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ISO 14001:2015 ISO 9001:2015 Certified Company

Made in EU

D9000 BEAM

Conventional Linear Detector

Revision 0.1

D9000 BEAM conventional linear fire alarm using an optical light beam designed in accordance with EN 54-12:2002 standard.

The linear fire alarm setup can be done via a wireless Wi-Fi connection and a Web-based app.

1. Technical characteristics:

1.1. Technical data of the detector:

- Supply voltage: 15 ÷ 30 V DC (17-30 V)
- Consumption in Security mode:
- Consumption in Fire mode:
- Distance between the detector and the reflector: From 5 to 120 m. (working distance with a single reflector – from 8 to 45 m.; working distance quadruple reflector – from 45 m to 120 m.)
  - At a distance of more than 50 m, 4 Large Reflectors are needed!
- Light beam wavelength: 850 nm (IR)
- Wireless connection to the Web: 2.4 GHz; IEEE 802.11 b/g/n Wi-Fi; TCP/IP Connectivity
- Threshold value for response:
- Delay to enter Fire mode:
- Settling time after restart:
- Operating temperature: From - 20 to +55 ^{o}C
- 1 Relay Output for Fire: 30 V DC; 2A
- 1 Fault Relay Output: 30 V DC; 2A
- Maximum aiming angle: ± 5 ^{o}
- Degree of protection: IP 43
- Cable for the line to the headquarters: 0.5÷1.5 mm2 / two-core
- Weight:
- Sizes:

Functional characteristics

Operating Voltage	17 – 30 V
Standby current	20 mA
Electrical installation	4 cables
Fire status relay	1
Damage status relay	1
Working distance with one reflector	From 8 m. to 45 m.
Working distance with *quadruple* reflector	From 45 m to 120 m.
Setting	Automatic/Manual
Laser Guidance/*Laser Sight*	Selectable

1.2. Technical data of reflectors:

- Weight:
- Dimensions: 100x100 mm (Large); 50x50 mm (Small)

1.3. Indication:

Color of the LED indicator (RGB LED - Fig.1):	Detector Status:
Red	Fire
Yellow	Damage
Green	Protection

2. Installation of the D9000 BEAM

2.1. Installation of the foundation

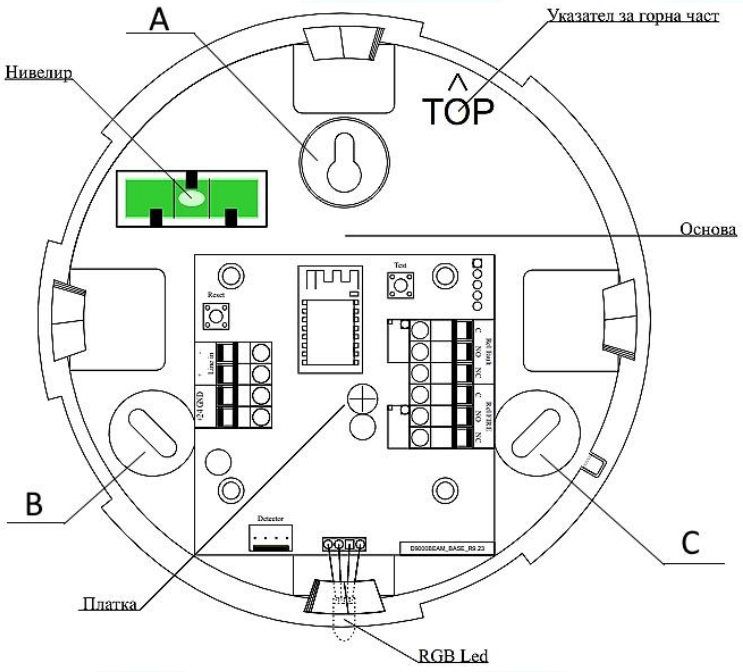


Fig.1

- The base is installed using the mounting holes A, B, C (Fig.1)

- The upper end of the base is marked with the inscription "TOP" (Fig.1)

- Alignment is carried out through the built-in spirit level (Fig.1)

- When driving Screws/Bolts through mounting holes B and C, approach with caution so as not to damage the board! (Fig.1)

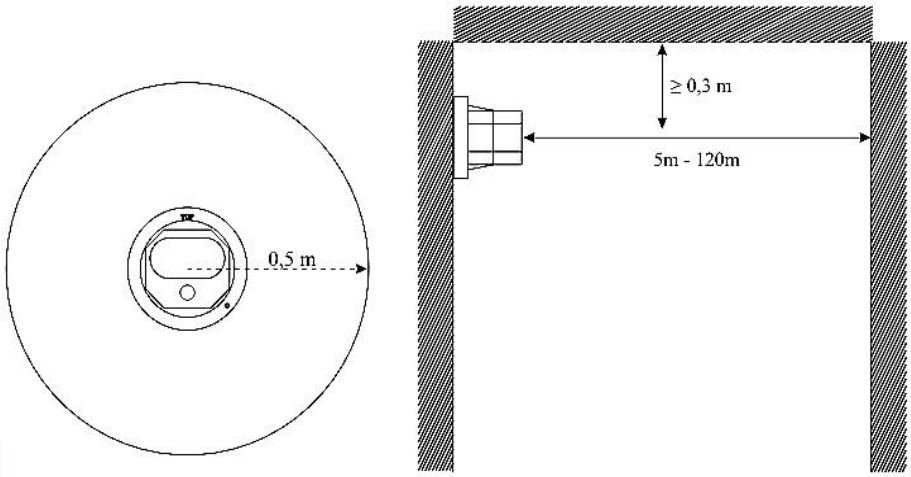


Fig.2

- During installation, the detector must be positioned according to the distances indicated in Fig.2!!

- DO NOT place the detector where persons or objects can cross the path of the beam!!

2.2. Connecting to a conventional line

2.2.1. Self-connect or connect to the end of the line

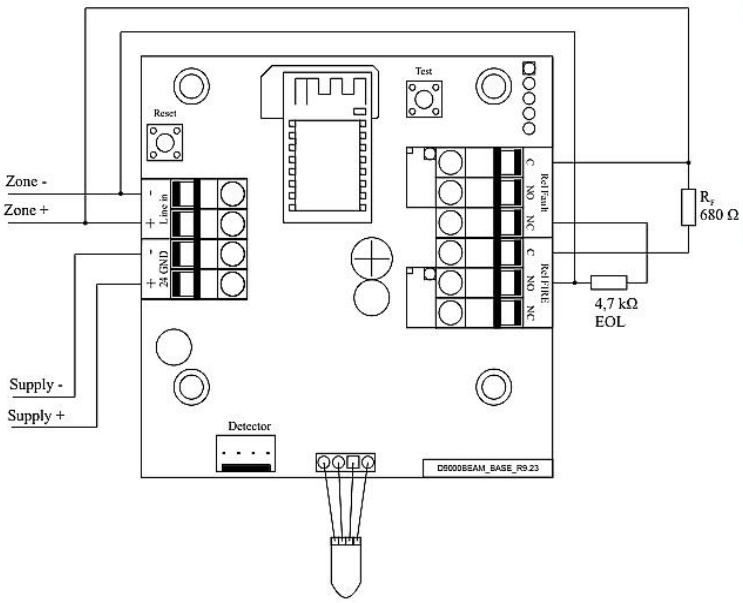


Fig.3

- The D9000 BEAM software processes the detector's output data and generates a "Fire" status and a "Failure" status. This status is output via 2 relay outputs so that it can be connected to all types of conventional panels. (Fig.3)

**An indication of the detector status is the color in which the RGB LED glows (item 1.3)!*

2.2.2. Connecting more than one detector to a conventional line

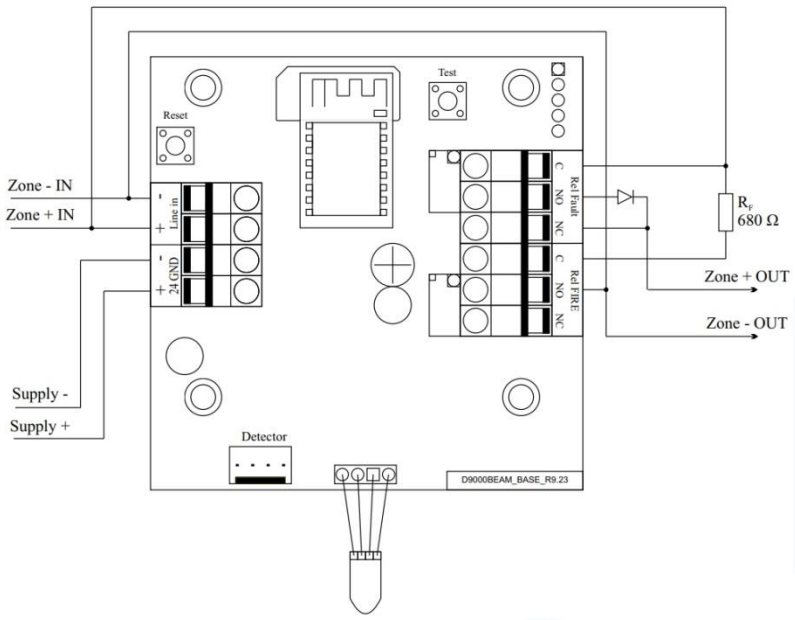


Fig.4

- When using more than one detector in one area of a conventional panel, it is important to choose the right wiring method (Fig.4). Improper wiring will isolate serial devices in this area if it enters the "Failure" condition and prevent these devices from signaling "Fire" on the panel.

**Recommended diode type: Shots, 60V, 1A*

2.3. Mounting the detector to the base

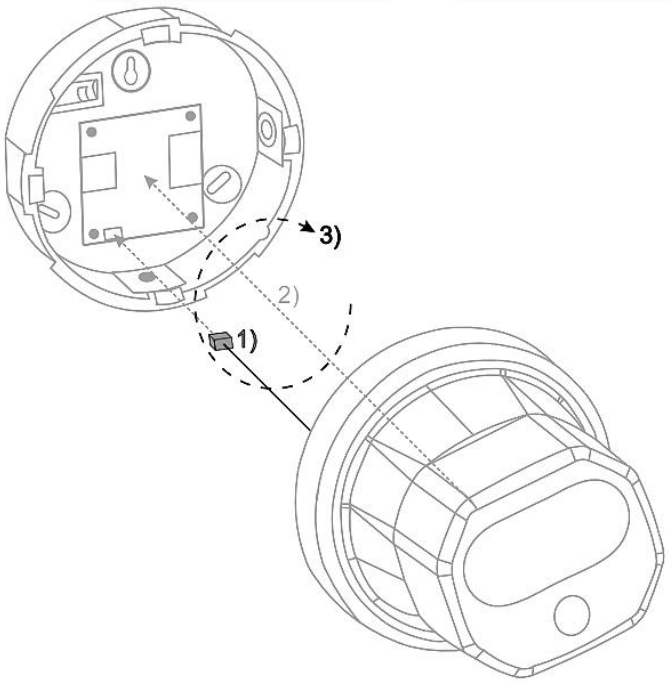


Fig.5

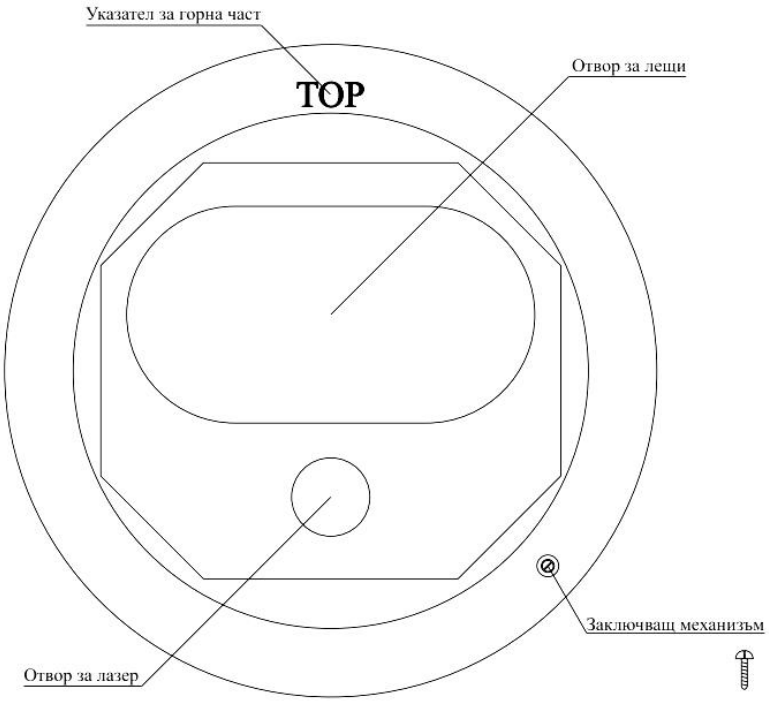
1) The cable from the detector head is plugged into the white connector on the base board.

2) The detector head is placed on the base inclined 20^{o} counterclockwise.

**When assembling, be careful about the location of the cable from the detector head!!*

3) The detector placed on the base is rotated clockwise so that it is assembled to it by four fasteners.

2.3.1. Locking the detector head to the base



- The detector head is locked to the base by a screw M3x, which is screwed into the locking mechanism indicated in Fig. 6.

**The visor of the lenses for the transmitter and receiver and the viewfinder for the laser must be kept clean of dust and dirt!*

Fig.6

3. Installation of reflectors

3.1. Requirements for the installation of reflectors

- The installation of the reflectors takes into account the location of the detector (Fig. 2).
- For the normal functioning of the system, it is necessary to constantly have a direct line of sight between the detector and the reflector!!
- DO NOT install the detector or reflector in environments where condensation or icing is likely to occur unless preventive measures have been taken!
- DO NOT mount the reflector on reflective surfaces!
- Please use only reflectors provided or purchased from DMTech!

3.2. Mounting a reflector

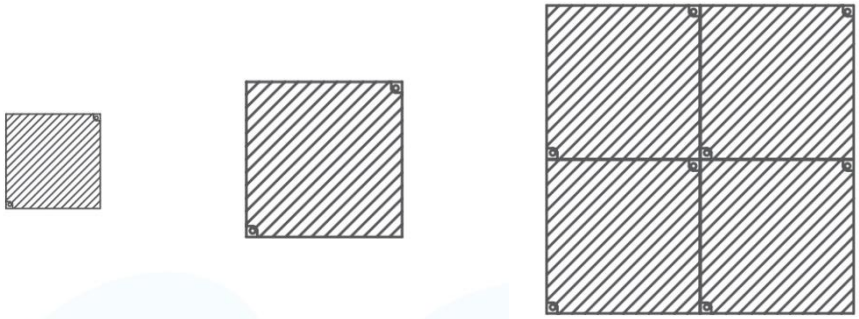


Fig.7

4. Detector setup via Web app

4.1. Access to the Web Application

Access to the web application takes place after connecting the user's device to the local wireless network of the linear detector.

- **The device to be used for setup connects to the wireless network of the linear detector.** Each linear detector has its own network with a unique name. **To do this, select the network of the respective detector and enter an access password for connection.**
- **Enter the detector's IP address through a browser**
- **In the menu that appears, enter the username and password for access to the web application for setting up the detector**

5. Modes of operation and troubleshooting