

Ultrasonic rodent repeller «Grad 506»

User Manual



This manual introduces a user to the design, operating rules (intended use, maintenance, repair, storage, and transportation) of the product **Ultrasonic Rodent Repeller “Grad 506”** (hereinafter referred to as the Product).

The main Product features: silent ultrasonic operation, which doesn't cause any physical discomfort; compact case, user-friendly and reliable.

Please read all the instructions before attempting to operate this Product.

All operating rules, restrictions, and directions should be read, adhered to and followed; it will prolong the service life and will enable more efficient use of the Product.

Caution! According to sanitary regulations the operating Product isn't allowed to place at a distance of 2,5 m (8,2 ft) or less from a human! It must be taken into account while organizing workplace.

Caution! Don't keep the operating Product at a close distance from human ears as it may cause headache or temporary hearing loss!

Caution! The operating Product may have a bad influence on such pets as cavies, hamsters and rats. It is not recommended to put operating Product near other pets (cats, dogs) so far as they are sensitive to ultrasound.

Caution! Keep out of reach of children!

1. Product description and operation

1.1 Intended use

1.1.1 This Product is a compact stationary appliance designed for rodent control (mice, rats) in enclosed space – storehouses, storages and other places.

The Product generates ultrasonic emission, which affects the central nervous system of the rodents causing pain and discomfort. Rats and mice try to leave the place.

The operation principle of the Product is in the following: the Product generates ultrasonic emission, which is unbearable for rodents. Ultrasonic waves affect the central nervous system of the rodents causing pain and discomfort. Rats and mice try to leave the area with operating product.

1.1.2 Operating conditions:

- ambient temperature,from –10 to 50^oC (from 14 to 122^oF);
- relative air humidity at 25^oC (77^oF), % up to 98;
- atmospheric pressure from 66,6 κPa up to 106,6 κPa (from 500 mmHg up to 800 mmHg)

1.2 Technical features

1.2.1 Visual appearance of the Product is shown in Figure 1



Figure 1 – Visual appearance of the Product

- 1.2.2 Dimensions, no more than85 x 65 x 75 mm (3,35 x 2,56 x 2,95 in)
- 1.2.3 The product weight, no more than0,12 kg (4,23 oz)
- 1.2.4 AC input voltage (50-60Hz)220/110 V
- 1.2.5 The maximum current consumption, no more than.....35 mA
- 1.2.6 Frequency ranges,from 20 to 40 kHz
- 1.2.7 Emission patterncircular
- 1.2.8 Sound pressure level at 1 m (3,28 ft) distance from the Product, no more than 110 dB*
- 1.2.9 The maximum emission area..... 500 m² (0,12 ac)

*(the maximum permitted level according to sanitary regulations)

1.3 Product components

1.3.1 Product components and supply package are shown in Table 1.

Table 1

No	Description	Quantity	Notes
1	Ultrasonic rodent repeller	1	
2	Individual package	1	
3	User Manual	1	

1.3.2 Location of controls is shown in Figure 2.

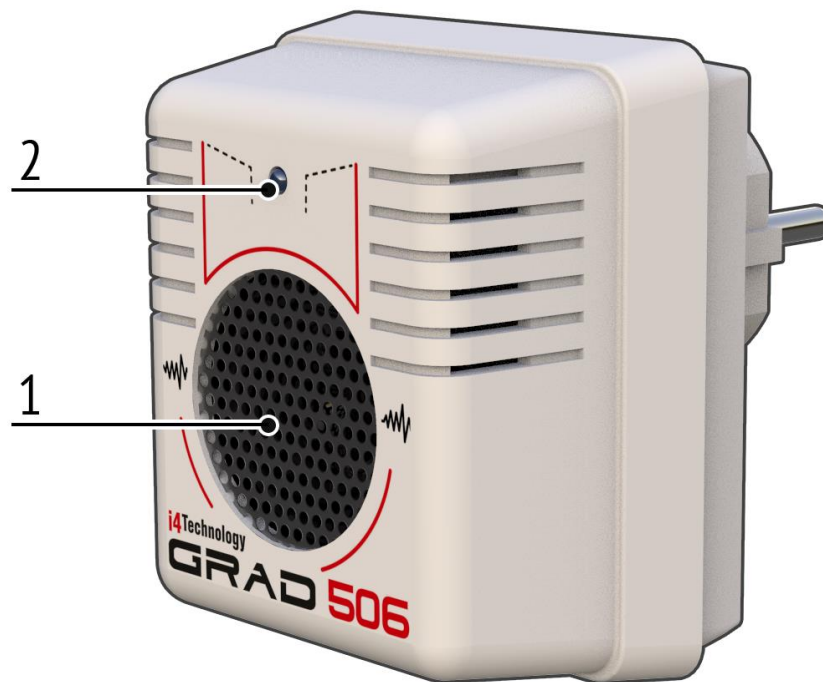


Figure 2 – Location of controls

The housing of the Product is made of high impact ABS plastic, it has:

- ultrasonic emitter (1);
- power indicator (2).

1.4 Structure and Functioning

1.4.1 The Product runs under command of microcontroller with embedded software.

1.4.2 The Product generates ultrasonic emission which is intolerable for rodents. Permanent change of emission settings excludes any rodent habituation to the Product.

2. Intended use

2.1 Operating restrictions

2.1.1 Do not damage the ultrasonic emitters located behind the grid by foreign objects. Damage of the emitter may cause improper operation of the Product and may reduce its efficiency or disable.

2.1.2 When the Product is operating, do not cover ultrasonic emitters with any objects as it may disable the Product.

2.1.3 Do not open or try to disassemble the Product.

2.1.4 Do not put water and foreign objects inside the Product.

2.2 Operating instructions

2.2.1 To turn the Product ON put a plug into a socket. After that the power indicator starts to flash.

2.2.2 It is important to choose the right place for the Product installation if you would like to take control over the rodents. Take into account the following:

- ultrasound waves bounce off hard materials and are absorbed by soft materials. Cloth, rags, furniture and so on may reduce ultrasonic impact a lot, so be concerned that there must not be many such things in the place where you would like to put the Product;

- ultrasound waves don't pass through the walls or partitions. That is why when putting the Product in a house you should concern that the Product can control the rodents in a stated area only when it is located in empty house of a similar size. If the area is divided into several rooms or filled with shelves and partitions it would be needed several appliances placed all over the area;

- installing the Product at the distance of 60-70 cm (1,97-2,30 ft) from the ground will bring to maximum efficient operation. For putting a plug into a socket it is possible to use extensions cords. **Do not use homemade or defective extension cords – it may disable the Product and cause short circuit!**

2.2.3 Rodents will disappear after 14 days of continuous Product operation in enclosed space.

3. Technical maintenance

3.1 Technical maintenance consists in cleaning the surface of the Product as needed.

3.2 Current repair. Types of malfunctions.

Typical malfunctions and possible solutions are specified in Table 2.

Table 2

Malfunction description	Possible reasons	Possible solution
When turning the Product ON the indicator does not light	There is no supply-line voltage	Check electric mains.
	Product is defective	Return the Product to the repair department.

4. Packaging, storage and transportation

Each Product is packed in individual package according to the supply package as indicated in Table 1.

Device moving in the package is not allowed. Parcels are placed into shipping containers – a corrugated fiberboard box.

Parcels can be transported by vehicle or railway in covered trucks or containers, by air in pressurized modules.

During transporting parcels should be protected from the effect of atmospheric conditions and solar emission.

Transportation conditions:

- ambient temperature: from -50 to 50°C (-58 to 122°F);
- relative humidity up to 95 % at 25°C (77°F);
- atmospheric pressure from 84 up to 107 kPa (from 630 up to 800 mmHg)
- peak impact acceleration is up to 147 m/s² (15g) at a duration of action of impact acceleration 10...15 ms.

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

5. Acceptance certificate

Ultrasonic rodent repeller “Grad 506”

Serial number _____

Manufacture date _____

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

Quality Department stamp _____

6. Manufacturer's warranty

6.1 The manufacturer guarantees that the product conforms to the specifications 6329-005-64062607-2014 under the operating, storage and transportation conditions specified in the operational documentation.

6.2 Product lifetime - 5 years.

6.3 Warranty period — 12 months starting with the day of purchase.

6.4 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.

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

- after the expiry of warranty period;
- violation of the operating, transportation and storage rules;
- mechanical damages causing device failure after the purchase;
- manufacturer's sealing is broken.

6.6 Repair and maintenance of the Product with the expired warranty period is covered at the customer's expense.

7. Certification

7.1 The Product meets the requirements of Technical Regulations of the Customs Union TS020/2011 «Electromagnetic Compatibility of technical means», Technical Regulations of the Customs Union TP TS004/2011 «Safety of low-voltage equipment». Declaration of conformity to EAEC № N RU D-RU.AN03.B.04518/19. Expiration date is 23.07.2024 inclusive.



The manufacturer reserves the right to introduce technical modifications improving 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. Distributor's contacts are specified in its warranty card.

