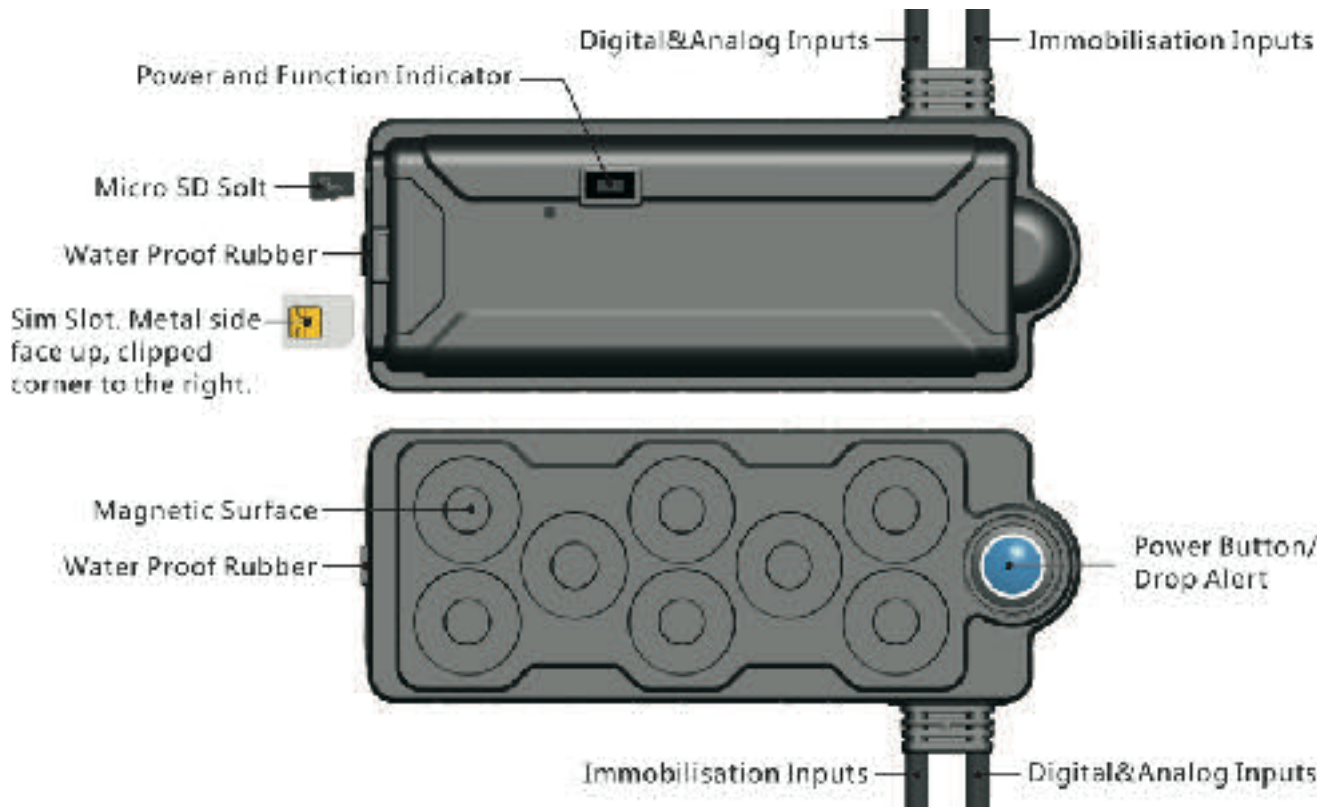


GPS TRACKER

TK10SDC User Manual

1. Product Image



Content of the packaging

- Tracking device
- Micro USB charging cable
- Screwdriver and screws
- User Guide

2. Installation Manual

2.1 SIM Card Pre-installation, specification note

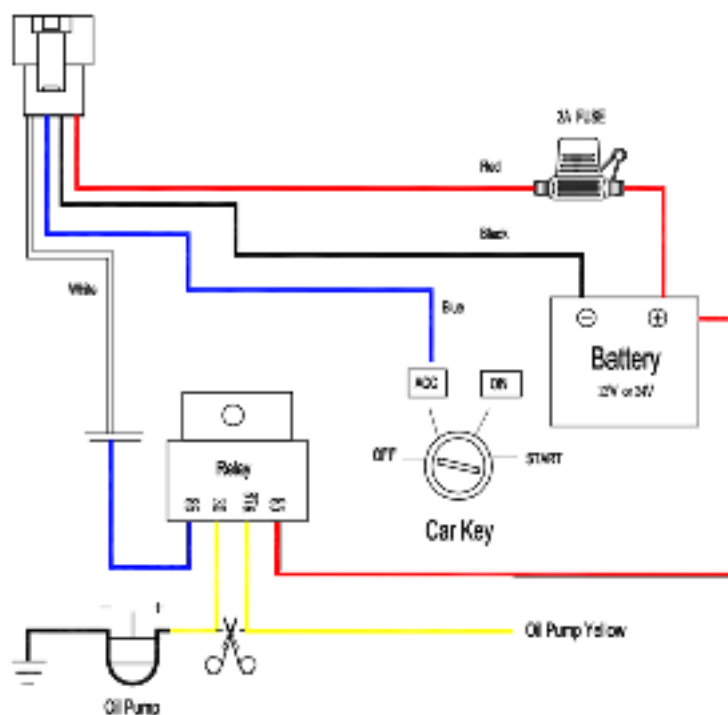
- GSM 3G/2G Normal SIM Only
- SIM card should have its GPRS function enabled.
- SMS request will function only if Caller ID function is enabled.

2.2 SIM Card Installations and Removal

- Open waterproof rubber
- Insert SIM card into the SIM slot, metal face up, clipped corner to the right.

- ## 2.3 Immobilisation Device Installation

-
- Diagram illustrating the back of the device, showing the terminal block and wiring connections. The terminal block is labeled with the following connections:
- Yellow — (Signal input)
 - White — (Signal input)
 - Black — (Power input)
 - Red — (Power input)



Please select 12V or 24V relay according to the car battery voltage.

Immobilisation Installation

- a. Red cable connects to positive pole and relay 85
- b. Black cable from device connects to negative pole.
- c. Blue cable from device connects to ACC ignition.
- d. White cable from device connects blue cable from relay 86
- f. Cut off the positive connection wire of the pump, connects with the 2 yellow wires from relay 30 and 87a

Inputs Installation

- a. Digital inputs: Yellow and White wires
- b. Analog inputs: Black and Red wires

3. Button Operation

We strongly recommend you to charge the product before using it the first time. And device will be automatically on once SIM is inserted. Please DO NOT PRESS ANY BUTTON when you use it for the first time.

3.1 Indicator for GPS function

- a. **Power On:** Insert Sim card. Green light flashes once and turns to steadily on for 10 seconds, and then turns off.
- b. **Power Off:** Take the Sim card out.
- c. **Charge:** A red light is steadily on during charging and turns off when it is fully charged.
- d. **GSM/GPRS Connection:** Green light flashes until network is connected.
- f. **GPS Connection:** Blue light flashes once.

3.2 Panic Button

2 short presses and 1 long press on the control button will trigger a SOS alert to registered master number and will be uploaded to the server, when SOS function is enabled.

3.3 Drop Alert

System has equipped with a Drop Alert button. When device is mounted on metal surface over 1 minute, drop alert will be triggered. Once device is removed, master number will receive a SMS alert. System default as On.

4. LED Indicator

Device Status	LED Light Description	Note
Power On	Green Light flashes, turns to steady on, and turns off	If the green light keep flashing,It mean GSM/GPRS is not connected.
GPS Connection	Blue light flashes once	
Power Off	Blue light flashes 3 times	
Charge	Red light on when charging and turns off when fully charged.	

SMS Commands Operating Guide

Please make sure the SIM card you insert in the device support sending SMS function, otherwise you won't be able to receive any command reply

1. Registration

1.1 Set APN

APN is Access Point Name. The correct APN must be set to enable the device to send data to the server. Different SIMs have different APN, make sure you have confirmed the correct APN information with the SIM provider when you purchase the SIM.

Command

apn* APN's name*username* password

Some APN goes without username and password, you can just leave them blank.

Example: Orange France

APN: orange.fr

Username: orange

Password: orange

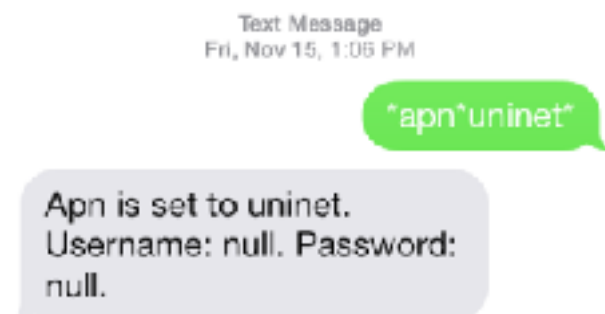
**Correct command format *apn*orange.fr*
orange*orange***

Example: China Union

APN : uninet

Username: null

Password: null



Correct command format ***apn*uninet***

Your cell phone will receive confirmation saying that the appointed APN is set (See screenshot).

1.2 Registering the “Master” Controller

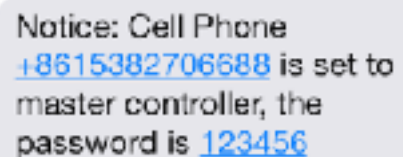
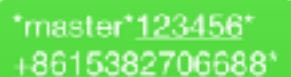
- A. Use cellphone to send SMS ***master*123456*+country code plus your cellphone number*** to the device SIM number. 123456 is the default password, it can be changed by changing password command as showed on 1.3.

Example

master*123456*+319876543210 (+31 refers to Netherlands country code, 9876543210 refers to the cell phone number)

- B. Once your cellphone receives the confirmation sms, it will become the only master phone to the tracker (See screenshot).

NOTE: The device will **ONLY** listen and respond commands from this number unless you choose to turn on the multi controller function and open the device to any cell phone number



1.3 Changing the Password

SMS: *password*654321* (654321 refers to new password)

Changing password command has to be sent only from the master number. And new password has to be applied to when you need to register the device with a new master number.

2. Motion Alert

The motion alert enables device triggered a call/sms alert when motion is detected, **after 3-minutes of non-movement.**

2.1 Set vibration sensitivity

There are 5 levels of the motion sensitivity. 1 being the most sensitive, 5 the least, default setting is 1.

SMS: *sensitive*1-5*

2.2 Set SMS/CALL Alert

There will be a Call/SMS alert sent to master number when any motion is detected, after 3 minutes of non-movement. **The system default setting is call alert, and can be turned off by command.**

SMS: *alertoff*

To turn off motion alert function.

SMS: *smsalert*

To enable motion sms alert function.

SMS: *callalert*

To enable motion call alert function.

2.3 Period Continuous Motion Alert

System will enable the continuous motion alert function at appointed time periods, up to 3 time periods per day.

That means master number will receive the call/sms alerts continuously when device detects on continuous motion.

Time format need to be in military time.

System default set UTC time, if you are not in this timezone, please set your timezone before using this function.

SMS: *continuousalert*(2 digits start time)*(2 digits end time)*

Example

*continuousalert*08*14* means system will enable continuous motion alert function from 8am to 2pm.

SMS: *continuousalertoff*

To turn off period motion alert function.

3. Tracking via SMS

3.1 SMS: *locateaddress*

Master number will receive the GPS address of the device via SMS. If GPS location is invalid, device will reply the WiFi location, or the closest cell tower location instead.

3.2 SMS: *locatemap*

Master number will receive a Google map link. Click the link to view the map via cellphone browser. If GPS location is invalid, device will reply the map link of the WiFi location, or the closest cell tower location instead.

And this function is suitable for smart phone user only.

4. Tracking via website and applications

Tracking Website: www.miitown.com

ID: Registered Master phone number.

Password: Default as 123456.

It can be changed on the tracking website.

Recommended Web browsers are Chrome, Firefox or cell phone default browser.

4.1 Real-time Tracking (High Power Consumption)

Routetrack function enables device to upload 6 locations to server every minute when device is **in motion**.

4.1.1 Routetrack

SMS: *routetrack*1-99*

1-98 represents the number of hours that the routetrack function works. 99 represents to turn the routetrack function always on.

Example

*routetrack*1* means uploading 6 location GPS data every minutes for 1 hour

4.1.1.1 Rsampling

Rsampling is to set routetrack data collecting interval.

The smaller interval, the higher accuracy, but the higher power consumption.

SMS *rsampling*1-999*

1-999 represents seconds of data collecting interval, default as 10 seconds

4.1.1.2 Rupload

Rupload is to set routetrack data upload interval.

The smaller interval, the higher accuracy, but the higher power consumption.

SMS *rupload*60-999*

60-999 represents seconds of data uploading interval, default as 60 seconds, **minimum rate should not be less than 60**

Example

*rsampling*30* plus *rupload*120* means 4 location data will be uploaded to server every 2 minutes when routetrack function is on.

SMS: *routetrackoff*

To turn off route track function.

4.2 Check GPS Location (Medium Power Consumption)

Check function enables device to upload GPS location in an appointed interval, **when device is in motion**. If GPS location is invalid, system will upload the WiFi location (for models support WiFi function), or the closest cell tower location instead.

SMS: *checkm*5-1800*

5-1800 represents the number of minutes that the device Check's data upload interval, **minimum rate should not be less than 5**.

Example

*checkm*360* means uploading GPS data every 6 hours.

Noted:

1. Check function is able to work with routetrack and Checkgsm functions at the same time.
2. System is default as *checkm*4320*. 1 location will be uploaded to server every 72 hours.
3. Location will be uploaded to server when device is in motion.

4.3 Check GSM Location (Low Power Consumption)

Checkgsm function enables device to upload ONLY the GSM location in appointed interval of time. Data will be uploaded to server on both occasions, i.e, if the device is **in motion or not in motion**.

And this function can be used with routetrack and Check function at the same time.

SMS: *checkgsm*5-1800*

5-1800 represents the the number of minutes of Checkgsm's data upload interval, **default as off**; rate should not be less than 5.

Example

*checkgsm*30* means uploading GSM data every 30 minutes.

4.4 Turning Upload function

Turning upload enable device to upload a location when the car turn angle is over 30 degrees. The angle degree can be changed as follow command.

SMS: *degree*0-360*

1-360 represents the turn angle location upload rate. 0 represent off.

Example

*degree*30* means location will be upload when the turn angle is over 30 degrees.

4.5 Distance Upload function

Distance upload enable device to upload location by appointed distance.

SMS: *distance*1-250*

1-250 represents the distance control in KM.

Example

*distance*10* means location will be upload every 10KM distance.

4.6 Advanced Tracking

Advanced tracking including appointed time tracking and appointed period tracking. System default as UTC time, timezone has to be set to use advanced tracking functions if device is not using in UTC timezone.

4.6.1 Timezone

SMS: *timezone*0-24*

Example

Italy= *timezone*2*

UK= *timezone*0*

Australia Perth = *timezone*8*

4.6.2 Appointed Time Tracking

To Check map location at appointed time, up to 3 time points per day.
Device will stay in deep sleep mode except the appointed tracking time.
Time format need to be in military time and can be set to every half hour.

SMS: **timinglocatemap*(appointed locating time)**

Example:

timinglocatemap*0830*1400*1830 means master number will receive a text message with a google map link at 8:30am 2:00pm and 6:30pm, click the link to view the device location on goole map through your cellphone browser. It is suitable for smart phone user only.

SMS: **timinglocateoff**

To end timing locate function.

4.6.3 Period Tracking

Period Tracking is to enable the preset tracking function in appointed periods only, up to 3 time periods.

Device will stay in deep sleep mode except the appointed tracking period.

Time format need to be in military time and can be set to every half hour.

SMS: **periodlocate*(8 digits locating period 1)*(8 digits locating period 2)**

Example

periodlocate*08301100*14001830 means system will enable the tracking function during 8:30am-11:00am and 2:00pm-6:30pm of the day. 0830 and 1400 refers to the start time of the tracking period, 1100 and 1830 refers to the end time of the tracking period.

SMS: **periodlocateoff**

To end period locate function.

4.7 Track Off

Track off will end all the tracking functions, including routetrack, checkm, checkgsm, timing locate and period locate.

SMS : **trackoff**

To turn off all tracking functions, including routetrack, check, checkgsm, timing locate and period locate.

5 Upload Alert

The upload alert function enables device upload alert status to the server including **motion alert, ACC on/off alert, bad battery alert, low battery alert** and **wire cut alert, drop alert** etc. User can check alert status on the tracking website or message section in app.

This function is default as ON.

SMS: *uploadalert*on*

To enabled upload alert function.

SMS: *uploadalert*off*

To disable upload alert function.

6. Sleep Function (Lowest Power Consumption)

7.1 Interval Sleep

Device will go to deep sleep mode and wake up after appointed interval, and stay awake for 12 mintues. If there is no new commands received in 12 minutes, device will go back to deep sleep mode for the next set interval.

Note: System will shut down GPS and GSM module during deep sleep period, so no call or SMS can be received or responded.

SMS : *sleep*1-99*

1-99 refers to the hours of appointed sleep interval.

Example

*sleep*6* means to enable device to go to deep sleep mode and wake up in every 6 hours.

6.2 Motion Sleep

Motion Sleep function enables device to stay in deep sleep mode and wakes up once motion is detected. System will upload the current location of the device. If motion continues, system will stay on and operate the previous tracking settings. If there is no further motion detected, device will go back to deep sleep in 12 minutes. And the circle repeats.

Note: System will shut down GPS and GSM module during deep sleep period, so no call or SMS can be received or responded.

SMS: *sleepv*

To enable motion sleep function.

SMS: * sleepoff*

To turn off motion sleep function.

7. Immobilisation

Immobilisation function suitable for models support fuel cut function only. It enables device to cut off the gasoline supply of the engine remotely when speed is under 20KM/hour. The vehicle can not be started again after device operating the fuel cut command. **Please make sure device has located GPS location before using this function.**

SMS: *engineoff*

To enable fuel cut function.

SMS: *engineon*

To end fuel cut function.

8. SD Offline Storage

SD offline storage function suitable for models support SD card only. Please check your models number in Hardware Specification to confirm.

Big Buffer

Offline storage enables device to save location data into the SD card when GPRS connection invalid and data will be automatically uploaded to server when connection gets back. This process will be done automatically, no extra command operation is needed.

Logger

Offline storage is able to switch the tracking device into a logger for data saving.

Please operate as follows:

- Insert a Micro SD card in the SD slot.
- Insert a activated SIM into the SIM slot, set all needed function as usual.
- Send command *sdon* to enable to the offline storage function.
- All location data will be saved in the SD card instead of uploading to the server.
- Take the SD out of the device, copy the .bin files to your PC.
- visit <http://offline.miitown.com/>
- Select the data file and click Submit



- Click Report to view saved data report. Click Start to view history playback.
- Send command *sdoff* to end offline storage function.

Note

If you want to take the SIM out of the device after setting all commands, please use an invalid SIM or artificial SIM to replace. Since SIM slot connection is the power switch of the device, a SIM is required to be inserted anyway.

9. Status query

SMS: *status*

To check device setting status and performance. GPS ranking data will shows up only when routetrack function is on.

10. SOS Alert

SOS Alert function enables device to send SOS alert to preset number when the panic button is triggered.

Up to 3 SOS numbers can be preset.

The registered master number is the default SOS alert number.

10.1 Register the SOS alert number

SMS: ***master*123456*cellphone number 1*cellphone number 2*cellphone number 3***

NOTE: Please make sure country code is included in the cellphone number.

10.2 Panic Button

Power button is the panic button. If there is a SIM card inserted, 2 short presses and 1 long press to trigger SOS alert. Preset numbers will receive the following SOS SMS

“SOS! HELP! SOS!! HELP!! SOS!!! HELP!!!” **System default as off.**

SMS: ***soston***

To enable SOS alert function.

SMS: ***sosoff***

To turn off SOS alert function.

11. Low battery Alert

There will be a low battery SMS alert sent to master number when battery drops to 20% of it's capacity, and the routetrack function will be turned off for power saving. And it will resume working when battery is charged. The alert number can be appointed to any other cellphone number if needed.

Appoint low battery alert number

SMS: ***lowbat*alert cellphone number***

Note: Please make sure country code is included in the cellphone number.

Example

lowbat*+319876543210

12. Reboot

SMS: **88888888**

Reboot system, previous settings will not be cleared.

134. Master query

SMS: **999999**

To check registered master number, password and device's serial number.

14. Default

SMS: **default**

To operate factory default, previous settings will be cleared.

15. Multi Controller

Allows any cellphone number to check the device location and status besides the master number.

15. 1 SMS: ***multiquery***

To enable multi controller function.

15. 2 SMS: ***multiqueryoff***

To turn off the multi controller function.

16. Device Information

SMS: ***about***

To check device information including software edition and serial number.

Command Setting List

Function	Command	Description
APN Settings	*apn*APN's name *username*password*	Enable device to access internet.
Master Setting	*master*123456*country code (plus) cellphone number*	Register master number.
Password Changing	*password*654321*	Original password is default as 123456. 654321 refers to new password.
Vibration Sensitivity	*sensitive*1-5*	Set motion alert sensitivity, 1 is the most sensitive, 5 is the least
	alertoff	End motion alert

Function	Command	Description
Motion Alert	*smsalert*	Motion alert via SMS
	callalert	Motion alert via Call
Period Motion Alert	*continuousalert*(2 digits start time)*(2 digits end time)	Set period motion alert. The first 2 digitals refers to start time and second 2 digits refers to end time in hour.
	continuousalertoff	End period motion alert function.
Address Query	*locateaddress*	Address information of current location.
Google Map Search	*locatemap*	Google Map link with current location.
Real-time Tracking	*routetrack*1-99*	Device will upload 6 locations every minute. 1-98 represents routetrack data upload interval in hours. 99 represents always on.
Real-time Tracking sampling interval	*rsampling*1-999*	1-999 represents seconds of routetrack sampling interval
Real-time Tracking upload interval	*rupload*1-999*	10-999 represents seconds of routetrack upload interval
Real-time Tracking Off	*routetrackoff*	End routetrack function.
Check Location	*checkm*5-1800*	5-1800 represents minutes of check function data upload interval
	checkoff	End check function
	*checkgsm*5-1800*	5-1800 represents minutes of check gsm function data upload interval

Function	Command	Description
Turning Upload Location	*degree*1-360*	1-360 represents turning angle degrees when device uploads new location.
	*degree*0*	End Turning upload function
Time Zone	*timezone*0-24*	0-24 represents the timezone number for each country.
Appointed Time Tracking	*timinglocatemap*(appointed locating time)*	Set appointed time tracking. 4 digitals refers to start time and end time in hour. 0830 refers to 08:30am
	timinglocateoff	End appointed time tracking function
Appointed Period Tracking	*periodlocate*(8 digits locating period)	Set appointed period tracking. 8 digitals refers to start time and end time of the period. 08001100 represents 8am-11am
	periodlocateoff	End period locate function
Track Off	*trackoff*	End all the tracking functions.
Upload Alert	*uploadalert*on*	Enable upload alert function
	*uploadalert*off*	End upload alert function
Online Control	*onlineon*	Enable online control function
	onlineoff	End online control function

Function	Command	Description
Deep Sleep	* sleep*1-99*	1-99 represents device wake up interval in hours.
Motion Sleep	* sleepv*	Motion Sleep function with motion alert.
Sleep Off	*sleepoff*	End Deep Sleep function.
Status query	*status*	Check system status.
Multi Controller	*multiquery*	Enable multi controller function.
	multiqueryoff	End multi controller function.
Offline Storge	*sdon*	Enable offline storage function
	sdoff	End offline storage function.
SOS Alert	*soston*	Enable SOS alert function.
	sosoff	Disable SOS alert function.
Device Information	*about*	Software edition information and device's serial number.
Reboot	88888888	Reboot the system, previous settings will NOT be cleared.
Master Query	999999	Registered master number information, password and device's serial number.
Low Battery Alert Number	*lowbat*country code (plus) cellphone number*	To set low battery alert number.

Function	Command	Description
Factory Default	default	Default system, previous settings will be cleared.
Power Off	*poweroff*	Power off the device.

FCC Statement:

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device must be operated with a minimum distance of 20 cm between the radiator and user's body.