

About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (<http://www.hikvision.com>).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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**Black Body
User Manual**

Symbol Convention

The symbols that may be found in this document are defined as follows.

Symbol	Description
NOTE	Provides additional information to emphasize or supplement important points of the main text.
WARNING	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
DANGER	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

Safety Instructions

WARNING

- Input voltage should be from 100 VAC to 240 VAC, 50 Hz/60 Hz.
- Check if power or accessory is damaged before use.
- Please use the supplied cable.
- DO NOT charge the device or operate the device with wet hands.
- DO NOT touch the radiation surface to avoid the scratch to influence the accuracy of temperature measurement.
- The working status of black body has been tested and debugged. DO NOT change the parameters on the temperature control panel, or it may lead to device exception.
- DO NOT aim the device at sun, and protect it from wind during on-site calibration.

DANGER

- Keep the camera away from liquid to avoid damage or danger.
- DO NOT cover the ventilation holes while in use.

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1. Function

- It is specially designed for calibrating temperature detection thermal device and thermal inspection device in various sizes.
- Excellent temperature uniformity, accuracy, and stability of calibration.
- Adopts intelligent temperature controller and has high temperature control accuracy.
- Good performance and favorable price compared with similar products.

NOTE

This device is not for medical use.

2. Appearance and Panel Introduction

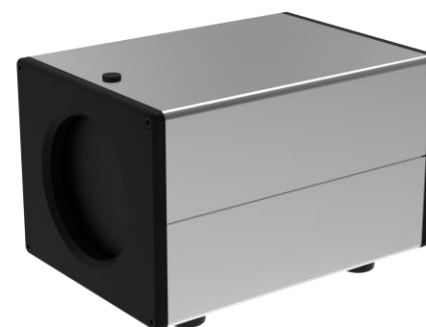


Figure 1-1 Device Appearance

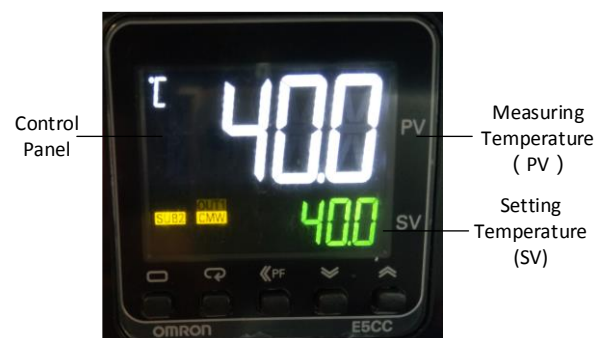


Figure 1-2 Temperature Controller

3. Technical Data

Parameter	Value
Temperature Range	Adjustable: environment temperature+5 °C (9 °F), up to 50°C (122 °F)
Effective Radiating Area	Φ 70 mm (2.76")
Temperature Resolution	0.1 °C (0.18 °F)
Temperature Accuracy	± 0.1 °C (0.18 °F)
Temperature Stability	± 0.1 °C/h
Effective Emissivity	0.97 ± 0.02
Power Consumption	20 W
Environment Temperature	0 °C to 35°C (32 °F to 95 °F)
Weight	1.85 Kg (4.08 lb)
Dimension	120 mm × 176.6 mm × 119.6 mm (4.72" × 6.95" × 4.71")
Power	100 VAC to 240 VAC
Mounting	Mounting on a plane desk or a tripod with 1/4-20UNC Interface or a ceiling mount bracket with 1/4-20UNC Interface

4. Mounting

1. Check the power supply. The working voltage should be 100 VAC-240 VAC, 35 W.
2. Check if the desk is horizontal.
3. Mount the device on the desk or a tripod in front of the thermal camera firmly. Make sure that the front of black body can show in the live view of thermal camera completely, and outside the temperature measurement area.
4. Switch on the device, and the power indicator is on. The factory default setting temperature is 40 °C.

5. Operation

1. Connect the black body with a 10 A socket via the power cable.
2. Switch on the device, and the power indicator is on. The factory default setting temperature is 40 °C.
3. Wait for 30 minutes after switching on device. You can calibrate the thermal camera when the temperature is stable at 40 °C.
4. Switch off the black body and store it after use.

6. Maintenance

1. The black body should be managed and maintained by professional person, and maintenance and usage should be recorded.
2. DO NOT use the device in an environment with oil or chemical air.
3. To ensure the temperature accuracy, place the device firmly in the environment with stable temperature. The recommended using environment temperature is 10 °C to 25 °C (50 °F to 77 °F)
4. Power off the device before mounting or removing it.
5. Clean the surface of device with a neutral detergent. Clean the dust on the black body with a soft brush.
6. Store the device in the packing box after use to prevent dust. Make sure the environment temperature is suitable.
7. DO NOT dismantle the device without authorization. Contact the professional specialist for repairing.
8. To ensure the temperature accuracy, it is recommended to calibrate the black body once a year. Please send the device to qualified calibration institute.

