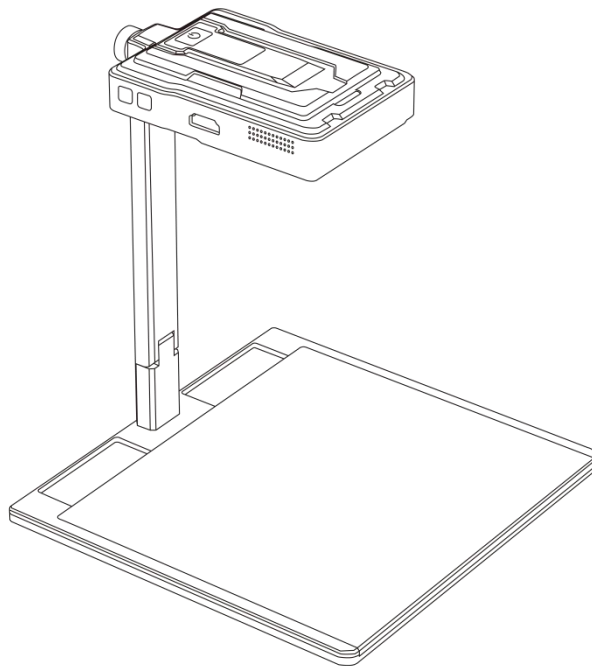




ShortCam III User's Guide



Model: LC-AD16

Makers: Shenzhen Launch Digital Technology Co., Ltd.

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1.Product introduction and characteristics

1.1 Product Profile

ShortCam III is the third generation of ShortCam series.This series is a PC client software dedicated to helping repairers troubleshoot circuit board leaks more efficiently. ShortCam III inherits the core function of “Seek” and adds the unique element of “Super Resolution” to simplify user operation and enable customers to locate fault problems more efficiently and quickly.

1.2 Product Characterization

- Supports visible and thermal imaging preview modes
- Support one-click quick search
- Supports tunable dual optical fusion
- Support for Super Resolution
- Supports zoomed-in preview of selected areas
- Supports image rotation preview
- Support overtemperature alarm
- Supports multiple thermal imaging palettes

1.3 Product Parameters

Thermal Camera	
Sensor	Uncooled Focal Plane Detector
Resolution/Pixel Size	256×192
Response Waveband	8-14μm
FOV	56°* 42°
Visual Camera	
Resolution	3840×2160
Interface and display	
Display mode	Visual/thermal imaging/quick inspection
Connection mode	Type-C USB2.0/WiFi/HDMI
Picture storage format	JPG
Communication mode	Type-C USB 2.0/WiFi/HDMI
Temperature measurement performance	
Temperature Accuracy	±3°C or ±3%(Take the maximum value)

Temperature Range	-20°C~550°C
Temperature measuring distance	16.5cm
General	
Sizes(LxWxHmm)	192.2mm*183.3mm*203.7mm
Weights	942.3g
Power source	
Power Supply	12V DC
Consumption	6W
Working Ambient	
Storage temperature	-20°C~60°C
Working temperature	3°C~45°C

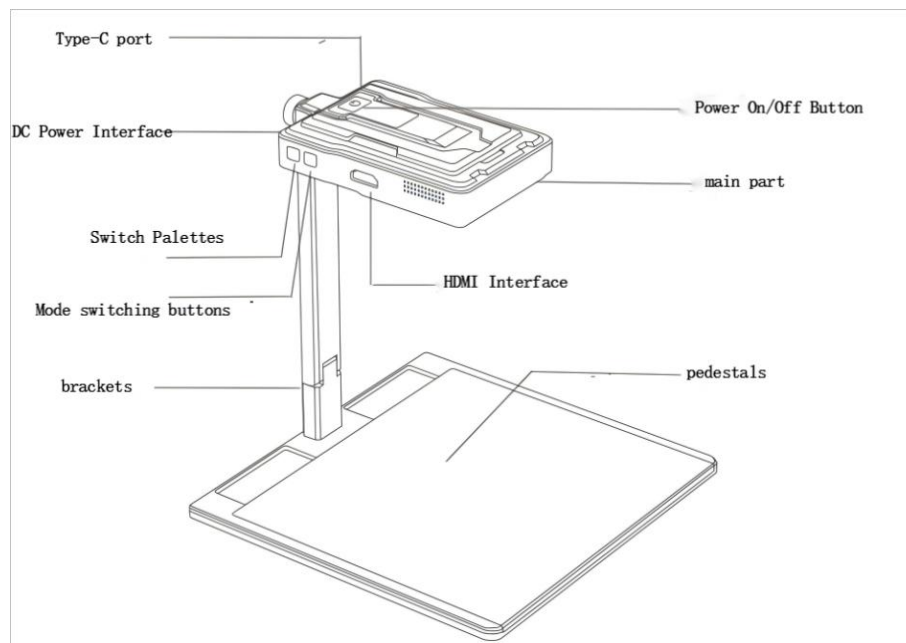
2 Machine instruction

2.1 Check the fittings

Unpack the ShortCam III and count the whole set of components according to the packing list (the whole set of components mainly includes main unit, base, stand, power adapter, HDMI converter, fixing screws*1, Type-C*1, HDMI*1).

2.2 Device Assembly

Assemble the device according to the product composition schematic, snap the front-end main unit into the upper end of the base bracket and tighten the fixing screws.



2.3 Device startup

Through the product configuration of the power adapter to the device power, press the device on the key, the device buzzer beeps softly three times, the front host red and blue LED lights at the same time often light, the device power on the boot completed. When the device is finished using, you can turn off the device through the switch button on the top of the device.

2.4 Online use

Connect the computer and the ShortCam III main unit with a Type-C cable or with WIFI (refer to Catalog 3 Connections), and the image will be displayed normally on the ShortCam III software in about 10 seconds.

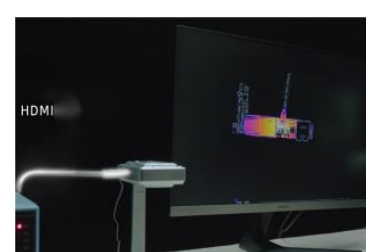
3.connection method



TYPE-C connection



WiFi Connection



HDMI connection

3.1 Mode 1: Computerized on-line operation procedure

3.1.1 Client software running environment requirements

The ShortCam III software requires a certain computer configuration. If the following requirements are met, the ShortCam III client software will run smoothly:

- (1) Computer CPU processor: I3 7 generation and above models
- (2) Memory size: 8G and above
- (3) Operating system: Windows 7/Windows 10/Windows 11

3.1.2 Software Download and Installation

- (1) The client software can be downloaded by opening the official website (<http://www.launchdigital.net/>), clicking “Service & Support” -> “Download Center”, and selecting ” ShortCam III” to download;
- (2) After decompressing the installation package, run the ShortCam III client installation software. Click Next as prompted. After the installation is complete, you can use the ShortCAM III client.
- (3) To connect the computer to ShortCam III, you can choose Type-C/WIFI to connect the computer, and the WIFI method is referred to Method 2 to connect the computer WIFI.
- (4) After the client software is installed, double-click the desktop shortcut.

3.2 Mode 2: WIFI online operation steps

- (1) Turn on your computer or cell phone Wifi, retrieve and connect to the device Wifi, the default name of the device Wifi is “ShortCamIII_xxxxx”, default password ‘12345678’.



Where xxxxx is the last 5 digits of the product serial number, for example, if the serial number of a device is 8000E22040485288, the hotspot Wifi of the device will be displayed externally as “ShortCamIII_85288”.

- (2) After the WIFI connection is successful, open the computer client or cell phone app, you can automatically connect to the device.

3.3 Mode 3: HDMI interface online operation steps

(1) Connecting tools:

- ① Display (supports HDMI interface output)
- ② HDMI cable
- ③ Display Power Cord

(2) Connection Operation

Connect the HDMI port of the device as well as the display with the HDMI cable, plug and play.

4. PCB Diagnostics Detailed Operating Instructions

After the whole machine is connected to the computer and the software is installed normally according to the above steps, you can start the normal use of PCB diagnostic function, the specific operation steps are as follows:

- (1) Power up and turn on the PCB speed diagnostic device, and operate the device through the PCB speed diagnostic client on the computer side;
- (2) In thermal imaging mode, the edge profile of the IR image is fused and adjusted using the right arrow key to ensure that the heat generation position and the visible image are corresponding correctly;
- (3) Click on the software interface of the “quick check”, button motherboard power, the screen can quickly locate the problem motherboard high-temperature areas.

The normal diagnostic imaging screen is as follows:





5. Software Operating Instructions

The overall interface of the software is divided into 4 areas according to functional areas, and the overall interface and functional menu layout areas are shown below:

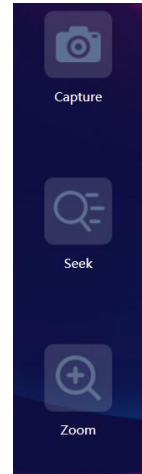


5.1 Main Function Menu Area

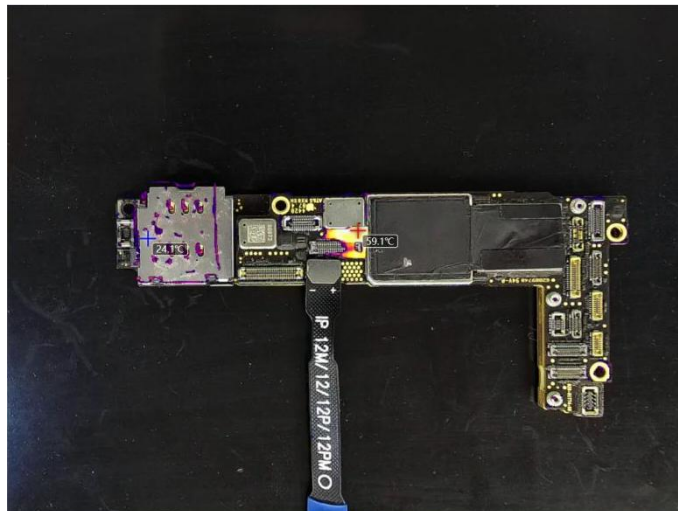
【Capture】 Click on the Client Software button  , you can capture the picture of the current test motherboard and keep the maintenance data for future maintenance reference,you can use the shortcut key C.

【Seek】 Click on the Client Software button  , the hottest area of the current screen can be displayed.

【Zoom】 Click this button, and then long press the left mouse button to select the visible or infrared screen in the screen, you can realize the local zoom observation of the heating components to meet the maintenance details.



5.2 PCB imaging area

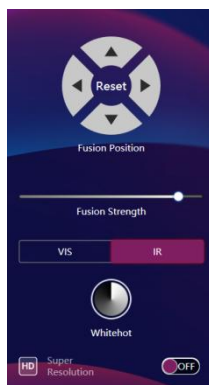


Will need to repair the PCB motherboard power placed in the center of the image (such as a shield need to remove the screen cover), you can view the image of the PCB board to be diagnosed in this area, if the screen has more than one high-temperature areas, you can switch on and off the power supply of the motherboard, to observe the screen temperature changes in the area of the obvious changes in the screen, so as to screen out the faulty components.

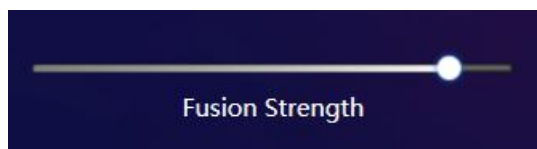
5.3 Software image parameter setting area

【Reset】 This menu item is presented in the software interface with a circular adjustment knob, adjust the up,down, left and right buttons on the knob to adjust the

Visible offset position of the detected PCB boards, and click on the “Reset” circular button in the center to reset the visible offset position.




【Fusion Strength】 Adjust the intensity of the IR/visible fusion by dragging the scale with a long press on the left mouse button, or by using the shortcut keys “Ctrl+←Decrease; Ctrl+→Increase”.



【Preview Mode Switching】 The image display modes of “Visible”, “Thermal Imaging” and “Quick Check” can be selected by using the computer shortcut key Space or the left mouse button.

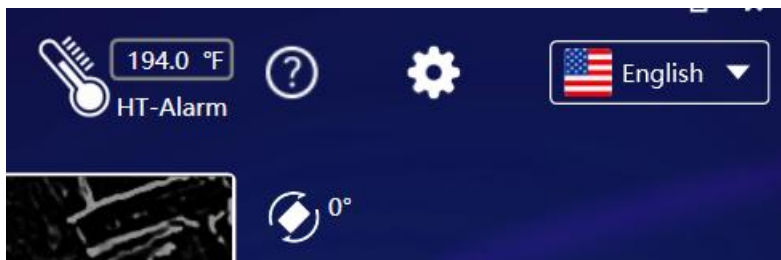



【Toggle color palette】  Click on the display mode button for thermal imaging in the area, Toggles between Whitehot, Hotmetal and Rainbow modes.


【Super Resolution】 Click the button in the area to toggle whether or not this feature is turned on.




5.4 Alarm and System Setup Area

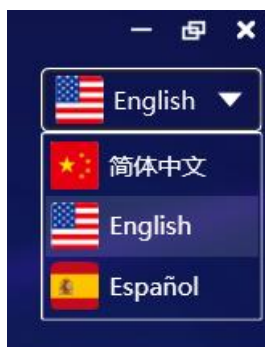



【HT-Alarm】  Click on the Client Software Temperature Settings box, Setting temperature parameters , when the software monitors the global range of temperature there is greater than the set value software, the device indicator flashes red accompanied by a beep, the imaging area flashes.

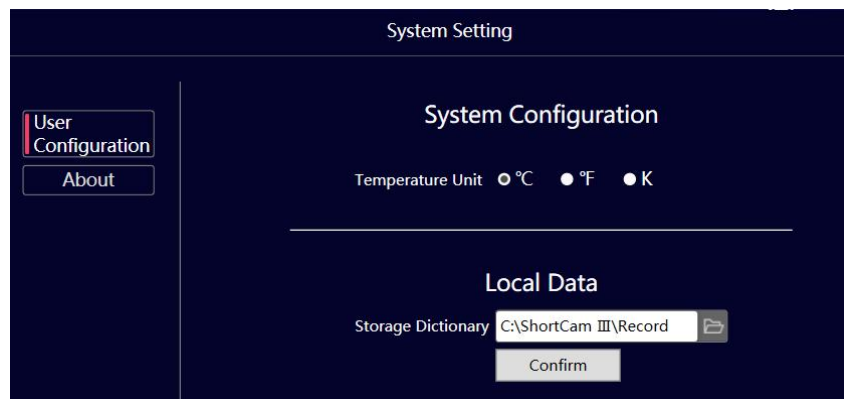
【Help】  Click on the client software help button, It contains 6 catalog items such as “Driver Installation”, “How to use the device WIF”, etc. You can refer to it if you have any problems during the process of using the device.

【Rotation】  Click on the client software rotation button, The device can be controlled to rotate the live screen of the device.

【Language Settings】 Click on the Language Settings drop-down window The display can be selected from “Simplified Chinese”, “English”, “Español”, and the user can set the language according to the need.

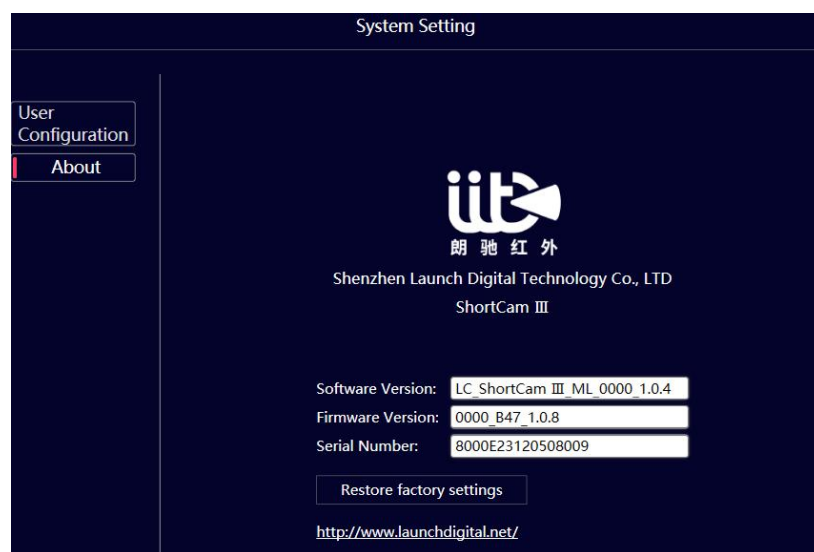


【System settings】  Click the System Settings button, It contains two directories, “User Configuration” and “About”, as shown below:



【User configuration】 You can switch the unit of temperature in Celsius (°C), Fahrenheit (°F) and Kelvin (K), and you can set the location of data storage, the configuration interface is shown in the above figure.

【About】 You can view the company logo, company name, product name, software version, firmware version, device serial number, factory settings button, and official website address, as shown in the following figure.



6 packing list

serial number	name (of a thing)	quantities
1	main part	1
2	pedestals	1
3	brackets	1

4	Type-C Data Cable	1
5	HDMI Converter	1
6	HDMI*1	1
7	Hand screw*1	1
8	Hex socket screw with cylindrical head	1
9	power adapter	1
10	warranty card	1
11	Certificate of conformity	1

7 Frequently Asked Questions

7.1 Client preview without video?

Q1: After the first successful installation of the client, open the client, the preview black screen, the preview box in the lower left corner of the prompt “not connected to the device ...”. If you are not connected to the device, you can check the connection according to the following steps:

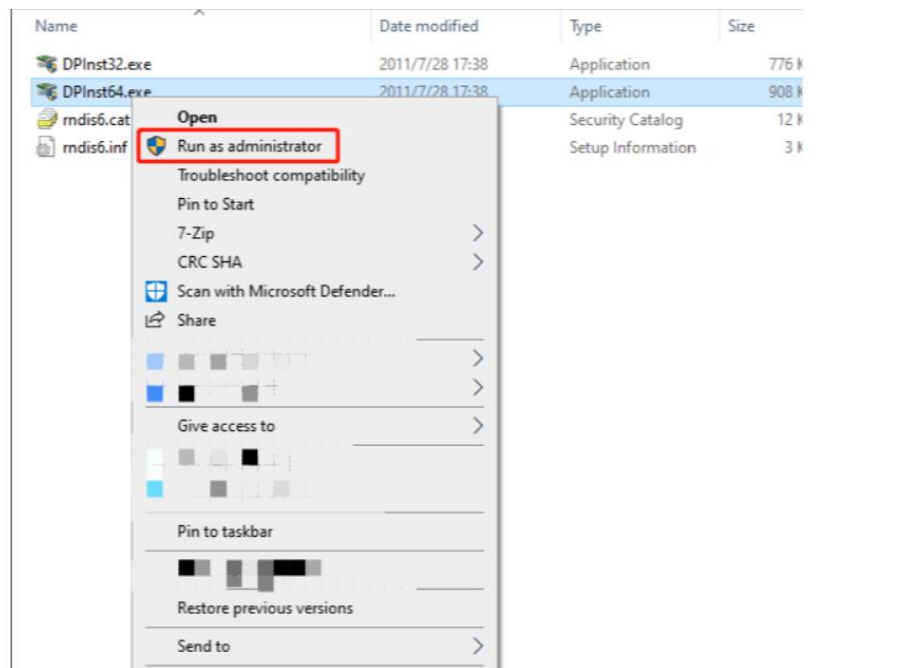
(1) Check the device status light, if it is not always on, make sure the power adapter is plugged in tightly and the switch button is pressed;

(2) If the client uses WIFI to connect to the device, you need to confirm whether the WIFI is connected successfully.

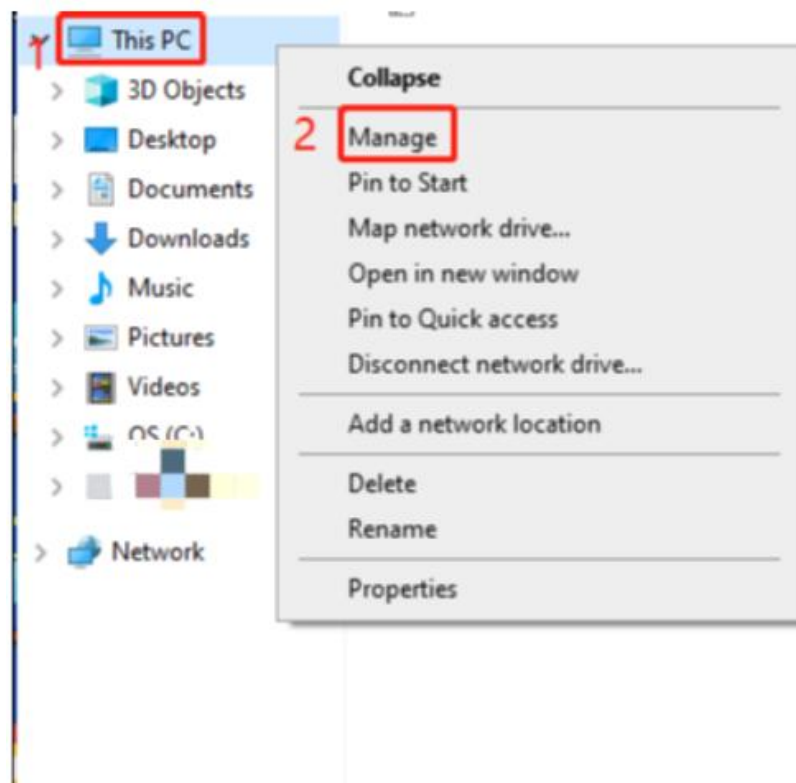
7.2 How to install device drivers manually?

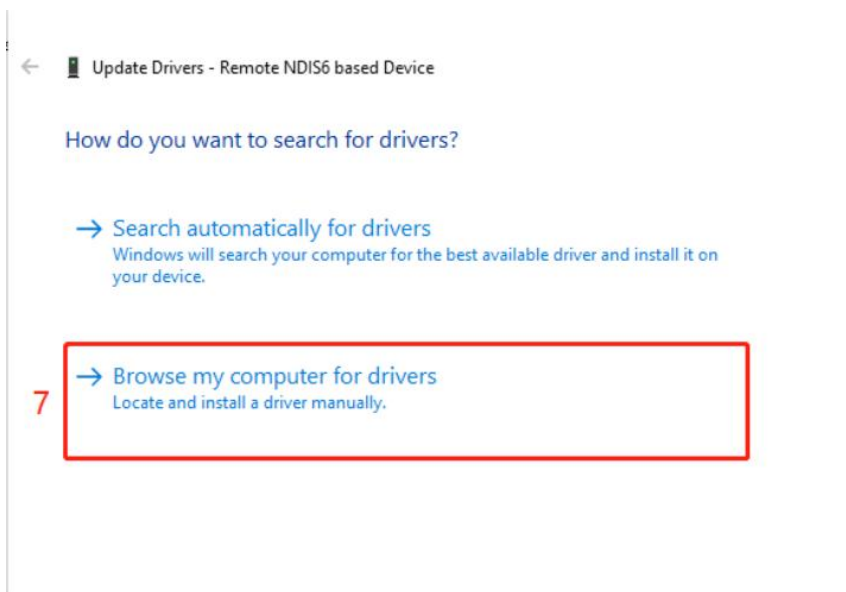
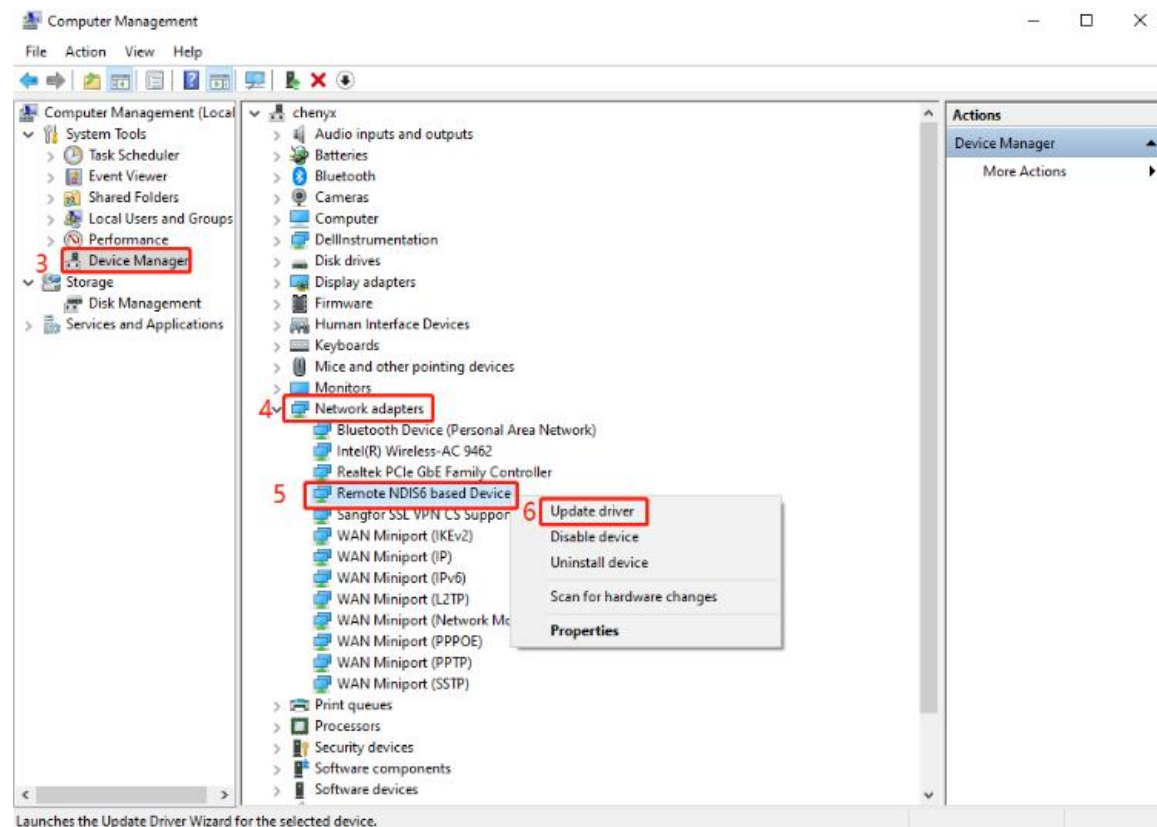
Q2: Choose one of the following three installation methods:

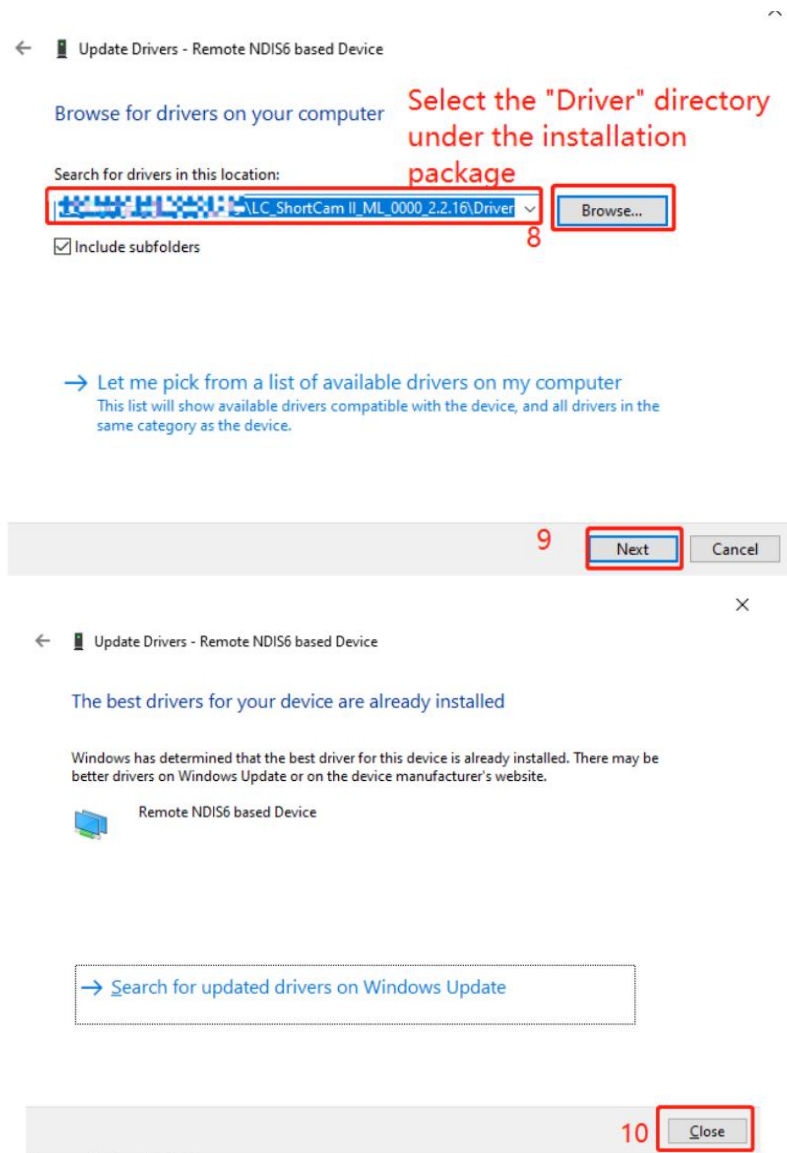
Method 1: Run “DPInst64.exe” or “DPInst32.exe” in the Driver directory of the installation package.



Method 2: Right-click “Computer” - “Management” - “Device Manager” - find the target device (usually in the port below, you can plug the device to see the new items) - right-click Update Driver - select Browse - select the Driver directory under the installation package - Next until complete.





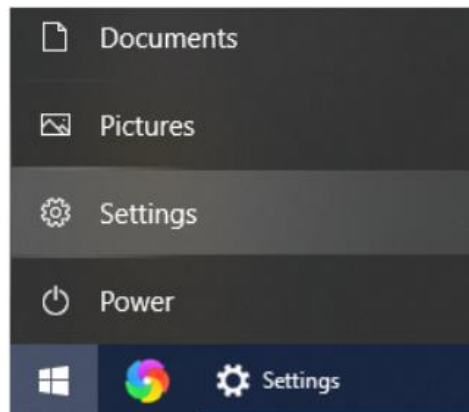


Method 3: Select the “RNDIS.inf” file in the Driver directory of the installation package, right click on the mouse and select “Install”.

7.3 How do I connect my device using Wifi?

Q3: **Step 1:** Turn on your computer's Wifi as follows

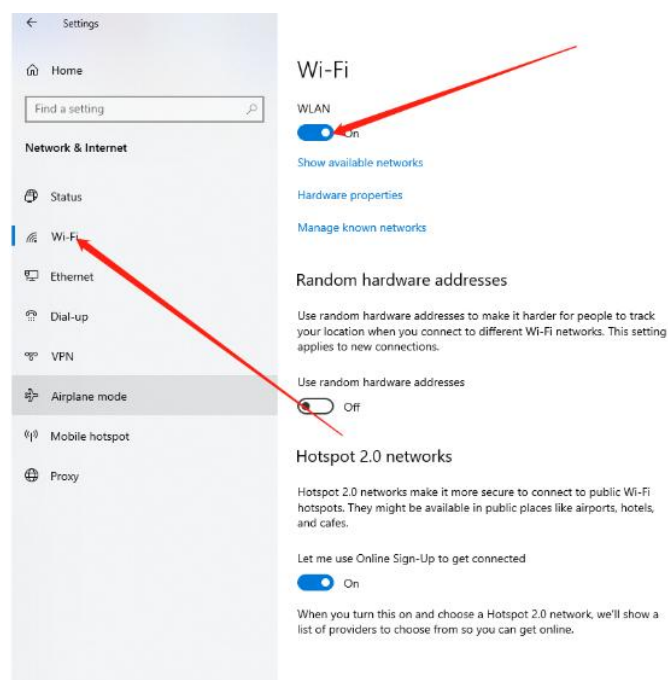
- ① Click “Start” -> “Settings”.



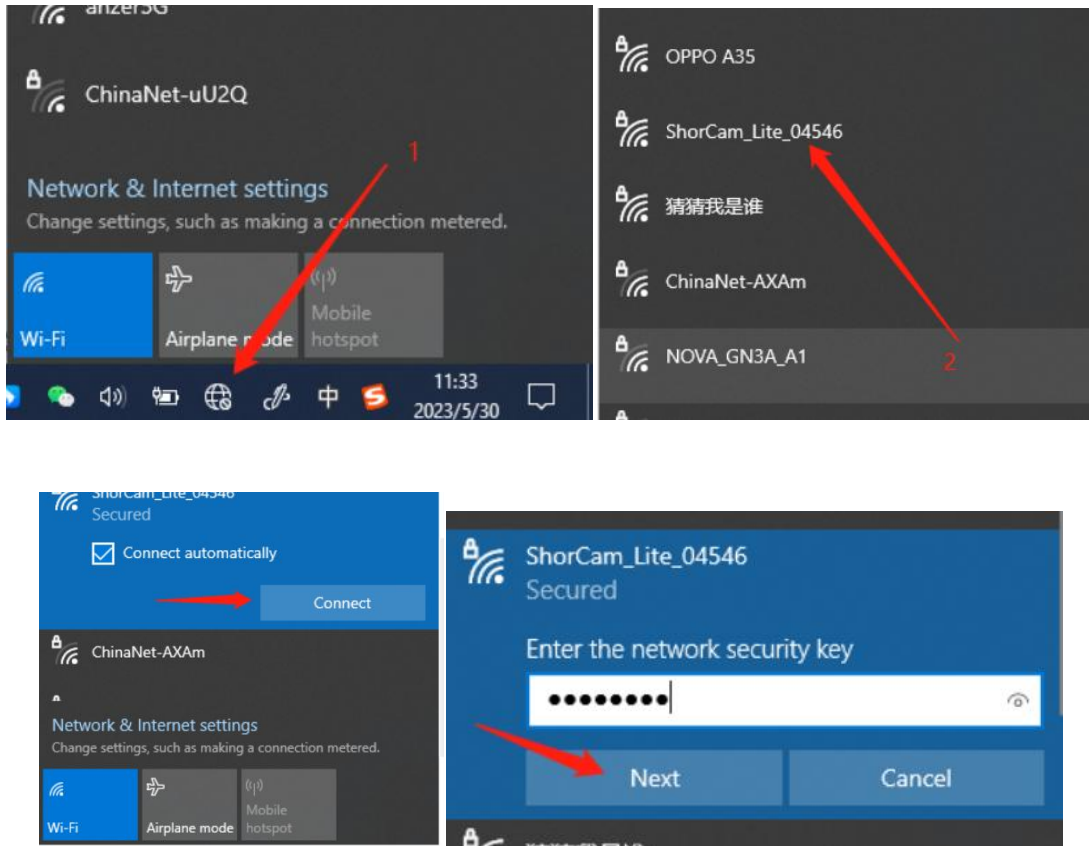
② Click “Network” -> “Internet”.



③ Turn on WLAN .



Step 2: Retrieve and connect the device Wifi with default name“ShortCam_III_XXXX” and default password “12345678”. The default name of the device Wifi is “ShortCam_III_XXXX” and the default password is “12345678”, where XXXXX is the last 5 digits of the product serial number, for example, if the serial number of a certain device is 8000E220404546, the hotspot Wifi of the device will be displayed as “ShortCam_III_04546”.



Step 3, open the client and connect the device automatically. If there is still no video image, please contact our technical support .

7.4 Common Shortcuts

- Hotkey H: Help
- Hotkey C: Snapshot
- Hotkey A: Access to the storage
- Hotkey Z: Switch the enable of Zoom
- Hotkey R: Rotate the image
- Hotkey P: Switch Palettes
- Hotkey S: Switch the enable of Super resolution
- Hotkey Space: Preview mode switching, i.e. visible, thermal imaging, and quick check preview modes switching
- Hotkey ↑;↓;←;→: Adjust visible offset position

- Hotkey Ctrl+←: Decrease the fusion strength
- Hotkey Ctrl+→: Increase the fusion strength

7.5 Technical Support

Service Hotline: 4001-386-389 ext. 2



8. important statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC warning:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.