




## Preface

- Congratulations on your purchase of HD Biometric products.
- Please read the manual carefully, so you can master the product quickly and skillfully. Please keep the manual as a reference later.
- We can only offer the functions described in the user's manual.
- Manufacturer will not be responsible for any damages caused by the users' improper use.

 Please write down the serial number on the line below, you can find it on the side of the packing box.

SN: \_\_\_\_\_



## Points for attention

1. The products is not suitable to **wet finger**.
2. When the box is stored or transported, you should not put the on-line accessory **RS232 communication harness; charger and on-line management software CD** in the box to avoid the box cannot be opened after locking up.
3. After purchasing the product, charge the battery at first.
4. At ordinary time, the protective lid should be kept at closing position

to protect fingerprint -scanning window.

5. Fingerprint-scanning window should be kept clean without stains or clear fingerprint trace on it.
6. Fingerprint-scanning window surface should be avoided to contact metal matter.
7. If verify fingerprint, the finger position and pressing force should be kept as identical as possible with the fingerprint was stored. If the finger is much drier, you can give a puff on it or press it harder. If the finger is much wet, you can dry it or press it lightly.
8. If the box may be regularly used outdoors and the range of temperature varies greatly between outdoor and indoor, it is recommended that the fingerprint storage should be done outdoors.
9. After the system is powered on with contacting power supply switch, if the system cannot scan fingerprint in 10 seconds, the system will automatically power off.
10. When storing fingerprint, you should pay attention to avoid the protective lid slips up and down to contact power supply switch.
11. When voltage is lower to prompt undercurrent, please charge in time.
12. Do not use the box in strong electro-magnetic field.

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## □ . **The main characteristic of Fingerprint Briefcase**

### ● Convenient carry

The contour design is succinct and novel; the box is suitable to convenient carry and satisfactory to successful personages

### ● High security

The box controller adopts security design without exposed lock-hole and it has effective prize-proof design. The security of common box cannot match our product.

### ● Leveling management

The box has user-leveling function. You can set up according to administrator and common user different operation authorities to prevent over-authority operation; doing so can increase the security for use of lock-body.

### ● On-line function

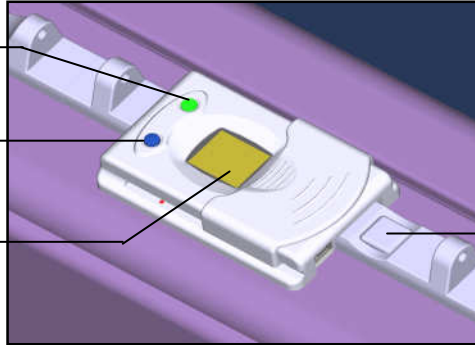
The system can cooperate with on-line software to manage 1-12 user fingerprints. Please refer to help file of on-line software for specific operation mode.

## II. The parts composition of BRIEFCASE box

Working State  
Indicator Lamp

Fingerprint  
Management Key

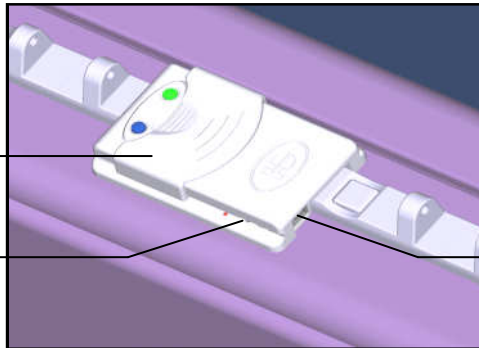
Fingerprint  
Scanning Window



Unlocking Key

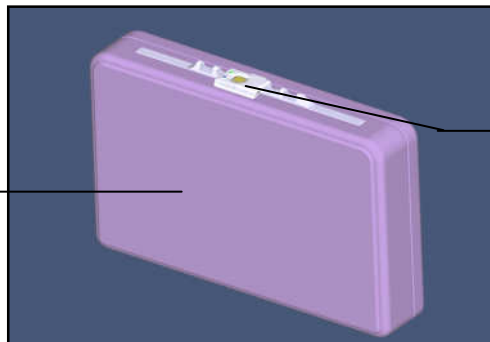
Protective Lid

Power Supply  
Switch



Charge and  
Communication  
Interface

Box-body

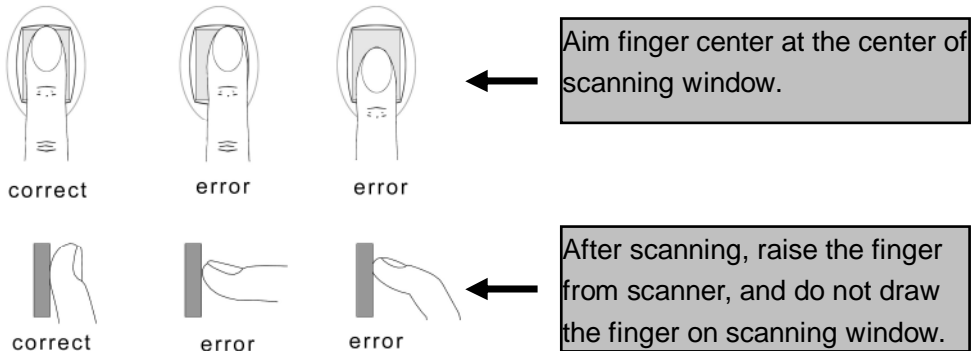


Controller

### III. Preparation before setup

#### 1. How to press fingerprint

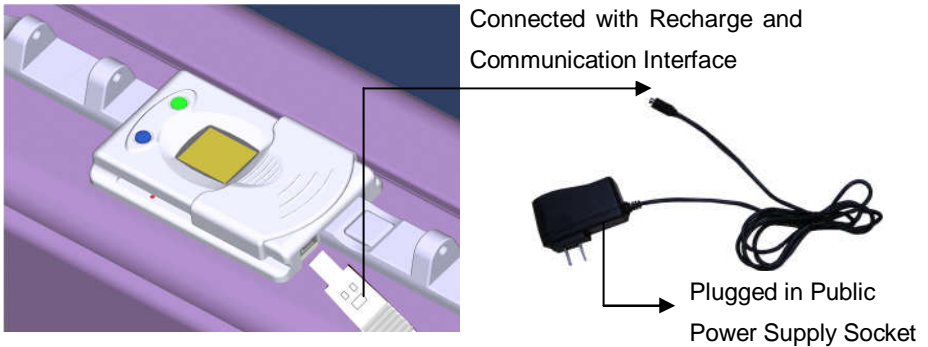
During the process of storage or recognition, you press the finger on scanning window with suitable pressure. You aim the fingerprint center at the center of scanning window, because the fingerprint center has more characteristic information points. Please refer to the following figure to scan fingerprint correctly.



#### 2. Charge mode

1. After power on the system, if the red indicator lamp twinkles for 3 times, which means battery is undercurrent. After the first prompt, the system can still be used for tens times.
2. Use the provided charger to charge battery for 5 hours. One end of the charger is connected with charge and communication interface,

the other end of the charger is connected with public power supply socket. The plug directions are indicated as the following figure (Figure1).



**Figure 1**

3. The standard Mini USB cable can also be used to charge the system for 4hours.The Mini USB plug end is connected with the charge and communication interface. The standard USB plug end is connected with computer

#### **IV. System function setup**

1. Power on mode

To do any operation, you should power on the system at first.

Power on mode: When the system is not powered on, slip the protective lid to contact power supply switch to power on the system.

2. Power off mode

---

If the system has been powered on, the system will automatically power off without pressing fingerprint in 10 seconds.

If the system has been powered on, slip the protective lid to contact power supply switch to power off the system.

### 3. Indicator lamp display

Red lamp long brightens: to indicate waiting for pressing fingerprint or the system is scanning fingerprint now.

Red lamp goes out: to indicate the system is treating or matching fingerprint.

Green lamp long brightens: to indicate the fingerprint identity verification is passed or fingerprint scanning is successful.

### 4. System management

When the box establishes fingerprint users, it can master one administrator user and 1-11 common users through on-line mode; each user stores a group (3) fingerprints. Under off-line mode, the system can store one administrator user and one common user.

## V. **Operation guide**

BRIEFCASE box has no stored fingerprint in the system, when left from the factory, after power on the system, the box can automatically unlock.

When the system has stored fingerprint, under off-line mode, power on the system at first, do user fingerprint match, after match is successful,

the box can be unlocked.

## 1. Change fingerprint

System fingerprint management can be divided into management fingerprint and user fingerprints.

Management fingerprint has system management authority. When storing management fingerprint, you should operate with care to ensure the storage quality is better. When changing user fingerprint, do management fingerprint verification at first.

User fingerprint has no authority to do system management; user fingerprint is only used to log on system.

**If management fingerprint cannot do identity verification, because of skin damage or other causes, you should use on-line management software to manage fingerprint and store management fingerprint again.** Please refer to help file of on-line management software. Under off-line mode, the fingerprint management method is as the following:

### (1) Change management fingerprint

- Storage of management fingerprint at the first time

If there is no stored management fingerprint in the system, press fingerprint management key firmly, slip the protective lid to power on the system, at this time, indicator lamp displays red and then release

fingerprint management key. Press the finger to be stored management fingerprint on scanning window; red indicator lamp goes out; remove the finger. After a while, indicator lamp displays green to indicate the first fingerprint is scanned successfully (if indicator lamp displays red, the fingerprint scanning should be done again until indicator lamp displays green). When indicator lamp displays red again, scan the next fingerprint, again and again, until indicator lamp displays green for 3 times. System stores the three gained fingerprints as a group in box controller and then does automatically power off, which indicates the management fingerprint is stored successfully.

- Change management fingerprint

If the system has stored management fingerprint, press fingerprint management key firmly, slip the protective lid to power on the system, at this time, indicator lamp displays red and then release fingerprint management key. Verify identity with management fingerprint. Indicator lamp displays green, which indicates the management fingerprint match is successful. After a while, indicator lamp displays red again, the original management fingerprint is deleted. Press the finger to be stored new management fingerprint on fingerprint-scanning window. When red indicator lamp goes out, remove the finger. Indicator lamp displays green, which indicates the first management fingerprint scanning is

successful (if working state indicator lamp displays red, scan fingerprint again until working state indicator lamp displays green). When indicator lamp displays red again, scan the next fingerprint. Repeatedly scan fingerprint, until indicator lamp displays green for three times. The system stores the three gained fingerprints as a group in box controller and then the system will automatically power off, which indicates the management fingerprint modification is successful. If fingerprint scanning is continuously failing for ten times, the system will automatically power off, which indicate the original management fingerprint is deleted, the management fingerprint modification is failing, there is no management fingerprint in the system.

## **(2) Change user fingerprint**

Under off-line mode, the method of the first storage of user fingerprint and the method of change of user fingerprint are just the same with each other.

Slip the protective lid to power on the system, indicator lamp displays red, press fingerprint management key firmly, use management fingerprint to verify identity. If indicator lamp displays green, which indicates management fingerprint match is successful, release fingerprint management key. After a while, indicator lamp displays red again, which indicates the original user fingerprint is deleted.

---

Press the finger to be stored new user fingerprint on fingerprint scanning window, red indicator lamp goes out, remove the finger. After a while, indicator lamp displays green, which indicates fingerprint scanning is successful (if indicator lamp displays red, scan fingerprint again, until indicator lamp displays green). When indicator lamp displays red again, scan the next fingerprint. Repeatedly scan fingerprint, until indicator lamp displays green for three times. The system stores the three gained fingerprints as a group in box controller and then the system will automatically power off, which indicates user fingerprint storage is successful. If fingerprint scanning is continuously failing for ten times, the system will automatically power off, which indicates the original user fingerprint is deleted, the new user fingerprint storage is failing.

**(3) Attention:**

- When do storage/ deletion of fingerprint, before scanning of three fingerprints is successful, the system is powered off automatically or manually, which indicates the storage / deletion operation is failing, the operation does only carry out deletion of the original fingerprint, but not store new fingerprint.
- After press fingerprint on fingerprint scanning window, before red indicator lamp goes out, do not move the finger.
- When scan fingerprint, the finger position should be changed a little

at each time. It is recommended that the finger belly center should be located at the scanning window center.

## **2. Unlock the box**

When the system has no stored fingerprint: Slip the protective lid to power on the system, indicator lamp displays green, press unlocking key, the box is opened.

When the system has the stored fingerprint: Slip the protective lid to power on the system, indicator lamp displays red, press the finger having been stored fingerprint on fingerprint scanning window, keep the finger position and pressing force as identical as possible with the fingerprint was stored, after indicator lamp goes out, remove the finger. After a while, indicator lamp displays green, press unlocking key, the box is opened.

### **Attention:**

- When fingerprint is matching, if indicator lamp goes out and then displays red, which indicates fingerprint identity verification is not passed. You should adjust pressing force and finger position to try again. If indicator lamp does continuously display red for ten times, after red indicator lamp twinkles for three times, the system will automatically power off.
- If the system has stored fingerprint, after the system is powered on,

no fingerprint is pressed in 10 seconds, the system will automatically power off.

### 3. Lock the box

The system will automatically lock up after three seconds of normal unlocking.

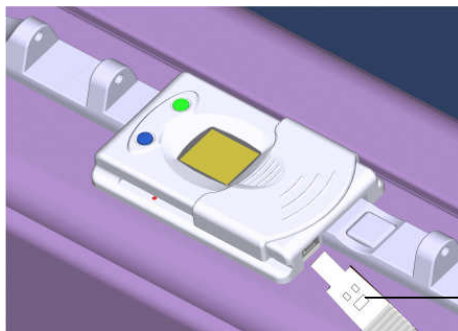
#### **Attention:**

Before the system does automatically lock up, repeatedly slip the protective lid to contact power supply switch, the system may be forcedly closed, the lock-body cannot lock up. If meet this condition, you should do unlocking operation again and wait for the system does automatically lock up.

## VI. On-line function

The password defaulted by on-line management software is 123456.

Connect with PC through communication cable to carry out on-line management function. One end of the cable is connected with charge and communication interface of the box controller, the other end is connected with PC RS-232 serial port connector

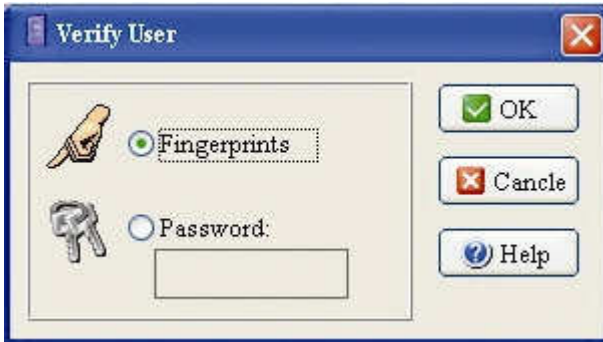


Connected with PC RS-232  
Serial Port Connector

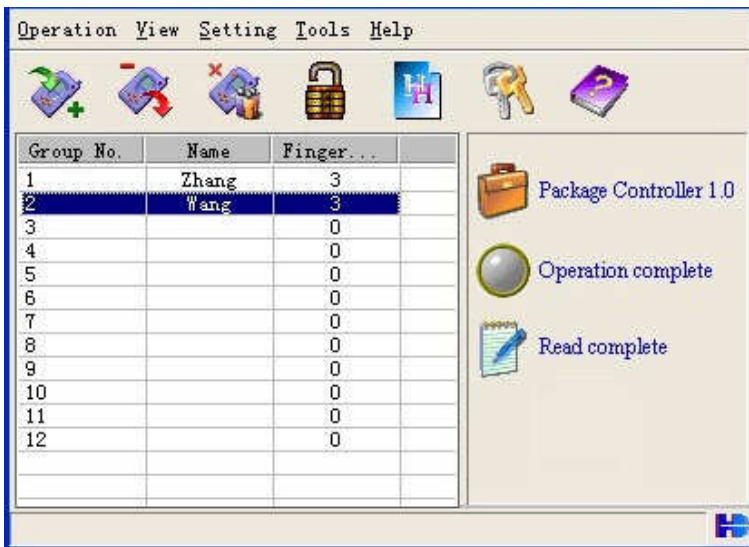
Connected with Recharge and  
Communication interface

“Confirm” key.

At this time, slip the protective lid to power on the system. Software enters into the interface as displayed by the following figure:



You can input correct password or match administrator fingerprint to enter into main interface.



Refer to the help file of CD software for detail instructions. After put CD

The system is powered off, before the fingerprint storage is finished.	The protective lid is slipped to contact the power supply switch.	Power on the system again and then store fingerprint again.
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in CD-ROM driver, it will automatically run software installation program.

## VII. Simple trouble shooting

The problem	The problem analysis	The treatment method
If the box was not used for a long time or the battery was not recharged for a time period after electricity was lack, then slip the protective lid down, but the lamp does not brighten.	It is caused by the system undercurrent protection.	After recharge the battery, use the box again.

<p>The stored fingerprint has been rejected.</p>	<p>The location of the put finger is deviated too much. The finger is too wet, dry or dirty. The fingerprint-scanning window is too dirty. Under the above situation, the stored fingerprint effect cannot be good enough.</p>	<p>Adjust the finger location and condition. Clean the fingerprint-scanning window. After the above treatment, store fingerprint again.</p>
<p>When replace fingerprint, after the green lamp brightens, the red lamp does not brighten, and then the system does directly power off.</p>	<p>The fingerprint management key is not pressed firmly or it is pressed in improper order.</p>	<p>Do the operation again.</p>
<p>The management fingerprint verification is still not passed.</p>	<p>It is caused by the finger is injured, the finger skin is lost or the other causes.</p>	<p>Use the on-line software to manage the system.</p>

**VIII. Technical parameters**

**1. Controller part**

<p>Fingerprint image resolution:</p>	<p>500 DPI</p>
<p>Fingerprint scanning window size:</p>	<p>13mm×14 mm</p>

Fingerprint image pixel amount	256×288
Fingerprint scanning time:	< 0.2 s
Fingerprint recognition time:	< 1 s
Fingerprint translation tolerance:	< ± 3mm
Fingerprint rotation tolerance:	< ±15°
FAR:	< 0.0001%
FRR:	<1%
Power supply:	540mAH 3.7V rechargeable Li cell
The system operation times after the cell is fully recharged:	> 600 times
The rechargeable times of the cell:	> 500 times
On-line communication serial interface:	RS232
Fingerprint management grouping:	2 groups for off-line management, 12 groups for on-line management.
Fingerprint grouping mode:	Each group contains 3 fingerprints. Management fingerprint: one group, user fingerprints: 1—11 groups.

**2. Charger part**

Input:	AC100-240V, 50/60Hz
Output:	DC5V, 400mA
The recharge time:	5 hours

