

Operations Manual V1.0.0

Revision History:

V1.0.0 2 July 2010 Preliminary



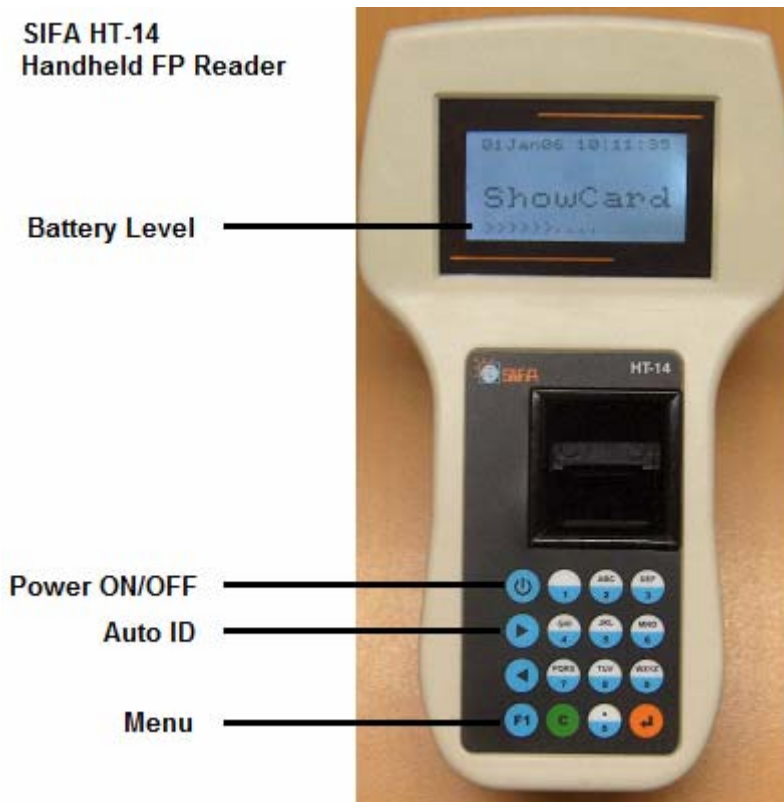
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1.0 Introduction

HT-14 can be used as a Finger print Verification and Identification terminal. You can enroll 4096 templates in Verification section and 100 templates in Identification section. Both sections work independently. In verification, you can use one finger per person mode or multiple finger mode. You can upload and download the verification templates to PC using the USB. The terminal does not require any special drivers at PC..

The terminal can display up to 32 characters of information like name and Expiry date. The terminal uses RFID card or PIN entry through keypad for Verification. The identification mode can be enabled with “>” key. The terminal has audio indication with beeper as well as recordable voice output. HT-14 stores up to 32000 “Valid” transactions in flash memory which is cyclic and can be downloaded to PC. The device has built in Li-ion battery and can be charged with charger provided.



The Terminal has soft ON/OFF switch that completely shuts down the power. However an

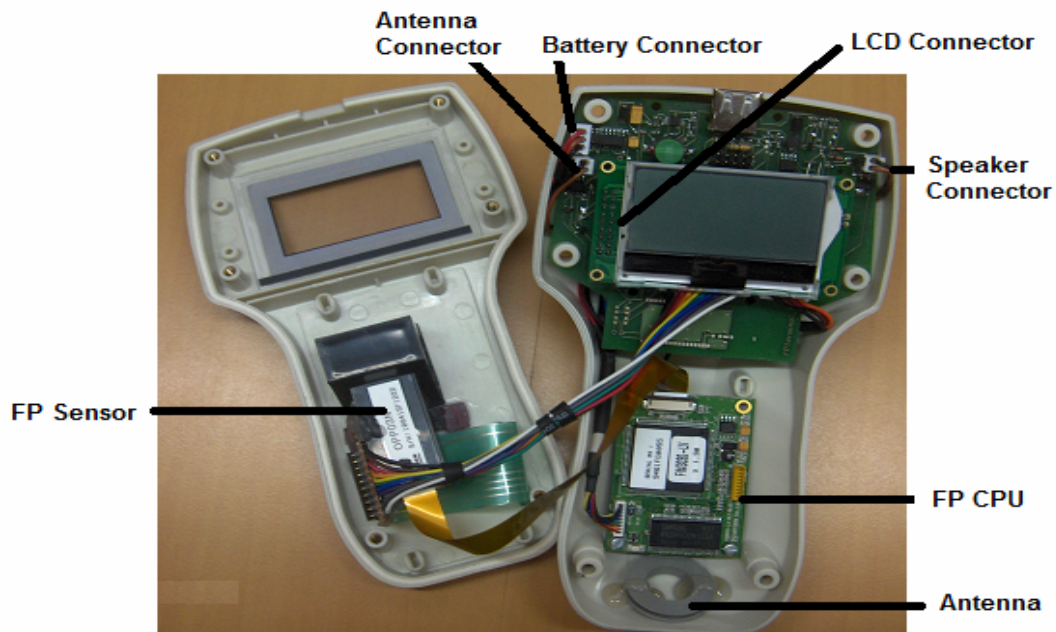
HT-14 Finger Print Terminal

additional switch to disconnect battery completely is provided for longer storage time. The terminal will shut off automatically if not used for 2 minutes. The terminal has built in watch dog, however,



in case of any inadvertent situations, you can switch off using “Battery Disconnect Switch” .

1.1 Terminal OPENED



Ensure you open without disturbing the FP, Display cables

To open fully, remove the LCD display from its connector and also remove Speaker Connector

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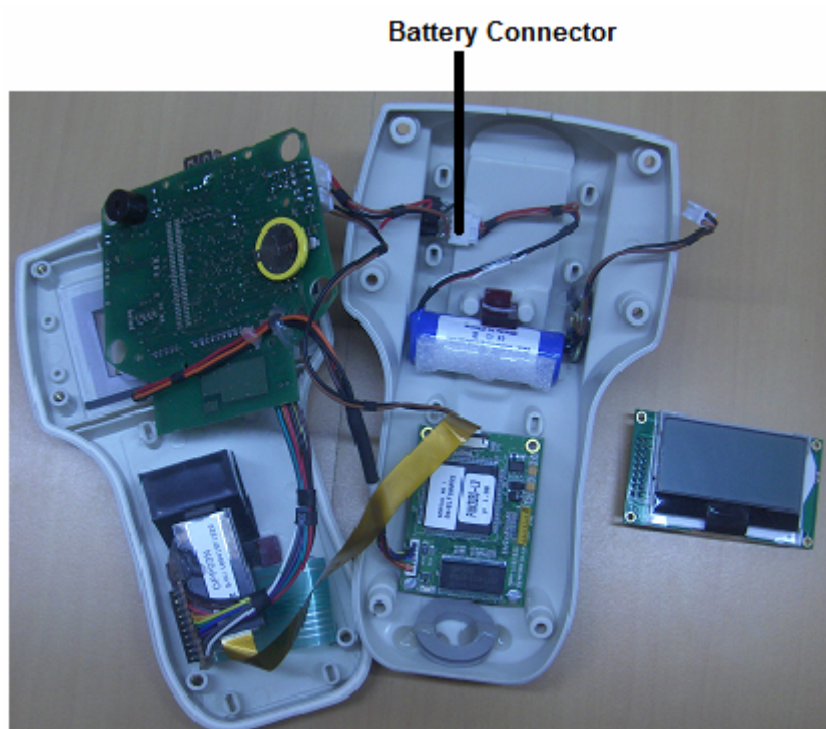
WARNING:

No user serviceable parts inside.

The terminal must be opened only by an authorized technician.

1.2 Changing Battery

To replace the battery, disconnect the battery from battery connector.





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1.3 Technical Specification

Processor : Arm7-TDMI
512 KB
Memory: 4 MB Data Flash
RTC: Battery Backed
Display: 128x64 Black/White Back lit

Finger Print Sensor : DSP 400 MHz
500 DPI Optical Sensor
Sensing Area: 12.9 X 15.2 mm
FRR : 1/1,000
FAR : 1/100,000

1.4 Power System

Battery: Li-ION 3.7V / 1AH

How to Change Battery: You have to open the device. Only authorized technicians should do. Please refer technical note.

The system will switch off if ON/OFF key is pressed or after 2 minutes idle (not in menu modes). Battery level is indicated as >>>>>>>>>> (10 digits in %)

Charging: Use the authorized adapter only (5.5V/1A)
The device will not charge through USB of PC. However it will power functioning of the device when connected to the PC.

2.0 Keypad Description

<i>ON/OFF key</i>	:	<i>Turns ON/OFF power</i>
<i>> key</i>	:	<i>Identify</i>
<i>F1 key</i>	:	<i>Menu</i>
<i>C key</i>	:	<i>Clear entry to 0 in Edit modes</i>
<i>Enter key</i>	:	<i>Confirm in edit modes</i>

2.1 Template Features

- Verification:** 4096 templates. In standard mode 1 template per finger (person). In MultiFinger mode you can enroll up to 10 fingers for a person. These templates can be downloaded to PC , uploaded from PC.
- Identification:** 100 templates
These templates cannot be downloaded or uploaded to PC.

How to use Identification:

Press ">" key and Place finger when requested.

How to use Verification:

You can Flash the card OR Enter the PersonalID and place finger when requested.

2.2 About Numbering System of PersonalID

Verification templates:

The personalID is 16 digits in one finger mode and 15 digits for Multifinger mode. The 16th digit is used for Finger number in Multifinger mode. Caution must be applied in changing the mode after enrolling.

Identification templates:

The personalID is 8 digits.
Since both the personalIDs transactions are sent to PC, please take care that the personalIDs do not overlap. The reader cannot verify the same personalID from both Identification and Verification. Do not use the same personalID on both systems.

2.3 Menu Operations

To Enter Menu: Press "F1" key

Enter Password:

{ Key in Password 6 digits – Default Setup 562300 }

Main Menu

Enroll Verify

Delete Verify

Identify Menu

Setup Menu

Quit

1. Enroll Verify:

To Enroll a finger (or Multiple fingers in MultiFinger mode) using either RFID card or PersonalID using keypad. Those enrolled with this option can be verified later on either with the RFID card or with PersonalID.

2. Delete Verify:

To delete a finger (or Multiple fingers in MultiFinger mode) using either RFID card or PersonalID using keypad.

3. Identify Menu:

Enroll Identify - To Enroll an Identification template
Delete Identify - To delete an Identification template
Identify Count - Shows how many Identification templates stored
Quit

To Enroll Identification fingers , Delete Identification fingers or to see the Identification count.

4. Setup Menu:

View CardNumber - To view an RFID card Number
Configuration - Shows the Configuration
Change Setup - To change the configuration
Lcd Contrast - To change the Contrast (use > Increase < Decrease)
Lcd Brightness - To Change the Brightness (use > Increase < Decrease)
 1 for least, 9 for max brightness
Quit

Configuration:

MultiFinger - 1 Use multiple fingers (up to 10 for a Card)
 - 0 Use only one finger (1 templates)
Voice ON: 1- Only on Acceptance 2- Only on Rejection
 3- Both cases 0- None of the cases
Volume: Volume for Voice output.



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2.4 Frequently asked Questions

Can I enroll the same personalID with Identify mode as well as verify mode?

YES. The reader treats them as two different systems.

Can I Enroll the same finger for more than one card/personalID?

YES. The reader cannot match the templates while Enrolling. It only verifies the template stored against a card/Id with the template of the finger placed.

How long the battery will last?

You should be able to use the Terminal continuously for about 2 hours. However in practice you will use reader intermittently, so you should be able to use it for approximately one day

Can I get more operation time with battery.

Please contact us.

How often should I change the battery?

It is recommended that once in a year battery should be changed. However this depends on the cycle time of charging.

What is the accuracy of Fingerprint?

This depends on the verification and Identification Security level. You can change them using PC. Please see the FAR and FRR from technical details.

From which country the reader is imported?

It is manufactured in India.

Can I get ISO specification templates?

Yes. Please contact us for IS)197974 / ANSI 378 template specification.

Which Finger print algorithm do you use?

We can supply you with Secugen, Nitgen, Suprema algorithms.

How can I adjust contrast, brightness?

Please see Setup Menu.

What is the transaction capacity?

32000 transactions can be stored. It has cyclic buffer.



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3.0 Software

Sifa Hand held FP Reader Application Interface Software in VB is available. Following is short description of the features of the software.

Options:

Files	Punch Data	Manage Templates
Configure Set Time Sensor Settings Voice Upload Exit	Download Data	

3.1.1 Files – Configure

- Device ID** : Contains Manufacturer ID and Product ID
- Password** : Password to access menu of the device
- Voice** : To have voice announcement, select respective Check Box
- Volume** : Volume of voice announcement
- Finger** : For Single Template per user, select “Single” else “Multiple”



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3.1.2 Files – Set Time

To set current PC time to the device, select this option. Shows “Time Set OK” on success or error message.

3.1.3 Files – Sensor Settings

To set Finger Print Sensor Parameters and to manage Identification Mode enrollments. Ensure value is in range as shown against each parameter.

- Set Default** : To set the default Values.
- Update** : To Update current setting to device

Identification Mode

- Delete All** : To Delete All enrollments done in Identification mode
- Delete** : To Delete one enrollment in Identification mode. Key in the Code number first. Code shall be of 8 digits, maximum.

3.1.4 Files – Voice Upload

To upload voice file to device for audio announcement. Shows progress made in terms of %.

Ensure only the files provided by the manufacturer is copied in to the default application directory. Contact manufacturer to know how to create Voice Files.

- Upload** : Upload the selected voice file to device
- Close** : To Close the application

3.2 Punch Data – Download Data

To download the transactions, view downloaded transactions, Export to a Text File and Purge Database.

Download : To download transactions from the Device. Only the transactions that are not already in the database are shown in the grid.

View : To View the data for the given date range

Export : To Export the data for the given date range to a text file. Data for select data range is stored in a text file named Fpdata_FROMDATE_TODATE.TXT. From Date and To Date are YYYYMMDD format.

Example: Fpdata_20100629_20100630.TXT.

Data is delimited with “;”. Contains Code, RFID No, Date & Time.

000000000008666;0000000000;29/06/2010;17:01:05;

000000000004444;0000000000;29/06/2010;17:01:23;

000000000000951;E082C8001E;29/06/2010;18:54:28;

000000000000952;E082C8001E;29/06/2010;18:54:38;

000000000000953;E082C8001E;29/06/2010;18:55:06;

000000000000951;E082C8001E;29/06/2010;18:55:17;

Purge Database : To delete the transactions for the select date range.

Close : To close Download form

3.3 Manage Templates

This module manages users, their Finger Templates. Users may be assigned a group for managing & uploading to device. Also the finger print may be Single or Multiple, based on the device setting.

When multiple templates are selected, you may enroll multiple templates for an RFID Card. Last character of User ID is taken as a template ID.

1. Shows Group Selected
2. Drop down to select Group
3. To SET group selected in '2' as default group. When SET, displays set group in '1'.
4. To ADD all the users in selected group to the grid below
5. To CLEAR Group Selection
6. Displays that the Data in Grid does not match with Database with “YELLOW” Color. When the Data in Grid matches with Database, it is Green. The Button “Save in Database” is to Save the data in Grid to Database
7. Displays that the Data in Grid does not match with Database with “YELLOW” Color. When the Data in Grid matches with Database, it is Green. The Button “Save in Reader” is to Save the data in Grid to Reader
8. Finger Template Selection. 'S' for Single, 'M' for Multiple. Click to Toggle selection

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9. To Read the data from the Reader. Grid is cleared and populated with this data. Finger Print Templates are also read and stored to database.
10. Select All records in the Grid
11. Clear All Selection in the Grid
12. To Set Group of selected records with Selected Group (as in 1). This button appears only when any record is selected
13. To Clear the Grid
14. To Close this form

6/7 in YELLOW color indicates that the Data in Grid does not match with Database / Reader

The data shown on the Grid are not updated to Database or Reader automatically. Only when respective Button (6 / 7) is pressed, this process is carried out.

To Add, Edit, Delete user position the cursor on the Grid by clicking. When no record is present, click on the Header.

To Add, Press INSERT Key. To Edit, Press ENTER Key or double click on the row.

To Delete, Press DEL Key.

While Add / Edit, following screen appears. Complete the process by selecting Save or Cancel.

Contact Details:

sales@sifa.com

URL:

www.sifa.com
