



User Manual

ADDRESSABLE SMOKE AND HEAT DETECTOR
BP-FD-ASHD303



Enjoy it.

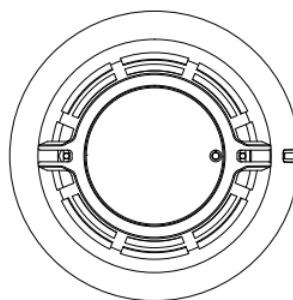
Instruction Manual of BP-FD-ASHD303 Addressable Optical Smoke and Heat Multisensor Detector

Read through these instructions before using this device to ensure correct installation and use!

1. Product overview

The BP-FD-ASHD303 point composite smoke and temperature fire detector (hereinafter referred to as the detector) is composed of a smoke sensor and dual heat sensors.

It not only has the performance of photoelectric smoke fire detector, but also has the performance of heat detector. The detector is made of non-polar two bus, which can be used with fire alarm control panel produced by our company.



2. Product features

- 1) Dual heat sensors
- 2) The low profile design of the Optical/Heat Multisensor detector is sleek and evolutionary, with a 360° LED indicator which illuminates red when in alarm.
- 3) Non-polarity, two-bus connection that ensures convenient installation and maintenance.
- 4) It can realize electronic coding and rewrite the address via coder in site.
- 5) Within a single-chip MCU, it can realize real-time data acquisition and processing, realize a curve tracing for the field situation.
- 6) It has a temperature, humidity and dust accumulation drift compensation function and a sensor fault detection function (fault reporting to fire alarm control panel).
- 7) A sophisticated dynamic algorithm, providing transient rejection and compensation for drift whilst maintaining accurate sensitivity.
- 8) Reference to Table 1, the detector has five modes. Working mode can be set with a coder.

MODE	FUNCTION	
1	heat sensor in A2R	optical sensor
2	heat sensor in A2	optical sensor
3	heat sensor in A2R	-
4	heat sensor in A2S	-
5	-	optical sensor

3. Technical data

- 1) Executive standard: EN54-5 & EN54-7
- 2) Operating voltage: 24V (pulse modulation)
- 3) Work indication: The red indicator will blink in the monitoring status or remain lit in the alarm status
- 4) Coding mode: It can realize electronic coding via coder in site. Address codes 1 to 324 are available for selection
- 5) Wiring method: non-polarity two-bus system (L1, L2)
- 6) Operating environment: Indoor, temperature: $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$; relative humidity: $\leq 95\%$ (non-condensing or icing)
- 7) External dimensions: diameter: 100mm, height: 58mm (with the base)
- 8) Weight: about 123g(with Base)

4. Appearance and dimensions (see Fig.1)

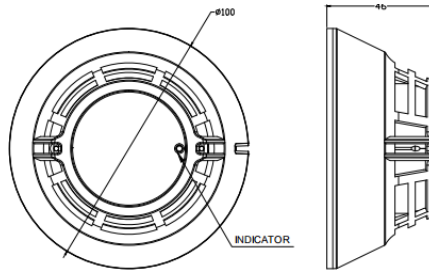


Fig.1(unit:mm)

5. Use and engineering application

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

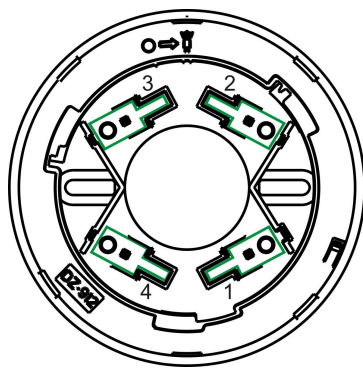


Fig.2

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

- 1 --Signal terminal (L1)
- 3 --Signal terminal (L2)

- 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.

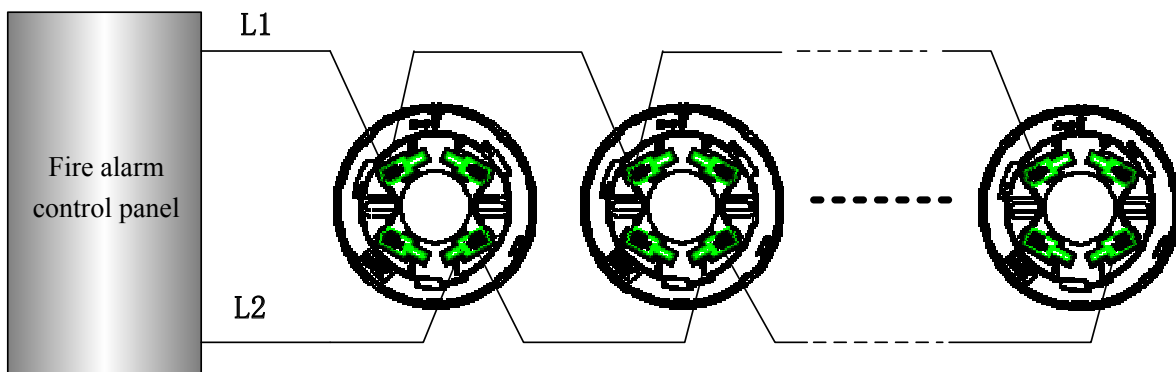


Fig 3

- 3) Coding address: As shown in Fig.4, detector is accessed via the detector mounting base on the coder, 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.)

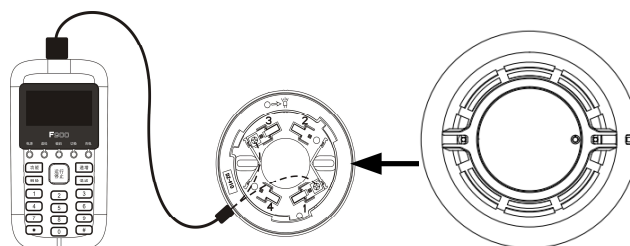


Fig 4

- 4) Working mode configuration: Working mode can be set via coder according to different applications. When setting the working mode, detector is accessed via the detector mounting base on the coder, (see Fig. 4). (Note: See the User's Manual of the coder for the detailed operation.)

6. 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 the local codes.

A self-contained complete base is necessary during the installation of a detector. As shown in Fig.6, the model, the external dimensions, the mounting hole diameter and the mounting hole spacing of the base are DZ-912, $\Phi 100\text{mm} \times 26.4\text{mm}$ (diameter \times thickness), $\Phi 4.5\text{mm}$ and $44.5\text{mm} \sim 64.3\text{mm}$ respectively.

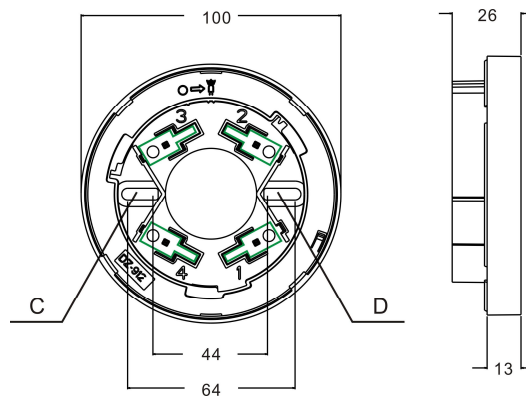


Fig.5

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.

7. 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.6, 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) The lower edge of the detector base raised position aligned with the groove position, and then the detector into the base, the detector clockwise until it locks into place the detector.
- 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. 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.

8. 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) The protection area and quantity of the detectors should comply with relevant provisions and regulations of the local codes.

9. Maintenance

⚠ Warning: Before conducting maintenance for detectors, 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) For a detector, at least semi-annual tests should be done according to related provisions and regulations of the local codes; for a detector that has been installed and used, it is recommended to have it cleaned and maintained once every two years.
- 2) Operating environment has a great influence on the performance of the detector. If the detector is installed and used in a place where its normal use is easily affected by dust, high wind speed and other factors, its maintenance period should be shortened.
- 3) 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.
- 4) 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.

10. 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 address.	Recode the detector address.	
The detector reports a fault after login.	The sensor has failed.	Send the detector back to the factory for repair.	
	The labyrinth is seriously contaminated.	Clean the labyrinth of the detector.	
The detector reports a fire alarm after login.	There is a great deal of smoke dust or steam in the room.	Log in again after the smoke, dust or the steam is eliminated.	
	The internal circuit has failed.	Send the detector back to the factory for repair.	
	The labyrinth is seriously contaminated.	Clean the labyrinth of the detector.	
The detector cannot operate normally after being powered up.	The indicator or the internal circuit is damaged.	Send the detector back to the factory for repair.	
	The contact with the base is poor.	Inspect and reinstall the base.	
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.	

For Inquiries, Please contact:

Security Shop

Vladimira Popovica 6/6/A606

11070 Novi Beograd, Serbia

Tell: +381 11 318 68 68

office@securityshop.rs

Imported/Distributed by Security Shop doo

BLAUPUNKT and the BLAUPUNKT logo are trademarks of
TALISMAN BRANDS (Luxembourg) S.A.R.L. and are used
under license from Talisman Brands, Inc.

BLAUPUNKT licensees are solely responsible for
the BLAUPUNKT branded products manufactured,
distributed and sold under license.

www.blaupunkt.com