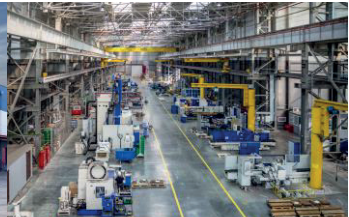


SmartVOX®

SMART VOICE SOUNDER



INSTALLATION
AND OPERATING
INSTRUCTIONS

SAFETY INFORMATION

Please read this installation manual carefully before starting the installation.



This product must be installed and maintained by a suitable skilled and technically competent person, in compliance with the latest codes and regulations.

Incorrect installation or use may cause electrical shock, injury or fire. Unauthorized repair will void the warranty.



SmartVOX® device produces loud sound (up to 126 dB at 1 m). Loud sound can cause irreversible damage. Operator must wear adequate ear protection during testing.

Sound output level must be adjusted and appropriate safety distance must be kept during operation in order to comply with all relevant laws and regulations.



Ae&t reserves the right to make changes to product specifications at its discretion and without prior notice.

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- 4 Overview
- 5 In the box
- 6 Technical data

MOUNTING AND WIRING

- 7 Mount the housing
- 9 Wire the mains power
- 10 Wire the inputs
- 11 Wire the fault output
- 12 Wire the trigger output
- 13 Wire the LED optional beacon
- 14 Mount the battery

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- 22 Customise radio settings
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OVERVIEW



SmartVOX® device plays back sounds and user defined voice messages.



SmartVOX® device is controlled and communicates with other SmartVOX® through radio LoRa modulation.



The 6 wired inputs per SmartVOX® device can be used to activate personalised scenarios from triggering devices.



In case of a power cut, the built in battery keeps SmartVOX® device operational.



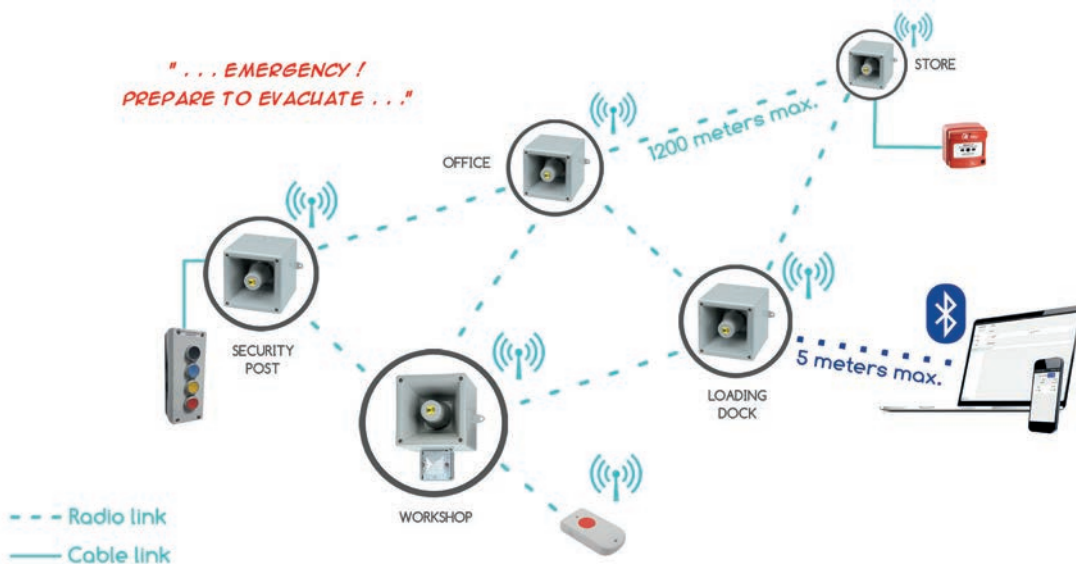
SmartVOX® device is easily configured and can be monitored through bluetooth connectivity with android devices and Windows PC.



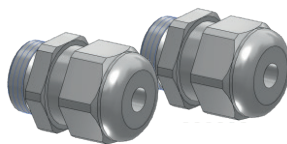
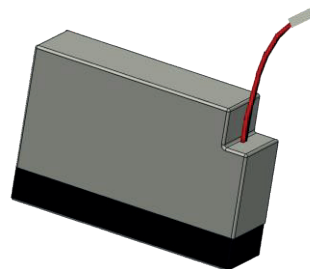
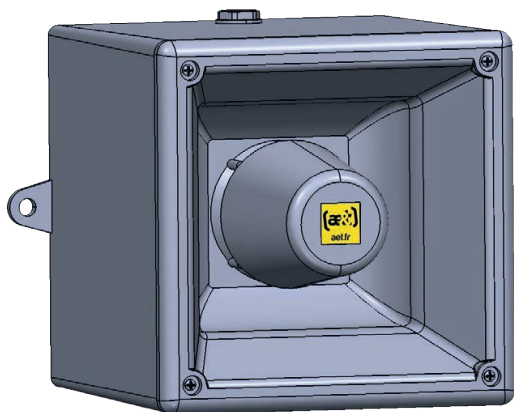
Each scenario can be broadcasted to a SmartVOX® device or a group of SmartVOX® devices. Up to 16 groups can be created.



SmartVOX® device is self-monitored. If a fault is identified, it can emit a fault tone and a relay output is activated. A SmartVOX® device can also monitor other SmartVOX® devices in the network.



IN THE BOX



TECHNICAL DATA

Acoustic

Output	Max 126 dB (A) at 1 m
Sound types	Alarm tones and voice messages
Number of alarm tones	45
Number of custom messages	Up to 128
Message length	Unlimited
Synchronisation	Yes
Audio file format	Wav 16-bit PCM / 48 kHz

Optical

(Available with combined product SmartVOXFlash)

Technology	LED
Effective Intensity	176 cd
Operating mode	Steady or 2 Hz flash mode

Radio

Frequency	868 MHz
Modulation	LoRa
Standard	ETSI EN300 220
Repeater	Yes
Network topology	Mesh
Inbuilt antenna	Yes
Range	Up to 1.2 km

Bluetooth

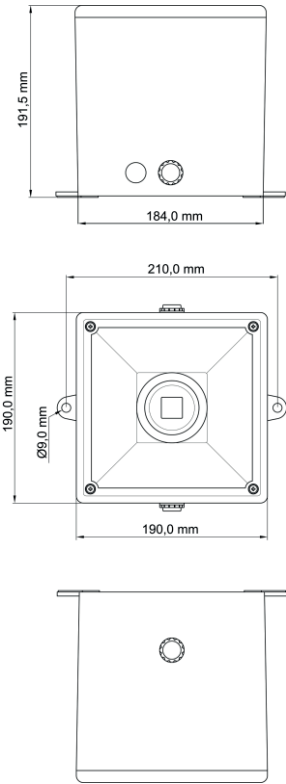
Standard	4.1
Range	5 m

Electrical

Mains supply voltage	100 – 240 V ac 50/60 Hz
AC current (typical)	1.5 A / 115 V ac 0.9 A / 230 V ac 0.75 A / 277 Vac
Standby consumption (typical)	10 W
Broadcast consumption (typical)	50 W
Trigger inputs	x 6
Fault relay	x 1
Alarm relay	x 1
Terminal block	24 - 12 AWG / 0,205 - 3,31 mm
Battery	12 V- 0.8 Ah – Lead

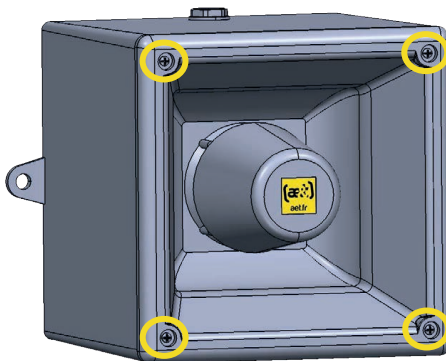
Mecanical

Dimensions	190 x 190 x 190 mm
Weight	2,8 kg
Cable entries	3 holes Ø 20 mm 2x cable glands included 2x hole plug included
Ingress protection	IP66
Operating temperature	-25°C to +55°C
Relative humidity	90% at 20°C
Material	ABS UL94 V-0 & 5 VA

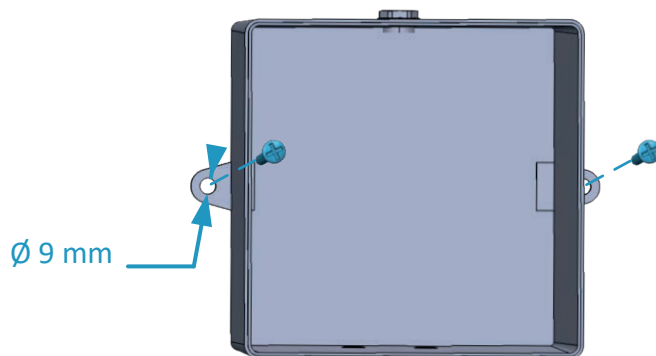


MOUNTING AND WIRING

- 1.1 Unscrew the 4 locking screws and remove the front panel

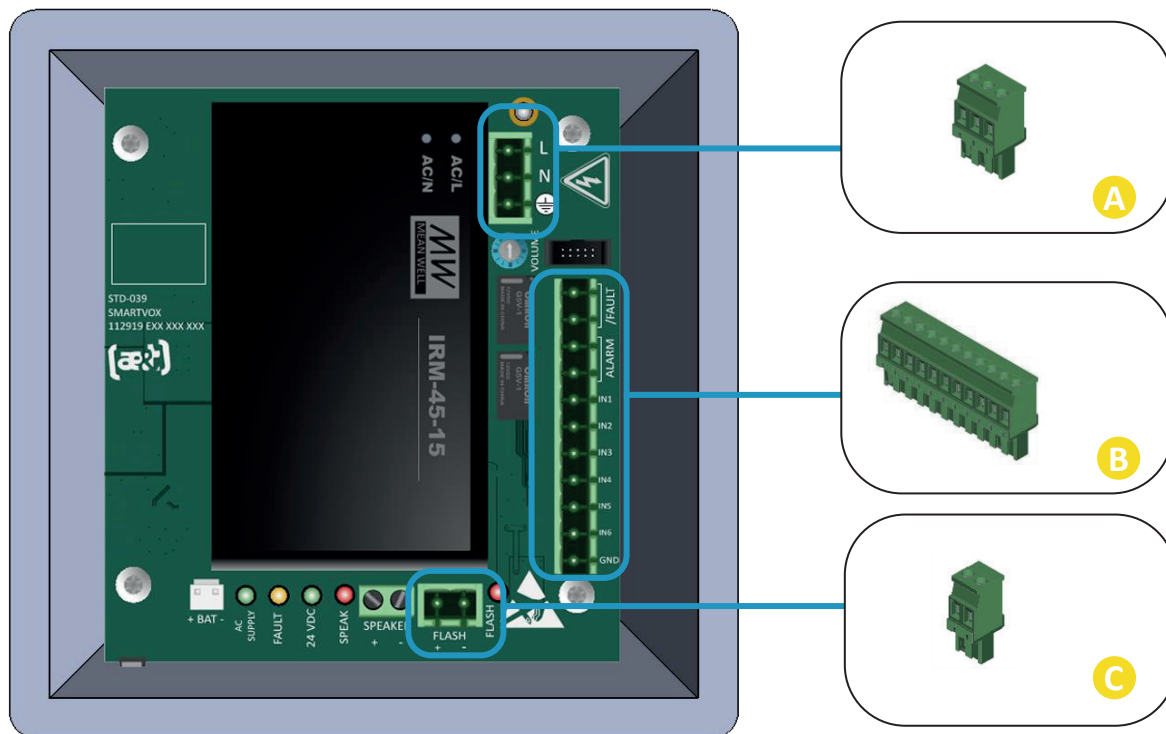


- 1.2 Securely fix the box using 2 suitable screws



MOUNTING AND WIRING

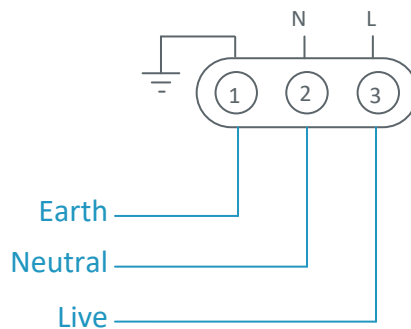
1.3 Disconnect the 3 terminal blocks



MOUNTING AND WIRING

1.4 Wire the mains power

Terminal block A



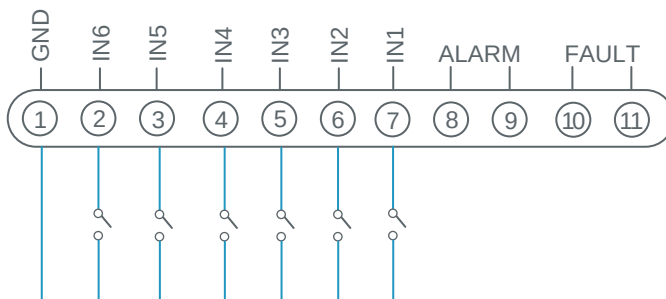
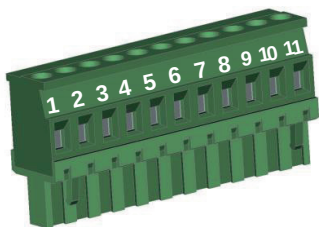
100 – 240 V AC | 50 / 60 Hz

MOUNTING AND WIRING

1.5 Wire the inputs

- Follow this step if a wired triggering device is connected to this SmartVOX® device.
- Technical data:
 - Self-powered inputs by 9 V DC voltage source
 - Leakage current to GND : 9 mA
 - Power series resistance : 1 kΩ
 - Minimum detection level : 2,7 V DC
 - Maximum detection level : 6 V DC
- The input can be set to normally close, normally open, momentary or latching in the software configuration (see page 27).

Terminal block B



Examples of triggering devices



MOUNTING AND WIRING

1.6 Wire the fault output

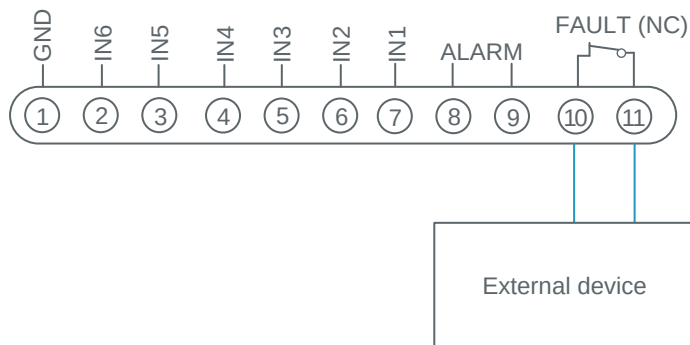
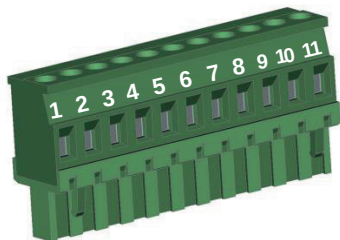
The fault output can be wired to control an external device in case of a fault (e.g: battery fault, power cut, loss of network communication...)

Technical data:

- Nominal resistive load : 0.5 A at 60 V AC; 1 A at 24 V DC
- Maximum switching power : 62.5 VA, 30 W
- Maximum switching voltage on resistive load : 60 V AC, 60 V DC
- Maximum switching current on resistive load : 1 A

Terminal block

B

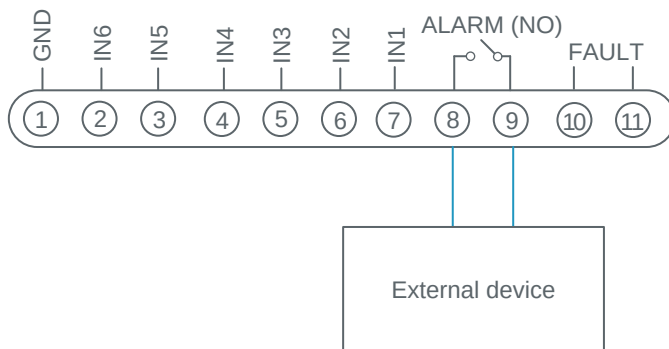
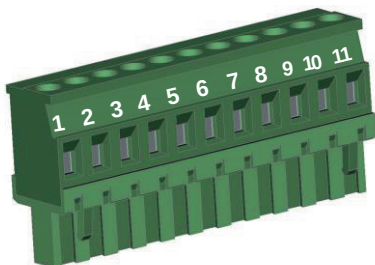


MOUNTING AND WIRING

1.7 Wire the trigger output

- The trigger output can be wired to control an external device. The relay is closed when SmartVOX® device emits an audible or visual signal.
- Technical data :
 - Nominal resistive load : 0.5 A at 60 V AC; 1 A at 24 V DC
 - Maximum switching power : 62.5 VA, 30 W
 - Maximum switching power on resistive load : 60 V AC, 60 V DC
 - Maximum switching current on resistive load : 1 A

Terminal block **B**

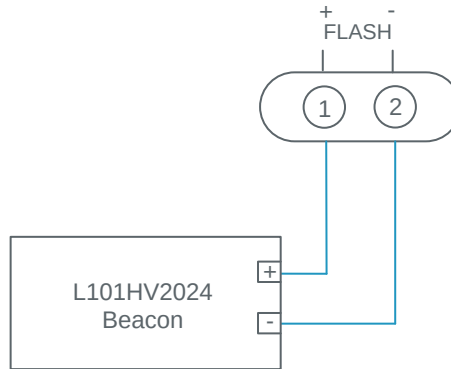


MOUNTING AND WIRING

1.8 Wire the optional LED beacon

- L101HV2024X beacon can be set to either steady or flashing mode. See L101HV2024X user manual for further information.
- Nota : LED beacon is already wired on the SmartVOX®Flash device.

Terminal block



L101HV2024X
user manual

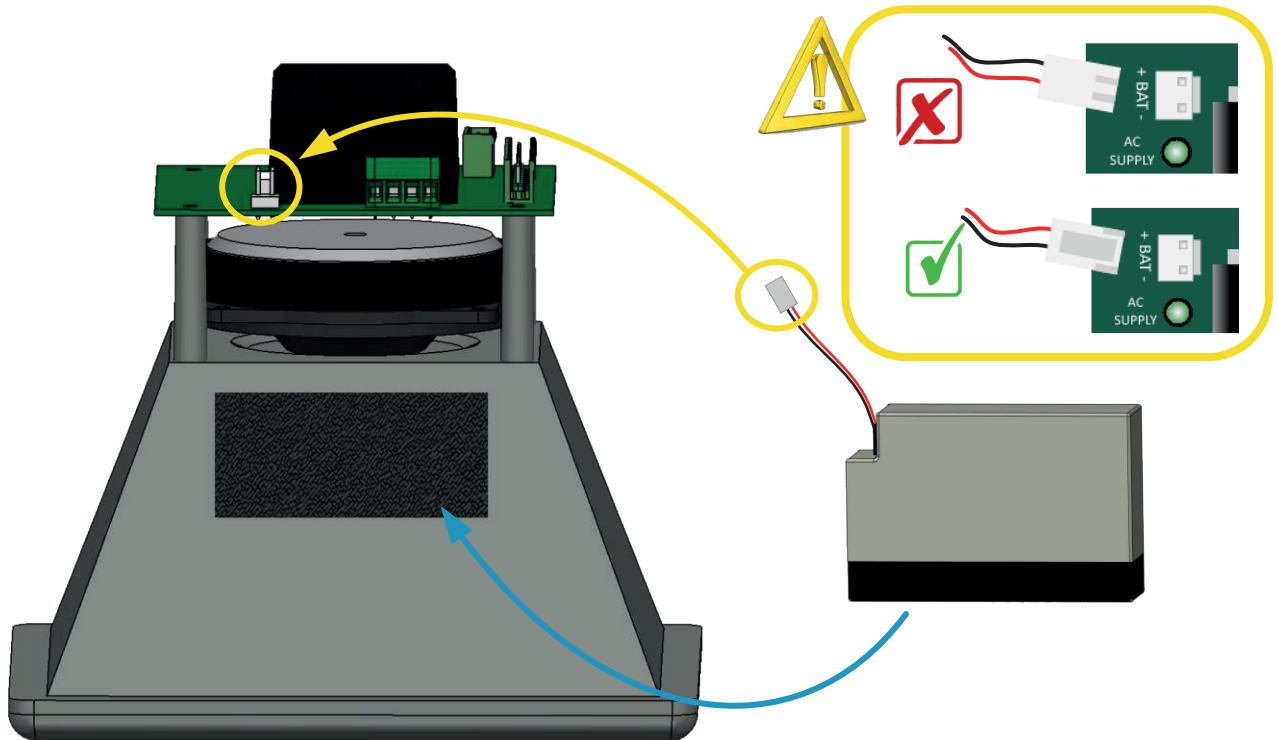


L101HV2024X

MOUNTING AND WIRING

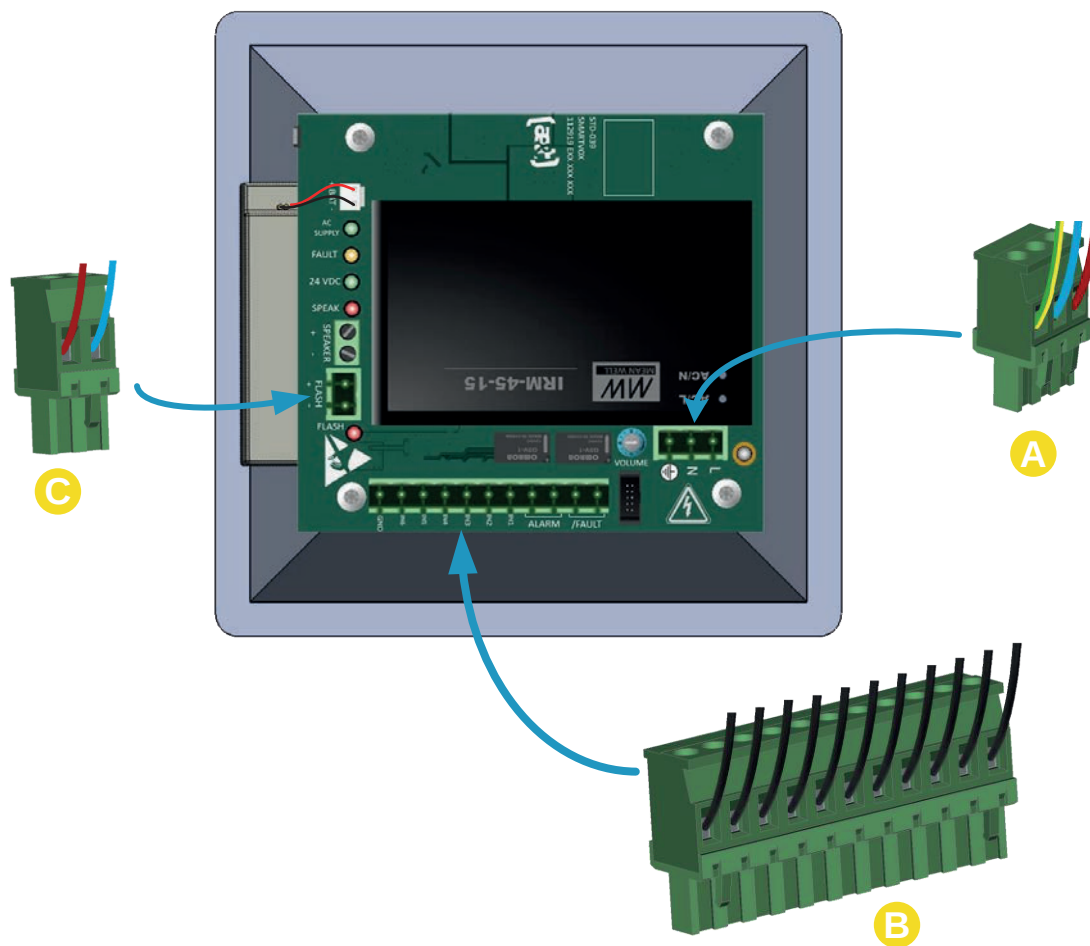
1.9 Mount the battery on the Velcro and connect it to the board.

- Battery 12 V - 0.8 Ah – Lead YUCEL Y0.8-12FR
- The battery is automatically charged when SmartVOX® device is on mains power.
- Battery self-test performed every 15 minutes.



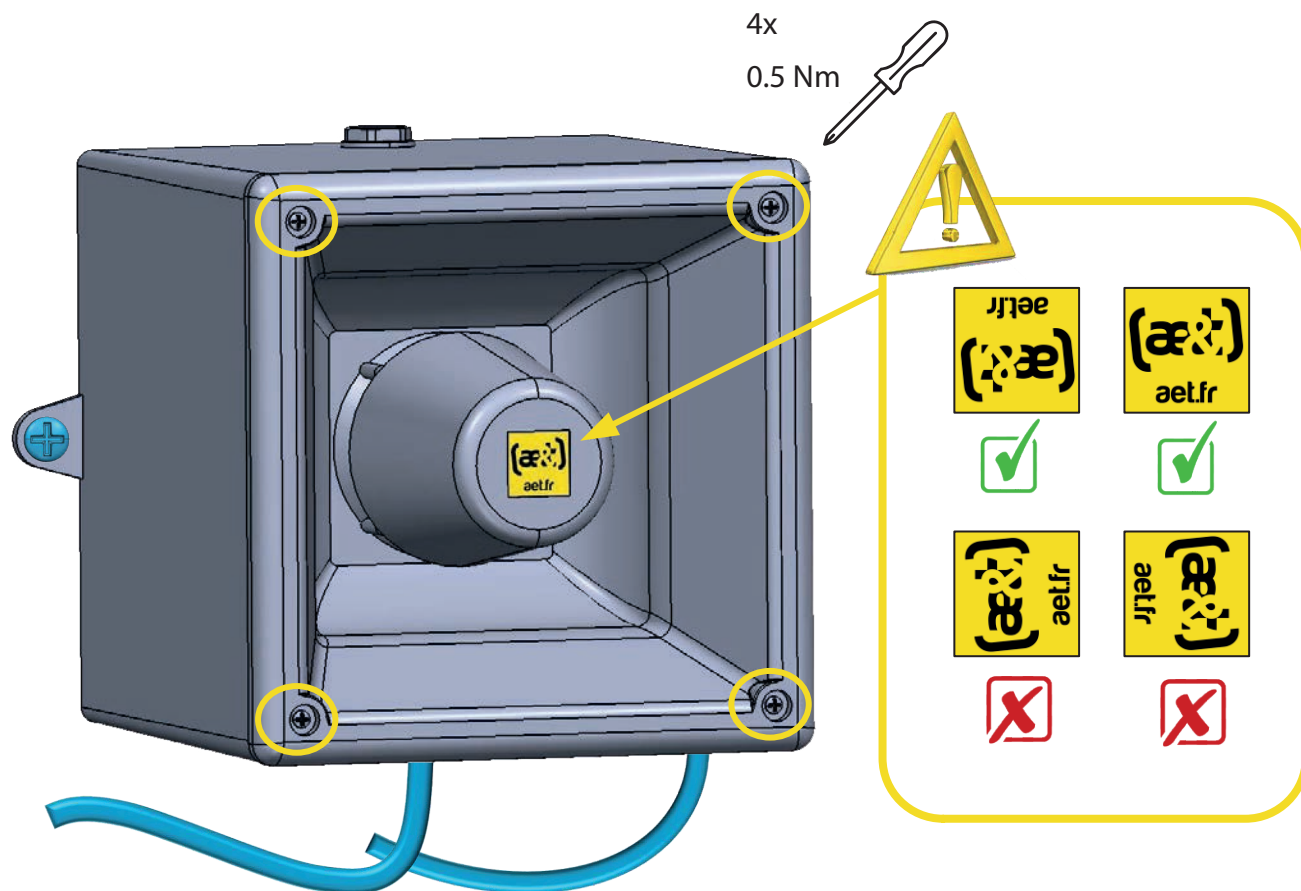
MOUNTING AND WIRING

1.10 Reconnect the terminal blocks



MOUNTING AND WIRING

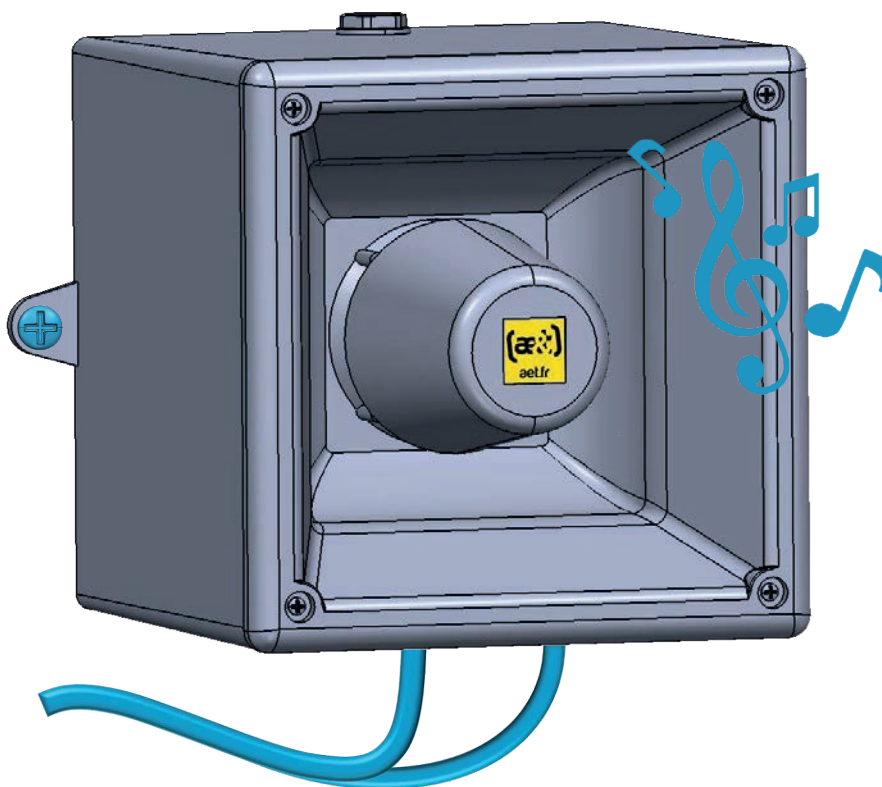
1.11 Mount the front panel to the back box



MOUNTING AND WIRING

1.12 Switch on the mains power: SmartVOX® starts up and emits a single tone

■ SmartVOX® device is ready to be configured.



Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.1 Download and install SmartVOX-Config software

■ Set up is done via bluetooth using the SmartVOX-Config software

Windows 10



www.aet.fr/xpa3074

OR

android



Google Play



Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

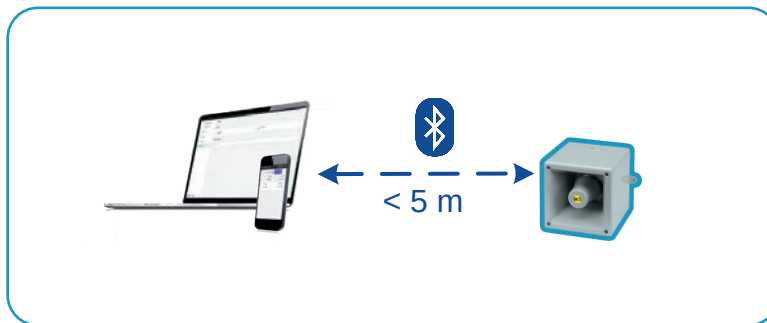
Groups

Bluetooth

Advanced

CONFIGURATION

2.2 Stand close to the SmartVOX® device to be configured



Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

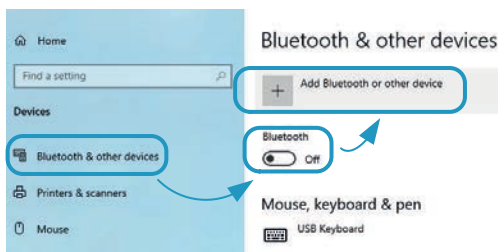
Advanced

CONFIGURATION

2.3 Pair the SmartVOX® device with your computer

■ Select **Start**  > **Settings**  > **Devices** 
> **Bluetooth & other devices**, and turn on **Bluetooth**.

■ Select **Add Bluetooth or other device** > **Bluetooth**. Choose the SmartVOX® to be paired.



■ Enter PIN code
By default : 0000. It is recommended to modify this PIN code. See page 30
See page 30 to reset the PIN code.

2.3' Pair the SmartVOX® device with your Android device

■ Swipe down from the top of the screen
Tap **Bluetooth**  to turn on Bluetooth

■ Touch and hold **Bluetooth** 
Tap **Pair new device**
Tap the name of the SmartVOX® to be paired.

■ Enter the PIN code
By default : 0000.
It is recommended to modify this PIN code. See page 30
See page 30 to reset the PIN code.

Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

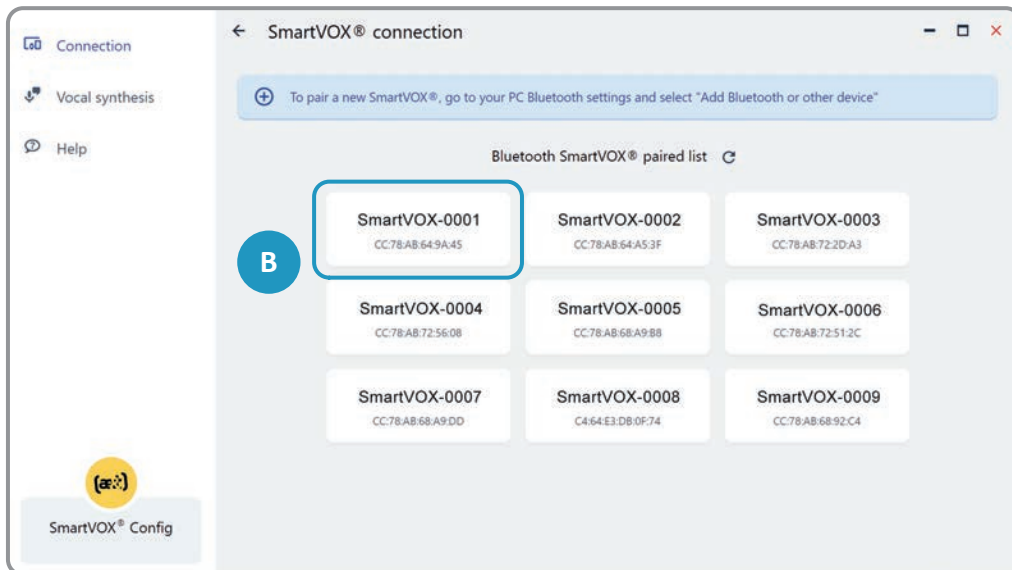
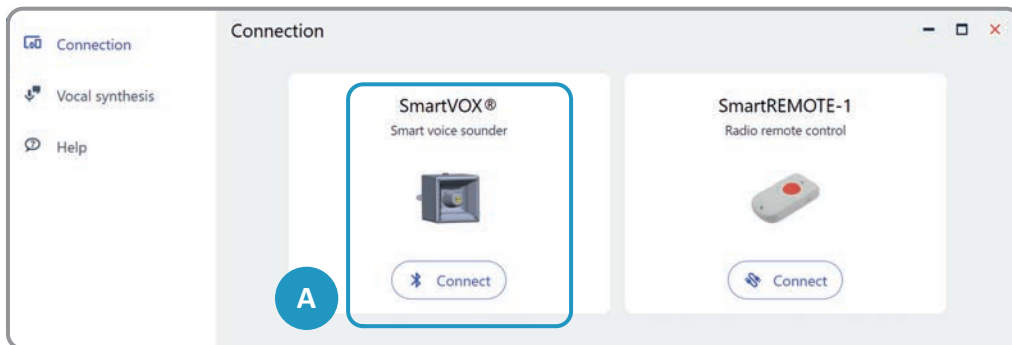
Groups

Bluetooth

Advanced

CONFIGURATION

- 2.4 Open SmartVOX-Config software and select the SmartVOX® device to be configured



Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.5 Customise radio settings

For security purpose, we recommend to enter a personalised network identifier and encryption key

These parameters must be identical across all radio devices of the network.

Connection > Settings > Radio

Disabled

Enabled

The radio parameters must be identical on all network devices

Radio channel

3 radio channels available

868.100 MHz

Network identifier

The network identifier must be between 0 and 65534

9346

Encryption key

The encryption key must not contain whitespace or special characters with a maximum of 15 characters

Disabled

Enabled

key

Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.6 Customise group names

For easier configuration and supervision, the names of the groups can be personalised

Connection > Settings > Groups

Group names

1st-FLOOR

2nd-FLOOR

MAIN-ENTRANCE

GROUP-4

GROUP-5

GROUP-6

GROUP-7

GROUP-8

GROUP-9

GROUP-10

GROUP-11

GROUP-12

GROUP-13

GROUP-14

GROUP-15

GROUP-16

Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.7 Create and upload custom sounds and voice messages

Voice messages are easily created and saved on your PC thanks to the text-to-speech tool.

Vocal synthesis

The screenshot shows a web interface for creating voice messages. It has a text input field labeled 'Voice message' with the placeholder 'Type your message here'. Below it is a 'Language' dropdown menu set to 'French female'. At the bottom, there is a checkbox labeled 'I'm not a robot' next to a CAPTCHA image, and a blue button labeled 'Create WAV file'.

Custom sounds and voice messages must be uploaded to each SmartVOX® and SmartREMOTE devices.

The custom sound table must be identical across all the SmartVOX® and SmartREMOTE devices.

Fill in page 35 to aid with the setup of the other devices.

Connection > Settings > Sound

The screenshot shows a configuration interface for sounds. At the top, there are two tabs: 'Custom' (selected) and 'Standard'. Below the tabs is a list of three custom sounds, each with a number in a circle, a title, and a duration. To the right of each entry is a trash icon. At the bottom, there are two buttons: '+ Add sound n°4' and '+ Add sound n°5'.

Number	Sound Name	Duration
1	Emergency evacuation procedure	19,1 sec
2	Lockdown procedure	4 sec
3	Safety instructions	2,6 sec

Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.8 Rename the SmartVOX®

For easier configuration and supervision, the nickname of the SmartVOX® device can be personalised

Connection > Settings > Description

Device nickname



Device nickname is only as an indication. It must not contain whitespace or special characters with a maximum of 15 characters

SECURITY-POST

Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.9 Adjust the output volume and system sound level

- Output volume is set to a minimum by factory default
- The Alert volume attenuation setting will be added to the scenario attenuation (see page 27)
- System sounds are used for start up melody, fault tones and system messages.

Connection > Settings > Audio

Alert volume

💡 *Local volume for tone / message sounds*

Attenuation : -27 dB

System sound level

💡 *Audio volume for startup melody, fault tones, and bluetooth connection / disconnection messages*

Low 

Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.11 Create broadcast scenario for each wired input

- Each wired input, IN1 to IN6, has to be enabled and personalised.
- Each scenario will be broadcasted by the SmartVOX® devices defined in the « destination » section. Each SmartVOX® device can be associated to several groups, see page 29.
- A scenario with a higher priority will take over the broadcasting of a lower priority scenario.

Connection > Settings > Inputs

The screenshot shows the configuration interface for a wired input (IN1 to IN6). The interface is divided into several sections:

- Input Selection:** A row of tabs labeled IN1, IN2, IN3, IN4, IN5, and IN6. IN1 is selected.
- Enabled/Disabled:** A toggle switch set to "Enabled".
- Contact type:** A dropdown menu showing "NO" and "NC".
- Scenario:** A section with a table of parameters:

Action	Destination	Priority	Signaling
Trigger	Activate all SmartVOX®	High	Audible and visual
- Audible alert:** A warning message: "Custom soundfiles must be uploaded to each activated SmartVOX®".
- Sound Selection:** Two tabs labeled "1 sound" and "2 sounds". The "2 sounds" tab is selected.
- Sound n°1:** A box containing a musical note icon, the text "500-1200Hz @ 0.3Hz 0.5 sec Slow Whoop", and volume/duration controls: "0 dB" and "3,3 sec".
- Sound n°2:** A box containing a musical note icon, the text "Emergency Evacuation Procedure", and volume/duration controls: "0 dB" and "5,7 sec".
- Repetitions:** A box containing a circular arrow icon, the number "2", and the text "18 sec".

Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.12 Enable / Disable fault tone and Select monitored devices

- A beep sound is broadcasted when the SmartVOX® device is faulty.
- The SmartVOX® can monitor network devices, emit a fault tone and switch on its fault relay if any one of the monitored devices is faulty

📶 Connection > ⚙️ Settings > ⚠️ Faults

💡 When a fault appears, the SmartVOX® will emit a beep every 10 seconds

🔇 Disabled **🔊 Enabled**

Network device fault monitoring

💡 The SmartVOX® can monitor network devices, and switch on its fault relay if any one of the monitored devices is faulty

Monitored devices		Available devices	
 WORKSHOP 0002	—	 LOADING DOCK 0003	+
 OFFICE 0005	—	 STORE 0004	+
		 ENTRANCE 0006	+

Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

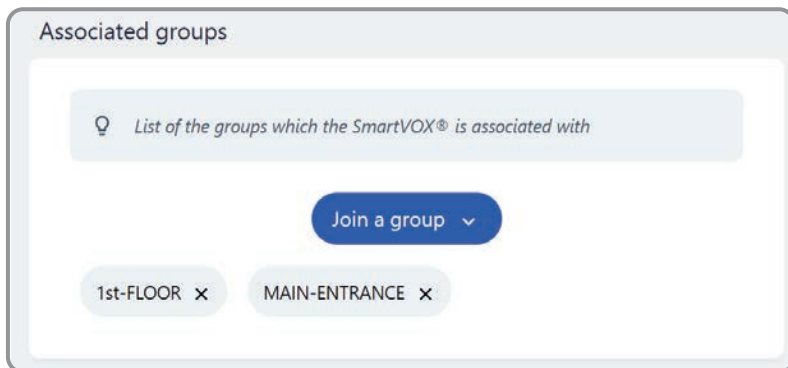
Advanced

CONFIGURATION

2.13 Define the groups which the SmartVOX® device is associated with

Each SmartVOX® device can be associated with several groups.

Connection > Settings > Groups



Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

Sound library

Specific parameters

Can be personalised on each SmartVOX® device

Name

Volume

Triggering Inputs

Fault

Groups

Bluetooth

Advanced

CONFIGURATION

2.14 Personnalise bluetooth PIN code

- For security reason, the PIN code should be change from the default factory value
- To reset PIN code to its factory value (0000), hold the DFU button for 10 seconds.
WARNING : total factory reset if DFU is held for 30 seconds.
- Bluetooth pairing will be lost if the PIN code is changed or reset. The device must be removed from the computer / mobile bluetooth paired device list and paired again, see pages 19-20.

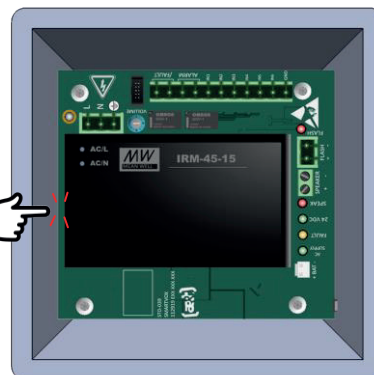
Connection > Settings > Bluetooth

PIN code

 The PIN code must contain between 4 and 8 digits

 Bluetooth pairing will be lost

PIN reset (0000) : 10 s



Configuration Steps

Must be repeated for each device

Preliminary step

Mandatory

SmartVOX-Config installation

Bluetooth Pairing

Connection

Common parameters

Must be identical on all the SmartVOX® devices

Radio

Group names

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Specific parameters

Can be personalised on each SmartVOX® device

Name

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Bluetooth

Advanced

CONFIGURATION

2.15 Automatic restart and bluetooth deactivation mode

■ Activate or disable the automatic restart and bluetooth deactivation mode

📱 Connection > ⚙️ Settings > 🛡️ Advanced

Automatic reboot

💡 Automatic and silent SmartVOX reboot every 24h

🚫 Disabled

🔄 Enabled

Bluetooth visibility

- *Permanent: Bluetooth always visible*
- *Temporary: Bluetooth will be deactivated after 15 minutes. Pairing and connection will no longer be possible. Recycle mains power to re-activate*

🕒 Temporary

📶 Permanent

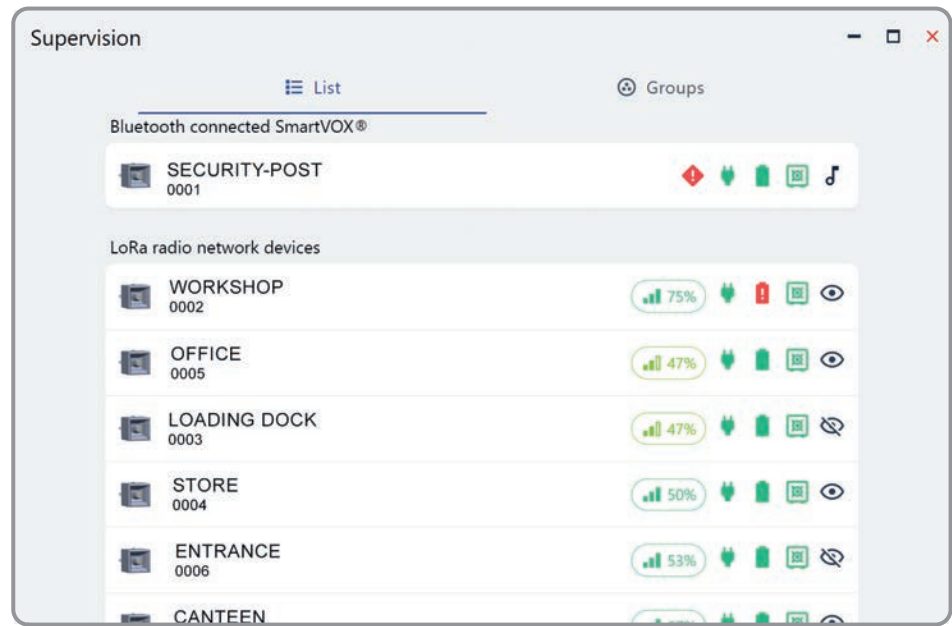
NETWORK OVERVIEW

2.16

Check the status of all SmartVOX® devices of the network.

SmartVOX® devices should be located so that all signal strenghts are green or orange.

Connection > Supervision

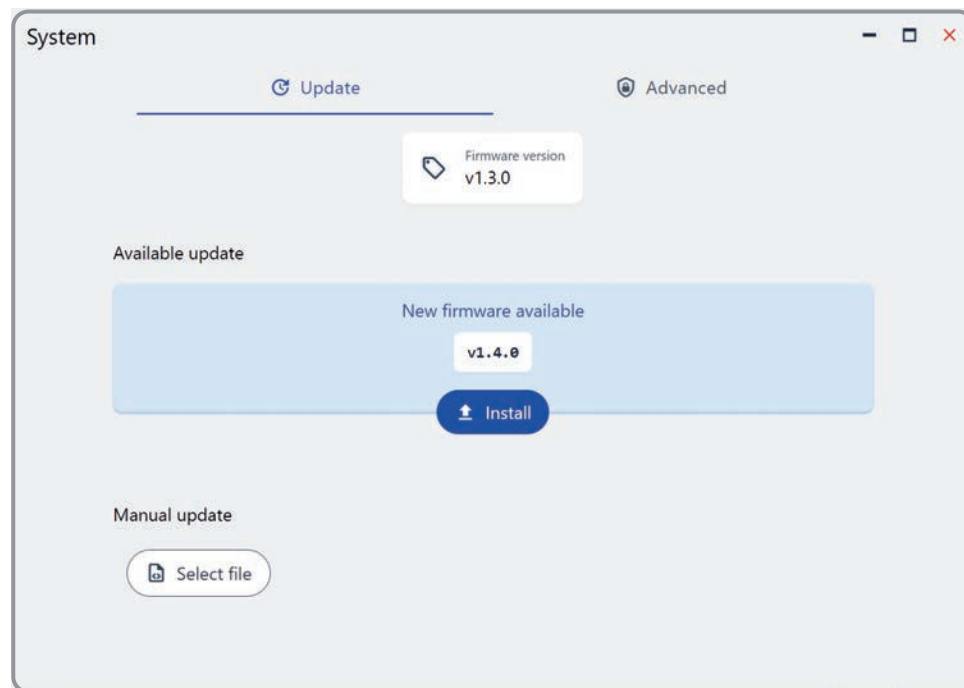


- Signal strength
- Power supply OK / Not OK
- Fault monitoring enabled / disabled
- Fault tone enabled / disabled
- Backup battery OK / Not OK
- System OK / Not OK
- The monitored equipments are OK /
At least one monitored equipment faulty

FIRMWARE UPDATE

2.17 When a new firmware is available, a « new » icon will appear in the menu.

Connection > System



MEMO

GROUPS NAME

GROUP-1

GROUP-2

GROUP-3

GROUP-4

GROUP-5

GROUP-6

GROUP-7

GROUP-8

GROUP-9

GROUP-10

GROUP-11

GROUP-12

GROUP-13

GROUP-14

GROUP-15

GROUP-16

MEMO

CUSTOM SOUND LIBRARY

The custom sound table must be identical across all the SmartVOX® and SmartREMOTE devices.

1	-----
2	-----
3	-----
4	-----

Contact us for personalised advice

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Designed and
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