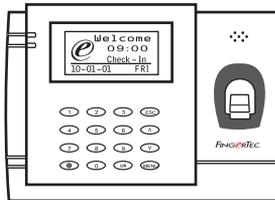
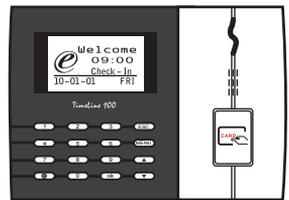


TA100 Series



AC100



TimeLine 100

Fingerprint & RFID Card Time Attendance System User Guide

CONTENTS

5 Chapter 1 • GETTING STARTED

- 5 Viewing the User Guide in the Internet
- 5 Terminal Included Accessories
- 8 Included Printed Materials
- 8 Activating Terminal
- 8 Registering Terminal

9 Chapter 2 • BASICS

- 9 Introduction to Products
- 9 Overview
- 11 Power On/Off Button
- 12 Keypad
- 12 Battery
- 12 Date/Time
- 12 Voice Control | [Turn On/Off](#) | [Adjust Volume](#)
- 12 Security Features | [Admin Affirm](#)
- 13 Cleaning Terminal | [Cleaning the Body](#) | [Cleaning the Fingerprint Prism](#)
- 13 Restarting and Resetting Terminal | [Restarting the Terminal](#) | [Resetting the Terminal](#)

14 Chapter 3 • CONNECTION – SYNCING TERMINALS

- 14 Installation Guide
- 14 Communications Diagrams
- 15 Descriptions of Available Connections | [USB Port](#) | [TCP/IP Port](#) | [Power Supply Port](#) | [RS232/RS485/Wiegand Connection Port](#)
- 16 Checking the Genuine TCMS V2
- 16 Installation and Setup of TCMS V2
- 16 Connecting The Terminals to TCMS V2 | [Determining Terminal Number](#) | [Using TCP/IP](#) | [Using RS232](#) | [Using RS485](#)
- 17 Using USB to Download/Upload Data
- 17 Communication Key

18 Chapter 4 • USER

- 18 Enrolling User | [Fingerprint Enrollment](#) | [Card Enrollment](#) | [Password Enrollment](#) | [Fingerprint and Password Enrollment](#)
- 19 Verifying User | [1:1 \(One to One\)](#) / [1:N \(One to Many\)](#) | [Voice Message](#) | [Fingerprint Verification](#) | [Password Verification](#) | [Card Verification](#)
- 20 Adding User Information
- 20 Deleting User
- 21 Access Level/Privilege

22 Chapter 5 • SYSTEM

- 22 General Settings | [Adjusting Date/Time](#) | [Date Format](#) | [System Language](#) | [Voice](#) | [Volume \(%\)](#) | [User Interface Style](#)
- 22 Fingerprint Settings | [Setting Threshold](#) | [Show Score](#) | [Defining Work Codes](#)
- 23 Update Firmware

CONTENTS

- 24 System Information
 - | Number of Users in the Terminal (User Count)
 - | Quantity of Fingerprint Templates Stored in the Terminal (FP Count)
 - | Quantity of Attendance Logs Saved in the Terminal (Att Log)
 - | Number of Administrators Registered in the Terminal (Admin Count)
 - | Number of Password Users Available in the Terminal (Password User)
 - | Number of Time Scanners Have Been Used for Verification (S Log)
 - | Free Space Information (Free Space) / Device Information (Dev Info)
- 26 Log Information (Log Opt) | Alarm Super Log | Alarm Att Log | Recheck Min

- 27 Chapter 6 • DATA
 - 27 Deleting Transaction Logs
 - 27 Deleting All Data
 - 27 Managing User Privileges
 - 27 Resetting to Factory Settings

- 28 Chapter 7 • USB
 - 28 Understanding the Need for USB Flash Disk
 - 28 Type of USB
 - 28 Downloading Attendance Logs
 - 28 Downloading User Data
 - 28 Uploading User Data from USB to Terminal
 - 28 Uploading Short Messages

- 29 Chapter 8 • RFID CARD FUNCTION
 - 29 Enrollment of RFID Card
 - 29 Verification Using RFID Card Only
 - 29 Multi Verification Methods Using RFID
 - 29 Deleting RFID Card
 - 29 Changing Card ID

- 30 Chapter 9 • MIFARE CARD FUNCTION
 - 30 Fingerprint Card Key (FP Card Key)
 - 30 Creating PIN Card
 - 30 Enrolling FP Card
 - 30 Creating FP Card
 - 31 Registering FP Card
 - 31 Unregistering FP Card
 - 31 Emptying FP Card
 - 31 Dumping FP Card
 - 31 Moving to FP Card
 - 32 Changing FP Card

33 Chapter 10 • HID CARD FUNCTION

33 Registering HID Card

33 Deleting HID Card

34 Chapter 11 • AUTO TEST

34 Who Should Do The Auto Test?

34 Run All Tests At Once

34 FLASH Test

34 LCD Test

34 Voice Test

34 FP Reader

34 Key Test

34 RTC Test

35 Chapter 12 • TROUBLESHOOTING

35 "Unable to Connect" Appears

35 "Admin Affirm" Appears

35 Difficult To Read Finger

36 The LED is Blinking All The Time

36 "Duplicate Finger" Appears

36 RFID Card Doesn't Respond

36 No Sound

37 INFORMATION ABOUT FINGERTEC

38 COPYRIGHT NOTICE & DISCLAIMER

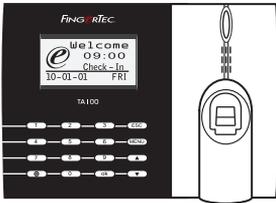
1 • GETTING STARTED

Viewing the User Guide in the Internet

The User Guide is available in the package when you purchased the terminal. The User Guide is also available online at fingertec.com and user.fingertec.com. Choose the language that you prefer for your User Guide.

Terminal Included Accessories

TA100 SERIES MODEL



DC 5V Power Adaptor
For supplying power to the terminal.



A Packet of Bolts
Use the screws to hold the back plate of the terminal against a wall.



RFID Cards (5 pieces)
** Exclusively for TA103-R model only*
For card enrollment and verification.



Cable Protector
To keep cables intact.



USB Extension
To connect to the USB port of a computer for uploading and downloading of data.

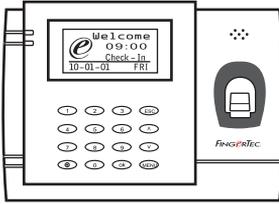


Screwdriver
Use the screwdriver to open the back plate of fingerprint terminal and to install the back plate against a wall.



Siren Cable
For connecting the terminal to external siren.

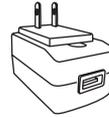
AC100 MODEL



A Packet of Bolts
Use the screws to hold the back plate of the terminal against a wall.

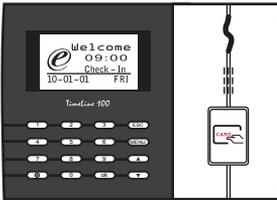


Cable Protector
To keep cables intact.



DC 5V Power Adaptor
For supplying power to the terminal.

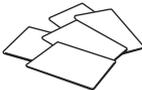
TimeLine 100 MODEL



DC 5V Power Adaptor
For supplying power to the terminal.



A Packet of Bolts
Use the screws to hold the back plate of the terminal against a wall.



RFID Cards (5 pieces)
For card enrollment and verification.



Cable Protector
To keep cables intact.



USB Extension
To connect to the USB port of a computer for uploading and downloading of data.



Siren Cable
For connecting the terminal to external siren.

Included Printed Materials

User Guide

Refer to the user guide to understand the terminal operations

Video Guide

View simple instructions of how to enroll and get verification from the terminals

TCMS V2 Software CD & Video Guide

Install TCMS V2 Software from the CD and view the video guide on how to navigate the software.

TCMS V2 Manual

Refer for the manual to understand how TCMS V2 software works.

Sample Enrollment Form

Input details of users during enrollment

Quick Start Guide

Overview of the FingerTec system

**NOTE**

All FingerTec resources are available at user.fingertec.com

Activating Terminal

To activate terminal, connect the terminal's power adapter to a standard power outlet and turn on the power. To download the data from the terminal, you need to have the product key and activation code for the TCMS. The product key and activation codes can be retrieved on top of the TCMS V2 manual booklet.

In case you lose TCMS V2 product key and activation code, go to user.fingertec.com/retrieve_key_user.php for retrieval.

Registering Terminal

Make sure that you register your terminal's warranty with us at fingertec.com/ver2/english/e_warranty.htm.

2 • BASICS

Introduction to Products

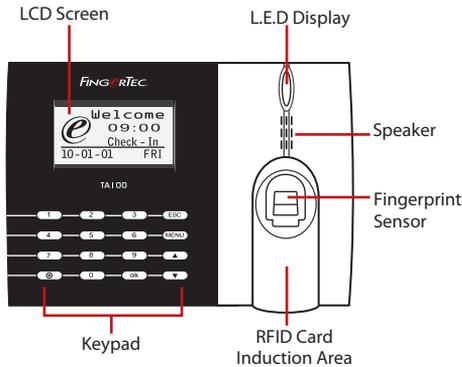
FingerTec is a renowned brand name for commercial products for door access and time attendance systems. FingerTec offers a wide range of products to cater to the growing needs for biometrics products in office/home automation as well as in security industry.

FingerTec terminals are loaded with powerful microprocessor that can process biometrics authentication methods for accurate personal identifications and for collection of precise data for time attendance. In addition, some fingerprint terminals are made to accept card verification as an added security measure.

This manual covers time attendance models of FingerTec products from TA100 series, AC100 model and TimeLine100 model. The terminal acts as a tool to collect attendance data. For a processing of attendance data, FingerTec is providing a powerful time management software, TCMS V2 to process data and provide accurate and reliable attendance reports.

Overview

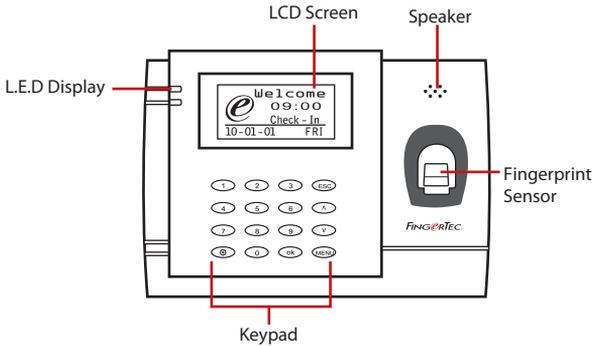
TA100 SERIES MODEL



ITEM	FUNCTION
LCD Screen	Displaying status of terminal, day, date and time.
LED Display	Green LED – The terminal is working fine and it is in standby mode. Red LED – There is an error at the terminal that requires checking. For first time use, the terminals need to be charged fully to avoid having the red light blinking.

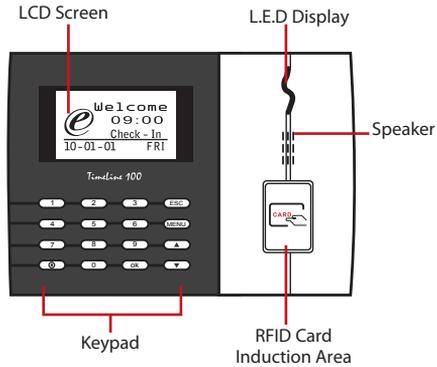
ITEM	FUNCTION
Keypad	To input instructions into the terminal and to allow configuration.
Fingerprint Sensor	To scan finger for confirmation of identity.
RFID Card Induction Area	Area that reads RFID cards.
Speaker	For terminal voice emission.
Reset Button 	Restart the terminal as and when required.

AC100 MODEL



ITEM	FUNCTION
LCD Screen	Displaying status of terminal, day, date and time.
LED Display	Green LED – The terminal is working fine and it is in standby mode. Red LED – There is an error at the terminal that requires checking. For first time use, the terminals need to be charged fully to avoid having the red light blinking.
Keypad	To input instructions into the terminal and to allow configuration.
Fingerprint Sensor	To scan finger for confirmation of identity.
Speaker	For terminal voice emission.
Reset Button 	To restart the terminal as and when required.

TimeLine 100 MODEL



ITEM	FUNCTION
LCD Screen	Displaying status of terminal, day, date and time.
LED Display	Green LED – The terminal is working fine and it is in standby mode. Red LED – There is an error at the terminal that requires checking. For first time use, the terminals need to be charged fully to avoid having the red light blinking.
Keypad	To input instructions into the terminal and to allow configuration.
RFID Card Induction Area	Area that reads RFID cards.
Speaker	For terminal voice emission.
Reset Button 	To restart the terminal as and when required.

Keypad



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

Battery

Fingerprint terminals operate using power supply from a standard power outlet.

Mini UPS: Mini UPS 5V provides mobile power supply to the terminals. Charge the mini UPS sufficiently for optimum performance. Refer to accessory.fingertec.com for more information about accessories.

Date/Time

The terminals display date and time at the home screen. Choose date and time format based on your preference. Press Menu > Options > Systems Options > Date/Time > set your time and save.

To change the date format: Press Menu > Options > Systems Options > Fmt > Determine the date format based on your preference.

Voice Control

Voice Control lets you control the level of volume emitted by the terminal.

TURN ON/OFF

The system lets you turn on/off the voice based on your preference. Press Menu > Options > System Option > Adv Option > Voice > Y/N.

ADJUST VOLUME

Default volume of the terminal's voice is 67. The volume can go as high as 100 and as low as 0. To sustain the performance of the speaker, it's recommended to stay at range 60-70. To adjust the volume Press Menu > Options > System Option > Adv Option > Adj VOL (%) > adjust accordingly .

Security Features

Security features help protect the information in the terminal from being accessed by unauthorized individuals.

ADMIN AFFIRM

Register an administrator to the system by enrolling, fingerprint or password to a user ID. Press Menu > User Manage > Enroll Admin > Choose enrollment method > Perform enrolment and Save. After enrolling an administrator, the main menu can only be accessed by the administrator.

Cleaning Terminal

CLEANING THE BODY

Use a dry cloth to clean the terminal's body. Do not use any liquids, household cleaners, aerosol spray, solvents, alcohol, ammonia and abrasive solutions to clean the body of the terminal because it could damage it.

CLEANING THE FINGERPRINT PRISM *(This feature is NOT available in TimeLine 100 model.)*

Clean the fingerprint prism with a cellophane tape for (silicon coated prism). View the video on how to clean the fingerprint prism at this link fingertec.com/newsletter/enduser/cleanfinger.html. For the non-coated prism, please use microfiber cloth.

Restarting and Resetting Terminal

If a feature isn't functioning as it should, try restarting or resetting the terminals

RESTARTING THE TERMINAL

Push the On/Off button or "reset button" on the terminal to restart the terminal. If you can't restart the terminal, or if the problem persists, you might want to reset.

RESETTING THE TERMINAL

Press Menu > Option > System Option > Adv Opt > Rest terminal. Resetting of the terminal will cause all your settings to return to its original factory settings. Make sure that you have backed up all data before you proceed.

3 • CONNECTION – SYNCING TERMINALS

Installation Guide

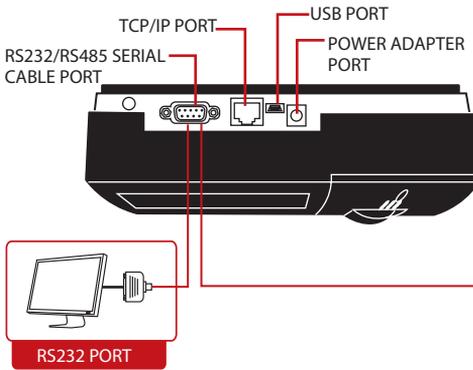
NOTE

The installation guides are for installer reference only

Communication Diagrams

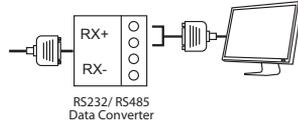
Connection points for power and communication are available on top of the terminals. Refer to the following diagrams for the terminals you require.

TA100 SERIES MODEL & TimeLine 100 MODEL

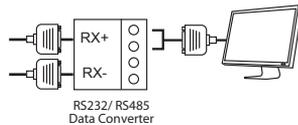


RS484 PORT

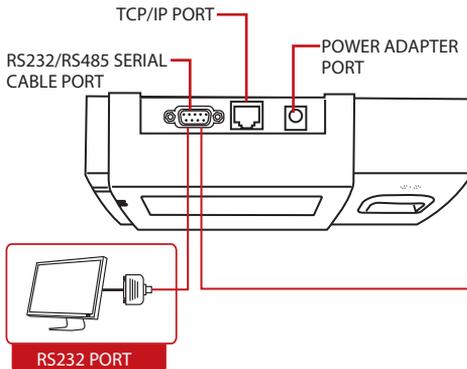
1. RS485 Single Connection



2. RS485 Network Connection

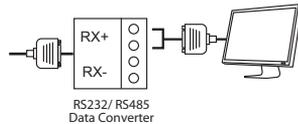


AC100 MODEL

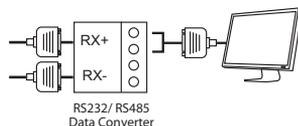


RS484 PORT

1. RS485 Single Connection



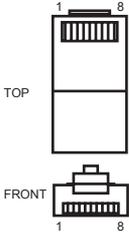
2. RS485 Network Connection



Descriptions of Available Connections

USB PORT

Linking with USB flash disk for remote data transfer.



TCP/IP PORT

Connect with CAT 5 cable for LAN connection, one end to this port and another end to the computer's TCP/IP Port.

TCP/IP for Single Connection – Linking the terminal to a single computer using TCP/IP requires Ethernet 10/100Base-T Crossover Cable. The cable can be used to cascade hubs or to connect Ethernet stations back-to-back without a hub. It works with both 10Base-T and 100Base-TX.

JOINT 1 PIN		JOINT 2 PIN	
TX+	1	3	RX+
TX-	2	6	RX-
RX+	3	1	TX+
RX-	6	2	TX-

TCP/IP for Network Connection – Linking the terminals to multiple computers using TCP/IP requires Ethernet 10/100Base-T Straight Thru Cable or “whips”. The cable works with both 10Base-T and 100Base-TX, connecting a network interface card to a hub or network outlet.

CONNECTOR PIN	CABLE COLOR	CONNECTOR
TX+	1 White/Orange	1 TX+
TX-	2 Orange	2 TX-
RX+	3 White/Green	3 RX+
	4 Blue	4
	5 White/Blue	5
RX-	6 Green	6 RX-
	7 White/Brown	7
	8 Brown	8

POWER SUPPLY PORT

Insert the Power Adapter point to this port for power.

RS232/RS485/WIEGAND CONNECTION PORT

RS232 – Connection to a computer using RS232 cable.

RS485 Single Connection - Connection to a single computer using RS485 wire.

RS485 Network Connection - Connection to multiple computers using Daisy Chain connection.

Wiegand Output – Connecting with third party connector or terminal(s).

Refer to diagrams on page 14.

NOTE Link all cables to the correct connection point(s) before attempting to connect the terminals to software.

Checking the Genuine TCMS V2



TCMS V2 is genuine software by FingerTec. Check the genuine sticker on top of TCMS V2 software manual booklet to retrieve product and activation code. The serial number of the terminal must match with the serial number printed on the booklet in order to activate the system.

Installation and Setup of TCMS V2

Install TCMS in a PC with sufficient minimum requirements. Refer to user.fingertec.com/user-promanual.htm for TCMS V2 Manual online. Setup Wizard will require the product key and activation code to activate the system. In case you lose TCMS V2 product key and activation code, go to user.fingertec.com/retrieve_key_user.php for retrieval.

Connecting The Terminals to TCMS V2

DETERMINING TERMINAL NUMBER

Identify the number of your terminal to differentiate between one another. One TCMS V2 can connect to 999 units of terminal. Press Menu > Options > Comm Opt > Dev Num > Select the number.

USING TCP/IP

Determining the IP Address

IP address is important, as it is a unique address of the terminal in LAN. Without the IP address, locating the specific terminal is not possible.

To input the IP address of the terminal: Press Menu > Options > Comm Opt > IP Addr > Key in IP address.

Setting up Ethernet

It is important to setup the Ethernet to connect the terminals using TCP/IP connection.

Setting up Ethernet is by enabling the Ethernet function: Press Menu > Options > Comm Opt > Ethernet > Yes. Turn off the terminal after you have set the Ethernet to Yes. Now, plug the network plug to the Ethernet interface and turn the power on.

NOTE

By enabling this function, the RS232/RS485 will be disabled.

Determining the Netmask, Gateway and NetSpeed: For TCP/IP connection, please configure the netmask, gateway and netspeed for the terminal.

Press Menu > Options > Comm Opt > NetMask > Insert the numbers.

Press Menu > Options > Comm Opt > Gateway > Insert the numbers.

Press Menu > Options > Comm Opt > NetSpeed > Choose the speed of your Ethernet connection

USING RS232

For connection via RS232, baudrate is the determinant of communication speed between the terminal and the software. The higher the baudrate, the faster the speed is.

To turn on RS232 connection and set the baudrate: Press Menu > Options > Comm Opt > RS232 > **Change the RS232 connection to Y.** **To change baudrate:** Press Menu > Options > Comm Opt > Baudrate > Change the Baudrate accordingly.

USING RS485

For connection via RS485, baudrate is also the determinant of communication speed between the terminal and the software but the speed must be according to the speed of the converter. Check your converter for the speed.

To turn on RS485 connection and set the baudrate: Press Menu > Options > Comm Opt > RS232 > Change the RS485 connection to Y.

To change baudrate: Press Menu > Options > Comm Opt > Baudrate > Change the Baudrate accordingly.

Using USB to Download/Upload Data

The USB flash disk is useful in cases where the terminal is installed far from a PC or there is a connection problem. To determine the type of USB compatible by the terminal, please refer to this link fingertec.com/newsletter/HL_74.html

USING USB

Press Menu > PenDrive Mgmt > Choose the operation that you want to carry out via USB

Communication Key

Since the software is controlled by an activation code and a product key, set the COMM key to zero. Press Menu > Options > Comm Opt > COMM Key > 0

4 • USER

Enrolling User

The terminals can enroll fingerprint templates, passwords and card information. This chapter covers all possible user enrollments in the terminals.

Caution: Enrollment of supervisor or administrator is important to making sure of the terminals data safety. Prior to enrolling new user, supervisor has to be enrolled first by using any of methods mentioned below. Select Enroll Admin > Choose the Privilege Level either Supervisor or Administrator to proceed.

FINGERPRINT ENROLLMENT *(This feature is NOT available in TimeLine 100 model.)*

It is recommended to enroll two fingers for one user ID. One template is default and another one is used for backup. You need to check the quality of the fingerprint before doing any fingerprint enrollment. It is important to locate the center points of the finger because the center points has to be placed in the middle of the scanner during enrollment to get a good reading. Refer to page 17. You also have to make sure that the fingers are not too wet or too dry for enrollment.

Enrolling fingerprint: Press Menu > User Manage > Enroll User > Enroll FP > New Enroll > OK > Place finger 3 times > (OK) Save > ESC to exit, New Enroll (Continue?) – OK to proceed to enroll another fingerprint.

Enrolling backup fingerprint: Press Menu > User Manage > Enroll User > Enroll FP > ESC > Input User ID > Place finger 3 times > (OK) Save > ESC to exit, New Enroll (Continue?) – OK to proceed to enroll another fingerprint.

CARD ENROLLMENT

The default card for the terminal with card reading feature is the RFID card. MiFare and HID card systems are available upon request.

Enrolling card: Press Menu > User Manage > Enroll User > Reg RFID > New Enroll? > OK > Key in User ID (PIN) > Wave the card at the scanning area until the screen displays the Card ID > (OK) Save

PASSWORD ENROLLMENT

The terminals offer password verification and maximum length of password is 5 digit.

Enrolling password: Press Menu > User Manage > Enroll User > Enroll Pwd > New Enroll? > OK > Key in User ID (PIN) > OK > Input your password > LCD showing the ID with minus -P to indicate that the user ID is using password > OK (Save)

Changing password: Press Menu > User Manage > Enroll User > Enroll Pwd > ESC > Input User ID > OK > Change your password > LCD showing the ID with minus -P to indicate that the user ID is using password > OK (Save)

FINGERPRINT AND PASSWORD ENROLLMENT

(This feature is NOT available in TimeLine 100 model. Please skip page 19,20 and 21 if you are using TimeLine 100)

The terminals offer a combination of fingerprint and password enrollment for better security.

Enrolling FP and password: Press Menu > User Manage > Enroll User > FP & Pwd > New Enroll? > OK > Key in User ID (PIN) > OK > Input your fingerprint > Input your password and confirm the password one more time > LCD is showing the ID with minus -OP to indicate that the user ID is using a combination of fingerprint and password > OK (Save)

Verifying User

1:1 (ONE TO ONE) / 1:N (ONE TO MANY)

VERIFICATION METHOD	PROCESS
1:1 (One to One)	You have to identify your User ID before inputting any biometrics feature for verification. For example, your user ID is 1008. One to one method requires you to key in user ID followed by your fingerprint to get verified.
1:N (One to Many)	You don't need to identify your User ID before inputting any biometrics feature for verification. Simply place your finger on the scanner for verification.

VOICE MESSAGE

VOICE / MESSAGE	WHAT DOES IT MEAN?
"Verified"	Identity verification is successful, the terminal stores the transaction logs and opens the door (if connected to door access)
"Try again please"	Identity verification is failed because the finger is not properly positioned, the template is not available in the terminal or the password is incorrect.
"Admin Affirm"	You are not an administrator of the system and you cannot access Menu page
"Duplicate Finger"	This message only appears during registration when the finger that you want to enroll has been enrolled before. "FP Enrolled Alrd" will be displayed on the LCD screen.
"Invalid ID"	For 1:1 verification, User ID entered does not match with fingerprint.

FINGERPRINT VERIFICATION

1:N – 1:N verification does not require any input of your user ID. Place your finger properly on the scanner and the terminal takes second to verify your identity

1:1 – 1:1 requires input of User ID before the terminal reads and verifies. Input ID on the screen > Press OK button > the terminal reads and verifies.

Some precautions have to be taken to get a good read every time.

- Make sure the center point of your finger is placed in the middle of the scanner for a good read.



- Recommended to use index finger. The terminal accepts other fingers but index is the most convenient.
- Make sure the finger is not wet, too dry, injured or dirty
- Do not press hard on the sensor, just place it comfortably
- Avoid direct sunlight or bright light

PASSWORD VERIFICATION

Password can be an option for those who do not prefer to use other verification methods. To verify using password, insert User ID > OK > insert password and press OK.

CARD VERIFICATION

Place the card on the card scanning area and the terminal will read and verify the card.

Adding User Information

User information can be added into FingerTec terminals through the TCMS V2 software. After the information is updated, sync TCMS V2 and the terminal to display the information.

Deleting User

Only an administrator can perform user deletion at the terminal. To delete certain user(s), press Menu > User Manage > Delete > Input User ID > The terminal will tell you the verification method enrolled by the user ID > OK > Prompting you to Delete User > Press OK > Confirmation is required > OK as Yes and Esc as No

Access Level/Privilege

The terminal offers various types of access level or privilege.

PRIVILEGE	USER ROLES
Normal User	Only use the terminal to verify your identity. You cannot access into the Menu and make changes on settings and system
Enroller	You are allowed to access into the menu to enroll user only.
Administrator	You are allowed to access into the menu to enroll users only and edit simple settings and system excluding access options and advanced options
Supervisor	You are allowed to access into the menu to enroll users and edit settings and system

5 • SYSTEM

General Settings

ADJUSTING DATE/TIME

The function of the terminal is to record time attendance and door access activities of employees. Precision in time and date cannot be compromised for the system to work efficiently. Adjust Date/Time according to your time zone. Press Menu > Options > System Opt > Date/Time > Select Value > OK

DATE FORMAT

Date format differs based on countries for example in Malaysia the format used is, date-month-year whereas in America, month comes first. Choose your date format according to your preference. The default format is dd-mm-yy. Press Menu > Options > System Opt > Fmt > Select Format > OK

SYSTEM LANGUAGE

The terminal offers various languages to match your local requirements. Maximum of 3 language packs available in one terminal at a time and it's set according to your request during purchase. Default language is English. Press Menu > Options > System Opt > Language > Choose your language > OK

VOICE

The terminal has certain voice commands to guide users during enrolment and to notify users during the identity verification process. Press Menu > Options > System Opt > Adv Option > Voice > Y/N

VOLUME (%)

Voice Control lets you control the level of volume emitted by the terminal.

Adjust Volume: Default volume of the terminal's voice is 65. The volume can go as high as 100 and as low as 0. To sustain the performance of speaker in the terminal it's recommended to stay at range 60-70. To adjust the volume Press Menu > Options > System Opt > Adv Option > Adj VOL (%) > Set your number > OK.

USER INTERFACE STYLE

The terminal offers different user interface styles. Select your style based on your preference. Press Menu > Options > UI Style > Select your style > OK

Fingerprint Settings *(This feature is NOT available in TimeLine 100 model.)*

Configure settings for fingerprint enrollment and verification to achieve optimum effectiveness.

SETTING THRESHOLD

Threshold refers to the level of fingerprint scanner's sensitivity. Threshold determines how many percent of minutiae points on a fingerprint template is being read by the

system. The higher the threshold level, the more points are being read, and the more restricted the system. Configure the threshold for 1:1 and 1:N methods.

For 1:1, the range is from 15-50 and the recommended value is 35.

For 1:N, the range is from 5-50 and the recommended value is 45.

1:N – Match Threshold: Press Menu > Options > System Opt > Adv Option > Match Threshold > Determine the Level > OK

1:1 – 1:1 Threshold: Press Menu > Options > System Opt > Adv Option > 1:1 Threshold > Determine the Level > OK

SHOW SCORE

The algorithm reads the minutiae points on a fingerprint for verification. This operation allows you to choose to display the number of minutiae points being read by the terminal. If you choose Y, the number will be displayed on the top right corner of the LCD screen. Press Menu > Options > System Opt > Adv Option > Show Score > Y/N > OK

DEFINING WORK CODES

The fingerprint terminal provides work code feature which allowing user to key in a pre-defined numbers after verification. The work code numbers are predefined in software. The following table is showing examples of work codes.

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

Workcode Mode 1: Verification followed by work code

Workcode Mode 2: Work code followed by verification

To disable: Select No

Press Menu > Options > System Opt > Adv Option > Work Code > OK > Select Preference > OK

Update Firmware

FingerTec offers update of the terminal regularly through software in a PC. Please always consult your local reseller before you update firmware of the terminal or alternatively you can contact us at support@fingertec.com. Save the latest firmware in a USB flash disk before attempting this operation. Press Menu > Options > System Opt > Adv Option > Upd Firmware > OK > Plug Pen Drive? > Insert the USB Flash Disk into the slot > OK

System Information

The terminals keep information of the system and this information is available for viewing by administrators.

NUMBER OF USERS IN THE TERMINAL (USER COUNT)

Every model of the terminal has different user capacity depending on the number of templates a user has in a terminal. For example, if a terminal could contain 3000 fingerprint templates and a user is entitled to 2 templates enrolment, the total user of the system would be 1500. **To find out how many users are enrolled in a terminal:** Press Menu > Sys Info > User Cnt > View the number

QUANTITY OF FINGERPRINT TEMPLATES STORED IN THE TERMINAL (FP COUNT) *(This feature is NOT available in TimeLine 100 model.)*

The terminals contain fingerprint templates and the capacity differs from one model to another. **To find out the number of fingerprint count in the terminal:** Press Menu > Sys Info > FP Cnt > View the number

QUANTITY OF ATTENDANCE LOGS SAVED IN THE TERMINAL (ATT LOG)

Once verification is completed, an attendance log will be stored in the terminal as record. A terminal can contain up to 120,000 logs depending on the models. Press Menu > Sys Info > AttLogs Cnt > View the number

NUMBER OF ADMINISTRATORS REGISTERED IN THE TERMINAL (ADMIN COUNT)

A company can enroll several administrators to manage the system. This function enable the company to check the number of administrator present for a particular terminal. Press Menu > Sys Info > Admin Cnt > View the number

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

NUMBER OF TIME SCANNERS HAVE BEEN USED FOR VERIFICATION (S 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 > S Logs > View the number of S Logs

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 > View the info Information available includes fingerprint count, att log and S logs.

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:

FPCnt (100): Showing the number of fingerprint templates stored in the terminal, for example for FP(100) 30 is $100 \times 30 = 3000$ templates (*This feature is NOT available in TimeLine 100 model.*)

AttLog (10k): Showing the number of attendance logs that can be stored in the terminal, for example for AttLog (10k) 12 means $10,000 \times 12 = 120,000$

S Logs: Showing 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 of the terminal is important to activate the software and to liaise with FingerTec Worldwide in support issues. 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: FingerTec Worldwide has already released a few algorithm versions into the market since the year 2000. New algorithm version comes with some improvements. This is where you can find terminal's algorithm version.

Firmware Version: Support sometimes require 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 requiring the correct MAC address. Without availability of MAC address, 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 software with a different hardware brand. An example of a MAC address is 00:0A:5D F1 BE 57. Menu > Sys Info > Dev Info > View MAC

MCU Version: An MCU is the Main Controller Unit for the terminals. Version of the MCU determines the features and functions the terminal carries. **To check the MCU Version:** Menu > Sys Info > Dev Info > MCU Version

Log Information (Log Opt)

A terminal can only retain certain amount of information before the terminal becomes full and stops accepting any more data . To maintain the performance of a terminal, you can set an alarm to alert you when the data reaches a certain warning level.

ALARM SUPERLOG

To instruct terminal to alert user if the transaction storage for administrator login is less than as configured. Default value is 99.

ALARM ATTLOG

To instruct terminal to alert user if the transaction storage is less than as configured. Default value is 99

RECHECK MIN

To instruct terminal to update clocking times of all users in a time interval. Default is 10 mins.

6 • DATA

Every time an enrollment is performed or a verification is done, a transaction log is created and stored inside the terminal. The data contains created terminal ID, date, time, userID and transaction activity. For example, 01050210090000000000010000:

These logs need to be managed to maintain the effectiveness of the terminal. It is recommended to do the housekeeping of data from the software but there are 5 functions available in Data icon to enable you to manage data in the terminals

DESCRIPTION	CODE
Terminal ID	01
Date (ddmmyy)	050210
Time (hhmm)	0900
User ID	000000001
Transaction Code	00
Terminal Activity	00

Deleting Transaction Logs

Delete Attendance Logs: The fingerprint terminal stores every transaction logs of its user. Once a user is enrolled and verified, the logs will be kept in the terminal. Sometimes housekeeping needs to be done to sustain the terminal's performance. Please be certain before performing this operation because once the OK button is pressed, all attendance logs will be lost. Press Menu > Options > System Opt > Adv Option > Del Attlogs > OK > Delete? OK

Deleting All Data

Clear All Data: The fingerprint terminal contains all user data including User ID, verification methods, fingerprint templates, logs, etc. This operation allows deletion of all data in the terminal. Please be certain before performing this operation because once the OK button is pressed, all data will be lost. Press Menu > Options > System Opt > Adv Option > Clear All Data > OK > Delete? OK

Managing User Privileges

Clear Admin Privilege: To access system menu, it is recommended to enroll administrator to the system. Once administrator is enrolled, every time someone presses the Menu button, Admin Affirm message will be displayed. Clear Admin Privilege operation allows the current administrator to clear all his/her data to make way for the new administrator's data. Once the operation is completed, system menu is accessible by all users. Press Menu > Options > System Opt > Adv Option > Clr Admin Pri > OK > Continue? > OK

Resetting to Factory Settings

Reset Option: This feature is to restore all settings in the terminal to return to the original factory settings. You have to be certain before conducting this operation because once the OK button is pressed the terminal will be reset automatically. Press Menu > Options > System Opt > Adv Option > Reset Opts > OK. Please redo all the settings to suit to your company's requirements. Press Menu > Data icon > Restore to Factory Settings > Confirmation is required (Yes/No)

7 • USB

NOTE

This feature is available in all TA100 series it is made to order for AC100 model.

Understanding the Need for USB Flash Disk

Communication between the terminal and a PC is very important to upload and download transaction data for time attendance and door access reports. The terminal offers a few communication options such as LAN and serial cable connections but sometimes there are scenarios that require USB (Universal Serial Bus) connectivity. USB can connect to the terminal with a computer for download and upload of user information and transaction logs. In the terminal, the USB Flash Disk function is known as Pen Drive Management.

Type of USB

There are various types of USB available in the market. The terminal can only work with USB flash disks that support minimum Linux Kernel 2.4.x, working fine with Imation, Transcend and Pen Drive (minimum support Linux Kernel 2.4.x) To determine the type of USB compatible by FingerTec terminal, please refer to this link fingertec.com/newsletter/HL_74.html

Downloading Attendance Logs

To download attendance logs from the terminal to the computer: Press Menu > Pen-Drive Mng > DwnLoad AttLog > The terminal would require you to plug in the USB Flash Disk to proceed. After download process is complete, eject USB Flash Disk from the terminal and connect it to your PC that has been installed with the software. Upload the data from the USB into software for further processing.

Downloading User Data

Enrollment of user must be done at the terminal. During enrollment, user data such as name and user ID are entered. **To sync the data between the terminal and computer:** Press Menu > PenDrive Mng > DwnLoad User > The terminal would require you to plug in the USB Flash Disk to proceed.

Uploading User Data from USB to Terminal

While administrator can input user data from the terminal, the rest of the users information is completed in the software. Get the latest updates of user information from the software to the terminal by using a USB Flash Disk. Press Menu > PenDrive Mng > Upload User > The terminal would require you to plug in the USB Flash Disk to proceed.

Uploading Short Messages

Some the terminals can display a short messaging system on the LCD. The SMS can be private or public. **To assign sms to an individual or all staff using USB:** Press Menu > PenDrive Mng > Upload SMS > Insert the USB Flash Disk to proceed

8 • RFID CARD FUNCTION

NOTE

This feature is NOT available in TA102, TA103 and AC100 models.

The fingerprint terminals are versatile and it can accept card verifications. This chapter covers the Radio Frequency Identification or better known as RFID system. The terminals accept RFID card with specifications of 64-bit, 125kHz.

Enrollment of RFID Card

RFID can be enrolled alone, with fingerprint or with password. Each RFID card comes with a unique ID and the terminals will read from the numbers and match it with the card.

Enrollment of RFID is easy. Press Menu > User Manage > Enroll User/Admin > Reg RFID > OK > Do you want to do new enrollment? > OK > Insert the user ID > OK > Wave the card to the induction area and the machine will display the card number on the LCD along with the User ID > OK > The terminal will display User ID-C meaning that the ID is enrolled with card > OK(Save)

Deleting RFID Card

RFID card can be used again and again but the information in the card must be deleted first before inserting new information.

Press Menu > User Manage > Delete > Input the User ID and wave the card at the induction area > The LCD will ask whether you want to delete the User ID-C > The terminal will ask whether you want to delete User ID > And to delete user. Press OK to all.

Once the card has been emptied, it can be used again.

Changing Card ID

Press Menu > User Manage > Enroll User/Admin > Reg RFID > ESC > Change Card ID > Key in Original ID > OK > Wave new card > OK (Save)

9 • MIFARE CARD FUNCTION

NOTE

This feature is not a default function and it's made upon request. Check your terminal card system to identify the type of card the terminal is using. This feature is NOT available in AC100.

This chapter covers the MiFare card system or better known in MC system. The terminals accept MiFare card with specifications MF1S50/S70, 13.56MHz.

Fingerprint Card Key (FP Card Key)

FP Card Key function provides extra security to the MiFare card users. FP Card Key is a password with a maximum 6-digit code. Once you have inserted an FP Card Key into a terminal, all the MiFare cards which are enrolled in this terminal will have this password. The terminal will always check the password before verification is done.

To input the FP Card Key: Press Menu > Options > System Option > Adv Option > FP Card Key > Input the Password > OK

Creating PIN Card

PIN is known as a User ID. Enroll a fingerprint to obtain a User ID. To create a PIN Card, you need to have a User ID or a PIN.

Press Menu > User Manage > FPCard Mng > Create PINCard > Input an ID > Show the card to the induction area > The LCD will display "Write Succ" which indicates that the ID has been transferred to the card and is not stored in the terminal anymore. After this registration, a user can get access by using the card only.

Enrolling FP Card

Enroll FP is a function to store a fingerprint template into a MiFare card. Once the enrollment is successful, the templates will no longer be kept in the terminal. Therefore, for access or attendance, you need to produce the card to the terminal to obtain verification. Your card will now store your user ID and your fingerprint templates.

Press Menu > User Manage > FPCard Mng > Enroll FPCard > Input a User ID > Register your fingerprint > Show the Mifare Card at the induction area > The LCD will display "Write Succ" to indicate that the process is successful

Creating FPCard

Create FPCard is a function that allows you to duplicate a fingerprint template already enrolled in the terminal to be copied into the card. Therefore, for access or attendance, you can choose to use your card or your fingerprint.

Press Menu > User Manage > FPCard Mng > Enroll FPCard > Input a User ID (Make sure that this User ID has been enrolled with a fingerprint > Show the Mifare Card at the induction area > The LCD will display "Write Succ" to indicate that the process is successful.

Now you can gain access or report attendance using the card or the fingerprint.

Registering FPCard

"Register FPCard" is a function available if you want to use your FP Card in other terminals in the company. Press Menu > User Manage > FPCard Mng > Reg FPCard > Show the Mifare Card at the induction area > The LCD will display "Write Succ" to indicate that the process is successful. Now you can gain access or report attendance using the FP card.

Unregistering FPCard

This is a function available if you do not want to use your FP Card in any terminals in the company. Press Menu > User Manage > FPCard Mng > Unreg FPCard > Show the Mifare Card at the induction area > The LCD will display "Write Succ" to indicate that the process is successful

The card is still valid but the card cannot be used in that particular terminal to gain access or report attendance.

Emptying FPCard

MiFare card is writeable; therefore you can use it time and time again. To delete all the information in the card, use Empty FPCard function.

Press Menu > User Manage > FPCard Mng > Empty FPCard > Show the Mifare Card at the induction area > The LCD will display "Write Succ" to indicate that the process is successful. Now the card is empty and ready to accept enrollment.

Dumping FPCard

Fingerprint template stored in MiFare card can be transferred to the terminal by this simple operation. Make sure that the card is containing fingerprint templates to proceed with this operation.

Press Menu > User Manage > FPCard Mng > Dump FPCard > Show the Mifare Card at the induction area > The LCD will display "Write Succ" to indicate that the process is successful. Once copied, you can use fingerprint or the card on that particular terminal for access or attendance.

Moving To FPCard

Fingerprint template stored in the terminal can also be transferred to the FP Card through this simple operation. Once the process is done, the terminal deletes the finger-

print template from its memory. Press Menu > User Manage > FPCard Mng > Move to FPCard > Show the Mifare Card at the induction area > The LCD will display "Write Succ" to indicate that the process is successful.

Changing FPCard

Press Menu > User Management > OK > Enroll User/Admin > OK > Register RFID > ESC > Change Card ID > Key in original ID > OK > Wave new card > OK (Save)

10 • HID CARD FUNCTION

NOTE

This feature is not a default function and it's made upon request. Check your terminal card system to identify the type of card the terminal is using. This feature is NOT available in AC100.

The terminals accept HID card with specifications of 1325, 26-bit, 125kHz. The Prox II cards support 26-bit and it comes with unique programming information into its contents, which include card reading bits, card number range, facility code, site code, etc. HID cards also applies encryption to the contents of the card to maintain high level of security and to eliminate duplications.

Registering HID Card

Registration of HID card is similar to registration of normal RFID cards. Press Menu > User Manage > Enroll User/Admin > Reg RFID > Do you want to do new enrollment? > Insert user ID > Wave the card to the induction area and the machine will display the card number along with the user ID on the LCD > The terminal will display UserID-C indicating that the user ID has been enrolled with card > OK(Save)

Deleting HID Card

HID card can be used again and again but the information in the card must be deleted first before inserting new information.

Press Menu > User Manage > Delete > Input the User ID and wave the card at the induction area > The LCD will ask whether you want to delete the User ID-C > The terminal will ask whether you want to delete User ID > And to delete user. Press OK to all.

Once the card has been emptied, it can be used again.

11 • AUTO TEST

Who should do the Auto Test?

Auto Test page is to diagnose or analyze the conditions in the terminal. There are 6 tests available in the Auto Test page and only the administrator is allowed to perform the test. Before running any tests, kindly contact your reseller for advice or you could email support@fingertec.com.

Run All Tests At Once

The Auto Test contains 6 tests and to run all of them at once, Press Menu > Options > Auto Test > Run All Test > OK > "Pls keep Pwr On" message will be displayed > The terminal will run all tests and when finished the LCD will display the result such as this: All: 31 Bad: 0, to indicate the level of breakdown in the terminal.

FLASH Test

Press Menu > Options > Auto Test > FLASH test > OK > "Pls keep Pwr On" message will be displayed > The terminal will run all tests and when finished the LCD will display the result such as this: All: 31 Bad: 0

LCD Test

Press Menu > Options > Auto Test > LCD test > OK > The screen will display lines of 'W'. Any missing Ws or jagged W indicates LCD error. Escape to return to the previous page

Voice Test

Press Menu > Options > Auto Test > Voice test > OK > The LCD will display for example: "Play Voice 1" and you will hear the message for that. Press OK to listen to the next voice. Any error indicates that something is wrong with the speaker.

FP Reader *(This feature is NOT available in TimeLine 100 model.)*

Press Menu > Options > Auto Test > FP Reader > OK > If your fingerprint sensor is not in good condition, you will see "OK!"

Key Test

Press Menu > Options > Auto Test > Key Test > OK > Press any key and look at the LCD display. If the key matches the description on the LCD, the keypad is in good condition

RTC Test

Press Menu > Options > Auto Test > RTC test > OK > If the RTC battery is still working, the test will prompt an "OK!"

12 • TROUBLESHOOTING

“Unable to Connect” Appears

When this message appears, it means that the settings for the terminals and the computers are not properly done. Find out which method you are using to connect. FingerTec offers LAN, RS232, RS485 and USB communication methods. Refer to Chapter 3: Connection - Syncing Terminal, page 14 to further understand the topic.

“Admin Affirm” Appears

You are not an administrator of this terminal. Only an authorized administrator of the system is allowed to access the Menu. Any attempt of normal user to access the Menu will prompt “Admin Affirm” message on the screen. In case the administrator has resigned from the company, kindly contact your FingerTec authorized reseller to access the terminal.

Difficult to Read Finger *(This feature is NOT available in TimeLine 100 model.)*

Five things could be the cause of this:

Enrolment is not properly done: Enrolment is the most important process to ensure that FingerTec terminal captures the best quality of your fingerprints. Refer to chapter 4 for how to do a good enrolment.

The location of the terminal is not conducive: The scanner does not work well in bright-lighted area. Cover the scanner a bit if this is the cause of the difficulty. Shift the location area for a better performance.

Finger is not properly placed: To get a good reading, make sure that your finger’s center points are located at the middle of the scanner. Adjust the position of your fingerprint as you see it onscreen.

The scanner is not cleaned or it is scratched: Check the quality of the scanner. If the scanner is dirty, please clean it with pasting and lifting of a piece of cellophane tape on the scanner. Use microfiber cloth for non-coated scanner. If it’s scratched, contact your local reseller for a replacement.

Did anything happen to your finger lately? Make sure that the finger is not injured, cut or bruised because it could cause difficulty to read. The algorithm reads the minutiae points of your fingerprint, the more it can read, the better the result.

The LED is Blinking All The Time

You have nothing to worry about unless the blinking light is red. The green light indicates that terminal is on standby mode. Red blinking light may signal a problem in the terminal. Charge your terminals for a few hours to avoid the red light from blinking. Consult your reseller for technical advice.

“Duplicate Finger” Appears *(This feature is NOT available in TimeLine 100 model.)*

FingerTec is an intelligent terminal. It will not accept the same fingerprint twice into its system. If you have registered a finger into FingerTec, the system would prompt, “Duplicate Finger” when you try to enroll that same finger again. Choose a different finger to proceed.

RFID Card Doesn’t Respond

Two possibilities for this problem

Have you registered the card to the terminal?

The card must be registered to the terminal before the terminal could read the information in the card. Refer to chapter 8 User, page 29 for card enrollment.

Have you assigned the user ID to the verification group that supports RFID card?

Without setting the terminal that you are under a group that supports RFID card, the FingerTec terminal wouldn’t read your card.

No Sound

A few things could cause this problem:

The terminal voice mode is silent

Perhaps someone has turned off the voice in your terminal or reduced its volume to 0%. Refer to Chapter 5 System, page 22 under Voice to rectify.

Speaker is damaged

Once you have rectified the voice mode and the problem persists, proceed to test the voice. Go to Chapter 11 Auto Test, page 34 to do the test. If no voice emitted, contact your local reseller for support.

For more troubleshooting, go to user.fingertec.com

INFORMATION ABOUT FINGERTEC

TO LEARN ABOUT	GO TO?
Company and the products	www.fingertec.com
The latest updates	Facebook Fan Page: FingerTec Worldwide Twitter: FingerTec Worldwide To subscribe for FingerTec® newsletter: fingertec.com/subscribe/newsletter/subscribe_newsletter.html
Technical Tips and Latest Product Updates and Upgrades	user.fingertec.com
Email	info@fingertec.com (Sales) support@fingertec.com (Technical)
Register for Warranty	fingertec.com/ver2/english/e_warranty.htm
FingerTec® Accessory	accessory.fingertec.com

COPYRIGHT NOTICE & DISCLAIMER

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 Sdn Bhd. 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 terminal 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 SDN BHD

www.fingertec.com

For technical tips and manuals in other languages, refer to <http://user.fingertec.com>

© 2010 FingerTec Worldwide Sdn. Bhd. All rights reserved. • Printed in Malaysia. 072010