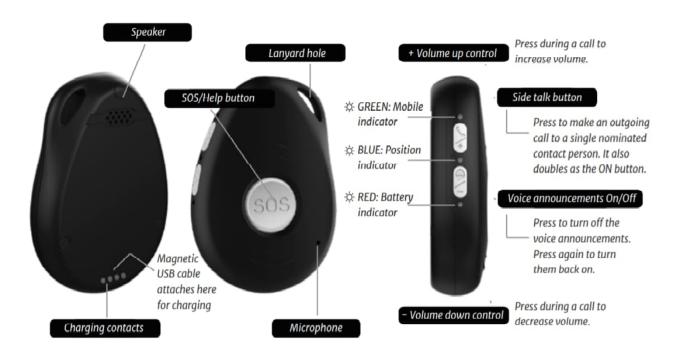
START GUIDE

GPS SOS TRACKER: MOBILE ALARM WITH GPS & FALL DETECTION

Recommended Settings





OVERVIEW & INTRODUCTION

The mobile alarm with GPS & Fall detection is a smart personal alert system. Your alarm pendant relies on 4G cellular frequencies to operate. It uses a Nano SIM card that connects to compatible 4G/VoLTE mobile networks. It also uses GPS, wifi and Bluetooth 5 to perform location finding functions. Your Device does not require an internet connection to perform any function. It may use wifi to find its location, but it is not dependent on wifi.

Your device uses SMS and voice frequencies across the cellular network to send out the text help messages and perform voice to voice communication with your emergency contacts. Being a mobile device, like a cell phone it needs to be recharged occasionally using the included charging leads. It is important that the user/operator of the device retains a copy any 'SMS Programming Guide' and this User Manual as it is likely they will be needed as a reference in the future.

BEFORE YOU START

The device requires a SIM Card with credit in order to operate. Prepay or Account SIM cards both work.

Please ensure your SIM personal voicemail is set up before inserting into the device. Test your SIM for calling and use text in a cell phone before inserting into the device.

How to Set up SIM before install https://youtu.be/EEveo7mgMYE

How to Insert SIM card — https://youtu.be/OyidohtePqM

Recommended SIM Cards:

USA - AT&T 4G, T-Mobile 4G

Canada – Rogers, Telus 4G, Bell, 4G

Australia – Telstra 4G, Optus 4G, Vodafone 4G New Zealand –One 4G, Spark 4G, 2Degrees 4G UK—EE /BT 4G. Europe/Africa—Check local providers**

Your Emergency Contacts

The device can call and send text help messages to a maximum of 10 people. The law of averages means the more contacts you have, the more chance someone will be able to help you quickly when you need help. Remember some contacts may have their phones turned off, be out of range, have dead batteries or it could be the middle of the night and they don't hear the phone.

Consider people with Smart phones in order to use the GPS/Bluetooth location feature fully. Only smart phone contacts will receive the help text messages with your location on Google Maps. You can include landline numbers, but these people will not see your location on a map.

You can include 'Emergency Services—911' (USA/Canada), 000 (Australia), 111 (NZ) 999 (UK) as one of the contact numbers. The 'Emergency Service' service may not receive the help text message. Many people place 'Emergency Service' ' last in the call sequence as a fallback in case the other contacts do not answer.

Speed Dial Side Button

The device has a Speed Dial button. When pressed till it vibrates it makes an outgoing call to a single emergency contact (contact 2 by default). You will then be able to have a 'hands-free' conversation with that nominated contact person. This may be useful for less urgent issues or simply to make contact with someone on a regular basis.

Turning On & Off

Turning On

When you take the device out of the box it will be turned off. To turn it on press the top side button. The green, blue and red LEDs will flash and the device will begin to start up. If you are in a mobile network area it will usually take between 30 to 60seconds to connect to the available mobile network. A slow green flash every 3 seconds signifies the device is trying to connect to the network. Once connected the green LED will show a fast flash once every 3 seconds.

Automatically turning on in charger If the device is off.

When you connect the USB magnetic charging cable it will automatically turn on.

Turning Off

There is no need to turn off the device off unless you will not be using it for a prolonged period of weeks or months.

To turn it off, hold down the SOS button and the grey, upper 'side talk button' together till the device vibrates. The lights will turn off shortly after you feel the vibration.



Charging

Charging via the Magnetic USB charging cable.

You can charge the device by attaching the magnetic USB cable plug to the four charging contacts on the rear of the pendant and the other end into the USB Power adaptor.

A voice warning will announce "Your mobile alarm is charging" when the magnetic charger is attached correctly.

The battery should only take around 120 minutes to fully charge if it is very low or dead. A full charge can last 2-3 days depending on use. The device will warn you when it needs to be recharged.

The device has the ability to send out a low battery warning via text to the first emergency contact. Usually this feature is turned on unless you asked us to turn it off during the setup. When the battery level in the device falls to around 20% it will vibrate and a voice will want you "Battery is low. Please recharge your battery." and will send a low battery text message to the first emergency contact at 15% charge. This feature can be turned on and off.

When the battery is fully charged the red light on the pendant will be solid red. You can also check with the command: battery

SOS Button



When you need help, Press the SOS/Help button down until you feel a vibration.

The device will then announce "SOS alarm has been activated. Click SOS to stop." before it starts the sequence of help text messages along with the outgoing help calls.

To cancel the SMS/call sequence just click the SOS button.

SMS to all contact

The device will send a help text message to all of your emergency contacts. Mobile numbers will receive the messages with the location of the wearer on your smart phone Maps.

If enabled to callout, the Help call sequence begins

The device will begin to call your emergency contacts in your chosen order, ringing for 20 seconds per contact before trying the next contact, thereby avoiding voicemail. You will hear each outgoing ring tone. Between each call your alarm will announce that it is about to call the next contact and that you can cancel the call sequence by "clicking" the SOS button or the person receiving the SOS call can press on their keypad to stop the call sequence. The first person to answer is the person who can talk to you. The wearer listens and speaks through the pendant. By default the call sequence loops and tries every contact once

Fall Detection

Fall detection is enabled by default. With medium sensitivity.

Designed for serious fall detection

The device has an automatic fall detection feature that is designed to detect serious falls, likely to result in unconsciousness.

It has been designed this way so as to be a secondary level of assistance to compliment the SOS help texts and calls. If after a fall a wearer is not able to press the SOS/help button due to being unable to move or reach the SOS button then the fall detection function can send out the text alerts and follow up with voice calls.

How it works

The device uses a complex algorithm to make a judgment as to whether a serious fall has occurred. Amongst other things, it measures the speed and angle at which the device impacts the ground. If all criteria is met, it will vibrate and a clear voice will announce "Fall alert has been activated, click the SOS to stop." to tell you it thinks a fall has occurred. During this time it can be canceled by clicking the SOS button. If it is not canceled, then it sends out 'Fall down alert!' as text messages with the wearer's location on Google Maps and then follows up with the voice call sequence to your contacts.

Fall detection is still a developing technology which means sometimes false alerts can occur. However, if the alarm detects a fall you will be warned and will have adequate time to press the SOS button to cancel the fall alert sequence. Additionally we cannot guarantee every serious fall will be detected as there are many variables involved in falls.

The device must generally be at least 1 meter above the ground before the fall. The impact surface and they way it is worn can influence it. Fall detection works best if worn on a lanyard around the neck.

Testing the fall detection feature

When you first receive your device you may drop it or gently toss it on a soft material (soft carpet) if you want to see the fall alert sequence in action. After that, however, we do not advise you to attempt to test the fall detection yourself multiple times. Every fall is different due to the variables involved. Over testing the feature may result in injury or damage to the device. Do not deliberately drop or throw the device at a hard surface to test it.

What can stop fall detection from working?

It may not detect falls if worn on a belt clip or wristband. Because the device is a pendant on a lanyard or chain it can be worn in such a way that it swings during a fall. Because it measures the speed of impact using a 3D accelorometer, it is likely a fall from a height of less than a metre, such as from a sitting position, will not likely trigger the fall detector.

Sensitivity

The device fall detection sensitivity can be change to suit your unique needs.

To change settings, please consult the SMS Programming guide.

GPS

Your device has a Swiss GPS designed function that monitors the location of the wearer of the device. It uses this GPS function to send out the location of the wearer as part of the SOS help text messages. The location of the wearer is shown on Google Maps as part of those messages. This means the people who received the message on their mobile phones know where to send help.

Accuracy of the GPS: uBlox 8 technology The GPS location is normally accurate to 2.5 meters. This rate of accuracy can be affected by walls, roof, trees, buildings and other environmental obstructions. To save power the GPS goes to sleep The GPS function goes to sleep to conserve power if it does not detect any movement for around 30 seconds. Adjust power setting to 'Mode 3' if you wish to keep GPS on (Will require battery recharging every day)

What wakes up the GPS? (In default mode)

The GPS wakes up and attempts to connect to the satellites when it detects some movement (two shakes or movements) or is turned on.

Why it can take a while to get a GPS fix?

The GPS can be slow to get a fix if it has been turned off for a number of hours or has been inside a building where it has been unable to see the satellites for a while. This can also happen due to normal limitations with GPS: Underground parkades, elevators, concrete buildings, tunnels and other obstructions can block the signal from satellites to the pendant. When a GPS location cannot be sourced the Mobile alarm will attempt to report position via Bluetooth 5 then via wif os GSM (LBS) location if enabled. If the device gives its location on Google Maps as somewhere it is no longer located at, this simply means it did not have a chance to get a new GPS fix before the SOS button was pressed or the 'loc' command was sent to it. Usually, a location will still be sent however, it could be a wifi or GSM location instead.

If a GPS position is not able to be fixed within 15 seconds of an activation, the device will search for WIFI & GSM locations and will transmit those in place of the GPS.

Barriers to getting a GPS fix?

The GPS needs to see the sky in order for the device to work out where it is.

If the device is located indoors, the signals from space, GPS signals will be hindered or nonexistent depending on the environment. For instance, if the device is placed in an underground concrete carpark, there will be no GPS signal available. Additionally, walls in a house, the roof, and even trees can affect the GPS signals coming from space.

In situations where GPS signals are not adequate, the device will rely on local Wi-Fi signals and GSM tower signals to determine its location. After sending a text message with the command "loc,gps" (or an SOS/fall alarm), the received SMS message will indicate the type of location information obtained. It could be one of the following: GPS location, Wi-Fi location, Wi-Fi and GSM location, or GSM location.

If the received message indicates GPS, it means the device is most likely situated outside or in an area with a good GPS signal reception. If the message indicates Wi-Fi, it suggests that the device is indoors without a full clear view of the sky, and it's utilizing available Wi-Fi signals to determine its location. However, it's important to note that it may also be detecting neighboring Wi-Fi signals, which could result in displaying different street numbers or down the street.

If the message indicates Wi-Fi and GSM, it implies that there is a mix of low or no Wi-Fi signals, and the GSM cell towers are helping provide a general location – maybe much further away than your immediate street. On the other hand, if the message only indicates GSM, it means there are no Wi-Fi or GPS signals available, and the device is relying solely on the local cell towers for location, which could provide a very general.

To manually check device GPS location—send SMS command

loc,gps

The device will respond with the users GPS location if available.

BASIC PROGRAMMING

Programming the device is done by sending SMS/Text commands from your own smart phone to the device.

The device is a highly customisable personal alarm with multiple adjustable parameters. As such, this quick start guide is designed to get the basics and essentials programmed.

The following programming settings are the basics based upon feedback from our real world customers who use this device on a daily basis, and covers what matters most for a broad range of users. Further customisation and programming instruction can be found in the SMS Programming guide.

Here we will set-

- 1) Set Emergency Contacts
- Turn off 'Calling Out' feature (Recommended)*, **
- 3) Set Personal Name in emergency text message
- 4) Set Time Zone
- 5) Turn off 'Low Battery' alert (If left enabled, SMS are sent to all contacts alerting 'Low Battery')
- 6) Turn off 'Bluetooth' (Only required if Bluetooth base station is purchased separately)
- 7) Set Network APN—to fully connect to cellular & VoLTE networks

Emergency sequence description if programming to above recommendations

If a user actives the SOS (Press SOS for 3 seconds), the device sends an SMS to all emergency contacts simultaneously. Contacts will receive SMS message from the device including Name, 'Help Me' message, time & location data with internet maps link. At this point, any available emergency contacts would immediately respond by phoning the device phone number to establish person to person communication. The user waits for the first contact to call with the device automatically answering incoming calls after 5 seconds and voice to voice communications are established (Like a speaker phone).

Please note; The Fall detection is already set to ON as default. Adjustments to sensitivity can be done by consulting the SMS Programming guide.

- *This sets the SOS button to only send SMS messages to the nominated contacts. It disables <u>all</u> 'Calling Out' functions. Preventing_outgoing call functions provides an available phone line, allowing the first nominated contact who is able to, to call into the device immediately to render assistance.
- **If Emergency services are a nominated contact (911) (000)(111), please leave the calling out function ON

Set Emergency Contacts/Turn Off Outgoing Calls

The device can have up to 10 emergency contact numbers programmed (1 minimum). This may include emergency services in some countries ie 911 (USA/Canada) 000 (Australia) 111 (NZ) 999 (UK)

Cell phone numbers are recommended as SMS and location data can be received when the SOS button has been activated. Landlines & international can be programmed if desired.

SMS Command for send text messages only — Send the device the following SMS

A1,1,0, 1st contact number (Example—A1,1,0,001123456789) No Gaps. Please use international phone format '00' before country code. The device will respond back 'Set contact number 1 OK'.

A2,1,0, 2nd contact number

A3,1,0, 3rd contact number

A4,1,0, 4th contact number

A5,1,0, 5th contact number

A6,1,0, 6th contact number

A7,1,0, 7th contact number

A8,1,0, 8th contact number

A9,1,0, 9th contact number

A10,1,0, 10th contact number

If you wish to change any number at any time, simply repeat the command in the A1-10 slot as required.

SMS Command for send text messages and calling in sequence (not recommended) — Send the device the following SMS

A1,1,1,YOURPHONENUMBER

Add more numbers in the A2-A10 slots as desired.

To remove a number send the following SMS

Removea1 (or applicable slot number)

To check contact numbers set

SMS Command

A?

Set Device Name

Sets the Name of the device for SMS/Tracking

SMS Command

Prefix1, johnsmith

The device will reply with—Set Johnsmith ok.

Up to 100 Characters can be used for the name description.

Set Time Zone

Default time zone is based off UTC (London). To set time please use the following command

USA Eastern Standard Time—SMS Command

TZ-5

USA Pacific Standard Time—SMS Command

TZ-8

United Kingdom Standard Time —SMS Command

TZ+1

Australia Eastern Standard Time - SMS Command

TZ+10

Australia Western Standard Time - SMS Command

T7+8

NZ Standard Time—SMS Command

TZ+12

Turn Off Low Battery Alert

By default, the device sends a 'Low Battery' SMS warning to all contacts when power drops to 15%. To turn this off use the following command

SMS Command

Low0

Turn Off Bluetooth

The device is equipped with Bluetooth 5 and is able to communicate with a Bluetooth Charging Base Station & Speaker Set (Sold Separately).

If the separate Bluetooth base station has not been purchased (Sold separately), It is advised to turn the Bluetooth Function off as it saves battery and does not interfere with Location finding.

SMS Command

BLE0

(Command is 'BLE' with the number zero, no gaps)

Set APN

To fully connect to network services and improve connection, please set the APN.

Send SMS command

s1,YOURNETWORKAPN

(Example AT&T = s1,NXTGENPHONE)

Please check with your local SIM card provider for APN details.

In areas where 3G is no longer available (USA, NZ), APN is required for voice transmission. The device is capable of using VolTE for voice communication if signal is available. Once APN is set it may take time for the network to connect VolTE. If connection is not instant, leave device beside a window 20-30min

USA: AT&T APN = NXTGENPHONE

NZ; Vodafone/One APN = Vodafone, 2Degrees APN & Spark APN = internet

Australia; Telstra APN = Telstra.wap

Canada; Rogers APN = Itemobile.apn

Location Finding

The device location can be found by using the following commands

Loc or loc,gps

Using the 'loc' command, the device will search for a GPS signal for 15 seconds. If no gps fix is available it will default to Wifi location (provided by 3rd party online tracking . Smart-locator.com is default) If no wifi location is available or 3rd party tracking not used, the device will fall back to wifi or GSM location which provides a very general location.

Using the 'loc,gps' command, the device will respond back with current GPS location if available.

Questions?

Please feel free to get on touch by emailing your questions to contact@mercari.co.nz

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General

Weatherproof

The device can be worn in the shower for short periods (5 min) or in the rain. The device is rated as water and dust resistant to IP67. This means that it should not be submerged in water for a prolonged period. We do not advise you to wear it in the bath, swimming pool, hydrotherapy, spa or ocean. Like all wireless devices it will not work when it is totally under-water. Dry the device if it gets wet.

Maintaining your device

The device is dustproof. The device can be used in some dusty environments. Care should be taken that dust, grime, soap or shampoo does not build up on the device. It is rated for normal shower use. Dry device completely. Take particular care to ensure the device is completely dry before each recharge. Wipe all water, sweat, perfumes and oils from the device before charging. Do not use cleaners or harsh chemicals.

Brief Specification

Operating temperature -20°C to +80°C for working -30°C to +70°C for storage

Battery life Up to 2-3 days with normal use

Charging voltage 5V DC

Outdoor location tracking GPS/GLONASS GPS technology U-blox M8130, AGPS support, 2.5 meter accuracy

GPS approx time to fix Cold start 26 secs, warm 2secs, hot start approx. 1 sec

WIFI 802.11 b/g/b, 2.4G

SIM card Nano

Sensors 3D accelerometer, motion and vibration sensor

Waterproof rating IP67

Dimensions 61mm x 44mm

Weight 40g

Trouble Shooting

Device is turned on but not communicating

Check that your SIM card has had its voicemail set up and the SIM has credit.

Check SIM is using recommended or compatible cellular network

Ensure SIM is operating correctly buy removing it from the device and using it in a Smart phone. Make a call, send SMS, check voicemail. Please check SIM card has been correctly set up https://youtu.be/EEveo7mgMYE

Reinstall into device & restart.

I have installed a working SIM card, but its not responding

Give the device a restart. Check details above. If still not operating, check that the SIM card holder connectors have not been damaged during SIM card installation. Any broken, missing or miss-shaped connectors will cause the unit to be non responsive. Damage to SIM card holder connectors is not covered under warranty.

Please check SIM card has been correctly set up https://youtu.be/EEveo7mgMYE

Check your network provider or issues or try a SIM card from a different compatible provider.

I'm sending the SMS but the device is not responding

Make sure there are no spaces when sending SMS commands. Commands for feature on and off are 1(one) & 0 (zero)

Check that the number you are send the SMS to is the same as the one n the device

It says I don't have a GPS location.

It means the device has lost track of the satellite signals. Leave by a window for 15-30mintues to allow it to reacquire the signals. If the device is not seeing a good GPS signal, it will revert to Wifi or Cell Towers.

My GPS location is not accurate.

GPS location is dependent on a variety of factors. See Page 5 for more information of 'Barriers'.

The GPS Link appears broken within the SMS.

The network being used is going through changes or having issues causing the broken SMS link. Network upgrades can take days to complete. Please check with your SIM card provider for details of any works or upgrades in your area. The broken link may rectify itself over time. Try restarting the device and setting the APN & turning on the GPRS. Please note, this problem is usually localized and your contacts will likely receive a working link.

If the problem persists, you may wish to change the SIM card to an alternate provider.

My device sends & receives SMS but call function is not working.

Check your calling functions have not been accidentally turned off whist setting up.

Set your APN. VoLTE/4G Voice connection may not be instant. Leave device beside a window for 30 min. Contact your network provider to ensure VoLTE has been enabled on your account/SIM. Please check SIM card has been correctly set up https://youtu.be/EEveo7mgMYE

Test in another location as it may be due to network issues or lack of signal.

Try a different carrier SIM card that is compatible with the device

Ensure you have no PIN Lock on the SIM

Check the SIM card holder to ensure no pins have been broken during installation