

# Safety Instructions

## Warning

A warning indicates a situation that may cause harm to the user. To avoid personal injury or instrument damage, please follow the following instructions:

Make sure the place is free of oil and chemicals, no inflammable and explosive articles!

Working environment is 0°C~ 40°C, do not put into high and low temperature box without permission, to avoid accidents!

Must use an earthing socket in case of accidental electric shock!

Blackbody cannot be used for applications other than temperature testing and calibration!

Do not change the blackbody range without permission, in case of damage to the blackbody or cause safety accidents!

Do not remove or modify blackbody without permission! The product is not guaranteed if the label is torn or damaged.

## Caution

To avoid damaging the instrument or affecting the measurement accuracy, please follow the following instructions:

Do not touch the radiant surface of blackbody to avoid scratches on the radiant surface of blackbody and affect the temperature measurement accuracy.

Indoor use only. There should be no obvious air convection and strong light irradiation, no strong electromagnetic interference Human temperature measurement blackbody and vibration.

It is necessary to reserve heat dissipation space and keep at least 10cm away from surrounding objects.

**Safety life:** the safety of blackbody can not be guaranteed after five years from the date of purchase (no matter whether the product is used within five years or not). Beyond this service life, the components may appear aging and failure. In order to ensure the efficiency of blackbody operation and the safety of electricity consumption, it is recommended that users repurchase or scrap blackbody beyond the safe service life.

## 1. Product overview and features

Human temperature measurement blackbody (Hereinafter referred to as blackbody). Product features are as follows:

The imported intelligent temperature control meter is used to control the temperature with high precision and good stability.

The target surface is coated with high emissivity aviation coatings.

Compared with the same type of products, cost-effective.

## 2. Product pictures



## 3. Parameters

Model	NXHT30
Temperature Range	30°C~45°C
Control Mode	PID Auto Control
Temperature Resolution	0.1°C
Effective Radiant Surface	80mm × 80mm
Cavity Emissivity	0.97 ± 0.2
Temperature Stability	± (0.1-0.2) °C/30min
Temperature Uniformity	± 0.2°C
Power Supply	220V AC 50Hz
Power Consumption	Maximum when power on: 40W, rated power: 25W
Volume(L×W×H)	24CM×15CM×16CM
Work Environment	Temperature: 0~30°C , Humidity: ≤60%
Weight	2.05Kg

## 4. User Manual

### 1. Power on

Connect the power cable to blackbody, and then connect to power supply.

### 2. Boot up

Press toggle button, “**I**” is on, “**O**” is off.

### 3. Set Temperature

The factory default setting temperature is "40°C", the user does not need to modify the temperature for field application. Heat up button is “ $\hat{\wedge}$ ” and heat down button is “ $\hat{\vee}$ ”. When the temperature needs to be set, press "heat up" or "cool down" directly to raise or lower to the required temperature, and the temperature will be saved automatically. (PV means present value, SV means setting value).



Temperature setting area

## 5. Temperature Correction Steps of Blackbody

### 1. Set Temperature

Power on blackbody, it will show as Figure 1 after heating.



Figure 1

### 2. Press the red circled button in Figure 2 until it shows as Figure 3.



Figure 2



Figure 3

### 3. If you want to increase the actual temperature by 1 degree, press the red circled button in Figure 4 to decrease by 1 degree, and the interface in Figure 5 will appear.



Figure 4



Figure 5

Note: Figure 4 shows -0.5. Each actual product may be different. There are 0.4, 0.5, 0.8 and other numbers. No matter how many are shown here, it doesn't matter. If you want to increase the actual temperature, you can reduce it. (if 0.8 is shown, add 1 degree to the actual temperature, and then reduce 0.8 to - 0.2).

Add as much as you want to reduce the actual temperature. The add button is the rightmost button.

4. After the above steps are completed, press the red circled button 5 times in the figure 6 below to finish.



Figure 6