

# The Protocol Manual of GP6000

## VERSION 1.7



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# I .Foreword

This protocol manual is an instruction of GP6000 for all command definition, description, application and operation of the demonstration. The manual was edited, proofread, published, updated by Shenzhen joint technology co.,ltd. Final interpretation as well as the copyright is from joint

The manual applies to: R & D engineers; systems engineer; application engineers; sales engineer; system integration engineers, maintenance engineers, as well as certain technical base of users and managers

This manual constantly updated content to retain, all subject to change without notice. Go to [www.joint-tracking.com](http://www.joint-tracking.com) site for an updated version, the error is inevitable, please contact us [sales@joint-tracking.com](mailto:sales@joint-tracking.com)

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# III.Instruction

This protocol is used only for GP6000 in Joint technology. Please donot use it for other model. Please contact with the sales people in Joint techonolgy if you cannot understand the protocol well or has some difficulty in understanding.

Joint technology keep the right for the updating of this protocol on the demand of some new function from client's requirement. Joint may not contact you in time for any update or amendment. Please keep in contact with us for updated information.

This protocol may has some clerical error or unprecise description. Please let us know if you found.

## IV. History

Serial	Content	Edition	Proofread	Publication date	Firmware version
1	1. add E08 command 2. modify S26 command in order to suit for all camera	wlh	Wlh	2009-10-23	
2	1. update error. 2. modify S43 command	wlh	wlh	2009-11-20	
3	1. Anti-explode function start,modify delay time to 2 minutes; saving power function start modify delay time to 5 minutes.	wlh	wlh	2009-11-25	
4	table6.1.4 Add FRAM;fatigue driving,GPS singal indicator	wlh	wlh	2009-11-26	
5	Add U18 command	wlh	wlh	V1.0 2009-11-30	20091216
6	update error	jeson	jeson	V1.0 2009-12-25	20091216
7	1,add S33 ,S37,S38,A11,A12,A13,E01,E08 command 2,modify the introduction the mian fuel level value.	Jeson	Jeson	V1.1 2010-3-28	2010-3-28
8	1,Add E08-5,E08-6,E08-7,E08-8,E14,S45,S46,S47,S48,U20,G09 commmand	Jeson	Jeson	V1.2 2010-6-10	20100528
9	1,add S49 ,S50,S51,E16,U22,U24 2,modify S19 –external device , A04,E08-4,G02,G03,G06	Jeson	Jeson	V1.3 2010-11-15	20101112
10	1 , Add E02 commands	Jeson	Jeson	V1.4 2011-01-11	20110111
11	1,Add S52 command 2,Edit S32 command 3,Add U01-27	Jeson	Jeson	V1.4 2011-02-23	20110223
12	1,add E19 command 2,add U26 report 3,update U16 report 4,add U01- 27 GPRS connection reconnect alarm	Jeson	Jeson	V1.5 2011-03-16	20110316
13	1,add U01- 28 GPS antenna disconnect alarm	Jeson	Jeson	V1.5	20110425

				2011-05-18	
14	Add S54 command	Jeson	Jeson	2011-06-20	20110616
15	Add E21 series command Modify U13 report Add U28 report	Jeson	jeson	2011-08-01	20110728

## V. Summary

### 5.1 Coding rule

GP4000/5000/6000 all adopt the following coding rule: Command coding rule is ASCII protocol; Data coding rule is binary system protocol

We can saving 50 percent GPRS flow of uploading data, when we use this coding rule. The command's flow of setup; response; alarm are very less in the GPRS data flow. so we could use it by ASCII coding. It is satisfied to the user.

(Table 1)

	ASCII coding	ASCII+binary coding
GPS locate data	18.292MB/month	9.146MB/month
The other data	300KB/month	300KB/month

remark: uploading time interval is 10 second, it is constantly 24 hours uploading ,it Only compare two forms of encoded data traffic. No any other mean. The compare is transfer the binary to ASCII coding only,no relate the other products.

### 5.2 Command assorted

All command is divided into seven categories.

1. "S" serial command, it is use for the parameter set/Inquire such as: set up/inquire IP,PORT,APN etc.
2. "A" serial command ,it is used for alarm function config/inquire. For example: some of alarm information all continue uploading untill the center control confirm this information
3. "G" serial command, it is used for GIS function parameter config/inquire. For example: set/inquire the GEO-fence function parameter
4. "C" serial command ,it is used for device control .for example : cold start function.
5. "D" serial command ,it is used for Unvarnished Transmitted data ; we could utilize these command to extend



the external devices;

6. "E" serial command,it is use for External devive Set;for example:RFID、

Password keypad and so on.

7."X" serial command,it is use for Set universal port.

Below is the table for correspondence:

(Table 2)

Command type	Command explain	the number of command
"S" serial command	Set command	44
"A" serial command	Alarm Set	13
"G" serial command	Geo-fence /hot spot Set/Zone or road	8
"C" serial command	Control command	7
"D" serial command	Send Unvarnished Transmitted data to external devices	2
"E" serial command	External device Set	2
"X" serial command	Set universal port.	2

## 5.3 The method of binary coding translated into ASCII code

Software automatically translate;Manually translate.if you need the software,please contact wih JOINT.

## 5.4 Notice

when test this units, make sure to notice that there are no additional "blank" or "," in the command,all of the command must accord with the protocol and DBC case English,don't exist any SBC case or non-ASCII standard signs.

# VI. Binary coding protocol

## 6.1 Protocol instructions

### 6.1.1 Binary coding protocol

Binary code protocol is majorly for normal GPS locating data upload. Each piece binary coding data packet's length is 37 byte. In this protocol, the bit is following the below order:

Each byte has 8 bits, the lower one is on the right, the higher one is on the left:

(Table 3)

The 8th	The 7th	The 6tg	The 5 <sup>th</sup>	The 4 <sup>th</sup>	The 3 <sup>rd</sup>	The 2 <sup>nd</sup>	The 1 <sup>st</sup>
BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0

(Table 4)

SN	items Name	Length	Note
1	protocol head	1	Is "0x24", is the "\$" in ASCII code
2	Terminal ID	5	Tracker's ID, the fixed length is 5 byte
3	Protocol version	0.5	GP6000's protocol version is 2
4	Data Type	0.5	Please refer to table5,
5	Data length	2	The data length, is the total length between Date to Reserved
6	Date	3	format is date/month/year, for the year, it omit "20" in "2009".
7	Time	3	Hour/minute/second/, it is Greenwich mean time.
8	Latitude	4	this value is: the real latitude multiply 10000; format is DDMM.MMMM;
9	Longitude	4.5	this value is: the real longitude multiply 10000, the format is DDDMM.MMMM;
10	Locating indication	0.5	If the GPS is locating, pls refer to Table 7.
11	speed	1	The current speed, Sea mile/hour as unit, so when you translate to kilometer/hour,you need to multiply

			1.85
12	direction	1	Current direction, in the unit of degree. When unit upload, it divided 2, so when you are calculating that, please use this value multiply 2, then you get the real degree;
13	fuel level high 8 bit	1	the high 8 bit value of terminal main fuel level
14	Status	4	Vehicle status, please check Table 8;
15	mileage	4	Current mileage, in the unit of kilometer;
16	fuel level low 8 bit	1	the low 8 bit value of terminal main fuel level;
17	SN	1	Serial Number, each time when you send a new data, the number increase 1.

Note:The length is in the unit of byte;

## 6.1.2 Data type

The binary data uploaded has several types, as below:

(Table 5)

Type ID	note
1	Real time data
2	historical data
3	re-uploaded data
4	packeted data

### 6.1.2.1 Binary code location data

Binary Data follow the Table 4's definition, for example:

24608111888821001B09060908045322564025113242329F0598000001003F0000002D00AB

The above data is a real uploaded data, let us follow the table 4 's definition to analyse it:

24\_6081118888\_2\_1\_001B\_090609\_080453\_22564025\_113242329\_F\_05\_98\_00\_0001003F\_0000002D\_00\_AB

(Table 6)

SN	items Name	value	note
1	Protocol head	24	Is "0x24", is the "\$" in ASCII code
2	Terminal ID	6081118888	Tracker ID
3	protocol version	2	GP6000's protocol version
4	data type	1	This indicates that this is a normal binary locating data
5	data length	001B	Data content length, totally it is 27byte.
6	Date	090609	It means year 2009 June 9 <sup>th</sup>
7	time	080453	means 08:04:53 am
8	latitude	22564025	The latitude is 2256.4025
9	longitude	113242329	The longitude is 11324.2329
10	locating	F	F = 1111, It indicate GPS is locating well, East longitude, North Latitude
11	speed	05	0x05, The current speed is 5 knot , it is equal to $5 * 1.85 = 9.25$ kilometer/hour
12	direction	98	0x98 = 152, $152 \times 2 = 304$ , so the direction is 304 degree.
13	fuel level high 8 bit	00	the high 8 bit value of terminal main fuel level
14	status	0001003F	Please check Table 8, the status is: ACC on, air conditioner on, left turning lamp on, right turn signal on, engine on, braking, flash working normal and FALSHwork normally
15	mileage	0000002D	The current mileage is 45kilometer
16	fuel level low 8 bit	00	the low 8 bit value of terminal main fuel level
17	SN	AB	Serial Number, each time when you send a new data, the number increase 1.

### 6.1.2.2 Historical data

Historical data has the same definition of the normal binary code data. The only difference is that the data type is 2:

```
24_6081118888_2_2_001B_090609_080453_22564025_113242329_F_05_98_00_0001003F_0000002D_00_
AB
```

### 6.1.2.3 Re-uploaded data

When the GPRS signal is not good, the connection will be stopped. So the tracker will store the current data into the buffer, maximum it could store 360 pcs data. Those data will be stored into the RAM as the format of 15 data in one packet. When the GPRS signal recover, tracker will automatically send those packets to server. So those data is called re-uploaded data.

So 15data will be packed into one packet, the format is as below:

```
246081118888230195
```

(the red one "3" means the data type, it is re-uploaded)

```
09060908045322564025113242329F0598000001003F0000002D00
```

```
09060908050322564025113242329F0598000001003F0000002D00
```

```
09060908051322564025113242329F0598000001003F0000002D00
```

```
09060908052322564025113242329F0598000001003F0000002D00
```

```
09060908053322564025113242329F0598000001003F0000002D00
```

```
09060908054322564025113242329F0598000001003F0000002D00
```

```
09060908055322564025113242329F0598000001003F0000002D00
```

```
09060908060322564025113242329F0598000001003F0000002D00
```

```
09060908061322564025113242329F0598000001003F0000002D00
```

```
09060908062322564025113242329F0598000001003F0000002D00
```

```
09060908063322564025113242329F0598000001003F0000002D00
```

```
09060908064322564025113242329F0598000001003F0000002D00
```

```
09060908065322564025113242329F0598000001003F0000002D00
```

```
09060908070322564025113242329F0598000001003F0000002D00
```

```
09060908071322564025113242329F0598000001003F0000002D00
```

```
1F
```

(Note: the received data is continuously. But we divided into several section for easy checking) We can found out from the "Date" to "reserved" it is repeated 15 times. So there are 15 pcs data here. The definition of these 15 pcs has the same definition with the normal data.

### 6.1.2.4 Packeted data

Packeted data indicates tracker pack several data into packet.(one packet less than 15 pcs data). Then the packet is uploaded to server. The data type is “4”. And it is easy to calculate how many data in one packet since each data has fixed length.

2460811188882400A2

(The red “4” indicates the data type , packeted data.)

09060908045322564025113242329F0598000001003F0000002D00

09060908050322564025113242329F0598000001003F0000002D00

09060908051322564025113242329F0598000001003F0000002D00

09060908052322564025113242329F0598000001003F0000002D00

09060908053322564025113242329F0598000001003F0000002D00

09060908054322564025113242329F0598000001003F0000002D00

1F

### 6.1.3 Locating indication

The SN 10 locating indication definition, in one byte, the right side is BIT0, the left side is BIT7;


(Table 7)

BITX	instructions
BIT0	Indicate if it is locating, 1 for locating, 0 for blank area;
BIT1	Indicate N or S, “1” for N, “0” for S
BIT2	Indicate E or W, “1” for E, “0” for W
BIT3	Fixed value is “1”

### 6.1.4 Status table

The tracker totally has 4 byte length status information. The lower byte is on the right, the higher byte is on the left. The order of the bit is the same as the Table 3.

(Table 8)

	Tel:+86-755-83237778 83236778 Fax:+86-755-83282631 P.C.:518028 Mail:hkczy@vip.sina.com
	Website:www.joint-tracking.com Add:5th Floor,404Bldg,Shangbu Industry Zone, Futian District, Shenzhen, P.R.C.

The first byte:

Bit order	explain	1	0	trigger	Signal ID
BIT0	ignition status	ACC On	ACC Off	high level	1
BIT1	engine status	Engine On	Engine off	high level	2
BIT2	brake status	brake	not braked	high level	3
BIT3	The first Universal Port is opened I/O port detecting	Opened	Closed	-	-
BIT4	The second Universal port is opened I/O port detecting	Opened	Closed	-	-
BIT5	Air condition	air condition on	air condition off	high level	6
BIT6	vehicle door	Vehicle door open	Vehicle door close	high level	7
BIT7	High reserved	-	-	-	8

The second byte:

Bit order	explain	1	0	trigger	signal ID
BIT0	power status	backup battery	main power	high level	9
BIT1	Fuel cut status	Fuel pump already cut	work normally	high level	10
BIT2	SOS status	SOS state	work normally	high level	11
BIT3	GPS antenna open-circuit status	GPS antenna open-circuit state	work normally	high level	12
BIT4	GPS antenna short-circuit status	GPS antenna short-circuit state	work normally	high level	13
BIT5	over speed driving	In speed driving state	work normally	high level	14
BIT6	The first Universal	High	Low	low level	15

	Port's I/O port status				
BIT7	The second Universal Port's I/O port status	High	Low	low level	16

The third byte:

Bit order	explain	1	0	trigger	signal ID
BIT0	FLASH	ICwork normally	work abnormally		-
BIT1	Flash RAM	ICwork normally	work abnormally	-	-
BIT2	Fatigue driving	In fatigue driving status	No fatigue driving status	-	-
BIT3	Tow alarm	In tow alarm status	No tow alarm	-	-
BIT4	GPSsignal 1	Signal 1 and signal 2 combination indicates the GPS signal 's weakness or strong <sup>①</sup> : 00:signal bad,0x01:signal normal,0x10:signal good,0x11: signal very good			
BIT5	GPSsignal 2				
BIT6	GSM signal 1	Signal 1 and signal 2 combination indicates the GSM signal 's weakness or strong <sup>②</sup> : 00:signal bad;0x01:signal normal,0x10:signal good,0x11: signal very good			
BIT7	GSM signal 2				

The fourth byte is not defined yet. Now it is "0", reserved.

Each IO port could detect the signal between DC 6-36V, the trigger has high level trigger and low level trigger; If you donot need those trigger, don't connect it . And pay attention not to short them together. For details ,please refer to the wire definition of the tracker.

① GPSsignal weak or strong table:

Signal status	GPSsignal I	GPSsignal II	satellite count
signal weak	0	0	$x < 4$
Normal	0	1	$4 \leq x < 7$
Good	1	0	$7 \leq x < 10$
Very good	1	1	$x \geq 10$



② GSM signal weak or strong table:

Signal status	GSM signal I	GSM signal II	satellite count
signal weak	0	0	$x < 4$
Normal	0	1	$4 \leq x < 7$
Good	1	0	$7 \leq x < 10$
Very good	1	1	$x \geq 10$

## 6.1.5 Main fuel level introduction

The value of main fuel level is included in the GPS data, it is real time uploading. the fuel level value is occupied 2 bytes, its SN is 13 and 16, **please refer to "Table 4"**, SN13 is stored high 8 bit fuel level,SN16 is stored low 8 bit value. so in the process of analyse protocol,the final fuel level is :  $SN13 * 256 + SN16$

for example:

SN 13 0F

SN 16 89

translate into decimal system

SN 13 15

SN16 137

main fuel level value= $15 * 256 + 137 = 3977$

## VII.ASCII code protocol

### 7.1 ASCII protocol structure

#### 7.1.1 Protocol instruction

ASCII code is used for command sending majorly and for the parameter Inquire or Set. For the command, please kindly follow the rules strictly. And don't put more "," in the command;

#### 7.1.2 Protocol structure

ASCII protocol use "(" as the protocol head, use ")" as the protocol end. And it is separated by "," check the definition as below:

(Table 9)

SN	items Name	length	character	Note
1	protocol head	1	(	One byte,character "("
2	Terminal ID	10	6081118888	10 byte
3	protocol version	1	2	Fixed is 2.
4	cmmand type	3	S05	Command name
5	command SN	3	123	SN number
6	parameter	N	...	Different command has different parameter, and it is separated by ","
7	protocol end	1	)	Protocol end.

Note:

- 1.The length is in the unit of byte.
- 2.Unless the Unvarnished transmitted data, all the command is in ASCII code.
- 3.After the SN it is the protocol end ")" if there is no other parameter.

### 7.1.3 Note

In command , all the command is in CAPITAL letter. i.e. "S","A","D","G"... . And take S01 for example, you must use "0" in S01.

### 7.1.4 Example:

Example: (6081118888,2,S01,123)  
(6081118888,2,S19,123,1,8)  
(6081118888,2,S03,129,1,13901821234)

## 7.2 "S" serial command Sets

### 7.2.1 S01 Inquire the name of the current terminal manufacturer

Command Identifier: S01  
Command Function: Inquire the name of the current terminal manufacturer  
Parameter list: None  
Set example: None  
Inquire example: (6081118888,2,**S01**,129)  
Return: (6081118888,2,**S01**,129,[www.joint-tracking.com](http://www.joint-tracking.com))

### 7.2.2 S02 Set or Inquire the IP address, Port and APN name

Command Identifier: S02  
Command Function: Set or Inquire the IP address, port and APN name  
Parameter list:

Mode: "0" for Inquire; "1" for Set;.

IP Address: This is the major IP address, i.e. 123.22.2.187, each part was separated by "." Please donot leave any space or "0".

Port:Port number, i.e.:10000.

APN:For GPRS access, for example "CMNET"

Connectmode:"0"for Set IP Address;"1" for Set domain name

Set example: (6081118888,2,**S02**,129,1,123.22.2.187,10000,CMNET)

Set domain name :(6081118888, 2, S02, 123, 1, GPS.JOINT-CHINA.COM, 10000, CMNET,1)

Inquire example: (6081118888,2,**S02**,129,0)

(6081118888,2,**S02**,129,0,123.22.2.187,10000,CMNET)

Explain:Both of the above command is correct. Because when unit detect that the Mode is "0", it will ignore the later parameter. Please kindly note. Later, we will not explain this part.

Return: (6081118888,2,**S02**,129,123.22.2.187:10000,CMNET)

Notice:

The IP address is the target IP address uploaded by the terminal and the port address is the target port address uploaded by the terminal. The recommended port numbers are above 1000 and meanwhile insensitive numbers. The IP address shall be in the form of XXX.XXX.X.XX. The APN refers to the access point name of the local network service provider, for example, CMNET of China Mobile. if your need to set the domain name, make sure that domain name has been mapped to the server's IP address.

## 7.2.3 S03 Set or Inquire the SMS center number

Command Identifier: S03

Command Function: Set or Inquire the SMS center number. manufacturer use this number control the terminal.

Parameter list:

Mode : "0" for Inquire; "1" for Set;

CenterNumber :SMS Center Number in monitoring center, please do not add country code i.e. "+86" .

Set example: (6081118888,2,**S03**,129,1,13999998888)

Inquire example: (6081118888,2,**S03**,129,0)

(6081118888,2,**S03**,129,0,13999998888)

Return: (6081118888,2,**S03**,129,13999998888)

Notice: This number is very important. When there is unexpected situation (for example disconnection with GPRS network due to false instruction Set), short messages can be sent to the terminal through this number for remote parameter

reSet for work recovery. manufacturer use this number control the terminal.and when the Data transfer mode is "SMS",all the gps message will send to this SMS center number.

## 7.2.4 S04 Set or Inquire the data uploading parameter

Command Identifier: S04

Command Function: Set or Inquire the current reply interval and reply times, monitoring type, upload type, the data pieces in one package

Parameter list:

Mode : "0" for Inquire; "1" for Set;

ReplyInterval : Time interval or distance interval , from 0-65535.

If (TrackType = 0), that indicates time interval; then thisvalue indicates the time in the unit of seconds; "0" indicates not uploading data.

If (TrackType = 1), that indicates distance interval; then this value indicates the distance in the unit of meter; The minimum value is 10 meter;

ReplyCount : reply count (0-65535); "0" means continuous reply

TrackType : Monitoring type, distance monitoring or time interval monitoring, "0" indicates time distance monitoring, "1" indicates distance interval monitoring;

ReturnType : Returned data type, through GPRS or SMS. If it is uploaded through GPRS, please refer to the <Table Six>; If it is uploaded through SMS, please check <Table X>. Unit will send message to the SMS center number which is provided by the operator: "0" indicates uploading by GPRS, "1" indicates uploading by SMS;

PacketCount : Packet pieces Set: from 1 to 15; If it is "0", that indicates donot pack, it will take the defaulted data; when you set it as "0" or "1" , it will be only one data uploaded;

Set example: (6081118888,2,**S04**,129,1,10,0,0,0,0)

Inquire example: (6081118888,2,**S04**,129,0)

(6081118888,2,**S04**,129,0,10,0,0,0,0)

Return: (6081118888,2,**S04**,129,10,0,0,0,0)

Notice:

1. This command is very important since it is related to the unit data upload type; so if there is not data upload, please firstly check this command's Set;

## 7.2.5 S05 Set or Inquire vehicle owner's cell phone number

Command Identifier: S05

Command Function: Set or Inquire vehicle owner's cell phone number

Parameter list:

Mode : "0" for Inquire; "1" for Set;

Index : SN, the number support maximum 3 cell phone number, from  
No.1 to 3;

TeleNumber : Car owner's cell phone. Pls donot add county code, i.e.  
+86 etc.

Set example: (6081118888,2,**S05**,129,1,1,13999998888)

Inquire example: (6081118888,2,**S05**,129,0,1)  
(6081118888,2,**S05**,129,0,1,13999998888)

Return: (6081118888,2,**S05**,129, 1,13999998888)

Notice:

1. Donot add country code before the number
2. This number could be the operator staff's number for their Set on the unit. But please pay attention to the authority. And to avoid misoperation.
3. You could use this cell phone to remote control the unit when the unit is not working properly.

## 7.2.6 S06 Set or Inquire mileage speed ratio and mileage statistic methods

Command Identifier: S06

Command Function: Set or Inquire mileage speed ratio and mileage statistic methods

Parameter list:

Mode : "0" for Inquire; "1" for Set;

Value : speed ratio value being 1-65535; "0" means the electronic

mileage is disabled and the GPS mileage is adopted for  
mileage statistics.

Set example: (6081118888,2,**S06**,129,1,4000)

Inquire example: (6081118888,2,**S06**,129,0)

(6081118888,2,**S06**,129,0,4000)

Return: (6081118888,2,**S06**,129,4000)

Notice:

- 1.The speed ratio refers to the number of pulse signals generated on the mileage pulse signal for every one kilometer run by the vehicle. Every vehicle which Set electric mileage owns a mileage pulse signal wire. If you need more accurate mileage monitor, you can set up electric mileage, but in normal situation, the GPS mileage statistic will be ok. If adopt GPS mileage, the speed ratio must be “0”.
- 2 .For GPS mileage, you donot need to install anything;
- 3 .Only when the Ignition (ACC) is on, the GPS mileage is activated,Pls kindly note.

## 7.2.7 S07 Set or Inquire backup IP address and port

Command Identifier: S07

Command Function: Set or Inquire backup IP address and port

Parameter list:

Mode : “0” for Inquire; “1” for Set;

BackupIP : Backup IP, the format should be the same as the major IP  
address;

BackupPort : Backup port.

OnOrOff : If the backup IP is activated, “1” for enable, “0”for disable;

Set example: (6081118888,2,**S07**,129,1,123.22.123.8,10000,1)

Inquire example: (6081118888,2,**S07**,129,0)

(6081118888,2,**S07**,129,0,123.22.123.8,10000,1)

Return: (6081118888,2,**S07**,129,123.22.123.8,10000,1)

Notice:

- 1.Backup IP can be set in this instruction. When the primary IP can not be connected, the terminal will automatically connect the backup IP with the premise of the Valid is set as “1”, i.e. the backup IP is enabled.
- 2.It will choose the major IP in first priority in the next time’s connection;
- 3.Please make sure the backup IP and port is available.

## 7.2.9 S09 Set mileage synchronization

Command Identifier: S09

Command Function: Set mileage starting value, i.e. mileage synchronization

Parameter list:

Mode : “0” for Inquire; “1” for Set

Mileage : the mileage starting value to be set,from 0-0xFFFFFFFF.

Set example: (6081118888,2,**S09**,129,1,1200)

Inquire example: (6081118888,2,**S09**,129,0)

(6081118888,2,**S09**,129,0,1200)

Return: (6081118888,2,**S09**,129,1200)

Notice:

- 1.Each data has the current mileage value when it has been uploaded to server;
- 2.The mileage synchronization is majorly for managing the mileage and make it the same with the current vehicle mileage;The mileage starting value can be set through this command, keeping the mileage startingvalue of the terminal consistent with the actual mileage value of the vehicle for the convenience of mileage tracing and monitoring.

## 7.2.10 S10 Signal detecting

Command Identifier: S10

Command function : Checking or Set example signal detecting mode

Parameter list:

Mode : “0” for Inquire; “1”for Set

SignalID : Signal ID, please refer to Table 8 for detailed signal ID

Mode : detecting mode, there are four type of mode for choosing

Mode	Explain
0	Don't send any status report when the signal is changing
1	If there happen signal, send one piece status changing report



2	When the signal is over, send one piece status changing report
3	No matter any changing, always send one status changing report.

Set example command: (6081118888,2,**S10**,129,1,1,3)

Inquire command: (6081118888,2,**S10**,129,0,1)

(6081118888,2,**S10**,129,0,1,3)

Return: (6081118888,2,**S10**,129,1,3)

Notice: 1. Signal detecting is mainly used to detect the signal on or off status. Such as when the Taxi Free/Load signal connect with high reserved signal, need to know when the Taxi when turn the board (Free/load),but if your upload interval is 10 minutes, the free/load signal maybe not detecting, we use S10 solve this problem. Set example monitor the high reserved signal (signal ID is 8), mode is 3, so it will upload the status changing reports when happen on/off signal and achieve real time detect signal changing.

## 7.2.11 S11 Explode-proof function

Command Identifier: S11

Command Function: Inquire or Set example explode-proof function. This function is related with ACC, when ACC open, GPRS working and uploading data; when ACC closed, GPRS will not work and it will not upload any data.

Parameter list:

Mode : "0" for Inquire; "1"for Set

OnOrOff : "0"means don't open funtion, "1" means open this function

Set example: (6081118888,2,S11,129,1,1)

Inquire: (6081118888,2,**S11**,129,0)

(6081118888,2,**S11**,129,0,1)

Return: (6081118888,2,**S11**,129,1)

Notice: When open this function, please confirm that you have connected with the ACC signal wire ( A9 ) , and working properly, or it will cause the tracker don't upload/receive any data.After close ACC, it will not close GSM module at once, it will close it after 2 minutes.

## 7.2.12 S12 SMS control Set

Command Identifier: S12

Command Function: Access to control the tracker via SMS or not

Parameter list:

Mode : "0" for Inquire; "1"for Set

Allow : there are 3 Set example status:

0 : Don't allow to set via SMS

1 : Allow to set via SMS with any cell phone. (default mode)

2 : Only allow SMS center number to set via SMS.

Set example: (6081118888,2,**S12**,129,1,1)

Inquire example: (6081118888,2,**S12**,129,0)

(6081118888,2,**S12**,129,0,1)

Return: (6081118888,2,**S12**,129,1)

## 7.2.14 S14 Inquire firmware version

Command Identifier: S14

Command Function: Inquire current firmware version

Parameter list: None

Set example: None

Inquire example: (6081118888,2,**S14**,129)

Return: (6081118888,2,**S14**,129,20081205)

Notice: the firmware version show as YYYYMMDD format, means the version in which day.

## 7.2.15 S15 Data transfer mode

Command Identifier: S15

Command Function: Set upload mode

Parameter list:

Mode : "0" for Inquire; "1"for Set

ReturnMode : there are 3 upload mode as following

mode	note
0	TCP, all of the data will be upload via TCP connection(default mode)
1	UDP, all of the data will be upload via UDP connection
2	SMS, all of the data will be upload to SMS center number via SMS, the GPRS network will not be open in this mode.

Set example: (6081118888,2,**S15**,129,1,0)

Inquire example: (6081118888,2,**S15**,129,0)

(6081118888,2,**S15**,129,0,0)

Return: (6081118888,2,**S15**,129,0)

Notice:

1. when in mode 0 and mode 1,if the tracker receive the SMS command, it will still reply in SMS.
2. Recommend use TCP mode, the data transfer is stable,UDP mode maybe exist data lost or delay and so on.
- 3.In SMS mode, the tracker will not auto upload SMS data, you need to send S04 command to let it Return Type by SMS.

## 7.2.16 S16 Set the preservation value

Command Identifier: S16

Command Function: the terminal provides three 15-byte buffer areas to the user for storing any ASCII value(or non-zero binary numbers).

Parameter list:

Mode : "0" for Inquire; "1"for Set

Index : index from 0 to 2,indicating storage position

Value : the value to be stored(cannot be ","or 0x00)

Set example: (6081118888,2,**S16**,129,1,1,20090301\_NEO)

Inquire example: (6081118888,2,**S16**,129,0,1)

(6081118888,2,**S16**,129,0,1,20090301\_NEO)

Return: (6081118888,2,**S16**,129,1,20090301\_NEO)

Notice:

1. Any ",", or ("", or ") " sign is forbidden in the Value.
2. This space is usually used to store the installing data, installer or SIM card information (or store other thing)

## 7.2.17 S17 Set the upload interval of trip report

Command Identifier: S17

Command Function: Inquire the constantly driving time, the feedback running time is calculate with minutes.

Parameter list:

Mode : "0" for Inquire; "1"for Set

ReturnInterval : Upload interval,how long will upload current running report, unit is minute.

Set example: (6081118888,2,**S17**,129,1,10)

Inquire example: (6081118888,2,**S17**,129,0)

(6081118888,2,**S17**,129,0,10)

Return: (6081118888,2,**S17**,129,10,30,2)

in the return results, 10 shows upload interval, 30 shows that it have drive 30 minutes, 2 shows current the idling time is 2 minutes.

Notice:

1. When the speed is 0, it don't mean that the trip is over, maybe the vehicle is waiting in red light or idling, only the ACC is closed, the tracker think it is stop, so this is the reason why there are 2 minutes idling data.

## 7.2.19 S19 Set or Inquire the current loaded public external device drivers

Command Identifier: S19

Command function: Inquire or Set the current loaded public external device drivers.

Parameter list:

Mode: "0" for Inquire; "1" for Set

PortID: means port ID, GP6000 contain port from 1 to 3.

DriverID: referring to equipment, ID numbers as below:

Dvice ID	Device name	Baud rate
0	Does not load any	--

	external device	
1	Temperature sensor	9600bps
2	Dispatch Screen	9600bps
3	Undefined	--
4	Print	--
5	Bar-code Scanner	9600bps
6	Debugging handle	design
7	Undefined	--
9	RFID	9600bps
10	Undefined	--
11	Password keypad	9600bps
12	Undefined	---
13	The second RFID solution	9600bps
14	Digital fuel sensor	9600bps
15	Active RFID	19200bps
16	TPMS	9600bps
19	Drum sensor	-----
21	Camera	115200
22	Taximeter	9600

Set example: (6081118888,2,**S19**,129,1,1,3)

Inquire example:

(6081118888,2,**S19**,129,0,1)

(6081118888,2,**S19**,129,0,1,3)

Reply: (6081118888,2,**S19**,129,1,3)

Note: When the loaded driving procedure is set, the corresponding port can identify the equipment. However the baud rate (S20 instruction) should be set to avoid communication failure due to wrong baud rate. If it is set as loaded camera, the baud rate of the port should be set as 115200bps.

if you have loaded external device formerly,when use the serial port to set tracker's parameter(IP Adress,port,APN),you should load 0:None device firstly.otherwise,the tracker can't be setted

## 7.2.20 S20 Set external device baud rate

Command Identifier: S20

Command Function: Set or Inquire baudrate of current external device.

Parameter list:

Mode : "0" for Inquire; "1"for Set

PortID: means port ID, GP6000 contain port from 1 to 3.

BaudRate : baud rate Table

BaudRate ID	BaudRate
0	1200bps
1	2400bps
2	4800bps
3	9600bps
4	19200bps
5	28800bps
6	38400bps
7	57600bps
8	115200bps

Set example: (6081118888,2,**S20**,129,1,1,8)

(6081118888,2,**S20**,129,1,2,9)

Inquire example: (6081118888,2,**S20**,129,0,1)

(6081118888,2,**S20**,129,0,1,8)

Return: (6081118888,2,**S20**,129,1,8)

Notice: the default baudrate is 9600bps.GP6000 has three serial ports(Port B,COM1 and COM2)

## 7.2.22 S22 GSM network signal uploading

Command Identifier: S22

Command Function: Function: Inquire current GSM network signal status or Set the uploading interval of GSM signal status information.

Parameter list:

Mode : "0" for Inquire; "1"for Set

UpInterval : GSM signal information uploading interval, minute is unit.

Set example: (6081118888,2,**S22**,129,1,10)

Inquire example: (6081118888,2,**S22**,129,0)

(6081118888,2,**S22**,129,0,10)

Return: (6081118888,2,**S22**,129,10,14)

1. "10" in the return parameter means the upload interval of GSM network signal, minute as unit.
2. "14" in the return parameter means current GSM network signal status, the highest value is 31.

Notice: the detail uploading GSM network signal data please reference "U serial data"

## 7.2.23 S23 Inquire the CCID of SIM

Command Identifier: S23

Command Function: Inquire current CCID of SIM card

Parameter list: None

Set example: none

Inquire example: (6081118888,2,**S23**,129)

Return: (6081118888,2,**S23**,129,89860020230950512536)

Notice: The administrator could record the CCID of SIM card, you could check which tracker has install which SIM card, because after you have many trackers, after several change with different SIM card and trackers, maybe it is confused, you could check the status clearly.

## 7.2.24 S24 Set the user name and password of APN

Command Identifier: S24

Command Function: Set or Inquire the user name and password when connect to the GPRS network.

Parameter list:

Mode : "0" for Inquire; "1"for Set

UserName : User name

Password : password

Set example: (6081118888,2,**S24**,129,1,username,password)

Inquire example: (6081118888,2,**S24**,129,0)

(6081118888,2,**S24**,129,0,username,password)

Return: (6081118888,2,**S24**,129,username,password)

Notice: if it require the user name and password when you connect with the GPRS network, need to set this command, the length of user name and password must be below 31 bytes.

## 7.2.25 S25 Inquire history location data

Command Identifier: S25

Command Function: Inquire the history location data of the tracker

Parameter list:

StartPos : It means that start with the current time and go back-forward xx points, then start the Inquire from this point.

ReadCount : The total points you want to check, this value means how many points you want to check calculating from the StartPos.

Set example: None

Inquire example: (6081118888,2,**S25**,129,100,10)

Return: Please refer 6.1.2 description

Notice:

1.A point is a gps data

2. The tracker support to check via point methods, if you want to check the history location data via time methods, then you need to translate to point form time, the process as following:

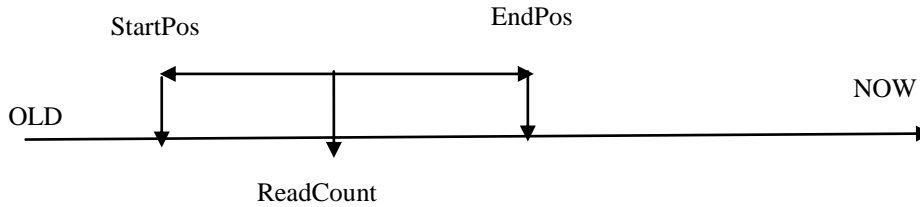
A) Calculate the points between Start point time and current point time.(the calculate method is that the time difference between this two points divide history location data storage



interval

- B) And then change the history time that you want to Inquire into points
- C) Send StartPos points and read the points.

3. Parameter as following:



## 7.2.27 S27 Set the time difference with Greenwich standard time

Command Identifier: S27

Command Function: Set the time difference with Greenwich standard time.

Parameter list:

Mode: "0" for Inquire; "1" for Set

TimeDifference : Support signed,if it is positive number, write the number directly, if it is negative number, need to put "-" before it. The default value is 0, minutes as unit.

Set example: (6081118888,2,**S27**,129,1,480)

Inquire example: (6081118888,2,**S27**,129,0)

(6081118888,2,**S27**,129,0,480)

Return: (6081118888,2,**S27**,129,480)

Notice:

1. Please notice the signed.
2. this function is mainly used to daily mileage report. After Set this value, the tracker will calculate the every day's mileage(from 0:00) basing the time difference, and then upload to the control center.
3. This function effect daily mileage and intelligent management about data uploading time

## 7.2.28 S28 Reply current location at once

Command Identifier: S28

Command Function: require uploading current location at once.

Parameter list: None

Set example: (6081118888,2,**S28**,129)

Inquire example: None

Return: It will return one normal binary code data at once.

## 7.2.29 S29 Set daily mileage function

Command Identifier: S29

Command Function: Set or Inquire if start the daily mileage function

Parameter list:

Mode: "0" for Inquire; "1" for Set

OnOrOff : If start the daily mileage function, 1 means start, 0 means don't start. The default mode start.

Set example: (6081118888,2,**S29**,129,1,1)

Inquire example: (6081118888,2,**S29**,129,0)

(6081118888,2,**S29**,129,0,1)

Return: (6081118888,2,**S29**,129,1)

Notice: the detail daily mileage uploading data please refer "U serial uploading data"

## 7.2.30 S30 Start trip report

Command Identifier: S30

Command Function: Set or Inquire if start the trip report.

Parameter list:

Mode: "0" for Inquire; "1" for Set

OnOrOff : Whether start the trip report function, 1 means start, 0 means closed. Default mode is closed.

Set example: (6081118888,2,**S30**,129,1,1)

Inquire example: (6081118888,2,**S30**,129,0)

(6081118888,2,**S30**,129,0,1)

Return: (6081118888,2,**S30**,129,1)

Notice: Detail trip report please refer " U serial data"

## 7.2.31 S31 Inquire the tracker call history

Command Identifier: S31

Command Function: Inquire terminal conversation(calls) records

Parameter list:

Index : Read which conversation record, from 1 to 10, the tracker only  
save 10 conversation records.

Set example: None

Inquire example: (6081118888,2,**S31**,129,1)

Return: (6081118888,2,**S31**,129,1,1,150XXXXXX,030809123212,32)

In the return parameter, 1 means communication record ID count backwards, 1 means this is the last communication, if it is 2, means the second communication, and so on. The tracker could record 10 communication records at most.

Every communication record composition as following:

- A) Call methods, 1 means dialing,0 means called
- B) Call number
- C) Start time, arrange as date/month/year/hour/minute/second
- D) Conversation time. Second as unit

In the parameter,1, 150XXXXXX,030809123212,32, 1 means dial, the number is 150XXXXXX, 030809123212 means the communication time is 2009-08-03,12:32:12, this is Greenwich standard time, 32 means conversation time is 32 seconds.

## 7.2.32 S32 Set power save mode

Command Identifier: S32

Command Function: Set power save mode.set the uploading time interval when vehicle **ACC is off** or **stopping status**.

**Moving or stopping status: when vehicle's speed is more than 3 KM/H,and it keeps on 10 seconds,it can be looked as moving.others conditions are stopping status.**

Parameter list:

Mode: "0" for Inquire; "1" for Set

SaveMode : there are 3 power save Mode as following:

Mode	Note
------	------

Mode 0	not start power save mode function
Mode 1	Standard power save mode, when ACC(Ignition) closed or vehicle is <b>stopping</b> , the tracker will auto upload the data basing the preset upload interval of standard power save mode.
Mode 2	Enhanced type power save mode,when ACC is closed or vehicle is <b>stopping</b> , GPS module will be closed, the tracker will auto upload the last data basing the preset upload interval of enhanced power-saving mode.
Mode 3	Deep power save mode, when ACC is closed or vehicle is <b>stopping</b> , the tracker close GSM and GPS module.after ACC on, it will re-upload the data

UpCount : the uploading data quantity in sleep mode, 0 means always uploading, the normal upload quantity range is 1 to 65535.

UpInterval : Upload interval,0 means don't upload, the range is from 1 to 65535, the unit is second.

**Judgemode: 0 indicates tracker refer to the ACC signal. 1 indicates tracker refer to the GPS speed(moving or stopping).**

Set example: (6081118888,2,**S32**,129,1,2,0,600,0)

Inquire example: (6081118888,2,**S32**,129,0)

(6081118888,2,**S32**,129,0,2,0,600,0)

Return: (6081118888,2,**S32**,129,2,0,600,0)

Notice:

1. if you want to start power save mode and (**Judgemode=0**) , the tracker need to connect with ACC(Ignition) wire,when Set power save mode in the situation which ACC is off, this function will not operation at once, it must need the ACC signal change one time, then finished;**if you set judgemode=1 (refer to stopping status),it's the same.**
2. when the tracker detecting ACC is off or **stopping status**, it will not start the power-saving mode immediately, it will delay 5 minutes.
3. When the tracker change the power save mode to normal upload mode, the tracker will auto Set the upload quantity(the parameter of UPCount) to be "0", it means that always uploading.

## 7.2.33 S33 Whether start real time uploading history location data

Command Identifier: S33

Command function: Set if start real time uploading the history location data

Parameter list:

Mode: "0" for Inquire; "1" for Set

OnOrOff : Whether start this function."1" means On,"0" means Off.

Set example: (6081118888,2,S33,129,1,1)

Inquire example: (6081118888,2,S33,129,0)

(6081118888,2,S33,129,0,1)

Return results: (6081118888,2,S33,129,1)

Notice:

After start this function, once there are new history location data, it will upload, if GPRS disconnect,it will re-upload after the network renew.

It is not available to send reading history location data command (S25) unless you closed this function.

## 7.2.34 S34 Inquire the last daily mileage record

Command Identifier: S34

Command Function: Inquire the last daily mileage

Parameter list: None

Set example: None

Inquire example: (6081118888,2,**S34**,129)

Return: (6081118888,2,**S34**,129,300409,321,142)

The parameter "300409" shows the date,month,year, 2009-04-30.

"321"Shows the last daily mileage data that record by the tracker.

"142" is the run time of that day, unit is minute.

## 7.2.35 S35 Set the history location data storage interval

Command Identifier: S35

Command Function: Set history location data storage interval.default value is one minute.

Parameter list:

Mode: "0" for Inquire; "1" for Set

Interval : Record interval, the unit is second, from 1 to 65535, default is 60 seconds.

Set example: (6081118888,2,**S35**,129,1,60)

Inquire example: (6081118888,2,**S35**,129,0)

Return: (6081118888,2,**S35**,129,60)

## 7.2.36 S36 Inquire trip record

Command Identifier: S36

Command Function: Inquire the history record of running section, the tracker save at most 10 trip data.

Parameter list:

Index : the value range is 1 to 10, the last trip ID is 1, the earliest trip ID is 10.

Set example: None

Inquire example: (6081118888,2,**S36**,129,1)

Return:

(6081118888,2,S36,129,1,230809090812,E,11323.1231,N,2312.2312,  
230809113212,E,11421.2387,N,2332.3212,393,1)

The part with gray color explain as following:

ID	example	note
1	1	Running section ID
2	230809090812	start time, date,month,year,hour,minute,second
3	E	start point is East longitude or West longitude
4	11323.1231	start longitude
5	N	start point is South latitude or North latitude
6	2312.2312	start latitude
7	230809113212	end time, date,month,year,hour,minute,second
8	E	End point is East longitude or West Longitude
9	11421.2387	End longitude
10	N	end point is South latitude or North latitude

11	2332.3212	end point latitude
12	393	running section mileage
13	1	if there happen over speed in the running section

## 7.2.37 S37 Set if start the channel exchanged between GPRS and SMS

Command Identifier: S37

Command Function: Set if start GPRS/SMS mode exchange

Parameter list:

Mode: "0" for Inquire; "1" for Set

OnOrOff : Whether start this function.

StartTime : The longest unavailable time of GPRS network, also the time of start SMS mode. When GPRS network is unavailable, and the constantly time is over this value, it will start SMS mode, the unit is second.

Interval : When start the SMS mode, the upload interval of one data in SMS mode. Normally from the cost consideration, the GPRS upload interval is less than SMS upload interval, such as it will upload one data every 10 seconds, but SMS upload one data every five minutes.

Set example: (6081118888,2,S37,129,1,1,900,300)

Inquire example: (6081118888,2,S37,129,0)

(6081118888,2,S37,129,0,1,900,300)

Return results: (6081118888,2,S37,129,1,900,300)

## 7.2.38 S38 Set the trigger signal wire of the seat belt and neutral gear

Command Identifier: S38

Command function: Set the trigger signal wire of the seat belt and neutral gear

Parameter list:

Mode: "0" for Inquire; "1" for Set

TargetSignal : The target signal , 1 means seat belt, 2 means neutral gear.

SignalID : The trigger signal ID, please refer to **Table 8**, if this value is 0, means cancel the IO port as trigger signal wire.

Set example: (6081118888,2,**S38**,129,1,1,1)

Inquire example: (6081118888,2,**S38**,129,0)

(6081118888,2,**S38**,129,0,1,1)

Return results: (6081118888,2,**S38**,129,1,1)

## 7.2.40 S40 Set parking report

Command Identifier: S40

Command Function: Set parking report

Parameter list:

Mode: "0" for Inquire; "1" for Set

OnOrOff : 1 means start parking report, 0 means close parking report function

Interval : If it constantly parking, this parameter is used to Set the report interval, minute as unit.

Set example: None

Inquire example: (6081118888,2,**S40**,129,0)

(6081118888,2,**S40**,129,0,1,10)

Return: (6081118888,2,**S40**,129,1,1,10)

Notice: Detail description please refer U15 command.

## 7.2.41 S41 Set vibration detecting function

Command Identifier: S41

Command Function: Set if start the vibration detecting

Parameter list:

Mode: "0" for Inquire; "1" for Set

OnOrOff : 1 means start this function, 0 means close this function



Set example: None

Inquire example: (6081118888,2,**S41**,129,0)

(6081118888,2,**S41**,129,0,1)

Return: (6081118888,2,**S41**,129,1)

Notice: 1. the car door and vibration sensor use the some IO port(door detecting wire), when you connect the vibration sensor with the tracker ,need to set this command.

## 7.2.42 S42 Set if start the temperature of chip detecting report

Command Identifier: S42

Command Function: Set if upload the temperature report of chip

Parameter list:

Mode: "0" for Inquire; "1" for Set

OnOrOff : 1 means start this function,0 means closed this function

UpInterval :Upload interval, minute as unit, support at most 1000 minutes.

Set example: None

Inquire example: (6081118888,2,**S42**,129,0)

(6081118888,2,**S42**,129,0,1,10)

Return: (6081118888,2,**S42**,129,1,1,10)

Notice: the tracker owns temperature self-detecting function, it could timing upload the IC temperature. And judge if it is running well.

## 7.2.43 S43 Intelligent management about data uploading time

Command Identifier: S43

Command Function: Set upload time intelligent management

Parameter list:

Mode: "0" for Inquire; "1" for Set

Type : Type,Set the date,time or day as the reference:

Type	note
------	------

"T"	time reference
"W"	week reference
"D"	date reference

OnOrOff : 1 shows open this reference,0 shows close this reference.

Para... : different refernce type, different item count of parameter means different meanings:

Type	Item count of parameter	note
"T"	must be 2	start time(such as 9),end time (such as 17),hour as unit,9 means 9 o'clock, 17 means 17 o'clock
"W"	equal to or below 7	which day you want to uploading data(big to small),such as 1,3,5 means Monday,Wednesday,Friday, the other day don't uploading data.
"D"	equal to or below 31	which date you want to uploading data(big to small),such as 1,2,3,4,5,11,12,13,14,15 means date 1-5 uploading data,11-15 uploading data, the other date don't upload.

Set example: (6081118888,2,**S43**,129,1,T,1,8,17)

(6081118888,2, **S43**,129,1,W,1,1,3,5,7)

(6081118888,2, **S43**,129,1,D,1,1,2,3,4,5,11,12,13,14,15)

Inquire example: (6081118888,2,**S43**,129,0,T)

(6081118888,2,**S43**,129,0,T,1,8,17)

(6081118888,2,**S43**,129,0,D)

(6081118888,2,**S43**,129,0,D,1,3,5,7,9,11,13,15,17,19)

(6081118888,2,**S43**,129,0,W)

(6081118888,2,**S43**,129,0,W,1,2,3,4,5)

Return: (6081118888,2,**S43**,129,T,1,8,17)

(6081118888,2,**S43**,129,D,1,1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0,0,0,0,0,0,0,0,0,0)

(6081118888,2,**S43**,129,W,1,1,2,3,4,5)

Notice:

time/date/day could be availale at the same time, it means that uploading data in some days or dates from which time to which time.

when you Set the day and date reference at the same time, only satisfy with the day and date, then it will upload data, such as date is 10, day is Friday, only Friday is date 10,then it will upload data.

## 7.2.44 S44 Return to factory-set

Command Identifier: S44

Command Function: Return to factory-set, let the tracker back to the factory Set.

Parameter list: None

Set example: None

Inquire example: None

Return: (6081118888,2,**S44**,129)

Notice: after tracker receive this command, it will erase all of the Set except SMS center number, main IP address and port, backup IP address and port, Vehicle owner's cell phone number, and back to the status of factory Set. please check the content on "IX.Default Set table".

## 7.2.45 S45 Set the vehicle name

Command Identifier: S45

Command Function: Set the vehicle name of current vehicle, the vehicle name info will be included in the alarm SMS instead of the terminal ID.

Parameter list:

Mode: "0" for Inquire; "1" for Set

CarNo : vehicle name, the maximum length is 15 bits, which can only be ASCII code.

Set example: (6081118888,2,**S45**,129,1,THA.4212)

Inquire example: (6081118888,2,**S45**,129,0,THA.4212)

(6081118888,2,**S45**,129,0)

Return: (6081118888,2,**S45**,129,THA.4212)

## 7.2.46 S46 Set IP address and Port of sub-connection (UDP)

Command Identifier: S46

Command Function: Set the second IP address and port for terminal, this connection will be used to transmit photo via UDP.

Parameter list:

Mode: "0" for Inquire; "1" for Set

UDP\_IP : UDP IP address format"XXX.XX.X.XX"

UDP\_Port : UDP port.

UDP\_DomainOrIP : use domain name or IP address to connect the assigned address, 0 means IP address, 1 means domain name

Set example: (6081118888,2,S46,123,1,123.45.0.123,8888,0)

Inquire example: (6081118888,2,S46,123,0,123.45.0.123,8888,0)  
(6081118888,2,S46,123,0)

Return: (6081118888,2,**S46**,129,123.45.0.123,8888,0)

## 7.2.47 S47 Set tracker passive listen-in

Command Identifier: S47

Command Function: Set tracker passive listen-in. the tracker will automatic answer incoming call after you call the tracker But It's different from two-way voice call.

Parameter list:

Mode: "0" for Inquire; "1" for Set

Autopick:"0"disable; "1" enable Default Set is disabling this function.

Set example: (6081118888,2,**S47**,123,1,1)

Inquire example: (6081118888,2,**S47**,123,0,1)  
(6081118888,2,**S47**,123,0)

Return: (6081118888,2,**S47**,129,1)

## 7.2.48 S48 Cell phone track current vehicle's location

Command Identifier: S48

Command Function: using cell phone to track vehicle's current location

Parameter list: None

Set example: None

Inquire example: (6081118888,2,**S48**,123)

Return:

FABCD\_2310,http://maps.google.com/?q=22.123432N, 113.231223E,ACC on,speed:0km/h,gsm signal:23,gps signal:8.

FABCD\_2310 is vehicle name, you can use S45 command to set

<http://maps.google.com/?q=22.123432N, 113.231223E> is the current location's link

ACC on: the current ACC status;

speed:0km/h: current vehicle speed;

gsm signal:23, the current GSM signal value, 31 is the highest, means the best signal;

gps signal:8, the current captured satellite number;

## 7.2.49 S49 Set the longest talk time

Command Identifier: S49

Command function: Set the longest talk time for two-way voice feature. Default is 15 minutes.

Parameters:

Mode : "0" for Inquire; "1" for Set

Value : the length of talk time. Unit is seconds.

The maximum is 900 seconds. Viz. 15minutes.

Setting example: (6081118888,2,**S49**,123,1,900)

Inquiry example: (6081118888,2,**S49**,123,0,900)

(6081118888,2,**S49**,123,0)

Reply: (6081118888,2,**S49**,129,900)

## 7.2.50 S50 Inquire single GPS information via SMS

Command Identifier: S50

Command function: Require that tracker reply a current GPS information via SMS. The content of this information. Please refer to the U05 command.

Parameters: None

Setting example: (6081118888,2,**S50**,123)

Inquiry example: None

Reply: Refer to the U05 command

## 7.2.51 S51 Set the heartbeat of the network

Command Identifier: S51

Command function: Set the heartbeat of the network.it's used for acknowledge the receiving data which transmit via UDP.

Parameters:

Mode : "0" for Inquire; "1" for Set

OnOrOff : whether enable this function or not, "1" indicates enable;  
"0" indicates disable.

If the current data transmission mode is UDP, Tracker will enable this function automatically; If TCP, You can choose if enable this function or not; If the current data transmission mode is SMS, default is disable it. You can't choose it.

MaxLostTimes : The maximum number of times which control center didn't acknowledge the heartbeat from tracker. When the number of times is equal to this number ,Tracker will reconnect the GPRS network.

Setting example: (6081118888,2,**S51**,123,1,1,3)

Inquiry example: (6081118888,2,**S51**,123,0,1,3)

(6081118888,2,**S51**,123,0)

Reply: (6081118888,2,**S51**,129,1,3)

Notice:

TCP	enable /disable this function
UDP	Forcibly enable it
SMS	Forcibly disable it

When control center received GPS data from tracker, It must acknowledge this GPS data. The acknowledgement as below:

**(6080808888,1,U23,123)**

## 7.2.52 S52 Set Keep alive procedure

Command Identifier: S52

Command function: Set Keep alive procedure. In order to keep connection in GPRS network, tracker can be set to send short keep alive report to the server in order to prevent the disconnection from the mobile service provider.and the keep alive report is "@JT". Excluding " ".

Parameters:

Mode : "0" for Inquire; "1" for Set

OnOrOff : whether enable this function or not, "1" indicates enable;  
"0" indicates disable.

Timeinterval : the time interval of the keep alive report.Unit is second.

Setting example: (6081118888,2,**S52**,123,1,1,600)

Inquiry example: (6081118888,2,**S52**,123,0,1,600)  
(6081118888,2,**S52**,123,0)

Reply: (6081118888,2,**S52**129,1,600)

## 7.2.54 S54 Set Uploading position data when turning a corner

Command Identifier: S54

Command function: Enable or disable uploading position data when turing a corner.

Parameters:

Mode : "0" for Inquire; "1" for Set

OnOrOff : whether enable this function or not, "1" indicates enable;  
"0" indicates disable.

Turn angle :only when turn angle is more than this preset value,Can the tracker uploads one  
position data.

Setting example: (6081118888,2,**S54**,123,1,1,10)

Inquiry example: (6081118888,2,**S54**,123,0,1,10)  
(6081118888,2,**S54**,123,0)

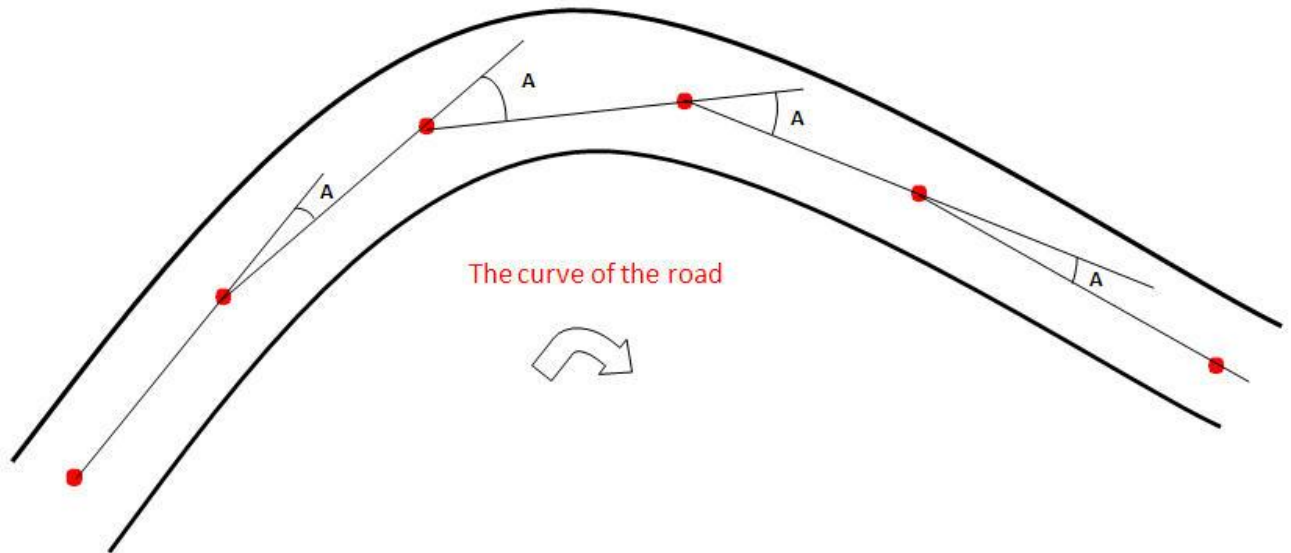
Reply: (6081118888,2,**S54**,129,1,10)

Notice:

The function is relative with ACC signal and GPS signal. Only when ACC signal is on, GPS signal is valid and the turn angle is bigger than your preset value, There is a position data uploading to control center. Tracker would calculate the turn angle change every 3 seconds.

**Red point:** position information.

**A :** turn angle. If the turn angle is more than preset degrees, There is a position information uploading to center server.



## 7.3 "A" serial alarm Set/control command

### 7.3.1 A01 Alarm Set command

Command Identifier: A01

Command Function: Alarm switch, such as if need to confirm by control center, or need to send the alarm to the cell phone.

If you Set that need to confirm by control center, it will constantly upload the alarm until the control center confirm the alarm.

Parameter list:

Mode: "0" for Inquire; "1" for Set

Alarm\_ID : alarm ID as following:

ID	alarm type
1	enter geo-fence



2	out geo-fence
3	overtime parking alarm
4	GSM module reset alarm
5	fatigue driving alarm
6	Over speed alarm
7	SOS alarm
8	Using backup battery alarm
9	Illegal open door alarm
10	Illegal ignition on alarm
11	fuel level change alarm
12	tow alarm
13	Vibration alarm
14	hot spot in/out alarm
15	Zone or road out/in alarm
16	Zone or road over speed and overtime parking alarm
17	Zone or road time relative alarm, such as reach to one road at a forbidden time
18	Extend digital fuel level change alarm
19	Universal port pulse calculation alarm
22	Temperature change alarm
23	Seat belt unfasten alarm
24	Harsh braking alarm
25	Neutral gear sliding alarm
26	Tyre pressure alarm
27	GPRS connection Reconnect alarm
28	GPS antenna disconnected alarm

Alarm\_Send : If send the alarm, it means that if it happen alarm, whether upload the alarm to the control center.

Alarm\_Ack\_Time : Confirm time interval Set, if the tracker don't receive the confirm from control center at this interval, it will re-uploading the confirm again. The Max value is 7, unit is 10 seconds, it means that it will upload the alarm again Max 70 seconds.

Alarm\_SMS\_Send : Whether upload the alarm into car owner's cell phone number via SMS.

Set example: (6081118888,2,A01,129,1,7,1,5,1)

Inquire example: (6081118888,2,A01,129,0,7,1,5,1)

(6081118888,2,A01,129,0,7)

Return: (6081118888,2,A01,129,7,1,1,5,1)

In the gray part of the "Return", 7 means alarm ID, first "1" means need to send the command, the second "1" means need to confirm by control center,"5" means if haven't receive the confirm by control center, re-upload the the alarm information after 50 seconds, the last "1" means sending the alarm to the car owner cell phone also.

## 7.3.2 A02 Initialization alarm Set

Command Identifier: A02

Command Function: initialization alarm Set command,back to factory Set regarding to the alarm.

Parameter list: None

Set example: (6081118888,2,A02,129)

Inquire example: (6081118888,2,A02,129)

Return: (6081118888,2,A02,129)

Notice:

1. the parameter of initialization as following:

SOS alarm and fuel level change alarm default Set is that need control center confirm, if didn't receive the confirm command from control center, upload the alarm information again every 50 seconds, other alarm don't need to confirm by control center,but it will upload the alarm information.

## 7.3.3 A03 Alarm confirmed command

Command Identifier: A03

Command Function: Confirm that the control center have received the alarm, the detail alarm ID please refer A01 command.

Parameter list:

AlarmID : Alarm ID number.

Set example: (6081118888,2,A03,129,7)

Inquire example: None

Return: if it receive the correct alarm confirm, it will feedback as following:

(6081118888,2,A03,129,7)

or it will feedback the invalid confirm information reminding:

(6081118888,2,A03,129, INVALID ACK)

Notice: 1. The correct alarm confirm means that if the tracker upload a alarm that need control center to confirm, and control center also confirm this alarm message correctly; it will feedback the invalid alarm message reminding if the tracker don't happen alarm or re-confirm the alarm again which has confirm before.

## 7.3.4 A04 Set overtime parking alarm parameter

Command Identifier: A04

Command Function: Set the limit value for parking overtime alarm.whether vehicle was parking or not,Refer to the igniton signal wire.

Parameter list:

Mode : Operate mode, "0" for query, "1" for Set.

StopTime : Limit value of parking alarm, minutes as a unit, value rang: 1-432minutes, after make sure parking, if the parking time over this value will cause parking overtime alarm.

**Start:** Start time to enable this function. in the unit of Hour and it is Greenwich time

**End:** End time to enable this function. in the unit of Hour and it is Greenwich time

Set example: (6081118888,2,A04,129,1,60,8,18)

Inquire example: (6081118888,2,A04,129,0,60,8,18)

(6081118888,2,A04,129,0)

Return: (6081118888,2,A04,129,60,8,18)

"60" is StopTime,minutes as unit.

Notice: After parking overtime alarm, it will upload U01 instruction

If you want that the tracker would be enabled this function during some time, You must set S27 (time zone) first.

### 7.3.5 A05 Set over speed alarm parameter

Command Identifier: A05

Command Function: Set overspeed monitor relate paramter

Parameter list:

Mode : "0" for query, "1" for Set.

SpeedValue : overspeed threshold; it is 0-255 in the unit of KM/H; when it is "0", it means that the overspeed monitoring function is disabled.

KeepTime : lasting time; it is 3-255 in the unit of second; the minimum value is 3 seconds.

GpsValid : orientation or not. If it is "1", it means judgment of the speed is working only under location(A), otherwise it will be considered that the speed limit is not exceeded. If it is "0", judgment on the speed will be realized regardless of location or not.

UpInterval :upload interval time, if keeping overspeed driving, so upload information timing. Seconds as unit.

Set example: (6081118888,2,**A05**,123,1,60,5,1,1)

Inquire example: (6081118888,2,**A05**,129,0,60,5,1,1)  
(6081118888,2,**A05**,129,0)

Return: (6081118888,2,**S05**,129,60,5,1,1)

Notice: 1.When overspeed alarm is generated and A06 command has been set, the hooting of the overspeed alarming horn in the vehicle, cautioning the driver to pay attention to driving safety. When an alarm is generated, it will be submitted to the control center; if the alarm continuous, no new alarms will be generated.

### 7.3.6 A06 Set over speed alarm indication in vehicle

Command Identifier: A06

Command Function: Whether open overspeed hint or not, if it is open, when happens overspeed alarm, the buzzer will hoot to hint driver pay attention speed.

Parameter list:

Mode : "0" for query, "1" for Set

Beep : "0" means close overspeed indication in vehicle, "1" means open overspeed indication in vehicle.

Set example: (6081118888,2,**A06**,129,1,1)

Inquire example: (6081118888,2,**A06**,129,0)  
(6081118888,2,**A06**,129,0,1)

Return: (6081118888,2,A06,129,1)

“1” means overspeed alarm indication in vehicle

Notice: While using this function, an overspeed alarm horn/ buzzer must be connected.

## 7.3.7 A07 Set fatigue driving alarm

Command Identifier: A07

Command Function: Set fatigue driving monitor parameter

Parameter list:

Mode : “0” for query, “1” for Set

AlarmValue : Fatigue driving limit value: maximum support 60000 seconds, “0” for cancel fatigue driving alarm function.

ReleaseTime : Cancele fatigue driving time, when the parking over this time it means cancele fatigue driving alarm. Seconds as unit, this value can beyond AlarmValue, or it will cancel fatigue driving function.

UpInterval : Alarm upload interval, seconds as unit, if the fatigue driving alarm haven't cancel, it will upload the current status interval, continuous fatigue driving time parameters will keeping changing

Set example: (6081118888,2,A07,123,1,10800,1200,600)

Inquire example: (6081118888,2,A07,123,0,10800,1200,600)

(6081118888,2,A07,123,0)

Return: (6081118888,2,A07,123,10800,1200,600)

Notice: 1. After fatigue driving alarm, terminal will upload U01 fatigue driving alarm and Set time to upload latest alarming status timing, After alarm finish, terminal will make summarize report for this fatigue driving and sent it to control center, detail fatigue driving report pls reference U serial upload instruction.

## 7.3.8 A08 Inquire fatigue driving alarm record

Command Identifier: A08

Command Function: Inquire the fatigue driving record, the tracker most record the latest 10 times fatigue driving record.

Parameter list:

Index : Fatigue driving index, last index value is “1” , the second is “2”, the earliest fatigue driving alarm record is 10.

Set example: None

Inquire example: (6081118888,2,**A08**,129,1)

Return:

(6081118888,2,**A08**,129,1,230809090812,E,11323.1234,N,2345.1232,230809142315,E,11325.3921,N,2346.2934,14320,395,1)

The part with gray color explain as following:

ID	example	note
1	1	Fatigue driving ID
2	230809090812	The start time of fatigue driving, date,month,year,hour,minute,second
3	E	start point is East longitude or West longitude
4	11323.1234	start longitude
5	N	start point is South latitude or North latitude
6	2345.1232	start latitude
7	230809142315	end time, date,month,year,hour,minute,second
8	E	End point is East longitude or West Longitude
9	11325.3921	End longitude
10	N	end point is South latitude or North latitude
11	2346.2934	end point latitude
12	14320	the keeping time of this fatigue driving
13	395	the total mileage of this fatigue driving, Kilometre as unit
14	1	overspeed or not

### 7.3.9 A09 Set fuel level change alarm parameter

Command Identifier: A09

Command Function: Set fuel level change alarm parameter

Parameter list:

Mode : "0" for query, "1" for Set

Alarm : "0" for Fuel level change alarm disabled; "1" for Fuel level change alarming enabled

Value : Threshold of the Fuel level change alarm; from 0 to 4096

CheckInterval : Check interval, unit is minutes.

ReleaseTime : unit is minutes. From 0 to 2000.It means the effective time of the fuel level change alarm.

Set example: (6081118888,2,A09,123,1,1,200,5,30)

Inquire example: (6081118888,2,A09,129,0)

(6081118888,2,A09,129,0,1,200,5,30)

Return: (6081118888,2,A09,129,1,200,5,30)

"1"for enabled, the threshold of the Fuel level change alarm is 200, 5 means fuel level detecting interval, minute as unit.30 it means the effective time of this alarm

Notice: In initialization, the threshold of the Fuel level alarm is 120, an alarm will be generated when the fuel level value over than specified value between two time intervals .

### 7.3.10 A10 Set tow alarm parameter

Command Identifier: A10

Command Function: Set tow alarm parameter

Parameter list:

Mode : "0" for query, "1" for Set.

Alarm : Whether use pull and hang alarm or not, "1" means open, "0" means closed and initialization.

Time : Hold time,to reach minimum hold time of minimum speed, initialize is 15 seconds.

Set example: (6081118888,2,A10,123,1,1,15)

Inquire example: (6081118888,2,A10,129,0)

(6081118888,2,A10,129,0,1,15)

Return: (6081118888,2,A10,129,1,15)

Notice: If you want to operate this function normally, the terminal have connect ACC signal, when the ACC closed and the speed over 5 Knots, also the duration meet time paratmeter, so it can do tow alarm.

### 7.3.11 A11 Set seat belt unfasten alarm parameter

Command Identifier: A11

Command function: Set seat belt unfasten alarm parameter.

Parameter list:

Mode : "0" for query, "1" for Set.

Alarm : whether start this alarm, 0 means start, 1 means not start, the default Set is 0.

Speed : The lowest speed threshold, if over this speed, it will check if the seat belt is lock. If it is lower this speed, it will not detecting, and will not trigger the alarm.

Time : Constantly time, it means that the lowest time that over the threshold speed and unlock seatbelt.

Set example: (6081118888,2,**A11**,123,1,1,15,5)

Inquire example: (6081118888,2,**A11**,129,0)

(6081118888,2,**A11**,129,0,1,15,5)

Return result: (6081118888,2,**A11**,129,1,15,5)

Notice: if want to use this function, the tracker must connect with the ACC and seat belt signal and set S38 command.

### 7.3.12 A12 Set harsh braking alarm parameter

Command Identifier: A12

Command function: Set the relevant parameter of harsh braking alarm

Parameter list:

Mode : "0" for query, "1" for Set.

Alarm :Whether start harsh braking alarm. 0 means start, 1 means don't start, the default Set is 0.

Speed : Lowest speed threshold(**Vx**), it will start to detect if happen harsh braking after over this value and there is coming braking signal.

Rate : The decreased rate in the designated time(**R**), once over this ratio, it will trigger the harsh braking alarm. The value is from 5 to 99. if it is over this range, it will return an Error reply message.

**R** define as the speed decreased rate

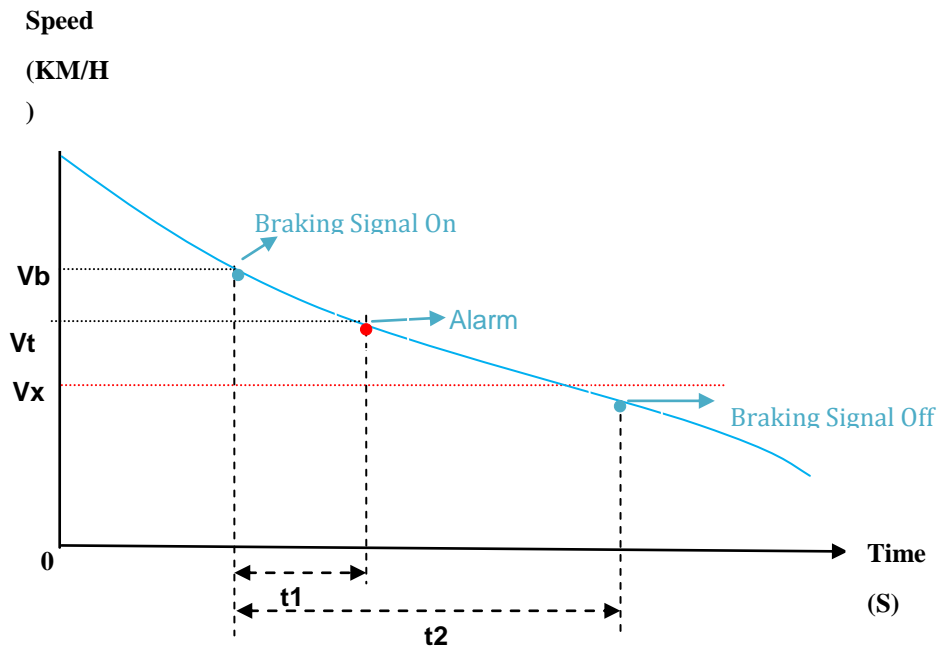


**Vb** define as the speed before braking

**Vt** define as the speed after braking

$$R = (Vb - Vt) * 100 / Vb$$

Time : Time threshold(**t1**), in this time, the decreased rate over Rate, then it will trigger the alarm. The unit is second, from 1 to 100. If over this value, it will auto adjust to 100, if it is 0 and also start this alarm, it will auto adjust to 1.



**t1** define as time threshold

**t2** define as the duration of braking

**Vb** define as the speed when braking

**Vt** define as the speed when braking after **t1** seconds

**Vx** define as the lowest speed threshold

Set example: (6081118888,2,**A12**,123,1,1,30,80,3)

Inquire example: (6081118888,2,**A12**,129,0)

(6081118888,2,**A12**,129,0,1,30,80,3)

Return result: (6081118888,2,**A12**,129,1,30,80,3)

(6081118888,2,**A12**,129,ERROR)

Notice: If want to start this function, must connect with the braking signal.

### 7.3.13 A13 Set neutral gear sliding alarm parameter

Command Identifier: A13

Command function: Set relevant parameter of neutral gear sliding

Parameter list:

Mode : "0" for query, "1" for Set.

Alarm : whether start Neutral gear alarm, 0 means start, 1 means not start, default Set is 0.

Speed : Lowest speed threshold. After start this function, if over this speed it will detecting if there happen neutral gear.

Time : Time threshold, after the constant time of neutral gear over this value, it will trigger the alarm.

Set example: (6081118888,2,**A13**,123,1,1,10,3)

Inquire example: (6081118888,2,**A13**,129,0)

(6081118888,2,**A13**,129,0,1,10,3)

Return results: (6081118888,2,**A13**,129,1,10,3)

Notice: if want to start this function, must Set S38 command and connect vehicle neutral gear signal wire.

## 7.4 "G"Set"G"Serial,postion/things/point command

### 7.4.1 G01 Set geo-fence control command

Command Identifier: G01

Command Function: Inquire or Set current geo-fence function are effective or not, and set geo-fence holding time, judge mode.

Parameter list:

M : "0" for query, "1" for Set.

Valid : "1" means open geo-fence function, "0" mean closed geo-fence function.

AV : "1" means can make judge only GPS locating, "0" means close geo-fence function.

KeepTime : At geo-fence (in/out) keep time value, 0-245,0 means no judgement this geo-fence.

Set example: (6081118888,2,G01,129,1,1,1,5)

Inquire example: (6081118888,2,**G01**,129,0)

Return: (6081118888,2,G01,129,1,1,5,64)

The first "1" means whether open geo-fence function, the second "1" means only GPS locating can do judgement. "5" means the keep time in the fency. "64" show the total fency

Notice: Sometimes, GPS locating, sometimes have blind area, AV limit GPS data for judge.

## 7.4.2 G02 Set single geo-fence command

Command Identifier: G02

Command Function: inquire or set single geo-fence.

Parameter list:

Mode : "0" for query, "1" for Set.

ID : geo-fence NO.

M : Operate mode

M = 1 : Set geo-fence information.

M = 2 : The fency of this fency inefficiency ( cannot judge the following value)

AlarmMode : alarm mode

AlarmMode = 0 : don't alarm

AlarmMode = 1 : alarm no matter out or in geo-fence

AlarmMode = 2 : alarm when enter geo-fence

AlarmMode = 3 : alarm when out geo-fence.

LTLongitude : The top left corner longitude

LTLatitude : The top right corner latitude

RBLongitude : The bottom right corner longitude

RBLatitude : The bottom ring latitude

Name : geo-fence name: limit by save, mostly 15 byte

**StopRecordData : Whether upload the gps data and store the history data when vehicle enter this geo-fence. 1 indicates not uploading and storing; 0 indicates uploading and storing the gps data. Default is 0.**

Set example:

(6081118888,2,G02,123,1,3,1,1 11232.1230,2212.3431,11341.2100,2212.5674,sale,0)

Inquire example:

SHENZHEN JOINT TECHNOLOGY CO.,LTD.

(6081118888,2,G02,123,0,3,1,1,11232.1230,2212.3431,11341.2100,2212.5674,sale,0)

(6081118888,2,G02,123,0,3)

Return: If fency ID wrong, return (6081118888,2,G02,123,ERROR ID)

if it is right, return

(6081118888,2,G02,129,3,1,1,11232.1230,2212.3431,11341.2100,2212.5674,sale,0)

Notice: 1. longitude or latitude both should be disposal( the form of after conversion is DDDMM.MMMM or DDMM.MMMM ), in the instruction, let longitude or latitude multiply 10000, the longitude that need to transfer is 11323.1243, so let 11323.1243 multiply 10000 switch to 113231243. as the same as latitude. Terminal most support 64 geo-fence.

### 7.4.3 G03 Set hot spot command

Command Identifier: G03

Command Function: inquire or set hot spot.

Parameter list:

Mode : "0" for query, "1" for Set.

Point\_ID : Is the hot spot ID NO, most can save 64 hot spot.

Point\_Longitude : Hot spot longitude. The form of this longitude can reference geo-fence (G02).

Point\_Latitude : Hot spot latitude. The form of this latitude can reference geo-fence (G02).

Point\_Name : Hot spot name, most 15 byte, And the name should not contain " , "

**StopRecordData : Whether upload the gps data and store the history data when vehicle enter this hot spot. 1 indicates not uploading and storing; 0 indicates uploading and storing the gps data. Default is 0.**

Set example:

(6081118888,2,G03,123,1,1,11323.1234,2312.3332,SwanPlace,0)

Inquire example:

(6081118888,2,G03,123,0,1,11323.1234,2312.3332,SwanPlace,0)

(6081118888,2,G03,123,0,1)

Return:

(6081118888,2,G03,123,1,11323.1234,2312.3332,SwanPlace,0)

Notice: 1. If you want cancel this hot spot, you can set longitude and latitude as "0".

2. The radii of hot spot is 150 meter.

## 7.4.4 G04 Set if start Zone or road function

Command Identifier: G04

Command function: Set if start Zone or road function

Parameter list:

Mode : "0" for query, "1" for Set.

Valid : 1 means start Zone or road function, 0 means not.

Set example: (6081118888,2,**G04**,123,1,1)

Inquire example: (6081118888,2,**G04**,123,0,1)

(6081118888,2,**G04**,123,0)

Return result: (6081118888,2,**G04**,123,1)

Notice: if cancel this function, the tracker will not judge the Sets any more, but this Set still store in the device.

## 7.4.5 G05 Set the valid distance of Zone or road

Command Identifier: G05

Command function: Set the valid distance of Zone or road

Parameter list:

Mode : "0" for query, "1" for Set.

Distance : Valid distance, unit is meter, the default Set is 100m.

Set example: (6081118888,2,**G05**,123,1,200)

Inquire example: (6081118888,2,**G05**,123,0,200)

(6081118888,2,**G05**,123,0)

Return result: (6081118888,2,**G05**,123,200)

Notice: If current point and one of pre-set zone or road distance is in the valid distance, it is thought that this vehicle is on this Zone or road.

## 7.4.6 G06 Set if the Zone or road is valid

Command Identifier: G06

Command function: Set if the Zone or road is valid, if Set invalid, it will not judge.

Parameter list:

Mode : "0" for query, "1" for Set.

AreaRoadID : the ID of Zone or road, from 1 to 100, the max is 100.

Valid : 1 means valid, 0 means invalid, other value haven't defined.

**StopRecordData : Whether upload the gps data and store the history data when vehicle enter this fence.**  
**1 indicates not uploading and storing; 0 indicates uploading and storing the gps data.**  
**Default is 0.**

Set example: (6081118888,2,**G06**,123,1,13,1,0)

Inquire example: (6081118888,2,**G06**,123,0,13,1,0)

(6081118888,2,**G06**,123,0,13,0)

Return result: (6081118888,2,**G06**,123,13,1,0)

## 7.4.7 G07 Set the detailed point of Zone or road

Command Identifier: G07

Command function: Set the detailed point of Zone or road

Parameter list: Mode,ID,Type,PageID,PointCount,PointA\_X,PointA\_Y,...

Mode : "0" for query, "1" for Set.

AreaRoadID : The ID number of Zone or road, ID is from 1 to 100, max 100.

Type : **Means current Set is Zone or road, 1 means road, 0 or other value means zone.**

PageID : Detail point "page" ID value, every page owns 16 points (please refer the Notice description about the page)

PointCount : The current point quantity that have set.

Point1\_X,Point1\_Y,Point2\_X... : nodal point information, one fully nodal point consist of one longitude and one latitude, every nodal point occupy 8 bytes, such as longitude is 11312.3212

Set example:

(6080808888,2,**G07**,123,1,13,1,2,10,11323.1234,2312.3212,11324.2312,2312.3212...)

Inquire example: (6081118888,2,G07,123,0,13,1,2)

(6080808888,2,G07,123,0,13,1,2,10,11323.1234...)

Return Result: (6080808888,2,G07,123,13,1,15,1,10,11323.1234...)

13 indicates the ID number of the current zone or road;1 indicates it's road;

15 indicates total points;1 indicates the ID number of the page;10 indicates the current point quantity that have set on this page; 11323.1234..is each point's longitude and latitude.

Notice: the nodal point is hex data, every G07 command only could be contained 10 node informations,

One zone or road consist of max 200 points, because every G07 command can only set 10 points .so when we send the G07 to set a zone or a road,these points need to be paged .every page include 10 point, it means that every Zone or road max include 20 page.

## 7.4.8 G08 Set the Zone or road Geo-fence name and monitoring mode

Command identifier: G08

Command function: Set the Zone or road Geo-fence name and monitoring mode

Parameter List:

Mode : "0" for Inquire; "1" for Set;.

AreaRoadID : Set the ID of the monitoring Zone or road, starting from 1 to maximum 100;

AlarmType : Four values, "1" for entering geo-fence alarm, "2" for alarm of leaving Geo-fence, "3" for alarm both enter/ leaving Geo-fence, "0" for no alarm.

UserDef : User defined field, could be any value between 0-255,tracker will only save or query this value. This value is used for grouping the Zone or road.

MaxSpeed : Maximum speed, If the speed is over this value in the Zone or road, it will generating over-speed alarm whatever the A05 command has been activated or not. If the value is"0", then it will not detect the over-speed.

TimeStart : starting time.

TimeEnd : ending time.

TimeAdjustType : time judge mode,

1 means Generating Alarm when the vehicle enter the Zone or road before the Starting Time;

2 means Generating Alarm when the vehicle enter the Zone or road late than the Ending Time;

3 means Generating Alarm both the above 2 situation;

4 means Generating Alarm when the vehicle enter the zone or raod after the Starting Time and before the Ending time;

If the TlmeStart and TimeEnd =0, the alarm will not judge the parameter of TimeAdjustType;

MaxStopTime : Maximum Parking Time; If the vehicle parking in this Zone or road for more than the defined time, it will generating alarms; The time unit is in Second;( whatever if you set the A04 Command).

Name :The Zone or road Geo name; the length should be less than 15 bytes. And the name should not contain “,”

Set example: (6081118888,2,**G08**,123,1,13,3,0,0,8,18,4,600,sale point 1)

Inquire example: (6081118888,2,**G08**,123,0,13)

(6081118888,2,**G06**,123,0,13,3,0,0,8,18,4,600,sale point 1)

Return: (6081118888,2,**G06**,123,13,3,0,0,8,18,4,600,sale point 1)

## 7.4.9 G09 Set the valid radius of hot spot

Command Identifier: G09

Command function: Set the valid radius of hot spot.The area within this radius is hot spot's range.

Parameter list:

Mode :“0” for query, “1” for Set.

Radius : Valid radius, unit is meter, the default Set is 150m.

Set example: (6081118888,2,**G09**,123,1,500)

Inquire example: (6081118888,2,**G09**,123,0,500)

Return result: (6081118888,2,**G09**,123,500)



## 7.5 “C” serial terminal remote control command

### 7.5.1 C01 Cold start the terminal

Command Identifier: C01

Command Function: request terminal turn off power and re-start.

Parameter list: None

Set example: None

Inquire example: (6081118888,2,**C01**,129)

Return: (6081118888,2,**C01**,129)

Notice: 1.After terminal receive re-start command, so enter the re-start state immediately, this state will keep 15-30 seconds, and later the whole machine power off. Around 10 seconds, re-power on. The whole process need 30 seconds, normally won't over 1 minute.

### 7.5.2 C02 Test over speed alarm buzzer

Command Identifier: C02

Command Function: Request inspect overspeed horn or buzzer, normally use for test horn or buzzer install right or not in install process.

Parameter list: None

Set example: None

Inquire example: (6081118888,2,**C02**,129)

Return: (6081118888,2,**C02**,129)

Notice: 1. After terminal receive this command will try to let alarm horn or buzzer keeping ring (depends on buzzer), after ring 5-8 seconds.the horn or buzzer output closed.

### 7.5.3 C03 Remote door opening or closing

Command Identifier: C03

Command Function: Request terminal operate open the door/close the door,

Parameter list:

Operator : "0" for close the door, "1" for open the door

Set example: (6081118888,2,C03,123,1)

Inquire example: None

Return: (6081118888,2,C03,123,1)

Notice:1.After terminal receive this command ,and then drive open the door/close the door IO port immediately by relay, this IO port cann't connect with vehicle's open door /close door control wires.

2. Open door/close door control pulse width approach 800ms.

## 7.5.4 C04 Cut off oil and power command

Command Identifier: C04

Command Function: control vehicle, fuel circuit power supply, the power supply of fuel pump circuit to cut off oil and electronic.

Parameter list: None

Set example: (6081118888,2,C04,129)

Inquire example: None

Return: (6081118888,2,C04,129,1)

Notice:

1.After terminal receive command will renew fuel and power 4 seconds, 4 seconds as a group, total have 8 group, as off oil and electronic to control vehicle's oil-way.

2. Need connect relay to drive

3. If it is in the off oil and electronic stats, so there are have no reply.

## 7.5.5 C05 Enable oil and power

Command Identifier: C05

Command Function: Get through vehicle's fuel pump circuit.

Parameter list: None

Set example: (6081118888,2,C05,129)

Inquire example: None

Return: (6081118888,2,C05,129,0)

Notice: 1. After terminal receive this command ,and then turn on vehicle's fuel pump circuit.

## 7.5.6 C06 Remote listen-in command

Command Identifier: C06

Command Function: Request terminal dialing the specify telephone or cell phone number, so that can listen-in.

Parameter list:

TeleNo:the telephone or cell phone number

Set example: (6081118888,2,C06,129,13710103232)

Inquire example: None

Return: (6081118888,2,C06,129,13710103232;)

Notice:

1. After terminal receive command will cut off GPRS net, and then dialing the specify NO.
2. Each monitor will record into "call record".
3. When finish monitor,terminal will sent "return result",regard that there are have ";" behind telephone NO in the return result.
4. During the monitor, terminal won't upload any GPRS data, so if the time of monitor is to long will cause buffer data.
5. After monitor, terminal will connect GPRS net again.

## 7.5.7 C07 Customize control command

Command Identifier: C07

Command Function: customize the command to control the terminal

Parameter list:

Mode : Operate mode, "1" for settig, "0" for query

ID : control the ID of IO port, as following:

- 1.horn
2. cornering lamp
- 3.open door
- 4.close door

CtrlStatus : "1" for output,"0" for cancel output or input.

KeepTime : Keep time, when Ctrlstatus as "1" is useful, the most as 1201.Second as unit

Set example: (6081118888,2,C07,129,1,2,1,10)

Inquire example: (6081118888,2,C07,129,0,2,1,10)

(6081118888,2,C07,129,0)

Return: (6081118888,2,C07,129,2,1,10)

"2" means current state as cornering lamp, "1" means current under controlling, "10" means there after 10 seconds will cancel output.

Notice:

- 1.Each control signal has a separate control timer, without disturbing each other.
- 2.The functions defined by ID number is not the ultimate or only definition, the user can manage or re-define these according to their own needs.

## 7.6 "D" serial data transmission command

### 7.6.1 D01 Inquire how many external device port at current

Command Identifier: D01

Command Function: Inquire terminal have connect how many external device at current.

Parameter list: None

Set example: None

Inquire example: (6081118888,2,D01,129)

Return: (6081118888,2,D01,129,1)

1 means that the terminal have only one external device port.

### 7.6.2 D02 Send unvarnished transmitted data

Command Identifier: D02

Command Function: Send unvarnished transmitted data

Parameter list:

PortNum : External device port number, "0" means terminal decide to send to which port, but the ID of this port's external device as instuction's Device Type.

DeviceType : External device type,if PortNum is "0" and this value is "0", this instruction will be discarded. The priority level of PortNum is higher than that of DeviceType. Only when PortNum value is "0", DeviceType will be effective.

Pack: whether packing the data transmitted to the external device; if it is "no", the content of Data will be transmitted directly to the appointed port or external device; otherwise 0x21 packet of the unvarnished transmitted will be added.

Length : Data length won't over 224 byte.

Data : data content; arbitrary binary value may be contained in it; however if there is packet end character in the data content, meaning transfer should be applied.

PortNum,DeviceType,Pack,Length all are showed by ASCII code.

Set example: (6081118888,2,D02,123,1,3,1,10,ABCDEFGHJIJ)

For example,(4080808888,1,D02,123,1,3,1,10,ABCDEFGHJIJ) means sending 10-character data to a external device of port 1 and equipment model 3; the data content is "ABCDEFGHJIJ", and it should be packed according to the unvarnished transmitted protocol.

Inquire example: None

Return: (6081118888,2,**D02**,129,1)

Notice:

Escape Character rule: If the character as same as the header(Package Tail)'s character, pls add escape charater 0x3D at front of character.Please escape the character(the header, package tail, 0x3D) with 0x3D. 0x3D is 0x3D 0x00, Escape Character donot increase the length

## 7.7 "E" serial command

All of Set and controlling command of external device is to be done by E serial command, the command that exist in D serial and S serial command before is also available.

The command format is according with the definition of table 1.All of the command type is EXX, XX shows the operation of different external device, currently there is only E09 which is used for the Set of RFID. The first field of parameter list is defined as Opcode.

The list of external device ID as below:

ID	External device	Command	Valid
----	-----------------	---------	-------

1	Temperature sensor	E01	O
2	Dispatch screen	E02	X
3	--	E03	X
4	--	E04	X
5	Bar-code scanner	E05	X
6	Handle	E06	X
7	--	E07	X
8	Camera	E08	O
9	RFID	E09	O
10	--	E10	X
11	232 Password keypad	E11	O

XX means invalid or not achieved

OO means it has achieved already.

## 7.7.1 E01 Temperature sensor device command

### 7.7.1.1 Set the temperature data upload interval

Command identifier: E01,OpCode = 1

Command function: Temperature data upload interval; the uploaded data is upload through Data Transmit Unvarnished format, in the format of U02 Command;

Parameter List:

OpCode : It is in a fixed value:

Mode : "0" for query, "1" for Set.

UpInterval : upload interval;

Set example: (6081118888,2,E01,123,1,1,600)

Inquire example: (6081118888,2,E01,123,1,0)

(6081118888,2,E01,123,1,0,600)

Return: (6081118888,2,**E01**,129,1,600)

Notice: 1. Upload in the unit of Second;

## 7.7.1.2 Set temperature sensor alarm

Command identifier: E01,OpCode = 2

Command function: Set alarms for each temperature sensor;

Parameter List:

OpCode : It is in a fixed value:"2".

Mode : Set or Inquire,"0" for Inquire; "1" for Set,.

Index : The index of the probe; starting from No.1.

AlarmType : 0 for no alarm; 1 for alarm when current temperature is over the temperature upper limit;  
2 for alarm when current temperature is below the temperature lower limit; 3 for alarm both;

ReferACC : Indicate if it is refer to the ACC signal; 1 for yes, that means judge the temperature only when the ACC is on; otherwise not;

TimeStart : Starting time; for instance: 8 indicate start from 8:00, that means only detect the temperature signal start from 8:00 am;It is Greenwich time.

TimeEnd :Ending time, for instance: 18, indicate no alarms after 18:00;

Max : Temperature upper limit, the value is between [-128,127], and it take for 1 byte; and this value should be more than the Min value.

Min : Temperature lower limit, the value is between [-128,127], and it take for 1 byte; and this value should be less than the Max value.

Set example: (6081118888,2,E01,123,2,1,2,3,1,8,18,30,-10)

Inquire example: (6081118888,2,E08,123,2,0,2)

(6081118888,2,E08,123,2,0,2,3,1,8,18,30,-10)

Return: (6081118888,2,**E01**,123,2,2,3,1,8,18,30,-10)

Notice:

1) If the Set value is not detected between -55 and +125 degree celsius, it will return the

below message:(6081118888,2,E01,123,2,ERROR:-55~125)

2) If the Set Max value is less or equal to Min, it will return:

(6081118888,2,E01,123,2,ERROR:Max<=Min)

3) If you want to let the Set time be effective, TimeStart should not equal to TimeEnd, and TimeStart < TimeEnd.

## 7.7.2 E02 Dispatching board command

### 7.7.2.1 Set Listen-in number

Command identifier: E02, OpCode = 1

Command function: Set Listen-in number for tracker. There are three numbers that can be set.

Parameter List:

OpCode : It is in a fixed value: 1.

Mode : "0" for query, "1" for Set.

Index : Index . from 1 to 3

Telnumber : Listen-in number. this number should be low than 15 digital numbers.

Set example: (6080808888,2,E02,123,1,1,1,18711093291)

Inquire example: (6080808888,2,E02,123,1,0,1)

(6080808888,2,E02,123,1,0,1,18711093291)

Return: (6081118888,2,**E02**,129,1,1, 18711093291)

1 the first listen-in number

18711093291 cell phone number .when you call tracker,tracker will pick up coming call,and at listen-in status.

### 7.7.4 E09 Set of RFID card reader

Command ID: E09

Command function: Set of RFID card reader

OpCode = 1, shows that Set ID number of RFID card, can be Set 5 ID number at most. The unit finish the driver identification basing this ID number.

Parameter list:

OpCode: It is fixed to be 1.

Mode: Set or Inquire, 1 shows controlling, 0 shows Inquire

IDIndex: The ranking of ID number, to be 1 to 5.



IDValue: The 10 byte ID number

Example: (6081118888,2,E09,123,1,1,2,1234567890)

shows Set the second RFID card, the ID number is 1234567890

Reply: (6081118888,2,E09,123,1,2,1234567890) the ID number of second RFID card is 1234567890

(6081118888,2,E09,123,1,0,2) Inquire the ID number of second RFID card.

Reply: (6081118888,2,E09,123,1,2,1234567890)

Note: If the length of IDValue not to be 10, the unit will cancel relative ID number, for example:

(6081118888,2,E09,123,1,1,2, 0) shows that shutdown the second card number.

## 7.7.5 E11 Set password keypad

Command ID: E11

Command function: Set password for password keypad, password must have 6 number.

Opcode=1, To set and check keypad's password, most set 5 groups password. Terminal according this password to identify driver's ID.

Parameter list:

OpCode: in this command as "1".

Mode: set or check, "1" as control, "0" as check.

IDIndex: Index for what need to operate, 1-5.

IDValue: password for 6 byte.

Example: (6081118888,2,E11,123,1,1,2,123456)

set the second password, password:123456.

Reply: (6081118888,2,E11,123,1,2,123456)

(6081118888,2,E11,123,1,0,2) Query the second password.

Reply: (6081118888,2,E11,123,1,2,123456)

Note:

If the length of IDValue not is 6, terminal will cancel relative ID number .such sent (6081118888,2,E11,123,1,1,2, 0)shows that shutdown the second card number..

## 7.7.6 E14 Digital fuel sensor commands

### 7.7.6.1 Inquire the list of current fuel sensor connected in

Command identifier: E14,OpCode = 1

Command function: Inquire the list of current fuel sensor connected in.

Parameter List:

OpCode : It is in a fixed value:1.

Mode : Set or Inquire, "0" indicates the list of current digital fuel sensor."1" indicates re-detecting the fuel sensor that connected in.tracker will reply the detecting result after detecting.

Set example: (6081118888,2,**E14**,123,1,1)

Inquire example: (6081118888,2,**E14**,123,1,0)

Return: (6081118888,2,**E14**,129,1,3,1,3,4)

1,3,1,3,4, the first "1" for OpCode, it's for command here, "3" for how many fuel sensor have connected in, "1,3,4" for the fuel sensor that connected in. "1" for the fuel sensor's ID NO as 1, so "3" and "4" and so on.

Notice:

Detecting digital fuel sensor need some time, generally you will get reply in 30 seconds.

### 7.7.6.2 Set fuel change alarm threshold value for each fuel sensor

Command identifier: E14,OpCode = 2

Command function: Set or Inquire the alarm threshold value for each fuel sensor.

Parameter List:

OpCode : It is in a fixed value:2.

Mode : "0" for Inquire; "1" for Set;

Count: The quantity of the fuel sensor which connected in.

Index1,Value1,ReleaseTime1,Index2,Value2,ReleaseTime2... :

Index1 means the first ID NO of fuel sensor, Value1 means the opposite alarm threshold value of fuel sensor, ReleaseTime1 means the opposite alarm time threshold value of fuel sensor( minutes as unit, "0" means fuel level change reach to the threshold, and then alarm. Max:2000), Index2 and so on...

Set example: (6081118888,2,**E14**,123,2,1,3,1,400,0,3,1000,30,4,1200,40)

Inquire example: (6081118888,2,**E14**,123,2,0)

(6081118888,2,**E14**,123,2,0,3,1,400,0,3,1000,30,4,1200,40)

Return: (6081118888,2,**E14**,129,2,1,400,0,2,0,0,3,0,0,4,1000,30,5,0,0,6,0,0,7,0,0,8,0,0)

1,400,0 means The fuel sensor ID is 1,and Its alarm threshold value is 400 .The alarm detecting threshold value is 0;

4,1000,30 means The fuel sensor ID is 4,and Its the alarm threshold value is 1000. The alarm threshold value is 30 minutes.

6,0,0 means fuel sensor's ID NO.6 haven't Set alarm threshold value and so on, The fuel sensor's ID NO and alarm fuel level threshold value and alarm time threshold value always appear together.

Notice:

If no need fuel level alarm, so no need to Set correspond fuel sensor's alarm threshold value.

### 7.7.6.3 Set time interval for current fuel level value upload

Command identifier: E14,OpCode = 3

Command function: Set or Inquire the time interval for current fuel level value upload.

Parameter List:

OpCode : It is in a fixed value:3.

Mode : "0" for Inquire; "1" for Set;

Interval: Time interval of fuel level value upload, seconds as unit. "0" means no upload, Max: 65535.

Set example: (6081118888,2,**E14**,123,3,1,600)

Inquire example: (6081118888,2,**E14**,123,3,0)

(6081118888,2,**E14**,123,3,0,600)

Return: (6081118888,2,**E14**,129,3,600)

600 means the time interval of current fuel level value upload, upload current fuel level value per 10 minutes.

### 7.7.6.4 Set fuel tank empty

Command identifier: E14,OpCode = 4

Command function: Set fcurrent fuel level value as 0.

Parameter List:

OpCode : It is in a fixed value:4.

Index:The digital fuel sensor 's ID number which need to be set fuel tank empty

Set example: (6081118888,2,**E14**,123,4,1)

Return: (6081118888,2,**E14**,129,4,1)

### 7.7.6.5 Set fuel tank full

Command identifier: E14,OpCode = 5

Command function: Set current fuel level value as 65535

Parameter List:

OpCode : It is in a fixed value:5.

Index:The digital fuel sensor 's ID number which need to be set fuel tank full.

Set example: (6081118888,2,**E14**,123,5,1)

Return: (6081118888,2,**E14**,129,5,1)

### 7.7.6.6 Set ID number for current connected fuel sensor

Command identifier: E14,OpCode = 6

Command function: Set ID No. for current connected fuel sensor

Parameter List:

OpCode : It is in a fixed value:6.

Index:Set ID No. for current connected fuel sensor.

Set example: (6081118888,2,**E14**,123,6,3)

Return: (6081118888,2,**E14**,129,6,3)

Notice:

When you set this command, pls to make sure current only fuel sensor connected in. or it will cause many fuel sensor to set be one ID, so garbled.

## 7.7.8 E16 TPMS commands

### 7.7.8.1 Set the Tyre pressure data uploading interval

Command Identifier: E16,OpCode = 1

Command function: Set or inquiry the current tyre pressure value uploading time interval

Parameters:

OpCode : It is in a fixed value:1

Mode : "0" for Inquire; "1" for Set

Interval : Tyre pressure value's uploading time interval. Unit is minutes.

If it's 0, it wouldn't upload.

Setting example: (6081118888,2,**E16**,123,1,1,6)

Inquiry example: (6081118888,2,**E16**,123,1,0)

(6081118888,2,**E16**,123,1,0,6)

Reply: (6081118888,2,**E16**,129,1,6)

6 it indicates the uploading time interval of the tyre pressure value. Unit is minutes.

### 7.7.8.2 Set the Tire pressure temperature parameters

Command Identifier: E16,OpCode = 2

Command function: Set or inquiry the high temperature alert parameters for all wheels

Parameters:

OpCode : It is in a fixed value:2

Mode : "0" for Inquire; "1" for Set

Temperature: Temperature value,Unit is degree Celsius. Setting range(0 to 149)

Setting example: (6081118888,2,**E16**,123,2,1,120)

Inquiry example: (6081118888,2,**E16**,123,2,0)

(6081118888,2,**E16**,123,2,0,120)

Reply: (6081118888,2,**E16**,129,2,120)

120 high temperature value is 70.  $120-50=70$  .

The value what you set is equal to that high temperature value plus 50.

Real temperature range is  $-50\text{ }^{\circ}\text{C}$  to  $99\text{ }^{\circ}\text{C}$

### 7.7.8.3 Set or inquire tire pressure parameters

Command Identifier: E16,OpCode = 3

Command function: Set or inquire tire pressure parameters.

Parameters:

OpCode : 3, fixed value

Mode : Operation mode, "0" for Inquire; "1" for Set

Axle index :

1:The 1<sup>st</sup> axle in tractor

2:The 2<sup>nd</sup> axle in tractor

3:The 3<sup>rd</sup> axle in tractor

4:The 4<sup>th</sup> axle in tractor

5:All wheels in trailers

High: high pressure. Unit is Bar. Setting range (0 to 130) Divide this value by 10, and you get the real high pressure.

Low: low pressure . Unit is Bar. Setting range (0 to 130) Divide this value by 10, and you get the real low pressure.

Setting example: (6081118888,2,**E16**,123,3,1,2,35,18)

Inquiry example: (6081118888,2,**E16**,123,3,0,2)

(6081118888,2,**E16**,123,3,0,2,35,18)

Reply: (6081118888,2,**E16**,129,3,2,35,18)

2 The 2<sup>nd</sup> axle in tractor

35 35/10=3.5 Bar. So real high pressure is 3.5 Bar.

18 18/10=1.8 Bar. So real low pressure is 1.8 Bar.

Notice: The real pressure range is 0 to 13 Bar. If the tire pressure of the car is more than this value. Our sensor can't be used for it.

## 7.7.11 E19 Drum sensor commands

### 7.7.11.1 Set the data uploading interval of drum sensor

Command Identifier: E19,OpCode = 1

Command Function: set or inquire the data uploading interval of the drum rotating direction and speed.

Parameter list:

OpCode : It is fixed 1

Mode : set or inquire, 0 means to inquire the data uploading interval,1 means to set the data uploading interval.

Interval : time interval, unit is second. If it is 0, it means no uploading, the maximum interval is 1000 seconds, the defaulted interval is 60 seconds.

Setting example: (6081118888,2,**E19**,123,1,1,60)

Inquiry example: (6081118888,2,**E19**,123,1,0)

Returned result: (6081118888,2,**E19**,129,1,60)

Note: While the drum rotating direction is changed, it also uploads the data.

## 7.7.11.2 Set the stalling threshold of the drum mixer

Command Identifier: E19,OpCode = 2

Command Function: set or inquire the stalling threshold of the drum mixer

Parameter list:

OpCode : It is fixed 2.

Mode : set or inquire, 0 means to inquire the stalling threshold of the drum mixer, 1 means to set the stalling threshold of the drum mixer.

Max : stalling threshold, unit is second. If it is 0, it means not to adjust the drum mixer is rotating or not. the maximum threshold is 1000 seconds, the defaulted threshold is 60 seconds.

Setting example: (6081118888,2,**E19**,123,1,1,60)

Inquiry example: (6081118888,2,**E19**,123,1,0)

Returned result: (6081118888,2,**E19**,129,1,60)

Note: the drum mixer is adjusted to rotate or not based on the stalling threshold. While the drum mixer status changes (from rotating to non rotating or from non rotating to rotating, it uploads the drum mixer rotating direction and speed report.

## 7.7.13 E21 Camera commands

### 7.7.13.1 Set Current connected Cameras' ID

Command identifier: E21, OpCode = 1

Command function: Set current connected cameras' ID.

Parameter List:

OpCode : It is in a fixed value: 1.

Mode : "0" for query, "1" for Set.

Count : Total of connected cameras. Maximum value is 6, which means that only allow six cameras  
Connected with tracker.

ID\_1, ID\_2... : Camera ID of the current connected cameras

Set example: (6080808888,2,**E21**,123,1,1,3,2,5,6)

Set the current connected three cameras, ID numbers are 2,5,6.

Inquire example: (6080808888,2,**E21**,123,1,0,3,2,5,6)

(6080808888,2,**E21**,123,1,0)

Return: (6081118888,2,**E21**,123,1,3,2,5,6)

Returns the current connected camera ID, ID numbers are 2,5,6.

Notice: Cameras ID can't be 0.

### 7.7.13.2 Take photo instantly

Command identifier: E21, OpCode = 2

Command function: Require camera taking photos install, transmit data.

Parameter List:

OpCode : It is in a fixed value: 2

Camera ID: Camera ID number from 1 to 6. If it's 0, it indicates all connected cameras. If specified ID  
Does not exist, it will return "error information".

Interval : The time interval of uploading photo data. The unit is seconds. From 10 to 3600.

Count: The amount of taking photos. From 1 to 100. If it's 0, it means stopping taking photo instantly.

Size: photo size:



No.	Resolution
1	160 * 128
2	320 * 240
3	640 * 480

Set example: (6080808888,2,**E21**,123,2,1,10,4,2)

Return: (6081118888,2,**E21**,123,2,1,10,4,2)

If specified ID does not exist, it will return.

(6081118888,2,E21,123,2,ERROR)

Notice: When the server receives this command, it will send control command to camera, let the camera taking photos instant. After the completion of taking, it will upload image data. If receive new command during the transmission, it will finish the current transmission and then begin to carry out the new instructions.

### 7.7.13.3 Set triggered signal for photo taking

Command identifier: E21, OpCode = 3

Command function: Set the tracker takes photo by triggered signal or alert.

Parameter List:

OpCode : It is in a fixed value: 3

Mode : "0" for query, "1" for Set.

Camera ID: If specified ID does not exist, it will return wrong information (see description of the reply). If the number is 0, which indicates it take turns to take pictures.

Interval : The time interval of uploading photo data. The unit is seconds.From 10 to 3600.

Count: The amount of taking photos. From 1 to 100. If it's 0. It means stoping taking photo instantly.

Size: photo size:

No.	Resolution
1	160 * 128
2	320 * 240
3	640 * 480

Trigger\_Value:Trigger type. If the value is 0, which indicates that don't open the trigger taking pictures, other values, see below chart:

ID	Name	Description
0	Disable triggered photo taking function	
1	ACC	
2	Engine	
3	Brake	
6	Air-condition	
7	Vehicle door detecting	
9	Low Battery	
10	Fuel cut	
11	SOS	
12	GPS antenna open	
13	GPS antenna short circuit	
14	Over speeding	
101	Fuel level change alert	

Trigger\_Count: The amount of taking photos by triggered signal. If is 0, indicates no taking pictures. The maximum number is 100.

Trigger\_Interval: Interval of the trigger taking pictures, from 10 to 3600. the unit is seconds, indicates how long it will take a photo. Please note that. The time interval means the waiting interval between uploading last one image and taking a new image. Minimum interval is 10 seconds.

Set example: (6080808888,2,**E21**,123,3,1,3,3,1,2,30)

Set camera 3, the interval is 30secs when ACC is opened, taking two photos.

Inquire example: (6080808888,2,**E21**,123,3,0,3,3,0,0,0)

(6080808888,2,**E21**,123,3,0)

Return: (6081118888,2,**E21**,123,3,3,3,0,0,0)

If specified ID does not exist, it will return:

(6080808888,2,**E21**,123,3,ERROR)

Notice:

When the server receives this command, it will send control command to camera, let the camera taking photos instant. After the completion of taking, it will upload image data. If receive new command during the transmission, it will finish the current transmission and then begin to carry out the new instructions.

### 7.7.13.4 Set take photo in time point

Command identifier: E21, OpCode =4

Command function: Set tracker takes photo at some time point.

Parameter List:

OpCode : It is in a fixed value: 4

Mode :”0” for query, “1” for Set.

Camera ID: Camera ID number.from 1 to 6.If it’s 0. It indicates all connected cameras.and each camera will take photo one bye one.If specified ID doesnot exsit ,It will return “error information”.

PhotoSize: photo size:

No.	Resolution
1	160 * 128
2	320 * 240
3	640 * 480

Clock\_UpCount: The amount of taking photos at each time point. From 1 to 100. If it’s 0, it means disable take photo in time point function.

Clock\_UpInterval: The time interval of uploading photo data. The unit is seconds.From 10 to 65534.

Clock\_Count: The amount of time points that you set. From 0 to 30.

Clock\_1,Clock\_2...:Time point value. The value from 0 to 1439.It indicates the whole day from 0:00 to 23:59. The amount of time points should be less than 30.

e.g. 480, it means 8:00 AM.

495 means 8:15 AM

Set example: (6080808888,2,**E21**,123,4,1,2,2,3,30,5,480,495,510,1080,1095)

Camera ID 2 is set at 8:00,8:15,8:30,18:00,18:15 5 time point uploading image, image size is 320\*240, each time upload 3 photos, time interval is 30 secs.

Inquiry example: (6080808888,2,**E21**,123,4,0,2,2,3,30,5,480,495,510,1080,1095)

(6080808888,2,**E21**,123,4,0,2)

Return: (6080808888,2,**E21**,123,4,2,2,3,30,5,480,495,510,1080,1095)

If specified ID does not exist, it will return.

(6081118888,2,E21,123,4,ERROR)

### 7.7.13.5 Resend the image frames from tracker

Command identifier: E21, OpCode =5

Command function: Center server request the tracker resend the frames of one image which center server didn't receive.

Parameter List:

OpCode : It is in a fixed value:5

Camera ID: Camera ID number.from 1 to 6. If specified ID doesnot exsit ,It will return "error information".

PictureID: Current image ID.

FrameCount: The amount of frames which need to be resent.

FrameID...image frame ID which need to be resent.

Set example: (6080808888,2,**E21**,123,5,2,3,1,2)

- 5 fixed value
- 2 camera ID 2
- 3 image ID 3
- 1 one frame
- 2 frame ID 2

(6080808888,2,**E21**,123,5,2,3,4,3,9,15,18)

- 5 fixed value
- 2 camera ID 2
- 3 image ID 3
- 4 4 image frames
- 3,9,15,18 frame ID are 3,9,15,18

### 7.7.13.6 Acknowledge received the whole image to tracker

Command identifier: E21, OpCode =6

Command function: Center server acknowledges received the whole image to tracker.

Parameter List:

OpCode : It is in a fixed value:6

PictureID: Current image ID.

Set example: (6080808888,2,**E21**,123,6,2)

6 fixed value

2 image ID 2

## 7.7.14 E22 Taximeter Commands

### 7.7.14.1 Inquire taxi status

Command identifier: E22, OpCode = 1

Command function: Enquire the taxi status (Vacant /hired!)

Parameter List:

OpCode : it is fixed to be"1".

Vacant/Hired: 0(Vacant) or 1(Hired);

Inquiry example: (6081118888,2,**E22**,129,1,0,1);

Return: (6081118888,2,**E22**,129,1,1);

Notice:

Every time when vehicle status change((Vacant /hired), the current status will be uploaded automatically, signal of status((Vacant /hired) will be sent to tracker through the vehicel door detecting signal wire(A15 wire), high level trigger for status of vacancy, and low level trigger for status of hire.

### 7.7.14.2 Acknowledge the receipt of U28 report

Command identifier: E22, OpCode =2

Command function: Center server acknowledges the receipt of U28 report

Parameter list:

OpCode : fixed to be 2

Return: (6081118888,2,**E22**,129,2)

Notice: When the center server receive U28, send back this command to acknowledge the receipt;

## 7.8 “U” serial data report command

### 7.8.1 Initiative upload data

#### 7.8.1.1 Purpose

Except initiative upload GPS data, terminal also upload some custom information or alarm, such as SOS alarm, mileage data, fatigue drive and so on, “U” serial command total have 19 piece to complete variety different functions respectively.

#### 7.8.1.2 Format

SN	Name	Example	Length( Byte)	Note
1	protocol head	“(“	1	Means start of pack
2	terminal ID number	2080409018	10	terminal ID number
3	protocol Version	2	2	fixed as “2”
4	Data type	U01	3	The first byte point out this data is upload by terminal, fixed as U, the second and the third byte point out the type of data.
5	Serial number	129	3	this byte is the command remark, when terminal reply the command which will

				copy on this byte and upload to center to make clear each sent message, if no need mark, so it can set as fixed three digit.
6	data content	...	n	this content is the content of terminal upload data, each segment separated by ",".
7	protocol trail	"")	1	Point out this pack is over.

Description: U serial most of the data packets are with the complete location information (contained in the data content).

### 7.8.1.3 When will upload report

Status report is the summarize report for one of status happen or end, such as alarm,running section report, overspeed alarm, fatigue driving report. Uusually this report have a tightness relate with track analysis, such as one of alarm status happen and always remain, alarm haven't cancel, when the alarm cancel there are have a status report which different from signal detecting that only capture one of IO sign.

ID	Data type	note
1	U01	alarm data, when terminal captured alarm conditions will upload actively alarm information, such as SOS alarm
2	U02	Unvarnished transmitted data
3	U03	Signal detecting, it will upload signal detecting information when terminal captured the signal changing of signal detecting mode.
4	U04	Terminal restart, it will upload a restart message when terminal restart.
5	U05	SMS method GPS locating data.
6	U06	Current running timing upload data.
7	U07	Current GPS ephemeris data
8	U08	Current GSM signal value
9	U09	fatigue drive status report
10	U10	overspeed alarm status report

11	U11	running section status report
12	U12	Daily mileage status report
14	U14	Call log report, when call over, terminal will sent this report to show dial and called, talking time, how long talking and so on

### 7.8.1.4 Status report type

three type as following:

ID	value	note
1	1	start point hint
2	2	running process report
3	3	summarize report

The relationship between various report and this three kind of type as following:

ID	Report type	Start point hint	Running process report	Summarize report
1	alarm upload	X	X	O
2	unvarnished transmitted upload	X	X	O
3	signal detecting	X	X	O
3	terminal restart	X	X	O
4	SMS GPS	X	X	O
5	Run-time regular reports	X	O	X
6	GPS ephemeris regular report	X	O	X
7	fatigue drive	<input type="checkbox"/>	O	O
8	overspeed drive report	<input type="checkbox"/>	O	O



9	running section report	O	O	O
10	daily mileage report	X	X	O
11	Photo uploading report	X	X	O
12	talking record report	X	X	O
13	parking report	O	O	O
15	the temperature of chip detecting report	X	O	X
16	00:00 telling time report	X	X	O

“X” means empty, there are no this kind of upload information in correspond upload.

“O” means correspond upload have this kind of upload information.

“□” means correspond upload can be replace by alarm information, no longer do start report/ running process report/ end report.

## 7.8.2 U01 Alarm upload

### 7.8.2.1 Alarm format

Format: (6081118888,2,U01,129, report type, alarm type, alarm content...)

Different alarm have different alarm content, every kind of alarm should be deal with individual. From 7.8.2.3 to 7.8.2.16 all are describe the signification of alarm content. Alarm type please reference 7.8.2.2 form. All the alarm report is 3, in other word is summarize report.

### 7.8.2.2 Alarm style

alarm style as following:

ID	Alarm type
----	------------

1	Enter geo-fence alarm
2	Exitting geo-fence alarm
3	Overtime parking alarm
4	GSM module reset alarm
5	Fatigue driving alarm
6	Over speed alarm
7	SOS alarm
8	Using Backup battery alarm
9	Illegal open door alarm
10	Illegal ignition alarm
11	Fuel level change alarm
12	Tow alarm
13	Vibration alarm
14	Hot spot in/out alarm
15	Zone or road out/in alarm
16	Zone or road over speed and overtime parking alarm
17	Zone or road time relative alarm, such as reach to one road at a forbidden time
18	Extend digital fuel level change alarm
19	Universal port pulse calculation alarm
22	Temperature change alarm
23	Seat belt unfasten alarm
24	Harsh braking alarm
25	Neutral gear sliding alarm
26	Tyre pressure alarm
27	GPRS Reconnect alarm
28	GPS antenna Disconnected alarm

### 7.8.2.3 Enter geo-fence alarm

Enter geo-fence alarm as following:

(6081118888,2,U01,129,3,1,A,270309120812,E,11323.1234,N,2312.2323,30,,abcd)

ID	value	note
1	1	alarm type , here as enter into geo-fence alarm
2	A	located or not,A means located, V means no located
3	270309120812	date,time as: date, month, year, hour, minute, second
4	E	East/West longitude instruction, E for east longitude, W for west longitude.
5	11323.1234	longitude
6	N	South/North latitude instruction, N for north latitude, S for south latitude
7	2312.2323	latitude
8	3	geo-fence ID number, here as the third fence
9	0	The time in the geo-fence
10	abcd	fence name

### 7.8.2.4 Exiting geo-fence alarm

Exiting geo-fence alarm as following:

(6081118888,2,U01,129,3,2,A,270309120812,E,11323.1234,N,2312.2323,3,20,abcd)

ID	value	note
1	2	alarm type , here as Exiting geo-fence alarm
2	A	located or not,A means located, V means no located
3	270309120812	date,time as: date, month, year, hour, minute, second
4	E	East/West longitude instruction, E for east longitude, W

		for west longitude.
5	11323.1234	longitude
6	N	South/North latitude instruction, N for north latitude, S for south latitude
7	2312.2323	latitude
8	3	geo-fence ID number, here means the third fency.
9	20	The time in fency , minute as a unit
10	abcd	Geo-fence name

### 7.8.2.5 Parking overtime alarm

parking overtime alarm:

(6081118888,2,U01,129,3,3,A,270309130815,270309120812,E,11323.1234,N,2312.2323,1,3)

ID	value	note
1	3	alarm type, here as parking overtime alarm
2	A	located or not,A means located, V means no loacted
3	270309130815	alarm time: date, month, year, hour,minute,second
4	270309120812	parking start point time as: date, month, year,hour, minute,second
5	E	East/West longitude instruction, E for east longitude,W for west longitude.
6	11323.1234	longitude
7	N	South/North latitude instruction, N for north latitude, S for south latitude
8	2312.2323	latitude
9	1	Geo-fence type, 1 indicates zone or road type;2 indicates geo-fence 3 indicates hot spot
10	3	The index of the geo-fence

### 7.8.2.6 GPRS module reset alarm

GPRS module reset alarm as following:

(6081118888,2,U01,129,3,4,A,270309120812,E,11323.1234,N,2312.2323)

ID	value	note
1	4	alarm type,here means GPRS module reset.
2	A	located or not,A means located, V means no loacted
3	270309120812	parking start point time as: date, month, year, hour, minute,second
4	E	East/West longitude instruction, E for east longitude,W for west longitude.
5	11323.1234	longitude
6	N	South/North latitude instruction, N for north latitude, S for south latitude
7	2312.2323	latitude

### 7.8.2.7 Fatigue driving alarm

fatigue driving alarm as following:

(6081118888,2,U01,129,3,5,A,270309120812,E,11323.1234,N,2312.2323,270309163219,E,11324.4254,N,2313.4189,429,12032,10800,1)

ID	value	note
1	5	alarm type,here means GPRS module reset
2	A	located or not,A means located, V means no loacted
3	270309120812	parking start point time as: date, month, year, hour, minute,second
4	E	East/West longitude instruction, E for east longitude,W for west longitude.

5	11323.1234	start point longitude
6	N	South/North latitude instruction, N for north latitude, S for south latitude
7	2312.2323	start point latitude
8	270309163219	current time: date,month, year, hour, minute, second
9	E	East/West longitude instruction, E for east longitude,W for west longitude.
10	11324.4254	current longitude
11	N	South/North latitude instruction, N for north latitude, S for south latitude
12	2313.4189	current latitude
13	429	already continuous driving mileage
14	12032	already continuous driving time
15	10800	most continuous drive time limit value
16	1	whether have overspeed

### 7.8.2.8 Over speed Alarm

Over speed alarm format:

(6081118888,2,U01,129,3,6,A,270309120812,E,11323.1234,N,2312.2323,270309163219,E,11324.4254,N,2313.4189,134,102)

ID	Value	note
1	6	Alarm type; it Indicates Over speed alarms here;
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	parking Start point time,format is:date/month/year/hour/minute/second
4	E	East or West longitude indicating; E for East, W for West;

5	11323.1234	Start point longitude;
6	N	South or North Latitude indicating; S for South, N for North;
7	2312.2323	Start point latitude;
8	270309163219	Current time;,format is:date/month/year/hour/minute/second
9	E	East or West longitude indicating; E for East, W for West;
10	11324.4254	the current longitude
11	N	South or North Latitude indicating; S for South, N for North;
12	2313.4189	the current latitude
13	134	current speed,
14	102	maximum speed allowed,

### 7.8.2.9 SOS alarm

SOS alarm format:

(6081118888,2,U01,129,3,7,A,270309120812,E,11323.1234,N,2312.2323)

ID	Value	note
1	7	Alarm type , it indicates SOS alarm here
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	Alarmtime;,format is:date/month/year/hour/minute/second
4	E	East or West longitude indicating; E for East, W for West;
5	11323.1234	longitude when the alarm occur
6	N	South or North Latitude indicating; S for South, N for North;

7	2312.2323	latitude when the alarm occur
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### 7.8.2.10 Backup battery alarm

Backup battery alarm format as below:

(6081118888,2,U01,129,3,8,A,270309120812,E,11323.1234,N,2312.2323)

ID	Value	note
1	8	Alarm type , It indicates that it is using the backup batter. The main power is weak or no power.
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	alarm time;,format is:date/month/year/hour/minute/second
4	E	East or West longitude indicating; E for East, W for West;
5	11323.1234	longitude when the alarm occur
6	N	South or North Latitude indicating; S for South, N for North;
7	2312.2323	latitude when the alarm occur

### 7.8.2.11 Illegal open door alarm

Illegal open door alarm format as below:

(6081118888,2,U01,129,3,9,A,270309120812,E,11323.1234,N,2312.2323)

ID	Value	note
1	9	Alarm type , It indicates Illegal open door alarm
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	Parking start point time,format is:date/month/year/hour/minute/second



4	E	East or West longitude indicating; E for East, W for West;
5	11323.1234	Start point longitude;
6	N	South or North Latitude indicating; S for South, N for North;
7	2312.2323	Start point latitude;

### 7.8.2.12 Illegal ignition alarm

Illegal ignition alarm Format as below:

(6081118888,2,U01,129,3,10,A,270309120812,E,11323.1234,N,2312.2323)

ID	Value	note
1	10	Alarm type , It indicates Illegal ignition alarm
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	Alarm time; formatis:date/month/year/hour/minute/second
4	E	East or West longitude indicating; E for East, W for West;
5	11323.1234	longitude when the alarm occur
6	N	South or North Latitude indicating; S for South, N for North;
7	2312.2323	latitude when the alarm occur

### 7.8.2.13 Fuel level change alarm

Fuel level change alarm format as below:

(6081118888,2,U01,129,3,11,A,270309120812,E,11323.1234,N,2312.2323,2000,3000,499)

ID	Value	note
1	11	Alarm type , It indicates the fuel level change alarm
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	Alarm time; format is:date/month/year/hour/minute/second
4	E	East or West longitude indicating; E for East, W for West;
5	11323.1234	longitude when the alarm occur
6	N	South or North Latitude indicating;
7	2312.2323	latitude when the alarm occur
8	2000	Fuel level value before alarm
9	3000	Fuel level value after alarm
10	499	Fuel level change threshold value

### 7.8.2.14 Tow alarm

Tow alarm format as below:

(6081118888,2,U01,129,3,12,A,270309120812,E,11323.1234,N,2312.2323)

ID	Value	note
1	12	Alarm type , It indicates tow alarm;
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	alarm time;,format is:date/month/year/hour/minute/second
4	E	East or West longitude indicating; E for East, W for West;
5	11323.1234	longitude when the alarm occur
6	N	South or North Latitude indicating; S for South, N for North;

7	2312.2323	latitude when the alarm occur
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### 7.8.2.15 Vibration alarm

Vibration alarm format as below:

(6081118888,2,U01,129,3,13,A,270309120812,E,11323.1234,N,2312.2323)

ID	Value	note
1	13	Alarm type , It indicates vibration alarm;
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	alarm time;,format is:date/month/year/hour/minute/second
4	E	East or West longitude indicating; E for East, W for West;
5	11323.1234	longitude when the alarm occur
6	N	South or North Latitude indicating; S for South, N for North;
7	2312.2323	latitude when the alarm occur

### 7.8.2.16 Hot spot in/out alarm

Hot spot in/out alarm format as below:

(6081118888,2,U01,129,3,14,A,270309120812,E,11323.1234,N,2312.2323,2,3,23,abcdefg)

ID	Value	note
1	14	Alarm type , It indicates hot spot in/out alarm
2	A	Indicates if the GPS signal is valid or invalid, A indicates valid; V indicate invalid;
3	270309120812	Alarm time;,format is:date/month/year/hour/minute/second

4	E	East or West longitude indicating; E for East, W for West;
5	11323.1234	longitude when the alarm occur
6	N	South or North Latitude indicating; S for South, N for North;
7	2312.2323	latitude when the alarm occur
8	1	1 indicates entering the hot spot 2 indicates leaving the hot spot
9	3	Hot spot ID number
10	23	When the ID 8 is "2"( leaving the hot spot), this indicates the remaining time in the hot spot area;(in minute); If the tracker already leave the hot spot, this value should be "0".
11	abcdefg	Hot spot name

### 7.8.2.17 Zone or road out/in alarm

Zone or road out/in alarm:

(6105555555,2,U01,123,3,15,V,291006000139,E,11323.3912,N,2224.2194, 1,2,1, 0,road1)

(6105555555,2,U01,123,3,15,V,291006000657,E,11323.3912,N,2224.2194, 1,2,2,5,road1)

ID	value	instructions
1	15	Alarm type, here means Zone or road out/in alarm:
2	A	IF it is locating, A indicates valid; V indicate invalid;
3	291006000139	date/ month/ year /hour/ minute/ second
4	E	EAST/ WEST longitude, here means EAST longitude
5	11323.3912	Longitude value
6	N	South/North Latitude, here means North Latitude
7	2224.2194	Latitude value
8	1	Index value of the GEO-ROAD or area

9	2	1 for Road, 2 for Area
10	1	1 for entering the Road, 2 for leaving the Road
11	0	The time period IN the road, in minutes
12	road1	The road's name

### 7.8.2.18 Zone or road over speed and overtime parking alarm

Zone or road Over speed alarm:

(6105555555,2,U01,123,3,16,A,291006000305,E,11323.3912,N,2224.2194, 1,2,1,10,41,road2)

ID	value	instruction
1	16	Alarm type, here indicate Zone or road over speed alarm
2	A	If it is located. A indicates valid; V indicate invalid;
3	291006000139	date/ month/ year /hour/ minute/ second
4	E	EAST/ WEST longitude, here means EAST longitude
5	11323.3912	longitude value
6	N	South/North Latitude, here means North Latitude
7	2224.2194	latitude value
8	1	Index value of the Zone or road
9	2	1 for Road, 2 for Zone
10	1	Indicate the over speed alarm in the Zone or road
11	10	Threshold value sea mile as unit;
12	41	Current speed, sea mile as unit
13	Road2	The name of the Zone or road

Zone or road over time parking alarm:

(6105555555,2,U01,123,3,16,A,291006000139,E,11323.3912,N,2224.2194, 1,2,2,30,513,zone1)

ID	Value	instruction
1	16	Alarm type, here indicate the GEO-ROAD area overtime parking
2	A	If It is located, A indicates valid; V indicate invalid;
3	291006000139	date/ month/ year /hour/ minute/ second
4	E	EAST/ WEST longitude, here means EAST longitude
5	11323.3912	longitude value
6	N	South/North Latitude, here means North Latitude
7	2224.2194	latitude value
8	1	The index value of the Zone or road
9	2	1 for Road, 2 for Zone
10	2	Indicate the overtime parking in the Zone or road
11	30	Allowed parking time, The maximum parking time in the Zone or road,second as unit.
12	513	Parking time passed, In seconds
13	Zone1	The name of the Zone or road

## 7.8.2.19 Zone or road time relative alarm

Time table alarm in Zone or road, for example: arrive in the Zone or road in prohibited time

Alarm type:

(2070101999,2,U01,123,3,17,A,291006000044,E,11323.3912,N,2224.2194,1,2,1,8,18,1,zone2)

ID	Value	instruction
1	17	Alarm type, here indicate the arrive earlier alarm/ arrive later alarm
2	A	If it is located. A indicates valid; V indicate invalid;
3	291006000139	date/ month/ year /hour/ minute/ second
4	E	EAST/ WEST longitude, here means EAST longitude
5	11323.3912	longitude value
6	N	South/North Latitude, here means North Latitude
7	2224.2194	latitude value
8	1	The index value of the Zone or road
9	2	1 for Road, 2 for Zone
10	1	1 for arrive in the Zone or road earlier, 2 for not arrive in the Area in time; 3 for arrive in the Area in time.
11	8	Starting time,Unit in hour; Here indicate 8 o'clock, It's greenwich time.
12	18	Ending time;Unit in hour; Here indicate 18:00, It's greenwich time.
13	1	1 indicate: It requires arriving in the Zone or road before the starting time; 2 indicate: It requires arriving in the Zone or road after the ending time; 3. indicate: It requires arriving in the Zone or road Before the starting time AND after the ending time 4. indicate: It requires arriving in the Zone or road

		Between the starting time and the ending time;
14	Zone2	The name of the Zone or road

### 7.8.2.20 Extend digital fuel level change alarm

Alarm type:

(6081118888,2,U01,129,3,18,A,270309120812,E,11323.1234,N,2312.2323,3,2,2000,3000,499)

ID	Value	instruction
1	18	Alarm type,It indicates extend digital fuel level change alarm
2	A	If it is located. A indicates valid; V indicate invalid;
3	270309120812	date/ month/ year /hour/ minute/ second
4	E	EAST/ WEST longitude, here means EAST longitude
5	11323.1234	Current alarm longitude
6	N	South/North Latitude, here means North Latitude
7	2312.2323	Current alarm Latitude
8	3	The quantity of digital fuel sensors connected in.
9	2	Current the fuel sensor 's ID number
10	2000	The fuel level value before alarm
11	3000	The fuel level value after alarm
12	499	Alarm threshold value

### 7.8.2.21 Universal port pulse calculation alarm

Alarm type:

(6081118888,2,U01,129,3,19,A,270309120812,E,11323.1234,N,2312.2323,1,34,4590)



ID	Value	instruction
1	19	Alarm type: universal port pulse calculation alarm
2	A	If it is located. A indicates valid; V indicate invalid;
3	270309120812	date/ month/ year /hour/ minute/ second
4	E	EAST/ WEST longitude, here means EAST longitude
5	11323.1234	Current alarm longitude
6	N	South/North Latitude, here means North Latitude
7	2312.2323	Current alarm Latitude
8	1	The index of the universal port: 1 indicates universal port 1;2 indicates universal port 2
9	34	Time,second as unit.It indicates the time to add up to the appointed pulse count
10	4590	Pulse count ,to achieve the alarm threshold value

## 7.8.2.22 Temperature change alarm

Temperature change alarm as following:

(6081118888,2,U01,129,3,22,A,270309120812,E,11323.1234,N,2312.2323,2,1,1,8,18,30,31)

ID	Value	Note
1	22	Alarm tye, here mean Temperature change alarm
2	A	located or not, A means located, V means not located.
3	270309120812	Alarm time, as date/month/hour/year/minutes/ seconds
4	E	East/West longitude .E for east longitude, W means western longitude
5	11323.1234	Alarm longitude
6	N	South/North latitude. N for north latitude, S for south latitude
7	2312.2323	Alarm latitude
8	2	The temperature probe ID.the number 2 probe.

9	1	Alarm type, "1" means over upper limit alarm, "2" means lower than lower limit alarm
10	1	Reference ACC or not, "1" for reference, "0" for won't reference.
11	8	The start time when tracker judge temperature change alarm. it is the Greenwich time.
12	18	The end time when tracker judge temperature change alarm. it is the Greenwich time.
13	30	the value of Upper limit alarm (if the Alarm type is "2" means the value of lower limit alarm
14	31	Currently temperature value

### 7.8.2.23 Seat belt unfasten alarm

Seat belt unfasten alarm as following:

(6081118888,2,U01,129,3,23,A,270309120812,E,11323.1234,N,2312.2323)

ID	Value	Note
1	23	Alarm type, this is seat belt unfasten alarm
2	A	located or not, A means located, V means not located.
3	270309120812	Alarm time, as date/month/year/hour/minutes/seconds
4	E	East/West longitude .E for east longitude, W means western longitude
5	11323.1234	Alarm longitude
6	N	South/North latitude. N for north latitude, S for south latitude
7	2312.2323	Alarm latitude

### 7.8.2.24 Harsh braking alarm

Harsh braking alarm as following:



Tel:+86-755-83237778 83236778 Fax:+86-755-83282631 P.C.:518028 Mail:hkczy@vip.sina.com  
 Website:www.joint-tracking.com Add:5th Floor,404Bldg,Shangbu Industry Zone, Futian District, Shenzhen, P.R.C.

ID	Value	Note
1	24	Alarm type, this is harsh braking alarm
2	A	located or not, A means located, V means not located.
3	270309120812	Alarm time, as date/month/year/hour/minutes/seconds
4	E	East/West longitude . E for east longitude, W means western longitude
5	11323.1234	Alarm longitude
6	N	South/North latitude. N for north latitude, S for south latitude
7	2312.2323	Alarm latitude
8	120	Start speed, that means the instantaneous speed when you braked the vehicle.
9	30	End speed,that means the instantaneous speed after braking 4 seconds.
10	4	Time threshold.you can set it via A12 command.

### 7.8.2.25 Neutral gear sliding alarm

Neutral gear sliding alarm as following

(608118888,2,U01,129,3,25,A,270309120812,E,11323.1234,N,2312.2323)

ID	Value	Note
1	25	Alarm type, this is Neutral gear sliding alarm
2	A	located or not, A means located, V means not located.
3	270309120812	Alarm time, as date/month/year/hour/minutes/seconds
4	E	East/West longitude . E for east longitude, W means western longitude
5	11323.1234	Alarm longitude
6	N	South/North latitude. N for north latitude, S for south latitude

7	2312.2323	Alarm latitude
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## 7.8.2.26 Tyre pressure alarm

Tyre pressure alarm as below:

(6081118888,2,U01,129,3,26,A,270309120812,E,11323.1234,N,2312.2323,120,1192128 , 60 , 120,23);

ID	value	Note
1	26	Alarm type,it indicates tyre pressure alarm.
2	A	located or not,A indicates located; V indicates not located.
3	270309120812	Alarm time, as date/month/year/hour/minutes/seconds
4	E	East/West longitude . E for east longitude, W means western longitude
5	11323.1234	Alarm longitude
6	N	South/North latitude. N for north latitude, S for south latitude
7	2312.2323	Alarm latitude
8	1	The number of the trailer, 0 means tractor
9	17	The number of the tyre
9	1193128	The ID of the tyre sensor
10	60	Pressure value(unit is Bar)
11	70	Temperature value (Unit is degree Celsius)
12	23	Status :

		<p>bit7 : Battery status of the tyre pressure sensor, 0 indicates normal; 1 indicates low battery</p> <p>bit6 : When there is no data for a long time (15 minutes). It will be 1 at this bit.</p> <p>bit5 : Reserved</p> <p>bit4 : 1 indicates high pressure</p> <p>bit3 : 1 indicates low pressure</p> <p>bit2 : 1 high temperature , 0 normal temperature</p> <p>bit1~0 : 00 normal status 01 fast leakage 10 slow leakage</p>
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### 7.8.2.27 GPRS connection Reconnect alarm

GPRS connection Reconnect alarm as following:

(6081118888,2,U01,129,3,27,A,270309120812,E,11323.1234,N,2312.2323)

ID	value	note
1	27	alarm type,here means GPRS connection Reconnect alarm
2	A	located or not,A means located, V means no located
3	270309120812	parking start point time as: date, month, year, hour, minute,second
4	E	East/West longitude instruction, E for east longitude,W for west longitude.
5	11323.1234	longitude
6	N	South/North latitude instruction, N for north latitude, S

		for south latitude
7	2312.2323	latitude

### 7.8.2.28 GPS antenna disconnected alarm

GPS antenna disconnected alert report as blow:

(6081118888,2,U01,129,3,28,A,270309120812,E,11323.1234,N,2312.2323)

ID	value	note
1	28	alarm type,here means GPS antenna disconnected alarm
2	A	located or not,A means located, V means no located
3	270309120812	parking start point time as: date, month, year, hour, minute,second
4	E	East/West longitude instruction, E for east longitude,W for west longitude.
5	11323.1234	longitude
6	N	South/North latitude instruction, N for north latitude, S for south latitude
7	2312.2323	latitude

### 7.8.3 U02 Unvarnished transmitted data Report

Command Identifier: U02

Command Function: The Unvarnished Transmitted data is transmitted by the unit to the server; When the unit received the request from external devices, the transmission started.

Parameter list:

ReportType : report type is No.3

PortID : Port ID, indicates the port which is request uploading data;the GP6000 port id is 1.

DeviceType : Device type, each device has a unique ID;the GP6000

terminal can only connect the dispatch screen

Len : length of the connect, in the unit of byte;

Data : Data content, could be ASCII or binary system; If the packet head and trail are the same please go to check D02 for detailed solution;

AorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

DateTime : Date and time;.

EW : East or West longitude indicating; E for East, W for West;.

LONG : longitude;

NS : South or North Latitude indicating; S for South, N for North;.

LAT : latitude;

Set example: None

Inquire example: None

Return:

(6081118888,2,**U02**,3,1,3,10,abcdefghij,230809172318,E,11342.2314,N,2312.4212)

The part with gray color explain as following:

ID	Value	note
1	3	indicates Summarize report
2	1	indicates theUnvarnished transmitted data port
3	3	incidates the Unvarnished transmitted data external device
4	10	indicates the data length
5	Abcdefghij	Indicates the data content
6	230809172318	indicate the time of uploading,the format is:date/month/year/hour/minutes/second;.
7	E	East or West longitude indicating; E for East, W for West;
8	11342.2314	longitude.
9	N	indicate North latitude/ South Latitude,
10	2312.4212	latitude.

Notice:

- 1, Because it is the additional device which uploaded the data actively so there is no Serial number for the Unvarnished transmitted data;
2. Different devices has different content, So if client has their own device, they could define the data according to their requirement;

## 7.8.4 U03 Signal detecting report

Command Identifier: U03

Command Function: signal detecting report;

Parameter list:

ReportType : signal report is No.3

SignalID : Single ID Value.

SignalStatus : Signal status, "1" for detecting the signal starting ; "2" for detecting the signal ending;

AorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

SignalTime : The time when the signal is generating, format is:date/month/year/hour/minute/second.

EW : East or West longitude indicating; E for East, W for West;.

LONG : longitude

NS : South or North Latitude indicating; S for South, N for North;.

LAT : latitude.

Speed: current Speed.it's in decimal code.unit is sea mile/hour.

Direction: cureent direction

Vehicleinfo: Vehicles staus (Refer to Table 8)

Set example: None

Inquire example: None

Return:

(6100803156,2,U03,129,3,1,2,A,030311204327,E,10342.3551,N,0116.1809,12,230,00000100)

## 7.8.5 U04 Terminal reset alarm

Command Identifier: U04



Command Function: tracker reset alarm

Parameter list:

ReportType : No.3

AorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

DateTime : the time when the terminal reset

EW : East or West longitude indicating; E for East, W for West;.

LONG : longitude

NS : indicate North latitude/ South Latitude

LAT : latitude

Set example: None

Inquire example: None

Return:

(6081118888,2,**U04**,129,3,140809172218,E,11324.8421,N,2313.4219)

Notice: the tracker will upload this message after it restart.

## 7.8.6 U05 SMS GPS locating message

Command Identifier: U05

Command Function: GPS locating message sending by SMS to user's cell phone or SMS center number;

Parameter list:

ReportType : No.3.

AorV : indicate if it is located correctly, A for OK, V for blank area.

Date : ormat is Date/Month/Year.

Time : format is Hour/Minute/Second.

LONG : longitude;

EW : East or West longitude indicating; E for East, W for West;

LAT : latitude;

NS : indicate North latitude/ South Latitude

Speed : speed

Direction : direction

VehicleStatus : Check the status list in 6.1.4.

Set example: None

Inquire example: None

Return:

(6081118888,2,U05,129,3,A,120809,213214,11323.1231,E,2314.2316,N,12,230,00000100)

## 7.8.7 U06 Reserved

## 7.8.8 U07 Reserved

## 7.8.9 U08 GSM Signal report timing

Command Identifier: U08

Command Function: GSM signal report timing

Parameter list:

ReportType : No.2

AorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

DateTime : restart time

EW : East or West longitude indicating; E for East, W for West;

LONG : longitude;

NS : indicate North latitude/ South Latitude

LAT : latitude;

SignalValue : The current GSM signal value, from 0- 31 normally, if it is below "10", that indicates the signal is weak;

Set example: None

Inquire example: None

Return:

(6081118888,2,U08,129,2,A,120809123218,E,11324.1233,N,2323.4318,14)

Notice:

You can use S22 command to setup or change the upload interval;

## 7.8.10 U09 Fatigue driving status report

Command Identifier: U09

Command Function: Fatigue driving status report; The difference from the fatigue alarm report is that it is a summarize report and not a start point hint when the fatigue driving happen;

Parameter list:

ReportType : Report type

StartAorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

StartDateTime : the starting date and time; format:  
date/month/year/hour/minute/second;

StartEW : starting point's indicate East longitude/ West longitude

StartLong : starting point's longitude;.

StartNS : starting point's indicate North latitude/ South Latitude.

StartLat : starting point's latitude;.

EndAorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

EndDateTime : the ending date and time; format:  
date/month/year/hour/minute/second;.

EndEW : indicate ending East longitude/ West longitude

EndLong : the ending longitude;

EndNS : indicate ending North latitude/ South Latitude.

EndLat : the ending latitude;.

Distance :The distance in this fatigue driving trip in the unit of kilometer;

RunTime : The total time of this fatigue driving trip;

AlarmTime : Allowed maximum driving time in one trip , in the unit of  
second;

OverSpeed : If there is any over speed in this trip.

Set example: None

Inquire example: None

Return:

## 7.8.11 U10 Over speed status report

Command Identifier: U10

Command Function: The difference between U10 and U01 is that this is a summarize report but not a start point hint report when the overspeed happen;

Parameter list:

ReportType : report type;

StartAorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

StartDateTime: the starting date and time; format: date/month/year/hour/minute/second;

StartEW : starting point's indicate East longitude/ West longitude

StartLong : starting point's longitude;.

StartNS : starting point's indicate North latitude/ South Latitude.

StartLat : starting point's latitude;.

EndAorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

EndDateTime : the ending date and time; format: date/month/year/hour/minute/second;.

EndEW : indicate ending point's East longitude/ West longitude

EndLong : the ending longitude;

EndNS : indicate ending point's North latitude/ South Latitude.

EndLat : the ending latitude;.

MaxSpeed : Maximum speed, in the unit of sea mile/ hour;

AvgerSpeed : Average speed, in the unit of sea mile/ hour

Distance : in the unit of kilometer;Distance for this time's overspeed trip,

Set example: None

Inquire example: None

Return:

## 7.8.12 U11 trip status report

Command Identifier: U11

Command Function: When the vehicle finished one running section, unit will upload a report.( when you start this function)

Parameter list:

ReportType : report type

StartAorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

StartDateTime : the starting date and time; format:  
date/month/year/hour/minute/second;

StartEW : starting point's indicate East longitude/ West longitude

StartLong : starting point's longitude;.

StartNS : starting point's indicate North latitude/ South Latitude.

StartLat : starting point's latitude;.

EndAorV : indicates the gps signal is valid or invalid,A indicates valid;V indicate invalid;

EndDateTime : the ending date and time; format:  
date/month/year/hour/minute/second;.

EndEW : indicate ending point's East longitude/ West longitude

EndLong : the ending longitude;

EndNS : indicate North latitude/ South Latitude.

EndLat : the ending latitude;.

Distance : the lasting distance of over-speeding,in the unit of kilometer;.

OverSpeed : If there is overspeeding;

Set example: None

Inquire example: None

Return:

(6081118888,2,**U11**,129,3,A,270309120812,E,11323.1234,N,2312.2323,A,270309163219,E,11324.4254,N,2313.4189,143,1)

## 7.8.13 U12 Daily mileage status report

Command Identifier: U12

Command Function: Daily mileage report; every 0:00 o'clock, it will upload the previous day's mileage message;

Parameter list:

ReportType : No.3

Date : Report date, date/ month/ year

Distance : running mileage,in the unit of kilometer;.

RunTime : Running time in a day, in the unit of minute;

RunCount : running times in one day.

Set example: None

Inquire example: None

Return: (6081118888,2,**U12**,129,3,090809,210,142,5)

090809: date,format is Date/Month/Year..

210 Current day's running mileage;

142 Current day's running time in the unit of minute;

## 7.8.14 U13 Photo uploading report

Command Identifier: U13

Command Function: upload this report to show the image location, image size and the data package quantity before the tracker upload one image.

Parameter list:

ReportType : It is fixed 3.

AorV : A means locating,V means non locating.

DateTime : time to take the photo

EW : east longitude and west longitude.

LONG : longitude.

NS : north latitude and south latitude.

LAT : latitude

PortIndex : for 6000, it is 1 or 2 or 3, showing which port is connecting with the camera.

CameraID:camera ID. From 1 to 3.

ImageIndex : image ID.

Size : image size.the unit is bytes

PacketCount : The amount of frames

Reason : reason to take the image,1 means the timing, 2 means trigger,3 means instant

Para : for reason 1 , it is the time to take the image, with unit of minute.

for reason 2, it is the signal source to trigger the image

for reason 3, it is 0. Take photo instantly.

Setting example: NON

Inquiry example: NON

Returned result:

(6081118888,2,**U13**,129,A,120809123218,E,11324.1233,N,2323.4318,2,1,14,41097,82,1,480)

120809123218 means day/month/year/hour/minute/second

E mean east longitude

11324.1233 is the longitude

N means north latitude

2323.4318 is the latitude

2 camera is connected to tracker's COM1.

1 camera ID 1

14 Image ID 14

41097 is the size, with unit of byte.

82 meansthe amout of the image frames is 82.

1 means the timing to take the image.

480 means the time to take the image, it is 8 clock am.

## 7.8.15 U14 Voice communication record report

Command Identifier: U12

Command Function: Voice communication report; each time when you finish one listen-in, the unit will upload a report;

Parameter list:

ReportType : value is "3"

CallType : Call type , if it is dial out or incoming call; "1" for dial out, "0"

for incoming call;

Telephone : received phone number from i.e. 1389023XXXX.

Time : voice call starting time,120809125312,the format  
is:date/month/year/hour/minutes/second;

Length : Voice call total time, in the unit of seconds, support 16000  
seconds maximum;

Set example: None

Inquire example: None

Return:

(6081118888,2,**U14**,129,3,1,13312345678,120809125312,153)

## 7.8.16 U15 Parking report

Command Identifier: U15

Command Function: vehicle parking report

Parameter list:

ReportType : report type

AorV : indicates the gps signal is valid or invalid,A indicates valid;V  
indicate invalid;

StartDateTime : start point parking time

EW : indicate East longitude/ West longitude of the parking

LONG :longitude of the parking;

NS : indicate North latitude/ South Latitude of the parking.

LAT : latitude of the parking;

TimeLength : The parking time, unit: in minutes;

Set example: None

Inquire example: None

Return:

(6081118888,2,**U15**,129,2,A,140809172218,E,11324.8421,N,2313.4219,32)



## 7.8.17 U16 Muti-fuel level monitoring report

Command Identifier: U16

Command Function: upload the fuel value of each fuel sensor. fuel value: 0 to 65535

Parameter list:

ReportType : .fixed2.

AorV : A means location, V means location not valid.

StartDateTime : the time of current point

EW : .East latitude/ West longitude of current location indication

LONG : Latitude of current point

NS : South/North longitude of current location

LAT : .Longitude of current point

Speed: current Speed.it's in decimal code.unit is sea mile/hour.

Vehicleinfo: Vehicles staus (Refer to Table 8)

Count : the total of fuel senor connected with tracker.

Tag 1 ID : the first fuel sensor's ID

Tag 1 Value : current fuel value of the first fuel sensor

Tag 2 ID : the second fuel sensor's ID

Tag 2 Value: Current fuel value of the second fuel sensor.

...

Reply: (6091118888,2,U16,123,2,A,291009030352,E,11324.3213,N,2413.8940,0,00030000,2,1,45535,2,33226)

## 7.8.18 U17 Chip temperature status report

Command Identifier: U17

Command Function: chip temperature status report

Parameter list:

ReportType : No.2

Temperature : Current chip temperature

Set example: None

Inquire example: None

Return: (6081118888,2,U17,129,2,32)

Notice: The returned temperature's unit is Celsius degree, "0" indicate "- 40" Celsius degree, "1" indicates "- 39" Celsius degree,and so forth; So you need to calculate each time.(to reduce 40 celsius degree)

## 7.8.19 U18 0:00:00 report

Command Identifier: U18

Command Function: Used for history track analyse in 0:00:00

Parameter list:

ReportType : No.3

AorV : indicates the gps signal is valid or invalid,A indicates valid;V  
indicate invalid;

DateTime : current date and time;

EW : indicate East longitude/ West longitude

LONG : indicate longitude;

NS : indicate North latitude/ South Latitude.

LAT : latitude;

Status :If it is parking or running, "0" for parking, "1" for running;

Set example: None

Inquire example: None

Return:

(6081118888,2,U18,129,3,A,230909000000,E,11323.1234,N,2312.2123,1)

Notice: We use ACC signal for reference,(in stopping or running status.)

## 7.8.20 U19 Universal Port AD Model Status Report

Command Identifier: U19



Tel:+86-755-83237778 83236778 Fax:+86-755-83282631 P.C.:518028 Mail:hkczy@vip.sina.com  
Website:www.joint-tracking.com Add:5th Floor,404Bldg,Shangbu Industry Zone, Futian District, Shenzhen, P.R.C.

Command Function: Universal port AD model status report

Parameters list:

- ReportType : Report type is 2
- AorV : A means located, V means not located.
- StartDateTime : the time when parking
- EW : East/West longitude instruction of Parking place
- LONG : Longitude of parking place
- NS : South/North latitude instruction of parking palce
- LAT : The latitude of parking place
- ADPortCount : The count of extand fuel level sensor
- ADIndex : AD port number, is the first AD port or the second
- ADValue : The currently value of AD port

Return result:

(6081118888,2,U19,129,2,140809172218,E,11324.8421,N,2313.4219,1,1,30)

(6081118888,2,U19,129,2,140809172218,E,11324.8421,N,2313.4219,2,1,230,2,136)

## 7.8.21 U20 Neutral Gear position sliding status report

The uploaded data after the vehicle slide:

(6081118888,2,U20,123,14,9,720,E,11404.6203,N,8960.0000,290110083418,E,11404.6203,N,8960.0000,290110083449)

Description	value	note
Alarm type	14	Neutral gear sliding alarm
Vehicle sliding time	9	The unit is second
Speed accumulated value during the vehicle sliding time	720	adding the speed in every second. the speed unit is sea mile.
East/West longitude	E	
longitude	11404.6203	longitude when the alarm occur
South/North latitude	N	

latitude	8960.0000	Latitude when the alarm occur
Data time	290110083449	29_01_10 08:34:49 date/month/year/hour/minute/second

The formula for calculating the sliding distance:  $S=(720*1.85*1000)*9/3600/9 = 41.11$  (meter)

note:

Number of times=9 times

Average speed= $720*1.85*1000/3600/9$  sea mile/hour to meter/second

Vehicle sliding time=9 seconds

## 7.8.22 U21 Universal port pulse calculation mode status report(Reserved)

## 7.8.23 U22 Upload the information of all the active RFID tag being detected

Command Identifier: U22

Command Function: upload the information of all the active RFID tag being detected

Parameter list:

ReportType : .fixed2.

AorV : A means location, V means location not valid.

StartDateTime : the time of current point

EW : .East latitude/ West longitude of current location indication

LONG : Latitude of current point

NS : South/North longitude of current location

LAT : .Longitude of current point

Count : the total of RFID tags being detected

PageCount : .how many pages

CurPageID : current page

CurPageCount : how many tags on the current page

Tag 1 ID : .ID of the first RFID tag

Tag 1 Battery : the power of the first RFID tag

Tag 1 Strong : the field intensity of the first RFID tag

...

Reply: (6100803220, 2, U22, 129, 2, V, 150209000651, E, 00000. 0000, N, 0000. 0000, 1, 1, 1, 1, 0A2A, 0, 0)

(6100803220, 2, U22, 129, 2, V, 150209002408, E, 00000. 0000, N, 0000. 0000, 2, 1, 1, 2, 0941, 0, 0, 0A2A, 0, 0)

## 7.8.24 U24 Type pressure report

Command Identifier: U24

Command function: uploading the current tyre pressure value.

Parameters:

ReportType : Report type. 2,Fixed value

AorV : A indicates tracker is located;V indicates not located.

StartDateTime : The current time

EW : East or West longitude

LONG : The current longitude

NS : North or South latitude

LAT : The current latitude

Count : The count of the tyre

Tocca\_1: the number of the trailers of the first tyre (0 it means tractor)

Seat\_1: the lable of the first tyre

ID\_1 : The ID of the first tyre

Pressure\_1 : The first pressure value

T\_1 : The first temperature

Stata\_1 : The first status

bit7 : battery status of the tyre pressure sensor, 0 indicates normal; 1 indicates low battery

bit6 : When there is no data for a long time (15 minutes). It will be 1 at this bit.

bit5 : Reserved

bit4 : 1 indicates high pressure

bit3 : 1 indicates low pressure

bit2 : 1 high temperature , 0 normal temperature

bit1~0 : 00 normal status

01 fast leakage

10 slow leakage

11 inflate

Tocca\_2: The number of the trailers of the second tyre.

.....

Reply: none

## 7.8.26 U26 Drum report

Command Identifier: U26

Command Function: upload the drum mixer rotating status report, including rotating direction and rotating speed.

Parameter list:

ReportType : It is fixed 2.

AorV : A means positioning,Vmeans no positioning.

DateTime : date and time.

EW : E is East longitude,W is west longitude.

LONG : longitude.

NS : N is north latitude,S is latitude.

LAT : latitude.

Speed\_GPS : GPS speed

Direction\_GPS: GPS direction

VehicleStatus : as shown in diagram 6.1.4.

Speed\_drum: the speed of the drum mixer rotation, unit is rotation per minute.

Turn\_drum: the direction of drum mixer rotating. 0 means non rotating, 1 means clockwise direction, 2 means anticlockwise direction.

Setting example: none

Inquiry example: none

Returned result:

(6081118888,2,**U26**,129,3,A,120809,213214,11323.1231,E,2314.2316,N,12,230,00000100 , 10,1)

Note: While the drum sensor is loaded to the tracker GP6000, the drum sensor connect to the pulse signal wire (brown white) and vehicle door detecting wire (grey white) in GP6000 port A. The drum sensor connected to door detecting wire should be fixed on the left. The left is defined in the condition that you are facing the vehicle head.

## 7.8.28 U28 Charge Report for Taximeter

Command Identifier: U28

Command function: the Charge Report for each passenger.

Parameters List:

Report Type: Fixed as 2

A or V: "A" represents "Positioning", "V" represents "non-positioning"

Start Date Time: The start time for passenger taking.

Start EW: The indication of Start Longitude

Start LONG: Start Longitude

Start NS: The indication of Start Latitude

Start LAT: Start Latitude

StartMileage: The GPS Mileage of starting

End A or V: "A" represents "Positioning", "V" represents "non-positioning"

End Date Time: The end time for passenger taking.

End EW: The indication of End Longitude

End LONG: End Longitude

End NS: The indication of End Latitude

End LAT: End Latitude

EndMileage: The GPS Mileage of Ending

Distance: (The output format from taximeter is 000.00)

Fare: Fare of this trip

ExtraFare:Extra fare of this trip.

Setting example: Negative

Inquiry example: Negative

Return:

(6081118888,2,U28,129,2,A,240611090812,E,11323.1234,N,2312.2323,1000,A,240611093219,E,11324.4254,N,2313.4189,1020,020.00,50,0)

Notice: 1. Every data uploaded after the passenger carrying, a confirmed message will be sent from center to show the successfule sending.

## 7.9 "X" series Universal Port Sets command

### 7.9.1 X01 Set and inquire universal port usage model

Command Identifier: X01

Command function: Set universal port usage model

Parameter list:

Mode : "0" for query, "1" for Set

Index : means currently Set which universal port, currently total have 2 .

Operation Model : Operation Model as following:

Note: currently only support Fuel mode and AD mode.

ID	Name	Note
1	IO MODE	IO mode.after you set this mode,the default is switch input.
2	AD MODE	AD mode
3	PLUSE MODE	Pulse mode

Set example: (6081118888,2,X01,129,1,1,2)

Inquire example: (6081118888,2,X01,129,0,1)



Return result: (6081118888,2,X01,129,1,2)

NO"1" means currently Set which universal port.

NO"2" means currently operation mode of universal port

Notice: currently only support the second and the third patterns.

## 7.9.2 X02 Set and inquire running parameters of universal port

Command Identifier: X02

Command function: Set the usage parameters of universal port

parameters list:

Mode : "0" for query, "1" for Set

Index : means currently Set which universal port, currently total have 2 .

RunMode : Operation model please check the RunMode parameter list of X01 comand.This parameter must the same with the currently operation model of universal port. Otherwise it will return an error.

Para... : parameters list, different mode correspond to different parameter. As following shows:

	PLUSE	AD	IO
Para1	Working mode <sup>3</sup>	Alarm type <sup>1</sup>	Input(1)/Output(2)
Para2	Uploading interval <sup>3</sup>	Upper limit value	\
Para3	Pulse count <sup>3</sup>	Lower limit value	\
Para4	\	Holding time <sup>2</sup>	\
Para5	\	Report upload interval <sup>2</sup>	\

1. AD as 12 bit precision, total have following alarm mode

ID	Note
----	------

0	none
1	over upper limit alarm
2	low lower limit alarm
3	over upper limit and low lower limit alarm

2. Second as unit
3. working mode 1 means fixed uploading, the unit of uploading interval is s, which means the pulse uploading interval, working mode 2 means counting uploading, pulse number means there will be a report when the number exceeds the preset value

Set example: (6081118888,2,**X02**,129,1,1,2,20,5)

(6081118888,2,**X02**,129,1,1,3,3,5000,100,5,600)

Inquiry example: (6081118888,2,**X02**,129,0,1,2)

(6081118888,2,**X02**,129,0,1,3)

Return result: (6081118888,2,**X02**,129,1,2,20,5)

(6081118888,2,**X02**,129,1,3,3,5000,100,5,600)

## IX.Defaulted Set table

SN	Command ID	note
1	S04	Use 10 seconds as the data uploading interval for the GPS tracker as defaulted Set
2	S11	Default: Explode-proof function is closed
3	S12	Default: allow any cell phone number to control the tracker
4	S15	Default: TCP mode
5	S20	Default: Port 1 baud rate is 9600
6	S32	Default: no power saving mode
7	S35	Default: 1 minute as the store interval for history location data
8	A01(SOS alarm)	Default: The SOS alarm need to be confirmed by the monitoring center, otherwise the alarms will be continuously sending to monitoring center; Please check A03 command for confirmation.
9	A01(fuel level change alarm)	Default: The fuel level change alarm need to be confirmed by the monitoring center, otherwise the alarms will be continuously sending to monitoring center; Please check A03 command for confirmation.