

## How to optimize the temperature accuracy

### Purpose

When thermal's temperature displays not so accurate (temperature accuracy beyond  $\pm 8^{\circ}\text{C}$ ), it needs you choose three points to detect again. Then temperature measurement will work well.

### Preparation

1. Thermal Imaging Temperature Measurement Tool .



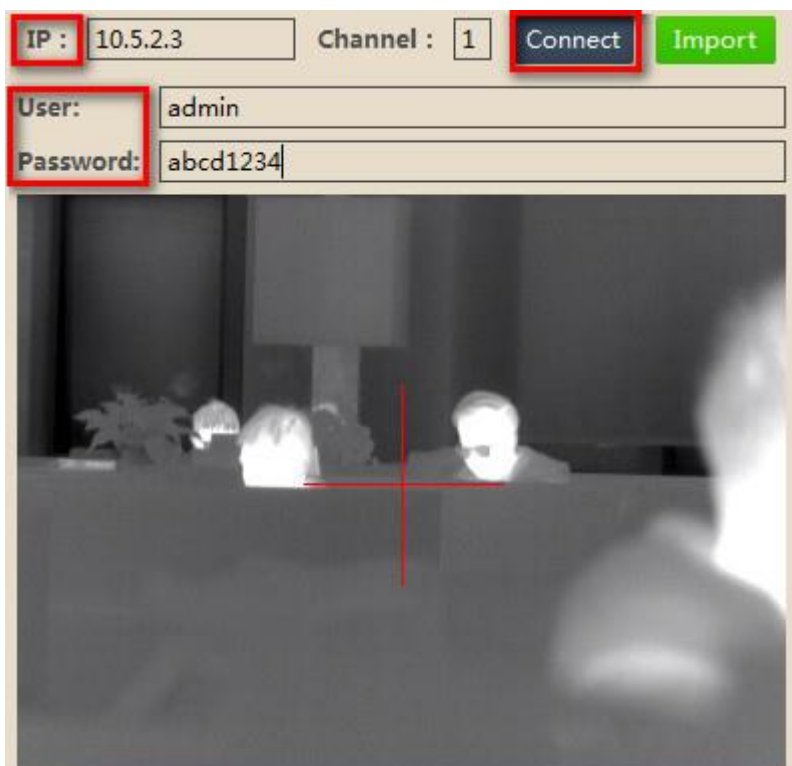
2. Thermal camera.

#### Note:

1. Tool can be found on FTP.  
The path: /17 Thermal/Product support/04 Tool/
2. We advise that place the tool to the desktop, because when file path is too long will cause the failure of calibration.
3. It need operates device after running for about one hour.

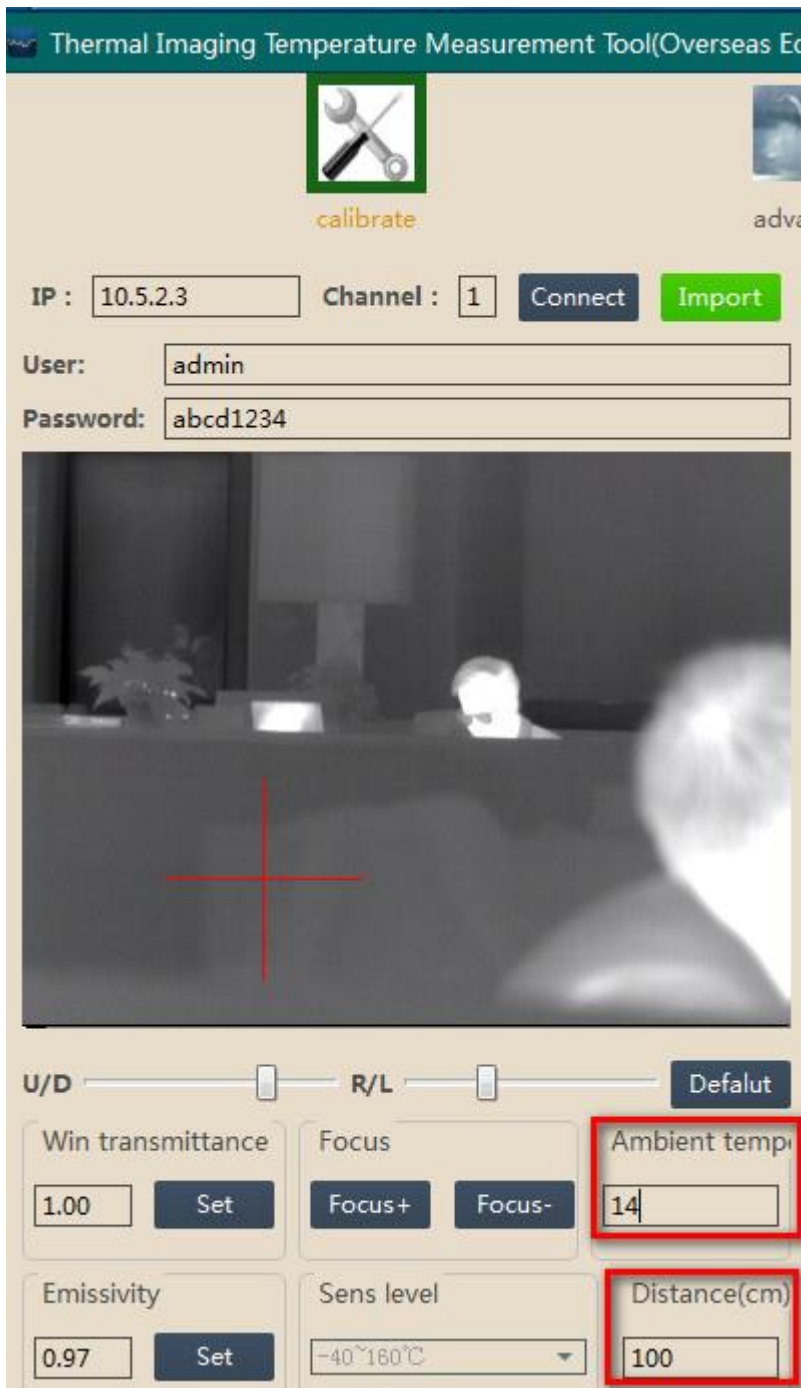
### Steps:

1. Enter the IP, User and Password, click the button of Connect.



2. Find the **ambient temperature ( $^{\circ}\text{C}$ ) and distance (cm)**, fill in the data by according to actual value. The distance means straight-line distance between the

high temperature target and the device.



**Note:**

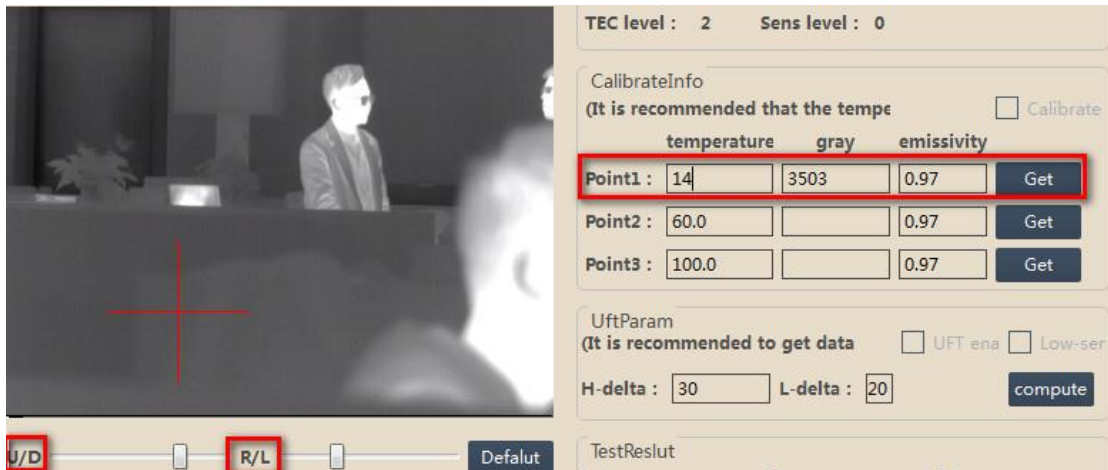
All thermal cameras have the fixed minimum focus distance. When you enter the distance, please pay attention to this for the image clarity. This parameter can be found in the spec of the thermal camera.

3. Select three points (low temperature target, medium temperature target, high temperature target) in the live view one by one.

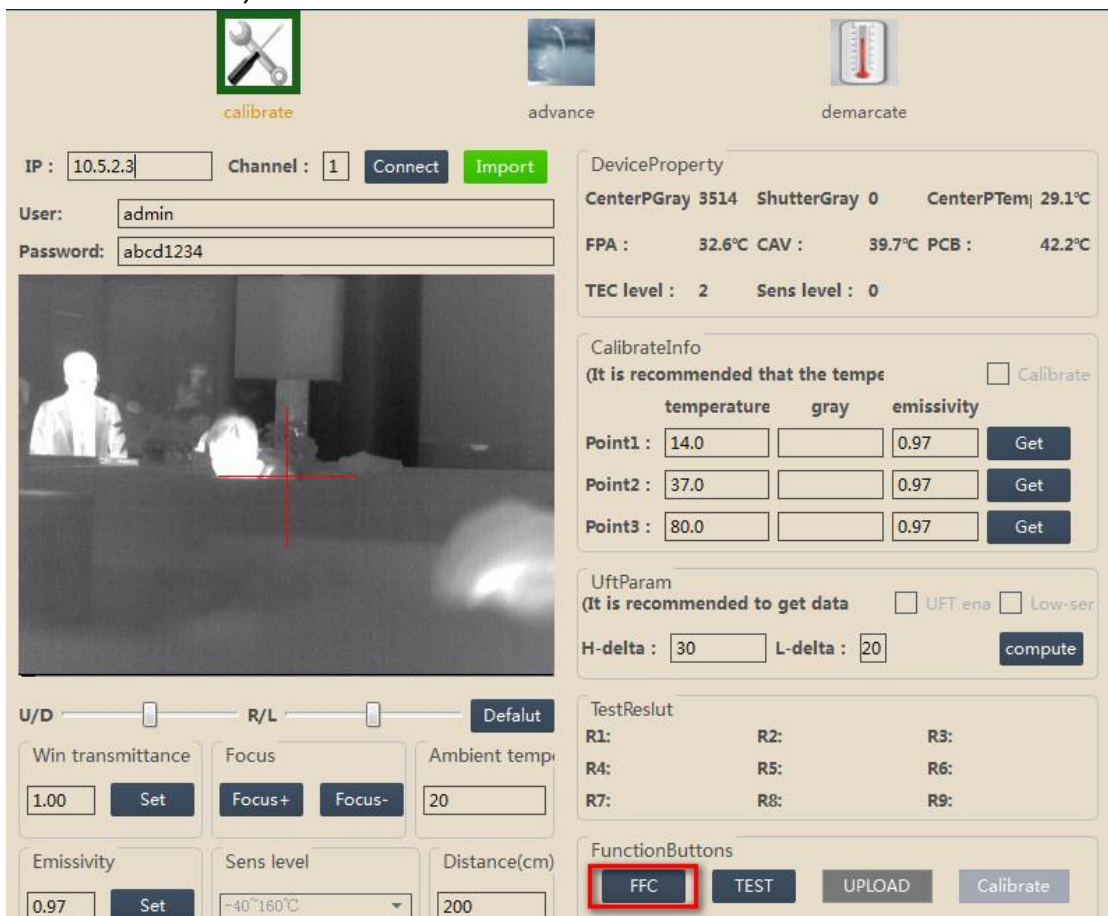
**Note:**

1. Three target's distance and emissivity needs not too much difference.

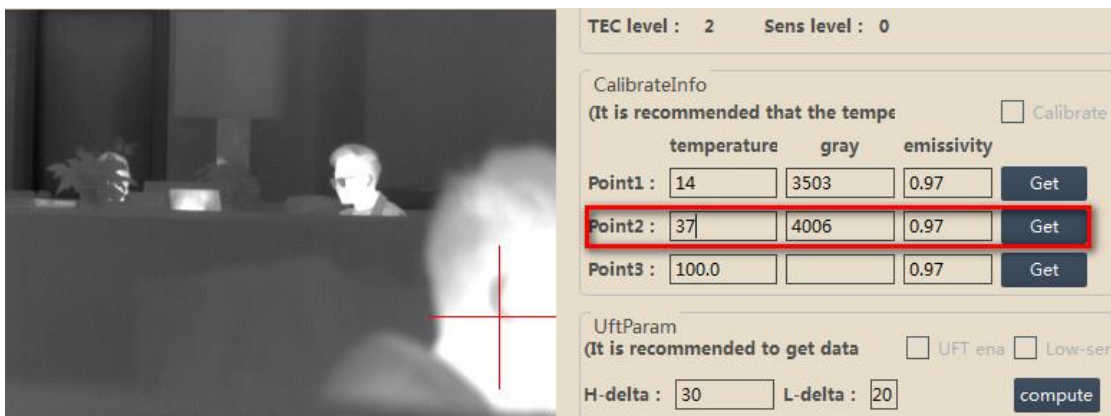
2. Make sure point is not selected on the glass or iron. Because this object's emissivity is much different from most other object.
  
4. Point1(Indoor environment temperature:14°C)  
 Select the point by dragging the **U/D** and **R/L** to create a fixed point.  
 Set the point1's temperature and emissivity.



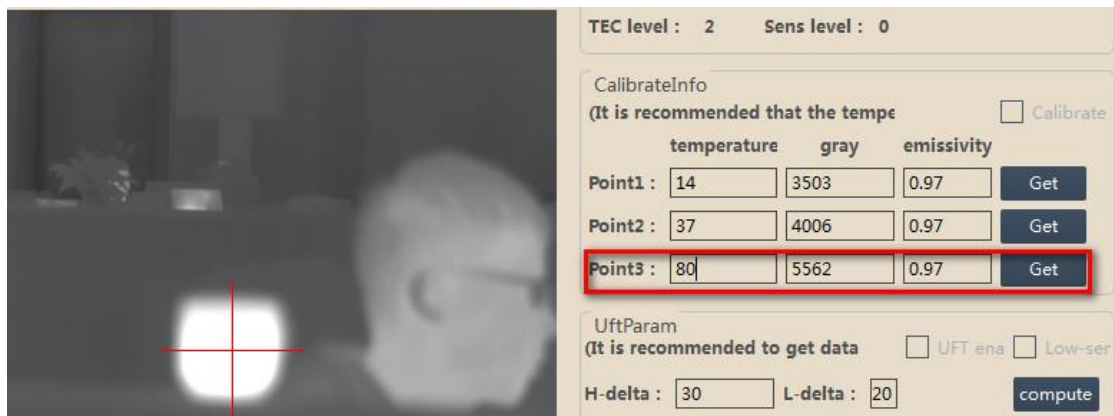
Before clicking the Get button to obtain the value of gray, you need to click FFC button first. If the time interval of three points is during 1 min, it only needs click FFC just once. If not, it needs click FFC one by one.



- Point2 (Body's temperature:37 °C)  
Operation is the same as point1.



- Point3(hot water:80°C)  
Operation is the same as point1.



- Finally click Calibrate button, double check the value of Ambient temperature and Distance.



If data are all correct, click Yes, you will see" upload file succeeded".

- Login the thermal by IE, check the temperature again.

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