

**FINGERTEC**  
One finger solves it all



# Q2i & TA200 Plus

Fingerprint Color Time Attendance  
& Door Access System

**USER GUIDE**

**Q2i** Color Multimedia  
Fingerprint  
Time Attendance &  
Door Access Control System



**TA200 Plus**  
Color Multimedia Fingerprint  
Time Attendance System

**USER GUIDE**

## COPYRIGHT NOTICE

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from FingerTec Worldwide Ltd. Every precaution has been made to supply complete and accurate information. Information in this document is subject to change without prior notice.

## DISCLAIMER

No person should rely on the contents of this publication without first obtaining advice from a qualified professional person. The company expressly disclaims all and any liability and responsibility to any reader or user of this book, in respect of anything, and of the consequences of anything, done by any such person in reliance, whether wholly or partially, upon the whole or any part of the contents of this book.

### FINGERTEC WORLDWIDE LTD

For enquiries on technical matters, please forward the email to [support@fingertec.com](mailto:support@fingertec.com)

## CONTENTS

<b>1</b>	<b>GETTING STARTED</b>	
	<b>IMPORTANT SAFEGUARDS</b>	<b>4</b>
	Installation Location	
	Use of Sensor	
	<b>INTRODUCTION TO READER</b>	<b>4-7</b>
	Complete Package	
	Materials Provided	
	Basic Features	
<b>2</b>	<b>USING THE FINGERPRINT READER</b>	
	<b>USING THE FINGERPRINT READER</b>	<b>8</b>
	<b>TIPS FOR BEST FINGERPRINT ENROLLMENT</b>	<b>9</b>
	<b>INITIAL SET UP OF THE FINGERPRINT READER</b>	<b>10-19</b>
	Date/Time Adjustment	
	Enrollment	
	Enrollment of Supervisor/Administrator	
	Enrollment of Normal User	
	Fingerprint Verification	
	Password Enrollment	
	Password Verification	
	Deleting Users	
<b>3</b>	<b>RFID CARD FUNCTION</b>	
	<b>RFID CARD</b>	<b>21-22</b>
	<b>VERIFICATION WITH RFID CARD</b>	<b>25</b>

For Q2i only

## 4 ACCESS OPTIONS

<b>BRIEF INTRODUCTION TO ACCESS OPTIONS</b>	<b>24-25</b>
Time Zone 1	
Time Zone 2	
Time Zone 3	
<b>FUNCTIONS DESCRIPTION DEFINITION OF TIME ZONE</b>	<b>26-27</b>
<b>DEFINITION OF GROUPING FUNCTION</b>	<b>28-29</b>
<b>DEFINITION OF USER ACCESS SETTINGS</b>	<b>30-31</b>
<b>DEFINITION OF HOLIDAY SETTINGS</b>	<b>32-35</b>
<b>USER UNLOCK COMBINATION SETTINGS</b>	<b>36</b>
<b>ACCESS CONTROL PARAMETERS</b>	<b>36-37</b>
<b>DURESS ALARM PARAMETERS</b>	<b>37-39</b>
<b>TO DEFINE DURESS FINGERPRINT</b>	<b>39-40</b>

## 5 OTHER USEFUL FUNCTIONS

<b>USB PEN DRIVE</b>	<b>41</b>
<b>WORK CODES</b>	<b>42-44</b>
To define work code	
To verify with work code	
<b>SYSTEM OPTIONS</b>	<b>44-49</b>
System / Data / Update / Keyboard / Display / Power / Reset / Bell	
<b>AUTO TEST</b>	<b>49</b>
<b>RECORD</b>	<b>49-50</b>
<b>SYSTEM INFO</b>	<b>51</b>
<b>SHORT MESSAGE DISPLAY</b>	<b>51-52</b>
<b>T9 INPUT METHOD</b>	<b>53-54</b>

## 6 INSTALLATION & COMMUNICATIONS

<b>CONNECTIONS AVAILABLE</b>	<b>55-56</b>
<b>POWER SUPPLY CONNECTION</b>	<b>56</b>
<b>COMMUNICATION CONNECTION</b>	<b>56-62</b>
TCP/IP Connection	
RS232 Connection	
RS485 Single Connection	
RS485 Network Connection	
<b>SECURITY</b>	<b>62-63</b>

<b>APPENDIX</b>	
<b>TROUBLESHOOTING</b>	<b>64</b>



**Q2i** Color Multimedia  
Fingerprint  
Time Attendance &  
Door Access Control System



**TA200 Plus**  
Color Multimedia Fingerprint  
Time Attendance System

## IMPORTANT SAFEGUARDS

### INSTALLATION LOCATION

Do not install readers 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 readers with enclosure.

Go to <http://accessory.fingertec.com> to view the enclosure and other accessories.

### 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.

## INTRODUCTION TO READER

The FingerTec® Q2i / TA200 Plus is the revolutionary product of time attendance and door access, designed with colored screen TFT display for vivid color presentation.

Storage capacity of FingerTec® Q2i / TA200 Plus is 1500 fingerprint templates and 50000 transaction logs, and it offers multiple methods of verification which include fingerprint, password and RFID card for user convenience. FingerTec® Q2i / TA200 Plus understands the needs of today's working environment which requires multitasking.

Fingerprint enrolment of every user shall be done once and these templates are downloadable into TCMS V2 software for backup and they are transferable to other readers for verification.

Every time a registered user gets verified at the readers, date and time of the transaction is stored as a transaction log. These logs can be downloaded into TCMS V2 software for reports and further analysis. Download process can be done via TCP/IP connection, USB flash disk (pen drive), RS232 connection, or RS485 connection.

## SPECIFICATION

Display area (inch)	3.5 TFT screen
Color resolution	65k
Surface finishing	Acrylonitrile Butadiene Styrene (ABS)
Functions	<b>Q2i</b> Time attendance and door access control system <b>TA200 Plus</b> Time attendance only
FP storage	1500
Transaction log	50000
Connection available	TCP/IP, RS232, RS485, USB flash disk, USB host-client, Wiegand 26-bits input and output
Card reader	RFID card reader
Card capacity	65534
Sensor	Optical scanner with silicon coating
Multimedia functions	Short message display
Software	Language available Default - English Optional - Arabic - Indonesian - Spanish - Thai - Portuguese - Chinese - French - Russian - Farsi - Italian - Vietnamese - German - Italian

## COMPLETE PACKAGE



Fingerprint Reader



TCP/IP Connector Jack



Screws & Bolts



DC 12V Power Adapter



Connector Jack (Q2i only)



USB Extension



RFID Card (5pcs)



Screwdriver



USB Flash Disk (Optional)



Software CD



Power Cable



DC 12V Wire (Q2i only)

## MATERIALS PROVIDED

- Quick Start Guide
- Hardware User Manual
- Software User Manual
- Video Guide for Hardware
- Video Guide for Software
- Sample of Enrollment Form

## BASIC FEATURES

### L.E.D DISPLAY

The L.E.D display has two lights.

**Green** - The reader is in standby mode or to indicate that user has been successfully verified.

**Red** - To indicate that user verification has failed

### COLOR LCD

Screen that displays instruction and status of reader

### OPTICAL SCANNER

For user to place finger for enrollment or verification

### FUNCTION KEYS

Shortcut keys to enter specific command to reader

### NAVIGATION KEYS

To navigate and to input command to reader

### KEYPADS

Keys from 0-9, alphabets Power on/off button, Escape/Cancel button, Menu/Enter button, backspace button, asterisk (\*) button, hash (#) button

### CARD

card induction area

### SPEAKER

To prompt user with result of verification and information





**NOTE**



USB port for data transfer

**USB PORT**

To upload/download users information, password, fingerprints and transaction logs via USB flash disk.

# 2 USING THE FINGERPRINT READER

## USING THE FINGERPRINT READER

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



The fingerprint reader provides 4 types of enrollment method:

### 1 FINGERPRINT ENROLLMENT

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

### 2 PASSWORD ENROLLMENT

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

### 3 FINGERPRINT AND PASSWORD ENROLLMENT

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

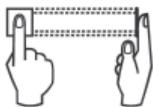
### 4 RFID CARD ENROLLMENT

Please refer to Chapter 3 for RFID Card Function.

## TIPS FOR BEST FINGERPRINT ENROLLMENT



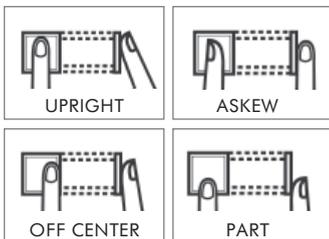
### WHAT YOU SHOULD DO



Place finger flat on the fingerprint sensor. Make sure the finger's midpoint is placed at the center of the fingerprint sensor.



### WHAT YOU SHOULD NOT DO



### 1 USE INDEX FINGER

Index finger is smaller than thumb and it can be comfortably placed on the sensor. The use of thumb is not recommended because the center points might not be placed properly on the sensor, hence cannot be read by the sensor.

### 2 MAKE SURE THE FINGER IS NOT WET, TOO DRY, INJURED OR DIRTY

The finger needs to be slightly moist to enable the sensor to read the minutiae points on the fingerprint.

### 3 PLACE THE CENTER POINTS OF YOUR FINGER AT THE CENTER OF THE SENSOR

The center points of a finger is an area where there is a swirl and the center points must be properly placed on the sensor during enrollment.

### 4 DON'T PRESS HARD AT THE SENSOR, JUST PLACE YOUR FINGER ON THE SENSOR

The sensor is reading minutiae points of your finger and placing a finger properly on the sensor will prompt the sensor to read those points. Pressing your finger hard on the sensor is not necessary.

### 5 DON'T DO ENROLLMENT UNDER BRIGHT LIGHT OR DIRECT SUNLIGHT

It is important to note that bright light or sunlight could interfere with reading of the sensor. Avoid placing the reader under direct sunlight or bright light to avoid difficulty in enrollment and future verification.

## INITIAL SET UP OF THE FINGERPRINT READER



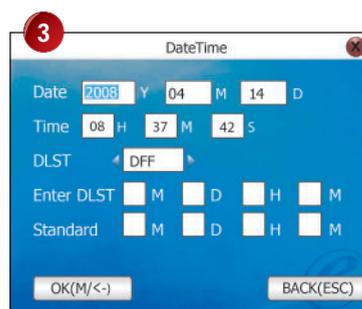
Press **M/↵** once.

## DATE / TIME ADJUSTMENT

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



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



Press **▼** to go to the desired column.  
Enter value using keypad.  
Press **OK** once to confirm setting.

DLST stands for Daylight Saving Time. Please enter the date and time in the given column to use this feature.

- **DLST**  
Enter date and time for daylight saving starts
- **Standard**  
Enter date and time to return to standard



Press **OK** once to save setting.

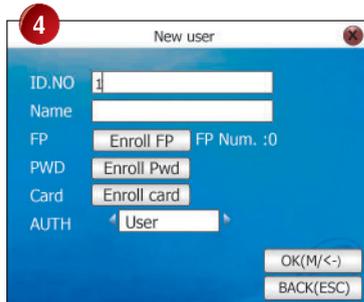


Press **Esc** twice to return to the main menu.

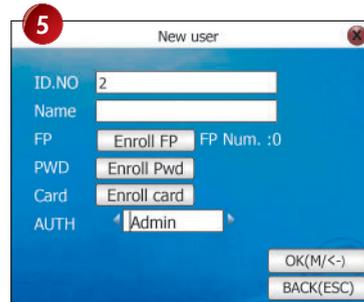




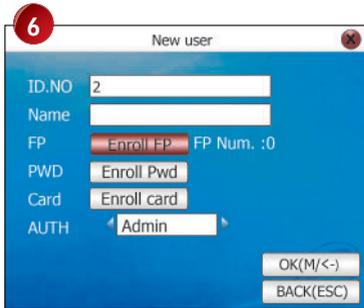
Press **OK** once.



Assign user ID of the administrator.



Press **▼** 5 times.  
Press **▶** once to select Admin.



Press **▼** 3 times to Enroll FP and press **OK**.



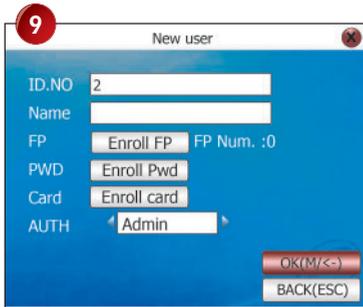
Place center point of fingerprint properly on the scanner. Place finger 3 times during enrollment. Read page 9 for tips on fingerprint scanning technique.



Press **OK** once to save enrollment.  
Press **Esc** once to end enrollment.

## ENROLLMENT OF NORMAL USER

A normal user is only allowed to use reader for identity verification, and he does not have any other authorities to access the system. To add a normal user, follow the steps shown.



Press **OK** once to save.



Press **Esc** twice to return to the main menu.



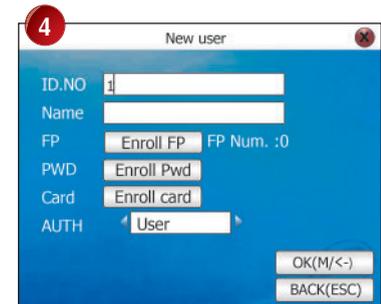
Press **M/↵** once.



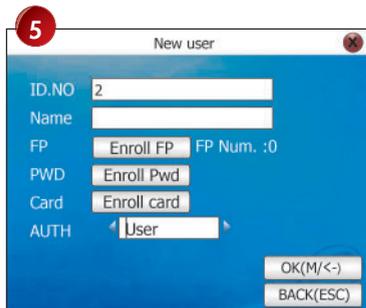
Press **OK** once.



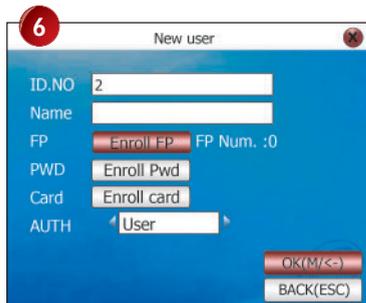
Press **OK** once.



Assign user ID for the user.



Press **▼** 5 times. Press **▶** once to select user.



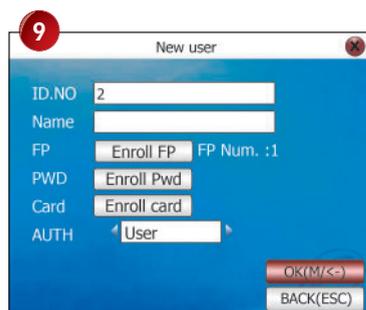
Press **▲** 3 times to Enroll FP and press **OK**.



Place center point of fingerprint properly on the scanner. Place finger 3 times during enrollment.



Press **OK** once to save enrollment.  
Press **Esc** once to end enrollment.



Press **OK** once to save.



Press **Esc** twice to return to the main menu.

To enroll more users, repeat the steps above.

## FINGERPRINT VERIFICATION

Reader supports 2 types of fingerprint verification method. User can choose either method to verify his fingerprint at the reader. 2 types of fingerprint verification methods are:

### ● 1 to Many (1:N) fingerprint matching



Place the enrolled finger properly on the fingerprint sensor.



The reader verifies user, displays the ID and prompts "Thank you"



Wait a second before removing the finger from the fingerprint sensor.



If verification failed, the reader prompts, "Please try again"

### ● 1 to 1 (1:1) fingerprint matching



Enter the user ID using keypad.



Place the enrolled finger properly on the fingerprint sensor.



The reader verifies user, displays the ID and prompts "Thank you".



If verification failed, the reader prompts, "Please try again"

## PASSWORD ENROLLMENT

For user who cannot enroll his fingerprint, he can choose to use passwords. Follow the steps below:



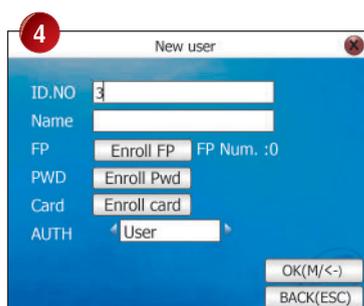
Press **M/←** once.



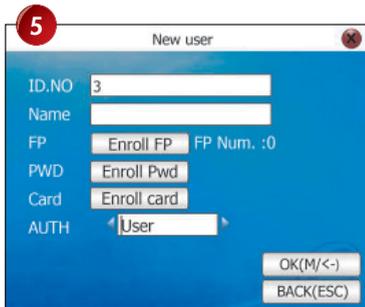
Press **OK** once.



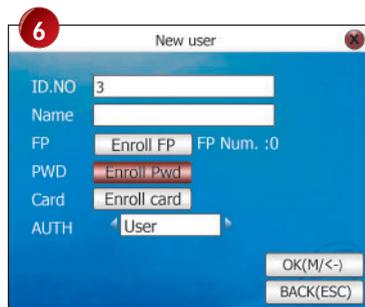
Press **OK** once.



Assign user ID using keypads, for example 3.



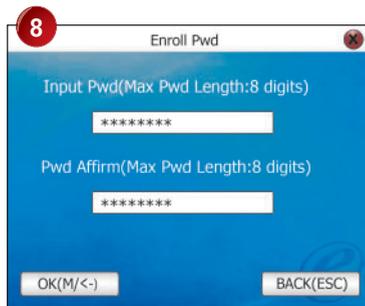
Press **▼** 5 times.  
Press **▶** once to select user.



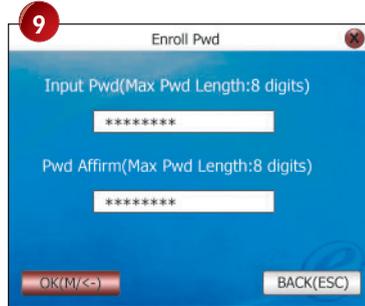
Press **▲** twice to Enroll Pwd and press **OK**.



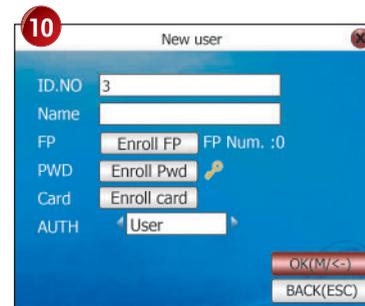
Enter password maximum 8 digits.  
Press **▼** once.



Re-enter the password to confirm.



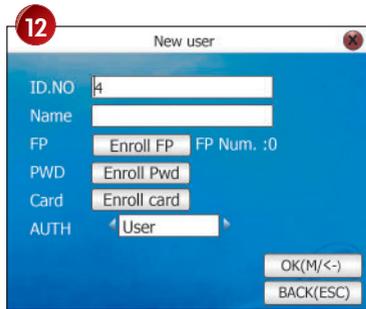
Press **OK** once to save.



Press **OK** once to save.



Press **OK** once to save.



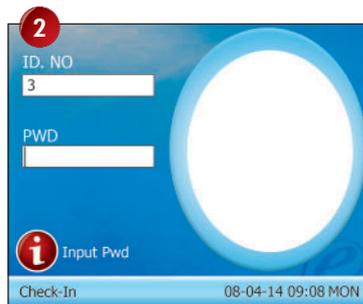
Press **Esc** twice to return to the main menu.

## PASSWORD VERIFICATION

User with password enrollment can always use password to report attendance or gain access from the readers.



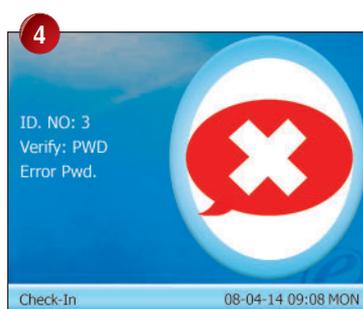
Enter the user and press **OK**.



Enter password and press **OK**.



The reader verifies user, displays the ID and prompts "Thank you".



If verification failed, the reader prompts, "Please try again".

## DELETING USERS

The system also allows deletion of user from the system. This is important as employees come and go. Therefore, for those who had left the company, their fingerprint templates or records must be deleted from the system to avoid any misuse of the system. Only an administrator or a supervisor has the rights to delete user.

Follow the steps shown to delete users.



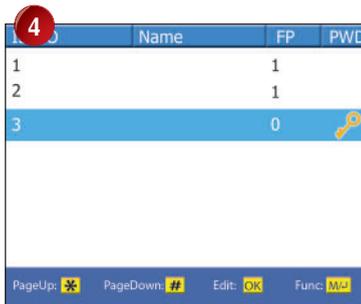
Press **M/←** once.



Press **OK** once.



Press **▶** once to go to Manage and press **OK**.



Press **▼** to choose user ID to delete.  
Press **M/←** once.



Press **▼** 3 times to go to Del User and press **OK**.

### Note

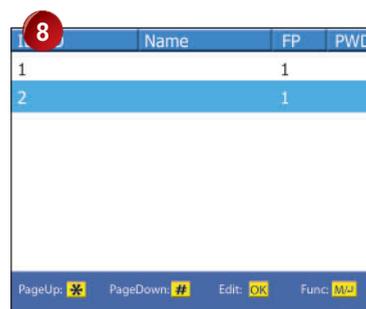
Remember to select the correct User ID for deletion.



Press **OK** once to delete user.



Press **OK** once to confirm.



Press **Esc** 3 times to return to the main menu.

# 3 RFID CARD FUNCTION

The reader supports enrollment of RFID Card. User can report time attendance and gain access by using RFID card. At the same time, users with fingerprint or password enrollment can add RFID card as well.

Each RFID card has a unique ID. During enrollment this Card ID will be read from the RFID card and stored in the reader. During verification the reader will match the ID in the card to the ID stored in the reader.

## RFID CARD

Each RFID card user must register his RFID card to the reader.

To enroll user with RFID card, follow the steps shown:



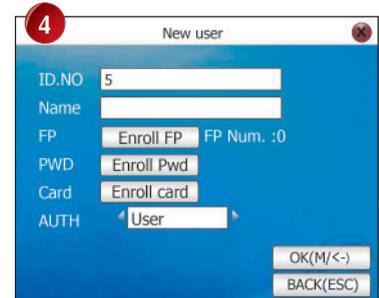
Press **M/←** once.



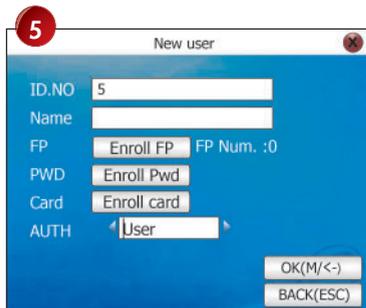
Press **OK** once.



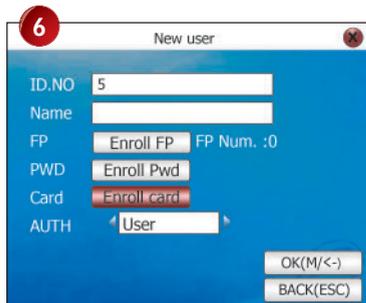
Press **M/←** once.



Assign user for example 5.



Press **5** 5 times.  
Press **▶** once to select user.



Press **▲** once to Enroll Card and press **OK**.



Wave RFID card at the induction area to read the card.



The Card ID is captured and displayed on the screen. Press **OK** once to save.



Press **OK** once to save.  
Press **Esc** twice to return to the main menu.

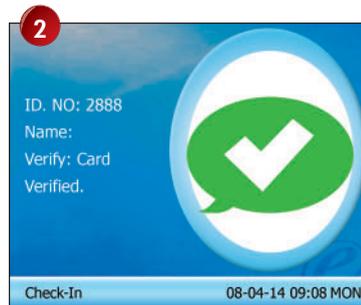
## VERIFICATION WITH RFID CARD

RFID card user can do verifications at the reader by using the following combinations:

To enable this operation, configure option "Card Only" in Advance Option to "Yes"



Place RFID card at the induction area.



The Card ID and the User ID are shown on the screen, and the reader prompts, "Thank you"



If verification failed, the screen shows "Not Enrolled" and prompts, "Invalid ID"

# 4 ACCESS OPTIONS • Apply to Q2i only

## BRIEF INTRODUCTION TO ACCESS OPTIONS

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
SUN	09:00-18:00
MON	09:00-18:00
TUE	09:00-18:00
WED	09:00-18:00
THU	09:00-18:00
FRI	09:00-18:00
SAT	09:00-18:00

Table 1.1 Time Zone 1

### TIME ZONE 1

Constant access time for a period of one week.

Table 1.1 is showing the time zone 1 detailed schedule where users are only allowed access from 9am to 6pm from Monday to Sunday.

Time zone	2	3
SUN	23:59-00:00	23:59-00:00
MON	08:00-12:00	14:00-18:00
TUE	08:00-12:00	14:00-18:00
WED	08:00-12:00	14:00-18:00
THU	08:00-12:00	14:00-18:00
FRI	08:00-12:00	14:00-18:00
SAT	23:59-00:00	23:59-00:00

Table 1.2 Time Zones 2 & 3

### TIME ZONE 2

Variation in access for a period of one week.

Table 1.2 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.

## TIME ZONE 3

### Variation in access for a period of one week.

Table 1.2 also is showing the 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 employee, therefore they can be grouped together in Group Time Zone, for example Group Time Zone 1.

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 Zone 1.

Group time zone	Time zones		
1	2	3	
2			
3			
4			
5			

Table 1.3 Group Time Zones

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.

Access option has 6 main functions

- 1 TIME ZONE SETTING**  
To define time zone 1 to 50.
- 2 HOLIDAY SETTINGS**  
To define time zone for holiday.
- 3 GROUP TIME ZONES SETTINGS**  
To define group time zones, a group can support up to 3 different time zones.
- 4 UNLOCK COMBINATION SETTINGS**  
To define different time zone combinations, and each combination is composed of different groups.
- 5 ACCESS CONTROL PARAMETERS**  
To define lock/unlock parameters
- 6 DURESS ALARM PARAMETERS**  
To define duress alarm parameters.

# FUNCTION DESCRIPTION

## DEFINITION OF TIME ZONE

### 1 TIME ZONE

Range of time specified for access options. The system can define a maximum of 50 time zones. Each user can set a maximum of 3 times zones.

### 2 TIME REGION

A certain period of time with a format of HH:MM-HH:MM, operates in 24-hr format and accurate to the minutes. For each time zones, 7 time regions can be set.

### 3 ALL DAY ACCESS

00:00 to 23:59, reader allows user to access anytime in a day.

### 4 FORBIDDEN TIME ZONE

23:59 to 00:00, reader blocks users to access anytime in a day.

All new enrolled users are automatically assigned to Time Zone 1. It is recommended not to change any settings in Time Zone 1.

For example,

Users are allowed to access from 8:30am – 6:00pm during work time from Monday to Friday. Saturday and Sunday are off days and users are not allowed any entry.

Follow the steps to configure time zones.



Press **M/←** once.



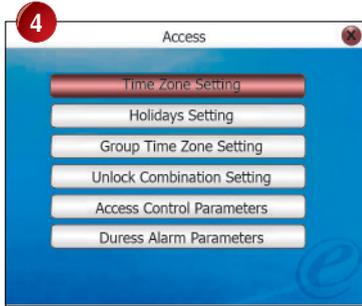
Press **OK** once.



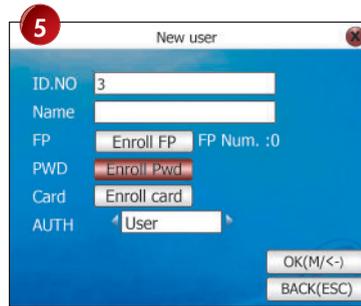
Press **▼** once to choose Access and press **OK**.

The configured time zone is saved and reader is allowed to set the next time zone. A total of 50 time zone is available and each user can use up to 3 time zones.

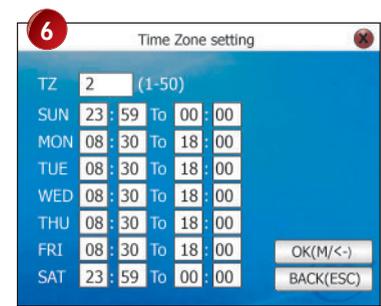
After time zones settings are configured, these time zones shall be included in the Group Time Zones for the configuration to take effects.



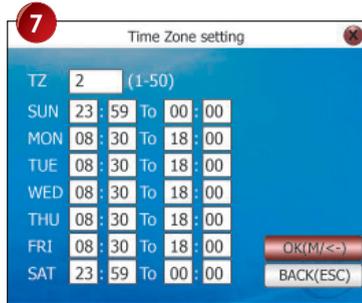
Press **OK** once.



Enter time zone (vary from 1 to 50)



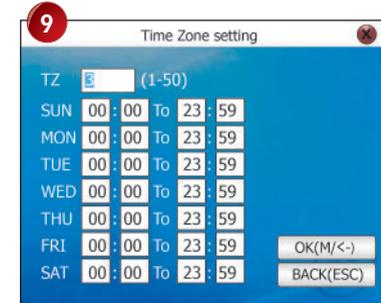
Press **▼** to go to the desired column. Enter time into the desired day.



Press **OK** once to save.



Press **OK** once to confirm.



Press **Esc** 4 times to return to the main menu.

## DEFINITION OF GROUPING FUNCTION

Grouping function can segregate users into group and combine different groups into different unlocking combinations. The function provides convenience to grouping management of Access Options. The grouping function can combine as many unlocking combinations as possible from the five groups. New registered user default belongs to Group 1 but the users in Group 1 can be relocated into another group.

For example,

Here are 3 time zones, TZ1, TZ2 and TZ3. And now all 3 time zones are grouped into group time zone 2.

Follow the steps below to configure group time zone:



Press **M/↵** once.



Press **OK** once.



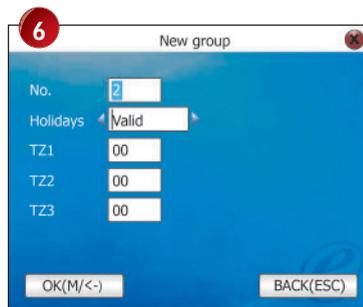
Press **▼** once to choose Access and press **OK**.



Press **▼** twice to choose Group Time Zone settings and press **OK** once.



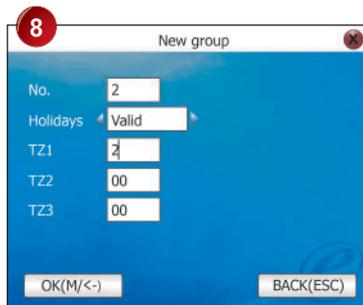
Press **OK** once and choose New.



Enter **2** and press **▼**.



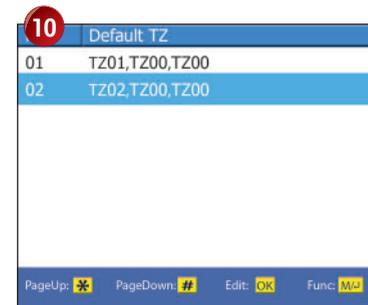
Press **▶** to choose Holiday as Valid.



Press **▼** and enter TZ into the column. Repeat to press **▼** to next column for next the time zone.



Move to **OK** and press **OK** to save setting.



Press **OK** once to confirm. Press **Esc** 4 times to return to main menu.

# DEFINITION OF USER ACCESS SETTINGS

User Access Options is to process correlative setting according to user's requirements.

Enter Access Options menu to check user's Access Options status.

User Access Options include user grouping setting, use group time zone and user time zone.

Grouping divides registered users into several groups making them manageable.

Use group time zone is whether the user uses default time zone of the belonged group.

User time zone is for user to set user's unlocking time, and select number of time zone already being set.

For example,

User ID 00001 is assigned to Group Time Zone 2. Follow the steps to assign user into group time zone.



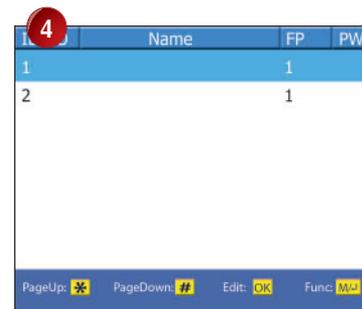
Press **M/←** once.



Press **OK** once.



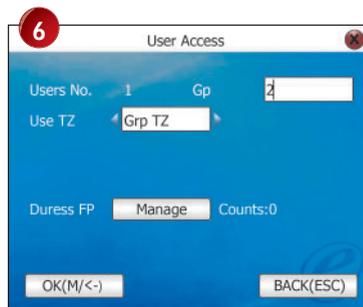
Press **▶** once to choose Manage and press **OK**.



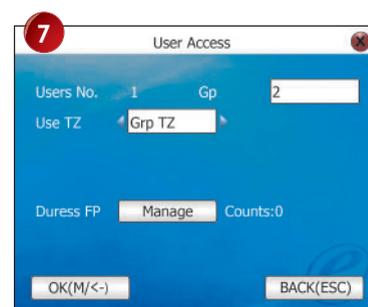
Press **▼** to select the user ID 00001 and press **M/←** button.



Press **▼** to choose User Access and press **OK**.



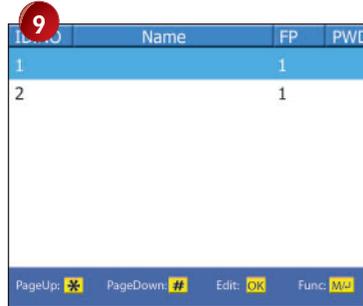
Enter 2 as Group Time Zone 2 and **▼**.



Press **▶** to choose Grp TZ.



Press **▼** twice and press **OK**.



Press **Esc** 3 times to return to the main menu.

## DEFINITION OF HOLIDAY SETTINGS

User access time can control reader during holiday. The access time zone might vary during holiday and the time zone for holiday can be preset.

During configuration of the time zone for holiday, the time range for the time zone is time to block users to gain access.

### Example,

Users are allowed to access during holiday from 8:00 to 12:00. Therefore, you must configure in time zone as below

**13:00 – 23:59**

This is the time range to block users to gain access from the reader. Please kindly take note, time zone for holiday has a different concept than the normal time zone.

### Example of settings

Select a public holiday for example 1st May. The reader is set to disallow any access during holiday. Follow the steps shown to configure holiday settings.



Press **M/←** once.



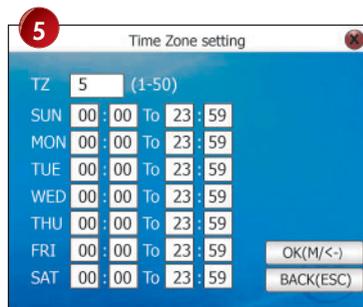
Press **OK** once.



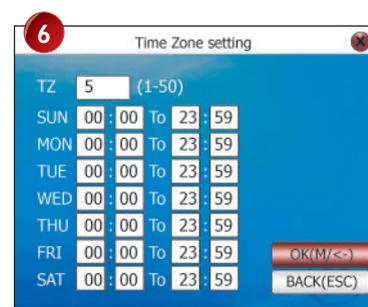
Press **▼** once to select Access.



Press **OK** once to choose Time Zone settings.



Enter a value to choose for time zone (1~50), for example 5. Press **OK** once.



Press **▼** and enter TZ into the column. Repeat to press **▼** to go to the next column for the next time range.



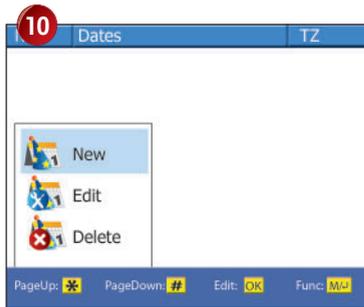
Press **OK** once to save settings.  
Press **Esc** once to return to the previous page.



Press **▼** to choose Holiday settings.



Press **M/←** once.



Press **OK** once to choose NEW.



Enter number of holiday, for example 1.



Press **▼** to enter date range of holiday.



Preset time zone for holiday in Time Zone settings, for example 5.



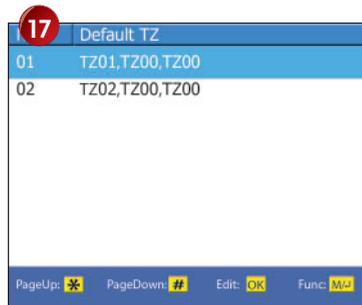
Move to **OK** and press **OK** to save settings.



Press **Esc** to return to the previous page.



Press **▼** to select Group Time Zone setting and press **OK**.



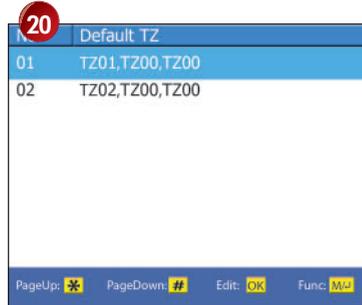
Choose Group Time Zone to apply holiday, for example 1. Press **OK** once.



Under holiday column, press **▶** to change to Invalid.



Press **OK** once.



Press **Esc** 4 times to return to the main menu.

## USER UNLOCK COMBINATION SETTINGS

In order to allow user to use different time zone groups, please set the followings accordingly:

- Comb1 value set to 1
- Comb2 value set to 2
- Comb3 value set to 3
- Comb4 value set to 4
- Comb5 value set to 5

## ACCESS CONTROL PARAMETERS

This page allows administrator to configure accessibility of readers. There are total 8 options ready for configuration. Follow the steps to enter to access control parameters.



Press **M/↵** once.



Press **OK** once.



Press **▼** once to select Access.



Press **▼** 4 times to choose Access Control Parameters and press **OK**.

## Options available and their functions

- 1 LOCK (1-10S)**  
To adjust the unlocking time after verification.
- 2 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.
- 3 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.
- 4 ALARM DELAY (1-99S)**  
To delay the reader from triggering alarm system.
- 5 ALARM COUNT (1-9 TIMES)**  
To adjust the maximum verification failures of users. When the maximum is reached, reader will trigger alarm system.
- 6 CLOSE TZ**  
Door is always locked during the predefined time period, so users cannot gain access after verification.
- 7 OPEN TZ**  
Door is always unlocked during the predefined time period, so users do not need to verify their identities but can gain access.
- 8 VALID HOLIDAYS**  
Choose Valid to enable the holiday settings. Choose Invalid to disable the holiday settings.

## DURESS ALARM PARAMETERS

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

**1** to use different fingers to do daily clocking mechanism and to trigger duress alarm

OR

**2** to use different verification to do daily clocking mechanism and to trigger duress alarm.

Follow the steps shown in page 38 to configure duress alarm parameters:



Press **M/←** once.



Press **OK** once.



Press **▼** once to select Access and press **OK**.



Press **▼** 5 times to choose Duress Alarm Parameters and press **OK**.

## Options available and their functions

If users would like to use the same fingerprint for daily clocking and to trigger duress alarm, administrator must enable either one of the following functions.

### 1 HELP KEY

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

### 2 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 1:1 fingerprint verification process will trigger alarm system.

### 3 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.

### 4 PWD TRIG

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.

### 5 ALARM DELAY

To delay the reader to trigger alarm system after verification.

If user would like to enroll another finger to trigger duress alarm, please disable all of the above options. Please see the next page to learn to enroll/define a finger to trigger duress alarm.

## TO DEFINE DURESS FINGERPRINT

If users would like to use different fingers for daily clocking mechanism and to trigger duress alarm, users must enroll 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 shown to define duress finger.



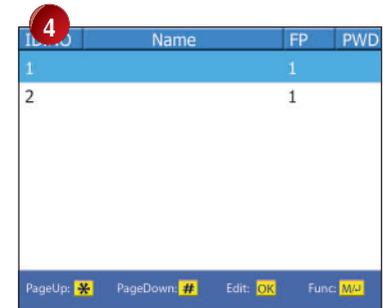
Press **OK** once.



Press **▶** to choose Manage and press **OK**.



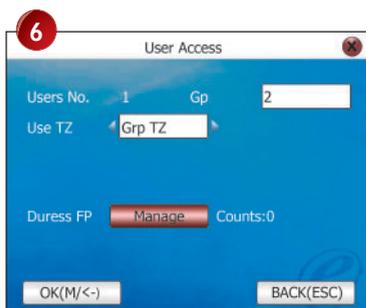
Press **M/↵** once.



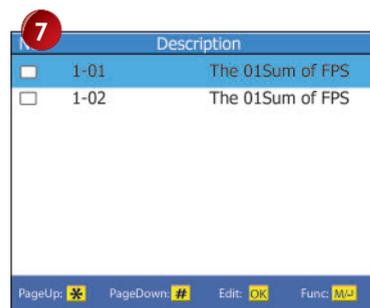
Press **▼** to choose the user ID and press **M/↵**.



Press **▼** to choose User Access and press **OK**.



Press **▼** twice to go to Manage.

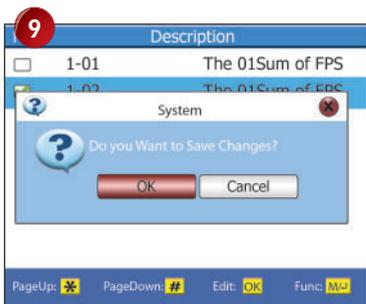


Press **OK** once to select the enrolled fingerprint as duress finger.

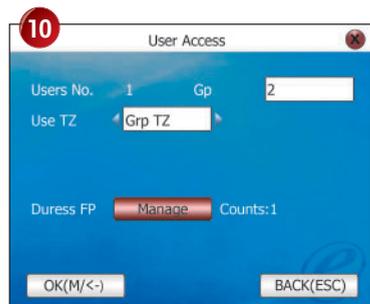


Press **▼** to choose the fingerprint to use as duress finger, and press **OK**.

User ID-01: first enrolled fingerprint.  
User ID-02: second enrolled fingerprint.



Press **Esc** once to end process.  
Press **OK** once.



Move to **OK** and press **OK** once to save settings.  
Press **Esc** 3 times to return to the main menu.

# 5 OTHER USEFUL FUNCTIONS

## USB PEN DRIVE



If reader is installed far from a PC or encountering cabling problem that is causing disruption of data download, user can transfer data via USB flash disk (pen drive).

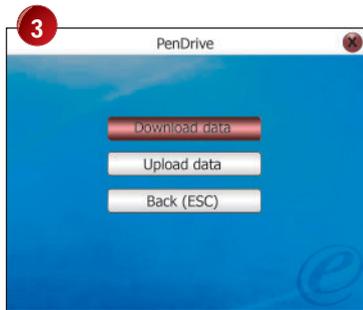
To use USB pen drive with reader, plug in your USB pen drive and follow the steps shown.



Press **▼** to Pen Drive.



Press **M/↵** once.



Press **OK** once.  
Choose the option by **OK** button.  
Unplug USB flash disk when process complete.

The functions of the USB flash disk include:

- 1 DOWNLOAD RECORD**  
To download transaction logs from reader into USB pen drive.
- 2 DOWNLOAD USER**  
To download users from reader into USB pen drive.
- 3 DOWNLOAD SMS**  
To download all short messages stored inside reader into USB pen drive.
- 4 UPLOAD USER**  
To upload users from USB pen drive to reader.
- 5 UPLOAD PICTURE**  
To upload users' pictures from USB pen drive to reader.
- 6 UPLOAD SMS**  
To upload predefined short messages from USB pen drive to reader.
- 7 UPLOAD THEME**  
To upload new theme to reader. Please refer to <http://user.fingertec.com> to learn to configure theme and upload to reader.

## WORK CODES



The reader is providing work code feature. The work code feature allows user to key in a predefined number after fingerprint or password verification. User will key in a number after fingerprint or password verification. User will key in related work codes to show purpose of their clocking data.

Table below is showing examples of work code function predefined by number:

Reasons	Work code
Check In	00
Check out	01
OT start	04
Done	05
Sick leave	10
Half day leave	12
Emergency leave	11
Meeting client	20
Outstation	21

These numbers are predefined by user in the software and represent different reasons, such as "10" for sick leave, "11" for emergency leave.

## TO DEFINE WORK CODE



Press **M/↵** once.



Press **OK** once.



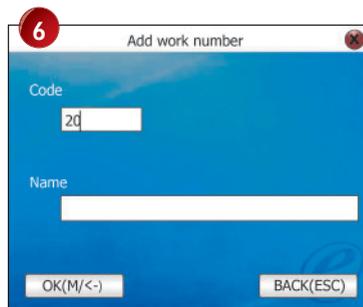
Press **▶** to choose Work Code and press **OK** button.



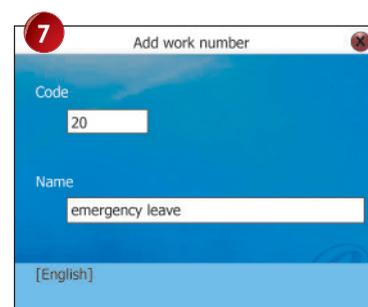
Press **M/↵** once.



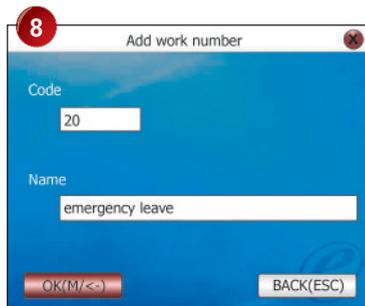
Choose NEW and press **OK** .



Enter number to represent work code.



By using the T9 input method, input the name



Press **OK** once to save all settings.



Press **Esc** 3 times to return to the main menu.

!

NOTE

It is recommended to define work codes from the software rather than from the hardware because the process is easier.

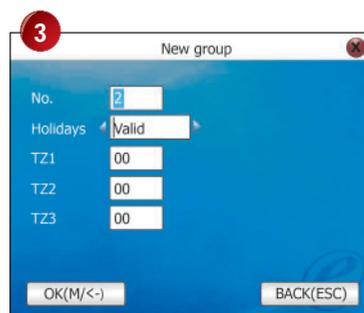
## TO VERIFY WITH WORK CODE



Press **\*** once.



Enter work code value and press **OK** once.



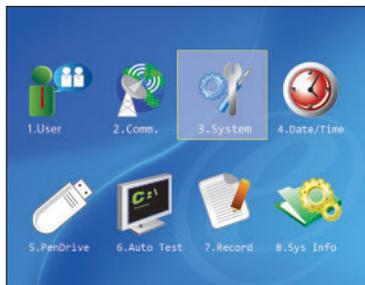
Verify your identity by your enrollment type.

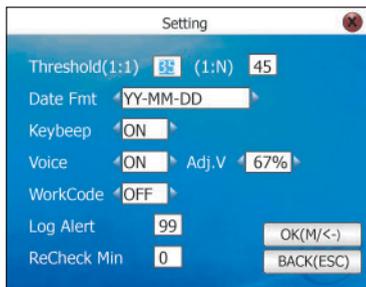
## SYSTEM OPTIONS



System option enables users to configure the followings:

- System
- Data
- Update
- Keyboard
- Display
- Power
- Reset
- Bell





#### Threshold (1:1)

To configure the sensitivity of the optical scanner 1:1 matching. Range 0~50, recommended 35.

#### Threshold (1:N)

To configure the sensitivity of the optical scanner for 1:N matching. Range 0~50, recommended 45.

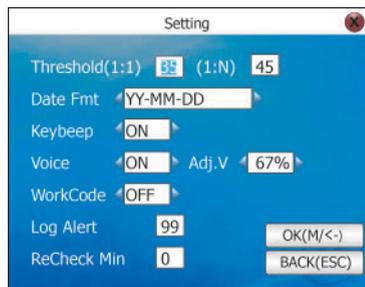
- **Date format:** To change the date display format.
- **Keybeep:** To enable or disable the keypad sound.
- **Voice:** To enable or disable greeting voice of reader.
- **Adj. V:** To adjust the volume of greeting voice.
- **Work code:** To enable/disable work code function.

#### Log alert

To instruct reader to alert user if the transaction storage is less than as configured, default is 99.

#### Recheck min

To instruct reader to update transaction logs of all users in a time interval, default is 10minutes.



#### Clear record

To delete all transaction logs stored inside the reader.

#### Clear all

To delete all users information and transaction logs stored inside the reader.

#### Clear admin

To clear administrator privilege in the reader.

#### Delete picture

To delete picture of users stored inside the reader.



This option is to allow installer to update the firmware version of reader. Firmware is stored inside the USB flash disk and plug to the reader. The updated process will run after you press **OK** for this option.

## KEYBOARD

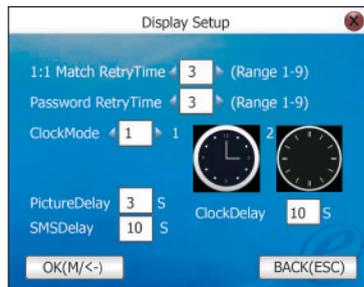


Key	Function	Code	Name
F1	Status Key	0	Check-In
F2	Status Key	1	Check-In
F3	Status Key	2	Break-Out
F4	Status Key	3	Break-Out
F5	Status Key	4	OT-IN
F6	Status Key	5	OT-OUT
F7	Undefined		
F8	Undefined		

PageUp: **☰** PageDown: **##** Edit: **M.9**

This option is to configure shortcut key for Status key, Work code, View SMS or Help Key for function key F1, F2, F3, F4, F5, F6, F7 and F8.

## DISPLAY



### 1:1 match retry times

To set the maximum number of tries when user is using 1:1 fingerprint verification method. The reader triggers alarm system when user tries more than as configured. Range 1 to 9.

### Password retry times

To set the maximum number of tries when user is using password verification method. The reader triggers alarm system when user tries more than as configured. Range 1 to 9.

### Clock mode

To choose the display mode of clock.

### Picture delay

To configure the picture delay time, range 1 to 99 sec.

### Clock delay

To configure the clock delay time, range 1 to 99 sec.

### SMS delay

To configure the short messages delay time, range 1 to 999 sec.

## RESET



This option is to reset reader back to default factory settings.



### CAUTION

Once the reader is reset, all information will be lost.

**Back up all your important files!!**

## BELLS



This option is to configure schedule bells of reader to trigger siren, total of 56 schedules. To define schedules bells:



Press **M/←** once.



Press **▶** to choose System and press **OK**.



Press **▶** to choose Bells and press **OK**.

Bell	Time	Ring	State
Bell1	00 : 00	Alarm01.wav	
Bell2	00 : 00	Alarm01.wav	
Bell3	00 : 00	Alarm01.wav	
Bell4	00 : 00	Alarm01.wav	
Bell5	00 : 00	Alarm01.wav	
Bell6	00 : 00	Alarm01.wav	
Bell7	00 : 00	Alarm01.wav	
Bell8	00 : 00	Alarm01.wav	

Press **▼** to go to the desired schedule bells press **OK**, for example Bell 1.



Enter value to adjust times should the bell ring. Press **▼** to proceed. Press **▶** to define day to trigger the bell, example Monday. Press **▼** to proceed.



Press **▶** to choose the sound of bell. Press **▼** to proceed.



Press **▶** to adjust the ring volume.  
Press **▼** to proceed.



Enter value to adjust how many times the bell will ring for example 3. Press **▼** to proceed.



Press **▶** to turn on or off. Press **▼** to proceed.

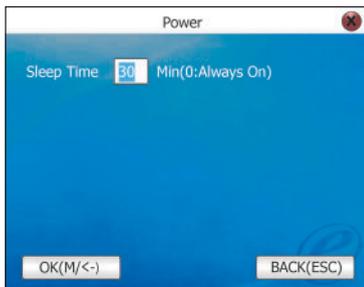


Press **OK** to save settings.

Bell	Time	Ring	State
Bell1	08 : 00	Alarm01.wav	
Bell2	00 : 00	Alarm01.wav	
Bell3	00 : 00	Alarm01.wav	
Bell4	00 : 00	Alarm01.wav	
Bell5	00 : 00	Alarm01.wav	
Bell6	00 : 00	Alarm01.wav	
Bell7	00 : 00	Alarm01.wav	
Bell8	00 : 00	Alarm01.wav	

PageUp: **X** PageDown: **#** Setting: **OK** On/Off: **M/W**

Press **Esc** 3 times to return to the main menu.



To enable/disable the fingerprint image display on screen when user is scanning finger.

#### Neither show

To not show image for enrollment or verification

#### Both show

Show image during enrollment or verification

#### Enroll show

Show image during enrollment only

#### Match show

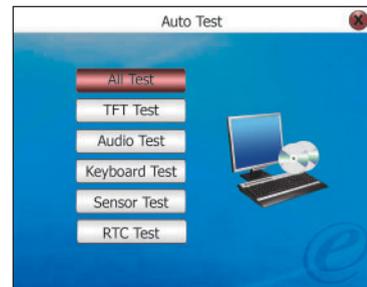
Show image during verification only

## AUTO TEST



This option is recommended to run the installer. Installer can run the test from reader to diagnose or analyze.

- 1 ALL TEST**  
To run a complete cycle of test to all components of reader.
- 2 TFT TEST**  
To run test of TFT screen.
- 3 AUDIO TEST**  
To run test of audio of reader.
- 4 KEYBOARD TEST**  
To run test of the keypad.
- 5 SENSOR TEST**  
To run test of the optical scanner.
- 6 RTC TEST**  
To run test of the real time clock in reader.



## RECORD



This is to allow administrator to view the transaction logs of users. Administrator needs to enter the user ID, start date and finish date to proceed.

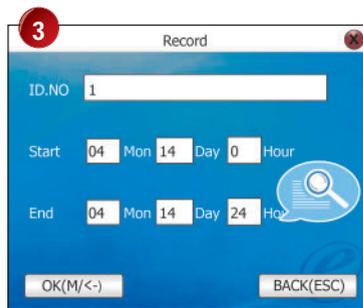
Follow the steps on page 50:



Press **M/←** once.



Press **▼** to choose Record and press **OK**.



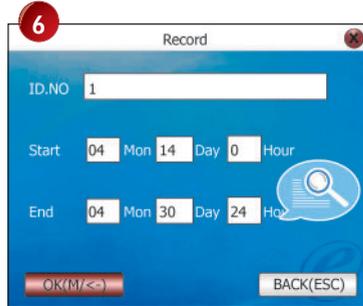
Enter user ID and press **▼**.



Enter start date and press **▼**.



Enter end date and press **▼**.



Press **OK** once.



Transaction logs found and displayed on screen. Press **Esc** times to return to the main menu.

## SYSTEM INFO



This option is to allow installer to check the information of reader, such as storage, firmware, algorithm etc.



## SHORT MESSAGE DISPLAY



This option allows administrator to input message to view by individual or all users after verification. To configure short message.



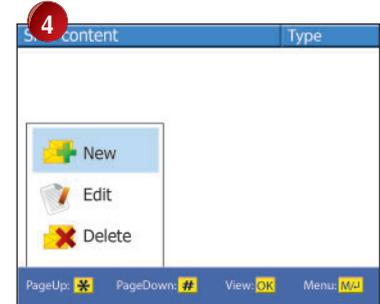
Press **M/↵** once.



Select User and press **OK**.



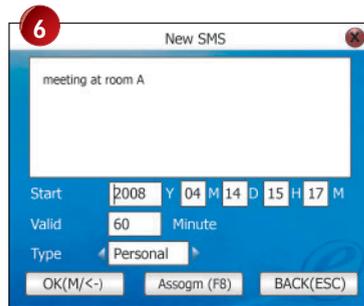
Press **▶** to choose SMS and press **OK**.



Press **M/↵** once. Choose new and press **OK**.



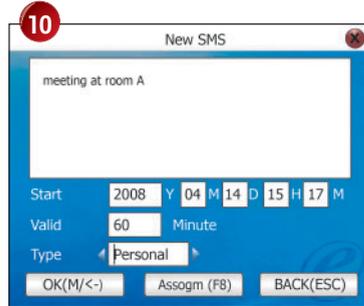
Enter the content of short message by T9 input method. Press **▼** to proceed.



Enter the start time for message to be displayed. Press **▼** to proceed.



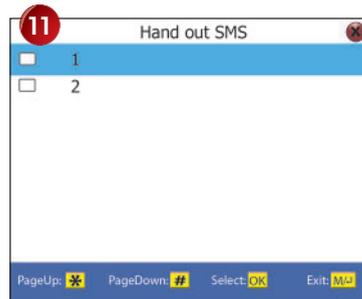
If Public or Reserved is selected, press **OK** to save settings. Press **Esc** 3 times to return to the main menu.



If Personal is selected, press F8 to proceed.

**7** Enter the valid time for message to be viewed, for example 60 minutes. Press **▼** to proceed.

**8** Press **▶** to choose recipient of the message.  
**Public:** Message display to all users after verification.  
**Personal:** Message only display to selected users only.  
**Reserved:** Message saved but not display to any users.



Press **OK** to choose user to display the message. You can choose multi users. Press **Esc** once to exit. Press **OK** once to save settings. Press **Esc** 3 times to return to the main menu.

## T9 INPUT METHOD

Administrator can enter alphabets, symbols or numbers during configuration at the reader, for example the user name, the content of short messages, etc. Administrator needs to use T9 input method to enter information.

For example

To input user name by T9 Input Method:



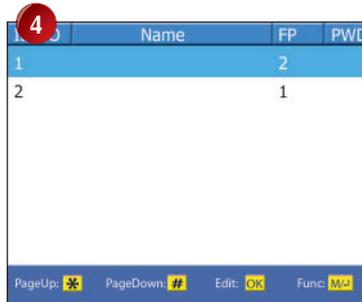
Press **M/←** once.



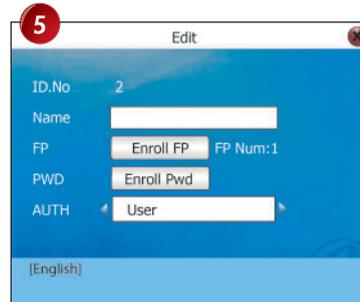
Press **OK** once.



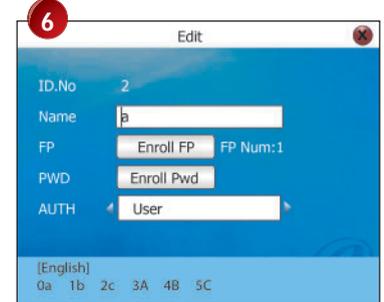
Press **▶** to select Manage.



Press **▶** to select the user ID and press **OK**.



Assign user ID by pressing keypad, example 2. Press **\*2** once to start T9 input.



Press **2** and select **0** for letter a.

**7**

Edit

ID.No 2

Name al

FP  FP Num:1

PWD

AUTH

[English]

0j 1k 2l 3j 4K 5L

Press **5** and select **4** for letter K.  
Repeat the process to input.

**8**

Edit

ID.No 2

Name albert

FP  FP Num:1

PWD

AUTH

[English]

Press **OK** once to save.

**9**

Edit

ID.No 2

Name albert

FP  FP Num:1

PWD

AUTH

Press **▼** 4 times.

**10**

ID.No	Name	FP	PWD
1		2	
2	albert	1	

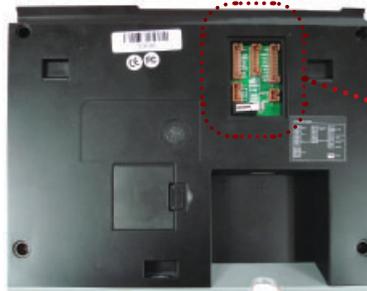
PageUp:  PageDown:  Edit:  Func:

Press **Esc** 3 times to return to the main menu.

# 6 INSTALLATION & COMMUNICATIONS

This Chapter is meant for qualified installer only. The installation of reader shall be handled by a well-trained installer. If you are not a qualified installer, you can ignore this Chapter or this Chapter serves as reference for all types of connections available for the reader only.

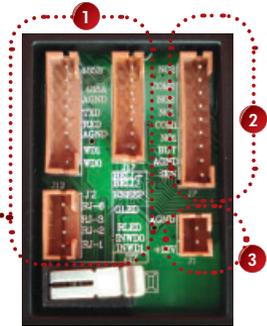
## CONNECTIONS AVAILABLE



Back of Q2i Reader

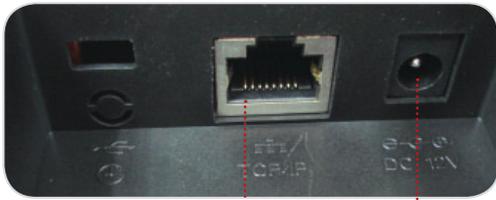


Back of TA200 Plus Reader



Connector Port

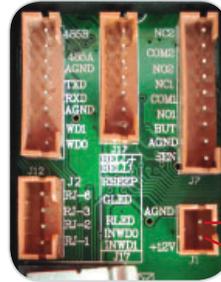
- 1 ACCESS CONTROL CONNECTION**  
To link reader with door lock systems and alarm system.
- 2 COMMUNICATION CONNECTION**  
**TCP/IP Connection** to provide TCP/IP communication to computer via LAN cable.  
**RS232 Connection** to provide RS232 communication to computer via RS232 cable.  
**RS485 Single Connection** to provide RS485 communication to computer via RS485 cable. **RS485 Network Connection** to provide RS485 communication to computer via RS485 network.
- 3 POWER SUPPLY CONNECTION**  
To provide DC 12V to reader to operate.



TCP/IP port to provide TCP/IP communication to the computer via LAN cable.

DC12V power input to provide power to the reader.

## POWER SUPPLY CONNECTION



Connector Port



Connector Pin

- 1 Connect DC 12V power supply to reader.
- 2 Turn on the power supply, the reader will start.

## COMMUNICATIONS CONNECTION TCP/IP CONNECTION

The reader can be connected to the computer by 4 ways. Please follow the steps shown to connect via TCP/IP.



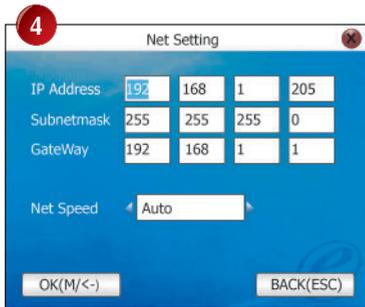
Press **M/←** once.



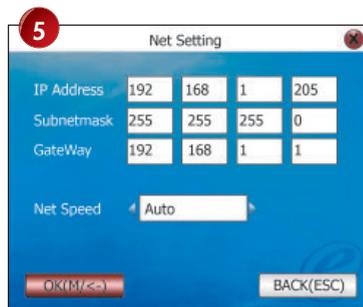
Press **▶** to Comm.  
Press **OK** once.



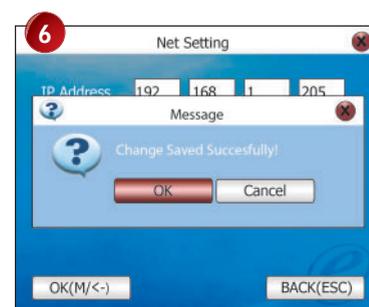
Select Network and press **OK**.



Enter the desired value.



Press **OK** to save settings.



Press **OK** to confirm.



Press **Esc** twice to return to the main menu.

- 8 Power off the reader.
- 9 Plug network plug into the network port of reader and network point.
- 10 Turn on power and continue to configure Security (see Security on page 62-63 for more details).

In this page you will need to enter the values.

#### IP address

To enter the IP address of the reader to suit into the network environment.

#### Subnet mask

To enter the subnet mask of the network environment.

#### Gateway

To enter the gateway of the network environment.

#### Netspeed

To select the network speed of the reader, 10M, 100M or Auto. Recommended to use Auto.



## RS232 CONNECTION

Please follow the steps shown to configure RS232.



Press **M/←** once.



Press **▶** to Comm.  
Press **OK** once.



Select RS232/485 and press **OK**.



Enter the desired value.



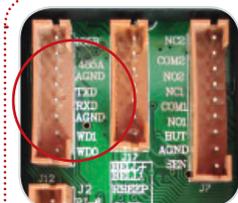
Press **OK** to save settings.



Press **OK** to confirm.



Press **OK** twice to return to the main menu.



Connector Port

Connector Pin

TXD  
RXD  
AGND

- 8 Power off the reader.
- 9 Plug RS232 cable into reader and computer.
- 10 Turn on power and continue to configure Security (see Security on page 62 for more details).

In this page you will need to enter the value.

**Baud** - To define the baudrate of the connection.

**RS232** - Select Yes to enable.

**RS485** - Select No to disable.

**USB** - Select Yes to enable.



RS232 cable

PC



RS232 cable

PC

TA200  
Plus  
only



Connection Port

USB to  
RS232  
Converter

## RS485 CONNECTION

Please follow the steps shown to configure RS485.



Press **M/←** once.



Press **▶** to Comm.

Press **OK** once.



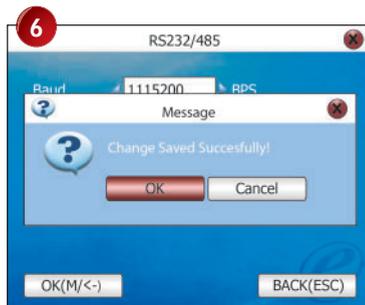
Select RS232/485 and press **OK**.



Enter the desired value.



Press **OK** to save settings.



Press **OK** to confirm.



Press **Esc** twice to return to the main menu.

- 8 Power off the reader.
- 9 Plug RS485 cable to data converter then into reader and computer.
- 10 Turn on power and continue to configure Security (see Security on page xx for more details).

In this page you will need to enter the value.

**Baud**

To define the baudrate of the connection.

**RS232**

Select Yes to enable.

**RS485**

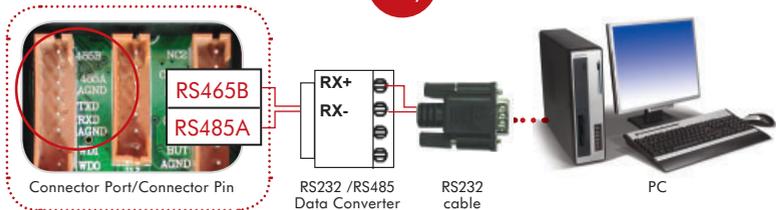
Select No to disable.

**USB**

Select Yes to enable.

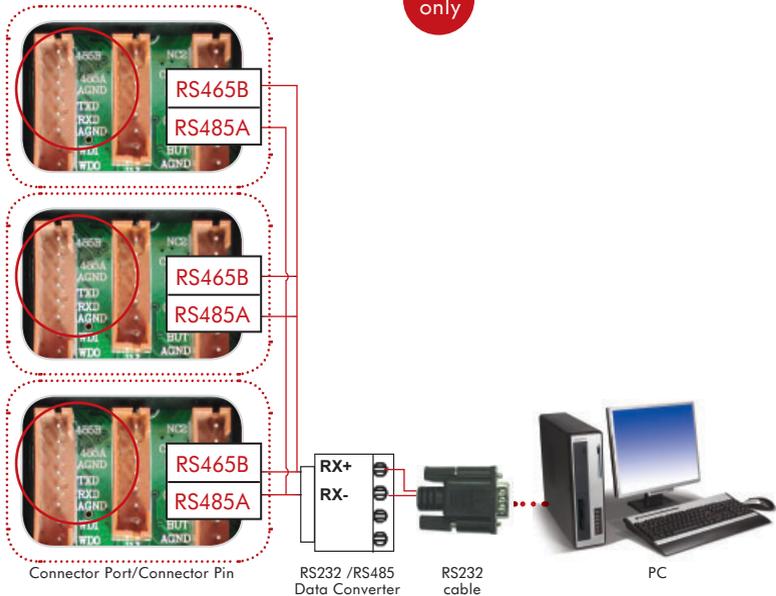
## RS485 SINGLE CONNECTION

Q2i  
only



## RS485 NETWORK CONNECTION

Q2i  
only



## SECURITY

You need to define the followings after you select your communication method.

### DEVICE ID

This is the ID of the reader for the software to recognize and connect to it. It starts from 1 to 254. Please make sure you define the Device ID after you configured the communication method. The Device ID of the reader must match with the ID in the software or the connection will fail.

### PASSWORD

This is the security password for software to connect to the reader. Please always keep it as default, 0 because the software comes with product key and activation code for security purpose.



Press **M/** once.

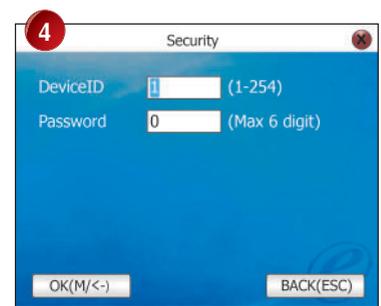
Press **▶** to Comm.



Select RS232/485 and press **OK**.



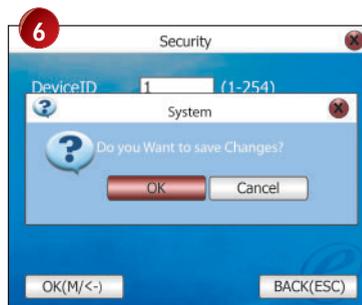
Enter the desired value.



Press **OK** once.



Press **OK** to save settings.



Press **OK** to confirm.



Press **ESC** twice to return to the main menu.

**8** Restart the reader.

# Appendix • TROUBLESHOOTING

## 1 How to power on and shut down the FingerTec® reader?

To power on, press the ON/OFF button once. To shut down, press and hold the ON/OFF button for 3 second.

## 2 I cannot connect the FingerTec® reader to the PC. Every time I try, the software prompts “Unable to connect” message. What should I do?

Please check communication settings in Menu > Option > Comm. Opt. Please see more details in chapter 6.

## 3 The FingerTec® reader has difficulty recognizing my fingerprint. It takes many tries before I am verified. What should I do?

Please make sure that your finger is not too oily or too dirty because the oil and dirt will cover the minutiae points of the fingerprints, thus making reading difficult. Make sure the FingerTec® reader is not facing direct sunlight because it will disturb the reading of the sensor. To deal with light interference, cover the reading area when you want to verify your fingerprint. If this occurred often, kindly ask for re-registration.

## 4 Alarm goes off every time when I place finger on the sensor. Why did such thing occur and what should I do?

The finger you used was defined as a duress finger. Once a duress finger is verified, it will trigger the FingerTec® reader to activate the alarm. To undefine your finger as a duress finger, follow these steps: Menu > Option > Access options > Duress Option > Duress FP > Undef Duress FP > Enter your user ID

## 5 When the FingerTec® reader is turned on, the red LED is blinking all the time. Is there any problem with the reader?

There is nothing wrong with the FingerTec® reader. The red LED blinks to indicate FingerTec® reader is on standby. When a fingerprint is verified, the LED will turn green to indicate successful verification.

## 6 The FingerTec® reader is accidentally turned off by a staff. Would we lose all the transaction data and fingerprints in that FingerTec® reader?

All transaction data and fingerprints in the FingerTec® reader is safe in the event of power shutdown because all the information is stored in the memory of the reader. This information can only be deleted via software or it can be manually purged in Advance option.

## 7 How to define the short message and assign it to certain users?

Refer to page 51 for instructions to define short messages. The easier way to define the short message is by using TCMS V2 software.

## 8 Do I need to clear the unwanted or outdated short messages in the reader?

Not necessary, as those messages will be deleted automatically after the predefined time period has expired.

## 9 During enrollment I heard “duplicate finger”. Why was that?

The “duplicate finger” voice message is to alert user if the enrolling finger is found to have existed in the FingerTec® reader. User must use other finger to enroll.

## 10 I waved my RFID card to a FingerTec® reader but it did not respond. What could be the reason?

Please make sure that your RFID card is registered to the FingerTec® reader, before you use it. Please also make sure that your user ID is assigned into the verification group that supports RFID card.

## 11 Do I need to stop the USB pen drive like we usually do when used in computer before we could unplug it from the reader?

Not necessary because once download or upload operation is completed, it is safe for you to remove the USB pen drive from the reader.