Quick Start Guide
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This quick start guide is intended for users of the models below:

<table>
<thead>
<tr>
<th>Series</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standalone Access Control Terminal</td>
<td>DS-K1T105E/M</td>
</tr>
<tr>
<td></td>
<td>DS-K1T105E/M-C (with Camera)</td>
</tr>
<tr>
<td>Optical IP-based Fingerprint Access Control Terminal</td>
<td>DS-K1T200EF/MF</td>
</tr>
<tr>
<td></td>
<td>DS-K1T200EF/MF-C (with Camera)</td>
</tr>
</tbody>
</table>

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.

0100001050825
Regulatory Information

FCC Information

FCC compliance: This equipment has been tested and found to comply with the limits for a digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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 Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, 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.

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.

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.
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.

<table>
<thead>
<tr>
<th>Warnings</th>
<th>Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow these safeguards to prevent serious injury or death.</td>
<td>Follow these precautions to prevent potential injury or material damage.</td>
</tr>
</tbody>
</table>

**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

1.1 Introduction

DS-K1T105 is a series of standalone access control terminal with picture capturing function. DS-K1T105 is designed with a 2.8-inch LCD display screen, and HD camera (2 MP optional). It supports two network communication methods (TCP/IP, and Wi-Fi), and supports offline operation.
DS-K1T200 is a series optical IP-based fingerprint access control terminal with multiple advanced technologies including fingerprint recognition, face detection, Wi-Fi, smart card recognition, LCD display screen, and picture capturing technology. It is designed with a 2.8-inch LCD display screen, and HD camera (2 MP optional). It is equipped with optical fingerprint recognition module (supporting 1:1 mode and 1:N mode), and supports offline operation.

1.2 Main Features

1.2.1 Main Features of DS-K1T105 Series Model

- Doorbell ringtone settings function.
- Touch mode and blue light display technique for keypad.
- Stand-alone settings for the terminal.
- 2.8-inch LCD display screen.
- Transmission modes of wired network (TCP/TP) and Wi-Fi.
- Face detection and picture capturing function implemented by built-in camera (2 MP optional, only supports DS-K1T105E/M -C)
- Supports multiple door opening modes (card, card + password, exit button, etc.)
- Supports RS485 communication for connecting to external card reader.
- Supports working as a card reader, and supports Wiegand interface and RS485 interface for accessing the controller.
Max. 100,000 valid card No., and Max. 300,000 access control events records storage.

- Supports EM card reading (DS-K1T105E/E-C)
- Supports Mifare card reading, including card No. reading, & writing function (DS-K1T105M/M-C)
- Tampering detection, unlocking overtime alarm, invalid card swiping over times alarm, and duress card alarm.
- Accurate data and time display provided by built-in electronic clock and watchdog program to ensure the basic function of the terminal.
- Data can be permanently saved after power-off.

1.2.2 Main Features of DS-K1T200 Series Model

- Doorbell ringtone settings function.
- Touch mode and blue light display technique for keypad.
- Stand-alone settings for the terminal.
- 2.8-inch LCD display screen.
- Transmission modes of wired network (TCP/TP) and Wi-Fi.
- Face detection and picture capturing function implemented by built-in camera (2 MP optional, only supports DS-K1T200EF/MF-C)
- Supports RS485 communication for connecting external card reader.
- Supports working as a card reader, and supports Wiegand interface and RS485 interface for accessing the controller.
- Max. 100,000 card No., Max. 300,000 access control events records, and Max. 9500 fingerprints storage.
Adopts the optical fingerprint module, supporting 1:N mode (fingerprint, card + fingerprint) and 1:1 mode (card + fingerprint).

Supports multiple authentication modes (card, fingerprint, card + fingerprint, card + password, fingerprint + password, card + fingerprint + password, and so on.)

Supports EM card reading (DS-K1T200EF/EF-C)

Supports Mifare card reading, including card No. reading, and sector reading & writing (DS-K1T200MF/MF-C)

Tampering detection, unlocking overtime alarm, invalid card swiping over times alarm, duress card alarm, and so on.

Accurate data and time display provided by built-in electronic clock and watchdog program to ensure the basic function of the terminal.

Data can be permanently saved after power-off.
2 Appearance

2.1 Appearance of DS-KITI05 Series Model

Please refer to the following content for detailed information of the DS-K1T105 series model.

Figure 2-1 Appearance of DS-K1T105 Series Model

Table 2-1 Description of DS-K1T105 Series Model

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.8-Inch LCD Display Screen</td>
</tr>
<tr>
<td>2</td>
<td>HD Camera with 2 MP (only DS-K1T105E/M/-C support)</td>
</tr>
<tr>
<td>3</td>
<td>Keypad</td>
</tr>
<tr>
<td>4</td>
<td>USB 2.0 Interface</td>
</tr>
<tr>
<td>5</td>
<td>Tampering Switch</td>
</tr>
<tr>
<td>6</td>
<td>PSAM Card Slot</td>
</tr>
<tr>
<td>7</td>
<td>External Wiring Terminals</td>
</tr>
<tr>
<td>8</td>
<td>Serial Port</td>
</tr>
<tr>
<td>9</td>
<td>Ethernet Port</td>
</tr>
</tbody>
</table>
2.2 Appearance of DS-KIT200Series Model

Please refer to the following content for detailed information of DS-K1T200 series model

![Appearance of DS-K1T200 IP-Based Fingerprint Access Control Terminal](image)

Figure 2-2 Appearance of DS-K1T200 IP-Based Fingerprint Access Control Terminal

2.2.1 Description of Components

Table 2-2 DS-K1T200 IP-Based Fingerprint Access Control Terminal Components

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.8-Inch LCD Display Screen</td>
</tr>
<tr>
<td>2</td>
<td>HD Camera with 2 MP (only DS-K1T200EF/MF-C support)</td>
</tr>
<tr>
<td>3</td>
<td>Keypad</td>
</tr>
<tr>
<td>4</td>
<td>Optical Fingerprint Reading Module</td>
</tr>
<tr>
<td>5</td>
<td>USB 2.0 Interface</td>
</tr>
<tr>
<td>6</td>
<td>Tampering Switch</td>
</tr>
<tr>
<td>7</td>
<td>PSAM Card Slot</td>
</tr>
<tr>
<td>8</td>
<td>External Wiring Terminals</td>
</tr>
</tbody>
</table>
2.3 Appearance of Keys

![Figure 2-3 Appearance of Keys](image)

2.3.1 Description of Items

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Numeric Keys: Enter number in the textbox. Direction Keys: Select icons in the menu.</td>
</tr>
<tr>
<td>2</td>
<td>Editing Key: Click the key to enter/exit the editing status.</td>
</tr>
<tr>
<td>3</td>
<td>Exiting Key: Click the key to exit the menu.</td>
</tr>
</tbody>
</table>
| 4   | Confirming Key: Click the key to confirm operations.  
Long-click the key to enter the login interface. |
| 5   | Deleting Key: Click the key to delete contents in the textbox. |
| 6   | Status Indicator: Indicator for POWER  
Power Status  
Thin Red: Active Key.  
Flash Red: Power Exception.  
Flash Blue: Connected; Powered. |

Table 2-3 Description of Keys
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Power, Ring, and Connection Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Doorbell Ring</td>
<td></td>
</tr>
<tr>
<td>LINK</td>
<td>Normal Card/Illegal Card</td>
<td>Normal Card: Solid Blue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Illegal Card: Solid Red</td>
</tr>
<tr>
<td></td>
<td>Connection Status</td>
<td>Off: Network or Wi-Fi Disconnected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solid Blue: Network or Wi-Fi connected, but client unarmed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flicker Blue: Network or Wi-Fi connected, but client armed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(RS485 Card Reader Mode)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flicker Red: Connection Exception.</td>
</tr>
</tbody>
</table>
3 Terminal Connection

3.1 Terminal Description

Group A

A1
A2

Power Input

Group B

B1
B2
B3
B4
B5
B6

Alarm Input

Alarm Output

Group C

C1
C2
C3
C4
C5
C6
C7

RS485

Wiegand Output

Group D

D1
D2
D3
D4
D5
D6
D7

Power Output

Door Lock

Figure 3-1 Terminal Diagram of Access Control Terminal
## Table 3-1 Terminal Description

<table>
<thead>
<tr>
<th>Line Group</th>
<th>No.</th>
<th>Function</th>
<th>Color</th>
<th>Terminal Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>A1</td>
<td>Power Input</td>
<td>Red</td>
<td>+12V</td>
<td>12V DC Power Supply</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td></td>
<td>Black</td>
<td>GND</td>
<td>GND</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>B1</td>
<td>Alarm Input</td>
<td>Yellow/Blue</td>
<td>IN1</td>
<td>Alarm Input 1</td>
</tr>
<tr>
<td></td>
<td>B2</td>
<td>Alarm Input</td>
<td>Yellow/Black</td>
<td>GND</td>
<td>GND</td>
</tr>
<tr>
<td></td>
<td>B3</td>
<td></td>
<td>Yellow/Orange</td>
<td>IN2</td>
<td>Alarm Input 2</td>
</tr>
<tr>
<td></td>
<td>B4</td>
<td>Alarm Output</td>
<td>Yellow/Purple</td>
<td>NC</td>
<td>Alarm Output Wiring</td>
</tr>
<tr>
<td></td>
<td>B5</td>
<td>Alarm Output</td>
<td>Yellow/Brown</td>
<td>COM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B6</td>
<td></td>
<td>Yellow/Red</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>C1</td>
<td>RS485 Communication Port</td>
<td>Yellow</td>
<td>485 +</td>
<td>RS485 Wiring</td>
</tr>
<tr>
<td></td>
<td>C2</td>
<td></td>
<td>Blue</td>
<td>485 -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C3</td>
<td>Wiegand Output</td>
<td>Green</td>
<td>W0</td>
<td>Wiegand Wiring 0</td>
</tr>
<tr>
<td></td>
<td>C4</td>
<td></td>
<td>White</td>
<td>W1</td>
<td>Wiegand Wiring 1</td>
</tr>
<tr>
<td>Line Group</td>
<td>No.</td>
<td>Function</td>
<td>Color</td>
<td>Terminal Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----</td>
<td>----------</td>
<td>---------</td>
<td>---------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td></td>
<td>C5</td>
<td></td>
<td>Orange</td>
<td>LED-ERR</td>
<td>Error Prompt LED Indicator Wiring</td>
</tr>
<tr>
<td></td>
<td>C6</td>
<td></td>
<td>Purple</td>
<td>BEEP</td>
<td>Beep Siren Wiring</td>
</tr>
<tr>
<td></td>
<td>C7</td>
<td></td>
<td>Grey</td>
<td>TAMPER</td>
<td>Tampering Alarm Wiring</td>
</tr>
<tr>
<td>D</td>
<td>D1</td>
<td>Power Output</td>
<td>Red</td>
<td>+12V</td>
<td>Power Output</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td></td>
<td>Black</td>
<td>GND</td>
<td>GND</td>
</tr>
<tr>
<td>D</td>
<td>D3</td>
<td>Door Lock</td>
<td>White/Purple</td>
<td>NC</td>
<td>Lock Wiring</td>
</tr>
<tr>
<td>D</td>
<td>D4</td>
<td></td>
<td>White/Yellow</td>
<td>COM</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>D5</td>
<td></td>
<td>White/Red</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>D6</td>
<td></td>
<td>Yellow/Green</td>
<td>SENSOR</td>
<td>Door Contact Signal Input</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Line Group</th>
<th>No.</th>
<th>Function</th>
<th>Color</th>
<th>Terminal Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D7</td>
<td></td>
<td></td>
<td>Yellow/Grey</td>
<td>BUTTON</td>
<td>Exit Door Wiring</td>
</tr>
</tbody>
</table>
4 Wiring Description

4.1 External Device Wiring Overview

Figure 4-1 External Device Connection Diagram
4.3 The Wiring of External Card Reader

4.3.1 The Wiring of External RS485 Card Reader

- When connected to the external card reader, the terminal only supports RS485 communication method (External Wiegand card reader is not supported).
- Set the dial-up of the external card reader as 2 when connected to the access control terminal.

![Diagram](image-url)

Figure 4-2 External RS485 Card Reader Connection Diagram
4.4 The Wiring of Electric Lock and Door Magnetic

4.4.1 The Wiring of Electric Lock

Group D (Door Lock)

<table>
<thead>
<tr>
<th>White/Purple</th>
<th>White/Yellow</th>
<th>White/Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC</td>
<td>COM</td>
<td>NO</td>
</tr>
</tbody>
</table>

Figure 4-3  The Installation of Electric Dropbolt, Magnetic Lock, and Electric Strike
Signal input interface of the door status (DOOR_NC, DOOR_COM, DOOR_NO) is used to recognize whether the door is locked. If the NC interface is connected for opening door, the NO interface can only be connected for locking door.

4.4.2 The Wiring of Door Contact

**Group D (Power Output)**
- Black
- GND

**Group D (Door Lock)**
- Yellow/Green
- SENSOR

![Diagram](image)

Figure 4-4 The Installation of Door Contact
4.5 The Wiring of Exit Button

Group D (Power Output)  Group D (Door Lock)

Black  Yellow/Gray
GND  BUTTON

Exit Button

Figure 4-5 The Installation of Exit Button
4.6 The wiring of Alarm Input

Group B (Alarm Input)

<table>
<thead>
<tr>
<th>Yellow/Blue</th>
<th>Yellow/Black</th>
<th>Yellow/Orange</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN1</td>
<td>GND</td>
<td>IN2</td>
</tr>
</tbody>
</table>

Alarm Input Device

Figure 4-6 Alarm Input Connection

4.7 The Wiring of External Alarm Device

Group B (Alarm Output)

<table>
<thead>
<tr>
<th>Yellow/Purple</th>
<th>Yellow/Brown</th>
<th>Yellow/Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC</td>
<td>COM</td>
<td>NO</td>
</tr>
</tbody>
</table>

Alarm Output Device

Figure 4-7 The Installation Diagram of External Alarm Device
4.8 Card Reader Connection

The access control terminal can be switched into the card reader mode. It can access to the access control as a card reader, and supports Wiegand communication port and RS485 communication port.

**NOTE**

When the access control terminal works as a card reader, it only supports being connected to the controller, but does not support alarm input or output, or the connection of external devices.

4.8.1 The Wiring of Wiegand Output

![Wiegand Connection Diagram](image)

Figure 4-8 Wiegand Connection Diagram
When the access control terminal works as a card reader, you must connect the LED-ERR and BEEP interfaces if you want to control the LED and buzzer of the Wiegand card reader.

Set the working mode of the terminal as card reader, which can be configured in **System Parameter → Mode Switch**, if the terminal is required to work as a card reader. The Wiegand mode can be configured in **Network Parameter -> Wiegand Mode** (Wiegand 26/Wiegand 34).

The distance of Wiegand communication should be no longer than 80 m.

### 4.8.2 The Wiring of RS485 Output

<table>
<thead>
<tr>
<th>Group D (Power Output)</th>
<th>Group C (RS485)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Yellow</td>
</tr>
<tr>
<td>Black</td>
<td>Blue</td>
</tr>
<tr>
<td>+12V</td>
<td>485+</td>
</tr>
<tr>
<td>GND</td>
<td>485–</td>
</tr>
</tbody>
</table>

![Figure 4-9 RS485 Connection Diagram](image)
- Set the working mode of the terminal as card reader, which can be configured in **System Parameter -> Mode Switch**, if the terminal requires working as a card reader.

- When the access control terminal works as a RS485 card reader, the default RS485 address is 1. RS485 address can also be configured in **System Parameter -> Serial Port Settings**.
5 Activating the Access Control Terminal

Purpose:
You are required to activate the terminal first before using it. Activation via SADP, and Activation via client software are supported. The default values of the control terminal are as follows.

- The default IP address: 192.0.0.64.
- The default port No.: 8000.
- The default user name: admin.

5.1 Activating via SADP Software

SADP software is used for detecting the online device, activating the device, and resetting the password.

Get the SADP software from the supplied disk or the official website, and install the SADP according to the prompts. Follow the steps to activate the control panel.

Steps:
1. Run the SADP software to search the online devices.
2. Check the device status from the device list, and select an inactive device.
3. Create a password and input the password in the password field, and confirm the password.

**STRONG PASSWORD RECOMMENDED**—We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

4. Click **OK** to save the password.

You can check whether the activation is completed on the pop-up window.

If activation failed, please make sure that the password meets the requirement and then try again.

5. Change the device IP address to the same subnet with your computer by
either modifying the IP address manually or checking the checkbox of Enable DHCP.

![Modify Network Parameters Interface](image)

Figure 5-2 Modify Network Parameters Interface

6. Input the password and click the **Save** button to activate your IP address modification.

## 5.2 Activating via Client Software

The client software is versatile video management software for multiple kinds of devices.

Get the client software from the supplied disk or the official website, and install the software according to the prompts. Follow the steps to activate the control panel.

**Steps:**

1. Run the client software and the control panel of the software pops up, as
shown in the figure below.

2. Click the icon on the upper-left side of the page, select **Access Control** to enter the control panel.

![Figure 5-3 Control Panel Interface](image)

3. Click the **Controller Management** icon to enter the Controller Management interface, as shown in the figure below.
4. Check the device status from the device list, and select an inactive device.

5. Click the **Activate** button to pop up the Activation interface.

6. Create a password and input the password in the password field, and confirm the password.
**STRONG PASSWORD RECOMMENDED**— We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

7. Click **OK** button to start activation.

8. Click the **Edit Network...** button to pop up the Network Parameter Modification interface.

9. Change the device IP address to the same subnet with your computer by either modifying the IP address manually or checking the checkbox of Enable DHCP.

10. Input the password to activate your IP address modification.
6 Basic Operation

Before You Start:

- You should activate the device before the first login. Otherwise, after powered on, the system will switch into activation notifying interface. For detailed information about activation, see Chapter 5.

![Activation Notifying Interface](image)

Figure 6-1 Activation Notifying Interface

- You should enter the default password for the first login.

Enter System Settings -> System Parameter -> Login Password to reset the login password.

The default password is 12345.

Steps:

1. The device enters the initial interface automatically after powered on.

![Initial Interface](image)

Figure 6-2 Initial Interface

2. Long-click the # key to enter the password authentication interface.
3. Enter the default configuration password. 
   - Click the # key to confirm the settings. If the configuration password authentication failed, the system will return to the initial interface, and if the configuration password is successfully authenticated, the system will enter the menu operation interface.

6.1 User Management

**Purpose:**
On the user management interface, you can add and manage users.

**Steps:**
1. Move the cursor to **User** (user management) with the direction keys.
2. Click the # key to enter the user management interface.
6.1.2 Adding User

**Purpose:**
In the **Adding User** menu, you can add users, register card, and record fingerprints optionally for the corresponding person.

**Steps:**
1. Move the cursor to **Add** (add user) by using the direction keys.
2. Click the # key to enter the card registration interface.

3. Register the card.
   - Register the card by swiping the card.
     1) Place the card on the induction area.
     2) The system displays the card No. in the textbox automatically with a beep sound if the card No. has been recognized.
   - Register the card by entering the card number into the **or enter the Card No.** textbox.
     1) Click the ➔ key to enter the editing mode.
2) Enter the card number into the textbox. 
3) Click the ➔ key to exit the editing mode.

4. After registering the card, a dialog box about whether to register the fingerprint pops up.

   ![Prompts](Image)

   Figure 6-7 Card Registration PoP-Up Window

1) Move the cursor to the OK button, and click the # key to enter the fingerprint registration interface.

   ![Record Fingerprint](Image)

   Figure 6-8 Fingerprint Registration Interface

2) Place the finger on the fingerprint scanner, rise and rest your finger by following the corresponding voice prompts.

   - The fingerprint registration function only supports device with fingerprint module.
   - The same fingerprint cannot be repeatedly registered.
   - For the optical access control terminal, you should place your finger twice to register the fingerprint.
6.1.2 Managing User

1. Move the cursor to Manage (edit user) by using direction keys on the user management interface.
2. Click the # key to enter the managing user interface.

**Searching User**

**Steps:**

1. Move the cursor to a user by using direction keys.
2. Click the # key to pop up an interface for selecting corresponding operations.

3. Move the cursor to Search User.
4. Click the # key to enter the searching interface.

5. Enter the card number into Please enter card No. textbox.
6. Click the # key to view the basic information about the card holder.

**Editing User**

**Steps:**
1. Move the cursor to a user by using direction keys.
2. Click the # key to popup an interface for selecting corresponding operations. (Figure 6-9)
3. Move the cursor to **Editing User**.
4. Click the # key to enter the editing interface.

```
<table>
<thead>
<tr>
<th>Edit User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card: 0739261945</td>
</tr>
<tr>
<td>PWD: Change PWD</td>
</tr>
<tr>
<td>Fingerprint: Add</td>
</tr>
<tr>
<td>Valid Date: From 2000 Y 1 M 1 D To 2025 Y 8 M 19 D</td>
</tr>
<tr>
<td>Enable first card?: [ ]</td>
</tr>
<tr>
<td>OK</td>
</tr>
</tbody>
</table>
```

Figure 6-11 Editing Interface

5. Edit the user information.
   - Adding the Fingerprint
     Move the cursor to **Add** to enter the fingerprint registration interface. See details in step 4 of adding user.
     
     **NOTE**
     DS-K1T105 series model does not support this function.
   - Changing the Password
     1) Move the cursor to **Change PWD** to enter the password changing interface.
     2) Enter a new password.
     3) Confirm the new password.
Changing the valid date
You can set the start/end time of the user’s permission.
Click the key to enter/exit the editing mode.

Enabling first card
Click the # key to enable first card.

After enabling first card, the door remains open during the pre-defined valid duration.

6. Move the cursor to the OK button, and click the # key to confirm the settings.

Deleting the User

Steps:
1. Move the cursor to the user by using direction keys.
2. Click the # key to pop up an interface for selecting corresponding operations. (Figure 6-9)
3. Move the cursor to Delete User, and click the # key to enter the deleting interface.
4. Move the cursor to Delete User, Delete PWD only or Delete FP only.
   Delete User: Delete the user and the overall information.
   Delete PWD only: Only delete the password set by the user.
   Delete FP only: Only delete the fingerprint information of the user.

   DS-K1T105 series model does not support this function.
5. Click the # key to finish the deleting operation.

You can click * key to return to the main menu.
6.2 Communication Settings

**Purpose:**
On the communication settings interface, you can set network parameters, the serial port, Wiegand parameters, and Wi-Fi.

**Steps:**
1. Move the cursor to **Comm** (communication settings) by using direction keys.
2. Click the # key to enter the communication settings interface.

![Communication Settings Interface](image)

**Network Settings:** It refers to network parameters of the device, including IP address, subnet mask, and gateway address.

**Serial Port Settings:** When the access control terminal works as a RS485 card reader, serial port parameters include working mode, Baud Rate, and RS485 address.

**Wiegand Settings:** When the access control terminal works as a Wiegand card reader, Wiegand parameters involve whether to enable the Wiegand connection, and the Wiegand mode.

**Wi-Fi:** You can enable the Wi-Fi function.

6.2.1 Network Settings

**Purpose:**
On the network settings interface, you can set network parameters of the device.

**Steps:**
1. Move the cursor to **Network** (network settings) by using direction keys.
2. Click the # key to enter the network settings interface.
3. Modify network parameters of the device, including IP address, subnet mask, and gateway address.

   ![NOTE]

   Click the ←→ key to enter/exit the editing mode.

4. Move the cursor to the OK button, and click the # key.

### 6.2.2 Serial Port Settings

**Purpose:**
When the access control terminal works as the RS485 card reader, you should set serial port parameters.

**Steps:**
1. Move the cursor to Serial (serial port settings) by using direction keys on the communication settings interface.
2. Click the # key to enter the serial port settings interface.
3. Modify parameters of the serial port, including working mode, Baud Rate, and RS485 address.

**Working Mode:** Up serial port and down serial port are supported.

![NOTE](image)

Set the working mode of the serial port as **Down** (downstream) if the access control terminal is connected to the external card reader.

**Baud Rate:** The current supported Baud Rate is 19200.

**RS485 Address:** When the access control terminal works as a RS485 card reader, the default RS485 address is 1.

- Click the key to enter and exit the editing mode.
- Click the Right/Left direction keys to choose contents.
- Click the # key to switch the mode between “Yes” mode and “No” mode.

4. Move the cursor to the **OK** button, and click the # key.

### 6.2.3 Wiegand Settings

**Purpose:**
When the access control terminal works as the Wiegand card reader, you should set Wiegand parameters.

**Steps:**
1. Move the cursor to **Wiegand** (Wiegand settings) by using direction keys on the communication settings interface.
2. Click the # key to enter the Wiegand settings interface.

![Figure 6-16 Wiegand Settings Interface](image)

3. Edit parameters of the serial port, including enabling the Wiegand, and the Wiegand mode.

**Enable the Wiegand:** Select whether to enable the Wiegand.
Click the # key to enable first card.

**Wiegand Mode:** The default Wiegand mode is Wigand 34.

**NOTE**
- Click the ← key to enter and exit the editing mode.
- Click the Right/Left direction keys to choose contents.
- Click the # key to switch the mode between “Yes” mode and “No” mode.

4. Move the cursor to the **OK** button, and click the # key.

### 6.2.4 Wi-Fi Settings

**Steps:**

1. Move the cursor to **Wi-Fi** (Wi-Fi settings) by using direction keys on the communication settings interface.
2. Click the # key to enter the Wi-Fi settings interface.

![Figure 6-17 Wi-Fi Enabling](image)

3. Move the cursor to and click the # key to enable the WLAN.

![Figure 6-18 Wi-Fi Selection](image)
4. Move the cursor to a network, and click # key to enter the network connection interface.

![Figure 6-19 Wi-Fi Settings]

5. Enter the password of the network.
6. Edit the IP mode, IP address, subnet mask, and gateway address.
7. Move the cursor to the OK button, and click the # key.

![NOTE]
Click the ← key to enter and exit the editing mode.

6.3 System Settings

**Purpose:**
On the system settings interface, you can set system parameters, manage the data, restore default settings, set access control parameters, and set cameras.

**Steps:**
1. Move the cursor to System (system parameters) by using direction keys.
2. Click the # key to enter the system parameters interface.

![Figure 6-20 System Settings Interface]
**System Parameters:** System parameters of the device include the device running mode, login password, and prompt sound.

**Data Management:** It is used to manage the storage data of the device, including Delete Card Parameters, Delete Event Only, and Delete Picture Only.

**Restore Settings:** The device can be restored into factory defaults or default settings.

**Access Control Settings:** You can set parameters of the access control terminal, including Controller Authentication, Card Reader Authentication, Door Action Time, Delayed Door Alarm, and Anti-passing Back.

**Camera Settings:** You can set the camera for the access control terminal (only supported by terminal with the model of -C).

### 6.3.1 Setting System

**Steps:**

1. Move the cursor to **System** (system parameters) by using direction keys on the system settings interface.
2. Click the # key to enter the system parameters interface.

![System Parameters Interface](image)

3. Modify system parameters, including switching the mode, entering the login password, and enabling voice prompts.

**Mode:** The device mode can be switched between **Controller** and **Card Reader**. After switching the mode, the system can automatically reboot and enter into the interface of the new mode.

**Login Password:** To reset the login password of the device, you should enter a new password, and confirm it.

**Voice Prompts:** After enabling voice prompts, you can hear the voice prompts to notify you the card status when you swipe the card. Otherwise, you will hear the beeper in place of the voice prompts.
Beep three times: legal card.
Beep four times: illegal card.

NOTE

- Click the ←→ key to enter and exit the editing mode.
- Click the Right/Left direction keys to choose contents.
- Click the # key to switch the mode between “Yes” mode and “No” mode.

4. Move the cursor to the OK button, and click the # key.

6.3.2 Managing Data

Purpose:
On the data management interface, you can delete the storage data of the device.

Steps:
1. Move the cursor to Data (data management) by using direction keys in the system settings Interface.
2. Click the # key to enter the data management interface.

<table>
<thead>
<tr>
<th>Data Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete Card Parameters</td>
</tr>
<tr>
<td>Delete Event Only</td>
</tr>
<tr>
<td>Delete Picture Only</td>
</tr>
</tbody>
</table>

Figure 6-22 Data Management Interface

3. Move the cursor to Delete Card Parameters, Delete Event Only, or Delete Picture Only.
   - Delete Card Parameters: Delete all cards parameters registered in the device.
   - Delete Event Only: Delete all access events in the system.
   - Delete Picture Only: Delete all captured pictures in the system.

NOTE
This function is only supported by terminal with the model of –C.

4. Click the # key.

6.3.3 Restoring Settings

Purpose:
On the restore settings interface, you can restore Factory Defaults or Default Settings.
Steps:
1. Move the cursor to **Reset** (restore settings) by using direction keys on the system settings interface.
2. Click the # key to enter the restore settings interface.

![Restore Settings Interface]

3. Move the cursor to Factory Defaults or Default Settings.
   - **Factory Defaults:** After restoring factory defaults, all parameters of the device are returned to the factory defaults.
   - **Default Settings:** After restoring defaults settings, parameters, excluding network parameters and event parameters, are returned to the factory defaults.
4. Click the # key.
5. Move the cursor to the OK button, and click the # key.

### 6.3.4 Door Settings

**Purpose:**
On the door settings interface, you can set door parameters, including Controller Authentication, Card Reader Authentication, Door Action Time, Delayed Door Alarm, and Anti-passing Back.

**Steps:**
1. Move the cursor to **ACS** (door settings) by using direction keys in the system settings interface.
2. Click the # key to enter the door settings interface.
3. Edit door parameters.

**Controller Authentication:** Set the controller authentication mode for opening the door, that is, Card Only, Fingerprint Only, Card/Fingerprint, Card & Fingerprint, Card & Password, Password & Fingerprint, Card & Password & Fingerprint.

**Card Reader Authentication:** Set the card reader authentication mode for opening the door, that is, Card Only, Fingerprint Only, Card/Fingerprint, Card & Fingerprint, Card & Password, Password & Fingerprint, Card & Password & Fingerprint.

**Door Action Time:** Set the door action time: 1 ~ 255 s.

**Delayed Door Alarm:** Set the delayed door alarm threshold: 1 ~ 255 s.

**Anti-Passing Back:** Set whether to enable the function of anti-passing back.

- Click the key to enter and exit the editing mode.
- Click the Right/Left direction keys to choose contents.
- Click the # key to switch the mode between “Yes” mode and “No” mode.

4. Move the cursor to the OK button, and click the # key.

### 6.3.5 Setting the Camera

**Purpose:**
On the camera settings interface, you can set camera parameters.

**NOTE:**
This function is only supported by terminal with the model of –C.

**Steps:**
1. Move the cursor to **Camera** (camera settings) by using direction keys in the system settings Interface.
2. Click the # key to enter the camera settings interface.
3. Edit camera parameters.

**Enable Face Detection**: When enabling face detection, the system can detect the face captured by the camera.

**Enable Card No. Overlay**: When enabling card No. overlay, captured pictures can be overlaid on the card information.

**Display Picture**: When enabling to display the picture, captured pictures can display on the screen.

![NOTE]

- Click the ➡️ key to enter and exit the editing mode.
- Click the Right/Left direction keys to choose contents.
- Click the # key to switch the mode between “Yes” mode and “No” mode.

4. Move the cursor to the **OK** button, and click the # key.

### 6.4 Time Settings

**Steps:**

1. Move the cursor to **Time** (time settings) by using direction keys.
2. Click the # key to enter the time settings interface.
3. Edit time parameters.
   **Date/Time:** Edit the data and the time of the device.
   **DST (Daylight Saving Time):** When enabling DST, you should set the bias time, the start time, and the end time of DST.

   ![NOTE]

   - Click the key to enter and exit the editing mode.
   - Click the Right/Left direction keys to choose contents.
   - Click the # key to switch the mode between “Yes” mode and “No” mode.

4. Move the cursor to the **OK** button, and click the # key.

### 6.5 Upload/Download Settings

**Purpose:**
On the upload/download interface, you can upgrade the device, upload the door parameters, download access parameters, download captured pictures, and download attendance record.

**Steps:**
1. Plug a USB disk into the access control terminal.
2. Move the cursor to **Transfer** (upload/download) by using direction keys.
3. Click the # key to enter the upload/download interface.
4. Move the cursor to Device Upgrade, Upload Access Settings, Download Access Settings, Download Attendance Record, or Download Captured Picture.
   - **Device Upgrade**: The system can automatically read the upgrading information from the USB, and upgrade the device.
   - **Upload Access Settings**: The system can automatically read the access parameters from the USB, and upload them to the device.
   - **Download Access Settings**: The system can automatically download access parameters into the USB.
   - **Download Attendance Record**: The system can automatically download attendance records into the USB.

5. **Download Captured Picture**: The system can automatically download captured pictures into the USB. Click the # key.

### 6.6 Testing

**Purpose:**
On the test interface, you can do voice test, keypad test, RTC test, and camera test.

**Steps:**
1. Move the cursor to **Test** by using direction keys.
2. Click the # key to enter the test interface.
3. Move the cursor to select Voice Test, Keypad Test, RTC Test, or Camera Test to do corresponding test.

**Voice Test:** You can hear a voice prompt “Voice prompt succeeds” after click the # key.

**Keypad Test:** On the keypad test interface, if the keypad test succeeds, the screen will display corresponding numbers or functions of the keypad you click.

**RTC Test:** On the RTC test interface, if the test succeeds, the screen will display the synchronization time.

**Camera Test:** On the camera test, if the camera test succeeds, the screen will display the real-time picture the camera captures.

   ![Note]

   This function is only supported by terminal with the model of –C.

### 6.7 Log Query Settings

**Steps:**

1. Move the cursor to Log (log query settings) by using direction keys.
2. Click the # key to enter the log query interface.
3. Enter the card number.
   - Enter the card number by swiping the card.
     Place the card close to the screen.
   - Enter the card number manually.
     1) Click the ➡️ key to enter the text editing mode.
     2) Enter the card number in the textbox.
     3) Click the ➡️ key to exit the text editing mode.
4. Set the start/end time.
   - Click the ➡️ key to enter and exit the editing mode.
5. Move the cursor to the OK button, and click the # key.

   **NOTE**

On the log query display interface, you can view the card number, swiping time, and card reader ID.

### 6.8 System Information

**Steps:**
1. Move the cursor to Info (system information) by using direction keys.
2. Click the # key to enter the system information interface.
3. Move the cursor to **Record Capacity** or **Information** by using Left/Right direction keys.

- **Record Capacity**
  - **Card Capacity**: It refers to the maximum amount of cards.
    
    The default maximum card amount is 100,000.

- **Fingerprint Capacity**: It refers to the maximum amount of fingerprints.
  
  - Fingerprint capacity only supports devices with fingerprint registration function.
  - The default maximum fingerprint amounts of devices with fingerprint registering function are as follows.
    
    Optical device: 9500
  - DS-K1T105 series model does not support this function.

- **Device Information**
  In the device information interface, you can view the device name, the serial No., Mac address, and so on.
<table>
<thead>
<tr>
<th>Record</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Access Controller</td>
</tr>
<tr>
<td>SN:</td>
<td>XX-xxxxxxxxxxxxx</td>
</tr>
<tr>
<td>Mac:</td>
<td>XX:XX:XX:XX:XX:XX</td>
</tr>
<tr>
<td>Firmware:</td>
<td>Vx.x.x build xxxxxxx</td>
</tr>
<tr>
<td>Hardware:</td>
<td>XXXXXX</td>
</tr>
<tr>
<td>Production Date:</td>
<td>XXXX-XX-XX</td>
</tr>
</tbody>
</table>

Figure 6-31 Device Information Interface
## Appendix

### Specification

<table>
<thead>
<tr>
<th>Parameters</th>
<th>DS-K1T105E/M/ (-C)</th>
<th>DS-K1T200EF/M-C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td>≥1GHz, 32 Bit High-Performance Processor</td>
<td>≥1GHz, 32 Bit High-Performance Processor</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>256 M Storage</td>
<td>256 M Storage</td>
</tr>
<tr>
<td><strong>Micro SD Card</strong> (Additional)</td>
<td>Max. 32 G</td>
<td>Max. 32 G</td>
</tr>
<tr>
<td><strong>Operation System</strong></td>
<td>Linux</td>
<td>Linux</td>
</tr>
<tr>
<td><strong>Camera</strong></td>
<td>2 MP (Optional)</td>
<td>2 MP (Optional)</td>
</tr>
<tr>
<td><strong>Valid Card/ Swiping Record</strong></td>
<td>100/300 Thousand</td>
<td>100/300 Thousand</td>
</tr>
<tr>
<td><strong>Fingerprint Capacity</strong></td>
<td>N/A</td>
<td>Max. 4750 People (Two Local Collected Fingerprint Templates for Each Person, 9500 Fingerprint in Total)</td>
</tr>
<tr>
<td><strong>Fingerprint Recognition Duration</strong></td>
<td>1:1 ≤ 1s, 1:1000 ≤ 1s</td>
<td></td>
</tr>
<tr>
<td><strong>FAR (False Accept Rate)</strong></td>
<td>≤ 0.001%</td>
<td></td>
</tr>
<tr>
<td><strong>FRR (False Rejection Rate)</strong></td>
<td>≤ 0.01%</td>
<td></td>
</tr>
<tr>
<td><strong>Fingerprint Recognizer</strong></td>
<td>Optical Fingerprint Recognizer Module</td>
<td></td>
</tr>
<tr>
<td><strong>Card Reading Mode</strong></td>
<td>Supports EM card reading (DS-K1T105E/E-C)</td>
<td>Supports EM card reading (DS-K1T200E/EF-C)</td>
</tr>
<tr>
<td></td>
<td>Supports Mifare card reading, including card No. reading, &amp; writing function (DS-K1T105M/M-C)</td>
<td>Supports Mifare card reading, including card No. reading, and sector reading &amp; writing (DS-K1T200MF/MF-C)</td>
</tr>
<tr>
<td><strong>External Card Reader</strong></td>
<td>RS485 IC Reader</td>
<td>RS485 IC Reader</td>
</tr>
<tr>
<td><strong>Communication Mode</strong></td>
<td>TCP/IP, Wi-Fi, RS-485, and Wigand 26/34 (under the)</td>
<td>TCP/IP, Wi-Fi, RS-485, and Wigand 26/34 (under the)</td>
</tr>
<tr>
<td><strong>Access Control Terminal • Quick Start Guide</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transmission Rate</strong></td>
<td>card reader mode only)</td>
<td>card reader mode only)</td>
</tr>
<tr>
<td>TCP/IP, Wi-Fi : 10/100Mbps Self-Adaptive, RS485: 19200 bps-N-8-1</td>
<td>TCP/IP, Wi-Fi : 10/100Mbps Self-Adaptive, RS485: 19200 bps-N-8-1</td>
<td></td>
</tr>
<tr>
<td><strong>Input Interface</strong></td>
<td>Door Switch Key x 1, Magnetic Door x 1, Relay x 1, Alarm Output (Door Bell) x 1, Alarm Input x 2</td>
<td>Door Switch Key x 1, Magnetic Door x 1, Relay x 1, Alarm Output (Door Bell) x 1, Alarm Input x 2</td>
</tr>
<tr>
<td><strong>LCD Screen</strong></td>
<td>320 x 240 LCD-TFT Display Screen</td>
<td>320 x 240 LCD-TFT Display Screen</td>
</tr>
<tr>
<td><strong>Key Board</strong></td>
<td>16 Keys (0 to 9, F1, DEL, Switch Key, *, #, Doorbell)</td>
<td>16 Keys (0 to 9, F1, DEL, Switch Key, *, #, Doorbell)</td>
</tr>
<tr>
<td><strong>LED Indicator</strong></td>
<td>Power/Communication</td>
<td>Power/Communication</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Loudspeaker</td>
<td>Loudspeaker</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>12 VDC</td>
<td>12 VDC</td>
</tr>
<tr>
<td><strong>Working Current</strong></td>
<td>430 mA (Max, without Locks)</td>
<td>430 mA (Max, without Locks)</td>
</tr>
<tr>
<td><strong>Working Temperature</strong></td>
<td>-20°C to 65°C</td>
<td>-20°C to 65°C</td>
</tr>
<tr>
<td><strong>Working Humidity</strong></td>
<td>10% to 90% (No Condensing)</td>
<td>10% to 90% (No Condensing)</td>
</tr>
<tr>
<td><strong>Certificate</strong></td>
<td>CE, FCC</td>
<td>CE, FCC</td>
</tr>
<tr>
<td><strong>Dimension (L x W x H)</strong></td>
<td>122 mm x 82 mm x 23 mm</td>
<td>122 mm x 142 mm x 27 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>280 g</td>
<td>400 g</td>
</tr>
</tbody>
</table>