VO8364AA+ UserMan

Applicant: **VOGO**
Product (PMN): **VO8364AA+**
Model (HVIN): **VO8364AA+**
Host (HMN):

VOK-ELITE PLUS-US/CAN/AUS/NZ (HVIN : VO8364AA) – Page 1

VOK-ELITE PLUS-VARSITY II (HVIN : VO8364VA) – Page 24

VOK-ELITE PLUS-US/CAN/AUS/NZ-WIRELESS INTERFACE (HVIN: VO8161CA) – Page 36

VOK-ELITE PLUS -US/CAN/AUS/NZ-SMART GATEWAY-4M (HVIN: VO8346BA) – Page 48

VOKKERO ELITE PLUS

Product Range	ELITE
Country	US/CAN/AUS/NZ
Creation Date	@16 octobre 2024
Document Reference	/
Language	EN
Product Reference	VO8364AA
Statut	Not published
Type of Document	
Version	1.0

This document applies to the following products:
-
VOK-ELITE PLUS-US/CAN/AUS/NZ (Ref: VO8364AA)
-
VOK-ELITE-CONFIGURATOR (Ref: VO7674AA)
-
VOK-ELITE-CHARGER (Ref: VO8363AA)

▼ TABLE OF CONTENT

TABLE OF CONTENT
PRÉAMBULE / PREAMBLE / PRÄAMBEL / PREAMBOLO
INFORMATIONS
REGULATIONS
RECOMMENDATIONS & WARNINGS
USAGE RESTRICTIONS
1. SYSTEM INSTALLATION PROCEDURE
2. SYSTEM DESCRIPTION
- 2.1. VOKKERO ELITE PLUS Terminal
  - 2.1.1. Description of product interface
  - 2.1.2. General characteristics
- 2.2. VOKKERO ELITE PLUS Charger/Configurator
  - 2.2.1. Description of product interface
  - 2.2.2. General Technical Specifications
3. QUICK START OF THE CONFERENCE
- 3.1. Setting up Audio Conference
- 3.2. Description of the terminal
- 3.3. Connecting a headset
  - 3.3.1. Plugging in a headset
  - 3.3.2. Removing the headset
  - 3.3.3. General instruction for headset use
- 3.4. Adjust Volume
- 3.5. Launch a recording
- 3.6. Locking and unlocking the terminal
4. START AND HOME SCREEN OF THE CONFIGURATOR
- 4.1. Home Screen
5. QUICK CONFIG. MENU
- 5.1. VAR Football «Quick Config.»

5.2. Standard “Quick Config.”
5.3. Central ref to others audio mode
6. SETTING MENU
6.1. Devices
6.1.1. Terminal name
6.1.2. Device ID
6.1.3. Microphone
6.1.4. Audio Matrix
6.1.5. Whistle Presets
6.1.6. Sidetone
6.1.7. Advanced audio
6.1.8. PIO beep mode
6.1.9. Vocal Synthesis
6.1.10. SD Card space
6.1.11. Radio Sensitivity
6.1.12. Factory settings
6.1.13. Versions
6.2. System
6.2.1. Channel mode
6.2.2. Encryption
6.2.3. Software
6.3. Configurator
6.3.1. Backlight
6.3.2. Screen calibration
6.3.3. Locking
6.3.4. Versions / Software
DOCUMENT HISTORY

▼ PRÉAMBULE / PREAMBLE / PRÄAMBEL / PREAMBOLO

- Ce guide décrit les fonctionnalités du système Vokkero®, ses options et ses accessoires. Il explique comment le configurer pour permettre une communication de type conférence entre plusieurs utilisateurs.
- This guide describes the functionality of the system Vokkero®, options and accessories. It explains how to configure it to allow a conference-type communication between multiple users.
- Diese Anleitung beschreibt die Funktionalität des Systems Vokkero®, Optionen und Zubehör. Es erklärt, wie man es konfigurieren, um eine Konferenz-Art der Kommunikation zwischen mehreren Benutzern zu ermöglichen.
- Esta guía describe la funcionalidad del sistema Vokkero®, opciones y accesorios. En él se explica cómo configurarlo para permitir una comunicación de tipo conferencia entre múltiples usuarios.

- Aucun extrait de ce document ne pourra être reproduit ou transmis (sous format électronique ou papier, ou par photocopie) sans l’accord de Vokkero. Ce document pourra être modifié sans préavis. Toutes les marques citées dans ce guide font l’objet d’un droit de propriété intellectuelle.
- No part of this document may be reproduced or transmitted (in electronic or paper, or photocopying) without the agreement of Vokkero.
  This document may be changed without notice. All trademarks mentioned in this guide are the subject of intellectual property rights Vokkero.
- Kein Teil dieses Dokuments darf ohne Zustimmung von Vokkero reproduziert oder übertragen werden (in elektronischer Form oder in Papierform oder durch Fotokopieren). Dieses Dokument kann ohne vorherige Ankündigung geändert werden. Alle in diesem Handbuch genannten Marken sind Gegenstand der Rechte an geistigem Eigentum von Vokkero.
- Ninguna parte de este documento puede ser reproducida o transmitida (en fotocopias electrónico o en papel, o sin el acuerdo de Vokkero.
  Este documento puede ser modificada sin previo aviso. Todas las marcas comerciales mencionadas en esta guía son el tema de los derechos de propiedad intelectual.

Systeme radiocommunication sans fil professionnel - Vokkero

Spécialisée dans les systèmes de communication pour équipes mobiles pour les professionnels, VOKKERO® est reconnu mondialement dans le domaine sportif (leader mondial dans l'arbitrage professionnel), le Pro Audio (spectacle, audiovisuel, broadcast) et l'industrie ainsi que les services comme la sécurité, le nucléaire, ou

https://www.vokkero.com/fr/

VOGO
895 Rue de la Vieille Poste
Parc Majoria-Pompignane
Immeuble LA LÓNA,
34000 Montpellier, France

▼ INFORMATIONS

DISCLAIMER

This document and the use of any information contained therein, is subject to the acceptance of the VOKKERO terms and conditions. They can be downloaded from www.vogo-group.com
VOKKERO makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice.
VOKKERO reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.
Copyright © 2016, VOKKERO.
VOKKERO is a registered trademark in the EU and other countries.

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.vogo-group.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
• Firmware version (for example V1.0)
• A clear description of your question or the problem
• A short description of the application

▼ REGULATIONS

▼ 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:

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
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 :

Cet émetteur ne doit pas être situé ou fonctionner conjointement avec une autre antenne ou un autre émetteur.

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 :

• Contains FCC ID: 2AU6N-VO8364AA
• Contains IC ID: 25704-VO8364AA

Authorised representative in Canada
ZEAT SPORTS
310-5253 Blvd Décarie - H3W 3C3 MONTREAL - CANADA
Phone : +1-855-750.2012

▼ AUSTRALIA - NEW ZEALAND : DECLARATION OF CONFORMITY

Terminals : VO8364AA

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/ac41faf9-0fdf-4b0d-b82b-86a54d969f02/suppliers-declaration-of-conformity_VOK_ELITE_TRANSCEIVER_VO8364AA.pdf

▼ RECOMMENDATIONS & WARNINGS

All rights to this manual are the exclusive property of VOGO. All rights reserved. Copying this manual (without written permission from the owner) via printing, copying, recording or by any other means, translating this manual (in full or partially) into any other language, including all programming languages, using any electrical, mechanical, magnetic or optical devices, manually or any by other methods, is prohibited.

VOGO reserves the right to change the technical specifications or functions of its products, or to cease manufacturing any of its products, or to cease technical support for one of its products without notice in writing and urges its customers to make sure that the information they have is valid.

VOGO configuration software and programs are available free of charge in a non-modifiable version. VOGO can make no guarantees, including guarantees concerning suitability and applicability for a certain type of application.
Under no circumstances can the manufacturer, or the distributor of an VOGO program, be held liable for any damage caused by the use of the aforesaid program. Program names, as well as all copyright relating to programs, are the exclusive property of VOGO. Any transfer, granting of licences to a third party, leasing, hire, transport, copying, editing, translation, modification into another programming language or reverse engineering are prohibited without VOGO's prior written authorisation and consent.

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 :

- **VOK-ELITE PLUS-US/CAN/AUS/NZ** (Ref: VO8364AA)
- **VOK-ELITE-CONFIGURATOR** (Ref: VO7674AA)
- **VOK-ELITE-CHARGER** (Ref: VO8363AA)

The recommendations apply to the different references and are identified by the following color code:

- Terminal
- Charger/Configurator
- Terminal + Charger/Configurator

Read the instructions in the manual.

CHARGER and CONFIGURATOR are intended for INDOOR USE ONLY.

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.

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.

Warning for Switzerland : the annex 4.10 of SR 814.013 Standad must be applied for batteries.

⎓

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

RECOMMANDATIONS REGARDING USE

- 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.

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.

▼ USAGE RESTRICTIONS

IMPORTANT : Before using the device, please observe the legal provisions in force in your country.

OPERATING FREQUENCIES of VOKKERO ELITE PLUS US/CAN/AUS/NZ

FHSS Mode: 2 Hopping tables are available

	Z1H1	Z2H22
Min	**915,795**	**915,420**
Max	**927,420**	**927,420**
1	927,045	925,17
2	916,545	926,67
3	918,42	919,545
4	922,17	923,67
5	923,295	922,92
6	925,17	915,42
7	921,42	921,42
8	915,795	924,795
9	925,545	916,545
10	918,795	915,795
11	926,67	921,045
12	921,795	919,17
13	916,17	918,045
14	918,045	922,17
15	922,545	916,92
16	925,92	917,67
17	920,295	927,42
18	917,67	916,17
19	920,67	918,795
20	927,420	923,295
21	924,42	924,045
22	923,67	918,42
23	916,92	927,045
24	924,045	921,795
25	926,295	924,42
26	917,295	

DTS mode: Each device proposes 127 SINGLE channels using digital modulation techniques (DTS mode). Available channels are listed below.

N°	DTS channels	N°	DTS channels	N°	DTS channels	N°	DTS channels
S1	902,4	S33	908,8	S65	915,2	S97	921,6
S2	902,6	S34	909	S66	915,4	S98	921,8
S3	902,8	S35	909,2	S67	915,6	S99	922
S4	903	S36	909,4	S68	915,8	S100	922,2
S5	903,2	S37	909,6	S69	916	S101	922,4
S6	903,4	S38	909,8	S70	916,2	S102	922,6
S7	903,6	S39	910	S71	916,4	S103	922,8
S8	903,8	S40	910,2	S72	916,6	S104	923
S9	904	S41	910,4	S73	916,8	S105	923,2
S10	904,2	S42	910,6	S74	917	S106	923,4
S11	904,4	S43	910,8	S75	917,2	S107	923,6
S12	904,6	S44	911	S76	917,4	S108	923,8
S13	904,8	S45	911,2	S77	917,6	S109	924
S14	905	S46	911,4	S78	917,8	S110	924,2
S15	905,2	S47	911,6	S79	918	S111	924,4
S16	905,4	S48	911,8	S80	918,2	S112	924,6
S17	905,6	S49	912	S81	918,4	S113	924,8
S18	905,8	S50	912,2	S82	918,6	S114	925
S19	906	S51	912,4	S83	918,8	S115	925,2
S20	906,2	S52	912,6	S84	919	S116	925,4
S21	906,4	S53	912,8	S85	919,2	S117	925,6
S22	906,6	S54	913	S86	919,4	S118	925,8
S23	906,8	S55	913,2	S87	919,6	S119	926
S24	907	S56	913,4	S88	919,8	S120	926,2
S25	907,2	S57	913,6	S89	920	S121	926,4
S26	907,4	S58	913,8	S90	920,2	S122	926,6
S27	907,6	S59	914	S91	920,4	S123	926,8
S28	907,8	S60	914,2	S92	920,6	S124	927
S29	908	S61	914,4	S93	920,8	S125	927,2
S30	908,2	S62	914,6	S94	921	S126	927,4
S31	908,4	S63	914,8	S95	921,2	S127	927,6
S32	908,6	S64	915	S96	921,4		

Inside the stadium, a spectrum referent may be available to assist in frequency allocation.
For the use of ELITE PLUS outside US/CAN/AUS/NZ, please contact customer support: " https://vogoassist.freshdesk.com/en/support/login". In the VOKKERO HELPDESK space, log in with your identifiers (or sign up to create your account) to access the support.

The operations described below allow you to rapidly and easily implement your VOKKERO ELITE PLUS communication system.

All the operations described are valid for all the VOKKERO ELITE PLUS terminals listed below:

VOK-ELITE PLUS-US/CAN/AUS/NZ : VO8364AA

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

The VOKKERO ELITE PLUS is a ready-to-use system with the following three main elements:
• Terminals:
VOK-ELITE PLUS-US/CAN/AUS/NZ : VO8364AA
• Configurator:
VOKKERO ELITE - Configurator : **VO7674AA**

• Optional Charger:
VOKKERO ELITE - Charger : **VO8363AA**

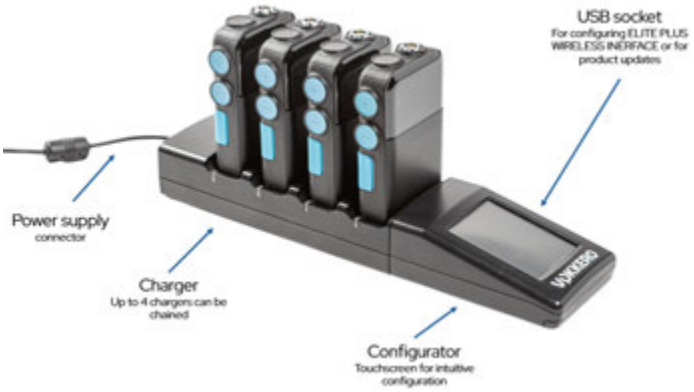
All the operating settings of the VOKKERO ELITE PLUS system are managed by the configurator which gives access to the Settings menu via a touchscreen. The configurator must be connected to the power unit (otherwise it will not work) and up to 4 extensions can be associated with the configurator.

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 ELITE PLUS terminals as shown below

Note 1: the order and position of the terminals on the charger(s) are not of importance at that time.

Note 2: if the purpose of the operation is only to charge terminals, then the configurator is not required.



2. SYSTEM DESCRIPTION

2.1. VOKKERO ELITE PLUS Terminal

2.1.1. Description of product interface

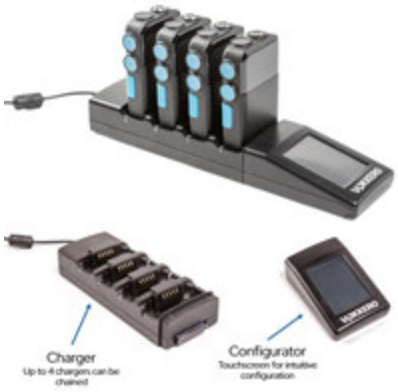
2.1.2. General characteristics

General Specifications	Value
Supply voltage	3.7V nominal
Maximum consumption	800mA (emission)

General Specifications	Value
Terminal power supply	Lithium battery
Battery life	More than 8 hours
Charging time	4 hours from 0 to 100% battery life
Operating temperature	20°C / +55°C
Dimensions	57 × 96 × 23 mm
Weight	130g (including battery)

2.2. VOKKERO ELITE PLUS Charger/Configurator

2.2.1. Description of product interface



2.2.2. General Technical Specifications

General Specifications	Value
AC/DC Power Converter (standard)	100 to 240V 12VDC/5A - 50/60Hz
Operating temperature	-5°C/+40°C
Dimensions configurator	150×70×36
Dimensions charger	180×70×35
Weight Configurator	100g
Weight Charger	180g
Terminal charging indicators (leds)	
- Red	No terminal or defective terminal
- Orange	Terminal charging
- Green	Terminal charged

3. QUICK START OF THE CONFERENCE

3.1. Setting up Audio Conference

The terminals are delivered pre-configured and ready-to-use. The first step consists in turning on the terminals and in particular the Master role terminal. This role is used to synchronize the other terminals. You can recognize the Master terminal thanks to its purple network icon.

In case no terminal show the purple network icon or if several terminals shows this purple network icon, that means that you have no Master or several Master roles in the network. In that case, the audio conference won't work properly. Put all the terminals on the configurator dock and launch a "Quick Config.". See §5 QUICK CONFIG. MENU for more info on the different "Quick Config." modes, options and functionnalities.

The Master role is automatically attributed to the terminal located in the first slot of the configurator during a normal"Quick Config".
The Master role is attributed to the terminal located either in the first slot or in the fourth slotof the configurator during a VAR

Football“Quick Config”.

With “Quick Config.”, you can rapidly reconfigure all the conference and attributes the Master role to a single terminal which is the key to a valid VOKKERO audio conference.

With Football “Quick Config.” you can configure all terminals for VAR Football application usage. In that case, a spare Master role will be created (and shall be of course kept shut-off if the Master is turned-on).

3.2. Description of the terminal

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

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

Network icon

- Colour of the Network Icon shows the role of the terminal in the VOKKERO conference.
  - If icon is purple: the terminal is the MASTER of the conference (can speak and listen and gives synchronization network to others terminals).
  - If icon is green: the terminal is a USER of the conference (can speak and listen).
  - If icon is white: the terminal is a LISTENER of the conference (cannot speak, only listen).

- Status of the Network Icon shows that the terminal is connected or not to a VOKKERO conference.
  - If icon blink: the terminal is searching for a VOKKERO conference.
  - If icon is fixed: the terminal is connected to a VOKKERO conference or the terminal is the MASTER of the conference.

Central ref icon

If a purple whistle appears, that means that this terminal has been selected as a Central Ref product (whatever its Network role, MASTER or USER). That only means that an extra robust radio is active (can be active only on one terminal in the conference/ network).
This gives even more robustness in case of radio interferences to that terminal. We recommend to give to give that terminal to the main referee (or the one speaking to VAR or to public announcement).

Recording icon

If icon does not appear: No recording.
If icon is fixed: A recording of the VOKKERO conference is going-on.
If icon blinks: The SD card for the recording cannot accept recording (full memory).

3.3. Connecting a headset

3.3.1. 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 headset and push the connector.
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 and check that you align the red dot with the red mark.

3.3.2. Removing the headset

Pull on the ring of the headset to release the connector switch.
Then remove the headset connector.

⚠️

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

⚠️

Do not turn the connector.

3.3.3. General instruction for headset use

In order to ensure a proper audio communication, be sure that your microphone is well positioned in front of your mouth.

Warning: Regarding PHO 521 and PHO 531 references, to prevent damage, please use the plastic clip as follows:

- Do not slide the plastic clip along the cable
- Press the button to remove the plastic clip from the cable and replace it in the desired position

3.4. Adjust Volume

Push + to increase the audio volume
Push – to decrease audio volume

5 steps of volume are available. A vocal synthesis (heard in the headset) indicates the step (volume 1 to volume 5). A vocal synthesis indicates that “Minimum volume” is reached, another vocal synthesis indicates that “Maximum volume” is reached.

To avoid possible hearing damage, do not listen at high volume for a long time.

3.5. Launch a recording

Insert a SD card into the dedicated slot (FAT32 formated)
Push during 2 seconds the Function button
The recording icon should appear and stay fixed.
In case it blinks and then disappears it means that your SD card is not present, well-inserted or well-recognized.

To stop recording, push the Function button again. The recording icon should disappear.
A vocal synthesis (heard in the headset) indicates the “Start of Recording”, another voca synthesis indicates the “End of recording” (in case the user stops the recording or if the SD card memory is full).

3.6. Locking and unlocking the terminal

You can lock the buttons of the terminal by pressing and holding the + and – buttons during 3 seconds.

All icons blinks one time when locking is activated. On/Off button remains functional.
Press and hold again during 3 seconds the + and - buttons to unlock.
All icons blinks one time when unlocking.

4. START AND HOME SCREEN 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 ELITE.
The configurator has a USB port for updates.
The configurator screen is a high-resistance touchscreen.
Immediately upon starting up the system, the configurator displays the VOKKERO logo, with the software version of the configurator, followed by the Home Screen.

Note: If red icon, then the terminals placed on the configurator have not been correctly configurated to work together.

4.1. Home Screen

The screen indicates the number of terminals that the charger has on it (each number corresponds to one terminal).
The configurator uses a color code to indicate the terminal battery's charging status, using the following colour scheme.

Plain round green: battery charged

Plain round orange: battery in charge

No visible round whereas a terminal is plugged in this charger's slot: terminal in default, try positioning again the terminal and contact our support in case it stays in that state.
You can rapidly configure the entire system by selecting the runner icon ("Quick config.").
You can fine-tune the system configuration by using the settings icon (Settings).

Note: You can also proceed directly to the configuration of the terminal by clicking on the desired terminal number.

5. QUICK CONFIG. MENU

The terminals are delivered pre-configured and ready-to-use.
However, with "Quick Config.", you can rapidly reconfigure all the conference (selecting another frequencies or modifying terminal role).
Start the configuration by selecting a "Quick Config." (Football or Normal).

VAR Football is dedicated to quick configure the product for VAR Football use case.
Standard is dedicated to any other usage.

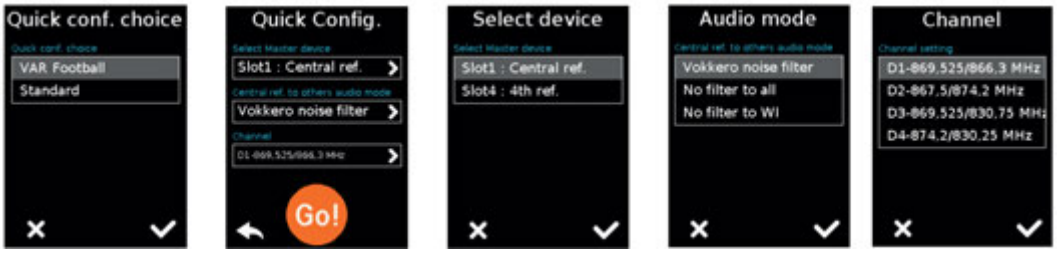
5.1. VAR Football «Quick Config.»

The VAR Football «Quick Config.» the terminals are paired in communication and there is an automatic configuration of terminals which is crafted for games with VAR where a technician can assist referees and has to setup main and backup VAR audio lines as well as backup spare terminals for referees. The VAR Football «Quick Config.» allows:

- naming of the terminals
- possibility to give the MASTER ROLE to the CENTRAL REF or to the 4th Assistant REF
- pairing of two WIRELESS INTERFACE (WI) for main and backup pitch-to-VOR audio lines
- creation of spare identical terminals for all different roles (allowing a technician to swap terminals during half-time if needed)
- creation of Listener terminals

1. Connect your main Wireless Interface (WI) on the USB dock of the configurator and turn on the Wireless Interface.
2. Put at least 4 ELITE terminals on the charger

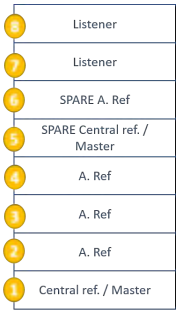
3. Select which slot you want for MASTER (“Select Master device”). Can be either the CENTRAL REF (Master role given to the device in Slot n°1) or an assistant referee such as the 4th referee (Master role given to the device in slot n°4)
4. Select the audio mode you want for Central Referee terminal (“Central referee to others audio mode”). See below §5.3 for more explanation of these audio modes.
5. Choose a frequency.
6. Unplug MAIN WI and connect a second WI if you want to add a backup WI & validate. Unplug USB cable both sides when completed.
7. If the configuration completes successfully, the indication “COMPLETED” displays. Alternatively, the indication “ERROR” displays if a problem is encountered.
8. To return to the Home Screen, use the left arrow.



With Football “Quick Config.”, the terminals are automatically configured this way (by order of slots on the charger):

<u>If you have chosen the Slot 1 (the CENTRAL REF) for MASTER ROLE:</u>

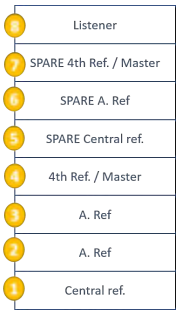
1. CENTRAL REF / MASTER ROLE (purple antenna icon / whistle icon)
2. A.REF (green antenna icon)
3. A.REF (green antenna icon)
4. A.REF (green antenna icon)
5. SPARE MASTER Role / CENTRAL REF (spare terminal with purple antenna icon / whistle icon, to be kept switched- off!)
6. SPARE A.REF (green antenna icon)
7. LISTENER (white antenna icon)
8. LISTENER (white antenna icon)
9. LISTENER (white antenna icon)
10. ...



<u>If you have chosen for instance the Slot 4 (the 4th REFEREE) for MASTER ROLE:</u>

1. CENTRAL REF (green antenna icon / whistle icon)
2. A.REF (green antenna icon)
3. A.REF (green antenna icon)
4. 4th REF / MASTER (purple antenna icon)
5. SPARE CENTRAL REF (Central REF spare with whistle icon, to be kept switched-off!)

6. SPARE REF (green antenna icon)
7. SPARE 4th REF / MASTER (MASTER spare terminal with purple antenna icon, to be kept switched-off!)
8. LISTENER (white antenna icon)
9. LISTENER (white antenna icon)
10. LISTENER (white antenna icon)
11. ...

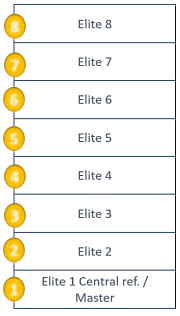


In case you put less than 4 ELITE terminals on the charger, the Football “Quick Config.”won’t be possible.
In that case the Football “Quick Config.” will propose to configure only additional terminals with the same role for all terminals aon the charger : LISTENER or SPARE REF.

5.2. Standard “Quick Config.”

With Standard «Quick Config.» the terminals are all paired in communication and all terminals are configured the same way (all users of the conference with green antenna icon) except the terminal located in slot n°1 which will be CENTRAL REF Role + MASTER Role.

1. Select the audio mode you want for Central Referee terminal (“Central referee to others audio mode”). See below for more explanation of these audio modes
2. Choose a frequency
3. If the configuration completes successfully, the indication “COMPLETED” displays. Alternatively, the indication “ERROR” displays if a problem is encountered.
4. To return to the Home Screen, use the left arrow.



IN ANY CASE AND NO MATTER THE “Quick Config.” CHOSEN:

Always make sure:

- To have only one MASTER ROLE terminal in the conference (only one terminal with purple antenna icon displayed)
- To have only one Central REF in the conference (only one terminal with whistle icon displayed)

5.3. Central ref to others audio mode

During the “Quick config.” you are invited to chose which terminal you want to apply the CENTRAL REF enhanced radio capabilities.

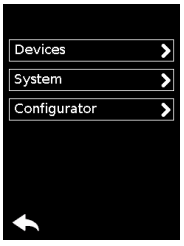
On top of that extra robustness to interferences, you may select a specific audio mode for this CENTRAL REF terminal only. This audio mode will define the way the audio from the CENTRAL REF will be sent to the others terminals / users.

- **VOKKERO filters** : it is the default mode. It enables the noise filtering VOKKERO technology (only the voice is transmitted). The CENTRAL REF terminal audio out will be noise filtered, just as the other terminals.
- **NO-Filter** : it allows free audio out (without noise filtering) to all others users (i.e. to all other terminals, and to the WIRELESS INTERFACE...). This can be chosen to enable other users to hear a raw unfiltered audio from the CENTRAL REF with ambiance sound in it. We won't recommend that settings in crowdy stadiums/arenas.
- **NO-Filter-to-WI** : it allows free audio out (without noise filtering) only to the WIRELESS INTERFACE. This can be chosen to enable VAR referees or TV to hear a raw unfiltered audio from the CENTRAL REF with ambiance sound in it.

6. SETTING MENU

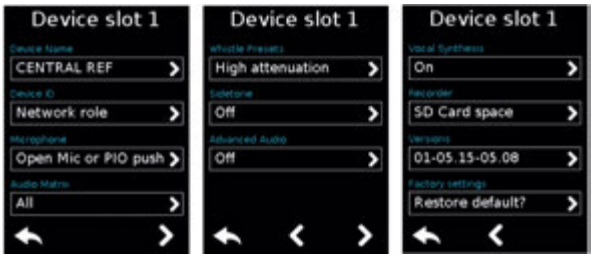
This menu enables a more detailed configuration of the system in order to configure the terminals, the system or the configurator.

- In "Devices", you can access the settings of the terminals which are currently positioned on your charger.
- In "System", you can change the settings of the whole VOKKERO network
- In "Configurator", you can set the configurator parameters.
  The details for each element are given below.



6.1. Devices

The first 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 terminal.

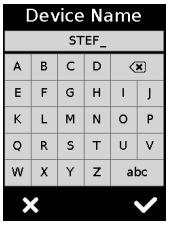


6.1.1. Terminal name

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

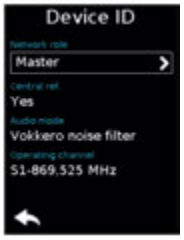
- “123” to switch to the numbers and symbols screen
- “ABC” to switch to the uppercase words screen
- Use the cross to delete the most recently entered character
- To validate, select on the bottom right-hand side.



6.1.2. Device ID

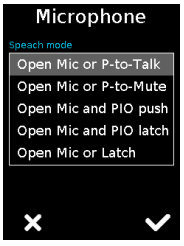
This menu allows a quick check of some parameters of the terminal (that may have been applied during a «Quick Config.».

- Network role: Master, User or Listener (this Network role can be changed there in this menu).
- Central Ref role: Yes or No
- Audio mode: Vokkero noise filter which is the standard default mode or eventually one of the two No-filter modes, see §5.3; the two latest being only possible for only possible with a Central Ref terminal.
- Operating channel frequency



6.1.3. Microphone

- Open mic or Push-to-talk (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will have push-to-talk functioning).
- Open mic or Push to mute (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will have push-to-mute functioning).
- Open mic or PIO push (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will still have open mic functioning but with specific WI audio-out mode if you hold pressing the button).
- Open mic or PIO latch (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will still have open mic functioning but with specific WI audio-out mode if you press the button, and then you need to press again to stop specific WI audio-out mode).
- Open mic or Latch (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will still have open mic functioning but, you'll have to press to close the mic and press again to reopen the mic).



Note that these two PIO modes have to selected if you want to:

- Make Push-to-announce with a WIRELESS INTERFACE authorizing WI audio-out (Public announcement in some sports) or,

- Make private conversations with a WIRELESS INTERFACE avoiding WI audio-out (keep referees discussion away from being broadcasted on TV in some sports).

To make these two modes work, it has to be set in conjunction with the proper WI parameter depending on what specific WI audio-out you want (see User Guide of VOKKERO WI ELITE):

- PIO - Public announcement
- PIO - Audio out muted

Make your selection and validate.

6.1.4. Audio Matrix

For each terminal (even Listener terminals), it is possible to select what terminal you want to listen to. The default setting is for all devices to be selected.

- Select the terminals that should or should not be listened to by the terminal you are currently configuring.

Note: If the listening selection has already been modified, the word “Custom” will appear.
If all the terminals are being listened to, “All” will appear.

- Once the selection has been made, click on the “OK” button in order to validate it, or on “Escape” in order to exit from the sub-menu.
- When the “OK” button has been clicked on, a window will appear confirming that the operation has been duly completed.
- Click on “OK” and then on “Escape” to return to the home screen.

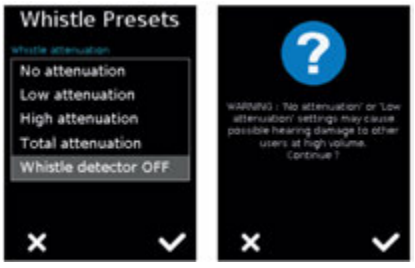
6.1.5. Whistle Presets

The whistle detector allows the terminal to detect that a whistle call has been made and then transmits the audio of this whistle to the other terminals accordingly to your choice.

Note: this is very helpful to have other users hearing the whistle while preserving their hearing health. We strongly recommend to keep the Whistle detector on with attenuation if you have selected another audio mode than VOKKERO filters during the Quick Configuration process for the CENTRAL REF to avoid any damage to other users audition.

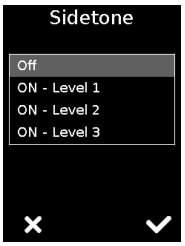
- No attenuation : the whistle is detected and sent to other users at high volume.
- Low attenuation : the whistle is detected and sent to other users at moderate volume.
- High attenuation : this is the default mode. The whistle is detected and sent to other users at low volume.
- Total attenuation : the whistle is detected and is NOT sent to other users (filtered)
- Whistle detector OFF : this is a backup mode in case the whistle detector shows unwanted behavior in some arenas (with other whistles coming from the crowd). In that case, the whistle is not detected and the audio results may depend from the audio mode you have chosen during the Quick Configuration process for the CENTRAL REF.

Make your selection and validate.



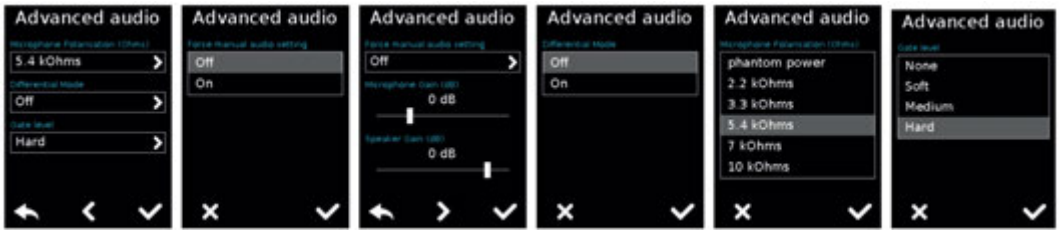
6.1.6. Sidetone

The Sidetone mode enables you to turn on and adjust the audio return level (enabling you to listen to your own voice) in your headset.
The default mode is OFF.



6.1.7. Advanced audio

This mode allows our customers to fine-tune themselves (Manual mode) some audio parameters including microphone and speaker gain, differential mode, gating or electrical polarization. We cannot provide tips as our headsets are engineered to be automatically recognized by the terminal which then applies the best settings so that our customers do not need to enter that Advanced audio mode. If you are willing to try different audio settings or your own headsets, force the terminal into Manual Mode and adjust the parameters. Please note that it may bring the terminal/headset association to bad or erratic functioning. Please consider this as an expert mode and play carefully with it.



6.1.8. PIO beep mode

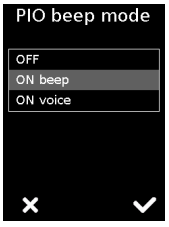
This menu is used to activate or deactivate an alert when the headset button is pressed. This alert, heard through the loudspeaker, gives an indication of whether the microphone is open or closed.

- **OFF**: alert deactivated
- **ON beep**: alert activated with BEEP

(example: when the button is configured in "Open mic or Latch" mode → 1 beep when opening the mic / 2 beeps when closing the mic)

- **ON Voice**: alert activated with voice synthesis

(example: When the button is configured in "Open mic or Latch" mode → voice synthesis "Mic ON" when opening the mic / "Mic OFF" when closing the mic)



6.1.9. Vocal Synthesis

This menu allows disabling or re-enabling the vocal synthesis alerts which can be heard in the user' headset.

6.1.10. SD Card space

This menu gives the remaining time that can be stored with the Recorder on the inserted SD Card.

6.1.11. Radio Sensitivity

The number of operator deployments of 4G/5G mobile telecommunications networks grew considerably especially near or inside the sport arenas.

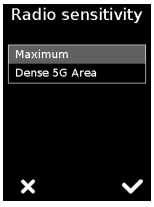
By activating the "Dense 5G area" feature, ELITE PLUS maximizes and secures refereeing communication by reducing the impacts of the 4G/5G network.

Apply it only to terminals or only to the gateway (WI or ESG), selecting the settings for each. If you need this feature, we advise you to apply it to the complete ELITE PLUS system.

Warning: Activating this option may reduce the radio range. However, the range remains sufficient to cover the use of an ELITE PLUS system during a match.

Note 1: By default, this option is configured to Maximum sensitivity.

Note 2: This option is only available on ELITE PLUS terminals and is not available on ELITE terminals. If you are using a system with a mix of ELITE and ELITE PLUS, only this option will be activated on the ELITE PLUS terminals.

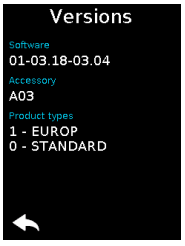


6.1.12. Factory settings

This menu brings back, to the factory settings, a terminal or all terminals connected to the configurator.
After selecting and validating your choice, the configurator lets you know if the return to factory settings has completed successfully. To finalize the operation, select the arrow on the bottom left-hand side to return to the configuration screen of the terminals.

6.1.13. Versions

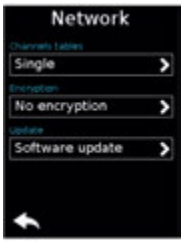
This menu provides the Product types, the accessory table reference and the software release which are embedded into the terminal.
These information are useful to contact our Support.



6.2. System

6.2.1. Channel mode

Use this menu to select a predefined mode of channels.



FHSS mode (i.e., «HOPPING» selected) means that the terminals send their radio frames to other terminals on 25 (or 26) frequencies with Frequency hopping spread spectrum functioning.
With «HOPPING» channel mode, the «Quick config.» provides access to two table channels (Z1H1 or Z1H2).

«SINGLE» channel mode means that system will be configured to operate on single frequency channel mode (DTS mode). That means that only one frequency is used by all the terminals to send radio frames. With «SINGLE» channel mode, the «Quick config.» provides access to S1 to S127. channels.

A full list of available channels and potential associated restrictions of usage is given in this user guide in the section "Usage Restrictions". Inside the stadium, a spectrum referent may be available to assist in frequency allocation.
For the use of ELITE outside US/CAN, please contact customer support: " https://vogoassist.freshdesk.com/en/support/solutions". In the VOKKERO HELPDESK space, log in with your identifiers (or sign up to create your account) to access the support.

6.2.2. 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; any VOKKERO ELITE terminal can join the network.
- Fixed AES 128 key: the system uses one single encryption key when pairing the terminals during the "Quick Config." process; this key can be occasionally changed by the user by selecting "New Key"
- New Key with each configuration: the configurator generates a new AES 128 key with each new successfully performed "Quick Config." process.
- Custom key: allows you to generate a custom encryption key to facilitate the synchronization of all ELITE systems installed in different stadiums. This custom key avoids a general reconfiguration at the beginning of each game.

If you take advantage of "No encryption" or "Fixed AES 128 key" settings to add further terminals after completing previously a "Quick Config." always make sure:

- To have only one MASTER Role terminal in the conference (only one terminal with purple antenna icon)
- To have only one Central REF in the conference (only one terminal with whistle icon)

6.2.3. Software

This menu is used to update the software versions of the terminals. Contact our support or your VOKKERO dealer to obtain the most recent software version.

Update the terminal

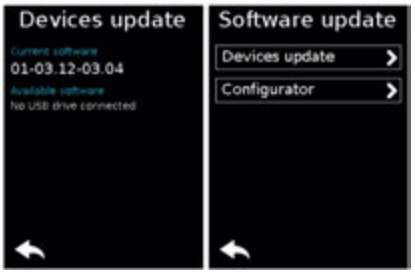
To update terminals you have to use a USB key. The USB key used must be < or = 4Go.
On the USB key:

- 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

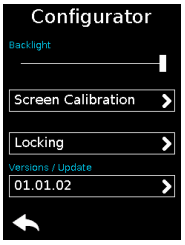
The version currently installed in the terminal appear on the display.
To configure a new software version on the terminals:

- Once the USB key ready, insert it into the dedicated USB port, situated on the left located on the left side of the configurator.
- 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.
- Then, click to launch the installation.
- The update of the terminals is launched
- The update is finished

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



6.3. Configurator



6.3.1. Backlight

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

6.3.2. Screen calibration

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.

6.3.3. Locking

Allows you to block access to the configurator using a PIN code.
In Lock mode, only the «Quick Configuration" menu 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 desactivated (see screen below showing the options available in the «Lock» menu, once the lock has been activated).

6.3.4. Versions / Software

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 configurator
5. Confirm
6. The configurator parameters have been reseted

Update the configurator

To update the configurator you have to use a USB key. 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

The version currently installed in the configurator appear on the display. To configure a new software version on the configurator:

- Once the USB key ready, insert it into the dedicated USB port, situated on the left located on the left side of the configurator.
- Once the USB key connected, the available software version is displayed. (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.
- Then, click to launch the installation.
- The update of the configurator is launched.
- The update is finished.

DOCUMENT HISTORY

Version	Contents
V1.0	Creation

VOKKERO VARSITY II

Product Range	VARSITY II
Country	US
Creation Date	@16 octobre 2024
Language	EN
Product Reference	VO8364VA
Statut	Not published
Type of Document	
Version	1.0

This document applies to the following products:
-
VOK-ELITE PLUS-VARSITY II-US (Ref: VO8364VA)
-
VOK-ELITE-CHARGER (Ref: VO8363AA)

▼ TABLE OF CONTENT

TABLE OF CONTENT
PRÉAMBULE / PREAMBLE / PRÄAMBEL / PREAMBOLO
INFORMATIONS
RECOMMENDATIONS & WARNINGS
REGULATIONS
USAGE RESTRICTIONS
1. SYSTEM INSTALLATION PROCEDURE
2. SYSTEM DESCRIPTION
- 2.1. VOKKERO VARSITY II Terminal
  - 2.1.1. Description of product interface
  - 2.1.2. General features
- 2.2. VOKKERO VARSITY II Charger
  - 2.2.1. Description of product interface
  - 2.2.2. General Technical Specifications
3. QUICK START OF THE CONFERENCE
- 3.1. Setting up Audio Conference
- 3.2. Description of the terminal
- 3.3. Connecting a headset
  - 3.3.1. Plugging a headset
  - 3.3.2. Removing the headset
  - 3.3.3. General instruction for headset use
- 3.4. Adjust Volume
- 3.5. Modification of the role number
- 3.6. Modification of the channel

DOCUMENT HISTORY

▼ PRÉAMBULE / PREAMBLE / PRÄAMBEL / PREAMBOLO

- Ce guide décrit les fonctionnalités du système Vokkero®, ses options et ses accessoires. Il explique comment le configurer pour permettre une communication de type conférence entre plusieurs utilisateurs.

- This guide describes the functionality of the system Vokkero®, options and accessories. It explains how to configure it to allow a conference-type communication between multiple users.
- Diese Anleitung beschreibt die Funktionalität des Systems Vokkero®, Optionen und Zubehör. Es erklärt, wie man es konfigurieren, um eine Konferenz-Art der Kommunikation zwischen mehreren Benutzern zu ermöglichen.
- Esta guía describe la funcionalidad del sistema Vokkero®, opciones y accesorios. En él se explica cómo configurarlo para permitir una comunicación de tipo conferencia entre múltiples usuarios.

- Aucun extrait de ce document ne pourra être reproduit ou transmis (sous format électronique ou papier, ou par photocopie) sans l'accord de Vokkero. Ce document pourra être modifié sans préavis. Toutes les marques citées dans ce guide font l'objet d'un droit de propriété intellectuelle.
- No part of this document may be reproduced or transmitted (in electronic or paper, or photocopying) without the agreement of Vokkero.
  This document may be changed without notice. All trademarks mentioned in this guide are the subject of intellectual property rights Vokkero.
- Kein Teil dieses Dokuments darf ohne Zustimmung von Vokkero reproduziert oder übertragen werden (in elektronischer Form oder in Papierform oder durch Fotokopieren). Dieses Dokument kann ohne vorherige Ankündigung geändert werden. Alle in diesem Handbuch genannten Marken sind Gegenstand der Rechte an geistigem Eigentum von Vokkero.
- Ninguna parte de este documento puede ser reproducida o transmitida (en fotocopias electrónico o en papel, o sin el acuerdo de Vokkero.
  Este documento puede ser modificada sin previo aviso. Todas las marcas comerciales mencionadas en esta guía son el tema de los derechos de propiedad intelectual.

Systeme radiocommunication sans fil professionnel - Vokkero

Spécialisée dans les systèmes de communication pour équipes mobiles pour les professionnels, VOKKERO® est reconnu mondialement dans le domaine sportif (leader mondial dans l'arbitrage professionnel), le Pro Audio (spectacle, audiovisuel, broadcast) et l'industrie ainsi que les services comme la sécurité, le nucléaire, ou

https://www.vokkero.com/fr/

VOGO
895 Rue de la Vieille Poste
Parc Majoria-Pompignane
Immeuble LA LÓNA,
34000 Montpellier, France

VOGO NA (North America)
25 Main Street, 3rd Floor
Tuckahoe, NY 10707

www.vokkerousa.com

▼ INFORMATIONS

DISCLAIMER

This document and the use of any information contained therein, is subject to the acceptance of the VOKKERO terms and conditions. They can be downloaded from www.vogo-group.com
VOKKERO makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice.
VOKKERO reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.
Copyright © 2016, VOKKERO.
VOKKERO is a registered trademark in the EU and other countries.

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.vogo-group.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
• Firmware version (for example V1.0)
• A clear description of your question or the problem
• A short description of the application

▼ RECOMMENDATIONS & WARNINGS

All rights to this manual are the exclusive property of VOGO. All rights reserved. Copying this manual (without written permission from the owner) via printing, copying, recording or by any other means, translating this manual (in full or partially) into any other language, including all programming languages, using any electrical, mechanical, magnetic or optical devices, manually or any by other methods, is prohibited.

VOGO reserves the right to change the technical specifications or functions of its products, or to cease manufacturing any of its products, or to cease technical support for one of its products without notice in writing and urges its customers to make sure that the information they have is valid.

VOGO configuration software and programs are available free of charge in a non-modifiable version. VOGO can make no guarantees, including guarantees concerning suitability and applicability for a certain type of application.
Under no circumstances can the manufacturer, or the distributor of an VOGO program, be held liable for any damage caused by the use of the aforesaid program. Program names, as well as all copyright relating to programs, are the exclusive property of VOGO. Any transfer, granting of licences to a third party, leasing, hire, transport, copying, editing, translation, modification into another programming language or reverse engineering are prohibited without VOGO's prior written authorisation and consent.

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

- **VOK-ELITE PLUS-VARSITY II-US** (Ref: VO8364VA)
-
VOK-ELITE-CHARGER (Ref: VO8363AA)

The recommendations apply to the different references and are identified by the following color code:

- Terminal
- Charger/Configurator
- Terminal + Charger/Configurator

⚠️

Read the instructions in the manual.

⚠️

CHARGER and CONFIGURATOR are intended for INDOOR USE ONLY.

⚠️

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.

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.

Warning for Switzerland : the annex 4.10 of SR 814.013 Standad must be applied for batteries.

⎓

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

RECOMMANDATIONS REGARDING USE

- 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.

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.

▼ REGULATIONS

▼ 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:

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
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 :

Cet émetteur ne doit pas être situé ou fonctionner conjointement avec une autre antenne ou un autre émetteur.

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 :
• Contains FCC ID: 2AU6N-VO8364AA
• Contains IC ID: 25704-VO8364AA

Authorised representative in Canada
ZEAT SPORTS
310-5253 Blvd Décarie - H3W 3C3 MONTREAL - CANADA
Phone : +1-855-750.2012

▼ USAGE RESTRICTIONS

IMPORTANT : Before using the device, please observe the legal provisions in force in your country.

OPERATING FREQUENCIES of VOKKERO ELITE PLUS VARSITY II US

FHSS Mode: 2 Hopping tables are available

	Z1H1	Z2H22
Min	**915,795**	**915,420**
Max	**927,420**	**927,420**
1	927,045	925,17
2	916,545	926,67
3	918,42	919,545

4	922,17	923,67
5	923,295	922,92
6	925,17	915,42
7	921,42	921,42
8	915,795	924,795
9	925,545	916,545
10	918,795	915,795
11	926,67	921,045
12	921,795	919,17
13	916,17	918,045
14	918,045	922,17
15	922,545	916,92
16	925,92	917,67
17	920,295	927,42
18	917,67	916,17
19	920,67	918,795
20	927,420	923,295
21	924,42	924,045
22	923,67	918,42
23	916,92	927,045
24	924,045	921,795
25	926,295	924,42
26	917,295	

DTS mode: Each device proposes 127 SINGLE channels using digital modulation techniques (DTS mode). Available channels are listed below.

N°	DTS channels	N°	DTS channels	N°	DTS channels	N°	DTS channels
S1	902,4	S33	908,8	S65	915,2	S97	921,6
S2	902,6	S34	909	S66	915,4	S98	921,8
S3	902,8	S35	909,2	S67	915,6	S99	922
S4	903	S36	909,4	S68	915,8	S100	922,2
S5	903,2	S37	909,6	S69	916	S101	922,4
S6	903,4	S38	909,8	S70	916,2	S102	922,6
S7	903,6	S39	910	S71	916,4	S103	922,8
S8	903,8	S40	910,2	S72	916,6	S104	923
S9	904	S41	910,4	S73	916,8	S105	923,2
S10	904,2	S42	910,6	S74	917	S106	923,4
S11	904,4	S43	910,8	S75	917,2	S107	923,6
S12	904,6	S44	911	S76	917,4	S108	923,8
S13	904,8	S45	911,2	S77	917,6	S109	924
S14	905	S46	911,4	S78	917,8	S110	924,2
S15	905,2	S47	911,6	S79	918	S111	924,4
S16	905,4	S48	911,8	S80	918,2	S112	924,6
S17	905,6	S49	912	S81	918,4	S113	924,8
S18	905,8	S50	912,2	S82	918,6	S114	925
S19	906	S51	912,4	S83	918,8	S115	925,2
S20	906,2	S52	912,6	S84	919	S116	925,4
S21	906,4	S53	912,8	S85	919,2	S117	925,6
S22	906,6	S54	913	S86	919,4	S118	925,8
S23	906,8	S55	913,2	S87	919,6	S119	926
S24	907	S56	913,4	S88	919,8	S120	926,2
S25	907,2	S57	913,6	S89	920	S121	926,4
S26	907,4	S58	913,8	S90	920,2	S122	926,6

N°	DTS channels	N°	DTS channels	N°	DTS channels	N°	DTS channels
S27	907,6	S59	914	S91	920,4	S123	926,8
S28	907,8	S60	914,2	S92	920,6	S124	927
S29	908	S61	914,4	S93	920,8	S125	927,2
S30	908,2	S62	914,6	S94	921	S126	927,4
S31	908,4	S63	914,8	S95	921,2	S127	927,6
S32	908,6	S64	915	S96	921,4		

Inside the stadium, a spectrum referent may be available to assist in frequency allocation.
For the use of VARSITY II outside US, please contact customer support: " https://vogoassist.freshdesk.com/en/support/login". In the VOKKERO HELPDESK space, log in with your identifiers (or sign up to create your account) to access the support.

The operations described below allow you to rapidly and easily implement your VOKKERO VARSITY II communication system.

All the operations described are valid for all the VOKKERO VARSITY terminals listed below:

-
VOK-ELITE PLUS-VARSITY II-US (Ref: VO8364VA)
-
VOK-ELITE-CHARGER (Ref: VO8363AA)

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

The VOKKERO VARSITY II is a ready-to-use system with the following two main elements:

• **Terminals: VOK-ELITE PLUS-VARSITY II-US : VO8364VA**
• **Optional Charger: VOK-ELITE-CHARGER: VO8363AA**

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 VARSITY II terminals as shown below.

Note: the order and position of the terminals on the charger(s) are not of importance.

2. SYSTEM DESCRIPTION

2.1. VOKKERO VARSITY II Terminal

2.1.1. Description of product interface

2.1.2. General features

General Specifications	Value
Supply voltage	3.7V nominal
Maximum consumption	800mA (emission)
Terminal power supply	Lithium battery
Battery life	More than 8 hours
Charging time	4 hours from 0 to 100% battery life
Operating temperature	20°C / +55°C
Dimensions	57 × 96 × 23 mm
Weight	130g (including battery)

2.2. VOKKERO VARSITY II Charger

2.2.1. Description of product interface

System installation procedure :

- Connect the power supply to the charger
- Connect the power supply to the mains
- Connect the VARSITY terminals as shown below. Place the terminals in the locations intended for this purpose (4 per charger). Insert them vertically so as not to damage the connector.
- When the terminal is detected, charging begins. If the corresponding LED does not come on, check that the terminal has been correctly positioned.
- To remove the terminals from the charger, pull them up.

Note: when the terminals are removed from the charger, they turn off automatically, so they must be turned on again to use them.

Be careful to use the power supply provided by Vokkero when your VARSITY kit is delivered.

2.2.2. General Technical Specifications

Specifications	Value
AC/DC Power Converter (standard)	100 à 240V 12VDC/5A - 50/60Hz
Operating temperature	-5°C / +40°C
Charger's dimensions	180×70×35
Charger's weight	180g
Terminal charging indicators (leds)	
- Red	No terminal or defective terminal
- Orange	Terminal charging
- Green	Terminal charged

3. QUICK START OF THE CONFERENCE

3.1. Setting up Audio Conference

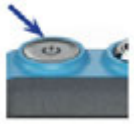
The terminals are delivered pre-configured and ready-to-use.

The first step consists in turning on the terminals and in particular the Master role terminal. This role is used to synchronize the other terminals. You can recognize the Master terminal thanks to its orange icon number 1.

In case no terminal show the orange icon number 1 or if several terminals shows this orange icon number 1 , that means that you have no Master or several Master roles in the network. In that case, the audio conference won't work properly. The «modification of the role number» function makes it possible to remedy this situation by offering the possibility of modifying the role number of a terminal by assigning it the role n°1 (see paragraph 3.5).

3.2. Description of the terminal

Press the On/Off button to turn on the terminal.
Press the On/Off for 3 secondes to turn off the terminal.



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).

The LCD screen will light up indicating a number with an associated color. This number indicates the role of your device in the conference.

- Icone 1 (orange) : Master
- Icone 2 (blue) : User 2
- Icone 3 (green) : User 3
- Icone 4 (red) : User 4

Note 2: as a reminder, there must be only one Master (icon 1) in the conference

3.3. Connecting a headset

3.3.1. Plugging 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 headset and push the connector.

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 and check that you align the red dot with the red mark.

3.3.2. Removing the headset

Pull on the ring of the headset to release the connector switch.
Then remove the headset connector.

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

Do not turn the connector.

3.3.3. General instruction for headset use

In order to ensure a proper audio communication, be sure that your microphone is well positioned in front of your mouth.

Warning: Regarding PHO 521 and PHO 531 references, to prevent damage, please use the plastic clip as follows:

- Do not slide the plastic clip along the cable
- Press the button to remove the plastic clip from the cable and replace it in the desired position

3.4. Adjust Volume

Push + to increase the audio volume.
Push – to decrease audio volume.

5 steps of volume are available. A vocal synthesis (heard in the headset) indicates the step (volume 1 to volume 5).

A vocal synthesis indicates that "Minimum volume" is reached, another vocal synthesis indicates that "Maximum volume" is reached.

To avoid possible hearing damage, do not listen at high volume for a long time.

3.5. Modification of the role number

To function correctly, the audio conference must have a terminal with the role number 1. Your VARSITY kit is deliver ready-to-use and no configuration is needed.

However, if this terminal is missing (eg: power problem or malfunction), the conference is no longer possible. The «modification of the role number» function makes it possible to remedy this situation by offering the possibility of modifying the role number of a terminal by assigning it role n ° 1.

IMPORTANT : The role numbers must be unique for the proper functioning of the conference (only one n ° 1, only one n ° 2, etc ...).

Procedure :

- Push + on the terminal for 5 seconds.
- Your terminal screen will then display your number flashing.
- You can switch the number by pressing + or -
- To confirm the change of terminal role, press the “On / Off” button on the terminal.
- After confirmation, the LCD returns to the main screen displaying the role number in a fixed way

3.6. Modification of the channel

VARSITY II offers 127 differents encryption channels.

Know the actual channel:
To know the frequency in use, press - on the terminal for 2 seconds. A voice synthesis indicates the current channel (channel 1 to 3).

Modification of the channel:

- Push - on the terminal for 5 seconds
- A vocal synthesis announce that your entry in the modification menu «Channel Selection»
- You can switch the channel by pressing + or -
- To confirm the channel modification, press the “On / Off” button on the terminal
- After confirmation, the LCD displays the selected channel number flashing rapidly for 3 seconds before returning to the main screen.

DOCUMENT HISTORY

Version	Contents
V1.0	Creation

VOKKERO ELITE PLUS CONNECT : WI

Product Range	ELITE
Country	US/CAN/AUS/NZ
Creation Date	@16 octobre 2024
Document Reference	/
Language	EN
Product Reference	VO8161CA
Statut	Not published
Type of Document	
Version	1.0

💡 This document applies to the following products:
-
VOK-ELITE PLUS-US/CAN/AUS/NZ-WIRELESS INTERFACE (Ref: VO8161CA)

▼ TABLE OF CONTENT

TABLE OF CONTENT
PRÉAMBULE / PREAMBLE / PRÄAMBEL / PREAMBOLO
INFORMATIONS
RECOMMENDATIONS & WARNINGS
REGULATIONS
USAGE RESTRICTIONS
1. SYSTEM DESCRIPTION
- 1.1. VOKKERO® ELITE PLUS WIRELESS INTERFACE
  - 1.1.1. Device interface description
  - 1.1.2. General features
2. STARTING THE INTERFACE
- 2.1. Description of screen icons (default)
- 2.2. Description of screen icons (default)
- 2.3. How the interface works
  - 2.3.1. CHANNEL/GROUP selection
  - 2.3.2. “CALL” button
  - 2.3.3. SETTING button
3. RADIO CONFIGURATION
- 3.1. Connection
- 3.2. Configuration with the VOKKERO® ELITE PLUS conference system
- 3.3. Antenna requirements
4. AUDIO CONFIGURATION with 4-wire Intercom systems
- 4.1. Clearcom 4-wire interface
- 4.2. GreenGo 4-wire interface
DOCUMENT HISTORY

▼ PRÉAMBULE / PREAMBLE / PRÄAMBEL / PREAMBOLO

- Ce guide décrit les fonctionnalités du système Vokkero®, ses options et ses accessoires. Il explique comment le configurer pour permettre une communication de type conférence entre plusieurs utilisateurs.

- This guide describes the functionality of the system Vokkero®, options and accessories. It explains how to configure it to allow a conference-type communication between multiple users.
- Diese Anleitung beschreibt die Funktionalität des Systems Vokkero®, Optionen und Zubehör. Es erklärt, wie man es konfigurieren, um eine Konferenz-Art der Kommunikation zwischen mehreren Benutzern zu ermöglichen.
- Esta guía describe la funcionalidad del sistema Vokkero®, opciones y accesorios. En él se explica cómo configurarlo para permitir una comunicación de tipo conferencia entre múltiples usuarios.

- Aucun extrait de ce document ne pourra être reproduit ou transmis (sous format électronique ou papier, ou par photocopie) sans l'accord de Vokkero. Ce document pourra être modifié sans préavis. Toutes les marques citées dans ce guide font l'objet d'un droit de propriété intellectuelle.
- No part of this document may be reproduced or transmitted (in electronic or paper, or photocopying) without the agreement of Vokkero.
  This document may be changed without notice. All trademarks mentioned in this guide are the subject of intellectual property rights Vokkero.
- Kein Teil dieses Dokuments darf ohne Zustimmung von Vokkero reproduziert oder übertragen werden (in elektronischer Form oder in Papierform oder durch Fotokopieren). Dieses Dokument kann ohne vorherige Ankündigung geändert werden. Alle in diesem Handbuch genannten Marken sind Gegenstand der Rechte an geistigem Eigentum von Vokkero.
- Ninguna parte de este documento puede ser reproducida o transmitida (en fotocopias electrónico o en papel, o sin el acuerdo de Vokkero.
  Este documento puede ser modificada sin previo aviso. Todas las marcas comerciales mencionadas en esta guía son el tema de los derechos de propiedad intelectual.

Systeme radiocommunication sans fil professionnel - Vokkero

Spécialisée dans les systèmes de communication pour équipes mobiles pour les professionnels, VOKKERO® est reconnu mondialement dans le domaine sportif (leader mondial dans l'arbitrage professionnel), le Pro Audio (spectacle, audiovisuel, broadcast) et l'industrie ainsi que les services comme la sécurité, le nucléaire, ou

https://www.vokkero.com/fr/

VOGO
895 Rue de la Vieille Poste
Parc Majoria-Pompignane
Immeuble LA LÓNA,
34000 Montpellier, France

▼ INFORMATIONS

DISCLAIMER

This document and the use of any information contained therein, is subject to the acceptance of the VOKKERO terms and conditions. They can be downloaded from www.vogo-group.com
VOKKERO makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice.

VOKKERO reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.
Copyright © 2016, VOKKERO.
VOKKERO is a registered trademark in the EU and other countries.

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

▼ RECOMMENDATIONS & WARNINGS

All rights to this manual are the exclusive property of VOGO. All rights reserved. Copying this manual (without written permission from the owner) via printing, copying, recording or by any other means, translating this manual (in full or partially) into any other language, including all programming languages, using any electrical, mechanical, magnetic or optical devices, manually or any by other methods, is prohibited.

VOGO reserves the right to change the technical specifications or functions of its products, or to cease manufacturing any of its products, or to cease technical support for one of its products without notice in writing and urges its customers to make sure that the information they have is valid.

VOGO configuration software and programs are available free of charge in a non-modifiable version. VOGO can make no guarantees, including guarantees concerning suitability and applicability for a certain type of application.
Under no circumstances can the manufacturer, or the distributor of an VOGO program, be held liable for any damage caused by the use of the aforesaid program. Program names, as well as all copyright relating to programs, are the exclusive property of VOGO. Any transfer, granting of licences to a third party, leasing, hire, transport, copying, editing, translation, modification into another programming language or reverse engineering are prohibited without VOGO's prior written authorisation and consent.

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 :

VOK-ELITE PLUS-US/CAN/AUS/NZ-WIRELESS INTERFACE (Ref: VO8161CA)

⚠️

VOKKERO ELITE PLUS WIRELESS INTERFACE is intended for INDOOR USE ONLY.

⚠️

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.

RECOMMANDATIONS REGARDING USE

- 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.

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.

▼ REGULATIONS

▼ 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:

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
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 :

Cet émetteur ne doit pas être situé ou fonctionner conjointement avec une autre antenne ou un autre émetteur.

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 :
• Contains FCC ID: 2AU6N-VO8364AA
• Contains IC ID: 25704-VO8364AA

Authorised representative in Canada
ZEAT SPORTS
310-5253 Blvd Décarie - H3W 3C3 MONTREAL - CANADA
Phone : +1-855-750.2012

▼ AUSTRALIA - NEW ZEALAND : DECLARATION OF CONFORMITY

Terminals : VO8161C

https://prod-files-secure.s3.us-west-2.amazonaws.com/e0e5cfca-d6c9-44fc-a71a-89e3e6bcdb2f/321dfac8-8dc5-4bd9-a008-4dafd4e86a3a/suppliers-declaration-of-conformity_VOK_ELITE_WI_VO8161C.pdf

▼ USAGE RESTRICTIONS

IMPORTANT : Before using the device, please observe the legal provisions in force in your country.

OPERATING FREQUENCIES of VOKKERO ELITE PLUS US/CAN/AUS/NZ WIRELESS INTERFACE

FHSS Mode: 2 Hopping tables are available

	Z1H1	Z2H22
Min	**915,795**	**915,420**
Max	**927,420**	**927,420**
1	927,045	925,17
2	916,545	926,67
3	918,42	919,545
4	922,17	923,67
5	923,295	922,92
6	925,17	915,42
7	921,42	921,42
8	915,795	924,795
9	925,545	916,545
10	918,795	915,795
11	926,67	921,045
12	921,795	919,17
13	916,17	918,045
14	918,045	922,17
15	922,545	916,92
16	925,92	917,67
17	920,295	927,42
18	917,67	916,17
19	920,67	918,795
20	927,420	923,295
21	924,42	924,045
22	923,67	918,42

23	916,92	927,045
24	924,045	921,795
25	926,295	924,42
26	917,295	

DTS mode: Each device proposes 127 SINGLE channels using digital modulation techniques (DTS mode). Available channels are listed below.

N°	DTS channels	N°	DTS channels	N°	DTS channels	N°	DTS channels
S1	902,4	S33	908,8	S65	915,2	S97	921,6
S2	902,6	S34	909	S66	915,4	S98	921,8
S3	902,8	S35	909,2	S67	915,6	S99	922
S4	903	S36	909,4	S68	915,8	S100	922,2
S5	903,2	S37	909,6	S69	916	S101	922,4
S6	903,4	S38	909,8	S70	916,2	S102	922,6
S7	903,6	S39	910	S71	916,4	S103	922,8
S8	903,8	S40	910,2	S72	916,6	S104	923
S9	904	S41	910,4	S73	916,8	S105	923,2
S10	904,2	S42	910,6	S74	917	S106	923,4
S11	904,4	S43	910,8	S75	917,2	S107	923,6
S12	904,6	S44	911	S76	917,4	S108	923,8
S13	904,8	S45	911,2	S77	917,6	S109	924
S14	905	S46	911,4	S78	917,8	S110	924,2
S15	905,2	S47	911,6	S79	918	S111	924,4
S16	905,4	S48	911,8	S80	918,2	S112	924,6
S17	905,6	S49	912	S81	918,4	S113	924,8
S18	905,8	S50	912,2	S82	918,6	S114	925
S19	906	S51	912,4	S83	918,8	S115	925,2
S20	906,2	S52	912,6	S84	919	S116	925,4
S21	906,4	S53	912,8	S85	919,2	S117	925,6
S22	906,6	S54	913	S86	919,4	S118	925,8
S23	906,8	S55	913,2	S87	919,6	S119	926
S24	907	S56	913,4	S88	919,8	S120	926,2
S25	907,2	S57	913,6	S89	920	S121	926,4
S26	907,4	S58	913,8	S90	920,2	S122	926,6
S27	907,6	S59	914	S91	920,4	S123	926,8
S28	907,8	S60	914,2	S92	920,6	S124	927
S29	908	S61	914,4	S93	920,8	S125	927,2
S30	908,2	S62	914,6	S94	921	S126	927,4
S31	908,4	S63	914,8	S95	921,2	S127	927,6
S32	908,6	S64	915	S96	921,4		

Inside the stadium, a spectrum referent may be available to assist in frequency allocation.
For the use of ELITE PLUS outside US/CAN/AUS/NZ, please contact customer support: " https://vogoassist.freshdesk.com/en/support/login". In the VOKKERO HELPDESK space, log in with your identifiers (or sign up to create your account) to access the support.

The instructions given below will make it simple and easy for you to start using your VOKKERO® ELITE PLUS Wireless Interface (WI) communication system.

All of the operations described are shared by the versions of the VOKKERO® ELITE PLUS WI product listed below:

VOK-ELITE PLUS-US/CAN/AUS/NZ-WIRELESS INTERFACE : Ref VO8161CA

Note: the reference number for your device can be found on the label located on the base of the device.

The system is made up of the following elements:

- **Wireless Interface box (WI)**
- **A power supply**
- **A radio antenna**
- **An antenna offset kit (optional)**

The WI interface makes it possible to operate a VOKKERO® ELITE PLUS wireless conference system with a wired communication system. In order to be able to configure the interface, you will need to link the equipment to a VOKKERO® ELITE configurator/charger. When using it for the first time, you will need to configure it in order to ensure that the system is compatible with the VOKKERO® ELITE PLUS conference system.
All of the WI system's operational parameters are controlled by the configurator. This lets you access the settings menu via a touchscreen.

1. SYSTEM DESCRIPTION

1.1. VOKKERO® ELITE PLUS WIRELESS INTERFACE

1.1.1. Device interface description

1.1.2. General features

Parameters	Value
Supply voltage	24Vdc - Powered by an external AC/DC Adpator FRIWO FW8001/24
Maximum consumption	300mA
Operating temperature	0°C / +45°C
Dimensions	230 × 110 × 50 mm
Weight	650g

2. STARTING THE INTERFACE

Before connecting the power supply, please ensure that the switch on the device is set to OFF.

- To switch the device on, set the "On/Off" switch to ON.
- To switch the device off, set the "On/Off" switch to OFF.

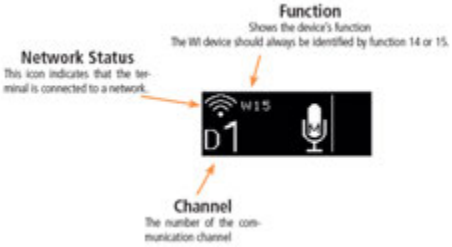
2.1. Description of screen icons (default)

Once you have switched on the device, the LCD screen will light up and the VOKKERO® logo will be displayed.

The “Welcome” screen will then be displayed, followed by the device name. By default, the product’s name will be “ELITE”. This name can be modified on the configurator.

NOTE : all settings, including the volume settings, will be retained when the device is switched off and will remain the same once the device is switched back on.

2.2. Description of screen icons (default)



2.3. How the interface works

2.3.1. CHANNEL/GROUP selection

When the device is switched on, you can change the communication channel (or group) with the 2 “high and low ar-rows” located on the front of the device. Pressing on the “up arrow” button will move it up a position, while pressing on the “down arrow” button will move it down a position.

2.3.2. “CALL” button

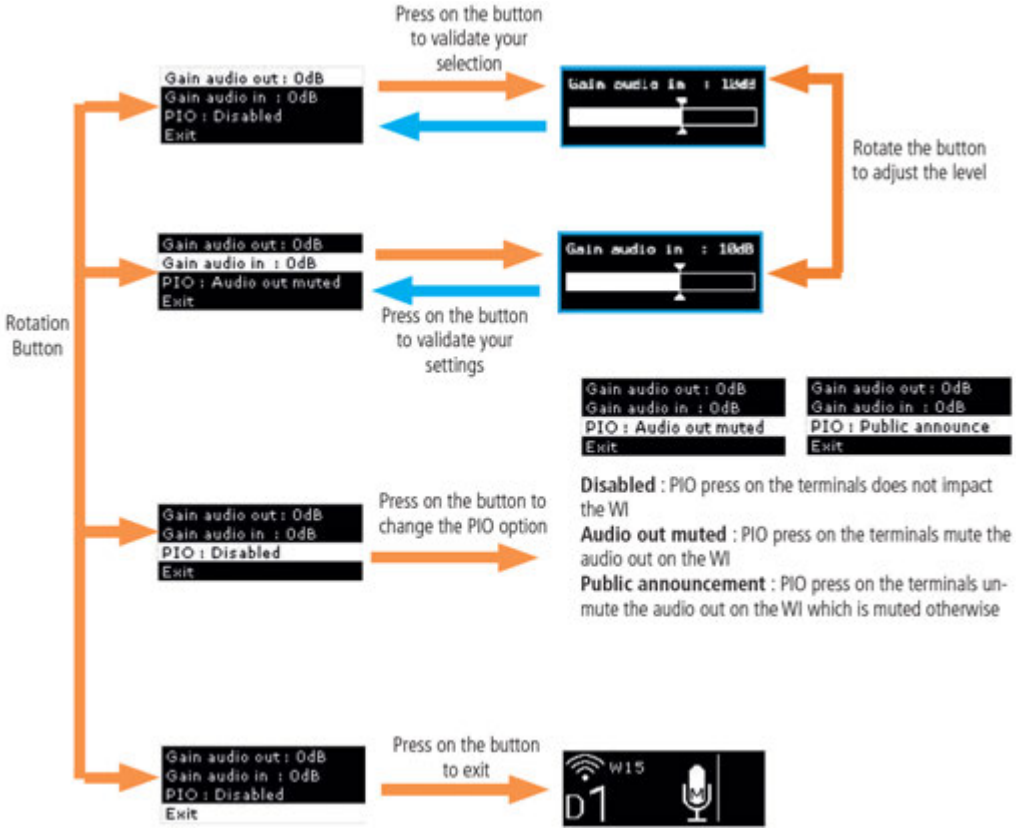
The “CALL” button is inactive with ELITE system.

2.3.3. SETTING button

The settings button is a continuous rotation button with a validation function. A long press on the button will let you switch to audio configuration mode for input/output.
Rotating the button will allow you to navigate between the different available options. Pressing the button will allow you to validate.

The following settings are available:

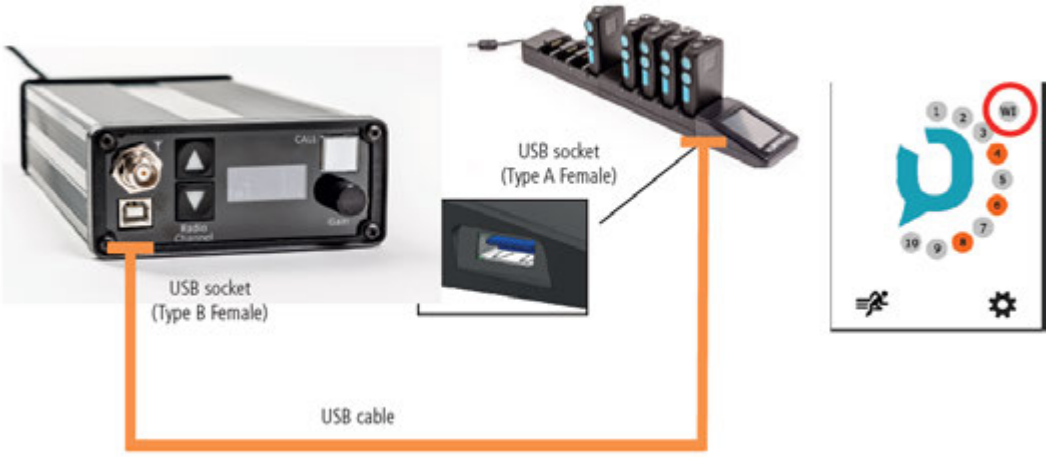
- **Out audio gain**: access the audio out gain settings menu
- **In audio gain**: access the audio in gain settings menu
- **PIO**: Set the way the WI acts on its audio output in case a PIO button is pressed on one or several ELITE terminals



3. RADIO CONFIGURATION

3.1. Connection

The interface can be connected to the configurator using the USB socket on the top of the device. It must be linked to the USB socket of the VOKKERO® ELITE configurator/charger. The USB cable comes supplied with your appliance.
The WI icon will be displayed on the configurator's home screen.



3.2. Configuration with the VOKKERO® ELITE PLUS conference system

The WI interface must be configured at the same time as the other conference system equipment. If the WI interface is connected during the quick config operation, it will then be configurated automatically and will be ready for use.

To find out how to launch the quick config operation on the configurator/charger, please consult the VOKKERO® ELITE conference system user manual: **VOK-ELITE PLUS-US/CAN/AUS/NZ** (Ref: VO8364AA)

At the end of the configuration of the WI interface with the ELITE conference system, it is mandatory to unplug the USB cable both sides (WI interface and ELITE configurator) to enable WI audio functioning !

3.3. Antenna requirements

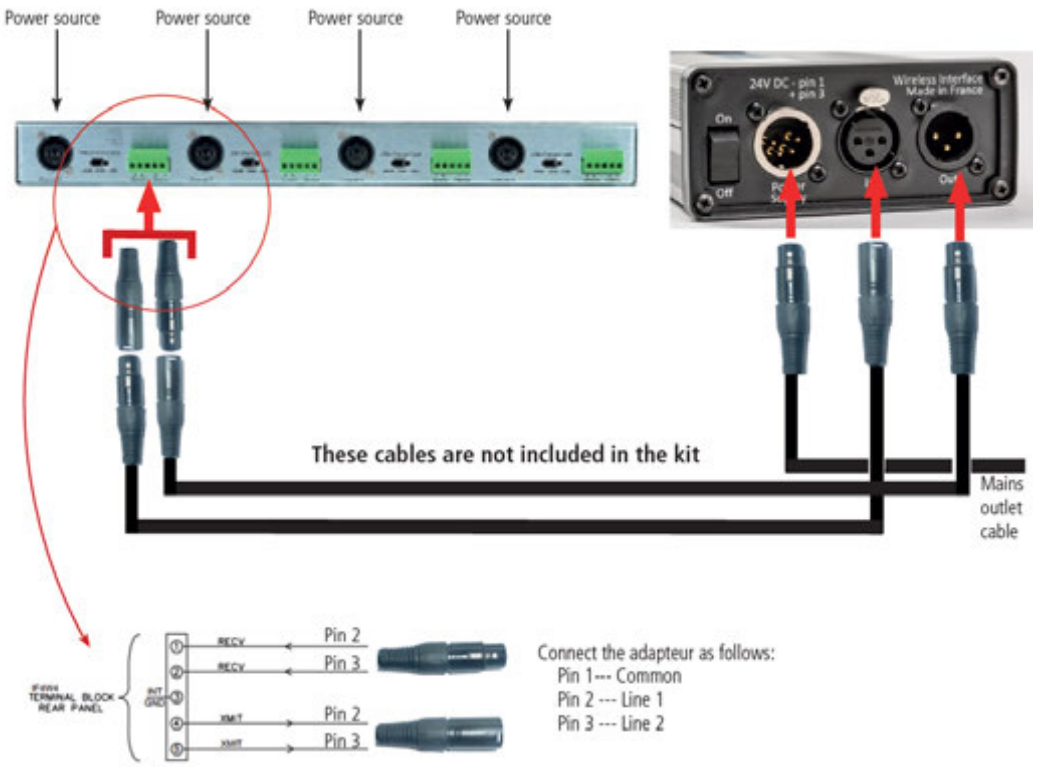
This device must be used with the antenna supplied by VOGO. The reference of the Antenna is TLB-902 928-900LD-TNC.

4. AUDIO CONFIGURATION with 4-wire Intercom systems

4.1. Clearcom 4-wire interface

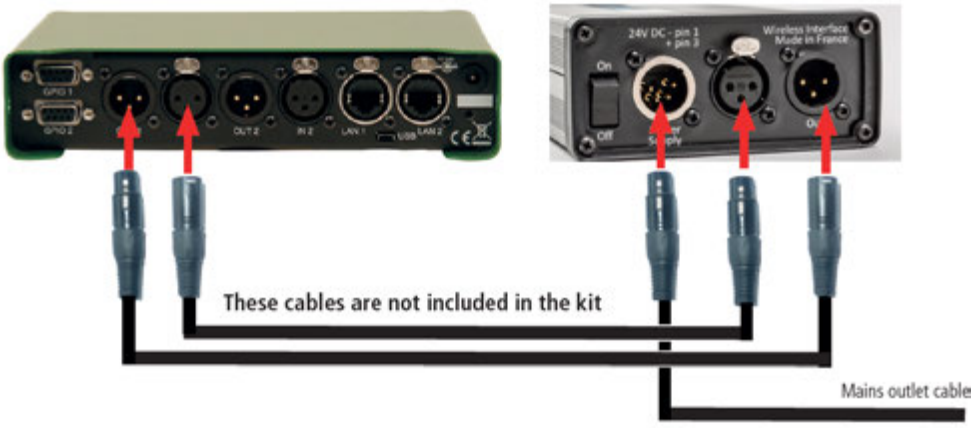
The WI interface is designed to be connected to a 4-wire intercom. Below you will find 2 configuration examples:

- Connect a cable between the green connector of the clearcom interface and two XLR 3 pts male and female.
  In order to identify the cabling, refer to the
  Clearcom IF4W4 user guide.
- Connect an XLR 3 pts cable (male/female) between the “OUT1” connector of the 4-wire interface system and the “IN” connector of the Vokkero ELITE wireless interface.
- Connect an XLR 3 pts cable (male/female) between the “IN1” connector of the 4-wire interface system and the “OUT” connector of the Vokkero ELITE wireless interface.
- Connect the Vokkero ELITE wireless Interface power cable to another power supply.



4.2. GreenGo 4-wire interface

- Connect an XLR 3 pts cable (male/female) between the “OUT1” connector of the 4-wire interface system and the “IN” connector of the Vokkero ELITE wireless interface.
- Connect an XLR 3 pts cable (male/female) between the “IN1” connector of the 4-wire interface system and the “OUT” connector of the Vokkero ELITE wireless interface.
- Connect the Vokkero ELITE wireless Interface power cable to another power supply.



Adopted settings for the WI interface:
Out Audio Gain: 0dB
In Audio Gain: 12dB

Adopted settings for the GreenGo interface:
4-wire interface gain: 6db
Threshold: -45dB

DOCUMENT HISTORY

Version	Contents
V1.0	Creation

VOKKERO ELITE PLUS CONNECT : ELITE SMART GATEWAY

Product Range	ELITE
Country	US/CAN/AUS/NZ
Creation Date	@16 octobre 2024
Document Reference	/
Language	EN
Product Reference	VO8346BA
Statut	Not published
Type of Document	
Version	1.0

💡 This document applies to the following products:

VOK-ELITE PLUS-US/CAN/AUS/NZ-SMART GATEWAY-4M (Ref: VO8346BA)

▼ TABLE OF CONTENT

TABLE OF CONTENT
PRÉAMBULE / PREAMBLE / PRÄAMBEL / PREAMBOLO
INFORMATIONS
RECOMMENDATIONS & WARNINGS
REGULATIONS
USAGE RESTRICTIONS
1. GENERAL FEATURES
2. DESCRIPTION OF VOKKERO ELITE SMART GATEWAY
- 2.1. Composition of a VOKKERO ELITE SMART GATEWAY
- 2.2. Details of the Vokkero ELITE SMART GATEWAY
  - 2.2.1. Product views
  - 2.2.2. Product specifications
  - 2.2.3 Description of the cards
3. INSTALLATION OF THE VOKKERO ELITE SMART GATEWAY
4. CONFIGURATION OF THE VOKKERO ELITE SMART GATEWAY
- 4.1. Step-by-step procedure
- 4.2. Understanding Leds
5. INTERFACING THE AUDIO INS AND OUTS OF THE VOKKERO ELITE SMART GATEWAY
- 5.1. Analog audio
- 5.2. Digital audio
6. ACCESS TO THE MONITORING DASHBOARD THROUGH THE VOKKERO ELITE SMART GATEWAY
- 6.1. Local access
  - 6.1.1. Connexion to the Wi-Fi
  - 6.1.2. Access to the Monitoring dashboard with a mobile tablet
- 6.2. Remote access
  - 6.2.1. Connexion to the network
  - 6.2.2. Access to the Monitoring dashboard with a remote computer
  - 6.2.3. Understanding leds
7. GAME-TIME USE OF THE MONITORING DASHBOARD
- 7.1. Principles

7.2. Health status
7.2.1. The warnings & alerts
7.2.2. Get tips and advices
7.3. Table frequency menu
7.4. Audio matrix menu
7.5. Devices cards
7.6. The PLUS menu
7.6.1. Generating a match report
7.6.2. Adding manual notes and game timestamps
7.6.3. Chatting with other Monitoring dashboard users
7.7. The Backup headset
7.8. The system Settings zone
7.8.1. Versions
7.8.2. **Network configuration**
7.8.3. Firmware update
7.8.4. Licence settings
DOCUMENT HISTORY

▼ PRÉAMBULE / PREAMBLE / PRÄAMBEL / PREAMBOLO

- Ce guide décrit les fonctionnalités du système Vokkero®, ses options et ses accessoires. Il explique comment le configurer pour permettre une communication de type conférence entre plusieurs utilisateurs.
- This guide describes the functionality of the system Vokkero®, options and accessories. It explains how to configure it to allow a conference-type communication between multiple users.
- Diese Anleitung beschreibt die Funktionalität des Systems Vokkero®, Optionen und Zubehör. Es erklärt, wie man es konfigurieren, um eine Konferenz-Art der Kommunikation zwischen mehreren Benutzern zu ermöglichen.
- Esta guía describe la funcionalidad del sistema Vokkero®, opciones y accesorios. En él se explica cómo configurarlo para permitir una comunicación de tipo conferencia entre múltiples usuarios.

- Aucun extrait de ce document ne pourra être reproduit ou transmis (sous format électronique ou papier, ou par photocopie) sans l'accord de Vokkero. Ce document pourra être modifié sans préavis. Toutes les marques citées dans ce guide font l'objet d'un droit de propriété intellectuelle.
- No part of this document may be reproduced or transmitted (in electronic or paper, or photocopying) without the agreement of Vokkero.
  This document may be changed without notice. All trademarks mentioned in this guide are the subject of intellectual property rights Vokkero.
- Kein Teil dieses Dokuments darf ohne Zustimmung von Vokkero reproduziert oder übertragen werden (in elektronischer Form oder in Papierform oder durch Fotokopieren). Dieses Dokument kann ohne vorherige Ankündigung geändert werden. Alle in diesem Handbuch genannten Marken sind Gegenstand der Rechte an geistigem Eigentum von Vokkero.
- Ninguna parte de este documento puede ser reproducida o transmitida (en fotocopias electrónico o en papel, o sin el acuerdo de Vokkero.
  Este documento puede ser modificada sin previo aviso. Todas las marcas comerciales mencionadas en esta guía son el tema de los derechos de propiedad intelectual.

Systeme radiocommunication sans fil professionnel - Vokkero
Spécialisée dans les systèmes de communication pour équipes mobiles pour les professionnels, VOKKERO® est reconnu mondialement dans le domaine sportif (leader mondial dans l'arbitrage professionnel), le Pro Audio (spectacle, audiovisuel, broadcast) et l'industrie ainsi que les services comme la sécurité, le nucléaire, ou
https://www.vokkero.com/fr/

VOGO
895 Rue de la Vieille Poste
Parc Majoria-Pompignane
Immeuble LA LÓNA,
34000 Montpellier, France

▼ INFORMATIONS

DISCLAIMER

This document and the use of any information contained therein, is subject to the acceptance of the VOKKERO terms and conditions. They can be downloaded from www.vogo-group.com
VOKKERO makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice.
VOKKERO reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.
Copyright © 2016, VOKKERO.
VOKKERO is a registered trademark in the EU and other countries.

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.vogo-group.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
• Firmware version (for example V1.0)
• A clear description of your question or the problem
• A short description of the application

▼ RECOMMENDATIONS & WARNINGS

All rights to this manual are the exclusive property of VOGO. All rights reserved. Copying this manual (without written permission from the owner) via printing, copying, recording or by any other means, translating this manual (in full or partially) into any other language, including all programming languages, using any electrical, mechanical, magnetic or optical devices, manually or any by other methods, is prohibited.

VOGO reserves the right to change the technical specifications or functions of its products, or to cease manufacturing any of its products, or to cease technical support for one of its products without notice in writing and urges its customers to make sure that the information they have is valid.

VOGO configuration software and programs are available free of charge in a non-modifiable version. VOGO can make no guarantees, including guarantees concerning suitability and applicability for a certain type of application.
Under no circumstances can the manufacturer, or the distributor of an VOGO program, be held liable for any damage caused by the use of the aforesaid program. Program names, as well as all copyright relating to programs, are the exclusive property of VOGO. Any transfer, granting of licences to a third party, leasing, hire, transport, copying, editing, translation, modification into another programming language or reverse engineering are prohibited without VOGO's prior written authorisation and consent.

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 :

VOK-ELITE PLUS-US/CAN/AUS/NZ-SMART GATEWAY-4M (Ref: VO8346BA)

VOKKERO ELITE SMART GATEWAY is intended for INDOOR USE ONLY.

Maximum working temperature of 0 °C to +40 °C (operating)

Each connection must be Safety Extra Low Voltage kind (SELV).

Do not apply excessive pressure on connectors or any other part of the board. Do not touch the metallic sharp parts (pins) of the product.

This product is electrostatic sensitive ; make sure you check this before touching or using it.

When connecting this product to accessories and/or another product, use only high quality shielded cables. Cable/s supplied with this product MUST be used.

No disposal by fire or crushing. Risk of explosion due to the presence of an internal battery.

Do not open the product as there is a risk of electrical shock. Voltage Current: 240Vac 2.3A.

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.

Do not open the product as there is a risk of electrical shock. Voltage Current: 240Vac 2.3A.

This symbol on the device or its packaging means the use of a AC voltage.

The product must be powered through a switching mechanism so that the power can be cut. The electrical installation must be equipped with a 20A circuit breaker and a differential. It must be easily accessible. Any electrical connection of the product must be equipped with a device to protect against voltage spikes and short circuits.

For your own safety, you must ensure that the equipment is switched off before carrying out any work on it. prevent electric shock, all power sources shall be disconnected before handling. The disconnect devices of the Vokkero Elite Smart Gateway unit are the appliance inlet of the auxiliary power supply (option) and the appliance inlet on the rear side of the unit. These must be easily reachable.

For electrical safety reasons, the product must be earthed. Earthing must be done done via the power cord connected to the equipment's power input. Reliable earthing of rack- mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Always use a power cable with a plug according to the current standards in the country of use

RECOMMANDATIONS REGARDING USE

- 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.

This product is designed to be rack-mounted. Be sure to observe following installation rules of this kind of equipment:

- Do not block the vents. This device has ventilation holes on the both side to prevent the internal temperature from becoming too high. Inadequate ventilation can result in overheating, possibly causing damage to the device(s), or even fire.
- Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environmentmay be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature specified by the manufacturer.
- Reduced Air Flow - Installation of the equipmentin a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised. In some cases, to be sure to ensure sufficient airflow, leave the rear and the front of the rack open, leave sufficient space (>5cm) on each side of the rack, and leave space above rack (>1cm). Or it can be better to have appropriate fan kit in the multi-unit rack.
- Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- 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.

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.

▼ REGULATIONS

▼ 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:

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
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 :

Cet émetteur ne doit pas être situé ou fonctionner conjointement avec une autre antenne ou un autre émetteur.

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 :
• Contains FCC ID: 2AU6N-VO8364AA
• Contains IC ID: 25704-VO8364AA

• Contains FCC ID: TFB-1004
• Contains IC ID: 5969A-1004

Authorised representative in Canada
ZEAT SPORTS
310-5253 Blvd Décarie - H3W 3C3 MONTREAL - CANADA
Phone : +1-855-750.2012

▼ USAGE RESTRICTIONS

IMPORTANT : Before using the device, please observe the legal provisions in force in your country.

OPERATING FREQUENCIES of VOKKERO ELITE PLUS US/CAN/AUS/NZ

FHSS Mode: 2 Hopping tables are available

	Z1H1	Z2H22
Min	**915,795**	**915,420**
Max	**927,420**	**927,420**
1	927,045	925,17
2	916,545	926,67

3	918,42	919,545
4	922,17	923,67
5	923,295	922,92
6	925,17	915,42
7	921,42	921,42
8	915,795	924,795
9	925,545	916,545
10	918,795	915,795
11	926,67	921,045
12	921,795	919,17
13	916,17	918,045
14	918,045	922,17
15	922,545	916,92
16	925,92	917,67
17	920,295	927,42
18	917,67	916,17
19	920,67	918,795
20	927,420	923,295
21	924,42	924,045
22	923,67	918,42
23	916,92	927,045
24	924,045	921,795
25	926,295	924,42
26	917,295	

DTS mode: Each device proposes 127 SINGLE channels using digital modulation techniques (DTS mode). Available channels are listed below.

N°	DTS channels	N°	DTS channels	N°	DTS channels	N°	DTS channels
S1	902,4	S33	908,8	S65	915,2	S97	921,6
S2	902,6	S34	909	S66	915,4	S98	921,8
S3	902,8	S35	909,2	S67	915,6	S99	922
S4	903	S36	909,4	S68	915,8	S100	922,2
S5	903,2	S37	909,6	S69	916	S101	922,4
S6	903,4	S38	909,8	S70	916,2	S102	922,6
S7	903,6	S39	910	S71	916,4	S103	922,8
S8	903,8	S40	910,2	S72	916,6	S104	923
S9	904	S41	910,4	S73	916,8	S105	923,2
S10	904,2	S42	910,6	S74	917	S106	923,4
S11	904,4	S43	910,8	S75	917,2	S107	923,6
S12	904,6	S44	911	S76	917,4	S108	923,8
S13	904,8	S45	911,2	S77	917,6	S109	924
S14	905	S46	911,4	S78	917,8	S110	924,2
S15	905,2	S47	911,6	S79	918	S111	924,4
S16	905,4	S48	911,8	S80	918,2	S112	924,6
S17	905,6	S49	912	S81	918,4	S113	924,8
S18	905,8	S50	912,2	S82	918,6	S114	925
S19	906	S51	912,4	S83	918,8	S115	925,2
S20	906,2	S52	912,6	S84	919	S116	925,4
S21	906,4	S53	912,8	S85	919,2	S117	925,6
S22	906,6	S54	913	S86	919,4	S118	925,8
S23	906,8	S55	913,2	S87	919,6	S119	926
S24	907	S56	913,4	S88	919,8	S120	926,2
S25	907,2	S57	913,6	S89	920	S121	926,4

N°	DTS channels	N°	DTS channels	N°	DTS channels	N°	DTS channels
S26	907,4	S58	913,8	S90	920,2	S122	926,6
S27	907,6	S59	914	S91	920,4	S123	926,8
S28	907,8	S60	914,2	S92	920,6	S124	927
S29	908	S61	914,4	S93	920,8	S125	927,2
S30	908,2	S62	914,6	S94	921	S126	927,4
S31	908,4	S63	914,8	S95	921,2	S127	927,6
S32	908,6	S64	915	S96	921,4		

Inside the stadium, a spectrum referent may be available to assist in frequency allocation.
For the use of ELITE PLUS outside US/CAN/AUS/NZ, please contact customer support: " https://vogoassist.freshdesk.com/en/support/login". In the VOKKERO HELPDESK space, log in with your identifiers (or sign up to create your account) to access the support.

1. GENERAL FEATURES

This ELITE SMART GATEWAY allows you to connect the VOKKERO ELITE system's audio conference to a wired intercom for VAR through analog or digital Dante audio protocol as well as monitoring your ELITE system locally or distantly through a private network.

As our previous Wireless Interface, this ELITE SMART GATEWAY offers an integrated built-in radio terminal. An optional Remote antenna is available for ensuring safe positioning of the ELITE SMART GATEWAY.

This ELITE SMART GATEWAY is merely a pitchside gateway reunited into a 2U box with audio and monitoring together. Engineered as a Stagebox Proaudio equipment for smooth integration in stadiums, it has:

- Ability to interface audio with different protocols/standards
- Ability to act remotely to maintain the best audio between VAR referees and pitch referees

The following paraphs will help you get familiar with the main features of this product that are described further in this document:

Audio features

- HD BROADCAST audio quality through analog or Dante digital audio protocol
- Bridge to other audio networks with full control over Dante network
- Multiple physical interfaces for audio: 4 wires XLR, RJ45 ethernet, monomode optical fiber
- Different VOKKERO audio mixes available : All terminals, only Central referee, All but Central referee...
- Possibility to connect a backup RRA headset for the Central referee just in case!

Built-in web-based System Monitoring (Monitoring Dashboard)

- Access to local monitoring through Wi-Fi, ethernet or optical fiber
- Close monitoring at the side of the pitch with a tablet or a laptop through Wi-Fi or ethernet
- Distant monitoring in the OB-Van in the Mediazone of the stadium through optical fiber
- Long Distance monitoring in the national Replay center through VAR optical fiber network
- Well-crafted and easy-to-use monitoring dashboard for monitoring live sport games with VAR, , set-up of audio gains,...

Monitoring Dashboard indicators

- Live Health status alerts and pop-ups for monitoring health of your ELITE system during the game and getting tips and advices to react
- Increased resilience to radio interferences with possibility to swap frequency
- Visualization of reception quality between terminals
- Ability to act and set-up audio gains

- Possibility to configure audio matrix of the ELITE system remotely
- Possibility to configure ELITE terminal roles remotely to correct any configuration mistake
- Possibility to configure audio gains (mic and speaker) for all ELITE terminals remotely to ensure the best audio clarity
- Possibility to adjust whistle emission remotely
- Visualization of battery life of every ELITE terminals

Possibility to extract VOKKERO event report of the whole game

- Built-in timestamps for labelling events and possible issues
- Manual Log report for adding user notes to the event report of the game
- Integrated live chat for simultaneous users

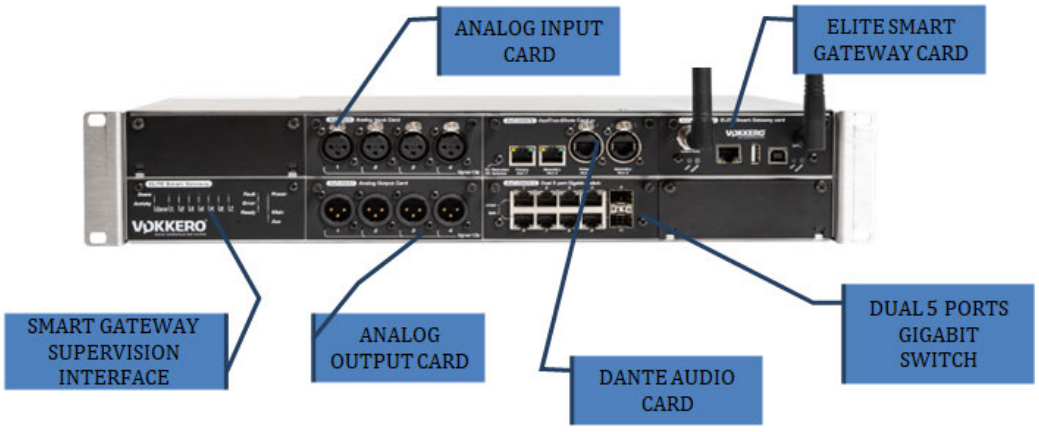
2. DESCRIPTION OF VOKKERO ELITE SMART GATEWAY

2.1. Composition of a VOKKERO ELITE SMART GATEWAY

Qty	Description
1	Vokkero ELITE SMART GATEWAY
1	Vokkero radio antenna
1	Wi-Fi antenna
2	Power supply cable
2	RJ45 jumpers cables

2.2. Details of the Vokkero ELITE SMART GATEWAY

2.2.1. Product views



2.2.2. Product specifications

Size:	483 × 253× 88 mm
Integration:	2U - 19 inches
Main power supply:	100-240 VAC - 50-60Hz - Maximum 50 W
Temperature / Humidity (non-condensing) non-operating:	-5 ° C to +70 ° C / Max 95%
Temperature / Humidity (non-condensing) operating:	0 ° C to +40 ° C / 5% to 90%

2.2.3 Description of the cards

- **Analog Input Card**
  4 balanced 4-wire analog audio inputs
  4 professional XLR male connectors

- **Analog Output Card**
  4 balanced 4-wire analog audio outputs
  Pre-configured audio mixes for VAR applications
  4 professional XLR male connectors
  Dynamic> 115 dB (A-weighted)
  THD + N <-100 dB

- **ELITE SMART GATEWAY Card**
  RJ45 connector for access to Monitoring data
  USB-A and USB-B connectors for wired pairing and software updates
  Wi-Fi antenna (for Monitoring control via tablet) and VOKKERO radio antenna
  Main gateway identification led or BACKUP gateway.
  Network role identification led
  Remote monitoring confirmation led from a remote remote center (VOR)

- **Dual 5 port Gigabit Switch**
  Two linkable 5 ports full speed gigabit Ethernet switches
  8 x RJ45 Gigabit connectors
  2 x SFP cages for two additional compact hot-pluggable SFP (mini-GBIC) transceivers available in many formats:
  - Single mode or Multimode Fiber Gigabit SFP transceiver
  - Single Fiber Bi-Directional Gigabit SFP Transceiver
  - Copper / Ethernet Cabling Gigabit SFP transceiver

- **Dante Card**
  Connectors: EtherCon RJ45-XLR and 2 x RJ45 connectors
  Dante operating modes: Integrated redundant Gigabit switch with primary and secondary ports, replicated to ports 3 and 4
  Audio outputs: Up to 64 channels
  Audio inputs: Up to 64 channels
  Sampling: 24 bits
  Sampling rate: 44.1 kHz, 48 kHz, 88.2 kHz and 96 kHz
  Synchronization: automatic from Dante network

- **Antenna offset card**

  1 remote connector and a Wi-Fi antenna connector
  1 remote connector and a VOKKERO radio antenna connector
  Designed to facilitate the radio performance of two ELITE SMART GATEWAY (MAIN & BACKUP) arranged in a field edge rack.

3. INSTALLATION OF THE VOKKERO ELITE SMART GATEWAY

Connect the gateway to the mains with the appropriate cables by using 1 or 2 of the dedicated inputs on the back of the product. The Aux input offers a redundancy.

Once connected to the main, the product will switch on automatically.
After a few seconds the Power led will light up fixed green and the corresponding led for Main or Aux will light up fixed blue.

Connect both antennas to the corresponding antenna connector.

Bind the Ethernet RJ45 connector of the AxC-Vokkero Card to your network through an Ethernet cable.

4. CONFIGURATION OF THE VOKKERO ELITE SMART GATEWAY

4.1. Step-by-step procedure

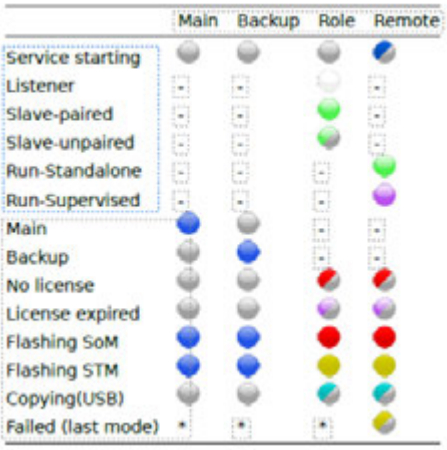
- Connect the USB Cable between the Smart Gateway and the USB slot of the Elite configurator dock.

  - Place all the Elite terminals on the configurator dock.
  - As soon as the Smart Gateway is connected to the Elite configurator dock, you can go to “SYSTEM” menu into the Configurator, then “Channel modes” and then “AUTO”
  - And then you are invited to launch a “Quick Config.”. Please refer to the Vokkero Elite User Guide for more details about the “Quick Config.”

Note that with a Smart gateway connected, the configurator dock will ask you if you want to add a Pitch operator (to be linked to the VOR, on a separate audio channel from the referees/VAR audio conference). If you choose YES, the ELITE placed in slot n°8 will be configured for the Pitch operator (blue antenna icon).

- After a quick configuration, this is mandatory to remove IEC power cable of the ESG and put it back again (power reboot) to start the VOKKERO conference with the ESG paired/synchronized with the MASTER role (which will be one of the ELITE terminals).

4.2. Understanding Leds



5. INTERFACING THE AUDIO INS AND OUTS OF THE VOKKERO ELITE SMART GATEWAY

5.1. Analog audio

The ELITE SMART GATEWAY provides 4 analog inputs through its XLR 4-wire Analog Input Card.
The ELITE SMART GATEWAY provides 4 analog outputs through its XLR 4-wire Analog Output Card.
These inputs and outputs are associated with the audio feed routing below.

- From VAR/AVAR referees (VOR) ⇒ XLR-Input 1 ⇒ To all ELITE terminals
- From VAR/AVAR referees (VOR) ⇒ XLR-Input 2 ⇒ To all ELITE terminals (spare backup
- From VOR-tech (VOR) ⇒ XLR-Input 3 ⇒ To pitch-tech ELITE terminal
- Central Ref RRA headset backup microphone (not provided) ⇒ XLR-Input 4 ⇒ To output 1+ to all ELITE terminals

- From all ELITE terminals ⇒ XLR-Output 1 ⇒ VAR/AVAR referees (VOR)
- From Central ref ELITE terminal ⇒ XLR-Output 2 ⇒ (can be sent to TV broadcast)
- From pitch-tech terminal ⇒ XLR-Output 3 ⇒ VOR-tech (VOR)
- From Input 1 ⇒ XLR-Output 4 ⇒ Central Ref RRA backup headset (not provided)

And thus the following use cases:

- The Pitch-Tech hears the Referees/VAR conference, so that he can react to events and selfmoderate (i.e. all terminals listens to Input 1). VOR-tech also hears the Referees but not the VAR.
- The terminal configuration (audio matrix for the radio conference) is so that Referees are not impacted by the Tech-conference i.e. only Pitch-tech terminal listens to Input 3 + Pitchtech is heard only by ESG (and routed to Output 3)
- The “VAR to All” conversation is prioritized in terms of radio, meaning that the “VOR-tech to Pitch-tech” is replaced when VAR speaks i.e. Input 1 has radio priority over Input 3 if there is a radio routing choice to make to terminals.

In a nutshell :

- XLR input n°1 is the usual input to talk to all VOKKERO conference (all ELITE devices).
- XLR output n°2 is a backup of XLR input n°1.
- XLR output n°3 is the input to talk only to the Pitch operator ELITE device.
- XLR input n°4 is dedicated to a backup headset (not provided but available from VOKKERO) which has to be left in the Referee Review Area (RRA). The activation of this headset has to be done from the Monitoring dashboard.
- XLR output n°1 is the usual mix of the VOKKERO conference (all ELITE devices being heard there).
- XLR output n°2 is the right choice for usage where the broadcast of the Central Referee only is required. This output can be given to broadcaster/TV while XLR output n°1 can be given to VAR/VOR (which requires the listening of the whole audio conference).
- XLR output n°3 is where you hear what is coming from Pitch operator.
- XLR output n°4 is dedicated to a backup headset (not provided but available from VOKKERO) which has to be left in the Referee Review Area (RRA). The activation of this headset has to be done from the Monitoring dashboard.

5.2. Digital audio

The ELITE SMART GATEWAY provides Dante audio interfacing capability through its Dante Card. By default the ELITE SMART GATEWAY provides the same Dante mix configuration than the one described for the Analog audio (XLR).

6. ACCESS TO THE MONITORING DASHBOARD THROUGH THE VOKKERO ELITE SMART GATEWAY

6.1. Local access

6.1.1. Connexion to the Wi-Fi

Open the Wi-Fi menu on your tablet and search for Wi-Fi Network name (SSID) :

VokkeroESG-[serialnumber]_Wifi

Refer to the label on the back of the ELITE SMART GATEWAY for the serial number.

To connect, enter the Wi-Fi Security key (password):

VOKKEROWIFI

Important note: you may change the Wi-Fi Security key to avoid unwanted connections but take care to memorize somewhere you new Wi-Fi Security key.

6.1.2. Access to the Monitoring dashboard with a mobile tablet

Once the Wi-Fi connexion active between the ELITE SMART GATEWAY, open a web browser on your tablet and enter the address: http://VokkeroESG-[serialnumber].local/

Refer to the label on the Smart Gateway for the serial number.

Important note:
The WEB Application may take a few seconds to start to get started. You must wait until the Remote Led stops blinking.

If you try to access the WEB Application while the starting process has is not finished, the error page below will appear. Wait a few minutes and refresh the page.

There two possible roles when you enter the Monitoring Dashboard

- VIEWER (can only view the Monitoring Dashboard but cannot act on parameters of the system nor the devices)
- MANAGER (can act on parameters of the system and the devices)

By default the password to access MANAGER Role is VOKKEROADMIN.
User can set a different password to access MANAGER Role in Preferences zone into the Monitoring Dashboard.*

6.2. Remote access

6.2.1. Connexion to the network

Connect the ESG to a network or directly to a computer, through RJ45 or Fiber, using:

- Ethernet RJ45 connector of the AxC-Vokkero Card
- Or Ethernet RJ45 connector of the Dual 5 port Gigabit Switch Card (needs to bind the Dual 5 port Gigabit Switch Card to the AxC-Vokkero Card using a small RJ45 jumper)
- Or Fiber connector of the Dual 5 port Gigabit Switch Card (needs to bind the Dual 5 port Gigabit Switch Card to the AxC-Vokkero Card using a small RJ45 jumper)

6.2.2. Access to the Monitoring dashboard with a remote computer

Refer to the label on the back of the ELITE SMART GATEWAY for the URL to access the Monitoring dashboard of the ESG (which is made based on the serial number of the ESG).

Once the network connexion is valid between the ELITE SMART GATEWAY and your computer (direct connexion or both device are connected on the same network), open a web browser and enter the address: http://VokkeroESG-[serialnumber].local/

Refer to the label on the Smart Gateway for the serial number.

Important note:
The WEB Application may take a few seconds to start to get started. You must wait until the Remote Led stops blinking.
If you try to access the WEB Application while the starting process has is not finished, the error page below will appear. Wait a few minutes and refresh the page.

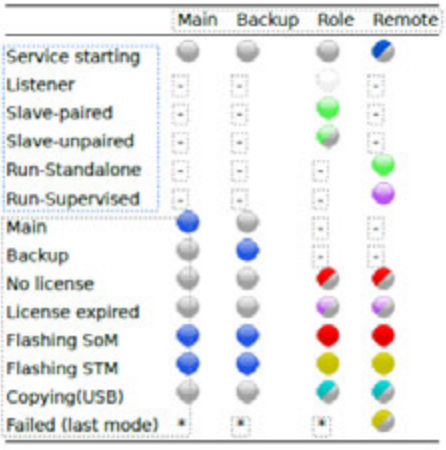
There two possible roles when you enter the Monitoring Dashboard

- VIEWER (can only view the Monitoring Dashboard but cannot act on parameters of the system nor the devices)
- MANAGER (can act on parameters of the system and the devices)

By default the password to access MANAGER Role is VOKKEROADMIN.
User can set a different password to access MANAGER Role in Preferences zone into the Monitoring Dashboard.

6.2.3. Understanding leds

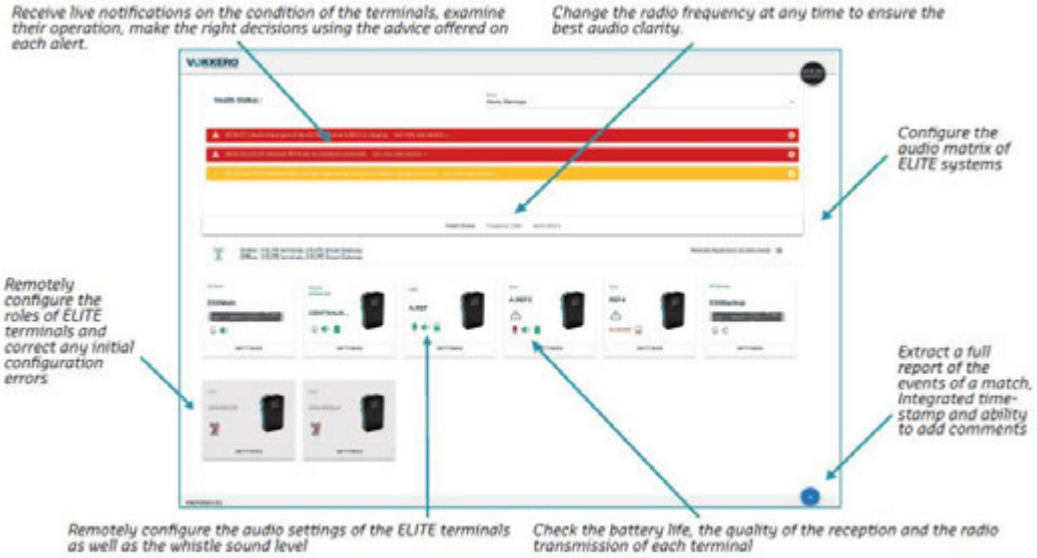
The leds which are visible on AxC-Vokkero Card can take all the following colour and status.



7. GAME-TIME USE OF THE MONITORING DASHBOARD

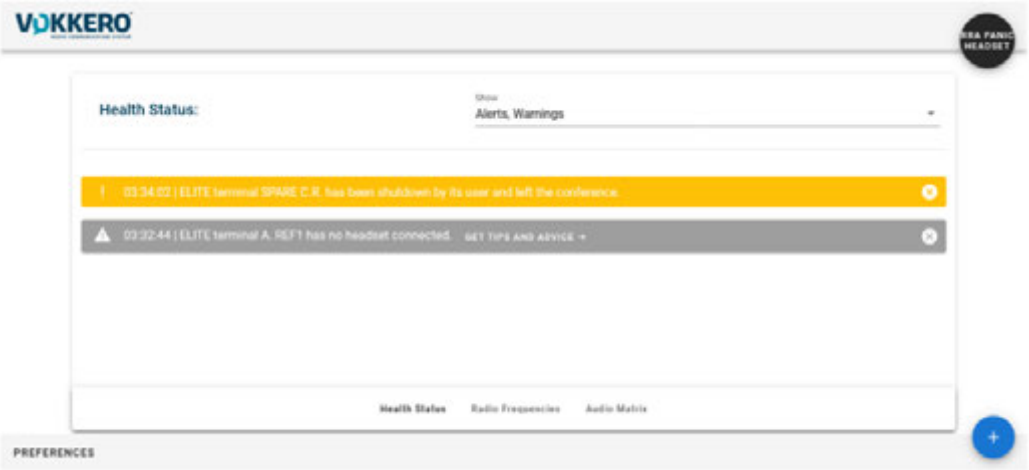
7.1. Principles

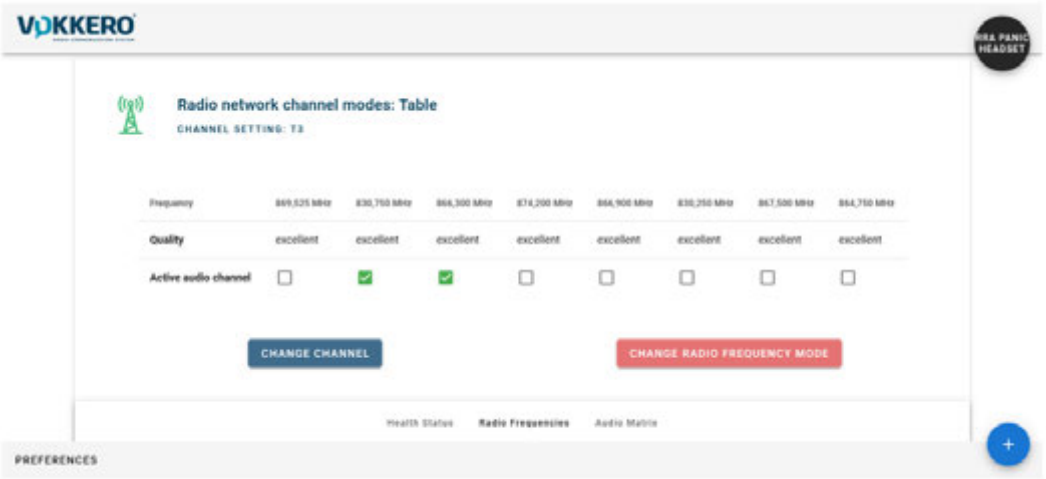
The monitoring dashboard is the brain, the nerve center of the ELITE SMART GATEWAY. It allows to monitor and act remotely on the system and specifically on the ELITE terminals.

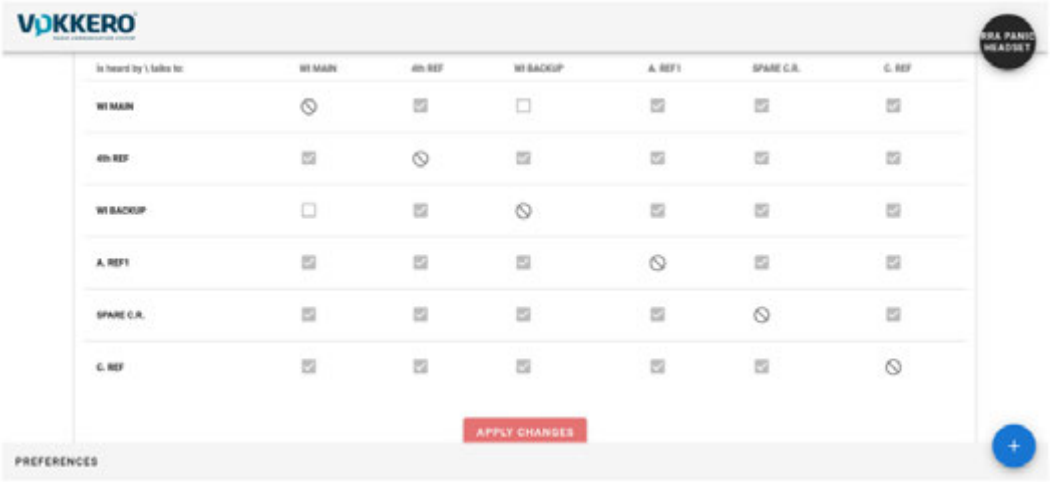


There are five main zones to consider:

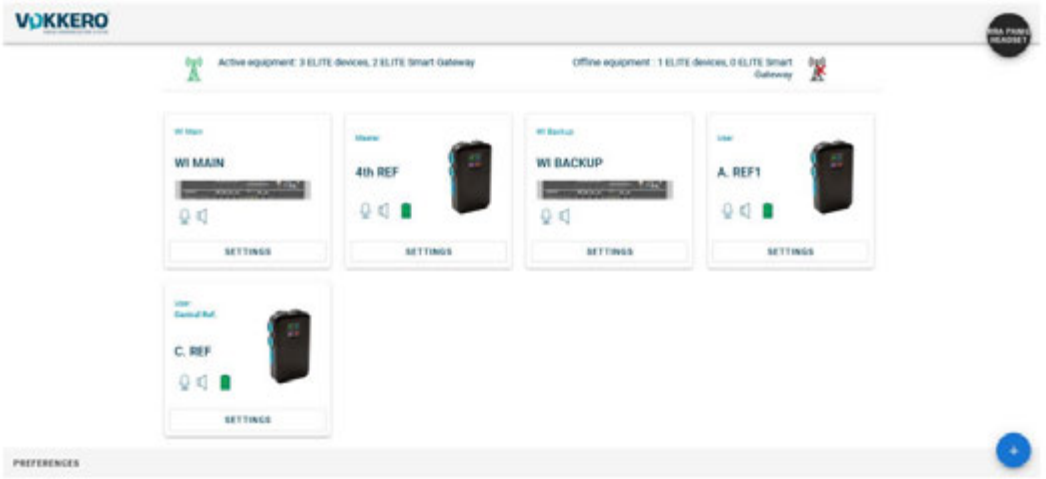
- The **Health status** zone which embeds Table frequency Menu and Audio matrix menu



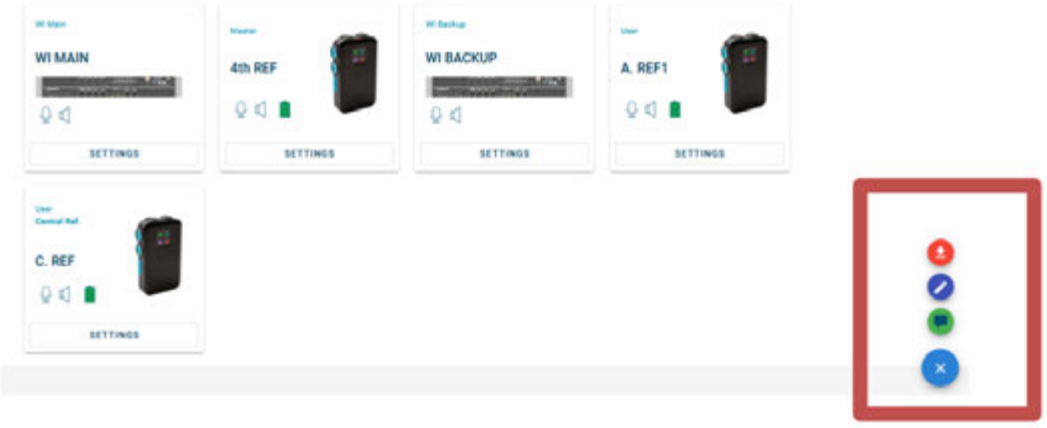




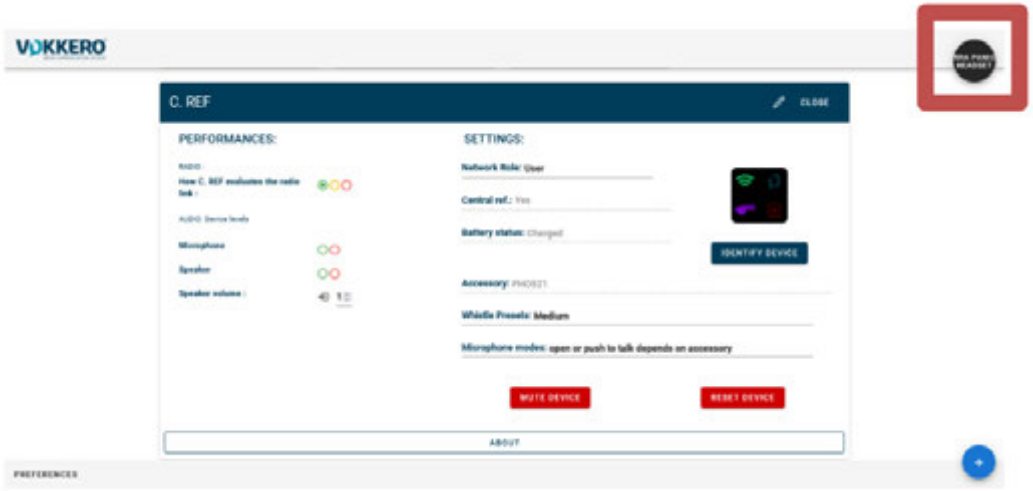
- The **Devices** cards zone



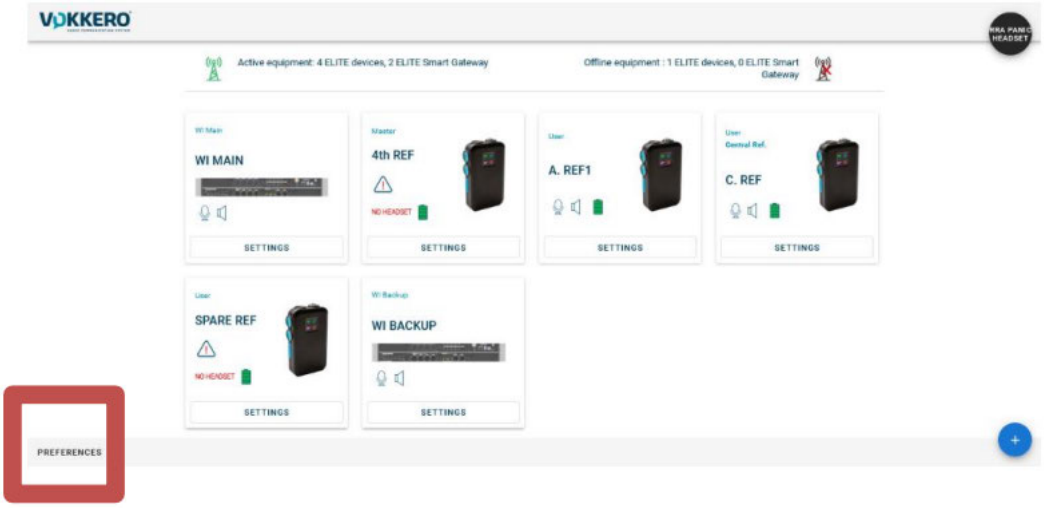
- The **PLUS** menu zone



- The **BACKUP RRA zone**



- The **SYSTEM SETTINGS zone**



7.2. Health status

7.2.1. The warnings & alerts

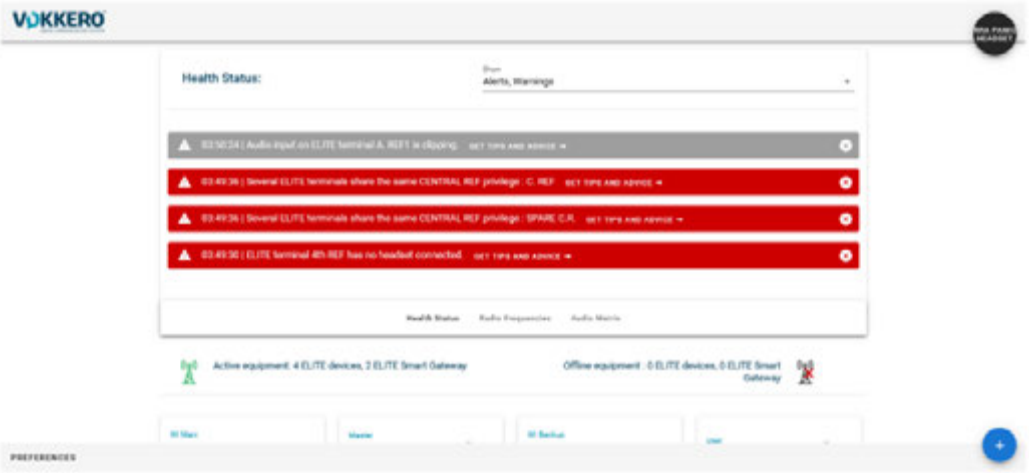
As soon as something newsworthy or interesting appears on the ELITE system, the Monitoring dashboard shows warnings or alerts to the user.

Warnings in ORANGE give information about noticeable events.

Alerts in RED require action from the user as the quality of the system is or will be impacted.

As soon as action has been taken to correct a warning or an alert or as soon as the event has disappeared from its own (like a mic saturation for instance), it becomes GREY so that the user can keep visualisation of what happened.

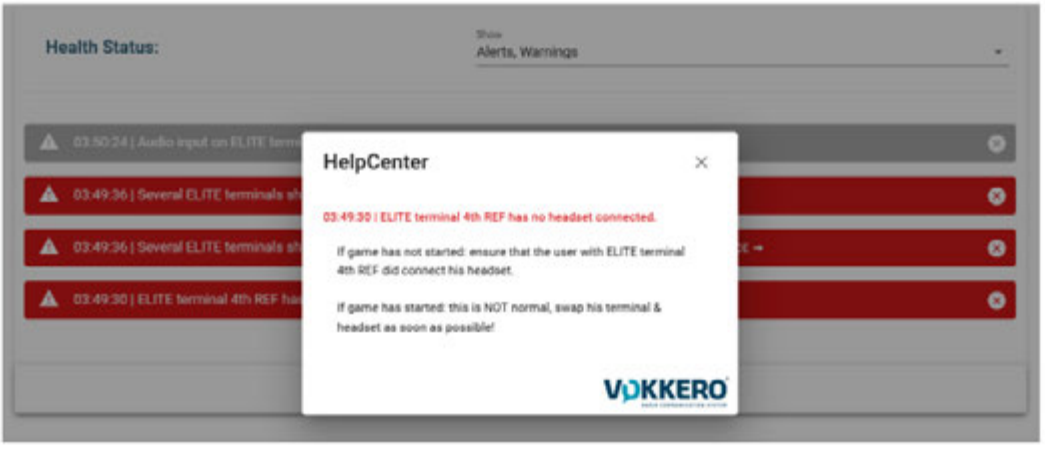
User can delete warnings or alerts no matter the colour status by click the [X] mark. The warnings or alerts which may have been deleted will still be visible in the downloadable Match report.



7.2.2. Get tips and advices

Clicking on the “Get tips and advices” button provides the user with a HelpCenter pop-up notice. It might be useful to correctly understand the warning or the alert and react wisely as the right reaction to have may be :

- Remotely from the Monitoring dashboard
- Locally with a physical intervention (for Very low battery life alerts for instance)
- A combination of the two

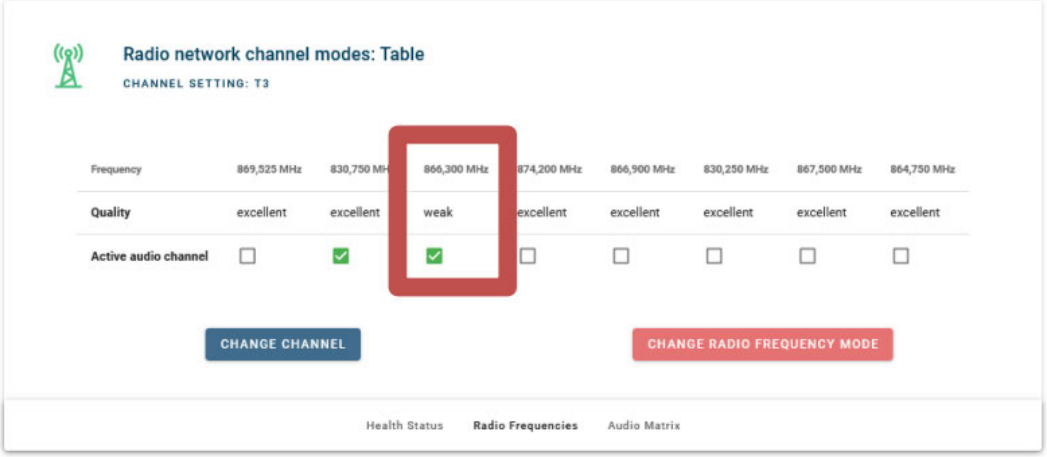


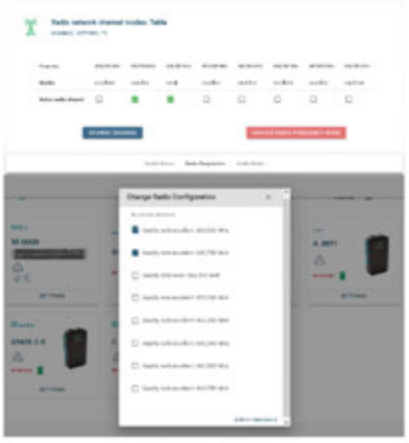
7.3. Table frequency menu

The Radio Frequencies Menu allows :

- **Choosing a Radio Frequency Mode:**
  Table of Frequencies (Two frequencies are used for audio, and other frequencies of the Table are scanned by the system). This is the best choice to ensure robust radio link while ensuring a clear view to the user of backup frequency possibilities in case of interferences. or Single Frequency (Only one frequency is used for audio with no scan on any other frequencies). This is the mode to choose only if a radio regulator inside the stadium oblige the ELITE system to only operate on a specified frequency.
- **Changing Channels:**
  When operating in Table Radio Frequency Mode, the user can change one or two of the two frequencies which are used for audio.

If there are interferences on one or two frequencies, the user will be alerted in the Health status menu. Depending on criticity of the interference and impact on audio, he can be invited to select new frequencies. In that case the Radio Frequencies Menu will provide an indication of quality strength of other frequencies of the used Table. The User thus can select new frequencies with the best quality strength.

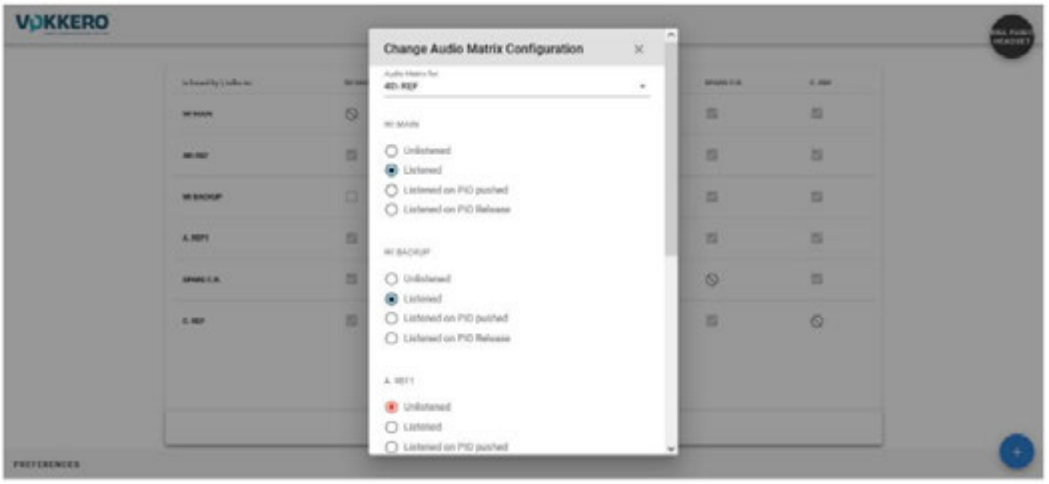




7.4. Audio matrix menu

The Audio Matrix Menu allows changing how the different ELITE terminals, ELITE WIRELESS INTERFACES and/or ELITE SMART GATEWAYS talk and hear each others.

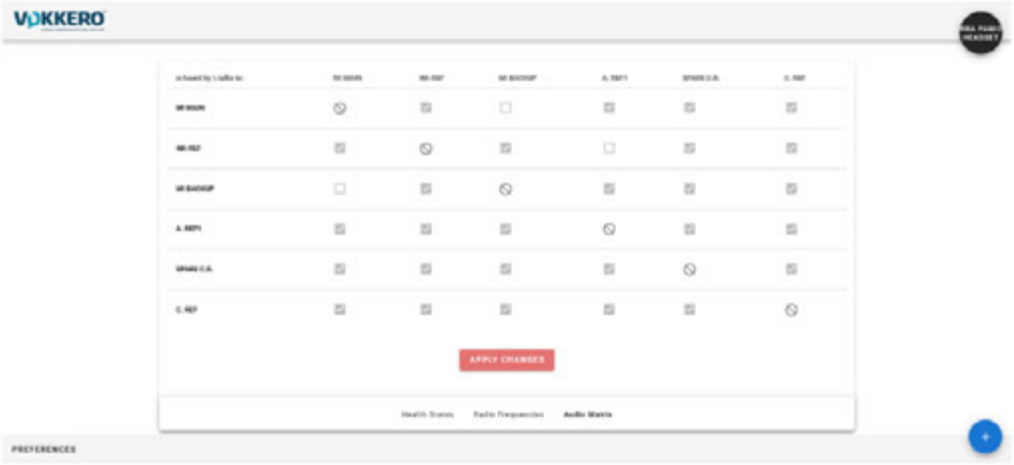
Click on Apply Changes to open the audio Matrix Menu.
Choose the device you want to configure and configure the listening preference for each device of the conference.



For each specific user of the conference (x) the possibilities are :

- To listen (y)
- To do NOT listen (y)
- To listen (y) only when (y) push a PIO button
- To listen (y) only when (y) a PIO button is released

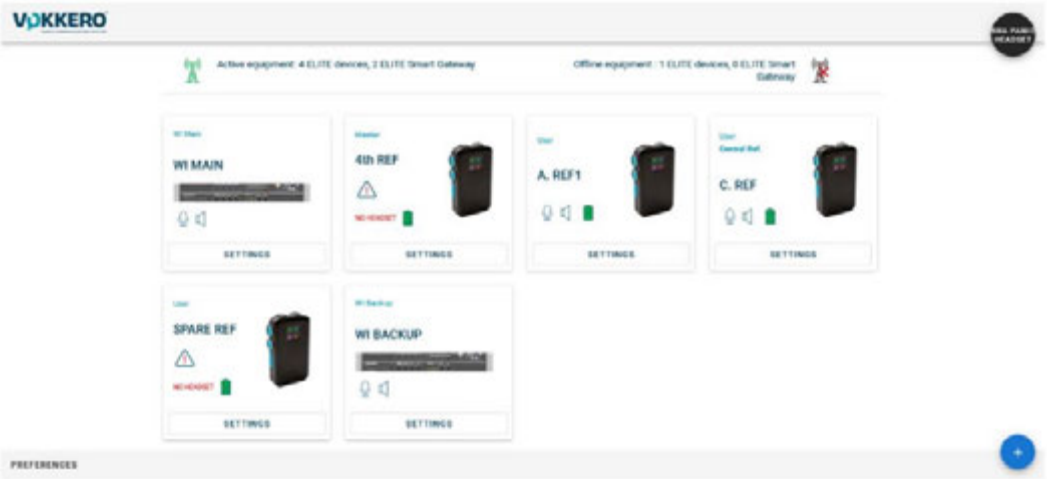
In this example, A. REF1 user is not heard by 4th REF user. In other words A. REF1 user don't talk to 4th REF user.



7.5. Devices cards

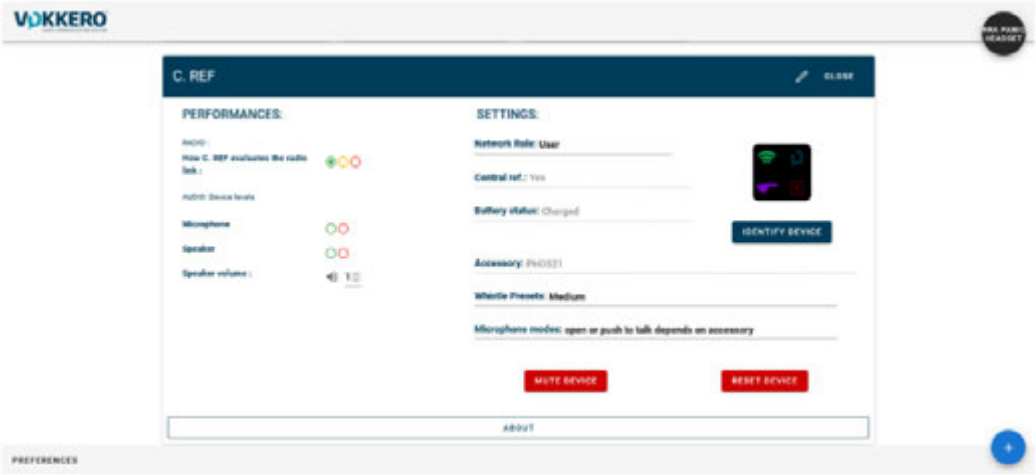
Each device in the conference has its own Device card.
The devices can be ELITE terminals, ELITE WIRELESS INTERFACES and ELITE SMART GATEWAYS.

As soon as a device enters the conference its Device card appears.



The info on the small Device card are:

- The role of the Device : User, Master or Listener
- The info if the device is Central Ref (privileged role)
- The Name of the Device as specified by the user or the quick config.
- A Warning icon if a warning or alert event is currently on-going in the Health status menu for this device
- A headset indication : No Headset wording if no accessory is connected
- A audio activity indication when an accessory is connected: Mic icon is getting green when audio is sent through the microphone of this device / Speaker icon is getting green when audio is received/played in the speaker of this device. Note that these icons are getting red if audio saturates.
- A Settings button which permit to deploy the small Device card into the complete Device card (see below)

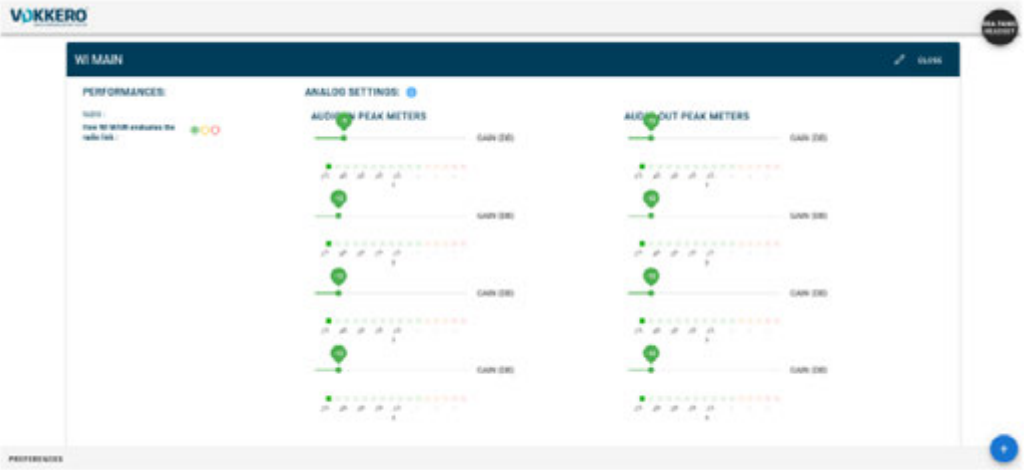


The possibilities of the complete Device card are:

- Radio Performances: static green led gives the indication of a good radio link for the device with the rest of the system. Orange or red radio link led gives the indication of an erratic radio link for the device with the rest of the system. Depending on the reason (network loss because the device is far from the rest of the users or radio interferences), the Health status Menu shall generate the right warning or alert to the user so that the reason can be understood.
- Audio device levels: Mic icon is getting green when audio is sent through the microphone of this device / Speaker icon is getting green when audio is received/played in the speaker of this device. Note that these icons are getting red if audio saturates. If this is the case, the Health status Menu will generate the right warning or alert to the user.
- Speaker Volume: Allows increasing/decreasing the volume of the device
- Network Role: allows changing the role of the device from User to Listener and vice versa.
- Central Ref: allows cancelling the Central Ref (privileged) role of the device. It can’t be done the other way (enabling).

- Battery status: Gives info of battery remaining life. If battery life starts to be very low, the Health status Menu will generate first a warning and then an alert to the user.
- Accessory: gives the info of headset type which is connected. If no accessory connected (anymore), the Health status Menu will generate an alert to the user.
- **Whistle preset**: The whistle detector allows the terminal to detect that a whistle call has been made and then transmits the audio of this whistle to the other terminals accordingly to your choice.
  - **No attenuation** : the whistle is detected and sent to other users at high volume.
  - **Low attenuation** : the whistle is detected and sent to other users at moderate volume.
  - **High attenuation** : this is the default mode. The whistle is detected and sent to other users at low volume.
  - **Total attenuation** : the whistle is detected and is NOT sent to other users (filtered)
  - **Whistle detector OFF** : this is a backup mode in case the whistle detector shows unwanted behavior in some arenas (with other whistles coming from the crowd).
- **Microphone mode**: allows to change the speech mode for the device.
  - **Open mic or Push-to-talk** (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will have push-to-talk functioning)
  - **Open mic or Push to mute** (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will have push-to-mute functioning)
  - **Open mic with PIO push** (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will still have open mic functioning but with specific WI audio-out mode if you hold pressing the button).
  - **Open mic with PIO latch** (that means if you plug a normal headset you will have open mic functioning, if you plug a headset with a button you will still have open mic functioning but with specific WI audio-out mode if you press the button, and then you need to press again to stop specific WI audio-out mode).

Note that ELITE SMART GATEWAY Device card provides access to different settings and specifically the adjustment of analog gains of each of the 4 XLR inputs and each of the 4 XLR outputs.



7.6. The PLUS menu

7.6.1. Generating a match report

The top button of the PLUS menu allows to generate a game report. The game report is a xls spreadsheet which embeds all warnings and alerts which have been registered by the Monitoring dashboard since powering-up the ELITE SMART GATEWAY.

7.6.2. Adding manual notes and game timestamps

The middle button of the PLUS menu allows to write manual notes (which can be related/linked to a device of the audio conference) and to add game timestamps. Manual notes and game timestamps will be added to the match report.

Game timestamps are:

- Pre-match audio tests
- End of Pre-match audio tests
- Referee warm-up
- End of Referee warm-up
- Kick-off
- Half-time
- Start of second half
- End of the game
- VAR check
- On-field review

7.6.3. Chatting with other Monitoring dashboard users

The bottom button of the PLUS menu allows discussing with other users of this Monitoring dashboard (i.e. users who are monitoring this same ELITE SMART GATEWAY). Indeed, multiple users can access the same ELITE SMART GATEWAY, monitor and act in parallel.
Thanks to the VIEWER MODE, some users can only check what is happening and allow them to interface in real time with MANAGER(s) of the Monitoring dashboard, poking them so that they can react in case of troubles.

7.7. The Backup headset

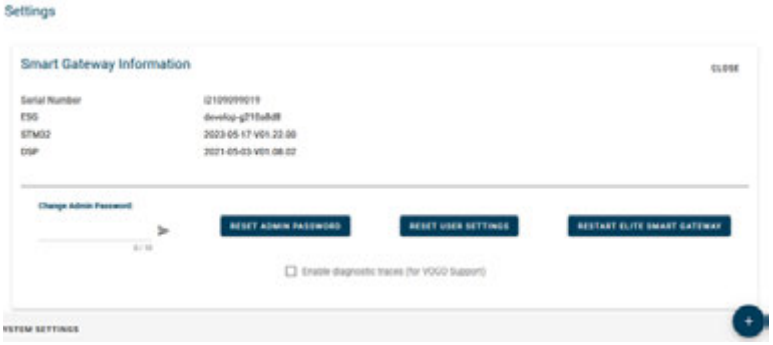
Clicking on this button will open XLR input n°4 and XLR output n°4 so that the Central Referee can use the backup headset provided near the Smart Gateway and connected in XLR n°4 (input and output). This has to be used in case the audio technician realizes that the Central Ref has an issue on his ELITE device.

Be careful clicking on that button also mutes the Central Ref ELITE device so that his device is completely replaced by the backup headset!

7.8. The system Settings zone

7.8.1. Versions

Shows here the info of your ELITE SMART GATEWAY and allows you setting the ADMIN password to differentiate VIEWER mode from ADMIN mode of the MONITORING DASHBOARD.



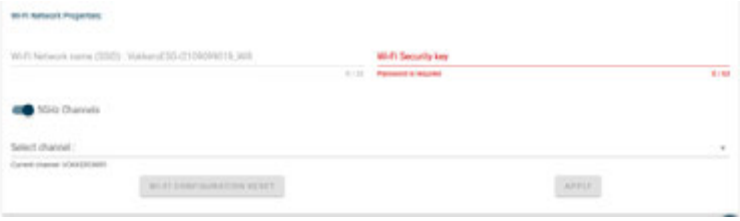
7.8.2. Network configuration

This menu allows you to specify the network parameters of the Smart Gateway so that you can “ping” properly the equipment wirelessly, from a local LAN or from a remote WAN location. The possibilities available from this menu are:

- Choosing between DHCP or fixed IP address, set by the user.
- Entering the network parameters of a fixed configuration

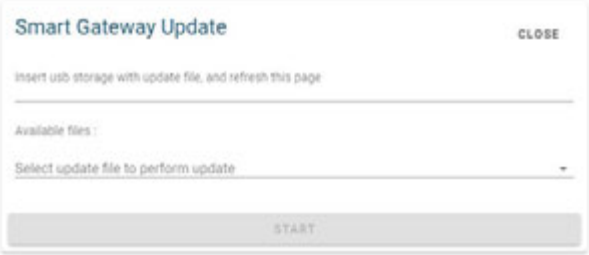
Note that the Smart Gateway supports partial subnets.

- Modifying Wi-Fi hotspot configuration (name, security key, channel bands, etc...).



7.8.3. Firmware update

Click on the title to open the box



To update your ELITE SMART GATEWAY, take the dedicated file provided by Vogo Support team and copy and paste it in a USB dongle
Note: a Smart Gateway updating file always ends with '.swu'

Insert it into the USB port of the ELITE SMART GATEWAY as shown below.

Refresh the web page to see the update file in the web application.

The file should appear in the drop down list. Select it and click on start.

Please note that at the end of the update the product will automatically restart.

Information :

The product does not display the progress of the update, but will only display errors in case problems occur.

7.8.4. Licence settings

Enter here the license key each year to renew the functionality of your Smart Gateway.

DOCUMENT HISTORY

Version	Contents
V1.0	Creation