Preface

Thank you for purchasing IGV-XH007 GPS Car anti-theft tracking system tracker. This manual shows how to operate the device smoothly and correctly, Thus, read this manual carefully before using this product. Please note: the specification and information are subject to changes without prior notice in this manual. Any change will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.
Safety Information

- 12V Working power supply, unable install to 24V or more higher Battery Voltage, otherwise will burn up circuit and not in Warranty
- Prior to the moving of the vehicle and the engine ON to install the device
- No raining or high temperature exposure, and unable to take this product under metallic shield’s place when installing. If the OBD port in User’s car disturbs the driver drives his car when connect the OBD device, or the OBD port is located in a deeper place of Center Console and can’t get the GPS signal, the user should use an extension cord to prolong it to a hidden place of car
- The product complies with the relevant Chinese standard of electromagnetic compatibility. However, please keep away from electronic equipment which is likely to be disturbed by the wireless signal, to avoid the signal interruption
- Switch off this product in any area marked “Explosive “, “might explode “, “closed wireless transceiver devices “ etc (such as the hospital, gas station and airport)
- Do not dispose the product in a fire, otherwise, it may cause the battery explosion
- Keep the product and accessories out of the reach of Children
1. Function Introduction

IGV-XH007 is equipped with OBD diagnostic GPS tracker, which set a multiple function of anti-theft, fault diagnosis, monitoring, emergency alarm and tracking in its entirety, also with compact size, standard OBD port to connect vehicle, and quick install etc. Widely used for vehicle location management, vehicle fault early warming, vehicle detection, fuel consumption statistics and safe driving auxiliary analysis.

Features:

1. GPS location / Vehicle Fault self-diagnosis alert function / GSM
remote management of Report, specialized design for private car

2. Quick install, plug and play

3. Obtain mileage, vehicle fuel consumption, engine revolution speed, temperature, travel speed and fault code etc. Data, also display it on remote surveillance software by remote meter.

4. GPS, GSM and LBS assistant position system.

5. Inbuilt 8MB Flash, to reserve the gps data if no gsm signal and upload it later upon getting the signal again — Blind access capabilities.

6. Multiple location modes:
   - fixed time location + Degree/Turns report
   - fixed time location + Distance + Degree/Turns report
   - Distance + Degree/Turns report (save up the flow of GPRS, low data traffic)

7. 3D Acceleration sensor determines the vehicle emergency brake status

8. 10000 pcs GPS track records to TF card

9. Report DTC fault code to Surveillance Center and record it to TF card

10. Vehicle battery voltage too low alarm and engine temperature too high alarm
2. Host appearance description

1. microphone

2. GSM network indicator light
3. GPS indicator light
4. OBD work indicator light
### 3. Accessories

<table>
<thead>
<tr>
<th>NO.</th>
<th>PHOTOES</th>
<th>NAME</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image" alt="OBD Tracker" /></td>
<td>OBD Tracker</td>
<td>1pc</td>
</tr>
<tr>
<td>3</td>
<td><img src="image" alt="Velcro" /></td>
<td>Velcro</td>
<td>1 pc</td>
</tr>
<tr>
<td>4</td>
<td><img src="image" alt="CD" /></td>
<td>CD</td>
<td>Including manual and Web manual</td>
</tr>
<tr>
<td>5</td>
<td><img src="image" alt="Packing Box" /></td>
<td>Packing Box</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><img src="image" alt="OBD extension" /></td>
<td>OBD extension</td>
<td>1 pc</td>
</tr>
</tbody>
</table>
4. Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>IGV-XH007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>66x111x27 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>60g</td>
</tr>
<tr>
<td>Network</td>
<td>EDGE, GSM/GPRS</td>
</tr>
<tr>
<td>Net frequency</td>
<td>EDGE/GPRS/GSM 850/900/1800/1900 MHz</td>
</tr>
<tr>
<td>GPS chip</td>
<td>UBLOX NEO-M6</td>
</tr>
<tr>
<td>GPS sensitivity</td>
<td>-162dBm</td>
</tr>
<tr>
<td>GPS accuracy</td>
<td>5m</td>
</tr>
<tr>
<td>OBD specification</td>
<td>OBD II/EOBD</td>
</tr>
<tr>
<td>Time to first init.</td>
<td>Cold status 45s</td>
</tr>
<tr>
<td></td>
<td>Warm status 35s</td>
</tr>
<tr>
<td></td>
<td>Hot status 1s</td>
</tr>
<tr>
<td>Sensor</td>
<td>Shock sensor, Acceleration sensor</td>
</tr>
<tr>
<td>Memory</td>
<td>8MB</td>
</tr>
<tr>
<td>Input Voltage</td>
<td>12V DC Input</td>
</tr>
<tr>
<td>Built-in Battery</td>
<td>Chargeable changeable 3.7V 150mAh Li-ion battery</td>
</tr>
<tr>
<td>Standby time</td>
<td>48hours</td>
</tr>
<tr>
<td>Storage Temp.</td>
<td>-40°C to +85°C</td>
</tr>
<tr>
<td>Operation Temp.</td>
<td>-20°C to +55°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>5%--95% non-condensing</td>
</tr>
</tbody>
</table>

Indicator status description

The operation status represented by indicator light are as below:
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Flag</th>
<th>Action</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSM network Indicator</td>
<td><img src="image" alt="Slow Flicker" /></td>
<td>Slow flicker</td>
<td>Connect the network after starting system</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Always On" /></td>
<td>Always on</td>
<td>GSM network failed</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="5 Seconds Off, 1 Second" /></td>
<td>5 seconds off, 1 second light</td>
<td>GSM signal is OK</td>
</tr>
<tr>
<td>GPS signal Indicator</td>
<td><img src="image" alt="Always On" /></td>
<td>Always on</td>
<td>GPS signal searching</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="No Lights" /></td>
<td>No lights</td>
<td>No GPS signal</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="5 Seconds Off, 1 Second" /></td>
<td>5 seconds off, 1 second light</td>
<td>GPS signal is OK</td>
</tr>
<tr>
<td>OBD function Indicator</td>
<td><img src="image" alt="Always On" /></td>
<td>Always on</td>
<td>OBD function is OK</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="No Lights" /></td>
<td>No lights</td>
<td>when you use the device over 1 minutes first time , means match it unsuccessful with OBD protocol</td>
</tr>
</tbody>
</table>

**The device apply to:**

Including all of Compatible OBDII /EOBD vehicles except for the model as below:

2. After 2003, all of China production of gasoline Vehicles
3. After 2001, or after 2000, Europe production of gasoline vehicles;
   
   After 2004, or after 2003, Europe production of diesel vehicles

**5. Operating Instructions**
First Steps: SIM card installation

Make sure that there is no call transfer, incoming call display is on, and PIN code turned off. SMS must be plain text, can not recognize the PDU form.

Open the SIM rear cover, put the SIM card into the holder, and turn the foil right and fasten it in place.

Second Steps: Plug the device to vehicle OBD II port.

If the OBD port is located in a deeper place of vehicle frame to influence getting GPS signal, please prolong the extension cord to a better place to get a good GPS signal, and fix it with velcro.

6 Boot Device

Plug the device to the OBDII port, the device will tick, then GSM indicator will blink, next the device will search GSM and GPS signal and begin to work normally after 10 to 40 seconds.

TO check the OBD indicator lights or not, the device will search the OBD protocol of the vehicle automatically when plugging the vehicle first time, and the time is about 1 minutes more or less.

The OBD indicator lights will always on if finding the matched OBD protocol.

GPS indicator will blink when the device get the GPS signal, you can set
any commands in the manual

6.1 Initiation
Send SMS “#begin#password#” to device, it will reply “System Recover successfully” and initialize all the settings.

6.2 change the password
Send SMS “#password#old password #new password#” to change the password.
After sending successfully the device will reply with “The password has been successfully changed. The new password is ****”.
6.2.2 Be sure keep the new password in mind, you should set the device to the factory setting if missing the new password.
6.2.3 Make sure the new password is in 4 digits, otherwise the tracker can not recognize the password.

6.3 Authorization
Max five numbers to be authorized.

6.3.1 Master setting
Send SMS “#master#” the device will act the cell phone number as the authorized number. If set successfully, the device will reply “welcome use GPS tracker ,the password is 1234”

6.3.2 General user setting
Send SMS “#user#phone number#”. All the other authorized number is set by the first authorized number. If set successfully, will reply “The user number has been successfully changed. The new number is: *******.”

6.3.3 change master:

send SMS “#new master# the administrator’s number (which want to change)#”, if the number authorizes successfully, the device will reply “The new master number have been changed successfully, the new number is *******.”

6.3.4 delete user:

Send SMS “#deluser # authorized number(which want to be delete)#”, if the number deletes successfully, the device will reply “Delete the user number ******* successfully”.

6.3.5 Set SMS alarm number

6.3.5.1 Send SMS alarm number “#center#phone number#”. After setting successfully, the device will reply with “SMS alarm number set successfully”.

Set SMS alarm number, when car in ACC OFF state. And arm device, If Shock sensor trigger will send alarm SMS to this mobile phone number.

6.3.5.2 Send SMS alarm number “#delcen#”, After setting
successfully, the device will reply with “SMS alarm number delete successfully”.

6.4 Single locations

6.4.1 If without any authorized number, any mobile numbers dial the device, it will reply Latitude and longitude information;

If set the authorized number, non-authorized numbers dial the device won’t reply Latitude and longitude information.

5.4.2 Dialing the device with an authorized number, it will hang up and reply a real-time Geo-info as below:

<table>
<thead>
<tr>
<th>Lat: 22.636027N</th>
<th>Long: 114.032210E</th>
<th>speed: 023.0</th>
<th>direction: 270.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>tim: 13/09/09 12:00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

http://maps.google.com/?q=22.636027N, 114.032210E

( means latitude, longitude, speed, direction and time )
URL: mobile phone click the URL link in the positioning message, can view the location map of the device (mobile phone must support WAP get online function)

6.5 Anto track

6.5.1 Anto track

1. Send SMS “#auto#030s#005n#” to the device, it will report the Geo-info at 30s intervals 5 times.(s: second, m: minute, h: hour). The setting must be in 3 Arabic numbers and the maximum value is 255 times
6.5.2 Unlimited positioning

Send SMS “#auto#030s***n#” to the device, it will reply SMS heaps of times

6.5.3 cancel:

send SMS “#offtn#” to the device.

Remark: Time interval must be more than 20 seconds

6.5.4 Blind Access Capabilities

If there is no GSM signal, or the GPRS is offline, the device will save the current GPS tracking message to the flash memory automatically. when the device get the signal again, and the device are in GPRS mode,will upload the GPS historical data information automatically.

6.6 Monitoring

This function is the user dialing the device, then can listen what happen around the device

6.7 Convert command“ track” and ”monitor” between the two mode

6.7.1 Default state “track”（location mode）

6.7.2 Send SMS “#monitor#”to the device,will reply “monitor ok!”，change to monitor mode.

6.7.3 Send SMS #track#” to the device,will reply “track ok!” return
to the locate mode.

### 6.8 Check IMEI

Send SMS “#imei#” to the device.

### 6.9 Status Report

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Degree Report</strong></td>
<td>Default 30°, can set between 5 to 180°. When the vehicle turns a corner that exceed the parameter you set, will send the GPS location data to platform, to improve the track data if failing to send the track information in time</td>
</tr>
<tr>
<td><strong>Distance Report</strong></td>
<td>Default 2000 meter. Can set between 100 to 100000 meters. When the vehicle exceeds the Degree you set, will become ZERO and re-calculate it again</td>
</tr>
<tr>
<td><strong>Mileage Report</strong></td>
<td>Each GPRS data packet contain the mileage information, you should modify the initial mileage value to current mileage of vehicle to make it synchronization when you use the device first time</td>
</tr>
<tr>
<td><strong>Emergency Brake &amp; Acceleration Report</strong></td>
<td>Built-in acceleration sensor, can determine vehicle acceleration and emergency brake acceleration threshold</td>
</tr>
<tr>
<td><strong>100 km Fuel Consumption</strong></td>
<td>Each GPRS data packet contain 100km fuel consumption (current speed), to evaluate Vehicle fuel consumption</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Movement Alarm</strong></td>
<td>the device stays a place 3-10 minutes and illegal movement of 200 meters, will report it to platform or on mobile</td>
</tr>
<tr>
<td><strong>Over speed Alarm</strong></td>
<td>the vehicle speed exceeds the speed threshold you set will trigger over speed alarm, and report it to platform or tick on the spot</td>
</tr>
<tr>
<td><strong>Illegal demolition Warning</strong></td>
<td>Someone demolish the device from the OBD port illegally, will report it to the mobile of master</td>
</tr>
<tr>
<td><strong>Engine revolution speed too high Warning</strong></td>
<td>device upload real-time data. platform extended function</td>
</tr>
<tr>
<td><strong>Coolant temperature too high Warning</strong></td>
<td>device upload real-time data. platform extended function</td>
</tr>
<tr>
<td><strong>Battery voltage too low Warning</strong></td>
<td>device upload real-time data. platform extended function</td>
</tr>
<tr>
<td><strong>Vehicle Fault alarm</strong></td>
<td>report default code (DTC ) to platform</td>
</tr>
</tbody>
</table>
6.10 Movement alarm:
Setting: When the device stays immobile in a place for 3-10 minutes, the user can send SMS “#move#” to the device, and then the device will reply “move alarm setting successfully!” It will reply SMS “Move+ the Geo-info to the authorized numbers upon the device move over 200 meters. Also, will send alarm SMS every 3 minutes.

Cancel: Send SMS “#offmove#” to cancel the movement alarm.

6.11 Over speed alarm:
Setting: Send SMS “#speed#080#” to the device (suppose 80km/h), and it will reply “speed ok!” . The device will send SMS “speed+080!+Geo-info to the authorized numbers when the driving speed over 80km/h. Also, will send an alarm SMS every 3 minutes. And will cancel the alarm automatically if the vehicle speed decelerate below the setting parameters.

Cancel: Send SMS “#offspeed#” to cancel Over speed alarm.

Remark: Recommended setting of Over speed alarm 50km/h or over, GPS signal may be not accurate because of drifting if Vehicle speed is too slow.

6.12 Illegal demolition Warning:
The device is demolished illegally, the device will reply “External power shut off” to the authorized mobile number.
6.13 Vehicle fault alarm:
When the vehicle fault happen will trigger vehicle fault alarm, the device will upload fault code to platform, the user can check the corresponding fault meanings of fault code library on the platform, then can find the fault in advance to avoid greater risks.

6.14 Modify time:
Send SMS: “#time#time zone#”, it will reply “time is set successfully” if it is successfully set. It will reply: “Time zone OK”

6.15 Initial mileage setting:
If we want to be on the mileage meter platform mileage value and vehicle meter synchronization, so we have to do the following Settings:

Send SMS: “#mileage#mileage value#”, it will reply “initial mileage set successfully”

For example: if send this SMS: “#mileage#1200#” to device, Mean vehicle meter mileage the current value is 1200KM.

6.15 GPRS setting:
Generally, user don’t need to set the server parameter before use, The factory has set the right server parameter. If the tracker can’t connect server, please reference to the following:

6.15.1 Setting an IP address and port:
Send SMS “#ip #IP address #port# ”

If set up successfully, the tracker will reply SMS “setting IP address, port set up successfully”.

For example: " #adminip # 123.183.212.133 #8067# ” (Default Mode)
Cancel: Send SMS "#delip#" to cancel the setting, It will reply “IP address delete successfully”.

6.15.2 Setting APN
Send SMS “ #apn#APN CONTENT#user name#password# ”, as long as APN has been set successfully the tracker will reply SMS “APN setting successfully”.

For example: Send SMS “ #apn#safaricom#saf#data# " it will reply “APN ok” .

6.16 SMS Mode & GPRS Mode
Send SMS "#smgp#1#" for SMS mode. (Default Mode)

Need to send SMS "#smgp#0#" to set up GPRS mode if you use software of monitoring center on PC.

Please reference to monitoring software instruction of the disk after set up GPRS mode.