

MOBILE PHONE INFRARED THERMAL IMAGER

PT210A/YXP96A USER MANUAL



Android Enable OTG before use!

Download method 1: Scan the QR code.
Download Method 2: Google Play/iOS
/Android Search for 'IR heat map' in the
app store.



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01/Precautions

To protect you and others or your device from injury or damage, please read all followings before start to use your device.

- (1) Don't exposure the device directly close to the high intensity radiation source such as the sun;
- (2) Don't use your hand or other thing to touch detector window or lens;
- (3) Don't touch the device or USB port with wet hand;

- (4) Don't use thinner cleaning the device;
- (5) Stay away from static electricity;
- (6) Don't disassemble the device and please contact the manufacturer if there is any failure.

02/Product introduction

2.1 Overview

PT210A&YXP96A (hereinafter referred to as "thermal imager") is a portable smart phone thermal imager, via the smart phone APP to measure temperature, night vision, take photo, video recording, etc.; Simple and easy to use the APP interface, and clear thermal imaging make your vision without limitation. It's really a all-round assistant for your daily working and life and venture and traveling.

2.2 Main functions

- (1) Thermal watching and temperature measurement;
- (2) Photo & video;
- (3) Picture effect & temperature parameter setting.

03/Parameter

Model	YXP96A	PT210A
Infrared		
Detector type	Vox	
Infrared image resolution	96×96	256×192
TISR	192×192	512×384
Pixel spacing	12μm	
Focal length	1.35mm	3.5mm
Focusing mode	fixed focal	
Field angle	56.8° (H) × 56.8° (V)	50° (H) × 37.2° (V)
IFOV	8.89mrad	3.43mrad
Working band	8~14μm	
NETD	≤60mK (@25℃, F#1.0)	≤40mK (@25℃, F#1.0)
Image frame rate	25Hz	
language	简体中文/繁体中文/English/Русский язык/日本語/Deutsch/Français/Italiano/한국어/język polski	
Temp measure		
Temp range	Normal temp:-20~150℃; Auto:-20~550℃; High temp:100~550℃	
Temp accuracy	± 2 ℃ and 2% of the reading; take the maximum value	
Distance	0.3~1.5m	0.3~3m
Temp Measure mode	Industrial temperature measurement	
Working/storage temperature		
Working temp	-10~50℃	
Storage temp	-20~60℃	
Other parameter		
Product interface	Type-C USB	
Power consumption	≤0.2W	≤0.38W
Support system	Android 8.0+/iOS 12+	
Product size	50×30×12mm	
Product weight	25g	
Accessories	Macro lens (optional)	

04/Connection guidance

4.1 Preparation before connection

- (1) This product supports mobile devices running Android 8.0+ and iOS 12+ operating systems;
- (2) Users need to enable the OTG function in advance(Android): Settings → More Connections → OTG switch (the path may vary for different phone models);
- (3) Environmental requirements: Ensure that the phone battery level is greater than 20%; Avoid environments with high temperatures, humidity, or strong magnetic fields.

4.2 Connection steps

- (1) After the APP is successfully installed, the first time you open the APP, you need to authorize the APP's access permissions: select "Allow when using the APP (there may be differences in the description of the pop-up window on each phone)";
- (2) Insert the "infrared thermal imaging device" vertically into the phone interface (note: do not forcefully tilt or shake it to avoid damaging the interface);
- (3) When the mobile phone and app first recognize the "infrared thermal imaging device", a pop-up window will appear: authorize the application to access the device, click "confirm" to authorize;
- (4) After the authorized application successfully accesses the device, the APP automatically recognizes and connects to the device, and displays the device connection status on the APP homepage as "Connected"; If the device is not displayed on the APP homepage, please try unplugging the device again.

4.3 Common problem troubleshooting

Question 1: The APP prompts "Please insert your device into the USB port of your phone".
Confirm whether OTG is turned on and clean the dust on the phone interface(Android).

Question 2: Screen stuttering/black screen.

- (1) Close other apps that occupy the camera;
- (2) Restart the app and unplug the plugin again.

4.4 Security Warning

The following operations are strictly prohibited:

- (1) Forcefully bend the plug or interface;
- (2) Used in high temperature (>60 °C) or flammable environments;
- (3) Expose the plugin to water or conductive dust environment.

05/Common material emissivity

Material	Emissivity
Wet dusty	0.95
Glass	0.94
Red brick	0.95
Skin	0.98
Water surface	0.95
White paper	0.93
Black cloth	0.98
Wood	0.87

06/Service

Thank you for choosing us! To ensure you have full support and service after sales, please read this product warranty card carefully and save it.

(1) The warranty period of this product is one year:the date of purchase is subject to the invoice date of the purchase of the product. If there is no valid invoice, the warranty period will be calculated from the date the product leaves the factory. The invoice date of the product is later than the actual delivery date of the product, and the warranty period starts from the actual delivery date of the product.

(2) No warranty coverage as follows:

- ① Out of the specified warranty period;
 - ② Can not show the product valid warranty certificate and valid original purchase invoice or receipt, the original serial number label of the product has been altered, replaced, torn phenomenon, the product has no serial number or the product model or number on the warranty certificate is not consistent with the physical product;
 - ③ Failure or damage to the product due to misuse, accident, modification, inappropriate physical or operational conditions, natural disasters, power surges and improper maintenance or storage is not covered by the warranty;
 - ④ Failure or damage to the device caused by third-party software, services, or actions;
 - ⑤ Normal decolorization, aging, bruising and scratches of the surface shell during the use of the product;
 - ⑥ The product can be operated without interruption or error;
 - ⑦ Consumed parts, except for failures caused by defects in materials or workmanship;
 - ⑧ Failure to use the product in accordance with the right user manual, or failure to use the product for the intended function or environment, any other violation of the user manual determined by the company after verification.
- (3) The company is not responsible for any additional commitments made to you by the Seller or any third party, and you should demand fulfillment from such third parties.**

Product Warranty Card

Customer name: _____ TEL: _____

Customer address: _____

Product name: _____ Model#: _____

Product (S/N): _____

Purchase date: _____

Seller: _____ TEL: _____

Warranty content: _____

After sales service: _____

Customer signature: _____ ☐ Satisfaction ☐ Dissatisfaction

Note: This warranty card is only applicable to the products in this warranty card and is valid only after being stamped by the seller.