

FOTRIC

WLIR System Operating Manual



Contents

Legal Disclaimer

- 1.1 Legal Disclaimer1
- 1.2 Usage Statistics 2
- 1.3 Copyright 2
- 1.4 Quality Assurance 3

User Instructions

- 2.1 Customer Service 4
- 2.2 Documentations Update 4
- 2.3 Software Update 4
- 2.4 Important Notes 5
- 2.5 Software License Information 5
- 2.6 Software Download 5

Safety Information

Operating Environment

- 4.1 Operating System 7
- 4.2 Hardware Configuration 7

Software Installation

5.1 Precautions Before Software Installation	9
5.2 Install .NET Framework 4.0	10
5.3 Installation steps for WLIR Automatic Infrared Temperature Screening Software	12
5.4 How to install the driver file for USB interface	15

Quick Guide

Software Use

7.1 Activate Face Detection Function	26
7.2 Device Connection	26
7.3 IR and Visible Light Image Match	28
7.4 HawkAI Mode	31
7.5 Threshold Alarm Mode	33
7.6 Snapshot and Storage Settings	34
7.7 Headcount Statistics	35
7.8 Introduction to More Functionalities	36
7.9 Privacy Features	40
7.10 Language	41
7.11 Help	42

About FOTRIC

Legal Disclaimer

1.1 Legal Disclaimer

Uncooled thermal imaging products manufactured by FOTRIC (Thermal Imaging Technology) are warranted with the assurance of after-sales service provided by FOTRIC (Thermal Imaging Technology) from the date of initial purchase and delivery, provided such products must be handled under normal storage, use, and repair conditions and in accordance with FOTRIC (Thermal Imaging Technology) operating instructions.

Uncooled thermal imaging detectors manufactured by FOTRIC (Thermal Imaging Technology) are entitled to 1-, 2-, or 10-year warranty (depending on the specific model) from the date of initial purchase and delivery. Warranty covers defects caused by materials and production processes, provided that such products are handled under normal storage, use, and repair conditions and in accordance with FOTRIC (Thermal Imaging Technology) instructions.

Products not manufactured by FOTRIC but included in the system that FOTRIC sells to the original purchaser are covered by the specific supplier's warranty terms (if any) and FOTRIC is not liable for those products. This warranty is provided to the original purchaser and is not transferable. This warranty does not apply to any product that has been damaged by misuse, neglect, accident, or abnormal operating conditions. Consumable parts are not covered by this warranty.

Any defects in the products covered by this warranty must be reported and the product must not be used to prevent further damage. The purchaser must report any defects to FOTRIC immediately, otherwise this warranty will not apply.

If the product is proven defective in relation to materials or manufacturing after FOTRIC's inspection, it is up to the user whether it is to be repaired free of charge or replaced, provided that the product must be returned to FOTRIC (Thermal Imaging Technology) within one year from above mentioned report date. FOTRIC has no obligation or liability for any defects other than those mentioned above. This product is exempt from any other warranties, expressed or implied. FOTRIC (Thermal Imaging Technology) hereby disclaims any implied warranties of merchantability and applicability for a particular purpose. FOTRIC (Thermal Imaging Technology) is not responsible for any direct, indirect, special, incidental or consequential loss or damage based on contract, civil, or any other legal theory. This warranty clause shall apply the relevant provisions of the laws of the People's Republic of China. Any dispute or claim arising out of or related to this warranty shall be finally settled

through arbitration in accordance with the rules of the Shanghai Pudong New District People's Court of the People's Republic of China. The place of arbitration shall be Shanghai.

The language to be used in the arbitral proceedings shall be simplified Chinese.

1.2 Usage Statistics

FOTRIC (Thermal Imaging Technology) reserves the right to collect anonymous usage statistics to help maintain and improve the quality of the software and services provided.

1.3 Copyright

No parts of this software (including source code) may be reproduced, transmitted, transcribed, or translated into any kind of language or computer language in any form or by electronic, electromagnetic, optical, manual ways, or any other means without the prior written permission of FOTRIC (Thermal Imaging Technology).

No parts of this document may be reproduced, photocopied, reprinted, translated, or transmitted to any readable electronic medium or machine without the prior written consent of FOTRIC (Thermal Imaging Technology).

The names and logos shown on the products herein are either registered trademarks or trademarks of FOTRIC (Thermal Imaging Technology) and/or its affiliates. All other trademarks, trade names or company names referenced herein are for identification purposes only and are the property of their respective owners.

1.4 Quality Assurance

The quality management system for the development and production of these products in FOTRIC (Thermal Imaging Technology) has been certified in accordance with the ISO 9001 standard.

FOTRIC (Thermal Imaging Technology) is committed to a policy of continuous development, so we reserve the right to modify or improve any product without prior notice.

User Instructions

2.1 Customer Service

For customer service information, please visit FOTRIC's (IR Imaging Technology) official website: <http://www.fotric.com>

2.2 Documentations Update

Our operation manual is updated several times a year, and we also release updated versions of software products periodically.

To view the latest operating manuals, translations of operating manuals and notices, please visit FOTRIC's (IR Imaging Technology) official download center at <http://support.fotric.cn/EN/WLIR>

2.3 Software Update

FOTRIC (IR Imaging Technology) regularly releases software updates, depending on the software version.

For software version update service, please visit FOTRIC's (IR Imaging Technology) official download center: <http://support.fotric.cn/EN/WLIR>

WLIR supports online software upgrades.

2.4 Important Notes

The software operating manual released by FOTRIC (IR Imaging Technology) covers several upgraded versions in a software suite. This means that this manual may contain instructions and explanations that do not apply to the different versions of the software you are using.

2.5 Software License Information

FOTRIC WLIR Auto Body Temperature Screening Infrared Software is the standard temperature screening software provided by FOTRIC (Thermal Imaging Technology) for FOTRIC 226B.

2.6 Software Download

You can download FOTRIC WLIR professional thermal image analysis software for free at the official website: <http://support.fotric.cn/EN/WLIR>

Safety Information

Definitions

! WARNING: Represents a hazardous situation or behavior that could result in personal injury or death.

! CAUTION: Represents conditions or actions that could result in damage to the instrument or permanent loss of data.

! Note: Represents useful information for users.

Operating Environment

4.1 Operating System

- Microsoft Windows 7, 32-bit (User must install .NET Framework 4.0 to allow proper running of the program).
- Microsoft Windows 7, 64-bit (User must install .NET Framework 4.0 to allow proper running of the program).
- Microsoft Windows 10, 32-bit Professional Edition.
- Microsoft Windows 10, 64-bit Professional Edition.

4.2 Hardware Configuration

- Personal computer with Core i3 7020 equivalent or above.
- Memory: at least 4GB or more.
- USB 3.0 port.
- Available hard disk space: 20GB.
- Super VGA (1024 × 768) display (or higher resolution).
- Discrete graphics card recommended.
- Audio output.
- Internet connection capable to perform necessary activation and plug-in upgrade installation.
- Keyboard and mouse, or compatible pointing device.

Software Installation

! Caution: Before installing FOTRIC WLIR professional IR image analysis software, please close all programs on the PC.

To install FOTRIC WLIR automatic infrared temperature screening software, please follow the steps below:

5.1 Precautions Before Software Installation


- Please make sure that the operating system you are using is Windows 7, Windows 8, or Windows 10. The operating system needs to have .NET Framework 4.0 installed and confirm that the operating system you are using is 32-bit or 64-bit (used to confirm the installation of the corresponding USB port driver file).
- You must be an administrator or a user with administrator's access to install the program. Find the WLIR.exe file in the installation directory, right-click on it, and go to Properties. Select the Compatibility tab, check the box for Run this program as an administrator," apply changes, and press Ok.
- Default Installation directory:

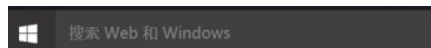
64-bit operating system C:\ProgramFiles(x86)\Fotric\WLIR

32bit operating system C:\ProgramFiles\Fotric\WLIR

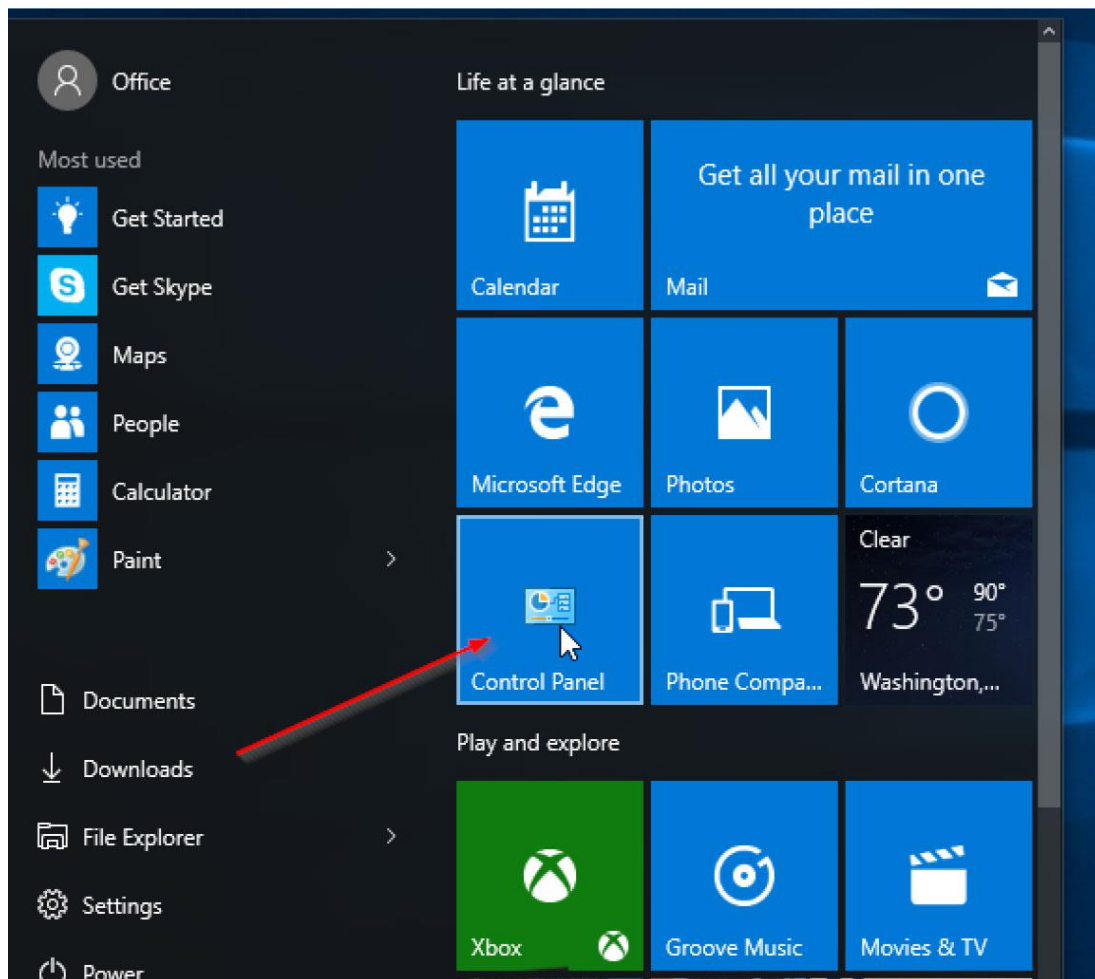
- During the installation process, Microsoft® at times repeatedly warns that the software has not passed the Windows® logo test or trust option. In all cases, select "Continue Anyway" or "Always Trust." If you are prompted by antivirus software, please choose "Always allow it to run" or choose to trust this software.
- A complete installation consists of multiple subprogram installations, some of which come from third-party vendors. Do not abort these subprogram installations, as they are required for a complete installation.
- It is recommended to turn off the firewall on the PC and other anti-virus software when the software is connected to the IR imaging instrument. You also may add this program to the trust list. Otherwise, problems such as connection failure and image loss may occur.
- Connecting the Fotric 226B product for online use requires the installation of the driver. Windows 8/10 system must be set to "Disable driver signature enforcement" prior to installation. For specific operations, please refer to 5.4. Driver Installation Instructions.

5.2 Install .NET Framework 4.0

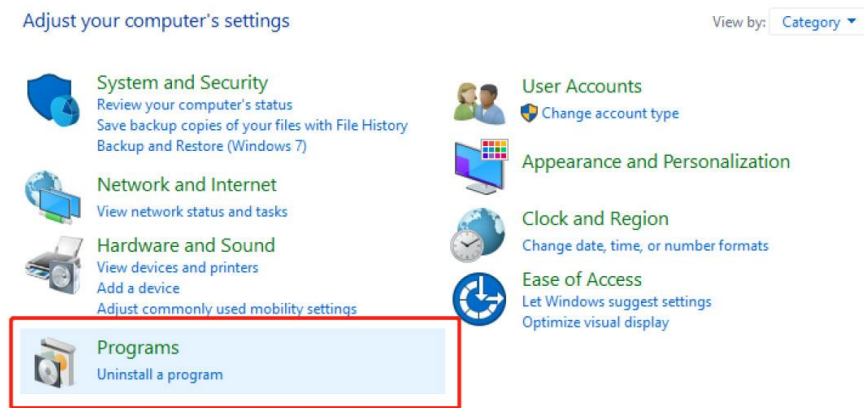
- Win7 defaults to .NET Framework 3.5. You need to install .NET Framework 4.0 or higher. Find it via any search engine, download, and install.
- .NET Framework 4.0 is enabled by default in Windows 10/8. If you need to enable it, please do as follows:
 1. Connect your PC to the internet.
 2. Click the "Start"  button in the lower left corner of the PC desktop and click "All Applications" – "Windows System" – "Control Panel." Or just click on the search bar and search for "Control Panel."



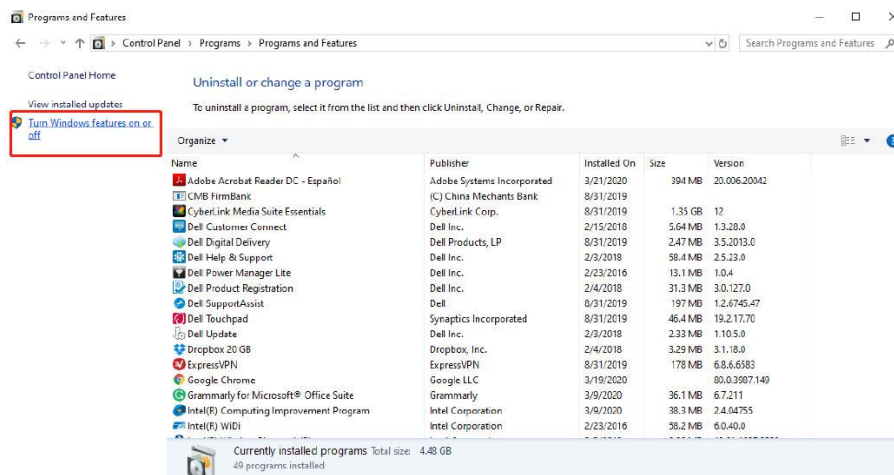
As shown below:



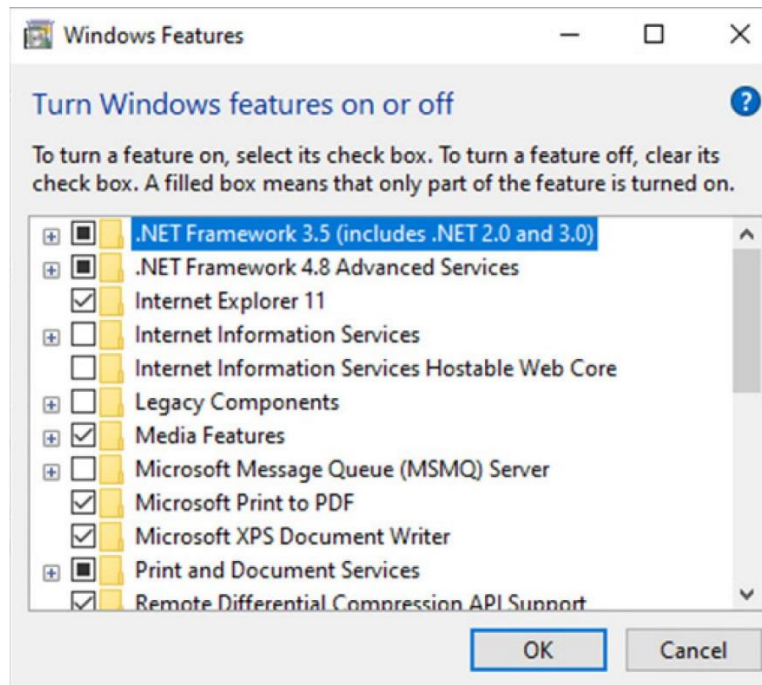
3. Select "Programs" in "Control Panel" (or click "Uninstall a program" in "Programs") and the following interface will appear:



4. Click "Turn Windows features on or off" to enter the following interface:



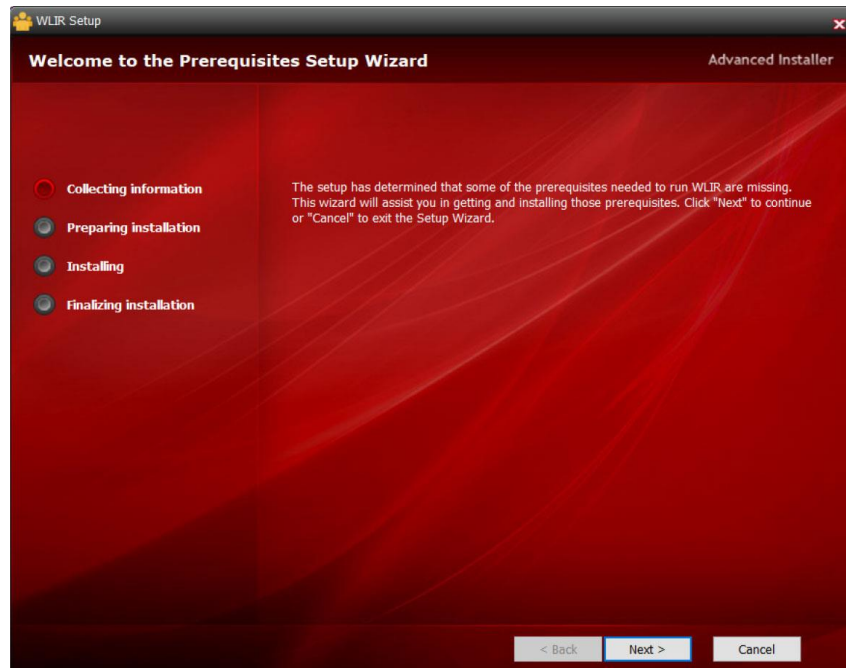
Click to turn on the “.NET Framework 4.0” feature (or change the version).



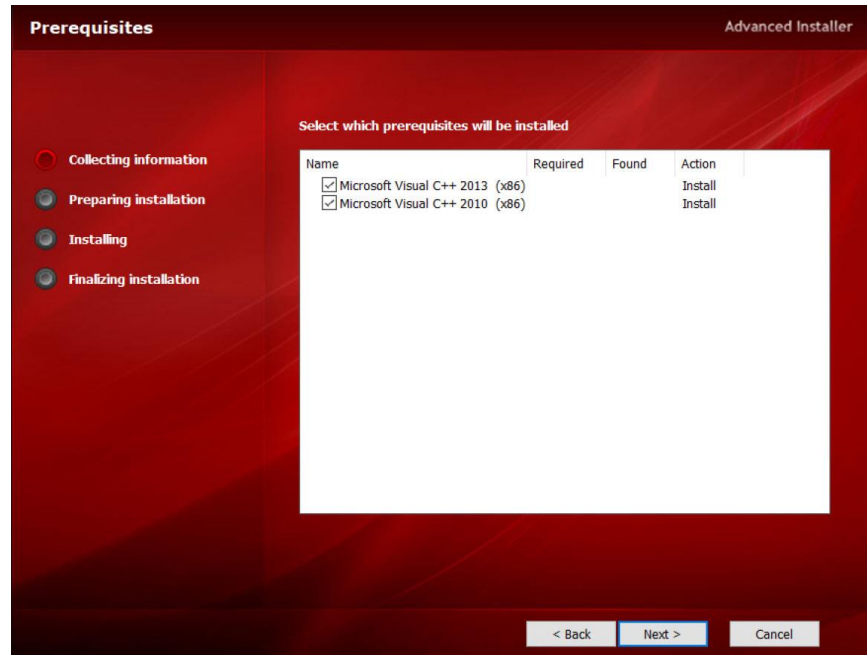
5.3 Installation steps for WLIR Automatic Infrared Temperature Screening Software

To install WLIR Automatic Infrared Temperature Screening Software on your PC, please follow the steps below:


1. Log into Windows using the administrator account and close any other applications.
2. Double click the installation file of WLIR Automatic Infrared Temperature Screening Software.
3. Do the operations step by step according to the instructions in the Setup Wizard.



4. When installing this software for the first time, please install MSVBCRT. When re-installing the software, if the MSVBCRT in the screenshot below has already been installed, you can cancel it. (In general, this MSVBCRT is installed by default in copyrighted software.)



5. Find the WLIR.exe file under the installation directory (C:\Program Files (x86)\Fotric\WLIR), then click the right button to select "Properties." Next, click on "Compatibility" tab in dialogue window, check the box "Run this program as an administrator," and save.

6. Double click the shortcut icon  for the WLIR Automatic Infrared Temperature Screening Software on the PC desktop to start the software, and you'll see the following interface:



5.4 How to install the driver file for USB interface

5.4.1 Disable Driver Signature Enforcement

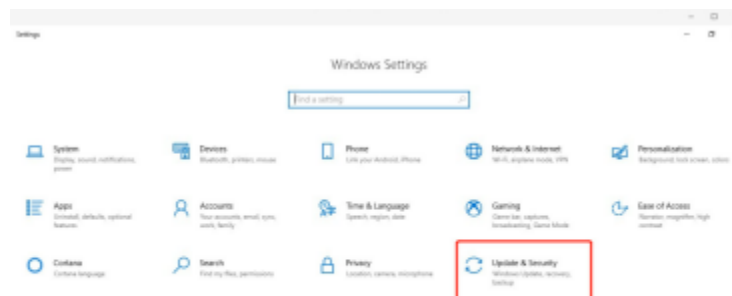
If your PC operating system is Windows 8 or Windows 10, please disable the driver signature enforcement following the steps below before installing the driver file for USB interface.

! Note: If you use Windows 7 operating systems, you can install the USB interface driver directly without the step to disable the driver signature enforcement.

1. Click the "Start" button at the bottom left of your PC desktop, then click the "Settings" button as shown below;

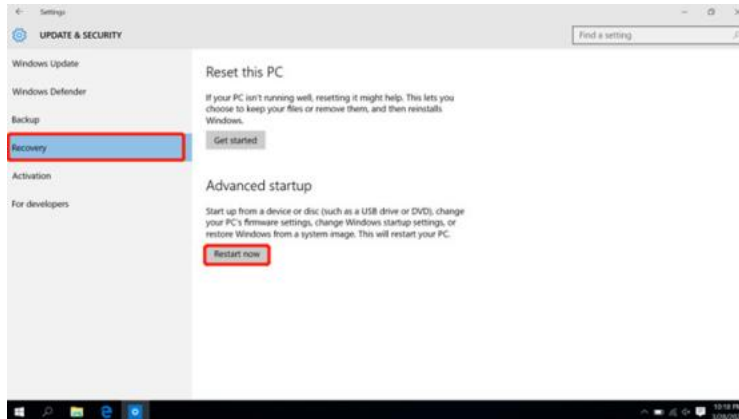


2. After entering the "Settings" interface, click "Update & Security" as shown below:

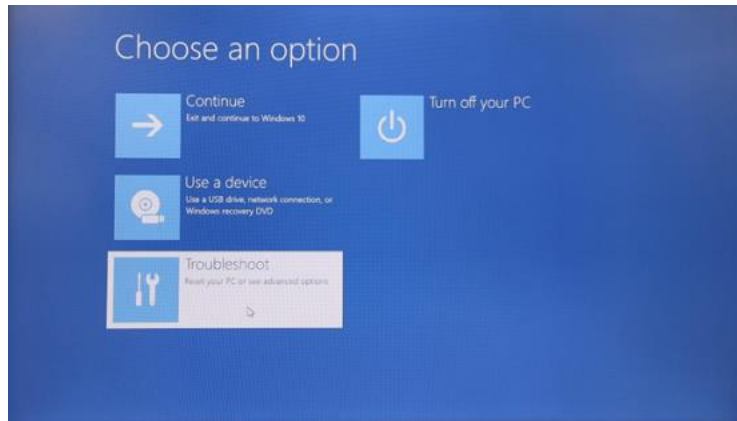


3. Click "Recovery" to select "Advanced startup" and click "Restart now" as shown below:

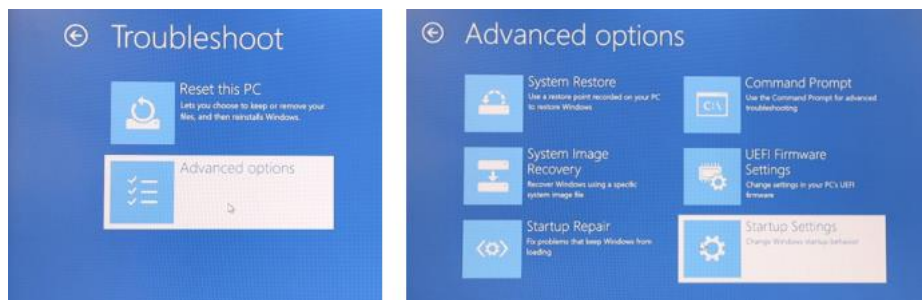
! Note: if you cannot find "Recovery," restart the computer and press the "Shift" button continuously during the startup procedure.



4. The following interface is displayed after restart. Please select "Troubleshoot":



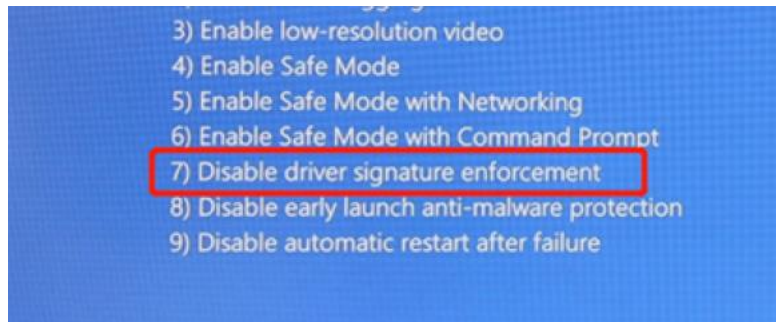
5. "Advanced options" is shown next as seen below. Click "Startup Settings":



6. Click "Restart" after entering the "Startup Settings" interface:



7. The following interface is displayed after restarting the PC. Press "F7" (for some computer models, you might need to press "Fn+F7" or "7"). Please follow the interface prompts to select "Disable driver signature enforcement":



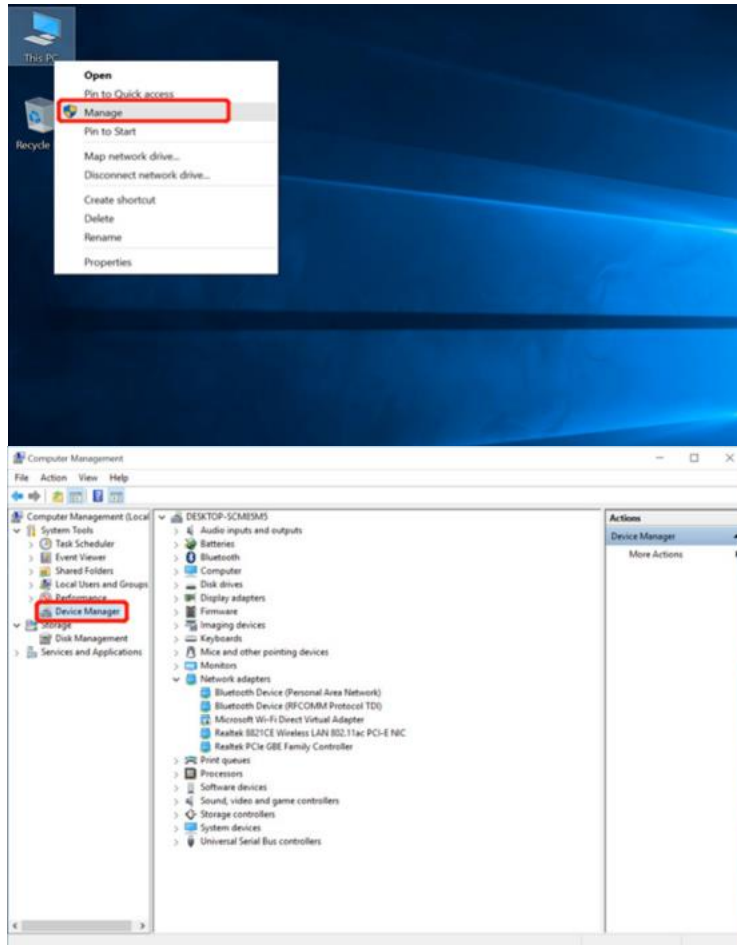
8. After restarting the PC, the driver signature enforcement will be disabled, allowing you to install the driver file for the USB interface.

5.4.2 Installation Steps for FOTRIC 226B USB Driver

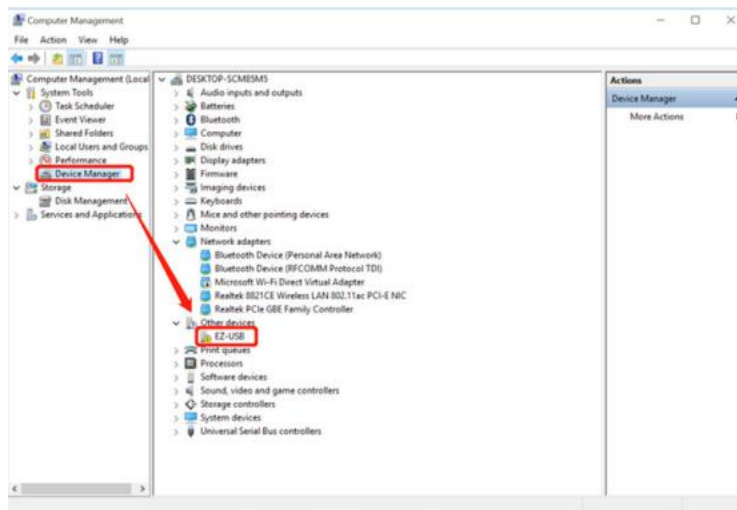
! Note: It is necessary to power on the 226B screening device and connect it to the computer in order to install the USB interface driver file.

! Note: If your computer runs Windows 8 or Windows 10, please set "Disable driver signature enforcement" first. Please see the detailed descriptions of "Disable driver signature enforcement" in 5.4.1 for specific steps. Then install the driver file for USB interface.

1. Power on the screening device and connect it to the computer. Click "This PC" with the right button, and click "Management" to show the interface below:

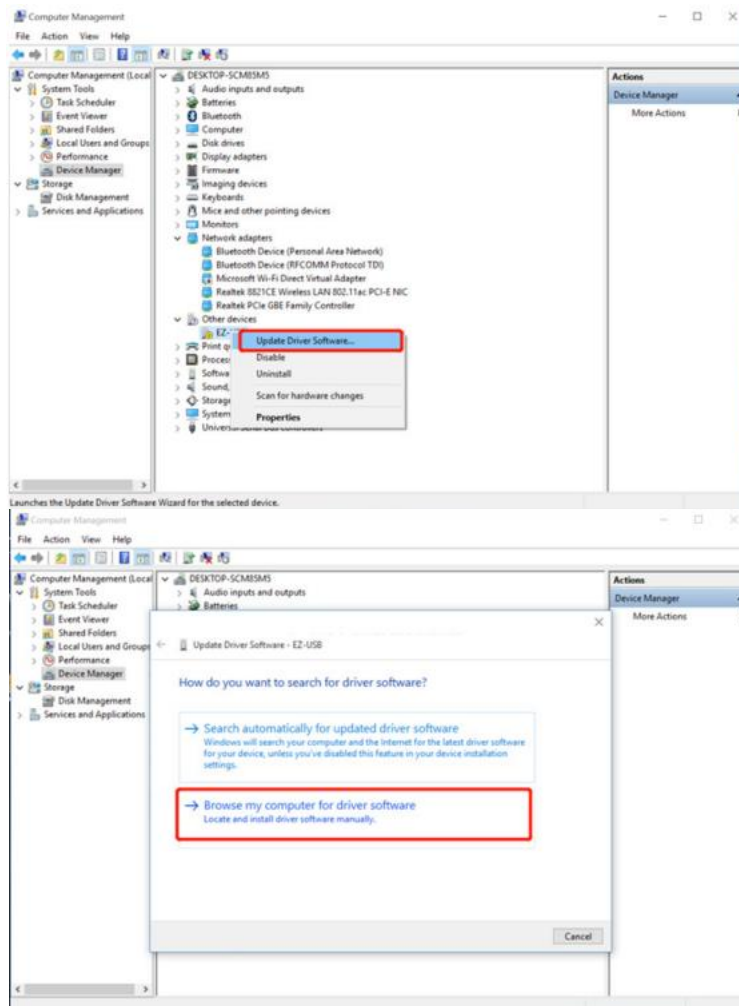


2. Click "Device Management" in the left column, confirm that Fotric 226B is powered on and connected to the computer through USB. The interface below will be displayed:

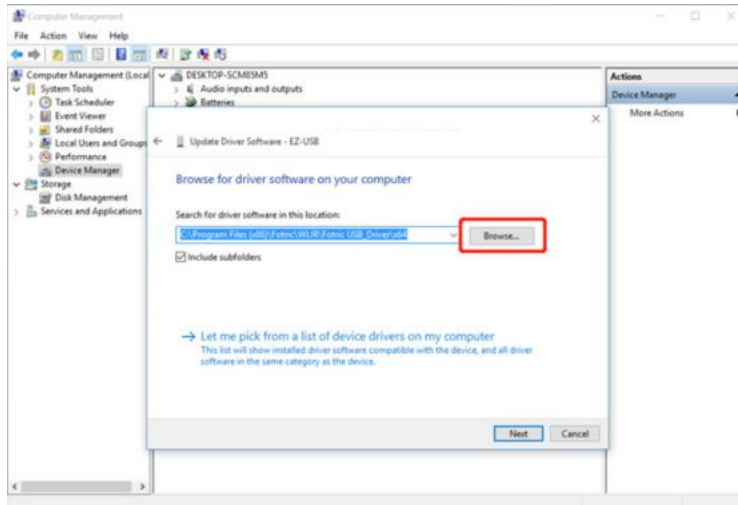


If "EZ-USB" appears in "Other devices," it indicates that the driver has not been installed.

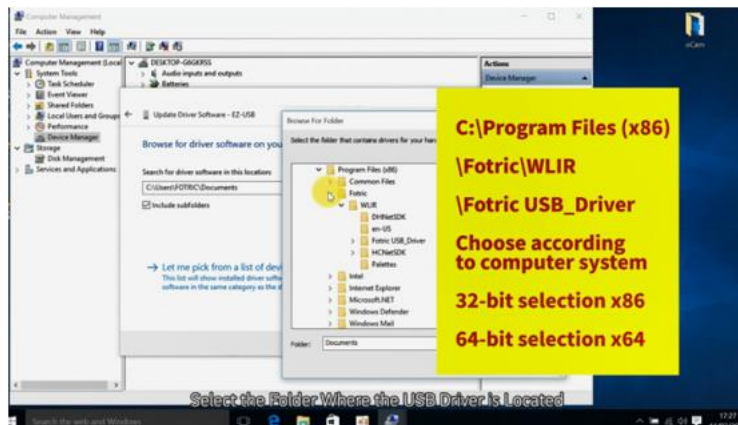
3. Select "EZ-USB" and click the right button. Select "Update Driver Software" to enter the interface below:



4. Click "Browse my computer for driver software" to enter the interface below:

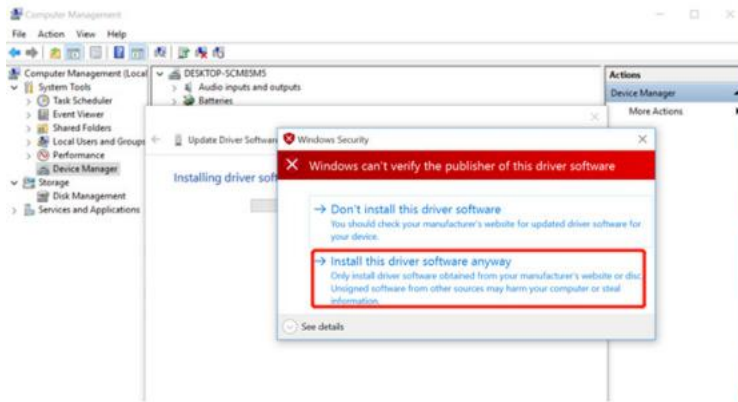


- Open the software installation directory "C:\Program Files (x86)\ Fotric\ WLIR" and find the folder "Fotric USB Driver." Select the x86 folder for 32-bit Windows system or the x64 folder for 64-bit Windows system.

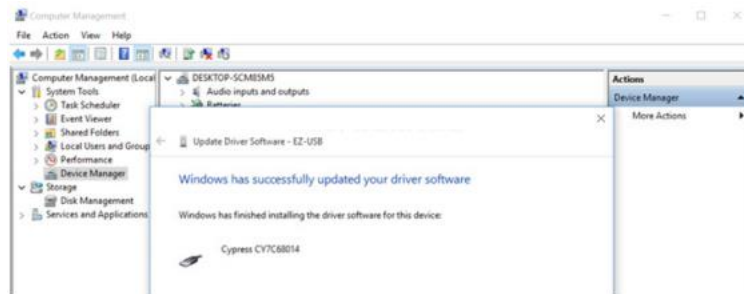


! Note: To determine whether the system is 32-bit or 64-bit, right-click on "Computer," select "Properties" and check "System type."

- After selecting the driver folder, click on "Next" and the following prompt will appear:

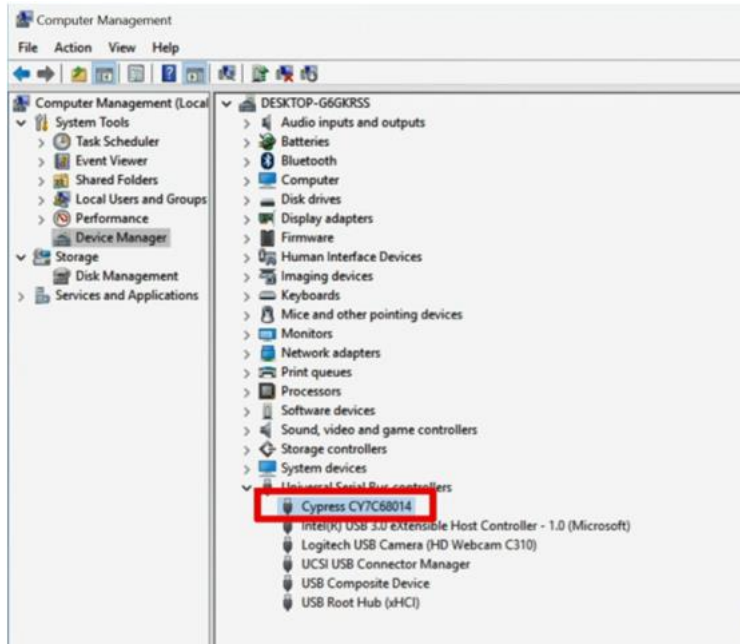


7. Click on "Install this driver software anyway." The following prompt indicates the success of the driver installation:



! Note: Please refer to the above steps and try again if you encounter any installation error. Make sure to follow the instructions step by step.

8. After the installation of the USB interface driver and connection of the 226B to the PC, the following prompt will appear in the Device Manager:



! Note: If an exclamation mark appears before the Cypress CY7C68014 option, it indicates that the driver is installed incorrectly. It is possible that a 32-bit driver (x86) or a 64-bit driver (x64) is installed on a 64-bit or 32-bit system, respectively.

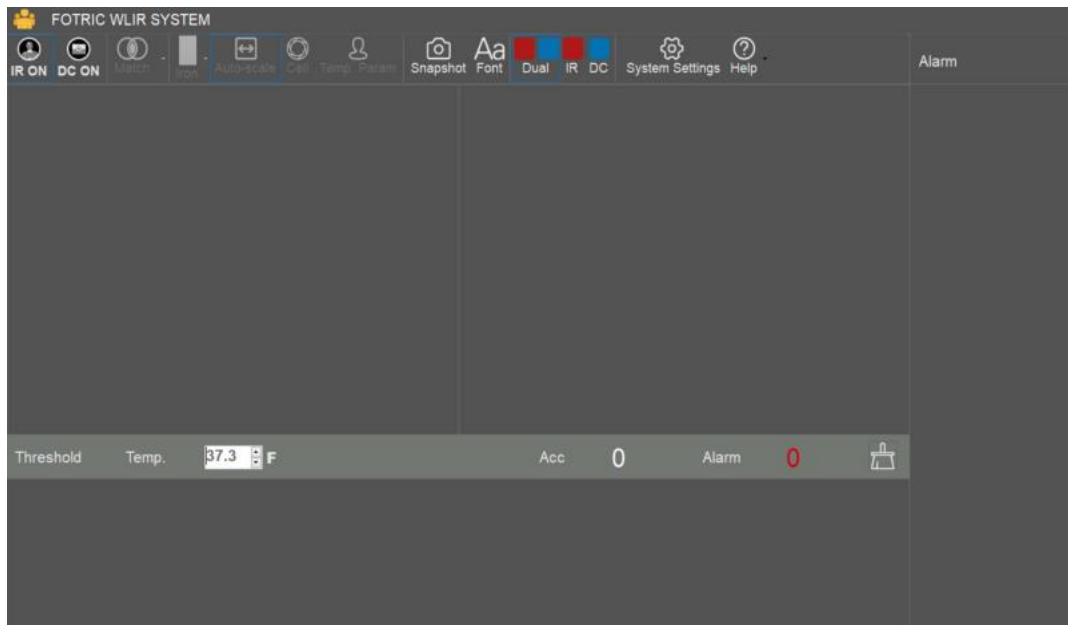
! Note: When reinstalling the USB interface driver, the installed driver needs to be uninstalled and the USB plug of the device needs to be unplugged. Then reconnect the USB plug of the device to the PC and perform the installation of the USB interface driver as above.







! Note: If "EZ-USB" is still displayed under "Other Devices," it indicates that the driver is not installed successfully and needs to be reinstalled.


Quick Guide

1. Power on the automatic infrared body temperature screener and connect to the computer with an USB cable.
2. Connect the USB cable of the DC Light camera to the computer.
3. Activate the face detection function by connecting network. Please refer to Section 7.1 for details.
4. Connect WLIR to the IR Camera and the DC Camera. Please refer to Section 7.2 for details.
5. Adjust the focus of the IR Camera and align the IR image with the visible light image. Please refer to Section 7.3 for details.
6. Set to capture photos after alarms and select the photo storage location. Please refer to Section 7.6.6 for detail.
7. When screening is in operation, an alarm will be triggered if an individual presents abnormal temperature.


Software Use




-  IR camera connection: Connect/disconnect IR imaging device.
-  Visible light camera connection: Connect/disconnect visible light imaging device.
-  Match the IR image and visible light image.
-  Color palette: Change the color of the IR image display.
-  Temperature Range: Modify temperature and width mode settings.
-  Calibration: Manually calibrate the device.

7.  Temp. Param Temperature measurement parameters: This function appears in the threshold mode, where the users can modify the emissivity, transmittance, and temperature compensation parameters.


8.  Snapshot Capture: Capture a real-time photo.


9.  Font Font: Modify the font of the contents displayed on the interface, such as temperature.

10.  Dual Dual view mode: The interface displays both IR and visible light images.


11.  IR IR image mode: The interface only displays IR image.

12.  DC Visible light mode: The interface only displays visible light image.

13.  System Settings Settings: System settings for alarm capture, alarm modes, storage path, activation, etc.

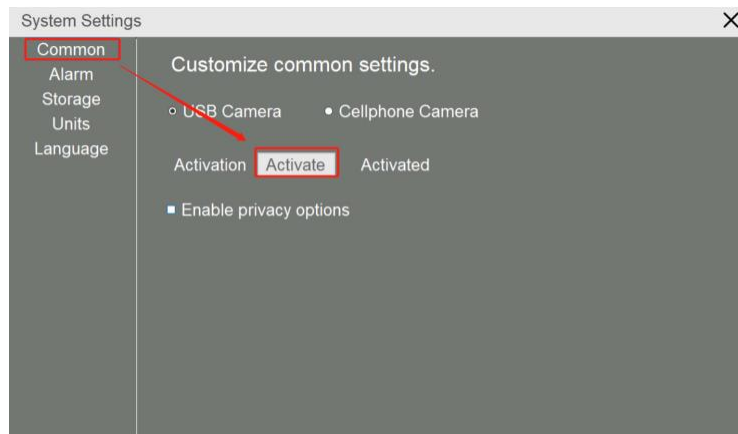
14.  Help About: View the user manual and software version.

15.  Alarm temperature: Modify the alarm temperature.

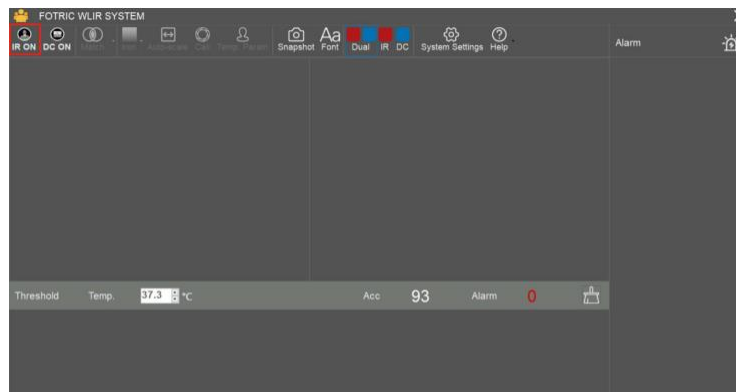
16.  Clear: Clear total and abnormal detection counts.

7.1 Activate Face Detection Function

1. Make sure that the computer is connected to the network;
2. Click on System Settings – Common – Activate. This function needs to be activated only for the first time. Network connection is not needed afterwards.

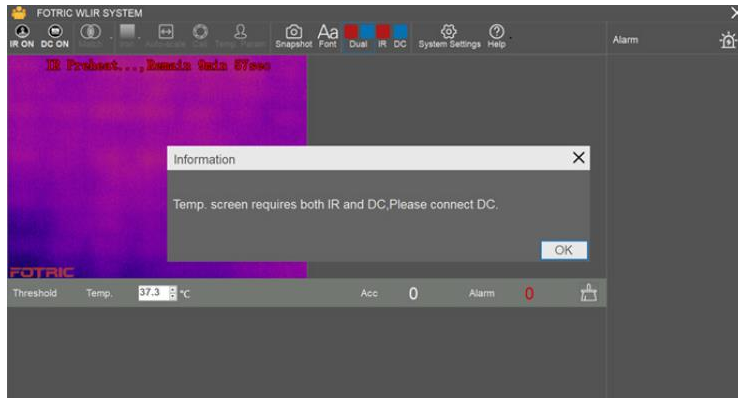


7.2 Device Connection




! Note: Before enabling the device connection, please make sure that the device is connected to the computer via the USB cable and power on.

1. Click on  in the upper left corner, the following prompt will appear:



2. Click on "OK."

3. Click on  to connect to the visible light camera and the following prompt will appear:



4. Select the camera (generally Logitech HD Webcam C310, Logitech HD Webcam C270 or USB Video Device) and click on "OK."



! Note: For stable operation, the device needs to preheat for 10 minutes after powering on. Sampling, detection, and alarm can be performed after preheating.

7.3 IR and Visible Light Image Match

1. The device must be aligned before its first use, otherwise the visible light image and the infrared image will not correspond, causing a temperature measurement error.

2. Click on the drop-down menu on 



3. Select one of the three default options to the distance between the camera and the testing object/individual. The current image matching will be assigned to the selected distance. Next time the system is launched it will automatically load the last option chosen.

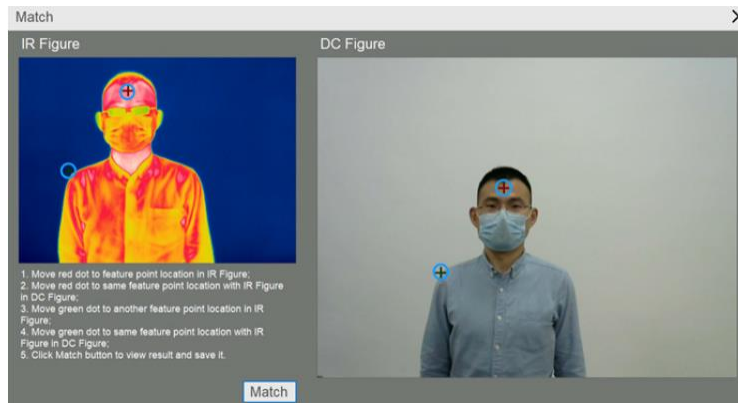
4. Click on  "Match" to enter the Match interface.



! Note: Before alignment, please focus the IR image. It is recommended to find a vertex or intersection point for easy identification within the actual measurement distance for alignment.


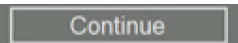
! Note: If the focus is not clear or the alignment is not precise, it will cause deviation during the temperature measurement, and the measurement of the face temperature will be inaccurate.

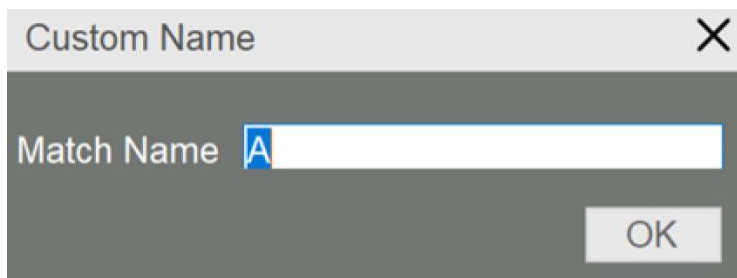
- Adjust the two red crosses to aim at a same point in both images. It is recommended to find an object that is easy to identify. Repeat the procedure with the green crosses as shown below:



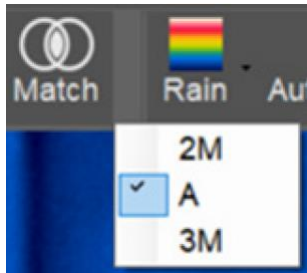
- Click Match and the following image will appear:



- Check the Match, then click on  to fine-tune the position. If the alignment is not precise, click  to re-match. Once successfully matched, save and assign a name to the alignment.

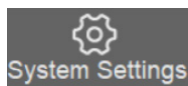


- If you need to recall the Match information, you can click on the triangle next to the Match button and select from the drop-down menu.

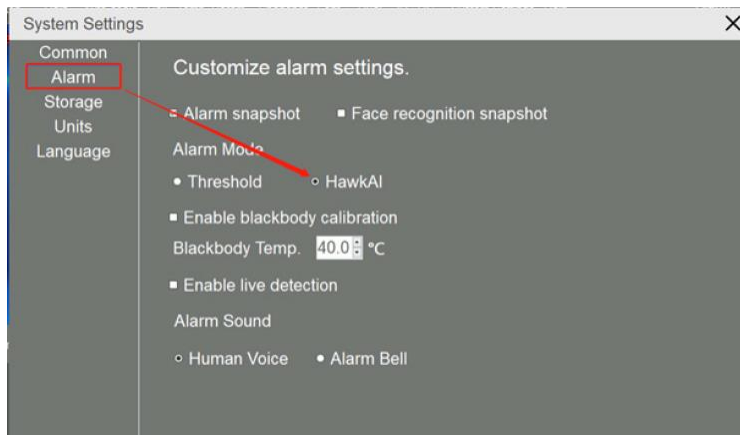


7.4 HawkAI Mode

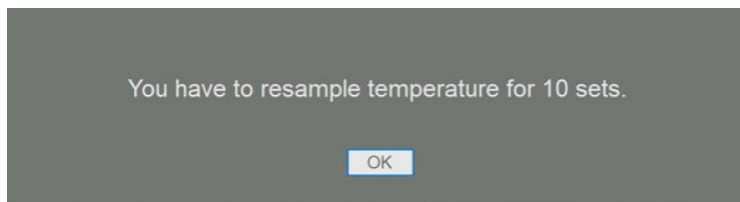
The HawkAI alarm mode automatically collects 10 forehead temperature samples and calculates the compensation temperature converting forehead surface temperature into human body temperature. As the inspected individuals enter and get sampled continuously, the compensation temperature is calibrated in real time, which is more suitable for locations with constant change of ambient temperature.



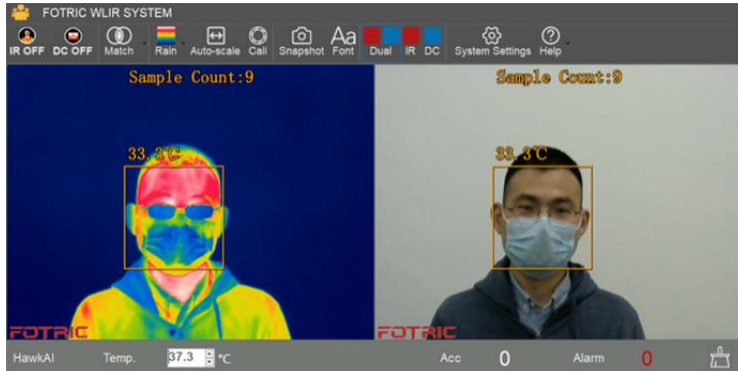
1. Click on **System Settings** and select "HawkAI" as shown below:



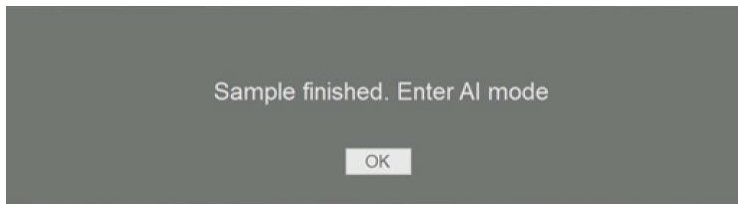
2. Close this interface to start AI sampling as shown below:



3. Click on OK. As each inspected individual enters, a headshot and temperature value are captured as shown below:



- After sampling 10 times, you will be prompted to enter the HawkAI alarm mode. Click "OK" to enter the HawkAI alarm mode as shown in the following figure:



- The default temperature alarm in AI alarm mode is 37.3 degrees Celsius, which is recommended to use. It can be adjusted if necessary, as shown in the following figure:




! Note: Accurate temperature measurement requires clear focusing of the screening instrument. Fotric 226B has a manual focusing ring that can be used to adjust the focus.

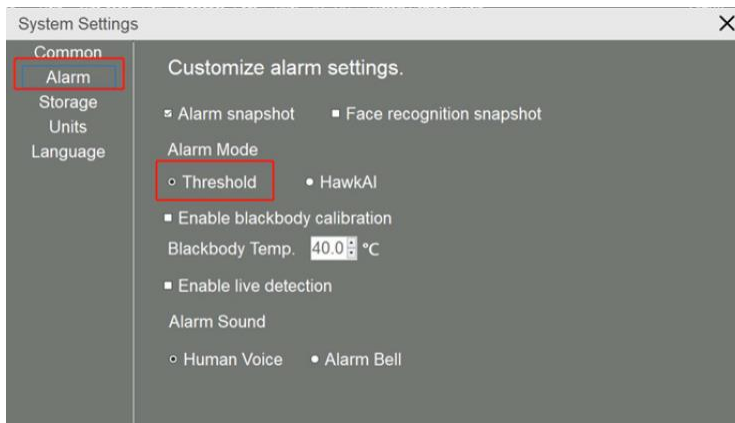
! Note: Accurate temperature measurement requires a good match between the IR image and the visible image. Poor matching will result in inaccurate sampling and temperature measurement.

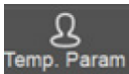
! Note: The preheating of IR imager should be completed before data collection. No data collection can be made during the preheating process; neither the screening nor alarm will be available.

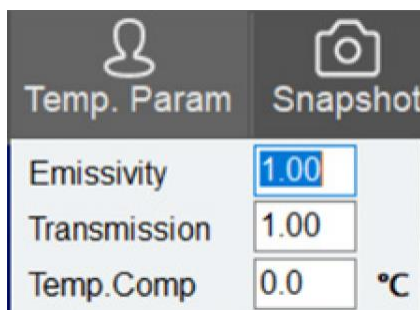
7.5 Threshold alarm mode

In the threshold alarm mode, it will measure the real temperature of the surface of the forehead. The temperature and alarm parameters can be manually adjusted.

1. Click on  option, select "Alarm," and then "Threshold" mode as shown in the following figure:



2. Click on Temperature Parameter option  Emissivity, transmission, and temperature compensation can be set as shown in the figure below:



3. Emissivity: Default setting is 1
Transmission: Default setting is 1
Temp.Comp: Here you can manually enter the compensation temperature value. If 1 is typed in, 1 will be compensated. The maximum allowed input number is 10.

- For the alarm triggering temperature setup it is recommended to measure 5-10 persons, then set the alarm temperature according to the measured temperature, as shown in the diagram below:




! Note: Accurate temperature measurement requires clear focusing of the screening instrument. Fotric 226B has a manual focusing ring that can be used to adjust the focus.

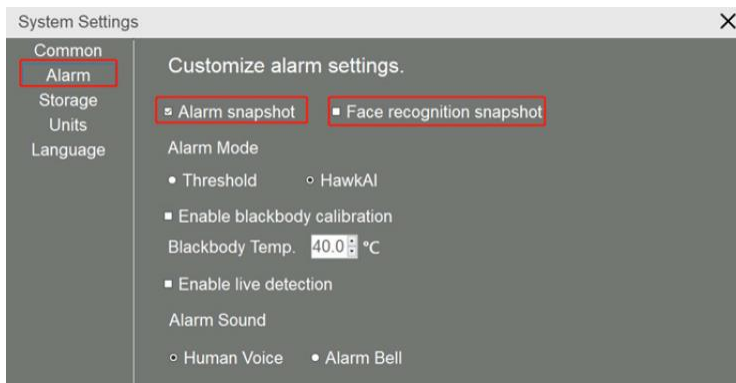
! Note: Accurate temperature measurement requires a good match between the IR image and the visible image. Poor matching will result in inaccurate sampling and temperature measurement.


! Note: The preheating of IR imager should be completed before data collection. No data collection can be made during the preheating process; neither the screening nor alarm will be available.

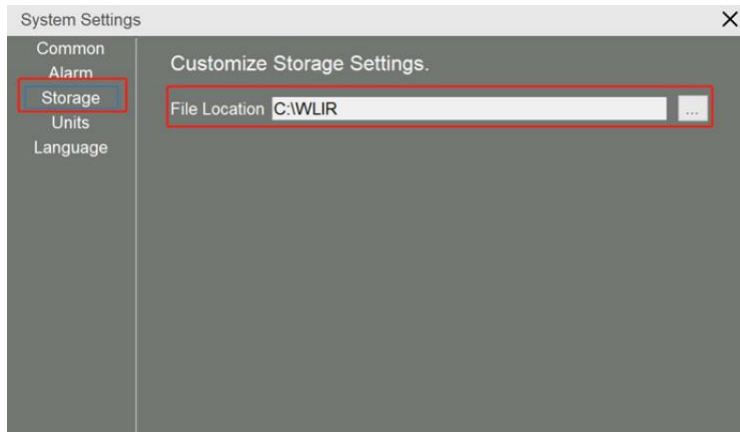
7.6 Snapshot and Storage Settings

Two types of alarm snapshot can be set. Alarm snapshot (snapshot is taken once alarm is triggered) and detection snapshot (snapshot is taken once human beings are detected).

- Click on , enter the following interface, and check "Alarm snapshot" to set the Alarm snapshot. Check "Face recognition snapshot" to set the detection snapshot. Click "Close" after setting.



- Click on , and select storage to set the save path for snapshot photos, as shown in the following figure:



3. Open the snapshot picture. There you can check the head bar at the bottom or the right side of the alarm head bar, right click at blank space, and open the folder:

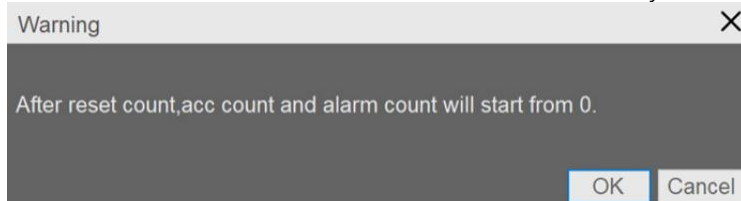


7.7 Headcount Statistics

1. The system automatically counts the number of detected people and the number of abnormal detections, as shown in the following figure:



2. Accumulative and abnormal counts can be reset by clicking on .

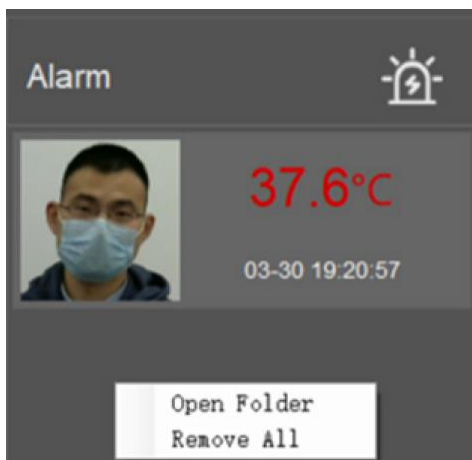


3. After the face portrait is captured and the temperature is measured, they will appear at the bottom. If the "Face recognition snapshot" function is enabled, double-click the face to zoom into the picture or right-click on the face portrait to view a larger image by selecting "Open."

- When an alarm sets off, the captured image and temperature will appear on the right side. If the alarm snapshot is turned on, double-click the image, or right-click on the image to select the file to view a larger image.



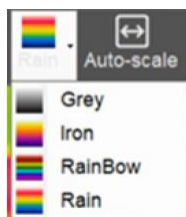
- Right-click on the face portrait to clear the selected face portrait or right-click on the blank area to clear all face portraits.



7.8 Introduction to More Functionalities

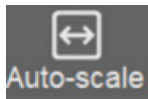
7.8.1 Palette

 Click to modify the infrared image palette

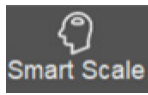


! Note: This function will only modify the visualization effect, not the temperature measurement itself.

7.8.2 Temperature Range Mode



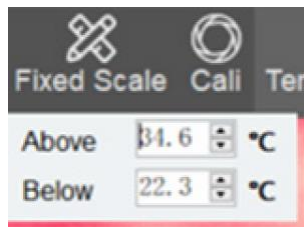
1. **Auto-scale** For automatic temperature range adjustment, the system sets the temperature range according to the highest and lowest temperatures in the picture.



2. **Smart Scale** For intelligent temperature range adjustment, the system intelligently sets the temperature range after discarding extreme high/ low temperature interference to avoid affecting other parts of the display.



3. **Fixed Scale** It allows to manually set the upper and lower limits of the temperature range, as shown below:



! Note: This function only affects the visual effect, not the temperature measurement results.

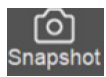
7.8.3 Calibration



This makes the device calibrate itself the moment it's clicked.

The equipment automatically calibrates itself by default; this function only adds a manual calibration and does not affect the automatic calibration.

7.8.4 Snapshot

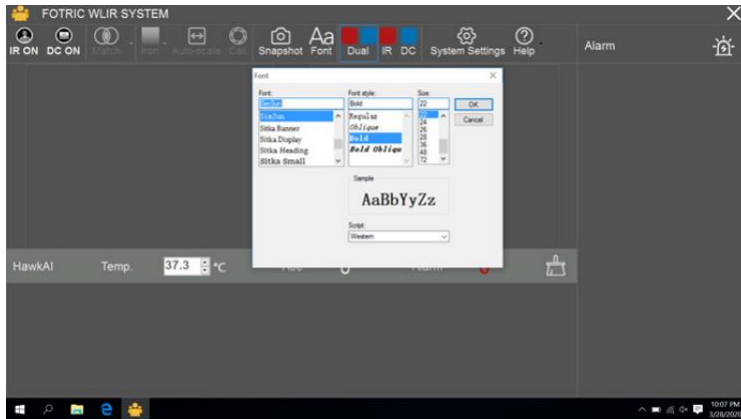


Click to take a screenshot of the interface. See 7.6 Snapshot and Storage Settings for the storage location.

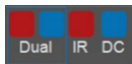
7.8.5 Fonts



Click to access the following interface to adjust the font and size of temperature prompts.

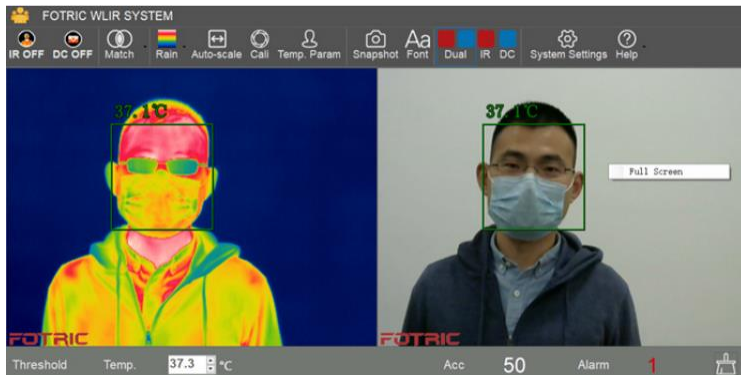


7.8.6 Display Settings




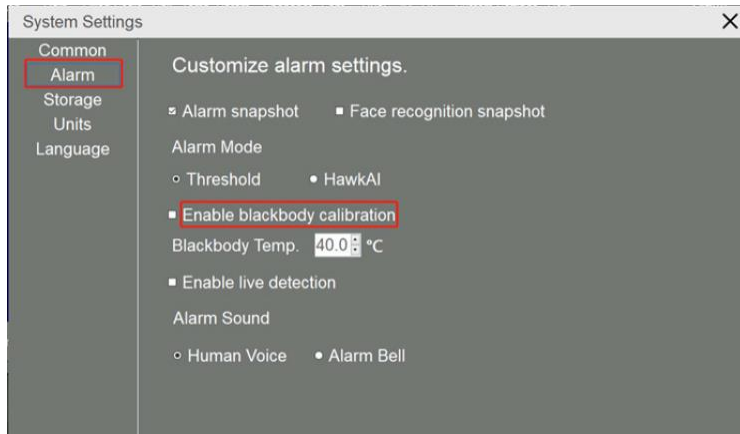
Click on **Dual IR DC** to switch screen display mode.

Right click on the IR image or visible image to display the corresponding full screen. Press Esc or right click to exit the full screen.




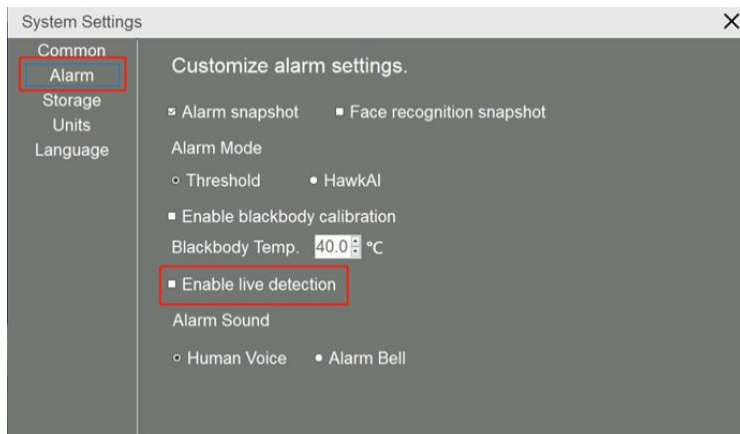
7.8.7 Enabling Blackbody Calibration

Click on  to enter the "alarm" menu to enable the Blackbody temperature calibration. Before enabling this option, it is necessary to preheat and stabilize the Blackbody at the set temperature, then place it on the edge of the IR image picture within the detection distance.




7.8.8 Live Detection

Click on  to access the "alarm" menu where the live detection can be enabled. This option will cause the software to tell if any face (real or in pictures) captured by the camera is a live person. If it is not a live person, the software will not compensate for the temperature.

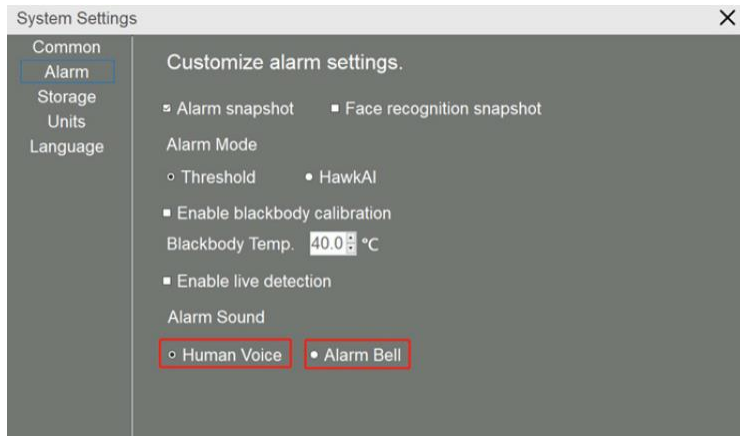


7.8.9 Alarm Sound

Click on  to enter the "alarm" menu to set up the alarm sound.

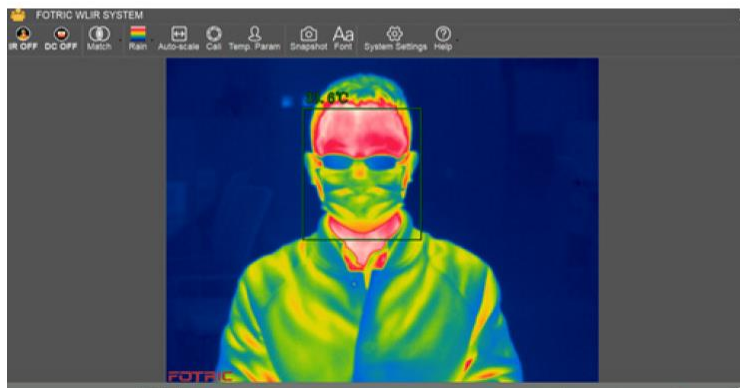
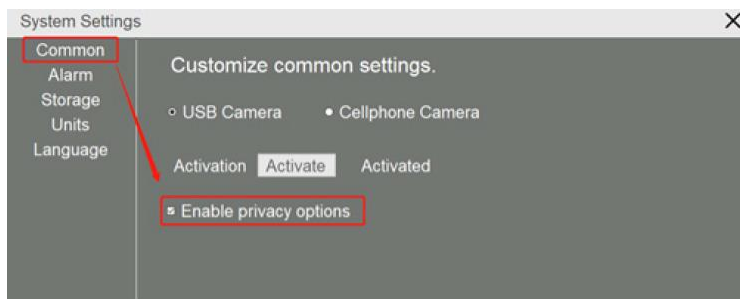
When the alarm is set off, a voice will announce "Caution, abnormal!"

A beeping sound is emitted when the alarm is set off.



7.9 Privacy Features

When the Privacy Option is enabled, only the infrared image will be displayed on the screen. Full screen mode can be activated by right-clicking on the infrared image as shown in the figure below:




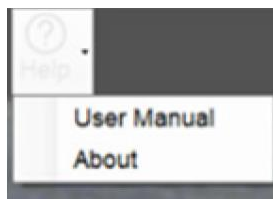
7.10 Language

The software is available in multiple languages. Click on , to enter the "language" menu to set up the language.

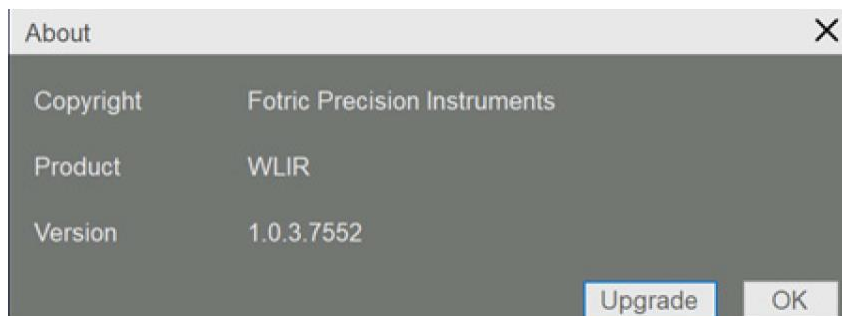


7.11 Help

Click on  for help and to see the user manual and software version information.



In the "About" section, available online software updates can be detected.



About FOTRIC

Shanghai Thermal Technology Co., Ltd., referred to as "Thermal Imaging Technology," is a new technology enterprise with its headquarters located in Shanghai, and China, as well as branch offices located in Beijing, Nanjing, Jinan, and Xi'an in addition to distributors in many countries and regions including North America, Europe, Korea, Singapore, Australia, and Taiwan. It currently holds international quality certifications such as ISO: 9001, the United States FCC, and European CE. In 2015, Thermal Imaging Technology was listed on the New Third Board (stock code: 831598), branded as FOTRIC. FOTRIC derives its name from a breakthrough stemming from basic science, reflecting the company's emphasis on fundamental scientific research.

FOTRIC is devoted to the intelligent innovation of thermal imaging technology and optimized user experience to improve work efficiency through thermal imaging in the Cloud.

FOTRIC has established the Infrared Optoelectronic Technology and Application Laboratory in conjunction with the Shanghai's Institute of Technology of Chinese Academy of Sciences, and invited members of the Academy in the domain of infrared and remote sensing technology to launch an academician expert workstation. FOTRIC owns several invention patents and software copyrights in the infrared thermal imaging system of mobile Internet and intelligence.

In 2012, it launched a large-scale thermal imaging system for monitoring. It developed the first thermal imaging monitoring app, which laid the foundation for the integration of thermal imaging technology with the Internet.

In 2013, a professional thermal imager was developed for Android smartphones.

In 2014, it launched an intelligent anti-threat alarm thermal camera, which has the capacity to autonomously run a disaster analysis, set off an alarm and link it with the fire-fighters local department. This application won the support of the Innovation Foundation of the Ministry of Science and Technology.

In 2016, the second-generation cell phone thermal imager FOTRIC 220 series received wide peer recognition and won the first prize in the electronic category of 2018's American IR/INFO thermal imaging competition.

In 2017, the FOTRIC 123 cloud-based fire detection thermal imager was released at CES in the United States. Through intelligent design, it has simplified user operation and it has become an innovative internet-based thermal imager. The FOTRIC X cloud thermal imager was released in 2018, based on the PdmIR thermal image data management system and

built-in industry standards and expert experience. It can display and analyze temperature trends in real time. It is capable of generating inspection statements and reports with one click, which significantly reduces the data processing and learning costs for users, thereby becoming a new category of digital intelligent thermal imager.

In 2019, the FOTRIC X cloud thermal imager won the 2019 German iF design award. FOTRIC also self-developed technologies such as HawkAI, MagicThermal, and TurboFocus were launched, initiating the era of AI thermal imaging.

FOTRIC's Mission: Improve efficiency and ensure safety

FOTRIC's Vision: To open the world of thermal imaging to 123,456,789 people.

FOTRIC's Core Values: Innovation, Perfection and Integrity

From 2018 to 2019, FOTRIC reached a strategic cooperation with CCTV, Hunan TV, and Shenzhen TV by recording several popular broadcasted programs including "I Love Invention," 2018 New Year's concert, Seasons 1 and 2 of "The Sound of the Situation," and "Hot Mom Academy." It has been applying thermal image technology to television broadcasts that are being watched by hundreds of millions of people, and hence constantly driving the popularization and application of the thermal image technology.

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