



M5

User Manual

(V1.0)

PREFACE

Honorable customers:

Thanks for choosing products of our company. The product with world cutting edge technologies—fingerprint/card recognition, computer communication, as well as microelectronics, is considered to be combination of three technologies: electronics, optics and computer communication. It is no doubt that it has become the first choice of standalone time & attendance for enterprises with its strong function and veracity. Please read this user manual carefully to have an initial understanding of functions and basic knowledge of installation, debugging, maintenance, application and management to better use this product.

Utilizing the latest biometric technology, this product will bring you a unprecedented reliability, convenience and benefits.

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Chapter 1. Product Introduction

This chapter introduces the advantages, performance, and functionality of M5.



1. Product Introduction

1.1. Product overview

M5 is a biometric fingerprint and RFID Card reader with a compact design, which is suitable for installing on a door frame. With master cards, you can register or delete users under offline state. The USB power supply and debug make operations simple. The IK10 and IP65 for outdoor solution.

M5 have the same look as following:

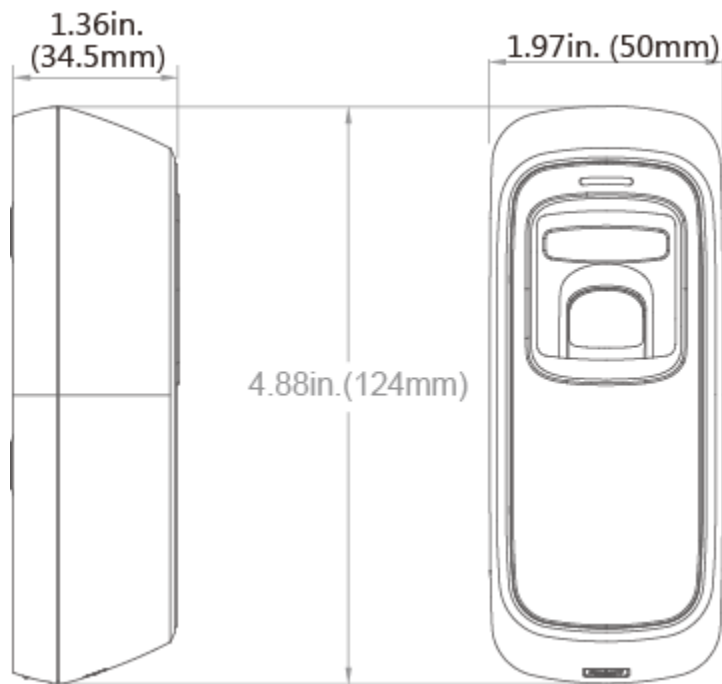


1.2. Module

Module Features:

- 2000 Fingerprints; 50000 Records;
- Touch Auto Wakeup Sensor;
- Management cards for user management;
- Support TCP/IP, USB Device, Wiegand Out;
- Support FP, Card, or Card+FP Identification Mode;
- IP54;IK10;
- Standard EM ID card module.

1.3. Size



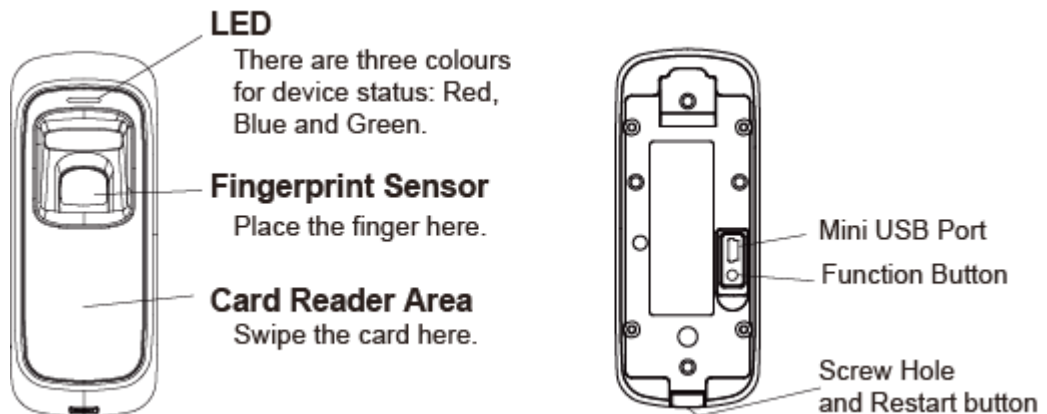
Chapter2. Operation Guide

This chapter is about the hardware operation and contains information of how to set the administrator, and how to add/delete users, etc.



2. Operation Guide

2.1. Interface Introduction



Note: The restart operation will not delete any user data stored in the device.

2.2. Upper Electricity

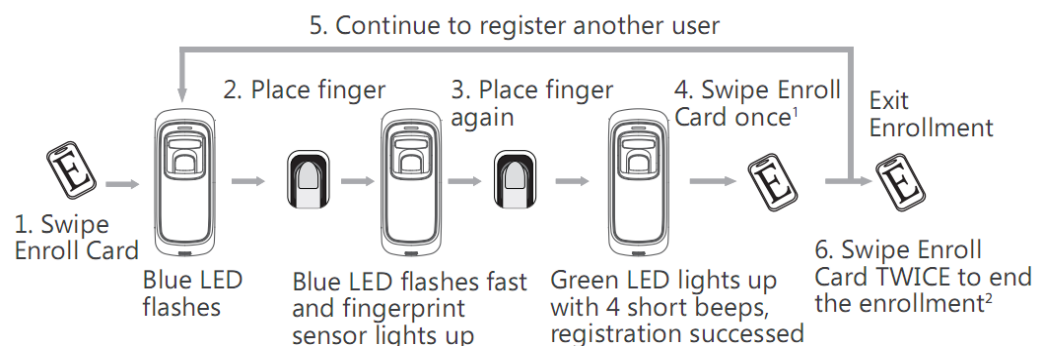
The DC 12V Power supplies the power to the device. Blue LED flashes fast and Fingerprint Sensor lights with beeps.

There are 4 cards in the packing: Enroll Card , Delete Card  and User Card  * 2.

2.3. Register User

2.3.1. Register User's Fingerprint

At first, swipe the Enroll Card. The blue LED will flash quickly, and enter into the registration stage. Now, we can register the user finger.



1. After finish enrolling current user, please swipe enroll card and then continue register another user.

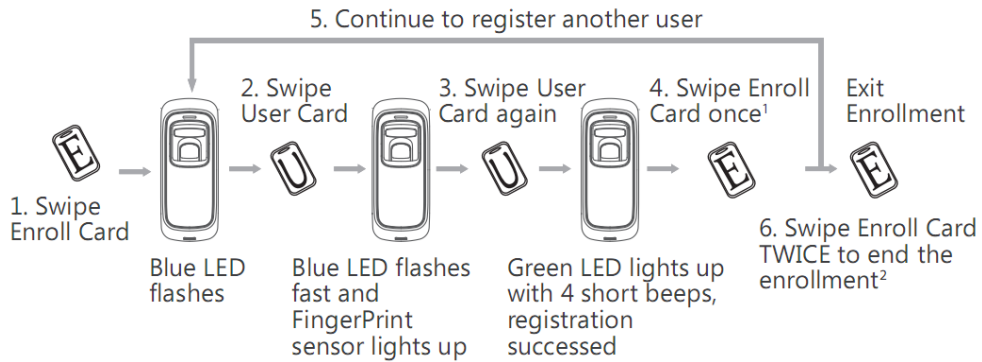
2. After finish enrollment, please swipe enroll card TWICE to exit enroll status.

Note: When place finger, Red LED flashes with two long beeps means the finger

have been registered.

2.3.2. Register User's Card

Swipe Enroll Card. The blue LED will flash quickly, and enter into registration stage. In time we can swipe the user card.



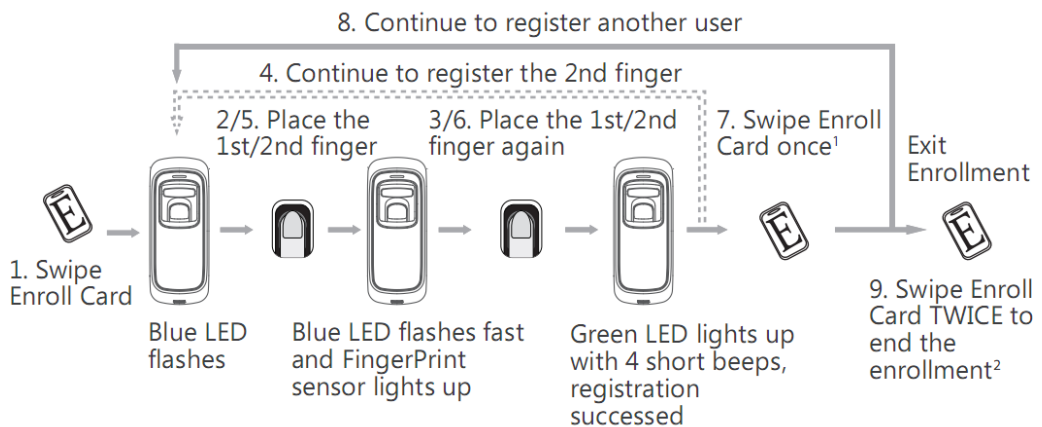
1. After finish enrolling current user, please swipe enroll card and then continue register another user.

2. After finish enrollment, please swipe enroll card TWICE to exit enroll status.

Note: When swipe card, Red LED flashes with two long beeps means the card have been registered.

2.3.3. Register Two Fingerprints

If the User Card has been already registered, the red LED will flash twice and follow with 2 beeps.

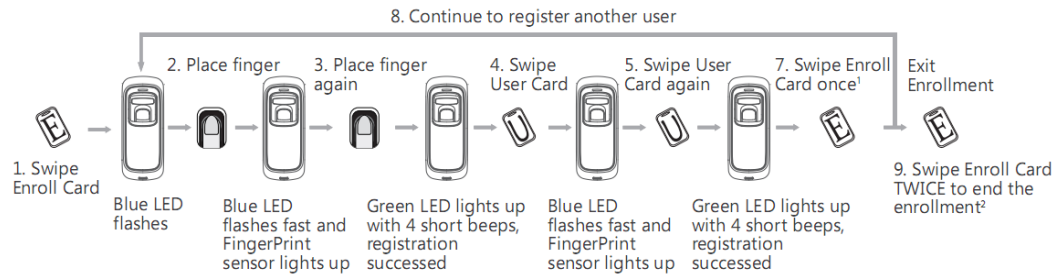


1. After finish enrolling current user, please swipe enroll card and then continue register another user.

2. After finish enrollment, please swipe enroll card TWICE to exit enroll status.

2.3.4. Register Fingerprint and Card of one User

If the User Card has been already registered, the red LED will flash twice and follow with 2 beeps.



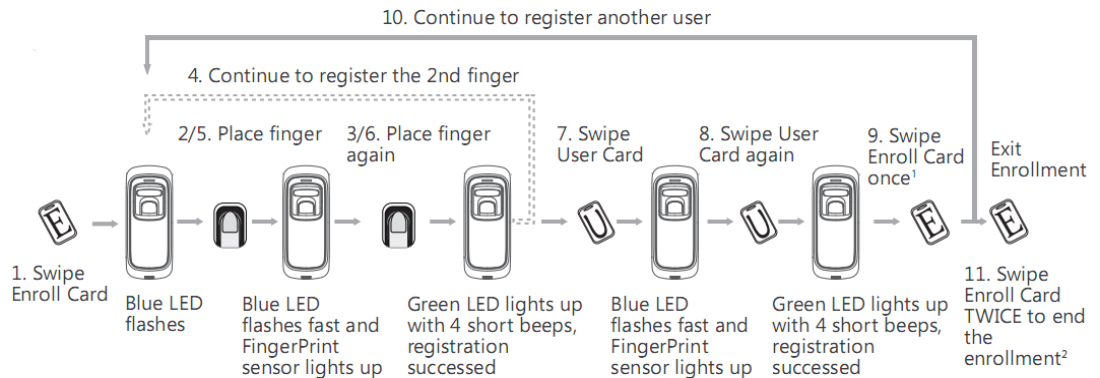
1. After finish enrolling current user, please swipe enroll card and then continue register another user.

2. After finish enrollment, please swipe enroll card TWICE to exit enroll status.

Note: The wiegand output of fingerprint and card are the same

2.3.5. Register Two Fingerprints and Card of one User

If the User Card has been already registered, the red LED will flash twice and follow with 2 beeps.



1. After finish enrolling current user, please swipe enroll card and then continue register another user.

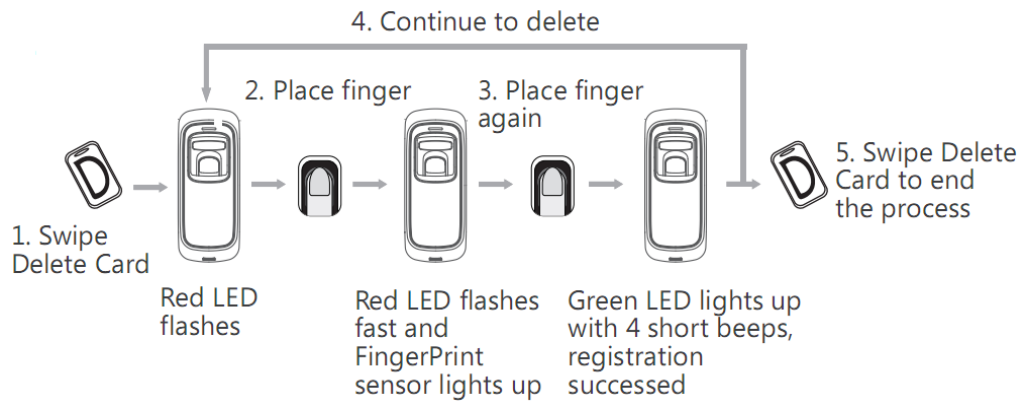
2. After finish enrollment, please swipe enroll card TWICE to exit enroll status.

Note: The wiegand output of fingerprint and card are the same

2.4. Delete users

2.4.1. Delete user's fingerprint or fingerprint and card

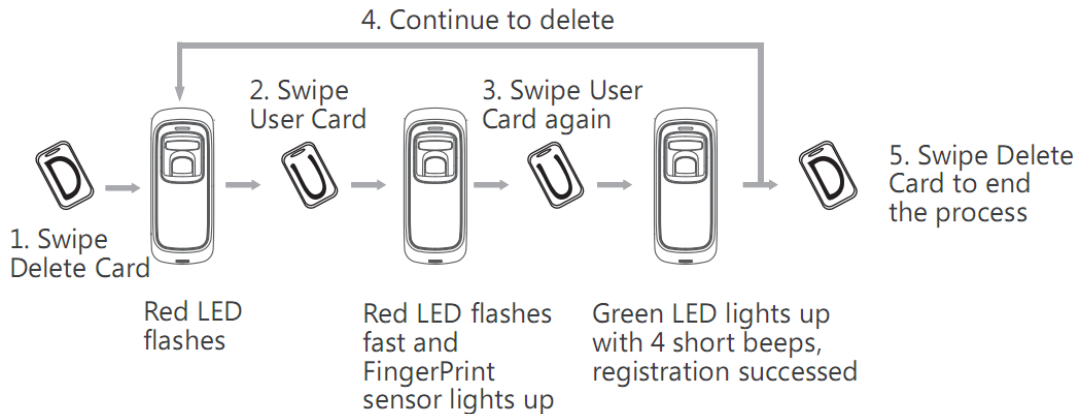
Swipe Delete Card. The red LED will flash quickly, and enter into the deletion stage. Now, you can delete the user.



Note: When place finger, Red LED flashes with long beep means the fingerprint does not exist in the device.

2.4.2. Delete user's card

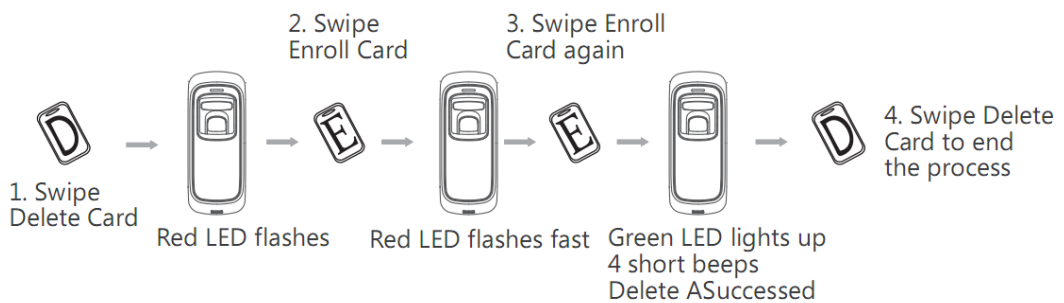
Swipe Delete Card. The red LED will flash quickly, enter into a deletion stage. Now, you can delete the user.



Note: When swipe card, Red LED flashes with long beep means the card does not exist in the device.

2.4.3. Delete All Users

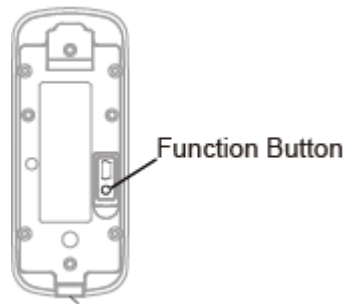
Swipe Delete Card. The red LED will flash quickly, enter into a deletion stage. Now, you can delete the user.



2.5. Function button

Press the button until you hear beeps, that eliminate the Enroll Card and Delete Card in the device. After that, you must register the management cards (Enroll Card

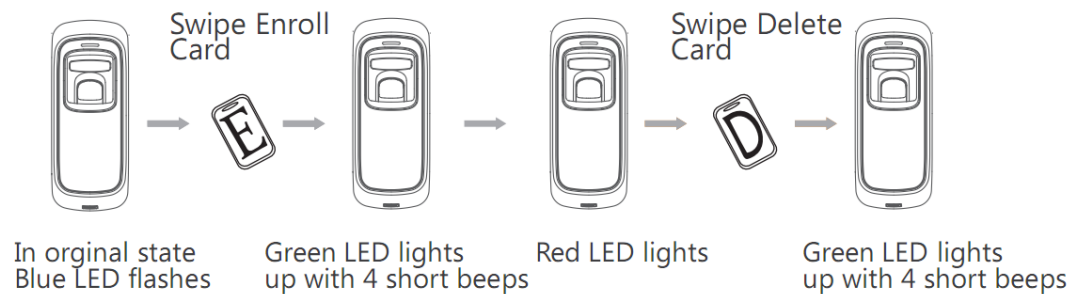
and Delete Card) to run the machine.



Note: The operation will not delete any user data stored in the device.

2.6. Register Management Cards

Register Management Cards(Enroll Card and Delete Card):



2.7. Illustration for pressing fingerprint

Correct method:



Wrong method:



Valid Left Right Defluxion Down

1. Please register the thumb or index finger if possible.
2. Place the center of the finger flat on the center of the scanner window and press a little hard on scanner so it can scan as large finger area as possible to extract enough minutia.
3. Keep the angle and direction of finger the same each time placing on scanner.
4. Touch the forehead to increase oily level of the finger, if the fingerprint is too dry.

2.8. Usage Notice

1. Don't scratch the surface of the optical fingerprint sensor with the keen-edged things such as small knife or pen.

2. Humidity, dust, and direct light can affect the terminal's performance.
3. Please don't clean the surface of the optical fingerprint sensor with an organic impregnate such as alcohol or gasoline.
4. Recommended solution: Use one-sided adhesive tape to paste on the sensor and then remove the tape.

Chapter 3. FAQ

Frequently asked questions and answers.



3. FAQ

Fingerprint has been enrolled but gets failure in identification.

Reason	Solution
1. The fingerprint was not captured properly.	Enroll the finger again.
2. The fingerprint is too dry or too wet with oil or cosmetics.	1. Touch the forehead to increase oily level of the finger; 2. Clean fingers with towel.
3. The fingerprint has peeling or calluses.	Enroll other fingers with better quality.
4. Latent fingerprint on the surface of sensor.	Clean sensor surface (adhesive tapes recommended).

The machine cannot be connected with PC.

Reason	Solution
1. Cable not plugged in firmly or a cable hardware problem.	Plug the cable in firmly or change to another cable.
2. Not able to connect COM (wrong COM No.).	Enter the right COM No.

No records found though identification have passed.

Reason	Solution
1. Unit power break for a long time (time turn to zero as default).	Synchronize the time.
2. Minority staff fingerprint false accepted.	Change another finger and enroll again.
3. The records have not downloaded.	Downloading records in time.
4. Records are full in the machine.	Delete some records.

The FP scanner is off and Employee can't be identified.

Reason	Solution
1. Unit in sleeping status.	Press the finger to activate.
2. Terminal is not communicating or has a line obstruction.	1. Cease communication between terminal and PC. Verify the ethernet cable is communicating properly. 2. Excludes the line's obstruction.
3. Fingerprint scanner abnormal.	Restart unit or change the fingerprint

	module.
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Terminal beeps automatically when no one punches in/out.

Reason	Solution
1. Direct sun light or light too bright.	Avoid direct sun light or other bright light.
2. Latent fingerprint on the surface of sensor.	Clean sensor surface (adhesive tape recommended).

Note: Should you have any other problems, please kindly email us the log files in zip or rar (The log files are in Log directory in the installation directory of the software).

Chapter 4. Appendix

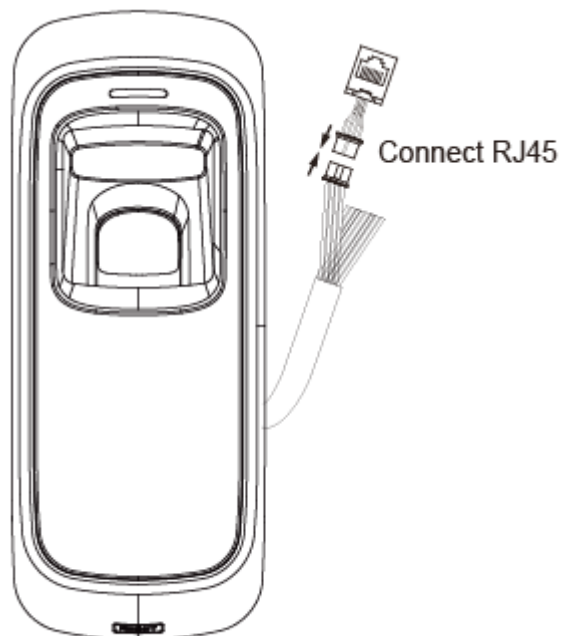
The main theme of this chapter includes additional information in regards to wiring.



4 Appendix

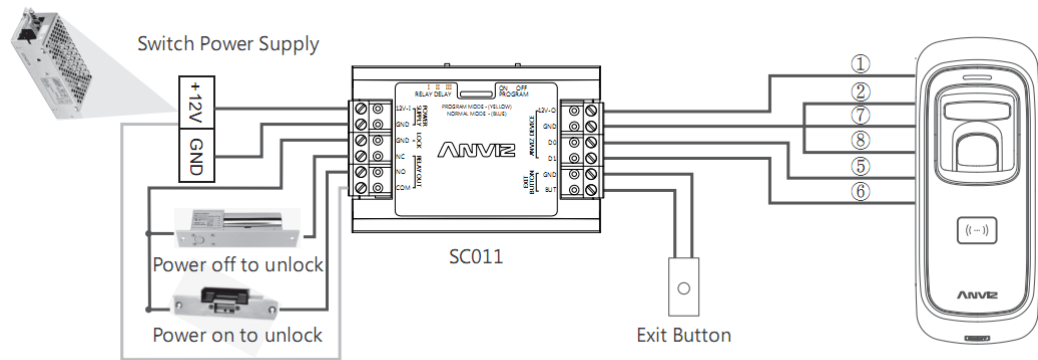
4.1 Wiring Instruction

The following shows the wiring ports on the device:

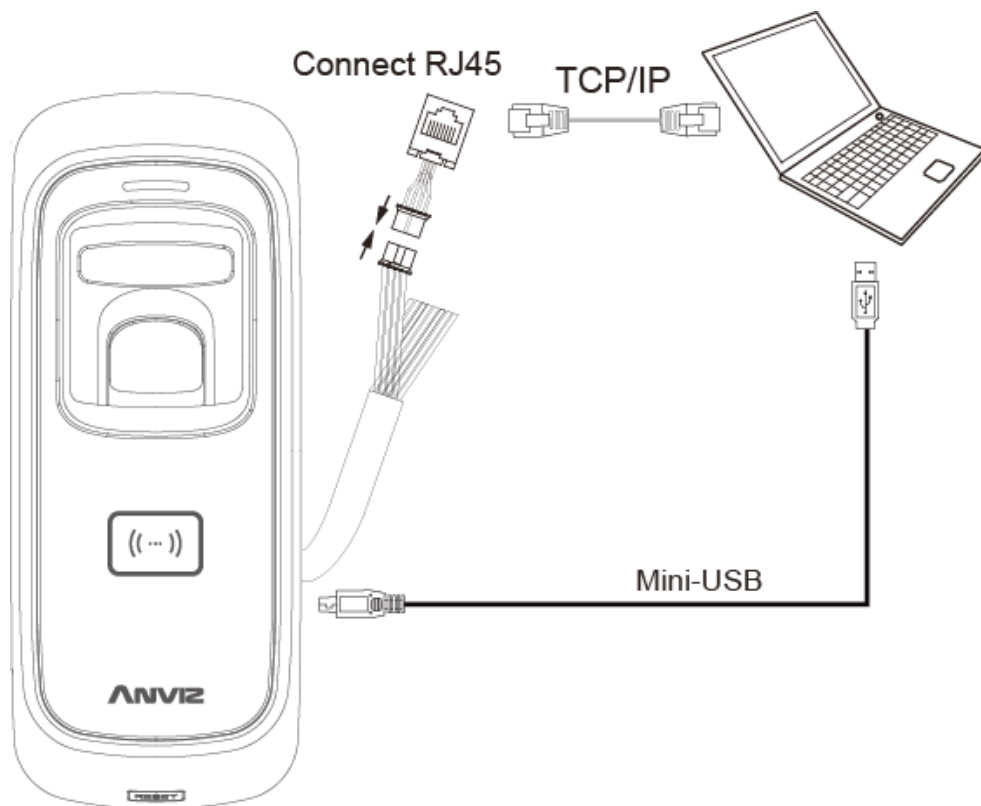


Function	No.	Cable Color	Description
Power	①	Red (AWG 24)	DC12V
	②	Black (AWG 24)	GND
Tamper alarm	③	Brown	Tamper alarm
	④	Orange	Tamper alarm
Wiegand26 Output	⑤	Green	Wiegand DATA0 Output
	⑥	White	Wiegand DATA1 Output
	⑦	Blue	GND
	⑧	Black	Anviz Wiegand Switch
Status LED	⑨	Red	GND
	⑩	Light Blue	LED

4.2 Wiring diagram of M5



Communicate M5 to PC :



Note: Please verify enroll card to enable the USB communication function.