

I4-technology LLC

Microphones, bugs and tape recorders jammer "BugHunter DAudio bda-3 Voices" with five UV- transducers on the side, two UV- transducers on the top and an acoustic silencer.

User manual



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The User Manual includes key features, operating instructions (intended use, maintenance, repair, storage and transportation) Microphones, bugs and tape recorders jammer "**BugHunter DAudio bda-3 Voices**" with seven UV- transducers and an acoustic silencer (hereinafter - device).

The device is designed to protect conversation areas from eavesdropping. Device blocks wireless microphones, tape recorders, wired microphones and most of professional digital tape recorders including tape recorders installed in mobile phones (smart phones). Ultrasonic inaudible noise signal * as well as acoustic speech-like noise signal ** are used in jamming the eavesdropping devices.

The device has two additional vertical UV-transducers and a jack to connect external ultrasonic speaker***.

** Ultrasonic pressure level of the operating device at a distance of 1 meter or less may exceed the maximum safety level of emission for people according to Sanitary Regulations and Norms 2.2.4/2.1.8.582-96 that may cause damage to your health!*

***The manufacturer cannot guarantee that if you use only one ultrasonic signal (or insufficient level of acoustic speech-like signal volume) all tape recorders and recording devices will be jammed.*

****Ultrasonic speaker is an additional accessory and not included in the contents of delivery*

Before using the device, please, carefully read the supplied User Manual.

Violation of the storage instructions and operating rules will lead to manufacturer warranty termination.

1. DEVICE DESCRIPTION AND OPERATION.

1.1. It is a portable device designed to protect conversation areas from eavesdropping.

1.1.2. Device operating instructions:

- Surrounding air temperature, °C..... from +5 to 55
- Relative air humidity at 25°C, %..... up to 98
- Atmospheric pressure..... from 66,6 kPa up to 106,6 kPa (from 500 mmHg up to 800 mmHg)

1.2. Technical specifications.

1.2.1. Visual appearance of the device is shown on Figure 1.



Figure 1.

1.2.2. Device characteristics:

- Dimensions, mm.....170x95x31
- Weight, including batteries.....0,3
- Internal source of power supply, V12
- External source of power supply, V15
- Current consumption, A0,35
- Effective (maximum) range of jamming the eavesdropping devices.....7
- Effective (optimal) range of jamming the eavesdropping devices,2
- Sound pressure level at 1 m distance from the device, dB120
- Installed batteries capacity, mAh.....1200

1.2.3. Ultrasonic speaker characteristics (sold separately):

- Dimensions, mm.....95x55x23
- Weight, kg.....0,08
- External source of power supply, V 12
- Current consumption, A0,25
- Sound pressure level at 1 m distance from the device, dB120

1.3. Device components.

1.3.1. Device components and supplied package are shown on Table 1.

Table 1

No	Description	Quantity
1	Microphones, bugs and tape recorders jammer " BugHunter DAUDIO bda-3 Voices " with seven UV- transducers and an acoustic silencer.	1
2	External power supply source (battery charger) from single-phase AC 50 Hz, 220 V	1
3	Individual packaging	1
4	User Manual	1
5	Quantity control list	1

1.4. Structure and functioning.

1.4.1. The housing is constructed of high impact ABS plastic. Location of the device's main parts is shown in Figure 2.

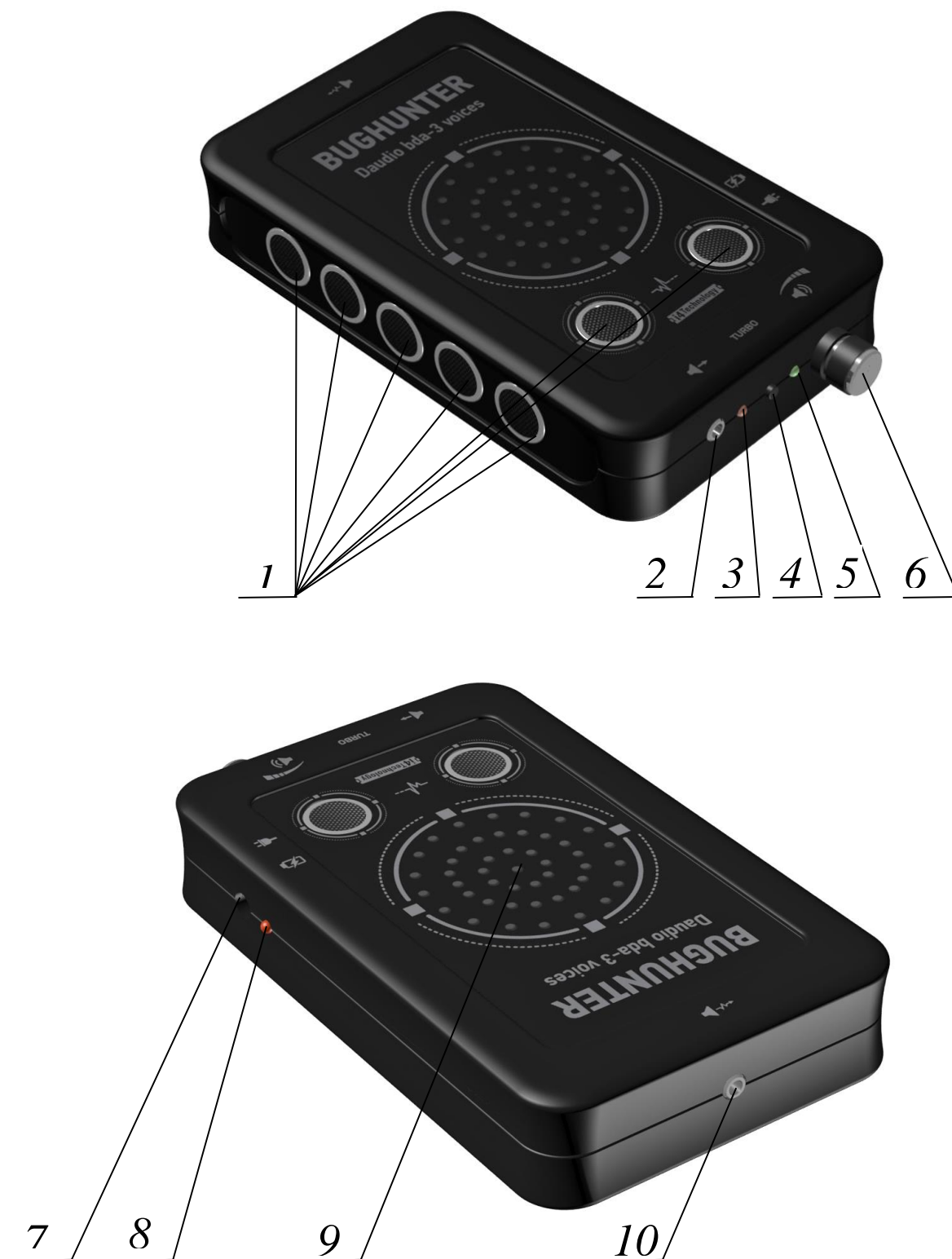


Figure 2.

- 1 – ultrasonic transducers
- 2 – jack to connect an external acoustic system (audio output) (аудио выход)
- 3 – turbo mode indicator
- 4 – button of turbo mode activation
- 5 – power switch ON indicator
- 6 – volume controller of the acoustic speech-like signal with a switch
- 7 – power jack for an external power source (battery charger)
- 8 – power indicator of the external power supply source (battery charger)
- 9 – speaker
- 10 – jack to connect ultrasonic speaker

1.4.2. The device runs under command of micro controller with embedded software.

1.4.3. Device's transducers emit special high frequency sound waves (pattern of the sound is determined by software in accordance with the specially developed algorithm) with the sound pressure reaching 120 dB at 1 m distance from the transducers. Additionally, the speaker produces an acoustic speech-like signal with adjusted volume.

1.4.4. The device is powered by the installed batteries or by the supplied external power source (battery charger).

1.4.5. The installed batteries are charged by the supplied external power source (battery charger).

2. INTENDED USE.

2.1. Operating restrictions

2.1.1. Ultrasonic pressure level of the operating device at a distance of 1 meter or less may exceed the maximum safety level of emission for people according to Sanitary Regulations and Norms 2.2.4/2.1.8.582-96 that may cause damage to your health!

2.1.2. Do not hold the running device in close proximity to person's ears - this may cause headaches and temporary hearing loss.

2.1.3. Do not damage the ultrasonic transducers that are located behind the grid by foreign objects. Damage of the transducer may cause improper operation of the device or render it unusable!

2.1.4. Do not cover or block the ultrasonic transducers or holes in housing cover by your hand or piece of clothes while the device is in operation!

2.1.5. Use only the supplied external power source (battery charger) for charging the installed batteries.

2.1.6. Children should not use the device!

2.1.7. Most of the pets (dogs, cats, rodents, etc.) rather painfully react to ultrasonic waves, so please avoid the use of the device in their presence when applicable!

2.1.8. Store the device with fully charged batteries. Monitor the batteries charge level, do not let them be fully discharged! In this way the batteries life will be extended.

2.2. Device usage.

2.2.1. ON/OFF. In order to switch ON the device, turn the volume controller (item 6) clockwise (in volume increasing direction) until you hear a click. Then power indicator will start to flash (item 5). Speech-like signal appears and accelerates upon further turning of the volume controller. In order to switch OFF the device, turn the volume controller (item 6) counterclockwise (in volume decreasing direction) until you hear a click

2.2.2. TURBO Mode *. In this mode, the effectiveness of tape recorders jamming is achieved by application of the additional ultrasonic transducer that produces frequency signals. In order to switch ON/OFF the mode press the button (item 3). Yellow flashing indicator (item 3) shows that the device is operating in TURBO Mode.

** NOTE in this mode, ultrasonic signal modulates the audio signal that becomes slightly audible to human hearing, even at zero volume of acoustic speech-like signal. This somewhat complicates the possibility of completely hidden use of the device.*

2.2.3 Installed batteries charge indication.

– Green LED of the switch indicator (item 5) is lit constantly - device is running normally, the batteries charge is sufficient.

– LED of the switch indicator (item 5) blinks 1 time per second - device is running, you need to connect an external power supply (battery charger);

– LED of the switch indicator (item 5) blinks 2 times per second - batteries charge is critical, the device does not work (ultrasonic and acoustic speech-like signals are not produced), you need to urgently connect an external power source (battery charger);

– LED of the switch indicator (item 5) is not lit when the device is switched ON - the batteries are dead, you must charge the batteries.

2.2.4. Batteries charging. In order to charge the batteries or to prevent its full discharge because of continuous running of the device, you need to insert the charger plug into the jack (item 7). Then the red LED of the power indicator of the external power supply source (item 8) starts flashing*. The batteries are fully charged after the red LED (item 8) turns off.

**It may possibly take 20-40 seconds for the external power supply source indicator to start flashing at the critically low batteries charge level.*

2.2.5. Device supports connection of an additional ultrasonic speaker. Ultrasonic speaker is an external acoustic device, intended to create a more “dense” ultrasonic interference where the conversation is happening. Ultrasonic speaker is connected to a 220V network through power adapter bundled with it and connects to the device by cable of mini-jack type.

To turn on ultrasonic speaker please do the following:

1. Connect ultrasonic speaker to a 220V network via power adapter.
2. Connect ultrasonic speaker to the device via cable to a jack (item 10).
3. Turn on the device (2.2.1 and 2.2.2. and Figure 3).



Figure 3.

2.3. Practical recommendations.

2.3.1. The device should be placed so that the transducers be directed towards possible location of eavesdropping devices (tape recorders, microphone, "bugs" etc.), for example, toward the new visitors or clients. The optimal distance from the transducers to microphone of the eavesdropping device is up to 2 meters. Then switch ON the device and adjust the volume of the acoustic speech-like signal so that you can still hear the person you are talking to. You should hold conversation in a low voice but so that you hear well each other without repeating every word. Use TURBO mode for more effective jamming of the microphones.

2.3.2. Do not switch on the acoustic speech-like signal when you want the device to be hidden. Note that this is somewhat reduces the effectiveness of the device (the manufacturer cannot guarantee that if you use only one ultrasonic signal the device will jam all tape recorders).

2.3.3. It is recommended to connect the device to external speakers (e.g. computer) and ultrasonic speaker through the special jack in order to more effectively expose the acoustic speech-like signal in a large room. This will protect the large conversation area from eavesdropping as well as to prevent from eavesdropping by external directed microphones (such as laser).

3. MAINTENANCE.

3.1. Maintenance requires only charging of the installed batteries as well as cleaning the surface of the device.

3.2. Current repair. Troubleshooting. Typical problems and possible solutions are specified in Table 2.

Problem	Possible reasons	Possible solution
When you turn on the device the battery indicator (item 5) is not lit	Battery is discharged	Recharge the battery
	Device is defective	Take the device to service center

Table 2

4. PACKAGING, STORAGE AND TRANSPORTATION.

Each device is packed in individual package according to the supply package as indicated in Table 1. Device moving in the package is not allowed. Packed devices are placed into shipping containers - a corrugated fiberboard box (State Standard 22637).

Packaged devices can be transported by vehicle or railway in covered trucks or containers, by air in pressurized compartments.

During transportation packed packages should be protected from precipitation and direct sun rays.

Transportation conditions:

- Surrounding air temperature: from -50 up to 50 °C;
- Relative humidity up to 95 % at 25 °C;
- Atmospheric pressure from 84 up to 107 kPa (630 - 800 mmHg);
- Shock acceleration peak value is up to 147 m/s² (15 g), with a duration of shock acceleration 10 ... 15 ms

The requirements on warning signs must be strictly obeyed when loading and transporting.

5. ACCEPTANCE CERTIFICATE.

Microphones, bugs and tape recorders jammer "**BugHunter DAudio bda-3 Voices**" with seven UV- transducers and acoustic silencer.

Serial number _____

Manufacture date _____

Manufactured and accepted in accordance with the applicable technical documentation and validated.

Quality Department stamp _____

6. MANUFACTURER WARRANTY.

6.1 **i4Technology™** - Russian vendor and manufacturer of innovative electronics is distinguished by the high quality and durability products. A unique multi-level quality control system is implemented at the plant.

The manufacturer uses only high-quality, expensive hardware components of world-famous vendors from Europe, USA and Japan.

6.2 The manufacturer guarantees that the product conforms to the applied requirements under the operating, storage and transportation conditions specified in the operational documentation.

6.3 Effective device duration period — not less than 3 years

6.4 Manufacturer warranty - 12 months from the date of purchase.

6.5 If the device fails during the warranty period, the supplier (manufacturer or companies providing maintenance services) should replace or repair it at its own expense.

6.6 Customer loses the right to obtain warranty service in the following cases:

- After warranty term expiration;
- Violation of the operation, transportation and storage instructions;
- Mechanical damages causing device failure after the purchase;
- Manufacturer sealing is broken.

6.7 Repair and maintenance of the devices with an expired warranty period is covered at the customer's expense.



Manufacturer has the right to amend and change device characteristics to improve it's consumer properties

Manufacturer's technical support: www.i4technology.ru

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Questions concerning the exchange after-sales service should be applied to the distributor that completed a sale.

Distributors contacts are listed in the warranty certificate.

Warranty Certificate

Product: Microphones, bugs and tape recorders jammer "**BugHunter DAudio bda-3 Voices**" with seven UV-transducers and acoustic silencer.

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Serial number _____

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Manufacture date _____

Quality Department stamp _____

Date of purchase _____

Seller's signature and stamp _____

I do not have any claim against quality of the device, its package and technical state _____