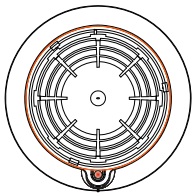
Instruction Manual of JTW-ZD-920E Point type Heat Fire Detectors

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

I. Product overview

JTW-ZD-920E point type heat fire detectors (Detector hereunder) is a mated product of the fire alarm control panel (JB-QBL-MN/300E) .It uses a two-bus work mode. With an internal microprocessor, it supports electronic coding. The detector realizes real-time acquisition of the in situ temperature data and sends back the data to a fire alarm control panel. It can also receive and execute the control commands given by a fire alarm control panel. When in a routing inspection, the detector indicator will blink. When there is a fire in the monitored area and the temperature has reached the alarm threshold, the fire alarm control panel will confirm a fire alarm according to the received message sent from the detector, and the detector indicator will light at the same time to indicate a fire alarm.

The detector is suitable for such industrial and civil buildings that have a great deal of heat when fire takes place, such as kitchens, boiler rooms, generator rooms, drying workshops and smoking rooms and is not suitable for places with a great deal of smoke but little heat.



II. Product features

- ✓ It can realize electronic coding and rewrite the address via coder in situ.
- ✓ Within a single-chip microcomputer, it can realize real-time data acquisition and processing, realize a curve tracing for the field situation.
- ✓ It has a temperature compensation function and a sensor fault detection function (fault reporting to fire alarm control panel).
- ✓ Non-polarity, two-bus connection that ensures convenient installation and maintenance.
- ✓ Designed with an upper cover and a lower cover and installed on an independent base, it can be installed, debugged and maintained conveniently.

III. Technical parameters

1. Executive standard: GB4716-2005
2. Operating voltage: 24V (pulse modulation)
3. Operating current: < 300uA (monitoring status) or < 1.5mA (alarm status)
4. Work indication: The red indicator will blink in the monitoring status or remain lit in the alarm status.
5. Weight: about 47g
6. Product class: A2
7. External dimensions: diameter: 100mm, height: 56mm (with the base)
8. Wiring method: non-polarity two-bus system (L1, L2)
9. Operating environment: Indoor, temperature: - 10℃～+50℃; relative humidity: ≤95% (40℃ ±2℃, without condensation)
10. Coding mode: It can realize electronic coding via coder in situ. Address codes 1 to 324 are available for selection.
11. Installation height: ≤8m
12. Protection area: about 60m^2. For details, see related provisions in GB50116-98 *Code for Design of Automatic Fire Alarm System*.
13. Matched host machine: JB-QBL-MN/300E

IV. Appearance and dimensions (see Fig.1)

(Unit: mm)

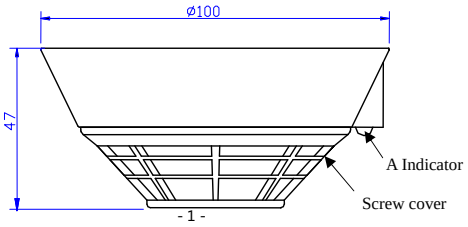
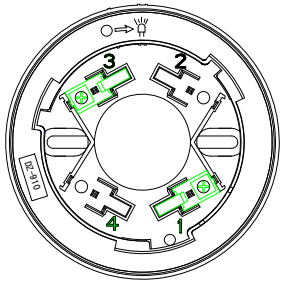


Fig.1

V. Use and engineering application

1. Fig.2 is the schematic diagram of the matched mounting base.



Definitions of terminals(non-polarity two-wire system):

1 --Signal terminal (L1)
2 –No Pin
3 --Signal terminal (L2)
4 –No Pin

Fig.2

2. Wiring method: The detector is accessed through a compatible fire alarm control panel via a two-wire bus. It uses non-polarity connection. The terminals L1 and L2 of the two-wire bus are connected with the terminals 1 and 3 of the matched mounting base. Fig.3 is a schematic diagram of the connection between multiple detectors with a fire alarm control panel.

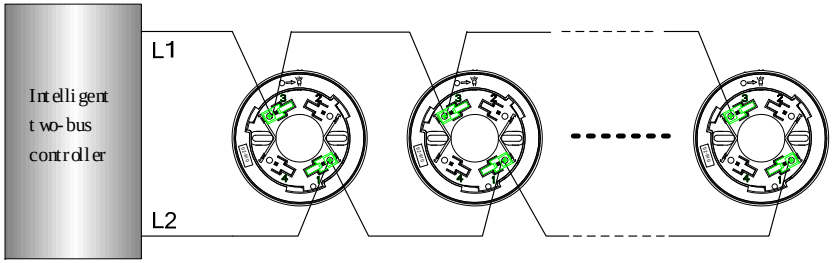


Fig.3

3. Coding address: As shown in Fig.4, detector is accessed via the detector mounting base on the coder（CODER-F900E）, non-polarity connection is adopted for the terminals L1 and L2, set the coder with the coding function, select the correct address number and press the RUN key to complete the address code setup. (Note: See the User's Manual of the coder for the detailed operation.)

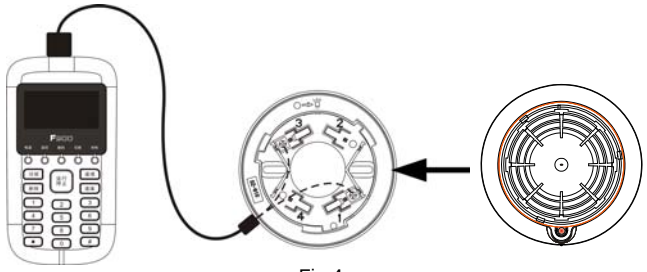


Fig.4

VI. Installation and debugging

Determine the location, mounting distance and numbers for mounting the detectors in the protection area according to relevant provisions and regulations of GB50116-98 *Code for Design of Automatic Fire Alarm*

System and GB50166-2007 *Code for Installation and Acceptance of Fire Alarm System*.
A self-contained complete base is necessary during the installation of a detector. As shown in Fig.5, the model, the external dimensions, the mounting hole diameter and the mounting hole spacing of the base are DZ-910, 100mm×22mm (diameter×thickness), 4.5mm and 44mm～65mm respectively.

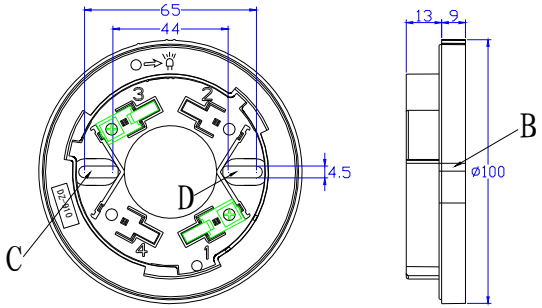


Fig.5

Wiring requirement:

It is proper to use RVS twisted pairs with a section area of equal to or larger than 1.0mm^2 for the signal buses L1 and L2.

Specific installation and debugging methods:

1. Make sure the type of the detector matches the type of the host machine of the fire alarm control panel;
2. Use two M4 screws to fix the matched mounting base on the designated position via the mounting holes C and D shown in Fig.5, as instructed in the construction drawing and make sure the matched mounting base has been firmly installed.
3. Use a coder to make the detector coded according to the detector address on the construction drawing.
4. Disconnect the power supply of the fire alarm control panel and connect the detector correctly according to the construction drawing.
5. Place the indicator at position A of the detector (see Fig.1) and position B of the base (see Fig.5), align them with each other, insert the detector into the base and turn the detector clockwise until it is firmly locked.
6. After all the products are installed and checked, connect the power supply of the fire alarm control panel and conduct automatic login.
7. when automatic login is success, the red indicator of the detector will blink once about every 12 seconds, which suggests that the detector has begun to operate normally.
8. Finally conduct an alarm test for the detector through some special tools or direct hot air gun blowing. After the detector gives a fire alarm, the indicator will remain lit and the fire alarm control panel will simultaneously give corresponding alarm prompt information. After the alarm test, reset the fire alarm control panel and restore to the monitoring status.

VII. Precautions ⚠

1. A detector can not share an address with other equipment in a single bus circuit, or else an address conflict may occur.
2. Never dismount the protective cover delivered with the detector too early after the field installation and before the use of the detector, or else the detector may be contaminated.
3. It is not permitted to use open flames (such as lighters) to firing thermistor during alarm tests, so as to avoid damage to the detector. It is recommended to use a hot air gun and other heating equipment in a simulation alarm test.
4. The protection area and quantity of the detectors should comply with relevant provisions in GB50116-98 *Code for Design of Automatic Fire Alarm System* and GB50166-2007 *Code for Installation and Acceptance of Fire Alarm System*.

VIII. Maintenance

⚠Warning: Before conducting maintenance for a detector, inform the related management department that the monitoring will be stopped temporarily when the system maintenance. Meanwhile, disable the logic control function of the area or system to be maintained to avoid unnecessary alarm linkage. After the test, inform the management department to restore the normal functions of the system.

1. According to the requirements of GB50166-2007 *Code for Installation and Acceptance of Fire Alarm Systems*, each quarter, some special testing instruments should be used to test the detector's operation and confirm the indication state of its indicators by batch and stage; for a detector that has been installed and used, It is recommended to have it maintained once every two years.
2. If a detector fails due to a material defect or a manufacturing process defect under normal conditions of use in one year following the date of its delivery, we shall repair or replace it for free. However, the faults of the detector due to artificial damage, improper use, or authorized adjustment, reconstruction or disassembly are not covered in the guarantee and we shall assume no responsibilities for any the consequence thereby caused.
3. We may provide paid repair service for products with any faults beyond the guarantee range. If you have such products that need repair, please contact us. When sending such a product to us for repair, you are expected to provide some important information about the product, such as the phenomenon and possible cause of the product fault, so that we can find out the cause of the fault in the shortest time and so the information may be used as a reference in our future product development and improvement.

IX. Fault analysis and troubleshooting

Fault	Possible cause	Troubleshooting method	Remarks
The detector can't be coded.	The internal circuit is damaged.	Send the detector back to the factory for repair.	
The detector can't be logged into normally.	The detector has no address or has a coincident code.	Recode the detector.	
The detector reports a fault after login.	The contact with the base is poor	Inspect and reinstall the base.	
	The internal circuit is damaged.	Send the detector back to the factory for repair.	
The detector reports a fire alarm after login.	The internal circuit has failed.	Send the detector back to the factory for repair.	
The detector can't send out fire alarm signal during an alarm test.	The internal circuit is damaged.	Send the detector back to the factory for repair.	