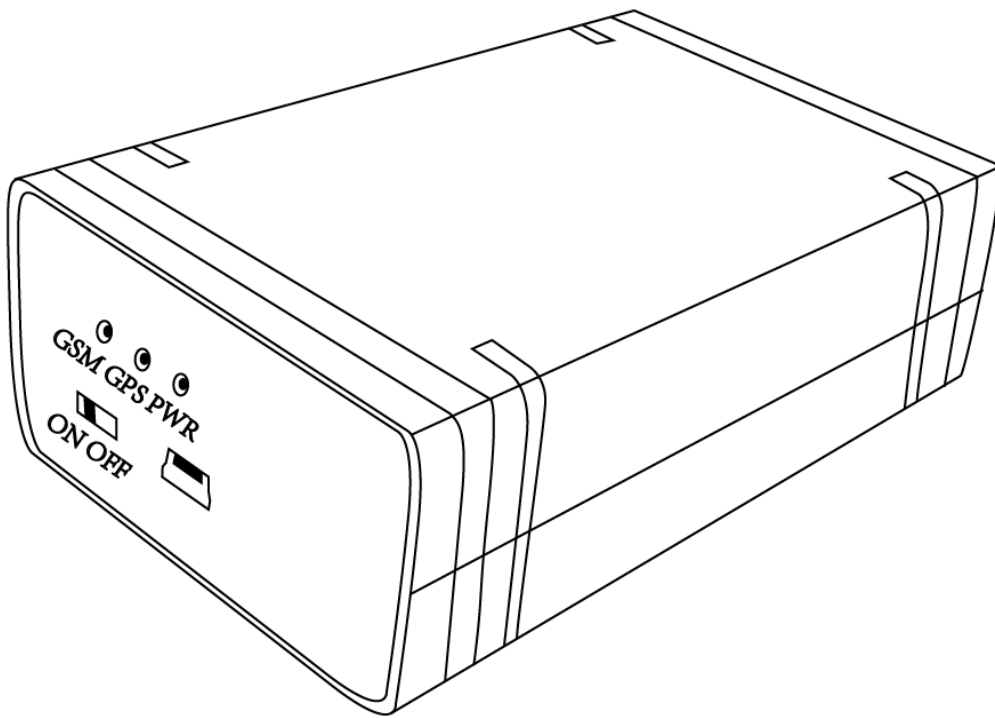




Configuration Utility

G6S/G3S User Guide

V1.1

Configuration Utility Users Guide

Document Title	G6S / G3S Configuration Utility User Guide
Version	1.1
Date	2014-05-21
Status	Release
Document Control ID	G6S/G3S

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INTRODUCTION

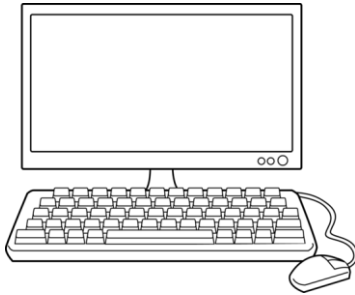
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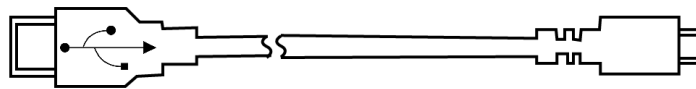
1. Materials Needed to Perform the Configuration Utility

1.1 Windows Based PC



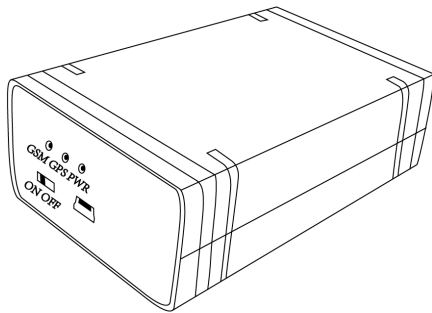
1.2 USB Configuration Cable

(USB) To the computer that runs the Configuration Utility



To the front panel of the G6S/G3S device

1.3 G6S/G3S GPS Vehicle Tracking Device



1.4 Configuration Utility Program

Access Setting
Serial Port: COM3
Baud Rate: 115200
Device Model: G6S
Password:
Connect Disconnect

Wireless Device
ID:
Bind OEM Mode

Assistant
☐ All ☒ Auto Conn
Read All Write All
Import Export
Save All Send All

Device Information
Device Name:
IMEI / Device ID: 351535057809543
Hardware Version: V1.0.5-US
Firmware Version: V2.08
SIM Card: MCC:310 MNC:69

Device Connectivity Event I/O Port Geo-Fence Voice Exclusive Debug & Upgrade

Software Hardware Command List Profile

☐ New Device Name (NAM)
☐ New Password (OPW)
☐ Time Zone (TZN) Hour Minute
☐ Enable Daylight Saving Feature (STO) Yes No
☐ Daylight Saving Configuration (DST)
Start Date: Month: Week: Day of Week:
End Date: Month: Week: Day of Week:
Time: 14:26 hh:mm
☐ Enable Odometer Counter (MGE) Yes No
☐ Enable Engine Hour Counter (ETO) Yes No
☐ Odometer Initial Mileage (MGS) 0 m
☐ Engine Initial Hour Counter Value (ETS) Input Channel ID
Hour 0 Minute 0 Second 0
☐ Over Speed Report Condition (SPO)
☐ Over Speed Configuration (SPS)
Lower Limit 0 km/h Upper Limit 1 km/h Duration Threshold 1 S
☐ Power Saving Mode Configuration (PSS)
☐ Enable GSM Module Power Saving (PSS0) Yes No
Unregistered Threshold 1 Min No Data Transmission Threshold 1 Min
Awake Interval 1 Min
☐ Enable GPS Module Power Saving (PSS1) Yes No
GPS Unfixed Threshold 1 Min Awake Interval 1 Min
☐ Private Hour Mode Configuration (PVM) Mode
All Read Write

COM3 has connected. Don't unplug the USB cable.

Cable port in NORMAL mode!
Please input password: *****
Cable port in OEM mode!
UGP:0
UGP:0
PTY
PTY:G6S
NAM:G6S
VER:V1.0.5-US;V2.08
MEI:351535057809543
MSI
MSI:310690403065538

2. System Requirements for PC

In order for this Configuration Utility, it must be run on the operating systems listed below:

- ◆ Windows 98SE;
- ◆ Windows ME Windows 2000 SP4;
- ◆ Windows XP SP2 and above (32 & 64 bit);
- ◆ Windows Server 2003 (32 & 64 bit);
- ◆ Windows Server 2008 (32 & 64 bit);
- ◆ Windows Vista (32 & 64 bit);
- ◆ Windows 7 (32 & 64 bit);
- ◆ Windows 8 (32 & 64 bit)

Supported System Environments:

- ◆ Microsoft .NET Framework 4.0 or higher

3. Configuring the Communications Port

Please run and install the Windows USB Driver “VCP_V1.3.1_Setup.exe” before connecting

The USB cable, if you are running x64 OS please install “VCP_V1.3.1_Setup_x64.exe” instead.

After the driver is properly installed please connect the device with the computer using the USB cable

That is accompanied with this Configuration Utility Program.

 VCP_V1.3.1_Setup	7/23/2010 10:08 PM	Application	6,345 KB
 VCP_V1.3.1_Setup_x64	7/23/2010 10:10 PM	Application	6,345 KB

When launching the Configuration Utility Program the following window will be displayed.

Please note: if the USB driver has been successfully installed the utility program will launch in

“Auto Conn” Mode. The USB com port will automatically be recognized and the Utility will read the

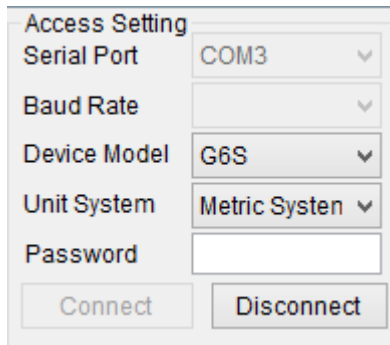
IMEI number of the GSM Module inside of the G6S/G3S. Further, if the SIM Card is also installed

In the device, it will also be read and displayed at the lower left side of the “device connection”

Window as illustrated on page 7.

1) Connection (Left Side of Screen)

Access Setting



Access Setting

Serial Port: COM3

Baud Rate: [dropdown]

Device Model: G6S

Unit System: Metric System

Password: [text box]

Connect Disconnect

Wireless Device



Wireless Device

ID: [dropdown]

Bind OEM Mode

Assistant



Assistant

☐ All ☒ Auto Conn

Reading and Writing Data



Read All Write All

Import Export

Save All Send All

Device Information



Device Information

Device Name:

IMEI / Device ID:
351535057809543

Hardware Version:
V1.0.5-US

Firmware Version:
V2.08

SIM Card:
MCC:310
MNC:69

Serial Port: COM Port selection here.

Baud Rate: Default Baud Rate is 9600.

Device Model: The Device Model will automatically be read and displayed here.

Password: Input new password here.

Connect: Establish connection between software and device.

Disconnect: Disconnect device and will release the occupied serial port.

ID:

Bind:

OEM Mode:

All: Select this to check mark all commands in utility.

Auto Conn: Selected by default, uncheck to manually set connection settings for device.

Firstly please have "All" checked.

Read all: Software will read out global setting of device at a time.

Write all: All the changes on each tab will save to device at a time.

Import: Import global configuration file from computer.

Export: Export global configuration file to computer.

Device Name: Model name of the device that is currently connecting.

IMEI/Device ID: IMEI of GSM module.

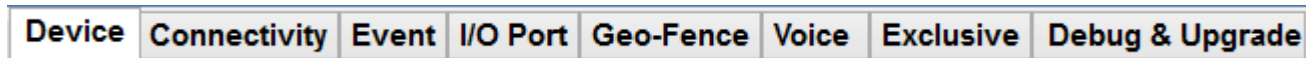
Hardware Version: Device hardware version.

Firmware Version: Device firmware version.

SIM Card: If SIM card is recognized by device then MCC and MNC is available here.

2. The Program Section

The program section is divided into 8 Tabs:

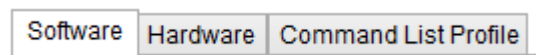


3. Tab “Device”

The First Tab is programming the Device

3.1. Sub-Tab “Software”

Software: is the first sub tab for programing the G6S/G3S Vehicle Tracking Device.



Icon Description



Green Check: Indicates the Command has been “Read”

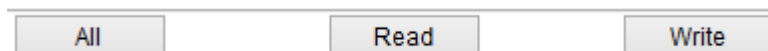


Light Bulb: Move your curser over the light bulb to receive description of the command.



Check box: Is ahead of each command. Please check the box in front of the command if needing to “Read” or Write” to the device.

On each Sub-Tab there are 3 buttons on the bottom of the page, please note they will only “Read or Write” the current tab.



All: Select or Unselect all of the commands on current Tab.

Read: Read the setting of commands on current Tab.

Write: Write changes to device on the current Tab.

Command NAM



☒ New Device Name (NAM)

G6S

Example: This is an example of the NAM command is to change the device name in the report message to USER (SMS) and the data string to the SERVER.

Default name is **G6S**. You can also change the name of the device if needed.

To SERVER: *GS06,356496042329318,031427090613,, SYS: G6S ;V1.00;V1.0.1, GPS:A;7;N23.164358;E113.428515;0;0;45;1.10#	To USER: G6S V1.00 LTM 2013-06-06 09:41:22 GPS 1.55/0.50/3/4 N23.164302 E113.428456 SPD:0km/h 0 CSQ -52dBm ACIN=12.13V BAT=3.96V #27
--	--

Command OPW

 ☒ New Password (OPW)

The default OEM password “0123456789” is for connecting the device with the configuration tool. If user wants to change the OEM password then every time a device connects with the configuration tool it will ask for the password. Which can entered into the password window. Changing the default password will keep the device secure from someone attempting to change device settings without proper authorization.

Command TZN and DST

☒ Time Zone (TZN)
Hour Minute

☒ Enable Daylight Saving Feature (STO)
☐ Yes ☒ No

☒ Daylight Saving Configuration (DST)

Start Date: Month: Week: Day of Week:

End Date: Month: Week: Day of Week:

Time: **hh:mm**

These commands are used to adjust the time information.

Example: in report message, e.g.

To SERVER: *GS06,356496042329318, 031427090613 ,, SYS:G6S;V1.00;V1.0.1, GPS:A;7;N23.164358;E113.428515;0;0;45;1.10#	To USER: G6S V1.00 LTM 2013-06-06 09:41:22 GPS 1.55/0.50/3/4 N23.164302 E113.428456 SPD:0km/h 0 CSQ -52dBm
--	---

	ACIN=12.13V BAT=3.96V #27
--	---------------------------------

Daylight Saving Time: It is the practice of advancing clocks during the lighter months so that evenings have more daylight and mornings have less. Typically clocks are adjusted forward one hour near the start of spring and are adjusted backward in autumn.

In the case of the United States where a one-hour shift occurs at 02:00 local time, in spring the clock jumps forward from the last moment of 01:59 standard time to 03:00 DST and that day has 23 hours, whereas in autumn the clock jumps backward from the last moment of 01:59 DST to 01:00 standard time, repeating that hour, and that day has 25 hours. A digital display of local time does not read 02:00 exactly at the shift to summertime, but instead jumps from 01:59:59.9 forward to 03:00:00.0. In the European Union, on the other hand, since the shift occurs at 01:00 UTC, the autumn shift happens an hour later than the spring shift, local time.

Command MGE

☒ Enable Odometer Counter (MGE) ☐ Yes ☒ No

This command works with the odometer counter feature. The device will accumulate distance based on GPS signal and the motion sensor status. (This will also avoid GPS drifting when the vehicle is stopped). This is set to off by default. Selecting Yes will enable this feature.

Command SOS

☐ Enable SOS Event (SOS) ☐ Yes ☐ No
☐ Speaker Enable ☐ Yes ☐ No

Command ETO

☒ Enable Engine Hour Counter (ETO) ☐ Yes ☒ No

This command is used when attaching the engine running hour counter feature; the device will accumulate engine hours based on a digital input pulse.

Command MGS

☒ Odometer Initial Mileage (MGS) m

Enter the initial value of the odometer in meters. The device will accumulate distance in meters based on the initial entered value. The incremental value can be queried at any time thereafter.

Command ETS

 ☐ Engine Initial Hour Counter Value (ETS) Input Channel ID
Hour Minute Second

This command will specify which one of two digital inputs for the device as “Engine Starts” signal input, only if the input is triggered will the device start to accumulate data based on a pre-set engine hour, and this command is also for querying current engine hours, similar to the example of command MGS above.

Please note: only two inputs are available here IN3 or IN4 user can select any one of these inputs whichever he is going to use as engine sensing wire:

IN3: High level

IN4: High level

Command SPO

☐ Over Speed Report Condition (SPO) Enter the Speed Range ▼

This command is for setting the trigger condition for an over speed event.

Disable: Disable the over speed event detection.

Enter the Speed Range: Only current speed entering pre-set speed range to trigger an event.

Leave the Speed Range: Only current speed leaving pre-set speed range to trigger an event.

Enter or Leave the Speed Range: Current speed leaving or entering pre-set speed range will trigger an event.

Command SPS

 ☐ Over Speed Configuration (SPS)
Lower Limit 0 km/h Upper Limit 1 km/h Duration Threshold 1 S

This command is for setting the over speed range.

Example: if command SPO set as “Enter the Speed Range”, when vehicle speed reaches or over 30km/h and last for 5 seconds, an over speed event report will be triggered.

Command PPS/PPS0

 Power Saving Mode Configuration (PSS)
☐ Enable GSM Module Power Saving(PSS0) ☐ Yes ☐ No
Unregistered Threshold 1 Min No Data Transmission Threshold 1 Min
Awake Interval 1 Min

This command will set the GSM module for power saving mode, when “yes” is selected, the device will go into power saving mode according to below setting:

Unregister threshold: Device cannot register to GSM network over 5 minutes will go to power saving mode.

No data transmission threshold: Device registered to GSM network but has not any data transmit activity over 5 minutes will go to power saving mode.

Awaken interval: The device will stay awake for 3 min when every time device awake.

Note: GSM module wakes up when interval timer up, or certain event is triggered (precondition is last GPRS connectivity is valid before device enters power saving, otherwise it will not wake up instantly).

Command PPS1

☐ Enable GPS Module Power Saving(PSS1) ☐ Yes ☐ No
GPS Unfixed Threshold 1 Min Awake Interval 1 Min

This command is to set the GPS module for power saving mode, definition is similar to GSM module.

GPS un-fixed threshold: Is the value that the GPS module will actively attempt to acquire satellite position before the module will shut down.

Awake interval: Is the value that can be set to stay the GPS module awake after every time it is awake.

Command PVM

 ☐ Private Hour Mode Configuration (PVM) Mode ▼

Digital Input Channel ▼

Working Day ☐ Sun. ☐ Mon. ☐ Tue. ☐ Wed. ☐ Thu. ☐ Fri. ☐ Sat.

Private Hour Period On Working Day

☐ Period1	Start Time	12:30	hh:mm	End Time	12:30	hh:mm
☐ Period2	Start Time	12:30	hh:mm	End Time	12:30	hh:mm
☐ Period3	Start Time	12:30	hh:mm	End Time	12:30	hh:mm

This command is used to setup 3 possible work shifts. “Private Hour Periods”

Disable: If you disable this feature, the data string to the SERVER will not contain this information.

Full manual: Digital input channel must be specified for this mode, if digital input is triggered (**Example:** a switch button is connected), the device will switch to private hour mode, it will report data string without current GPS/GSM position to a SERVER.

Half manual: Digital input channel must be specified for this mode, if digital input is triggered (**Example:** when a switch button is connected and pressed on), and current time is inside private hour, device will switch to private hour mode, it will report data string without current GPS/GSM position to SERVER, otherwise it reports as usual.

Automatically: Regardless of digital input, device will go to private mode only referring private hour period setting, during private hour period device will report data string without GPS/GSM position to SERVER.

Private activity monitoring: The device will go to private activity monitoring mode only referring private hour period setting, during private hour period device will force to report data string with GPS/GSM position and device status to SERVER. It is to monitor after hour movement of the equipment (vehicles).

According to above “private hour period on working day” setting, private hour will be:

Saturday and Sunday: Whole day.

Monday to Friday: During 00:00 to 09:00, 12:00 to 13:30, and 17:00 to 23:59.

Command POB

 ☒ Private Hour Mode Digital Output Configuration(POB) ☒ Yes ☐ No

Digital Output Channel OUT1 Mode Low Level

Interval 10

This command is to toggle digital output when private hour mode is activated, Definition of “mode” please refer command DIM in tab “I/O Port”.

Digital output channel: Specify which output port.

Interval: Interval between each output the interval time is in Seconds and range is 0-65535.

Command OAS

 ☐ OTA Firmware Upgrade File Server Configuration (OAS)

Server IP/Addr. Port

This command will configure a SERVER IP/Addr address that is responsible for firmware sent over the air (OTA) for upgrading a device. By default it is using our GOSAFE SERVER.

Command OAP

☒ Firmware File Path Configuration (OAP) Path

3.2. Sub-Tab “Hardware”

Hardware: is the second sub tab for programming the G6S/G3S Vehicle Tracking Device.

Command MOT

 ☐ Enable Motion Sensor (MOT)

This command will enable or disable the motion sensor.

No: Motion sensor will be disabled, and please note it is going to affect any event related with motion status judgment.

Low sensitivity: Motion sensor is enabled and it requires stronger vibration level for motion status judgment.

High sensitivity: Motion sensor is enabled and it requires weaker vibration level for motion status judgment.

Command STP

☐ Parking Timeout Configuration(STP)

Threshold S

This command can sets a duration time for motion status judgment, if motion sensor detects current motion status is still (does not match with vibration level that defines as moving), and last it over 30 seconds, device will consider that the vehicle has stopped.

Note: Current version of hardware is not using the motion sensor to detect the parking or motion. The hardware is using accelerometer for sensing the parking or motion.

Command PTH

 ☒ Power Supply Alarm (PTH)

External Power Threshold 100mV Backup Battery Threshold 100mV

Duration S

This command is to set threshold value for power supply event.

External power threshold: If external power supply voltage drops to below 8 volts and last for 10 seconds, a power supply event is triggered.

Backup battery threshold: If backup battery voltage drops to below 2.5 volts and last for 10 seconds, power supply event is triggered.

Note: The value is x 100mV

Command BMO

☒ Enable Driving Behavior Detection (BMO)

- | | | |
|------------------|--------------------------------------|--------------------------|
| Moving | ☒ Yes | ☐ No |
| Harsh Brake | ☒ Yes | ☐ No |
| Harsh Accelerate | ☒ Yes | ☐ No |
| Harsh Cornering | ☒ Yes | ☐ No |

This command will turn on or off harsh driving behaviors detection feature.

Command BMS

☒ Driving Behavior Configuration (BMS)

- | | | |
|--|----|------|
| Motion Status Acceleration Magnitude | 2 | 10mg |
| Move to Stop Threshold | 10 | S |
| Harsh Brake Acceleration Magnitude | 45 | 10mg |
| Harsh Accelerate Acceleration Magnitude | 35 | 10mg |
| Harsh Left Cornering Acceleration Magnitude | 40 | 10mg |
| Harsh Right Cornering Acceleration Magnitude | 30 | 10mg |

This command is to set acceleration magnitude value threshold for harsh behavior, these values must be carefully calibrate according your practice, and otherwise please keep the factory default setting.

Command AMO

☒ Enable Accident Detection (AMO)

- | | | |
|-----------|--------------------------------------|--------------------------|
| Collision | ☒ Yes | ☐ No |
| Turn Over | ☒ Yes | ☐ No |

This command will turn On or Off the accident event detection function.

Command AMS

☒ Accident Detection Configuration (AMS)

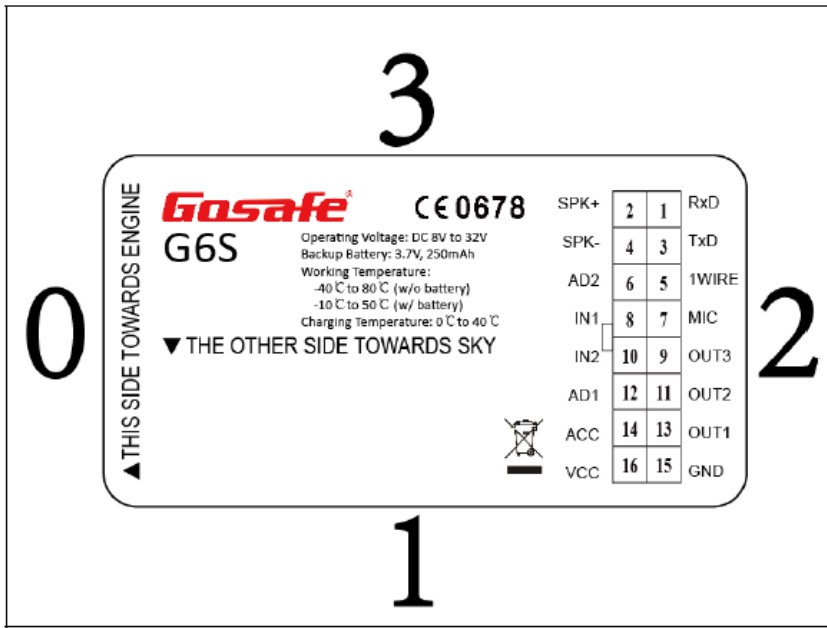
- | | | |
|----------------------------------|-----|------|
| Collision Acceleration Magnitude | 150 | 10mg |
| Turn Over Acceleration Magnitude | 90 | 10mg |

This command sets the acceleration magnitude value threshold for harsh behavior. These values must be carefully calibrated, otherwise please keep the factory default setting, and device is able to identify front/rear collision in the event report if an accident has occurred.

Command BDS

☒ Device Installation Direction (BDS) 0

This command is to adjust accelerate meter according to practical device installation direction, on the device sticker it has noticed the default installation direction (left) must point to the engine, which means left side of device must point to direction as vehicle heading. If your installation requires other side point to vehicle heading please change the default setting here accordingly.



Command AGP

☐ Enable Assisted GPS (AGP) ☐ Yes ☐ No

This command is to toggle A-GPS feature for GPS module, if enabled it helps GPS to fix faster, and please note this feature requires GPRS connectivity and will consume GPRS data flow.

Command ILO

☐ Enable Idle Status Detection (ILO) ☐ Yes ☐ No

This command can enable the vehicle idle status detection feature.

Command ILS

☐ Idle Status Configuration (ILS)
 Enter Idle Threshold S Quit Idle Threshold S

This command is to set idle status judgment, device will refer "Ignition status & vibration status & GPS speed" to decide vehicle is under idle or not.

Stop duration: Threshold to enter idle status, if ignition is ON, motion sensor detects vibration, has not speed and last over 30 seconds, vehicle will be considered as idle.

Moving duration: Threshold to quit from idle status, i.e. Vehicle is under idle already, ignition goes to OFF or there is speed, and last over 30 seconds, vehicle will be considered quitting from idle state.

Command GPO

☐ Toggle GSM/GPS Module (GPO)
 Enable GSM Module ☐ Yes ☐ No
 Enable GPS Module ☐ Yes ☐ No
 Enable 2.4G Module ☐ Yes ☐ No

This command is to toggle GPS and GSM module, please note if "No" is selected, GSM/GPS connectivity will be disabled.

Command JAM

☐ Enable GSM Anti-Jamming Feature (JAM) ☐ Yes ☐ No

This command enables GSM module Anti-Jamming detection feature. The mobile phone jammer is an instrument used to prevent a device from receiving signals from base stations, if "Yes" is selected when it happens devices will report GSM jamming event.

Command JMP

☐ Jamming Detection Configuration(JMP)

GSM RSSI Threshold	30	
Enter Jamming Counter	10	S
Quit Jamming Counter	120	S

Command TOW

☐ Enable Tow Detection Feature (TOW) ☐ Yes ☐ No

This command will enable the internal Tow detection feature.

Command EPM

☐ Serial Port Working Mode (EPM) Data Type 

Interval ms

This command will set a serial port communication data format.

Disable: Device will use its set serial port for communication.

Transparent: Device will not do any data format process from/to peripheral device via serial port.

GARMIN: Device will communicate with peripheral device based on GARMIN protocol.

Command PKI

☐ Serial Link Peripheral Device Input Data String Stuffing(PKI)

Carrying Device ID Information	☐ Yes	☐ No
Carrying Time Information	☐ Yes	☐ No
Carrying Position Information	☐ Yes	☐ No

This command is to modify data string on serial port.

Carrying device ID information: Device ID field will be added to data string on serial port.

Carrying time information: Current time field will be added to data string on serial port.

Carrying position information: GPS/GSM information field will be added to data string on serial port.

Command EPS

☐ Serial Port Configuration (EPS)

Baud Rate		Data Bit	
Stop Bit		Verify Bit	

This command is to configuration serial port baud rate to communication with peripheral device.

3.3. Sub-Tab “Command List Profile”

Command List Profile: is the third sub tab under **Device** for programming the G6S/G3S Vehicle Tracking Device.

Software Hardware **Command List Profile**

Command YCF

 ☐ Load Device Existing Command List Profile (YCF)

This command is to ask the device to execute commands from a command list profile that you can create and save to the device.

Command YSF

☐ Load Command List Profile From Computer To Device (YSF)

Profile Number

This command is to import command list files for the device to execute automatically when certain conditions are satisfied. There are 5 command list profile slots available and by default they are empty, you must create a note pad .txt file with commands and load that file to the device by assigning a profile number to it, and then these profiles will be available for command FRL to call.

Command YGF

☐ Save Command List Profile From Device To Computer (YGF)

Profile Number

This command will save individually created list profiles from the device to your computer. The file format will be saved as .txt.

Command FRL

 ☐ Command List Profile Trigger Condition (FRL) Profile Number

	Status0	Status1
☐ External Power	☒ Abnormal to Normal	☐ Normal to Abnormal
☐ Backup Battery	☒ Abnormal to Normal	☐ Normal to Abnormal
☐ Domestic Roaming	☒ Quit Roaming	☐ Roaming
☐ International Roaming	☒ Quit Roaming	☐ Roaming
☐ Geo-Fence	☒ Normal	☐ Crossing
☐ Parking	☒ Parking	☐ Quit Parking
☐ Private Hour	☒ Inactive	☐ Active
☐ ACC	☒ ON to OFF	☐ OFF to ON
☐ Digital Input IN1	☒ High Level Or Null	☐ Low Level
☐ Digital Input IN2	☒ High Level Or Null	☐ Low Level
☐ Digital Input IN3	☒ Low Level	☐ High Level

The command is to specify certain conditions for a device to execute a created command list profile.

Example: If ACC “ON to OFF” event is selected and triggered, device will execute commands automatically in command list profile number 5.

Note: If multiple conditions are selected at the same time, device only if executes command list profile when multiple conditions are satisfied simultaneously.

Command SCF

☐ Save Current Setting As Configuration File On Device (SCF)

File Number

This command is to save global setting of device as a configuration profile, there are 3 profile slots available, which mean you can configure device according to different application and switch between them easily.

Command RCF

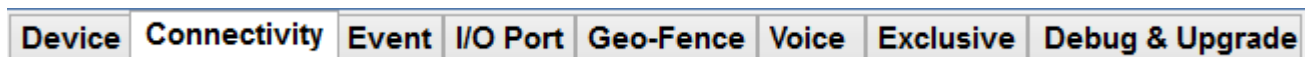
☐ Load Configuration File (RCF)

File Number

This command is to switch between pre-saved configuration profiles. There are 3 profile slots available.

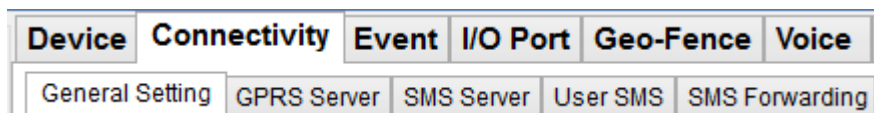
4. Tab “Connectivity”

The Second Tab is for programming the “Connectivity”

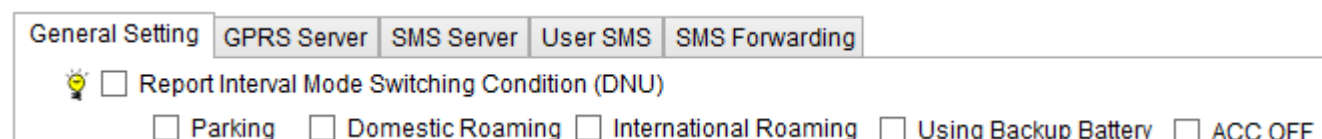


4.1. Sub-Tab “General Setting”

General Setting: is the first sub tab for programing the Connectivity section for G6S/G3S Vehicle Tracking Device.



Command DNU



This command will set the report interval mode switching condition, it is valid for SMS and GPRS fixed time report. You will notice that for SMS report (command SSP, command USP) and GPRS server report (command SVP) they have 2 report

intervals, “static” and “dynamic” mode.

Example: Suppose we select ACC OFF and International Roaming. This means that the device will change its upload mode to “dynamic” when anyone of the features are selected. If we select ACC OFF the device will always change its upload mode to that setting based on the setting to be on or off. If the ACC OFF is off it will be sending a slower rate and when ACC OFF is on then the data will be sending at a higher rate.

Note: Multiple conditions is supported, and device will change to “dynamic” mode when any one of them is satisfied.

Command ADM

 ☒ Report Data String Mask Mode (ADM) 1(GPRS Server) ▼

☒ System Data	☒ GPS Data	☒ GSM Data	☒ COT Data
☒ Analog to Digital Converter Data	☒ Status Data	☐ 1-WIRE Data	
☒ Event Data	☐ Tag Data	☐ FUL Data	

The G3S/G6S has been designed to adjust the string length based on your own settings. The field has several options for sending different types of data from the device to the SERVER and USER. There are 8 profiles (ADM0 to ADM7) available in the dropdown tab. and can be selected to use which profile is created for any report to the SERVER and USER.

0 (SMS Server) Selecting this profile will send the string data to the SMS Server.

1(GPRS Server) Note: This is the default profile used by the device sending data to the GPRS Server.

Profiles 2 thru 7 are also sending data to the GPRS Server.

Example: Select the profile you would like to customize for sending preferred data string to the Server. Make selections by check or uncheck the box next to the field of choice for the selected profile and “Write” it to the device. Select another profile and make your choice of data to send to the Server and “Write” the profile to the device. You can now select between profiles you have created and “Write” the one you select to the device.

Command SDM0

Sub Data String Mask (SDMx)

☐ System Data(SDM0):

☐ Device Name	☐ Firmware Version	☐ Hardware Version
--------------------------------------	---	---

This command is to further customize main data type “System Data”, selected sub-data type will be carried.

Command SDM1

☐ GPS Data(SDM1):

☐ Fix Sign and Valid Satellites	☐ Coordinate	☐ Speed
☐ Azimuth	☐ Altitude	☐ HDOP
		☐ VDOP

This command is to further customize main data type “GPS Data”, selected sub-data type will be carried.

Command SDM2

 ☐ GSM Data(SDM2):

☐ Registration Status and CSQ Quality	☐ First Base Station Info.	☐ Second Base Station Info.
☐ Third Base Station Info.	☐ Fourth Base Station Info.	☐ Fifth Base Station Info.
☐ Sixth Base Station Info.	☐ Seventh Base Station Info.	

This command is to further customize main data type “GSM Data”, selected sub-data type will be carried, please note

multiple base station info must be selected in continuous number order from first base station info..

Command SDM3

- ☐ COT Data(SDM3)
- | | | |
|---|---|---|
| ☐ Mileage | ☐ Engine Hour | ☐ IN1 Frequency/Pulse Data |
| ☐ IN2 Frequency/Pulse Data | ☐ IN3 Frequency/Pulse Data | ☐ IN4 Frequency/Pulse Data |

This command will further customize main data type “COT Data”, selected sub-data type will be carried.

Command SDM4

- ☐ Analog to Digital Converter Data(SDM4)
- | | |
|--|---|
| ☐ External Power Supply Voltage | ☐ Backup Battery Voltage |
| ☐ AD1/IN3 Input Voltage | ☐ AD2/IN4 Input Voltage |

This command will further customize main data type “ADC Data”, selected sub-data type will be carried.

Command SDM5

- ☐ Status Data(SDM5)
- | | |
|--|---|
| ☐ Device Status | ☐ I/O Port Status |
| ☐ Number 1 to 120 Geo-Fences Status | ☐ Number 121 to 156 Geo-Fence Status |
| ☐ Event Status | ☐ Packet Type Indicator |

This command will further customize main data type “Device Status Data”, selected sub-data type will be carried.

Command HBI

- ☐ Heart Beat Packet Report Interval (HBI) Min

This command will set a keep connection live short message interval with GPRS SERVER using TCP/IP and UDP. Normally most of the GSM server providers have different settings in there network that can drop the connection for a device that is not connected for a set period of time that is not sending data to the SERVER and will drop the session. Please set this number according to your network provider’s connection preferences.

Command HTM

- ☐ Device Healthy Check Report Interval (HTM) Hour

This command is used for setting a device self-test “healthy check” message over GPS and SMS to the SERVER. This can check the device GPS, GSM, Heartbeat Sensor, CPU, and other internal components to ensure the device is functioning properly.

Command DIS

-  ☒ Fixed Distance Report and Cornering Report (DIS)
- | | | | | | |
|----------------|---------------------------------|-----------------|---------------|---------------------------------|--------|
| Fixed Distance | <input type="text" value="10"/> | 0,10~65535(10M) | Turning Angle | <input type="text" value="20"/> | Degree |
|----------------|---------------------------------|-----------------|---------------|---------------------------------|--------|

This command will send a report based on certain travel distance and/or certain degree of angle.

Example: The device will send a report when every 1KM of distance is travelled, and also report if the vehicle heading has changed over 10 degrees or more based on the input settings. Setting the “Fixed Distance” and “Turning Angle” to 0 will

turn off this function. Setting the “Turning Angle” to 20 will send less data to the SERVER and a lower number will send more data.

Command EFM

☐ Offline Data Report Mode (EFM)

Enable Offline Data Buffer ☐ Yes ☐ No

Priority ☐ Offline Data Prior ☐ Real Time Data Prior

Erase Flash ☐ Yes ☐ No

This command can record offline data and report its behavior to the SERVER.

The device has a 4Mbit flash memory internal storage for offline data when GPRS is offline.

Enable offline data buffer: If set to “yes” the device will save data to flash memory when GPRS is offline, and report it to SERVER when GPRS comes back online.

Priority: Specify offline data report priority when GPRS comes back online, “offline data prior” means reporting all offline data to the SERVER as soon as possible, while “real time data prior” means reporting offline data when device is idle (between real time report interval).

Erase Flash: If “yes” is selected and you click on the “write” button, the flash memory will be formatted.

4.2. Sub-Tab “GPRS Server”

GPRS Server: is the second sub tab for programing the **Connectivity** section for G6S/G3S Vehicle Tracking Device.

Device	Connectivity	Event	I/O Port	Geo-Fence	Voice
General Setting	GPRS Server	SMS Server	User SMS	SMS Forwarding	

Command APL

☐ APN List (APL) Country China ▼ Edit

This command is to specify SIM card according to your location, device has storage various mobile networks APN information around the world to automatically fulfill APN information once a SIM card is inserted.

Edit: It is for you to review all the supported networks for each country and add more based on your requirement.

Command APN

 ☒ Access Point Name (APN)

APN cmnet Name guest Password guest

This command is for you to input your APN information and also a Name and Password here if required for your SERVER provider.

You may also set it up for a private

Command SVR

☒ GPRS Main Server (SVR) ☒ Enable ☐ Disable

IP/Domain

TCP Port UDP Port Mode

ACK Packet Request From Server

This command is to setup periodical report to host SERVER, if “disable” is selected device will not report periodically to SERVER.

IP/Domain: IP address or Domain name is inputted here

TCP port: Specify SERVER TCP port number.

UDP port: Specify SERVER UDP port number.

Mode: Specify data transfer protocol, “TCP command & UDP data” means only command interaction will use TCP, regular data report will stick with UDP to save on data flow.

Enable ACK via UDP: Acknowledgement message will be sent when using UDP protocol.

Command SVT

☒ Server Timeout Configuration (SVT)

Backup Server Connection Timeout S

ACK Packet Timeout S

This command will set a timeout value to the backup SERVER when using ACK is enabled.

Command BSV

☒ GPRS Backup Server (BSV) ☐ Enable ☐ Disable

IP/Domain

TCP Port UDP Port Mode

ACK Packet Request From Server

This command is to setup backup SERVER when main host SERVER is unavailable.

Command BDU

 ☐ Records Batch Process (BDU)

This command send\$ How many records do you want to send in 1 packet. Normally if you want real time tracking you need to select 1. If you want the device to send more data packets to the server increase the value.

Command SVP;0

☐ Static Report Interval Mode (SVP;0)

Interval Unit 5~900S, 15~59M, 1~720H

Report Mode Data Format

This command will set periodical “static” report to SERVER, device is able to switch between “static” mode and “dynamic”

mode according to vehicle status change (Please refer command DNU for supported conditions).

Interval: Device will report position interval based on this value.

Unit: Report time unit.

Report mode: “Disable” means device will not report to SERVER. “GPS prior” means device will prefer to report GPS position when GSM and GPS position information both available. “GPS & LBS” means device will report GSM and GPS position both to SERVER.

Data format: “Disable” means device will not generate any data. “HEX” means device will generate data that coded with HEX. “ASCII” means device will generate data that coded with ASCII.

Command SVP;1

☐ Dynamic Report Interval Mode (SVP;1)

Interval	1	Unit	Hour	5~900S、15~59M、1~720H
Report Mode	GPS Prior	Data Format	HEX	

This command is to set periodical “dynamic” report to SERVER, when the selected conditions in command DNU is satisfied, device will report according this setting, and otherwise it will stick with “static” mode.

Interval: Device will report position interval based on this value.

Unit: Report time unit.

Report mode: “Disable” means device will not report to SERVER. “GPS prior” means device will prefer to report GPS position when GSM and GPS position information both available. “GPS & LBS” means device will report GSM and GPS position both to SERVER.

Data format: “Disable” means device will not generate any data. “HEX” means device will generate data that is coded with HEX. “ASCII” means device will generate data that coded with ASCII.

4.3. Sub-Tab “SMS Server”

SMS Server: is the third sub tab for programing the **Connectivity** section for G6S/G3S Vehicle Tracking Device.

Device	Connectivity	Event	I/O Port	Geo-Fence	Voice					
<table border="1"> <tr> <td>General Setting</td> <td>GPRS Server</td> <td>SMS Server</td> <td>User SMS</td> <td>SMS Forwarding</td> </tr> </table>						General Setting	GPRS Server	SMS Server	User SMS	SMS Forwarding
General Setting	GPRS Server	SMS Server	User SMS	SMS Forwarding						

Command SSN

General Setting	GPRS Server	SMS Server	User SMS	SMS Forwarding
☒ SMS Server Number (SSN)				

This command is to set phone number that has Administrator authority, please have the country code ahead.

Command SSP;0

☐ Static Report Interval Mode (SSP;0)

Interval Unit 30~900S, 15~59M, 1~720H
Report Mode Data Format

This command is to set periodical “static” report to Administrator phone number, device is able to switch between “static” mode and “dynamic” mode according to vehicle status change (Please refer command DNU for supported conditions).

Interval: Device will report position interval based on this value.

Unit: Report time unit.

Report mode: “Disable” means device will not report to Administrator phone number. “GPS prior” means device will prefer to report GPS position when GSM and GPS position information both available. “Periodical voice call” means device will proactive to call administrator phone number periodically, and if you pick up the call you can voice monitoring the vehicle (microphone installation is required).

Data format: “Disable” means device will not generate any data. “ASCII” means device will generate data that coded with ASCII.

Command SSP;1

☐ Dynamic Report Interval Mode (SSP;1)

Interval Unit 30~900S, 15~59M, 1~720H
Report Mode Data Format

This command is to set periodical “dynamic” report to Administrator phone number, when the selected conditions in command DNU is satisfied, device will report according this setting, and otherwise it will stick with “static” mode.

Interval: Device will report position interval based on this value.

Unit: Report time unit.

Report mode: “Disable” means device will not report to Administrator phone number. “GPS prior” means device will prefer to report GPS position when GSM and GPS position information both available. “Periodical voice call” means device will proactive to call administrator phone number periodically, and if you pick up the call you can voice monitoring the vehicle (microphone installation is required).

Data format: “Disable” means device will not generate any data. “ASCII” means device will generate data that coded with ASCII.

Command ACM

 ☐ Admin Command Mask (ACM)

☐ UCM ☐ HBI ☐ CDS ☐ EUP ☐ DOM ☐ EPS ☐ UFM ☐ PSS ☐ YCF ☐ FRS
☐ OAS ☐ URL ☐ SDM ☐ EOB ☐ AIM ☐ EPM ☐ AGS ☐ GPO ☐ FRL
☐ OAP ☐ UGP ☐ EFM ☐ ERL ☐ DIM ☐ BMS ☐ AIR ☐ YSF ☐ DOP
☐ APL ☐ CEN ☐ ESM ☐ ADM ☐ ADS ☐ AMS ☐ PKI ☐ YGF ☐ JMP

This command is to customize command accessibility for administrator phone number.

Please note that when using this configuration software it is under OEM (OEM>Administrator>User) authority.

Selected commands are open for administrator (SMS Server phone number) to use.

4.4. Sub-Tab “User SMS”

User SMS: is the fourth sub tab for programming the **Connectivity** section for G6S/G3S Vehicle Tracking Device.

Device	Connectivity	Event	I/O Port	Geo-Fence	Voice
General Setting	GPRS Server	SMS Server	User SMS	SMS Forwarding	

Command PIN

☐ Auto-unlock PIN of SIM Card (PIN)

This command will set the PIN number for accessibility of the SIM card. Its default is 1234 normally you do not need to specify it.

Command SIM

☒ Query Current SIM Phone Number(SIM)

This command can query the current SIM Phone Number.

Command BLS

☒ Balance Notification(BLS) USSD Command

Interval Unit 1-366D,1-48W,1-12M

Low Balance Threshold

☐ Define Separator in USSD (TSP) Thousand Separator

This command is a feature that can call a USSD number and you will receive back information on account balance for prepaid SIM cards.

USSD Command: A protocol used by GSM cellular telephones to communicate with the service provider's computers.

Interval: Here you can set this for you to receive a message every 1 Day or every 5 Days.

Unit: Here you have 3 selections Day/Week/Month and works in conjunction with the interval setting.

Low Balance Threshold: Here you can set the amount of currency to a low balance for notification.

Command URL

☐ Google Map Hyperlink Configuration (URL) Mode

URL

This command is to set Google map hyperlink in the report message to USER phone number.

Mode: “GPS” means map API that able to parse according GPS position, and “GSM” means map API that able to parse according GSM position.

URL: GPS or GSM location parser hyperlink, e.g.: <http://maps.google.com/maps?q=%n,%e&t=m&z=16>

Sample of SMS report to USER with map hyperlink:

Content of message	Explanation
G6S V1.00	Device name/Firmware version
LTM 2013-06-06 14:17:12	Date/Time
http://maps.google.com/maps?q...	Google map hyper link
ETD:6/ACC ON	Event ID/User defined event name/Data
CSQ -52dBm	GSM network signal strength
ACIN=12.08V	External power voltage
BAT=3.86V	Built-in battery voltage
#301	Consumed messages

Command SCN

☐ SMS Service Center Number (SCN)

This command is to set server center number, normally leave it as default or consult your network provider for this information.

Command UCM

 ☐ User Command Mask (UCM)

☐ PIN ☐ SVP ☐ RST ☐ DIS ☐ HWL ☐ BDS ☐ ILS ☐ RCF ☐ TMP
☐ SCN ☐ SSP ☐ TZN ☐ ATH ☐ SWL ☐ MGE ☐ ETO ☐ PVM ☐ SVT
☐ APN ☐ USP ☐ DST ☐ VOE ☐ GFS ☐ MGS ☐ ETS ☐ POB ☐ NULL
☐ SVR ☐ SSN ☐ STO ☐ PWL ☐ GOF ☐ SPO ☐ HTM ☐ IBO
☐ BSV ☐ SMT ☐ PTH ☐ QWL ☐ BMO ☐ SPS ☐ AGP ☐ IBI

This command is to customize command accessibility for USER phone number.

Please note that when using this configuration software it is under OEM (OEM>Administrator>User) authority.

Selected commands are open for USER phone number to use.

Command UNO0

User #0 Configuration

☐ User Mobile Phone Number (UNO0)

This command is to set USER0 phone number, please have country code ahead.

Command UPW0

☐ User Command Password (UPW0)

This command is to set USER0 command password, default is 1234, it means when you try to send command to device must carrying the right password in command, otherwise device will not accept.

Example: 1234, VER to query information of device.

Command USP0;0

☐ Static Report Interval Mode (USP0;0)

Interval	24	Unit	Hour	30~900S, 15~59M, 1~720H
Report Mode	GPS Prior	Data Format	ASCII	

This command is to set periodical “static” report to USER0 phone number, device is able to switch between “static” mode and “dynamic” mode according to vehicle status change (Please refer command DNU for supported conditions).

Interval: Device will report position interval based on this value.

Unit: Report time unit.

Report mode: “Disable” means device will not report to USER0 phone number. “GPS prior” means device will prefer to report GPS position when GSM and GPS position information both available. “Periodical voice call” means device will proactive to call administrator phone number periodically, and if you pick up the call you can voice monitoring the vehicle (microphone installation is required).

Data format: “Disable” means device will not generate any data. “ASCII” means device will generate data that coded with ASCII. “URL” means device will report position by using map hyperlink in message.

Command USP0;1

☐ Dynamic Report Interval Mode (USP0;1)

Interval	24	Unit	Hour	30~900S, 15~59M, 1~720H
Report Mode	Disable	Data Format	ASCII	

This command is to set periodical “dynamic” report to USER0 phone number, when the selected conditions in command DNU is satisfied, device will report according this setting, and otherwise it will stick with “static” mode.

Interval: Device will report position interval based on this value.

Unit: Report time unit.

Report mode: “Disable” means device will not report to USER0 phone number. “GPS prior” means device will prefer to report GPS position when GSM and GPS position information both available. “Periodical voice call” means device will proactive to call administrator phone number periodically, and if you pick up the call you can voice monitoring the vehicle (microphone installation is required).

Data format: “Disable” means device will not generate any data. “ASCII” means device will generate data that coded with ASCII. “URL” means device will report position by using map hyperlink in message.

Command UNO1

User #1 Configuration

☐ User Mobile Phone Number (UNO1)

This command is to set USER1 phone number, please have country code ahead.

Command UPW1

☐ User Command Password (UPW1)

This command is to set USER1 command password, default is 1234, it means when you try to send command to device must carrying the right password in command, otherwise device will not accept.

E.g.: 1234,VER to query version information of device.

Command USP1

☐ Static Report Interval Mode (USP1;0)

Interval Unit 30~900S, 15~59M, 1~720H
Report Mode Data Format

This command is to set periodical “static” report to USER1 phone number, device is able to switch between “static” mode and “dynamic” mode according to vehicle status change (Please refer command DNU for supported conditions).

Interval: Device will report position interval based on this value.

Unit: Report time unit.

Report mode: “Disable” means device will not report to USER1 phone number. “GPS prior” means device will prefer to report GPS position when GSM and GPS position information both available. “Periodical voice call” means device will proactive to call administrator phone number periodically, and if you pick up the call you can voice monitoring the vehicle (microphone installation is required).

Data format: “Disable” means device will not generate any data. “ASCII” means device will generated data that coded with ASCII. “URL” means device will report position by using map hyperlink in message.

4.5. Sub-Tab “SMS Forwarding”

SMS Forwarding: is the fifth sub tab for programing the **Connectivity** section for G6S/G3S Vehicle Tracking Device.

Device Connectivity Event I/O Port Geo-Fence Voice I
General Setting GPRS Server SMS Server User SMS SMS Forwarding

Command SMT

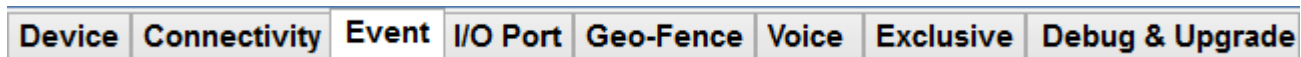
SMS Forwarding Configuration (SMT)

☒ SMT0: Incoming Phone Number1 Forward To
☒ SMT1: Incoming Phone Number2 Forward To
☒ SMT2: Incoming Phone Number3 Forward To

This command can setup automatic forwarding from a specific number. Up to 3 phone numbers are supported, the device will forward the message that it receives from these 3 phone numbers to User0/User1/Administrator/GPRS Server.

5. Tab “Event”

The Third Tab is programming the “Event”



5.1. Sub-Tab “Event Mask”

Event Mask: is the first sub tab for programming the G6S/G3S Vehicle Tracking Device.

Command ESM

This command is to set events for device to detect, it shows all the events (including single event and combination event) that supported with device, selected event means device will monitor and respond according to setting when event happens.

Most of events have 2 statuses,

Example: TOW event. It means device has 1 status bit flag for TOW, let us suppose for this bit “1”=under TOW, “0”=Normal (Quit TOW), then:

Status 0 = if “1” change to “0”, device will report/trigger output for this change.

Status 1 = if “0” change to “1”, device will report/trigger output for this change.

And so on for the rest of events.

By the above setting it means device will report to USER/Administrator/SERVER (GPRS) or trigger output when vehicle is entering TOW status, but will ignore (not report/trigger any) when vehicle leaving TOW status.

Event report clear type: “automatically” means after event report, device will automatically reset event report bit flag.

“Manually” means the opposite way that you need to send command to reset event report bit flag.

Definition of event “Comb1 to Comb8” is defined by Tab “Combination Event”.

5.2. Sub-Tab “Combination Event”

Combination Event: is the second sub tab for programing the G6S/G3S Vehicle Tracking Device.

Command ERL

☒ Combination Event(ERL)

Combination Event ID Valid Period S

	Status0	Status1
☐ Tow	☐ Tow to Normal	☐ Normal to Tow
☐ Idle	☐ Idle to Normal	☐ Normal to Idle
☐ Parking	☐ Parking	☐ Quit Parking
☒ Over Speed	☐ Enter the Speed Range	☒ Leave the Speed Range
☐ GSM Jamming	☐ GSM Jamming to Normal	☐ Normal to GSM Jamming
☒ Geo-Fence	☐ NULL	☒ In or Out

This command is to define combination event, it is able to bind multiple single events (up to 5 single events and please note that status0 and status1 from identical event cannot be selected simultaneously) as a combination event, and only if all single event flags are active then combination event is active, i.e. It is using “AND gate” logic.

Example: By above setting Comb1 will active only if vehicle is over speeding and crossing pre-set GEO-fence.

5.3. Sub-Tab “Device Reaction”

Device Reaction: is the third sub tab for programing the G6S/G3S Vehicle Tracking Device.

Command EUP

☐ Device Reaction For The Triggered Event (EUP)

Event ID

☒ Tow	☐ Idle	☐ Parking	☐ Over Speed
☐ GSM Jamming	☐ Geo-Fence	☐ 1st Position Fix	☐ Health Check Report
☐ Harsh Brake	☐ Harsh Accelerate	☐ Harsh Cornering	☐ Front Collision
☐ Rear Collision	☐ Turn Over	☐ 1-WIRE	☐ Balance Notification
☐ External Power	☐ Backup Battery	☐ AD1 Voltage	☐ AD2 Voltage
☐ NULL	☐ NULL	☐ NULL	☐ NULL
☐ IN1 Event	☐ IN2 Event	☐ IN3 Event	☐ IN4 Event
☐ ACC Status	☐ Comb1	☐ Comb2	☐ Comb3
☐ Comb4	☐ Comb5	☐ Comb6	☐ Comb7
☐ Comb8			

Action

Report Interval Min Report Time

Report Data String Mask Mode

This command is to specify output wave shape, and it is corresponding with “Trigger I/O port action” from command EUP above.

Digital output channel ID: Specify which output port.

Status 0 output mode: Specify wave shape when event is under status 0.

Status 1 output mode: Specify wave shape when event is under status 1.

After event clearance output mode: Specify wave shape when event report bit flag is reset.

Command EUC

☐ Reset All Event Configuration(EUC) ☐ Yes ☐ No

This command will reset all of the event configuration changes.

Command EOB

☐ I/O Port Reaction For The Triggered Event (EOB)

Event ID			
☒ Tow	☐ Idle	☐ Parking	☐ Over Speed
☐ GSM Jamming	☐ Geo-Fence	☐ 1st Position Fix	☐ Health Check Report
☐ Harsh Brake	☐ Harsh Accelerate	☐ Harsh Cornering	☐ Front Collision
☐ Rear Collision	☐ Turn Over	☐ 1-WIRE	☐ Balance Notification
☐ External Power	☐ Backup Battery	☐ AD1 Voltage	☐ AD2 Voltage
☐ NULL	☐ NULL	☐ NULL	☐ NULL
☐ IN1 Event	☐ IN2 Event	☐ IN3 Event	☐ IN4 Event
☐ ACC Status	☐ Comb1	☐ Comb2	☐ Comb3
☐ Comb4	☐ Comb5	☐ Comb6	☐ Comb7
☐ Comb8			

Digital Output Channel ID

Status0 Output Mode Status1 Output Mode

This command is to specify output wave shape, and it is corresponding with “Trigger I/O port action” from command EUP above.

Digital output channel ID: Specify which output port.

Status 0 output mode: Specify wave shape when event is under status 0.

Status 1 output mode: Specify wave shape when event is under status 1.

After event clearance output mode: Specify wave shape when event report bit flag is reset.

Command ENM

☐ Rename Event Name In User Report Message (ENM)

Event ID

- | | | | |
|--------------------------------------|--|--|--|
| ☒ Tow | ☐ Idle | ☐ Parking | ☐ Over Speed |
| ☐ GSM Jamming | ☐ Geo-Fence | ☐ 1st Position Fix | ☐ Health Check Report |
| ☐ Harsh Brake | ☐ Harsh Accelerate | ☐ Harsh Cornering | ☐ Front Collision |
| ☐ Rear Collision | ☐ Turn Over | ☐ 1-WIRE | ☐ Balance Notification |
| ☐ External Power | ☐ Backup Battery | ☐ AD1 Voltage | ☐ AD2 Voltage |
| ☐ NULL | ☐ NULL | ☐ NULL | ☐ NULL |
| ☐ IN1 Event | ☐ IN2 Event | ☐ IN3 Event | ☐ IN4 Event |
| ☐ ACC Status | ☐ Comb1 | ☐ Comb2 | ☐ Comb3 |

This command is to customize event report name to USER. **Example:**

By default	Customization
G6S V1.00	G6S V1.00
LTM 2013-02-28 23:51:09	LTM 2013-02-28 23:51:09
GPS 1.55/0.50/3/4	GPS 1.55/0.50/3/4
N23.164302	N23.164302
E113.428456	E113.428456
SPD:0km/h 0	SPD:0km/h 0
ETD:28/ACC ON	ETD:28/Car starts
CSQ -52dBm	CSQ -52dBm
ACIN=12.13V	ACIN=12.13V
BAT=3.96V	BAT=3.96V
#28	#28

6. Tab “I/O Port”

The fourth tab is for programming the I/O Port



Command AIM

☐ AD/IN Input Working Mode (AIM) AD1/IN3 Analog(12V) AD2/IN4 Digital

This command is to set input port attribution.

AD1/IN3: “Analog” means this input is used for voltage value reading (or peripheral device that based on voltage). “Digital” means this input is used for switch detection, and IN3 is defined as low level triggered.

AD2/IN4: “Analog” means this input is used for voltage value reading (or peripheral device that based on voltage). “Digital” means this input is used for switch detection, and IN4 is defined as low level triggered.

Note: For TTL gate circuit Input>2.4V as high level, input<0.4V as low level.

Command DOM

☐ Digital Output Working Mode (DOM) Channel ID **OUT1**
 Mode **Rising Edge** Duration **10000** **ms**

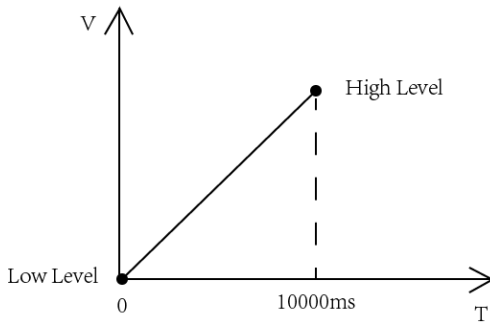
This command is to configuration digital output wave shape.

Channel ID: Specify which output port.

Mode: Rising edge.

Duration: 10000ms

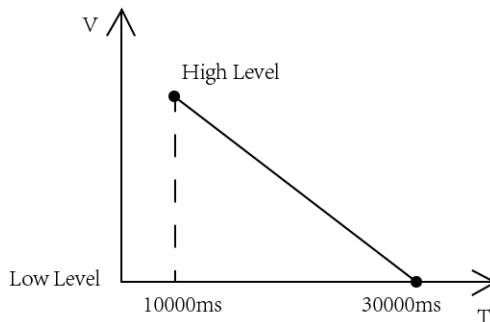
It means it is going to take 10 seconds to rise from low level to high level, could be like:



Mode: Failing edge

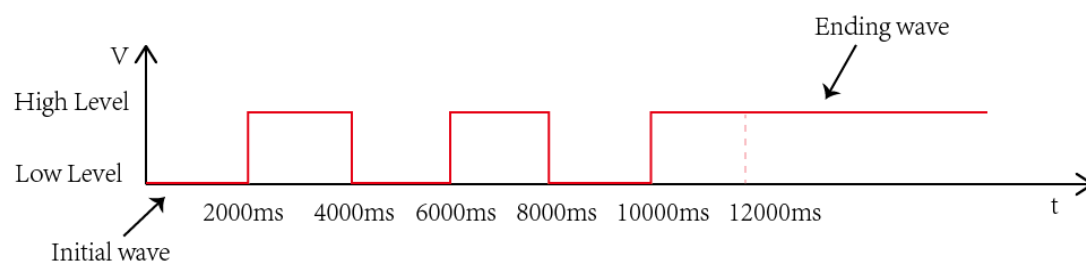
Duration: 20000ms

It means it is going to take 20 seconds to fall from high level to low level, could be like:



Mode: Square wave 1 to Square wave 4, they are having same parameter, e.g.:

Square Wave Para
 High Level Duration **2000** **ms** Low Level Duration **2000** **ms**
 Time **3** Initial Wave **Low Level** Ending Wave **High Level**



Command DOP

 ☐ Output Port Speed Condition(DOP)

OUT1 Activate Speed Threshold	40	km/h
OUT2 Activate Speed Threshold	40	km/h
OUT3 Activate Speed Threshold	40	km/h

This command will set the active speed threshold.

Command DIM

 ☐ Digital Input Working Mode (DIM)

Channel ID:

Mode:

Duration Threshold: ms

Lower Limit:

Upper Limit:

Initial Meter Value:

Meter Value Threshold:

Reset Meter Value to Zero When Reach Threshold: ☐ Yes ☐ No

This command is to set wave shape trigger conditions of digital inputs.

Mode:

“Level”:

It means any input level switching will trigger input (IN) event.

“Frequency meter”:

“Lower limit” and “upper limit” to specify input frequency range, outside range will trigger input (IN) event.

“Pulse meter”:

“Initial meter value” means device will accumulate pulse number based on this value. “Meter value threshold” means surpassing this value will trigger input (IN) event.

“Low level”:

“Duration” means input switching **from high level to low level**, and keep low level over this duration will trigger input (IN) event.

☒ Digital Input Working Mode (DIM)

Channel ID:

Mode:

Duration Threshold:

Example: DIM set as above, and let us suppose IN3 is connecting with a high level signal at the beginning.

IN3 “status0: high level to low level” event will be triggered if:

Signal high level goes to low level and last over 10000ms (10 seconds).

“High level”:

“Duration” means input switching **from low level to high level**, and keep high level over this duration will trigger input (IN) event.

☒ Digital Input Working Mode (DIM)

Channel ID:

Mode:

Duration Threshold:

Example: DIM set as above, and let us suppose IN1 is connecting with a high level signal at the beginning.

IN1 “status0: low level to high level” event will be triggered if:

Signal high level goes to low level, then low level goes back to high level again and last over 5000ms (5 seconds).

“Rising edge”:

“Initial meter value” means device will accumulate rising edge number based on this value. “Meter value threshold” means surpassing this value will trigger input (IN) event.

“Failing edge”:

“Initial meter value” means device will accumulate failing edge number based on this value. “Meter value threshold” means surpassing this value will trigger input (IN) event.

“Edge”:

“Initial meter value” means device will accumulate rising and failing edge number based on this value. “Meter value threshold” means surpassing this value will trigger input (IN) event.

Important Note:

IN1 & IN2 is low level triggered (which means when IN1 & IN2 is floating, their default input level is HIGH)

IN3 & IN4 is high level triggered (which means when IN3 & IN4 is floating, their default input level is LOW)

Command ADS

☐ AD Sample Rate (ADS)
 Channel ID AD1/IN3

Sample Period 10 S
 Sample Times 20

This command is to set Analog-Digital converter sample rate.

Sample rate, or sampling frequency defines the number of samples per unit of time (usually seconds) taken from a continuous signal to make a discrete signal, the reciprocal of the sampling frequency is the sampling period or sampling interval, which is the time between samples.

Sample Period: 1/frequency.

Sample Times: Times of each AD sampling.

Command ATH

☐ AD1/AD2 Voltage Event Configuration (ATH)
 Channel ID AD1/IN3

Lower Limit 50 100mv
 Upper Limit 100 100mv

Duration Time 3 S

This command is to set analog input voltage event.

Channel ID: Specify which input to use, please note set input as AD via command AIM in advance.

Lower limit & Upper limit: Specify event triggered voltage range, and inside range is defined as “Normal”.

Duration time: Over this duration time will trigger event.

Command IBO

☐ 1-WIRE Working Mode (IBO)
 Disable

This command is to set 1-WIRE peripheral device.

Disable: 1-WIRE data wire is disabled.

iButton: To use driver ID.

Temperature sensor: To use temperature sensor.

Command IBP

☐ Set iButton Working Mode (IBP) Enable Permit iButton Verification ☒ Yes ☐ No

Enable Digital Output ☒ Yes ☐ No Digital Output Channel OUT1 ▼

Digital Output Mode High Level ▼ Delay Time 10 S

This command is to set iButton (driver ID) working mode

Enable permit iButton verification: “no” means device will not verify with iButton white list (command IBI), any iButton input is able to start, device will report current GPS/GSM position and iButton ID to server, digital output is disabled. “Yes” means device will compare input iButton ID with permit list, if match vehicle is able to start, digital output is disable. If not match device will report current GPS/GSM position and illegal ID to server, digital output or not depending on Enable digital output.

Enable digital output: Specify when illegal iButton input happens to trigger wave shape output.

Command TMP

☐ Set 1-WIRE Temperature Alarm Range (TMP)

Lower Limit 10.0 Celsius Upper Limit 20.0 Celsius

Duration Time 3 S

This command is to set temperature range event, only valid when command IBO set as “Temperature sensor”.

Lower limit & Upper limit: Set temperature range, outside this range will trigger 1-WIRE temperature event report.

Duration time: Temperature outside this range over this duration will trigger event.

Command IBI

Set iButton White List (IBI)

☒ iButton Serial Num.1		☒ iButton Serial Num.9	
☒ iButton Serial Num.2		☒ iButton Serial Num.10	
☒ iButton Serial Num.3		☒ iButton Serial Num.11	
☒ iButton Serial Num.4		☒ iButton Serial Num.12	
☒ iButton Serial Num.5		☒ iButton Serial Num.13	
☒ iButton Serial Num.6		☒ iButton Serial Num.14	
☒ iButton Serial Num.7		☒ iButton Serial Num.15	
☒ iButton Serial Num.8		☒ iButton Serial Num.16	

This command is to save iButton ID as legal iButton, up to 16 IDs is supported.

Command IBC

☒ Reset All iButton ID Setting(IBC) ☐ Yes ☒ No

This command is to reset iButton settings to default.

7. Tab “Geo-Fence”

The fifth tab is for programming the Geo-Fence

7.1. Sub-Tab “General”

General: is the first sub tab for programming the G6S/G3S Vehicle Tracking Device.

Device	Connectivity	Event	I/O Port	Geo-Fence
General	Draw Geo-Fence	Geo-Fence Config		

Command GOF

☒ Enable Geo-Fence (GOF) ☐ All

☒ 01	☒ 02	☒ 03	☒ 04	☒ 05	☒ 06	☒ 07	☒ 08	☒ 09	☒ 10	☒ 11	☒ 12	☒ 13
☒ 14	☒ 15	☒ 16	☐ 17	☐ 18	☐ 19	☐ 20	☐ 21	☐ 22	☐ 23	☐ 24	☐ 25	☐ 26
☐ 27	☐ 28											
☐ 29	☐ 30	☐ 31	☐ 32	☐ 33	☐ 34	☐ 35	☐ 36	☐ 37	☐ 38	☐ 39	☐ 40	☐ 41
☐ 42	☐ 43	☐ 44	☐ 45	☐ 46	☐ 47	☐ 48	☐ 49	☐ 50	☐ 51	☐ 52	☐ 53	☐ 54

This command is for setting the Geo-fence mask. The device supports up to 156 Geo-fences by default only the first

16 are enabled. Check mark the All box then write to the device will enable all 156 Geo-fences for you to setup and use, or select them individually.

Note: The first 28 can use the Polygonal, Rectangular, and Circular Geo-fences. The Next 29 to 156 can only use the Circular Geo-fences and you can set them up more than 100 meters.

Command UFM

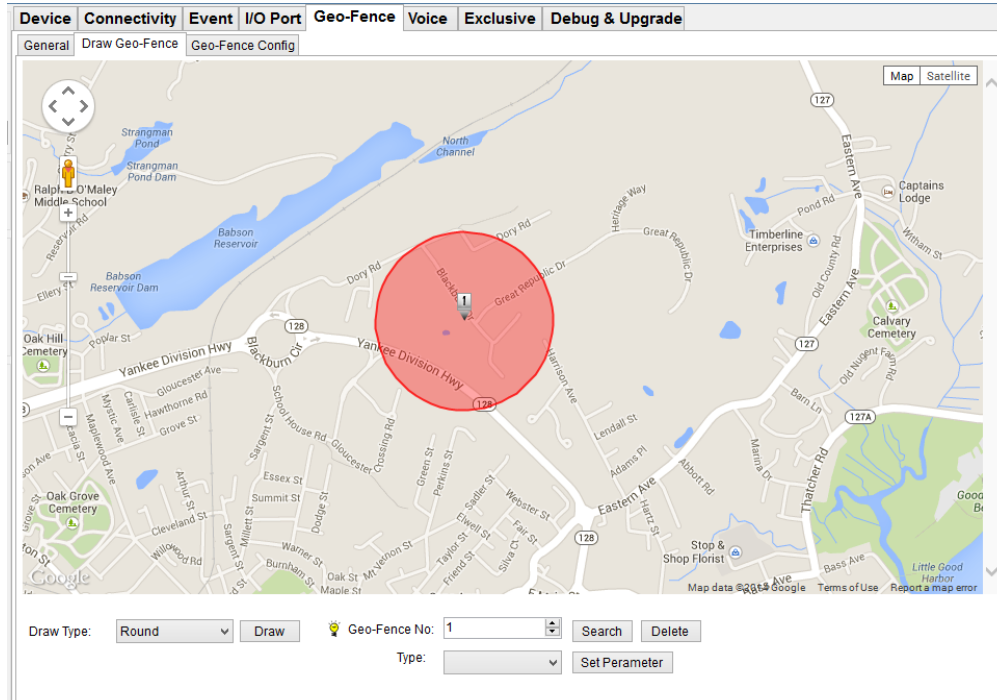
☒ User Geo-Fence Mask (UFM) ☐ All

☒ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10	☐ 11	☐ 12	☐ 13
☐ 14	☐ 15	☐ 16	☐ 17	☐ 18	☐ 19	☐ 20	☐ 21	☐ 22	☐ 23	☐ 24	☐ 25	☐ 26
☐ 27	☐ 28											
☐ 29	☐ 30	☐ 31	☐ 32	☐ 33	☐ 34	☐ 35	☐ 36	☐ 37	☐ 38	☐ 39	☐ 40	☐ 41
☐ 42	☐ 43	☐ 44	☐ 45	☐ 46	☐ 47	☐ 48	☐ 49	☐ 50	☐ 51	☐ 52	☐ 53	☐ 54

This command is to open Geo-fence for a USER to use, checked box means it is open to USER0 and USER1.

7.2. Sub-Tab “Draw Geo-Fence”

Draw Geo-Fence: is the second sub tab for programing the G6S/G3S Vehicle Tracking Device.



This command is to draw Geo-fence and set trigger conditions.

Draw Type: Specify Geo-fence shape, please note only Geo-fence number1 to number28 support “Round/Rectangle/Polygon”, and while number29 to number 156 supports “Round” only.

Type: “Geo-fence In” means this Geo-fence event will be triggered when entering, “Geo-fence Out” means this Geo-fence will be triggered when leaving. “In or Out” means event will be triggered when crossing.

7.3. Sub-Tab “Geo-Fence Config”

Geo-Fence Config is the third sub tab

Command GFS

General Draw Geo-Fence **Geo-Fence Config**

☐ Enable Geo-Fence Valid Period(GFS)
 Geo-Fence No: Enable Valid Period ☐ Yes ☐ No

☐ Set Geo-Fence Valid Period(GFSx;T) Geo-Fence No:
 Valid Day of Week ☐ Sun. ☐ Mon. ☐ Tue. ☐ Wed. ☐ Thu. ☐ Fri. ☐ Sat.

☐ Valid Period1 Start Time hh:mm End Time hh:mm
☐ Valid Period2 Start Time hh:mm End Time hh:mm
☐ Valid Period3 Start Time hh:mm End Time hh:mm

This command is to set the time range restriction for Geo-fence event detecting on daily basis.

Example: For Geo-fence number 1 it only valid during 08:00 to 12:00, 13:00 to 18:00, 1900 to 22:00 on Monday to Friday

Command GFS

☐ Enable Geo-Fence Valid Speed Range(GFS)
 Geo-Fence No: Type

☐ Set Geo-Fence Speed Range(GFSx;S) Geo-Fence No:
 Min Speed km/h Max Speed km/h

☐ ResetAll Geo Fences Setting(GFC) ☐ Yes ☐ No

This command is to set speed range restriction for Geo-fence detecting.

Type: “Invalid” means this feature disabled. “Inside range” means if vehicle inside speed range Geo-fence number 1 event will be triggered. “Outside range” means if vehicle outside speed range Geo-fence number 1 event will be triggered.

Min Speed” & “Max speed: Define speed range.

8. Tab “Voice”

VOICE SECTION:

Device Connectivity Event I/O Port Geo-Fence **Voice**

Command PWL

 Phone Number White List (PWL)

☐ Phone Number 1		☐ Phone Number 9	
☐ Phone Number 2		☐ Phone Number 10	
☐ Phone Number 3		☐ Phone Number 11	
☐ Phone Number 4		☐ Phone Number 12	
☐ Phone Number 5		☐ Phone Number 13	
☐ Phone Number 6		☐ Phone Number 14	
☐ Phone Number 7		☐ Phone Number 15	
☐ Phone Number 8		☐ Phone Number 16	

This command is to modify phone number list that authorized to use voice related features of device, 16 phone numbers is supported, and please note that microphone and speaker installation is needed.

Command MWL

 ☐ Stealthy Voice Monitoring White List (MWL)

☐ Num.1 ☐ Num.2 ☐ Num.3 ☐ Num.4 ☐ Num.5 ☐ Num.6 ☐ Num.7 ☐ Num.8
☐ Num.9 ☐ Num.10 ☐ Num.11 ☐ Num.12 ☐ Num.13 ☐ Num.14 ☐ Num.15 ☐ Num.16

This command is to specify which phone number from above command PWL to have authorization of voice monitoring, which means when phone number 1 “123456” from PWL calls, device will pick it up and enable microphone of device (Speaker disabled), and you can hear from vehicle.

Command HWL

 ☐ Hotline Number White List (HWL)

☐ Num.1 ☐ Num.2 ☐ Num.3 ☐ Num.4 ☐ Num.5 ☐ Num.6 ☐ Num.7 ☐ Num.8
☐ Num.9 ☐ Num.10 ☐ Num.11 ☐ Num.12 ☐ Num.13 ☐ Num.14 ☐ Num.15 ☐ Num.16

This command is to specify which phone number from above command PWL to have authorization of hotline, which means when phone number 2 “1234567” from PWL calls, device will pick it up, and enable microphone & speaker of device for conversation.

Command QWL

 ☐ Inquiry Position Permitted Phone Number White List (QWL)

☐ Num.1 ☐ Num.2 ☐ Num.3 ☐ Num.4 ☐ Num.5 ☒ Num.6 ☐ Num.7 ☐ Num.8
☐ Num.9 ☐ Num.10 ☐ Num.11 ☐ Num.12 ☐ Num.13 ☐ Num.14 ☐ Num.15 ☐ Num.16

This command is to specify which phone number from above command PWL to have authorization of inquiry position,

which means when phone number 3 “12345678” from PWL calls, device will pick not it up, but will reply a message with current position.

Command SWL

☐ SOS Phone Number White List (SWL)

☐ Num.1 ☐ Num.2 ☐ Num.3 ☐ Num.4 ☐ Num.5 ☐ Num.6 ☐ Num.7 ☐ Num.8
☐ Num.9 ☐ Num.10 ☐ Num.11 ☐ Num.12 ☐ Num.13 ☐ Num.14 ☐ Num.15 ☐ Num.16

This command is to specify which phone number from above command PWL to have authorization of SOS, which means when Panic button is pressed, device will call phone number 4 “12345678” from PWL automatically.

Command VOE

☐ Voice Functionality Configuration (VOE)

Enable Voice Feature

☐ Yes
 ☒ No

Enable Voice SOS

☐ SOS Input Channel

This command is to toggle all voice features of device.

Enable voice SOS: “Disable” means when panic button is pressed, device will not call the specific SOS phone number.

“Communicate” means when panic button is pressed device will enable microphone & speaker, and call SOS phone number. “Monitoring only” means when panic button is pressed device will enable microphone only and call SOS phone number.

SOS input channel: Specify which input to connect with panic button, please note if use IN3/IN4, need to set as digital.

Command AGN

☐ Audio Configuration (AGN)

Microphone Gain

0

Speaker Gain

0

This is for setting up values for microphone gain and speaker gain.

9. Tab “Exclusive”

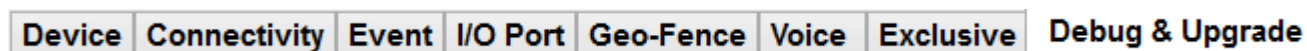
EXCLUSIVE SECTION:

Device	Connectivity	Event	I/O Port	Geo-Fence	Voice	Exclusive
G737IC	G79W					

***Note:** This section is reserved for programming of the G737IC and G79W

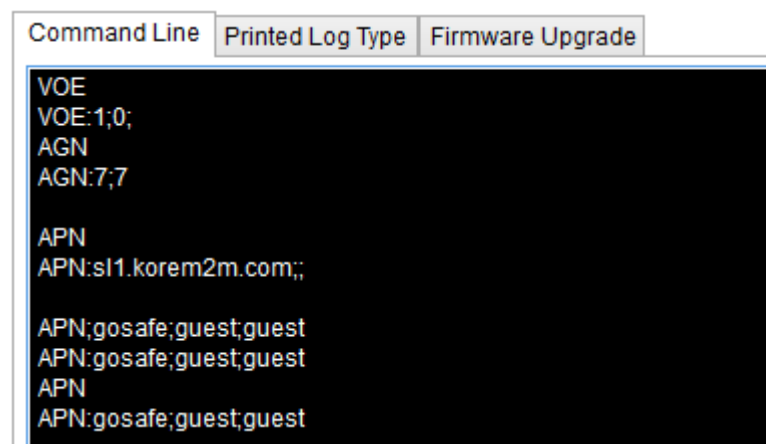
10. Tab “Debug & Upgrade”

The Eight Tab is for Device Debugging and Firmware Updating



10.1. Sub-Tab “Command Line”

Command Line Terminal



The command line terminal is used to manually input any command from the G3S/G6S protocol. You can read back current command settings and also you have the ability to make command changes here in the terminal for the device.

Example: In the screen above the user typed command **VOE** in the terminal and after pressing enter the value stored in that register will display on the screen. The command **APN** here was initially set to **APN:sl1.korem2m.com** and was changed by inputting preferred changes with the command name first then semicolon to separate the individual changes **APN;gosafe;guest;guest**.

10.2. Sub-Tab “Printed Log Type”

Printed Log Type UGP

Device	Connectivity	Event	I/O Port	Geo-Fence	Voice	Exclusive	Debug & Upgrade
Command Line Printed Log Type Firmware Upgrade <pre> 2014-5-30 5 19:29:2 2D Moving Device MoveHarsh Turn LeftHarsh Turn Right2014-5-30 5 19:29:13 Creat Gprs Std InfoSnding Dat In Soc2Harsh Turn RightSnded Dat In Soc2Harsh Accelerate Harsh Turn LeftHarsh Turn Left 2014-5-30 5 19:29:22 Harsh Turn LeftHarsh Turn LeftEvent: TOWSTATE_Enter! Harsh Turn Left2014-5-30 5 19:29:32 2D Static2D MovingHarsh AccelerateHarsh Turn LeftDevice Move 2014-5-30 5 19:29:42 Creat Gprs Std InfoSnding Dat In Soc2Snded Dat In Soc2 2D StaticEnter1 REG:5 CSQ:4 Geted Lbs Info2014-5-30 5 19:29:52 2014-5-30 5 19:30:2 2D MovingDevice Move 2014-5-30 5 19:30:12 Creat Gprs Std InfoSnding Dat In Soc22D StaticSnded Dat In Soc2 2014-5-30 5 19:30:22 2014-5-30 5 19:30:32 Event: TOWSTATE_Over! 2014-5-30 5 19:30:42 Creat Gprs Std InfoSnding Dat In Soc2Snded Dat In Soc2 2014-5-30 5 19:30:52 Enter1REG:5 CSQ:3 </pre>							

☒ Printed Log Type(UGP)

Tracker

Read

Write

Exit

Save

With this utility you have the ability to read various data strings directly from the connected device and also save it to a log file for later viewing.

Printed Log Type (UGP): This mode is to print real time packet in the debug window.

NULL: This is zero for no log.

GSM (AT+): The GSM module communicates with AT protocol command string.

GPS (NMEA): This item reads the GPS NMEA protocol command string.

Tracker: This item reads directly from the MCU of the tracker.

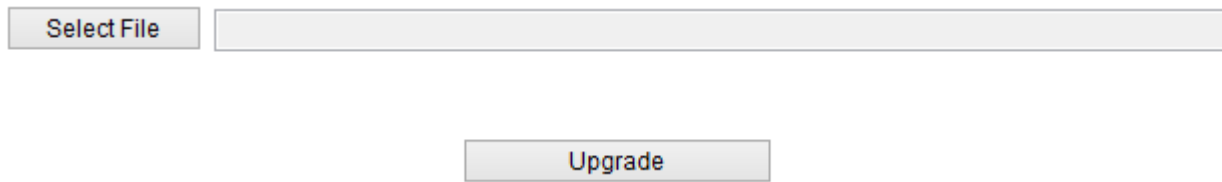
Read:

Write: Click on write to activate selected drop down setting.

Exit: Click to exit the debug mode you are currently working with.

Save: Click on save to write the data to a log file and save on the computer.

10.3. Sub-Tab “Firmware Upgrade”



The interface consists of a 'Select File' button on the left, followed by a large, empty rectangular text box for file selection. Below this, centered, is an 'Upgrade' button.

This command is for firmware local upgrading of your device. Click on “**Select File**” and direct file browser to the upgrade file, then click on “**Upgrade**” to start. Once the firmware upgrade has been completed the device will reboot itself to finish the process.