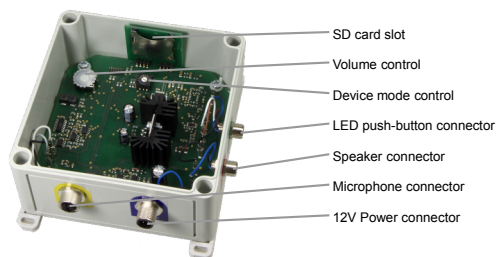


# BATSCANNER STAND Manual

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**elekon**

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Thank you for purchasing Elekon AG's BATSCANNER STAND.

The BATSCANNER STAND is an automatic bat detector for stationary use. It converts the ultrasonic bat calls into an audible frequency with the „mixer“ principle (heterodyne). The mixing frequency is adjusted automatically for the detected bat species. Thus, the different bat species can be heard without manual tuning. Optionally, an instructional audio file can be played back before the detection period. It is ideal for demonstration purposes, exhibitions, booths and can be used by virtually anyone even without any bat knowledge.

## 1 Notes



### Instructions for safe use:

Please read this manual carefully and entirely before using this product. The product must be properly installed before usage.



### Warning:

The microphone must be protected from rain and generally from liquids and harsh environmental influences. The housing, push-button and speaker are waterproof only if mounted correctly. The speaker must be mounted such that no water can accumulate between front panel and speaker.



### Power supply:

Only use the provided 12V power supply. Unplug from outlet when not in use and before conducting maintenance. The included power supply adapter must be protected from liquids and environmental influences. Do not use with a damaged cord or plug. Do not attempt to open the power supply adapter.

Repairs should only be carried out by a qualified customer care centre. When disconnecting the power adapter from the wall outlet always grasp the adapter itself and not the cord.



### Sensitivity:

BATSCANNER STAND microphone must be placed away from electronic devices, speakers, lamps, machines, cars, or other ultrasonic sound sources. The device is very sensitive and it will pick up and amplify any noise. This might lead to unwanted interferences.

## 2 Package Contents

- BATSCANNER STAND device incl. SD card
- Start push-button with LED and cable 2m
- Speaker with cable 2m
- changeable Ultrasonic microphone with cable 2m
- Power supply 12V, 5W
- This manual



## 3 Features

- Automatically detects bat calls and tunes frequency accordingly
- Powerful speaker output, volume adjustable
- Starts detection after button push and switches off after a few seconds automatically
- Optional audio instruction output from SD card
- Configurable detection- and standby times
- Water- and vandal-proof for unattended outdoor use

## 4 Installation

1. Use the provided drilling template to prepare a front panel, steel sheet or similar (thickness max 11mm) for the mounting of the push-button and the speaker.
2. Mount the device in a box, housing or hidden place. Use screws (4x M4) to attach the device.
3. Mount the microphone in a place that ensures a good audio reception but still is protected from rain and vandals.
4. Connect the microphone, speaker and push-button cables to the device.
5. Connect the power supply to the device and plug it into a power outlet.

## 5 Adjustments

1. Open the device housing by unscrewing the four plastic screws.
2. Optional: Insert a SD card with the instruction audio file (see below).
3. Change the device mode with the "Mode control" (see below)
4. Push the button to start detection.
5. Adjust the speaker volume with the volume control.
6. Close the device housing and tighten the four plastic screws.

## 6 General usage

The device is on, as soon as power is available. After power up, it is in sleep mode. The LED is off.

### 6.1 Default mode (without SD card)

The device acts as a simple bat detector. The mixing frequency is adjusted automatically for the detected bat species and the ultrasonic calls are transformed into audible range.

1. Press the push-button to start the detection. The LED lights red.
2. After 30s the device goes into standby. The LED lights green.
3. After 30min of inactivity, the device turns into sleep mode. The LED is off.

### 6.2 Instruction mode (with SD card)

The device first plays an instructional audio file and after that switches into bat detection mode (see above).

1. Short-Press the push-button to start the audio instruction. The LED blinks red.
2. After the instruction, the detection is started. The LED lights red. (depending on the mode)
3. After 30s (see chapter 8) detection the device goes into standby. The LED lights green.
4. Long-Press the push-button to start the detection immediately. The LED lights red.
5. After 30min (see chapter 8) of inactivity, the device turns into sleep mode. The LED is off.

## 7 Audio-Instructions

For instruction or demonstration purpose an audio file can be played back.

1. On your computer, use a common audio application to record a WAV-File (PCM, 16bit, Mono).
2. Name the WAV-File "message.wav" (without quotes).
3. Copy the WAV-File onto a SD card's root folder.

## 8 Device mode

For special use cases it may be needed to change device mode. Set the device mode control switch to change the detection and standby times:

- 0: infinite detection
- 1: 30s detection, 30min standby (default)
- 2: 1min detection, 30min standby
- 3: 2min detection, 30min standby
- 4: 5min detection, 30min standby
- 5: 10min detection, 30min standby
- 6: 30s detection, 1h standby
- 7: 1min detection, 1h standby
- 8: 2min detection, 1h standby
- 9: 5min detection, 1h standby
- A: 10min detection, 1h standby
- B: 30s detection, infinite standby
- C: 1min detection, infinite standby
- D: 2min detection, infinite standby
- E: 5min detection, infinite standby
- F: 10min detection, infinite standby

## 9 Troubleshooting

- Device does not turn on:
  - Check power supply
  - Check push-button connection
- Output volume is too low:
  - Increase volume
  - Check speaker connection
- Only noise is output:
  - Decrease volume to minimize feedback loops or place the microphone away from noise
  - Check/replace microphone

## 10 Specifications

Dimensions L×W×H, Weight	130×130×78 mm, 350 g
Weather protection	IP66 (except microphone, power supply)
Power supply	12 V DC to 18 V DC, min. 5W
Operating environment	-20°C to 50°C, < 80% RH
Mode-Display	LED
Audio converter	Mixer (Digital heterodyne), with automatic adjustment
Input frequency range	15 – 120 kHz
Microphone	Electret condenser, omni directional, changeable
Speaker	20W, Range: 350 – 5800 Hz (-10dB)

## 11 Disclaimer

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Made in Switzerland  
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