VOKKERO
RADIO COMMUNICATION SYSTEM

# VOKKERO GUARDIAN STAFF
# FCC

User Guide Version 1.0



211952


VOKKERO

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# QUICK START GUIDE

## START SETTING UP THE VOKKERO GUARDIAN STAFF SYSTEM WITH THE CONFIGURATOR

**1**

CONNECT THE GUARDIAN CONFIGURATOR TO A POWER SOURCE



**2**

PLACE THE GUARDIAN C2C TERMINALS ON THE CONFIGURATOR. BE SURE THAT ALL TERMINALS ARE PROPERLY SEATED IN THE CHARGING DOCKS; STILL CHARGING LED WILL BE ORANGE; FULLY CHARGED GREEN; NOT SEATED PROPERLY WILL BE RED.

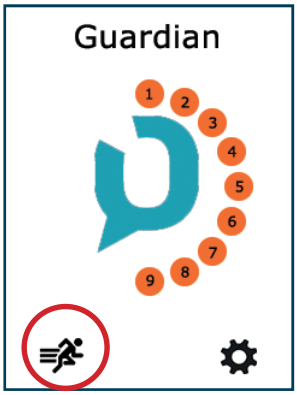
Terminal on slot #1 = «M1» visible on the screen display = master terminal
=> To be kept switched ON to keep the audio conference alive

**Beware** this product «M1» is essential.
No «M1» switched ON = no possible audio conference.
Never keep two «M1» products switched ON at the same time.



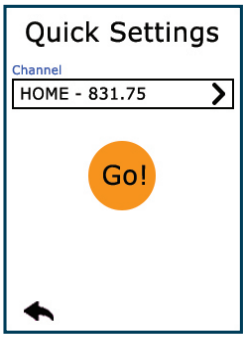
**3**

LAUNCH A CONFIGURATION WITH THE « QUICK SETTINGS » MENU !




**4**

CHOOSE YOUR OPERATING RADIO FREQUENCY :
« HOME » IF YOU ARE PLAYING HOME
« AWAY » IF YOU ARE PLAYING AWAY




**5**




**NOTE:** taking care to always reconfigure your system «Home» or «Away» depending on the location of the game, you make sure that you never disturb or be disturbed by the opposing team if it is also equipped with GUARDIAN STAFF.

**NOTE:** at the «Quick Settings» configuration, GUARDIAN STAFF communications are encrypted by an AES128 key.
No chance of being heard even if the opposing team also has GUARDIAN STAFF and gets on the same radio frequency.

# QUICK START GUIDE

## DISCOVER THE GAME TIME USE OF THE VOKKERO GUARDIAN STAFF SYSTEM THROUGH THE TERMINALS

**1**

REMOVE THE TERMINALS FROM THE CONFIGURATOR, POWER YOUR TERMINAL AND CONNECT THE HEADSET TO IT





To disconnect the headset, grasp the secure connector ring. WARNING, do not turn the connector or pull the cable!

Line up the 2 red marks of the product and the connector

**2**

ADJUST THE VOLUME BY SWITCHING THE TRIGGER KNOB UP & DOWN.




**3**

CHECK THAT YOU ARE IN THE NETWORK AND IN COMMUNICATION (VISIBLE ANTENNA ICON)




## GROUP MODE

The group mode, which can be activated from the configurator, allows setting up separate discussion groups. The «Channel» trigger on the terminal allows changing the frequency channel or to switch groups (depending on whether group mode is enabled or not).

- **You are in group 0:** You hear all groups and you can talk to all groups

- **You are in group 1:** You are in communication with people also in group 1. You do not hear and you are not heard by people who are on other groups. By cons, people in group 0 hear you and can talk to you.

- **You are in group 2 or 3:** Same as Group 1.

**Example of possible match configuration:**
- Coaches in Group 1
- Medical Team in Group 2
- All users have the ability to communicate important information to both groups by switching in group 0!

## EMIT AN ALERT !






If a person in communication with you no longer wears his headset, you can make him vibrate and beep his GUARDIAN terminal with the alarm button!
NB : You can desactivate this alarm button (see below).

## TIPS !

To avoid any mishandling in match, you can disable the buttons and triggers of the terminal individually from the configurator : Menu: Devices - Advanced settings - Button Assignment

## PRÉAMBULE / PREAMBLE

- Ce guide décrit les fonctionnalités des produits VOKKERO GUARDIAN STAFF FCC, ses options et ses accessoires.
- This guide describes the functionality of the VOKKERO GUARDIAN STAFF FCC products, options and accessories.
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# INFORMATIONS

| Document Information | |
|---|---|
| **Title** | VOKKERO GUARDIAN STAFF |
| **Subtitle** | FCC |
| **Document type** | User Guide |
| **Version** | Version 1.0 |

This document applies to the following products:

| Nom | Référence |
|---|---|
| **VOKKERO GUARDIAN STAFF FCC** | Up to : VO8320CEH |

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## TECHNICAL SUPPORT

### Website

Our website contains a lot of useful information: information on modules and wireless modems, user guides, and configuration software and technical documents which can be accessed 24 hours a day.

If you have technical problems or cannot find the required information in the provided documents, contact our Technical Support on our website: www.vokkerousa.com. This ensures that your request will be processed as soon as possible.

### Helpful Information when Contacting Technical Support

When contacting Technical Support, please have the following information ready:

- Product type (for example Guardian)
- Firmware version (for example V1.0)
- A clear description of your question or the problem
- A short description of the application

## COMPLIANCE TO FCC US/CAN

This device complies with part 15 of the FCC rules and Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions: (1). this device may not cause Harmful interference, and (2). this device must accept any interference received, including interference that may cause undesired operation 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 instruction, may cause harmful interference to radiocommunication. 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.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by VOGO could void the user'sauthority to operate the equipment.
This device is limited to operating the frequencies authorized by Part 15 and cannot be configured by end users or professional installers to operate outside the authorized bands.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lower) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be chosen so that the equivalent isotropically radiated power (e.i.r.p.) is not superior than necessary for successful communication.

Ce dispositif est conforme aux règles de la FCC part 15 and à la norme CNR-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Cet équipement a été testé et déclaré conforme aux limites d'un appareil numérique de classe B, conformément à la partie 15 des règles de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie radiofréquence et, s'il n'est pas installé et utilisé conformément aux instructions, peut causer des interférences nuisibles aux radiocommunications. Il est cependant toujours possible que des interférences se produisent dans le cadre d'une installation particulière.
Si cet appareil produit des interférences nuisibles à la réception des programmes de radio et de télévision –détectables lors de la mise hors tension ou en tension de l'appareil-l'utilisateur est encouragé à mettre en œuvre une ou plusieurs des mesures suivantes pour remédier à ces interférences :

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Branchez le matériel à une sortie sur un circuit différent de celui auquel le récepteur est branché.
- Prendre conseil auprès du commerçant ou d'un technicien de radio/TV expérimenté.

Tout changement ou modification non expressément approuvé par la partie responsable des mesures de conformité peut amener l'utilisateur à se voir interdire l'usage de l'appareil.
Cet appareil est limité à l'exploitation des fréquences autorisées Partie 15, et ne peut pas être configuré par des utilisateurs finaux ou des installateurs professionnels à fonctionner en dehors des bandes autorisées.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

**FOR PORTABLE DEVICE USAGE (<20cm from body/SAR needed)**

Radiation Exposure Statement:
This device complies with the FCC and ISED portable RF exposure limit set forth for an uncontrolled environment and is safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available. This portable equipment with its antenna complies with FCC's and ISED RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance follow the instructions below:
1. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2.Avoid direct contact with the antenna, or keep it to a minimum while using this equipment.
The SAR limit adopted by USA and Canada is 1.6 W/kg averaged over 1 gram of tissue. The highest SAR value reported to FCC and ISED for this device complies with this limit.

Déclaration d'exposition aux radiations:
Le produit est conforme aux limites d'exposition FCC (Etats-Unis) et ISED (CANADA) pour les appareils portables RF établies pour un environnement non contrôlé. Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction supplémentaire aux expositions RF peut être obtenue si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.
Cet équipement portable avec son antenne est conforme aux limites d'exposition aux radiations RF de la FCC définies pour un environnement non contrôlé.
Pour maintenir la conformité, suivez les instructions ci-dessous :
1. Cet émetteur ne doit pas être situé ou fonctionner conjointement avec une autre antenne ou un autre émetteur.
2. Évitez ou réduisez au minimum tout contact direct avec l'antenne pendant l'utilisation de cet équipement.
La limite de DAS adoptée par les États-Unis et le Canada est de 1,6 W / kg en moyenne sur 1 gramme de tissu. La valeur SAR la plus élevée signalée à la FCC et à ISED pour cet appareil est conforme à cette limite.

Identification :

- FCC ID: 2AU6N-VO8320GUARD
- IC ID: 25704-VO8320

Product reference: USA/CANADA: VO8320CEH

Authorised representative in Canada
ZEAT SPORTS
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Phone : +1-855-750.2012

# OPERATING FREQUENCIES of VOKKERO GUARDIAN STAFF FCC

**FHSS Mode:** 2 Hopping tables are available

| | Frequency Hopping tables (MHz) | |
|---|---|---|
| | **HOME1** | **AWAY1** |
| Min | 915.250 | 916.375 |
| Max | 925.750 | 927.625 |
| 1 | 916.375 | 926.500 |
| 2 | 917.125 | 921.250 |
| 3 | 920.125 | 917.875 |
| 4 | 922.750 | 923.125 |
| 5 | 917.500 | 926.875 |
| 6 | 915.625 | 920.125 |
| 7 | 920.875 | 922.750 |
| 8 | 921.625 | 916.375 |
| 9 | 916.750 | 925.750 |
| 10 | 926.125 | 916.750 |
| 11 | 922.000 | 923.500 |
| 12 | 916.000 | 927.250 |
| 13 | 921.250 | 920.500 |
| 14 | 925.000 | 924.250 |
| 15 | 924.250 | 925.375 |
| 16 | 922.375 | 921.625 |
| 17 | 923.500 | 926.125 |
| 18 | 915.250 | 917.500 |
| 19 | 925.375 | 923.875 |
| 20 | 920.500 | 927.625 |
| 21 | 925.750 | 922.000 |
| 22 | 924.625 | 920.875 |
| 23 | 923.125 | 924.625 |
| 24 | 917.875 | 922.375 |
| 25 | 923.875 | 917.125 |
| 26 | | 925.000 |

**DTS mode:** Each device also features 2 channels using digital modulation techniques (DTS mode). Available channels are listed below.

| | DTS channels (MHz) |
|---|---|
| **HOME2** | 921.4 |
| **AWAY2** | 926.2 |

Inside the stadium, a spectrum referent may be available to assist in frequency allocation.
For the use of ELITE outside FCC zone, please contact customer support: “www.vokkero.com/Support/Technical Support”. In the VOKKERO HELPDESK space,

## ENVIRONMENTAL RECOMMENDATIONS

All superfluous packaging materials have been eliminated. We have done everything possible to make it easy to separate the packaging into three types of materials: cardboard (box), expanded polystyrene (filler material) and polyethylene (packets, foam protective sheets). Your device is composed of materials that can be recycled and reused if it is dismantled by a specialist company. Please observe local regulations concerning the manner in which waste packaging material, used batteries and your obsolete equipment are disposed of.

## WARNINGS

Valid for :
VOKKERO GUARDIAN - Terminals: VO8320A - VO8320B - VO8320C - VO8320D - VO8320E - VO8320F - VO83020G - VO8320H - VO83020I - VO8320J
VOKKERO GUARDIAN - Configurator : VO8118AA
VOKKERO GUARDIAN - Charger : VO8139AA



Read the instructions in the manual.



The safety of this product is only guaranteed when it is used in accordance with its purpose.
Maintenance should only be carried out by qualified persons.

**Please note**: Do not install the equipment close to a heat source or in damp conditions.

**Please note**: When the equipment is open, do not carry out any operations other than the ones set out in this document.



Please note: Do not open the product as there is a risk of electrical shock.



Please note: For your own safety, you must ensure that the equipment is switched off before carrying out any work on it.



Please note: For your own safety, the power supply circuit must be SELV (Safety Extra Low Voltage) and must be from limited power sources.

The product must be equipped with a switching mechanism so that the power can be cut. This must be close to the equipment. Any electrical connection of the product must be equipped with a protection device against voltage spikes and short-circuits.

**USAGE OBLIGATIONS**

- Before using the system, check that the power supply voltage shown in the user manual corresponds to your supply. If it doesn't, please consult your supplier.
- Place the device against a flat, firm and stable surface.
- The device must be installed in a location that is sufficiently ventilated so that there is no risk of internal heating and it must not be covered with objects such as newspapers, cloths, curtains, etc.
- The device must never be exposed to heat sources such as heating equipment.
- Do not place the device close to objects with naked flames such as lit candles, blowtorches, etc.
- The device must not be exposed to harsh chemical agents or solvents likely to damage the plastic or corrode the metal parts.
- To fulfill RF exposure limit, the device VO8320A - VO8320B - VO8320C - VO8320D - VO8320E - VO8320F - VO83020G - VO8320H - VO83020I or VO8320J must be attached to belt with the belt-clip provided by Vokkero.

## DISPOSAL OF WASTE BY USERS IN PRIVATE HOUSEHOLDS



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste by taking it to a collection point designated for the recycling of electrical and electronic appliances. Separate collection and recycling of your waste at the time of disposal will contribute to conserving natural resources and guarantee recycling that respects the environment and human health. For further information concerning your nearest recycling centre, please contact your nearest local authority/town hall offices, your household waste collection company or the shop where you bought the product

 Warning: If the charger is used with any other batteries or products whatsoever, there is a risk of an explosion. After use, the batteries must be disposed of at an appropriate recycling centre. They must not be thrown away to degrade in the environment. When batteries are replaced, the device must be corectly implemented.

 This symbol on the devode or its packaging means the use of a DC voltage.

## INTRODUCTION

The operations described below allow you to rapidly and easily implement your VOKKERO Guardian communication sys-tem.

All the operations described are valid for all the VOKKERO® Guardian products listed below:
VOKKERO GUARDIAN - Terminals: VO8320A - VO8320B - VO8320C - VO8320D - VO8320E - VO8320F - VO83020G - VO8320H - VO83020I - VO8320J
VOKKERO GUARDIAN - Configurator : VO8118AA
VOKKERO GUARDIAN - Charger : VO8139AA

Note:
Your product reference is given on the label on the back of the terminal housing.

The VOKKERO Guardian system is ready-to-use; it comprises the following three main elements:

Terminals
Configurator/Charger
(Optional) Charger extension (1 to 4 maximum)

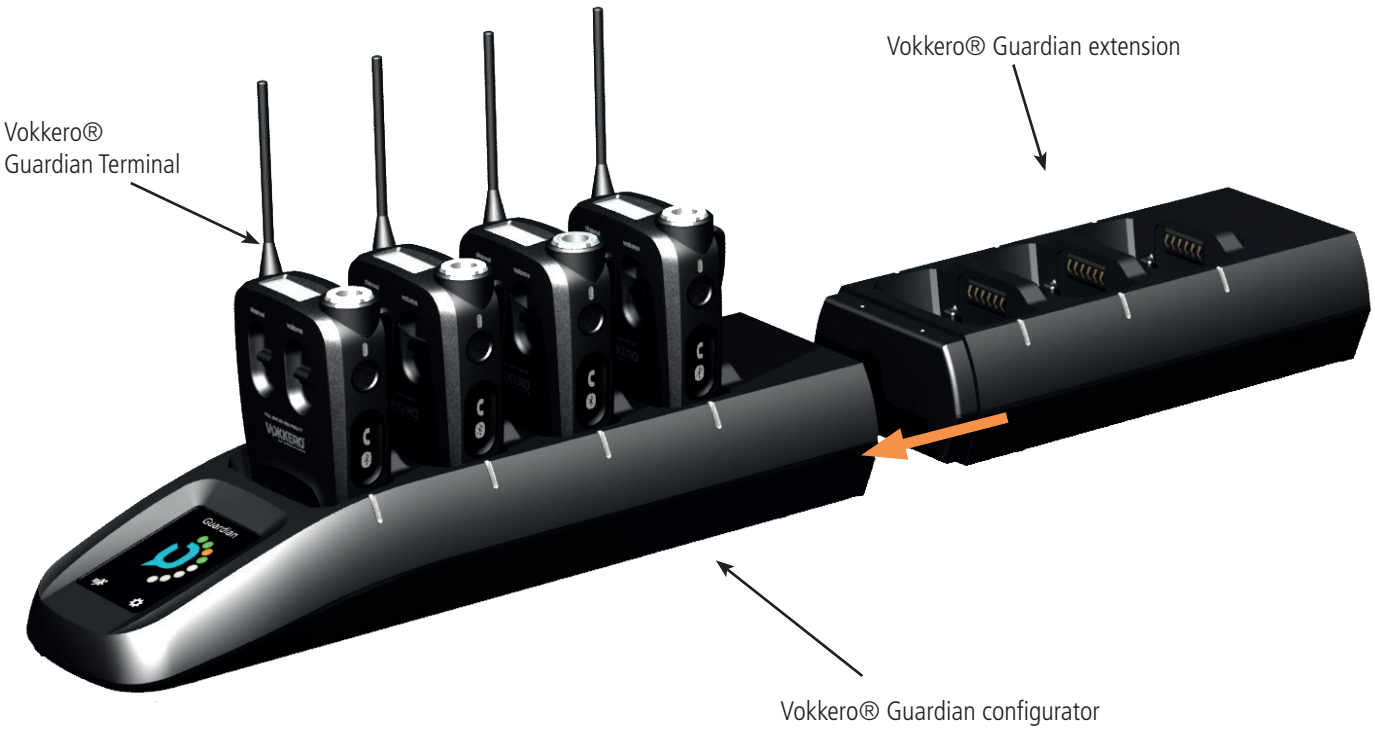
All the operating settings of the VOKKERO Guardian system are managed by the configurator which gives access to the Settings menu via a touchscreen. The configurator must be connected to the power unit (otherwise it will not work) and up to 4 extensions can be associated with the configurator.

## 1. SYSTEM INSTALLATION PROCEDURE

- Connect the power unit to the end charger (if several are connected in a row).
- Connect the power unit to the mains.
- Connect the VOKKERO Guardian terminals as shown below.

**Note 1: the order and position of the terminals on the charger(s) are irrelevant.**
**Note 2: if the purpose of the operation is solely to charge terminals, then the configurator is not required.**

The first configurator slot (i.e., closest to the LCD) is of importance to the system-configuration process.



1.1. General Technical Specifications
1.2.




| General Specifications | Value |
|---|---|
| Supply voltage | 3.7V nominal |
| Maximum consumption | 800mA (emission) |
| Terminal power supply | Lithium battery |
| Battery life | 11 hours (normal usage)<br>7 hours (permanent communication) |
| Operating temperature | -20°C / +55°C |
| Dimensions | 110 x 70 x 27mm |
| Weight | 190g (including battery) |




| **Specifications for**<br>VOKKERO GUARDIAN - Configurator : VO8118AA<br>VOKKERO GUARDIAN - Charger : VO8139AA | **Value** |
|---|---|
| AC/DC Power Converter (standard) | 100 to 240V 12VDC/5A - 50/60Hz (maximum of 10 terminals charging) |
| AC/DC power converter (extended system) | 100 to 240V, 12 VDC/6.67A - 50/60Hz (more than 10 terminals charging) |
| Operating temperature | -5°C / +40°C |
| Dimensions Configurator/Charger | 337 x 95 x 58mm |
| Dimension extension | 216 x 95 58mm |
| Weight configurator/charger | 470g |
| Weight extension | 310g |

## 2. STARTING UP THE TERMINAL

Before starting your terminal, make sure that it has been properly charged using a compatible charger.

- Press the On/Off button to turn on the terminal.

The LCD screen should turn on and display the VOKKERO® logo. The LED above the On/off button should also light up permanently.




Next, the Welcome Screen displays, followed by the product name. By default, the product name "Guardian" displays. This text can however be customized in the configurator for each terminal (refer to §4.3.1).

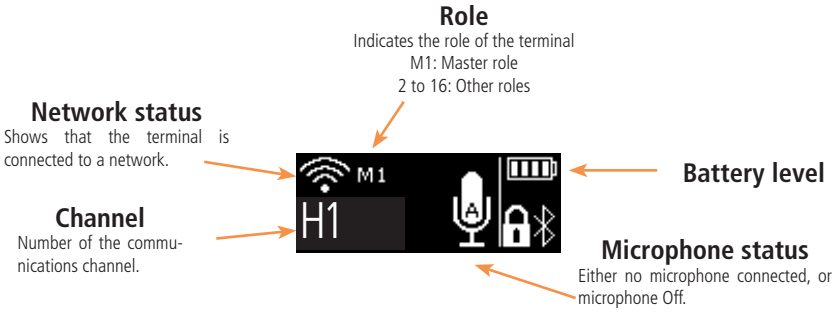



- To turn off the terminal, press and hold the "on/off" button.



**Note 1:** all settings, including volume, remain unchanged when the terminal is turned off (i.e., will be identical when the terminal is turned again).

### 2.1. Screen Icons (by Default)

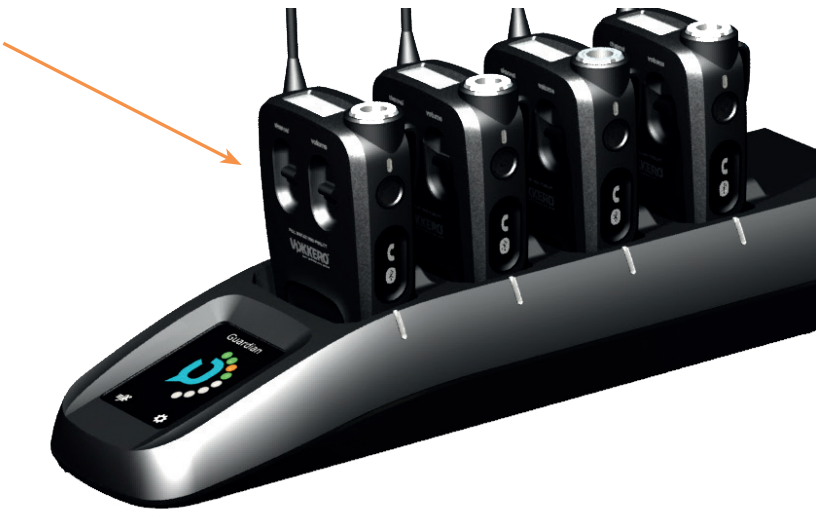



### 2.2. Setting up Audio Conference

You can set up a VOKKERO audio conference. The first step consists in attributing the Master role (M1) to a single terminal. This role is used to synchronize the other terminals.

The Master role (M1) is automatically attributed to the terminal located in the first slot of the configurator during a quick configuration (see §4.2).

See Quick start guide for more info.



## 2.3. Connecting a headset

Several types of headsets from the VOKKERO range can be connected to VOKKERO Guardian. The headset is automati-cally detected by the terminal when the headset is plugged in.

### 2.3.1. Plugging in a headset



Plug the headset into the slot at the top of the product, beside the LCD.

Line up the 2 red marks of the product and the connector

**Note:**
Do not force the headset; it should connect easily; if this is not the case, check the headset to make sure it isn't damaged.



### 2.3.2. Removing the head-set

To remove the headset

- Firstly, pull on the ring of the headset to release the connector switch.
- Then remove the headset connector

**Attention**

Do not attempt to remove the headset by pulling the cable.





**Attention**

Do not turn the connector



Use the "Micro" icon on the terminal screen to make sure that the headset is properly connected. After disconnection of a head-set, it is necessary to wait a few moments for the micro icon to be crossed out before reconnecting a headset.




No accessory connected




Accessory connected

## 2.4. Terminal operation




### 2.4.1. Volume

Adjust the terminal volume with the Volume trigger button.
- Push the trigger upwards to increase the volume
- Push the trigger downwards to decrease the volume

When you increase or decrease the volume, you will hear a beep.
When you reach the maximum or minimum volume setting, you will hear 2 consecutive beeps.
The volume setting is also indicated on the terminal LCD.
The sound level can be adjusted between 0 and 10. When level 8 is reached, an alert message is displayed on the terminal screen («Warning: high volume. Consult User Guide»).
To avoid possible hearing damage, do not listen at high volume for a long time.






### 2.4.2. Channel (mode activated by default)




Adjust the terminal's communication channel with the Channel trigger button.
- Push the trigger upwards to increase the channel number
- Push the trigger downwards to decrease the channel number

The channels available on the terminal depend on the terminal version; for more information, refer to the channels table (document annex).

When you change channel, you will hear a beep.
When you reach the top or bottom channel, you will hear 2 consecutive beeps.
The selected channel is also indicated on the terminal LCD.




### 2.4.3. Group (accessible by configuration)




To change groups, you must also use the Channel trigger button:
- Push the trigger up to increase the group number
- Push the trigger down to lower the group number

Group 0 links all available groups.
Thus, the terminals in groups 1 to 3 can only hear and speak with the members of their group.
Group 0 terminals (Gr0) can hear and speak with all groups.

When you change groups, a beep in the accessory's loudspeaker signals that the terminal has taken the change of group into account.
A double beep signals that you have reached the upper or lower limit.

Check the number of the selected group on the terminal's LCD.



### 2.4.4. "Micro" button (Latch mode by default)



Adjust the Microphone setting using the Micro button.
The microphone can be configured in various modes using the configurator; for full information on available modes, refer to §4.3.1.

Check the microphone status on the terminal LCD:

- if there is a Struck-through micro icon, then the microphone is Off and you can be heard on the network.
- if there is no Struck-through micro icon, then the microphone is On and you cannot be heard on the network.




### 2.4.5. Call button



Use the Call button to send an alert to all the terminals on the network; concretely, the terminal gives off a beep for 1 second and vibrates for 4 seconds and the LED above the On/Off button blinks.

The terminal screen displays the "Call" icon, as well as the name of the terminal.
All the other terminals connected to the network behave in the same way, namely, beep for 1 second, vibration for 4 seconds, LED blinking, and the calling terminal displays.




Note: if the "GROUP" function is active, then the notification is only sent to that group to which the calling terminal be-longs.

### 2.4.6. Locking the terminal




You can lock the terminal by pressing and holding the Channel button.
The locked functions are as follows:

- Channel
- Push To Talk
- Bluetooth (option)

By contrast, even if the terminal is locked, the following functions are made available:

- Volume
- Call
- On/Off



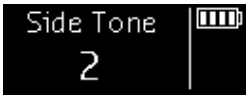

The 'Locked' status of the terminal will display on the LCD.

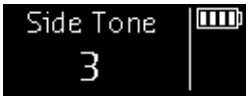
### 2.4.7. Side Tone










By default, the side tone is disabled. To activate the side tone, press and hold the centre of the volume knob.

The product then displays the side tone menu. To choose among the following options toggle the trigger:
- Side tone disabled (OFF)
- Side tone volume 1, 2 or 3

The system automatically exits the menu after a few seconds.
We do not recommend using the side tone (especially at high-level) if you use a Push-to-Talk other than the one you can set up and run on the terminal (if, for example, you use a Push-to-Talk from an accessory headset).




### 2.4.8. Battery

The terminal's button can be removed and recharged on the charger.

**Removing the battery**
Remove the battery from the terminal by pressing the locking mechanism at the top of the terminal and then slide the battery downwards.

**Inserting the battery**
Slide in the battery at the back of the product; keep pushing until you hear the locking clip.





### 2.4.9. Belt clip

**Removing the belt clip**
The terminal comes with a belt clip. However, you can remove this; simply take out the battery, pull on the locking mechanism in the center of the belt clip, and then slide it downwards.

**Attaching the belt clip**
Slide the belt clip into the slot; keep pushing until you hear the locking clip.

**NOTE :** the terminal must always be positioned at the belt.



# 3. DESCRIPTION OF THE CONFIGURATOR

The configurator does not have an On-Off switch. To turn it on, the configurator must be connected to the power unit provided with the VOKKERO Guardian. The configurator has a USB port for updates. The configurator screen is a high-resistance touchscreen.

The configurator can also be used to download products.

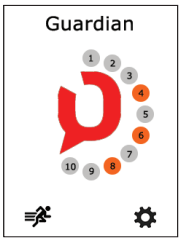
Immediately upon starting up the system, the configurator displays the VOKKERO logo, with the firmware version of the configurator, followed by the Home Screen.

## 3.1. Home Screen

The screen indicates the number of terminals that the configurator can hold (each number corresponds to one terminal). The configurator uses a color code to indicate the terminal's charging status or the battery's charging status, using the following code:




- Empty space
- Terminal in charge
- Terminal loaded
- Terminal battery fault
- Battery in charge
- Battery loaded
- Battery in error




### 1.1. Settings

This menu enables a more detailed configuration of the system in order to configure the terminals, the system or the configurator.




In "Devices", you can change the name of your terminal as well as the operation of the "Call" button, the «Alarm»

If red icon, then the terminals placed on the configurator have not been correctly configured to work together;

A "WI" icon displays when you connect the WI interface on the configurator.

This system is optional.
You can rapidly configure the entire system by selecting the icon. Alternatively, you can fine-tune the system config-uration by using the settings icon.

You can also proceed directly to the configuration of the terminal by selecting the desired terminal number.

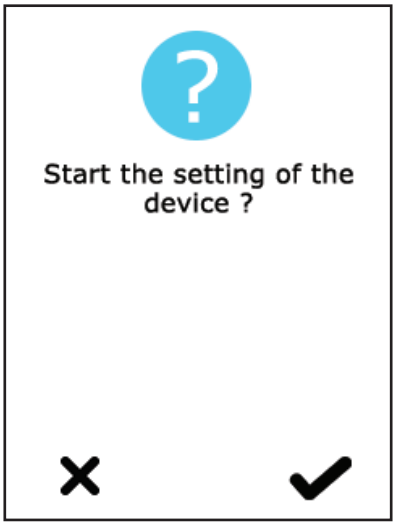
## 3.2. Quick configuration

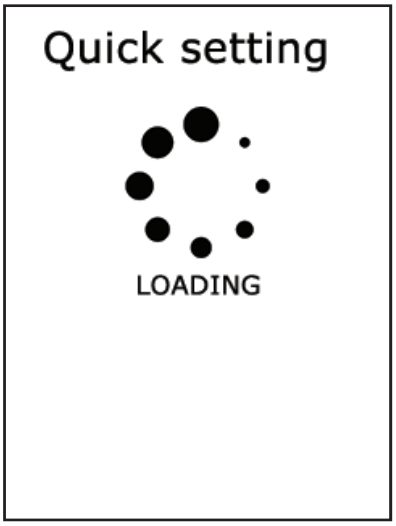
The terminals are delivered pre-configured and ready-to-use. With Quick Configuration, you can rapidly reconfigure all system devices; with this option, any devices on the configurator/charger will be automatically reconfigured in one single action, and will once again be ready-to-use.

The screen displays the channel that you have configured (by default, channel 1, namely 869.525 MHz, displays).
You can choose another channel from the list of channels available for your terminal; do this using the Channel setting.
This channel is the terminal start-up channel; the other channels are available using the Channel button on the terminal.

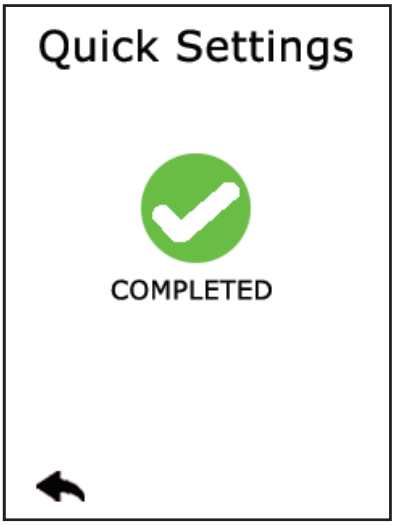
Start the configuration by selecting "GO" on the screen, and then validating the confirmation screen; the configuration starts.




If the configuration completes successfully, the indication "DONE" displays. Alternatively, the indication "ERROR" displays if a problem is encountered.

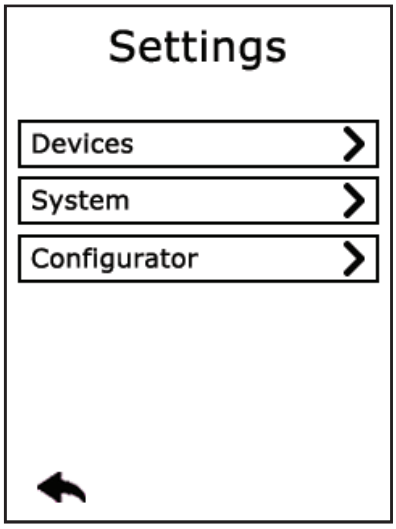






To return to the Home Screen, use the left arrow.

### 3.3. Settings




This menu enables a more detailed configuration of the system in order to configure the terminals, the system or the configurator.

In "Devices", you can change the name of your terminal as well as the operation of the "Call" button, the «Alarm» mode, set the Voice gate preset or reset your terminals to the factory configuration.

In "Systems", you can change the system language, change the radio operation of the products, activate the multi-master mode, update the terminal and the configurator's software, and change the encryption mode.

In Configurator, you can calibrate the touchscreen and lock the access to the configurator.

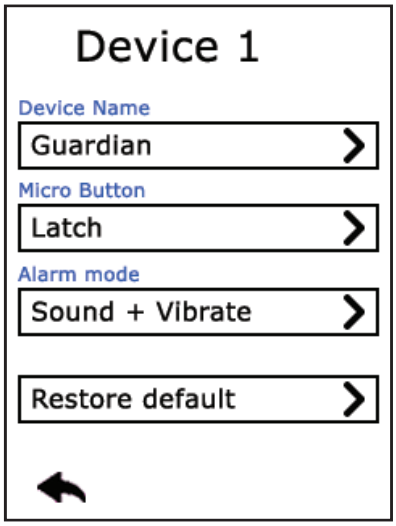
The details for each element are given below.




### 3.3.1. Configuring the terminal

This screen indicates the terminals present on the configurator. The charge status as well as the name of each terminal displays. The terminals display in their order of presence on the configurator, going from the closest (position 1) to the furthest away.

To modify a product, select the product row; this displays all the settings available for the selected product.




The available settings are as follows:

- Terminal name (1): product name displayed on the LCD
- Microphone action (2): defines the behavior of the audio button in the middle of the terminal
- Alarm mode (3): defines the operating mode of the alarm
- Voice Gate Preset (4) : provides access to the voice detector presets
- Advanced Settings (5): Provides access to the following options: Assignment buttons, Alarm button, Expert mode
- Version (6)
- Factory Setting (7): allows to reset the products to factory settings

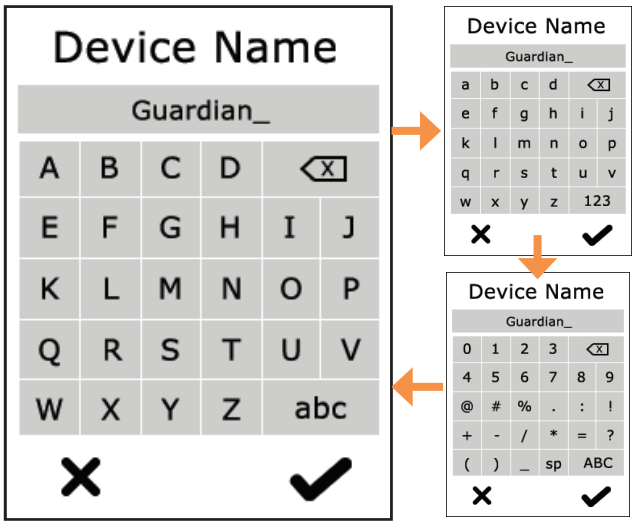
**1 - Terminal name**

To change the name of the terminal, you can use the available keyboard. Three screens/keyboards are available to de-fine the product name. To switch between screens/keyboards, use the button on the bottom right-hand side.

"abc" to switch to the lowercase words screen
"123" to switch to the numbers and symbols screen
"ABC" to switch to the uppercase words screen

Use ⌫ to delete the most recently entered character.

To validate, select ✔ on the bottom right-hand side.



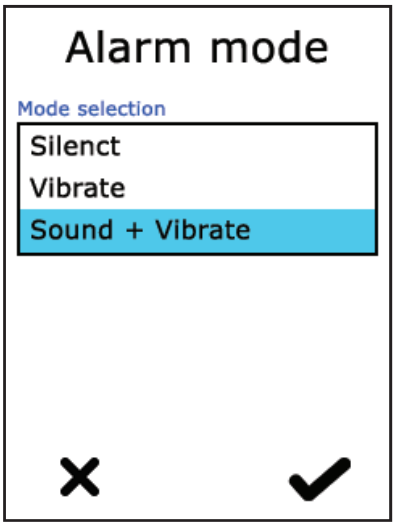
### 2 - Microphone action




The central button can have a number of operating modes:
- **Latch:** press to switch the microphone from Microphone On to Microphone Off; the microphone status displays on the terminal LCD
- **Push to talk:** the microphone is On for as long as the button is pushed and held. To note: it is implemented a latency of a second at the closing of the microphone after release of the button. This avoids any audio interruptions even with unwanted release of the pressing of the button during a conversation.
- **Latch /Push-To-Talk:** combination of Latch and Push-to-Talk functions
A short press switches from Microphone On to Microphone Off.
If the microphone is Off, press and hold this button to switch to Microphone On.
- **Push to mute:** The microphone is Off for as long as the button is pushed and held

Make your selection and validate.

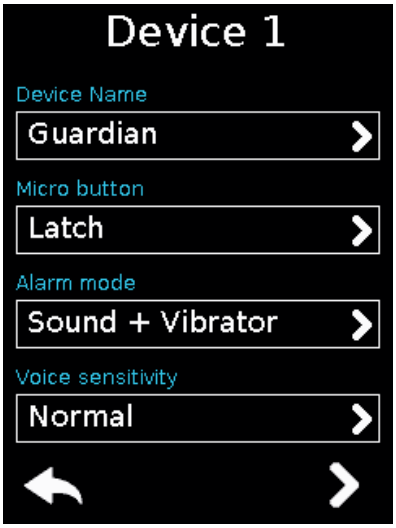
### 3 - Alarm Mode




Whenever the product receives a call from another terminal or from a paired Blue-tooth device, it can notify the user depending on the configured mode.
The modes available are:

- Silent: visual notification on the screen
- Vibration: the terminal vibrates + visual notification on LCD
- Audio + Vibration: combined action: sound beep + vibration + visual notification on LCD

### 4 - Voice Gate Preset

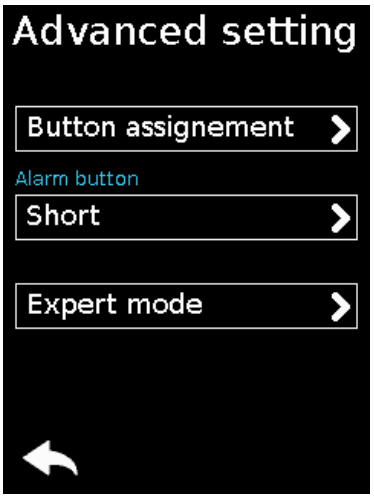



Stadium mode allows clear communication in very noisy environments thanks to Voice Detection.

Normal mode allows also using Voice detection for noise filtering but with a lower threshold than the Stadium mode.

Whisper mode allows the terminal to recognize whispers and low tones.

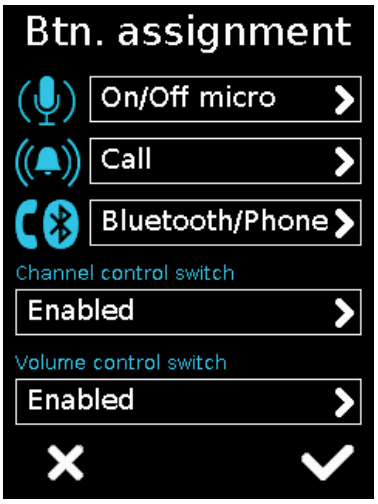
**Important note:** Whisper mode only works in a quiet environment (it should not be activated in a noisy environment).




## 5- Advanced settings

Provides access to the following options:

- Assign buttons: to change the functions of the buttons on the terminal
- Alarm button: to change the press mode of the alarm button
- Expert mode: Users cannot access this mode as it has settings that can disrupt the smooth-running of your VOKKERO® Guardian system.




### 5.1 Assignment buttons

Reset the functions of the terminal buttons or disable certain functions.

The microphone On / Off + Call + Bluetooth buttons can be switched or deactivated. Click the option shown by the pictogram on the button of your choice and reassign the chosen function to it.

The Channel and Volume Selector triggers can only be turned on or off.

**To reset the original functions, reload the terminal's default settings via the «Factory Setup» menu.**




### 5.2 Alarm button

Allows you to change the way you press the «Call» button to activate the alarm, regardless of the selected alarm mode (silencer, vibrator or sound + vibrator).

The possible ways of activating the alarm are:
- **Short:** 1 short press on the Call button triggers the alarm
- **Long:** 1 long press on the Call button triggers the alarm
- **Long + Acknowledgment:** 1 long press on the Call button triggers a loop alarm. To stop the alarm, press again continuously on the same button from one of the network terminals.

### 6 - Version

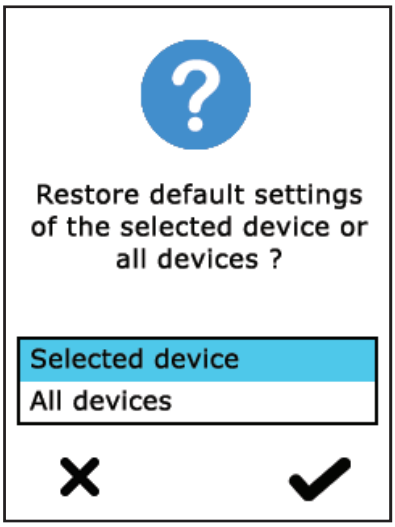
Shows you the factory version of the terminal used.




### 7 - Factory settings

This menu returns, to the factory setting, a product or all products connected to the configurator. After selecting and validating your choice, the configurator lets you know if the return to factory settings completed successfully.

To finalize the operation, select the arrow on the bottom left-hand side to return to the configuration screen of the terminals.

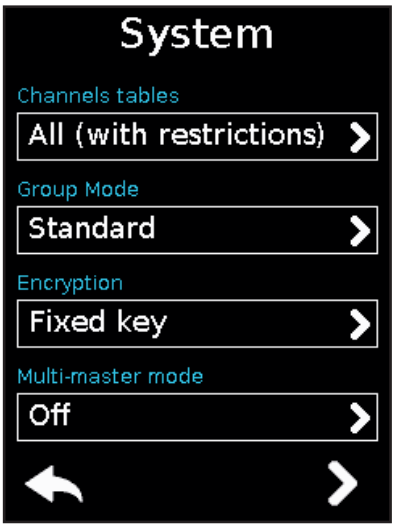








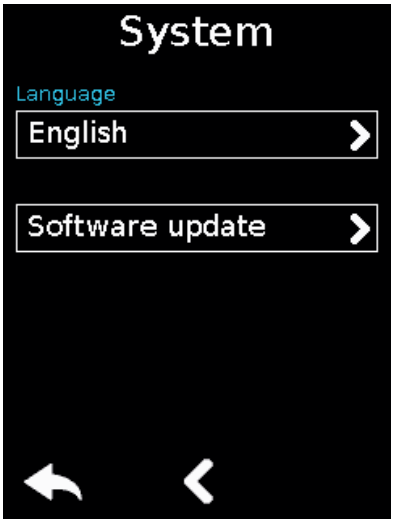
### 3.3.2. System configuration



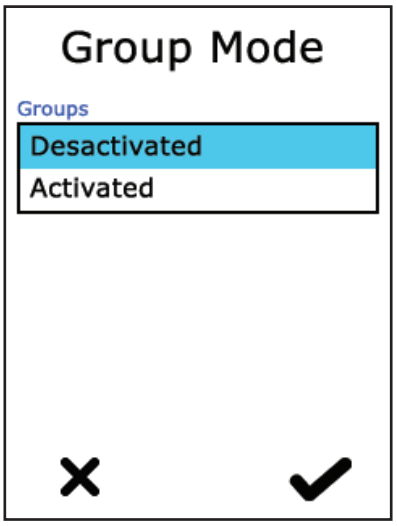

In this screen you can see all the settings related to the system configuration. The settings in this menu apply to all the terminals present on the configurator.

The available settings are:
- Group Mode: Enables or disables group mode
- Encryption: allows you to choose the encryption operating-mode
- Language: allows you to select the display language of the configurator
- Software update: allows you to update the software version of the terminals and configurator

The settings are displayed over several pages. To browse the pages, select the left and right arrows at the bottom of the screen.



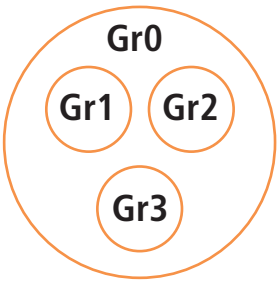

**1 - Group mode**



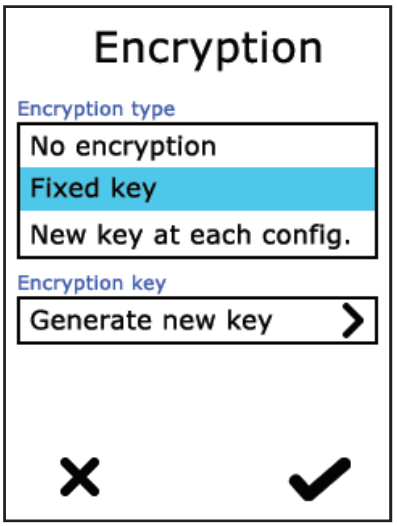

Use this setting to activate and deactivate the Group mode.

If activated, the terminal works in Group mode; use the Channel button (front of terminal) to switch between groups.
When first used, all the products are configured in the same group (group 0).
After first use, a group must be selected individually on each terminal; this choice will be retained.

Details of groups:
Group 0 (Gr0): you can hear and talk with all groups.
Group 1 to 3 : you can only hear and talk with members of that group.



### 2 - Encryption




The encryption key is used to make communications within a given system secure. Only the devices using the same encryption key are authorized to communicate on the network.
Several options are available:

- **No encryption:** the communications are not secure; all the Guardian devices can join the network, even if they have no encryption key.
- **Single key:** the system uses one single encryption key; this key can be occasionally changed by the user by selecting "New Key"
- **New Key with each configuration:** the configurator generates a new key with each new successfully performed con-figuration.

### 3 - Language




You can change the system's display language by m , of the "Language" setting.
Choose the language you want and validate with on the bottom right-hand side.

### 4 - Updating software




Used to update the software versions of the terminals and / or the configurator.

4.1 - Updating terminals

To update terminals you have to use a USB key.
Contact your vendor to obtain the most recent software version.

The USB key used must be < or = 4Go.

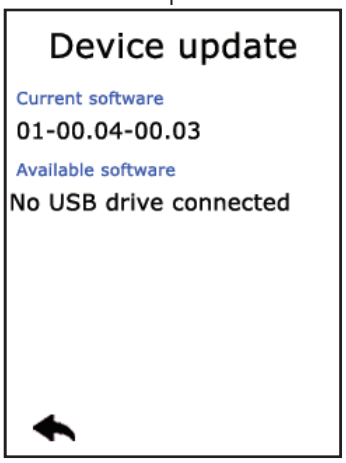
On the USB key:
- Copy the update software to the root
- The files mustn't be in a folder
- No others files or folder have to be on the USB key

To know the version currently installed in the terminal:
Menu > System > Software > Device update:
The version currently installed in the terminal appear on the display. (Screen No. 1).

To configure a new software version on the terminals:
- Once the USB key ready, insere it into the dedicated USB port, situated on the left located on the left side of the configurator. (Screen No. 2)
- Once the USB key connected, the available software version is displayed. (Screen No. 3)

(If the USB key is empty or involves wrongs files, you will read on the display: «Update file missing from the USB key»)
- Click «GO» to validate. (Screen No. 3)
- Then, click ✔ to launch the installation. (Screen No. 4)

1




2




3



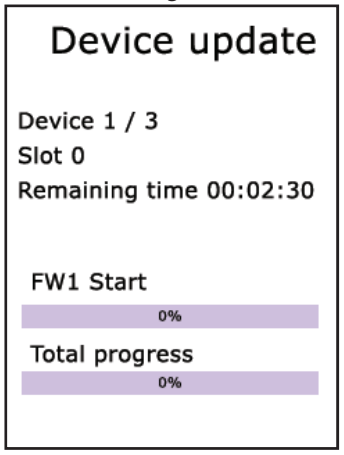

4



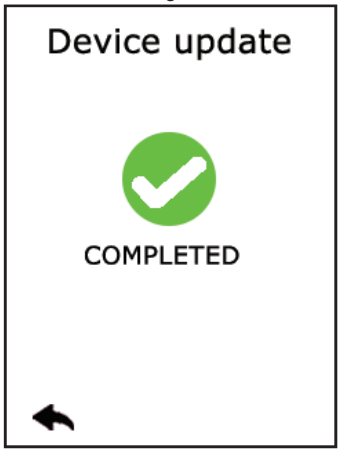

- The update of the terminals is launched (Screen No. 5).
- The update is finished (Screen No. 6).

Note: All terminals on the Configurator will be updated regardless of their location on the Configurator.

5




6



4.2 - Updating the configurator

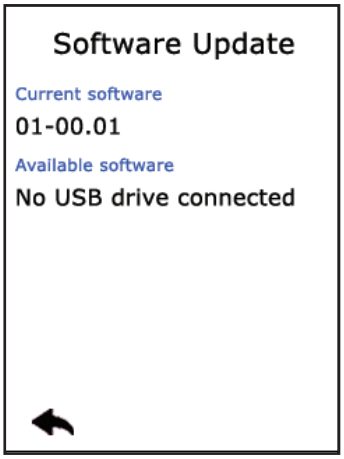
To update the configurator you have to use a USB key.
Contact your vendor to obtain the most recent software version.

The USB key used must be < or = 4Go.

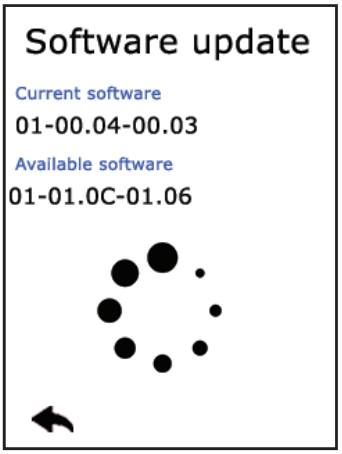
On the USB key:
- Copy the update software to the root
- The files mustn't be in a folder
- No others files or folder have to be on the USB key

To know the version currently installed in the configurator:

1




2




3




4




Menu > Configurator > Software update:
The version currently installed in the configurator appear on the display. (Screen No. 1).

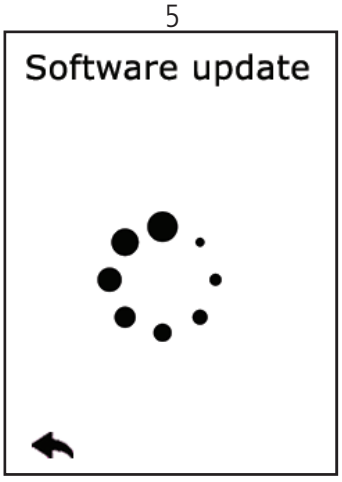
To configure a new software version on the configurator:

- Once the USB key ready, insere it into the dedicated USB port, situated on the left located on the left side of the configurator. (Screen No. 2)
- Once the USB key connected, the available software version is displayed. (Screen No. 3)

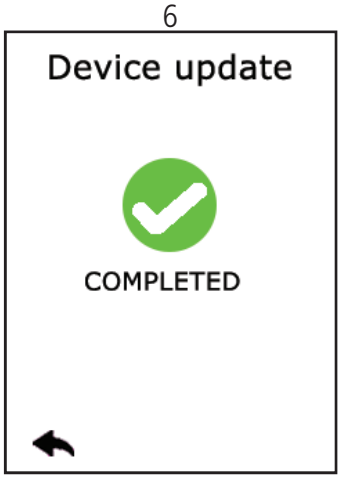
(If the USB key is empty or involves wrongs files, you will read on the display: «Update file missing from the USB key»)

- Click «GO» to validate. (Screen No. 3)
- Then, click ✔ to launch the installation. (Screen No. 4)

5

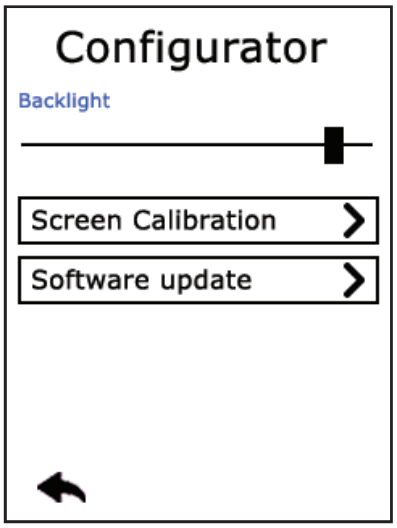



6




- The update of the configurator is launched (Screen No. 5).
- The update is finished (Screen No. 6).

### 3.3.3. Configuring the configurator




Use this setting to adjust the screen.
In this area, you can adjust the screen lighting, calibrate the touchscreen, and lock the configurator.

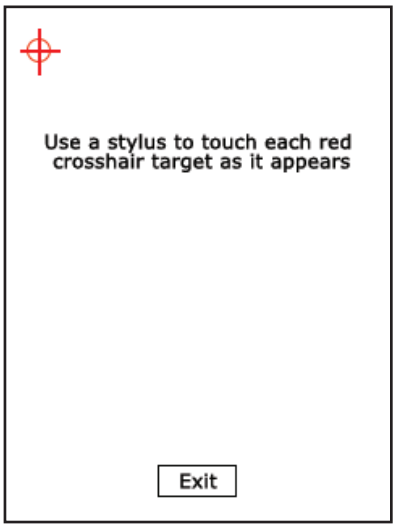
**1 - Adjusting the screen lighting**

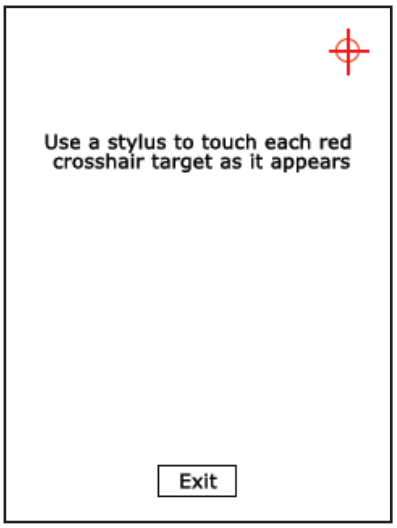
Slide the cursor from left and right to decrease and increase, respectively, screen lighting.

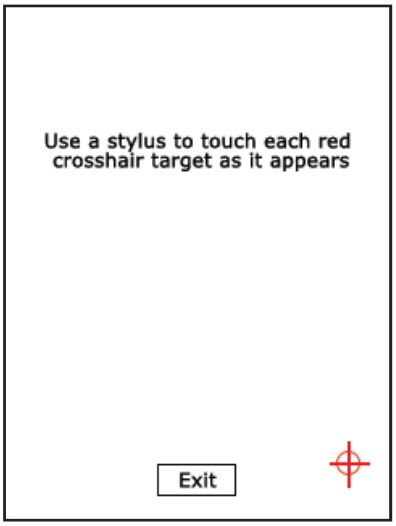
**2 - Calibrating the touchscreen**

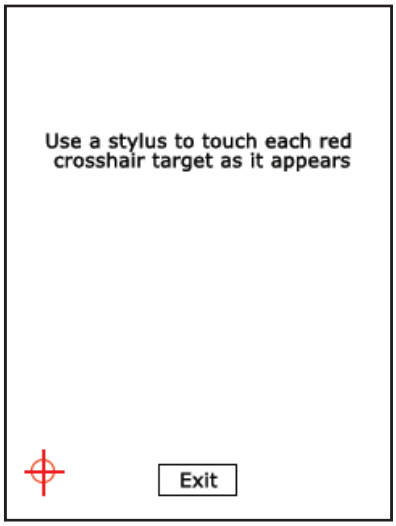
The configurator touchscreen is already calibrated in the factory; you can however calibrate your own touchscreen if you note a significant change in screen detection.

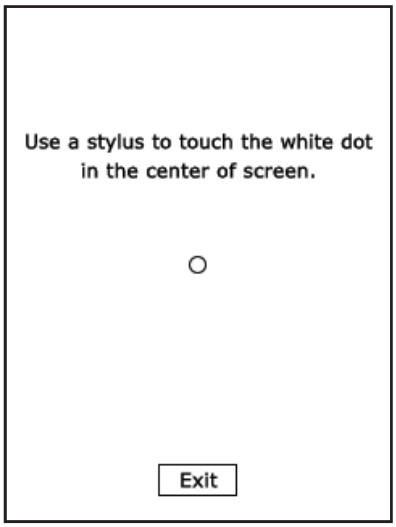
To do this, carry out the following 5 steps:
Select each angle with the yellow pointer, then select the circle at the middle of the screen.
The calibration is complete.



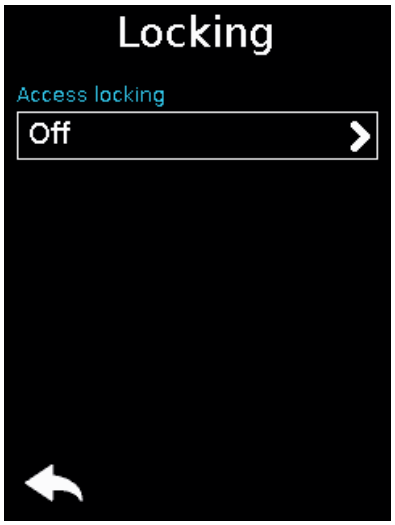



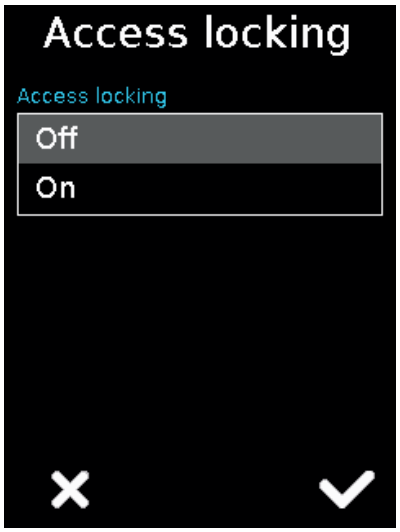
**3 - Locking**

Allows you to block access to the configurator using a PIN code.
In Lock mode, only the «Quick Config" option is available. You can only access the other settings after validating the PIN code.

Note: The PIN code consists of 1 to 6 digits

Once the lock has been activated, the PIN code can be modified or deactivated (see screen below showing the options available in the «Lock» menu, once the lock has been activated).




### 3.3.4. Resetting the configurator functions

In order to put the configurator back in factory mode (and thus cancel all the configuration changes made previously), do the following:

1. Unplug the configurator
2. Reconnect the configurator
3. When the configurator is switched on, on the first home screen, consisting of the «VOKKERO®» logo: press the 2nd «O" of VOKKERO®.
4. Then you can restore the default settings of the configurato
5. Confirm
6. The configurator parameters have been reset.

## DOCUMENT HISTORY

| Version | Contents |
|---|---|
| V1.0 | Creation |