

# TRBO.SOS

## User Guide

Version 1.0

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# 1 Introduction

## 1.1 About This Guide

This document is intended for end users of the TRBO.SOS software installed on an Android/iOS mobile device. The document describes how to install and configure TRBO.SOS, configure and start check-in timer, enable and configure safety alarms, send predefined alarms, connect V.ALRT buttons, and report incidents.

## 1.2 About TRBOnet

TRBOnet is a suite of professional applications for MOTOTRBO digital two-way radio networks. TRBOnet manages voice and data communication paths across network endpoints. It provides a unified graphical dispatcher workbench interface for the entire range of workforce fleet management tasks.

For more information about TRBOnet products, refer to our [website](#).

## 1.3 Contacts

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EMEA	+44 203 608 0598	<a href="mailto:info@trbonet.com">info@trbonet.com</a> — general and commercial inquiries
Americas	+1 872 222 8726	<a href="mailto:support@trbonet.com">support@trbonet.com</a> — technical support
APAC	+61 28 607 8325	<a href="https://trbonet.com/kb/">https://trbonet.com/kb/</a> — online knowledge base

## 2 About TRBO.SOS

TRBO.SOS is a software application that may be used to help people summon first-aid, security or safety assistance via their Android/iOS mobile devices.

### 2.1 Features

- Requests To Talk
- TRBOnet calls (PTT type)
- GSM call (common phone call)
- First Aid alarm
- Emergency alarm
- Fire alarm
- Police alarm
- Incident Reporting (photo + description)
- Lone Working - Check-In Timer
- ManDown Detection
- No Movement Detection
- Shake Detection
- Remote monitoring
- Location tracking in Alarm mode
- Enhanced push notifications (High-priority notifications bypass the mute mode)
- Wearable devices support (V.ALRT alarm buttons)

### 2.2 Requirements

The hardware and software requirements to install and run TRBO.SOS 1.0 on an Android/iOS mobile device include:

- Android version: 4.4.1 and higher
- Android version: 6.0 and higher to work with Bluetooth Wearable Devices
- iPhone 5s and above
- Network connection: Wi-Fi or 3G/4G/LTE
- TRBOnet Enterprise 5.5 and higher

### 3 Installation

The latest version of the TRBO.SOS software application is available for download on the [Google Play Store](#) (or [App Store](#)).

**To install TRBO.SOS:**

1. Visit the [Google Play Store](#) (or, [App Store](#)) from your mobile device.
2. Type "TRBO" in the **Search** box and run the search.
3. Tap the TRBO.SOS application, then tap the **Install** button.

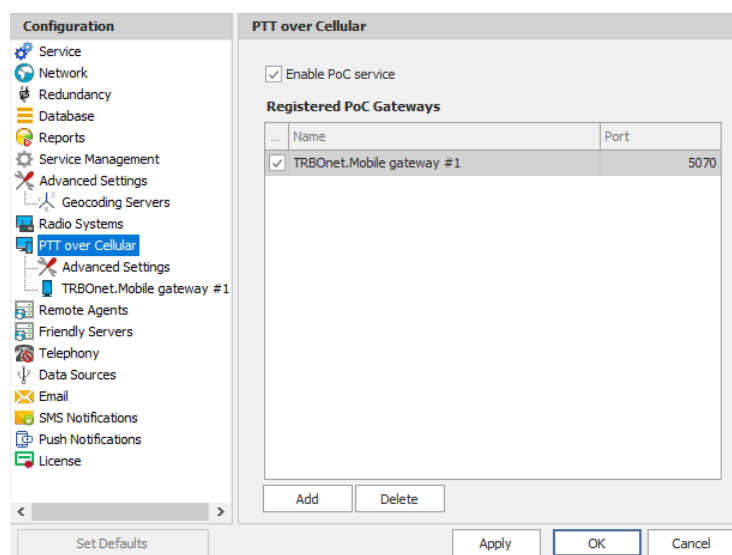
### 4 Configuring TRBOnet Enterprise

Before connecting TRBO.SOS to TRBOnet Enterprise, make sure that a Mobile System gateway have been configured in TRBOnet Server, and the corresponding TRBO.SOS account has been created in TRBOnet Dispatch Console.

#### 4.1 Configuring TRBOnet Server

This section describes how to configure TRBOnet Server.

- In the **Configuration** pane, select **PTT over Cellular**.
- In the **PTT over Cellular** pane, select **Enable PoC service**.

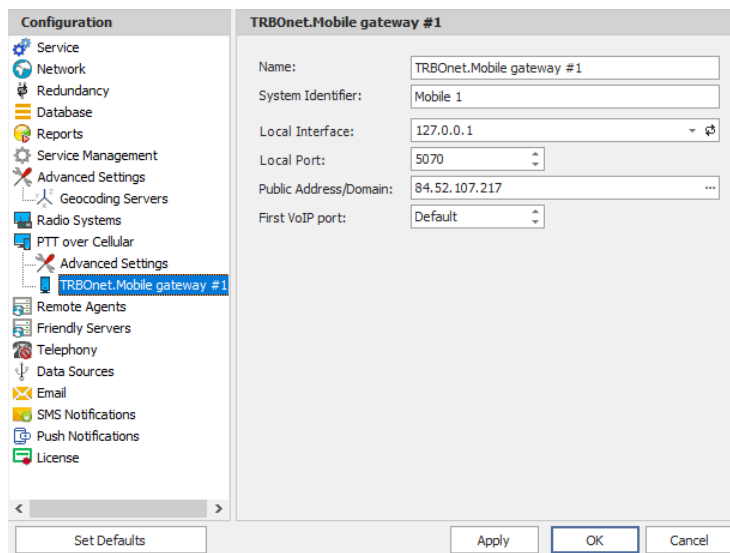


##### 4.1.1 Advanced Settings

- In the **Configuration** pane, select **PTT over Cellular > Advanced Settings**.
- In the **Advanced Settings** pane, specify the following parameters:
  - **Max Call Time**  
Specify the maximum call time, in minutes.
  - **Registration Interval**  
Enter the time interval, in seconds, to check the registration status of mobile subscribers.

### 4.1.2 Adding a Mobile Gateway

- In the **PTT over Cellular** pane, click **Add**.
- In the **Mobile Gateway** pane, specify the following parameters:

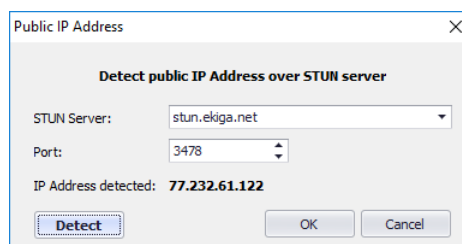


The screenshot shows the 'Configuration' pane on the left with a tree view containing various system components. 'TRBOnet.Mobile gateway #1' is selected. The main pane on the right is titled 'TRBOnet.Mobile gateway #1' and contains the following fields:

- Name: TRBOnet.Mobile gateway #1
- System Identifier: Mobile 1
- Local Interface: 127.0.0.1
- Local Port: 5070
- Public Address/Domain: 84.52.107.217
- First VoIP port: Default

At the bottom of the window are buttons for 'Set Defaults', 'Apply', 'OK', and 'Cancel'.

- **Name**  
Enter the name of the mobile gateway.
- **System Identifier**  
Enter the name of the mobile system to which the gateway will belong.
- **Local Interface**  
Enter the IP address of the PC with TRBOnet Server.
- **Local Port**  
Enter the local UDP port number for the Mobile service (5070, by default).
- **Public Address/Domain**  
This is the public IP address of your PC. To detect the public address, click the ellipsis (...).



The 'Public IP Address' dialog box contains the following information:

- Title: Public IP Address
- Section: Detect public IP Address over STUN server
- STUN Server: stun.ekiga.net
- Port: 3478
- IP Address detected: 77.232.61.122
- Buttons: Detect, OK, Cancel

- **STUN Server**  
From the drop-down list, select the STUN Server.
- **Detect**  
Click this button to detect your public IP address.

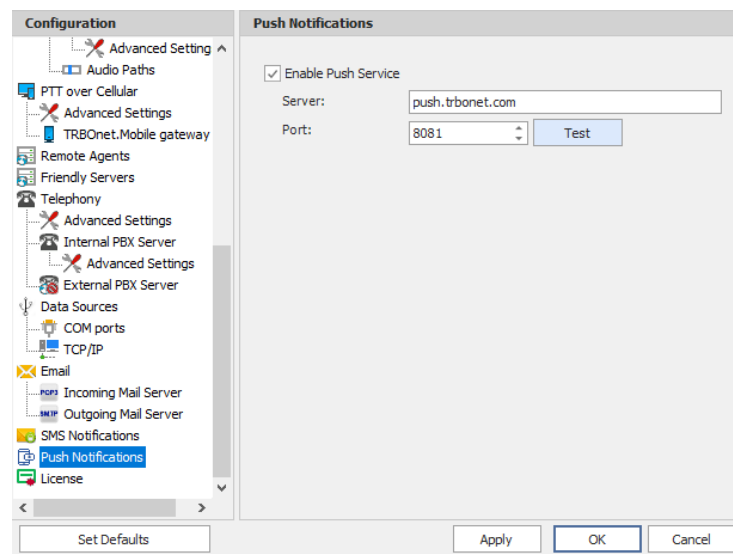
- **First VoIP port**

Enter the number of the first VoIP port for audio communications. The default value is specified in **Configuration > Network**.

Note: In addition, in order to ensure a better performance, go to **Configuration > Network**, and set the **Data protocol** parameter to **UDP**.

#### 4.1.3 Enabling Push Notifications

- In the **Configuration** pane, select **Push Notifications**.
- In the **Push Notifications** pane, select **Enable Push Service**.



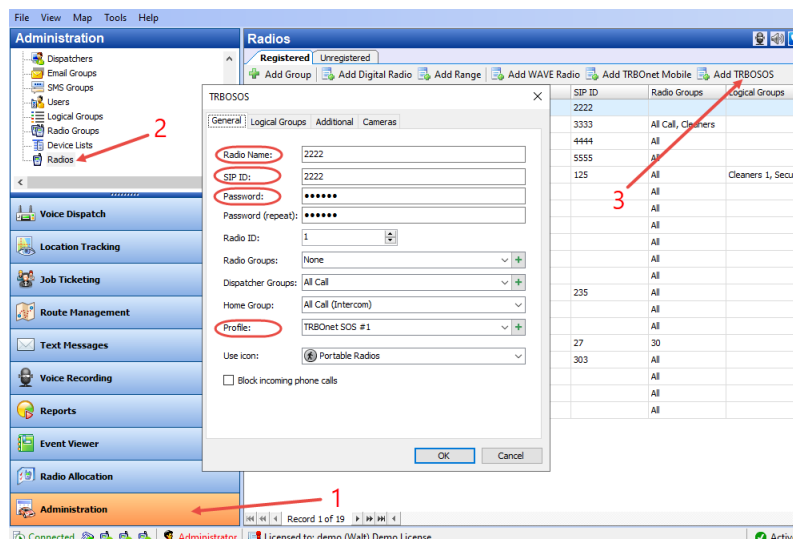
- In the **Push Notifications** pane, specify the following parameters:
  - **Server**  
Enter the Ethernet IP address of the push server.
  - **Port**  
Enter the UDP port number of the push server.
  - **Test**  
Click this button to check the connection to your push server. If the test is successful, you'll see information on the server you are connected to.



## 4.2 Configuring TRBOnet Dispatch Console

### 4.2.1 Adding TRBO.SOS

- Go to **Administration** (1), **Radios** (2) and click **Add TRBO.SOS** (3).



- Radio Name**  
 Enter the descriptive name of the TRBO.SOS user to display in the Dispatch Console.
- SIP ID**  
 Enter the SIP ID that will be used by the TRBO.SOS user. Note that this is a case-sensitive value. See also section [5.1, Running TRBO.SOS](#).
- Password**  
 Enter the password for the authentication.
- Profile**  
 Select the location profile for the mobile client. See section [4.2.2, Adding TRBO.SOS Profile](#).

### 4.2.2 Adding TRBO.SOS Profile

The Mobile Client Profile feature allows configuring different location profiles that can be applied to the Mobile Client app running on a smartphone.

- Go to **Administration > Mobile Client Profile (TRBO.SOS)**.

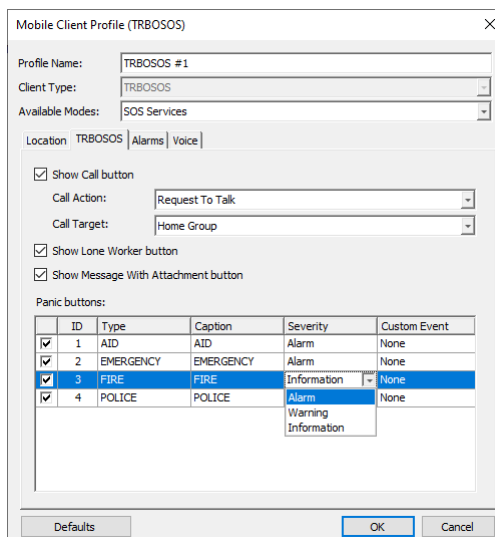
You can see the default TRBO.SOS Profile settings in the **Mobile Client Profile (TRBO.SOS)** pane.

#### To add a TRBO.SOS Profile:

- In the Mobile Client Profile (TRBO.SOS) pane, click the Add button.
- In the **Mobile Client Profile (TRBO.SOS)** dialog box, specify the following parameters:
  - **Profile Name**  
Enter a name for the mobile client profile.
  - Click the **Location** tab.
    - **Use GPS location**  
Select this option to enable sending GPS data to TRBOnet Server.
      - **Trigger interval**  
Specify the time interval, in seconds, that will be used to send GPS location data.
      - **Emergency interval**  
Specify the time interval, in seconds, that will be used to send emergency messages.
    - **Use Indoor location**  
Select this option to enable sending iBeacon data to TRBOnet Server.  
\*\*\* See the note below.
      - **Trigger interval**  
Specify the time interval, in seconds, used to send iBeacon location data.
      - **Emergency interval**  
Specify the time interval, in seconds, that will be used to send emergency messages.
    - **Number of iBeacons**  
Specify the number of the most recently detected iBeacons whose data will be included in the data packet sent to TRBOnet.
    - **iBeacons filter**  
Click the **Add** link and enter the UUID of the beacons that will be used by the mobile client.

Note: The **Indoor Location** feature is not yet supported for TRBO.SOS.

- Click the **TRBO.SOS** tab.



Mobile Client Profile (TRBOSOS)

Profile Name: TRBOSOS #1

Client Type: TRBOSOS

Available Modes: SOS Services

Location: TRBOSOS | Alarms | Voice

☒ Show Call button

Call Action: Request To Talk

Call Target: Home Group

☒ Show Lone Worker button

☒ Show Message With Attachment button

Panic buttons:

ID	Type	Caption	Severity	Custom Event
<input checked="" type="checkbox"/> 1	AID	AID	Alarm	None
<input checked="" type="checkbox"/> 2	EMERGENCY	EMERGENCY	Alarm	None
<input checked="" type="checkbox"/> 3	FIRE	FIRE	Information	None
<input checked="" type="checkbox"/> 4	POLICE	POLICE	Alarm	None

Defaults OK Cancel

- **Show Call button**

If you select this option, the PTT button will be available in TRBO.SOS.

- **Call Action**

From the drop-down list, select the action to be performed when the PTT button is pressed: Request To Talk, TRBOnet Call, or Phone Call.

- **Call Target**

From the drop-down list, select the call target.

- **Show Lone Worker button**

If you select this option, the Lone Worker button will appear in TRBO.SOS. This will allow the TRBO.SOS user to start the Lone Worker mode.

- **Show Message With Attachment button**

If you select this option, the corresponding button will appear in TRBO.SOS.

- **Panic buttons**

In the table below, specify the Type, Caption, Severity/Status, and Custom Event for the alarm button(s).

- Click the **Alarms** tab.

- Select the desired safety alarms to be automatically triggered on TRBO.SOS and sent to the Dispatch Console (Man Down, No Movement, Shake).

- Click the **Voice** tab.

- **Allow remote monitor**

If you select this option, the dispatcher will be able to activate the smartphone's microphone in hidden mode.

- **Timeout**

Specify the remote monitor duration, in seconds.

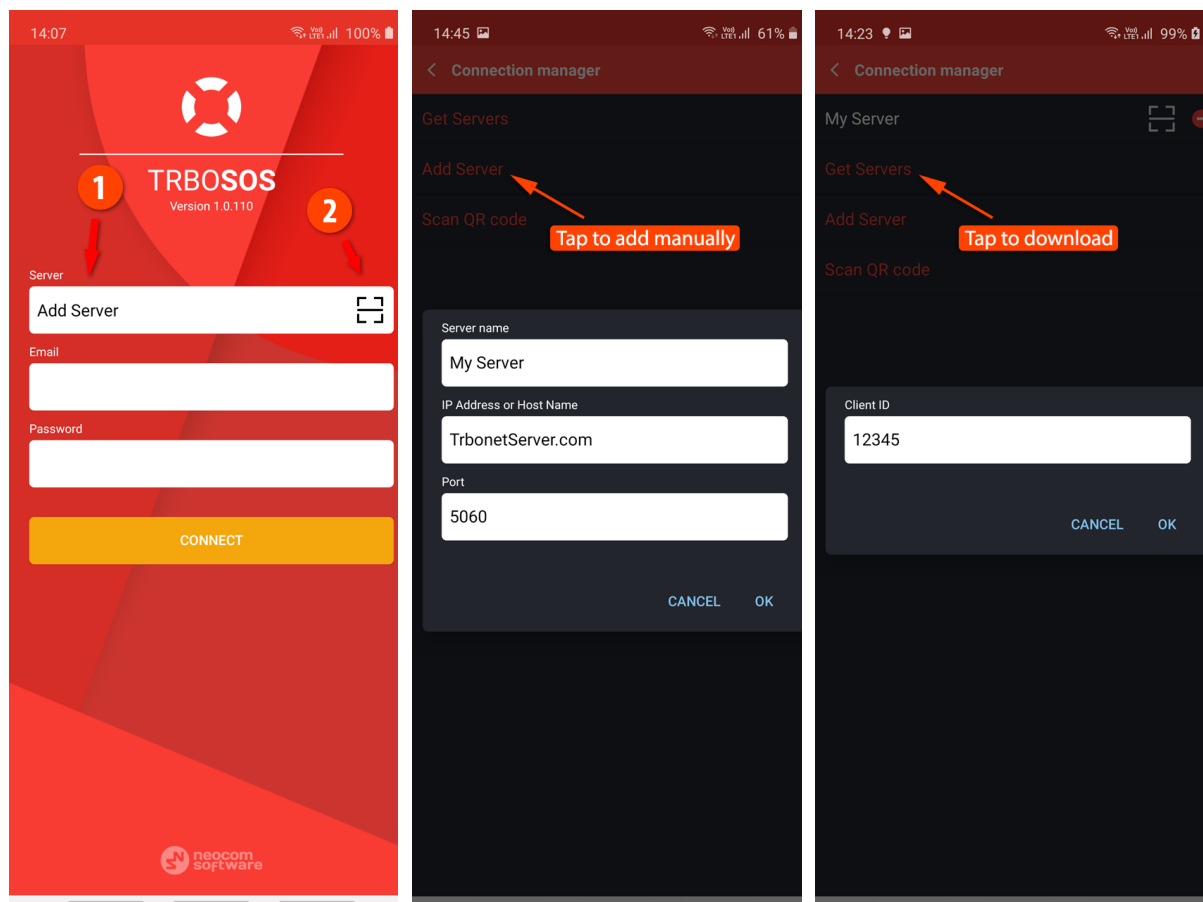
## 5 Getting Started

### 5.1 Running TRBO.SOS

To launch TRBO.SOS on your mobile device, tap the TRBO.SOS icon on the screen. The login page appears on the screen.

On the login page, enter the following connection settings:

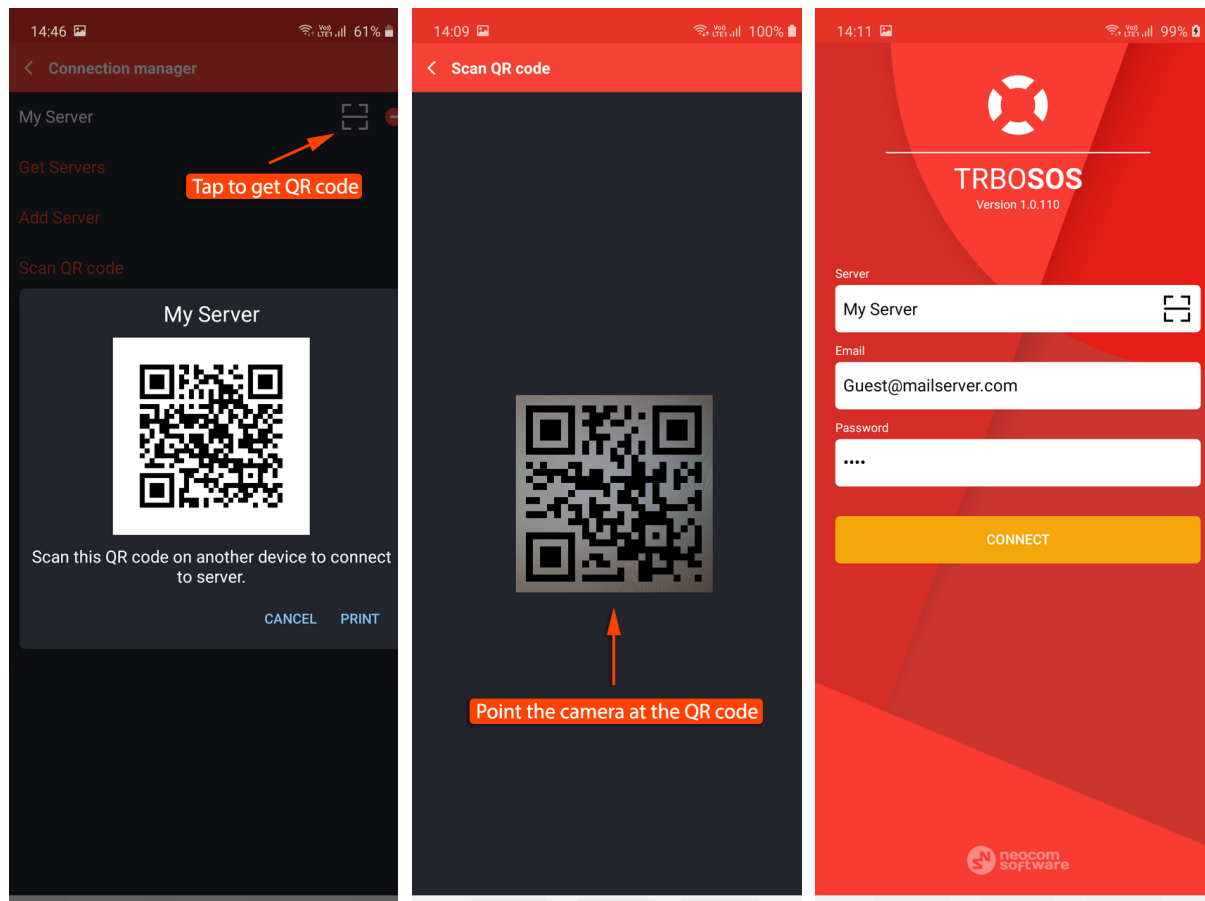
- Tap **Add Server** (1).
- In the **Connection manager** page,
  - Tap **Add Server**, and in the box that pops up, enter the following information:
    - **Server name**
    - **IP Address or Host Name:** The IP address or the host name of the TRBOnet Mobile Gateway.
    - **Port:** The local port of the TRBOnet Mobile Gateway (see sections [4.1, Configuring TRBOnet Server](#) and [5.1.1, Recommended Port Numbers](#)).
  - Or, to download the server, tap **Get Servers** and in the box that pops up, enter the **Client ID**.



- In the list of servers, tap the button on the right to get the server's QR code and in the box that pops up, tap **Print** to print this QR code.

Or, to add a server with the QR code:

- Tap the button on the right (2).
- While in the **Scan QR code** page,
  - Point the camera at the QR code and wait for the QR code to scan. As a result, the corresponding server will be added to the list of servers. You can long-tap on it to see its properties (Server name, IP Address, and Port)



Once the server is selected, enter the following login parameters:

- **Email:** The SIP ID of your TRBOnet Mobile application (this is a case-sensitive value). See also section [4.2.1, Adding TRBO.SOS](#).
- **Password:** The SIP password of your TRBOnet Mobile application.

Note: The connection settings in the figure on the left serve as an example. Contact your administrator to get the actual connection settings.

- Tap the **Connect** button.

Note: If the connection cannot be established, make sure that your mobile device is connected to the network.

### 5.1.1 Recommended Port Numbers

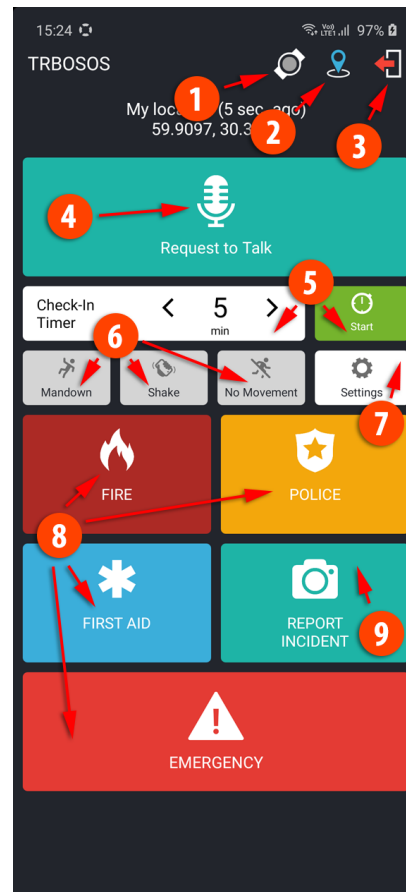
#### TRBOnet Mobile Gateway

Available port range: 1024 - 65535

Recommended port value: **5070**.

## 5.2 Main Page

Once connected, you will see the main page of TRBO.SOS.



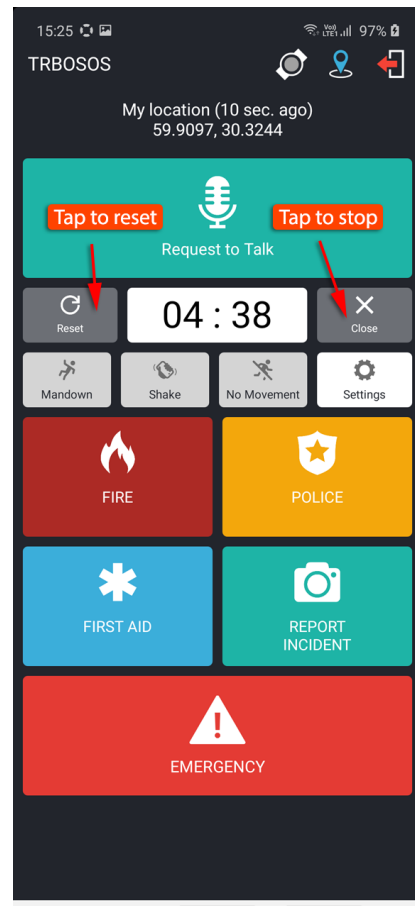
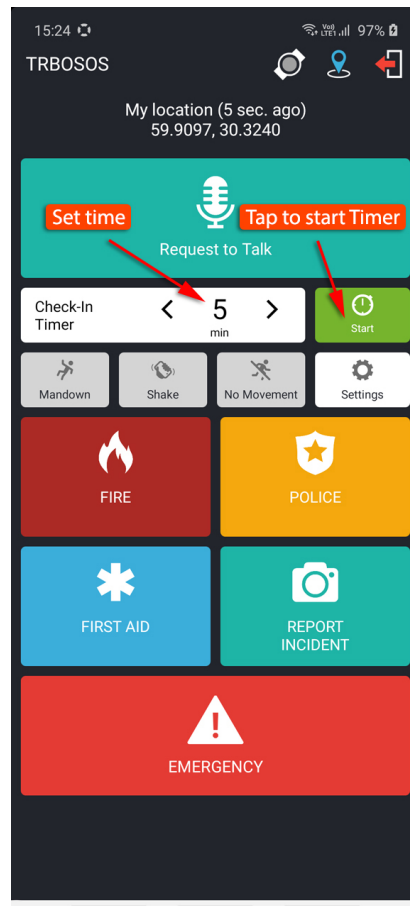
1. V.ALRT Device  
This icon indicates the state of connection to V.ALRT device:  
Green – connected to device  
Yellow – connecting to device (or searching for device)  
Grey – not connected to device  
See section [5.6, Connecting V.ALRT](#).
2. GPS Positioning  
This icon indicates that the GPS Positioning is enabled in TRBO.SOS Profile (Location tab, Use GPS Location selected).
3. Quit button  
Tap this button to disconnect from the server.
4. PTT button

5. Lone Worker buttons  
Select the Check-in Timer value and tap the Start button to start the Lone Worker mode. The Lone Worker buttons appear if they are configured in TRBO.SOS profile, [TRBOSOS tab](#).
6. Safety Alarm buttons  
If you select the button (selected button turns red), then the corresponding alarm event will be triggered on the device. The safety alarm buttons appear if they are configured in TRBO.SOS profile ([Alarms tab](#)).
7. Settings (see section [6, Settings](#))
8. Panic buttons  
Depending on what is configured in TRBO.SOS profile ([TRBOSOS tab](#), [Panic buttons](#)), you may see up to four panic buttons. Tapping and holding these buttons will send the corresponding alarms.
9. Report Incident button  
To report an incident, tap this button and take a photo to be sent. This button appears if configured in TRBO.SOS profile ([TRBOSOS tab](#)).

### 5.3 Check-in Timer / Lone Worker

You can also set a Check-in Timer (Lone Worker), which starts a countdown timer to cover the duration of your work session. The timer will count down to zero, starting from your nominated time. At any time, you can tap the timer to stop or reset.

- Tap the **Start** button.
- To reset the timer, tap **Reset**.
- To stop the timer, tap **Close**.

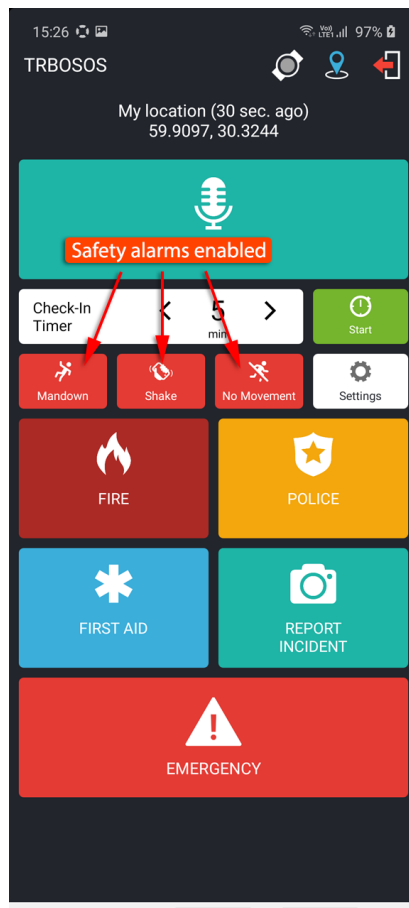


If the timer expires, TRBO.SOS will raise an alert, sharing your location and ID with the corresponding dispatchers.



## 5.4 Enabling Safety Alarms

You can enable the following safety alarms provided they are configured in TRBO.SOS profile ([Alarms tab](#)). Just tap the corresponding button (selected button turns red).



- **Man Down**  
This alarm event is triggered when the smartphone's tilt angle is below the threshold angle for a time longer than the pre-alarm duration.
- **Shake**  
This alarm event is triggered when a user physically moves their smartphone from side to side a couple of times.
- **No Movement**  
This alarm event is triggered when the smartphone's acceleration is below the threshold for a time longer than the pre-alarm duration.

The Safety alarms can be additionally customized. See section [6, Settings](#).

## 5.5 Sending Predefined Alarms

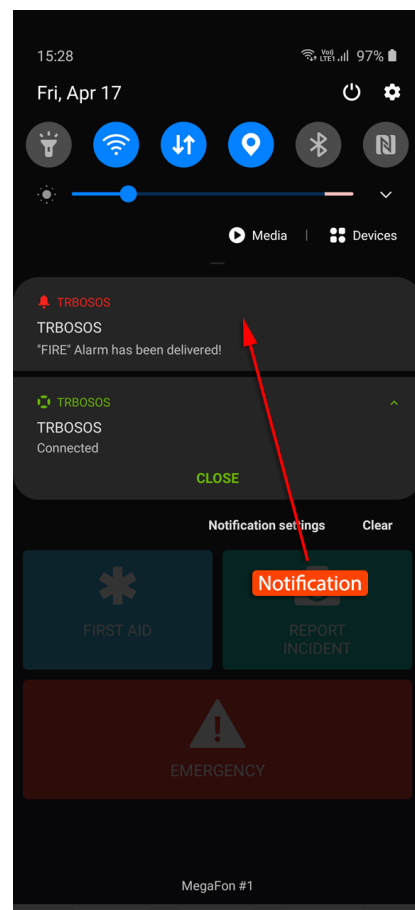
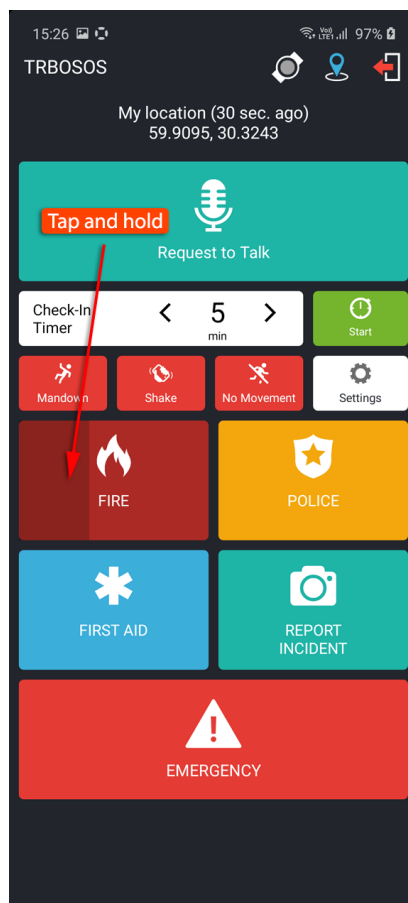
Depending on what has been selected in TRBO.SOS Profile ([TRBOSOS tab](#), Panic buttons), you can send various alarms by tapping and holding the following buttons:

- Fire
- Police
- First Aid
- Emergency

### To send an alarm:

- Tap and hold the corresponding button until it vibrates thrice.

Once the alarm reaches the dispatcher, you will see a notification saying "TRBO.SOS # Alarm has been delivered".

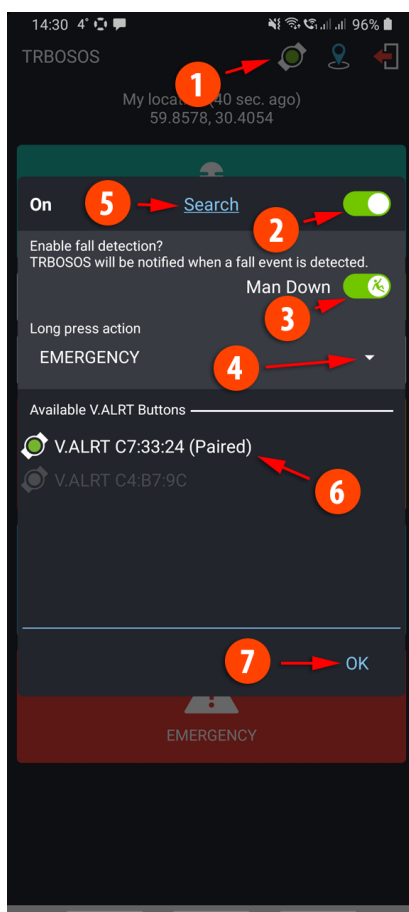


Note: You can also send a pre-defined alarm by long-pressing the connected V.ALRT button. See section [5.6, Connecting V.ALRT Device](#).

## 5.6 Connecting V.ALRT Device \*\*\*

You can also use your V.ALRT device connected to the smartphone. You can configure the V.ALRT button to send one of the four pre-defined alarms (Emergency, Fire, Police, or First Aid). In addition, the V.ALRT device can be used for Man Down detection.

- Tap the V.ALRT icon (1) on top of the screen.  
In the pup-up window that opens:
  - Set the module to On (2).
  - Enable the **Man Down** feature (3).
  - Select the specific alarm (4) to be sent upon a **long press** of the V.ALRT button.
  - Tap **Search** (5) to search for available V.ALRT buttons.
  - Tap the paired V.ALRT device (6) you want to connect to.
  - Tap **OK** (7).



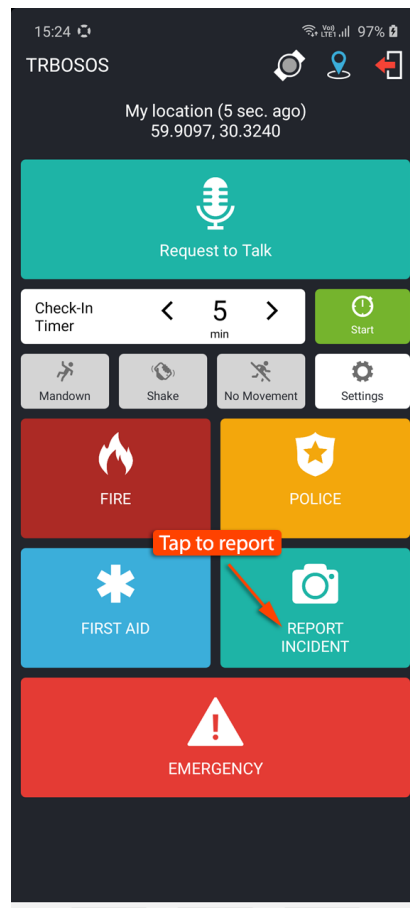
\*\*\* Note: This functionality is available only on Android devices.

## 5.7 Reporting Incidents

In TRBO.SOS you can report incidents accompanied by photos directly to the dispatcher.

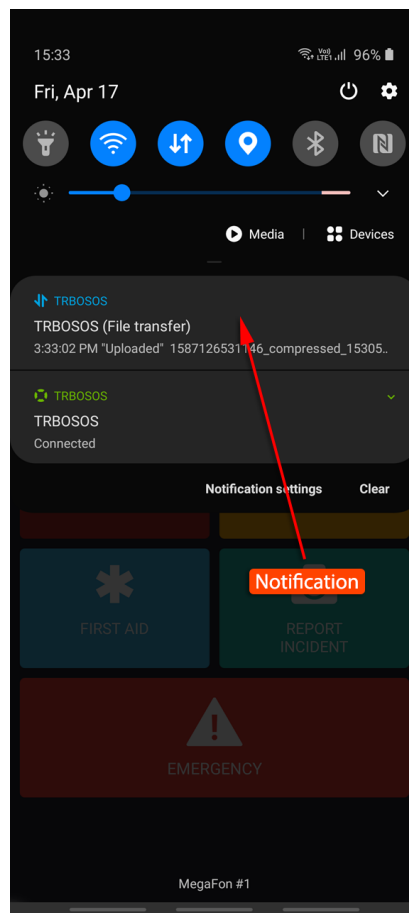
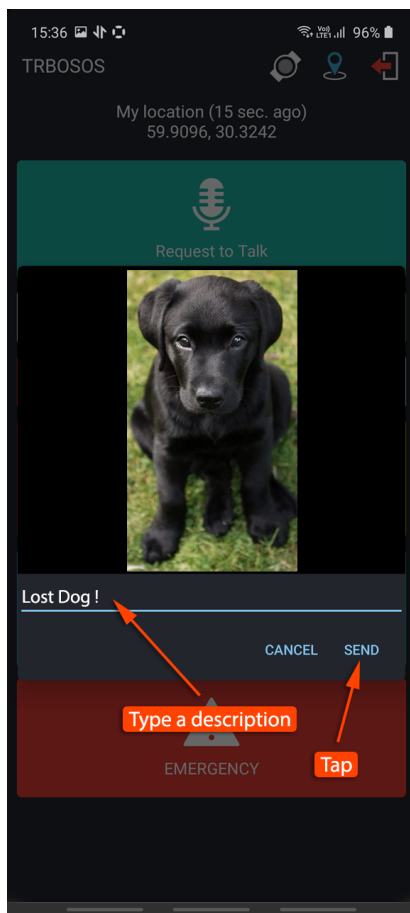
### To report an incident:

- Tap the **Report Incident** button.
- When the camera opens, take a snap of the incident.



- Once the photo has been taken, enter a description of the accident and tap **Send**.

Once the report is dispatched, you will see a notification saying "TRBO.SOS (File Transfer) # Uploaded".



## 6 Settings

To configure your TRBO.SOS application, tap the **Settings** button on the main page. Below is the list of available settings:

### Safety

Note: This section appears if the corresponding options are selected in the associated TRBO.SOS Profile (see section [4.2.2, Adding TRBO.SOS Profile, Alarms tab](#)).

- **Man Down Detection**

These are the settings for Man Down Detection when the device is carried in a pocket.

- **Vertically oriented**

Choose this option when the device is oriented vertically in the pocket.

- **Horizontally oriented**

Choose this option when the device is oriented horizontally in the pocket.

- **Orientation doesn't matter**

Choose this option when the device may be oriented either vertically or horizontally in the pocket. Note that choosing this option may result in a decreased sensitivity.

- **Not used**

Select this option the device is not carried in a pocket. Note that choosing this option may result in a decreased sensitivity.

- **Shake Detection**

These are the sensitivity grades for Shake Detection. There are five sensitivity grades: Very-High, High, Medium, Low, and Very-Low.

- **Pre-Alarm Time Interval**

Choose the time interval, in seconds, between triggering the event and sending the corresponding alarm.

- **Pre-Alarm Effects**

Select one or all of the effects (Vibrate, Sound, and Flash Blinking) that will take place when the corresponding alarm event is triggered on the device.