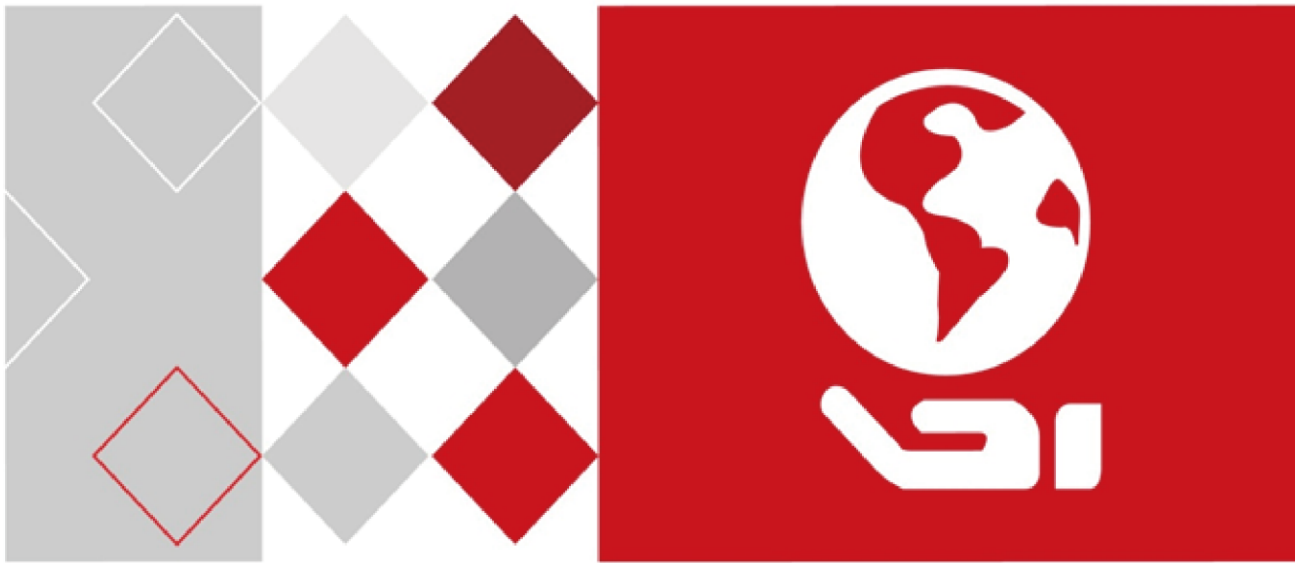


**HIKVISION**



# DS-K1F820-F Fingerprint Recorder

User Manual

UD05957B-A

## **User Manual**

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This manual is applied for DS-K1F820-F Fingerprint Recorder.

It includes instructions on how to use the Product. The software embodied in the Product is governed by the user license agreement covering that Product.

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### **Support**

Should you have any questions, please do not hesitate to contact your local dealer.

## Regulatory Information

### FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**FCC compliance:** 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.

### FCC Conditions

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.

### EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info)



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info)



## Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into **Warnings** and **Cautions**:

**Warnings:** Neglecting any of the warnings may cause serious injury or death.

**Cautions:** Neglecting any of the cautions may cause injury or equipment damage.

	
<b>Warnings</b> Follow these safeguards to prevent serious injury or death.	<b>Cautions</b> Follow these precautions to prevent potential injury or material damage.



## Warnings

- All the electronic operation should be strictly compliance with the electrical safety regulations, fire prevention regulations and other related regulations in your local region.
- Please use the power adapter, which is provided by normal company. The power consumption cannot be less than the required value.
- Do not connect several devices to one power adapter as adapter overload may cause over-heat or fire hazard.
- Please make sure that the power has been disconnected before you wire, install or dismantle the device.
- When the product is installed on wall or ceiling, the device shall be firmly fixed.
- If smoke, odors or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the device yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)



### **Cautions**

- Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetism radiation. Avoid the equipment installation on vibrations surface or places subject to shock (ignorance can cause equipment damage).
- Do not place the device in extremely hot (refer to the specification of the device for the detailed operating temperature), cold, dusty or damp locations, and do not expose it to high electromagnetic radiation.
- The device cover for indoor use shall be kept from rain and moisture.
- Exposing the equipment to direct sun light, low ventilation or heat source such as heater or radiator is forbidden (ignorance can cause fire danger).

- Do not aim the device at the sun or extra bright places. A blooming or smear may occur otherwise (which is not a malfunction however), and affecting the endurance of sensor at the same time.
- Please use the provided glove when open up the device cover, avoid direct contact with the device cover, because the acidic sweat of the fingers may erode the surface coating of the device cover.
- Please use a soft and dry cloth when clean inside and outside surfaces of the device cover, do not use alkaline detergents.
- Please keep all wrappers after unpack them for future use. In case of any failure occurred, you need to return the device to the factory with the original wrapper. Transportation without the original wrapper may result in damage on the device and lead to additional costs.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

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# 1 Overview

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## 1.1 Introduction

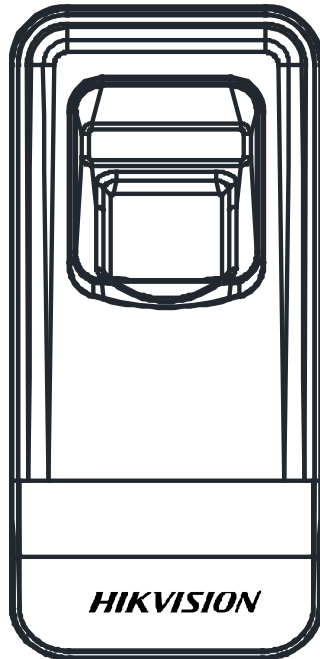


Figure 1-1 DS-K1F820-F Fingerprint Recorder

DS-K1F820-F Fingerprint Recorder supports living fingerprint registration, and identification. It can upload/download fingerprint characteristic data and image to the controller/ module. It supports the function of checking the completeness of registered fingerprint templates.

## 1.2 Main Features

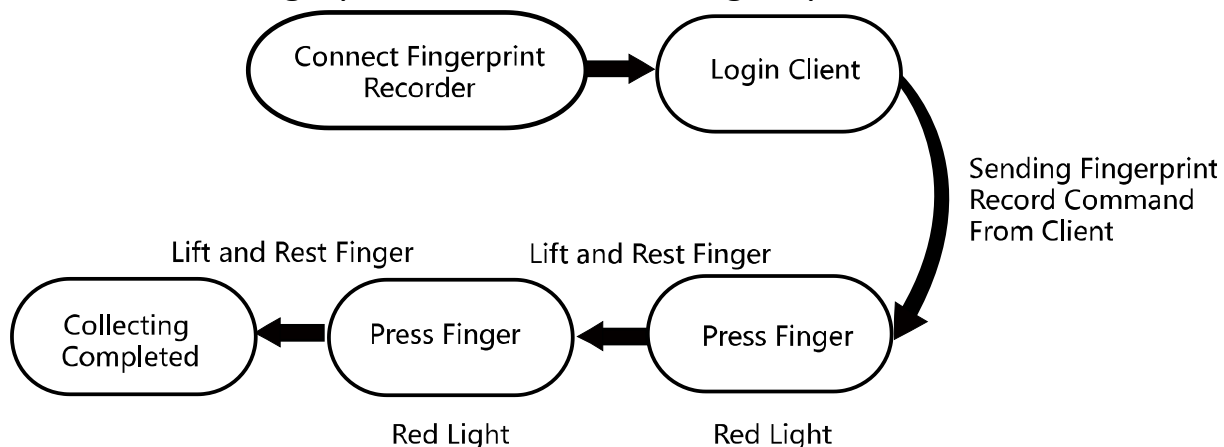
- 508 dpi high-definition
- Support the function of PnP(plug and play)
- Optical fingerprint sensor designed with scratch-resistant material
- USB 2.0 communication standard for data transmission.



## 2 Fingerprint Collection Description

### 2.1 Fingerprint Collection Progress

You can collect fingerprint with the following steps



#### **Before you start:**

You should install iVMS-4200 Control Client from the company website and run the client.

#### **Steps:**

1. Plug the wiring of USB into the USB interface of PC directly.

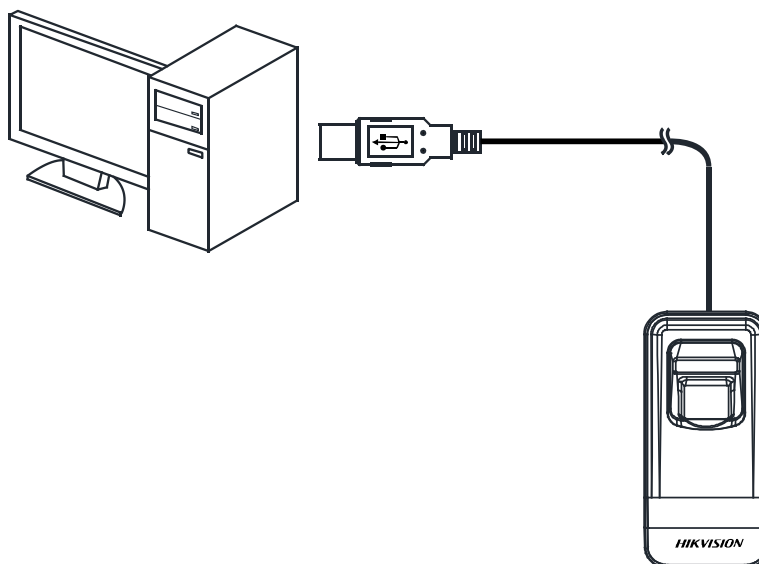


Figure 2-1 USB Interface Connection

#### **Notes:**

- The picture is only for reference. Please refer to the actual products.

- When the fingerprint recorder is identified by the PC, the item “HID-compliant device” or “USB Input Device” will display in the computer control panel of PC.

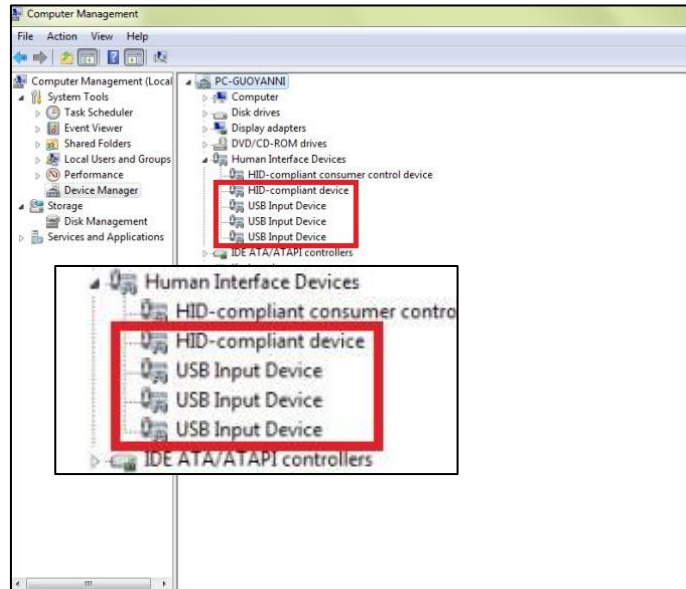


Figure 2-2 Computer Control Panel

2. Place the device on the desk.
3. Login the iVMS-4200 control client.
4. Enter the access control panel and click **Selecting Modules** to select access control.

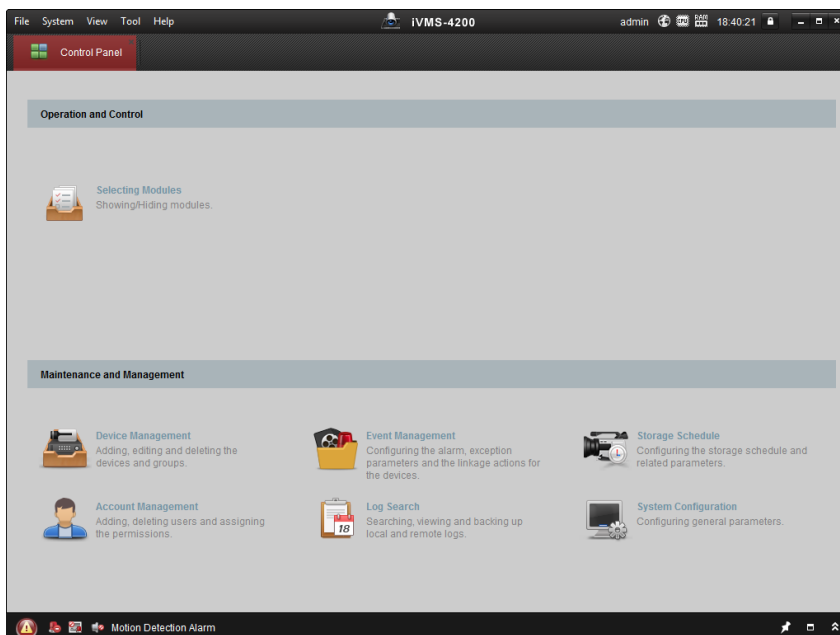


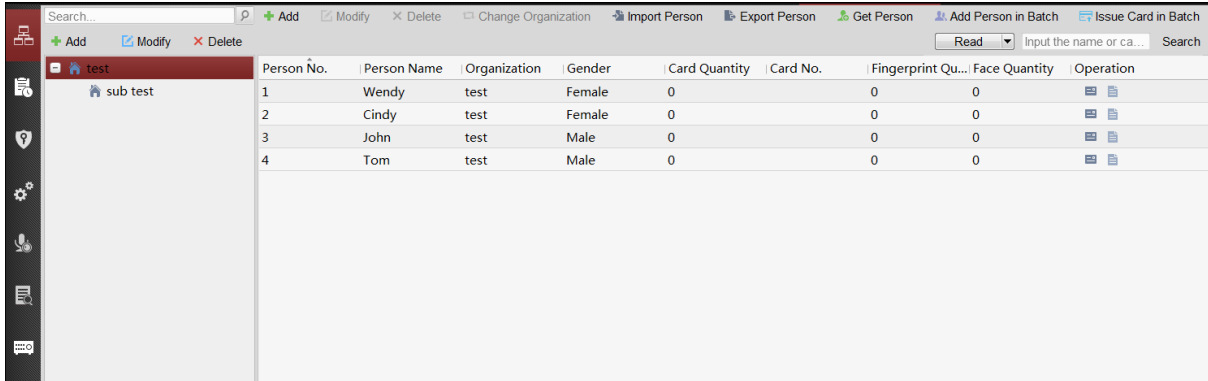


Figure 2-3 Client Control Panel

5. Click  to enter the Access Control module.
6. Click  tab to enter the Person and Card Management interface.











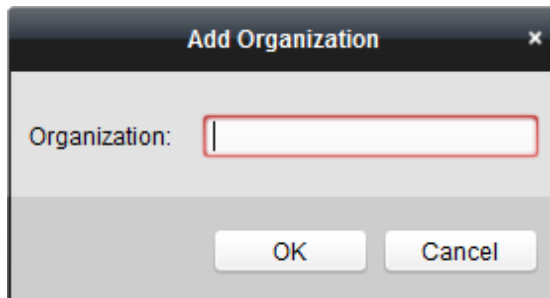
Person No.	Person Name	Organization	Gender	Card Quantity	Card No.	Fingerprint Qu...	Face Quantity	Operation
1	Wendy	test	Female	0		0	0	 
2	Cindy	test	Female	0		0	0	 
3	John	test	Male	0		0	0	 
4	Tom	test	Male	0		0	0	 

Figure 2-4 Person and Card Management interface

7. Add an organization.
- 1) In the organization list on the left, you should add a top organization as the parent organization of all organizations.
  - 2) Click **Add** button to pop up the adding organization interface.



**Add Organization** ✕

Organization:

Figure 2-5 Add Organization Window

- 3) Input the Organization Name as desired.
  - 4) Click **OK** to save the adding.
- Note:** Up to 10 levels of organizations can be created.
8. Add fingerprint.
- 1) Select an organization in the organization list and click Add button on the Person panel to pop up the adding person dialog.
  - 2) Click **Fingerprint** tab.



Figure 2-6 Fingerprint Tab

3) Select the Collection Mode as **Local Collection**.

4) Click **Set Fingerprint Machine** to enter the following dialog box.

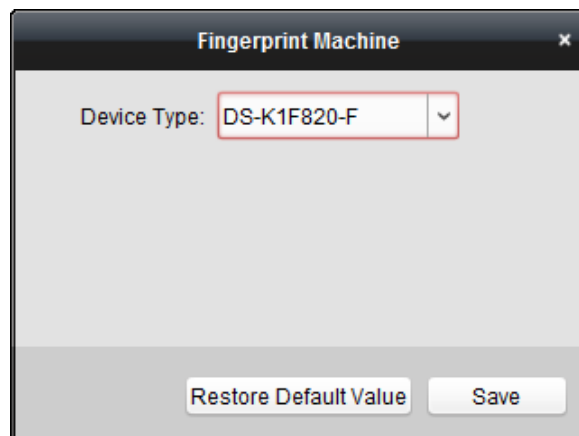


Figure 2-7 Select Fingerprint Window

5) Select DS-K1F820-F as the device type.

6) Click **Save** button to save the settings.

7) (Optional) You can click **Restore Default Value** button to restore the default settings.

9. Start collecting.

1) In the Fingerprint tab, click **Start** button, click to select the fingerprint and start collecting.

2) Lift and rest the corresponding finger on the fingerprint scanner for two times to collect the fingerprint picture to the client.

**Note:** If the collected fingerprint picture is not clear, you should try another. You can collect the fingerprint picture for no more than 4 times.

3) Click **OK** to save the fingerprint picture.

## 2.2 Fingerprint Collection Method

The place of finger affects the fingerprint information collected a lot because of the area sensor used in the fingerprint reader. The following are some tips for fingerprint collection.

### Placement of Finger

Try to place the finger in the center of the sensor. If the fingerprint stored in the template is left skewed when collection, and then the user press his finger too right when identification, the identification will be failed, because the overlap area between the template and the recorded fingerprint information is too small to pass the user.

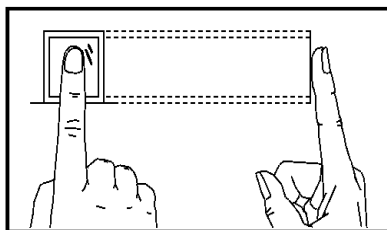
### Area between Finger and Sensor

The touch area between finger and sensor decides the information content of the collected fingerprint. The more information the device sensed, the higher of the pass rate.

Thumb, forefinger, middle finger are suggested to use in order to improve fingerprint identification rate.

### Correct Scanning

The figure displayed below is the correct way to scan your finger:

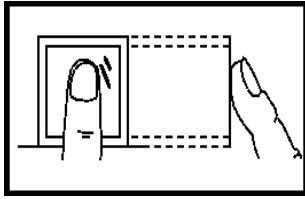


You should press your finger on the scanner horizontally. The center of your scanned finger should align with the scanner center.

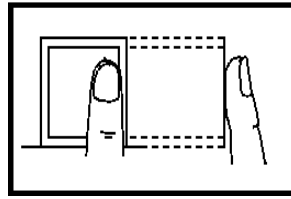
### Incorrect Scanning

The figures of scanning fingerprint displayed below are wrong:

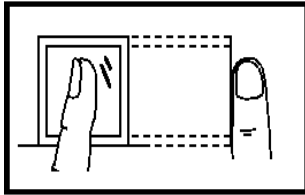
Vertical



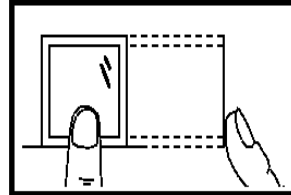
Edge I



Side



Edge II



### Environment

The scanner should avoid direct high light, high temperature, humid conditions and rain.

When it is dry, the scanner may not recognize your fingerprint successfully. You can blow your finger and scan again after drying the finger.

### Others

If your fingerprint is shallow, or it is hard to scan your fingerprint, we recommend you to use other authentication methods.

If you have injuries on the scanned finger, the scanner may not recognize. You can change another finger and try again.

### 3 Points of Attentions

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In order to acquire high quality of fingerprint information, we hope users notice the tips below in the using process.

#### **Properly Protect Fingerprint Sensor**

Fingerprint sensor is the key component for image capture, and damage on the sensor will directly affect the quality of the fingerprint image. Please keep it from crash with any hard object.

#### **Keep Finger Clean**

If the fingers are dirty, please wash the hands.

If the fingers wet or sweat a lot, you'd better use dry paper or towel to wipe the fingers and then capture the fingerprint image. If the finger is too dry to acquire the fingerprint, you can blow your finger and record fingerprint after drying the finger.

#### **Keep the Surface of Fingerprint Sensor Clean**

If the surface of the sensor is dirty, you can use soft paper or towel to wipe it.

#### **Choose a Finger with High Quality Fingerprint**

Choose a finger without melanin skin, scars, or any cracks. It is recommended to use the thumb, forefinger and middle finger.

#### **Keep the device away from water**

As for fingerprint reader intake water accidentally, you should cut down the power immediately and retry power on after drying the fingerprint reader, but not guarantee it function well.

#### **Power Supply Equipment Grounded**

The power supply equipment needs to be well grounded otherwise there may result the damage of equipment, or discomfort when touch it.

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