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Made in EU

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Addressable repeater FP9000A R

Manual

1. Introduction

The remote control and display panel FP9000A - R is a product that expands the capabilities of systems built on the basis of addressable panels of the FP9000A series. The product works in a network with up to 16 connected remote control units connected by a two-wire line (RS485 with a maximum length of up to 2 km).
The product is used in the construction of objects where:
- the persons who are expected to detect and respond initially to the fire and/or failure signals are located in a place other than that of the panel(s);
- it is necessary to monitor and manage panels located in different sites from one place;
- the panel or panels are monitored from several locations.
- When remote monitoring of objects is required.
- For large sites located in different cities, it is possible to monitor the various devices responsible for the sites in the respective settlement. Remote monitoring center.

2. Purpose

The remote display and control panel FP9000A-R is designed to optimize the work of users of Fire Alarm Systems. The product is compatible with the addressable fire alarm panel FP9000A-xx. The panel is designed to exchange information with one or more remote addressable FP9000A panels.

The product:
- receives and visualizes information about the status of remote fire alarm centers;
- forms a controlling influence, to areas from remote fire alarm centers, for their forced exit from the "Fire" state;

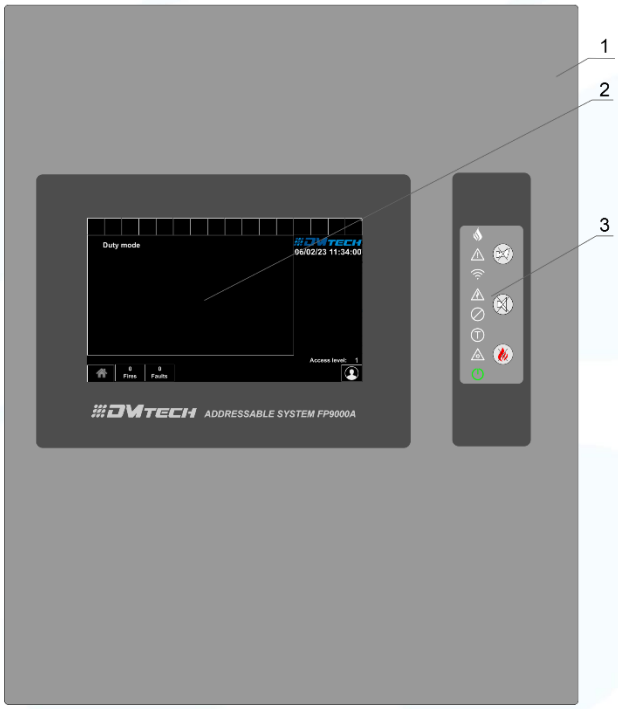

Fig.1

3. Characteristics - in fig. 1 presents the front panel of the FP9000A-R addressable "Repeater" - control and indication panel. Position 1 – front cover; 2 – 7" Touch Display 800x600; 3 – Panel with indication and additional buttons;

3.1 Functional characteristics

- Number of remote control units connected to the repeater – up to 16;
- Indication of the state of fire and/or damage from each zone and fire detector of the remote control units connected to it;
- Forming a management impact to a remote headquarters;
- Viewing the parameters and setting of each of the central units connected to it;
- Clear screen for easy functionality;
- TFT Touch display for visualizing the status of the remote control units and receiving commands from the user;

- LED indication and sound signaling in emergency and extreme situations;
- User oriented test modes;
- Built-in clock for astronomical time;
- Interfaces for communication with remote control units FP9000A – RS485;
- Interfaces for communication with PC – LAN Ethernet;

3.2Indications of registered events
- Light - LED
- Text - liquid crystal display 7", 800 x 600 dots, illuminated
- Sound - built-in sound signal

3.3. Power supply (conforming to EN54-4)
Voltage - (230)V AC
Maximum current - 500 mA

3.4. Dimensions
- overall dimensions - 375 x 300 x 90
- mass - 3 kg

4. Completing the product in packaging for delivery

- • Repeater FP9000A-R - 1 pc.
- • Fuse 4.3A - 1 pc.
- • Set of resistors 4.7kΩ - 1 pc.
- • Transport packaging - 1 pc.

5. General information

5.1. Access levels

The FP9000AR repeater implements 4 levels of access to control functions.

5.1.1. Access level 1 - active by default

This is a level of access for all persons who are expected to detect and initially respond to alarms of fire or damage.

The following repeater options are available:

- displaying suppressed messages for Fire, Damage, Prohibited components and Zones in test;
- introduction of reconnaissance time;
- forced transition from "Fire First Degree" phase to "Fire Second Degree" phase;
- suppression of the local buzzer;
- displaying the messages from the inputs;
- displaying the repeater programming data;
- checking the state of the addressable devices in the loops of the central units connected to it;

All repeater light indications are visible

5.1.2. Access level 2 – (passwords: 0; 11111; 12222; 13333…. change from settings)

This is an access level for persons who are responsible for safety and are trained and authorized to operate the repeater and fire alarm system in the following conditions:

- Duty mode;
- Fire;
- Fault;
- Disabled component;

 Information and setup.
  Access level 2 is entered by entering a password.
  The following repeater options are available:
  all available at level 1;
  switching off the exits activated in case of fire;
  exit from Fire state;
  the system functions of the repeater.

5.1.3. Access level 3 (default access password '0', recommended to be changed by the user)
This is an access level for individuals who are trained and authorized to:
- reconfigure the site-specific data recorded in the repeater or the exchanges connected to it;
- carry out the maintenance of the built fire alarm system.

Access level 3 is accessed by entering a password.
The following repeater options are available:
- all available on levels 1 and 2;
- repeater setting.

5.1.4. Access level 4
This is an access level for persons who are trained and authorized by the manufacturer to repair the repeater and change its firmware. All functions from levels 1, 2 and 3 are available.
Special funds are required to enter this level.

5.2. Statuses, Indication and Home Screen

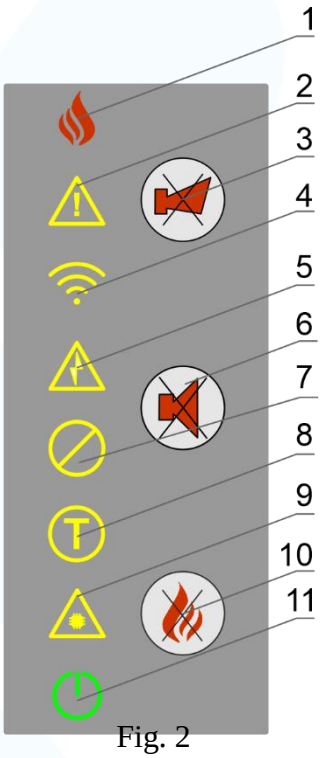

Fig. 2

5.2.1. Indication – in fig. 2 shows the additional indication of the FP9000A-R repeater. It consists of eight fields with light indication and three buttons (two of which with indication). They have the following functionality:pos. 1 – fire indication;

pos. 2 – indication of damage, lights up in the presence of damage regardless of the type;

pos 3 – button for muting executive devices, lights up red when muting is activated

pos. 4 – indication of lack of communication with any of the modules (specifically, it is written on the display which control unit is not communicating);pos. 5 – fault when there is no power (lights up when there is no mains power or batteries);

pos. 6 – button for muting the sound indication of the repeater itself, lights up in red when muted;

pos. 7 – lights up in the presence of prohibitions

pos. 8 – signaling for switching to the system test mode, lights up in yellow;

pos. 9 – alarm for system failure, accompanied by an audible alarm. In the presence of this damage, the Repeater does not function correctly.

pos. 10 - button to exit "FIRE" mode password required for access level 2 or higher;

pos. 11 – indicator for the working status of the repeater, normally lights up in green;

5.2.2. Initial screen of the repeater - in fig. 3 shows the home screen with the characteristic information areas and function buttons.

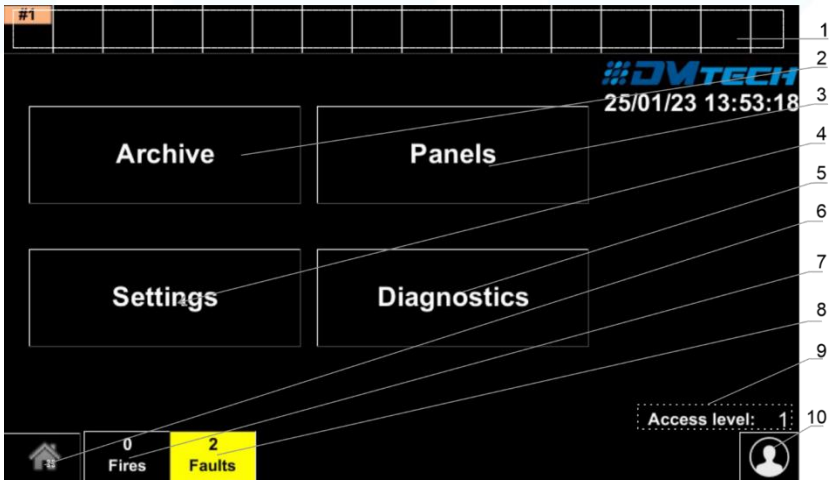

Fig. 3

Pos. 1 – fields for reconnection of 16 exchanges. By holding down on it, the setting options of the respective remote control unit are called up accordingly. Configuring remote panel address, panel name. After activating the corresponding box, the status of each of the central units is visualized. Accordingly, with yellow for failure, red for fire and orange for lack of communication. The maximum number of connected power stations is 16

Pos. 2 - Archive button - with this button you can access the list of events available in the repeater.

Pos. 3 - Panel button - this button displays information about the central units connected to the remote panel (network address, name of the central unit, number of devices, etc.)

Pos. 4 - Settings button - gives access to the options of the remote panel itself in order to configure (access level, repeater language and others)

Pos. 5 – Diagnostics button – this menu provides information specific to the repeater and access to the repeater test tools

Pos. 6 – The button returns us to the navigation screen

Pos. 7 – shows the number of reported fires. It is colored Red. The button calls up a list of the events detected by switched switchboards. Each addition of an event is also signaled with a specific sound signal characteristic of the "FIRE ALARM" mode.

Pos. 8 - shows the number of reported errors from all connected exchanges. It is colored yellow. When the button is pressed, a detailed list of reported errors is displayed on the screen, respectively by date and time.

Pos. 9 – This position shows the current access level (Default Level 1)

Pos. 10 – This button changes the access level. By entering the corresponding password corresponding to Access Level 1, 2, 3 or 4. The user passes between the Levels. Accordingly, he receives the rights he needs.

5.2.3. Repeater status

The repeater can exist in seven basic states (Table 1).

Table 1

Repeater status	Description
Duty mode	A state in which remote exchanges connected to the repeater are not in any of the other six states and have a connection to it, and it itself is in none of the other six states
Fire	Condition when a fire detector is triggered in a zone from a remote control unit connected to the repeater. It triggers the corresponding executive logic
Fault	State when a fault is registered in one of the remote central units connected to the repeater or when the connection with a central unit is lost. Logging a fault in the sled repeater.
A forbidden component	The repeater enters the Disabled Component state after a manual operation to disable a component - a fire alarm zone, an addressable device or a controllable output of any of the remote control units connected to it.
Test	State resulting from a manual operation for the repeater outputs in "test".
Information and management	The repeater enters the Information and Control state when the main menu is activated. In this state, information about the repeater and its connected remote centers is displayed and control data is entered.
Setup	The repeater enters the Setup state when the "Setup" submenu is activated from the Information and Control state. In this state, the configuration parameters of the repeater are set.

At any time, the repeater can be in one of the states listed, or in any combination of the states: Fire, Fault, Disabled Component, Test, and Information and Control.
The states Standby and Setup cannot be combined with another state:
• the repeater enters Standby mode when exiting all other states;
• entering the Setup state causes exit from the other states.

5.3. Controls and indications

Table 3 describes the main purpose of the control bodies.

Table 2

LED Indication	Description
FIRE	FIRE INDICATOR. Illuminates permanently in the event of a fire alarm event following a signal from an automatic or manual fire detector or other external device connected to the panel input.
DIST FIRE	DISTANT FIRE INDICATOR. Illuminates continuously (red) in case of a fire alarm event in a remote control panel after a signal from an automatic or manual fire detector or other external device connected to the inputs of the remote panel.
FAULT	DAMAGE. Illuminates continuously (yellow) in case of system failure.
TEST	TEST. Steady on (yellow) when performing a system test.
DISABLE	Prohibited Component – illuminates the "Prohibited Component" indicator with a steady yellow light
POWER	POWER FAILURE. Lights up constantly (yellow) in the event of a 220V power supply or battery failure.
SYS ERR	CPU FAILURE. Steady on in the event of a main processor failure.
TRANSM	transmission of a fire message to a remote center
COMMUN	data transmission over the network - steady yellow light
OUTS	Fault in controllable outputs - "Fault in controllable output" indicator lights up with a constant yellow light
DELAY OUT	"Output delay" indicator - constant yellow light

5.4. Terminal order on the panel - In fig. 4 with positions 1-8 show the main connections of the repeater with the periphery controlled by it.

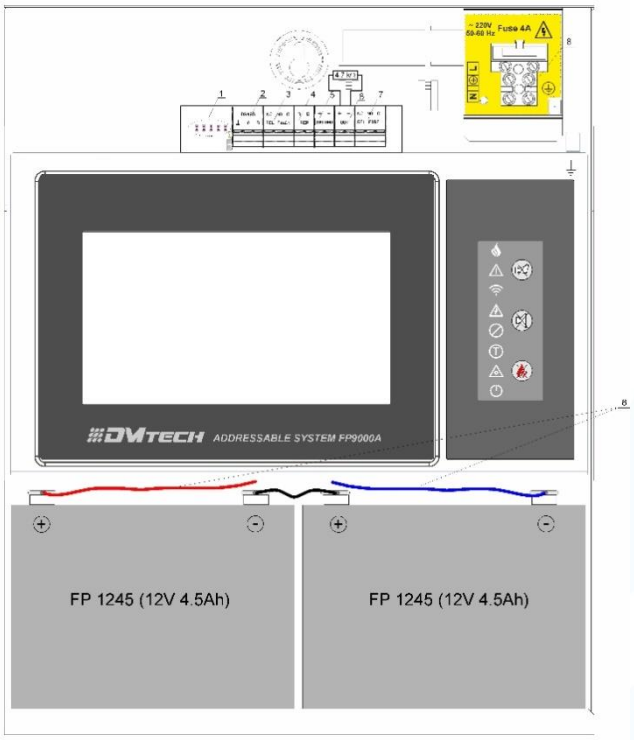

Fig. 4

5.4.1. Main functions of the panel - a brief description of the main positions in fig.4
- pos. 1 – light indication of current status
- pos. 2 – RS 485 (E, A, B) - Used to connect the repeater to centrals. Holds up to 16 panels. The connection direction A-A must be observed; B-B; Shown in Fig.5.
- pos. 3 – Pins NC (Normally Closed Contact), NO (Normally Open Contact), C on Fault Relay
- pos. 4 – A B (REP) – For connection between two repeaters
- pos. 5 – Power supply +/- 28V
- pos. 6 – Controllable output. Controlled by panel settings, line integrity monitors. A 4.7k□□ terminal element is required
- pos. 7 – Terminals NC (normally closed contact), NO (normally open contact), C relay Fire – activated in "Fire Alarm" mode Terminals NC (normally closed contact), NO (normally open contact), C

5.4.2. Connecting panel to the repeater via RS 485 communication line (wire length 1.2 km). The samples according to fig. 6 should be tied to the communication line. The beginning and end of the communication line are closed by means of end element 120□□

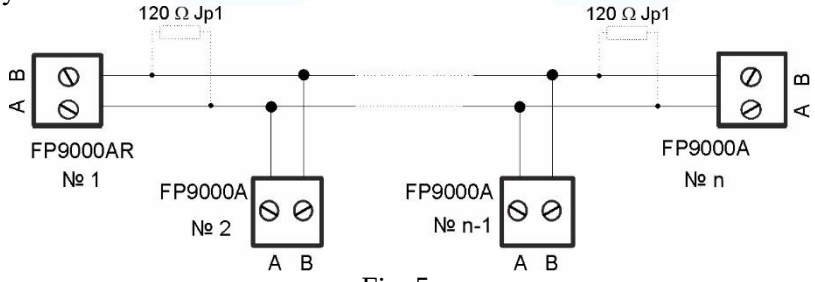

Fig. 5

6. Status Standby mode

6.1. Description

The repeater is in Standby mode when it is not in any of the other six states (no faults, fires, test or prohibition status in the built system and is connected to all remote control units).

6.2. Indication

LED indication and sound signaling
Only the green LED indicator ("Power") lights up.
The local buzzer is not triggered.

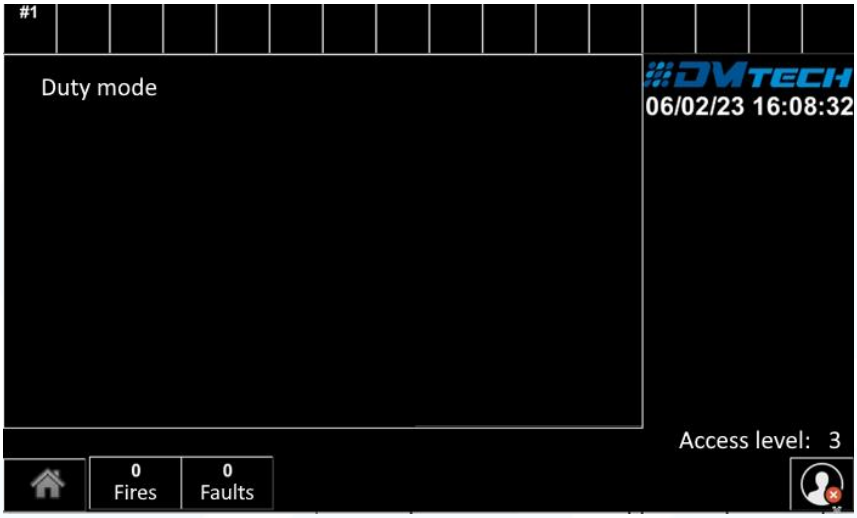

Fig. 6

7. Fire condition

7.1. Description

The repeater enters the Fire condition when the fire detector of the panel(s) connected to it is activated.
Repeater may be in "Fire" condition
- one or several zones from one panel;
- one or more zones from different panels.

Exiting this state is possible only by manual operation - pressing a button at access level 2 or higher. (default password '0')

The repeater is in the Fire condition until the fires are reset in each of the panels connected to it.

7.2. Indication

7.2.1. LED indication and sound signaling

In this state, the general indicator lights up with a red flashing light (“Fire”).

The local buzzer emits an intermittent signal (0.5s sound, 0.5s pause) if not suppressed by button (“Stop alarm”).

8. Fault condition

8.1. Description

The repeater enters this state when registering:
• Fault in the repeater:
- fatal system failure;
- damage to the processor program;
- failure in communication with the headquarters;
- damage to the clock;
- failure in the mains supply;
- battery power failure;

• Fault in a remote control panel connected to the repeater:
- failure in communication with the panels;
- damage to the clock;
- damage to the plant;
- failure in a module;
- damage in a circuit - short circuit or interruption;
- uninitialized loop;
- a greater number of devices in a fire alarm loop;
- fault in a zone – when a fault occurs in a device included in the zone;
- removed device;
- device failure;
- tripped device isolator;
- tripped isolator to Power loop of device;
- dirty sensor (only for fire detectors with optical-smoke part);
- error in communication with a device;
- uninitialized device (a new device was detected in the loop);
- exchanged devices;
- a different device ID;
- different device type;
- different device class;
- failure in a controllable output – short circuit or interruption;
- failure in the mains supply;
- battery power failure;
- short circuit to a grounded wire;
- circuit power failure;
- power failure of external devices;
- low power – discharged battery when mains power fails.

In the "Fault" condition, the LED indication is triggered and a corresponding message is displayed on the display.

The repeater is in Fault condition until all faults have been rectified.

8.2. Indication

8.2.1. LED indication and sound signaling

The LED indication is a combination of three indicators glowing with a constant yellow light:

LED indication	Sound signaling	Fault
"Fault" "System fault"	Continuous signal	Fatal system fault
"Fault" "Power fault"	Interrupted signal (1s sound, 1s pause)	Power fault

The local buzzer can be suppressed with a button ("Stop alarm").

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DMTech wishes you pleasant work!