IDD-213T User Manual

(Rev. 1.0)

China Aerospace Telecommunications Limited

Contents

1. Introduction

IDD-213T is a plug and play GPS tracking device equipped with standard OBD II interface. It features real-time tracking and various alarm reporting.

Packing List

Parts name	Quantity	Note
IDD-213T Device	1	●
User Manual	1	●
USB Configuration Cable	1	○
External GPS Antenna	1	○
OBD II extension cable	1	○

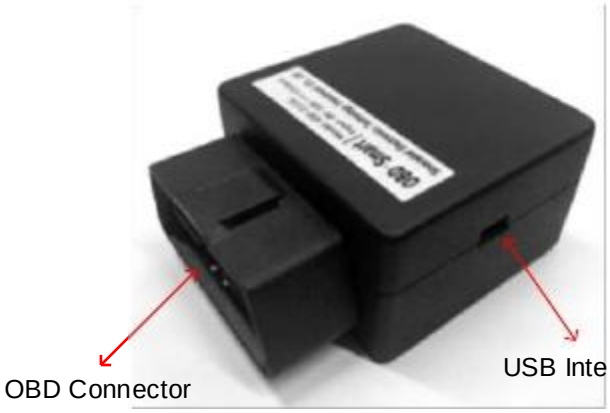
Note: ● Standard configuration ○ Optional configuration

(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).

USB interface

Connect to PC through USB configuration cable.

GPS Antenna Interface

Connect an external GPS antenna to strength GPS signal (optional accessories).

SIM Card slot

Use for insert SIM card.

2.2 Status Indicator

Indicator	Color	Status
Power LED	Red	Solid on - Power on Fast blinking - Charging or no internal battery Slow blinking - Working with internal battery Solid off - In sleep
GSM LED	Orange	Slow blinking (on:64ms, off:2s) - Registered network Fast blinking (on:64ms, off:800ms) - No SIM card or Network searching Solid off - GSM off Solid on - GSM abnormal
GPS LED	Green	Blinking - GPS signal is good Solid on - Searching for GPS signal Solid off - GPS off

2.3 Technical Parameters

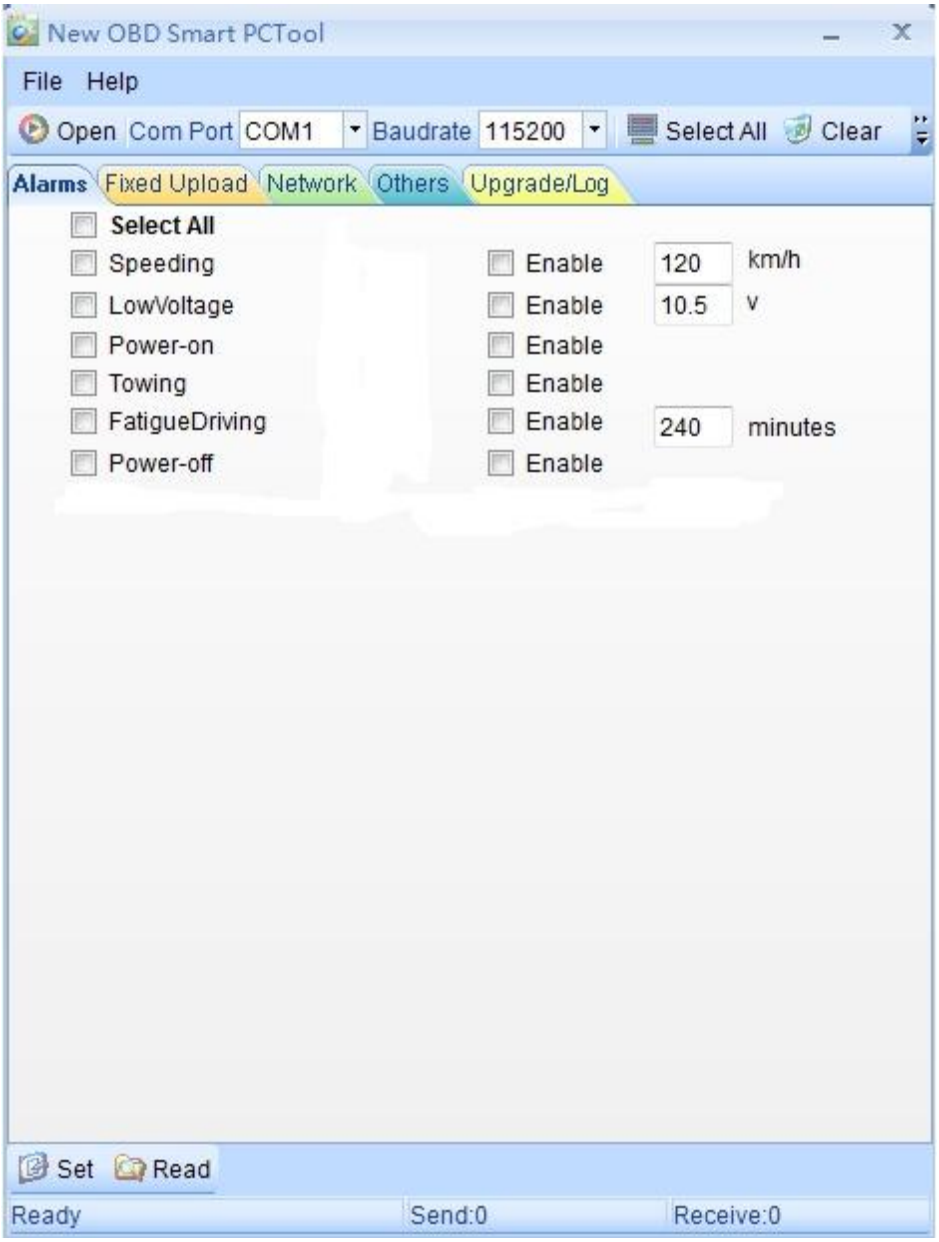
Mechanical	Dimension	63mm (L) x 50mm (W) x 28mm (H)
	Weight	50g
Interface		OBD interface USB interface GPS antenna interface
Storage		2MB FLASH, can store up to 24000 GPS data
Data Transmission		GPRS/SMS
Positioning Mode		GPS/A-GPS
Power	Working Voltage	9-36VDC
	Working Currency	Average Currency: <150mA@13.8VDC Max. Currency: <200mA@13.8VDC Sleep Currency: <10mA@12VDC
	Internal Battery	3.7V/100mA Lithium battery
3-axis Accelerometer		+/-2g、+/-4g、+/-8g、+/-16g
GPS		Channels: 50 Sensitivity: -160dBm Accuracy: 5m CEP Cold start: <32s Hot start: <1s
GSM		Frequency: Quad-band 850/900/1800/1900MHz Protocol: TCP/IP Sensitivity: -107dBm@850/900MHz -106dBm@1800/1900MHz Output Power: Class 4 (2W)@850/900MHz Class 1 (1W)@1800/1900MHz
LED Indicator		Power/GPS/GSM
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

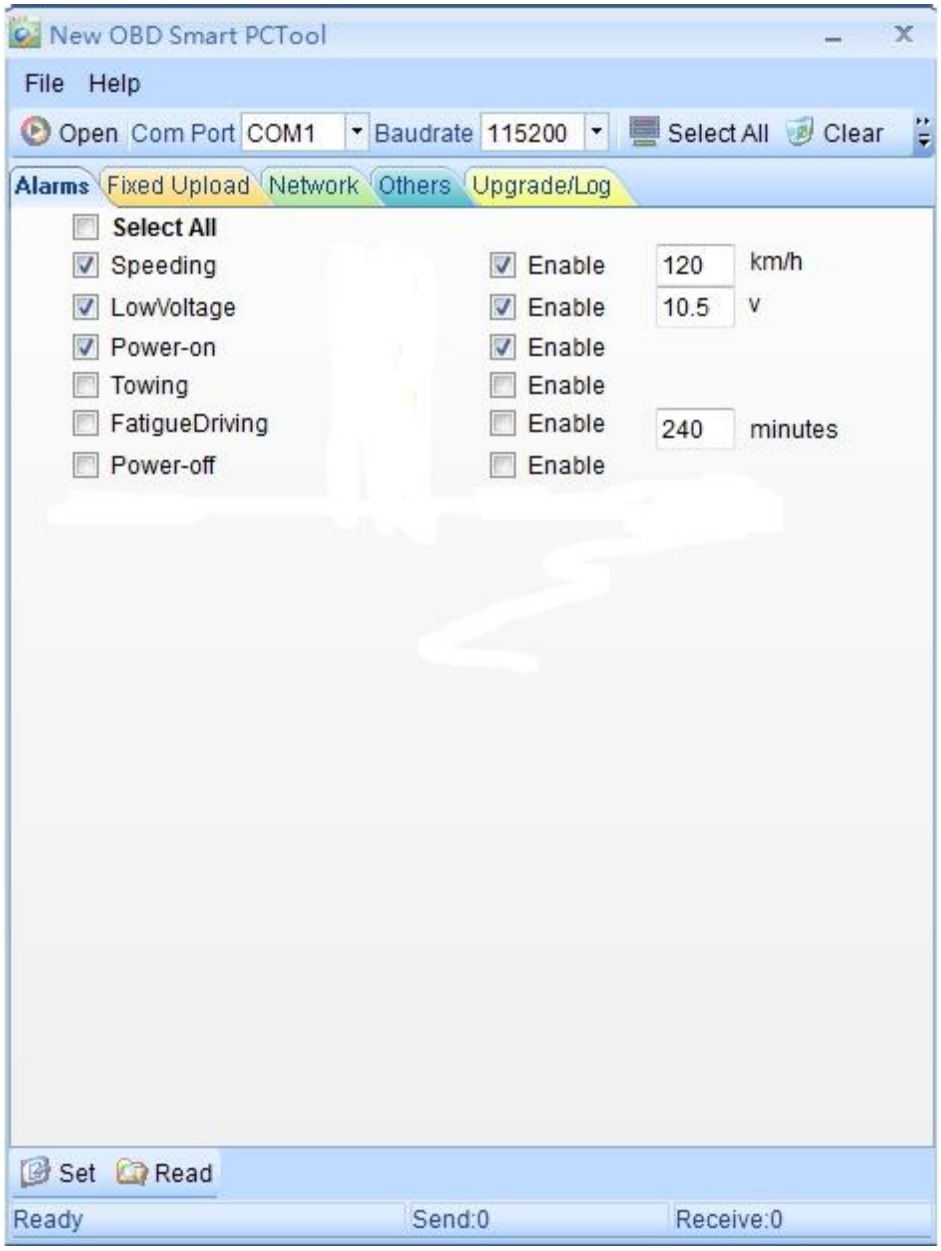
Install the USB driver and PC Tool on your PC.

Connect the device to PC through USB configuration cable, open the OBD PC Tool, click on “Help->Product type” and select “IDD-213T”.

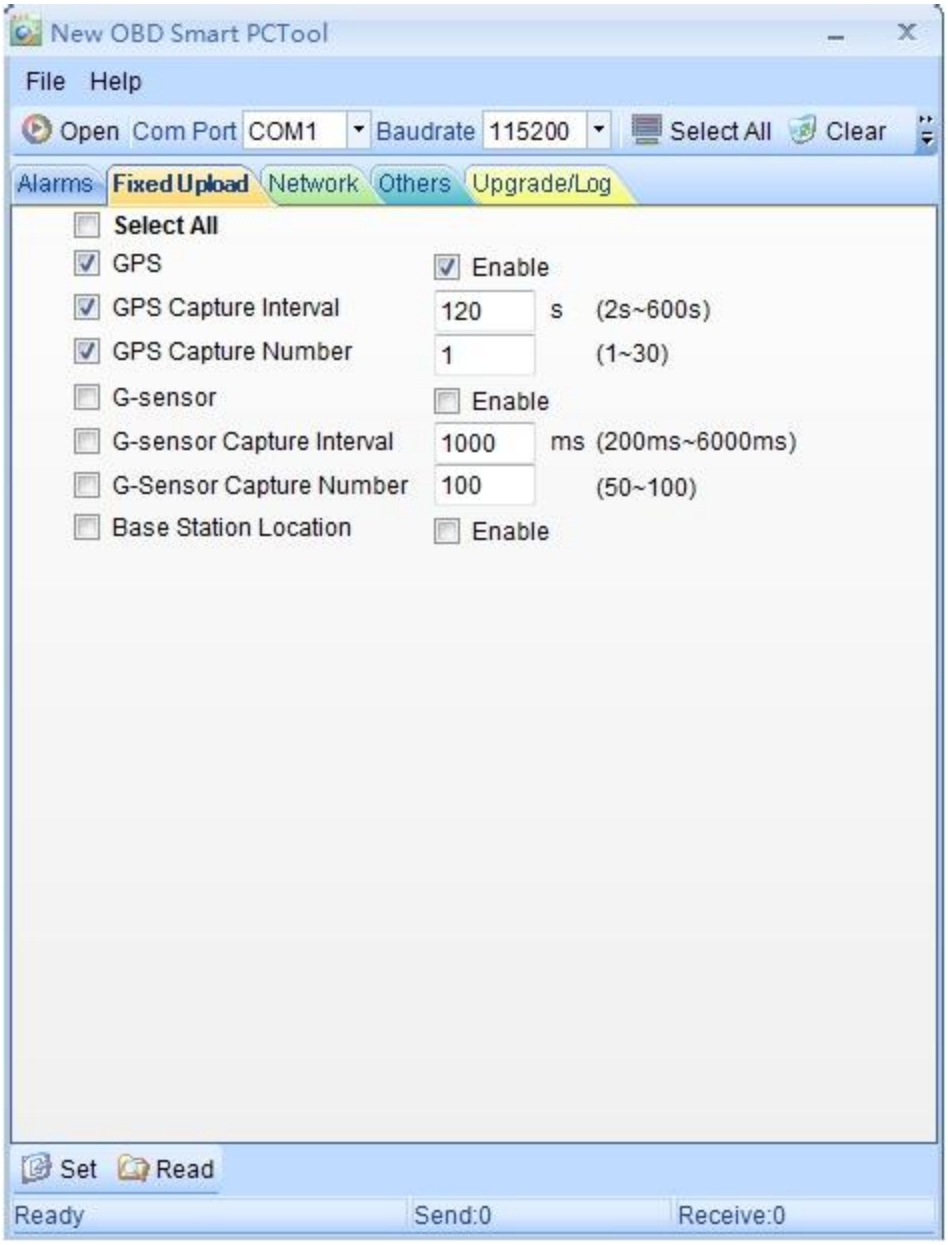


Select the correct serial port and baud rate (default is 115200), and then click on "Open" button in the tool bar to open the selected serial port.

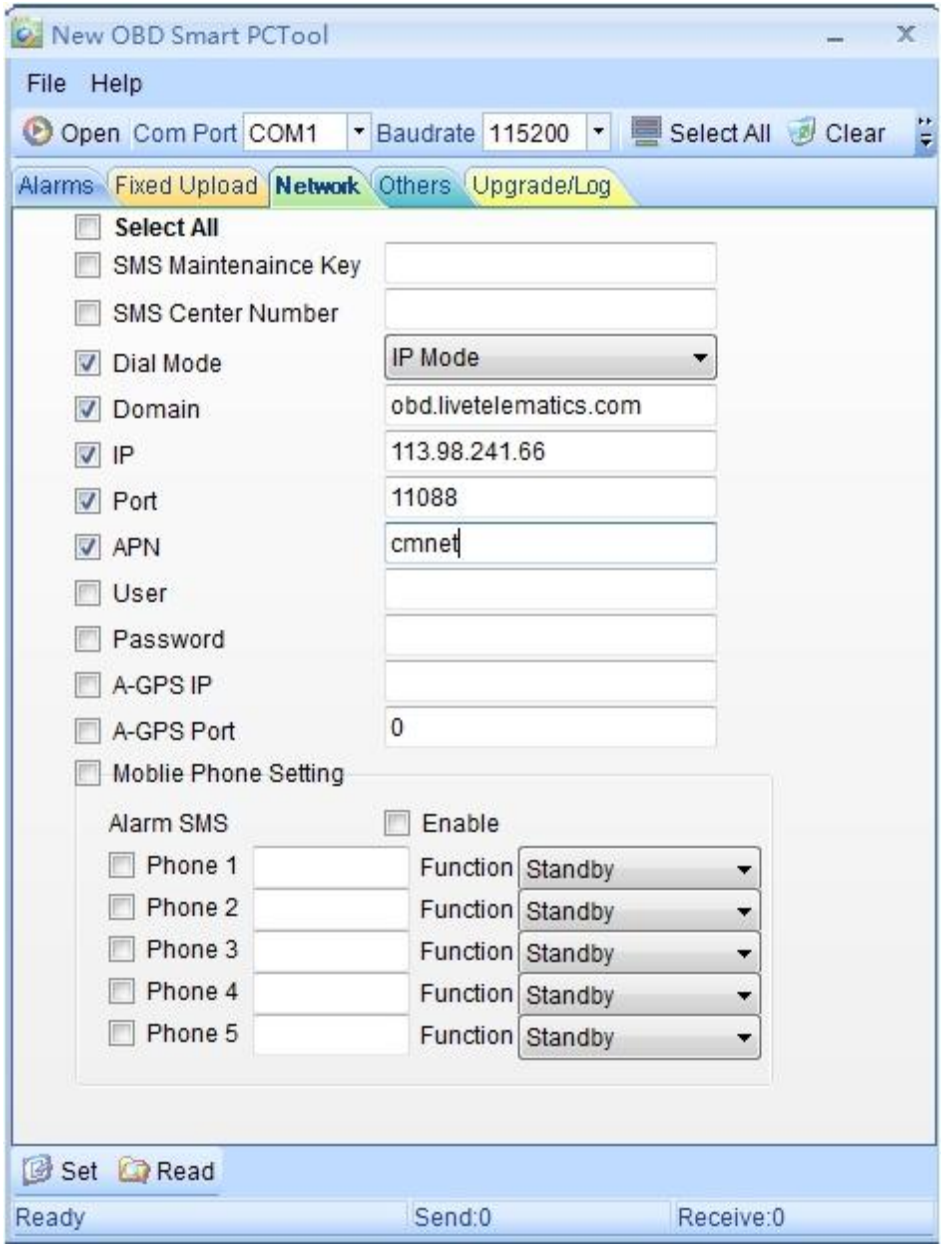
Click on “Alarm”, select required items and click on “Read” to get parameter values, e.g. sound indication, enable/disable status and threshold. Modify those values and click on “Set” to save new configuration into the device.



Click on “Fixed Upload”, select required items and click on “Read” to get parameter values, e.g. enable/disable status and threshold. Modify those values and click on “Set” to save new configuration into the device.



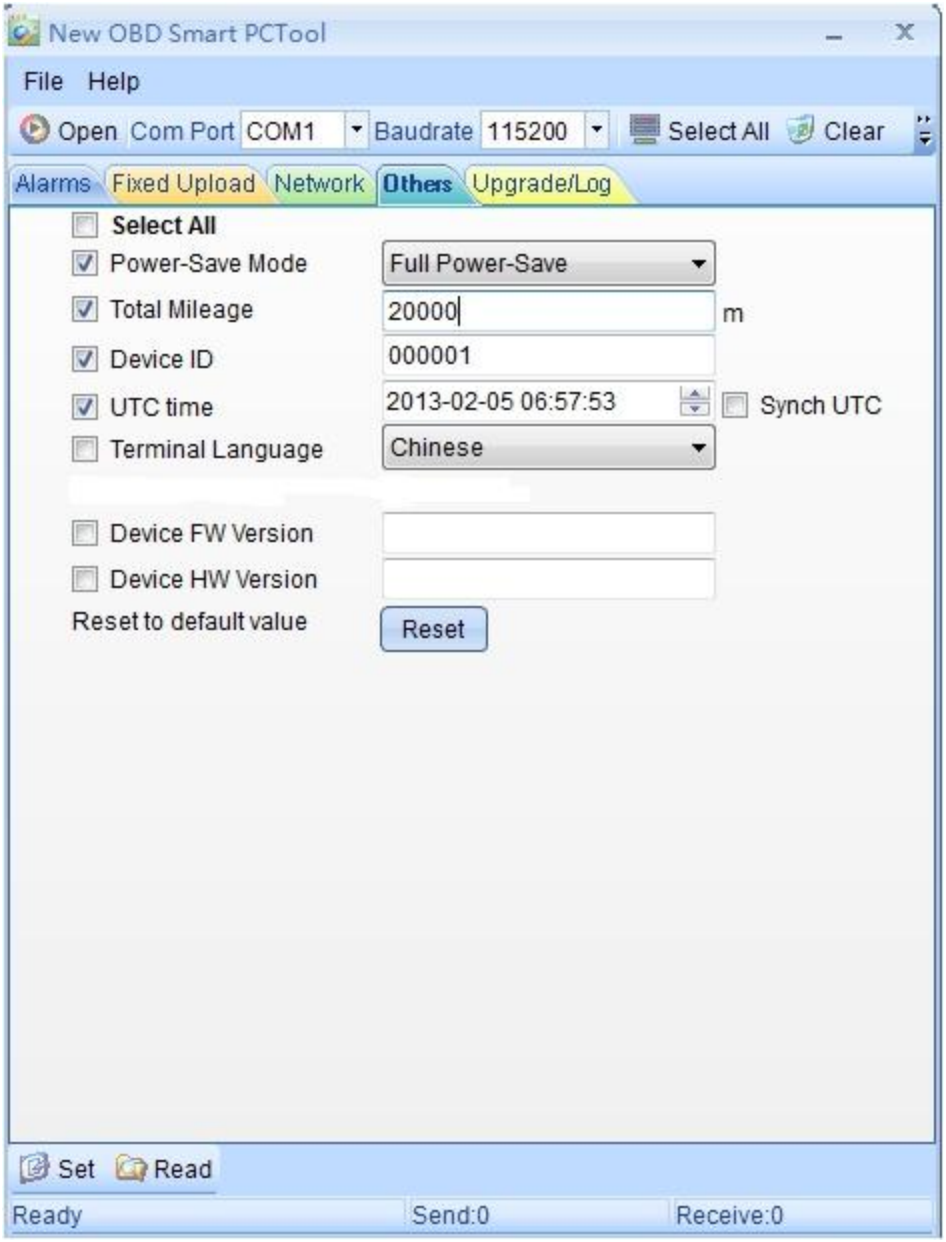
Click on “Network”, select required items and click on “Read” to get parameter values, modify those values and click on “Set” to save new configuration into the device.



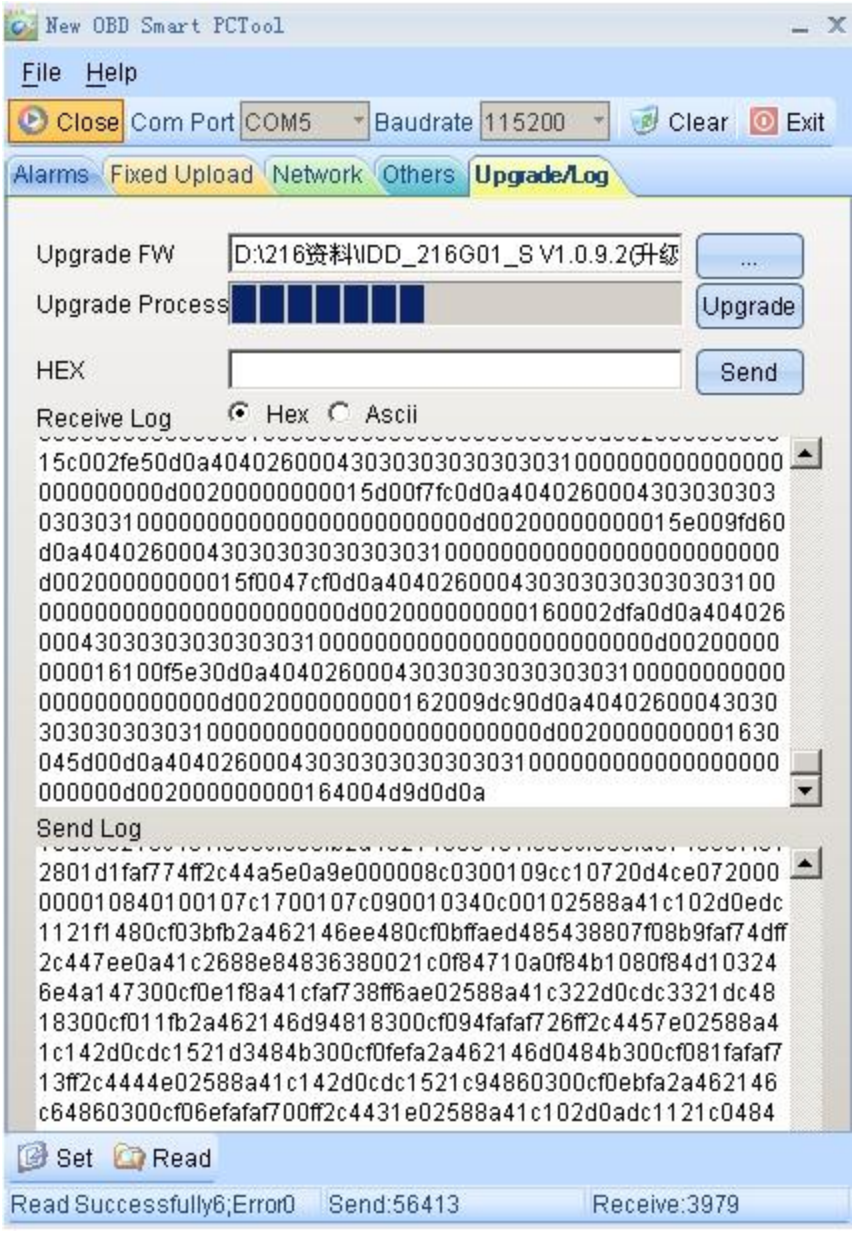
Default network setting:

Items	Values	Items	Values
Dial Mode	Domain Mode	Domain	obd.livetelematics.com
IP	113.98.241.66	Port	11088
APN	cmnet	User, Password	None

Click on “Others”, select required items and click on “Read” to get parameter values, modify those values and click on “Set” to save new configuration into the device.



Click on “Upgrade/Log”, click on “ ... ” button to select bin file, click on “ Upgrade ” button to upgrade the firmware to new version. After finish upgrading there is a popup window prompt and the device reboots.



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:

SecretKey#set gprs#APN,User,Password,IP,Port
e.g.: *123456#set gprs#cmnet,,,113.98.241.66,11088*

3.2.2 Set IP parameters response:

set gprs#ok: success
set gprs#fail: fail

3.2.3 Read IP parameters:

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

3.2.4 Read IP parameters response:

get gprs#APN,User,Password,IP,Port

3.2.5 Set the domain parameters:

SecretKey#set domain #APN,User,Password,IP,Port
e.g.: *123456#set domain# cmnet,,,obd.livetelematics.com,11088*

3.2.6 Set the domain parameters response:

set domain#ok: success
set domain#fail: fail

3.2.7 Read domain parameters:

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

3.2.8 Read domain parameters response:

get domain#APN,User,Password,domain,Port

3.2.9 Get current location:

SecretKey#position#

e.g.: *123456#position#*

3.2.10 Get current location response:

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

e.g.: *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.

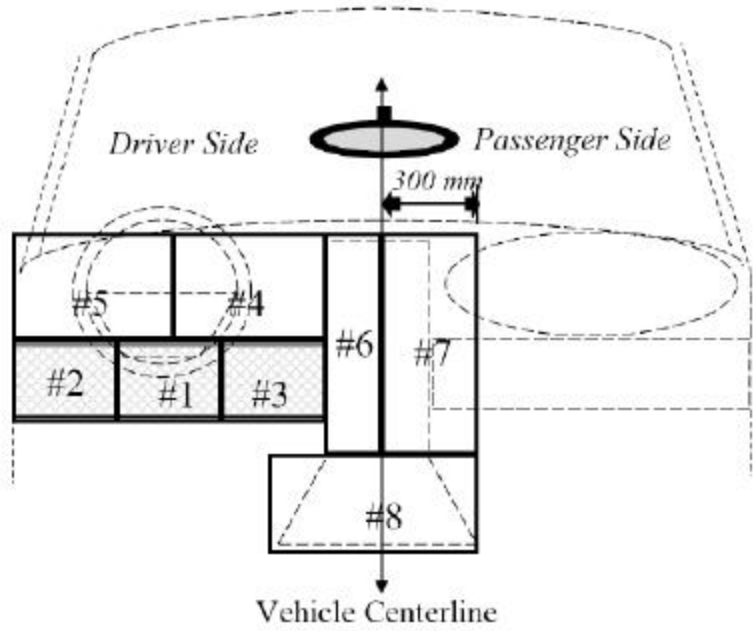
4.1.1 Remove the SIM card cover

4.1.2 Insert the SIM card into the device

4.1.3 Insert the SIM cover

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

Park the car and make sure engine is off, connect the external GPS antenna (optional) to the device. Fix the antenna on the dashboard horizontally, make sure no mental shielding above them. Plug the device into OBD port and start engine.

5. Functions

5.1 Location inquiry

Upon receives location inquiry command from server or via SMS, device reports GPS information immediately.

5.2 Regular GPS info reporting

Device reports GPS information according to configured interval time. The interval time is defined by sample time (120s default) and uploading packets number (1 packet default).

5.3 Regular G-Sensor info reporting

Device reports G-Sensor information according to configured interval time. The interval time is defined by sample time (1s default) and uploading packets number (100 packets default).

5.4 Cell ID reporting

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

5.5 Power Failure Alarm

Device reports power failure alarm when external power fails.

5.6 Power low alarm

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

5.7 Speeding alarm

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

5.8 Towing alarm

Device reports towing alarm when the vehicle is being towed.

5.9 Fatigue driving alarm

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

5.10 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.

5.11 Mileage statistics

Device reports mileage in each reported message.

5.12 GPRS/SMS dual mode communication

Device supports GPRS/SMS dual mode communication, alarm information can be reported via SMS.

5.13 Intelligent power saving mode

Device wakes up from sleep on detecting motion or power off event and goes into sleep on detecting static state last for 3 minutes.

5.14 SMS Alert

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

5.15 Google map link

The latitude and longitude information in position inquiry messages can be directly linked to Google map.

5.16 Trip Mileage

At the end of the trip, device reports driving mileage to the server.

5.17 Remote Configuration

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

5.18 SMS Configuration

Users can configure device via SMS commands.

5.19 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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Add: ADD: Room 902,A BlockTCL Building, No. 1 Gaoxin South Road, Nanshan, Shenzhen, Guangdong, China

Tel: 86-755-86018742
Fax:86-755-86018712

http:// www.castelecom.com