DMTech LTD, Pleven

Addressable Fire Alarm Panel

FP9000A

Instruction manual for installation, setup and exploitation

Revision 01.19

1. INTRODUCTION

1.1. General description

The fire alarm panel is an addressable fire alarm panel of maximum possible coverage of 8 zones in 1 loop. The fire alarm panel supports DME(Loop) communication protocol.

> ⚠ **Up to 250 units (modules and/or fire detectors regardless of their type) can be connected to the Loop.**

To each zone can be connected up to 80 units, of which 60 fire detectors and 20 Input-Output devices, thus providing easy adaptation of the system to any type of configuration. To avoid or reduce significantly possible problems during system installation it shall be carefully designed before the final installation of the panel and the fire detectors. The design includes: assigning an address to each device and planning a name for it, maximum length 20 symbols (spaces included), so it can be easily found in the configured system.

The devices shall be grouped in zones in compliance with current standards applicable to installation of fire alarm systems and according to building blueprints.

1.2. General characteristics

The front panel consists of alphanumeric LCD display (4 lines x 20 symbols), functional buttons and LED indicators. Access to panel functions is organized in three separate levels.

The fire alarm panel has a built-in real-time clock and calendar, allowing for day mode and night mode of operation. Switching between the two modes is done automatically or manually. Events like FIRE, RESET, FAULT, etc. are being stored in the memory, creating a log file of events. The log file contains time and date, address and name of device, number and name of zone, etc.

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1.2.1. Main technical characteristics

- Loops – 1;
- Number of devices in a loop: up to 250 units (modules and/or fire detectors, regardless of their type). Their total consumption shall not exceed 0.5 A. For this purpose you can use the specialized DM-Calculator at www.dmtech-ltd.com (It offers calculation of total consumption of the devices in the loop, as well as wire's diameter and length for the loop)
- Maximum number of zones - 8
- 2 monitored potential outputs: OUT1; OUT2;
- Relay output for fault condition FAULT, not monitored, parameters: 0.3A@24VDC;
- Relay output for fire condition Rel 3, not monitored, parameters: 1A@24VDC;
- 2 programmable relay outputs Rel 1, Rel 2, not monitored, parameters: 1A@24VDC;
- 1 conventional line;
- Alphanumeric LCD display (4 lines x 20 symbols);
- Real-time clock powered by built-in Lithium battery - 3V, CR3032 type;
- Memory for 1024 events with registered date and time of occurring;
- Programming option for Day/Night Mode of Operation;
- Operation menus in Bulgarian/English language;
- Setup via computer and USB, using software;
- Developed in compliance with the requirements of EN54-2/4 Standard;
- Wall mounted box: case (313x218x85) and lid (314x219x18)

1.2.2. Operational environment

- Protection degree: IP30
- Ambient temperature: -5ºC to +40ºC
- Relative humidity: to 95% (no condense)
- Storage temperature: -10ºC to +60ºC
- Weight (no battery): ~ 1.8 kg

1.2.3.   Electrical characteristics

Earthing

Earthing shall be completed in compliance with electrical safety rules and the total resistance of the earthing wire and earther shall be less than 10Ω. The earthing wire must be connected to fire alarm panel's terminal earthing output – see *p.2.4. Connection to main power supply*

> ⚠ **The fire alarm panel must not be installed in close proximity to sources of strong electromagnetic field (radio transmitting devices, electrical motors, etc.)!**

Main power supply

Under normal conditions the fire alarm panel is power supplied by the electrical grid. In case of failure in the power supply from the mains, a backup battery provides supply to the panel.
Characteristics of the main supply unit:

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- Voltage: 90 ~ 264 VAC
- Frequency: 50/60 Hz

Backup battery supply

- Charge voltage (U): 27.3V
- Storage battery: 2 x 12V / 5Ah, lead-acid, encapsulated
- Storage battery internal resistance Ri: < 0.3Ω
- Storage battery maximum dimensions: 2 pcs – 90x98x70mm
- Type of connection to battery: cable terminal

Load capacity

- Maximum load capacity of loop: 500 mA DC
- Maximum load capacity of *AUX*: 500 mA DC
- Maximum load capacity of outputs *OUT1* and *OUT2*: 500 mA DC
- Maximum load capacity of outputs *FIRE*, *FAULT* and *EXT*: 300 mA DC
- Maximum total load (sum up of the 4 above): 2.0 A DC
- Programmable relay outputs: 1A@24VDC

List of fuses

- Main power supply: 4A, T-type, slow-melting, 5x20 mm
- Storage battery: 6.0A, T-type, slow-melting, 5x20 mm
-

Contents of delivery: Addressable Fire Alarm System FP9000A

1	Fire alarm panel FP 9000A	1 pc
2	Fuse 6,3A	1 pc
3	Fuse 4,0A	1 pc
4	Jumper for backup batteries	1 pc
5	Packing	1 pc
6	Resistor 4.7кΩ	3 pcs

WARNING!

> ⚠ **The fire alarm panel must be installed by a qualified staff only.**
> **Panel's electronic components are vulnerable to electrostatic discharge.**
> **DO NOT make any hardware changes in panel's configuration while the panel is powered by grid or backup batteries.**

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2. INSTALLATION

2.1. Mounting

• Choose the most suitable location for the fire alarm panel in the premise (Fig. 1), away from heating appliances, points of dust accumulation or access to water; ambient temperature between -5°C and +40°C. Warning: the fire alarm panel is not waterproof!
• Unpack the panel and inspect the unit for any visible damages caused during transportation or due to long-term shelf storage.
• Open the front lid (Fig. 2).
• Remove the front lid by unscrewing the screw under the front panel (Fig. 2, position 3).

<div align="center">
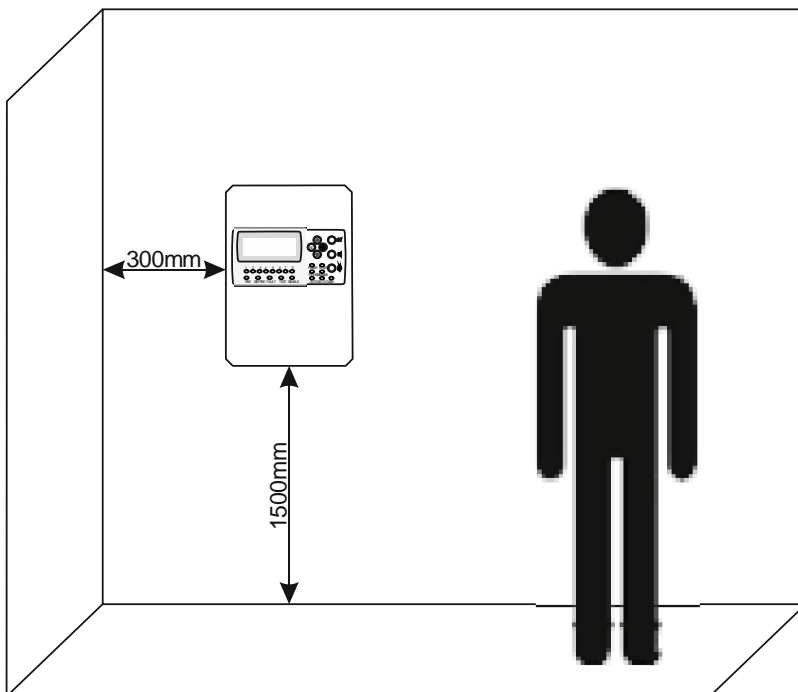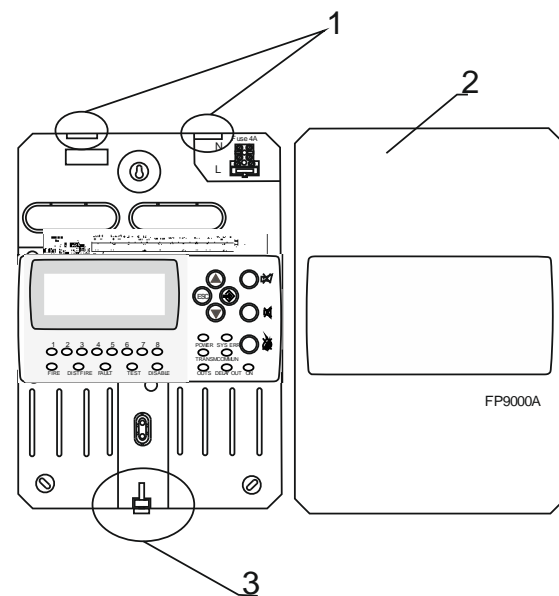
Fig. 1   **Fig. 2**

</div>

• In compliance with the dimensions provided in Fig.3 drill holes in the mounting surface.
• Drill holes in the wall and fasten the box.
• All external cables must be pulled through in the box, to make the connection, BUT DO NOT CONNECT THEM TO POWER YET. THE POWER CABLE MUST BE PULLED THROUGH THE DESIGNATED HOLE AND MUST BE KEPT AWAY FROM LOW VOLTAGE CONNECTIONS.
• Connect the power supply and the ground to power supply terminal (see Fig.3), but do not supply power yet.
• Put the backup batteries in place.
• Replace the front lid by mounting the lid to the circuit board box and fasten with the screw following the description on Fig.2 in reverse order.
• Proceed to initiation and testing of the system.

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a)

Fire Alarm Panel
TYPE: FP9000A
Ekarsh Joseph Str. 1, A7 Pleven 5800
Bulgaria, www.dm-teh.com
BG201673368
No   XXXX   XXXX
U-(187- 244)V 50/60Hz; P=45VA
EN54-2:1997/A1:2006/AC:2009
IP30   EN54-4:1997/A2:2006/AC:2009
Made in EU
85 mm

5

b)

~220V ± 10%
50-60 Hz

Fuse 4A
N
L

Fuse 4A   to panel

3

1

2   2

313 mm

240 mm

170 mm

218 mm

c)

4
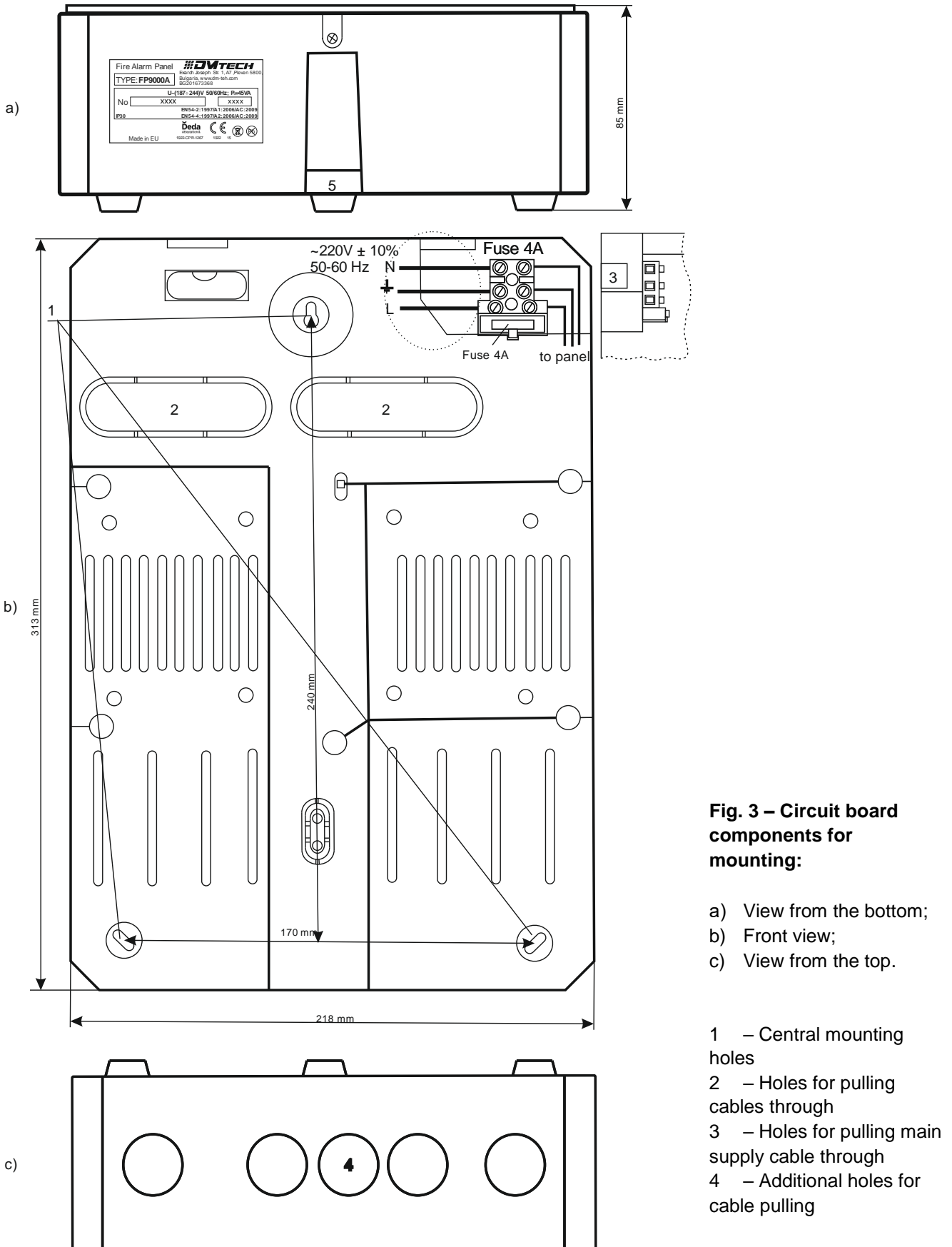
Fig. 3 – Circuit board components for mounting:

a)   View from the bottom;
b)   Front view;
c)   View from the top.

1   – Central mounting holes
2   – Holes for pulling cables through
3   – Holes for pulling main supply cable through
4   – Additional holes for cable pulling

2.2. System elements

**2.2.1. Front panel** – front panel is shown on Fig. 4. Puncture line separates logically buttons and indicators according to their purpose.
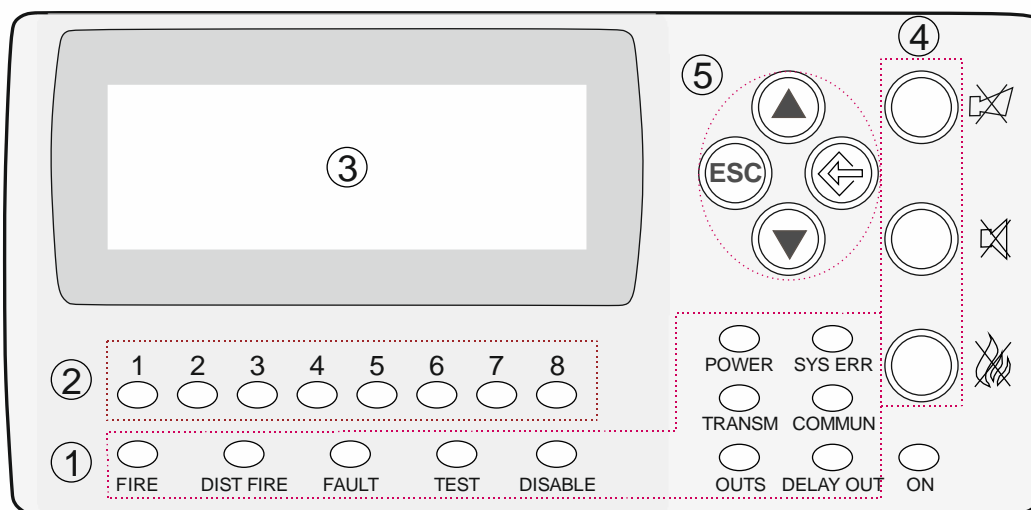
Description of elements:

1 – LED indicators with events description
2 – LED indicators for zones
3 – Alphanumeric LCD display (4x20)
4 – Functional buttons
5 – Navigation and control buttons

Fig. 4

1 – Description of LED indication of events:

LED	Indication/ Description
FIRE	**FIRE INDICATOR**. Illuminates continuously in case of alarm for fire event, after received signal from automated fire detector, manual call point or from another external device connected to panel's output
DIST FIRE	**DISTANT FIRE INDICATOR**. Illuminates continuously in red, in case of alarm for fire event in a distant fire alarm panel, after received signal from automated fire detector, manual call point or from another external device connected to distant panel's outputs
FAULT	**FAULT**. Illuminates continuously in yellow, in case of fault event in the system
TEST	**TEST**. Illuminates continuously in yellow upon system testing
DISABLE	Disabled component – Disabled Component indicator illuminates in continuous yellow light
POWER	**FAULT IN POWER SUPPLY**. Illuminates in continuous yellow light in case of fault condition in 220V main supply or battery
SYS ERR	**CPU FAILURE**. Illuminates continuously in case of CPU failure (System Error)
TRANSM	Signal for fire event is being transmitted to a remote center
COMMUN	Data communication via LAN – continuous yellow light
OUTS	Fault condition in controllable outputs – the indicator for fault in controllable outputs illuminates in continuous yellow light
DELAY OUT	The indicator for output delay illuminates in continuous yellow light

2 – Description of LED indication for zones in use:

LED	Indication/ Description
1 2 3 4 5 6 7 8 (LED 1 red, LED 3 red, others white)	**ZONE IN FIRE CONDITION**. Separate indicators for fire condition in zones 1-8 – in case of fire they illuminate in red light and the sounder releases a continuous signal.
1 2 3 4 5 6 7 8 (LED 3 yellow, LED 6 yellow, others white)	**ZONE IN FAULT CONDITION**. In case of fault condition the indicator for the relevant zone 1-8 illuminates in yellow and the sounder releases an interrupted signal.

3 – Description of LCD display

The fire alarm panel has an alphanumeric LCD display (4 lines x 20 symbols). It displays information on registered events. The display visualizes menus for panel settings (menus are tree-structured, see Fig.11) that can be accessed consecutively using the navigation buttons. The user can assign freely names to zones and devices, using the buttons for navigation and control.

4 – Description of functional buttons:

Button	Description
Outputs button	Functional button for sounder silencing – illuminates in red when silenced
Alarm button	Fire condition and Fault condition - Functional button for suppressing the local sounder – illuminates in red
Line reset button	Functional button for Fire Alarm Mode resetting. Requires access level 2 password.

5 – Description of navigation and control buttons:

Button	Action	Description
MENU button	Entering the menu OK	The button is for entering the MENU option. It also acts as an OK/confirmation button.
UP button	Up	The button increases a highlighted value with one step, or enables access to an ascending menu.
DOWN button	Down	The button decreases a highlighted value with one step, or enables access to a descending menu.
EXIT button	Exiting the menu	The button is for exiting the menu. It is active at access level 1,2 and 3.

2.2.2. Position of modules in the box
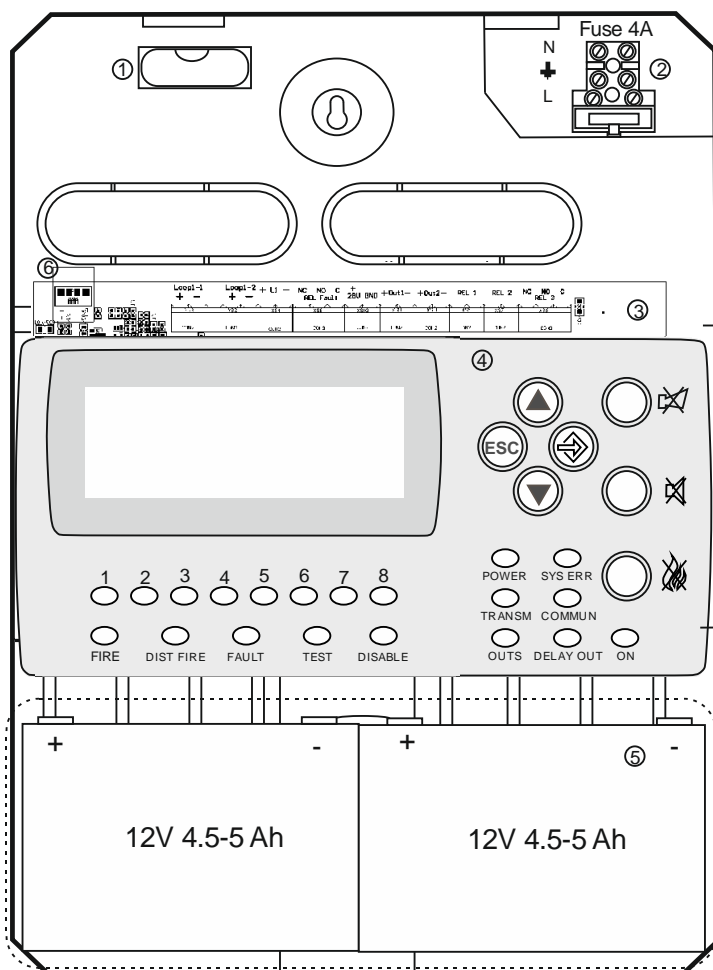
Fig. 5 – Position of modules in the box:

1 – Box leveling ampule;

2 - 220V terminal for main power supply cable

3 – Main PCB with built-in power supply

4 – Chassis with ready-to-use alphanumeric display window, waveguides for light indication, buttons

5 – Space for storage batteries, 2 x 12V/ 4.5–5Ah

6 – Coupling for USB connection to a computer

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2.2.3. Description of main PCB
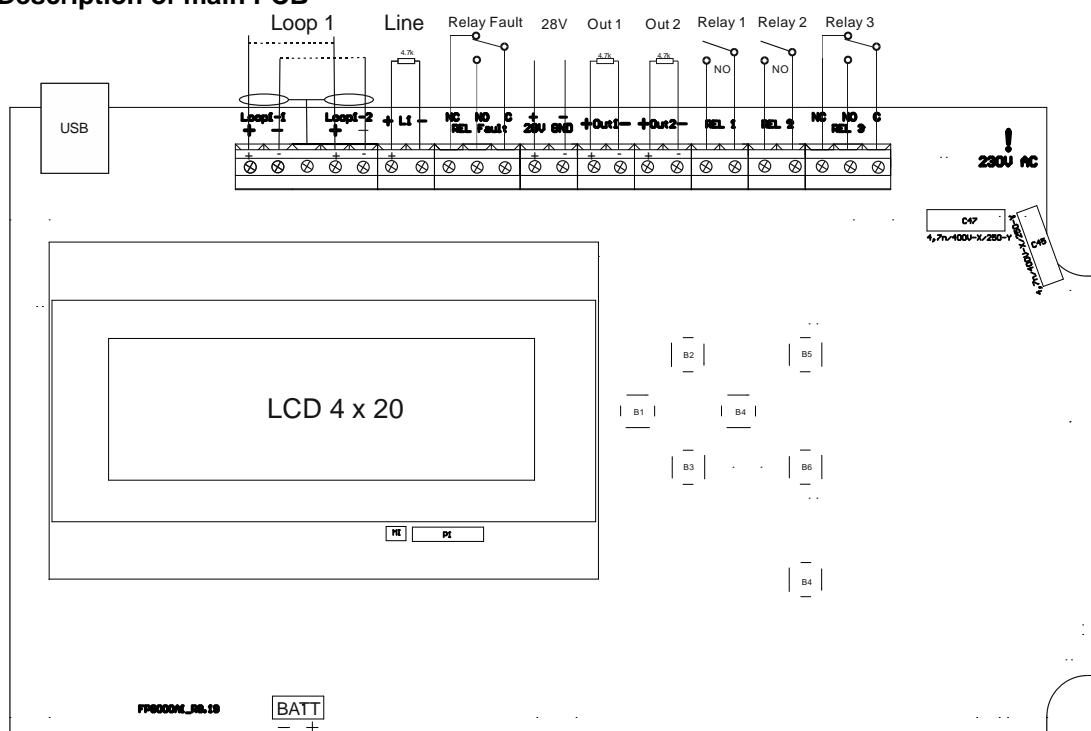
Fig. 6 – Main PCB of the fire alarm panel

Terminal strip description (from left to right):

- **LOOP 1** (-LOOP+ / +ERT / -LOOP+) – Terminal strip for connecting Loop 1 to the fire alarm panel.
- **LINE** – Conventional line
- **FAULT** – Potential output connecting external devices, 24 VDC/ 0.3A. It is deactivated in fault condition of in the system.
- **28V** – User power supply
- **RELAY FAULT -** the fault relay is activated when the panel is in fault mode – 3 positions provided for Nc (default) condition and No condition
- **OUT1 –** Monitored output OUT1 – a 4.7 кOhm terminating resistor shall be connected in parallel to the device far off from the panel
- **OUT2 -** Monitored output OUT2 - a 4.7 кOhm terminating resistor shall be connected in parallel to the device far off from the panel
- **RELAY 1** – Programmable relay 1 – the relay function shall be assigned in settings menu
- **RELAY 2** – Programmable relay 2 – the relay function shall be assigned in settings menu
- **RELAY 3** – The relay is activated in fire mode. 3 No terminals are provided, Normally open contact, Nc normally closed contact and center.
- **USB** –USB B/ micro connector; communication with the fire alarm panel from a computer via specialized software
- **BATT –** Pin connector (red and black pins) for connection to the storage battery. An additional Ø5mm cable ear connector is installed to each cable terminal (M5)

2.2.4. Connecting the main supply

Power to the fire alarm panel is provided by connecting the main power supply cable to a 220V terminal, installed in fire alarm panel's box, see Fig.5, position 2. The wiring between the 220V terminal and the power supply unit is done by the producer. The connection between the main power supply cable and the 220V terminal is shown in Fig.3.

2.2.5. Connecting the storage battery

Storage battery connecting pins are situated at the base of the PCB. The connection to the storage battery is shown in Fig.7. The fire alarm panel box has a cable, with installed cable ear terminals for serial connection of storage batteries.

> ⚠ **WARNING: Storage battery must be charged at maximum current value I = 2A and voltage U =** 27.2V **±1%.**
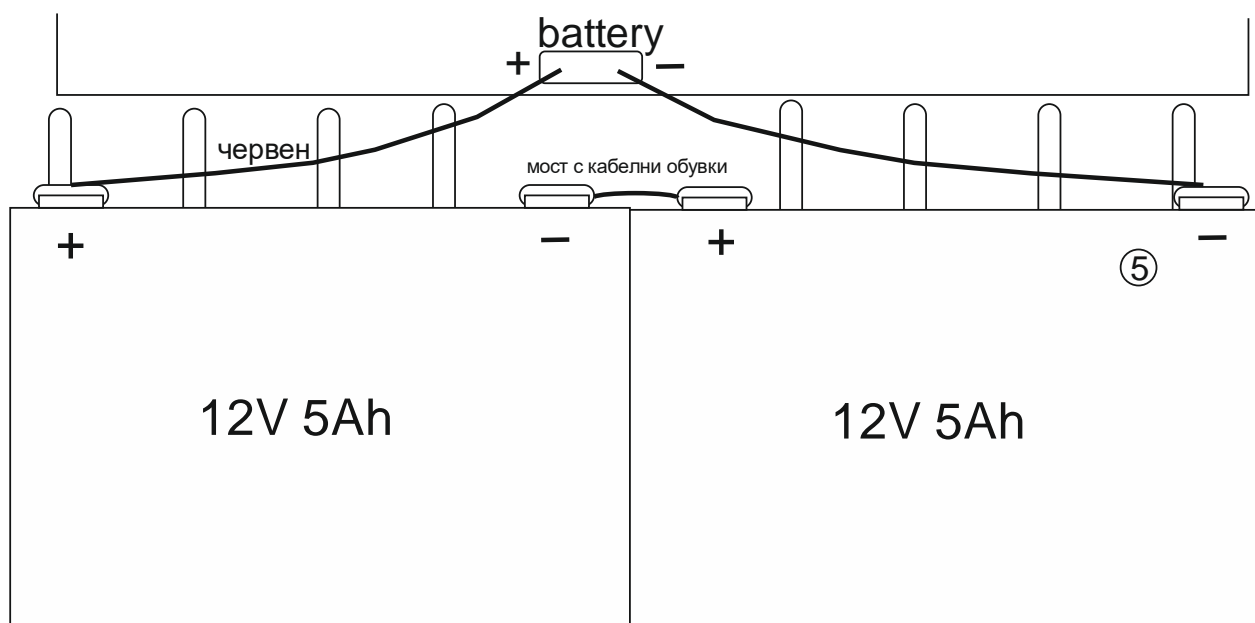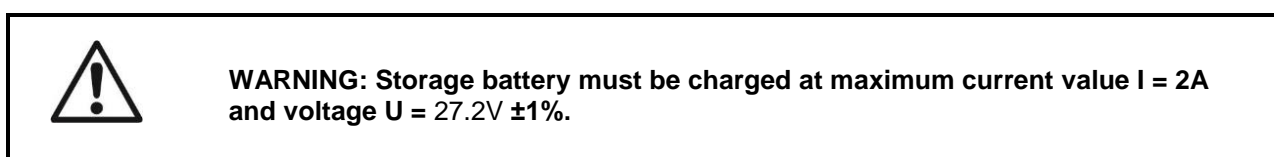
Fig. 7 Connecting the storage batteries

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2.3. Connecting devices

2.3.1. Connecting devices to a loop

A terminal strip and an example for connecting devices to the loop are shown in Fig. 8. Up to 250 devices can be connected to the loop. It is recommendable that the first and the last device, and each 25th device in the loop have a built-in short circuit isolator. The cross-section and the Ohm resistance of the cable used for connecting the devices to the loop shall be carefully assessed, the loop length varies.

For convenience, a calculator has been developed for calculating the loop length and the cable cross section according to specified number and type of devices.
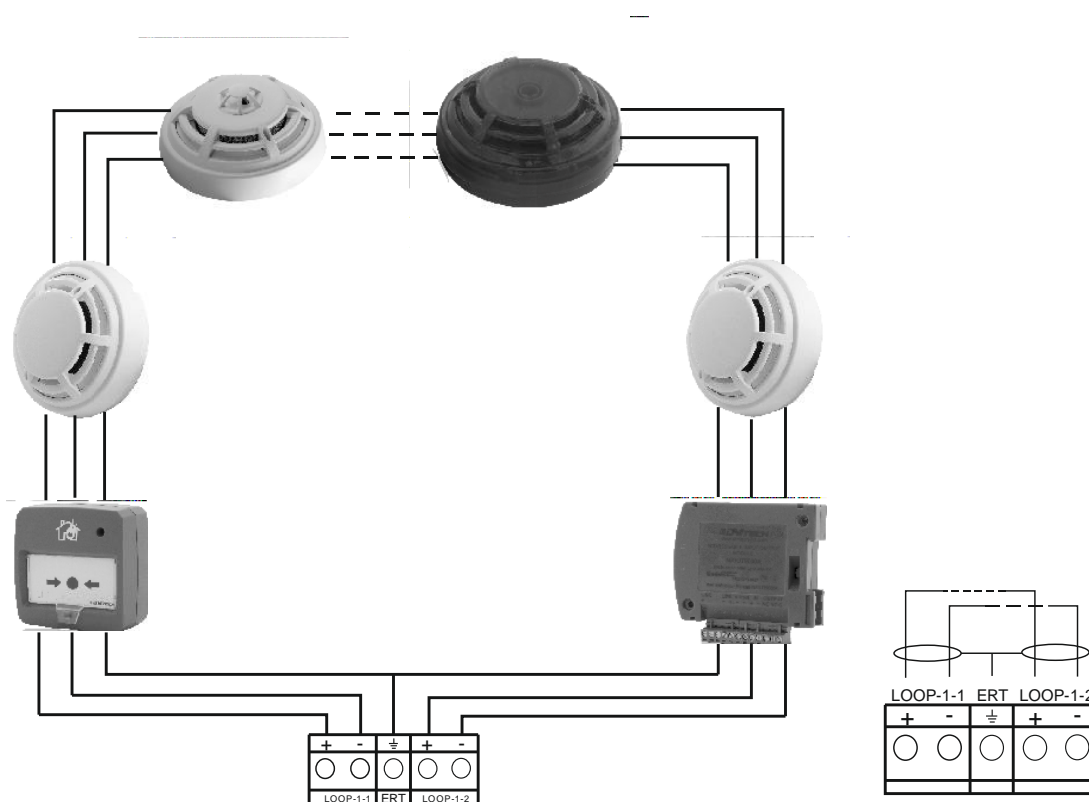
Fig. 8 Example of devices connected in a loop

2.3.2. Connecting devices to a conventional line
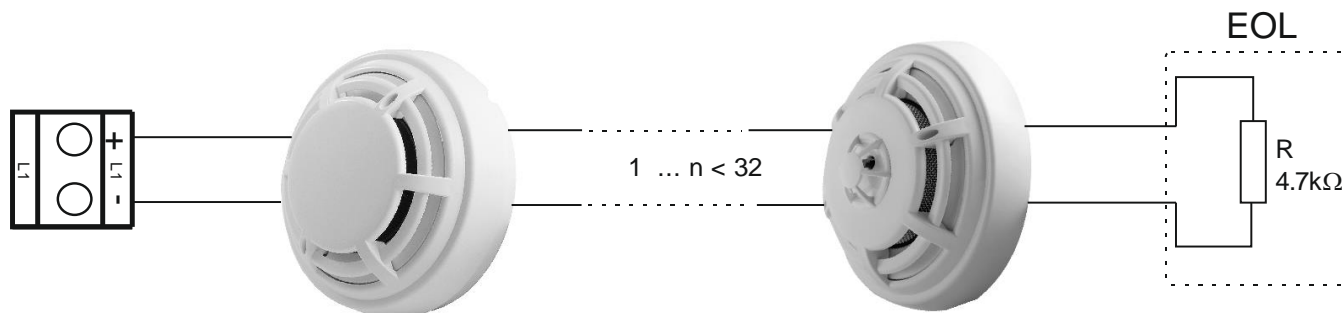
Fig. 9. Example of devices connected to conventional line

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2.3.3. Connecting signaling devices

> ⚠ **Monitored outputs OUT1 and OUT2 provide 24VDC 0.5A to load, connected between them and a mass*.**
> **A 4.7 кOhm terminating resistor shall be connected in parallel to the device far off from the panel in the loop, so the panel is able to check the loop integrity – see Fig.10.**

Signaling or other devices can be connected to each monitored output **OUT 1, OUT2** - Fig. 10. Device's maximum consumption shall not exceed 0.5A. A 4.7 кOhm terminating resistor **must** be connected in parallel to the loop.
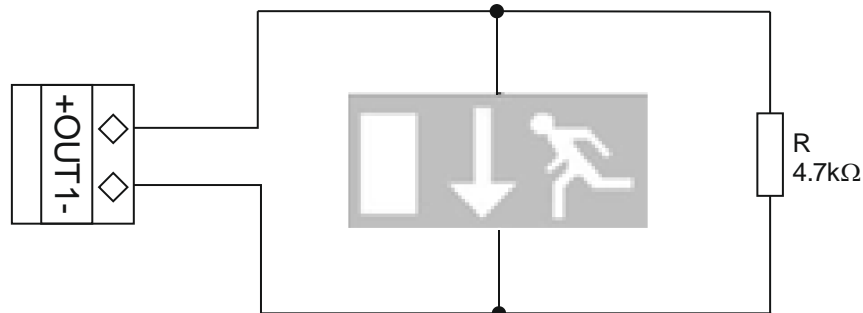
Fig. 10 – Example of an exit sign device connected to an output

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3. Program menus and settings of the fire alarm panel
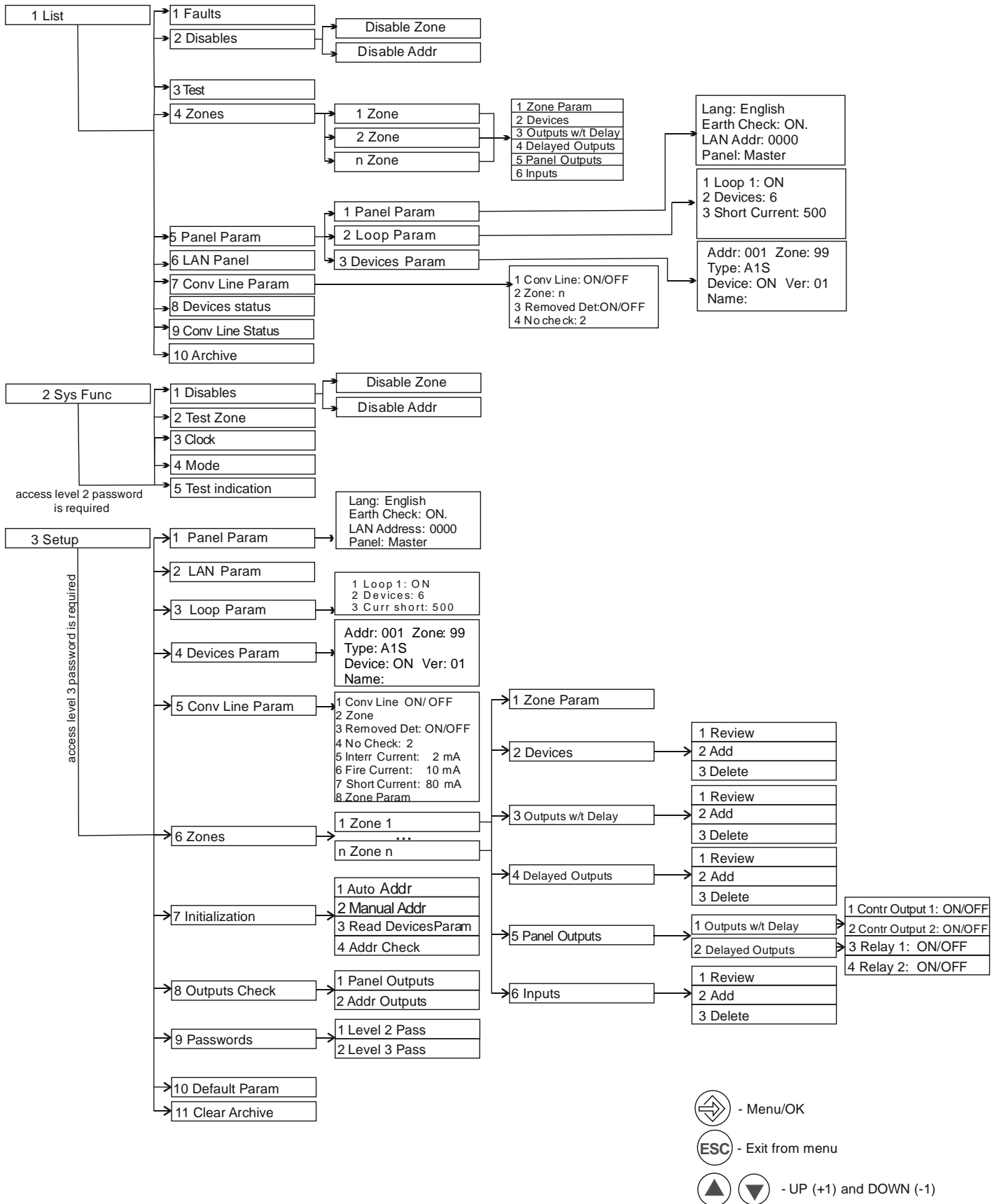
Fig. 11 General diagram of menus

3.1. LIST Menu – provides access to information about the system. No password is required.
  3.1.1. FAULTS (Fig.11 pos.1-1) – displays all faults registered by the panel
  3.1.2. DISABLES (Fig.11 pos.1-2) – displays a list of disabled zones and/or addresses
  3.1.3. TEST (Fig.11 pos.1-3)
  3.1.4. ZONE (Fig.11 pos.1-4) – displays a list of registered zones and information on a specified zone:
        1. Zone parameters
        2. Devices
        3. Outputs without delay
        4. Delayed outputs
        5. Panel outputs
        6. Inputs
  3.1.5. Panel parameters (Fig.11 pos.1-5) – the menu displays information on panel parameters, loop parameters and device parameters
  3.1.6. LAN parameters (Fig.11 pos.1-6)
  3.1.7. Conventional line parameters (Fig.11 pos.1-7) – displays information on conventional line settings
  3.1.8. Device status (Fig.11 pos.1-8) – displays status of devices; allows making inspections rounds and reading devices' parameters
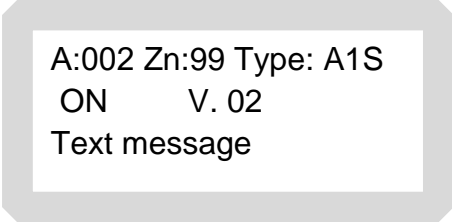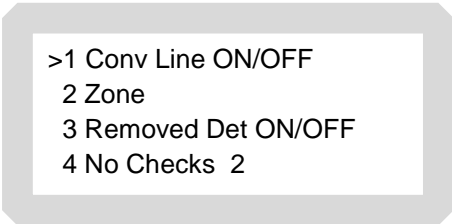 3.1.9. Conventional line status (Fig.11 pos.1-9) – displays conventional line status ON/OFF
  3.1.10. Archive (Fig.11 pos.1-10) – provides access to the archive of events

3.2. SYSTEM FUNCTIONS – access level 2 password is required to access the menu
        3.2.1. Disables – provides options for disabling zones and addresses
        3.2.2. Test zone – provides options for testing each of the zones – Activation and Deactivation. The purpose is to test the serviceability of the devices connected to each zone
        3.2.3. Clock – to setup the astronomical time of the fire alarm panel
        3.2.4. Mode – the fire alarm panel operates in two modes – DAY MODE and NIGHT MODE
        3.2.5. Test indication – activates a test mode allowing to perform functionality check of panel's light indication checking the functionality of the light indication of the panel

3.3. SETUP Menu – to access the menu a password for access level 3 is required
3.3.1. Panel parameters – the menu provides access to options for changing panel's language settings, monitoring of earthing, panel's LAN address and panel's priority level of communication (Main or Subordinate)
3.3.2. LAN parameters – settings for communication between panels
3.3.3. Loop parameters – loop parameters are being set through the menu: loop on/off, number of devices in a loop, current monitoring for short circuit (to move between submenus use arrows and the OK button)
3.3.4. Device parameters – the menu provides access to parameters of each connected device
  - A: xx – device address: the device address is selected by pressing the OK button and the arrows
  - Zn: xx – number of zone to which the device is assigned (if the device has not been assigned to any zone, the display reads Zn: 99)
  - Type: xxxxx – device type (A1R; A1S; S; SR; M; IO; A…….)
  - A third display line shows the device status (ON/OFF) and software version
  - A fourth line provides space for entering a logical name of the device by using the arrows, in order to identify easily the devices (to move between letters and symbols use the arrows and confirm with the OK button)

```
A:002 Zn:99 Type: A1S
 ON       V. 02
Text message
```

3.3.5. Conventional line parameters
  1. Conv Line ON/OFF – switching on/off the conventional line
  2. Zone - assigning the conventional line to a specified zone
  3. Removed Det ON/OFF – starting and suspending the check for removed fire detector
  4. N$_O$ Checks 2 - number of checks to be performed

```
>1 Conv Line ON/OFF
 2 Zone
 3 Removed Det ON/OFF
 4 No Checks  2
```

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5. Interr current: 2 mA – current threshold below which a signal will be released for interrupted line
6. Fire current   10 mA – current threshold for fire alarm condition
7. Short current 80 mA – current threshold above which a short circuit will be registered
8. Text – text message field for the line, 20 symbols max.

```
>5 Interr current:      2 mA
 6 Fire current      10 mA
 7 Short current     80 mA
 8 Text
```

3.3.6. Zones – allows assigning name to a zone, adding devices to a zone. More details and options are given in p.5

3.3.7. Initialization – addresses are being assigned to the devices from this menu
-   Allows automated (serial) assigning of addresses to new devices
-   Manual addressing – assigning an address to each device manually
-   Reading device parameters – allows reading of already addressed devices via a programmer, or in case of replacing the panel due to defects in the existing one. (Example: 10 addressable units with a programmer, added to the loop at specified locations. The fire alarm panel is switched on and starts operation with default parameters; the loop shall be switched on using Settings menu, Loop parameters, and here the number of devices in the loop -10- shall be set. The panel shall read each device parameters and shall register the parameters in the memory, in order to operate properly. It is done in menu Read Device Parameters).
-   Check Address – the menu allows assigning an address to a specified device. Device's light indicators illuminate so it can be identified and its location – registered.

3.3.8. Check Outputs – the menu allows running a functionality check on panel outputs and addressable devices outputs M9000A IO
  - Panel outputs – check is performed by manual activation of each output, marked with a tick in the menu
  - Addressable outputs – check is performed by selecting the address of the device that will be tested (analogically as in menu Check Address)

3.3.9. Passwords – allows setting a password for access level 2 and 3
  - Access level 2 – set a password for access level 2
  - Access level 3 - set a password for access level 3

3.3.10. Default Parameters – the default parameters are restored and the fire alarm panel is restarted

3.3.11. Clear Archive – files with registered events are deleted, requires a confirmation and a password for access level 3

4. Addressing devices in a loop

Each device shall have an individual address so it can be identified by the fire alarm panel. Device addressing is completed as follows:

4.1 Before device addressing is started, the loop shall be switched on from Settings -> Loop Parameters (Fig.11 position 3.3.) and the number of devices shall be configured (Initially the number of devices in the loop is 0. Adding any new device will change the number of devices automatically). On line 3 shall be set the current threshold, which, when exceeded, will allow the fire alarm panel to register a short circuit and to activate the relevant protection.

4.2. After the loop is switched on, enter menu Settings, submenu Initialization (Fig.11 position 3.7). Device addressing modes here are also two:

Auto addressing – as soon as a device is attached to its base, the fire alarm panel recognizes it and assigns a sequential address.

```
  1 Panel Param
  2 LAN Param
> 3 Loop Param
  4 Device Param
```

```
> 1 Loop ON.
  2 No Devices 0
  3 Short current 500
```

```
  4 Device Param
  5 Conv Line Param
  6 Zones
> 7 Initialization
```

Manual addressing (Fig.11 position 3.7.2.) – as soon as a device is attached to its base, the fire alarm panel recognizes it and suggests a sequential address, but awaits confirmation. A specific number can be assigned to each device in this menu (once an address has been selected, it's not suggested again)

4.3. Where **Auto addressing** is selected, the message ADD DEVICE is displayed (Fig.11 pos. 3.7.1.). As soon as the addressable device is physically attached to the base, its light indicators start illuminating and the message ADDRESS FOR ADDRESSING appears on the display. The address is accepted automatically then the message PLEASE WAIT appears on the display. As soon as the device is recognized and its address is programed, the message ADD DEVICE is displayed again and the panel waits for a next device to be added. This sequence is repeated until all devices are added to the loop.

4.4. Where **Manual addressing** is selected (Fig.11 position 3.7.2.), the sequence of actions is the same as in auto addressing; the only difference is that the fire alarm panel suggests an address and waits until it is selected and confirmed. The user then has the option to use sequential numbers as addresses or to assign a specific number (from the available numbers) at his choice.

5. Assigning names to devices and adding devices to a LOOP.

To ensure easy orientation, the fire alarm panel allows assigning an individual name to each device. The devices also can be grouped in ZONES.

5.1. Assigning names to devices. Enter Settings menu -> Device Parameters (Fig.11 pos. 3.4.). Use the arrows to see the parameters of the device. To enter a text select the letters consecutively.

5.2. Assigning names to zones and adding devices to zones. Enter Settings menu and select ZONES submenu (Fig.11 pos. 3-6.) As each zone is set, the menu automatically includes it.

5.2.1. **Zone Parameters**. The following zone parameters can be set in this menu:
- Priority Manual Call Point: Prioritized activation through a manual call point ON/OFF. Where the set priority is ON and the manual call point is activated, the fore alarm panel enters FIRE ALARM mode regardless of any other settings for this zone.
- Coincidence Mode: The options are ON/OFF. After one fire detector is activated, the fire alarm panel waits for a signal from a second detector before entering FIRE ALARM mode.

- Delayed Outputs: After a delay is set, the zone will be activated

Side panel displays:

> 1 Auto Addressing
  2 Manual Addressing
  3 Read Device Param
  4 Check Address

ADD DEVICE

ADRRESS FOR ADDRESSING
10
PLEASE WAIT

  2 LAN Param
  3 Loop Param
> 4 Device Param
  5 Conv Line Param

A:001 Zn:99 Type: A1S
 ON   V 02
SUGGESTED NAME

  4 Device Param
  5 Conv Line Param
> 6 Zones
  7 Initialization

> 1 Zone Param
  2 Devices
  3 Outputs w/t Delay
  4 Delayed Outputs

>Call Point Priority: OFF
  Coincidence Mode: OFF
  Delayed Outputs: 20
  ZONE1

- ZONE 1: Name of the zone. The user can change the name using the arrows and the OK button.

5.2.2. **Devices**: The following options are available in this menu: Review/Add/Delete. Devices are added to the zone and in case one of them sends a fault signal or a fire alarm signal, the relevant zone enters condition in accordance (Fire Alarm condition and/or Fault condition)

```
 2 Devices
 3 Outputs w/t Delay
 4 Delayed Outputs
>5 Panel Outputs
```

5.2.3. **Outputs without delay:** The following options are available: Review/Add/Delete. Outputs that shall be activated in case of events in the zone occur.

5.2.4. **Delayed outputs:** The following options are available: Review/Add/Delete. Outputs that shall be activated with delay, after some time period, in case of events in the zone occur.

```
>1 Review
 2 Add
 3 Delete
```

5.2.5. **Panel outputs:** The submenu allows setting activation of certain panel outputs in case of fire as delayed outputs or outputs without delay Fig.11 pos. 3 – 6 … 5 – 1 or 2). The following outputs can be set: Controllable Output 1, Controllable Output 2 and Relay 1 and Relay 2.

5.2.6. **Inputs:** The following options are available: Review/Add/Delete.   The inputs of input/output devices (M9000A IO) included in the loop are added in this menu.

```
>1 Contr Output 1: OFF
 2 Contr Output 2: OFF
 3 Relay 1: OFF
 4 Relay 2: OFF
```

EXAMPLE:

Let's assume that devices are allocated in a building as follows:
1. Automated fire detectors - 10 devices on each floor. A1R, A1S, SR, MSR
2. Manual call points MCP – 3 on each floor
3. Sound and light indicator S9000A – 2 on each floor

We assume that each device has been addressed and has an individual address (point 4). Each device has a name (p.5) For example, the manual call point at building's entrance on floor 1 has been assigned the name MCP Entrance. The manual call point near the stairs – MCP Stairs Floor 1, etc. The same logic is applied to automated fire detectors.

The zones may get names like: FLOOR 1, FLOOR 2, FLOOR 3.

The addressable devices shall be added to the relevant floor. The sound and light indicators shall be added to zone addressable outputs. The location of the relevant zone and the path for evacuation shall be carefully considered here. Example: In case of FIRE in zone FLOOR 1, zones FLOOR 2 and FLOOR 3 must be evacuated; therefore, the sound and light indicators shall be activated on all three floors.

For this purpose all sounders shall be added to zone 1 FLOOR 1, using submenu Outputs w/t Delay (if we want them activated immediately). Analogically, for floor 2, all sounders available on floor 2 and 3 shall be added. For floor 3 – only the sounders available on floor 3.

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