



Date: Aug,

Hardware Tutorial For the DC-Series Fingerprint Model

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Our philosophy: We sell product, but the most valuable thing is our service to you.

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1. INTRODUCTION

1.1. SUPPLIED PART LIST

- ✓ Fingerprint Terminal 1pcs
- ✓ 5V/0.5A Power Supply 1pcs
- ✓ USB Cable 1pcs
- ✓ Hardware User's Manual (Soft copy, if can't find, send email to seller)
- ✓ Software (Soft copy, if can't find, send email to seller)

1.2. About this fingerprint

The is a flexible and reliable design to meet the market requirement for a robust and secure biometric Time & Attendance solution at a reasonable cost. Allows you to register up to 3,000 fingerprints and store up to 20,000 records.



1.3. Acronym

Slog: System Log, All administrators' operation is record as system log.

Glog: General Log, it means the time in/out record or attendance record, it's the original data which for attendance check.



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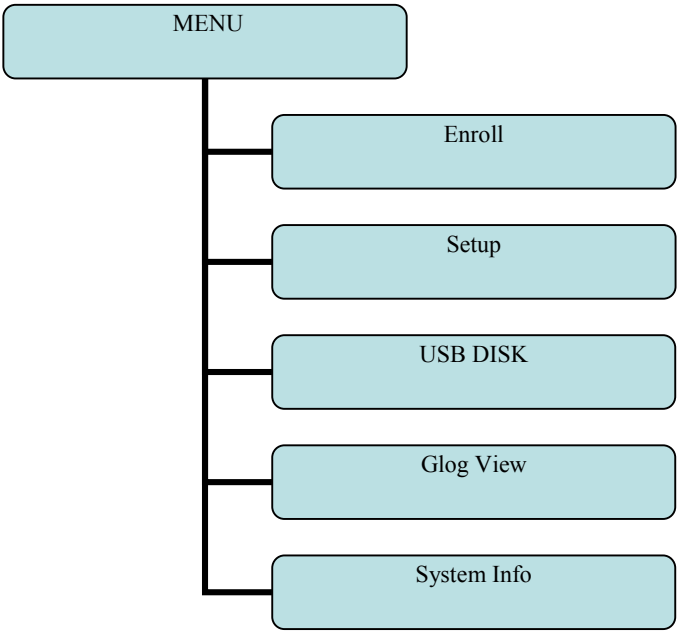
2. HOW TO POWER ON

- ✓ power supply to connect
- ✓ turn on the power switch at the bottom
- ✓ press the key at the bottom left corner

1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

3. MENU GO-THRU

Click “Menu” on the key area, there is below sub menu hierarchy:



Click “UP” or “Down” arrow to select sub-menu, then clock “OK”

1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

The picture is like:



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3.1. Menu: "Enroll" to register user

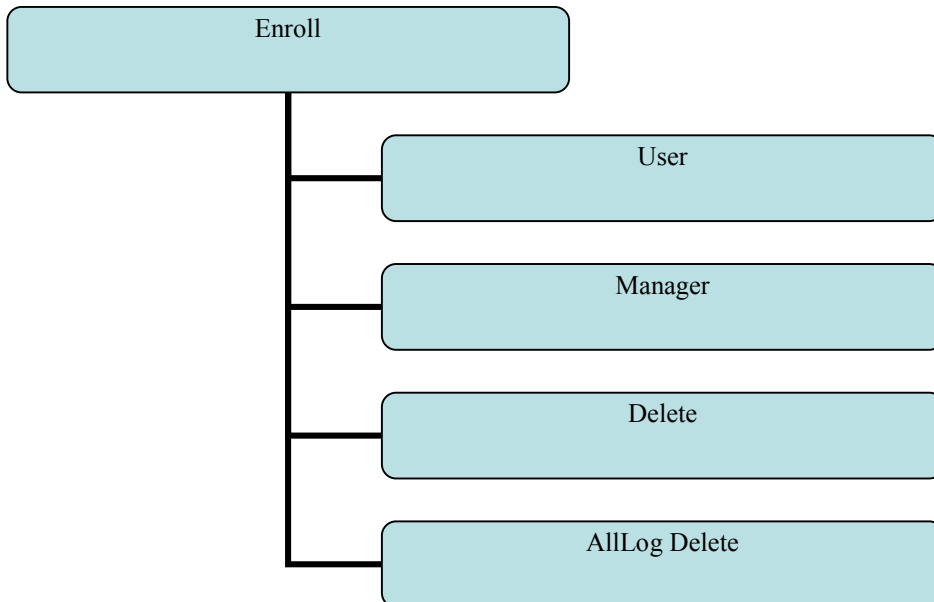
Enrollment is the process of creating an ID, assigning a password (optional) and scanning a user's fingers to create the fingerprint templates. All these associated information are stored in the device.

During user verification, the stored fingerprint templates are compared to the current scanned fingerprint to confirm the user's identity.

Enrollment takes approximately 2 seconds for each user. Up to 3 fingers can be enrolled for the same ID number. Ideally, at least one finger on each hand should be enrolled in case of injuries.



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The picture is like:



3.1.1. Register User

Here, you can register common user fingerprint/password or ID card(if machine support ID card reading), you can enroll new user or enroll back-up finger for existing user.

✓ Click "User"

- "Finger", **(the recommend way, easy and fast)**

To enroll the user finger here, need to punch the finger for 3 times for a successful register process. After done, click key "OK" to continue for another new user or "ESC" to quit to up-level menu.

- "Password"



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To enroll a new user with password, when verify, firstly input the user ID, then input the password to verify.

- “Card”

“Optional” function, enroll a new user with RF ID card.

3.1.2. Register Manager

Admin(Administrator) user is a manager, Manager has the top access right to the device.

- ✓ The whole process is like to enroll a common user.
- ✓ Once an admin user enrolled, all other common user can't access the device menu.
- ✓ If an admin use want to access the device menu, he(she) should firstly verify himself(herself) by punching finger(or password), only after verification passed, the device menu can display.

3.1.3. Menu: “Delete” to delete user

The “Delete Menu” shows up after select “Delete”. When you confirm that the user ID to be delete, Press “OK” to confirm the deletion.

Delete	
ID	00001
ESC	ENTER

3.1.4. Menu: “AllLog Delete”

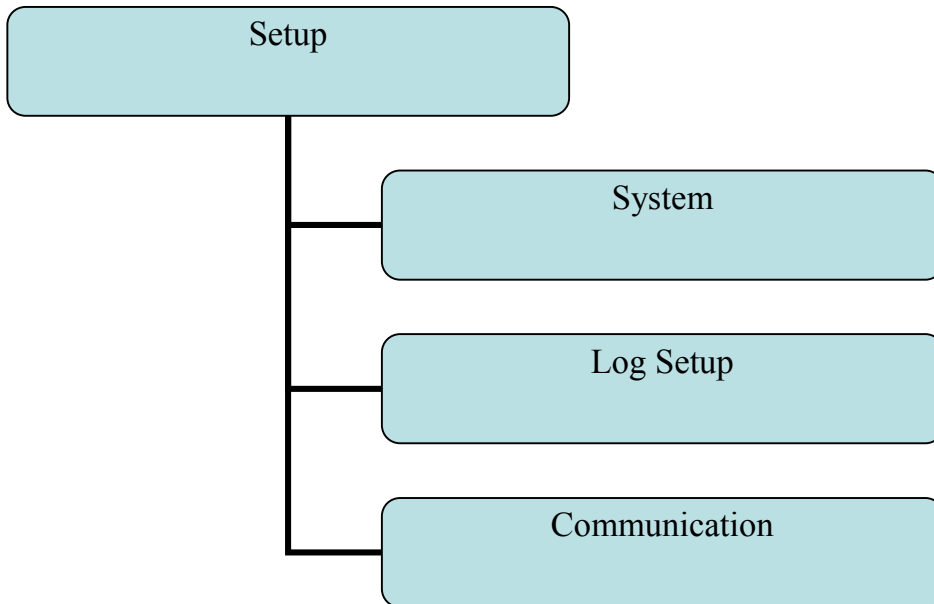
This is to delete all time in/out records, click “OK” to confirm the deletion.

3.2. Menu: “Setup”

The menu hierarchy is:



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The picture is like:



3.2.1. Menu "System" Configuration(**Very Important**)

The picture is like:



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✓ “Language” (**Important**)

Set different language for information display, there are English//Deutsch/French/Spanish/Chinese languages by default for your choice, also we can provide your customized language, Please tell us in advance for your order requirement.

✓ Graphics(**By Default**)

✓ Time(By Default)

To set the device to your local time.

✓ Time Fmt(By Default)

To set your preferred time display format.

✓ Log times(By Default)

✓ LCD Contrast

To set the screen contrast.

✓ VoiceOut(By Default)

✓ Lock Ctrl(By Default)

✓ Shut down Key(By Default)

✓ AutoShutdown(By Default)



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3.2.2. Menu “Log Setup”

✓ Set “Slog Wrn” (**Keep default**)

Administrative event full warning. The machine will give a “FULL” warning signal when the administrative event buffer is below the set thresh

Setting	Description
NO	There's no warning if there's no administrative event buffer left, and no further administrative events will be logged.
1 – 255	
Factory Default	No

✓ Set “Glog Wrn” (**Keep default**)

Attendance Event Full Warning. The machine will give a “FULL” warning signal when the attendance event buffer is below the set threshold.

Setting	Description
NO	There's no warning if there's no attendance event buffer left, and no further attendance events will be logged.
1 – 1500	
Factory Default	1000

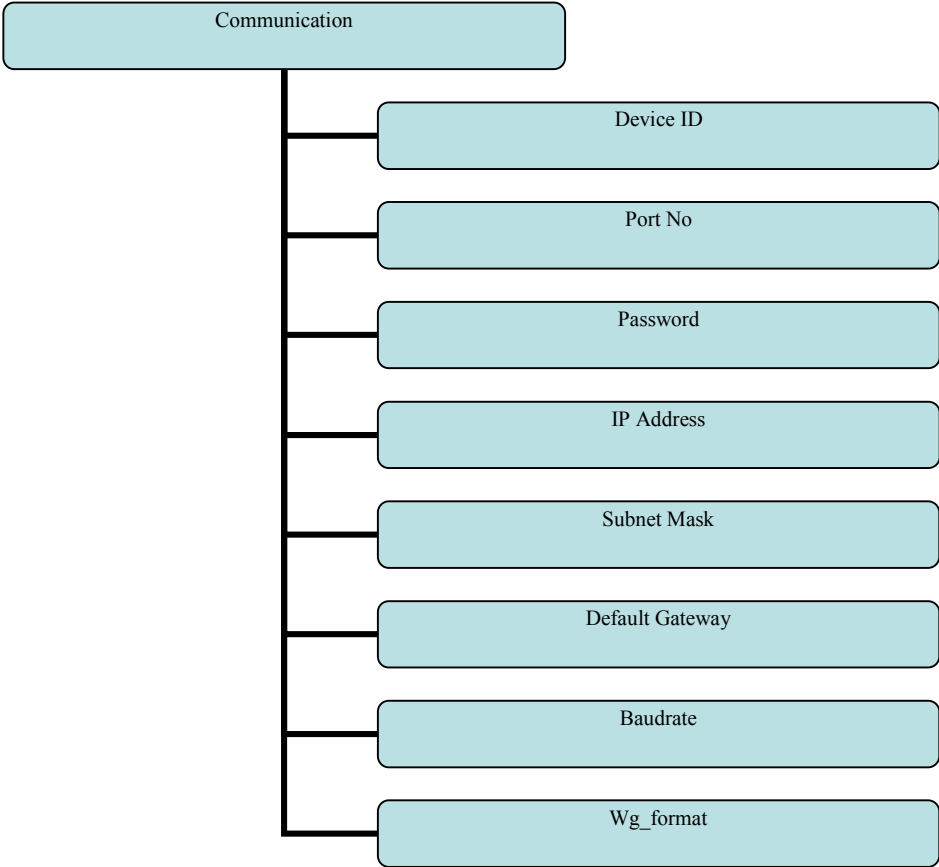
✓ Set “Re-Verify” (**Keep default**)

To set the duration of 2 successful attendances which from the same fingerprint. All duplicate attendance record doesn't be recorded.



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3.2.3. Communication



✓ Device ID(**Important**)

Setting	Description
1 -255	set an unique address ID to the device, especially within network with multiple machines
Factory Default	1

If you use the software to connect the device, the machine ID must be the same between software and the device setting here.

✓ Port No(**Important**)

It's used for TCPIP connection(Suppose your device has configured this optional module). Keep the default value normally, ensure the software configuration use the same port no.

✓ Password(**Keep default**)

✓ IP Address(**Important**)

Set the IP address, ensure that the IP address is within the same net range with your connected computer.

✓ Sunet Mask(**Important**)



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Set the same subnet mask of your computer.

- ✓ Default Gateway(**Important**)

Set the same gateway address of your computer.

- ✓ Baudrate(**Important**)

Set the Baud Rate to match the computer connection with RS232 interface(Seldom use)

Setting	Description
9600	set the communication speed to 9,600 bps (Bit Per Second)
19200	set the communication speed to 19,200 bps
38400	set the communication speed to 38,400 bps
Factory Default	38400

- ✓ Wg_format(**Keep default**)

3.3. Menu: "USB DISK"

Before enable this menu, please insert the USB stick firstly.

- ✓ Glog

Download the new time in/out records from last download to USB stick.

- ✓ All GLog

Download all stored time records to USB stick.

- ✓ Slog

Download system log to USB stick.

- ✓ AllEnrollDown

Download all enrollment template to USB stick.

If you have multiple devices, you don't need enroll each user on each device, can download the device A's template(user enrollment information) to U-disk, then upload to device B.

- ✓ AllEnrollUp

Upload the enrollment template to device from USB stick.

- ✓ firmware update(Only use this in special condition)



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3.4. Menu "Glog View"

Here can view the time in/out records according to the stuff ID.

3.5. Menu "System Info"

- ✓ "User", to check the number of registered user.
- ✓ "Manager", to check the number of registered manager.
- ✓ "Finger", to check the number of registered finger.
- ✓ "Card"
- ✓ "Password"
- ✓ "G_Log", to view number of glog records.
- ✓ "S_Log", to view number of slog records.

4. TROUBLE SHOOTING

4.1. Can't turn on the machine

Please refer to Chapter 2

4.2. Can't Setup the TCP/IP connection

Step1: ensure your device has tcpip module configured, this is optional function, ask seller to confirm.

Step2: Refer to chapter 3.3.3 to do the configuration

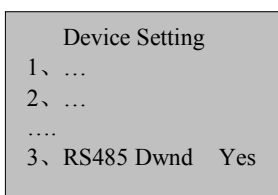
Step3: ensure the machine ID is same with software 's setting

Step4: use command "ping" to test the connection between computer and device.

5. APPENDIX

5.1. Appendix-1: About RS485 connection

Step1: Set "RS485 Download" to "Yes"



Setp2: Power off.

Step3: Connect RS485 cable to the RJ45 port on . (Note: please check bellow RJ45 Port Pin Assignment for details of the required RS485 cable)



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Step4: Connect the other end of RS485 cable to a RS232/RS485 Converter

Step5: Connect the other end of RS232/RS485 to computer COM-PORT.

Step6: Power on.

RJ45 Port Pin Assignment

Pin	Function
-----	----------

1	TCP---TX+
2	TCP---TX-
3	TCP---RX+ / RS485A
4	RS485B
5	GND
6	TCP---RX
7	RS232---R
8	RS232---T

Top
View



Front
View

5.2. Appendix-2: Tips on pressing fingerprint

Correct Method:



Wrong Method:



Too small valid area

left-of-center

right-of center

Defluxion

Too down

1. Place finger flatly and the center of the finger is on the center of scanner window and press a little hard on scanner so it can scan as large finger area as possible to extract enough minutia.
2. Keep the angle and direction of finger the same each time placing on scanner.
3. If your finger has sweat or water, please make it dry first and then register .
4. If your finger is too dry, make it a little wet or touch the forehead to increase oily of the finger, press a little hard on scanner. (the dry finger can cause the finger image not clear .
5. Avoiding the callus peeling or injury of the finger to ensure the register and identification successful.



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6. You'd better register the thumb first , then index finger or middle finger to increase the precision.

5.3. Appendix-3: FAQ

Fingerprint has been enrolled but often gets failure in identification.

Reason	Solution
1.The fingerprint was not captured properly	Enroll the finger again. Please refer to illustration of pressing finger.
2.Direct sun light or too bright light	Avoid direct sun light or other bright light
3.The finger is too dry, wet or oily	1.Touch the forehead to increase oily level of the finger. 2.make you finger dry and clean
4.Low fingerprint quality with callus or peeling	Enroll other fingers with better quality
5.Wrong way in placing fingers when punching in/out	Please refer to illustration of pressing finger.
6. Latent fingerprint on the surface of sensor	Clean sensor surface (adhesive tapes recommended)
7.Not enough finger pressure	Place the finger evenly on the sensor with moderate pressure
8.Influence by fingerprint image change	Enroll fingerprint again. Please refer to illustration of pressing finger.