

# TA700W

Biometrics Time Attendance System

## User Guide

# CONTENTS

- 4 Chapter 1 • GETTING STARTED
  - Viewing the User Guide in the Internet
  - Accessories
  - Activating Terminal
  - Registering Terminal
  
- 5-8 Chapter 2 • BASICS
  - Introduction to Terminal
  - Terminal Overview
  - Main Menu
  - Battery
  - Date/Time
  - Voice Control
  - Security Features
  - Cleaning Terminal
  - Restarting Terminal
  
- 9-12 Chapter 3 • USER
  - Enrolling User
  - Verifying User
  - Adding User Information
  - Deleting User
  - Access Level/Privilege
  - Defining Work Codes
  
- 13-14 Chapter 4 •  
INSTALLATIONS & CONNECTION
  - Installations
  - Security
  - Installation and Setup of TCMS V3
  - TCMS V3 Online Activation
  - Connecting Terminal to TCMS V3
  - Using USB to Download/Upload Data
  - Communication Key
  
- 15-17 Chapter 5 • SYSTEM
  - System Settings
  - Data Management
  - Reset
  
- 18 Chapter 6 • DATE/TIME
  - Setting Date/Time
  - Daylight Saving Time
  
- 19 Chapter 7 • USB
  - Understanding the Need for USB
  
- 20 Chapter 8 • SYSTEM  
INFORMATION
  - Records
  - Device
  
- 21-22 TROUBLESHOOTING
  - “Unable to Connect”
  - “Admin Affirm”
  - Difficult to Read Finger
  - The LED is Blinking All The Time
  - “Duplicate Finger”
  - No Sound

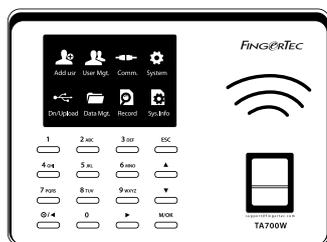
# 1. GETTING STARTED

## Viewing the User Guide in the Internet

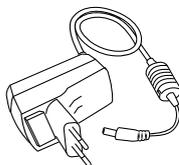
The User Guide is available in the package when you purchased the terminal.

The User Guide is also available online at: <http://www.fingertec.com> and <http://user.fingertec.com>. Choose the language that you prefer for your User Guide.

## Accessories



**A bucket of screws and bolts**  
Use the screws to install the terminal backplate on a wall



**5VDC 0.8A Power Adaptor**  
To supply power to the terminal

## Activating Terminal

Every FingerTec Time Attendance model comes bundled with a unique license key. To start using the terminal with TCMS V3, you must connect the terminal to the software and do online activation. TCMS V3 reads the serial number of your terminal for verification at the FingerTec server via the Internet.

If you do not have an Internet connection, please do an offline activation. Send the serial number and model of your terminal to your local reseller or email [support@fingertec.com](mailto:support@fingertec.com) to request for a product key and an activation key.

## Registering Terminal

Register your terminal warranty with us at: [http://www.fingertec.com/ver2/english/e\\_warranty.htm](http://www.fingertec.com/ver2/english/e_warranty.htm) for a 24 month warranty protection.

## 2 • BASICS

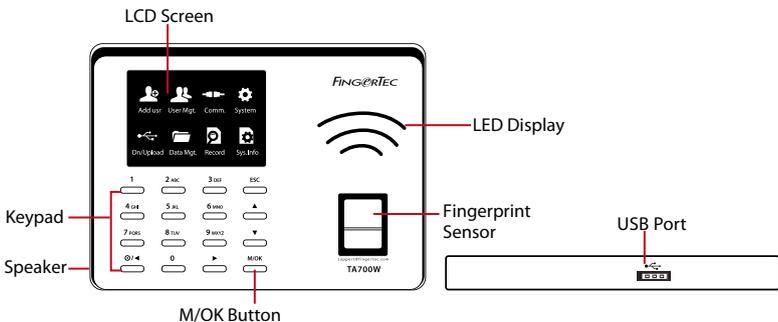
### Introduction to Terminal

FingerTec is a renowned brand name of biometrics commercial products for door access and time attendance systems. FingerTec offers an array 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 microprocessors that can process biometrics authentication methods for accurate personal identifications and for collection of precise data for time attendance. Some fingerprint terminals can also accept card verification as an added security measure.

“FingerTec TA700W is an elegant biometric device with Wifi capability. It can contain up to 1000 fingerprint templates for a maximum 1000 users (1 template per user) and 50000 transaction logs in its flash memory. The TA700W was designed with user friendliness and efficiency in mind. TA700W verifies fingerprint and password. All users need to do is to scan their fingerprint and they are done! Be on their way, attendance data will be stored onto TimeTec TA ([www.timetecta.com](http://www.timetecta.com)) instantaneously. TA700W comes complimentary with TCMS V3 for data management.

### Terminal Overview



| ITEM        | FUNCTION   |
|-------------|--|
| LCD Screen  | Displaying status of terminal, day, date and time  |
| LED Display | <b>Green LED</b> – The terminal is working fine and it is in standby mode.<br><b>Red LED</b> – 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 problem |

| ITEM                | FUNCTION   |
|---------------------|--|
| Keypad              | To input instructions into the terminal and do configuration   |
| Fingerprint Sensor  | To scan fingerprint  |
| Speaker             | For terminal voice instructions and prompts  |
| USB Port            | To upload/download user information, password and transaction logs using USB disc  |
| M/OK Button         | Press and hold the M/OK button to enter the menu.  |
| Power On/Off Button | Use the power on/off button to turn on and shut down the terminal. Disable the button to avoid accidental shut down of the terminal. |

## Main Menu



Add usr

Enroll users, manage user data and input workcode.



Comm.

Setup the terminal communication with computer through LAN. Set security password of the device for a secure data transfer.



System

Configure the settings of the terminals from general to display setting to fingerprint. Data management, update via USB, keyboard functions, reset and other terminal settings can be done here.



Dn/Upload

Upload and download data from the terminal using a USB flash disk.



Data Mgt.

Delete all attendance data and user information in the terminal.



Record

Check user attendance and transaction logs that are available in FingerTec terminals and perform housekeeping of the machine.



Sys. Info

View free and used memory of the terminal as well as the terminal's details in system information.

## Battery

FingerTec terminals operate using power supply from a standard power outlet. Inside each terminal, there is an RTC battery to keep the terminal clock running. When there is a serious delay in time or the clock of the terminal reverts to 00:00 after restarting, this is an indicator that the RTC needs to be replaced.

**External power supply:** Mini UPS (uninterrupted power supply) 5V provides mobile power supply to the terminals. Refer to <http://accessory.fingertec.com> for more information about accessories.

## Date/Time

The terminal display the date and time at the home screen. Choose the data and time format based on your company's preference. Press Menu > System > Date/Time > Select Value > OK to save.

## Voice Control

Control the terminal volume level.

### **TURN ON/OFF**

Turn the voice on/off based on you preference. Press Menu > System > System > Voice Prompts > On/Off.

## Security Features

This feature helps protect the information in the terminal from being accessed by unauthorized individuals.

### **ADMIN AFFIRM**

Register an administrator to the system by enrolling a fingerprint or a password to a user ID. Press Menu > New User > Role > Administrator > Choose Enrollment method > OK to Save. After enrolling an administrator, the main menu can only be accessed by the administrator. The terminal will display "Admin Affirm" when an unauthorized individual tries to access the Menu.

### **COM KEY**

Create password for a specific terminal. Press Menu > Comm. > Password > Insert Password > OK to save. The password known as COM Key is intended for extra security. To connect the terminal with TCMS V3, the COM key inserted in the software must be the same as the one inserted in the terminal or else the connection will not be established even though the activation key and the product key are correctly inserted.

## 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**

Clean the fingerprint prism with a microfiber cloth.

## Restarting Terminal

If a feature isn't functioning properly, try restarting or resetting the terminals

### **RESTARTING THE TERMINAL**

Push the On/Off button on the terminal to restart the terminal. If you can't restart the terminal, or if the problem persists, contact your reseller or email to [support@fingertec.com](mailto:support@fingertec.com)

## 3 • USER

### Enrolling User

Enroll fingerprint templates and passwords in the terminal. This chapter covers all possible user enrollments in the terminals.

#### FINGERPRINT ENROLLMENT

It is recommended to enroll two fingerprints for one user ID. One template is the default fingerprint and another is for backup. Check the quality of the fingerprint before you enroll it. It is important to place the center points in the middle of the scanner during enrollment to get a good reading. You also have to make sure that the fingers are not too wet or too dry for enrollment.

**To enroll fingerprint:** Press Menu > New User icon > ID. No: (insert value) > Select “Enroll FP” > Select Role > Place your fingerprint 3 times following instructions given by the terminal > OK to save.

#### PASSWORD ENROLLMENT

Passwords can be used as one of the verification methods. The maximum length of a password is 8 digits.

**To enroll password:** Press Menu > New User icon > ID. No: (insert value) > Select “Enroll Pwd” > Input password using the keypad > Reconfirm password > OK to save.

### Verifying User

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

| VERIFICATION METHOD | PROCESS   |
|---------------------|---|
| 1:1 (One to One)    | One to one method requires you to key in your user ID followed by your fingerprint to get verified. If your ID is 1008, you need to key in 1008 and then place your finger on the scanner for verification. |
| 1:N (One to Many)   | Simply place your finger on the scanner for verification.   |

#### VOICE MESSAGE

| VOICE / MESSAGE    |   |
|--------------------|---|
| “Verified”         | Identity verification is successful, the terminal stores the transaction logs.  |
| “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 will find the template that matches your fingerprint, it will take a second to verify your identity.

**1:1–1:1** requires input of your User ID because the terminal needs to call your template before it is being matched with your live finger and verifies your identity. Press 1:1/1:N > Input ID on the screen > Press fingerprint icon > terminal will read and verify.

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, press 1:1/1:N > insert User ID and press key button > insert password and press OK.

## Adding User Information

There are two ways to add users into the terminal. One is through the FingerTec terminal and the other is through TCMS V3. To add/change user information via the terminal, press Menu > New User icon > OK > Select Instruction > Edit/Add > OK to Save.

| Edit user |            |
|-----------|------------|
| ID        | 1          |
| Name      | Test       |
| FP        | Enroll FP  |
| PWD       | Enroll PWD |
| Dept.     | Company    |
| Purview   | User       |
|           | M/OK       |
|           | ESC        |

| Instruction | Function   |
|-------------|--|
| Find        | Insert User ID in the column and press OK            |
| Record      | Press to view available user records                 |
| Edit User   | Delete/Add Verification Methods and change Privilege |
| Del User    | Delete User, Fingerprint or Password                 |
| Add User    | Enrolment of New User                                |

| Field  | Function  |
|--------|---|
| ID No. | Edit user ID based on your company's system. Maximum length of user ID is 9 digits.                     |
| Name   | Add user name in this field (Can only be done through the software). Maximum number of characters is 24 |
| FP     | Quantity of Fingerprint   |
| PWD    | Quantity of Password  |

## User privilege

It is recommended that the updating of user information is carried out in TCMS V3. After the information is updated, sync the TCMS V3 and the terminal to display the information.

## Deleting User

Only an administrator can perform user deletion at the FingerTec terminal. To delete certain user(s), press Menu > User Mng icon > OK > Select User > Choose "Delete" > OK.

Please be extra careful when performing this task to avoid any unauthorized deletion.

## Access Level/Privilege

FingerTec terminals offer two types of access level or privilege.

| PRIVILEGE     | USER ROLES   |
|---------------|--|
| Normal User   | Only use the terminal to verify own identity. Normal User cannot access the Menu to make changes into settings |
| Administrator | Administrator can access the menu to enroll users and edit settings and system                                 |

## Defining Work Codes

The terminal provides a work code feature which allows users to key in predefined numbers after verification. The work code numbers are predefined in the TCMS V3. The following table shows examples of work codes.

To turn on the work code function, Press Menu > System icon > System > Workcode > Turn On/Off > OK to save.

To add a work code through the terminal, Press Menu > System icon > Workcode > Add Workcode > Enter Code Number eg: 02 > Enter Code Name eg: Emergency Leave > OK to save.

| 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

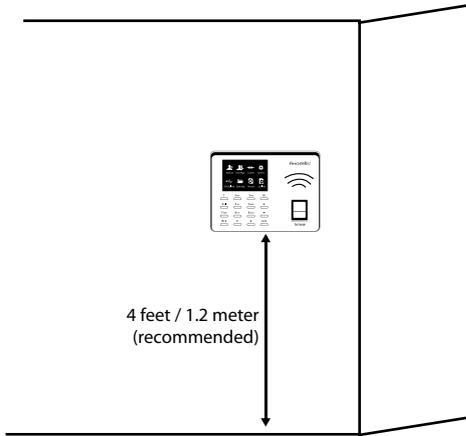
## 4 • INSTALLATIONS & COMMUNICATION

### Installations

The terminal offers several connections for power and communications.

#### WALL MOUNTING

After measuring the height accordingly and make relevant marking on the wall, drill the screws into the wall to secure the back plate.



### Security

Create password for a specific terminal here. Press Menu > Comm. > Password > Insert Password > OK to Save. The security password known as COMM Key is intended for extra security. To connect the terminal with the software, the COMM key inserted in the software must be the same as the one inserted in the terminal or else connection cannot be established even though the activation key and product key are correctly inserted.

### Installation and Setup of TCMS V3

Install TCMS V3 in a PC that fulfills the software minimum requirements. Refer to <http://www.fingertec.com/customer/download/postsales/SUM-TCMSV3-E.pdf> for the TCMS V3 user guide online. Setup Wizard will require you to do online activation before any connection is established between TCMS V3 and the terminal(s).

# TCMS V3 Online Activation

TCMS V3 is a complimentary bundled time attendance software by FingerTec. To start using the terminal with TCMS V3, you must connect the terminal to TCMS V3 to perform an online activation. TCMS V3 reads the serial number of your terminal for verification at the FingerTec server via the Internet. If you do not have an Internet connection, please do offline activation. Send the serial number and your terminal model to your local reseller or [support@fingertec.com](mailto:support@fingertec.com) to request for a product and activation key.

## Connecting The Terminals to TCMS V3

**DETERMINING TERMINAL NUMBER:** Number your terminals to differentiate them between one another. TCMS V3 can connect up to 999 units of terminal. Press Menu > USB > DeviceID > Select the number.

**WIFI CONNECTIVITY:** TA700W comes with built-in Wifi module. To connect the terminal to a Wifi network, press Menu> Comm. > WIFI Settings > Select Network Name > Enter the WIFI password > Press OK to save.

**Determining the Subnetmask and Gateway:** For TCP/IP connection, please configure the netmask and gateway for the terminal.

For WIFI connection, the IP setup of the terminal can be retrieved automatically from the Wifi router when the Wifi connection is established.

For DHCP connection for the terminal to network, Menu > Comm > WIFI Settings > Press (0) > Turn DHCP ""On"" > Press OK to save.

To enter the IP setup of the terminal for Wifi connection manually, Menu > Comm > Wifi Settings > Press (0) > Turn DHCP ""Off""> Enter the IP address, Subnetmask, and Gateway value > Press Ok to Save. "

## Using USB to Download/Upload Data

To determine the type of USB flash disks compatible with the terminal, please refer to this link at [http://www.fingertec.com/newsletter/HL\\_74.html](http://www.fingertec.com/newsletter/HL_74.html). Press Menu > USB > Choose the operation that you want to carry out .

## Communication Key

Since the software is controlled by an activation code and a product key, set the COM key to zero.

Press Menu > Comm. > Password > Set to 0.

## 5 • SYSTEM

### System Settings

#### THRESHOLD

Threshold is the level of the fingerprint scanner's sensitivity. Threshold determines how many percent of minutiae points on a fingerprint template will be read by the system. The higher the threshold level, more points are being read, more restricted the system. Configure the threshold for 1:1 and 1:N methods.

For 1:1, the range is from 0-50 and the recommended value is 15.

For 1:N, the range is from 0-50 and the recommended value is 35.

Press Menu > System > System > Threshold (1:1) or Threshold (1:N) > Determine the Level > OK to Save.

#### DATE FORMAT

The date format can differ based on countries for example in Malaysia, the date-month-year format is used while in America, the month comes first. Choose your date format according to your preference. The default format is dd-mm-yy.

Press Menu > System > System > Date Format > Select Format > OK to save.

#### SOUND OF KEYBOARD

The terminal makes a sound when you press any of its buttons.

**To turn on/off the keypad sound:** Press Menu > System > System > Key Voice > On/Off > OK to save.

#### FINGER SENSITIVITY

Determine the sensitivity of the sensor to fingerprint. Choose Low, Mid or High sensitivity. It is recommended that you set it to Mid.

Press Menu > System > System > Sensitivity > Select your preference > OK to save.

#### VOICE

The terminal has voice commands to guide users during enrolment and to notify users during verification.

Press Menu > System > System > Voice Prompts > On/Off > OK to save.

#### VOLUME (%)

Voice Control controls the volume level of the terminal.

To adjust the volume of the terminal, press Menu > System > System > Select your preference > OK to save.

## RETRY PERIOD

Once you have inserted a value, eg: 1, when a user checks in at 10:01, his time will be automatically adjusted to 10:00. The maximum value is 99. When you enter 5, a user is given 5 minutes leeway time in his attendance.

## LOG ALERT

When the log storage is at a certain level, the user/administrator needs to be alerted to keep the terminal performance at its optimum.

The recommended value is 99. Press Menu > System > System > Log Alert > Input your value > Save

## Data Management

Every time an enrolment is performed or a verification is done, a transaction log is stored inside the terminal. The data contains the terminal ID, date, time, user ID and transaction activity. For example, 010502100900000000010000:

| DESCRIPTION       | CODE     |
|-------------------|----------|
| Terminal ID       | 01       |
| Date (ddmmyy)     | 050210   |
| Time (hhmm)       | 0900     |
| User ID           | 00000001 |
| Transaction Code  | 00       |
| Terminal Activity | 00       |

These logs need to be managed to maintain the effectiveness of the terminal. It is recommended that you do the housekeeping of data from the software. There are 4 functions available in the Data icon to enable you to manage your data in the FingerTec terminal.

In the data management icon, you can choose from three instructions. Press Menu > Data Mgmt > Select your instruction > OK to save.

## DELETING ATTLOG

Please make sure that you are certain when you do this operation. The logs stored inside the terminal are the ones that have not been downloaded into the software. Deleting the logs means that no backup data is available.

## DELETING ALL DATA

This function allows you to delete all attendance data and user information in the terminal. Make sure that all user information has been backed up in the software before you perform this task.

## **CLEARING ADMIN**

There are three user privileges in the terminals, administrator and normal user. You can delete administrator privilege; but without an administrator, normal user can access the menu easily and interrupt the settings.

### **NOTE**

Please be extra careful when performing this task to avoid unauthorized deletion of important data

---

## **Reset**

Reset allows you to reset all the settings to factory settings. Please make sure that you are certain of performing any of the tasks before proceeding to avoid loss of crucial data.

## **Misc Settings**

### **INTERNAL BELL**

To set the alarm time using the internal bell, Press Menu > System > Bell > Select Bell Type > OK to Edit > Set the settings accordingly > OK to save.

### **SYSTEM LANGUAGE**

FingerTec offer various languages to match your local requirements. Maximum of 9 language packs are available in the terminal and it is loaded based on your request during purchase. The default language is English. Press Menu > System > System > Language > Choose your language > OK to save.

## 6 • DATE/TIME

### Adjusting Date/Time

FingerTec time attendance terminal functions to record time attendance 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 > System > Date/Time > Key in the time > OK to save.

### Daylight Savings Time

Daylight savings time (DLST) is the practice of temporarily advancing clocks so that afternoons have more daylight and mornings have less. Adjust your DLST if necessary. Press Menu > System > DST > DST to On and adjust time accordingly > OK to save.

# Understanding the Need for USB

## USB FLASH DISK

Communication between FingerTec terminals and a PC is very important to upload and download transaction data for time attendance and door access reports. The terminals offer a few communication options including USB (Universal Serial Bus) connectivity. USB can connect terminals with a computer for download and upload of user information and transaction logs.

## TYPES OF USB

There is various type of USB available in the market. FingerTec terminals can only work with USB flash disks that support minimum Linux Kernel 2.4.x, working ideally with Imation, Transcend and Pen Drive (minimum support Linux Kernel 2.4.x) To determine the type of USB compatible with the FingerTec terminal.

Please refer to this link at [http://www.fingertec.com/newsletter/HL\\_74.html](http://www.fingertec.com/newsletter/HL_74.html)

## DOWNLOADING DATA INTO USB

A FingerTec terminal is able to download data i.e. transaction logs, user information, and short messaging system into the USB Disc.

**To download the data:** Press Menu > USB > Download Attlog. After the download process is complete, eject the USB flask disk from the terminal and connect it to your PC that has been installed with the TCMS v3 software. Upload the data from the USB into TCMS V3 for further processing.

## UPLOADING DATA FROM USB

A FingerTec terminal is able to upload data i.e. user information, short messaging system, picture screensaver and themes into the USB Disc.

**To upload the data:** Press Menu > USB > Upload User. After the upload process is complete, eject the USB flask disk from the terminal.

## CHECKING RECORDS OF USERS IN THE TERMINAL

To view a particular user record in terminal, press Menu > Record > Insert ID No: > Select Start and End Range Date > OK to view

## 8 • SYSTEM INFORMATION

This option under System allows the installer to check the information of the terminal including storage, firmware, algorithm, etc.

To retrieve the System Information of the terminal Press Menu > Sys Info.

### Records

Shows free storage and used storage of the terminal, and details of user counts, admin counts and password users. It also displays other information such as FP templates and logs templates that have been used and are available.

### Device

Pressing "Device" displays the terminal name, serial number, MAC Address, fingerprint algorithm, firmware version, manufacturer and manufactured date and time.

## TROUBLESHOOTING

### “Unable to Connect”

When this message appears, it means that the settings for the terminal and the computer are not properly done. Find out which method are you using to connect. The terminal offers Wifi and USB communication methods. Refer to Chapter 4 to further understand the topic.

### “Admin Affirm”

You are not the 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 or he/she has resigned from the company, kindly contact your FingerTec authorized reseller to access the terminal.

### Difficult to Read Finger

Five things could be the cause of this:

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

**The location of the terminal is not conducive:** The scanner does not work well in bright-lighted area. Cover the scanner a little 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 read, 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 a microfiber cloth. If it is 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 which could cause it 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 blinking light is indicating that the terminal is under its standby mode. Red blinking light may signal problem in the terminal. Contact your reseller for consultation.

## “Duplicate Finger”

The terminal will not accept the same fingerprint twice into the system. If you have registered a finger into the terminal, the system would prompt “duplicate finger” when you try to enroll that finger for another time. Choose a different finger to proceed.

## 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 under Voice to rectify.

### Speaker is damaged

Once you have rectified the voice mode, if the problem persists, contact your local reseller for support.

For more troubleshooting, go to [user.fingertec.com](http://user.fingertec.com)

