

Smart Mobile Phone Thermal Imager

User Manual

HT-301



Version No. V1.0

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Table of Content

1. Considerations	1
2. Product overview	1
2.1. Application scene	1
2.2. Main functions	1
3. Software installation	2
4. Product use	2
4.1. Equipment connection	2
4.2 Software operation	3
4.2.1 Gallery, camera and recording	3
4.2.2 Shutter	3
4.2.3 Temperature measurement analysis	4
4.2.4 Color palette	5
4.2.5 Temperature measurements setting	7
4.2.8 Other settings	8
5. Technical parameters	9

1. Considerations:

In order to protect you and other people from injury or your equipment from damage, please read all the following information before you use your equipment.

1. Don't let the product in direct sunlight or other sources of radiation with high intensity.
2. Don't touch or collide the detector window or the lens with hands or other articles.
3. Don't touch the equipment or USB interface with wet hands.
- 5). Please don't use thinner to wipe your equipment.
6. Please note to prevent static.
7. Don't dismantle the equipment. Or there is any failure, please contact our company to repair it by professionals.

2. Product overview

2.1. Application scene

To use HT-301 smart mobile phone thermal imager, it is necessary for your mobile phone to download and install Android mobile phone software for thermal imager and achieve infrared observation and infrared temperature measurement function through the software.

2.2. Main functions: the following functions are achieved mainly.

- (1). Open the application software of infrared thermal imager to conduct infrared observation.
- (2) Conduct infrared temperature measurement and temperature analysis.
- (3) Take photos and picture recording
- (4) Action control and parameter setting of mobile phone thermal imager.

3. Software installation

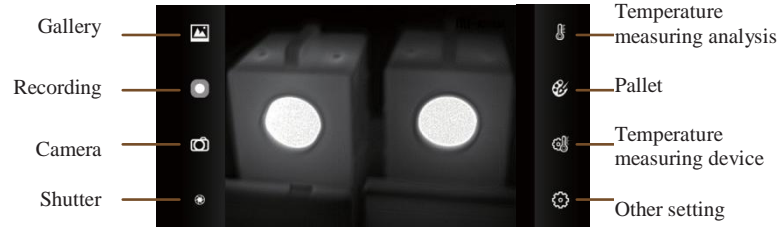
Scan the following two-dimensional code to download application software and install it.

4. Product use

4.1. Equipment connection: insert the infrared thermal imager into USB interface of the mobile phone and it will identify USB equipment automatically and pop out the prompt. Click “OK” and the software will start the mobile phone thermal imager and the mobile phone screen enters the infrared observation picture.



4.2 Software operation



4.2.1 Gallery, camera and recording


(1). Gallery: Click to check the photos and videos stored in the mobile phone photo album.

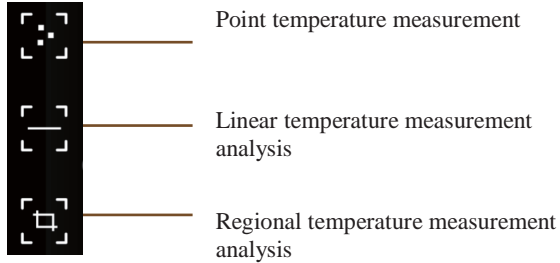
2) Camera: Save the current picture and the photo position is: Internal memory /DCIM/Htilmage.

3. Recording: Click to begin the recording and click again to end the recording. The recording position is: Internal memory /DCIM/Htilmage.

4.2.2 Shutter: click the shutter button to carry out heterogeneity correction.

4.2.3 Temperature measurement analysis

Click  button to pop out option of temperature measurement.



Temperature measurement option

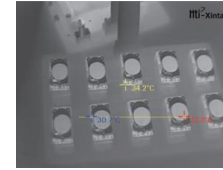
1). Point temperature measurement: Click the point temperature measurement button and the picture will display temperature information of three points, i.e., the core temperature point, highest temperature point, lowest temperature point. At the moment, click the screen and the temperature information of self-defined points will be added.

2). Linear temperature measurement analysis: Use fingers to drag and draw horizontal line on the screen and it will make analysis for the highest and lowest temperature on the horizontal line and mark relevant information.




Linear temperature measurement analysis

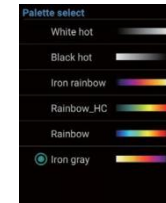
3). Regional temperature measurement analysis : Use fingers to drag and draw rectangle on the screen and it will make analysis for the highest and lowest temperature in the rectangular area and identify relevant information as the following diagram:



Regional temperature measurement analysis

4.2.4 Color palette

Click  button to pop out the pallet interface and you may switch among 6 types of pallets.



Palette menu

The display effect of 6 types of pallets is as follows:



White hot



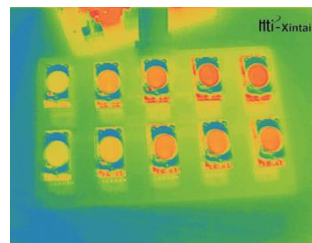
Black hot



Iron rainbow



Rainbow_HC




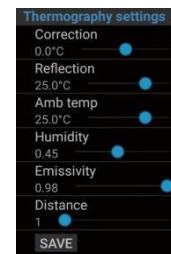
Rainbow



Iron gray


4.2.5 Temperature measurements setting

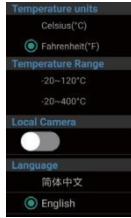
Click “” button to pop out temperature measurement setting interface.



- 1) Correction: Correct the error of temperature measurement;
- 2) Reflection: The temperature of surrounding objects reflected on the target object.
- 3) Amb temp: The environmental temperature of the target object;
- 4) Humidity: The atmospheric temperature of the target object;
- 5) Emissivity: Emissivity of the target object;
- 6) Distance: The distance between the thermal infrared imager and target object.

4.2.6 Other settings

Click the “” button to pop out the setting interface



- 1) Temperature units: Select Fahrenheit degree or degree centigrade;
- 2) Temperature Range: The infrared thermal imager supports two temperature measurement scopes of -20°C-120°C and -20°C-400°C
- 3) Local Camera: you may select to open and close the mobile phone camera;
- 4) Language: select Chinese or English