



USER'S MANUAL

SPR-3L MANUAL CALL POINT

1 PURPOSE

1.1 The SPR-3L manual call point has been designed to comply with EN 54-11:2001. The call points are Type A devices meaning they are for indoor use only. They have been designed to manually transmit the alarm signal to fire alarm control panels.

1.2. The call points are counted on the continuous operation by 2-wire fire alarm loop in connection with a 12/24 V fire alarm control panel that responds to the current consumption change of the call point.

1.3. The fire mode is indicated with the "FIRE" yellow warning indicator as well as with red LED (steady light – DC alarm loop, flashing light – AC loop). The standby mode is indicated with short-term flashes of the red LED.

2 TECHNICAL SPECIFICATIONS

Supply voltage	9 - 30 V
Internal resistance in the fire mode at 20 mA	$\leq 500 \text{ Ohm}$
Standby current consumption at 30 V max	$\leq 50 \mu\text{A}$
Fire current consumption set by an external resistor in the value range	5-20 mA
Push-button force	$\geq 25,0 \text{ N}$
Operating temperature	from -10 to $+55 \text{ }^{\circ}\text{C}$
Relative humidity at 35°C	$95 \pm 3\%$
Dimensions	102 x 102 x 38 mm
Weight	120 g
Average lifespan	≥ 10 years

3 ITEMS SUPPLIED WITH THIS MANUAL CALL POINT

Name	Quantity	Note
SPR-3L manual call point	Up to 12 pcs.	
Manual	1 pc.	Per package
Key	1 pc.	
Reset key	1 pc.	
Package	1 pc.	per 12 pcs.

4 DESIGN AND OPERATION PRINCIPLES

4.1 For dimensions of the SPR-3L please refer to Figure 2 and for appearance – to Figure 1.

4.2 The MCP consists of the front cover 1 and the surface mounting backbox 5 with the installed PCB 9 (see Figure 1). The front cover has the protective cover 2 intended to prevent accidental pressing the resettable element (button) 4.

4.3 The fire mode shall be activated by pressing the button 4 after opening the protective cover 2. The button shall be mechanically fixed pressed. Simultaneously the 'Fire' warning indicator shall pop up and the red LED 13 shall be lit (see Figure 1).

4.4 The call point can be reset using the reset key 14 (see Figure 1).

Follow these steps for resetting:

- 1) insert the reset key into the corresponding hole on the bottom of the front cover **1** as far as it will go and turn it 90 degree clockwise;
 - 2) pull the reset key down as far as will go and turn it 90 degree anti-clockwise;
 - 3) remove the reset key.
- 4.5 Wiring diagram to DC FACP appears in Figure 3.
- 4.6 Wiring diagram to AC FACP appears in Figure 4.

5 PLACEMENT AND INSTALLATION

- 5.1 The units should be located vertically with consideration of dimensions (see Figure 2). You should place them as high as 1,5 m $\pm$ 10% from the floor level.
- 5.2 Connect call points to an alarm loop using screw joints of the terminals **10** (see Figure 1).
- 5.3 You should connect call points using screen wire.
- 5.4 It is not recommended to site call points in places where they can be affected by aggressive gases, vapour and aerosols.
- 5.5 You should provide protection against construction debris and dusts when making repairing lodgings.

6 PREPARATION FOR OPERATING AND SEQUENCE OF OPERATIONS

- 6.1 Open the package after receiving MCPs, check contents.
- 6.2 On opening the call point insert the key **15** (see Figure 1) into right-angled slots **3** as far as it will go into the housing **1** and lift it using the key as a lever (hold backbox **5** still). The 90° turn of the housing relatively to the backbox (towards itself) allows to separate the first one from the second.
- 6.3 Prepare the site for installation of MCP. Pull through the entry hole **8** (see Figure 1) in incoming and outgoing wires of loop. Secure the backbox at the site of installation with two $\varnothing 3 \times 20$ mm self-tapping screws (not supplied with the MCP).
- 6.4 Connect wires of alarm loop according to Figure 3 or Figure 4. Tighten screws. Check reliability of the junction.
- 6.5 Secure the housing to the backbox and close it.
- 6.6 Connect the alarm loop with MCPs to a fire alarm control panel and test the loop circuit.
- 6.7 Connect the screen braid of the loop to the earthing terminal located on the enclosure of FACP (see manual for the FACP you are using).
- 6.8 Testing of MCP should be made in accordance with pp. 4.3, 4.4.

7 MAINTENANCE

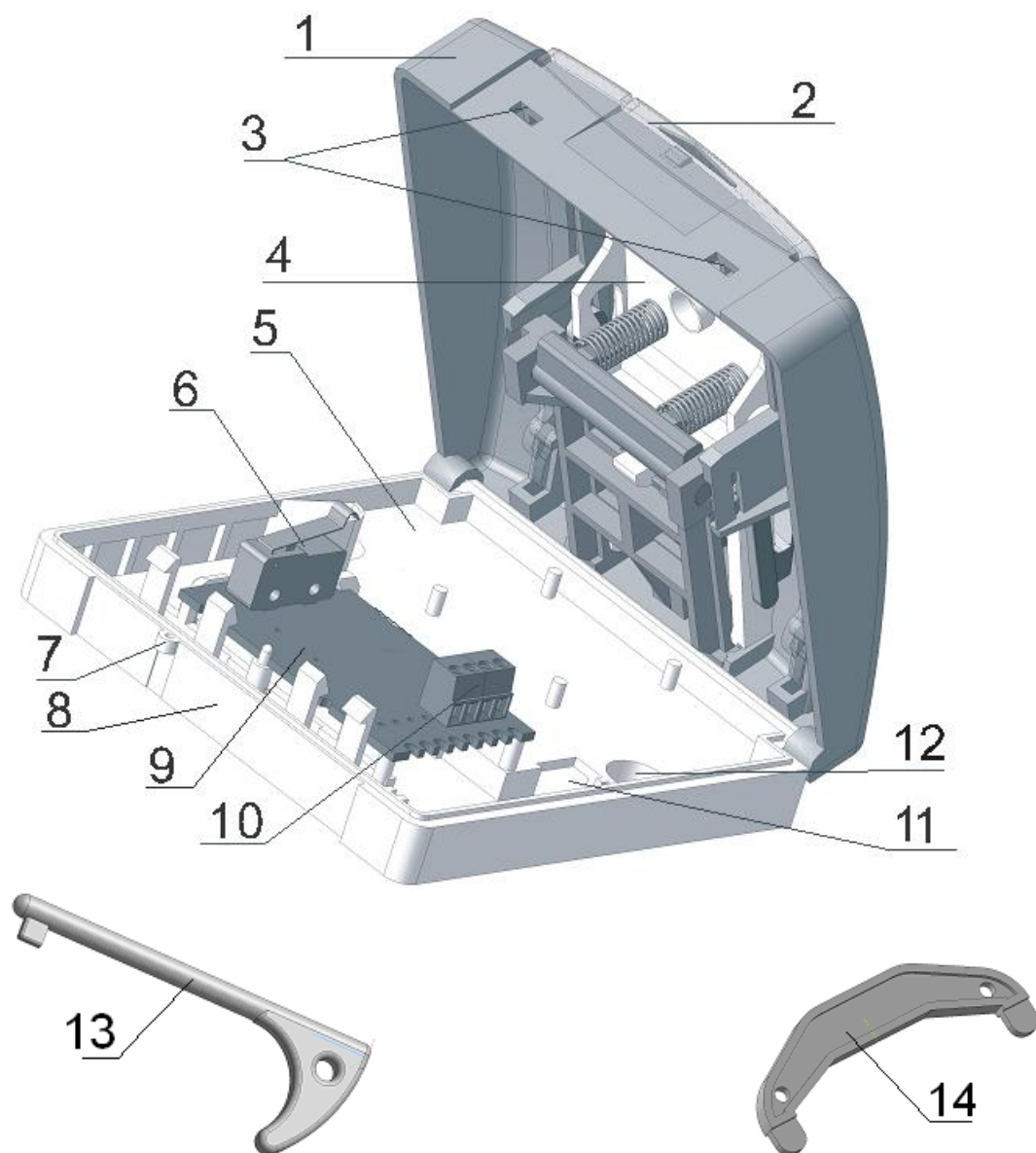
- 7.1 Servicing your fire alarm system regularly, at least once every 6 months check the operation of MCP as follows:
- 7.1.1 Check the MCP for correct operation in standby and fire modes (p. 4.3);
 - 7.1.2 Reset the MCP to standby mode using the reset key (see p. 4.4).

8 GUARANTEE

The detector is warranted by the manufacturer for 18 months upon the date of the MCP's commissioning but not more than for 30 months from the date of approval by the manufacturer's quality control department.

Figure 1

General appearance and design



- 1 – housing;
- 2 – cover;
- 3 – holes for key (hole for reset key is located on the opposite side of the housing);
- 4 – resettable element (button);
- 5 – backbox;
- 6 – microswitch;
- 7 – opening for seal;
- 8 – spot (break the thin wall) for pulling over wires of loop (to pull wires of loop break from the opposite side of the backbox);
- 9 – PCB;
- 10 – terminals for fixing wires of elements
- 11 – opening for pulling wires of loop to terminal blocks;
- 12 – mounting hole;
- 13 – reset key;
- 14 – key.

Figure 2

Dimensions

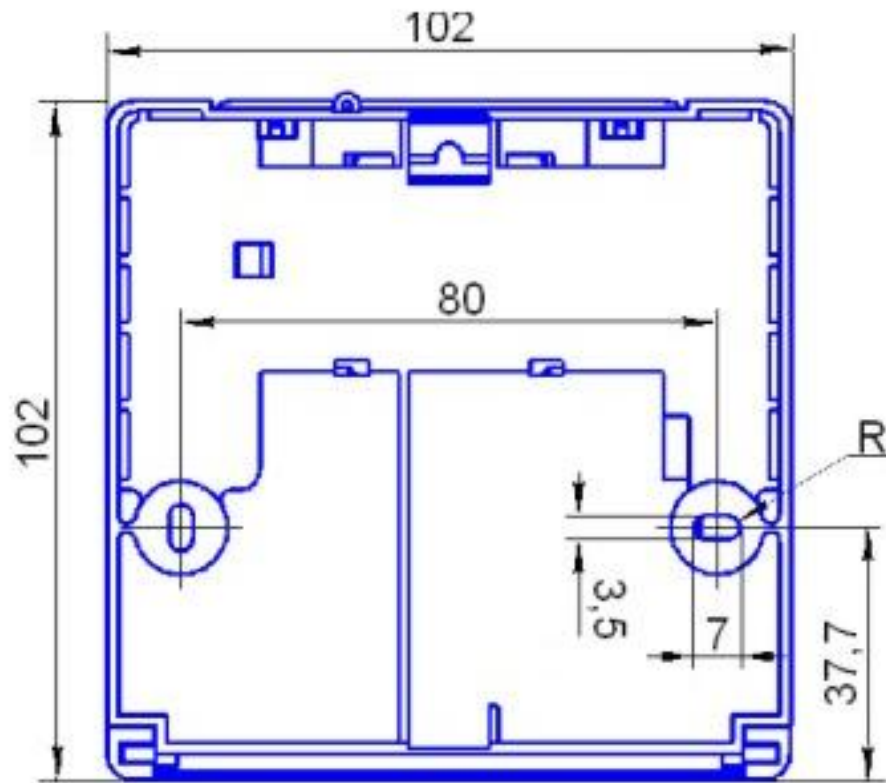
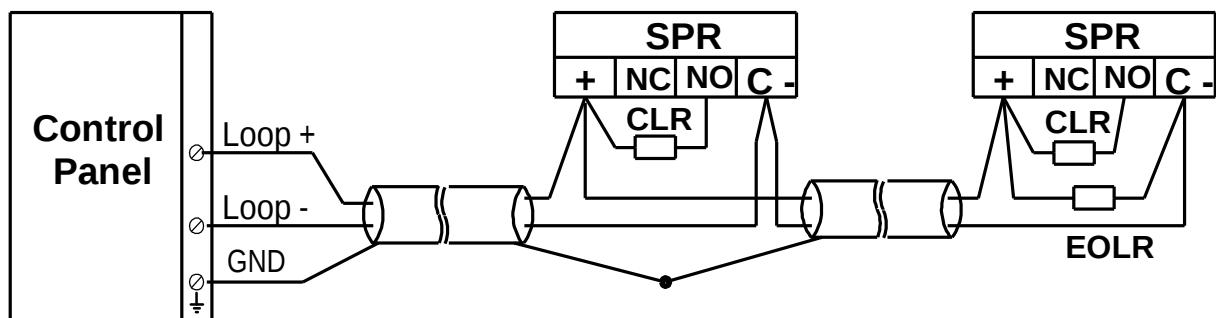


Figure 3

**Wiring diagram for N.O. detectors to D.C. control panel
(with current increase in Fire mode)**



Resistors values are specified by the control panel's manufacturer and can be:

24 V : EOL resistor= (3,6-5,1) kOhm, CLR=(2,0-2,7) kOhm

12 V: EOL resistor = (1,8-2,7) kOhm, CLR=(0,62-0,91) kOhm