I – SEE - YOU

USERS MANUAL

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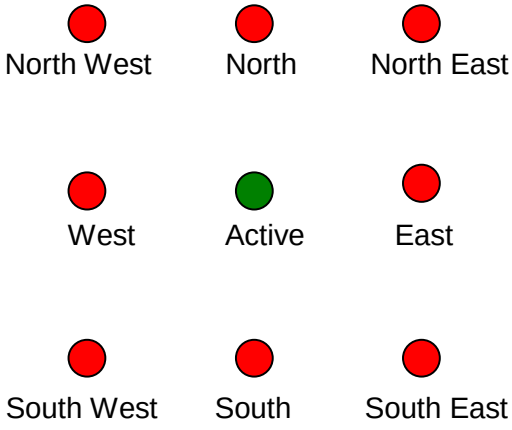
1. SCOPE

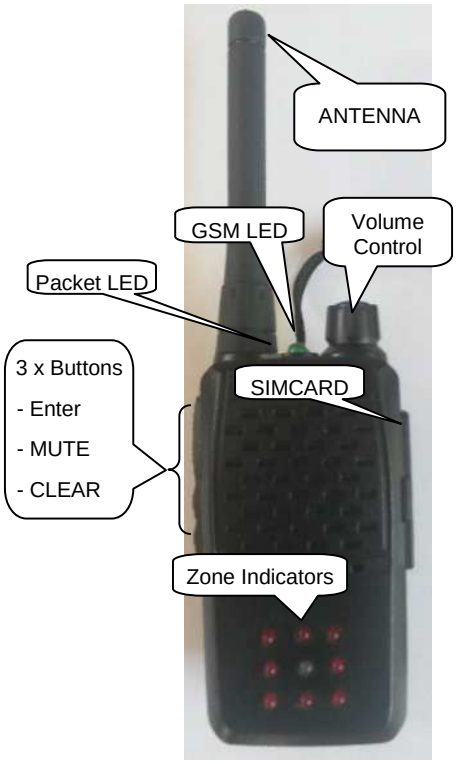
This is a users manual for the I-SEE-YOU perimeter alarm system. Target audience is the installer or DIY owner.

2. HAND HELD UNIT

The HHU is a receiver that indicates perimeter intrusion using the sensors in range. The HHU is battery powered. It requires up to 8 hours to charge that should provide 12 hours of power.

The perimeter to be monitored is divided into 8 directions or zones :





Each direction is monitored by a sensor (or multiple sensors). These sensors are wireless and also battery operated.

The HHU has 3 main modes of operation.

- Open Mode
- Closed Mode
- Modes for configuration

Open Mode

Open mode operation receives and displays all sensors on the selected RF channel that are within RF range. It requires no learning of sensors.

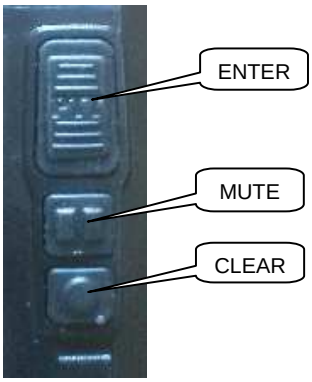
When using this mode, be aware that so called false alarms may occur. Sensors within range on the same RF channel will also trigger an alarm.

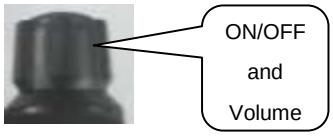
Closed Mode

Closed mode operation receives and displays only the sensors that have been learned into the specific HHU. This mode also displays a warning (referred to as trouble) if a sensor heartbeat is not received after 30 minutes.

Later in this paragraph all the modes, settings and learning will be explained.

2.1 BUTTONS AND KNOBS





2.1.1 ON and OFF

To turn on the unit rotate volume control clock-wise. To turn off the unit rotate volume control counter clock-wise.

Directly after turning on the unit, it will display 3 settings before starting to receive. Each (Mode, RF CHANNEL and Learned Zones) is displayed for one second.

1.Mode

Open Mode	Closed Mode	Learn Mode

2.RF CHANNEL

CH 0	CH 1	CH 2	CH 3	CH 4	CH 5	CH 6	CH 7

CH 8	CH 9	CH 10	CH 11	CH 12	CH 13	CH 14	CH 15

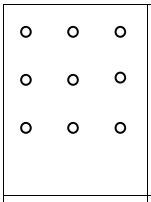
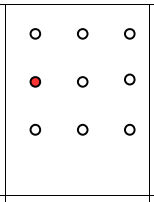
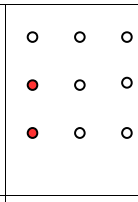
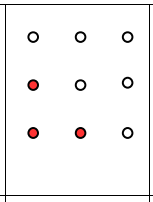
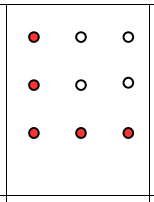
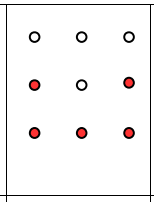
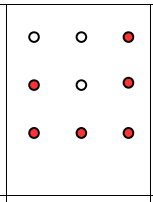
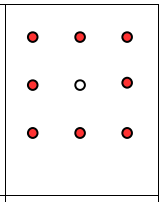
CH 16 is for future use with repeaters

3.Learned Zones

In closed mode the learned zones are shown. In open mode all zones are shown.

2.1.2 ENTER button

Press and hold ENTER to display HHU battery level. The number of Zone LEDs illuminated will give an indication of battery power.

							
FLAT	12%	25%	37%	50%	62%	75%	100%

When configuring the unit the ENTER button has other functions

2.1.3 MUTE Button

The main function of the MUTE button is to mute the last received alarm's zone. The speaker will sound when a zone is muted.

When pressing MUTE with no received alarms, it will have no effect.

By pressing and holding the MUTE button it is possible to see all the muted zones

2.1.4 CLEAR Button

The received alarms will be displayed, and the associated sound will be made for each zone. The zone will remain illuminated.

The main function of the CLEAR button is to clear the illuminated zones

2.2 INDICATORS

ZONE INDICATORS

GSM INDICATORS

CHARGE INDICATOR

2.2.1 Charge Indicator

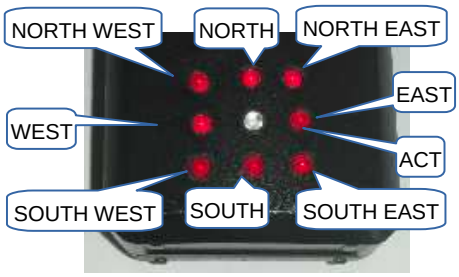
The cradle charger has a two colour LED.

When charging it is orange.

If the battery is fully charged it is green.

The indicator will also indicate green if mains is present.

2.2.2 Zone indicators



In Receive mode

Zone indicators display triggered zones.

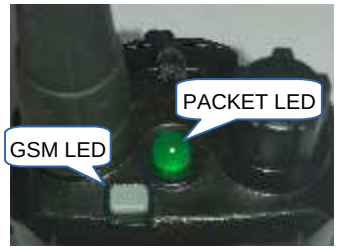
Indicators will remain illuminated until cleared.

The blue ACT LED in the middle will pulse.

In Configuration modes

In configuration modes the zone indicators display specific info described in the next paragraph.

2.2.3 GSM indicators



The GSM LED shows network status.

- ½ second interval indicate not yet connected
- 2 second interval indicate GSM network connected

The PACKET LED shows packet delivery to server

- While no network it will blink ½ second on ½ second off
- If connection can not be established to the server the period becomes 3 times longer (1.5 seconds on 1.5 seconds off)
- Once connection to the server is established, the packet led will remain off unless packet delivery is in progress

There are multiple errors that can inhibit packet delivery :

- Battery below 20% will allow receive of alarms, but the GSM transmission requires more power.
- GSM air-time depleted (data-bundle or normal airtime will work)
- Network coverage, GSM network down or server down will inhibit packet delivery

2.3 SOUND AND VOLUME

A speaker with volume control present audible feedback in case of received alarm or other conditions. These include :

- Alarm Condition (Movement detected at beams)
- Battery low on sensor (Long peep after zone sequence)
- HHU battery Low (repetitive short beep)
- Tamper on Sensor (Sound after zone sequence like a dog wiggle ling it's tail)

2.3.1 Sound for each zone

A two-tone scheme is adopted to reduce the amount of beeps.

There are 8 sounds associated with zones

In the table below the High tone is represented with a Pi and the low with a Po. Each tone has a duration of approximately 0.3 seconds.

Zone	Primary scheme
North	Pi
North East	Pi Po
East	Pi Pi
South East	Pi Pi Po
South	Pi Pi Pi
South West	Pi Pi Pi Po
West	Pi Pi Pi Pi
North West	Pi Pi Pi Pi Po

2.3.2 Battery low on sensor sound.

The battery level of the sensor is monitored. On a critical level, the condition is reported on the HHU by adding a 0.8 s low tone at the end of the alarm event.

2.3.3 Tamper on sensor sound

The tamper switch on the sensor, when activated, will add a unique dual tone sequence after the alarm tone reminiscent of a dog wagging it's tail.

2.3.4 Battery low on HHU sound

In the event that the battery of the HHU runs low, a nagging alarm every 8 seconds. This alarm cannot be disabled.

2.4 HHU CONFIGURATION

It is important to tell the HHU which beams to receive and on what RF channel and this is done by configuring the HHU.

Once the configuration is done, it will remember this configuration even if the power is turned off or battery is removed. Re configuration can be done as required.

2.4.1 RF CHANNEL selection procedure

In order for the HHU to receive alarm signals it must be on the same channel as the beams. There are 16 channels to choose from. Channels 7, 8 and 9 are close to the middle of the frequency band where most of the gate and car remotes are located. Choose a random channel (0 to 15) and use it to configure the beams and HHU.

- **Step 1 : Enter Configure mode**

Turn the HHU off if it is on.

While pressing CLEAR button turn HHU on.

Then release CLEAR button

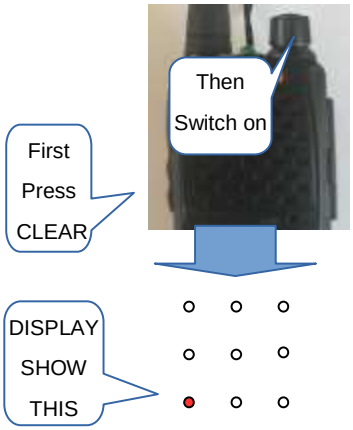
See config-mode1 displayed on zone indicators

The config modes are:

1 : Open/Close/Learn mode

2 : Set RF CHANNEL

3 : Delete learned zone



- **Step 2 : Select SET RF CHANNEL**

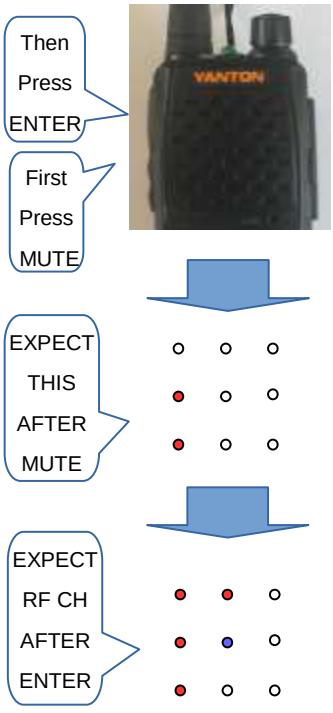
Directly after step 1 press and release MUTE for ½ second.

See the display with 2 LEDS on bottom left illuminated.

Then press and release ENTER for ½ second.

See current RF CHANNEL displayed.

In our example CH 12 was current.



- **Step 3 : SET required RF CHANNEL**

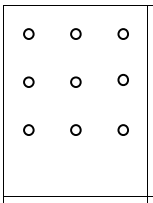
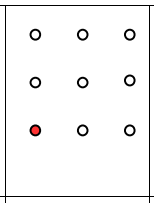
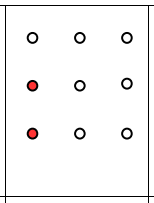
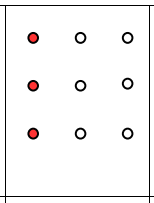
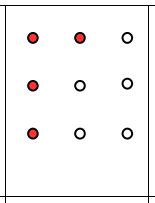
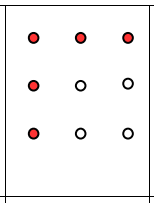
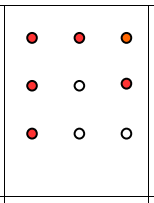
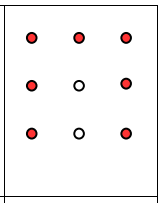
Use MUTE button to increment RF channel

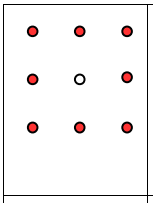
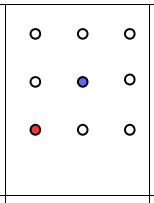
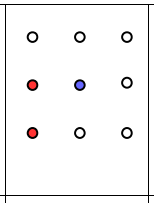
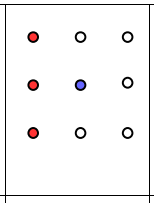
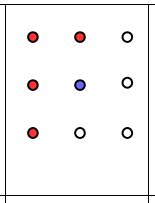
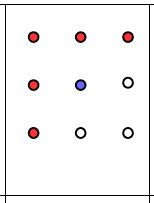
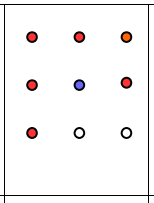
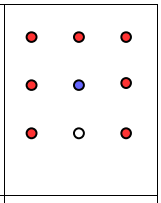
Use CLEAR button to decrement RF channel

Use ENTER to select the displayed RF channel

Once ENTER is pressed the RF channel select is done.

Below is the table of available RF channels

							
CH 0	CH 1	CH 2	CH 3	CH 4	CH 5	CH 6	CH 7

							
CH 8	CH 9	CH 10	CH 11	CH 12	CH 13	CH 14	CH 15

CH 16 (not shown in the table) is for future use with repeaters

2.4.2 OPEN MODE OPERATION

In open mode all alarms on the selected RF channel will be received.

Learning of sensors is not required.

Heartbeat presence is not available (this is only available in closed mode)

OPEN MODE selection procedure

To check the current mode, turn off and on the HHU and check the mode as described in paragraph 2.1.1

To change the mode do the following procedure :

- **Step 1 : Enter Configure mode**

Turn the HHU off if it is on.

While pressing CLEAR button turn HHU on.

Then release CLEAR button

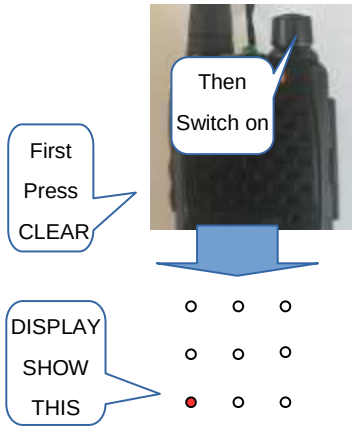
See config-mode1 displayed on zone indicators

The config modes are:

1 : Open/Close/Learn mode

2 : Set RF CHANNEL

3 : Delete learned zone



- **Step 2 : Select OPEN/CLOSED/LEARN**

If the display indicates one LED bottom left proceed.

If not, use CLEAR button to get 1 LED bottom left.

Then press and release ENTER

Expect 2 LEDs bottom right (closed mode=default)

The modes are:

1 LED : Open mode

2 LEDs: Closed mode

3 LEDs: Learn Mode

- **Step 3 : Select OPEN mode**

Press and release CLEAR if 2 LEDs are on bottom right

Confirm that display change to 1 LED bottom right

This indicate open mode is selected

Press and release ENTER to accept open mode

2.4.3 CLOSED MODE OPERATION

In closed mode only alarms on the selected RF channel that has bean learned will be received.

Heartbeat not received from learned beams will result in flashing of the zone indicator indicating trouble with that zone.

The configuration for closed mode require the following

- Configure HHU in learn mode
- Generate a tamper at each of the beams to be learned in
- Configure the HHU to closed mode

To check the current mode, turn off and on the HHU and check the mode as described in paragraph 2.1.1

To change the mode do the following procedure :

LEARN MODE selection procedure

To check the current mode, turn off and on the HHU and check the mode as described in paragraph 2.1.1

To change the mode do the following procedure :

- **Step 1 : Enter Configure mode**

Turn the HHU off if it is on.

While pressing CLEAR button turn HHU on.

Then release CLEAR button

See config-mode1 displayed on zone indicators

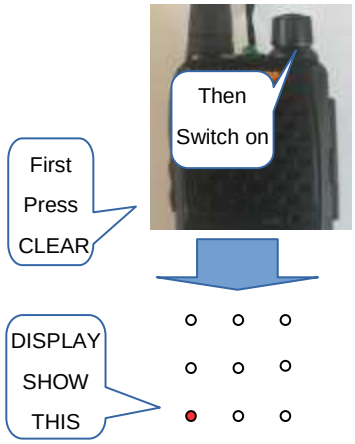
The config modes are:

1 : Open/Close/Learn mode

2 : Set RF CHANNEL

3 : Delete learned zone

4 : Delete all learned zones



- **Step 2 : Select OPEN/CLOSED/LEARN**

If the display indicates one LED bottom left proceed.

If not, use CLEAR button to get 1 LED bottom left.

Then press and release ENTER

Expect 2 LEDs bottom right (closed mode=default)

The modes are:

1 LED : Open mode

2 LEDs: Closed mode

3 LEDs: Learn Mode

- **Step 3 : Select LEARN mode**

Press and release MUTE if 2 LEDs are on bottom right

Confirm that display change to 3 LEDs right

This indicate LEARN mode is selected

Press and release ENTER to accept LEARN mode

While the unit is in this mode it will learn tamper alarms

CLOSED MODE selection procedure

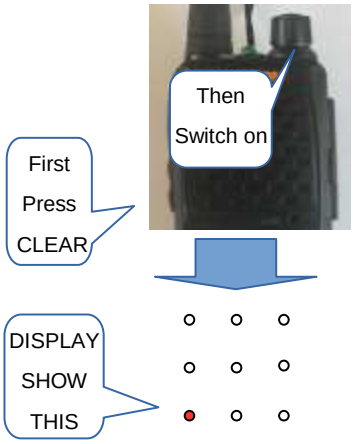
Once all the beams are learned in the HHU closed mode needs to be configured.

Closed mode configuration is the same as LEARN mode except for step 3 that don't require mute button press and 2 LEDs bottom right is used for closed mode.

Closed Mode – deleting a specific zone

If a beam was learned in but is no longer present, the trouble warning for that zone will be displayed. (Flashing zone indicator)

To change delete a specific beam from the



- **Step 1 : Enter Delete_Zone mode**

Turn the HHU off if it is on.

While pressing CLEAR button turn HHU on.

Then release CLEAR button

See config-mode1 displayed on zone indicators

The config modes are:

1 : Open/Close/Learn mode

2 : Set RF CHANNEL

3 : Delete learned zone

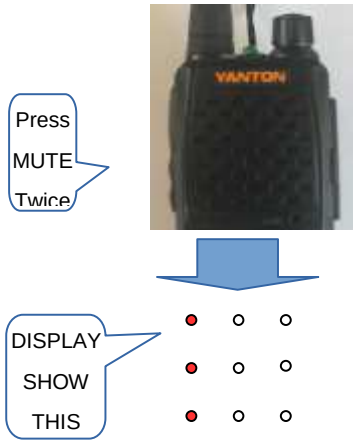
4 : Delete all learned zones

Now select [3 : Delete learned zone]

Press Mute Twice

Then Press Enter

All 8 zones should be illuminated



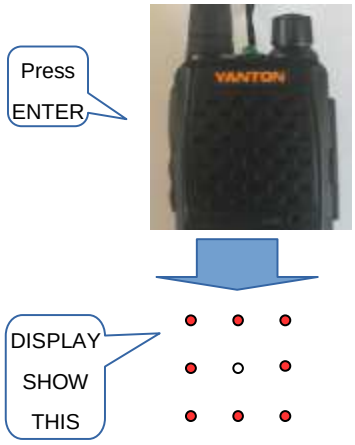
- **Step 2 : Delete selected Zone**

MUTE and CLEAR buttons scroll zones 1 to 16

ENTER will delete the illuminated zone

Only one zone is deleted at a time

To delete another zone, redo from start.



Closed Mode – deleting all learned zones

It is a good idea to delete potential beams from a previous install.

Here is how to do it

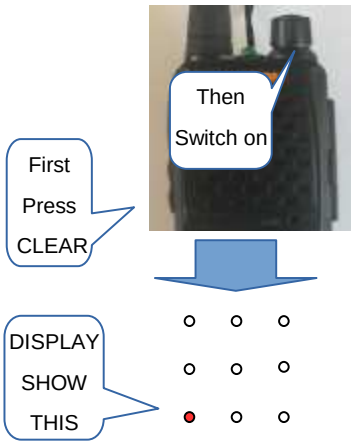
- **Step 1 : Enter Delete_All_Zones**

Turn the HHU off if it is on.

While pressing CLEAR button turn HHU on.

Then release CLEAR button

See config-mode1 displayed on zone indicators



The config modes are:

1 : Open/Close/Learn mode

2 : Set RF CHANNEL

3 : Delete learned zone

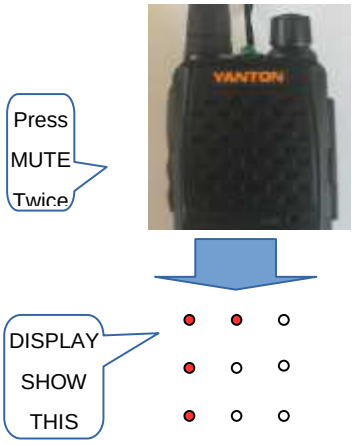
4 : Delete all learned zones

Now select [4 : Delete all learned zones]

Press Mute three times

Then Press Enter

All 8 zones should be illuminated



That is it – all zones are deleted

3. MULTIRAY SENSOR

The system uses a dual sensor multi beam out-door passive infra-red sensor optimised for farm and small-holding usage.

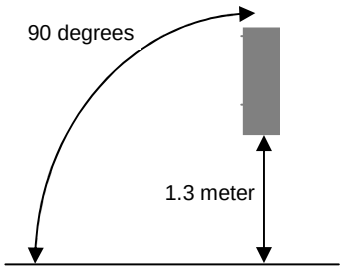
The sensor is battery powered using a 3.6V ER14505M lithium battery (size AA). With normal usage the battery life should exceed 1 year.

The sensor is wireless and its RF range is optimised for smallholdings and farms. Line of sight range is up to 400 m and non line of sight is 250 meter typical.

3.1 INSTALLATION

Install with mounting bracket to a pole, fence or whall

- Vertical as indicated with top pointing upwards
- At a height of 1.3 meter as indicated
- The sensor should be perpendicular to ground surface



The standard sensor has multiple horizontal beams spanning 110 degrees.

Avoid pointing the sensor to open roads up to 100 meter unless detection of moving vehicles are required.

Avoid pointing sensor to areas with large moving animals closer than 50 meter unless detecting the animals are required.

The sensors will be pre-configured as ordered from the factory. These will be marked with the specific direction (defined by the zone setting)

Identify the locations where the sensors should be placed.

A standard L bracket is supplied with the Multiray.

For non standard installations a multi directional bracket is available.

3.2 SENSOR CONFIGURATION AND MAINTENANCE

3.2.1 Cleaning

The sensor may need cleaning if the IR range deteriorates due to dust build-up on the lenses.

Use a damp cloth for the job. Take care not to scratch the surface, because it will reduce the IR range of the sensor.

3.2.2 Opening

The sensor may need to be opened to replace batteries or to change dipswitch settings.

To open the sensor, you require a Philips screwdriver.

Here are the steps to open it up:

- Remove the sensor from where it is mounted
- Unscrew the two Philips screw in the center
- Hinge open on the bottom side, then remove the lid
- Remove the battery

3.2.3 Battery Replacement

Replace with ER14505M 3.6V. The ER14505 can be used if the unit is fitted with a capacitor.

Check Polarity – Incorrect can damage the unit and battery

For battery replacement, open up the sensor as described in the previous paragraph.

Inspect the PCB for water damage or signs of corrosion.

Check polarity and then insert the battery. Incorrect insertion will drain the battery within seconds.

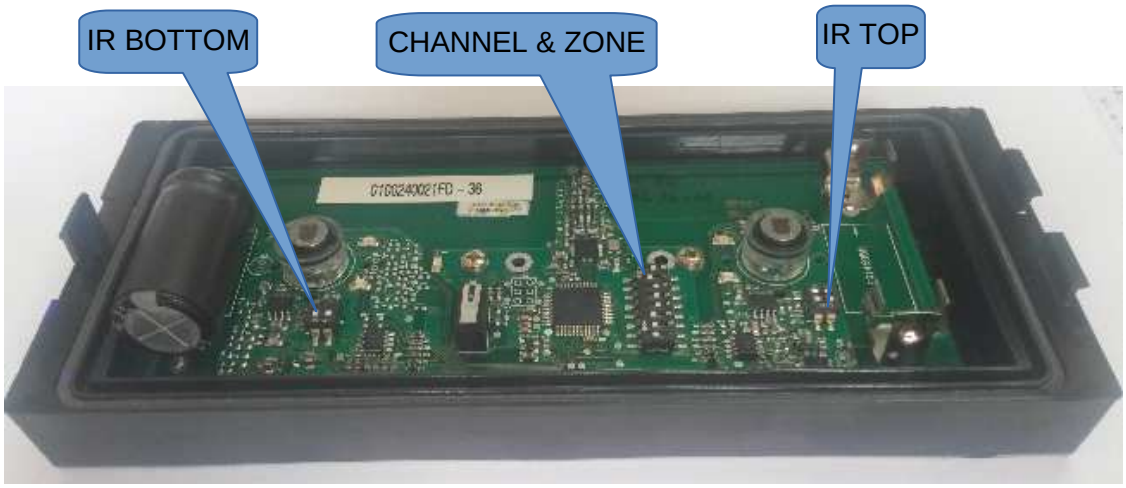
Before closing it up check on the HHU that the sensor alarms is received with the tamper indication.

When assembling the sensor, insert the PCB with the tamper switch towards the bottom. Then locate the PCB so that the bottom screw line up. Partially tighten the bottom screw. Then insert the top one and tighten both.

Finally put the bottom lid back on and ensure that the sensor stopped sending tamper alarms.

3.2.4 Dipswitch settings on the sensor

Perform the opening procedure and closing procedure as with battery replacement.



The PIR PCB has 3 dipswitches as shown above

To effect changes made on the dipswitches, remove one battery for at least five seconds, before replacing it.

3.2.4.1 IR sensitivity Dipswitch

The two-way dipswitches located on top and bottom of the PCB is for the IR sensitivity.

The IR range is determined by the thermal size and speed passing through the sensitive area of the sensor.

The movement of large animals or vehicles can cause alarms on distances beyond 25meter. The location and direction of sensors are paramount to eliminate false alarms.

Always set both the two IR sensitivity dipswitches on the same setting

1	2	Expected IR RANGE
OFF	OFF	7 meter (Least Sensitive)
OFF	ON	10 meter
ON	OFF	15 meter
ON	ON	20 meter

3.2.4.2 Channel & Zone Dipswitch

The eight-way dipswitch located on the lower portion of the PCB. It has two functions:

- RF channel Selection [1 to 4]
- Zone selection [5 to 8]

RF Channel selection (1 to 4 of the 8 way dipswitch)

1	2	3	4	Description
OFF	OFF	OFF	OFF	CH0
OFF	OFF	OFF	ON	CH1
OFF	OFF	ON	OFF	CH2
OFF	OFF	ON	ON	CH3
OFF	ON	OFF	OFF	CH4
OFF	ON	OFF	ON	CH5
OFF	ON	ON	OFF	CH6
OFF	ON	ON	ON	CH7
ON	OFF	OFF	OFF	CH8
ON	OFF	OFF	ON	CH9
ON	OFF	ON	OFF	CH10
ON	OFF	ON	ON	CH11
ON	ON	OFF	OFF	CH12
ON	ON	OFF	ON	CH13
ON	ON	ON	OFF	CH14
ON	ON	ON	ON	CH15

Zone selection (5 to 8 of the 8 way dipswitch)

1	2	3	4	HHU mapping
OFF	OFF	OFF	OFF	Reserved for testing
OFF	OFF	OFF	ON	West
OFF	OFF	ON	OFF	South West
OFF	OFF	ON	ON	South
OFF	ON	OFF	OFF	South East
OFF	ON	OFF	ON	East
OFF	ON	ON	OFF	North East
OFF	ON	ON	ON	North
ON	OFF	OFF	OFF	North West
ON	OFF	OFF	ON	Reserved
ON	OFF	ON	OFF	Reserved
ON	OFF	ON	ON	Reserved
ON	ON	OFF	OFF	Reserved
ON	ON	OFF	ON	AM mode (for testing)
ON	ON	ON	OFF	Reserved
ON	ON	ON	ON	Reserved

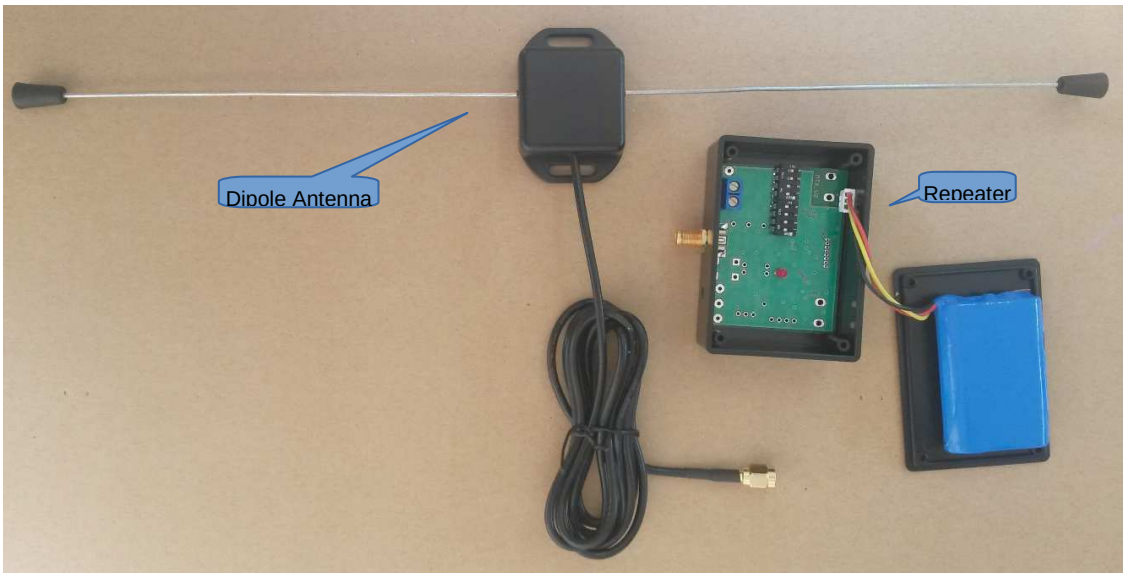
Pulse Count Selection (5 to 8 of the 8 way dipswitch)

1	2	3	4	HHU mapping
OFF	OFF	OFF	OFF	Reserved for testing
OFF	OFF	ON	OFF	ONE PULSE COUNT
OFF	ON	OFF	OFF	TWO PULSE COUNT
OFF	ON	ON	OFF	THREE PULSE COUNT
ON	OFF	OFF	OFF	FOUR PULSE COUNT
ON	OFF	ON	OFF	FIVE PULSE COUNT
ON	ON	OFF	OFF	SIX PULSE COUNT
ON	ON	ON	OFF	SEVEN PULSE COUNT

Set dip switch 1-4 off and 5-8 as per table above, power up the PIR the status led will flash for 10 seconds. Remove power, set dip sw 1-4 as per frequency setting and 5-8 as per zone required.

4. REPEATER

In cases where RF range is an issue, a repeater can be used.



4.1 DESCRIPTION

Receive and transmit channels of the repeater is set using dip-switches. The concept is to choose a different channel number for the remote beams and use the repeater to act as bridge and transmit in the channel chosen for the hand-held and close proximity beams.

The delay introduced by the repeater is less than 0.2 seconds. It is possible to use multiple repeaters as long as there is no duplicate paths created using repeaters.

4.2 INSTALLATION

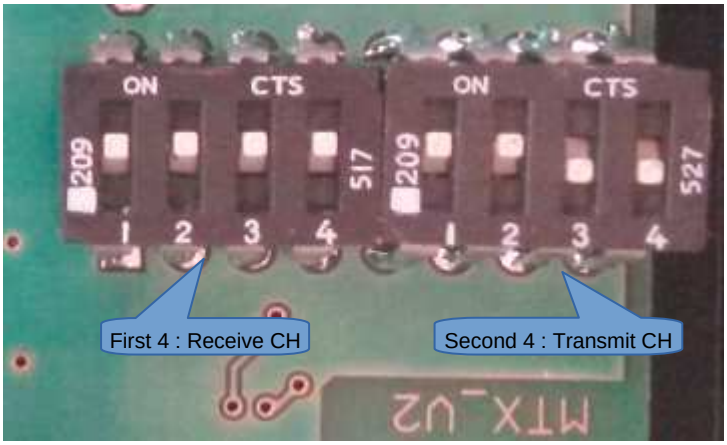
When installing the repeater, here are the guidelines:

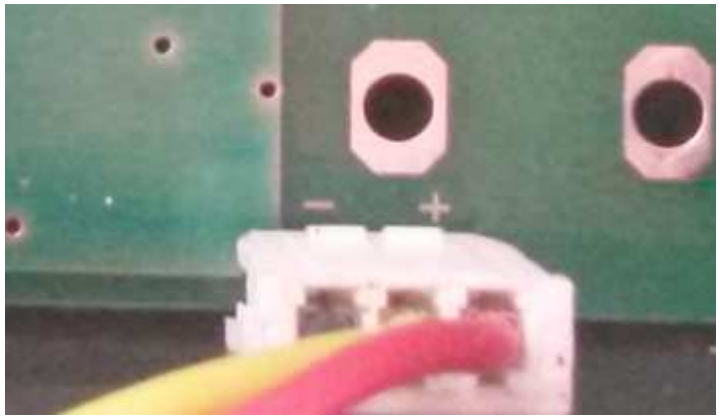
- The repeater needs a power source 8 – 12V
- The typical RF range to hand-held or multiray beam is 200 meter
- Keep antenna at least 100mm away from metal for optimum range
- Mount antenna as high as possible for maximum range

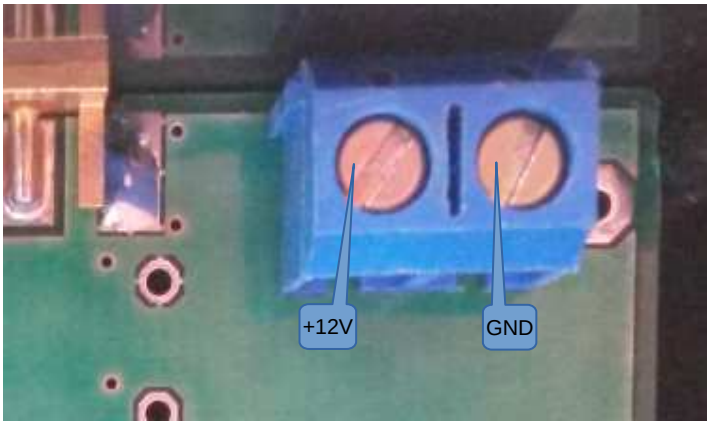
4.3 CONFIGURATION

The repeater receives on one channel and transmits on another channel as selected by the dip-switches. Here is the configuration procedure:

- Open the repeater
- Remove the battery and power
- Use something like a tooth pick to set the dip-switches
- RX=remote multiray Channel
- TX=hand-held and close multiray Channel
- Check battery polarity
- Red to +
- Black to -
- Connect battery
- Connect antenna
- Reverse polarity will damage repeater
- Connect 12V
- Received alarms should pulse the LED indicator
- The remote beam alarms should now also be received on the hand-held
- Close repeater







5 MTX DRIVEWAY GATE ALARM

5.1 DESCRIPTION

Driveway gate motors can be monitored and an alarm sent to your HHU if the gate is forced open, left open for more than 2minutes or the motor is tampered with.

The intelligent hall effect sensor automatically re calibrates itself each time the gate closes, any additional magnetism or lack of magnetism will trigger the alarm, **tamper proof**.

The built in vibration switch triggers an alarm if the motor is tampered with.

All the alarm inputs are disabled upon a valid opening of the gate.

Simple 3 wire connection ensures your motor remains protected.

5.2 INSTALLATION

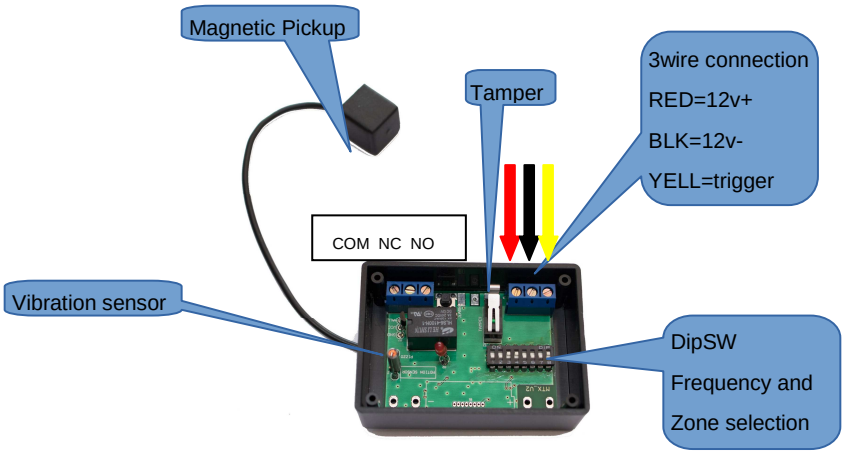
Connect three wires to gate motor electronics.

Red = +12v DC

Black = -12v DC

Yellow = trigger input from receiver/intercom.

5.3 CONFIGURATION



The Snitch may be used as a stand alarm or in conjunction with a single channel receiver and or connected to the HHU.

If a stand alone unit is required use the relay contacts to drive a siren inside the gate motor.

The relay may also be used to trigger alternative manufacturer's transmitters.

The siren automatically times out after 20 seconds, and will retrigger every 2 minutes if the fault is still active.

Alternatively the snitch may be programmed into a single channel receiver or HHU using the tamper switch.

Dipswitch 1-4 corresponds to the frequency channel used and should be the same as the HHU or receiver, dipswitch 5-8 selects the zone required on a HHU and may be any zone for a receiver.

6 GSM INTERFACE MODULE

6.1 DESCRIPTION

Complete wireless home alarm system with remote arming/disarming and GSM messaging.

8 PIR locations, 4 remote locations.

Siren, alarm and panic relay outputs, status LED output.

May be used to interface wireless PIR's to hardwire system, up to 12 zones.

6.2 INSTALLATION

Connect 12v DC.

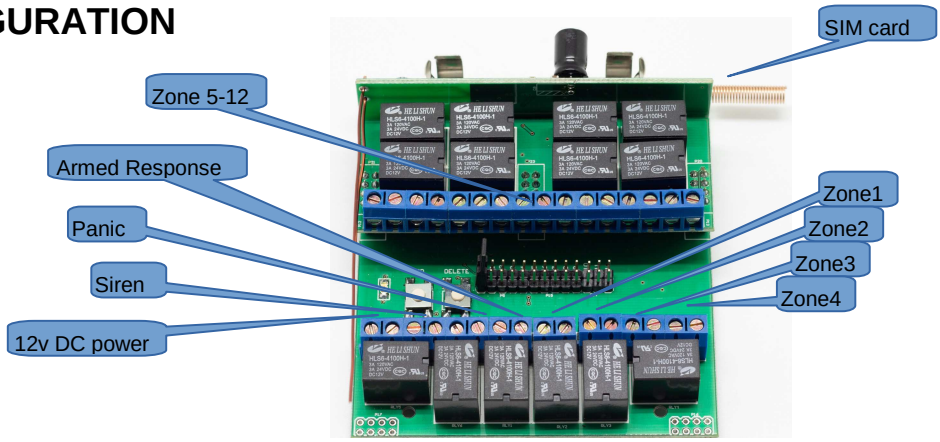
Connect alarm relay outputs.

If the DELETE button is pressed for more than 2 seconds at power up all stored sensors are deleted and the unit is configured as a stand alone alarm, fully wireless complete alarm system.

If both ADD and DELETE buttons are pressed at power up all the stored sensors are deleted and the unit is configured as an alarm interface, wireless to hardwire interface, relays are used to trigger hardwire alarm.

Place the shunt on the zone number you wish to program, press and hold ADD button and send a tamper from the PIR, status led flashes to accept the code. Repeat for all zones required. For remote control programming, press and hold the ADD button while holding in all three buttons on the remote.

6.3 CONFIGURATION



7 ALARMS TO YOUR PHONE

7.1 DESCRIPTION

I-SEE-YOU offers cloud access to your alarm using the GSM in HHU.

This option include

- GSM-bridge receiving RF signals from the sensors and sending it to a server.
- Secure web access for registered users.
- Notifications sent to registered users by telegram

A. TELEGRAM INSTALLATION

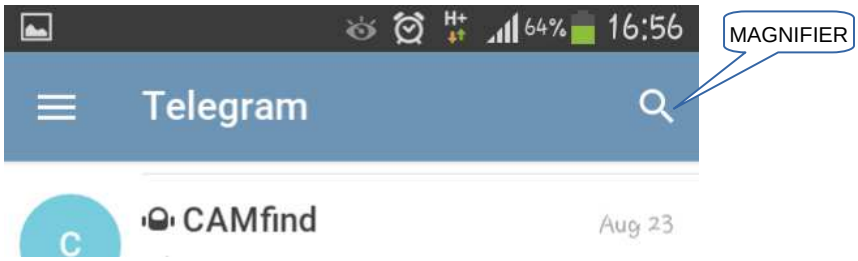
We use a 3rd party application that is well supported and free called Telegram

https://telegram.org

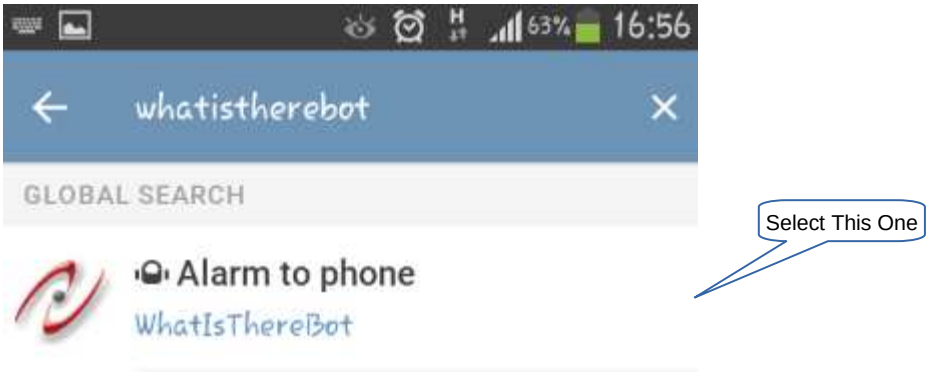
Here is the installation procedure :

- Install Telegram Messenger on the SmartPhone where you want to receive alarms
- Android users may use an alternative APK download at icu.quaint.co.za

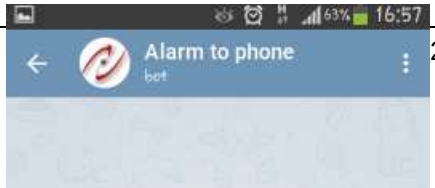
- Open Telegram and search for a contact on the web using the magnifier



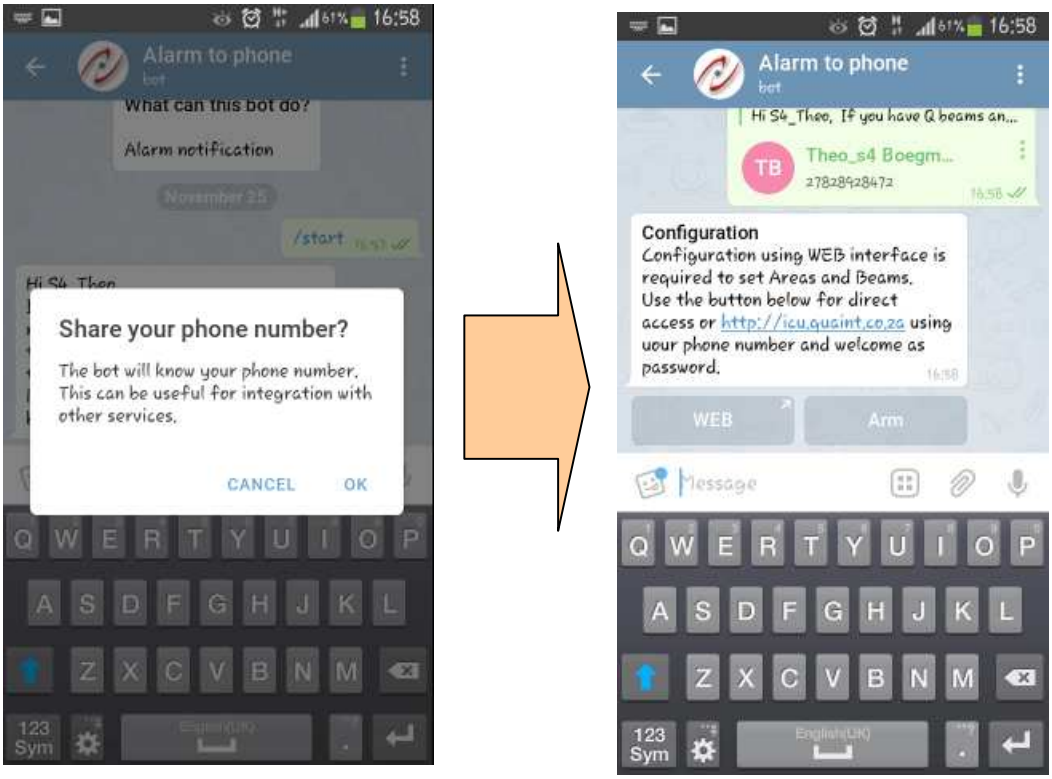
- Type the name WhatIsThereBot



- After selection click on RESTART on the bottom



- After RESTART read the terms and then press Accept on bottom left



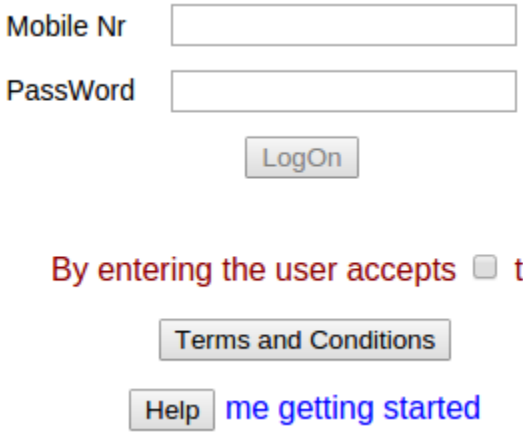
- Use the WEB button bottom left to create areas and sensors

B. WEB ACCESS

There is a website is hosted at http://ICU.quaint.co.za specifically to configure your profile.

It is required to do the telegram registration procedure to create a user profile linked to a mobile number. Once this registration is done it is also possible to access your profile using a internet browser. When

It is also possible to access your profile directly using login



Use 27 prefix when entering your mobile number. A default password “welcome” is used for new users. Change the password using the User menu option.

i. Introduction

Alarms are sent to a server via GSM repeaters. The HandHeld can act as GSM repeater or there can be dedicated repeater but to get alarms on the phone, you need a GSM repeater.

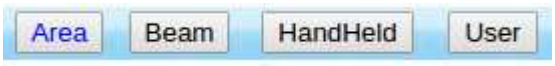
Beams are grouped in areas. Areas can be enabled or disabled. In addition Arm will allow enabled areas to be sent to the phone while disarm will disable all alarms to the phone.

It is possible to send the alarm to multiple phones by linking sub users to a main user. Only the main user can manage the system. The users receive alarms independently in terms of Arm, Disarm and area enable/disable.

Users may have multiple locations with each divided into multiple areas with the limit of 30 areas per user. Each main user may link up to 7 sub users. There is no limit to the amount of beams.

ii. Menu Structure

There is a menu located on the bottom of the web interface



The menu present easy access to configure the following

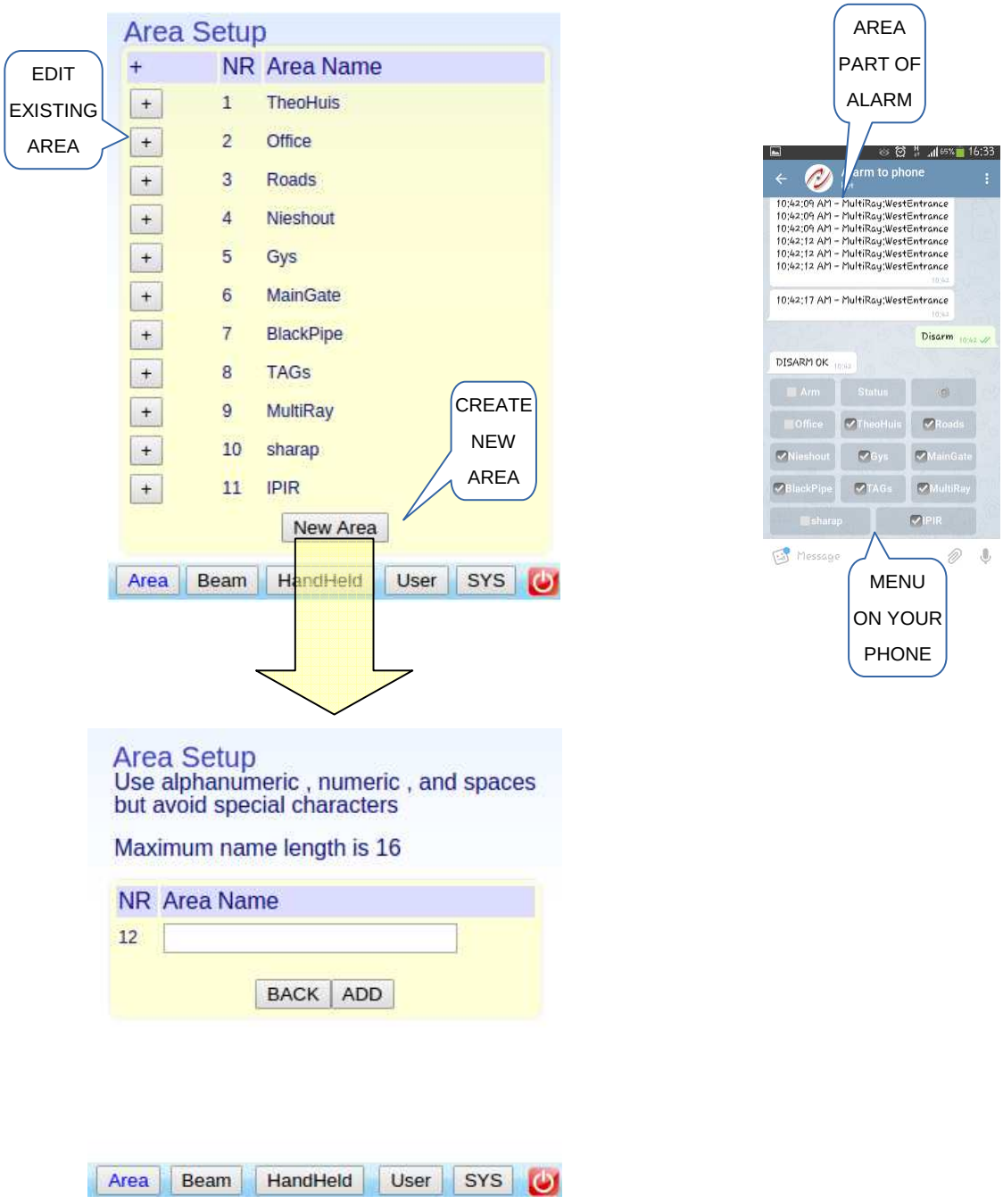
- AREA – A name to group specific beams like office or home
- Beam – Select the area for the beam and give the beam a name
- HandHeld – Identify your handheld to better maintain GSM airtime
- User – Manage passwords, and allow options to link sub users

1. Area menu option

Areas does the following :

- Areas are used to group beams. A beam needs a area as part of it's configuration.
- It appears as a menu item that can be enabled/disabled
- It acts as part of the identification. The area form part of the alarm message.

To manage Areas click on the Area menu item

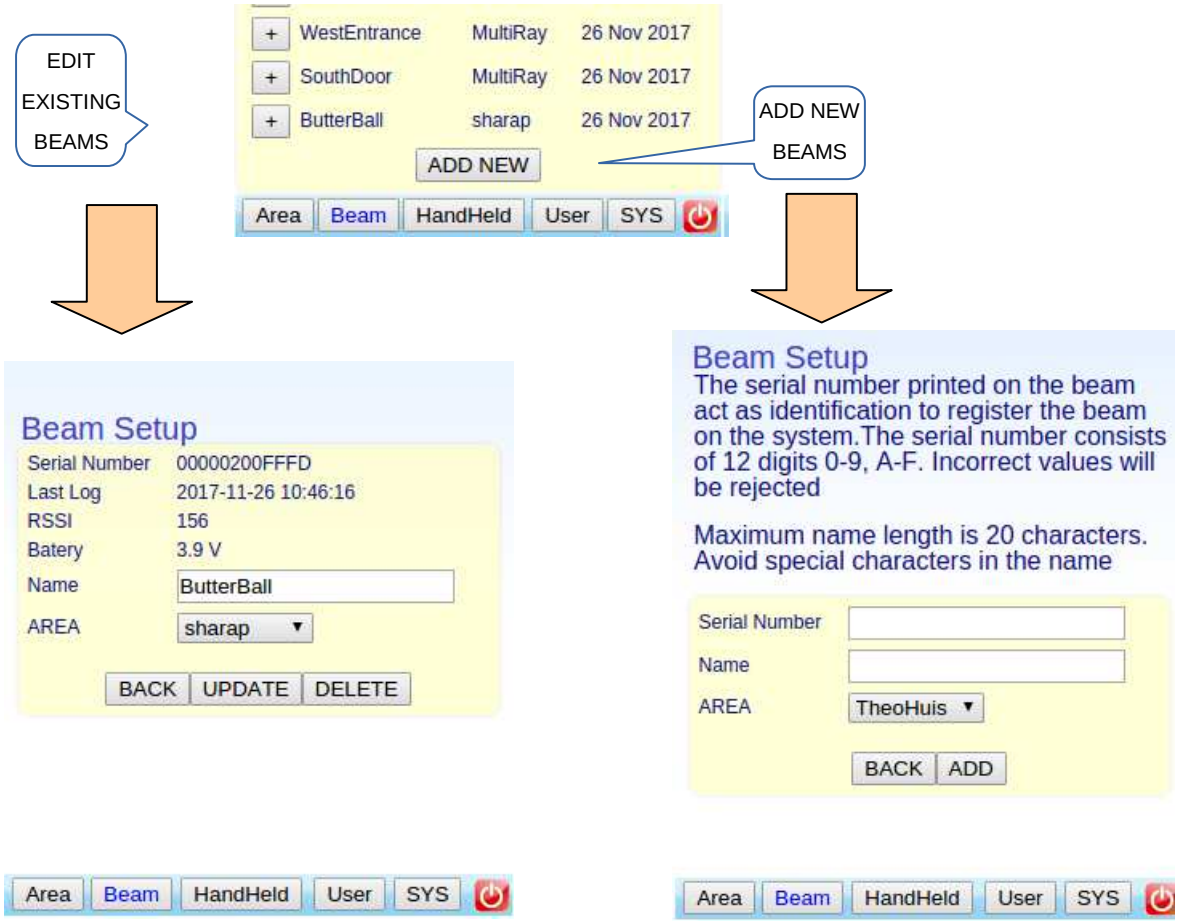


2. Beam menu option

The following are relevant for beams:

- To add it you require 12 digit serial number
- Select an Area for it
- Use a name for it so that the Area:Beam_name will uniquely define the alarm location

To manage beams click on the Beam menu button



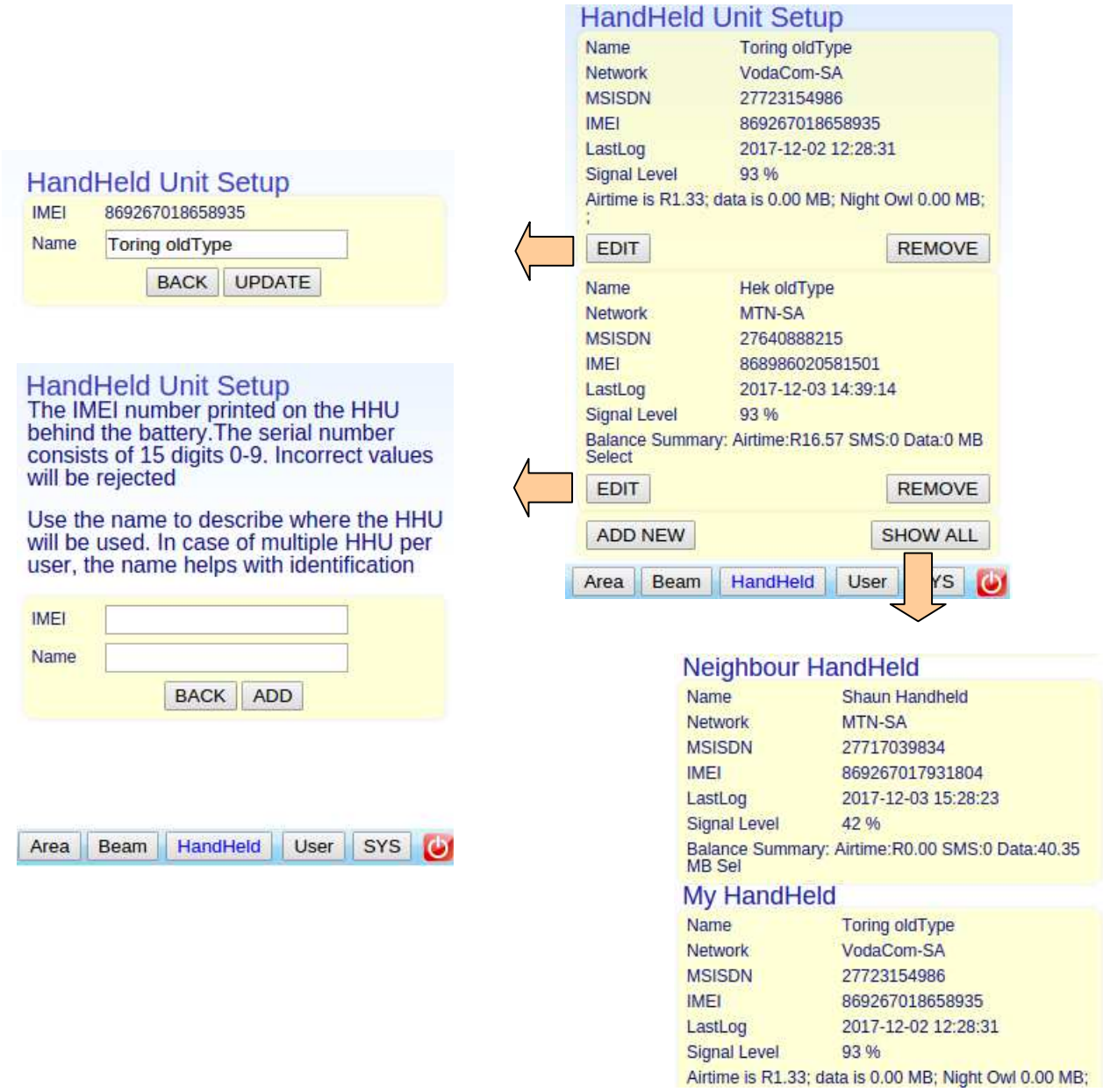
3. HandHeld Menu option

In open mode the HandHeld will send all received alarms and heartbeat signals to the server.

In closed mode it will send only learnt beam's signals.

The landing page for HandHelds shows the units already configured as belonging to this profile.

It is also possible to add new HandHelds, remove existing or show visible ones. Visible GSM repeaters refers to those sending alarm signal from this profile's beams to the server



4. User menu option

The following are relevant for user:

- Your phone number to a unique telegram ID – so if you swap phones you should retain your existing profile
- Access to your phone can access the alarm web interface – use a phone lock for security
- Your username used in telegram is inherited when creating alarm profile, but you can change the name
- The default password at ICU.quaint.co.za is “welcome” – change when configuring your system.
- It is possible to set up linked users to also receive alarms from the same system This is described below

To manage User click on the User menu button

Enable / Disable and set time for Auto Arm

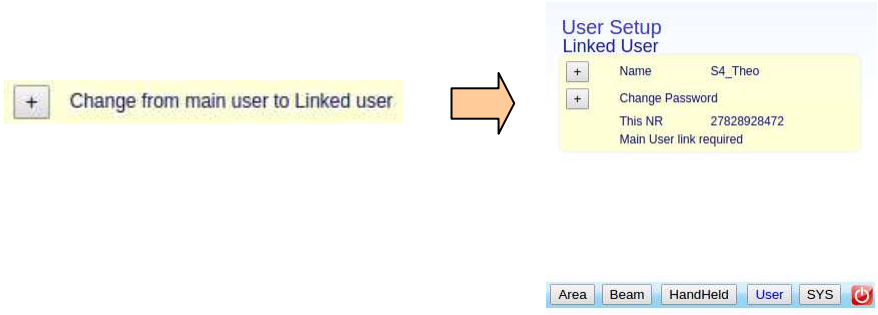
- Click the "+" at AutoArm
- Select disable or the time to arm at that time
- Click update

The alarm will arm on the hour selected and notify when it was armed.

Note that the Areas will remain unchanged.

Creating a linked user procedure

- First create and configure the main user.
- For the linked user, do the telegram installation but don't add areas or beams. Click on the link-user "+" button as shown below.



- In the main user, type the phone number of the linked user then click on the add linked user “+” button

- The linked user should now have areas and beams identical as main user

C. USESAGE OF TELEGRAM FOR ALARM NOTIFICATION

Here is how to use the telegram app to receive alarm notifications on your phone.

Ultimately you are communicating with your alarm system using a social media app.

Currently the interface is limited to cap sensitive text and menu buttons. Voice, pictures, and video content are rejected.

i. Prerequisites

The following should be completed to continue

- Telegram app installation on your phone is done and works
- The registration of your phone to ICU server as per paragraph 4.2 was completed
- Area, Beams and HandHeld configuration completed as described in paragraph 4.3
- The Beams are installed at the required positions
- The HandHeld is powered on and actively receiving with indication and audible alarm signals when intrusion is detected.

Now the focus is on receiving alarms on the phone as well.

ii. Getting started

How do I get to the alarms to phone contact in telegram

- If telegram is closed open it by double clicking on this icon 

- Then scroll to this contact and double-click on it 

If you accidentally deleted the contact search for “whatistherebot” with no spaces to get started again.

iii. Arm, Disarm and Areas

To receive alarms from a specific beam, the Area of that beam must be enabled and the user must be armed.

There are 3 ways to arm (and a auto arm at selected time)

- Send the text “Arm” 3 letters case sensitive to Alarm to phone
- Use the custom keyboard button

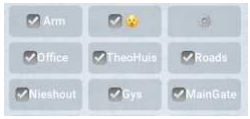
- Use the inline menu checkbox 

The reverse is possible with “Disarm” or the menu buttons

By default created Areas is disabled. To see the areas in telegram

- Use the gear button to get to settings 

- Then Check Area CheckBox 

- Then enable Areas 

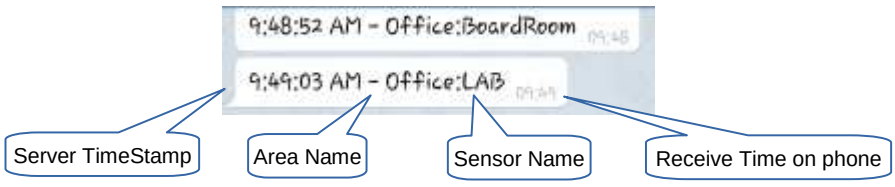
Arm, Disarm and enabled zones are maintained per user. When there are linked users on the same system this functionality operates independently.

Muting areas on HandHeld does not mute on received alarms to the phone.

Turning off the HandHeld will terminate alarms on the phone unless there is another GSM repeat function in range.

iv. Alarm format

Expect alarm notifications between 3 and 15 seconds after the HandHeld alarm.



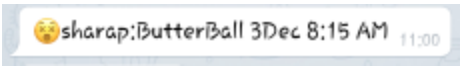
v. Health and Wellness

Similar to heartbeat monitoring on the HandHeld in closed mode, there is something to check presence of beams even if no alarms are sent.

To enable this check, enable the dead-face checkbox 

This is an hourly check on the hour for enabled areas only

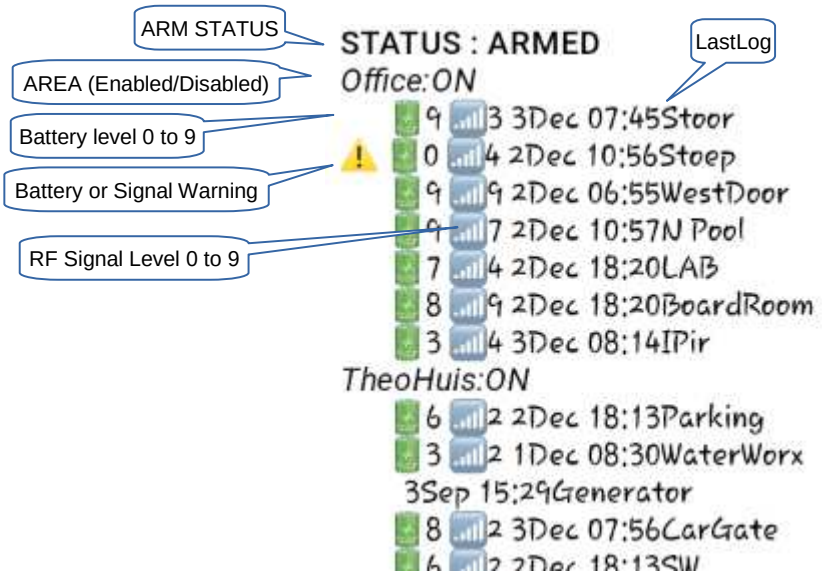
A dead-face Area:Beam Last log is displayed for beams that did not send like this



vi. Beam Status

Beam Status can be checked using the gear button 

Then use the status button 



vii. GSM airtime

It is possible to get the detail of the HandHeld GSM using the GSM button or send “GSM ”.

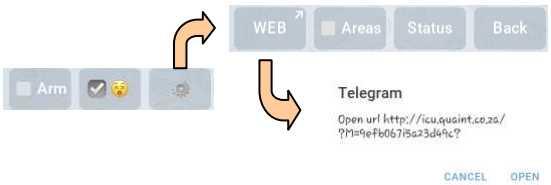
It is 3 letters all capitals.

```
Name:Toring oldType
Network:VodaCom-SA
MSISDN:27723154986
 Airtime is R1.33; data is 0.00 MB;
Night Owl 0.00 MB; ;
Name:Hek oldType
Network:MTN-SA
MSISDN:27640888215
 Balance Summary:
Airtime:R16.57
SMS:0
Data:0 MB
```

It is possible to get more detailed status using the WEB interface

viii. WEB INTERFACE from telegram

Use the gear button, WEB button then open

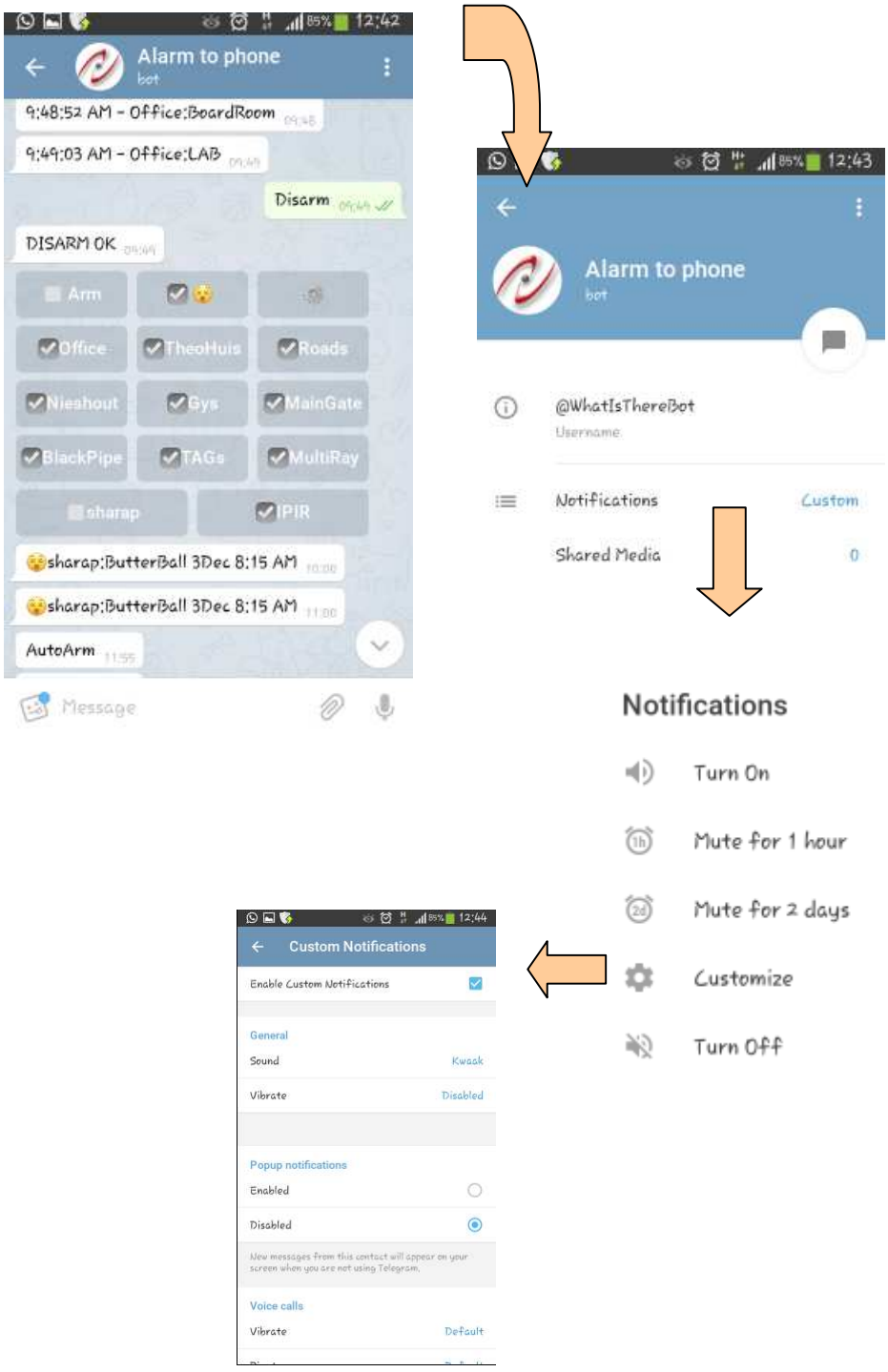


D. ANDROID CUSTOM SETTINGS

Here is some useful settings specifically for Android users

i. Custom notification for the alarms

Open the telegram app and with the Alarms to phone contact open press and hold the top bar, then click on notifications, then customize. There you can set the sound and vibration.



Note that these settings will only be for the Alarm to phone contact