TOPDON®



TC001 Max

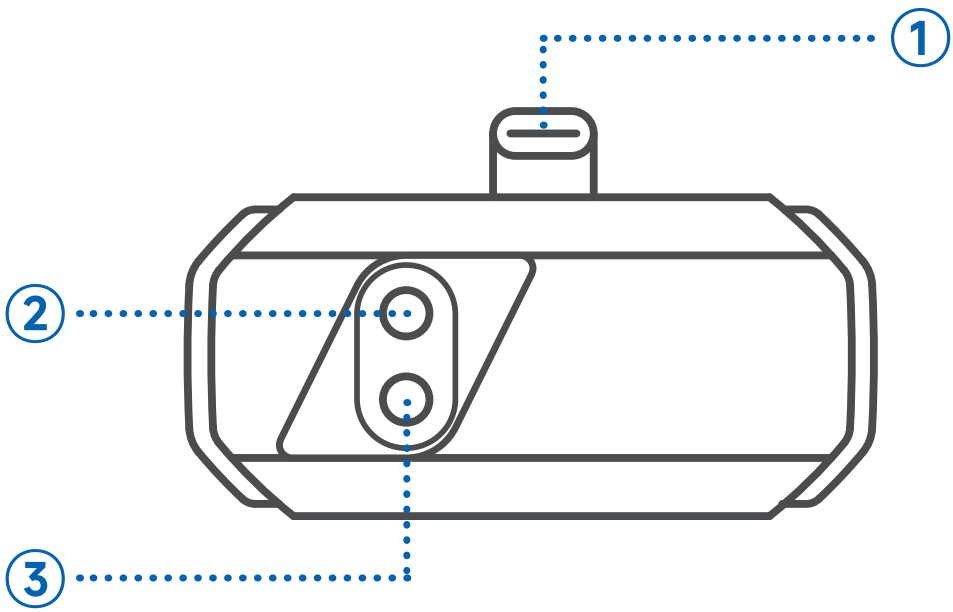
Thermal Camera for Smartphones | User Manual

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1. Product Overview

Thank you for buying TC001 Max, a portable camera that can turn your smartphone, tablet or Windows laptop into a powerful thermal imager.



① USB-C Connector
② Visible Light Lens
③ Infrared Lens

2. Caution and Notice

CAREFULLY READ AND MAKE SURE YOU FULLY UNDERSTAND ALL THE SAFETY INSTRUCTIONS AND MESSAGES ON THIS MANUAL BEFORE OPERATING.

2.1. Safety Information

- Do not point the infrared camera at the sun or other strong energy sources for long periods of time. This may cause damage to the detector in the camera.
- Keep the unit away from water to avoid leakage or short circuit.
- Do not touch the lens with your hands. Do not knock, pry, puncture, or scratch the lens.
- Do not disassemble the unit.

2.2. Notice to User

- The device is designed to measure surface temperatures but cannot detect heat through transparent materials like glass, acrylic, or water, nor through opaque objects.
- To reduce errors and interference and achieve accurate results, avoid measuring in direct strong light or near reflective surfaces, like glass.
- Extended expose to high-temperature sources may reduce image quality. To address this issue, tap **Image Calibration** under **Learn More** and follow the on-screen instructions.

3. Operating Instructions

TC001 Max can be used with a mobile device or a Windows computer. This section presents the usage introduction in these two modes.

3.1. Using TC001 Max with a Mobile Device

1. Download the Topinfrared application from your preferred app store, and then install it on your phone. Alternatively, you can go to www.topdon.com/products/TC001-Max, and enter the **Download** page to install the application.

2. Launch the **Topinfrared** application.

3. Connect the TC001 Max camera to your mobile device directly via the USB-C connector or using the supplied multifunctional adapter cable.

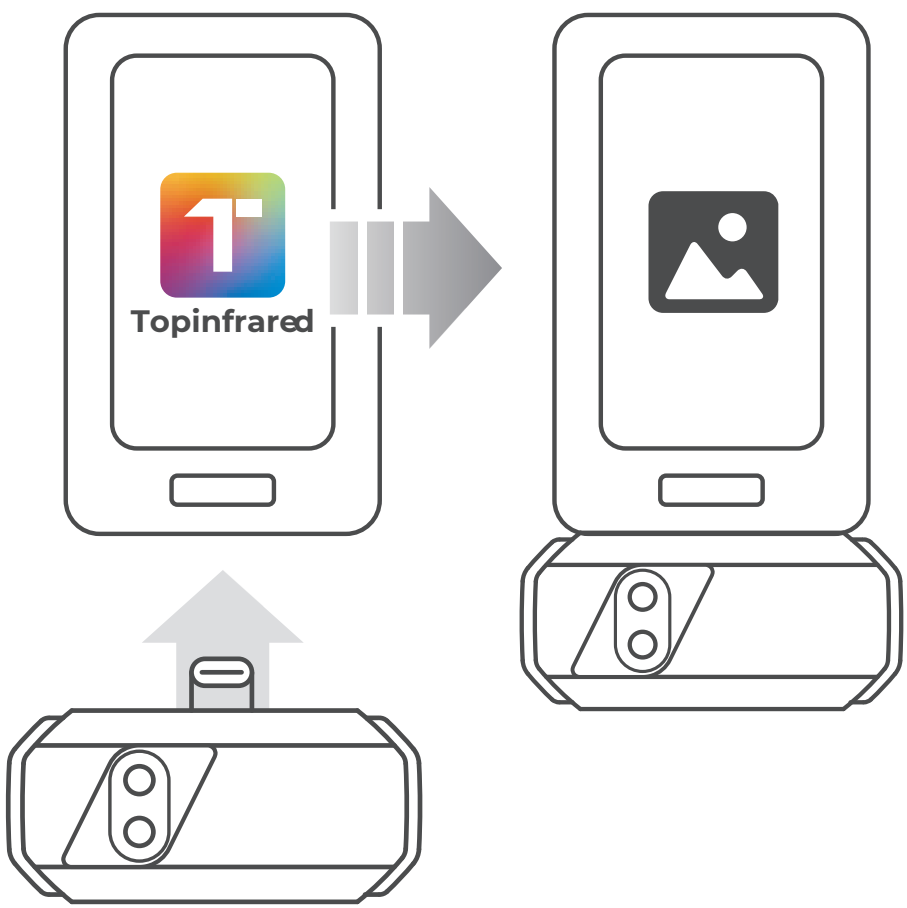


Figure 3.1.1

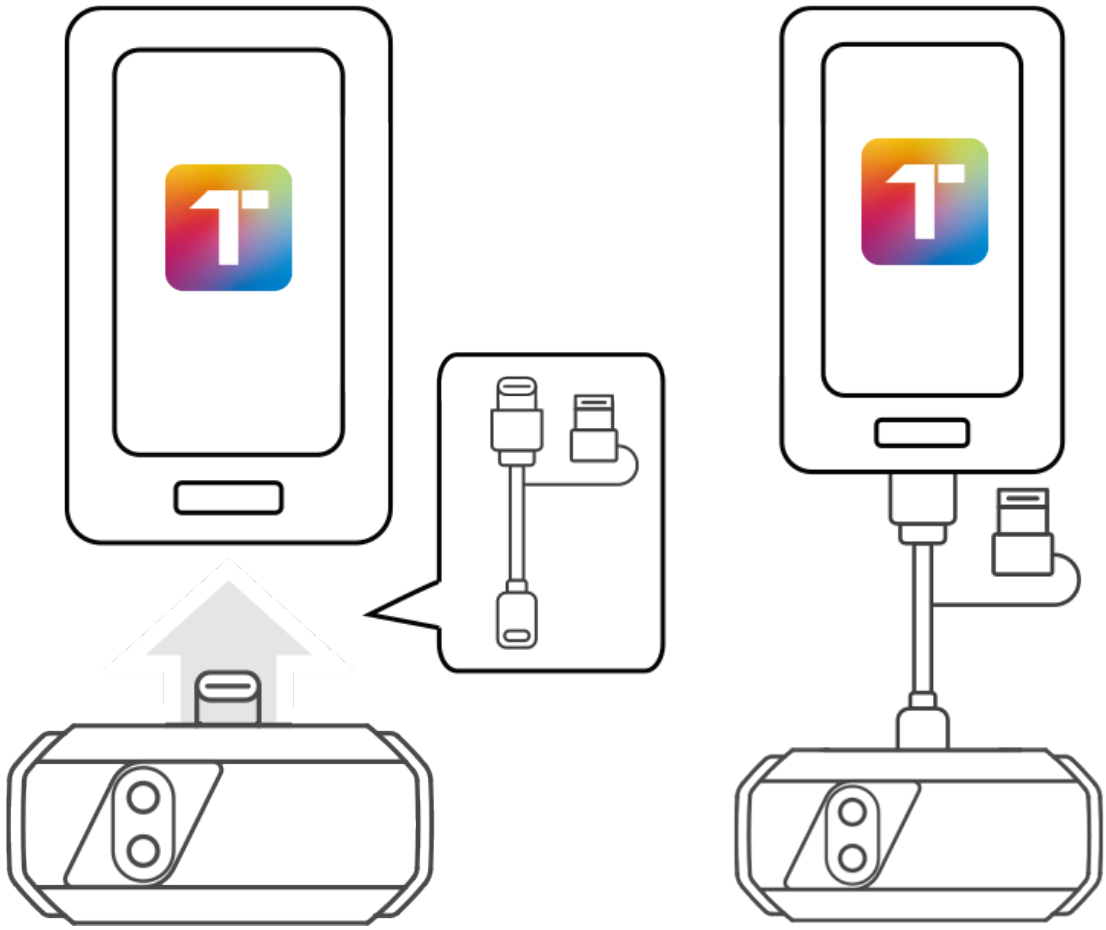


Figure 3.1.2

4. The onboarding of the Topinfrared will guide you and help you setup the permissions for the application.

5. For detailed instructions on operating TC001 Max with a mobile device, please refer to the user manual of Topinfrared by going to **Me > e-Manual**.

3.2. Using TC001 Max with a Computer

1. Download the software TopView from the website www.topdon.com/products/TC001-Max, and enter the **Download** page to install it or by scanning the QR code below.

2. Connect the TC001 Max camera to a Windows-based computer using the supplied adapter cable (see figure 3.2.1).

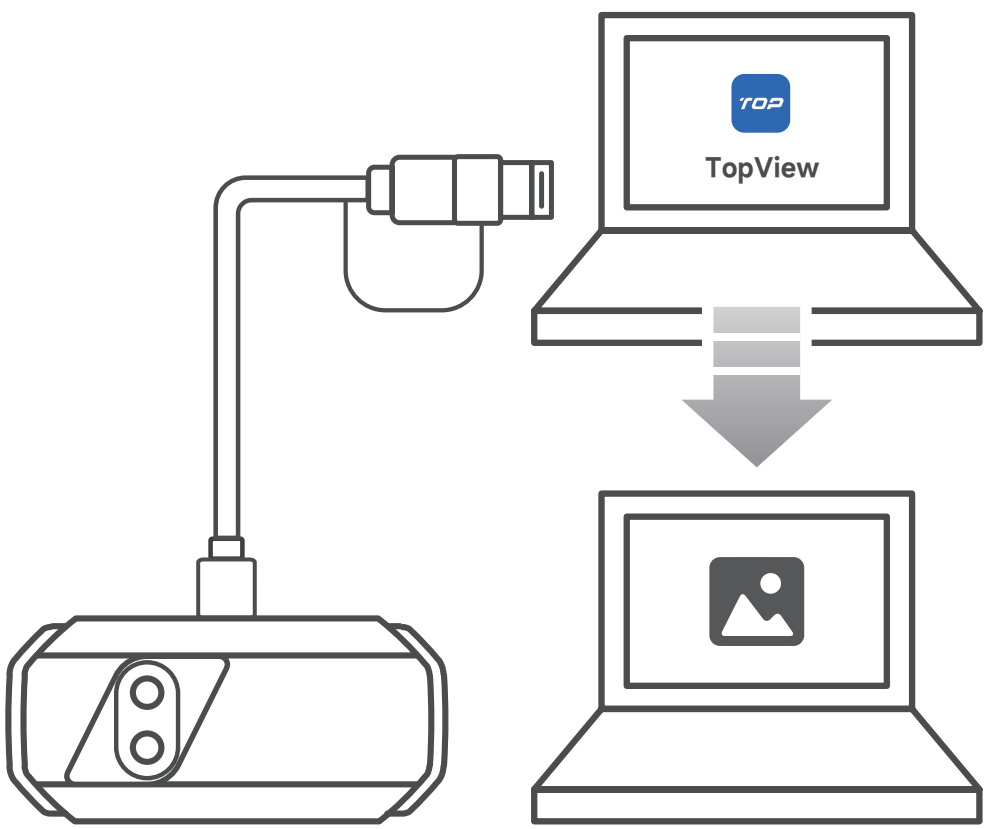


Figure 3.2.1

3. Launch the software, and you can conduct thermal analysis.

4. For detailed instructions on operating TC001 Max with a Windows-based computer, please refer to the TopView user manual by clicking the settings icon located in the bottom-left corner of the home screen.

4. Specifications

Camera Resolution	256 × 192 pixels
Visible Light Lens Resolution	1.5 MP
Thermal Image Super Resolution (TISR)	Supported
Spectral Range	8~14 μm
Pixel Size	12 μm
NETD	≤ 40 mK
Frame Rate	25 Hz
Object Temperature Range	-20° C~550° C (-4° F~1022° F)
Accuracy	±2° C or ±2% of reading, the larger value shall prevail
Resolution	0.1° C
Compatible Systems	iOS, Android and Windows
FOV	56° × 42°
IFOV	3.75 mrad

5. FAQ

Q: What should I do if my device fails to display a thermal image?

A: Please follow the steps below for troubleshooting. If none of them work, the module may be faulty — in that case, please contact our after-sales team.

- If you are using an Android 10 device, be sure to download the specifically developed app for Android 10.0 from our official website.
- Make sure that you have closed any other apps that might be accessing the connected camera via the USB port, such as other thermal imaging apps or video capture tools.
- Go to your smartphone settings, search for “OTG”, and ensure it is turned on.
- After launching the app, grant all necessary permissions, including USB access and storage.
- Try connecting the device to a different phone or laptop to check if the thermal image can be displayed properly.

Q: Why does my TC001 Max occasionally make a clicking sound and the image freeze briefly?

A: This is a normal occurrence caused by the infrared camera automatically hitting the shutter. During the imaging process, the absorbed scattered infrared light forms an abnormal heat source, causing the image to slowly become blurred. In such cases, refreshing the shutter can make the picture clear, but will produce a "clicking" sound.
The shutter is set to refresh automatically every 30 seconds by default. If you mind the clicks, you can turn off the automatic shutter in the Shutter Setting.

Q: How can I check the temperature accuracy of my TC001 Max?

A: Temperature accuracy can be affected by various factors. We

recommend the following method:

- Prepare an ice-water mixture, stir it, and let it settle for a few minutes.
- Enter the interface of **Temperature Correction** via **Learn more**, set the Emissivity to 0.96, and input the actual Distance to Spot.
- Use your device to measure the mixture's temperature and check if it reads 0° C ±2° C. If yes, it confirms the device's accurate temperature measurement. If not, please contact our after sales team.

Q: What should I do if the image displays ghosting, halos, or other abnormalities?

A: If you notice any visual anomalies, we recommend performing a calibration to restore image quality. Simply go to **Learn More > Image Calibration** in the Topinfrared and follow the instructions to complete the process. For optimal performance, it's also advised to perform a full calibration at least once a year as part of routine maintenance.

6. Warranty

TOPDON's One Year Limited Warranty
TOPDON warrants to its original purchaser that the company's products will be free from defects in material and workmanship for 12 months from the date of purchase (Warranty Period).
For the defects reported during the Warranty Period, TOPDON will either repair or replace the defective part or product according to its technical support analysis and confirmation.
TOPDON shall not be liable for any incidental or consequential damages arising from the device's use, misuse, or mounting.
If there is any conflict between the TOPDON warranty policy and local laws, the local laws shall prevail.

This limited warranty is void under the following conditions:
- Misused, disassembled, altered or repaired by unauthorized stores or technicians.
- Careless handling and/or improper operation.

Notice: All information in this manual is based on the latest information available at the time of publication and no warranty can be made for its accuracy or completeness. TOPDON reserves the right to make changes at any time without notice.

7.Compliance Information

FCC Statement

This device complies with Part 15 of the FCC Rules. Its operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

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