

Bi-Spectrum Network Camera Quick Setup Guide

NO:101-300-0617-01
Issue:1.0

Precautions

Fully understand this document before using this device, and strictly observe rules in this document when using this device. If you install this device in public places, provide the tip "You have entered the area of electronic surveillance" in an eye-catching location. Failure to correctly use electrical products may cause fire and severe injuries.

⚠ WARNING	It alerts you to moderate dangers which, if not avoided, may cause minor or moderate injuries.
⚠ CAUTION	It alerts you to risks. Neglect of these risks may cause device damage, data loss, device performance deterioration, or unpredictable results.
NOTE	It provides additional information.

⚠ WARNING

- Strictly observe installation requirements when installing the device. The manufacturer shall not be held responsible for device damage caused by users' non-compliance to these requirements.
- Strictly conform to local electrical safety standards and use power adapters that are marked with the LPS standard when installing and using this device. Otherwise, this device may be damaged.
- Use accessories delivered with this device. The voltage must meet input voltage requirements for this device.
- If this device is installed in places with unsteady voltage, ground this device to discharge high energy such as electrical surges in order to prevent the power supply from burning out.
- When this device is in use, ensure that no water or any liquid flows into the device. If water or liquid unexpectedly flows into the device, immediately power off the device and disconnect all cables (such as power cables and network cables) from this device.
- Do not focus strong light (such as lighted bulbs or sunlight) on this device. Otherwise, the service life of the image sensor may be shortened.
- If this device is installed in places where thunder and lightning frequently occur, ground the device nearby to discharge high energy such as thunder strikes in order to prevent device damage.

⚠ CAUTION

- The normal operating temperature of the camera is 0°C~+50°C(32°F~122°F). Please ensure that the device is used within this ambient temperature range. If you need to measure temperature, please install the device in 0°C~35°C(32℉~95℉) indoor environment without wind to keep accuracy. Use beyond the temperature range may cause abnormal display of the thermal imaging camera image, and long-term work will damage the equipment.
- Avoid heavy loads, intensive shakes, and soaking to prevent damages during transportation and storage. The warranty does not cover any device damage that is caused during secondary packaging and transportation after the original packaging is taken apart.
- If the camera is installed outdoors, user need to build a closed environment to keep the measurement temperature accurately.
- Clean the device with a soft dry cloth. For stubborn dirt, dip the cloth into slight neutral cleanser, gently wipe the dirt with the cloth, and then dry the device.
- Do not jam the ventilation opening. Follow the installation instructions provided in this document when installing the device.
- Keep the device away from heat sources such as radiators, electric heaters, or other heat equipment.
- Keep the device away from moist, dusty, extremely hot or cold places, or places with strong electric radiation.
- Remove the power plug if the device is idle for a long time.
- Before unpacking, check whether the fragile sticker is damaged. If the fragile sticker is damaged, contact customer services or sales personnel. The manufacturer shall not be held responsible for any artificial damage of the fragile sticker.

Special Announcement

- All complete products sold by the manufacturer are delivered along with nameplates, quick setup guide and accessories after strict inspection. The manufacturer shall not be held responsible for counterfeit products.
- The manufacturer will update this manual according to product function enhancement or changes and regularly update the software and hardware described in this manual. Updated information will be added to new versions of this manual without prior notice.
- This manual may contain misprints, technology information which is not accurate enough, or product function and operation description that is slightly inconsistent with the actual product, the final interpretation of company is as a standard.
- This manual is only for reference and does not ensure that the information is totally consistent with the actual product. For consistency, see the actual product.

NOTE

For more information, please refer to website.

1 Open Package Examination

Open the package, check the appearance of the product for no obvious damage, and confirm the item list for table 1-1 and 1-2 are consistent.

Table 1-1 Packing list 1

Component	Quantity	Remark
Face recognition terminal	1	
Power supply DC 12 V 2A	1	
User manual	1	
Bracket	1	Optional
Screws package	1	
Warning labels	2	

Component	Quantity	Remark
Blackbody and bracket	1	
Power adapter (one in two)	1	
Accessories package	1	

2 Device Structure

2.1 Device Ports

NOTE

Different devices may have different ports and multi-head cables, please refer to the actual product.

Figure 2-1 Multi-head cable

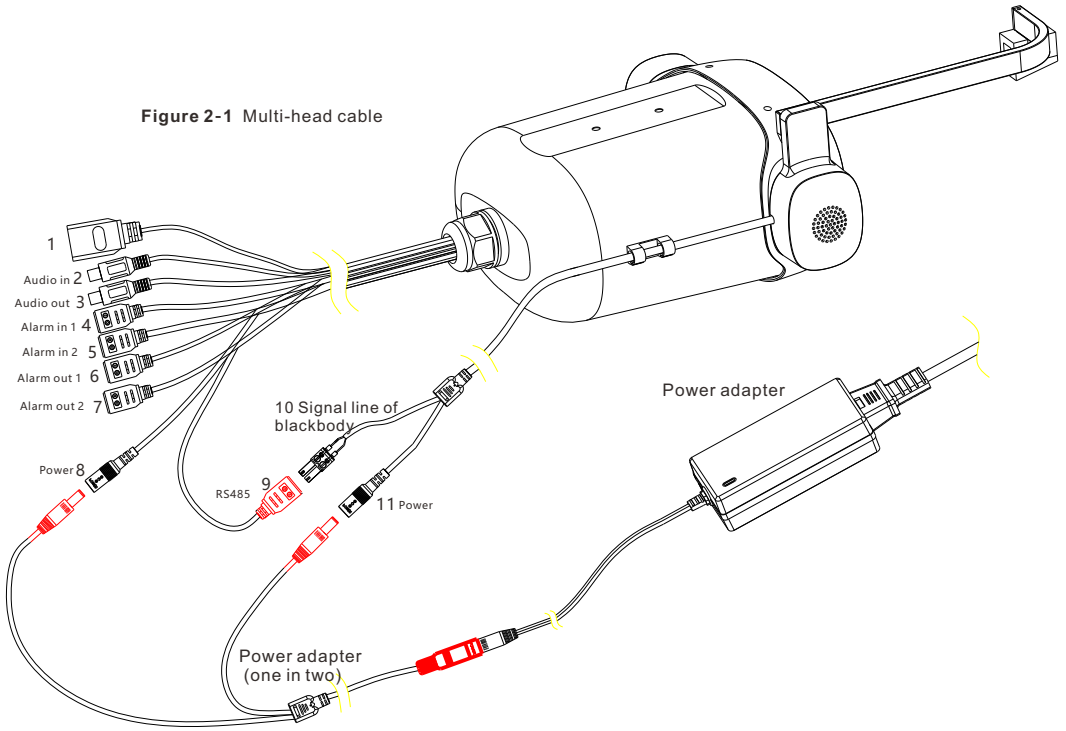


Table 2-1 Multi-head cable description

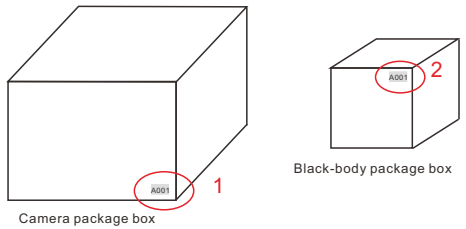
ID	Core	Description	Remark
1	Network port	Connect to Ethernet	
2	Audio in	Connect to an external audio device, such as speaker.	Applied for audio function
3	Audio out	Receives an analog audio signal from devices such as a sound pickup device.	
4	Alarm in 1	Alarm input port 1	Applied for alarm function
5	Alarm in 2	Alarm input port 2	
6	Alarm out 1	Alarm output 1	
7	Alarm out 2	Alarm output 2	
8	Power port of camera	Connect to DC 12V, the power adapter be connect to the one in two line.	
9	RS485	RS485 port, connect to black body signal.	
10	Black body signal	connect to 9 RS485 port, the yellow line plug in +, the white line plug in -.	
11	Power port of black body	Connect to DC 12V, the power adapter be connect to the one in two line.	

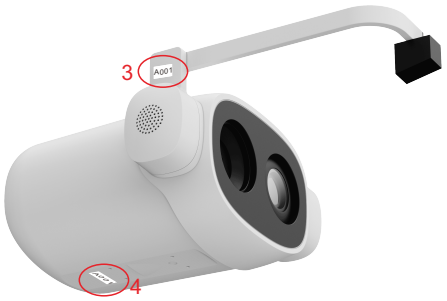
3 Device Installation

3.1 Install Black-body

Step 1Confirm the No. of package box, the NO. of camera and black-body are the same. Take out the camera and black body, confirm the No. label on the bodies are the same as box. As shown in Figure 3-1.

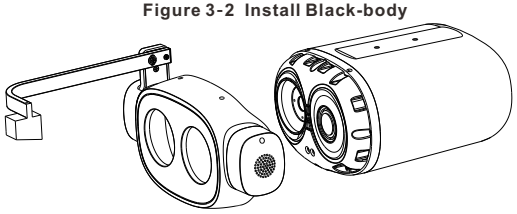
Figure 3-1 Confirm No.





Step 2 Install the black-body as shown in Figure 3-2.

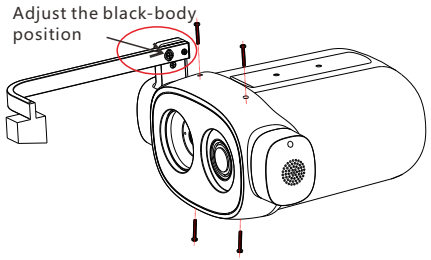
Figure 3-2 Install Black-body



Step 3 Take out the PM 2.5 x 8mm screws, install the screws in holes on above.

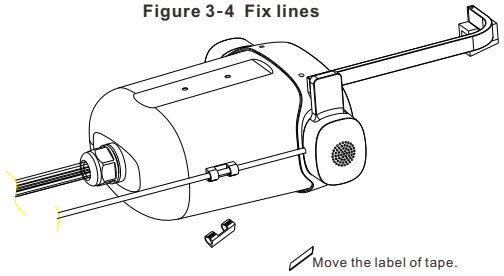
Step 4 Take out the PA 2.6x 10 mm self-screws, install the screws in holes at bottom, as shown in Figure 3-3.

Figure 3-3 Fix Black-body



Step 5 Take out the double-sided tape to stick on the camera to place the lines of black-body, as shown in Figure 3-4.

Figure 3-4 Fix lines

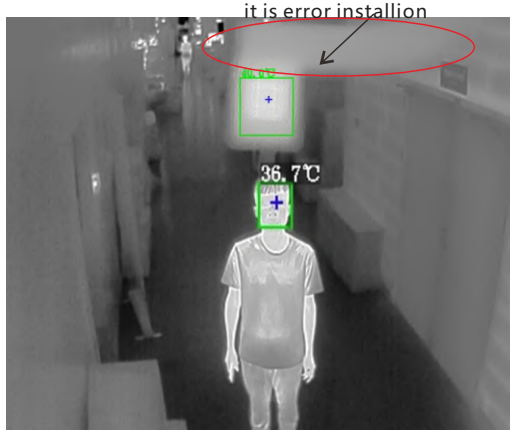


3.2 Install Black-body

Adjust the position of black-body, user need to login the web to show channel 2(thermal channel), the image of black body is quite showing, and the bracket is not showing, as shown in Figure 3-5.

Figure 3-5 Installation of Black-body





3.3 Install camera

There are many modes to install the camera, it depends on environment. The installation modes as the figures showing.

Figure 3-6 Install on the wall

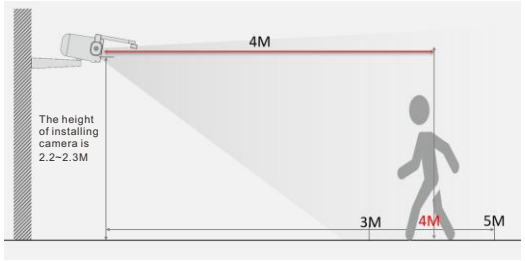


Figure 3-7 Install on the ceiling

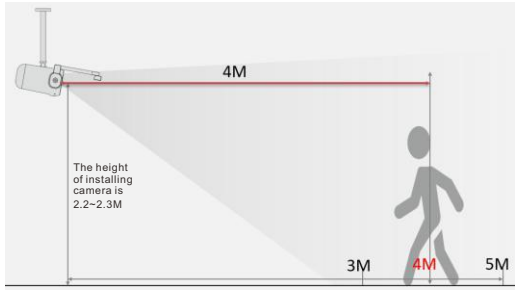
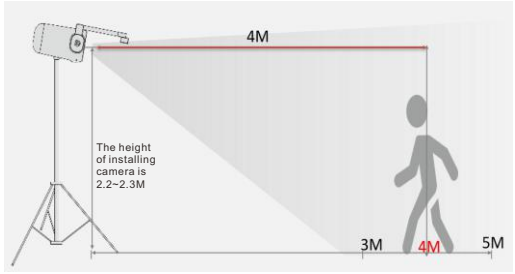


Figure 3-8 Install on the bracket



⚠ CAUTION

The advised height of camera installation is 2.2 to 2.3 meters. Camera should be installed indoor, and there is no wind at ambient, the temperature is 0℃ ~ 35℃ (32℉~95℉) .

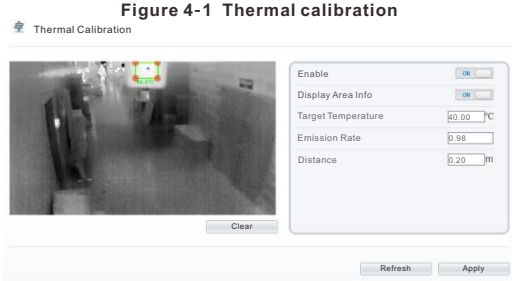
4 Device Installation

At **Configuration > Temperature Measurement interface**, user can set the temperature parameters of measurement, such as parameter configure, ambient temperature, thermal mapping, bad point check, thermal calibration, measure verify.

4.1 Thermal calibration

The camera is carrying the black body, and the temperature is be calibration before leaving the factory. User just need to enable, and draw the black-body frame to use this function, as shown in figure 4-1. Enable the display area info, the live video will show the temperature and frame of black-body.

Figure 4-1 Thermal calibration



4.2 Thermal mapping

Set three point to map images of the thermal channel and visual channel.

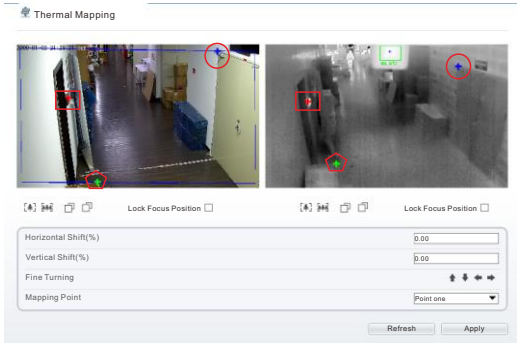
Before set the mapping point, user should adjust the visual channel to make sure two channels are the same view angle.

Choose the point, click the locations at both channels.

Repeat upper step three times to set three points(point 1 is green, point 2 is red, point 3 is blue). The points should be distribute widespread, as shown in figure 4-2

If there are a little deviation between two frames, you can click fine turning to adjust the frame position. Or input the value to adjust horizontal shift and vertical shift.

Figure 4-2 Thermal mapping



⚠ CAUTION

The images have been calibrated before leaving the factory and can be used directly. If the face detection frame deviated on the face, it needs to be re-calibrated.