REPEATER FS5200R

INSTRUCTION MANUAL

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1. Introduction

Repeater FS5200R is a unit supplementing the range of 5000 series products expanding the possibilities of the fire detecting and fire extinguishing systems built on the basis of fire control panels FS5100, FS5200, FS5200E and FS4000.

Some of its main features and possibilities are:

- Indicates Fire condition and/or Fault condition occurred in each of the fire control panels connected to it;
- control effect on the connected fire control panels that have sent a signal for Fire condition;
- user oriented menu dialogue for easy and convenient operation;
- four-line LCD for visualization the different modes of the repeater;
- LEDs and sound indication of the operation modes;
- user oriented test modes allowing for a total control of the site protected;
- energy independent archive memory saving the event type, date and time,;

2. Function

Repeater FS5200R:
- receives data for Fire condition from the remote fire control panels:
- receives data for Fault condition from the remote fire control panels:
- displays information for the condition of remote fire control panels;
- executes control commands to lines of remote fire control panels for their forced exit of Fire condition;

Repeater FS5200R could be used:
- when the persons whom are expected to detect and react initially to the fire condition and/or fault condition signals are at a different place from the location of the fire control panel/s;
- when fire control panels located at different sites have to be monitored and controlled from one place;
- when the fire control panel/s are monitored from several locations.

It is compatible with FS4000, FS 5100, FS 5200, FS 5200E and FS5200R**.**

3. Technical data

3.1. Functional characteristics

- Connection of maximum 15 remote fire control panels (repeaters) to one repeater;
  - Built-in sounder for fire condition – one tonal, discontinuous, can be switched off
  - Built-in sounder for fault condition – one tonal, discontinuous, can be switched off

– Built-in real time clock

- Interfaces for communication with the fire control panels RS485 connected to it;
- Option to prolong the time period for Fire condition stage I with programmable inspection period
- Possibility for delay when switching the outputs for Fire alarm;
- Energy independent archive – up to 100 events;
- Operation with a wide range of output devices;

3.2. Indications of registered events

- Light indication – LED
- Text messages – LCD display, 4 lines 20 characters per line, Cyrillic letters
- Sound signaling – built-in sounder

3.3. Monitored outputs

- type – potential
- electrical characteristics - (24±5)V DC / 1A

3.4. Relay output for general function

- type – potential free, switching
- electrical characteristics – 3A/125ADC; 3A/30VDC

3.5. Relay output for fault condition

- type – potential free, switching
- electrical characteristics – 3A/125ADC; 3A/30VDC

3.6. Power supply

3.6.1. Mains

- voltage – 220/230 VAC
- frequency – 50 Hz

3.6.2. Back up batteries

- battery type – lead, gel electrolyte
- number of batteries – 2 pcs
- connection – consecutive
- nominal voltage of the connected back up batteries – 24 V DC
- nominal capacity C_{20} – (1,2 – 4,5) Ah
- extreme discharge voltage – 17,6V
- charge voltage – 28V

3.6.3. Fuses

- mains 220/230 V – 4,0 A
- back up batteries – 2,0 A

3.7. Dimensions and weight of the unit

- dimensions – 313 x 218 x 85 mm
- weight (batteries not included) – 1,6 kg

4. Contents of delivery

- Repeater FS5200R - 1 pc
- Resistor 5,6 kΩ - 2 pcs
- Jumper for backup batteries - 1 pc

- Fuse 4A - 1 pc
- Fuse 2A - 1 pc
- Instruction manual - 1 pc
- Instructions for authorized staff - 1 pc
- Packing - 1 pc

5. General information

5.1. Access levels

Four access levels are available in the repeater:

5.1.1. Access Levels 1 and 2
All persons who would presumably find out and react to alarm upon fault condition or fire condition have access to level 1 and 2. They shall be trained and authorized to operate the repeater in the following conditions: Duty Mode, Fault condition; Disabled component and System functions (except SetUp).

The following actions are accessible:

- Displaying suppressed messages for Fire condition, Fault condition, Disabled components and Zone in test
- Forced proceeding from phase Fire condition stage I to phase Fire condition stage II
- Suppressing the local sounder
- Displaying the status of the connected fire control panels and repeaters;
- Switching off the outputs, activated upon fire condition;
- Exit of Fire condition; SetUp Mode
- System functions of the fire control panel, except

5.1.2. Access Level 3
To access this level:

- unlock and open the front cover of the repeater;
- enter a password.

For the personnel authorized to have Access Level 3, it is available

- all features accessible at Level 1 and 2;
- reconfiguration of specific data of the repeater;
- replacing a burnt fuse;
- connecting executive devices;
- connecting slave fire control panels and repeaters;
- maintenance of the repeater.

5.1.3. Access Level 4
Accessible for personnel trained and authorized by the Producer to repair the repeater and to modify the software

5.2. Conditions and indication

The repeater FS5200R operates in six basic modes: Duty Mode, Fire Condition, Fault Condition, Disabled Component Mode, Information and Control Mode and SetUp Mode:

- Duty Mode - the repeater is in Duty Mode, when the fire control panels connected to it are not in any of the rest five possible conditions and they have a connection with ;
- Fire condition – The repeater enters Fire condition when a fire detector is activated in a line/lines of the fire control panel connected to it;
- Fault condition – the repeater enters this condition when a fault in any of the fire control panels connected to it is registered or its connection with any of the fire control panels has been interrupted;
- Disabled component - the repeater enters Disabled component after a manual operation, disabling a certain component has been performed –monitored output;
- Information and Control;
- SetUp Mode – the repeater enters SetUp Mode after activation of submenu Set up, in Information and Control Mode;

In any moment the repeater can be in any of the above conditions/modes, or in a random combination of Fire condition, Fault condition, Disabled component and Information and Control mode.

Duty Mode and SetUp Mode can not be combined with another mode:

- the repeater enters Duty Mode after all other conditions are exited;
- when the repeater enters SetUp Mode it exits all other conditions.

The conditions of the repeater and their corresponding indication are shown in Table 1.

Conditions of the repeater	Indication
All conditions - The repeater is power supplied	- indicator *Power supply* – continuous green light [12] - indicator for inspection time (if programmed) [13]
Fire condition	- common indicator *Fire condition* - red light; [19] - individual LED indicator for the slave fire control panel (repeater) [21] - indicator for inspection time (if programmed) [13] - indicator *Power supply* – continuous green light [12
Fault condition - All faults except for *Battery Low*	- Common indicator *Fault condition* – continuous yellow light [1] - Fault condition in a remote fire control panel [4]
Fault condition – System error	Indicator *System error* – continuous yellow light [2]
Fault condition	Indicator *Fault in mains supply of the remote fire control panel* - continuous yellow light [5]
Fault condition	Common indicator *Fault in fire detecting line of a remote fire control panel* - continuous yellow light [6]

Conditions of the repeater	Indication
Fault condition	Indicator *Fault in monitored output of a remote fire control panel* - continuous yellow light [7]
Fire condition	Local sounder – discontinuous signal: 0.5 s sound, followed by 0.5s break
Fault condition – All faults except for *Battery Low*	Local sounder – discontinuous signal: 1 s sound, followed by 1 s break
Fault condition - Low battery	Local sounder – discontinuous signal: 1 s sound, followed by 3 s break

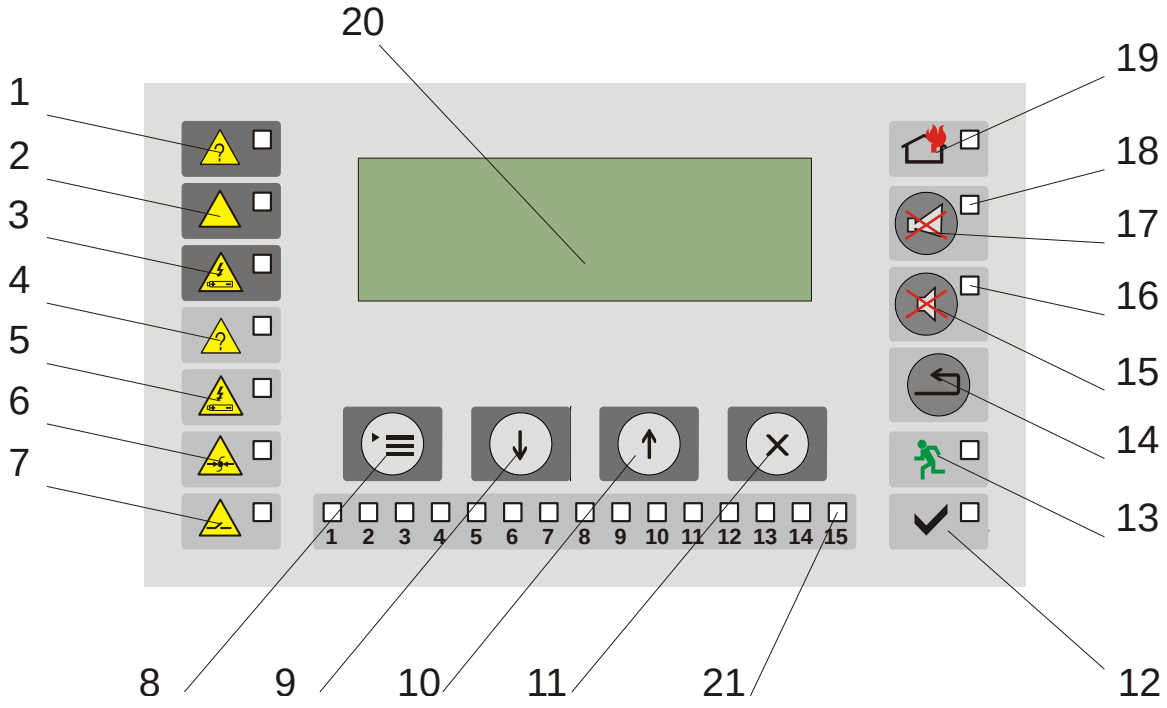
5.3. Means of control and indication

Means of control	Condition of the repeater	operation
Button *Reset*	Fire condition	Control operation, to force a line of the remote fire control panel to exit Fire condition (reset line) [14]
Button *Menu*	Duty mode, Fault condition Information and Control mode, SetUp mode and Fault condition	To enter the menu for review, setting up the repeater [8]
Button *Down*	Duty mode, Fault condition Information and Control mode, SetUp mode and Fault condition	To display in the text screens the next message or element of the menu [9]
Button *Up*	Duty mode, Fault condition Information and Control mode, SetUp mode and Fault condition	To display in the text screens the next message or element of the menu [10]
Button *Exit*	Duty mode, Fault condition Information and Control mode, SetUp mode and Fault condition	To exit the menus or to exit SetUp mode with saving the changes [11]
Button *Alarm*	Fault condition, Fire condition	To suppress the local sounder [15]
Button *Outputs*	Fire condition	- Upon activated outputs for fire condition – to suppress the outputs; - If no outputs for fire condition are activated – to activate the suppressed outputs, if any [17]

5.4. Panel for control and indication

LED indicators and buttons are positioned in functional groups, as follows:

- Indicators for common fault conditions - [1], [2] and [3];
- Indicators for fault conditions in the remote fire control panels (repeaters) – [4], [5], [6] and [7];
- Buttons for control on the LCD display and for entering of parameters – [8], [9], [10] and [11];
- Individual indicators for Fire condition and Fault condition of remote fire control panels – [21];
- Buttons and indicators showing each status of the repeater – [12], [13], [14], [15], [16], [17], [18] and [19].



Front panel of repeater FS5200R

1 Common indicator for *Fault condition*
2 Indicator for *System error*
3 Indicator for *Fault in power supply*
4 Common indicator for *Fault condition* in a remote fire control panel
5 Common indicator for *Fault in power supply* in a remote fire control panel
6 Common indicator for *Fault condition in fire detecting line* of a remote fire control panel
7 Common indicator for *Fault condition in monitored output* of a remote fire control panel
8 Buttons *Menu*
9 Button *Down*

10 Button *Up*
11 Button *Cancel*
12 Indicator *Power supply*
13 Indicator *Delay of the outputs for Fire condition of the repeater*
14 Button *Reset*
15 Button *Alarm* with indicator *Suppressed alarm*
16 Indicator *Suppressed alarm*
17 Button *Outputs* with indicator *Suppressed outputs*
18 Indicator *Suppressed outputs*
19 Indicator for *Fire stage*
20 LCD display (4x20)
21 Individual indicators for Fire condition and Fault condition in the remote fire control panels.

6. Duty Mode

6.1. Description

The repeater is in Duty Mode when:

- it is not in Fault condition;
- the connected to it remote fire control panels (repeaters) are not in Fire condition or Fault condition.

6.2. Indication

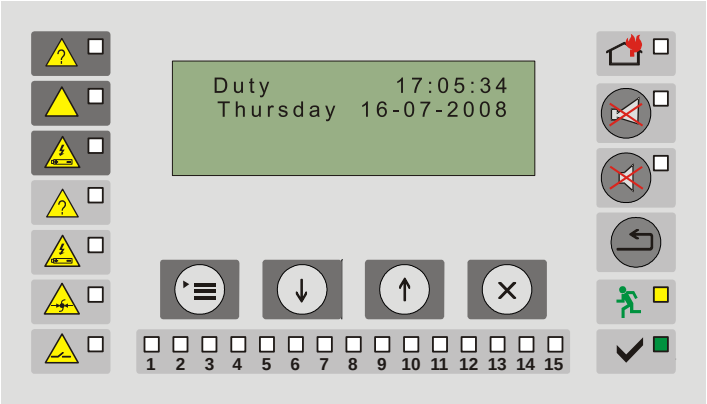
6.2.1. LED and sound indication

In Duty Mode the green LED indicator (Power supply) and the indicator upon programmed inspection time of the outputs are activated.

6.2.2. Text message

The display shows:

- a message “Fire protect”, i.e. the fire control panel is in Duty Mode;
- the current local time;
- the day of the week;
- the current date.



6.2.3. Using the keypad

For all access levels the only active button in Duty Mode is (Menu). Press it and the repeater enters System Functions status.

7. Fire condition

7.1. Description

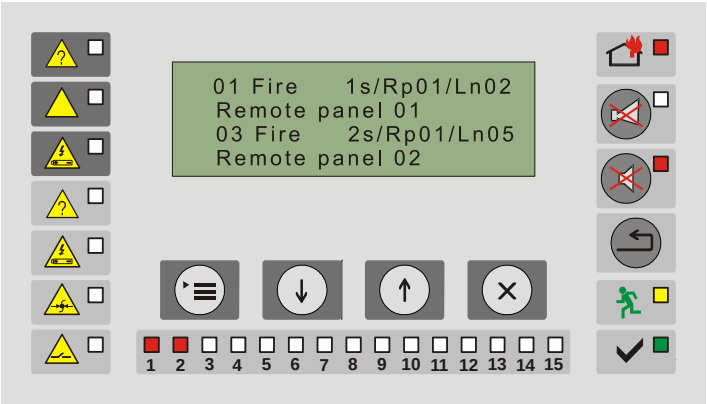
The repeater enters Fire condition after a fire condition has been activated in any of the fire control panels or repeaters connected to it.

To exit this condition press button and the line in fire condition shown in the upper field of the display is reset (section.7.3.3).

7.2. Indication

7.2.1. LED and sound indication

In this condition the following indicators illuminate:

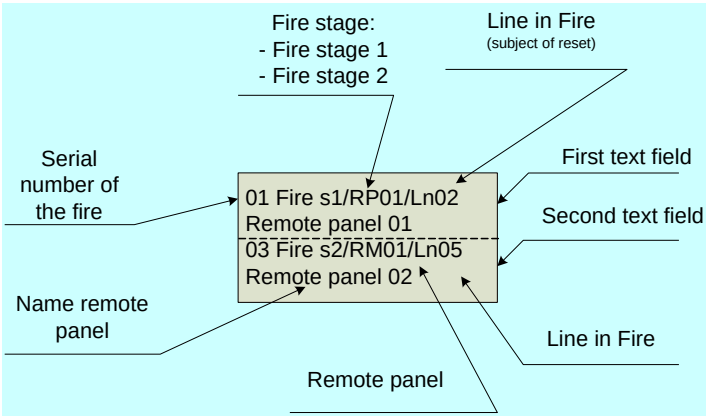


- indicator (Fire) in red light;
- the individual indicator for Fire condition of a remote fire control panel illuminates in red light;
- if the outputs of the repeater for phase Fire condition are suppressed by button (Outputs), the LED indicator of the button illuminates in continuous red light;
- if the sound signaling is suppressed by button (Alarm), “Аларма”), the LED indicator of the button illuminates in continuous red light.

7.2.2. Text messages

For this condition the display is divided into two text field:

- the first field displays information about the first fire control panel and line in fire condition;
- the second field is used to show information if more than one fire control panel (line) is in fire condition.



If more than 2 lines are in fire condition, use the buttons (down) and (up) to view all lines

Upon registration of more than 2 fire conditions, the display visualizes continuous information about

in fire condition at the respective fire control panels.

the first and the last fire condition (EN54-2).

Only the fire condition displayed in the first text field could be reset.

7.3. Using the buttons

7.3.1. Button (Alarm)

Press it to:

- turn the local sounder off if it is activated for Fire condition or Fault condition;
- activate the local sounder if the fire control panel is in Fire condition or Fault condition and the local sounder has been switched off by a preceding pressing of the same button. The LED indicator of the button illuminates of the local sounder is switched off for Fire condition or Fault condition.

Buttons' operation does not effect an event, Fault condition and it is not cancelled by them.

A signal for a new fault condition/s will trigger the local sounder for Fault condition only.

7.3.2. Button (Outputs)

The button's operation depends on the current Access level and the condition of the fire control panel.

Press it to:

- Suppress the outputs that have been activated for Fire condition.
- Activate the suppressed outputs, if any.

The LED indicator of the button illuminates if there are suppressed outputs for Fire condition.

7.3.3. Button (Line Reset)

The button is used to force the line of the remote fire control panel to exit Fire condition.

The procedure to reset a line in which the remote fire control panel is in Fire condition includes the following steps:

- **Select a line** – Using the buttons (Down) and (Up) in the first text field of the display it is visualized the line which status is going to be changed The line and the fire control panel shown in the first text field is considered to the selected one;
- **Control action** – Pressing the button (Line Reset) has a controlling action from the repeater to the remote fire control panel in Fire condition and the line is reset (i.e. the remote fire control panel is in Duty Mode for that line).

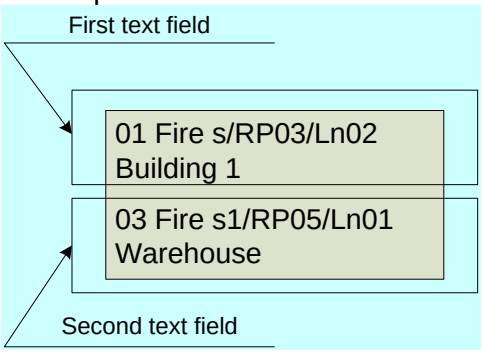
  Note: If the remote fire control panel is FS4000 or FS5200E type, pressing the button (Line Reset) results in forced exit of all lines of the fire control panel from Fire condition not only of a single line.

The above-described steps (select a line/fire control panel and control action) are repeated for every line in Fire condition that is being reset.

You can reset lines (fire control panels) in Fire condition from any repeater included in the system.

Example:
It is created a system of 5 fire control panels and two repeaters (Appendix 1)
Signals for Fire conditions in two remote fire control panels are received in the repeaters:
- Fire condition in lines 1 and 2 of the fire control panel in Building 1;
- Fire condition in line 1 of the fire control panel in Warehouse;

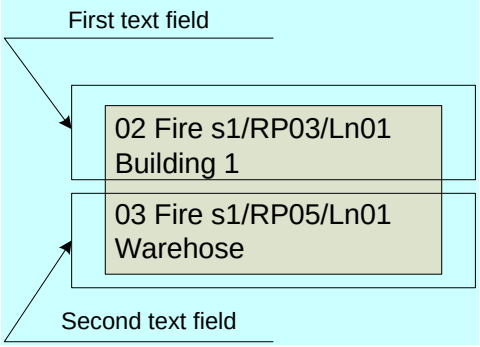
The following information is visualized on the display of the repeater.



In the first text field:
01 (the first occurred fire condition);
1c (phase of fire condition);
RP03 (No. of the remote panel in fire condition);
Ln02 (No. of line in fire condition);
Building 1 (user's text showing where the remote panel is located (see section 10.4.5.2.4)).

In the second text field:
03 (the last occurred fire condition, in this case the third one);
1c (fire condition Stage 1);
RP5 (the fire condition is in remote panel No. 5)
Ln01 (No. of line in fire condition);
Warehouse (user's text showing where the remote panel is located (see section 10.4.5.2.4)).

Based on the number of the first and the last fire condition it is evident that during the time of the fire conditions shown on the display there is another fire condition but its visualizing is suppressed at the moment. Use the buttons ↓ (Down) and ↑ (Up) to review the suppressed messages for fire condition.



Using the buttons ↓ (Down) and ↑ (Up) in the first text field you can visualize the data for the line that has to be reset. This line will be forced to exit fire condition.

Reset the fire signal transmitted from line 1 of remote panel 3, located in building 1.

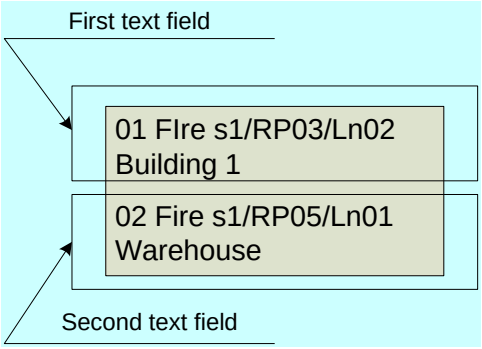
Pressing the button ⮌ (Line Reset) in this screen results in:

- Line 1 from Building 1 exits Fire condition and enters Duty Mode;
- The other two lines in Fire condition are visualized. .

Total number of lines in Fire condition – 2
First text field:
First occurred fire condition – line 2 in Building 1

Second text field:
Last occurred fire condition – line 1 in Warehouse.

Note: There are no suppressed messages for fire conditions.



After a confirmation is received from the remote fire control panels (up to 10 seconds) that their lines have been reset and are not in Fire condition, the repeaters enter Duty Mode. If during Fire Condition the menus are manipulated, it is not possible the Fire condition to be reset.

Attention!
The remote fire control lines are reset only after a check is performed for false activation. The control action of the repeaters will switch off the activated outputs of the remote fire control panels for fire condition.

7.3.4. Button (Menu)
Press the button to enter Information and Control Mode.

7.3.5. Button (Exit)
Press it to return to the main screen.

8. Fault Condition

8.1. Description

The repeater enters Fault condition when a fault is registered in:

- the repeater;
- the remote fire control panels (repeaters) connected to it.

It is accessible at all Access levels.

8.1.1. The repeater enters Fault Condition when any of the events below have been registered:

- Battery low - backup batteries discharged due to interruption of mains supply;
- Fault in a processor program;
- Fault in a monitored output – short circuit or break;
- Fault in the mains supply;
- Fault in the backup batteries supply;
- Short circuited ground wire;
- Fault in external devices supply.

8.1.2. The repeater enters Fault Condition when any of the events below have been registered in remote fire control panels, too:

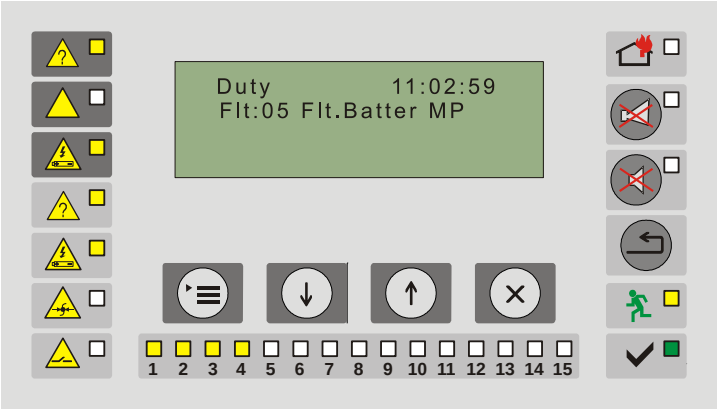
- Battery low - backup batteries discharged due to interruption of mains supply;
- Fault in a processor program;
- Fault in a monitored output – short circuit or break;
- Fault in the mains supply;
- Fault in the backup batteries supply;
- Fault in a line – removed fire detector, short circuit or break;
- Short circuited ground wire;
- Fault in external devices supply
- In any fault condition of the remote fire control panel with its specific functions.

In Fault condition text messages showing the type of the fault appear on the LCD display. Additional information is provided by LEDs indicators.

8.2. Indication

8.2.1. LED and sound indication

Upon *Low battery* fault condition no LED indicator is illuminated. The local sounder produces discontinuous signal (1 s sound, followed by 3 s break). The lighting of the LCD display is off.



All other fault conditions in the repeater are designated by indicator pos. 1 (Fault) illuminating in flashing yellow light. Depending on the specific fault, the following indicators are illuminated too:

- upon *System error* - indicator pos. 2 (System error) in continuous yellow light;
-
- pos. 3 (Fault in mains supply) in continuous yellow light;

For any fault condition in the remote fire control panels, indicator pos. 4 (Fault) illuminates in flashing yellow light. Depending on the specific fault, the following indicators are illuminated too:

pos. 5 (Fault in mains supply) in continuous yellow light.

pos. 6 (Fault in a fire detecting line of a remote fire control panel) in continuous yellow light;

pos. 7 (Fault in a monitored output of a remote fire control panel) in continuous yellow light;

The individual indicator for a Fault condition in a remote fire control panel illuminates in yellow light.

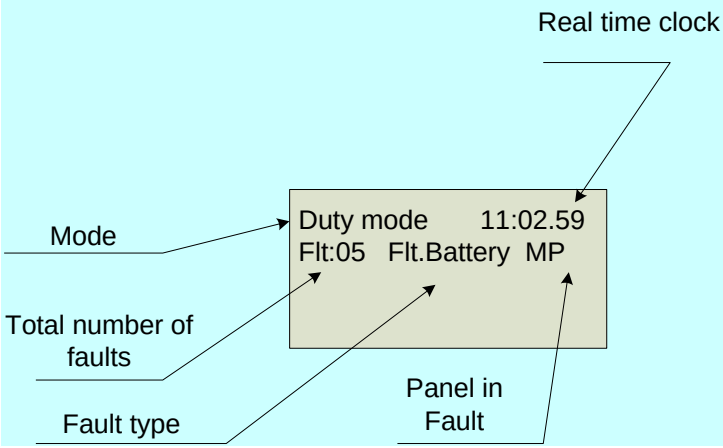
If the sound indication is suppressed by button (Alarm), the LED indicator of button illuminates in red light.

8.2.2. Text messages

Upon registration of a fault/s condition the LCD display provides information about:

- The total number of fault events;
- Type of the fault event
- Control panel in fault condition

The information on fault conditions is displayed only if the repeater is not in fire condition.



The most frequently indicated fault conditions in the repeater are:

Text message	meaning
FaultMainsRP	Fault in mains supply of remote panel No. ... (slave fire control panel or repeater)
FaultLnRP	Fault in a line of remote panel No. ... (slave fire control panel or repeater)
FaultMOutRP	Fault in a monitored output of remote panel No. ... (slave fire control panel or repeater)
FaultRP	Fault in remote panel No. ... (slave fire control panel or repeater)
FaultEartRP	Fault in earthing of remote panel No. ... (slave fire control panel or repeater)
FaultFsMP	Fault in a fuse on the main panel (repeater)
FaultMOut2ShortMP	Short circuit in monitored output 2 of the main panel (repeater)
FaultMOut2BreakMP	Break in monitored output 2 of the main panel (repeater)
FaultMOut1ShortMP	Short circuit in monitored output 1 of the main panel (repeater)
FaultMOut1BreakMP	Break in monitored output 1 of the main panel (repeater)
FaultErthMP	Fault in earthing of the main panel (repeater)
FaultBatMP	Fault in battery back up of the main panel (repeater)
FaultMSMP	Fault in mains supply of the main panel (repeater)

8.3. Using the buttons

For fault conditions 2 active buttons are being supported. Where the fire control panel operates in combination of other conditions, their buttons are active too.

8.3.1. Button (Alarm)

Press it to:

- switch the local sounder off if it was activated for Fire condition or Fault condition;
- activate the local sounder if the fire control panel is in Fire condition or Fault condition and the local sounder has been switched off by a preceding pressing of the same button.

The LED indicator of the button illuminates of the local sounder is switched off for Fire condition or Fault condition.

A new fault condition will trigger the local sounder for Fault condition only.

8.3.2. Button (Menu)

Press the button to enter Information and Control Mode.

8.3.3. Buttons (Down) and (Up)

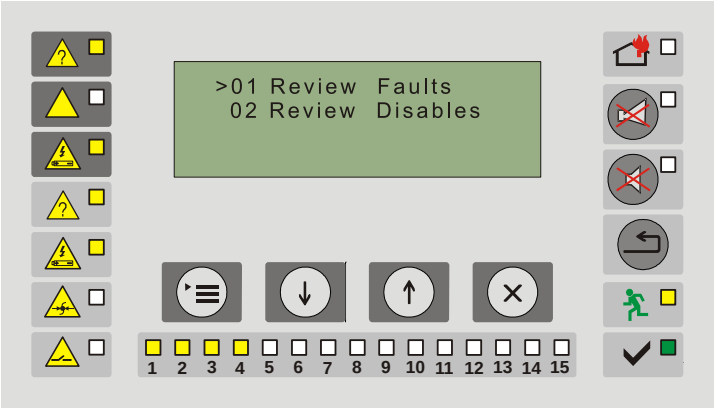
Press the buttons to see on the display the next/previous fault conditions.

8.3.5. Button (Exit)

Enter Information and Control Mode to review the fault events.

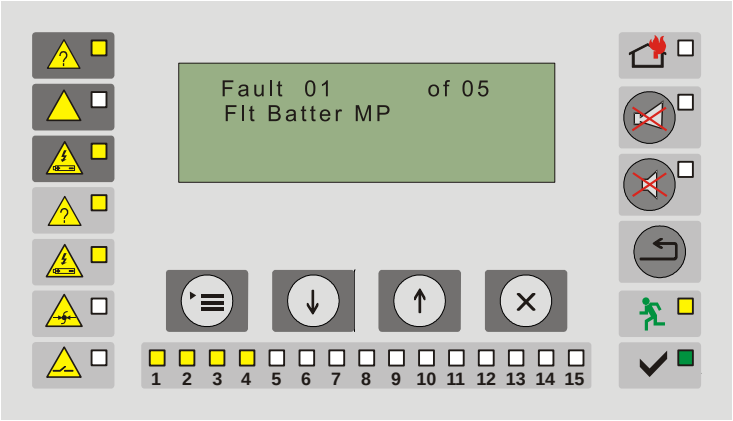
Upon pressing the button (Menu) the following options are available:

01 Review Faults
02 Review Disables
03 Review Statuses
04 System Function



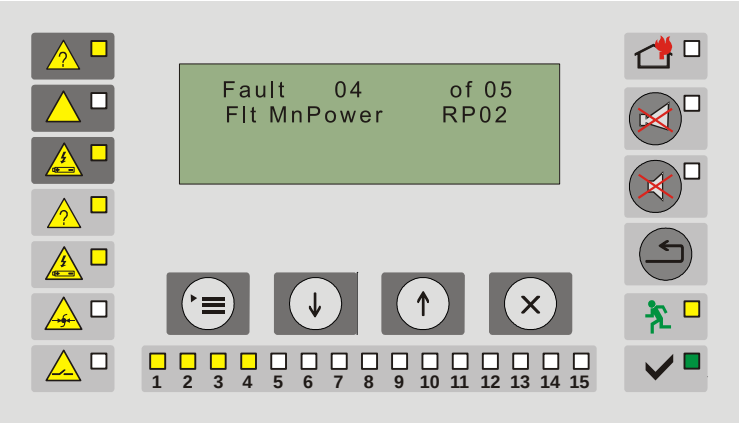
Press the button (Menu) again to enter submenu *Review Faults.*

Information about the first fault appears on the display. Use the buttons (Down) and (Up) to display the rest of the fault conditions.



Press button (Exit) to exit the review of the faults.

Upon exit the fire conditions the LED and sound indication is switched off.



9. Disabled Component

9.1. Description

The repeater enters *Disabled component* after a manual operation, disabling a specific component – monitored output or relay for fire condition. A disabled monitored output is switched off and is not monitored for fault condition.

That condition is controlled via the screens of System Functions.

Its control is accessible from all Access levels.

9.2. Indication

9.2.1. LED and sound indication

No LED and sound indication is supported for Disabled component condition.

9.2.2. Text messages

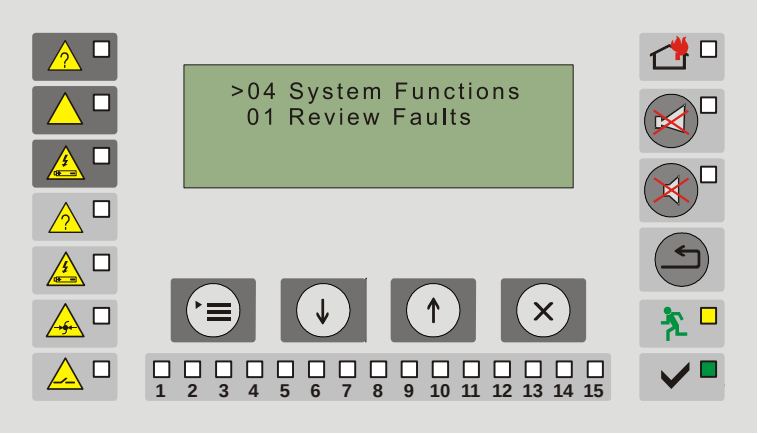
The text messages are displayed in System information condition.

9.3. Using the buttons

Upon pressing the button (Menu) the following options are available:

01 Review Faults
02 Review Disables
03 Review Statuses
04 System Function

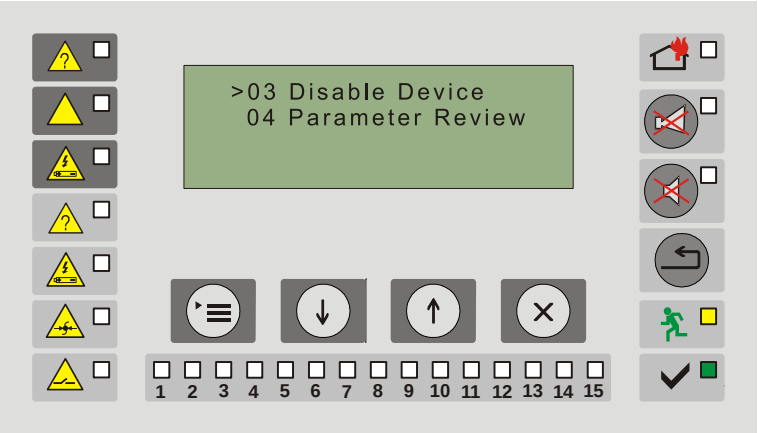
Press the button (Down) three times to move the cursor to System Functions.



Press the button (Menu) again to enter submenu:

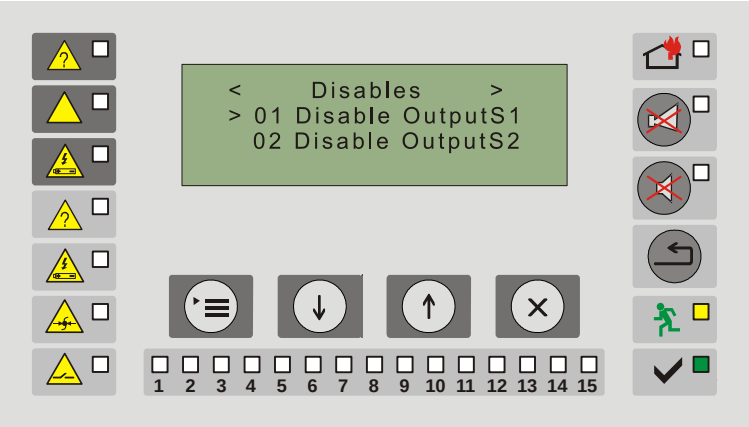
01 Indication check
02 Clock
03 Disable outputs
04 Parameters reviews

Press the button (Down) twice to move the cursor to Disable Outputs.



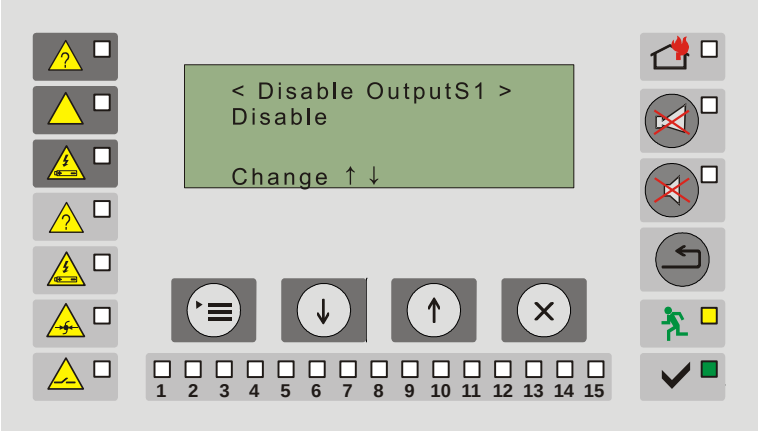
Confirm the selection with button (Menu) and use the buttons (Down) and (Up) to select the output to be disabled.

Confirm the selection with button (Menu).

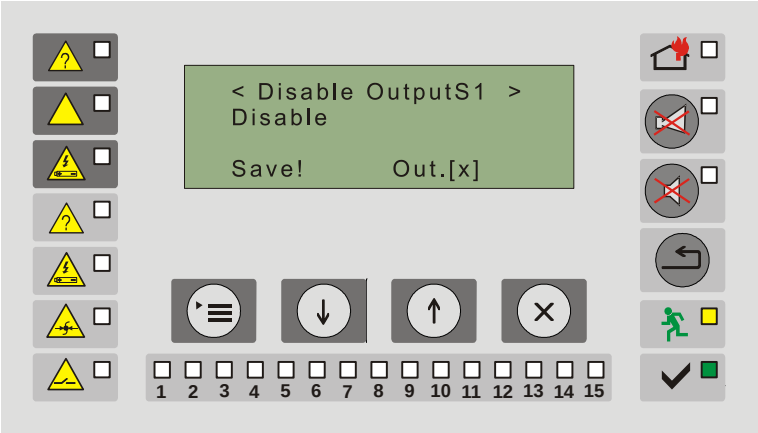


After confirming the selection with button (Menu), use the buttons (Down) and (Up) to choose the condition of the selected output (Off/On).

Confirm the change with button (Menu) or cancel the change with button (Exit).



Upon confirming the change with button (Menu) a message appears that the change is saved and for exit the menu.

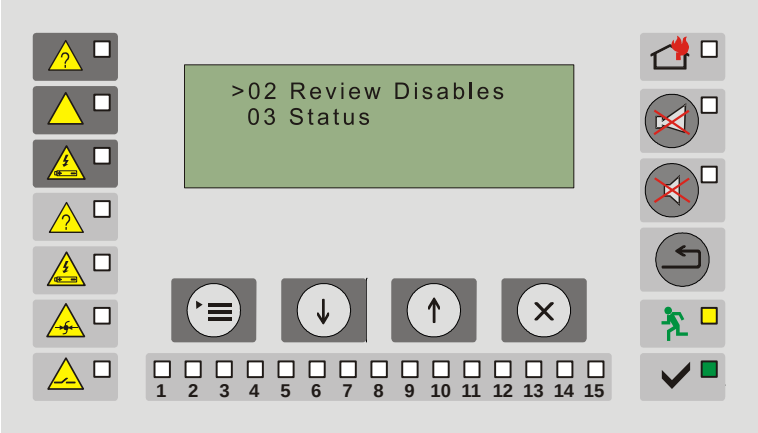


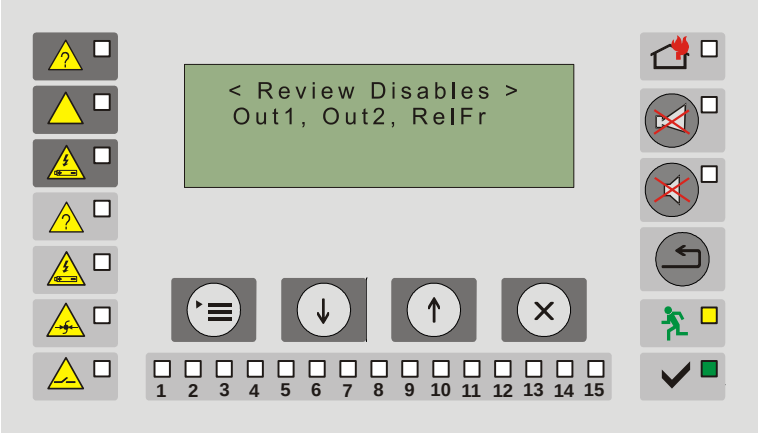
Where an output is disabled it is not activated for Fire condition and data are not processed for a Fault condition in the monitored outputs line.

9.4. Review of the entered disables

Enter Information and Control Mode to review the entered disables. The menu is accessible for all Access levels.

- Enter the main menu with button (Menu);
- Press once (Down) and the cursor moves to “02 Review Disables;
- Confirm the selection with button (Menu);
- The entered disables are displayed (e.g. Out1, Out2, RelFr) or if there are no disables – “No disables” is shown;
- To exit the menu use button (Exit).





10. Information and Control Mode

Information and Control Mode provides the user with the possibilities to:

- display information about the repeater;
- enter control data;
- display information about the connected fire control panels (repeaters).

To enter Information and Control Mode, press button on the screen for Duty Mode, Fire Condition, Fault Condition (with the exception of the screen for fatal error) and Disabled component which suppresses their text messages.

.

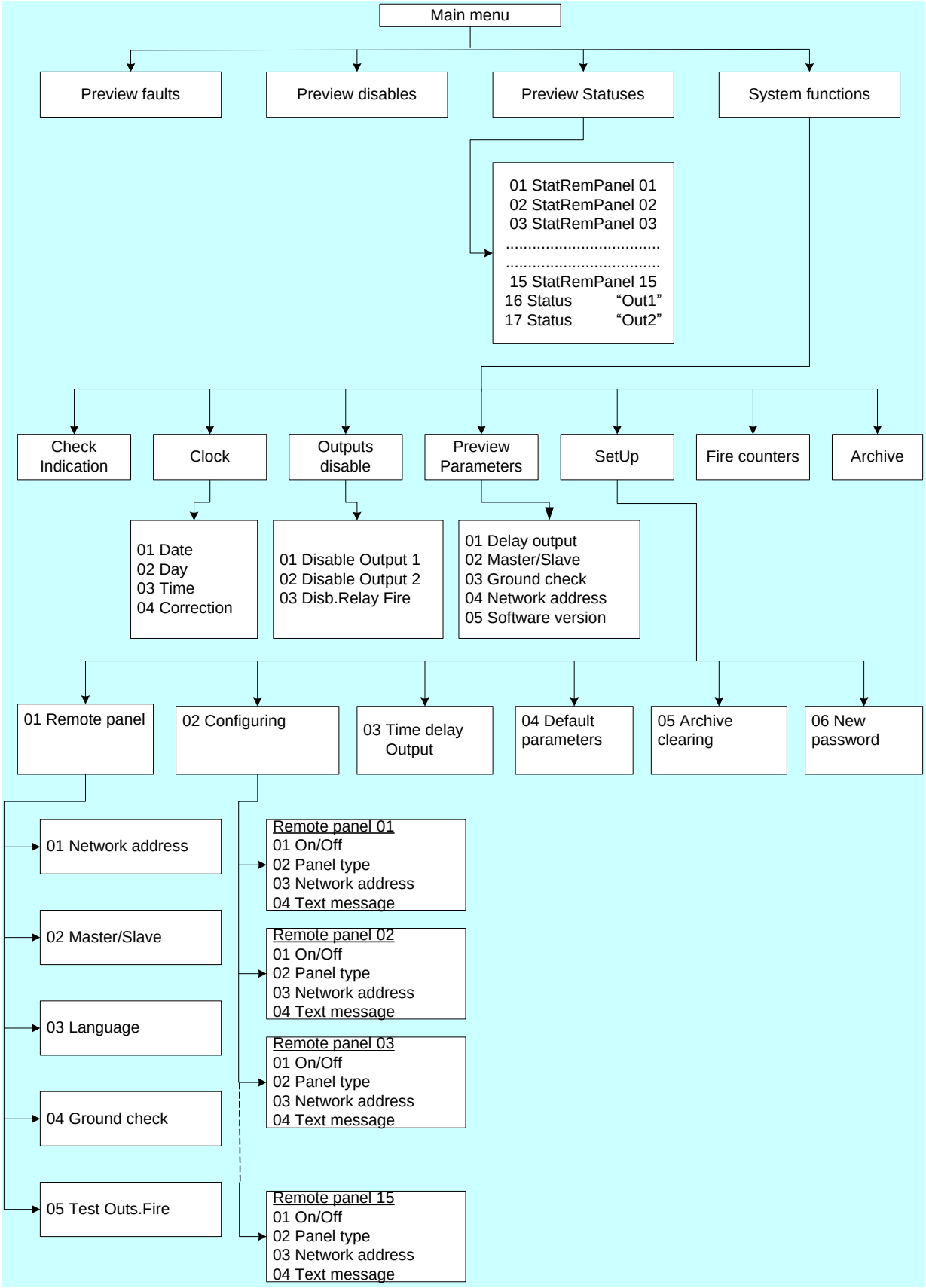
The following buttons are active in Information and Control Mode:

- button (Menu);
- button (Down);

- button ↑ (Up);
- button × (Exit).

No specific LEDs or sound indication is provided for Information and Control Mode.

The screens visualized on the display are organized in a tree structure, containing subordinate menus.


Main menu
Preview faults
Preview disables
Preview Statuses
System functions
01 StatRemPanel 01
02 StatRemPanel 02
03 StatRemPanel 03
.....
.....
15 StatRemPanel 15
16 Status "Out1"
17 Status "Out2"
Check Indication
Clock
Outputs disable
Preview Parameters
SetUp
Fire counters
Archive
01 Date
02 Day
03 Time
04 Correction
01 Disable Output 1
02 Disable Output 2
03 Disb.Relay Fire
01 Delay output
02 Master/Slave
03 Ground check
04 Network address
05 Software version
01 Remote panel
02 Configuring
03 Time delay Output
04 Default parameters
05 Archive clearing
06 New password
01 Network address
02 Master/Slave
03 Language
04 Ground check
05 Test Outs.Fire
Remote panel 01
01 On/Off
02 Panel type
03 Network address
04 Text message
Remote panel 02
01 On/Off
02 Panel type
03 Network address
04 Text message
Remote panel 03
01 On/Off
02 Panel type
03 Network address
04 Text message
Remote panel 15
01 On/Off
02 Panel type
03 Network address
04 Text message

10.1. Submenu *Review Faults*

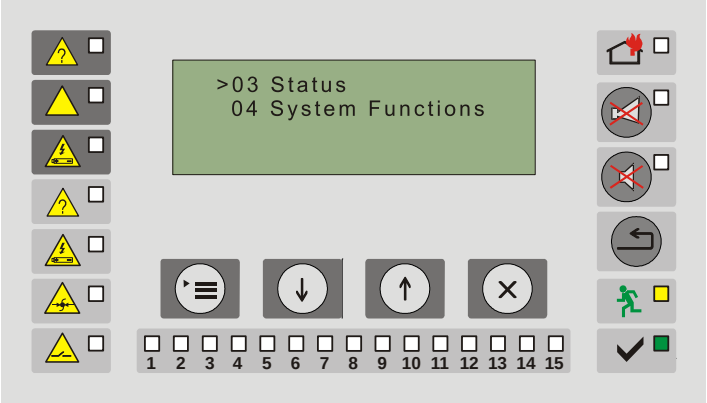
This submenu displays the registered fault conditions in the repeater and the remote fire control panels (see section 8. Fault condition).

10.2. Submenu *Review Disables*

This menu provides visual information about the disables for activating the monitored outputs and the fire relay (see section 9.4. Review of the entered disables).

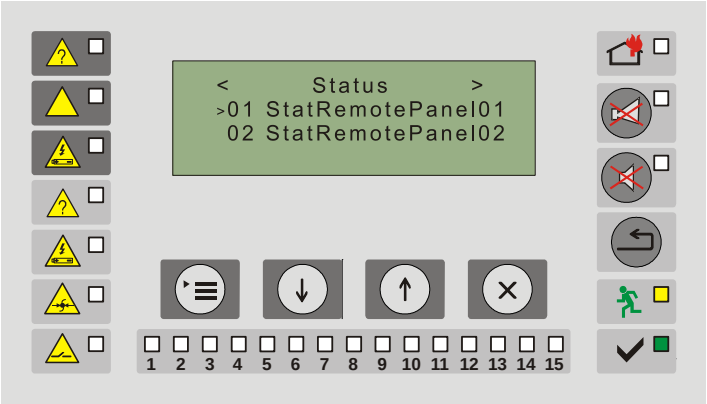
10.3. Submenu *Review Statuses*

The menu displays the status of the remote fire control panels (repeaters) and the monitored outputs of the repeater.



Upon entering the menu a screen appears for selecting the remote fire control panel or monitored output of the repeater which status is to be reviewed.

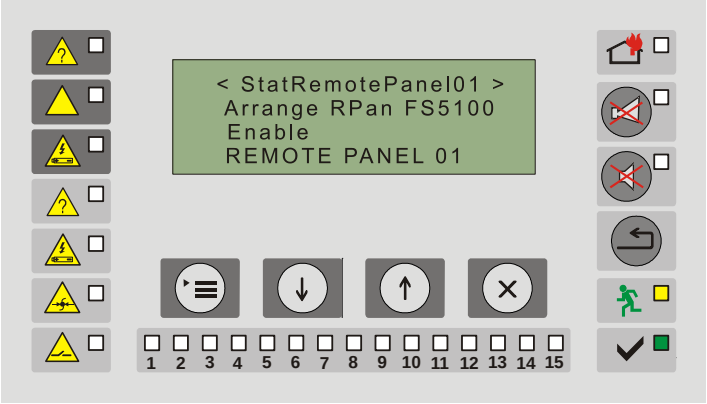
Use buttons ↓ (Down), ↑ (Down) and ≡ (Menu) to select the object for visualization.



The displayed information has the following structure:

- No. of the remote fire control panel;
- Type of the connected fire control panel;
- Status –Duty Mode or Fault condition;
- Name of the remote fire control panel.

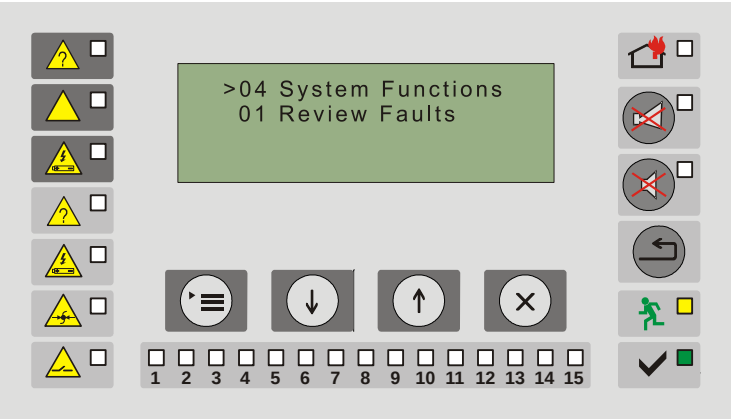
To exit the menu use button × (Exit).



10.4. Submenu *System Functions*

The menu contains the following subordinate menus and functions:

- Check indication;
- Clock;
- Disable outputs;
- Review Parameters;
- Setup;
- Fire counter;
- Archive.



10.4.1. Function *Check indication*

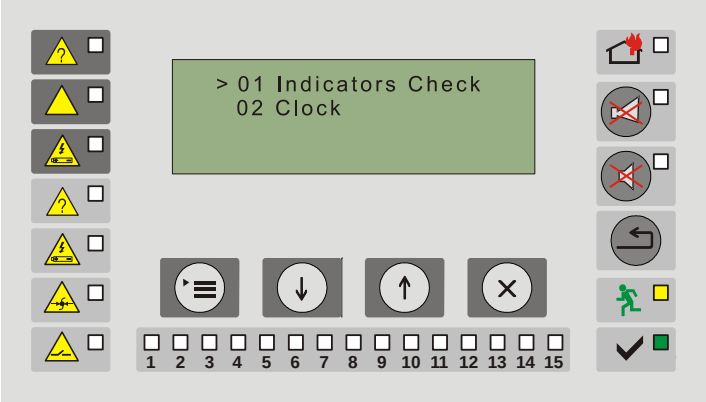
The screen to select the function has the following appearance:

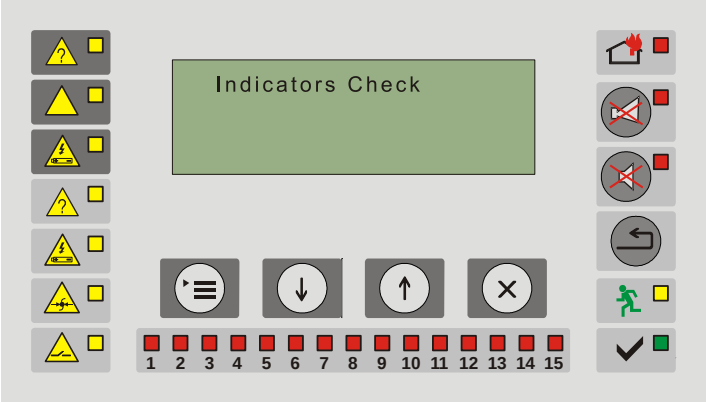
Press the button (Menu) to activate the check.

TAll LEDs indicators should illuminate as the individual indicators of the connected fire control panels change their indication periodically from yellow to red.

The sound signaling is continuous.

Use the button (Exit) to deactivate the check.



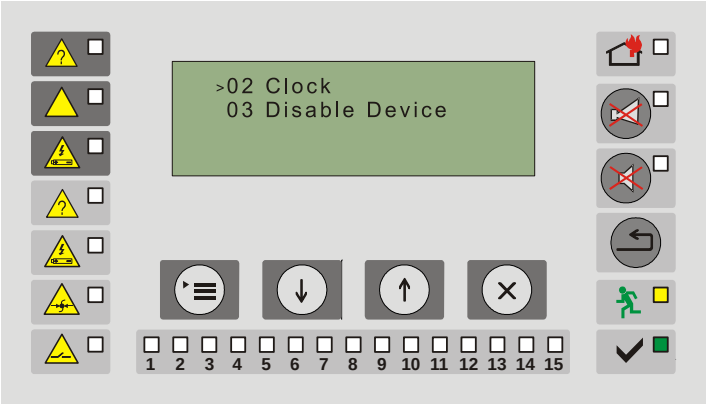


10.4.2. Submenu *Clock*

The menu is selected from menu *System Functions*. Press twice button ↓ (Down) and confirm with button ≡ (Menu).

The menu contains the following functions:

- calendar date;
- day of the week;
- the time
- calibration index

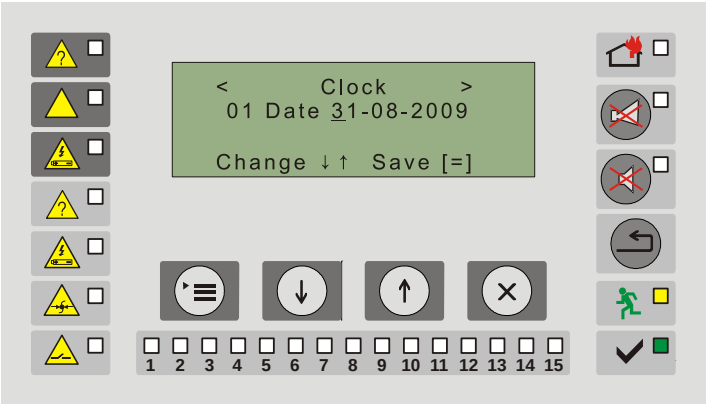


10.4.2.1. Function *Date*

Use this function to set or adjust the current calendar date.

Upon activation of the function the factory set date appears and the cursor flashes on the first left digit of the date. Admissible values are:

- for the date (two characters, 01÷31)
- for a month (two characters, 0÷12)
- for a year (four characters)



Use:

- button ↓ (Down) – to change the calendar date;
- button ↑ (Up) – to move to the next character;
- button ≡ (Menu) – to confirm the entered or set calendar date;
- button × (Exit).

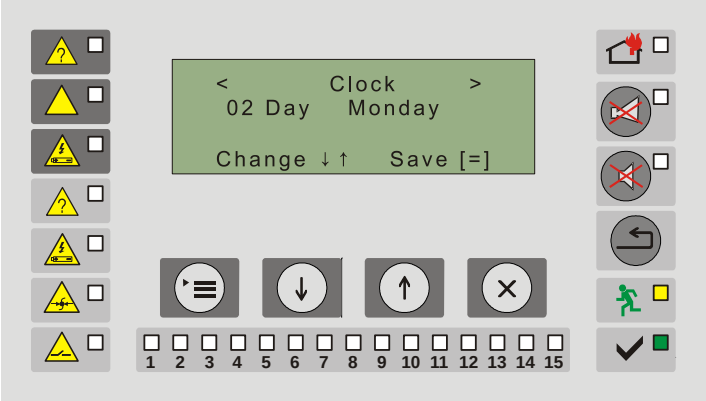
10.4.2.2. Function *Day*

Use this function to adjust the current day of the week. The field contains the current day.

Upon activation a screen appears with the entered current day of the week.

To change, save the data and to exit the function, use:

- buttons ↓ (Down) and ↑ (Up) for selecting the day (Monday, Tuesday, etc.);



• button (Menu) – to confirmed the entered day;

• button (Exit).

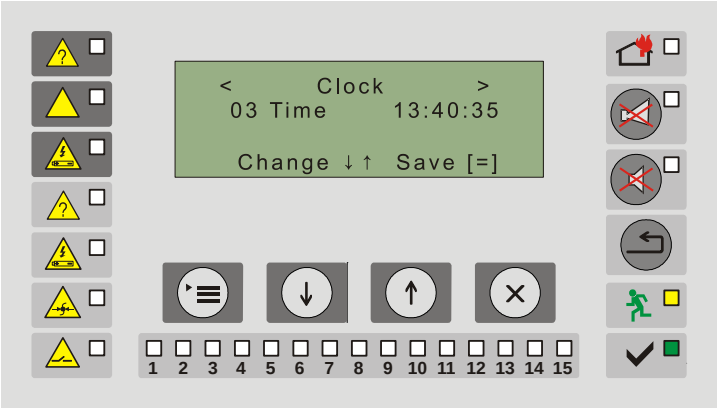
10.4.2.3. Function *Time*

Use this function to set or adjust the current time.

Upon activation of the function the factory set time appears and the cursor flashes on the first left digit of the hour. Admissible values are:

- for hour (two characters, 00÷23);
- for minutes (two characters, 00÷59);
- for seconds (two characters, 00÷59).

Use:

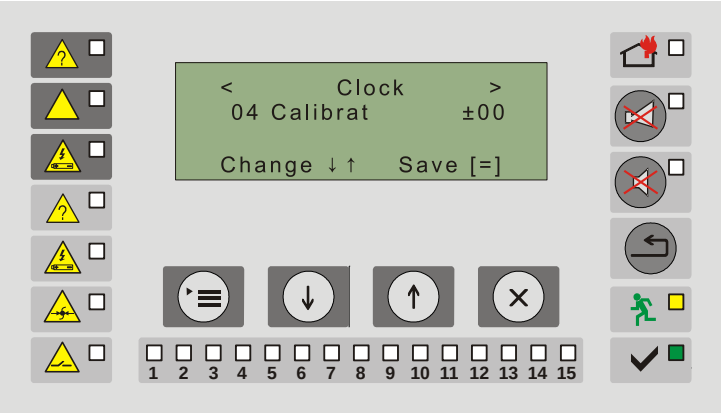


- button (Down) – to change the value of the hour;
- button (Up) – to move to the next character;
- button (Menu) - to confirmed the entered or adjusted date;
- button (Exit).

10.4.2.4. Function *Calibration*

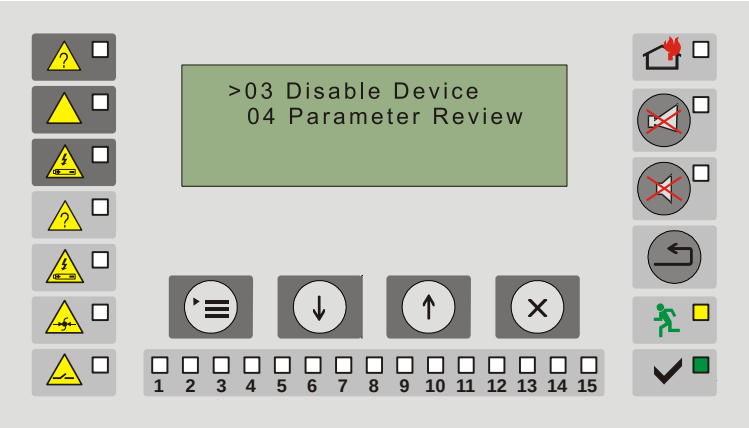
Use this function to “accelerate/ delay” the clock. Each entered positive unit (“+”) accelerates the clock at the rate of 10,7s per month; each negative unit delays the clock at the rate of 5,35s per month.

The maximum rate is e +5,5min per month or -2,75min per month



10.4.3. Submenu *Disable Outputs*

The screen for activation of the menu is displayed as follows:



The operations for disable of outputs, monitored and/or relay are described in details in section 9 Disabled Component".

10.4.4. Submenu *Review Parameters*

The menu allows for reviewing the parameters entered in the fire control panel.
It contains information about:

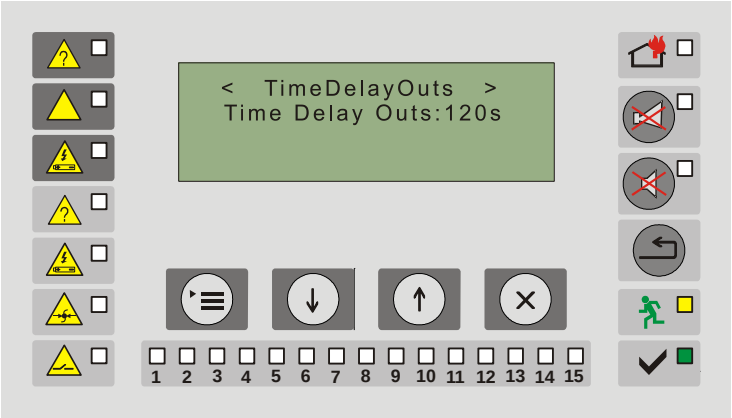
- Entered delayed times of the outputs;
- The logical place of the repeater in relation to the connected fire control panels;
- Is the option Ground Check switched on;
- Network address of the repeater;
- The software version.

Use:

- buttons ↓ (Down) and ↑ (Up) – to move the cursor in the menu;
- button ≡ (Menu) – to select an item of the menu;
- button × (Exit).

10.4.4.1. Function *Delayed time Output*

This function provides information about the programmed inspection time. Possible values are from 0 to 255 seconds.

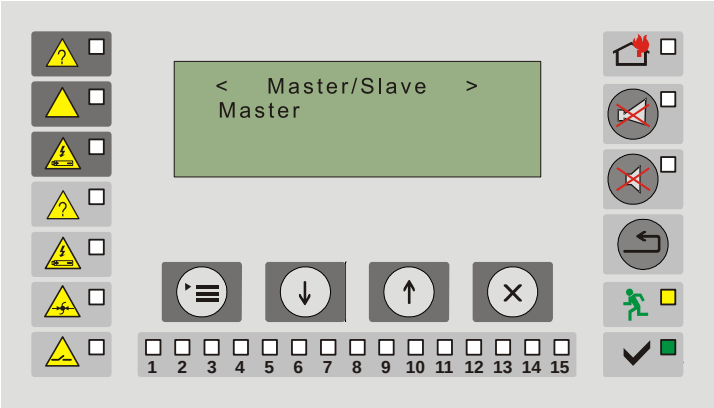


10.4.4.2. Function *Master/Slave*

This function provides information about the logical level of connection of the repeater.

Possible options are:

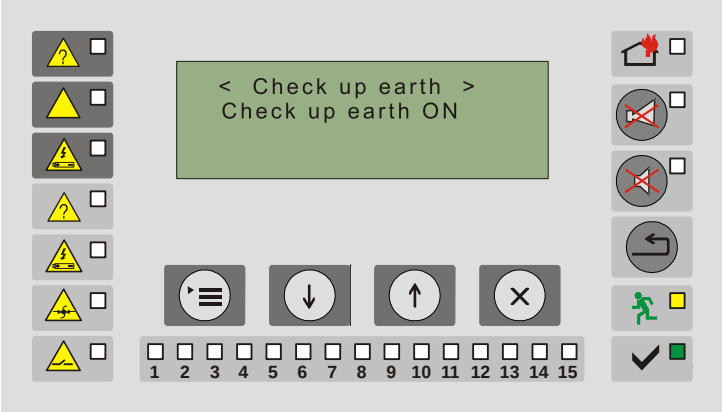
- Master;
- Slave.



10.4.4.3. Function *Check Ground*

The function has the two possibilities:

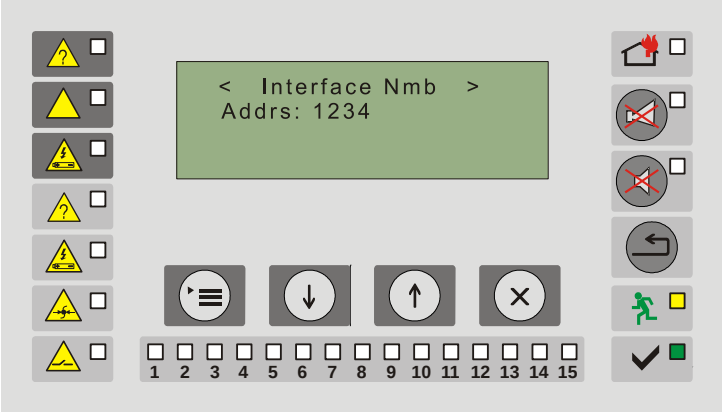
- On;
- Off.



10.4.4.4. Function *Network Address*

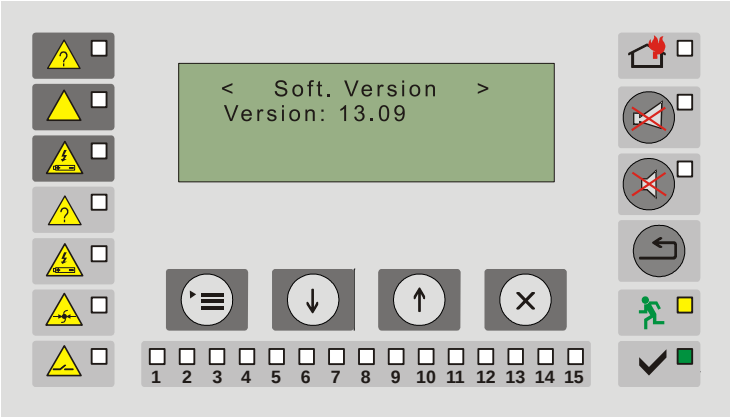
The network address of the repeater is visualized in this function. Possible values from 0000 to 9999, as the network address must be **unique** within the connected repeaters and fire control panels.

This parameter is setup from menu SetUp and requires Access Level 3 or 4.



10.4.4.5. Function *Software Version*

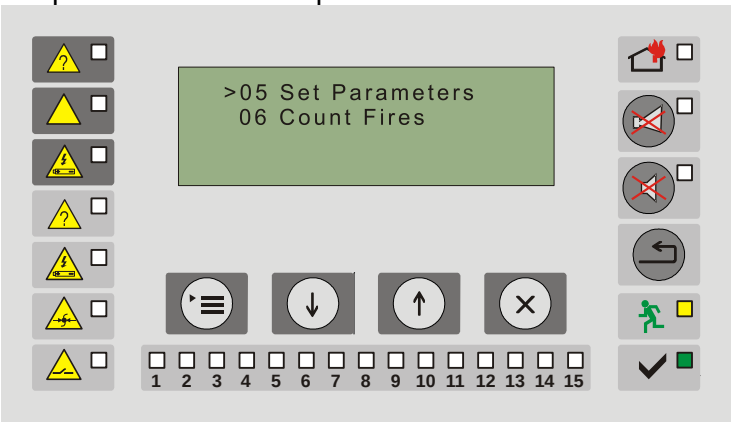
This function provides information about the software of the repeater.



10.4.5. Submenu Setup

It is used for setting the configuration parameters of the repeater.

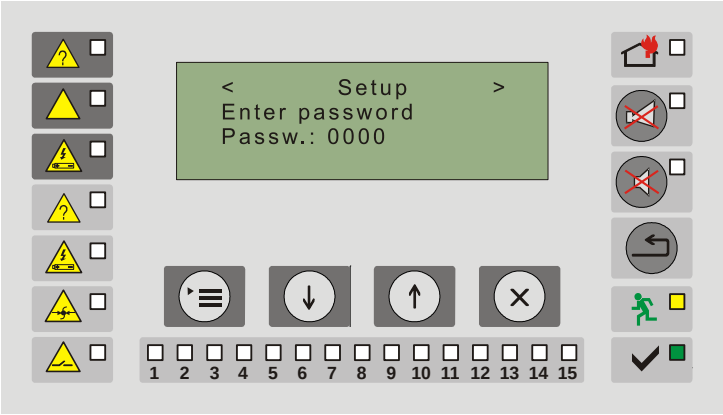
Access to the Setup menu is provided through submenu *System Functions* of the main menu.



The operations in Menu Setup require Access Level 3 or 4. Enter a password (four-digit number) to have an access to the menu. The factory set password is “0000”.

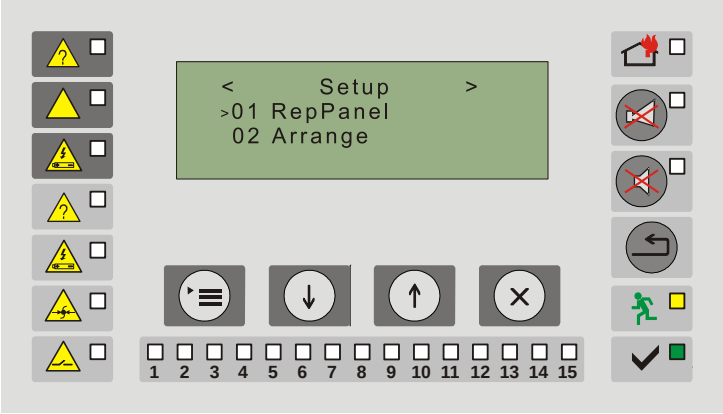
Use:

- button ↓ (Down) – to change the character;
- button ↑ (Up) – to move to the next character;
- button ≡ (Menu) – to confirm the entered password;
- button × (Exit).



The menu has the following subordinate menus:

01 Repeater
02 Configuration
03 Time Delay
04 Factory settings
05 Clear archive
06 New password



10.4.5.1. Menu *Repeater*

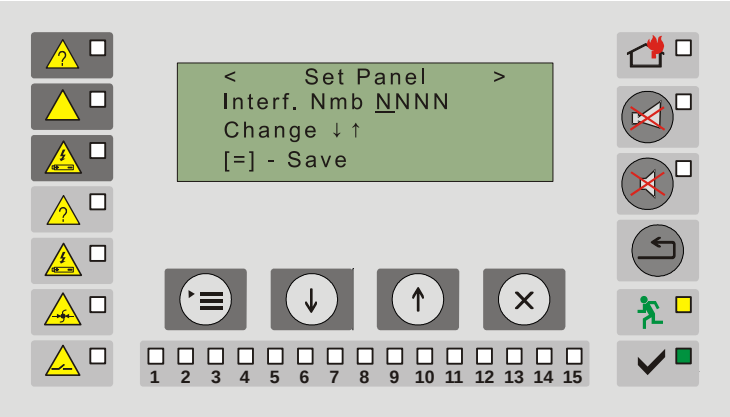
Use this menu to setup:

- Network address of the repeater – unique four-digit number for the connected fire control panels (it is setup only when the repeater operates as SLAVE),;
- Logical place – the status of the repeater in relation to the connected fire control panels (master/slave);
- Language – Menu language of the repeater (Bulgarian, English or Russian);
- Check ground – switched on or off;

- Check of fire outputs.

10.4.5.1.1. Screen *network Address*

The setting *Network Address* is valid only in the case when the repeater is a SLAVE one, i.e. when a network of more than one repeater is created. In this case the repeater is equal to all connected fire control panels and its address is described in the menu *Configuration Remote Control Panels" (*see section10.4.5.2).



The network address is unique for each connected object within one system. It identifies the repeater.

A screen for entry of the data appears in setting (entry) of a network address.

The permissible values of the network address are from 0000 to 9999.

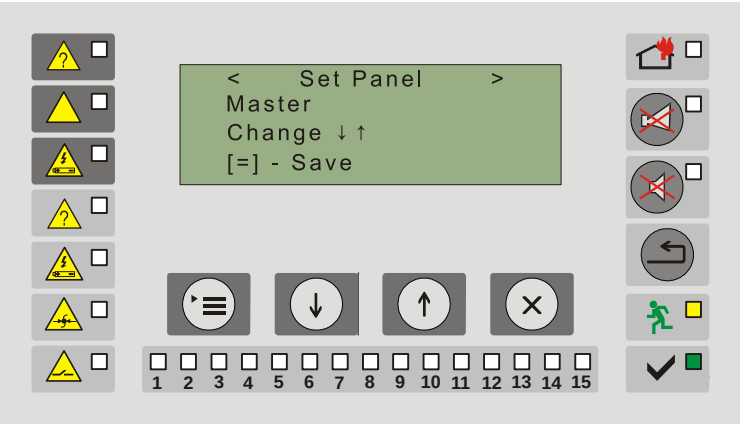
Use:

- button ↓ (Down) – to change the character;
- button ↑ (Up) – to move to the next character;
- button ≡ (Menu) – for confirmation;
- button × (Exit).

10.4.5.1.2. Screen *Master/Slave*

This parameter points the logical place of the repeater in the system of connected fire control panels. **The parameter is not related to the physical location of the repeater** but with the logical structure of the system.

In one system of connected fire control panels there is only one repeater defined as *Master* and up to 15 fire control panels (repeaters) defined as *Slave.*



Use the buttons:

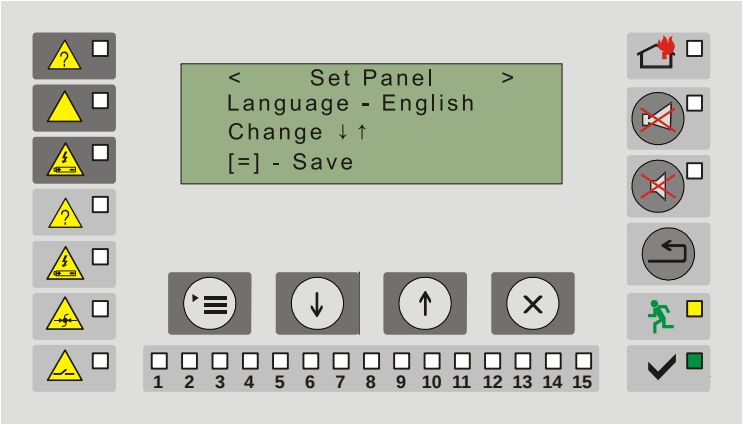
- ↓ (Down) and ↑ (Up) – for alternating change Master/Slave;
- ≡ (Menu) – to confirm;
- × (Exit) – to exit.

10.4.5.1.3. Screen *Language*

The repeater supports menus in three languages:

- Bulgarian;
- English;
- Russian.

Use the buttons ↓ (Down) and ↑ (Up) for alternating change of the language.

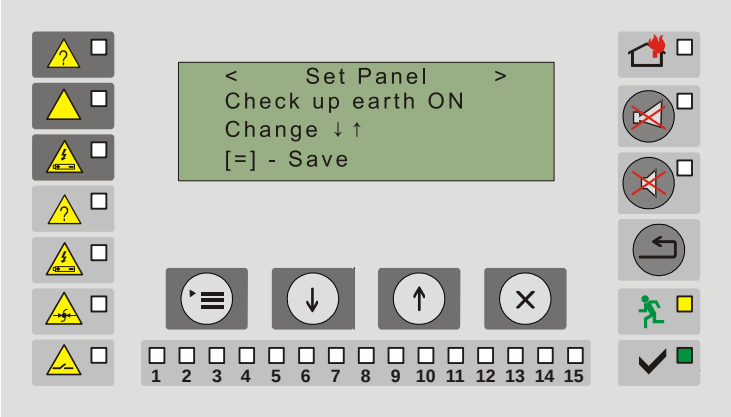


10.4.5.1.4. Screen *Check Ground*

The screen provides the information if check ground is being performed or not.

The possible options of the parameter are – Check ground switched ON or OFF.

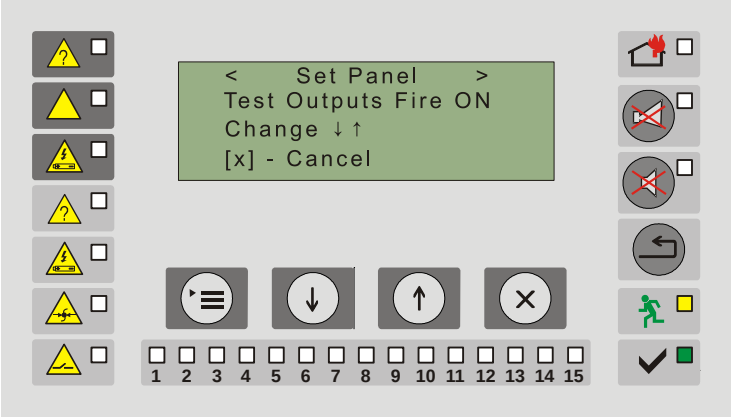
For the alternating change of this parameter use the buttons ↓ (Down) and ↑ (Up).



10.4.5.1.5. Function *Test Fire Outputs*

This function tests the fire outputs. When the parameter is changed from OFF to ON the fire outputs of the repeater are activated.

For the alternating change of this parameter use the buttons ↓ (Down) and ↑ (Up), to exit the function use the button × (Exit).



Attention! Regardless of the last entered position of the parameter (ON/OFF) it is automatically restored to OFF position upon exit of the function.

10.4.5.2. Menu *Configuration*

Use this submenu for setting the parameters of the connected to the repeater fire control panels and repeaters:

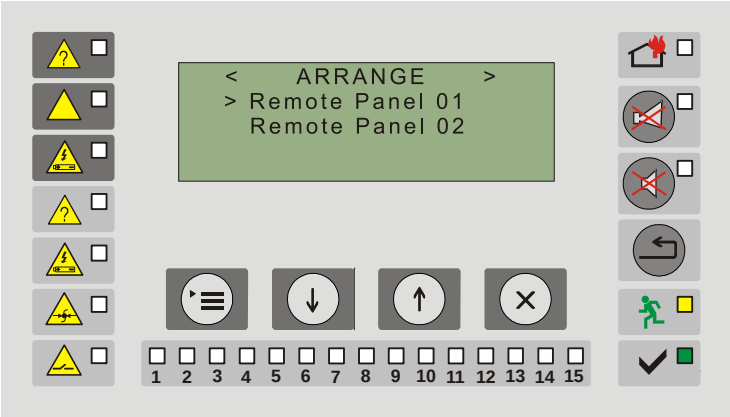
- Is the fire control panel going to be ON or OFF – in the cases when a fire control panel has to be switched off for repair, test, etc.

- Type of the panel – determines the type of the connected fire control panel (repeater).
- Network address – the unique for-digit network address within the system.
- Text message – text, convenient for the user in order to distinguish the remote fire control panels.

Enter the menu and a screen for selecting the No. of the remote panel (fire control panel) to be configured appears.

Use the buttons ↓ (Down) and ↑ (Up) to select the remote panel.

Confirm the selection with button ▸≡ (Menu).



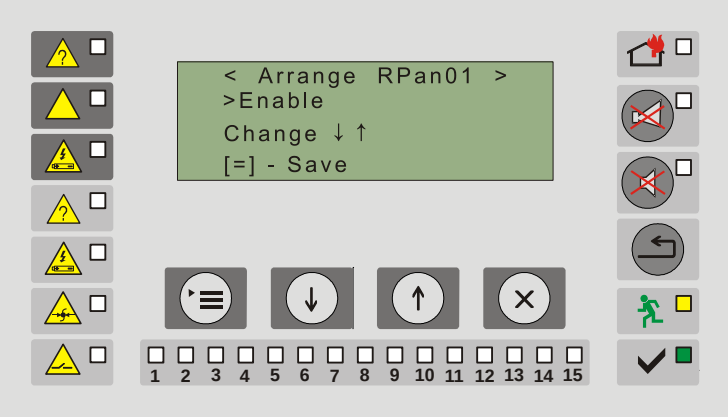
The configuration procedure described for one remote object should be repeated for all remote fire control panels.

10.4.5.2.1. Screen *On/Off*

This screen provides the option for switching on or off a remote fire control panel from the entire system.

This option is suitable in the cases when preventive maintenance, tests, repair or other operations are performed to any of the connected fire control panels. The fire control panel that is switched off is not monitored by the repeater. The possible options for this parameter are: panel ON or OFF.

To select the option use the buttons ↓ (Down) and ↑ (Up), to confirm – the button ▸≡ (Menu).

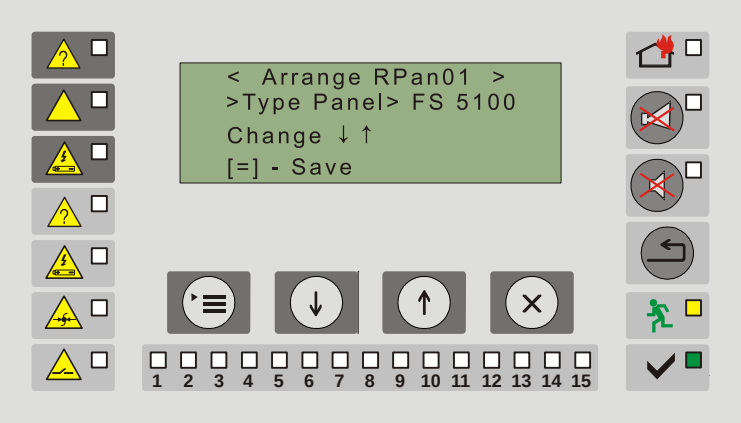


10.4.5.2.2. Screen *Panel Type*

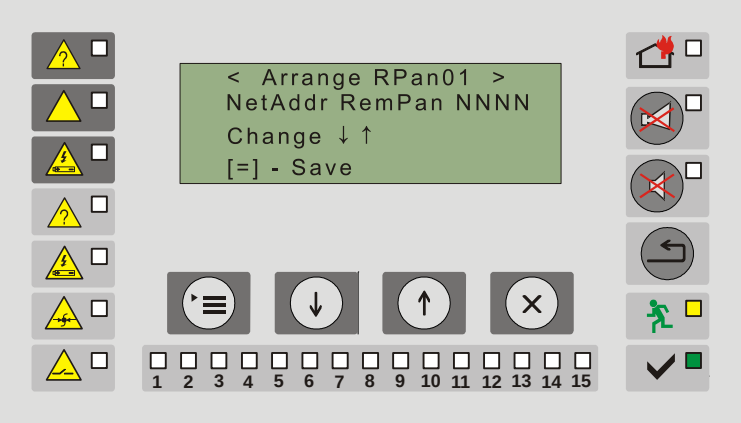
This screen is used for setting the type of the connected remote fire control panel (repeater). The possible types are:

- FS 5100;
- FS 5200;
- FS 5200E
- FS 4000;
- FS 5200R.

To select the type use the



buttons ↓ (Down) and ↑ (Up), to confirm – the button ≡ (Menu).



10.4.5.2.3. Screen *Network Address*

Use this screen to enter the network address of the remote fire control panel.

The entered address should be unique for the created system of connected fire control panels, i.e. only that fire control panel (repeater) must be identified by it.

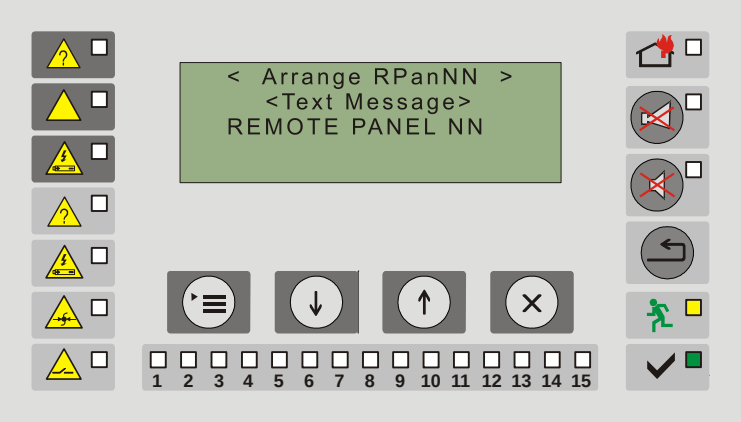
The permissible values of the network address are four-digit numbers from 0000 to 9999.

To enter the address, use:

- button ↓ (Down) – to change a character;
- button ↑ (Up) – to move to the next character;
- button ≡ (Menu) – to conform;
- button × (Exit).

Note: When the connected remote fire control panel is FS4000 type, the network address is fixed as it coincides with the serial number of the fire control panel.

10.4.5.2.4. Screen *Text Message*



Use this screen to enter the "user's name" of each of the connected remote fire control panels.

This option provides better possibilities for identification of each connected remote fire control panel, as the user could choose its name for better identification.

After the name is entered, all messages referring that remote fire control panel will be visualized and displayed with the name assigned by the user.

The length of the text field is maximum 20 characters.

The factory setup displays the message "REMOTE PANEL NN" (REMOTE PANEL NN), where NN is the number of the remote fire control panel (01-15).

When the screen is displayed the cursor begins to flash on the first character.

To enter the text, use:

- button ↓ (Down) – to change the character (all letters from the Bulgarian and Latin alphabets, space);
- button ↑ (Up) – to move to the next character;
- button ≡ (Menu) – to conform;
- button × (Exit).

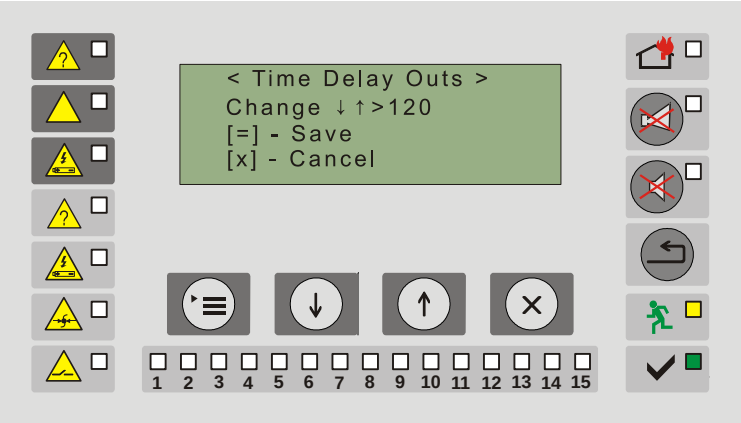
10.4.5.3. Function *Time Delay*

This screen provides the option for setting the time delay for switching the outputs of the repeater.

The entered time is in seconds within the range 0 to 255 seconds.

This parameter is factory setup to 120 seconds.

To setup the time delay, use the buttons:



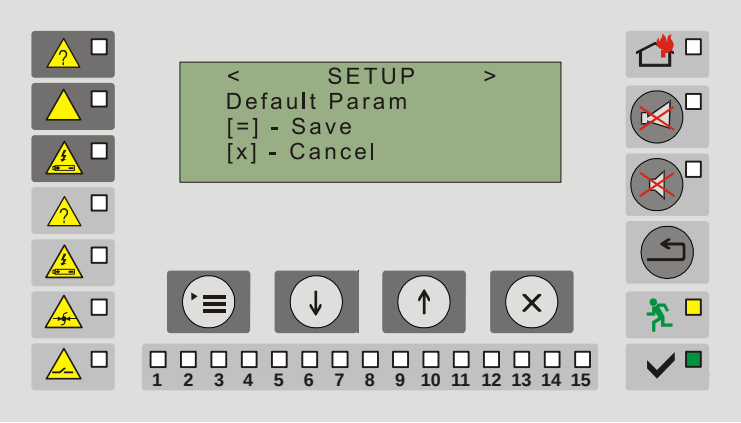
- ↓ (Down) – press it once to decrease the time by 1 second;
- ↑ (Up) - - press it once to increase the time by 1 second;
- ≡ (Menu) – to confirm the change;
- × (Exit).

10.4.5.4. Function *Factory Settings*

The screen returns the parameters of the repeater to their default settings.

The factory settings are:

Password:	0000
Network address:	1234
Master/Slave:	MASTER
Language:	BULGARIAN
Check ground:	ON
Time delay:	120 seconds
Disabled outputs:	NO



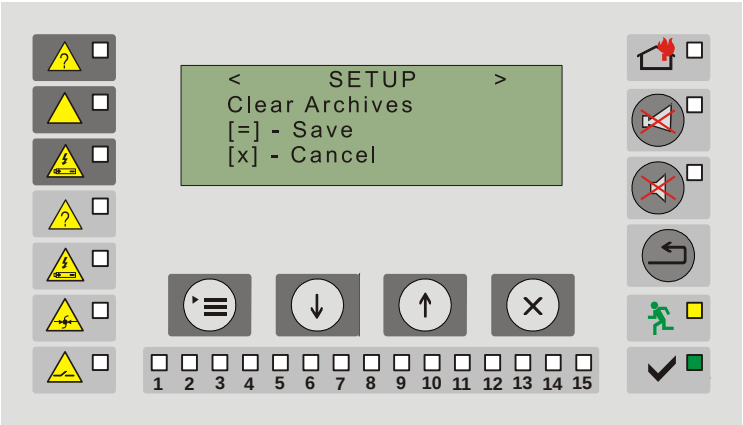
Use the buttons ≡ (Menu – to confirm the change and/or × (Exit).

10.4.5.5. Function *Clear Archive*

When this function is selected a screen appears to confirm the deletion or to exit the screen without deletion.

Press the button (Menu). “Меню”) to activate the function and to delete the archive. The information for the events, saved in the energy independent memory is deleted.

The fire counter is not cleared. It is reset in a special mode.



10.4.5.6. Function *New Password*

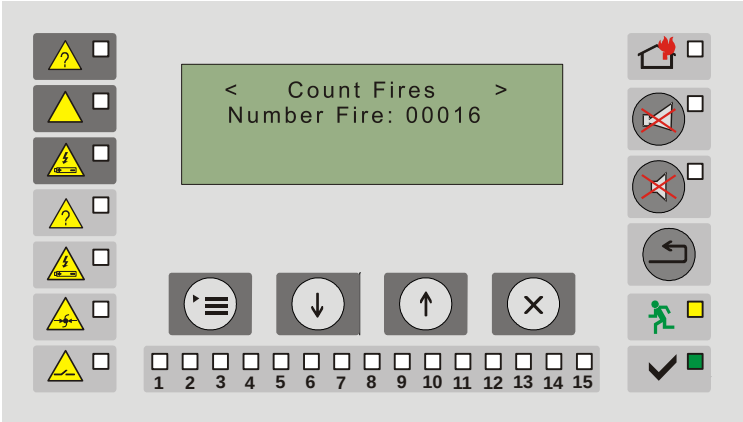
The function allows the user to change the password for access (for levels 3 and 4).

Upon activation a screen appears as the cursor is positioned on the first digit of the previous (or factory setup) password.

10.4.6. Function *Fire Counter*

This function displays information about the total number of fire conditions, registered after the initial switching of the repeater.

The number of the occurred fire conditions is saved in an energy independent archive. It could not be adjusted or deleted.



10.4.7. Function *Archive*

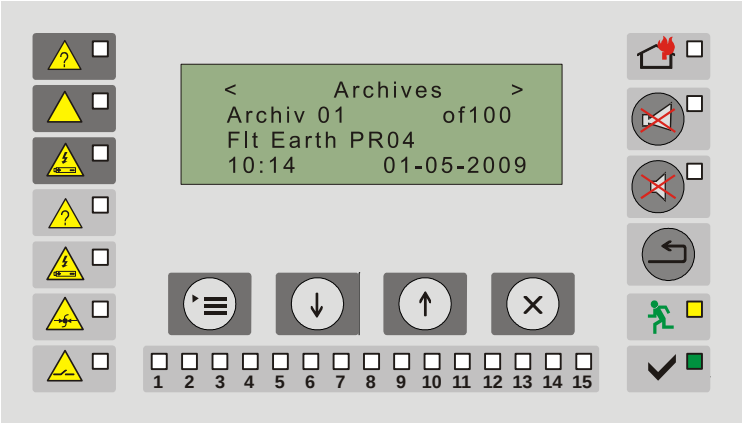
This function allows information to be displayed for the events, saved in the energy independent memory. The structure of the shown information is as follows:

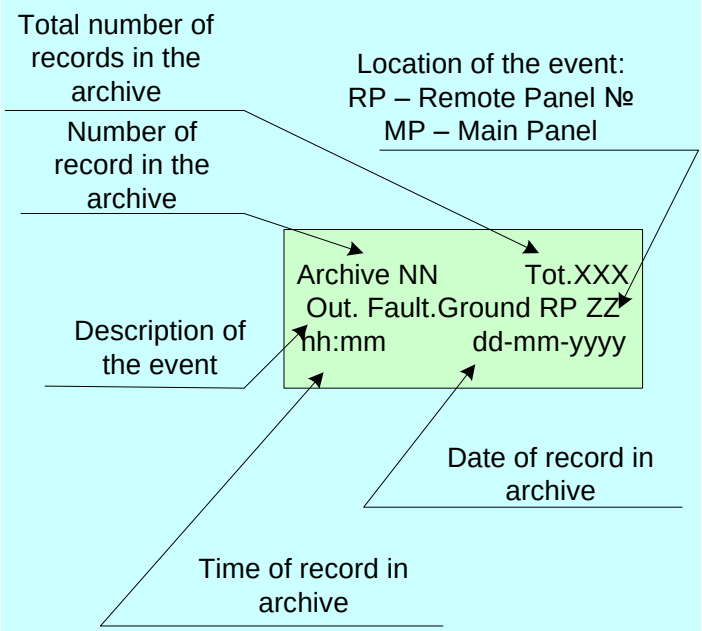
- No. of the record;
- total number of the records;
- text of the event in the archive;
- time of the record;
- date of the record.

The permissible values for the data are:

- No. of the record – (from 0 to 100);
- total number of the records – (from 0 to 100);
- text – event type. In which connected fire control panel the event is;
- time – time of the event;
- data – date when the event occurred.

The maximum number of registered events is 100 as if this number is surpassed the newly-occurred events replace the oldest ones (i.e. “first comes - first goes” scheme is used).





11. Labour protection requirements

The installation and maintenance staff shall be well grounded in equipment’s mechanism and operation, as well as in common technical safety regulations.

Connection to unearthed or to indirectly earthing mains supply is prohibited.

Troubleshoots are to be cleared after disconnecting the feeding cable from the mains supply.

The repeater is designed for installing in premises with a normal fire hazard, as per the Fire Precaution Technical Regulations in Building Construction.

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12. Installation

When installing the peripheral devices to the Repeater avoid arranging wires in closed loops; it will reduce the resistance of the repeater to electromagnetic interferences.

For the installation operations it is required Access level 2 or higher.

12.1. To mount the repeater

- Unpack the repeater.
- Check the content of the delivery.
- Install the fixing pins at the specified places.
- Open the front cover by turning the key to 90 degrees.
- Install the repeater to dowels through the three holes on its back wall. It is recommended not to install the repeater near sources of heat (radiators, air conditioners, etc.)
- All inputs and outputs of the repeater are on a terminal row as on the monitored outputs “Out1” and “Out2” resistance 5.6 kΩ is installed.

12.2. Inputs and outputs of the repeater

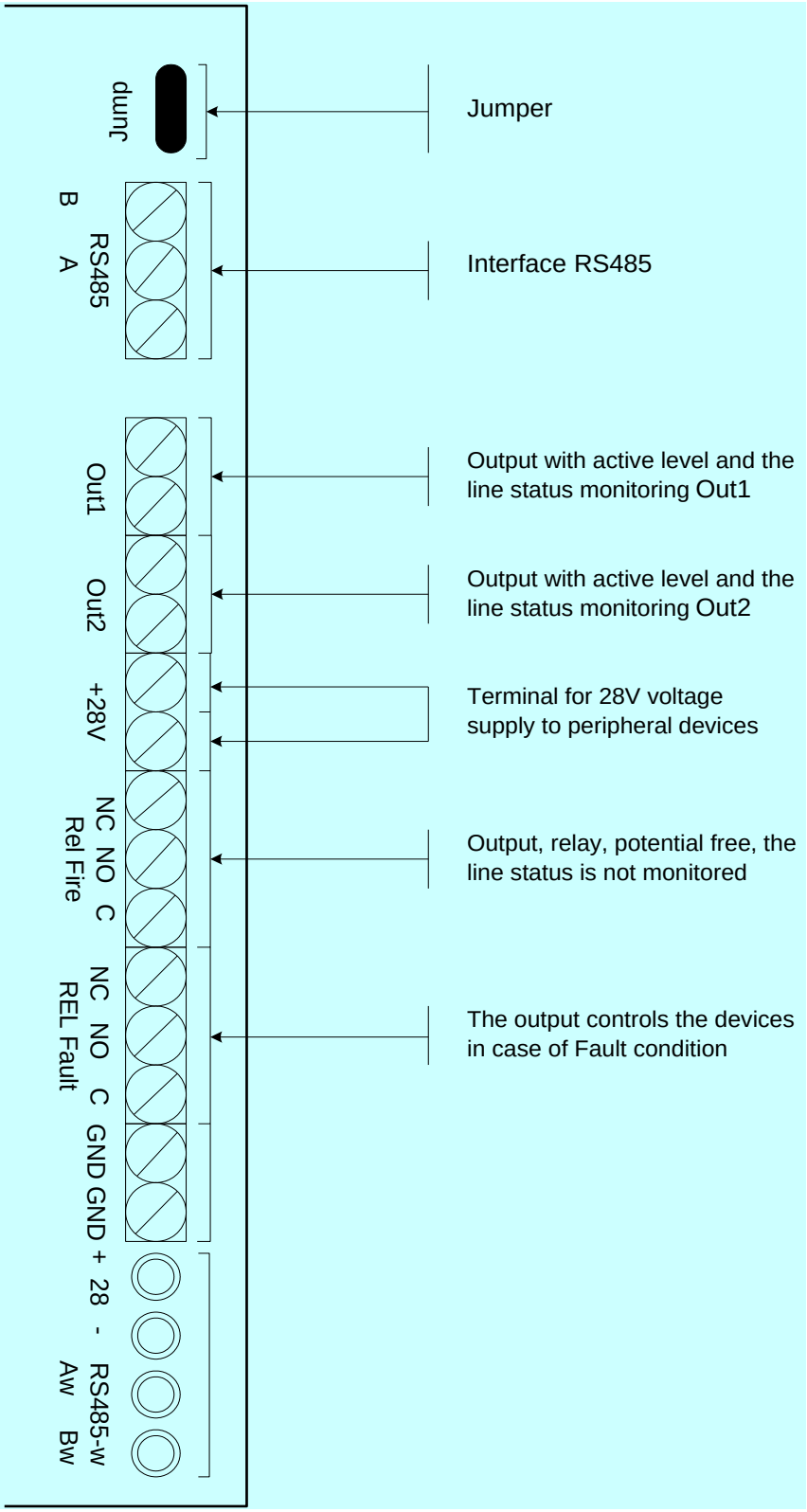
12.2.1 Description

All connections are made by means of terminals installed on the PC board. Remember that the sum of the consumption for external devices voltage supply (at terminal “+28V”) and the monitored output consumption should not exceed 1.2A in the most severe mode.

- **“GND”** – Terminal for GND potential supply to peripheral devices
- **“-Out1+”, “-Out2+”** – Outputs with active level and the line status monitoring. The output switches on the sound-light signaling in case of Fire condition.
- **“Rele Fire”** – Output, relay, potential free, the line status is not monitored. The output controls the devices in case of Fire condition of remote fire control panels.
- **“REL Fault”** – Output, relay, potential free, the line status is not monitored. The output controls the devices in case of Fault condition, both on the repeater and the remote fire control panels
- **“+28V”** – Terminal for 28V voltage supply to peripheral devices.
- **“RS 485”** – Terminals for connecting RS 485 interface two-wire line. The connection to the peripheral fire control panels or repeaters is executed via this interface. A jumper is provided which could shunt the line with resistor 120Ω. It is necessary if the repeater is a final point in the interface line. The interface requires both ends of the line to be terminated with resistors 120Ω.

A wide range of output devices could be connected to the repeater:

- built-in sounders
- external sounders
- control devices for fire detecting automation
- telephone dialer
- steel-plated sounders



12.2.2. Fire Relay *Rel Fire*

Relay *Rel Fire* is with potential free contacts, on the terminal row

– Normal open “NO”;

- Normal Closed ”NC”;
- common point “C”.

In Duty Mode there is a circuit between “C” and “NC” terminals of the relay.

In Fire condition “NO” is closed a circuit is executed between “C” and “NO” terminals of the relay.

The output is not monitored for short circuit and break.

The relay contacts don’t commutate 220V!

12.2.3. Relay Fault *REL Fault*

Relay REL Fault is with potential free contacts, on the terminal row

- Normal open “NO”;
- Normal Closed ”NC”;
- common point “C”.

The output is activated in Fault condition of the repeater.

In Duty Mode there is a circuit between “C” and “NO” terminals of the relay.

In Fault condition “NC” is closed a circuit is executed between “C” and “NC” terminals of the relay, i.e. output device commutated through the contacts of REL Fault will signal the occurrence of a fault condition.

The output is not monitored for break and short circuit.

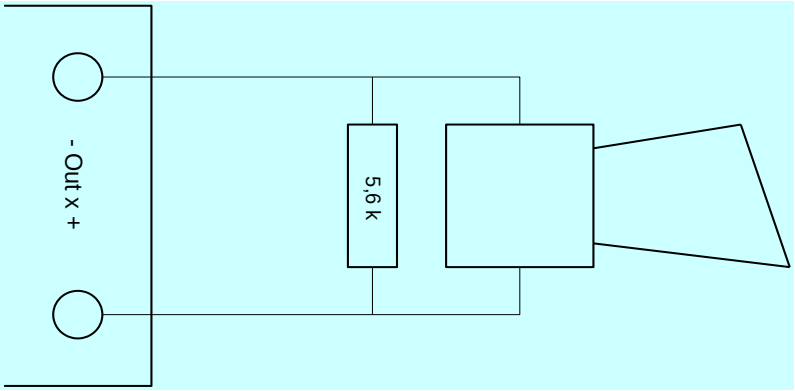
The relay contacts don’t commutate 220V!

12.2.4. Monitored outputs “Out1” and “Out2”

The outputs are connected to the two-wire line for connection with sound and light signaling devices.

The line is balanced as it is monitored for break and short circuit.

Resistor 5.6 kΩ / 0.25W has to be installed to the signaling device terminals so that the status could be monitored.



Voltage (24±3) V with load carrying capacity 1A is supplied upon activation of the outputs. The outputs are activated for Fire condition in the remote fire control panel.

12.2.5. Interface RS485

12.2.5.1. Description

RS485 interface function is to transmit data and receive commands from FS4000, FS5100, FS5200, FS5200E remote fire control panels or FS5200R repeater.

FS5200R repeater receives data from fire control panels connected to it as it indicates the occurred events by means of sound, light and text messages.

Based on the received data, if necessary, the fire control panels in Fire condition could be reset by manual operation.

RS485 interface could be utilized also for communication to other intelligent devices and computers.

The data exchange rate is 9600 [Bits/s].

12.2.5.2. Connection

The connection between the devices along RS485 is executed by parallel connection along the two-wire line as it should be observed potential “A” and “B” not to be crossed. The maximal distance between the final point devices is 1200 meters.

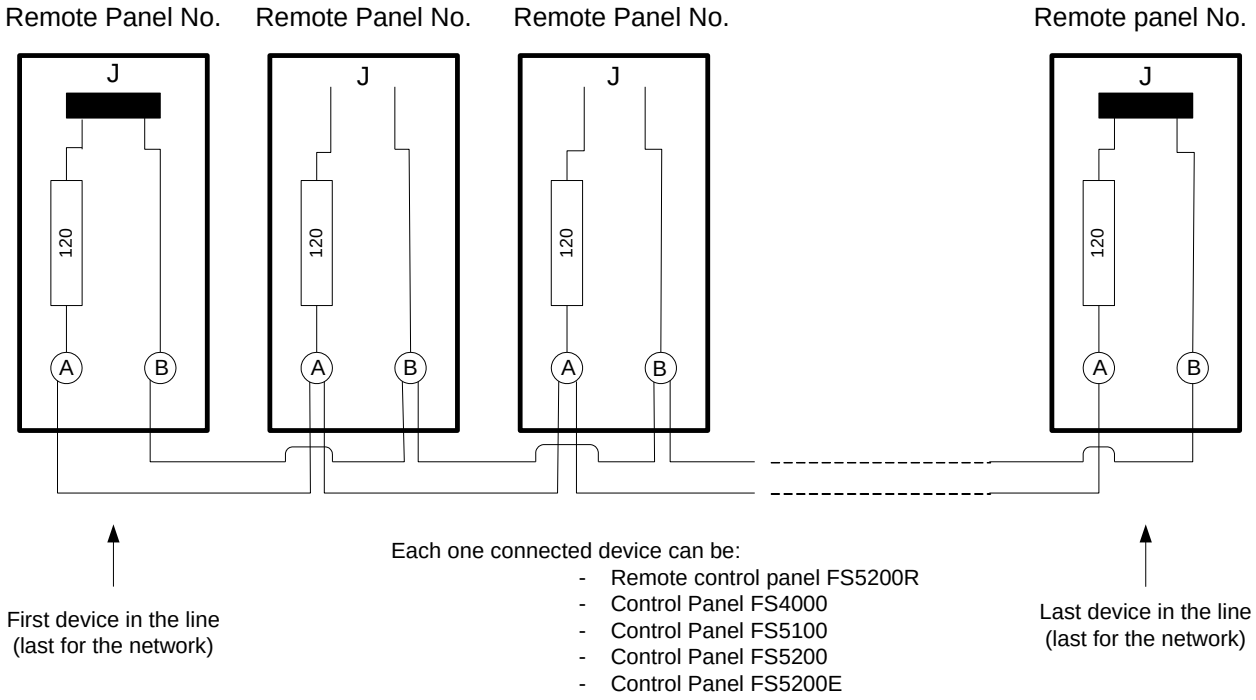
The recommended connecting wire cross section should not be less than:

- Up to 500 m - connecting wire 2 x 0.5 мм^2
- Up to 1000 m - connecting wire 2 x 1.0 мм^2

In the case of long distances or environment with electromagnetic radiation it is recommended the wire to be double-core or shielded. If the wire is shielded, the shield should be connected only in one end to “earth” terminal on the respective fire control panel or repeater.

Regardless the line length a jumper should be installed to the first and the last device to terminate the line by 120 ohms. The jumper should be removed from all other devices.

ATTENTION! The setting MASTER/SLAVE (see section 10.4.5.1.2.) of the repeater and the fire control panels connected to it does not depend on the physical location of the devices in the network. The repeater could be physically connected anywhere in the line. If it is the first or the last device (in RS485 there is only one two-wire line connected), it should be terminated with the jumper. The same rule applies for the fire control panels too.



- Connection to FS5100 and FS5200 fire control panels

Interface PC board should be installed to the configuration of the fire control panels so that FS1200 and FS5200 could operate with a repeater.

For FS5200 fire control panel the Interface PC board is fixed by means of the screws from the set to the Base Unit and the ribbon cable is put in the coupling of the Base PC Board (see the Instruction Manual of FS5200 fire control panel).

For FS5100 fire control panel the Interface PC board is installed directly on the Base PC Board and is fixed by means of a screw (see the Instruction Manual of FS5100 fire control panel).

- Connection to FS5200E fire control panel

The interface module is built-in on the base PC Board with these fire control panels and it is only necessary the interface wires to be connected to the terminals for “A” and “B” potential, respectively.

- Connection to FS4000 fire control panel

In order to operate in a network FS4000 fire control panel has to be completed with an extended PC Board where RS485 is located.

In the fire control panel it is fixed:

- network address – corresponds to the fire control panel serial;
- data exchange rate– 9600 Bits/s.

- Checking the line resistance

With switched off power supply of all connected objects, the line resistance is measured by means of an electronic measuring instrument (Multizet):

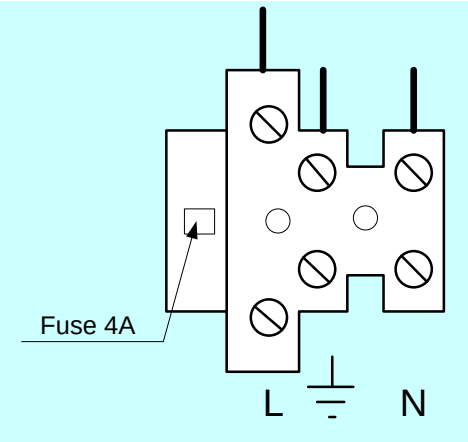
- If the measured resistance is in the range 45Ω ÷ 60Ω - the line is within the referent values;
- If the measured resistance is < 45Ω - there are more than two installed terminating resistors in the line;
- If the measured resistance is > 60 Ω - both ends of the line are not terminated by resistance of 120 Ω.

12.3. Power supply connection

Remove fuse Fs1 (4A) from the terminal with mains fuse.

Connect the power supply cable to the terminal with network fuse observing the following layout:

- L – power supply wire “Phase”;
- N – power supply wire “Zero”;
- “Earth” – earthing wire.



The cable should be with double-insulation and cross section not less than 0.5mm^2 for the power supply wires and 1,5mm^2 for the earthing wire.

Connect the other end of the power supply cable to the mains using a junction box.

The mains power supply of the fire control panel should be to a separate current circle.

13. Repeater start up

13.1. Make sure that the connection to mains supply is properly made (see section 12.3).

13.2. Make sure that repeater and the fire control panel are properly connected in a common network (see section 12.2.5.2.).

13.3. Place fuse Fs1 (4A) in the terminal with the mains fuse.

The display shows the logo of the company-producer, kind and type of the unit and the software version.

UniPOS **Repeater** **FS5200R** **V xx.xx**

13.4. Connect the feeding cables to the backup.

Connect the red wire to the positive pole, and the blue wire – to the negative pole. The overall voltage of both batteries shall exceed 17.6V, otherwise the fire control panel will not recognize them.

Attention! The repeater operates with two backup batteries 12V in a series connection.

13.5. In Menu Setup-Repeater-Test Out.Fire (see section 10.4.5.1.5.)

Check the fire outputs.

13.6. In Menu Setup, program the main repeater (see section 10.4.5.1.)

The data are:	default	for changing
Password:	0000	see section 10.4.5.6.
Network address:	1234 (for slave repeater)	see section 10.4.5.1.2.
Master/Slave:	MASTER	see section 10.4.5.1.1.
Language:	BULGARIAN	see section 10.4.5.1.3.
Check ground:	ON	see section 10.4.5.1.4.
Delayed time:	120 seconds	see section 10.4.5.3.
Disabled outputs:	NO	see section 9.
Communication rate:	9600 Bits/s (fixed)	

Setup the data for all connected objects (see section 10.4.5.2.)

- On or off (see section 10.4.5.2.1.);
- Network address (see section 10.4.5.2.3.);
- Type of the device (see section 10.4.5.2.2.);
- Text messages for the objects (see section 10.4.5.2.4.);

13.7. Enter the required data for communication with the repeater in each remote control panel:

- Network address – unique for the created system and coinciding with the information entered in the repeater (see section 10.4.5.2.3.);
- Communication rate - the data exchange rate of the repeater is 9600 [Bits/s], therefore this parameter should have the same value in each remote fire control panel.

The settings in the main repeater and the remote devices should be accurate for the communication to be realized.

If the communication with a certain object fails due to any reason the repeater will display an error message and the name of the devices with which there is no connection.

14. Conditions of operation, storage and transportation

14.1. Operation and storage

The repeater shall operate and be kept in closed premises, under the following conditions:

14.1.1. Temperature

- storage – from +5°C to +35°C
- transport – from –10°C to +50°C
- operational – from –5°C to +40°C

14.1.2. Relative humidity

- storage – to 80%
- operational – to 93%

14.2. Transportation

The repeater shall be transported

- by closed vehicles
- in factory packing
- in the above stated environmental conditions
- at sinusoidal vibrations with acceleration amplitude not more than 4,9m/s^2 in frequency range 10 to 150Hz.

15. Warranty

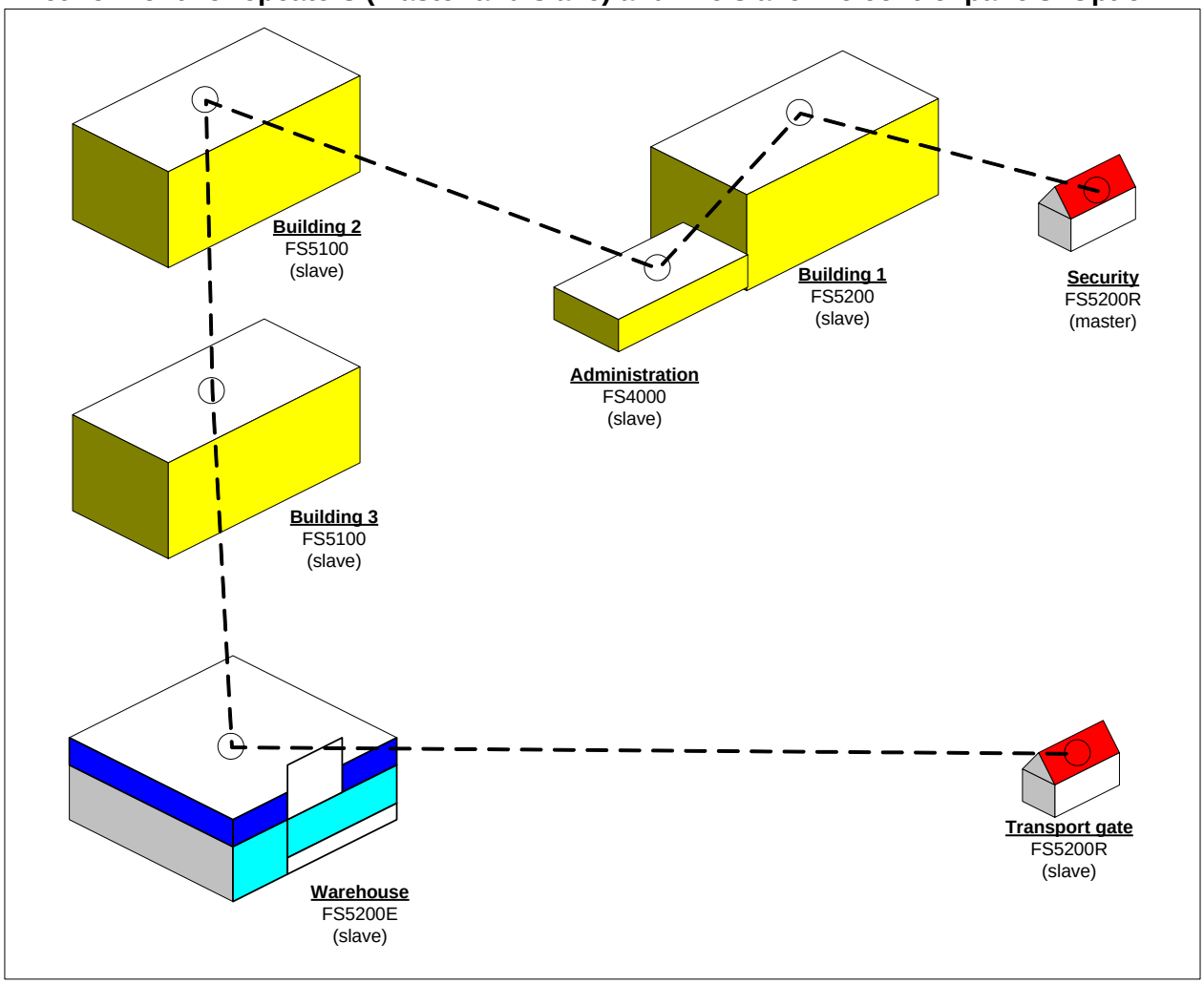
The producer guarantees compliance of the device with BDS EN 54-2: 1997.
The warrant period is 24 months from the date of the purchase, providing that

- the conditions of storage and transportation have been observed;
- the startup has been done by authorized personnel by the producer.
- the requirements for operation stated herein have been observed.

UniPOS wishes you a successful work!

16. Appendix 1

Network of two repeaters (master and slave) and five slave fire control panels–Option 1



1. Setup of the master repeater

In the created network, the repeater that is being set up is the first one (end one) thus the jumper for terminating with resistor 120 Ω is on.

- Menu – System Functions – Setup – Repeater (see section 10.4.5.1.)

Network address:	not to be entered;
Master/Slave:	MASTER;
Language:	BULGARIAN
Check ground:	ON

- Menu – System Functions – Setup – Configuration (see section 10.4.5.2.)

Remote panel 01:	ON/OFF:	ON;
	Type of panel:	FS5200;
	Network address:	1111 (random four-digit number);
	Text message:	BUILDING 1.

Remote panel 02:	ON/OFF:	ON;
	Type of panel:	FS4000;
	Network address:	XXXX (the fire control panel serial number);
	Text message:	ADMINISTRATION
Remote panel 03:	ON/OFF:	ON;
	Type of panel:	FS5100;
	Network address:	1010 (random four-digit number);
	Text message:	BUILDING 2.
Remote panel 04:	ON/OFF:	ON;
	Type of panel:	FS5100;
	Network address:	1020 (random four-digit number);
	Text message:	BUILDING 3.
Remote panel 05:	ON/OFF:	ON;
	Type of panel:	FS5200E;
	Network address:	2222 (random four-digit number);
	Text message:	WAREHOUSE.
Remote panel 06:	ON/OFF:	ON;
	Type of panel:	FS5200R;
	Network address:	1234 (random four-digit number);
	Text message:	TRANSPORT GATE.

2. Setup of the slave fire control panels and the slave repeater

2.1. Fire control panel in Building 1

Menu – System Functions – Setup – Fire Control Panel

Network number: 1111 (the same as the network number entered in RP1);
Interface rate: 9600.

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

2.2. Fire control panel in Administration

Fire control panel of FS4000 type is not setup.
It is fixed in it:

Network number: XXXX (serial No. of the fire control panel, entered in RP 2);
Interface rate: 9600.

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

2.3. Fire control panel in Building 2

Menu – System Functions – Setup – Fire Control Panel Parameters

Network number: 1010 (the same as the network number entered in RP3);
Interface rate: 9600.

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

2.4. Fire control panel in Building 3

Menu – System Functions – Setup – Fire Control Panel

Network number: 1020 (the same as the network number entered in RP4)
Interface rate: 9600.

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

2.5. Fire control panel in Warehouse

Menu – System Functions – Setup – Fire Control Panel

Network number: 2222 (the same as the network number entered in RP5)
Interface rate: 9600.

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

2.6. Repeater at the Transport Gate

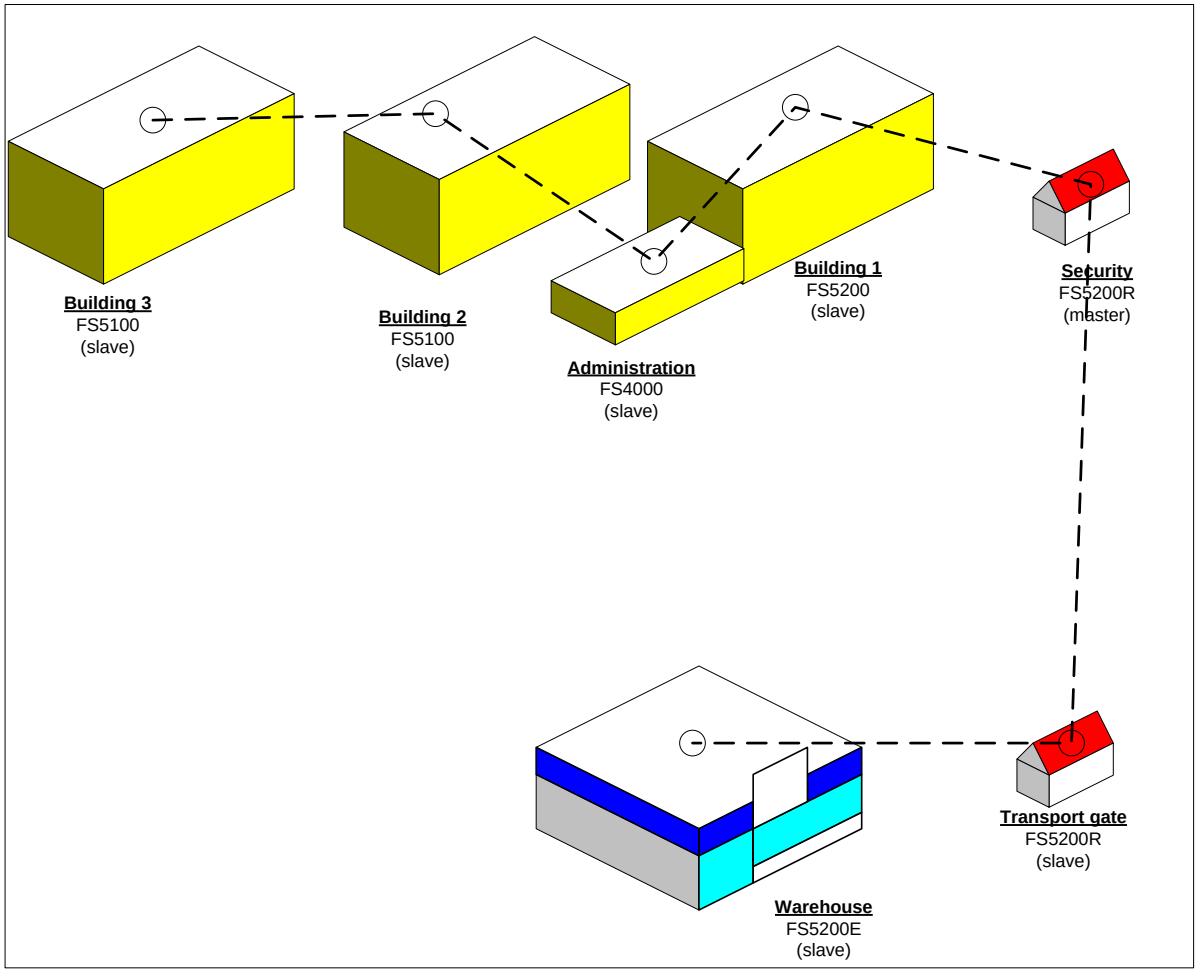
In the created network, the repeater that is being set up is the last one (end one) thus the jumper for terminating with resistor 120 Ω is on.

Menu – System Functions – Setup – Repeater (see section 10.4.5.1.)

Network address: 1234 (the same as the network number entered in RP6)
Master/Slave: SLAVE;
Language: BULGARIAN
Check ground: ON
Interface rate: fixed

Appendix 2

Network of two repeaters (master and slave) and five slave fire control panels–Option 2



1. Setup of the master repeater

The object is not the first one or the last one. The jumper for terminating the line is not on.

- Menu – System Functions – Setup – Repeater (see section 10.4.5.1.)

Network address:	not to be entered;
Master/Slave:	MASTER;
Language:	BULGARIAN
Check ground:	ON

- Menu – System Functions – Setup – Configuration (see section 10.4.5.2.)

Remote panel 01:	ON/OFF:	ON;
	Type of panel:	FS5200;
	Network address:	1111 (random four-digit number);
	Text message:	BUILDING 1.

Remote panel 02:	ON/OFF:	ON;
	Type of panel:	FS4000;
	Network address:	XXXX (serial No. of the fire control panel);
	Text message:	ADMINISTRATION.
Remote panel 03:	ON/OFF:	ON;
	Type of panel:	FS5100;
	Network address:	1010 (random four-digit number);
	Text message:	BUILDING 2.
Remote panel 04:	ON/OFF:	ON;
	Type of panel:	FS5100;
	Network address:	1020 (random four-digit number);
	Text message:	BUILDING 3.
Remote panel 05:	ON/OFF:	ON;
	Type of panel:	FS5200E;
	Network address:	2222 (random four-digit number);
	Text message:	WAREHOUSE.
Remote panel 06:	ON/OFF:	ON;
	Type of panel:	FS5200R;
	Network address:	1234 (random four-digit number);
	Text message:	TRANSPORT GATE.

2. Setup of the slave fire control panels and the slave repeater

2.1. Fire control panel in Building 1

Menu – System Functions – Setup – Fire Control Panel

Network number: 1111 (the same as the network number entered in RP1);
Interface rate: 9600.

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

2.2. Fire control panel in Administration

Fire control panel of FS4000 type is not setup.
It is fixed in it:

Network number: XXXX (serial No. of the fire control panel, entered in RP 2);
Interface rate: 9600.

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

2.3. Fire control panel in Building 2

Menu – System Functions – Setup – Fire Control Panel Parameters

Network number: 1010 (the same as the network number entered in RP3);
Interface rate: 9600.

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

2.4. Fire control panel in Building 3

Menu – System Functions – Setup – Fire Control Panel

Network number: 1020 (the same as the network number entered in RP4)
Interface rate: 9600.

In the created network, the fire control panel that is being set up is the first (end one), thus it is terminated with resistor 120 Ω.

2.5. Fire control panel in Warehouse

Menu – System Functions – Setup – Fire Control Panel

Network number: 2222 (the same as the network number entered in RP5)
Interface rate: 9600.

In the created network, the fire control panel that is being set up is the last (end one), thus it is terminated with resistor 120 Ω.

2.6. Repeater at the Transport Gate

The object is not the first one or the last one. The terminating resistor 120 Ω is not on.

Menu – System Functions – Setup – Repeater (see section 10.4.5.1.)

Network address: 1234 (the same as the network number entered in RP6)
Master/Slave: SLAVE;
Language: BULGARIAN
Check ground: ON
Interface rate: fixed