USER'S MANUAL

Fire indicating panel

JB-FSD-982E

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Instruction Manual of JB-FSD-982E

------ Please read this Manual carefully before installing and using the product. -----

I. Product overview

The JB-FSD-982E fire indicating panel (indicating panel for short) is a kind of microprocessor-controlled fire indicating panel developed by our company. Each indicating panel is connected to a fire alarm control panel produced by our company via a special RS-485 interface to process and display the data sent from the fire alarm control panel. Each floor of a building may have a indicating panel installed. When there is a fire alarm on the floor where the indicating panel is installed, or the neighboring floor above or below it, the indicating panel will give a horn/strobe alarm and display the floor No., the room No., and some other position information of the fire alarm.

II. Product features

- ü Each indicating panel is connected with a fire alarm control panel via a RS-485 bus. At most 99 indicating panels may be connected with each RS-485 bus.
- ü The indicating panels can display fire alarm messages or feedback messages only rather than fault messages, action messages or other messages.
- ü A fire alarm control panel may be used for setting the display area of a indicating panel. The set indicating panel can display the fire alarm messages of the designated area (floor display) only. Note: See the User's Manual of the fire alarm control panel for the setting method.
- ü It can replace a JB-FSD-981 fire indicating panel in a 2100 system.

III. Technical parameters

1. Executive standard: Fire Indicating Panel (GB17429-2011)
2. Display capacity: Each indicating panel can display the fire alarm messages of floors -9~89 and at most 99 fire alarm messages or feedback messages.
3. Wiring system: Four-wire system, power lines (+24V, GND) and RS485 signal lines (485A, 485B)
4. Operating environment: Indoor; temperature: -10℃ ~ +50℃; relative humidity: ≤95% (40℃, without condensation)
5. Power supply: DC 24V ±20 %
6. Overall power consumption: < 2W

IV. Appearance and dimensions (see Fig.1)

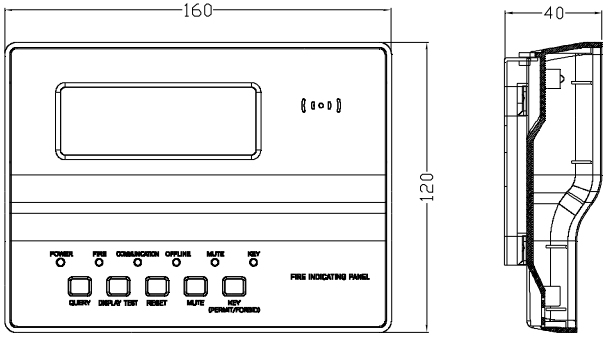


Fig.1

V. Use and engineering application

1.Fig.2 is the schematic diagram of the terminals of a indicating panel.

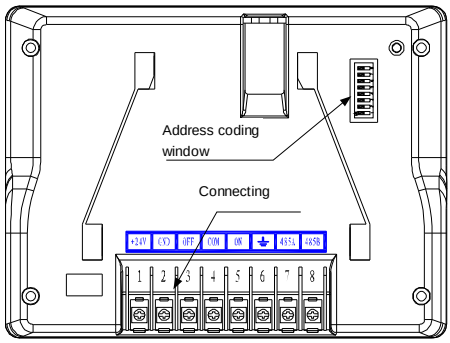


Fig.2

Definitions of terminals:

1 -- +24V (positive input terminal of the power supply)
2 -- GND (negative input terminal of the power supply)
3--OFF (reserved terminal)
4 -- COM (reserved terminal)
5 -- ON (reserved terminal)
6 -- ⏚ (earth terminal of the equipment)
7 --485A (485 bus input terminal)
8 --485B (485 bus input terminal)

2.Fig.3 shows the general functions and wiring diagram of the product.

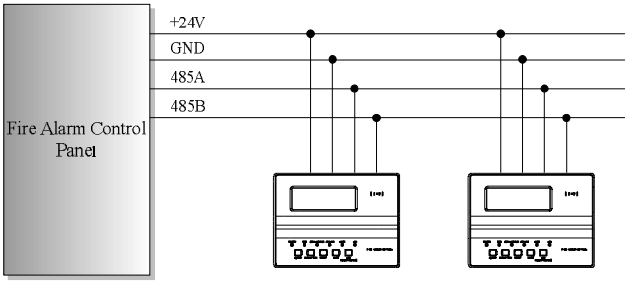


Fig.3

3.Functions and usage of the product:

1) The displayed content

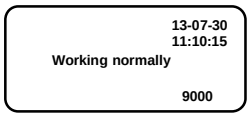


Fig.4 Normal Monitoring Status

If the indicating panel operates normally after startup, “The machine is operating normally,” as shown in Fig.4 will be displayed. The current date and time are displayed at the top right corner of the screen. The time is synchronous with that of the host machine of the fire alarm control panel and is refreshed by it (there is some interval for refreshing). The currently supported control system is displayed at the lower right corner of the screen. If “2100” is displayed, it means that a 2100 control system is supported; if 9000 is displayed, it means that a 9000 control system is supported. The specific control system supported depends on the eighth digit of the address dial switch on the back of the indicating

panel. For more details, see 10) Setup of address parameters and control system.

The indicating panel can display 99 fire alarm messages or feedback messages. When set to the floor display mode, each indicating panel can display all the fire alarms of the floor. When there are multiple fire alarms, the equipment will display them in an automatic rolling way. See Fig.5 for the interface.

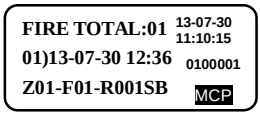


Fig.5 Fire Alarm Display Status

MCP means that this fire alarm is called by a Manual call point.

2) Display and statuses of indicators

Name	Color	Description
POWER	Green	If the power supply is normal, the green POWER indicator will remain lit.
FIRE	Red	It is out at ordinary times and will be lit in case of any fire alarm(s).
COMMUNICATION	Green	It blinks under normal circumstances and is out in case of a communication fault.
OFFLINE	Yellow	If the panel is not on line, the yellow OFFLINE indicator will be lit.
MUTE	Green	It will be lit after the system or the equipment is muted.
KEY	Green	If it is lit, it suggests that the keyboard lock is unlocked and all key functions are enabled; if it is out, it suggests that the keyboard lock is locked.

3) Functions of the keyboard lock

Keys SYSTEM TEST, QUERY, and RESET can be operated only when the keyboard lock is unlocked, otherwise they cannot. After a combined password is set for the keys and keys KEY (ENABLE/DISABLE), RESET and QUERY are pressed once in order, the keyboard lock will be unlocked and the KEY indicator will be lit. After the KEY (ENABLE/DISABLE) is pressed again after that, the keyboard lock will be locked again and the KEY indicator will go out.

4) Muting

After the SYSTEM MUTE key is pressed, the fire alarm tone will be eliminated, the MUTE indicator will be lit and the normally closed contact of the relay will be closed. After receiving another fire alarm, another horn/strobe alarm signal may be triggered and the MUTE indicator will go out automatically.

Note: After receiving a MUTE command from an automatic fire alarm control panel, the indicating panel can also realize the muting function.

5) System test

After the SYSTEM TEST key is pressed after the keyboard lock is unblocked, all the indicators on the display panel will be lit, the buzzer will buzz and the LCD backlight will be lit too. Two seconds later, all the indicators (except for the POWER indicator) will go out, the buzzer will stop buzzing, the system test is completed and the equipment restores the status before the system test.

Note: The system test function is disabled when there is a fire alarm.

6) Reset

After the RESET key is pressed after the keyboard lock is unblocked, all the indicators (except for the POWER indicator) on the display panel will go out, the fire alarm tone will disappear, the normally closed contact of the relay will get closed and all the fire alarm records of the equipment will be deleted.

Note: After receiving a RESET command from an automatic fire alarm control panel, the display

panel can also realize the reset function.

7) Query

After the equipment receives two or more fire alarm messages, it will display the fire alarm messages automatically and circularly. After the QUERY key is pressed after the keyboard lock is unlocked, the equipment will enter the manual display status. Each time after the QUERY key is pressed, the equipment will display the next fire alarm message. If the QUERY key is not operated within eight seconds, the equipment will automatically return to the circular display status.

8) Communication indication

When the indicating panel is communicating with the automatic fire alarm control panel normally, the COMMUNICATION indicator on the indicating panel is on, which indicators normal communication.

9) Setup of address parameters and control system

During the installation of the indicating panel, its address must be set according to the specific installation location. The address is set through a JP3 dial switch on the main board on the back of the indicating panel (see Fig.2 for its location). The JP3 dial switch has eight dial digits in all, wherein the first to the seventh digits are used for setting the address (see Fig.6 and Fig.7), and the eighth digit for choosing the 2100 control system or the 9000 control system. If the eighth dial switch is pulled to the ON position, the 9000 control system will be chosen (see Fig.6); if it is pulled to the OFF position, the 2100 control system will be chosen (Fig.7). Corresponding content is displayed at the lower right corner of the screen.

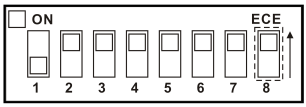


Fig.6 Address Codes of the 9000 Control System

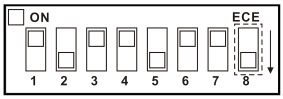


Fig.7 Address Codes of the 2100 Control System

If the short-circuit block is pulled to the ON position, the digit will be set to be “0”; if it is pulled to the OFF position, the digit will be set to be “1.” Address setup is calculated through a binary coding method (popularly speaking, binary numbers like 1, 2, 4, 8, 16, 34, 64 and so on are used). For example, if the JP3 dial switch is set to be “1000000” (see Fig.6), the address will be 1+0+0+0+0+0+0=1; and if it is set to be “0100100” (see Fig.7), the address will be 0+2+0+0+16+0+0=18.

VI. Installation and wiring

A special base is necessary during the installation of a indicating panel. As shown in Fig.8, the external dimensions, the mounting hole diameter and the mounting hole spacing of the special base are 101.5mm×14mm×86mm (L×B×H), 4.5mm and 58mm～62mm respectively.

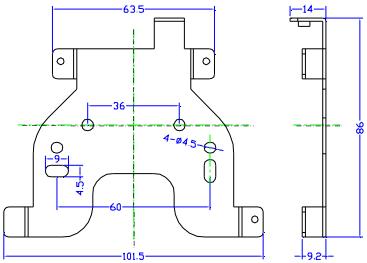


Fig.8

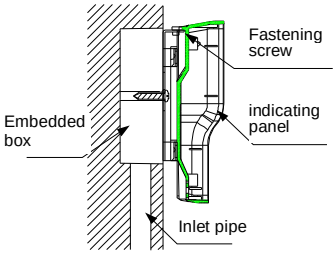


Fig.9

A JB-FSD-982E fire indicating panel consists of a base and a indicating panel. It is subject to a wall-mounted installation. Its external wires may be directly connected with the terminals on the rear panel of the indicating panel. See Fig.9 for the schematic diagram of the mounting base of the indicating panel.

Base fixing: Fix the base of the indicating panel on the embedded box.

Wiring: Connect the leads stretching out from the junction box with the terminals on the indicating panel and do a correct wiring according to the contents marked on the terminals.

Fix the indicating panel.

Arrange the guide slot on the back of the indicating panel so it aligns with the mounting base and press the indicating panel with a downward force along the wall until the guide slot fits the mounting base perfectly. After that, lock the small hook on the upside of the back of the indicating panel with the guiding sheet on the mounting base with some matched screws (see Fig.9).

Precautions ⚠

Please inspect whether or not the circuit of the equipment suffers short circuit, open circuit, wrong wiring and other defects.

The indicating panel is a precise electronic product and therefore needs to be managed by a specific person. No other persons are allowed to operate it without permission.

Please wipe the surface of the equipment with alcohol.

VII. Fault analysis and troubleshooting

Fault phenomenon	Possible cause	Troubleshooting method	Remarks
The indicating panel fails to indicating or has an abnormal display after being started.	a. The power supply is abnormal; b. The connection with the fire alarm control panel is poor; or c. The LCD or the CPU are damaged.	a. Inspect the DC24V power supply; b. Inspect the power line; or c. Send the indicating panel back to the factory for repair.	
The equipment cannot be started.	The DC 24V power supply is not connected.	Inspect the DC 24V power supply.	
The fire alarm control panel cannot be registered.	The RS-485 bus is poorly or wrongly connected.	Inspect the RS-485 bus and reconnect it.	
The indicating panel has abnormal communication.	The system chosen is not proper and the eighth digit of the dial switch is wrongly pulled.	Pull the eighth digit of the dial switch to the correct position.	