Detector of Hidden Television Surveillance Systems
GCU-OCD15

Operating manual

CONTENT

Operating manual (OM) worked out to provide correct and safe operation of device for observation hidden television systems GCU-OCD15 (further in the text “device” or “instrument”) and to carry out the evaluation of the Instrument technical condition with the goal to make decision whether it should be sent for repair. No additional training of the operator is required.

1. DESCRIPTION AND PRINCIPLE OF OPERATION

1.1 Area of application

1.1.1. Detector of hidden television surveillance systems GCU-OCD15 is designed for searching and visualizing the location of portable hidden television surveillance systems (HTSS), such as cameras hidden in the walls or furniture, button, icon, briefcase or handbag, with a conventional lens or micro lens (pin-hole type), enabled or disabled, transmitting image via wire or radio channel, and operating indoors in mild climate.

1.2. Technical parameters

1.2.1. Minimum diameter of HTSS pupil detected 1 mm.
1.2.2. Detection range:
- minimum - 2 ± 0,1 m;
- maximum - 25 ± 0,5 m.

1.2.3. Operating observation field 8°.
1.2.4. Maximum zoom 4.
1.2.5. Probing LEDs radiation with white LED.
1.2.6. Power from one CR123A battery.
1.2.7. Power supply voltage from 2.5 to 3 V.
1.2.8. Continuous operation under standard climatic conditions from a new battery at least 10 hours.
1.2.9. The product has the following functions and settings:
- eyepiece diopter adjustment ± 5 diopters;
- continuous radiation mode;
- pulse radiation mode.

1.2.10. Time to enable operation mode after switching, no more than 5 seconds.
1.2.11. Dimensions, no more than 80x70x45 mm.
1.2.12. Overall dimensions of the standard package (cover) no more than 130x80x60 mm.
1.2.13. Weight of the device with standard batteries, no more than 0.25 kg.
1.2.14. Weight of the product in standard package with battery, no more than 0.5 kg.
1.2.15. Climatic conditions:
- Relative humidity no more than 95% at temperature 25 ° C;
- operating temperature range from -10 ° C to + 50 ° C.

1.3. Delivery Set.

1.3.1. Product Delivery Set is specified in Table 1.

Table 1

Name	Pcs	Note
GCU-OCD15	1	
CR123A battery	1	
Cloth for cleaning optics	1	
Operation Manual	1	
Data sheet	1	
Delivery package (cover)	1	

1.4. Principal of operation.

1.4.1. The main components of the device and control layout are shown in Figure 1.

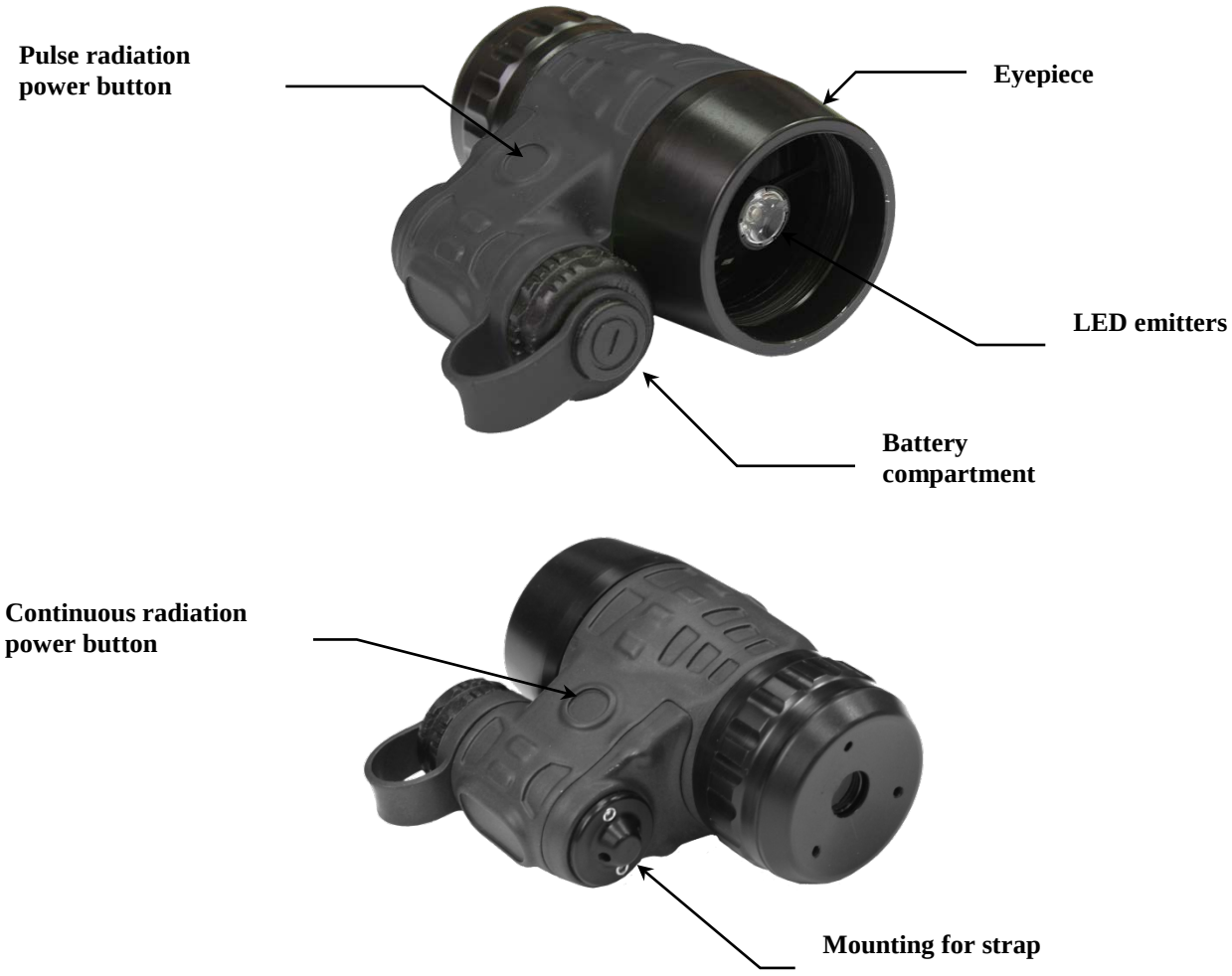

Figure 1

1.4.2. Control of the operation of the device is performed using two buttons.
1.4.3. The eyepiece has a diopter adjustment of ± 5 diopters available by rotating the settings' ring.
1.4.4. The device operates in two modes: continuous and pulsed radiation. Application of LED emitter with pulse radiation mode allows to increase the accuracy of detection of hidden cameras as compared to conventional detectors.
1.4.5. The device has a mounting for carrying strap.
1.4.6. Battery compartment lid is threaded and fixed in the removed state using a rope to the mount of the product's case.

1.5. Marking.
1.5.1. Marking of a product, which includes short name of the manufacturer or a trademark of the manufacturer, part number, serial number and year of manufacture marked on the code plate on the case of the device and on the package (cover). Cover with the device is packaged in a cardboard box. The markings on the cardboard package of the product may contain, in addition to the above markings, other information specified in the supply contract.
1.5.2. The product is sealed on a standard package (cover). The product itself is not sealed.

1.6. Packing
1.6.1. The product is packed in a standard package (cover).
1.6.2. The product in a standard package is packed in a matched transport packaging (cardboard box).

2. Proper use
2.1. Operational restrictions
2.1.1. Before starting, carefully read Operation Manual.
2.1.3. ***It is prohibited*** to open battery compartment of the product, replace batteries, remove protective lid of the battery compartment in the conditions of high humidity (over 90%), condensate, or the possibility of water penetration into the interior content of the product and its parts.
2.1.4 ***It is prohibited*** to immerse the product into water, do not turn on the product in the case of water ingress or operate the product at temperatures beyond the limits specified in p.1.2.15.

2.2. Getting Started.
2.2.1. Before using the device, make sure there is no violation of operational restrictions.
2.2.2. Remove the unit off the standard package.
2.2.3. Make sure there is no mechanical or chemical damage on the power units. Check for any mechanical damage on the product.
2.2.4. Install a new CR123A battery into the battery compartment of the device with "-" up, carefully observing polarity.

2.2.5. Close the battery compartment cover tight to prevent the penetration of foreign objects and water into the case while operating the device.

2.3. Product Use

2.3.1. Bring the eyepiece of the device to the eye and direct the output window with LED emitters onto the inspected object.
2.3.2. Adjust image sharpness in the eyepiece by turning diopter adjustment ring clockwise or counterclockwise. Get the best visibility for your eyes.
2.3.3. To search for hidden television surveillance systems, use all modes of operation of LED emitters alternatively.
2.3.4. To work in constant radiation mode, press and hold continuous mode power button.
2.3.5. To switch to pulse mode, press and hold continuous mode power button and then press and hold pulse mode power button (pulse mode is activated when both buttons pressed).

2.4. Safety measures

2.4.1. In case of fire on the device, power off the device and to take measures to put out fire.
2.4.2. In case of emergency operating conditions (high temperature, humidity, vibration, etc.), take measures to reduce the impact of accidental factors on the product.

3. MAINTENANCE SERVICE

3.1. Product maintenance does not require special training of staff.
3.2. Any oxidation and salt presence on the surfaces of the batteries must be avoided. When any appear, the batteries must be replaced.
3.3. The optical surfaces of the device (eyepiece, output window) when dirty should be cleaned only with a clean cloth made of genuine or microfiber suede, designed for cleaning optical parts (eg glasses). Before that, blow away the grains of sand and dust. To remove heavy grease, use a cotton swab moistened in ethanol, having preliminary removed solids from the optics with a soft brush.
3.4. Product functional testing and its technical inspection is controlled by checking paragraphs 1.2.2., 1.2.9., 1.2.10.
3.5. Preservation (degreasing, reconservation) of the product is carried out by packing it in its standard packing (cover).

4. REPAIR

4.1. Current repair of the product is carried in accordance with Table 2.

Table 2

Failure and damage consequences	Possible Reasons	Eliminating consequences of failure and damage
No LED when pressing the buttons	- Batteries are depleted - Contacts in battery compartment have been oxidized - LEDs have failed or worn out	- Replace batteries - Clean contacts in battery compartment - Replace LEDs

5. STORAGE

5.1. Storage conditions.

5.1.1. The device should be stored packed on the shelves in the capital heated rooms at temperature from 5 °C to + 40° C and a relative humidity of 80% at temperature of +25 °C at no vapors of acids, alkalis, current-conducting dust and other chemically active substances, gases that cause corrosion and destroy insulation. It can be stored in a standard package when stacked (horizontally cover up) on the shelves with up to 4 products. Stacking in a vertical position is not allowed.

5.2. Storage life

5.2.1. Storage life of the product in a standard package is 1 year (without batteries) in heated ventilated premises at ambient temperature from + 50 °C to + 40 °C and a relative humidity of 80% at a temperature of 25 °C.

5.3. Terms of placing the product in storage and withdrawing it from storage.

5.3.1. When placing the product for storage, its components must be carefully packed in standard package to the appropriate places in the installation. When withdrawing it from storage, the components of the product should be removed from the package and keep the product under standard climatic conditions for at least 12 hours.

6. TRANSPORTATION

6.1. Requirements for transportation and transportation conditions.

6.1.1. Transportation of the device is carried out in a transport container by all kinds of goods and passenger transport at a height of no more than 12,000 meters at ambient temperatures from -40 °C to + 60 °C and protected against direct exposure of precipitation and reactive components. When carried in railway wagons, the shipment should be small low-tonnage. After transportation

and before using, keep the product in standard climatic conditions for at least 12 hours.

6.2. The procedure to prepare the product for transportation and methods of attachment during transportation.

6.2.1. Before transporting the product in a standard package, it can be packed into an extra matched shipping container (plywood box). Products in transport containers should be secured in such a way as to ensure the stability of their position, excluding mutual displacement and strokes. During loading and unloading and transporting, the requirements of handling marks on the shipping container must be strictly observed.

6.3. Transport characteristics of the product.

6.3.1. Dimensions of the product in the standard package (cover) no more than 130x80x60 mm.

6.3.2. Product weight in a standard package (cover) with battery is no more than 0.5 kg.

7. Warranty

7.1.The manufacturer undertakes warranty repair liabilities for 1 year from the date of purchase, provided the consumer observes the rules of operation, transportation and storage.

7.2. Warranty storage life – 6 months.

7.3. Operation lifetime (including regular battery replacement) – 5 years.

7.4. Warranty is valid provided the integrity of warranty seal and absence of mechanical damages.