

# **OPTIC-2**

**PROFESSIONAL HIDDEN  
CAMERA DETECTOR**

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## 1. Purpose of the device

The “Optic-2” Professional camera lens detector” is designed to detect and locate hidden cameras (camouflaged within a location) such as “pinhole” type devices, regardless of their status (on / off) and the type of video signal.

## 2. Specifications

Locating a camera lens from light reflection.

If you find a hidden camera lens with the “Optic-2”, you will see a green or red point or spot of light. This is the result of light reflection from the camera lens.

<i>Nº p/n</i>	<i>Parameter</i>	<i>Value</i>
1.	Detection range (Depends on light conditions (ambient light))	from 0.5 to 50 meters
2.	Angle of view	7,5 degrees
3.	Magnification	6.5x
4.	Focus range:	0.5 m to $\infty$

5.	Mode	<ul style="list-style-type: none"> <li>- Continuous green</li> <li>- Continuous red</li> <li>- pulse green</li> <li>- pulse Red</li> <li>- pulse red- green</li> </ul>
6.	Power type	Li-ion battery 3.7V
7.	Type of backlight	LED
8.	Number of LEDs	22
9.	Backlight color	green, red, red / green
10.	Weight (grams)	450
11.	Device weight including transport bag with charger (grams)	800

12.	Operating time (when battery is fully charged)	<ul style="list-style-type: none"> <li>- In impulsive mode when using red / green light: at least 4 hours</li> <li>- In continuous mode: not less than 6 hours</li> </ul>
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*Delivery set*

1.	Detector "Optic-2"	1 pcs.
2.	Built-in battery Li-ion 3,7 V, 800-1200 mA	1 pcs.
3.	Charger	1 pcs.
4.	Strap	1 pcs.
5.	Transport bag	1 pcs.
6.	Manual, passport	1 pcs.

### **3. Battery Installation**

#### **NOTE:**

The device is powered by a battery, installed by the manufacturer.

### **4. Battery Charging**

The device is charged using the charger included in the delivery set (5 V, 0.6 A). Charging should be performed while the device is switched off. A completely discharged device will require charging for 4 hours.

Plug the charger into 220 V (50 Hz) source. The red LED on the charger will light up when connected to 220 V.

Connect the charger to the device connector labeled +5 v. When connecting, the CNG indicator will light up on the device, confirming charging has begun. The red LED on the charger will be lit while charging is in process.

When charging is complete the indicator on the unit will turn off (CNG).

Unplug the charger from the device first and then from the 220 V source.



*Fig.1* The device is ready for use

**Warning** — before use, ensure the device is charged.

**Warning** — during long-term storage the device must be charged at least once every 6 months.

## 5. Controls

On / off and mode switching are performed using the Select button. A long press (more than 2 seconds) turns the device on / off. When the device is on, a short press of the select button changes the mode. When first turned on the red continuous mode is set.

The central focus ring located at the top of the binocular adjusts the focus.

## 6. Verifying the device

A distance of 2-3 meters, test an object such as a “pinhole” camera (is not supplied) so that the lens is pointed to the place you will be standing. Turn on the back light and look through the device to locate

a green or red spot in the lens of the camera. In the same way, a hidden camera lens will be visible while checking the room.

## **7. Working with the Device.**

Working with the device consists of checking the selected room by visually inspecting for camera lenses utilizing the device.

### **IMPORTANT.**

To detect and locate a camera lens, an operator should be in the same position, which is presumed to be the subject or target of the surveillance. Walking around a room randomly, looking through the interior with the "Optic-2", will probably not detect the hidden camera.

For example: If it is assumed the managers' desk is the object of surveillance, then the operator should be positioned to sit in the manager's chair and to search the room from this point. If a glaring or reflective spot is observed, a closer check should be performed to identify the source of light.

The basic operation mode is continuous. Pulse mode is optional and is used when working in normal light conditions. In a dark room, it is recommended to use the continuous mode.



In Fig. 2 and 3 where is an example of the detected camera

*Fig.2*



*Fig.3*



## **8. Recommendations for locating hidden cameras**

The basic rule for detecting hidden cameras is the necessity to stay in the area or place, which is most likely to be of interest to those who would install the hidden camera (or the intended recorded location).

Most likely these are places where work is performed (desks and tables where individuals would sit) or places of leisure (chairs, couches, beds). If the interest is individuals entering a room, the camera could be aimed at the doorway.

Be aware that there may be several cameras. Detection of one or two video cameras does not indicate that the room has been checked completely. All areas or places from which surveillance is possible are required to be checked and verified.

The most difficult areas to search will be those with large number of reflecting objects such as mirrors and glass, etc. When such objects are present the reflections prevent proper inspection of the surfaces and the operator is required to change the angle at which the surface is inspected. Often it is enough to move one step and a distracting reflection will disappear. In this case, a camera lens reflection will remain.

It is necessary when inspecting areas to try and not stand at right angles or directly in front of a glaring or reflective surface.

Video cameras can be installed in any part of the interior which is suitable for surveillance. This may be the ceiling, video and audio equipment, paintings, decorations, etc.

Searching is made easier and the brightness of the visible spot (reflection) on the lens increases, when there is no direct sunlight in the room. There is no need to turn off lights or darken the room. It is sufficient to create normal work environment lighting conditions. If necessary, the operator can work almost in the direction of the sun, but the operator's eye is only able to recognize the lens spot from 1-2 meters. Note: The device should not be pointed directly at the sun.

These recommendations are valid with any detector of hidden video cameras using light reflection.

## 9. Safety regulations

**Attention!** The device includes glass optical elements. In order to avoid injury, do not operate the device if any of the glass elements are broken or damaged. .

Do not point the backlight toward a person's eyes. Short exposure on the eye is safe but should be avoided.

Avoid subjecting the device to direct sunlight or sources of heat.

Do not disassemble or throw the device.

Do not leave exposed to low temperatures for long periods of time. The device is designed for use indoors with a normal room temperature range of +5 to +40 degrees Celsius.

To clean optical elements, only use wipes designed to clean optical lenses.

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**The originality of the method of detection is confirmed by the RF patent.**