WIRELESS MANUAL CALL POINT

TYPE **VIT50**

INSTRUCTION MANUAL 06-VIT50-10-13

GENERAL DESCRIPTION

The manual call point is designed to send radio signal "Fire condition" to control panel VIT01 upon manual activation by pushing non-fragible (plastic) element on the area marked by arrows. Activation of the manual call point incorporates a red LED.
Communication between VIT50 and the other VIT components is based on high frequency radio emissions.
The manual call point consists of a base (pos.1, fig.1), a carrier unit (pos.2, fig.1) with two-colors LED indicator (pos.7, fig.1), providing information about the operating modes, a cover (pos.3, fig.1), elastic element (recoverable glass) with protective sticker (pos.5, fig.1) and test key (pos.8, fig.1).
Note: Using the elastic element does not comply with the European standard EN54-11; A1:2005 and should not be used in countries where this standard is applicable.
The LED indication gives information about the operational modes of the manual call point;

- "Network Connection" Mode – Green LED, activated for 15 sec every 30 sec. The manual call point scans all the frequency channels. Upon finding a Control Panel or a Router in its radio range, the manual call point submits a request for connection to the network. If the request is confirmed, it is registered in the configuration of the Control Panel and switches to "Service" Mode. The manual call point may switch to the "Network Connection" Mode in case of failed radio connection to the Router or Control Panel;
- "Service" Mode – Green LED, flashing up with different frequency, proportional to the established quality of the connection with a Control Panel or a Router. In case of significant attenuation of the radio signal, the green LED changes to red flashing up LED. Lost connection with the Control Panel (Router) is indicated by continuous flashing of the red LED or LED is off for more than 15 seconds. This mode checks the quality of the signal strength between the manual call point and the Router (the Control Panel). From the menu of the Control Panel can be adjusted and reviewed network and detection parameters of each manual call point. The Mode is highly energy-intensive. If no additional adjustments are performed with the manual call point, it switches to "Duty" Mode after 1 minute;
- "Duty" Mode – LED is not lit on. The manual call point periodically measures its status and sends it to the Control Panel. "Duty" Mode is the basic mode of the manual call point. When pushing the elastic element on marked place or releasing it by key, the manual call point switches to "Fire condition" Mode;
- "Fire condition" Mode – Red LED is lit on. The manual call point stays in "Fire condition" until recovering the position of the elastic element and receiving a fire reset command from the Control Panel.

Steps for activate "Fire condition" Mode:
1. Press the elastic element on the marked with arrows place or use the key.
2. The built-in red LEDs is ON.
3. The Control Panel going in Fire condition.
Steps for reset the manual call point from "Fire condition" Mode to "Duty Mode":
1. Insert the spiral end of the key into the opening on the bottom side of the VIT50 (fig.2-1) and press-to-end. The elastic element should be released.
2. Place the flat end of the key into the same opening (fig.2-2) and press-to-end. The elastic element should returns to its initial position.
3. When reset command from the Control panel is received, the manual call point establish state "Duty Mode" up to 1 minute. The manual call point LED is switched off.

Note: The manual call point automatically saves the network address of the Router(or of the Control panel in case the manual call point is enrolled directly to it) during it communicates with the Control panel. If the Router missing, its position in the network is changed or the quality of the signal is low, the communication between the detector and the Control panel will be suspended. In such cases it is necessary to delete these network parameters for the previous "parent" in the network from the manual call point.

Sequence to erase the old parameters for the "parent" :
1. Wait the finishing of mode "Network connection" - Green LED is permanently off;
2 . Hold the tamper and wait for confirmation from green LED- lights for half a second. (If the LED not lit , it means that the detector doesn't have saved parameters and will recorded them as soon as a connection with a Router or Control panel, is established.
3 . Release tamper and wait for confirmation from green LED - lights for half a second.
4 . Repeat steps 2 and 3 consecutively five times, with the successful completion of the operation, the green LED flash - parameters for its previous "parent" are deleted and when the next activation of mode "Network connection" is presented, the manual call point will search for a new Router or Control panel with the best radio quality connection.

TECHNICAL DATA

Supply voltage	(3.2-3.6)V DC
Back-up power supply	(3.0-3.2)V DC
Current consumption in transmitting	45 mA
Current consumption in receiving	55 mA
Average consumption in "Duty" Mode	80 μA
Response time	30 sec.
Degree of protection	IP40
Operating temperature range	minus 10°C up to 60°C
Relative humidity resistance (no condensation)	≤ 95%
Overall dimensions	90x90x56 mm
Weight including the battery	0.200 kg

MOUNTING AND PUT INTO OPERATION

1. Manufacturer recommendations
1.1 Manual call points of this series should not be installed in locations distant by more than one barrier (wall) from the Control Panel or Router. Exceptions to this rule are permitted in operating efficiency approved by the installers.

1.2. Manual call points of this series must be charged only with batteries, provided by the manufacturer of the system – 3.6V (Li-SOCl2) with a nominal capacity of 2600mA/h. This guarantees the efficiency of the battery supply in "Duty" Mode for a period of at least 3 years according to the required standard EN54-25.
1.3. The manual call point is equipped with a backup battery, which provides autonomous operation of the detector for a period of seven days in case of fault in the main battery. Access to the backup battery is done from the rear of the carrier unit (pos.2, fig.1).
1.3. In premises, where there are other devices operating in the frequency range of 2.4GHz, it is necessary to scan and detect the channel of operation of these devices. This ensures that the Fire Alarm system we use will occupy a channel that will be shared only by its devices.
2. Evaluation of the signal strength
Before proceeding to installation of fire alarm system on the site, radio test should be performed for the position, where the detector will be mounted.
This radio test must be done for all radio component, part of the Fire Alarm System.

This evaluation must be performed to an established already "Mainstay" of the Wireless Fire Alarm System. The "Mainstay" of the Wireless Fire Alarm System is build by a Control panel VIT01 and Routers VIT02.
Evaluation of the signal strength of wireless fire detectors shall be performed as follows:
2.1. Provide a Control Panel VIT01 or a Router VIT02, connected to Control Panel VIT01, set into Mode "Registration" (See Instruction Manual VIT01).
2.2. From the Control panel enter in menu "Setup/Registration/Auto registration" (see Instruction manual VIT01).
2.3. The manual call point is activated when put on the battery inside the detector (remove the isolation sticker from plus of the battery). It have to be wait while the signal is registred from the panel.
2.4. Next step is evaluation of the signal strength in "Service" mode of detector where (the place) will be mounted. The levels of the radio signal should be higher than 40-50% in both directions. Otherwise the main battery will be discharged faster. This values should be recorded for future reference.
2.5. To switch on the back up battery - remove isolation sticker.
3. Installation
Figure 1 is performed according to the following sequence:
3.1. Manual call point is dismantled by developing the screws (pos.4 and pos.6, fig.1).
3.2. The base is mounted on the wall by dowels and self-tapping screws, keeping the place selected in accordance with the working design and the assessment of patency of the signal.
3.3. To the substrate holder is mounted via a set-screw (pos.6, fig.1), it is placed on the elastic element is mounted through the cover screw (pos. 4, fig.1).
3.4. From the panel in Menu "Setup / Registration / Auto(Manual) registration / Devices / Change mode" activated "Duty" Mode(see Instruction Manual VIT01) .

TESTING

The manual call point is to be tested after installation as a part of the Fire Alarm System of the premise or after service schedule in the following sequence:
1. Check the supply voltage of the manual call point from the menu of the Control Panel. The supply voltage value is defined in chapter "Technical Data" of the Instruction Manual herein. Supply voltage is provided by an autonomous battery supply in the set from the manufacturer.
2. Set the fire detector into "Duty" Mode, and its zone into "Test" Mode.
3. Insert the spiral end of the key into the opening (fig.2-1) and press it to end. The elastic element drops. For not more than 10 seconds after the impact, the detector must enter "Fire" condition and the LED of the detector's body (pos.7, fig.1) must be illuminated in red light. Status and connection quality of the fire detector can be monitored from the menu of the Control Panel.
4. Place the flat end of the key into the opening (fig.2-2) and press it to end. The elastic element should take its initial position.
5.The panel automaticly gives a command to manual call point for resetting and he must enter "Duty" Mode up to 1 minute. LEDs on the detector's body (pos.7, fig.1) must turn off.
6. Switch back the zone from test to duty mode from the menu of the Control Panel.

SERVICE SCHEDULE

It is to be performed by an authorized person and includes:
1. Inspection for visible physical damages – monthly;
2. Operational test for fire detection in real conditions – monthly;

WARRANTY OBLIGATIONS

The warranty period is 36 months from the date of the purchase.
The manufacturer guarantees the normal operation of the product, providing that the requirements set at the Instruction Manual herein have been observed. The manufacturer does not bear warranty liabilities for damages caused through accidental mechanical damage, misuse, adaptation of modification after production. The manufacturer bears warranty liabilities of the product caused through manufacturer's fault only.

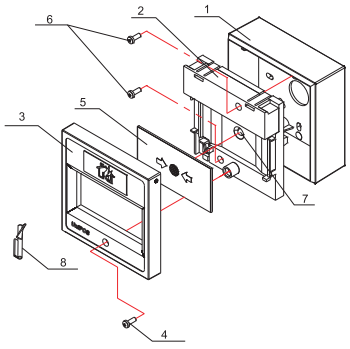

Fig.1

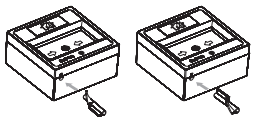
Fig.2-1 Fig.2-2

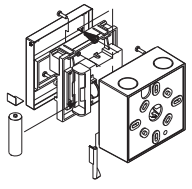
Fig.3

Manufacturer: UniPOS Ltd. 47 San Stefano Street, Pleven 5800, R. Bulgaria, http://www.unipos-bg.com