



USER'S MANUAL

SPR-1 MANUAL CALL POINT

1 PURPOSE

1.1 The SPR-1 manual call point has been engineered to comply with EN 54-11:2004. The call points are Type A devices meaning they are for indoor use only. They have been designed for transmission by manual way the alarm signal to fire alarm control panels.

1.2. The call point issues the alarm notification by a switch contact and auxiliary current limiting components.

1.2. Call points are counted on the continuous 24-hours operation by 2-wire fire alarm loop in connection with fire alarm control panels that respond to the current consumption change of the call point.

1.3. The fire mode is indicated with the warning indicator with the inscription “Fire”.

2 TECHNICAL SPECIFICATIONS

Supply voltage	≤ 30 V
Internal resistance at open contact	> 1 MOhm
Internal resistance at closed contact	< 1 Ohm
Current consumption set by an external resistor in the value range	5-20 mA
Push-button force	$\geq 25,0$ N
Operating temperature	from -10 to $+55$ °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-1 manual call point	Up to 12 pcs.	
Manual	1 pc.	
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-1 please refer to Figure 2 and for the view – to Figure 1.

4.2 The MCP consists of the front cover 1 and the surface mounting backbox 5 with PCB fixed 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 is activated pressing the button 4 after opening the protective cover 2. The button is mechanically fixed pressed. Simultaneously the warning indicator with the inscription ‘Fire’ appears (see Figure 2).

4.4 The call point can be reset using the reset key 13 (see Figure 1).

Follow these steps to reset the MCP:

- 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:
- 1) with current increase in Fire mode – Figure 3;
 - 2) with current decrease in Fire mode – Figure 4.
- 4.6 Wiring diagram to AC FACP appears in Figure 5.

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 $1,5\text{ m} \pm 10\%$ 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 repair of 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) in 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 place 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 place of installation with two self-tapping screws $\varnothing 3 \times 20$ mm (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

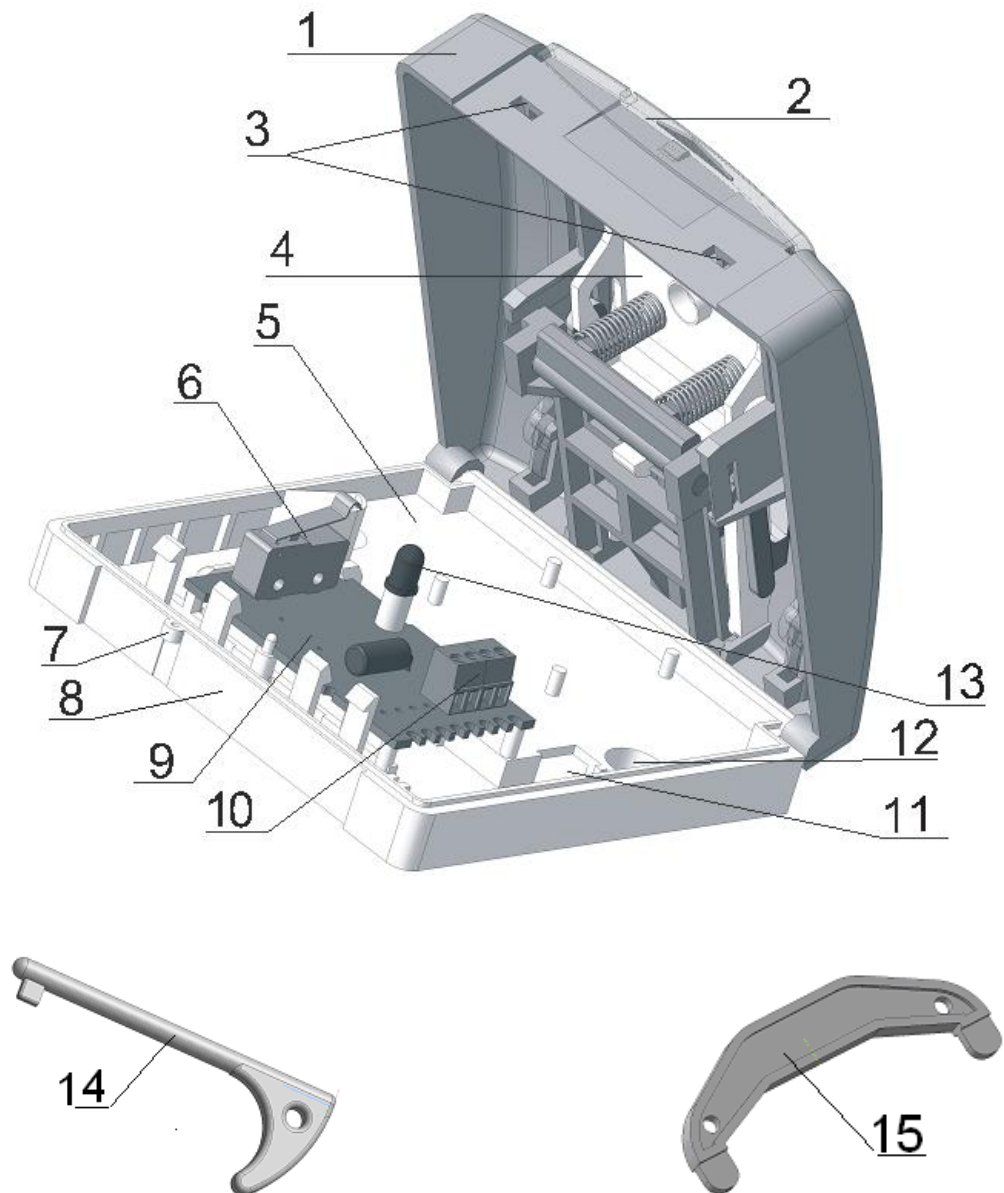
- 7.1 Servicing your fire alarm system regularly, at least once every 6 months check the operation of MCP as follows:
- 7.1.1 Check the MCP for correct operation in standby and fire modes (p. 4.3);
 - 7.1.2 Reset the MCP to standby mode using the reset key (see p. 4.4).

8 GUARANTEE

- 8.1 The detector is warranted by the manufacturer for 18 months upon the date of the detector's commissioning but not more than for 30 months from the date of approval by the manufacturer's quality control department.
- 8.2 The manufacturer shall repair or replace detectors within the guarantee term provided that the rules of installation, timely maintenance, transportation and storage of detectors have been kept.
- 8.3 In the case faults according to a reclamation have been removed the guarantee term is prolonged for the while detectors were not in use because of faults.

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 – LED indicator;
- 14 – reset key; 15 – key.

Figure 2

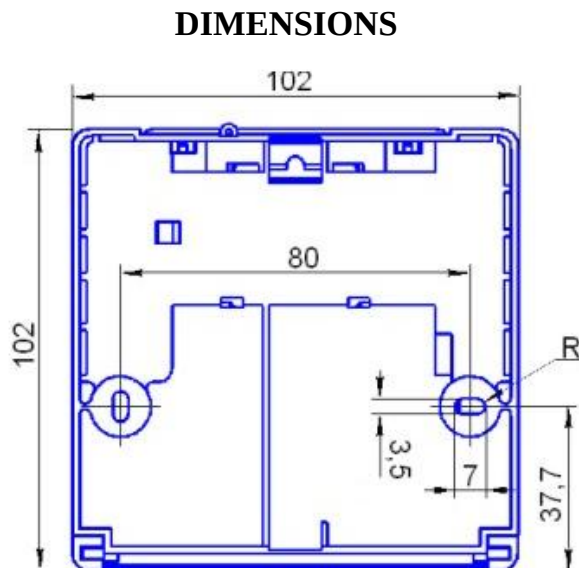
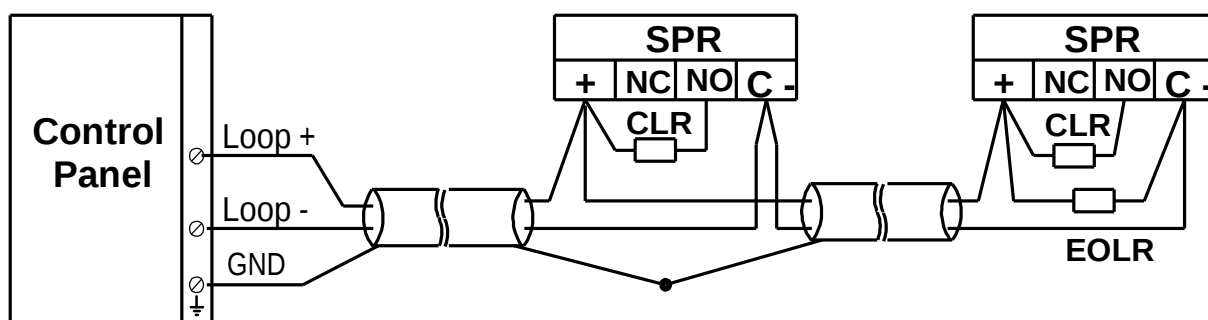


Figure 3

**WIRING DIAGRAM FOR N.O. DETECTORS TO D.C. CONTROL PANEL
(with current rise in Fire mode)**



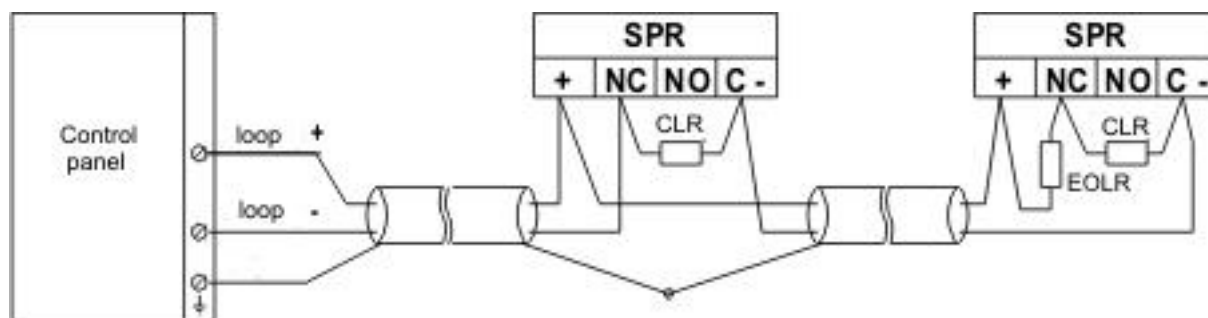
Resistors values are specified by the control panel's manufacturer and can be:

24 V : EOL resistor= (3,6-5,1) kOhm, CLR=(2,0-3,9) kOhm

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

Figure 4

**WIRING DIAGRAM FOR N.C. DETECTORS TO D.C. CONTROL PANEL
(with current drop in Fire mode)**



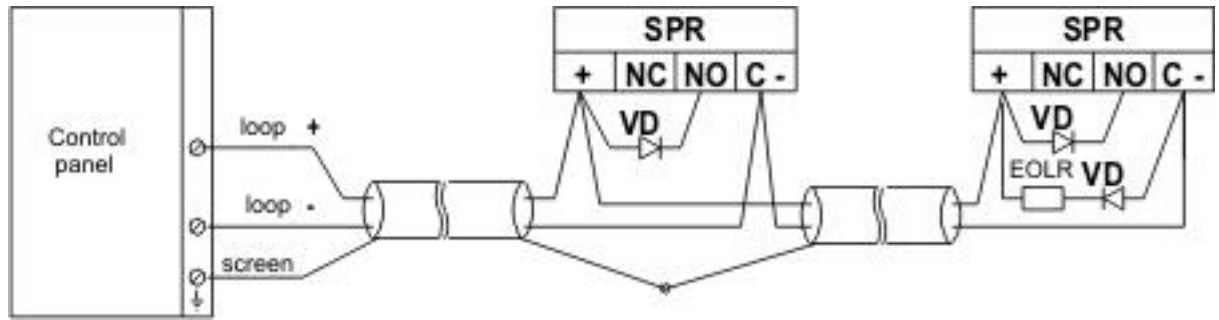
Resistors values are specified by the control panel's manufacturer and can be:

24 V : EOL resistor= (2,4-3,6) kOhm, CLR=(1,6-2,4) kOhm

12 V: EOL resistor = (1,2-1,8) kOhm, CLR=(0,82-1,2) kOhm

Figure 5

WIRING DIAGRAM FOR N.O. DETECTORS TO A.C. CONTROL PANEL



EOL resistor is specified by the control panel's manufacturer