

# Bittium

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## Bittium Mexsat Satellite Terminal Model Mx Rugged B User Manual



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## 1 CONTENTS OF THE DELIVERY

Bittium Rugged Basic Terminal sales package contains the following items:

- Battery pack
- Wall charger with US plug
- Micro USB2.0 cable
- Satellite Antenna (connected to the device)
- 3.5 mm headset
- User Manual

Following items can be ordered as additional/optional items:

Product name	Product code
Additional battery pack 3900 mAh, Rugged	9304569
Stereo headset (included also in sales package)	9100601
USB cable (included also in sales package)	5500962
USB wall charger (included also in sales package)	9100709
USB car cigarette plug charger	9304717
SAT stub antenna (included also in sales package)	9304707
Black carry case with clip	9304696
Green carry case with clip	9304697
Blue carry case with clip	9304698
Belt clip dock Fastclick	9100682
Screw to fit dock Fastclick	9100683
6-bay Desktop phone/battery charger AC	9304700
Car roof SAT antenna	9100708
Rugged PTT headset Hold to Talk, earhook earpiece	9399060
Rugged PTT headset Hold to Talk, D-shape earpiece	9399061
Rugged PTT headset Hold to Talk, C-shape earpiece	9399062

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Throat Mic PTT headset, Hold to Talk	9399063
Inline PTT headset, Hold to talk	9399064
Helmet mic PTT headset	9399065
Remote speaker&microphone (Wired)	9100692
Remote speaker&microphone (Bluetooth)	9100691

Note that the box contents and the appearance of the items may vary.

Always place the device in a Bittium approved accessory if you wear the device on your body. Using accessories that are not supplied by Bittium may cause the device to exceed RF energy exposure guidelines.

## 2 DEVICE AT A GLANCE

1. Power/emergency key
2. Earpiece
3. Headset connector and protective cover
4. Satellite antenna
5. Loudspeakers
6. Volume keys
7. Push to Talk key (PTT)
8. Battery pack
9. Dock charge connectors
10. USB 2.0 data and charging port connector and protective cover
11. Status LED
12. Combined proximity and ALS sensor
13. Lanyard loop

# Bittium

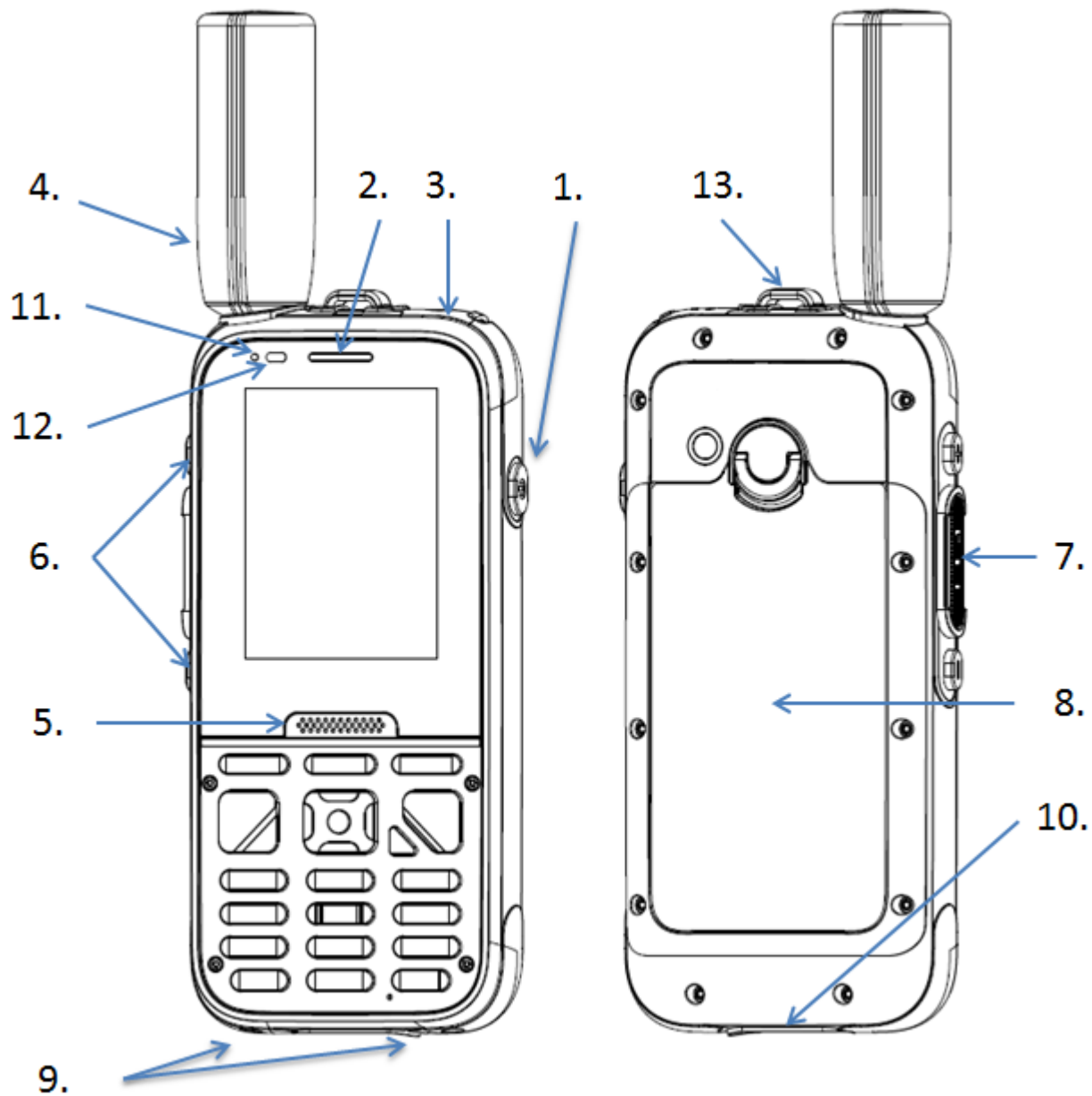
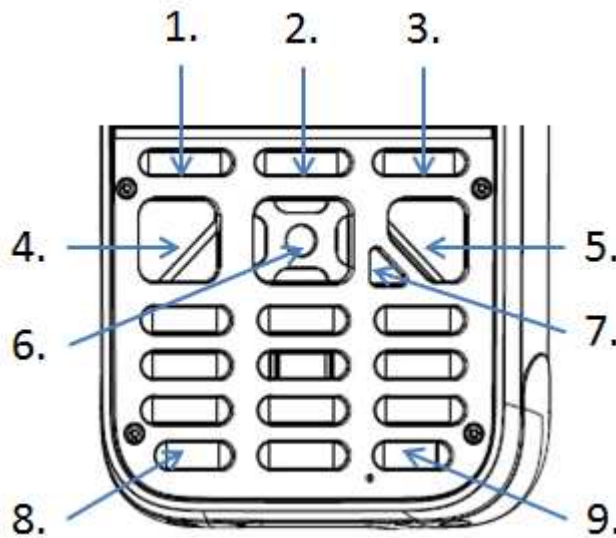


Figure 1 Overview

## Keypad functions:

1. Back button
2. Home button. Also Status Bar (press and hold to activate)
3. Task switcher button. Also Menu (press and hold to activate)
4. Call Start button
5. Call End button
6. Navigation keys
7. Delete button
8. Special characters button (press and hold to activate)
9. Input mode change button (letters/numbers)



*Figure 2 Keypad*



## 3 GENERAL WARNINGS, CAUTIONS AND NOTES

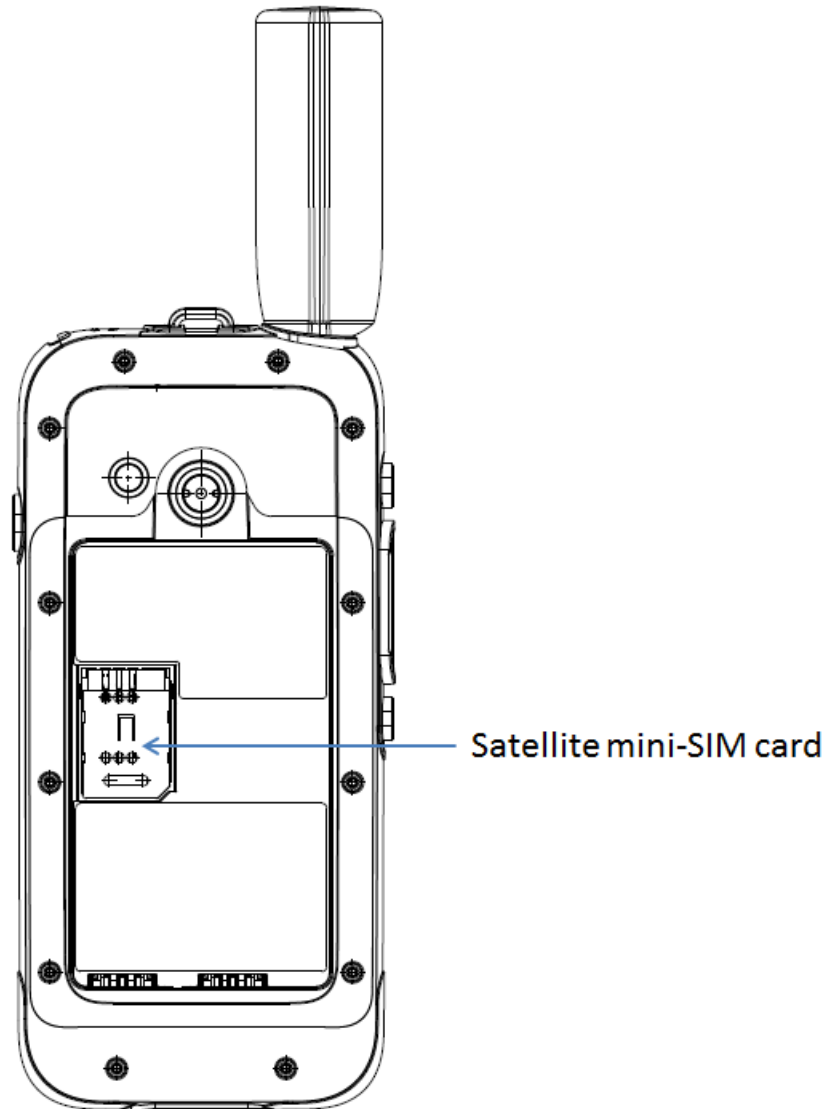
Please use Bittium Rugged Basic with the following safety precautions:

Type	Description
Warning	Permanent hearing loss may occur if earphones or headphones are used at high volume for prolonged periods of time.
Warning	Only use batteries, antennas and chargers approved by Bittium Wireless Ltd. The use of non-Bittium approved batteries, antennas, and chargers may be dangerous.
Warning	Do not use the battery or charger if it has a visible defect, or if you suspect it is damaged.
Warning	Do not allow children to play with the device since it contains small parts that can become detached and create a choking hazard.
Warning	This device must be turned off at all times while on board aircraft.
Caution	The material used in the display is glass. The display can break if your handset is dropped or if it receives a significant impact. Do not use the device if the screen is broken or cracked as this may cause an injury.
Caution	Any modification to this product is prohibited and will make the warranty void. The opening of the unit and use of the components for purposes not otherwise authorized by this document, including any use in airplanes or any other aviation application, is prohibited and will make the warranty void.
Caution	Allow only authorized personnel to service the device and its accessories. Unauthorized service will make the warranty void.
Caution	The device may become warm when using your device for prolonged periods of time, such as talking on the device, charging the battery or browsing the web. In most cases, this condition is normal and therefore should not be interpreted as a problem with the device.
Caution	Do not expose the plastic surfaces of the device to sun lotion or mosquito oil.
Note	When driving, check and obey the laws and regulations on

	the use of mobile phones in the area where you drive. If you are going to use your device while driving, always pay full attention to driving and use a handsfree solution, if available. The law in many countries requires the use of a vehicle handsfree solution while driving.
Note	Always create a backup of data you want to keep (such as contacts and calendar notes) before sending your device for service.

## 4 GETTING STARTED

Please read this user manual carefully before using the device. To start using Bittium Rugged Basic Terminal first insert the satellite mini-SIM card.



*Figure 3 Satellite mini-SIM card location*

**Use only satellite mini-SIM card in Bittium Rugged Basic.**

Insert satellite mini-SIM card into the satellite mini-SIM card slot. After the SIM card is inserted, insert the battery pack.

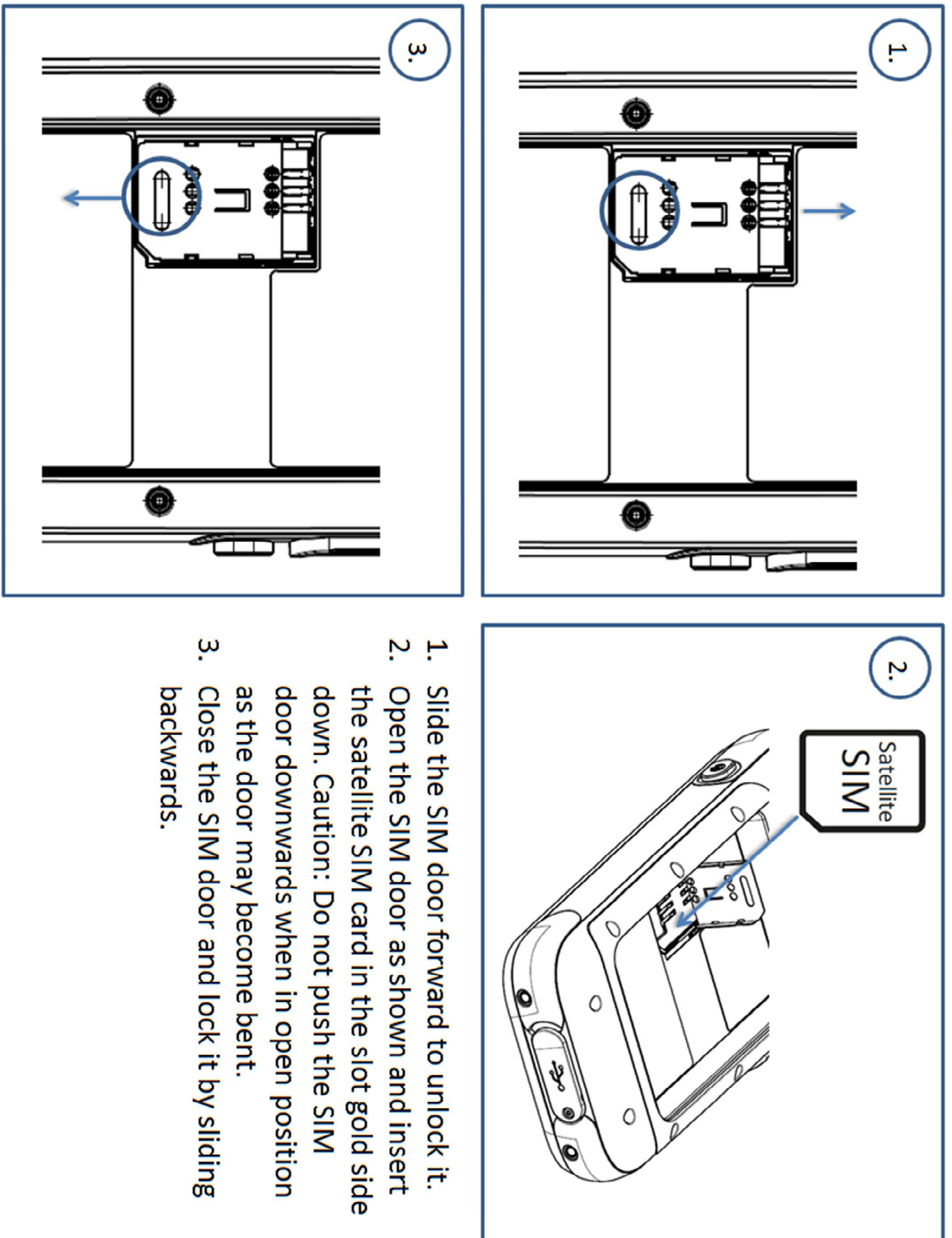
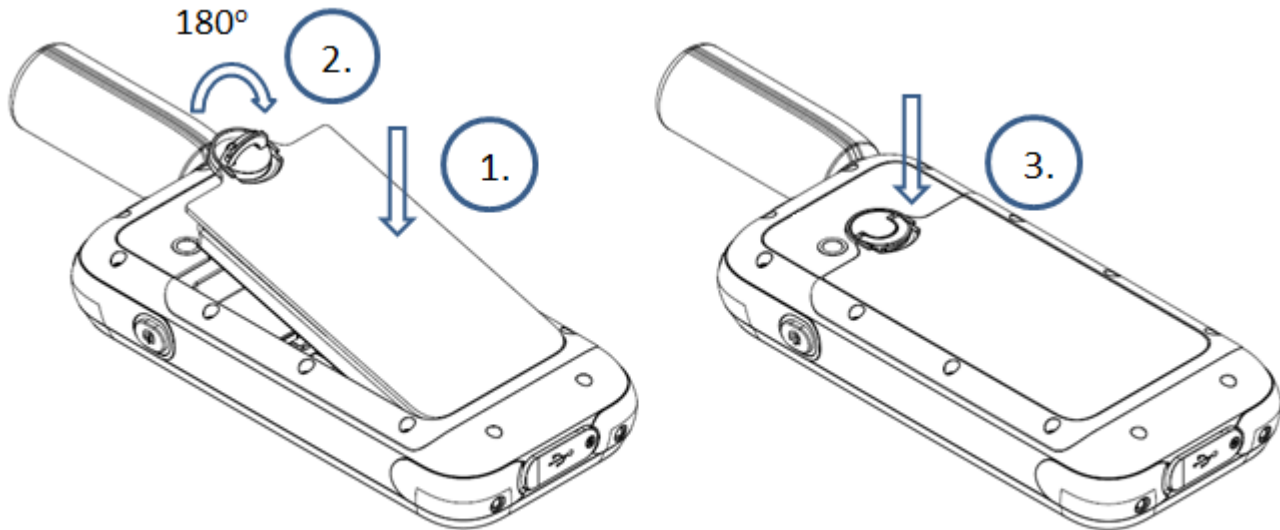


Figure 4 Inserting the satellite mini-SIM card



*Figure 5 Inserting the battery pack*



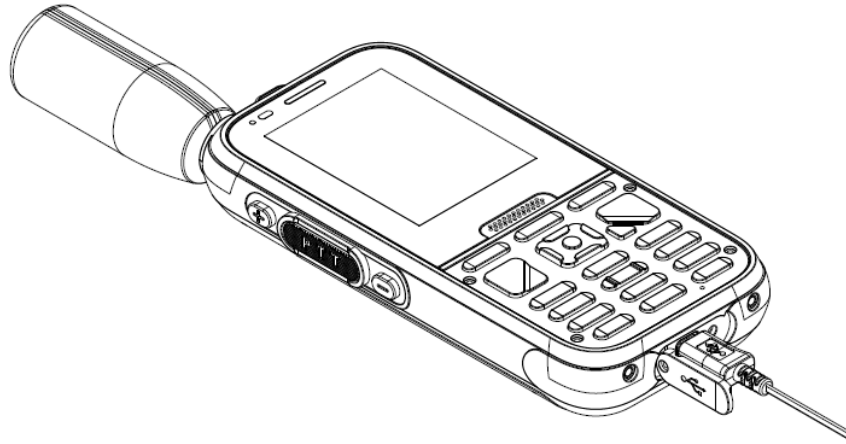
**Caution:** Make sure that the seal inside the battery pack is intact and that the battery pack and the battery housing are clean before inserting the battery pack.

Wipe the battery pack with a clean cloth, if required.

1. Insert the battery pack in place so that all sides are closed. Make sure the top of the battery pack is also properly in place before locking it.
2. Rotate the lock ring tab 180 degrees clockwise.
3. Push the lock ring tab down.
4. Charge the battery. Use the wall charger to charge the battery full before using the device for the first time. Connect the USB cable from the charger to the USB port at the bottom of the device.

The device can also be charged via a computer using the USB cable or in a dedicated multicharger or in a car cradle charger.

If the battery is completely discharged, it is not possible to turn on the device immediately after connecting the charger. Let a depleted battery charge for a few minutes before turning on the device.

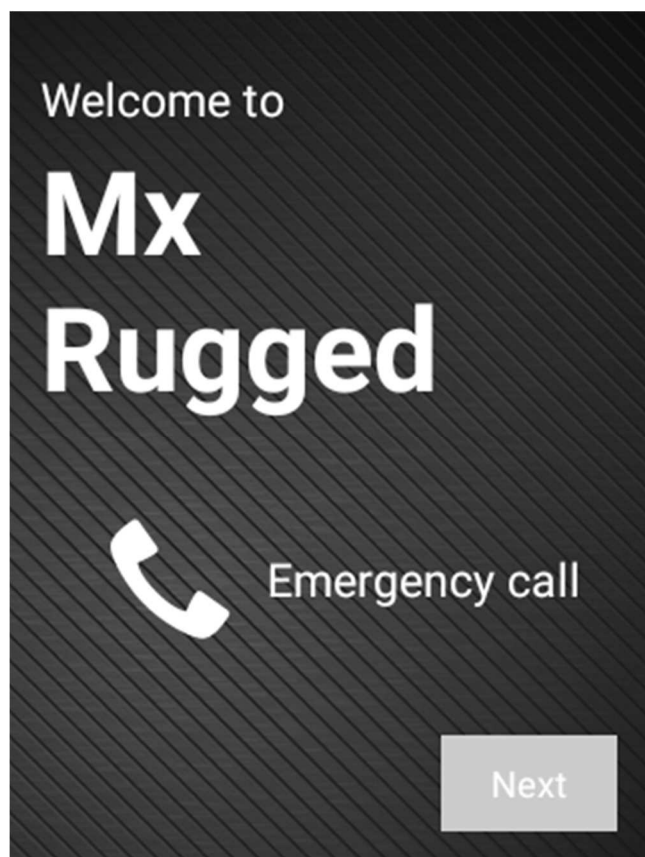


*Figure 6 Charging with the USB cable*

5. Power up the device by pressing the power key.
6. Go through the Security Wizard steps.

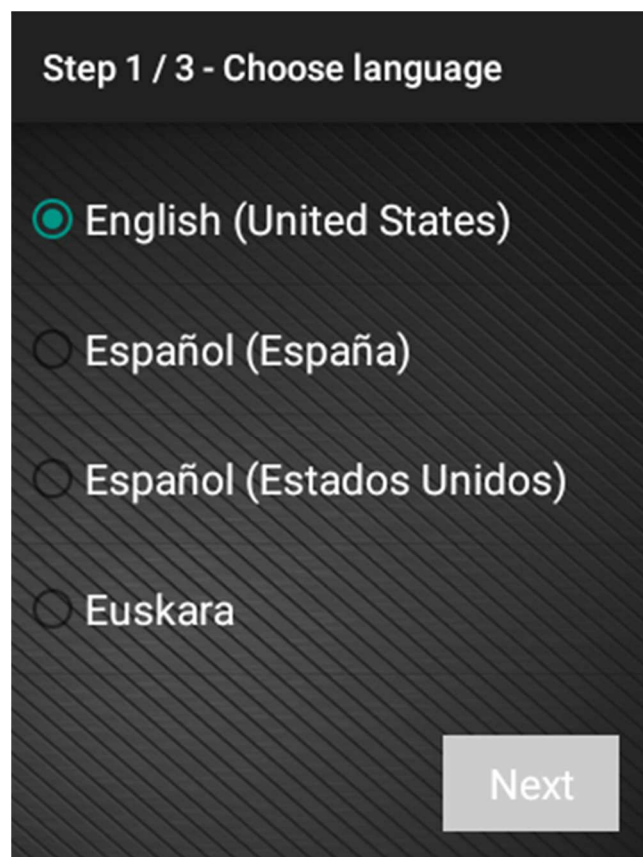
Bittium Rugged Basic is equipped with a Security Wizard that is launched during the initial power up of the device. The Security Wizard is used to set up a number of different device settings. Follow the on-screen instructions.

The number of set-up steps may vary depending on the security features of the device.



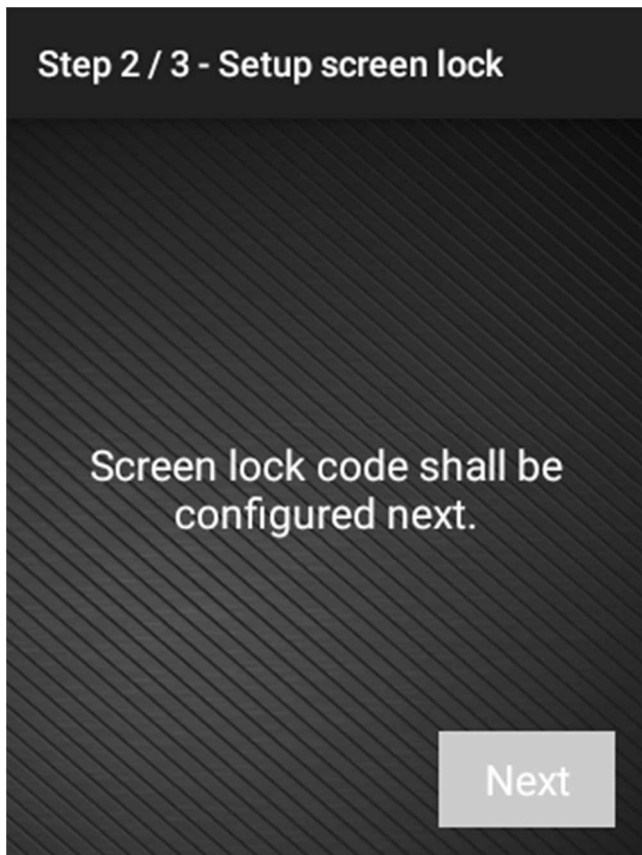
*Figure 7 Security Wizard start screen*

1. Tap Next to continue.



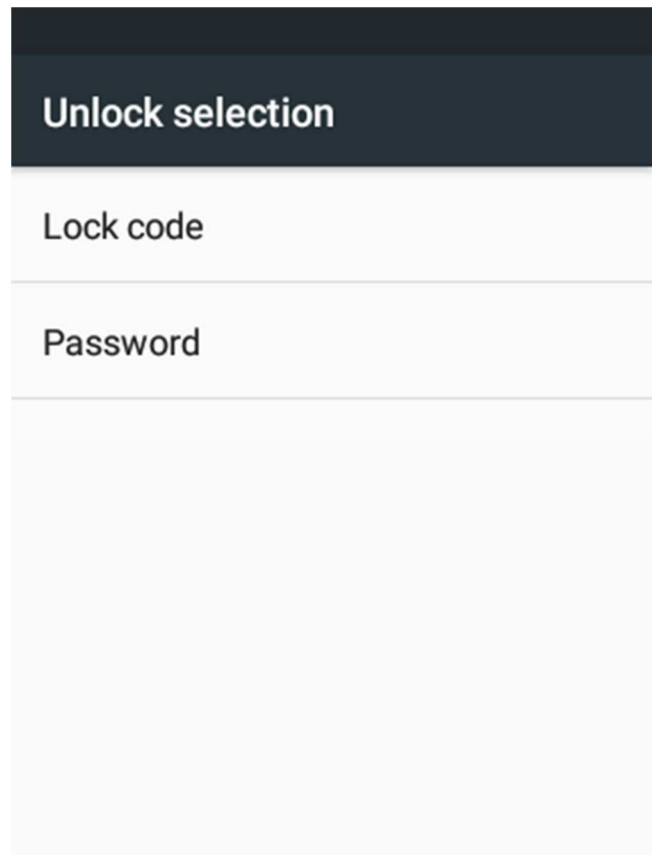
*Figure 8 Choosing the language*

2. Choose the language.



*Figure 9 Screen lock setup*

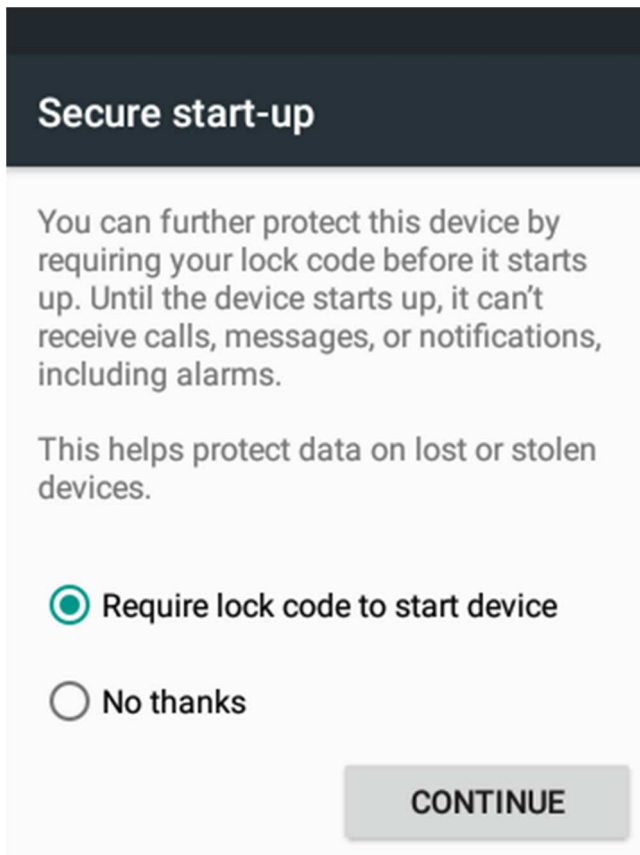
3. Tap Next to continue.



*Figure 3 Unlock selection*

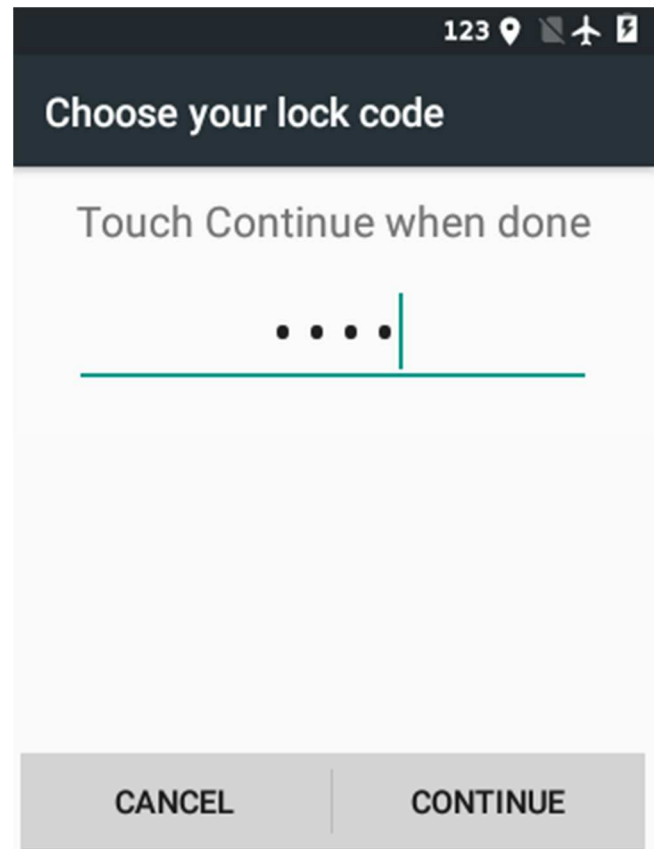
4. Select Lock code or password.





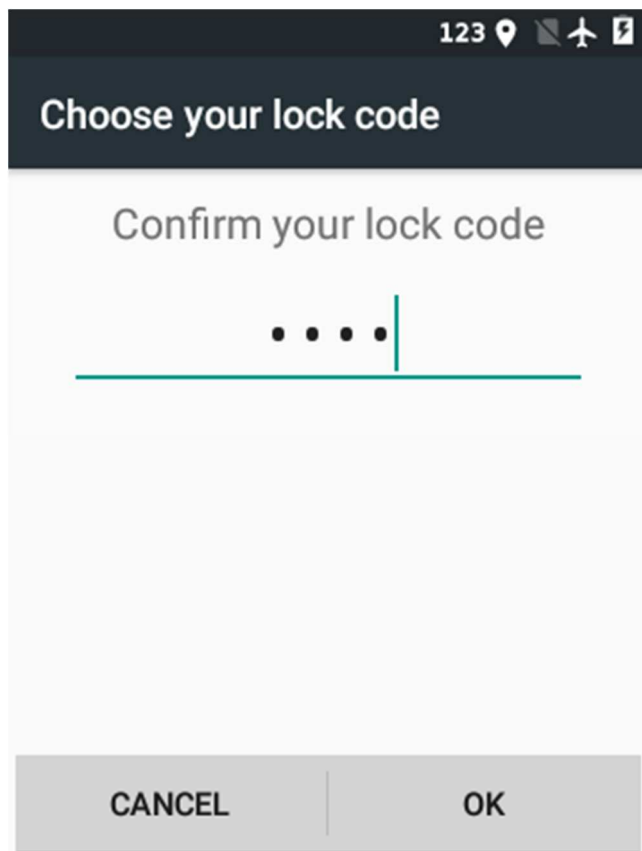
*Figure 4 Secure startup*

5. Choose whether to use the code or password in startup or no.
6. Tap Continue to continue.



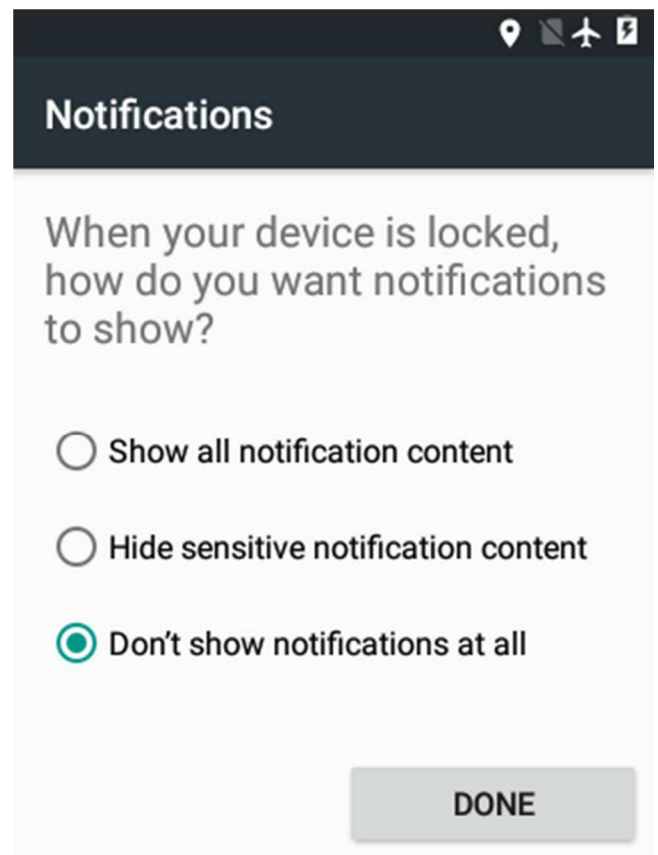
*Figure 5 Entering the lock code*

7. Enter your lock code or password.
8. Tap Continue.



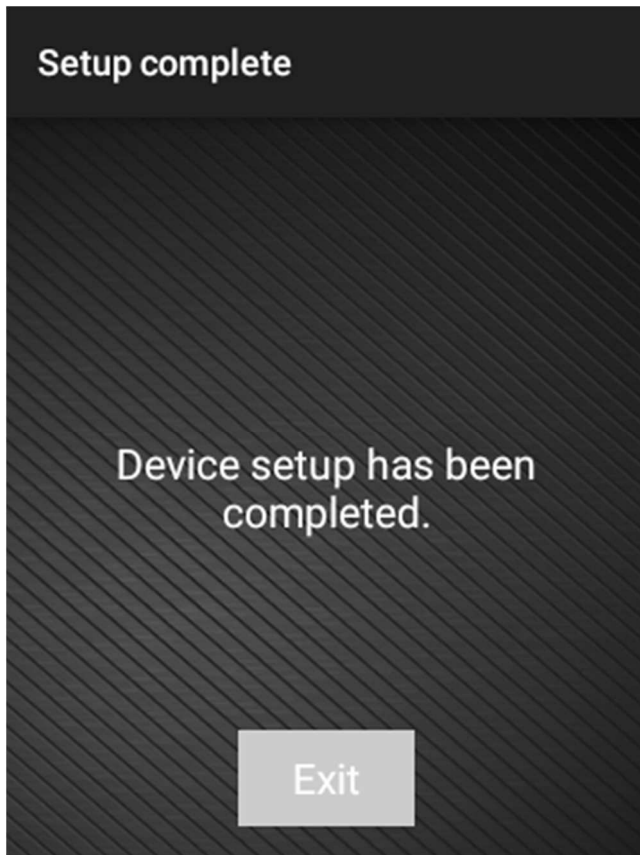
*Figure 6 Confirming the lock code*

9. Confirm your lock code or password.
10. Tap OK.



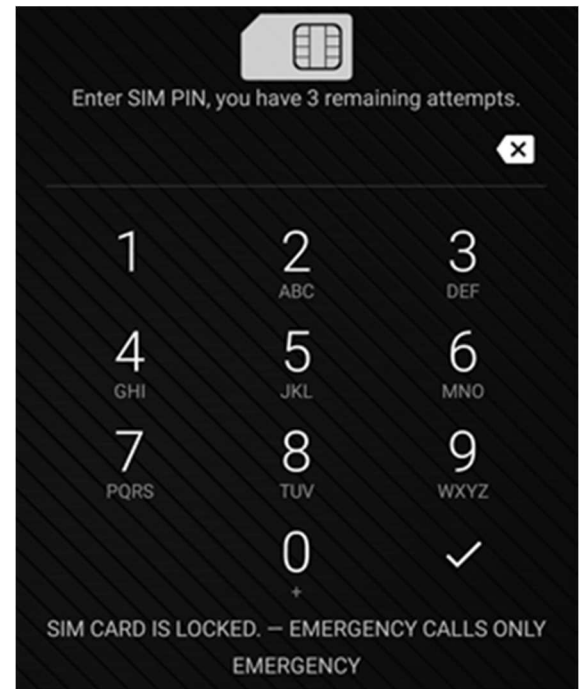
*Figure 7 Notifications*

11. Select how to display notifications when the device is locked.
12. Tap Done.



*Figure 8 Setup complete*

13. Tap Exit to complete the setup.



*Figure 9 Enter the PIN code*

14. Enter your SIM PIN code to start using the device.

## 5 OPERATING THE DEVICE AND SW FEATURES

The screenshots shown in this manual may not represent the latest available SW views.

### 5.1 Operating the device





#### 5.1.1 Lock screen

Turning off the display locks Bittium Rugged Basic. The device also locks after a period of inactivity. Turn the display off by pressing the power key once. The display can be turned on by pressing the power key.

To open the screen lock and to access the home screen follow these steps:

1. Press the volume down key.
2. Enter the lock code or password.
3. Press the “Check” mark.

#### 5.1.2 Home screen

Once Bittium Rugged Basic is successfully booted up and the screen is unlocked, it will display the home screen. Tap the Apps  icon to open the application grid. Press the  button to open the task switcher. Press the  button to return to the home screen. Press the  button to return to the prior screen. The green Call button can be used in the home screen to open the Phone application.

#### 5.1.3 LED indications

The device has a tri-color LED located on top of it. See the following table for LED statuses.

LED color	LED status	Device power	Device status	Network	Description
Red	Constant	ON/OFF	Charging	Sat/Cell	Battery level below 90%
Red	Constant	ON	Not charging	Sat/Cell	No service / No SIM / Unable to read SIM
Red	Blinking	ON	Not charging	Sat/Cell	Battery level below 15%
Green	Constant	ON	Charging	Sat/Cell	Battery level above 90%
Green	Constant	ON	Not charging	Sat	Connected to satellite network
White	Blinking	ON	Not charging	Sat/Cell	Missed call or unread message

## 5.1.4 Maintaining water and dust resistance

Follow the water and dust protection information carefully to prevent damage to the device and to maintain the water resistance and dust protection.

- The device may be damaged if water or dust enters it. Do not immerse the device in water on purpose. The device is not designed for purposeful underwater or shower usage. Purposeful use of the device in these environments will result in a void of the warranty.
- The device is water and dust resistant (IP67) meaning that the device can survive accidental dips and up to 30 minute submersion at 1 meter depth in water. In order to maintain the water and dust resistance the battery cover, the USB connector cover, satellite antenna connector cover and the headset cover must be properly closed.
- The battery cover, USB connector cover, satellite antenna connector cover and headset jack covers may be loosened during normal use or may be broken or deformed if the device is dropped or receives an impact. For IP67 rating ensure that all the covers are in good condition and are properly aligned and tightly closed.
- Submerging the device in water will degrade touch screen responsiveness and audio quality. To restore the touch screen responsiveness and normal audio quality dry all water from the touch screen, earpiece, satellite antenna connector and loudspeaker openings.
- Do not expose the device to water which is moving with force, such as water running from a tap, shower, hose, drips, sprays or splashes.
- If the device is exposed to salt water, rinse it softly with fresh water immediately and dry it thoroughly with a clean, soft cloth.
- Dry your hands before opening the device's back cover. Do not open the device's back cover if the device is wet, in water or in very humid environment.
- Be careful when opening or closing the battery cover to avoid damaging the rubber seal. Also, clean the battery cover and the rubber seal from all water and debris before closing it.
- The USB, satellite antenna connector and headset ports must be completely dry and free of any dirt before use.

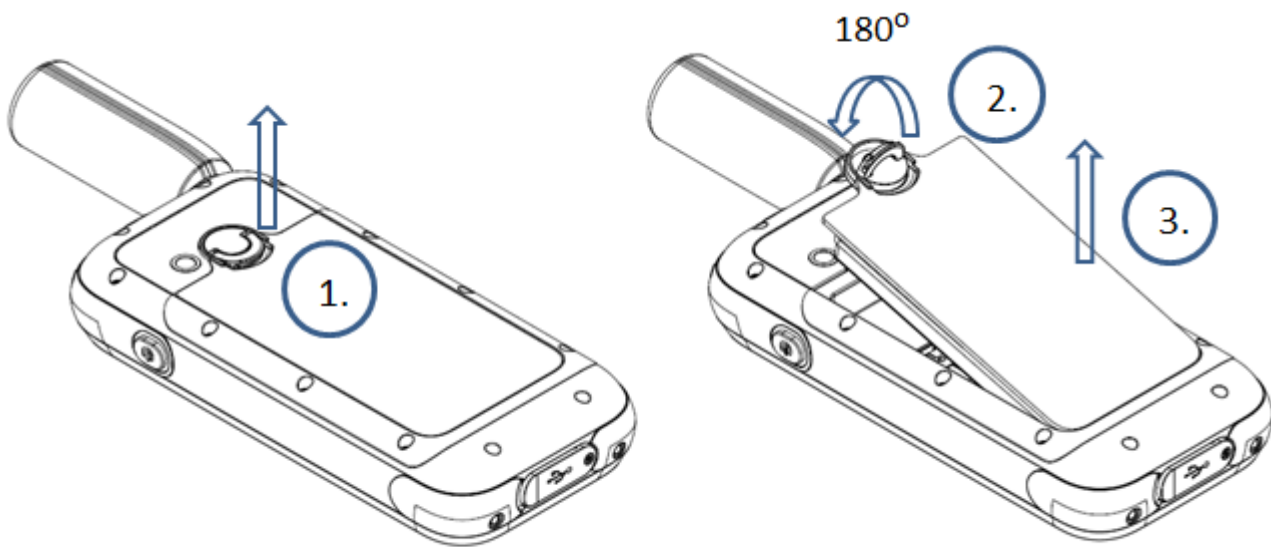
## 5.1.5 Replacing items in field conditions

Some basic replacing operations can be performed in field conditions if necessary. In general the only items that can be replaced in field conditions are the satellite antenna and the battery pack. Any other maintenance activity must be performed only in an authorized service facility by properly trained personnel.

If you carry any extra batteries in field conditions make sure to store every battery pack individually in a waterproof plastic bag.

In case you need to change the battery pack:

1. Lift the locking ring tab up.
2. Rotate the locking ring 180 degrees counterclockwise.
3. Remove the battery pack.



*Figure 17 Removing the battery pack*



**Caution:** The battery pack housing of Bittium Rugged Basic is intentionally tight to meet IP67 requirements.

Follow the instructions in **3.2 Before use** to install the battery pack.

If any of the connector covers break or become detached from the device, the device must immediately be delivered to authorized maintenance facility for repairs. Any debris accumulated in the connectors may break the connectors.

## 5.2 SW features

### 5.2.1 Operating system

Bittium Rugged Basic runs on the Android™ operating system. For a full Android User Guide please refer to: <https://www.android.com>.

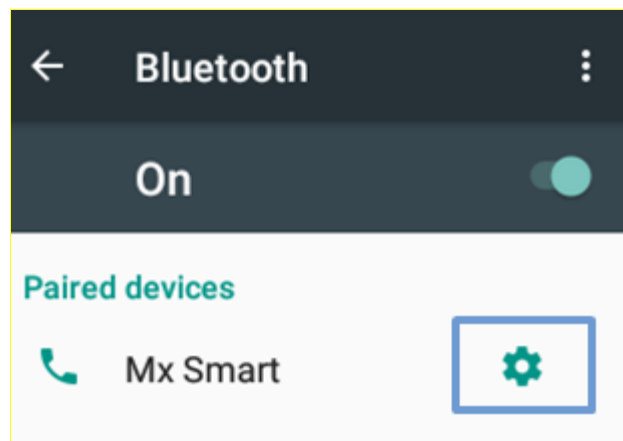
Bittium Rugged Basic may have 3rd party applications pre-installed.

### 5.2.2 SW update

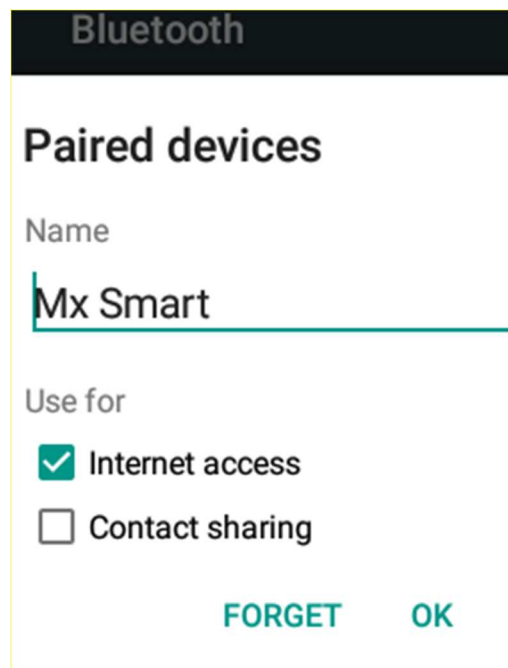
Use software update to manually check for available software updates and install them on your device. Note that updating SW takes approximately 40 minutes.

To update the SW:

1. Connect your smartphone to WLAN. Note that this smartphone can be any device capable of sharing WLAN over Bluetooth tethering.
2. Enable Bluetooth and turn Bluetooth tethering ON from smartphone Settings -> More -> Tethering & portable hotspot.
3. Enable Bluetooth in the Rugged Basic Terminal and pair the device with smartphone by selecting it from the list of devices. Select also the Rugged Basic Terminal from the list in the smartphone.
4. When you are prompted to pair the devices select Pair on both devices.
5. Once pairing is done, enable “Use for Internet access” from Rugged Basic Terminal’s Paired devices settings and tap OK.



*Figure 18 Selecting Paired devices settings*



*Figure 19 Enabling use for Internet access*

6. In Rugged Basic Terminal, select Software updates under Settings -> About phone.
7. In Rugged Basic Terminal, tap Check Now to start the update process.
8. Follow the on-screen instructions in Rugged Basic Terminal.

Once the update process is complete you can disable Bluetooth from both devices.

### 5.2.3 In Case of Emergency, ICE

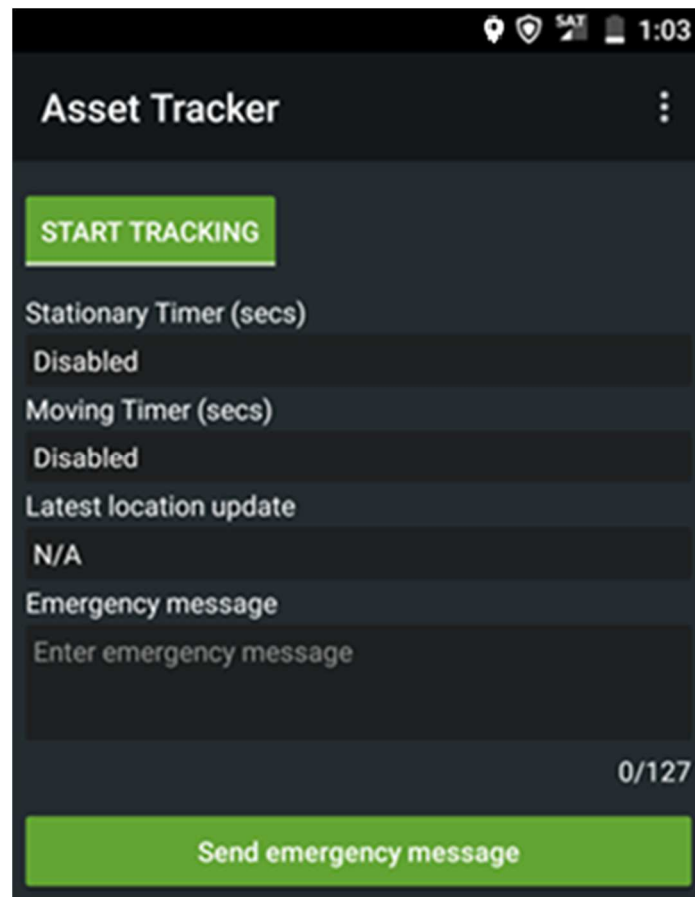
When the “In Case of Emergency” function is turned on, you can call the pre-defined emergency Contact number by pressing the power key for a long time (>3 seconds). You can turn the function on by selecting In Case of Emergency in the Accessibility menu under Settings.

1. Select In Case of Emergency in the Accessibility menu.
2. Turn on the function.
3. Add the contact number to call in case of emergency.
4. Press the “Check” mark.

### 5.2.4 Asset Tracker

With the asset tracking service it is possible to track the movement and location of the Bittium Rugged Basic via a dedicated hub.

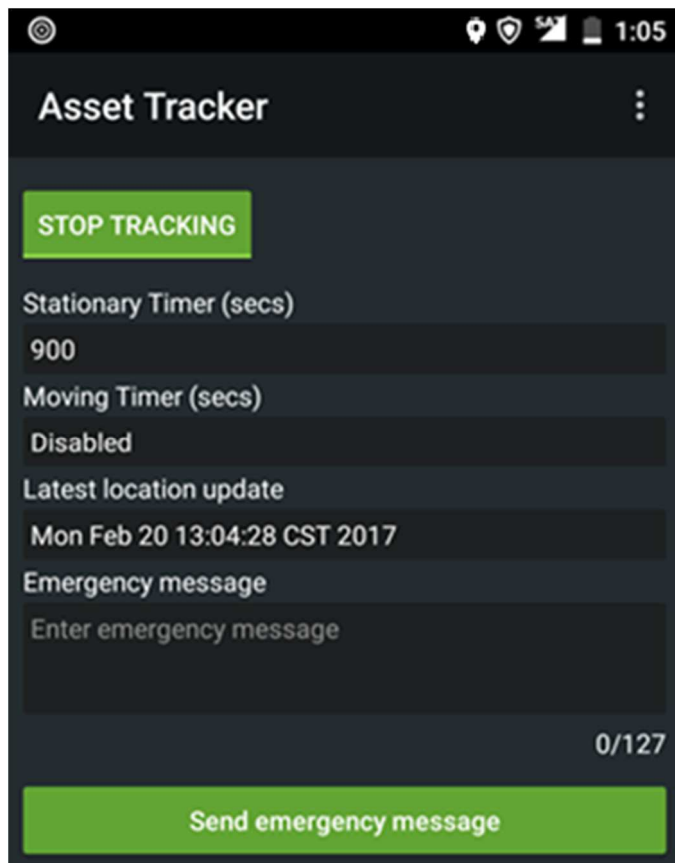




*Figure 20 Asset Tracker main view*

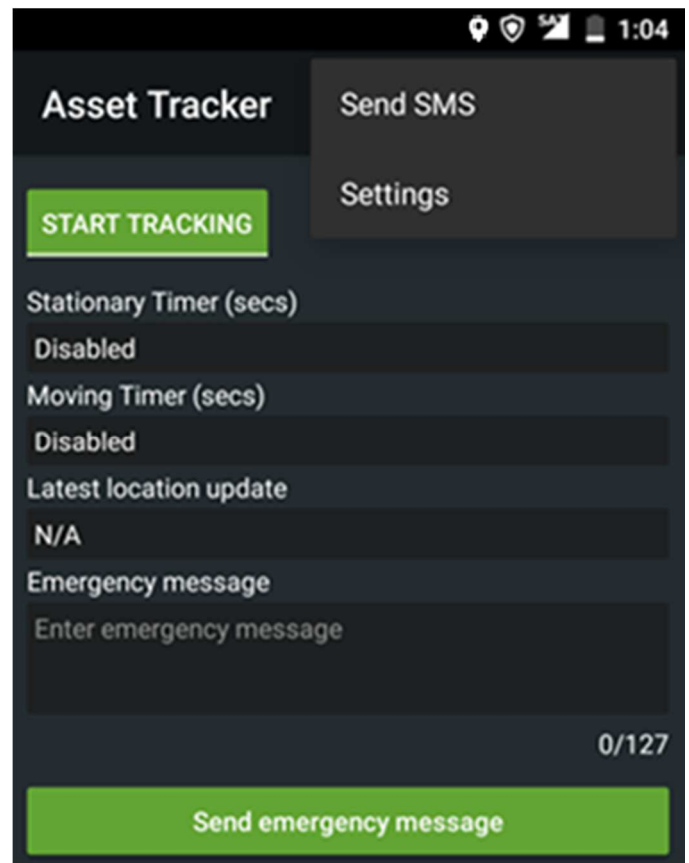
1. Tap the Asset Tracker icon to start the application. Main view is displayed.

- **Start Tracking:** Tap to start the asset tracking service
- **Stationary Timer (secs):** Shows the stationary timer information in seconds
- **Moving Timer (secs):** Shows the moving timer information in seconds
- **Latest location update:** Shows the time of the latest update on location
- **Emergency message:** This field can be used for an emergency message if necessary
- **Send emergency message:** Tap to send an emergency message entered in the emergency message field. Maximum number of characters is 127.



*Figure 21 Stop Tracking*

2. Tap Start Tracking to start the tracking service.
3. Tap Stop Tracking to stop the tracking service.



*Figure 22 Send SMS*

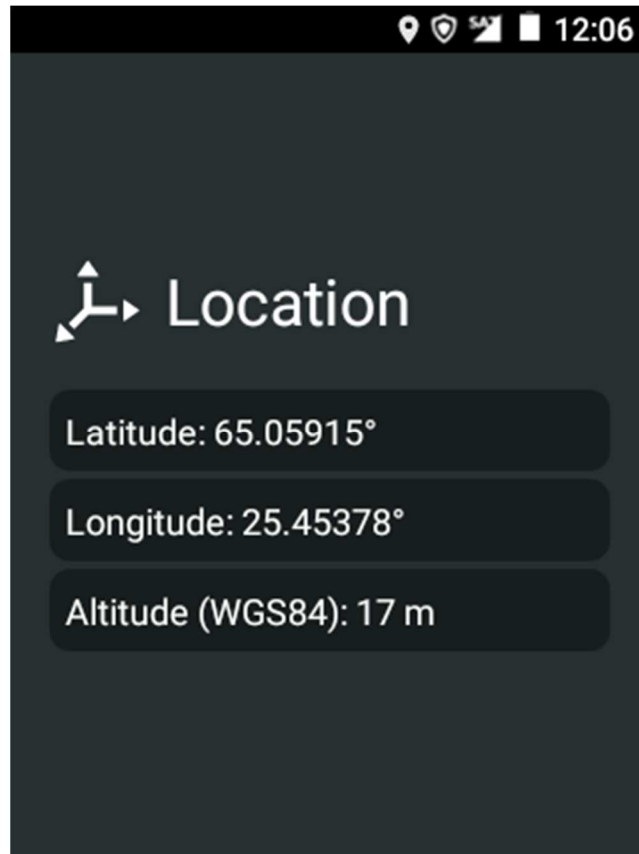
It is also possible to send an SMS message. This service is available by tapping the top right-hand corner and selecting Send SMS.

## 5.2.5 Stealth mode

The device can be entered into a mode called Stealth mode by pressing the volume down key for approximately 3 seconds after the device is unlocked by pressing the power key. In this mode the display of the device is dimmed and sounds are muted. You can exit the Stealth mode by pressing the volume up key for approximately 3 seconds. If you keep the device in your pocket in this mode it is advisable to lock the screen by pressing the power key once.

## 5.2.6 Location

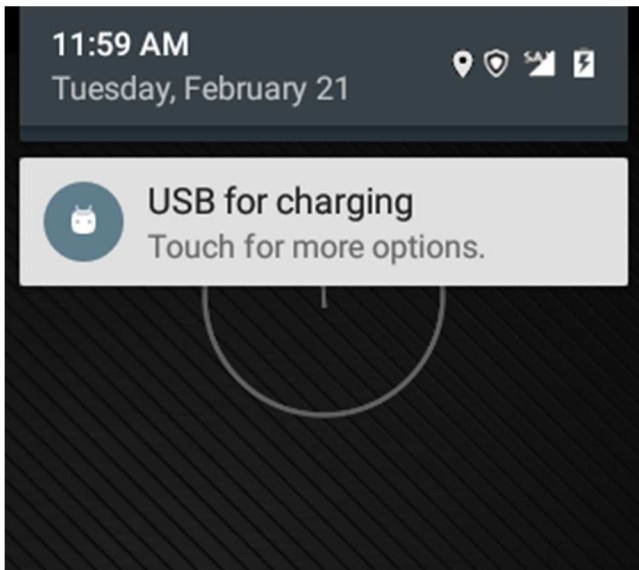
The device has a location application that can be activated by selecting the Location icon. Location gives your exact position in latitude and longitude as well as the altitude from the nominal sea level. Note that GPS must be enabled in order to use the application.



*Figure 23 Location*

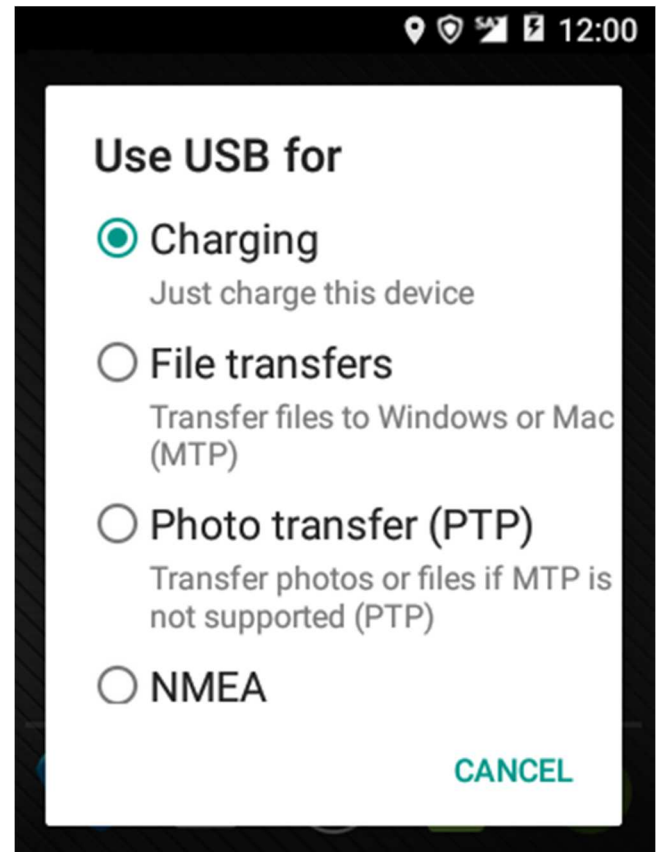
## 5.2.7 Changing the USB mode

It is possible to change the USB mode when the USB cable is connected. For example, if you want to transfer files between the device and a computer using the USB cable you must select 'File transfers' from the device's pull down menu when the USB cable is connected. Other options are 'Charging', 'Photo transfer (PTP)' and 'NMEA'.



*Figure 24 USB mode*

1. First tap USB for charging from pull down menu.



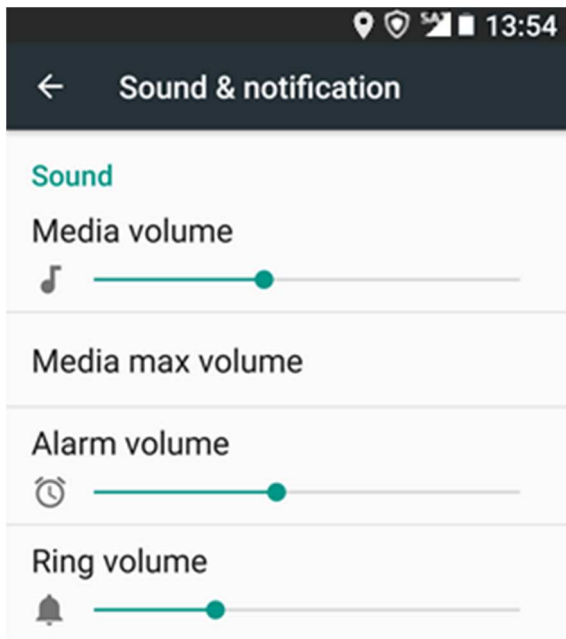
*Figure 10 USB options*

2. Then select File transfers.

Note that the last option NMEA stands for National Marine Electronics Association and it is used for communicating with devices complying with the NMEA standard.

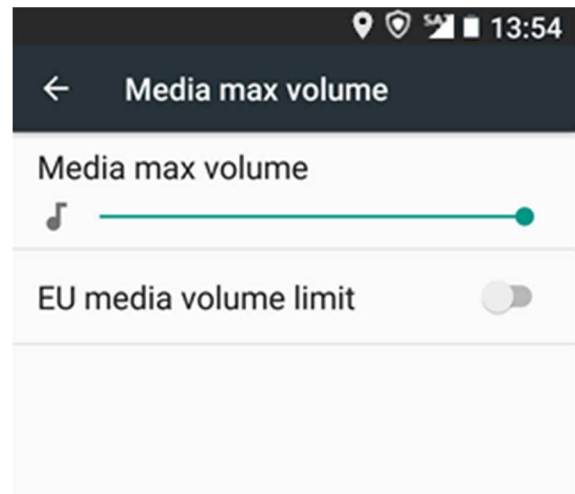
## 5.2.8 Media max volume limiter

With the Media max volume limiter setting it is possible to set a maximum volume level for media. The setting can be accessed under Settings->Sound & notification:



*Figure 26 Media max volume option*

1. Select Media max volume.



*Figure 27 Media max volume setting*

2. Set the Media max volume level.

Note that this setting is not available if EU media volume limit is on.

## 6 SATELLITE CALL

Make sure the device has a clear view of the southern sky.

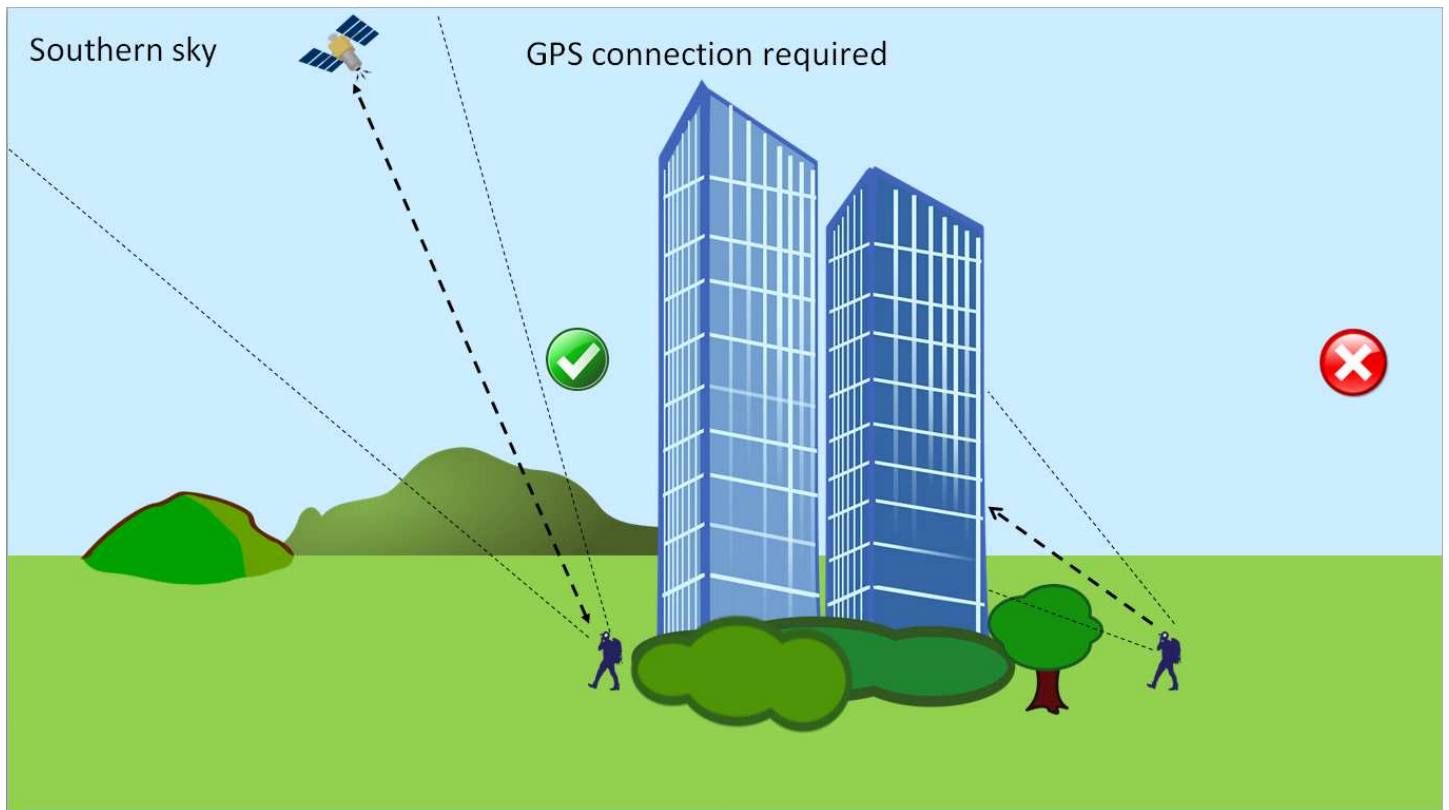
Using your device on satellite network has the following differences compared to cellular network:

- Establishing a satellite call can take several minutes due to the physical distance of the satellite.
- There is a delay of 2 to 4 seconds before what you say reaches the recipient and before you hear the recipient.
- Applications may be slower when on satellite network.
- Avoid data transfers when on satellite network.
- To preserve battery power, keep the device on satellite network only when necessary.

### 6.1 Restrictions of the satellite connection

When using the satellite call function there are some restrictions that should be taken into account.



- Ensure that the device has a clear view of the southern sky.
- Ensure you have a GPS connection and that the clock is set to local time. See page 33 for a description of the Location icon.
- Ensure there are no obstacles between the satellite and the device.
- To maintain the view of the satellite during a satellite call, it is recommended to use a wired headset and a vest clip, for example. See list of accessories for options.
- If you are expecting an incoming call, maintain a clear view of the southern sky (do not keep the device in your pocket). Make sure not to block the signal with your own body, for example.
- Note that a high power alert dialog will be displayed when a satellite call is incoming and the signal path to the satellite is very weak. The dialog changes to standard Android call dialog when the signal is strong enough.



*Figure 28 Establishing satellite connection*

- To maintain a constant connection to the satellite, move the device to the satellite's direction. Stay in the same position for the duration of the call. Note that obstructions may reduce call quality or may cause the call to drop.

## 6.2 Making a satellite call







The quickest way to start a call is to either select the Phone  icon or the Contacts  icon on the home screen. Note that it may take a while to establish the call as the signal travels to the satellite and back. Note also that when in call there may be a several seconds delay between what you say and what the call recipient says due to the distance of the satellite.

1. Tap the Phone icon on the home screen.
2. Select how you want to make the call.

You can select either from existing contacts, favorites or from the call log. You can also enter the number manually.

3. Tap the green phone icon to start the call.
4. Tap the red phone icon to end the call.

Depending on the active applications the following icons may appear on the status bar at the top of the screen. Note that location should be always enabled.

Icon	Meaning
	Connected to satellite
	Satellite connection is ciphered and secure
	External satellite antenna is in use
	Asset tracking is on
	PTT is on
	Location is on



## 7 PTT CALL

PTT (Push-To-Talk) function makes it possible to use the device like a walkie-talkie by switching from voice reception to transmit mode with a press of the dedicated PTT button. The advantage of PTT is the ability for a single person to reach an active talk group with a single button press as there is no need to make several calls to coordinate with a group.

Note that when PTT is started the device goes to PTT mode. Satellite calls are not possible in this mode.

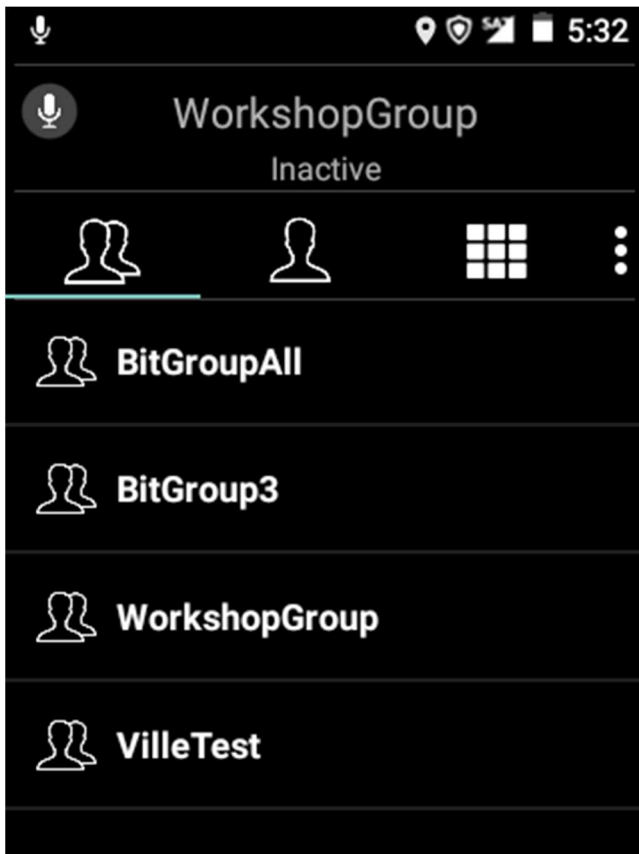


Figure 29 PTT Groups view

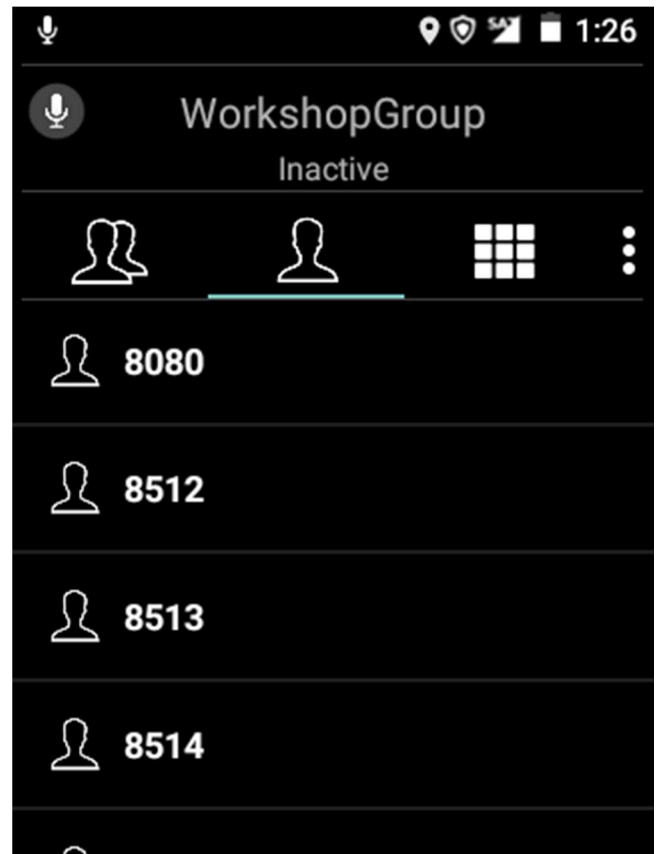

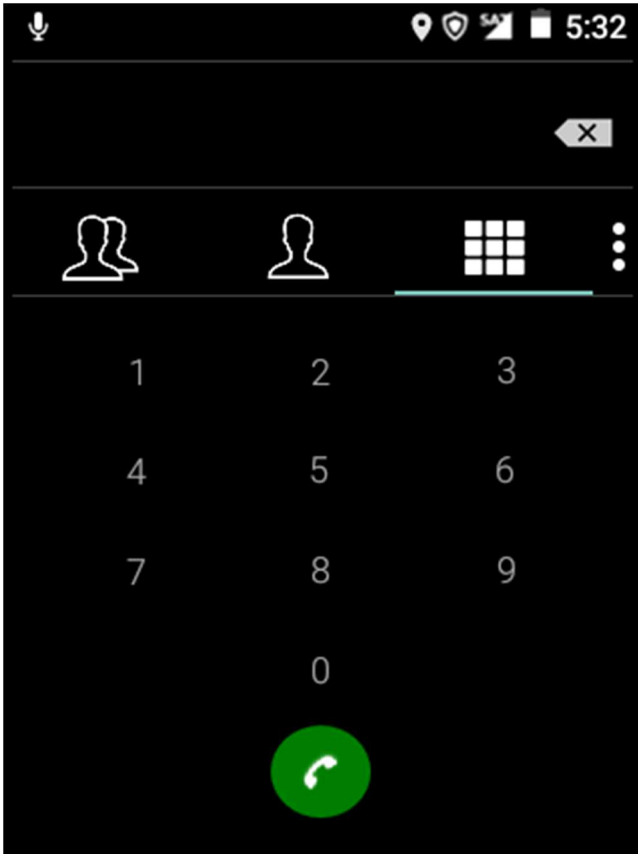


Figure 30 PTT Contacts view

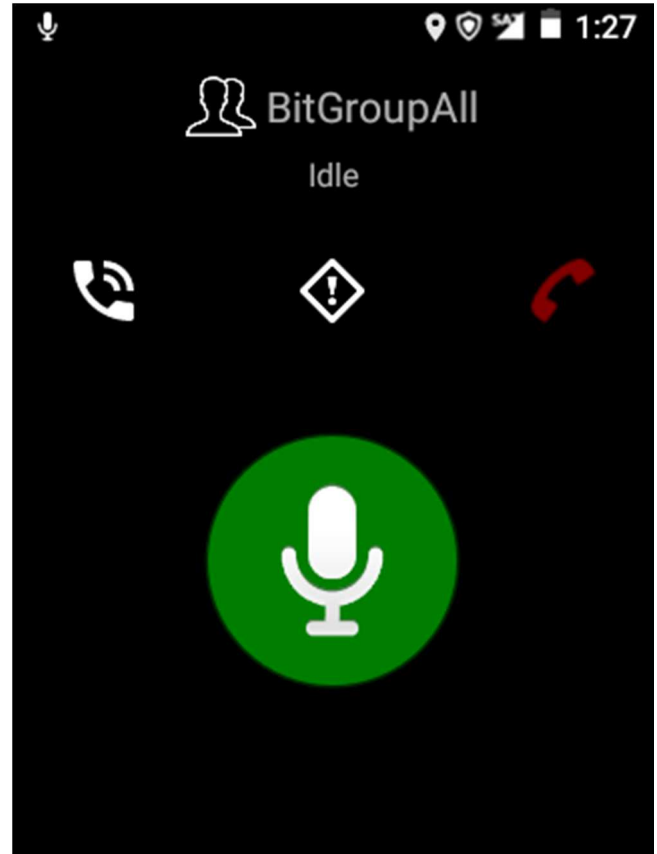
1. Tap on the PTT  icon to start the application. If the SIM card is valid and the service is registered the main view opens.

The main view is divided into three views: Groups, Contacts and Dialer.



*Figure 31 Dialer view*

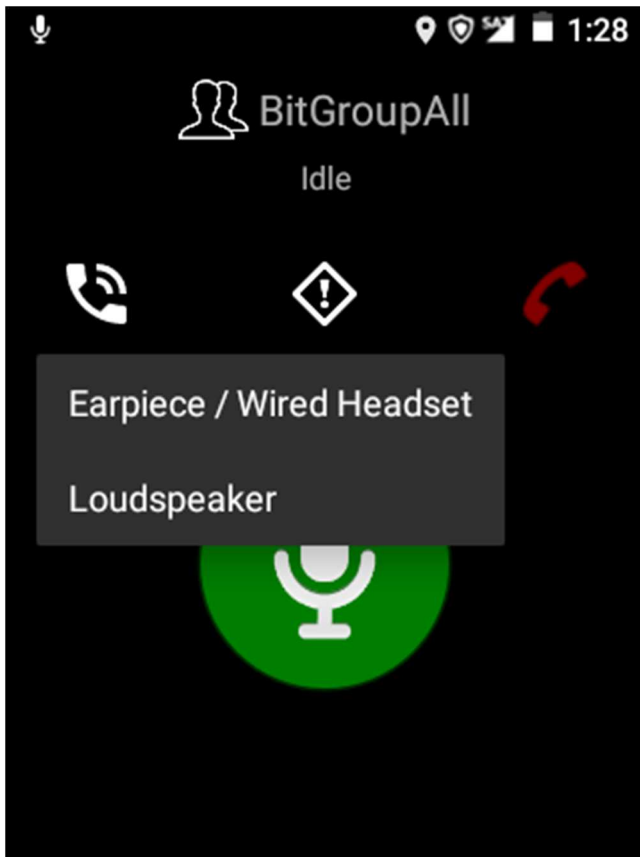
2. To make a PTT group call select Groups and then the group you want to call by tapping on the group name and then tapping the PTT icon.



*Figure 32 Group call view*

3. To call a single contact select Contacts and then the contact you want to call by tapping on the contact name and then tapping the PTT icon. Remember to hold down the PTT key when talking.
4. To call a separate number select Dialer and then enter the number you want to call. Tap the PTT icon to make the call.
5. To end a call tap the red phone icon.

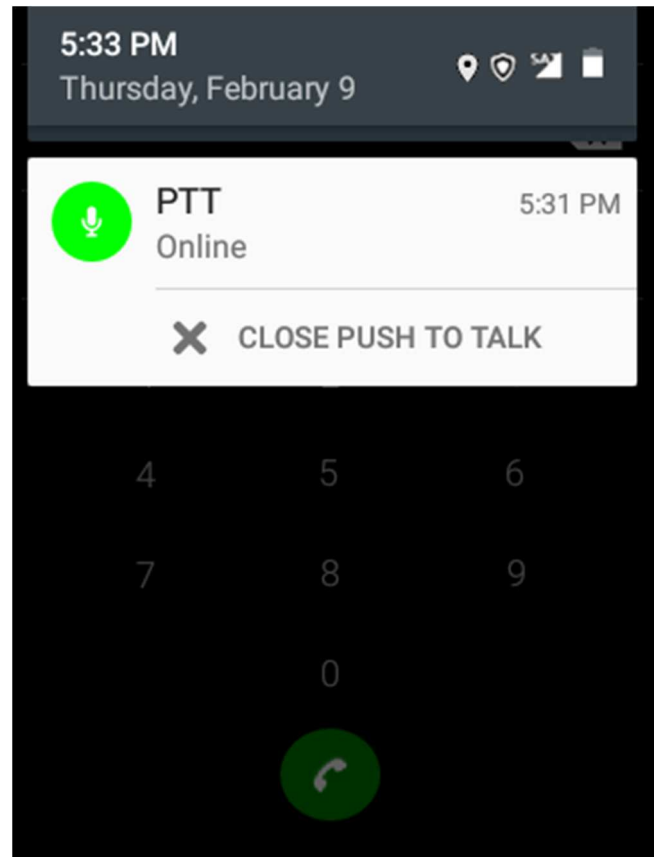
During and before a call you can select whether to use the device's loudspeakers, earpiece/wired headset or a BT headset.



*Figure 33 Selecting audio output*

Tap the white phone icon in the call view.

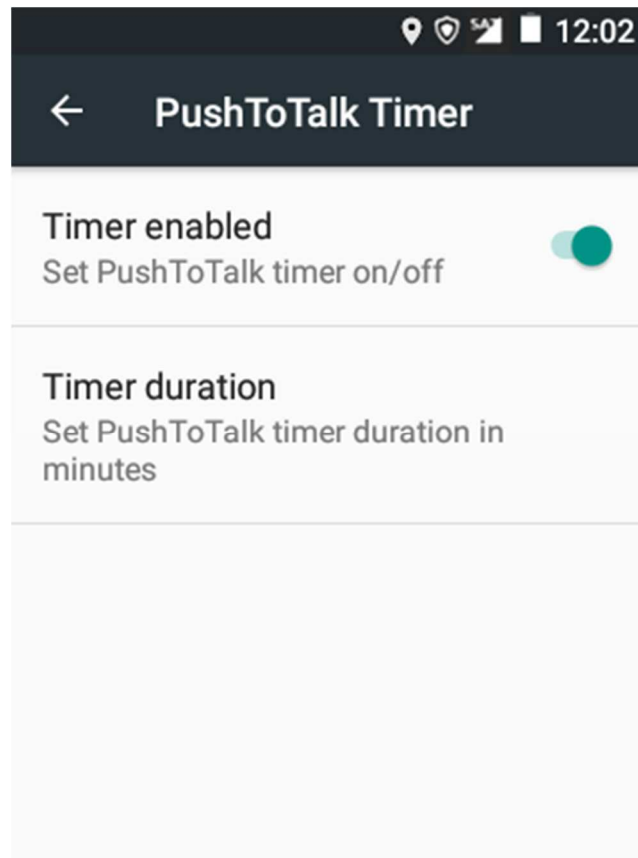
To close PTT swipe the screen downwards from top of the screen and select Close push to talk.



*Figure 34 Closing PTT*

## 7.1 PTT Timer

The purpose of the timer is to enable PTT application autostart after a specified time has elapsed. Set the PTT timer under Settings.



*Figure 35 PTT timer*

You can switch the PTT timer on and off and set the timer duration in minutes. When for example the timer is ON and the device is booted and the timer is set to 5 minutes the PTT application is started automatically after 5 minutes. Note also that when the timer is enabled PTT application will be re-launched after closing the application and the specified time has elapsed.

Note that when PTT is active the icon in the status bar can be used to close the application.

## 8 TROUBLESHOOTING

You can find extensive support for your device on the customer support page at <https://dojo.bittium.com/mexcare>.

### 8.1 General

#### **Device does not respond:**

- Device may be low on power. Charge the battery and try starting the device.
- If the battery is charged turn the device off and then turn it back on.
- If the device still does not respond remove the battery and then insert it back and turn the device on.

#### **No sounds available:**

- Check volume settings.

### 8.2 Satellite calls

#### **Cannot make or receive satellite calls:**

- Check whether your device is on satellite network.
- Check whether you are in the area with satellite network coverage. For more information about network coverage areas, contact your service provider.
- Check the satellite signal strength in the status bar at the top of the device screen. If there are no bars, move to a different location and point the device toward a clear view of the southern sky and that there are no objects blocking the view.
- If you are indoors, go outdoors.
- Turn the device off and back on.
- There may be a problem in your service provider's satellite service. For more information about your service provider's satellite service, contact your service provider.

## 9 IMPORTANT CUSTOMER INFORMATION

Bittium Rugged Basic is a wireless device, containing a radio transmitter and receiver which emit radio frequency energy during its use. Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the radio signals from a wireless device.

Do not use Bittium Rugged Basic near medical equipment without permission. A minimum of six (6) inches should be maintained between Bittium Rugged Basic and an implantable medical device, such as a pacemaker or implantable cardiac defibrillator in order to avoid potential interference with the medical device. Persons having implanted medical devices should follow instructions from the manufacturer of the medical device for safe use within proximity of wireless devices. Wireless devices may also interfere with some hearing aids. In the event of such interference, consult the service provider or call customer service line to discuss alternatives.

Radio signals may interfere with improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the vehicle manufacturer or its representative regarding your vehicle. Aftermarket electronics which have been added to the vehicle should also be checked.

Any modification of Bittium Rugged Basic is prohibited. Only authorized personnel should service Bittium Rugged Basic and its accessories.

Only use software updates provided by Bittium. Accessories for Bittium Rugged Basic should be either purchased from or approved by Bittium.

Only use the battery specified by and provided by Bittium in the Bittium Rugged Basic. Do not short-circuit the battery. Do not use the battery with a charging system which has not been approved by Bittium.

Turn Bittium Rugged Basic OFF in any facility where posted notices so require.

To avoid interfering with blasting operations turn Bittium Rugged Basic OFF when in a blasting area or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Turn Bittium Rugged Basic OFF when in areas with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Areas with a potentially explosive atmosphere are often, but not always, marked clearly. Potential areas may include fueling areas (such as gas stations);

below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles (such as grain, dust, or metal powders); and any other area where you would normally be advised to turn off your vehicle engine.

An emergency call can be made only within a service area. For an emergency call, make sure that you are within a service area and that the device is turned on.

The device does not necessarily meet all specifications in extreme temperatures. Battery capacity (use time) is limited in low temperatures, and the device performance may be limited in high temperatures. The device is equipped with intelligent battery charging control that limits battery charging in extremely hot and cold temperatures to ensure battery safety and extended operating life.

## 9.1 Federal Communications Commission (FCC) notice to users

Bittium has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. 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 a 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 on the radio or television equipment, 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 radio or television equipment dealer.

## 9.2 Radiation exposure statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This transmitter must not

be co-located or operated in conjunction with any other antenna or transmitter. To satisfy the FCC RF Exposure requirements for mobile transmitting devices, a separation distance of 10mm should be maintained between the antennas of this device and persons during operation. To ensure compliance, operations at closer distances than this are not recommended.

### 9.3 Specific Absorption Rate (SAR) certification information

This device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE Std. C95.1-1992 and has been tested in accordance with the measurement procedures specified in FCC RF Exposure guidelines and IEEE Std. 1528-2013. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations. The highest SAR value reported under these guidelines when used at the ear is 1.52 W/kg and when correctly worn on the body is 0.41 W/kg.

### 9.4 Instituto Federal de Telecomunicaciones (IFT) notice to users

Para cumplimiento de la IFT: La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

### 9.5 Mexican importer information

BITTIUM MEXICO, S.A. DE C.V.

CASTILLO DE KENT 20, COL. CONDADO DE SAYAVEDRA,

C.P. 52938, ATIZAPAN DE ZARAGOZA, EDO. DE MEXICO,

MEXICO.

### 9.6 Limited warranty statement

This limited warranty applies to Bittium Rugged Basic Terminal deliveries. This limited warranty is subject to the following terms and conditions:



- For a period of 1 year from the date of purchase, Bittium Wireless Communications Ltd. (“Bittium”) warrants this Product (including any accessories provided in the sales package) against defects in materials or workmanship.
- Exclusions:
  - Normal wear and tear of visual surfaces, batteries or display.
  - Cosmetic damage or damage due to misuse, abuse, negligence, accident, or modification of any part of the Product.
  - Damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by Bittium to service this Product.
  - Performance issues or an incompatibility caused by editing of the registry settings, modifications of the operating software or 3rd party application downloads. Using custom operating system software may cause your device and application to work incorrectly.
  - Product failures which have been caused by use of accessories or other peripheral devices which are not the original accessories intended for use with the Product defined by Bittium.
- To ensure the water and dust resistance of your device, all openings, including the covers for the battery, headset connector, satellite antenna connector and the micro USB port must be firmly closed. If the covers are missing or damaged, including use that is contrary to the instructions provided by Bittium (e.g., as set out in the Product’s user guide) the Product warranty is void.
- Warranty will not apply if the product serial number, the accessory date code, the IMEI number, water indicator or the warranty seal has been removed, erased, defaced, altered or is illegible.
- To obtain warranty service, you must receive a Return Merchandise Authorization from Bittium and ship the Product at your expense to Bittium’s authorized service facility. You must ship the Product in either its original packaging or packaging affording an equal degree of protection.
- This warranty does not cover customer instruction, set up or set up adjustments or network coverage problems.

- When Bittium or its authorized service provider repairs or replaces the Product, the repaired or replaced Product will be warranted for the remaining time of the original warranty period or for ninety (90) days from the date of repair, whichever is longer. Repair or replacement may involve the use of functionally equivalent reconditioned units. Replaced parts or components will become the property of Bittium.
- This warranty does not cover Product failures caused by installations, modifications, or repair, or opening of the Product performed by a person not authorized by Bittium.
- A rechargeable battery can be charged and discharged more than a hundred times. However, it will eventually wear out—this is not a defect and corresponds to normal wear and tear. When the talk-time or standby time is noticeably shorter, it is time to replace the battery. Bittium recommends that you use only batteries and chargers approved by Bittium.
- Minor variations in display brightness and color may occur between devices. There may be defective pixels, either bright or dark dots on the display. This occurs when individual pixels have malfunctioned and cannot be adjusted. Three defective pixels are deemed acceptable.
- Since the cellular system on which the Product is to operate is provided by a carrier independent from Bittium, Bittium will not be responsible for the operation, availability, coverage, services, or range of that system.
- Tampering with any of the seals on the Product will void the warranty.
- Warranty is void if the defect was caused by a defective function of the cellular network or any other network within a limited area, or the Product software needs to be upgraded due to changes in network parameters.

Please contact <https://dojo.bittium.com/mexcare> for warranty support.

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5800564A01, version 1.0

## 9.7 Disposal of device



This marking on the product or accessories indicates that they should not be disposed of with other household waste.



This marking on the battery indicates that it should not be disposed of with other household waste.