

HS6401 Infrared Beam Smoke Sensitive Detector

It is suitable for large warehouse, workshop, library, exhibition hall, gymnasium and antique building etc., is a product that the common smoke sensitive detector cannot substitute.

1. Functions and features:

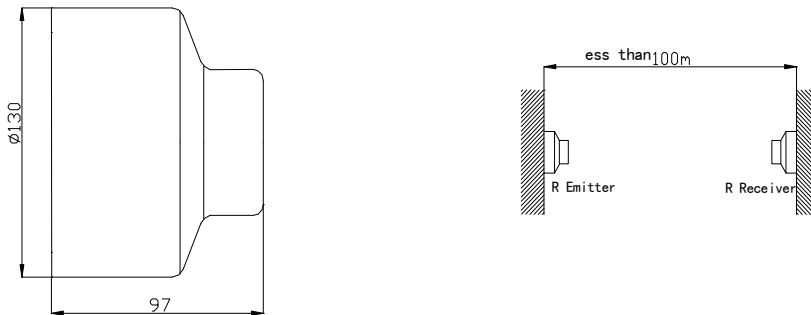
- * Big protection area, the maximum area protected is: $100\text{m} \times 14\text{m} = 1400\text{m}^2$
- * Good stability, not environment interfered; Adjustable sensibility
- * Sensitivity adjustable
- * Can suitable controller any for manufacturer



2. Main technical specifications:

Working Voltage	DC24V	Side Protection Distance	Left or Right side $\leq 7\text{m}$
Working Current	$\leq 15\text{mA}$	Ambient Temperature	$-20 \sim 55^\circ\text{C}$
Alarm Current	$\leq 20\text{mA}$	Ambient Humidity	$\leq 95\%$ 40°C
Maximum correlation distance	100m	Form Dimensions	$\Phi 130 \times 97\text{mm}$
Minimum correlation distance	9m	Installation Fashion	Wall mounted type

3. Schematic Diagram of Profile Dimensions and Installation:



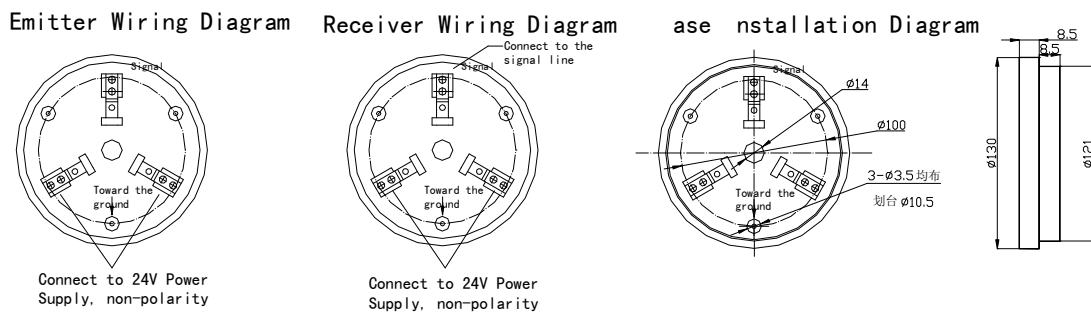
Keep the Emitter and Receiver at the same level when installation

The height of installation refers to

Height of Building	4m	8m	10m	12m
Height of Detector Installation	3.5m	7m	8.75m	10.05m

The receiver will be installed close to the infrared interface and share the 24V power supply with it.
Installation wire $\geq 1.5\text{mm}^2$ BV wire.

4. Schematic Diagram of Installation and Wiring:



5. Notice:

- * It must be installed on the wall or fixed rack without any vibration and deformation. It must be firmly fixed and align with its centerline as much as possible.
- * There should be no shelter in the range of 0.5m-radius along the beam axis. No deposit dust is permitted in the using environment of the detector.
- * After Infrared Beam Smoke Sensitive Detector to warning, it must reset manually.

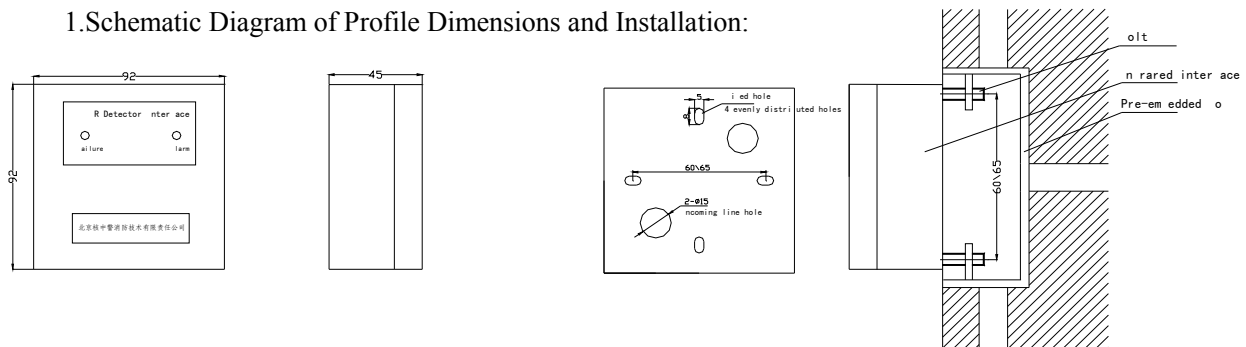
6. Debugging Method:

- a) When the correlation distance is less than 30m, insert the short circuit jumper wires inside the transmitter into position 1 and 2. When the correlation distance is more than 30m, insert the jumper wires into position 2 and 3.
- b) Switch on the power supply and open the cover of receiver, use the digital meter to monitor the voltage inside the receiver between point S4 and S0 (S4 is the positive, S0 is the ground). Make some adjustment after 5 minutes when the voltage becomes steady. Debugging steps: 1. To catching the signal and adjust the three positioning nuts of loose and tighten at the same time until some change happens to the monitoring voltage of the receiver. 2. Adjust the transmitter, adjust the three positioning nuts clockwise and counter-clockwise one by one until the monitoring voltage of the receiver reaches the maximum value. 3. Adjust the receiver, adjust the three positioning nuts clockwise and counter-clockwise one by one until the monitoring voltage of the receiver reaches the maximum value. If the maximum value 7.1V cannot be reached through above adjustment, adjust the potentiometer of the receiver clockwise with a screwdriver until reaching the maximum value 7.1V. On the contrary, if the maximum value exceeds 7.1V, adjust the potentiometer counter-clockwise until the desired figure.
- c) Be careful to act evenly on the springs under the three positioning nuts when adjusting them, in order to ensure the stability of the detector.
- d) Buckle on the cover after the adjustment to avoid dust.

JBM7 Infrared Beam Smoke Sensitive Detector Interface

It is the supporting product of infrared beam smoke sensitive detector, also the important conversion device to connect to other alarm equipment. It has two relays of fire alarm and failure. The fire alarm relay uses the normally open contacts for output, and the failure relay uses the normally close contacts for output. Each of them has a corresponding indication led, the red one stands for fire alarm and the yellow one failure. The detecting signal can connect to any alarm devices with the help of interface conversion.

1. Schematic Diagram of Profile Dimensions and Installation:



2. Schematic Diagram of wiring:

Where: NO and COM are passive normally open contacts and will close in the case of alarm, is the import the switch signal into the input module.

NC and COM are normally close contacts and will open in the case of failure.

SIGN is the signal line connection terminal of infrared receiver.