.0

## 6.2 Configuration via SMS

You can send all commands (see 2.3 Overview of all commands) via SMS to the tracker. Before you do, you should inform themselves about the correct parameters to the command. There are two ways to detailieren parameters come.

1st In the protocol description (English) you can find all the details of detail on the commands.

2nd In the GPS tool, you can find all the commands under the button "send commands ...". For beginners, this is the best way to acquire the basic knowledge.

## 6.3 Configuration via GPRS

You can send all commands (see 2.3 Overview of all commands) via GPRS to the tracker. only developer should This possibility only should be considered by developers. For successful communications the command "\$ wp" or "\$ WP" must be at the beginning and at the end of the command a <CR>. In the response of the tracker, you will always receive a <CR> <LF> at the end of the command.



# 6.4 Command syntax

The commands will always have the same structure:

WP + \$ command = password, parameter, parameter, parameter...

#### **Example:**

\$WP+TRACK=0000,1,60,0,0,1,1,15

"\$WP+" is the sign and thus the basis for each command.

A complete command consists of these four parts. For details about the parameters of the commands, see the Protocoll description or the GPS tool.

# 6.5 Response of the tracker

When you send a command to the tracker, the tracker will always confirm the command, so you know whether the transfer has worked, and the new command will be followed.

These confirmations will always receive the fixed SMS central number. (See GPS-Tool)

#### **Example:**

You send **\$WP+TRACK=0000,1,60,0,0,1,1,15** via SMS to the tracker.

#### **Answer choice 1:**

**\$OK:**TRACK=0000,1,60,0,0,1,1,15

The order was confirmed with "OK". This means that the command was accepted.

### **Answer choice 2:**

#### \$ERR:TRACK=2

The "ERR" in the response is a mistake. More details will give us the number "2". The number can be looked up in the error code list (see 6.6). In the example, the number stands for "incorrect command parameters". Check if the command you have sent is correct.

<sup>&</sup>quot;TRACK" is the command. A list of all commands, see Section 2.3

<sup>&</sup>quot;0000" is the password. This you can use a GPS tool, or via SMS.

<sup>&</sup>quot;1,60,0,0,1,1,15" are the parameters that are necessary for the particular command.



## **6.6 Error Codes**

Here is a list of error codes, which were addressed under 6.5.

Error-code	Description	Solution
0	unknown error	ka.
1	incorrect password	password check
2	incorrect command parameter	command desription control
3	central number or IP not set	complement command parameters
4	GSM connection not possible	check SIM-card and wireless connection
5	GSM error	ka.
6	GPRS connection is not possible	check APN and radio link
7	download process interrupted	Check USB cable and start again
8	Voice line busy	try again

#### **Notes:**

- 1. All error codes can be output via USB communication.
- 2. Error Code 1, 2 and 3 can be output via SMS, GPRS and USB.
- 3. All error codes can be issued only by SMS, if the primary communication type GSM was chosen.

### 6.7 Event IDs

<b>Event ID</b>	Description	Corresponding command
0	Position data	\$WP+GETLOCATION
1	Logging data	\$WP+REC
2	Track position data	\$WP+TRACK
3	Over speeding event	\$WP+SPD
4	Emergency contact number	\$WP+EMSMS
5	Unauthorized movement event	\$WP+EMOV
37	Entering-sleeping mode event	\$WP+PSM
40	Power low report	\$WP+LOWBATT
50-99	User defined event position	\$WP+SETEVT



# 6.8 Overview of all commands

Command	Description	
\$WP+COMMTYPE	Set / Read the communication type / SMS central number / GPRS parameters	
\$WP+ROAMING	On / off GPRS roaming function	
\$WP+GETLOCATION	Query the current position of the device	
\$WP+TRACK	On / off / read auto tracking function	
\$WP+REC	On / Off / Read Data logger function	
\$WP+CLREC	Delete all items of the data logger.	
\$WP+DLREC	Download full of items in the data logger	
\$WP+SPDLREC	Download full of items in the data logger stop	
\$WP+REBOOT	remain restart the device (set commands and settings)	
\$WP+RESET	Reset all parameters to factory settings	
\$WP+PSM	On / Off / Read power saving mode "	
\$WP+SETEVT	Switching (set) / off / read Geo-fence	
\$WP+CLEVT	Geo-fence delete	
\$WP+IMEI	IMEI query	
\$WP+SIMID	Query identification of the SIM card	
\$WP+TEST	Device hardware and battery voltage test	
\$WP+VER	Firmware version query	
\$WP+NMEA	On / off output format format via USB (NMEA-0183)	
\$WP+SPD	On / off / read speed alarm	
\$WP+EMSMS	SOS button and share numbers	
\$WP+SETTZ	Set the time zone	
\$WP+SETMILE	Set / Reset / query format KM / Miles	
\$WP+GSMINFO	Query information GSM communication	
\$WP+LOWBATT	Set / Read Battery low alarm	
\$WP+EMOV	On / off motion alarm	
\$WP+VWT	Wiretap mode (microphone)	
\$WP+CITRACK	Set individual item by calling (authorization number)	
\$WP+GBLAC	On / off / query CELL ID Info	
\$WP+UNCFG	Set / read device ID, Password, and SIM PIN code	

More details on the commands available in the GPS tool, or in the log description.



## 7. Brief description of the Tracker commands

On the left you will find the various commands. By clicking on the command, you get Declarations about the command.

Below is the command line (eg \$ WP + IMEI = 0000). Here you can revice the command. Then click on the "Send" button.

The command will be send to the Tracker via USB.

INFO: The commands may be send to the tracker via SMS.

In status window you can see whether the command was accepted:

\$OK!WP+TRACK=0000,..... this means the command has been set this means the command has not been set

For the cause Check the error code list (eg, Code 2)

### 7.01 Quickguide: define your mobile phone number

First you define your phone number. All command confirmations will be send to this number. Here you usually use your own phone number.

When you send a command via SMS to the tracker, then you get an SMS confirmation to the defined number.

Edit your phone number in the command line and press "Send" \$WP+COMMTYPE=0000,1,+4917911111

The country code "+49" must be named.

### 7.02 Quickguide: authorize the number

Note: You can authorize only one phone number at the moment.

Here you set numbers, the tracker is allowed to send coordinates to. You can authorize up to five phone numbers.

Enter the numbers in the command line.

A call number: for example \$WP+CITRACK=0000,+491791111,,,,33

The country code "+49" must be named.



### 7.03 Quickguide: Position Format

This command is currently not available, so skip # 3. You have the choice between two SMS formats: Coordinates as TEXT (default) or coordinates as LINK

When you receive the coordinates as a link, you can click on it. Generally it opens your mobile browser and you will see the location on the map. The SMS costs are identical.

e.g.

http://maps.google.com/m/m?q=48.868806,009.529978&site=maps

### 7.04 Quickguide: Let's start

The tracker is now configured.

In order to get the coordinates, you need to call the tracker. After a few rings, you can hang up. Seconds later you get the coordinates via SMS.

OR you can send an SMS command "\$WP+GETLOCATION=0000" to the Tracker.

#### 7.05 Set the SMS-central number

Usually the central number is your phone number. You must define the central number if you use the tracker in the SMS operation.

Edit your phone number in the command line and press "Send" e.g. the command: **\$WP+COMMTYPE=0000,1,+4917911111111** 

The country code "+49" must be named.

### 7.06 Query the SMS-central number

Usually the central number is your phone number. The central number you must determine if you use the tracker in the SMS service.

Command: \$WP+COMMTYPE=0000,?



### 7.07 Single position query

Send the following command by SMS or by software ("Send") to the Tracker. Seconds later you will receive a text message with the coordinates.

In your habitation or in buildings, you usually have no GPS reception.

Command: \$WP+GETLOCATION=0000

### 7.08 Position query via CALL

Note: You can authorize only one phone number at the moment Here you set numbers, the tracker is allowed to send coordinates. You can authorize up to five phone numbers.

Enter the numbers in the command line.

A phone number: e.g. \$ WP + CITRACK = 0000, +491791111,,,, 33

The country code "+49" must be named.

Command: \$WP+CITRACK=0000,+491791111,,,,,129

#### 7.09 Position query via TIME

In this command, the tracker sends you the position in a certain time interval. This time information is in seconds. In the example, the number "300" means the time in seconds.

Change the seconds to the desired time in the command line. Then click "Send".

Command: \$WP+TRACK=0000,1,300,0,0,1,1,15

### 7.10 Position query via DISTANCE

In this command, the tracker sends a position in a certain distance. This distance is in meters. In the example the number "500" is the distance in meters.

Change the meter to the desired distance in the command line. Then click "Send".

Command: \$WP+TRACK=0000,2,0,500,0,0,1,15



### 7.11 Position query via ANGLE

With this command you set an angle-dependent Sending (in degree). In the example the number "35" is the angle change in degrees. The tracker will transmit at any angle (turn) greater than 35 degree. You can change this value and send it to the tracker.

Command: **\$WP+TRACK=0000,5,0,0,0,0,1,35** 

#### 7.12 position query MIXED

You can combine the various queries. Insert the desired configuration on the command line and adjust the parameters.

**\$WP+TRACK=0000,3,300,500,0,0,1,15**  $\rightarrow$  "3" stands for TIME AND DISTANCE. You can change the seconds and the meter. Tracker sends, if both conditions are met.

**\$WP+TRACK=0000,4,300,500,0,0,1,15**  $\rightarrow$  "4" stands for TIME OR DISTANCE. You can change the seconds and the meter. Tracker sends when one of the two conditions are met.

**\$WP+TRACK=0000,6,300,0,0,0,1,35**  $\rightarrow$  "6" stands for ANGLE OR TIME. You can change the seconds and the angle. Tracker sends when one of the two conditions are met.

**\$WP+TRACK=0000,7,0,500,0,0,1,35**  $\rightarrow$  "7" stands for DISTANCE OR ANGLE. You can change the meter and the angle. Tracker sends, if two conditions are met.

#### 7.13 Automatic queries STOPPING

If you "send" the following command to the tracker all automatic position queries are stopped.

Command: \$WP+TRACK=0000,0



### 7.14 activate power-save mode 1

With the power-save mode 1, only the GPS receiver is turned off.

The rule is: ON = GSM | GPRS = ON | G-Sensor = ON | OFF = GPS

300 seconds after motion standstill the tracker switches in power-save mode. You can change the delay time and "Send" it to the tracker.

\$ WP + PSM =  $0000,1,300,1,0 \rightarrow 60$  seconds

Once the tracker is moved again, it changes into normal mode.

Command: \$WP+PSM=0000,1,300,1,2

### 7.15 activate power-save mode 2

With the power-save mode 2, GPS and GPRS is turned off.

The rule is: GSM = ON | OFF GPRS = | G-Sensor = ON | OFF = GPS

300 seconds after motion standstill the tracker switches in power-save mode. You can change the delay time and "Send" it to the tracker.

 $$WP + PSM = 0000,2,300,1,0 \rightarrow 60 \text{ seconds}$ 

Once the tracker is moved again, it changes into normal mode.

Command: \$WP+PSM=0000,2,300,1,0

#### 7.16 activate power-save mode 3

With the power-save mode 3 GPS, GPRS and G-sensor is turned off.

The rule is: ON = GSM | GPRS = OFF | G-Sensor = OFF | GPS = OFF

300 seconds after motion standstill the tracker switches in power-save mode. You can change the delay time and "Send" it to the tracker.

\$ WP + PSM =  $0000,3,300,1,0 \rightarrow 60$  seconds

The tracker can ONLY be woken from this mode via phone or SMS.

Command: \$WP+PSM=0000,3,300,1,0



### 7.17 deactivate power-save mode

With this command the power-save mode is turned off.

The rule is: ON = GSM | GPRS = ON | G-Sensor = ON | GPS = ON

Command: \$WP+PSM=0000,0

### 7.18 switch-on speed alarm

This command monitors the speed (km / h) of the tracker. If a defined speed range (minimum-maximum) is reached, you will receive an SMS to the SMS central number.

Adjust the minimum and maximum km / h and press "Send".

Command: \$WP+SPD=0000,2,50,255,60

#### 7.19 switch-off speed alarm

With this command you can disable the speed alarm.

Command: **\$WP+SPD=0000,0** 

#### 7.20 activate movement alarm

With this command the G-sensor (accelerometer) is used as alarm transmitter. For activating/deactivating the alarm, do the following:

Push the SOS button three times within two seconds.

Upon successfully activation ONLY the red power LED flashes. 60 seconds later, the motion alarm is active.

Include your phone number.

Command: \$WP+EMOV=0000,+4917911111,,,,,1

#### 7.21 deactivate movement alarm

With this command, the motion alarm is turned off.

Command: **\$WP+EMOV=0000,,,,,,0** 



### 7.22 define the SOS phone number

You must set a minimum of one SOS phone number so that the SOS button work. You must press the SOS button for 3 seconds to activate the alarm.

Add your mobile number at the command line and click "Send"

Command: \$WP+EMSMS=0000,+4917911111,,,,,1

#### 7.23 delete the SOS phone number

With this command, the SOS feature is disabled.

Command: **\$WP+EMSMS=0000**,,,,,,**0** 

#### 7.24 activate "LEAVE" Geo-fence

Alert via SMS, if the region was left. To set this geo-fence, you need the coordinates of the center of the area. You can determine this with Google Earth.

Now you just have to pretend the radius in meters.

The number "500" are the radius in meters, this value can change in the command line.

minimum of 50 feet 65,000 meters

Command: \$WP+SETEVT=0000,50,1,9.529976,48.868806,500,2

#### 7.25 activate "ENTER" Geo-fence

Alert via SMS, if the region was entered. To set this geo-fence, you need the coordinates of the center of the area. You can determine this with Google Earth.

Now you just have to pretend the radius in meters.

The number "500" are the radius in meters, this value can change in the command line.

minimum of 50 feet 65,000 meters

Command: \$WP+SETEVT=0000,50,1,9.529976,48.868806,500,1



#### 7.26 deactivate Geo-fence

With this command you can deactivate the Geo-fence. You must assign each with a geo-fence-ID.

Command: \$WP+SETEVT=0000,50,0

#### 7.27 Low battery

With this command, you receive an alarm SMS when the battery is almost empty. You should recharge the battery then.

Activate:

Change the number to "2" in the command line, and click "Send"

Disable:

Change the number to "0" in the command line, and click "Send"

Command: \$WP+LOWBATT=0000,2

#### 7.28 Data log on TIME

In this command, the tracker stores the position in a given time interval. This time information is in seconds. In the example, the number "300" means the time in seconds.

Change the seconds to the desired time in the command line.

Command: \$WP+REC=0000,1,300,0,0,0,15

### 7.29 Data log on DISTANCE

In this command, the tracker stores a position within a certain distance. In the example the number "500" is the distance in meters.

Change the command line to the desired distance in meters.

Command: \$WP+REC=0000,2,0,500,0,0,15



#### 7.30 Data log on ANGLE

With this command you define an angle-depending saving (in degrees). In the example the number "35" is the angle change in degrees. The tracker would save at each 35 degree gradient (turn).

Command: \$WP+REC=0000,5,0,0,0,0,35

#### 7.31 Data log MIXED

You can combine various queries. Insert the desired configuration on the command line and adjust the parameters.

**\$WP+REC=0000,3,300,500,0,0,15**  $\rightarrow$  "3" stands for TIME AND DISTANCE. You can change the **seconds** and the **meter**. Tracker sends, if both Conditions are met.

**\$WP+REC=0000,4,300,500,0,0,15**  $\rightarrow$  "4" stands for TIME OR DISTANCE. You can change the **seconds** and the **meter**. Tracker sends when one of the two conditions are met.

**\$WP+REC=0000,6,300,0,0,0,35**  $\rightarrow$  "6" stands for ANGLE OR TIME. You can change the **seconds** and the **angle**. Tracker sends when one of the two conditions are met.

**\$WP+REC=0000,7,0,500,0,0,35**  $\rightarrow$  "7" stands for DISTANCE AND ANGLE. You can change the meter and the angle. Tracker sends, if both conditions are met.

### 7.32 STOP data logger

With this command you can turn off the data logger. The previously stored positions are not deleted.

Command: \$WP+REC=0000,0

### 7.33 DELETE data logger

Use this command to erase the memory of the data logger. All data will be lost.

Command: \$WP+CLREC=0000



### 7.34 reset to factory settings

Use this command to reset the tracker to factory settings. The content of the data logger is not deleted.

Command: \$WP+RESET=0000

### 7.35 battery voltage query

With this command you can check the current battery voltage.

Command: \$WP+TEST=0000

#### 7.36 define the time zone

With this command you can set the time zone.

Summertime:

Command: **\$WP+SETTZ=0000,+,01,00** 

Wintertime:

Command: **\$WP+SETTZ=0000,+,02,00** 

### 7.37 request the firmware version

With this command you can check the firmware version of your tracker.

Command: **\$WP+VER=0000** 

### 8. technical details

data	specification
dimensions	44 x 82 x 18 mm
weight	70 grams
communication	SMS/GPRS/USB
band	850/900/1800/1900
GPS Chip	MTK 3329 (66 channels)
GPS sensitivity	-165 dbm
GSM module	Simcom

data	specification
localization cold/worm/hot	42 / 38 / 1 second
GPRS	Class 10, TCP/UDP
memory	internal 4MB
sensor	3D G sensor
battery	1100mAh Li-ion
standby	up to 100 hours



# 9. installing USB driver

Damit der Tracker am Computer für die Konfiguration oder dem Auslesen des Datenloggers verwendet werden kann, müssen Sie zunächst die passenden USB-Treiber installieren, damit der Tracker von Ihrem Computer erkannt wird.

# 9.1 installing USB driver (Windows XP)

Please follow the order of these instructions exactly.

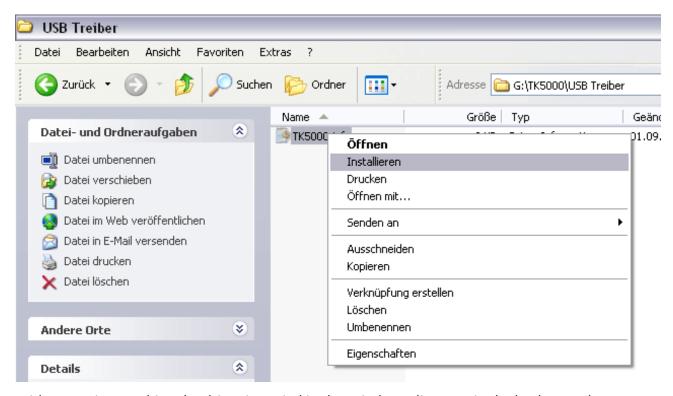
#### 9.11 insert the software CD and install .Inf

CAUTION: Do NOT connect the Tracker to the PC yet.

You got the driver via e-mail or CD. Change in the following folders:

\TK5000 \ USB Driver \ XP in this folder you will find the TK5000.inf

Click the right mouse button on this file. This opens a menu, you click the left mouse button on "Install".



Without seeing anything the driver is copied in the Windows directory in the background. Continue with the next step.



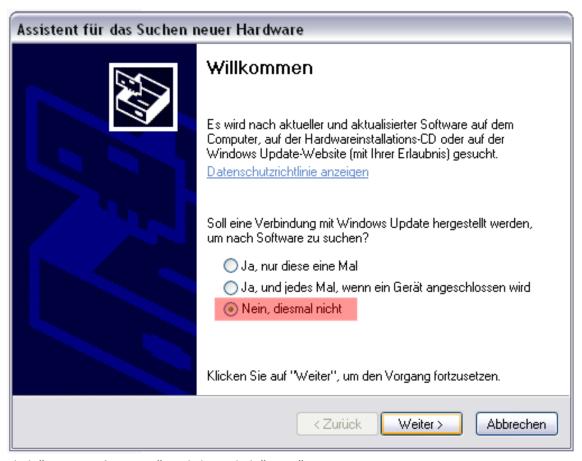
#### 9.12 switch-on the tracker and install the USB driver

ATTENTION: You need to charge the tracker before this step.

Switch-on the tracker at the ON/OFF button. Wait for 10 seconds before you connect the USB-wire with the tracker and the computer.

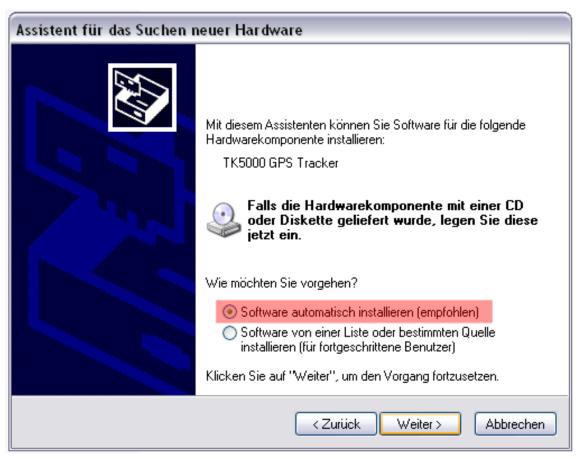


After you have connected the tracker via USB to computer, the following window appears:



Click "No, not this time" and then click "Next".





Click on "Install software automatically" and then click "Next".

Then click on "Continue Installation". This step can be repeated.





Click "Finish". The USB drivers are now installed.





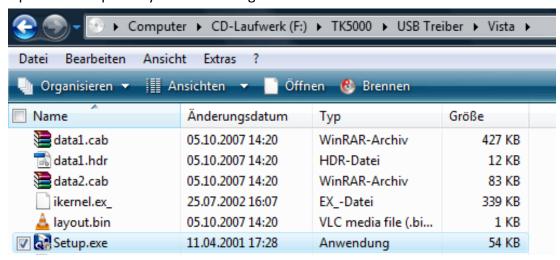
# 9.2 installing USB driver (Windows VISTA)

To use the tracker on the computer for the configuration or the readout of the data logger, you must first install the appropriate USB driver so that the tracker will be recognized by your computer. Please follow exactly the order of these instructions.

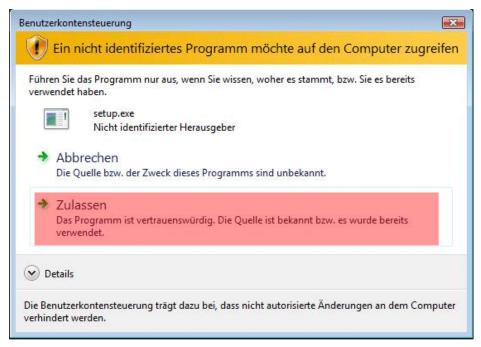
### 9.21 insert Software CD and pre-install the USB-driver

ATTENTION: Don't connect the Tracker with your computer yet.

You got the driver via CD or via e-mail. Change in the following folders: \ TK5000 \ USB Drivers \ Vista in this folder you will find the Setup.exe Open the Setup.exe by double clicking it.

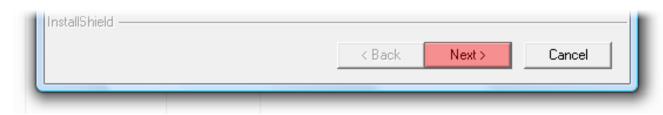


Then the User Account Control appears. Click "Allow" to continue.





Setup will continue to run and you confirm it by clicking "Next". This process may be repeated several times.



If the Windows-safety reports, click on "install this driver anyway".



To complete the setup, click "Finish".



Continue with the next step.



#### 9.22 switch-on the tracker and install the USB driver

ATTENTION: You need to charge the tracker before this step.

Switch-on the tracker at the ON/OFF button. Wait for 10 seconds before you connect the USB-wire with the tracker and the computer.



After you have connected the tracker with your PC, the tracker is automatically detected. Please keep the COM port in mind. you will need it for the GPS tool later.



The installation is now complete.

## 9.3 installing USB driver (Windows 7)

To use the tracker on the computer for the configuration or the readout of the data logger, you must first install the appropriate USB driver so that the tracker will be recognized by your computer.

Normally, your trackers are automatically recognized.

If not, then follow the installation instructions for "Windows Vista".



# 10. GPS-tool (PC software)

With the GPS tool, you can configure and administer the tracker, contract SIM-Pins and passwords and retrieve and save positions from the Data Logger.

#### 10.01 install Microsoft .NET Framework 3.5 Service Pack 1

ATTENTION: You must install .NET Framework 3.5 Service Pack 1.

You can install .Net 3.5 in different ways:

install the file **dotnetfx35.exe** inside the folder of the CD **/TK5000/GPS-Tool/DOTNET**. **Restart your computer after installation.** 

#### OR

http://www.microsoft.com/downloads/details.aspx?FamilyID=d0e5dea7-ac26-4ad7-b68c-fe5076bba986&DisplayLang=de

#### OR

visit **google.de** and search for ".NET Framework 3.5 Service Pack 1". Select the search result, which leads to Microsoft and install the file. Restart your computer after installation.

#### 10.02 switch-on the Tracker

ATTENTION: You need to charge the tracker before this step.

Switch-on the Tracker at the ON/OFF Button. Wait 10 seconds and connect the USB-wire with the tracker and the computer.





#### 10.03 start the GPS-tool

You have received the GPS tool via CD or via e-mail. Change to the following folder: **\TK5000\GPS-Tool** in this folder you can find the file **GPSTrackerConfigurator.exe** Open the file GPSTrackerConfigurator.exe by double-click.





### 10.04 select COM-port

Select the **COM-Port** of the tracker and click **"Connect"**. If you don't know the port, you can check this in the Device Manager. (See 4.5)



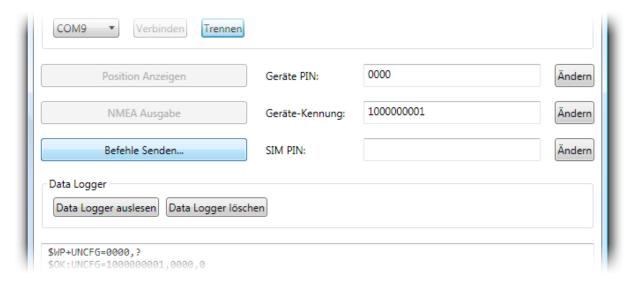
### 10.05 check the COM-port (if unknown)

If you don't know the COM-port, you can find it out the following way:

- Press the shortcut "WIN + PRINT" on the keyboard or open the Control Panel in the Start menu.
- Select the Device Manager. This opens a list of all devices.
- Click the "Connections". There you will find the COM port.

## 10.1 sending commands...

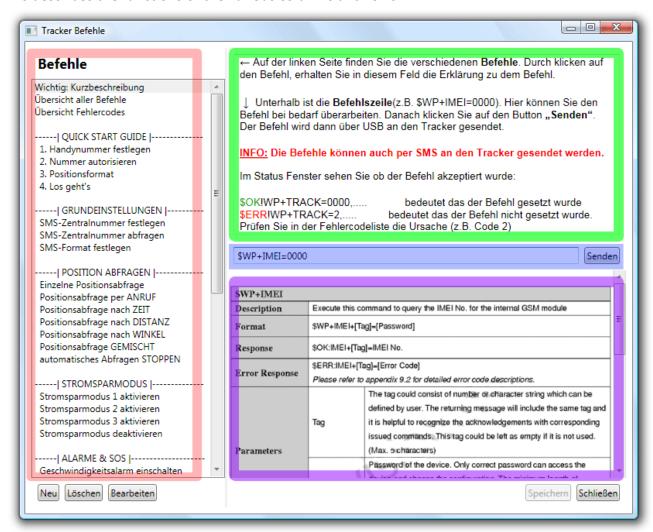
After the connection to the tracker is made, click on the button "Send Commands".





### 10.11 sending commands... Structure Description

This describes the functions of the various columns and rows.



#### **Commands**

You have many preconfigured commands for the TK5000 in this column. By clicking the command the help, command line and protocol description will update.

#### Help

In this column, you get help, descriptions and instructions about this command.

#### **Command line**

In this line you can see the real command. This can be revised before "send".

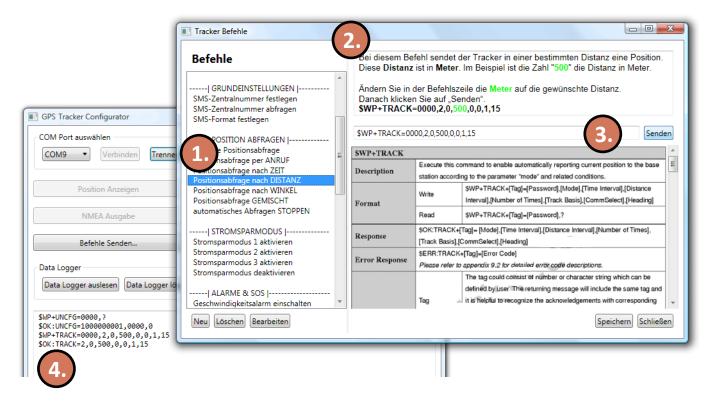
#### **Protocol Description**

This columnyou can find the English protocol description. It gives detailed information about the command as parameters, minimum values, maximum values, command structure, etc.



### 10.12 sending commands... order of use

After the connection to the tracker is made, click on the button "Send Commands".



- 1. Choose the command from the list you want to use.
- 2. read the help for the command to understand the function of the command.
- 3. Change the parameters in the command line as required and click Send.
- 4. Check the response from the tracker in the status window.

### 10.13 sending commands... new command templates

If you add your own command templates, you must do the following:



- 1. Click "New". It opens a new window with three empty fields.
- 2. In the field "Name of the Command" you determine the title in the column "commands".
- 3. In the "Description" field you specify the contents of the Help text. (Rich Text Format possible)
- 4. Enter the real command in field "Command" (z.B. \$WP+IMEI={0}). As Password, you must enter the placeholder "{0}", so that it can then be replaced by the real password.
- 5. Click on "OK". The window disappears afterward. Click "Save".