

GST852RPX LCD Repeater Panel



Installation and Operation Manual

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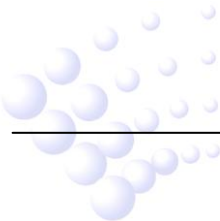
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I General

GST852RPX LCD Repeater Panel (the repeater panel) is designed with a microprocessor to display the user code and description of the alarming detector (detectors) and generate audible and visual signals simultaneously.

II Features

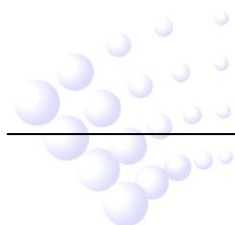
Through communication loops, GST852RPX LCD repeater panel can be connected with GST200, GST500 and GST5000 fire alarm control panels, processing and displaying the data transmitted from the control panels. Command of *Silence* and *Reset* can be sent to the control panel, and the *Silence* command can stop the output of sounder. When one fire alarm control panel monitors several floors or several zones, a repeater panel can be installed on each floor or in each zone instead of zonal control panel.

III Technical Specifications

1. Display Range: Each screen displays no more than 1 piece of fire information. The following can be displayed in turn.
2. Display Capacity: Not more than 126 pieces of fire information can be displayed by the repeater panel.
3. Wiring: Connected with fire alarm control panel through polarity sensitive two wires; connected with power supply through two 24VDC power lines, polarity insensitive.
4. Operating environment:
 - Temperature: 0°C ~ +40°C
 - Relative Humidity: ≤95%, non condensing
5. Power supply: centralized electrification by 24VDC power supply.
6. Quiescent power consumption ≤2W; Maximum power consumption ≤5W

IV Structure and Operation Principle

1. GST852RPX LCD repeater panel is wall-mounted. Fig.1 shows its appearance.



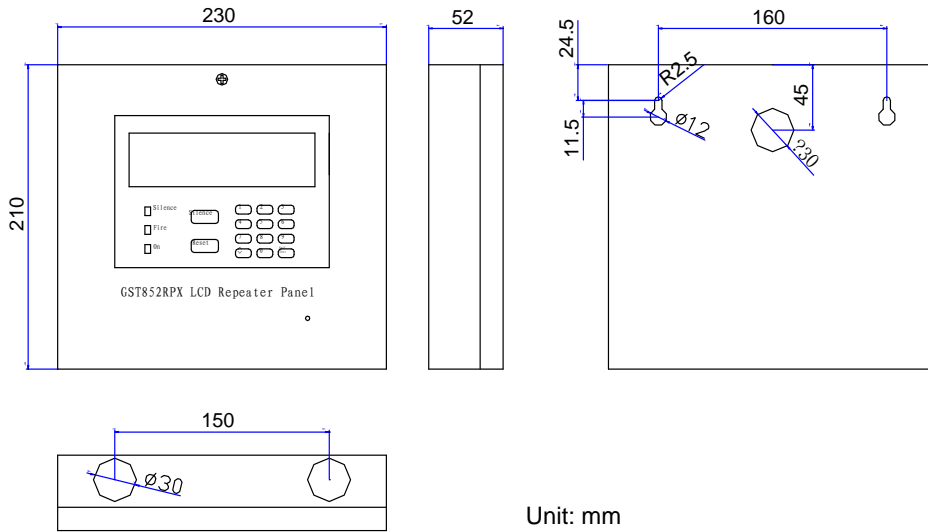


Fig.1

2. Front panel of the repeater panel is shown in Fig. 2.

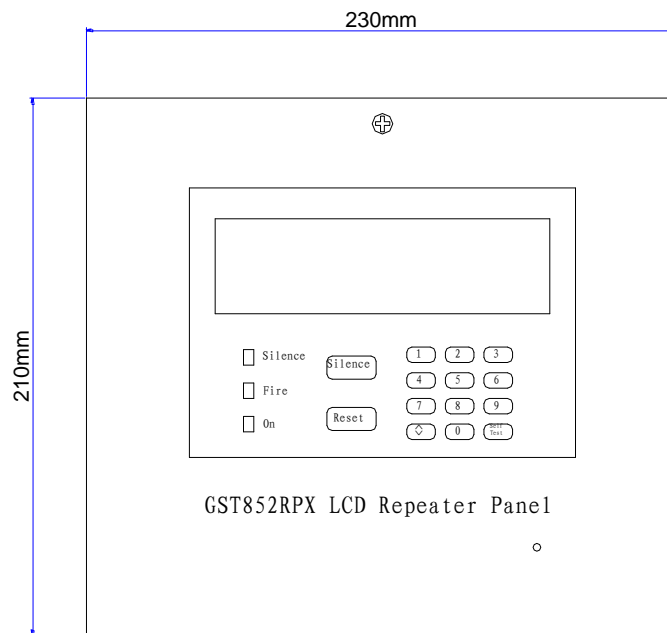



Fig. 2

Description of keys

- 1) **Silence Key:** In monitoring state, the repeater panel enters in power save mode and it will exit the current state when this key is pressed again. In alarm state, pressing *Silence* key and inputting password can stop the sound of the repeater panel. Then send the command of silence to the control panel. Press it again, the repeater panel will cancel the silence command and transmit the command to the control panel
- 2) **Reset Key:** Press *Reset* and then input correct password to clear the fire information and send the reset command to the control panel.
- 3) **Self-test key:** It is only available in monitor state.

4)  key: It is used to scroll the screen. In alarm state, press this key can stop the circular display and start scrolling screen when the fire information is more than 1 piece. In monitor state, pressing it can enter the screen of device code defining.

5) 0~9: To define the device code.

Description of indicators:

1) **On** LED: Green, lit when the repeater panel is working.

2) **Fire** LED: Red, lit when any of the detectors reports fire.

3) **Silence** LED: Yellow, lit when the repeater panel is in mute state.

3. Operation Principle

Adopt AT89S52 as its MCU, the repeater panel can communicate with fire alarm control panel through RS485. The microprocessor can make the LCD display the relevant information and activate the sounder strobe.

V Operation

1. Sound indication description


1) Fire Alarm Sound: buzzer 0.25s on, 0.25s off

2) Fault Sound: buzzer 0.5s on, 4.5s off

2. Adjusting LCD definition

If the LCD display isn't clear, you can adjust the LCD.ADJ adjusting resistor to make the LCD display clearly.

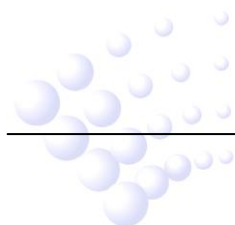
3. System setting

In monitor state, the repeater panel enters system setting screen, with  pressed and 6-digit password (666666 is super password) input.

1) Password modification: Selecting number 1, the screen of password modification appears, then input a new password twice. If confirmed correct, the repeater panel enters main screen with sound indication (0.25s). Otherwise, it enters main screen silently.

2) Device code setting: Selecting number 2, the device code can be set. Input 2 digit device code, then press *Reset* key, the main screen can be accessible. The buzzer vocalizes sound (0.25s) to indicate the successful setting. The device code ranges from 1 to 64. After the code number is over 64, it will return to 1. If the device code setting failed, the repeater panel enters the main screen without any sound. Press non-numerical figure during setting, it exits the current screen and enter the main screen.

Note: Check the wires before powering up, such as short circuit, open circuit or wrong connection.

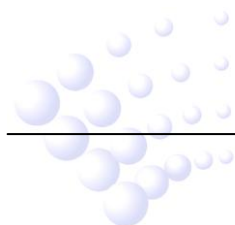


VI Troubleshooting

Problem	Reasons	Solution	Remark
Connecting with a fire alarm control panel, the repeater panel hasn't been registered after starting.	Communication between the repeater panel and the fire alarm control panel is abnormal. (1) The polarization of Communication two-wire is reversed. (2) The wires are threaded in the same tube with strong current circuit.	(1) Change the polarization of communication two-wire. (2) Separate the two wire cables from strong current circuit.	The LED of repeater panel flashes regularly when it is normal.

VII Cautions

1. This panel is precise electronic product and must be maintained by trained personnel.
2. This product must be in the charge of trained personnel.
3. We take charge of repairing the repeater panel. Any problem occurs, please contact us in time. GST won't be responsible for any result if you repair it by self.





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