



XD-R1002

Vehicle Locator / Tracker

User Guide

(R1.3)

Peak Points Technology Co., Ltd.



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1. Introduction

The XD-R1002 vehicle locator/tracker utilizes the GPS / *BDS2 / *GLONASS global positioning system, seamlessly merged with GSM / GPRS communication technology, it can pin point the device position fast and accurately. XD1002 designed with industrial grade fireproof material, strong magnet attach, IPX-5 waterproof, built-in 4000mAh battery that enough for 30 days standby. The device will be monitored and managed by the service platform remotely, via the GPRS and SMS service. Installation is simple and easy with the magnetic attachment, no any tool required.

*Remark: By default, positioning is based on GPS system, if other positioning system is required, please make contact with manufacturer.



2. Specifications

Item	Specification
Input Power	DC 5V/1000mA (micro USB)
Built in battery	4000mAh (3.7V)
Dimension	90 x 60 x 26mm
Weight	160g (includes battery)
Operating Temperature	-20℃ to 70℃
Operating Humidity	5% to 89% (non condense)
Mobile Frequency	GSM 850/900/1800/1900MHz
GPS Sensitivity	-162dBm



GPS Frequency	L1
BDS Frequency	*B1
GLONASS Frequency	*L1
C/A Code	1.023MHz
Channel	56
Position Accuracy	10m, 2D RMS
Speed Accuracy	0.1m/s
Timing Accuracy	Satellite time 1ms sync.
Coordinate System	WGS-84
Refresh Rate	Average 1s
Hot Start	Average 1s
Maximum Height	18,000m (60,000 ft)
Maximum Speed	515m/s (1000 knots)
Acceleration	Less than 4g
Instant Displacement	20m/s

*Remark: Factory activate, if such frequency is required, please contact our sales representative.

3. Package

XD-R1002 locator and user guide
5V 1000mA charger
USB cable

4. Operate Guide

4.1 SIM card install and activate

(A pre-installed SIM card can be provided according to customer request)

- 1) Open the packing box and check, if model is not correct, please contact the supplier;
- 2) the device needs to insert a microSIM GSM card, card from Unicom or China Mobile can be used;
- 3) SIM slot is located on the top side of the device, open the cover and put in the microSIM face downward on to the card slot, and then plug in the cover.

Note:

- 1) Insert or extract the SIM card is function as power switch. Remove SIM card will power off the device immediately;
- 2) microSIM need to be activated the GPRS transport;
- 3) the microSIM may need the caller display according to user expectation;



- 4) if your microSIM request to input the PIN, please check with the mobile operator manual to shut that down;
- 5) please ensure the microSIM card has enough tariff and data traffic;
- 6) to avoid damage by the thief, device should be hidden carefully;
- 7) device should not put together with other car electronics, such as backward radar or any other vehicle telecommunication equipment;
- 8) device has built-in GSM and GPS antenna, the front case should face upward and there should be no metal on top of it, since that can shield the radio signal from GSM or GPS.

4.2 Indicator

There are 3 LED indicators on front cover:

White LED – Power Status

Status	Description
On	Power normal (Charge completed)
Fast flash	Power low (Please charge up)
Slow flash	Charging on the way
Off	Power off (SIM card extracted)

Blue LED – GSM Signal Status

Status	Description
Fast flash	GSM initialize
On	GPRS online/normal
Off	GSM sleep mode

Green LED – Positioning Status

Status	Description
Fast flash	GPS signal searching
Slow flash	GPS fixed
On	* DGPS fixed
Off	GPS sleep mode

Remark: DGPS requires working together with the “Star Spot” system, if required, please contact our sales representative.

4.3 Battery charging

Please charge up the battery for 24 hours in the first time. Use the original battery and charger from manufacturer is requested.

Note:

1. the battery contains chemical substance, don't dismantle or drop it to fire;
2. charge up the device on time to keep it working normally.



4.4 Real time checking from Internet

1) Login

Please check with the provider website or visit manufacturer website:

<http://www.xd-gnss.com/>

Get in the login page, input the username and password:

By default

Username: device serial number (IMEI number, labeled on the device)

Default password: 123456 (please modify the password after login)

2) Check vehicle position

After successful login, click on the appropriate functional icon for the location of the vehicle, track playback, parameter settings, etc.

3) Check statistics report

From the web page, click on the "Report", several statistic report can be achieved, such as total distance, over speed detail and alarm statistics .. etc.

4.5 Mobile app

Please go to the home page of www.xd-gnss.com website to download the Android or iphone client application program,

5. Command

XD-R1002 will accept command setting by using SMS message. The command is formed by English letter and number, separated with comma; end with "#" sign, and **NO Space Character** in between. Command is case insensitive.

5.1 Alarm report phone number

It can define 3 telephones for receiving the alarm message from the device

Command: SOS,<index>,<phone number>

Index = 1 ~ 3, phone number with max. 20 digits

(Ex.: Setting the first SOS number – **sos,1,14705133082#**)

Return: SOS1#(phone number) set succeed.

5.2 Clear alarm phone number

Command: SOS,<index>#

Return: SOS number 1(phone number) has been cleared.



5.3 Device reset

Command: reset#
Return: Device is reset.

5.4 Enable / disable sleep mode

Command: sleep,<range>#
Range = 1 ~ 60 minutes
(Ex.: Set one minute to sleep – **sleep,1#**)
Return: Sleep mode is activated.
Command: sleep,0#
Return: Sleep mode is inactivated.

5.5 Remote listening

Command: JT#
Effect: Device receive the command, then it will call back to the originate phone number, then the surrounding sound will be packed up and then being monitored

5.6 Position request

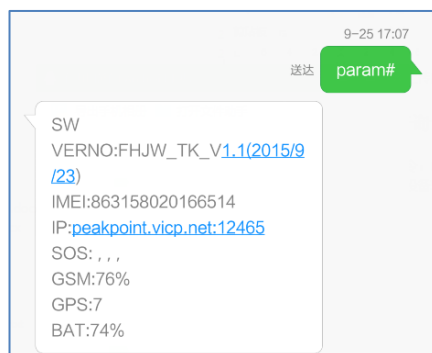
Command: DW#
Return: Device return a link for the current position, use web browser to click on the link and get the location on the map. Device also returns with a description of approximate location in text form.

5.7 Set vibration alarm

Command: Vib,0#
Return: Vibration alarm is inactivated.
Command: Vib,1#
Return: Vibration alarm is activated.
(By default, vibration alarm is inactive)

5.8 Device status check

Command: Param#
Return: Device software version, IMEI number, IP address, SOS phone number, GSM signal strength (higher is better), GPS signal strength (number of satellite signal is received) and battery level



5.9 Geo-fence

This command must be set on the web site or smart phone.

5.10 Over speed alarm

This command must be set on the web site.

5.11 Power low alarm

When the device power is lower than 25%, a SMS message “**Power is low and please charge up asap**” will be sent to the phone set on the SOS1, if SOS1 is blank, the battery low alarm message will not send.

5.12 Vibration alarm

When vibration alarm is set active, once alarm is triggered, device will send alarm “**Please note, vehicle has abnormal vibration**” to SOS1 to SOS3 circularly, if 3 phone number has being set.

(By default, vibration alarm is inactive, please use **vib,1#** to activate)

6. Diagnostic

6.1 Offline status

After few minutes of power applied, but the application platform or the client app is still shown as off-line, please check the device:

- 1) SIM card is properly installed;
- 2) whether the vehicle is in the basement, does not cover by the GSM signal;
- 3) check that is individual device or all devices are in offline mode within the same region, that can help to determine whether the operator's network problem;
- 4) SIM card is in arrears;
- 5) GPRS service has been cancelled (usually at the end of the month).



6.2 GPS signal bad

When the GPS signal reception environment is poor (surrounding by tall building and GPS signal is blocked), then it will show LBS positioning, and accuracy is getting lower, please drive to the open space for better GPS positioning.

7. Safety

- 1) The device will generate with large number of negative oxygen ion once in operation, please do not touch the metal parts of the device, in order to avoid electrostatic bunt.
- 2) Do not put the device in high heat, high temperature or flammable environment.
- 3) Do not disassemble or put any metal into the device, to prevent electric shock.
- 4) Vehicle power voltage must be in line with the provisions of the power supply voltage, otherwise it will damage the device and the negative ion generator.
- 5) At any time, please do not let the children play with the device.
- 6) When the device is in working mode, it will produce an irregular "Chi Chi" sound, which is the voice of the corona discharge, which is a normal phenomenon.

8. Maintenance

- 1) Do not use organic solvent to clean the device. Power supply must be disconnected first, and by using a soft cloth with neutral detergent to clean the surface and no liquid is allowed to get into the device.
- 2) After certain of time, use a dry brush to wipe the ion outlet, keep that clean and clear.
- 3) Do not overload the USB port that may cause high temperature of the device and resulting of charging power shutdown.

9. Warranty

- 1) The information contained in this document is subject to change without notice and does not represent a commitment on the part of Peak Points Technology Co., Ltd.
- 2) The information in this document is believed to be accurate and reliable; however, Peak Points Tech. assumes no responsibility or liability for any errors or inaccuracies that may appear in the document.
- 3) Please get in the website and activate the device within one month after the purchase. Warranty will **NOT** subject to those devices haven't been activated.
- 4) One year warranty is granted to those devices haven't been opened or repaired by unauthorized person.



- 5) Please fill in the following info, and keep the purchase receipt, warranty may request those documents as reference.

Warranty info:

Customer Name		Contact Phone	
Product Model		IMEI/ID Number	
Purchase Date		Invoice Number	

Peak Points Technology Co., Ltd.

Tel: 0752-2150773

Website: <http://www.fhjwchina.com>

Application server: <http://www.xd-gnss.com>

FCC Warning Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment. The distance between user and products should be no less than 20cm. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.