

USER MANUAL ACOUSTIC SAFES SERIES "PROSAFE"

The purpose of the Acoustic safe is to block/prevent the audio access of mobile phones/ recorders / dictaphones, etc. (devices with microphone) during meetings, conferences, confidential conversations or situations where it is important to take precaution against eavesdropping via recording devices.

The control panel is inside of the Acoustic safe (**fig.1**).



Fig.1 Control panel

Power ON

To switch **ON** the device, turn the ON/OFF switch to ON. The green LED (POWER) lights up.

Switch **OFF**- switch the ON/OFF to OFF.

To adjust the noise level, turn the **VOLUME** knob left or right.

Switching between different types of noises/sounds is by pressing the VOLUME knob. Each press generates the next sound. When they come to an end, the program starts from the beginning.

The Acoustic safe generates several types of sounds (7), each of which could be used for different TSCM activities:


➤ **White noise** - 2 types

Purpose:

1. To block the mics and ensuring confidentiality of the conversations/ meetings. Frequency-optimized white noise generated by the Acoustic safe covers all frequencies of the human voice.

➤ **Speech like noise** - 2 types

Purpose:

1. To block the mics and ensuring confidentiality of the conversations/ meetings. The  Speech like noise generated by the Acoustic safe covers all frequencies of the human voice.
2. Evaluation the sound permeability through various barriers and protections.

➤ **Metronome** - generates sharp rhythmic sound with different octaves- 2 types

The use of the Metronome sound mode is recommended together with TSCM devices that in addition to the spectrum analyzer have also oscilloscope- it monitors the similarity between the metronome clicking sound and the oscillation of the oscilloscope graph.

Purpose:

1. To evaluate the sound permeability through various barriers and protections.
2. To activate VOX (voice activated) microphones.
3. To assess the relevance of intercepted radio signal to the sounds it the inspected room.

➤ **Octave (rhythmic) sound** with different sound frequencies - 1 type

Purpose:

1. To assess the permeability of sound through different barriers (walls, pipes, air ducts, etc.) and protections. When the lid is open and the Acoustic safe is switched on and set to sound **Octave mode**, it could be checked with different microphones or to be heard without any special equipment (naked ear) if the different sounds (frequency ranges) pass through the barriers or through the wiring installation or air ducts, pipes, windows, etc.
2. Search hidden activate VOX (voice activated) microphones. Using **Octave sound mode** activates the VOX microphones because it creates sounds in a wide frequency range. In addition, the sound is easily recognizable at possible detecting and hearing the sound from a radio microphone.

➤ **Combined** - 4 different noises alternating sequentially

How to operate:

Mobile/Cell phones and electronic devices with microphones

1. Open the lid of the Acoustic safe. Switch **ON** the noise generator
2. Choose the type of the noise/sound (if you wish)- to prevent your meetings from eavesdropping through the mobile phones we recommend using **White noise** or **Speech like noise** modes.
3. Adjust the noise level. Usually, level 2 is enough to block the external sounds, but you could change the level according to your preference and the surrounding noises.
4. Turn off the Bluetooth and Wi-Fi of the phones/devices.
5. Put the devices (mobile phones, tablets, car remote controls, Dictaphones, etc.) into the box.
6. Close the lid of the box.

All microphones of the devices placed in the Acoustic safe will be blocked and will not be able to record audio (conversation) from the meeting room.

- **For EMI Shielded model**- In an electromagnetically shielded safe, the mobile phones lose connection to the mobile operator's network, with Bluetooth handsfree, smart watches, and Wi-Fi devices.

- **Model with solid (non-transparent) lid**- When the lid of the box is closed, the video camera of the devices could record the interior of the box only. The cell phones remain connected to the mobile network. Therefore, if some of them rings, the call can be taken.

- **Model with transparent lid**- When one of the devices inside the box rings, you can see who is calling and decide whether to accept the call or not.

- **Model with USB and USB-C**- to charge the devices inside the Acoustic safe.



Characteristics:

USB output: 5V/3A; 9V/2A; 12V/1.5A

USB - C output: 5V/3A; 9V/2.22A; 12V/1.67A

Note: Charge the devices inside the box ONLY when the Acoustic safe is connected to the power supply (charger)!!!

How to adjust the Volume level

The volume level adjusts with a rotary encoder (**Volume knob**). There is a scale from 1 to 7 on the control panel (**fig. 2**) and 7 is the highest level. The rotary encoder allows it to be rotated

indefinitely in both directions (left/ right). If you scroll two or more times (cycles) in one direction, this will shift the positions for the lowest and highest noise level.



Fig. 2 the Volume knob (rotary encoder)

Adjusting the noise level positions:

Turn the Volume knob (rotary encoder) until you reach maximum sound level. Turn off the device. Turn the Volume knob until it points the number 7. Switch on the device again.

Power supply/ charging

1. On battery- 9V 6F22 battery (non- rechargeable) or NiMH accumulator (rechargeable). The battery is under the black lid near to the control panel (**Fig.3 and 4**).

When the Acoustic safe is on battery, the mobile phones cannot be charged.



Fig. 3 Battery holder



Fig. 4 Battery holder (the battery is illustrative)

The battery life depends on battery capacity and on adjusted noise level. **For example-** the estimated operating time with 200mA rechargeable battery is described in Table 1.

Volume setting	Operating time
1	10 hours
3	8 hours
5	5 hours
7	4 hours

Table 1

The Acoustic safe Noise Generator can operate constantly if it's connected to the external power using rechargeable (NiMH accumulator) battery.

2. External supply- Connect the external power supply to the socket on the back side of the Acoustic safe (*Fig.5 and fig.6*).



Fig. 5 and 6

When the external power supply is connected except continuous operation, it charges the 9V battery if the battery is rechargeable. The charging automatically stops when the battery is fully charged. The external power can be connected permanently without any risk for the battery or the electronics, because the Acoustic safe contains battery overcharging protection circuit.

When the device is **OFF** but at the same time is connected to external power supply and it has a rechargeable battery inside, the **BATTERY/CHARGE LED** lights. That indicates that the battery is charging. It stops when the battery is fully charged and the LED turns off. The device automatically keeps the level of the battery.

In case of external power supply failure (e.g., blackout) the device automatically switches to battery operation. When the power is restored, the device switches to external power supply, and at the same time the battery starts charging.

Red LED blinks constantly if the battery level is below 7.3V. It is possible to blink if the rechargeable battery is damaged.

If the battery is non-rechargeable, never connect the Acoustic safe to the external power supply until the battery is in the battery holder!

The non-rechargeable batteries must not be charged!!!

The Acoustic safe can operate without battery on the external power supply only.