IDD-213T User Manual

(Rev. 1.4)

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Contents

1. Introduction

IDD-213T is a plug-and-play GPS tracker with standard OBD II interface, it monitors and records trip info including engine start/off time, real-time location, vehicle speed, various alarms and events, it supports GPRS and SMS channel.

Packing List

Parts name		Quantity	Note
IDD-213T Dongle		1	●
Installation Guide		1	●
USB Configuration Cable		1	○
OBD II extension cable		1	○
9-Pin deutsch wiring harness		1	○
6-Pin deutsch Wiring harness		1	○
Power cable (including 3A Fuse)		1	○
SOS button		1	○

Note: ● Standard configuration ○ Optional configuration

(Optional accessories will not be included if there is no indication in the order)

2. Specifications

2.1 External Interface

Product appearance as follows：

Standard OBD Connector

Connect to the 16 pin on-board Diagnostic Link Connector (DLC).

Mini USB interface

Connect to PC through USB configuration cable.

SOS button Interface

This is a SOS button interface, to connect the SOS button for emergency, interface type is MMCX.

SIM Card slot

Insert SIM card.

2.2 Status Indicator

Indicator	Color	Status
Power/OBD LED	Red	Solid off
GSM LED	Orange-red	Fast blinking (on 0.5s, off 0.5s) - No SIM card or network searching Slow blinking (on 0.5s, off 2.5s) - Registered network Solid on - Logged into the server Solid off - GSM off
GPS LED	Green	Blinking (on 1s, off 1s) - GPS signal is good Solid on - Searching for GPS signal Solid off - GPS off
Buzzer	Beep	One beep - Power on Two beeps - Successful OBD communication Three beeps - Successful log in Four beeps - Trip end and stop OBD communication Five beeps - Power off Six beeps - Fail to access OBD system Five beeps (short beep) - Alarm indication

2.3 Technical Parameters

Mechanical	Dimension	63mm (L) x 48mm (W) x 28mm (H)
	Weight	50g
Interface		OBD interface: 16 pin standard OBD II Configuration interface: Mini USB SOS button interface: MMCX SIM card interface: Push-Push Type
Storage		2MB FLASH, can store up to 24000 GPS data
Data Transmission		GPRS/SMS
Positioning Mode		GPS/A-GPS
Power	Working Voltage	9-36VDC
	Working Currency	Average Currency: <150mA@13.8/27.6VDC Max. Currency: <200mA@13.8/27.6VDC Sleep Currency: <10mA@12/24VDC
	Internal Battery	3.7V/160mA Lithium battery
3-axis Accelerometer		+/-2g、+/-4g、+/-8g、+/-16g
GPS		Channels: 50 Sensitivity: -160dBm Accuracy: 5m CEP Cold start: <32s Warm start: <32s Hot start: <1s
GSM		Frequency: 850/900/1800/1900MHz Protocol: Embedded TCP/IP Sensitivity: -107dBm@850/900MHz -106dBm@1800/1900MHz Output Power: Class 4 (2W)@850/900MHz Class 1 (1W)@1800/1900MHz
LED Indicator		Power/GSM/GPS
Buzzer		System status/Alarm indication
Antenna	GSM Antenna	Built-in
	GPS Antenna	Built-in

Environment	Working Temperature	-30℃ ~ +70℃
	Storage Temperature	-40℃ ~ +85℃
	Humidity	5%～95%（no frog）

3. Device Configuration

3.1 PC Tool

Download USB driver and PC Tool at http://www.sinocastel.com/en/Downloads/. Install the USB driver and PC Tool on your PC.

Connect device to PC through USB configuration cable, open the OBD PC Tool, click on “Help->User manual” for configuration reference.

3.2 SMS Instructions

SMS command is mainly for remote maintenance. The message content is text format. Default secret key is the last 6 digits of the device ID. The key can only be changed through PC Tool. SMS format is defined as follows:

3.2.1 Set IP parameters

Send SMS *SecretKey#set gprs#APN,User,Password,IP,Port*, device will reply *set gprs#ok* or *set gprs#fail*.

e.g.: *123456#set gprs#cmnet,,,113.98.241.66,11088*

3.2.2 Read IP parameters

Send SMS *SecretKey#get gprs#*, device will reply *get gprs#APN,User,Password, IP,Port*.

e.g.: *123456#get gprs#*

3.2.3 Set domain parameters

Send SMS *SecretKey#set domain #APN,User,Password,IP,Port*, device will reply *set domain#ok* or *set domain#fail*.

e.g.: *123456#set domain# cmnet,,,obd.livetelematics.com,11088*

3.2.4 Read domain parameters

Send SMS *SecretKey#get domain#*, device will reply *get domain#APN,User, Password,domain,Port*.

e.g.: *123456#get domain#*

3.2.5 Get current location

Send SMS *SecretKey#position#*, device will reply

position#http://maps.google.com /?q=latitude,longitude.

e.g.: *123456#position#*http://maps.google.com/?q=22.536934,114.021425*

4. Installation Instruction

4.1 SIM Card Installation

Remove the SIM card cover, insert the SIM card into the device and press gently, then insert the SIM card cover back.

4.1.1 Remove the SIM card cover

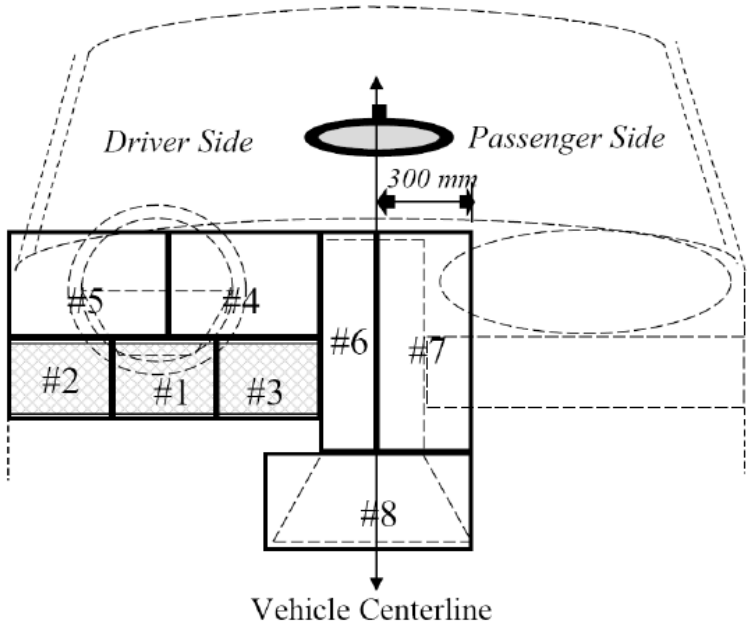
4.1.2 Insert the SIM card into the device

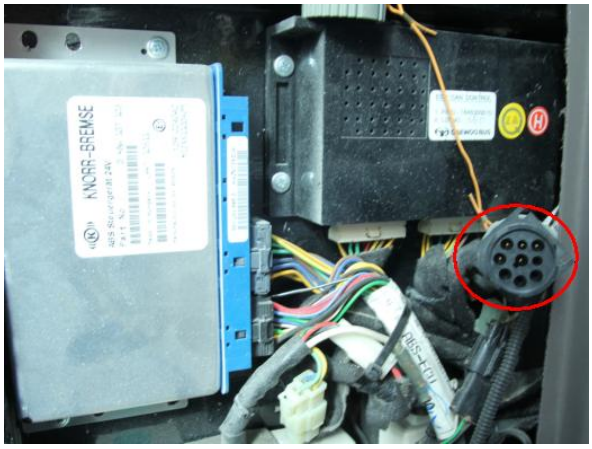
4.1.3 Insert the SIM cover

Note: There is a backup battery in the device, please make sure all lights are off before inserting or removing SIM card.

4.2 OBD Port

In general, the OBD port is located in the driver or passenger cabin, from the edge of dashboard on driver side to the border of 300mm. It is easy to touch by sitting in the driver's seat, the preferred location is within the area from steering post to the vehicle centerline.





4.3 Device Installation

Before installing the device, please make sure device has been configured with necessary parameters including network and other parameters.

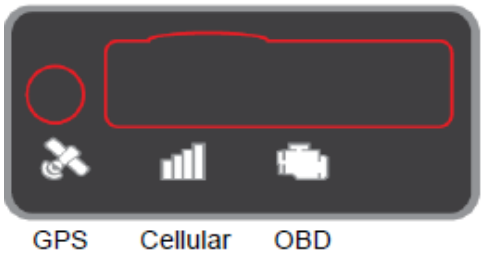
Park the car and make sure engine is off, align the OBD connector of the device with the engine diagnostic port and simply push in place, ensuring the device is secure. There comes one beep indicating device is power on, then 6 beeps.

If the OBD port cover can not be closed back after device plugged in, please use OBD extension cable and mount the device in proper place.

Most heavy duties may need 9-Pin or 6-Pin deutsch wiring harness.

For vehicles do not have an OBD port, please use power cable to connect vehicle battery and configure the device with tracker mode.

Start engine, then device starts acquiring GPS info and GPRS network connection. Various status can be indicated by lights and beeps. If engine keeps off or idle state it will go into sleep after 3 minutes.



GPS function: The GPS light becomes blinking indicates that device has got its location.

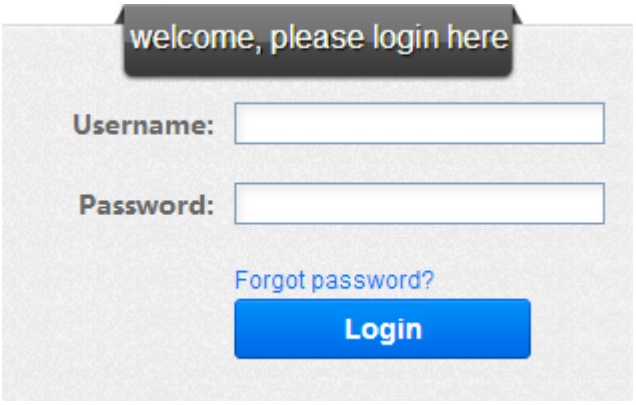
GPRS connection: The Cellular light change its status to slow blinking indicates registered network, becomes solid on and comes 3 beeps indicate logged into the server.

We advise you to drive the car for at least 10 minutes with the first installation.

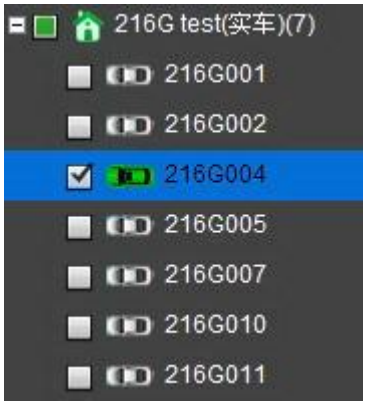
Note:

***If GPS does not work**, please use OBD extension cable and mount the device in a proper place to make sure GPS signal can be well received.

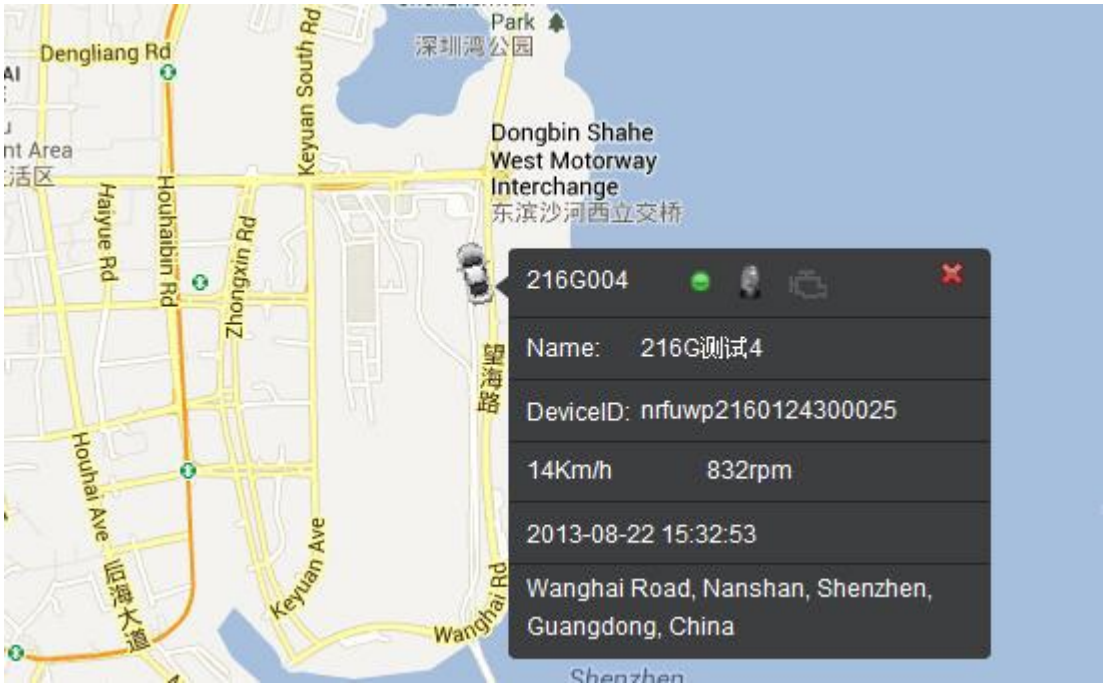
Log into www.livetelematics.com to check real-time monitor and trip reports.



Login



Vehicle monitoring list



Vehicle real time location

Status	Lic.#	Name	Received time	ACC
Online | Positioned	216G004	216G测试4	2013-08-22 15:33:53	ON

Vehicle real time status

5. Functions

5.1 Location Inquiry

Upon receiving location inquiry command from server or via SMS, device reports GPS data immediately.

5.2 Regular GPS Data Reporting by Time Interval

Device reports GPS data according to configured time interval.

5.3 Regular GPS Data Reporting by Distance

Device reports GPS data according to configured distance interval. (Supported from firmware v2.x.x)

5.4 Regular GPS Data Reporting by Heading Change

Device reports GPS data according to configured heading change. (Supported from firmware v2.x.x)

5.5 Regular G-Sensor Data Reporting

Device reports G-Sensor data according to configured time interval.

5.6 Cell ID Reporting

Device reports Cell ID every 30 seconds when it loses GPS signal.

5.7 GPS Data Reporting in Sleep Mode

Device reports GPS data according to configured time interval during sleep. (Supported from firmware v1.0.9)

5.8 Power Failure Alarm

Device reports power failure alarm when external power fails.

5.9 Power Low Alarm

Device reports power low alarm when external power is below configured threshold (10.5V default).

5.10 Speeding Alarm

Device reports speeding alarm when the vehicle speed exceeds configured threshold (120km/h default).

5.11 Towing Alarm

Device reports towing alarm when the vehicle is being towed.

5.12 Fatigue Driving Alarm

Device reports fatigue driving alarm when the driving time exceeds configured threshold (480 min default).

5.13 Data storage/Supplementary Report in Dead zones

When there is no GSM signal or GSM signal is poor, GPS information are stored, and reported after signal recovery. Supplementary report can be last for 15 minutes at most after ignition is off.

5.14 Mileage Statistics

Device reports mileage in each reported message.

5.15 Alarms and Events Reporting

Alarms and Events are reported when they are triggered or eliminated and there comes short beeps.

- High Speed (triggered and eliminated)
- Low Battery Voltage (triggered and eliminated)
- Fatigue Driving (triggered and eliminated)
- Towed
- Power On
- Power Off
- Emergency

5.16 Intelligent Power Saving Mode

Device wakes up from sleep on detecting motion state last for 20 seconds, and goes into sleep on detecting static state last for 3 minutes.

5.17 SMS Alert

If user mobile phone numbers are configured, device sends SMS to each user number when alarms are triggered.

5.18 Google Map Link

Latitude and longitude in location SMS can be directly linked to Google map.

5.19 Remote Configuration

Users can configure device or update firmware through website: http://www.livetelematics.com.

5.20 SMS Configuration

Users can configure device via SMS commands.

5.21 PC Tool Configuration

Users can configure device or update firmware through PC Tool.

6. Disclaimer

This user manual only applies to IDD-213T device.

The poisoning function may be affected in electromagnetic shielding area or bunker place.

The device has a built-in wireless communication module. It should be used as far as possible away from fuel depots, chemical plants and other areas could cause an explosion. Most sensitive to external RF sites (such as gas stations, hospitals and school, etc.) may be equipped with radio frequency jamming equipment, some functions may be affected in the interference area.

As the device transmits data via GPRS, please use the SIM card which supports GPRS data service and make sure that the account balances is sufficient. Do not use any SIM card which is restricted by region.

To make sure the products works well, please use the original accessories.

This manual is based on the “as-is” situation. CASTEL will not guarantee the accuracy, reliability and content of the handbook. Also Castel reserves the right to amend or withdrawn this manual without any prior notification.

7. Warranty

If product got quality problem within the warranty period, please bring the product together with a valid warranty card and purchase invoice to the dealer for checking. Please do not disassemble this product, this may result in damage, CASTEL will not be responsible for those problem.

1 year of warranty since purchase time and life-long maintenance. For Failure or damage due to incorrect operation or not following the instruction, CASTEL will provide paid maintenance within warranty period.

User name: _____

Contact number: _____

Address: _____

Post code: _____

Purchasing date: _____

Serial number: _____

Remark: _____

Please keep this card carefully in order to better serve you.

Distributor (Company Chop):

Maintenance Records

Product Model:

Date	Faults and maintenance of records		Maintenance (Signature)	User (Signature)
	Fault Description	Maintenance		

Note: This form must be carefully completed.

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