CDP 305 GPS bicycle tracker
(GPS+GSM+SMS/GPRS)

USER MANUAL V1.2

Bicycle Taillight GPS Tracker

Introduction

The CDP 305 Tracker uses the most advanced and modern GPS, GSM, and GPRS technology. It has been specifically designed and developed for pinpoint location and tracking.

Based on the existing GSM GPRS network and GPS satellites, this product can locate and monitor potential targets remotely via SMS or the Internet.

The CDP 305 tracker has the following features

- Tracking via SMS or GPRS.
- Point location.
- Time interval tracking.
- SOS alert at the touch of a button.
- Zone control, it will notify you if the tracker leaves or enters areas that you defined.
- Low battery alert.
- Excessive speed alert.
- Internal rechargeable battery.
- Motion sensor and vibration alert
- Sleep mode to save battery and GPRS traffic
- Automatic and programmable rear light on and off.

This manual shows how to operate the device. Be sure to read this manual before using the product. Please note that technical specifications and information contained in this manual are subject to change without notice.

1. CONSIDERATIONS FOR USING THE CDP 305 TRACKER

Please read the user manual carefully before using this device for the first time.

IMPORTANT WARNINGS:

- Deactivate the PIN code and answering service of the SIM card installed in the tracker.
- The tracker uses the GPRS connection of your SIM card if you want tracking mode. Be careful with prepaid cards! Find out the connection cost, as you could run out of credit and leave the tracker out of service.
- SMS messages sent to the SIM card must be in text format.
- Using more than one advanced tracker function at a time is not permitted. The most recent request sent will replace the present function.
- The manufacturer's recommended battery charging time is at least 3 hours. Please adhere to the specified time.

2. UNIT INSTALLATION DIAGRAMS

Use the accessories in the kit to install the GPS with rear light on your bike. Below are some images showing how to do it.

3. STARTING TO USE THE EQUIPMENT

3.1. Functionalities and meaning of LEDs

The internal LEDs will light up when the device is turned on. Once it's ready, they'll turn off so as not to alert a potential thief of its existence, so your device will look like a simple taillight for your bike.

1: LED lighting

2: Internal status LEDs (*)

3: SOS button

4: SIM slot and USB battery charging

5: Fastening bracket

LED indicators

YELLOW LED	Meaning
Always on	Initializing GPRS
Blinking	Normal operation of GPRS
BLUE LED	Meaning
Always on	Initializing GPS
Blinking	Normal GPS operation

3.2 First use

- Make sure the SIM card is installed.
- Check that the SIM card has not run out of credit.
- Make sure the SIM lock code is disabled.
- Use another mobile phone to confirm that the PIN code is disabled and that you can make and receive phone calls, and that you can connect to the Internet via GPRS.
- The factory taillight is off; see the corresponding section on how to turn it off, on, or set it to automatic mode.

Charge the battery for at least 3 hours in the off state using the wall charger or car charger.

Steps to install the SIM:

1. Open the rubber back cover.

2. Place the SIM card into the device, as shown in the image, and push it in until it clicks and locks in. Push it in with your fingernail or similar. At that point, the tracker will turn on and you'll see the red light.
3. If set, the status LEDs will light up.
4. To remove the SIM, press it again until it clicks and it will release, allowing you to slide it out again.

3.3 Quick Start

Default password: 123456

Step 1:

- Power on the unit outdoors by inserting the SIM.
- In 10 to 80 seconds, the unit will start working and acquire GSM signals as well as GPS signals.
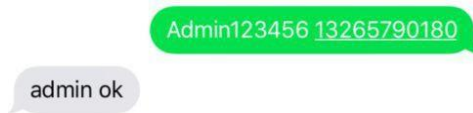
  Commands must be sent in text mode and respecting the space, for example:

  admin+Password[space]+Phone

  This would be sent like this: admin123456 13265790180

Step 2:

- Record the authorized number. To do so, send an SMS with the following text: admin123456 [phone number].
- Note that there is a space between the command and the phone number. Example: admin123456 13265790180
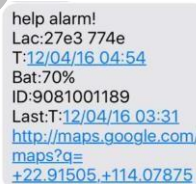
Admin123456 13265790180

admin ok

Please note that from now on all confirmation messages will arrive at this number.

- When the unit is in overspeed alarm, vibration sensor alarm, or low battery alarm, it will send the information to the administrator number. (13265790180)
- Cancel the administrator number by sending an SMS: noadmin123456

Step 3 (optional):

- Record the SOS number. To do this, send an SMS with the text: sos123456 [phone number].
  Example: sos123456 13265790180
- The Tracker will reply: SOS number OK
- Now if you press the SOS button for 3 seconds, the administrator will receive a message like the one in the image:

help alarm!
Lac:27e3 774e
T:12/04/16 04:54
Bat:70%
ID:9081001189
Last:T:12/04/16 03:31
http://maps.google.com/
maps?q=
+22.91505,+114.07875

- Cancel the SOS number by sending an SMS: nosos123456
  Note: If you're using the app or the web, many of these commands can be performed directly from them without using SMS or remembering codes. To do this, configure your internet connection by following step 4.

Step 4 (optional, only if you want tracking and management from the APP or Web):

- Configure your telephone operator's internet connection, inserted in the unit.
- Send SMSs with the operator's APN, username and password, one for each piece of information.

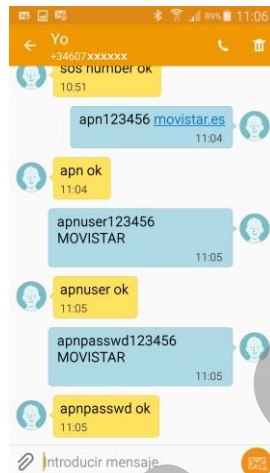Respect the space between the command and the value.

*See Annex 1 for details of Spanish operators or ask your operator.

apn123456 apn
apnuser123456 user
apnpasswd123456 password

The image shows the Movistar example; you should send SMS according to your carrier's settings.

Step 5 (optional, only if you want GPSR tracking and management in the APP or Web):

Connect to GPRS for tracking. Send SMS gprs123456

- It is advisable to activate the automatic hibernation mode, Send the SMS:

  sleep123456 shock

  If this mode is enabled and the GPS is not moving, it won't report until you move, significantly increasing battery life. To wake it up, simply move, make a missed call, or send a text message.

- **It is advisable to set the GPS time so that the server logs match our local time.** To do this, send one of the following SMS depending on whether you are in winter or summer time.

  timezone123456+1(Spain   winter time)
  timezone123456+2(Spain   daylight saving time)

Your device is now ready and connected to the internet!

3.4 Operating modes

A very simple SMS-based tracking system. Simply make a missed call to the tracker, and it will send an SMS to your mobile phone with a link to Google Maps where you can view the location.

This modality has different functions:

- Listen function: Possibility of listening to sounds around the tracker.
- Electronic fence function: The device will alert you if you leave a predefined area.
- Speed limit function: The device will notify you of speeding violations.
- SOS Function: It will alert authorized users of possible emergencies.
- Power outage alert function.

TRACKING Mode

Using a GPRS connection, you can track a route from a web browser, on your tablet, or on your smartphone. Free tracking software is available at:www.mytkstar.net

In this mode you can:

- Create a fleet control system.
- Make a report of the routes taken.
- Receive alerts for route departures or exceeding a set speed limit, etc.
- Create geofences, the device will send you SMS when you enter and leave areas you pre-set.

1. Real-time pinpoint location

If you want to see a specific location at a specific time with a link to Google, make a missed call to the device with the administrator's number.
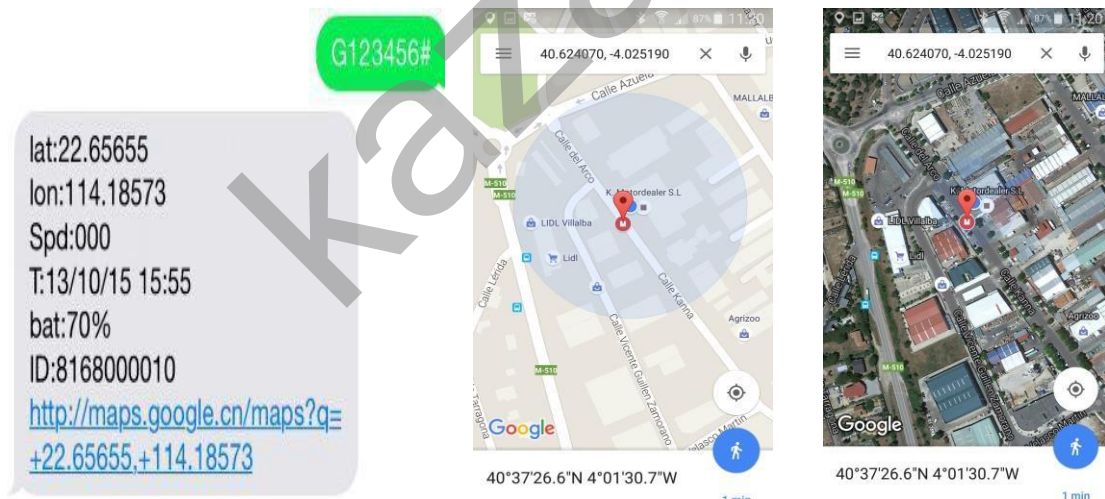
You will receive SMS on your phone of this type:

lat:22.63952
lon:114.17122
Spd:002
T:24/09/15 16:00
bat:100%
ID:2015070203
http://maps.google.com/maps?q=+22.63952,+114.17122
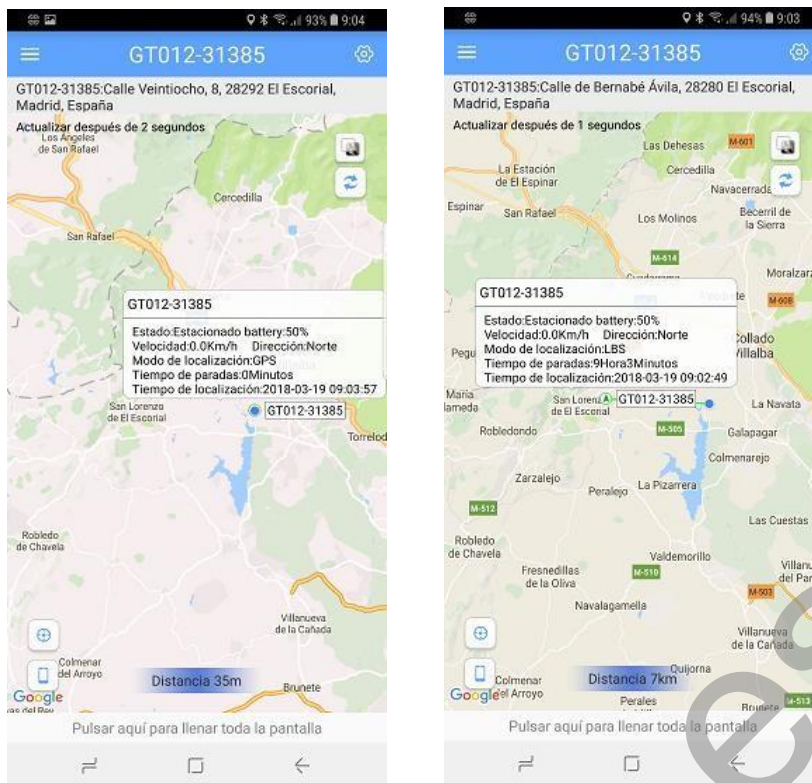
Explanation of the message:

- ✓ **Latin:** Latitude
- ✓ **Lon:** Longitude
- ✓ **Spd:**002 km/h: This indicates the last known speed of the unit.
- ✓ **T:**09/24/2015 4:00 PM: Date and time.
- ✓ **Bat:** The approximate amount of battery charge remaining.
- ✓ **ID:**2015070203 The device's identification code. This number is used for the tracking website and the Android and iOS app.
- ✓ **Google Maps link:** This is the link to the Google map showing the tracker's location. Click on the link to view a map and see if there is GPS information for the unit.

You can make a missed call to the tracker or send the command: G123456# via SMS to get a precise location.

Once you receive the link on your phone, open it in Google Maps and you can use all the features it offers.

What is LBS and GPS tracking?

When there are differences between the actual position of the device and the one shown in the APP, Web and SMS, check if it is a GPS or LBS position.

When the GPS is unavailable, the device will provide the position of the nearest GSM antenna. This is called cell-based positioning, which gives a rough idea of the area you're in. As soon as the device moves or acquires GPS coverage, it will show you its actual position.

2. Tracking mode

The tracking option is the most advanced and allows for real-time and delayed tracking, real-time route tracking, or viewing routes stored on the server, as well as many other reporting features, zone control, and more.

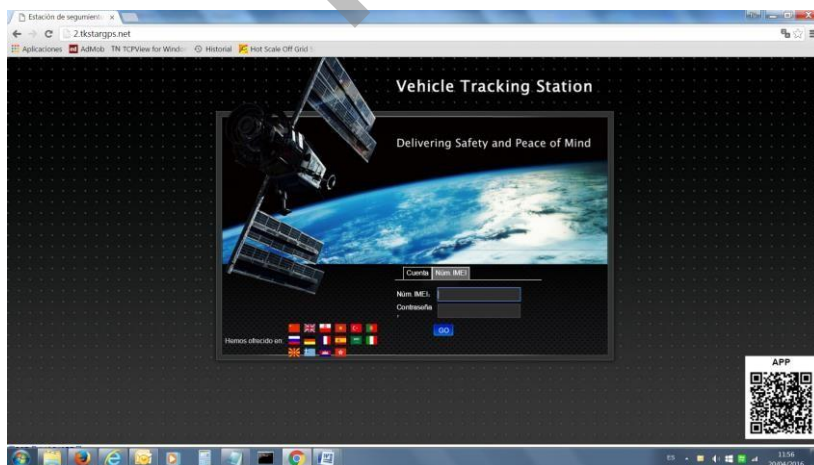In order to use the tracking function, the device must have a GPRS connection.

In addition to the real-time report, the device has internal memory (Data logger) if there is a connection interruption, when it recovers it will send the lost data to the server, so we will never lose the route taken.

In this mode you can also control a multitude of events such as:

Enter and exit preset zones, speed, stop or parking times, distances traveled, approximate fuel consumption, and all kinds of reports.
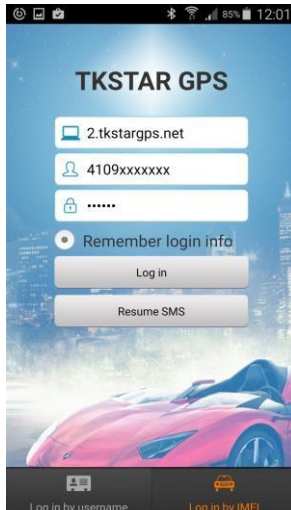
INSTRUCTION	COMMAND	ANSWER	EXAMPLE
Record the APN	apn123456 operator's APN	apn ok	apn123456 movistar.es
Record User	apnuser123456 operator user	apnuser ok	apnuser123456 MOVISTAR
Save Password	apnpasswd123456 operator password	apnpasswd ok	apnpasswd123456 MOVISTAR
Connect GPRS	gprs123456	GPRS ok	gprs123456
Disconnect GPRS	nogprs123456	NO GPRS ok	nogprs123456
Upload frequency of data (default 60 seconds)	upload123456 Frequency	Upload ok	upload123456 30
Server and port, do not modify or you will lose the connection with the APP and the web.	Adminip123456 ip port (Default: 119.145.9.4 7700)		Adminip123456 119.145.9.4 7700

✓ To access the server or the mobile phone application, you will need to enter your device ID located on the back of it and by default the password is: 123456

✓ Web address for the tracking service. It may take a while to load for the first time, but then it will get faster because part of the program will already be in the browser cache:www.mytkstar.net

Tracking app

- You can download it directly from the QR code on the tracking page or by searching for "TKSTAR GPS" in the App Store or Google Play.
- From the APP, once configured, you can manage the entire device without having to send SMS.
- Where it says server in the APP you should write:www.mytkstar.net
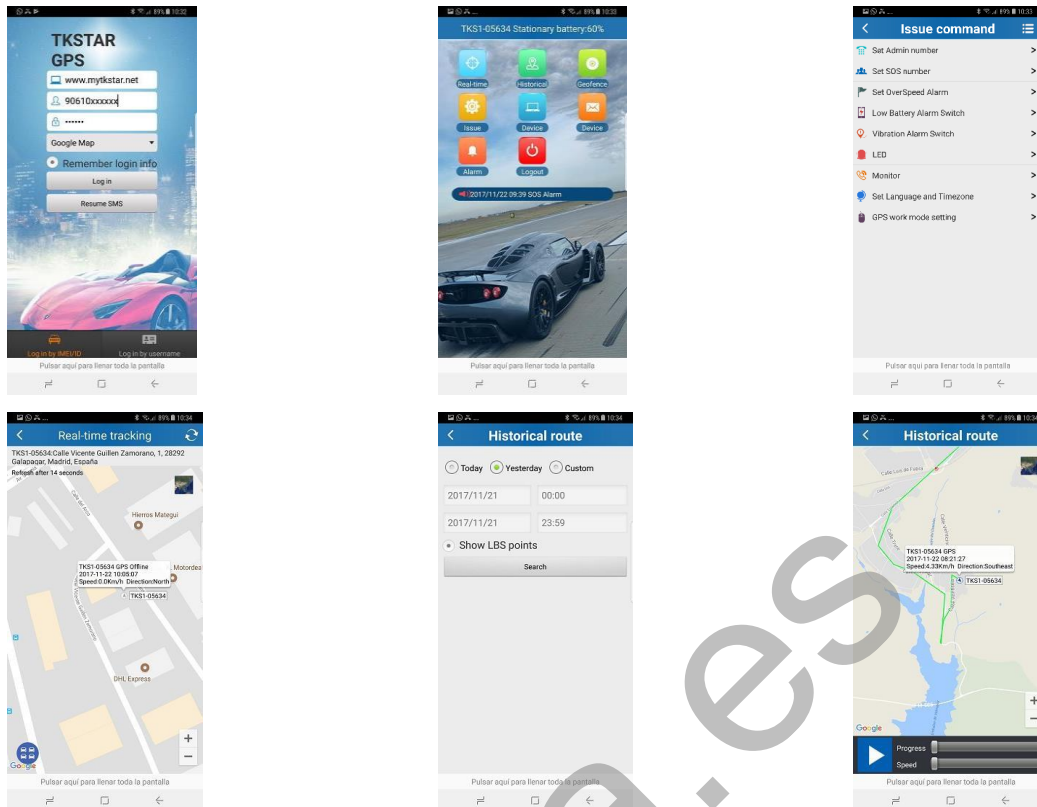

3.5 SMS commands and additional functions

This section explains all the commands you can send via SMS to configure, activate, or deactivate device functions. Many of them can be sent from the app with pre-configured menus, so you won't have to remember them.

To send them from the APP via GPRS, you must first have configured the GPRS connection as indicated in step 4 with SMS. Once the device has Internet access, you can manage it without using SMS.

APP Screens:

List of additional commands.

INSTRUCTION	COMMAND	ANSWER
Reset to factory settings, you will need to start from step 1 again to set it up. If the administrator number is not configured begin doesn't work.	begin123456	begin ok
Location or a call lost by the administrator.	G123456#	Returns a link Google
Record the number of the administrator	admin123456 phone number	admin OK
Delete the administrator number	noadmin123456	No admin OK
Record the SOS number	sos123456 phone number	SOS number OK
Record multiple SOS numbers	sos, phone number, number2, phone number3	SOS!S1: number, number 2
Delete SOS numbers	nosos123456 number	our number OK

Call when SOS occurs	soscall123456	Soscall ok
Do not call when it occurs SOS	nososcall123456	Nososcall ok
SMS when SOS occurs	sossms123456	Sossms ok
Do not send SMS when produce SOS	nosossms123456	Nosossms ok
Set GMT zone (Spain winter +1, Summer +2)	timezone123456 +1	time ok
Hibernation: If activated when the device is idle for more than the selected time, it will hibernate. For example, if you set it to 5 minutes, it will hibernate after 5 minutes if you're not moving. To exit hibernation, press the SOS button (default), send a text message, or make a missed call.	sleep123456 time Example: sleep123456 5	sleep time ok
Hibernation, if activated when the device is in hibernation mode as long as it doesn't detect vibrations or shocks. Thus, if it's a vehicle, it won't activate until we're moving, or we send it an SMS or a text message.	sleep123456 shock Example: sleep123456 shock	sleep shock ok
Disable hibernation and switch to continuous monitoring.	sleep123456 off Example: sleep123456 off	sleep off ok
Send alarm when a blow is noticed (e.g. bicycle parked).	shock123456	Shock ok
Deactivate the alarm motion.	noshock123456	Noshock ok
Send SMS when a message is detected bang	vibalml123456	Shock SMS alarm ok
Do not send SMS when detected a blow	novibalm123456	Shock SMS alarm ok
Overspeed alarm (From 50 to 120 km)	speed123456 Speed E.g.: Speed123456 80	Speed ok
Deactivate overspeed alarm	nospeed123456	Nospeed ok

Create a 500m circular geofence (different to do it with the APP or Web)	move123456	move ok
Delete Geofence	nomove123456	Nomove ok
Activate GPRS mode	gprs123456	GPRS OK
Disable GPRS mode	nogprs123456	nogprs ok
Low battery warning by SMS	LOWBATSMS123456 on	lowbatsms ok
Do not notify by SMS of low battery	LOWBATSMS123456 off	lowbat sms ok
Change Password. If administrator number any number you can change the password.	password123456 New	Password OK
Recover the default password on the device (does not apply to the web and the APP)	cpwd	Old pwd 123456
RELATIVE COMMANDSTO THE REAR LIGHT OF THE BICYCLE		
LED Light On	LED123456 on	Led ON OK
LED Light Off	LED123456 off	Led OFF OK
LED light on when there is movement (if it is daytime it will not turn on, check light sensor) (from the following section)	LED123456 shock	Led shock OK
Ambient light sensor for turn on the LED (default on)	ledsensor123456 on	LED sensor on OK
Ambient light sensor for lightthe LED Off	Ledsensor123456 off	LED sensor off ok
Light sensitivity of the sensor (2 per flaw)	Sensorlevel123456 x X= 1 or X=2 or X=3	LED sensor level OK

5. TECHNICAL SPECIFICATIONS

- **Dimensions:**40mm x 85mm x 28mm (1.5"*3.3"*0.7")
- **Weight:**80g
- **Grid:**GSM/GPRS
- **Bands:**850/900/1800/1900Mhz
- **Sensitivity:**-159dBm
- Accuracy: 5m
- **Acquisition time:**
    - ✓ Cold 45s
    - ✓ Hot 35s
    - ✓ In operation 1s
- **Feeding:**9－75V DC
- **Battery:**3.7V 370 mAh Li-ion 1800mAh
- **Battery life:**In standby mode up to 25 days
- **Storage:**-40°C to +85°C
- **Operation:**-20°C to +55°C
- **Degree of humidity:**5%--95% non-condensing

6. CONTACT INFORMATION

Advanced Tecso, S.A. - KAZA

Email address: consulta@kaza.es

Annex 1

GPRS configuration of the main Spanish operators

Vodafone	ac.vodafone.es	Vodafone	Vodafone
Orange	orangeworld	orange	orange
Yoigo	Internet	[blank]	[blank]
Movistar	movistar.es	MOVISTAR	MOVISTAR
Euskaltel	internet.euskaltel.mobi	CUSTOMER	EUSKALTEL
TeleCable	internet.telecable.es	cable TV	cable TV
Mobile R	internet.mundo-r.com	[blank]	[blank]
ONO	internet.ono.com	[blank]	[blank]
Simyo	gprs-service.com	[blank]	[blank]
Jazztel	jazzinternet	[blank]	[blank]
DigiMobil	internet.digimobil.es	digit	digit
Eroski	gprs.eroskimovil.es	wap@wap	wap125
LycaMobile	data.lycamobile.es	lms	plus
Másmovil	internetmas	[blank]	[blank]
Pepephone	gprsmov.pepephone.com	[blank]	[blank]
Carrefour Mobile	CARREFOURINTERNET	[blank]	[blank]
Tuenti Mobile	tuenti.com	tuenti	tuenti
Lebara	gprsmov.lebaramobile.es	[blank]	[blank]
Llamaya	moreinternet	[blank]	[blank]
Happy Mobile	internettph	[blank]	[blank]
YouMobile	youinternet	[blank]	[blank]
Lowi	lowi.private.omv.es	[blank]	[blank]