

Time & Attendance and Access Control Termina Access Control Terminal











User Manual

Version 1.1

Date: November 2011



Table of contents

1	Getting started	3
	1.1 Fingerprint Placement	3
	1.2 Instruction for Card Swipe	3
	1.3 Precautions	
2	Introduction of device	4
	2.1 Overview of Device Functions	4
	2.2 Important Safeguards	4
	2.2.1 Installation Location	4
	2.2.2 Use of Sensor	
	2.2.3 Product Appearance	4
	2.3 Using the Fingerprint Terminal.	
	2.4 Date & Time Adjustment	
	2.5 Enrol Administrator / User	
	2.6 Password Enrolment	
	2.7 RFID Card Enrolment	
	2.8 Fingerprint & Password Verification	
	2.8.1 Fingerprint cerification	
	2.8.2 Password verification	
	2.8.3 Card verification	
	2.9 Manage Users	
	2.9.1 Search Users	
	2.9.2 Delete User	
3	User Access	10
	3.1 Description of User Access	. 10
	3.2 Assign a User to Time Zone	. 11
	3.2.1 Create a Time Zone	
	3.2.2 Assign a Holiday Time Zone	
	3.2.3 Create or Edit Group settings	
	3.2.4 Unlocking Combination settings	
	3.2.5 Change Access Control Parameters	
	3.2.6 Duress Alarm Parameters	
	3.2.7 Define a Duress Finger	
4	Communications	16
	4.1 Network (TCP/IP)	. 16
	4.2 RS232/485	
	4.3 Security	

Table of contents...continue 1

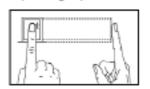
4	Communicationscontinue	17
	4.4 Wiegand	. 17
5	System	18
	5.1 System settings	. 18
	5.2 Data Management	. 19
	5.2.1 System Update	. 19
	5.3 Keyboard	. 19
	5.4 Display	. 20
	5.5 System Reset	. 20
	5.6 Miscellaneous settings	. 20
	5.7 Pendrive (USB)	. 21
	5.8 Auto Test	. 21
	5.9 Record	. 21
	5.10 System Information	22

1. Getting started

1.1 Fingerprint Placement

Recommended fingers: The index finger, middle finger or the ring finger; the thumb and little finger are not recommended (because they are usually clumsy on the fingerprint collection screen).

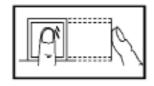
1. Proper finger placement:



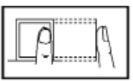
The finger is flat to the surface and centered in fingered guide.

2. Improper finger placement:

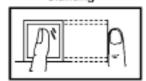
Not flat to the surface



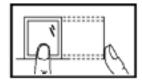




Slanting



Off-center



Please enrol and verify your fingerprint by using the proper finger placement mode. We shall not be held accountable for any consequences arising out of the degradation in verification performance due to improper user operations. We shall reserve the right of final interpretation and revision of this document.

1.2 Instruction for Card Swipe

This device is supplied with an integrated non-contact RFID (125 MHz) card reader module. By offering multiple verification modes such as fingerprint, RF card and fingerprint + RF card verification, this device can accommodate diversified user needs.

Swipe your card across the sensor area after the voice prompt and remove your card after the device has sensed it. For the swipe area, please see 2.2.3 Product Appearance.

1.3 Precautions

Protect the device from exposure to direct sunlight or bright light, this greatly affects the fingerprint collection and leads to fingerprint verification failure.

It is recommended to use the device under a temperature of 0-50°C so as to achieve the optimal performance. In the event of exposure of the device to the outdoors for long periods of time, it is recommended to adopt sunshade and heat dissipation facilities because excessively high or low temperature may slow down the device operation and result in high false rejection rate (FRR).

When installing the device, please connect the power cable after connecting other cables. If the device does not operate properly, be sure to shut down the power supply before performing necessary inspections. Note that any live-line working may cause damage to the device and the device damage arising out of live-line working falls beyond the scope of our normal warranty.

For matters that are not covered in this document, please refer to related materials including the installation guide, access control software user manual.

* Ensure to disconnect all power cables, before attempting maintenance.

Summary

reader.

* Please ensure correct

placement of finger on



2. Introduction of Device

2.1 Overview of Device Functions

As an integrated fingerprint & access control device, our product can be connected with either an electronic lock or an access controller. This device features simple and flexible operations and supports the use of administrators. The screen displays will guide you through all the operations. It supports access control function for a security management and supports multiple communication modes.

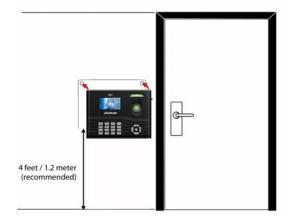
2.2 Important Safeguards

2.2.1 Installation Location

Do not install terminal in areas which are exposed to bright sunlight or rain, as the fingerprint readers are not designed to work in those areas. Bright light will interfere with reading of the sensor and fingerprint readers are not waterproof or vandal proof. It is recommended to protect your fingerprint terminal with enclosure.

2.2.2 Use of Sensor

Do not abuse the fingerprint sensor by scratching the surface, contacting the sensor's surface with heat, pressing hard during placement of fingerprint for verification. Clean the sensor occasionally with cellophane tape to maintain the performance of the sensor.



2.2.3 Product Appearance

Front view:



2.3 Using the Fingerprint Terminal

This chapter will guide on how to use the fingerprint terminal effectively. To get a good reading every time, initial fingerprint enrollment must be done properly.

Summary

* Multiple communication modes

* Do not install in bright light or direct sunlight.

* Recommended height is 1.2m from the floor



The fingerprint terminal provides 4 types of enrolment methods:

• Fingerprint enrolment

User enrolls his fingerprint template into a terminal and the template will be used for future verifications.

Password enrolment

For user who has difficulty to enrol fingerprint due to poor fingerprint quality, enrolment of password is recommended. Password enrolment is also suitable for visitors and temporary workers.

· Fingerprint and password enrolment

Under this option, a user can enrol both fingerprint and password at the same time. The user can either use fingerprint or password to report atten dance or to gain access.

· RFID card enrolment

Please refer to Chapter 2.7 for RFID Card Function.

11-12-01 03:14 THU

2.4 Date / Time Adjustment

When first installing a fingerprint terminal, it is important to set the correct date and time. Follow the steps shown to access the Date/Time adjustment menu:

 You can insert inputs into the terminals through the keypad. It contains numbers from 0-9, an OK button, an ESC/Cancel button, a Scroll up/down button, a doorbell button and a Menu button.



• Press M./... (menu) once

Check-In

Press ▶ 3 times to go to Date/Time
 Press OK once



- Press v to go to the desired field.
- Enter the value using keypads.



Press OK once to confirm settings

Summary

* Ensure the correct date & time on the unit.

* Enter the correct date & time in the required fields



2.5 Enrol Administrator / User

Once the fingerprint terminal is switched on, a display on the screen will appear. Enrol a supervisor or an administrator, who is the in-charge person to administer the fingerprint templates and the transaction data in the terminal. Choose trustworthy people for this particular role.



• Press M/J (menu) once

- User Ming Comm. System Date/Time

 PenDrive Auto Test Record Sys Info
 - Press OK (menu) once





New user

- Press OK (menu) once
 - (Helid) Office
- Press 2 times to enrol fingerprint
- Press OK
- Enroll FP(1-0)

 86

 Quality

 Third Press
- Press desired finger 3x times on sensor to enrol



- Press once to enrol more
- Press ESC to exit

Summary

* Ensure to enrol an administrator on the unit.

- * FP = Fingerprint
- * PWD = Password / pin
- * User = No administrative rights on the unit
- * Admin = Full control of unit

* Ensure a good quality fingerprint



2.6 Password Enrolment

If a user cannot enrol his fingerprint, he can choose to use passwords. Follow the steps below:







- Type a numeric password in the fileds
- Press **OK** to enter

Summary

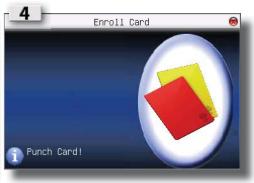
* Password may contain numbers ranging from 1 - 8 digits.

2.7 RFID Card Enrolment

If a user cannot enrol his fingerprint, he can choose to use a RFID Card. Follow the steps below:



Press ▼ 4x times to enrol a RFID card



Punch the card to enrol



- Confirmation of enrolment
- Press ok to save OR
- Press ESC exit

* RFID card is for added security on the unit, or if the user can't use a fringerprint



2.8 Fingerprint & Password Verification

2.8.1 Fingerprint verification



Press fingerprint for verification



Summary

*Take note of verification screens

2.8.2 Password verification



ID.NO: 1
Name:
Verify: PHD
Verified.

Check-In 11-12-01 03:22 THU

Type your password for verification

Successful verification

2.8.3 Card verification



Punch your card for verification



 Declined verification will indicate the image above. * Declined verification will show on screen.



2.9 Manage Users

2.9.1 Search User



Name FP PWD Card

1 1 2

2 1

PageUp: F1 PageDown: F2 Edit: OK Funo: MENU

Press 🔻 to selected user

* Take note: Only Administrator can edit / delete users

Summary

- Press M/J (menu) once
 Press OK
 Press ► once
 Press OK
 - Search User

 Record

 Edit

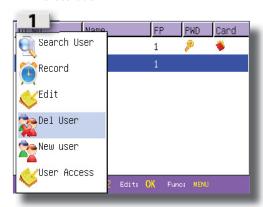
 Del User

 New user
- Press MA (menu) for options window
 Select SEARCH USER
 Press OK



Type in the desired user id to search

2.9.2 Delete user



Select DEL USER to enter delete options



- Delete a single user
- Move down to desired user
- Press **OK**

* Ensure to select correct user ID before deletion



2.9.2 Delete user...continue



Press (menu) once to select available options to delete.



Press ok
 to confirm

Summary

* Time Zones can be created for access times to allow access

* Access from 9H00 - 18H00

Everyday of the week

3. User Access

3.1 Description of User Access

Access option function setting is the settings of user's accessibility to certain doors. It is known as Time Zone. A combination of Time Zones is known as Group Time Zone. There are a total of 50 Time Zones available in the reader. Below are some examples of Time Zone configurations and combinations of Time Zones.

Time Zone 1

Constant access time for a period of one week . Table below is showing the time zone 1 detailed schedule where users are only allowed access from 9am to 6pm from Monday to Sunday.

Time Zone	1	
SUN	09H00 : 18H00	
MON	09H00 : 18H00	
TUE	09H00 : 18H00	
WED	09H00 : 18H00	
THU	09H00 : 18H00	
FRI	09H00 : 18H00	
SAT	09H00 : 18H00	

Time Zone 2 & 3

Variation in access for a period of one week . Table below is showing the Time Zone 2 where users are allowed to access from 8am to 12pm from Monday to Friday but denied any access on the weekends and Time Zone 3 where users are allowed to access from 2pm to 6pm from Monday to Friday but denied any access on the weekends. The Time Zone 2 and Time Zone 3 belongs to the same group of employees, therefore they can be grouped together in Group Time Zone, for example Group.

Time Zone	2	3
SUN	23H59 : 00H00	23H59 : 00H00
MON	08H00 : 12H00	14H00 : 18H00
TUE	08H00 : 12H00	14H00 : 18H00
WED	08H00 : 12H00	14H00 : 18H00
THU	08H00 : 12H00	14H00 : 18H00
FRI	08H00 : 12H00	14H00 : 18H00
SAT	23H59 : 00H00	23H59 : 00H00
<u> </u>	<u> </u>	10

- * TZ 2 : Access from 8H00 to 12H00 during week * No weekend access
- * TZ 3 : Access from 14H00 to 18H00 during week
 - No weekend access



Group Time Zones

There are a total of 5 Group Time Zones available for use. Every new registered user belongs to Time Zone 1. Default grouping combination is Group 1 and default Group Time

GROUP TIME ZONE	TIME ZONES		
1	2	3	
2			
3			
4			
5			

Under a condition where Group 1 and Time Zone 1 are in factory default status, new registered user defaults in unlocking status. If the grouping of that user does not include in grouping combination setting, then user can only record time attendance but cannot unlock the door.

3.2 Assign a user to a Time Zone

3.2.1 Create a Time Zone





* Ensure to setup a Time Zone first before assigning users

Summary

- Press M/J (menu) once Press **ok** Press to select ACCESSS
- Press **OK**



Press to selected field and enter values

3.2.2 Assign a Holiday Time Zone



- Press ▼ to select HOLIDAY SETTINGS
- New Holiday

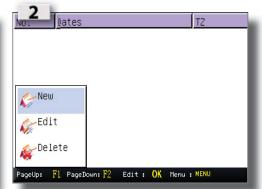
 No. 01

 Start 01 M 01 D

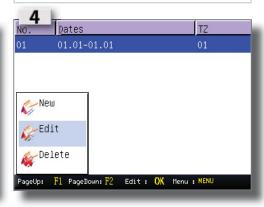
 End 01 M 01 D

 TZ 01

 OK(M/<-) Back(ESC)
- Insert valuesPress **OK** to save



- Press M/J to open options window
- Press OK to create a new settings



EDIT / DELETE are available to change and delete

3.2.3 Create or Edit a Access Control Group setting



Press ▼ to select A&C SETTINGS



- Press M/J to open options window
- Note that Time Zone is already available
- NEW / EDIT / DELETE options are available

Summary

- * Ensure to capture all holidays when setting up.
- * Recommended to create holiday time zones to deny access, rather than deny access per user for holidays

* Delete is only available when a new group is created. There must always be a group active.



3.2.4 Unlocking Combination settings

Combo settings are for extra added security, where more than ons user need to sign in before access is granted.



Press 🔻 to select UNLOCK COMB SETTINGS Press **OK**



Press M/J (menu) for NEW / EDIT / DELETE options

Summary

- * Combo settings for added security
- * 2 or more user verification needed before access allowed

* Parameter settings is to

unit

change the control of the

3.2.5 Change Access Control Parameters settings



- Press To select ACCESS CONTROL SETTINGS
- Press **OK**



Press v to select field and change values



Press OK to save

- - Lock (1-10s):
 To adjust the unlocking time after verification.
- Dsen. Delay (1-99s)

To delay door sensor from triggering alarm system when door is not closing. This function only works when a door sensor is attached to the reader.

Dsen Mode:

To choose the type of door sensor attached to the reader. There are NO (normally opened) and NC (normally closed) available. Choose NONE if no door sensor is attached.

Alarm Delay (1-99s):

To delay the reader from triggering alarm system.

Alarm count (1-9 ti mes):
To adjust the maximum verification failures of users. When the maximum is reached, reader will trigger alarm system.

Close TZ:

Door is always locked during the predefined time period, so users cannot gain access after verification.

Open TZ:
Door is always unlocked during the predefined time period, so users do not need to verify their identities but can gain access.

Valid holidays: Choose Valid to enable the holiday settings Choose Valid to enable the holiday settings.

Choose Invalid to disable the holiday settings.

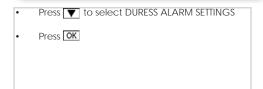
3.2.6 Duress Alarm Parameters

The fingerprint reader will trigger alarm system after a duress fingerprint is verified sucessfully. It is advisable:

- 1 to use different fingers to do daily clocking mechanism and to trigger duress alarm
- 2 to use different verification to do daily clocking mechanism and to trigger duress alarm.











Select [Yes] to enable. Hold the for 3 second followed by the fingerprint verification. Successful verification will trigger alarm system.

1:1 Trig : Select [Yes] to enable. Enter user ID followed by fingerprint verification to trigger alarm system. During daily clocking mechanism, all users use 1:N fingerprint verification. All 1: N fingerprint verification process will trigger alarm system.

1:N Trig: Select [Yes] to enable. Place finger on scanner for fingerprint verification to trigger alarm system. During daily clocking mechanism, all users use 1:1 fingerprint verification. All 1:N fingerprint verification process will trigger alarm system.

Select [Yes] to enable. Enter user ID and password for verification to trigger alarm system. During daily clocking mechanism, all users use fingerprint verification. Any password verification process will trigger alarm system.

To delay the reader to trigger alarm system after verification.

3.2.7 Define a Duress Finger

If users would like to use different fingers for daily clocking and to trigger duress alarm, users must enrol with more than 1 fingerprint (2 or above).

Example: index finger for daily clocking activities and thumb as duress finger.

When duress finger is used for verification, it will trigger alarm system as well. Administrator does not need to enable any of the verification methods in Duress Alarm Parameters.

Follow the steps on the next page to define duress finger.

- Summary
- * Duress finger enrolment for added security, especially in high risk areas.

- * Enrol 2x or more fingerprints to assign a fingerprint.
- * Assign index finger for daily clocking, and thumb for duress finger.



Define a duress finger...continue

Summary



- Description 1-10 the 01 sum of FPS PageUp F1 PageDown F2 Select OK
- Press OK on USR MNG, to MANAGE
- Select user id for change
- Press M/J, USER ACCESS
- Select MANAGE

The following screen will display





Press **OK** to save

- Press M/J (menu) once
- Select ENROL FP
- Follow instructions
- ESC to exit



Press **OK** to exit



4. Communications

4.1 Network (TCP/IP)





- Press M/Jonce Press **D**once Press **OK**
- Press **OK** on NETWORK



Press 🔻 to desired field, and complete the values

* Ensure to assign a static address, units will not work on DHCP

Summary

4.2 RS232 / 485



- 2 RS232/485 < 115200 ► BPS Baud **√** ON RS232 RS485 **√** OFF OK(M/<-) Back (ESC)
- Press once to select RS232/485
- Press **OK**

- Press **v** to select field
- Press to change values

- * Recommended distance
- ** RS232 = 20m 60m
- *** Could be affected by distance and power cables running parallel with unit cable
- ** RS485 = 1000m (max)
- *** Could be affected by power cables



4.3 Security



Press 2x times to select SECURITY



Press ▼ to change values

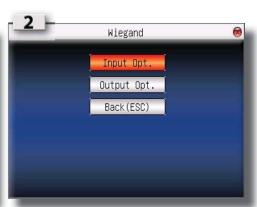
Summary

- * Device related password
- * Restrict sub-administrator access

4.4 Wiegand

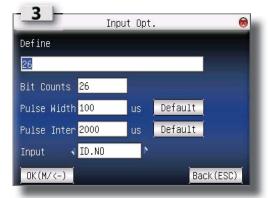
Press **OK**





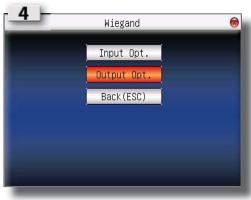
* Use WIEGAND communication port to connect to maglock or turnstiles

- Press 3x times to select WIEGAND
 Press K
- Select INPUT OPT



- Press to desired field and enter values
- Press OK to save

Summary





Select OUTPUT OPT.

- Press to select fields
- Press to change values or enter values

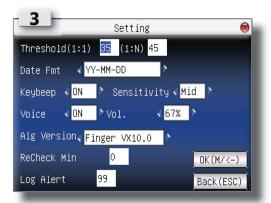
5. System

5.1 System settings





- Press M/J once
- Press 2x times to select SYSTEM
- Press **OK** to enter SYSTEM SETTINGS



* Ensure correct system settings before handing over to client.

- Press to scroll down to fields
- Change values



5.2 Data Management



Press to select DATA MNG



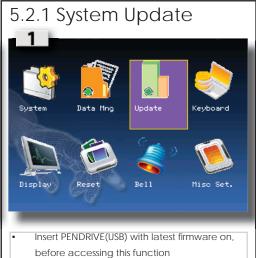
- Press OK on a delete function
- Press OK to confirm

Summary

* Ensure to keep data logs clean, to prevent unit from filling up space.



- Press to select desiired option
- Press **OK** to confirm



- * Ensure to use correct USB drive that is compatible with device.
- * System update ensure to have latest firmware loaded on USB before this function will activate

5.3 Keyboard



- Press 3x times to select KEYBOARD
- Press **OK**

- Function No. Name
 F1 Status Key 0 Check-In
 F2 Status Key 1 CheckOut
 Up Undefine
 Down Undefine
 Left Undefine
 Right Undefine

 Edit: OK
- Press OK to edit selected field

- * Assign shortcut for faster access.
- * Custom "F" keys to diffirentiate between access modes



5.4 Display



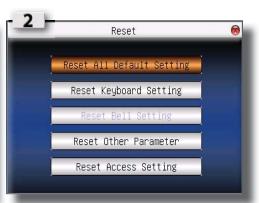
Press ▼ to select DISPLAY
 Press OK



Press ▼ to select field
Press ▼ to change values
Press ○K to save

5.5 System Reset





- Select field that needed to be reset
- Press OK to confirm

5.6 Miscellaneous settings



- Press 3x times to select MISC SET
- Press OK



Press to change the value of the desired field or enter text

Summary

* Reset function are only configuration of unit, and not to delete users

* Ensure device settings are correct when installing the device



5.7 Pendrive (USB)



Select PENDRIVE on the MAIN MENU

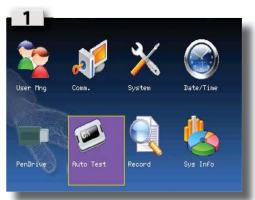


Insert a PENDRIVE (USB) and select desired option

Summary

* Pendrive / USB can be used to upload and download user ID's

5.8 Auto Test



Select AUTO TEST on the MAIN MENU



Select the desired field for testing

* Ensure to run a AUTOTEST to test all functions on unit

5.9 Record



Select RECORD on the MAIN MENU

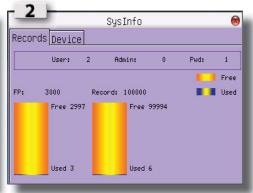


Select option to run desired query on



5.10 System Information





Summary

- Select SYS INFO on the MAIN MENU
- Press to select desired info page
 RECORD screen



5.10.1 Number of Password Users Available in the Terminal (Password User)

Users can do verification using PIN password and a combination of fingerprint and password. To find out how many users are using password:

• Press Menu > Sys Info > Password User > View the number

5.10.2 Number of Time Scanners Have Been Used for Verification (\$ Logs)

S logs stands for scanner logs, which means the number of times the scanner has been used for verification, regardless of whether it is successful or not. To view the scanner logs:

• Press Menu > Sys Info > Record > Amount of transactions USED / FREE

5.10.3 Free Space Information (Free Space)

Find out the information about availability of space in your terminal through this function.

Press Menu > Sys Info > Free Space > Free = number available

5.10.4 Device Information (Dev Info)

Find out the information about your terminal through this function. Press Menu > Sys Info > Dev Info > View the info



Information available includes:

- AttLog (10k): Shows the number of attendance logs that can be stored in the terminal, for example for AttLog (10k) 12 means 10,000 x 12 = 120,000
- **S Logs**: Shows the number of Scanner Logs available for the terminal.
- Manufactured Time (Manu Time): The date and time when the terminal was produced is displayed when you press Manu Time
- Serial Number of the Terminal (Serial Num): The Serial number is pasted on the back of the terminal but in case the sticker is damaged, this is where you can retrieve the serial number.
- Manufacturer: Get the name of the manufacturer of the terminal here.
- **Device Name**: All models have different names. If you don't know the name of the terminal that you are having, get it here.
- Algorithm Version: This is where you can find terminal's algorithm version.
- **Firmware Version**: Support sometimes require a firmware version to resolve some support issues. The version and date of the version is released is provided here. **For example**: Ver 6.20 Aug 19 2009
- View MAC: This feature is a security feature of the products. Linking Software to the
 terminal requires the correct MAC address. Without availability of MAC address,
 the software will not be activated correctly. All products are supplied with the correct MAC address to ease communication. This is also to hinder people from using
 the software with a different hardware brand. An example of a MAC address is
 00:0A:5D F1 BE 57.
- Press Menu > Sys Info > Dev Info > View MAC