GPRS/UMTS/GSM/GPS 3G DVR tracker User 'manual



1. Summery

Working based on HSDPA,UMTS,EDGE,GSM,GPRS network and GPS satellites, this product can also anti-theft ,locate, monitor and provide urgent service to any remote targets .It is featured with compact and use-easy characteristics and therefore is mainly used in monitoring ,locating and tracking the car and other mobile things.

At the same time, it completely support the digital transportation function of SMS/GPRS/HSDPA/Internet ,making it available for wide-area monitor, urgent dispatch ,traffic safety management and many different fields.

2. Features

1, use USIM card, support WCDMA 3G network and GSM network.

2 use video ropes to connect CCD simulated camera externally.

3, support SMS/GPRS/ HSDPA/Internet data transportation (GPS/Internet will be illustrated in addition)

4, support mobile phone message to control and reach privacy security

5, support alarm by SMS, voice call and video call.

6, record a vedio of alarm process to SD card

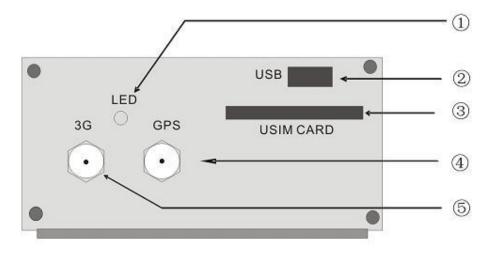
7. Built-in Li-ion battery, can work normally even in power off state.

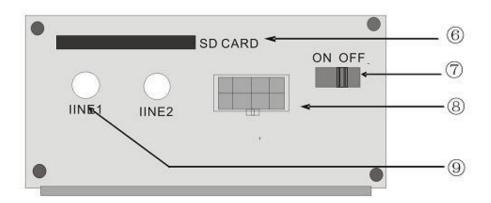
8, monitor the place any time any where by video call.

9, integrate anti-theft, location, real-time control,monitor,video record, urgent alarm and tracking service

10, mainly used in monitoring and locating the ship and train, and in fleet management of moving car and truck.

3. Hardware description





- 1 LED indicator light 2、USB jack
- 3、USIM jeck 4、GPS reticle
- 5、 3G 6、 SD CARD jack
- 7、 ON/OFF 8、 Connection port
- 9、 external video jack

Indicator light instruction

The state represented by indicator light are as below:

Color	Action	Statement
red	Slow flicker	connecting to net after opening
	Quick flicker	Alarm state
	Always on	Fail to connect to net
green	Always on	Practicing state
	Slow flicker	Cancel protection state
	Quick flicker	Data processing

4. Specification

Content	Specification		
Dim	66x111x27 mm		
Weight	256g		
Network	HSDPA,UMTS,EDGE,GSM/GPRS		
Net frequency	EDGE/GPRS/GSM 850/900/1800/1900 MHz		
channel	HSDPA/UMTS 850/1900/2100 MHz		
Chip	SIRF3 chip		
3G chip	WCDMA		
GPS sensitivity	-159dBm		
GPS accuracy	5m		
Time to first initiate	Cold status 45s Warm status 35s Hot status 1s		
Input voltage	12V input		
User-defined input alarm detection level	0V		
Video form	MP4		
Battery	Chargeable changeable 3.7V 1500mAh Li-ion battery		
Standby	48hours		
Storage temp	-40°C to +85°C		
Operation temp	-20°C to +55°C		
Humility	5%95% non-condensing		

5 Noun Definition

Locate mode: in this mode ,all the alarming information will be send every 3 minutes with Geo-info and begin to record a video.

3G monitor mode: all the alarm system will inform the master by incoming video call. It will then call the other member one by one until the phone is available if the master is not around. However, the device can dial all the phone numbers for 3 times. After failing 3 times, the unit will stop dialing automatically.

Incoming video phone

Master and normal members can initiate video by calling the host machine.

Organize a defense: in this state, the device will alarm according to the alarming mode of the time if external inputting port is touched.

Cancel the defense: I t means to withdraw from a defense situation, and the device won't alarm when the external inputting port is touched.

6.Use:

First step: connection

1, Find the matched wire, and insert the jack.

2, fix the included camera in the needed cabin ,please turn the camera on the right direction. Insert one end of video plug into the IN1 video jack of host machine, another end used to connect video interface. Finding the included camera power wire , then insert it into the

corresponding 12V camera input interface, another end connect the camera CD plug.

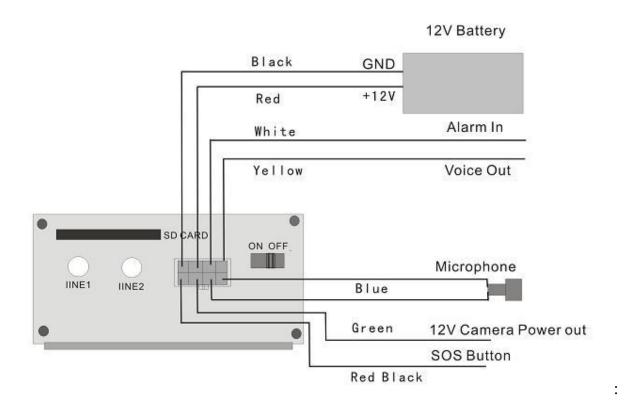
3 Connect urgent button with red and black wire.

4 set aside an external inputting jack to alarm, which is called negative triggering, it alarm when the unit is in the defence-conceling state.

5. Connect GPS wire to GPS wire terminal and 3G wire to 3G wire terminal. Tighten the nut

- 6. Insert the external monitoring microphone to monitoring jack.
- 7. It can support 8GB SD card at most, mainly used in recording a video when calling the police.
- 8. Connect the red and black wire (power cord of the unit) to the positive and negative electrodes of the car, red wire to + and black wire to -

Circuit graph



2. SIM card installation

Make sure that there is no call transfer , call display is on, and PIN code off..

SMS must be plain text, can not recognize the PDU form.

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

3. Power on

Turn the switch to "ON", and check whether 3G/GPS wire is connected.. At this time, the red light Begin to twinkle. In 10 to 40 seconds, the unit will begin to work and acquire the 3G as well as the GPS signals. The indicator will change to green and keep flashing every 3 seconds. You can begin to set anything in the user' guide.

6.1 initiation

Send "begin+password" in SMS to the unit, it will reply "System Recover successfully" and initialize all the settings.

6.2change the password

Send SMS "password old password +new password" to change the password.

After sending successfully the unit 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 have to upload the software to restore the original setting in case of losing the new password.

6.2.3 Make sure the new password is in 4 digits, or else the tracker can not recognize the password.

6.3 Authorization

There are only 5 numbers able to be authorized.

6.3.1 Set up master

Send MSM "#master#". It will make the cell phone number as the authorized number automatically. If set successfully, the unit will reply

"welcome use 3G GPS tracker ,the password is 1234"

6.3.2

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Set up general user:

Send SMS "#user#phone number#". All the other authorized number is set by the first authorized number. It will reply "The user number has been successfully changed. The new number is: ********.", if be authorized successfully.

6.3.3 change master: send SMS "#newmaster#the administrator's number (which want to change)#", if the number is successfully authorized, the unit will reply "The new master number have been 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 unit will reply "Delete the user number ******** successfully".

6.4 the two convert command "track" and "monitor" between the two mode

6.4.1. "track" (locator pattern) is the implied state ,all the alarming message will be send every 3 minutes.

6.4.2. send SMS "#monitor# "to the unit, it will reply "monitor ok!", changing to 3G monitor mode. In 3G monitor mode, the alarm system will inform the master by incoming video call or

voice call. It will then call the other member one by one until the phone is available if the master is not around. However, the device can dial all the phone numbers for 3 times. After failing 3 times, the unit will stop dialing automatically.

6.4.3. send SMS "#track#" to the unit, it will reply "tracker ok!" and return to the locator pat term $_{\circ}$

6.5 one-time locations

dial a video phone:

6.5.1 Dialing the device with any NO it will reply with Geo-info if there is no authorized No, while it won't reply when dialing with an unauthorized NO if there is an authorized No has been settled.

6.5.2 when dialing the device with an authorized No, it will hang up and reply a real-time Geo-info as below:

Lat: 22.636027N(latitude) Long:114.032210E (longitude), speed: 023.0 (speed) direction:270.0 (direction) time:13/09/09 12:00(time) http://maps.google.com/?q=22.636027N, 114.032210E

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)

6.6 Anto track

6.6.1 send SMS "#auto#030s#005n#" to the device, it will report the Geo-info at 30s intervals for5 times.(s: second, m: minute, h: hour). The setting must be in 3 Arabic numbers and at maximum

255 in value.

6.6.2 Send SMS "#auto#030s#***n#" to the unit, it will reply SMS heaps of times

6.6.3 cancel : send "#offtn#" to the device.

Remark: the interval must not be less than 20s.

6.7 Incoming Video call (GPS mode and 3G mode all can operate like this)

The device will detect whether it is the administrator or user when incoming video calls, if not, it will hang up; if it is the administrator or any user of the number, while the link will be established, it could send real-time monitoring of images and sound at this time.

6.8 Incoming Voice call (only 3G mode can operate like this)

The device will detect whether it is the administrator or user when voice call incoming, if not, it will hang up; the device will be vibration with 6 sound if it is the number of administrator or any user, and you could talk with each other at this time.

7. Alarm function

7.1 movement alarm

7.11 Set up: When the unit stays immobile in a place for 3-10 minutes, the user can send SMS "**#move#**" to the unit, and then the unit will reply "move alarm setting successfully!" In case of such a movement surpass 200 meters; it will reply SMS "Move+ the Geo-info to the authorized numbers. It will send an alarm SMS every 3 minutes when it surpass the limits.

7.12 Cancel: Send SMS "#offmove#" to deactivate the movement alert.

7.13 Over speed alert:

Set up: Send SMS "**#speed#080#**" to the unit (suppose the speed is 80km/h), and it will reply "speed ok!" When the target moves exceeding 80 km/h, the unit will send SMS "speed+080! +Geo-info to the authorized numbers. It will send an alarm SMS every 3 minutes Cancel: Send SMS "**#offspeed#**"to deactivate the over speed alert.

Remark: It is recommended that the speed alarm is set at not less than 50km/h. For below that rate, it may cause the excursion of the GPS signal influenced by clouds etc.

7.14 Urgent alarm

Press the SOS for 3 second; it will send SMS "help me! + Geo-info" to all the authorized numbers every 3 minutes. It will stop sending such a SMS when any authorized number reply SMS "#help#" to the tracker.

7.15 low power alarms

The device will send SMS "low battery+Geo-info" to all the authorized numbers in 30 minutes intervals when it is 3.4V

7.16 Input alarm port

The user can define how to trigger if choosing input alarm port. For example triggering by touching the car door or trunk.

Remark, input alarm port must be triggered in the defense-canceling state

How to organize a defense:

Send a SMS "#arm#" to the device, it will reply with "Defense mode activated" if the device

Has been in defense state, no other operation.

After initiating this function, the unit will alarm when input alarm port change to 0.

How to cancel the defense :

Send SMS "#disarm#" to the device, it will reply "Cancel defense" if it has been in the Defence-canceling state, no other operation.

7.18: check IMEI

Send SMS "#imei#"to the device.

7.19 Change time

Send SMS: send SMS "#time#time zone#", it will reply "time is set successfully" if it is successfully set.

It will reply: "Time zone OK"

For example: #time#8# means east 8 time zone.

#time#-7# means west 7 time zone.

7.20 CCD simulated camera video NTSC or PAL format setting.

If video format set not right, the video is Black and white.

You can send SMS:

PAL format: send SMS "#camset#0#"

NTSC format: send SMS "#camset#1#"

if it is successfully set. It will reply: "Set video format successfully".

7.21 GPRS setting

In order to use GPRS function, the user needs to set IP, Port and APN (access point name) by either cell phone.

7.21.1 Set an IP address and port:

Send SMS *"#adminip #IP address #port#"*

For example: **#adminip #20.110.12.123 #9090#** "

If setup successful, the tracker will reply SMS "setting IP address ,port setup successfully". Cancel: Send SMS #delip# to cancel the setting: It will reply "IP address delete successfully".

7.21.2 Set APN

For example: send SMS "#APN#APN CONTENT#, as soon as APN are set up, the unit will reply with SMS "APN setting successfully"。

After setting IP, port and APN, the user can make a call to tracker, the tracker will hang up and send SMS with Geo-info to IP address

The message sent by tracker to IP address is as following:

Serial number + authorized number + GPRMC+ signal indicator

Remark: the part of GPRMC outputs according to the NMEA (National Ma2rine Electronics

Association), 0183

说置 本机城名: []	92,188,1,16	服余端口: 177	· · · · · · · · · · · · · · · · · · ·	止服身
数据监控				
070802192	4,1326564749	3, GPRMC, 112444.	106, A,	6
E. inei:35	202200529679	0, 2, 2, 2, 90, 2, 11, U	20801,,,,,,,,,,,,	8,
F, imei: 35	202200529679	3, GPRMC, 112444. 5, E, 2, 93, 2, 11, 0 1, 102.	20801,,,,,,,,,,,	8,
F, imei: 35	202200529679	, 2, 2, 3, 2, 11, 0 1, 102.	20601,,,,&*6	8,
F, inel:35	202200529679	, <u>e.</u> 2, 99, 2, 11, 0 [, 102,	20301,,,,,,,,,,,	8,

For example: information is showed as followed

8 Cautions

Please comply with the instructions to extend the unit line:

- 1. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry.
- 2. Don't use & store the unit in dusty places.
- 3. Don't put the unit in overheated or overcooled places.
- 4. Handle carefully. Don't vibrate or shake it violently.
- 5. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.
- 6. Don't paint the unit, this may cause some foreign materials left in between the parts.
- 7. Don't disassemble or refit the unit.
- 8. Please read the instruction very carefully before using it, knowing the level

Range of different interface. Or else, the unit can not work normally or will be damaged.

Nine. Faults&	Solutions
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Faults	Solution		
Startup fail	Check the battery and see if it is fully charged or		
	Correctly installed.		
Vediophone fail	Check whether 3G line is well connected, USIM card is well		
	placed or power-line voltage is normal.		
Hangup fail	In existence of an authorized number, an unauthorized Number dials up the unit. Please initialize the unit and re-set up		
No picture after getting through the	Check whether the video line or power line is well		
through the video phone	connected.		
Location report in Digits of zeros.	check whether the external line GPS is well connected, Don't use it in the place beyond reach of GPS signals		