ACTAtek2 Manual

Version 1.4 Aug 6th, 2007 Hectrix Limited





Revision History

Revision	Date	Description	Author
1.0	2006/09/19	Initial Release	Clement
1.1	2007/01/17	Format revised	Ken
1.2	2007/04/27	Address Updated	Cheong
1.3	2007/07/17	ACTAtek2 Manual	Keith / Cheong
1.4	2007/08/06	Product specification update	Cheong



ACTAtek2 Manual

Copyright 2004 - 2007 Hectrix Limited, All rights reserved.

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise without the prior written permission of Hectrix Limited.

ACTAtek2 is a registered trademark of Hectrix Limited

All trademarks, registered trademarks, and service marks are the property of their respective owners.

Offices:

Americas:

Hectrix Inc. 13372 Newport Ave suite A, Tustin, CA 92780, USA.

Tel: (714)-505-0433 Fax: (714)-544-5077

E-mail: sales-US@hectrix.com

Singapore and Malaysia:

ACTAtek Pte Ltd 8, Boon Lay Way, #06-09 Tradehub 21, Singapore 609964

Tel: (65) 6515-4520 Fax: (65) 6515-4521

Email: sales-asean@ACTAtek.com

Asia and the Rest of the World:

Hectrix Ltd. 1101-1103, 11/F., Yardley Comm. Bldg. 3 Connaught Road West, Sheung Wan, Hong Kong.

Tel: (852) 2319 1333 Fax: (852) 2776 8997

Email: sales-row@hectrix.com

Europe:

Hectrix UK Unit 7 Lightning Way, West Heath, Birmingham, B31 3PH, United Kingdom

Tel: +44 121 411 2288 Fax: +44 121 411 2288 Sales Tel: +44 121 288 9923 Email: sales-EU@hectrix.com

ACTAtek2 Manual iii



Table of Contents

Chapter 1.Introduction	6
1.1.Purpose	6
1.2.Document Conventions	6
1.3.Intended Audience and Reading Suggestion	6
1.4.Software References for this document	6
Chapter 2.Product Overview	7
2.1.ACTAtek2 Model number	7
2.2.Comparison between Fingerprint and Smart Card Models:	8
2.3.Warranty Note	9
2.4.Setup Requirements	10
Chapter 3.ACTAtek2 Structure and Connections	11
3.1.ACTAtek2TM Internal Structure and Connections	11
3.2.Connection Details:	12
Chapter 4.Fingerprint Notes	14
4.1.Introduction	14
4.2.Technical Information	14
4.3.Good Image vs Bad Image	15
4.4.Fingerprint Enrollment & Authentication	16
4.5.Fingerprint Enrollment:	17
Chapter 5.ACTAtek2TM Introduction	18
5.1.Introduction	18
5.2.LCD Module	19
5.3.Keypad Module	19
5.4.Fingerprint Scanner Module	20
Chapter 6.System Configuration	21
6.1.Login	21
6.2.Add User	23
6.3.Error Messages	27
6.4. User Management	29
6.5.Auto Match	32
6.6.Date & Time	34
6.7.IP Settings	36
6.8.Terminal Settings	42
6.9.Reset	46



6.10.Exit	48
Chapter 7.Web Administration	49
7.1.SSL Certification – Data Encryption	50
7.2.Terminal Status	51
Chapter 8.Super Administration Guide	52
8.1.Overview	52
8.2.User Administration	55
8.3.Access Control	64
8.4.Terminal Settings	71
8.5.Terminal	79



Chapter 1. Introduction

This sections explains the purpose and software references of the ACTAtek2.

1.1. Purpose

ACTAtek2 is an **A**ccess **C**ontrol and **T**ime **A**ttendance product which allows users to access its record from any where, at any time and on any platform.

The primary objectives of this document is to provide advance features of ACTAtek2.

The secondary objectives of this document is to help the user to troubleshoot the ACTAtek2 within the shortest time. So, after read through this training manual, user will become more familiar with the functions and features of ACTAtek2.

1.2. Document Conventions

Input typed in a bold Arial font, and output using Arial. Comments are added in italics.

Command prompt and Source code looks like

```
main()
{
    printf("Hello World\n");
}
```

1.3. Intended Audience and Reading Suggestion

This document is self-contained but assumes a basic knowledge of ACTAtek2. Advanced customers can use this document to enhance their usage in ACTAtek2, and resellers can use this document to enhance their customers needs.

1.4. Software References for this document

ACTAtek2 firmware: 1.31.1



Chapter 2. Product Overview

2.1. ACTAtek2 Model number

	Model Number	Description
Α	CTA2-[Model]-[Option]-[Others]	Embedded SSL-Web Server with PIN / Camera / Smartcard / Fingerprint / Sample up to 10,000 users

Table 1.ACTAtek2 Model Number

2.1.1. Legend

Model	Meaning	
10k (smartcard,	Embedded SSL-Web Server up to 10,000 users	
camera,fingerprint)		
15k	Embedded SSL-Web Server up to 15,000 users	
20k	Embedded SSL-Web Server up to 20,000 users	
30k	Embedded SSL-Web Server up to 30,000 users	
Option	Meaning	
Р	Pin Model	
С	Camera Model	
S (M / L / Hp / EXBC)	Smart Card Model (Mifare/ Legic / HID / Barcode)	
FP	Fingerprint Model	
FS	Fingerprint + Smartcard Model	
Others	Meaning	
SAM	Sample Unit	

Table 2.Legend

2.1.2. **EXAMPLE**

Model Number	Description
ACTA2-1k-PC	Pin + Camera Model (up to 1,000 users)
ACTA2-3k-S-M	Smartcard Model (Mifare) (up to 3,000 users)
ACTA2-5k-S-LC	Smartcard Model (Legic) + Camera (up to 5,000 users)
ACTA2-1k-FP-C	Fingerprint Model + Camera (up to 1,000 users)
ALLIAZ-IK-C.S-IVIL.	Fingerprint + Smartcard Model (Mifare) + Camera (up to 1,000 users)
	Fingerprint + Smartcard Model (Legic) + Camera (up to 1,000 users) – Sample unit
ACTA2-10K-5-LC	ACTAtek 128 Meg Disk on Chip + Smart Card Model (Legic) + Camera (up to 10,000 users)
	ACTAtek 128 Meg Disk on Chip + Fingerprint + Smart Card Model (Mifare) + Camera (up to 20,000 users)

Table 3.Example



2.2. Comparison between Fingerprint and Smart Card Models:

Features	Fingerprint ONLY	Smartcard ONLY	Fingerprint + Smart Card
Seven-Finger Enrollment	V	-	V
Built-in Smart Card Reader	-	V	V
Built-in Web and Database	$\sqrt{}$	V	V
Server	0	Ontinual	Ontinual
Built-in Web Camera Exchange of Information	Optional	Optional	Optional
Between Devices (Primary /	V	V	V
Secondary)			
Static IP Address	√	V	V
Assignment			
Support existing DHCP	V	V	V
Server	22.22		
Operating Temperature	0C-60C	0C-60C	0C-60C
Disk on Chip G4 Memory Maximum Users	128 MB 30,000 Users	128 MB 30,000 Users	128 MB 30,000 Users
Maximum Osers	- 10K for 1K / 3K /	- 10K for 1K / 3K / 5K	- 10K for 1K / 3K / 5K
	5K model	model	model
Maximavina avantlana atanad	- 40K for 10k model	- 40K for 10k model	- 40K for 10k model
Maximum eventlogs stored	- 30K for 15k model	- 30K for 15k model	- 30K for 15k model
	- 10K for 20k model	- 10K for 20k model	- 10K for 20k model
	- 10K for 30k model	- 10K for 30k model	- 10K for 30k model
	- 100 for 1K / 3K / 5K	- 100 for 1K / 3K / 5K model	- 100 for 1K / 3K / 5K model
	model - 1000 for 10k model	- 1000 for 10k model	- 1000 for 10k model
Maximum Photos stored	- 750 for 15k model	- 750 for 15k model	- 750 for 15k model
	- 100 for 20k model	- 100 for 20k model	- 100 for 20k model
	- 100 for 30k model	- 100 for 30k model	- 100 for 30k model
	Apple Macintosh / Win 95/98/NT/XP	Apple Macintosh / Win 95/98/NT/XP	Apple Macintosh / Win 95/98/NT/XP
Computers Supported	Unix Machines /	Unix Machines /	Unix Machines /
	Linux Machines /	Linux Machines /	Linux Machines /
Databasa Interfesa Cumpart	PDA / Smart Phone	PDA / Smart Phone	PDA / Smart Phone
Database Interface Support Encryption	ODBC / JDBC SSL	ODBC / JDBC SSL	ODBC / JDBC SSL
Multilingual Support			
Programming API	SOAP	SOAP	SOAP
Reporting	1	√ V	V
LDAP	Only 20k model	Only 20k model	Only 20k model
SNMP	Only 20k model	Only 20k model	Only 20k model
Product Weight / Gross Weight with power supply & packaging	650g/1.5kg	650g/1.5kg	650g/1.5kg
paoraging	CPU / Fingerprint /	CPU / Fingerprint /	CPU / Fingerprint /
Deplements Markets	Contact &	Contact &	Contact &
Replaceable Modules	Contactless	Contactless	Contactless
	Smartcard / Keypad	Smartcard / Keypad	Smartcard / Keypad
External Devices Support	V	V	√ D-4 M-4± 400 04
LCD Module Product Dimension	Dot Matrix 128 x 64 215 x 110 x 72 (mm)	Dot Matrix 128 x 64 215 x 110 x 72 (mm)	Dot Matrix 128 x 64 215 x 110 x 72 (mm)
Weatherproof Casing	210 X 110 X /2 (IIIIII)	210 X 110 X /2 (IIIII)	210 X 110 X /2 (IIIII)
(except for contact card	\checkmark	$\sqrt{}$	1
module)	,	,	$\sqrt{}$
Expansion	Serial / RS-232 / RS-	Serial / RS-232 / RS-	Serial / RS-232 / RS-
Laparision	485(built-in)	485(built-in)	485(built-in)
National Intent	10 BaseT Ethernet	10 BaseT Ethernet	10 BaseT Ethernet
Network Interface	(Build-in) / Optional Wi-Fi / Modem	(Build-in) / Optional Wi-Fi / Modem	(Build-in) / Optional Wi-Fi / Modem





Safety Standard	CE, FCC, IP65	CE, FCC, IP65	CE, FCC, IP65
	IP65fluid-ingress,	IP65fluid-ingress,	IP65fluid-ingress,
Case	dust,salt,	dust,salt,	dust,salt,
	fog,protection	fog,protection	fog,protection

Table 4.Comparison between Fingerprint and Smartcard Models

2.3. Warranty Note

Warranty Card **MUST** be mailed or e-mailed after you receive your ACTAtek2TM for us to keep your unit(s) on our warranty program. Please keep the left side for your reference, and mail the right one to the office you purchased your unit from. Warranty for a 1 year period is provided for free, for any extension, please consult your sales agent for details on ongoing maintenance and warranty for your units.



Checklist

Please check that your ACTAtek 2^{TM} has come with the following, if anything is missing, contact us at

support@hectrix.com.

- ACTAtek2 Unit
- · Instructions CD
- · Quick Installation Guide
- Crossover Network Cable (Black) [for connection DIRECTLY to PC/Notebook]
- Straight Network Cable (White) [for connection to network (hub/switch)]
- A 12V DC Switching Power Supply (Input: 100 240 VAC 50/60 Hz)
- 1 Power Cord [according to Country Specification]

2.4. Setup Requirements

2.4.1. Operating System (For access via Corporate Network)

- Windows 95/98/2000/NT/XP
- Linux Machines
- · Unix Machine
- Apple Macintosh
- PDA
- Smart Phone

2.4.2. Network Interface

- 10 BaseT Ethernet (built-in)
- · RJ45 Cabling for Network Connectivity.
- Straight Network Cable (White cable, to connect to your corporate network via Hub/Switch)
- Crossover Network Cable (Black cable, to connect directly to your Computer)

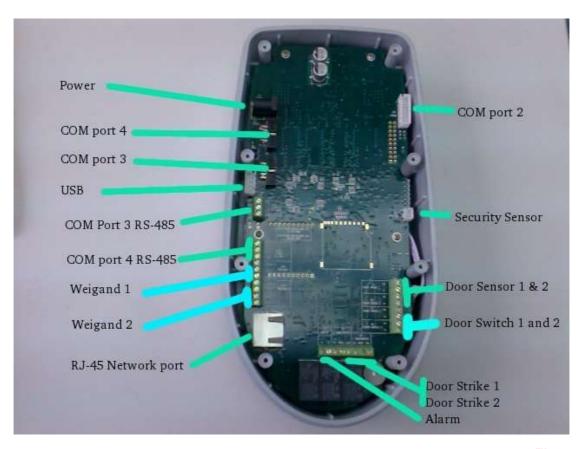
2.4.3. Power Requirements

- A 12V DC switching power supply (provided), please do not substitute our power supply from another one
- Each 12V power supply can only support ONE ACTAtek2, failing to do so will void the warranty.



Chapter 3. ACTAtek2 Structure and Connections

3.1. ACTAtek2™ Internal Structure and Connections



WARNING: DO NOT TOUCH ANY COMPONENTS WHILE ATTACHING CABLES TO THE ACTAtek2™.



3.2. Connection Details:

3.2.1. COM1 to COM4

- COM1, by default, is connected to the fingerprint module, if installed. Otherwise, it is open for use by other applications.
- COM2, by default, is connected to the Mifare Contactless Smart Card Reader/Writer, if installed. Otherwise, it is open for use by other applications.
- COM3 is shared with the COM 3 RS-485 port.
- · COM4 is shared with COM 4 RS-485 port.

3.2.2. RS485

- The RS485 port is built-in to the ACTAtek2 unit. The ACTAtek2 has 2 RS-485 ports COM3 and COM4.
- · RS485 is enabled by default as long as JP8 and JP9 have pins
- COM3 or COM3 RS-485 can only connect to one device not both likewise with COM4 and COM4 RS485.
- Typical devices connected to RS485 are External Relay and/or external Mifare Contactless Smart Card Reader/Writer.

3.2.3. Weigand output

- · Weigand output is supported in ACTAtek2.
- Users can select either 26-bit or 40-bit outputs.
- · Smart card ID will be sent out in 26-bit or 40-bit Weigand formats, when authorized.
- There is also a Weigand 2 output which is currently not used. It will be used later for future expansion.

3.2.4. Security Sensor

- Used to protect ACTAtek2 in an event when someone is trying to remove or attack the unit.
- Alarm output will be triggered if ACTAtek2 is lifted up or removed from its installed position.

3.2.5. RJ45

 Used to connect a RJ45 cable to the network which enables ACTAtek2 to be reached by Ethernet.

3.2.6. USB

A USB interface is present and reserved for future use.

3.2.7. 12V DC jack

Power up the ACTAtek2 with shipped switching power supply.



 Make sure you have same rated power supply (12V DC, 27W) if the one provided is not used.

3.2.8. Door Switches 1

- · Connect both ends of the external door switch to GND and DSW1 respectively.
- · Door strike will be connected once the door switch is triggered.

3.2.9. Door Strike 2 / Door Bell

3.2.9.1. Door Switch mode:

- Connect both ends of the external door switch to GND and DSW2 respectively.
- · Door strike will be connected once the door switch is triggered.

3.2.9.2. Door Bell mode:

- Connect both ends of the door bell switch to GND and DSW2 respectively.
- · Enable the door bell in "Terminal Setup".
- · Door bell will ring once the door bell button (Top right corner of the keypads) is pressed.

3.2.10. Door Sensors (GND DS1, GND DS2)

- System will alert user (LCD Display message, buzzer sounds) if each of the door sensors is closed for about 30 seconds.
- · Alert stops when sensor is open.

3.2.11. Alarm (Alarm+ Alarm-)

- · Connect the Alarm+ and Alarm- to the external alarm.
- Alarm relay will trigger whenever somebody is trying to remove the ACTAtek2[™] if the door sensor is activated.

3.2.12. Door Strikes (NC1 COM1 NO1) & (NC2 COM2 NO2)

- · Opens a door.
- NC Normally connect, COM Common, NO Normally Open
- · Connect an electrical relay to NO and COM as shown below.



Chapter 4. Fingerprint Notes

4.1. Introduction

ACTAtek2 ™ uses latest Optical Scanning technology with its own algorithms and matching calculations, a step above other sensors in the market.

It must be emphasized that to get an accurate enrollment and quick authentication each time a fingerprint is presented, the fingerprint placement must be towards the center of the scanner. Placing your finger far from the center position of the sensor will increase the rejection rate.

Finger Rotation should be kept to a minimum during enrollment and verification.

When enrolling, place the finger on the sensor where the entire core can clearly be seen by the scanner.

A good image is critical for the overall performance of the fingerprint scanner. Any deviation from a good image, either by placing the finger far away from the scanner, or by applying too much pressure or not locating it in the CENTER of the scanner, will cause the scanner's rejection rate to rise. Read below on how to get a good image for your enrollment/authentication.

4.2. Technical Information

Features	Technical Specification
Image Resolution:	500DPI
False Rejection Rate (FRR):	0.01%
False Acceptance Rate (FAR):	0.0001%
Allowable Fingerprint Rotation:	+/-15degree
Operation Temperature:	-25 to +65 Degrees Celsius
Number of minutiae being taken:	30 to 60 depending on user
Matching Speed:	0.05 second
Scanning Speed:	1.50 second

Table 5.Technical Information

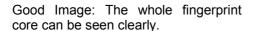


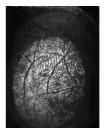
4.3. Good Image vs Bad Image

A good fingerprint image is one in which the core of the fingerprint is well-defined and easily recognizable. The core of a finger is defined as the "point located within the inner most recurring ridge", it is normally located in the MIDDLE of the fingerprint. It is therefore critical when enrolling that you place the finger on the scanner where the entire core can clearly be seen.

An example of a good & bad image is displayed as follows:





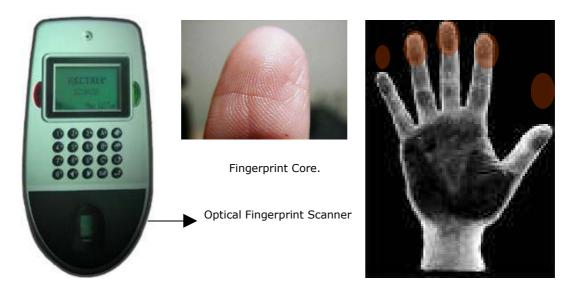


Bad Image: An image where the crackles & displacement of the fingerprint core makes it unrecognizable.



4.4. Fingerprint Enrollment & Authentication

In order to receive a successful enrollment and authentication, it is critical that the following should be noted carefully. Each successful enrollment will result in a successful authentication and save a lot of time in troubleshooting and erroneous readings.



It is highly recommended for the fingerprint core to be big and clear for a successful enrollment of a clear and good image.

Make sure the fingerprint image captured is of the core of the finger presented. A fingerprint core is a point located within the innermost recurring ridge of any given finger.

Also, to obtain a higher success rate, enroll the same finger 3 times in a slightly adjusted angle, one to the center, one inclined slightly to the left and the third inclined slightly to the right.

If you follow the following enrollment procedure, the success rate will increase dramatically.



4.5. Fingerprint Enrollment:

Step 1: Place the center of any one finger directly above the sensor right in the center, as shown below:







Step 2: Place the center of the same finger (enrolled in Step 1), slightly aligned to the left.

Step 3: Place the center of the same finger, slightly aligned to the right.

After each placement, wait for the message "Template Stored" on the LCD screen to appear, and then remove your finger and press "Enter/Return" to enroll the second or third finger(s).

If you have any questions regarding the enrollment procedure, e-mail us at support@hectrix.-com .



Chapter 5. ACTAtek2™ Introduction

5.1. Introduction

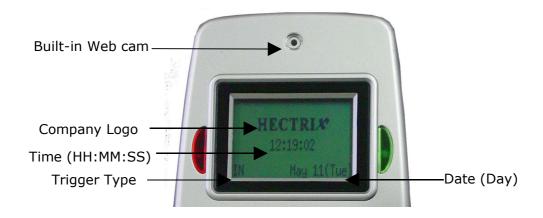
To begin operation of your ACTAtek 2^{TM} , you must make sure it is connected to a 12V DC Power supply with the network cable securely attached to the port. Once your unit is powered up, the following screen should appear, the Hectrix logo, the system clock, the Trigger should appear in the left corner, and the date/day of the system in the right corner. On the next page, the keypad will be described as to how to access the unit for all the functionalities.





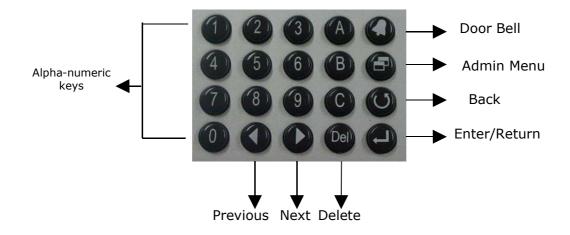
5.2. LCD Module

The Standby Screen displayed when the ACTAtek2 $^{\text{TM}}$ is first powered up is as shown below. It has basic information such as the company logo, time, trigger type, date and day displayed when the system is idle and is not currently in use.



5.3. Keypad Module

The keypad module, displayed below, has various menu options and alpha-numeric keys, below is a brief description of the keypad.





5.4. Fingerprint Scanner Module



The biometric fingerprint module uses optical scanner technology with a 500 dpi resolution and it can be accessed either with a 1:1 authentication or 1:M authentication. The 1:M authentication, although convenient, has its limitation in the maximum number of users.

With any database, the more users in the system, the slower the authentication & verification time of the unit since the system has to check its entire database for that 1 specific fingerprint for authentication. It is therefore highly recommended for users to key in their ID, and then presents their fingerprint for a much quicker & accurate verification process.

The steps for a successful enrollment have been discussed earlier in the Fingerprint Notes section, for more information on the scanner and its technology; please refer to Chapter 3 on Fingerprint Notes.



Chapter 6. System Configuration

6.1. Login

Logging In to the ACTAtek2 ™ Admin System

There are two ways for a Super Administrator to log in to the ACTAtek2 system, one by fingerprint, and two by password. To login via fingerprint, do read up on the fingerprint enrollment procedure and follow the below steps to login.

Logging in via Password:

- Press the Admin Menu Button on the keypad of your ACTAtek2™ unit.
- · The system will prompt for the Admin ID. (Default: A999),
- · Press Enter / Return
- The system will prompt for the Password. (Default: 1)
- Press Enter / Return, and you will see the Administration Menu.

Logging in via Fingerprint:

- Press the Admin Menu Button on the keypad of your ACTAtek2™ unit.
- The system will prompt for the Admin ID. (Default: A999),
- · Place your fingerprint on the scanner.
- · Once successfully enrolled, you will see the Administration Menu.







- Once logged into the system, a number of different actions can be performed, ranging from:
- · Adding New Users via Fingerprint/Password/Smart Card.
- Managing Users by Activating/Deactivating/Deleting Users from the system.
- Configuration of Fingerprint Options, such as Auto Match and Fingerprint Capture.
- Configuration of the Date & Time of the system.
- Managing the network settings, including IP assignment, Subnet Mask, DNS, and so on.



• Resetting the system and other miscellaneous terminal settings can also be done.

Each of these steps will be discussed in detail in the following sections, starting from Adding a new user to Exiting from the system.

Changing the Default ID & Password:

The first thing to do with the unit is to change the Administrator ID & password, to do so:

- Log in to the web interface using a web browser. (Make sure the ACTAtek2[™] is connected to the network)
- 2. Default ID: A999, Default Password: 1, Super Administrator, and click OK
- 3. Go to "View User List", click on the ID "A999".
- 4. Enter the new Administrator ID, and Password, and click "Modify". (The name and other details can also be changed here either now or later)

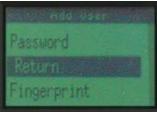


6.2. Add User

6.2.1. Adding A New User via Fingerprint

• After successfully entering the Administrator Menu, select the first icon on the top left of the screen, which is for Adding A New User.







- · Press Enter/Return
- · Press Previous/Next until "Fingerprint" is Highlighted
- · Press Enter/Return
- · Enter the ID for the new user, e.g. AB01
- · Press Enter/Return







- 3 Fingerprint Templates (default) will be requested, 3 images of 1 finger must be enrolled. If you have selected to enroll more than 3 templates, you will be requested to enroll more images of the same finger.
- After each successful enrollment, the "Template Stored" message will be displayed, press Enter/Return to enroll another fingerprint.
- Enroll the second and third fingerprints by placing the finger on the sensor, and allow it to process. Once "Template Stored" message has been displayed, press Enter/Return.







- After successful enrollment of the third fingerprint, the message "User Added" will be displayed.
- Press Enter/Return to add another user, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.



6.2.2. Adding A New User via Smart Card

• After successfully entering the Administrator Menu, select the first icon on the top left of the screen, which is for Adding A New User.





- Press 'Enter/Return'
- Press 'Previous/Next' until "Smart Card" is Highlighted
- · Press 'Enter/Return'
- · Use the 'Previous/Next' buttons to highlight "New User".
- · Press 'Enter/Return'
- Enter the ID for the new user, e.g. AB02
- · Press 'Enter/Return'





- · Place the smart card over the keypad.
- If successful, the write progress will be completed and "Success" will be displayed.



6.2.3. Deleting A Smart card user

• After successfully entering the Administrator Menu, select the first icon on the top left of the screen, which is for Adding A New User.







- · Press 'Enter/Return'
- Press 'Previous/Next' until "Smart Card" is Highlighted
- · Press 'Enter/Return'
- Use the 'Previous/Next' buttons to highlight "Delete Smartcard".





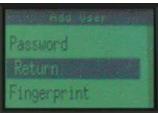
- Place the smart card over the keypad.
- If successful, the delete progress will be completed and "Success" will be displayed. The card will then be available for use for another user.



6.2.4. Adding A New User via Password

- After successfully entering the Administrator Menu, select the first icon on the top left of the screen, which is for adding a New User.
- Press Enter/Return







- · Press Previous/Next until "Password" is Highlighted
- Press Enter/Return
- Enter the ID for the new user, e.g. AB03
- · Press Enter/Return





- Enter a unique password for the new user, e.g. ABC234
- Press Enter/Return
- Once addition is completed, the "Success!" message will be displayed.
- Press Enter/Return to add another user, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.



6.3. Error Messages

Beware Of...



A "Bad Quality" warning will be displayed if the fingerprint enrolled is not of acceptable quality by the system.

The reasons for the message could be manifold, either due to too little pressure on the sensor, or too much pressure on the sensor, both of which could result in an inaccurate reading of the fingerprint captured.

Another reason could be the placement of the finger is not correct, or the finger you are enrolling does not have a good fingerprint core to capture a good image. It is recommended that you do not use the pinky finger for registration and use either one of the other 4 fingers.



A "User Exist" warning will be displayed if you add the same ID that previously exists in the unit.

To avoid running into this problem, please make sure that all user ID's assigned are unique and that they are not randomly assigned.

Also, to override users, you can press Enter/Return or press Back to cease any override, and re-enter a unique user ID.

A999 cannot be used as a new ID since it is the system default's Administrator ID.



1. Access Denied

This message will be displayed when and if the user provides invalid login information, such as invalid ID, password, fingerprint or smart card.

2. Unauthorized

This message will be displayed when the user tries to login during an unauthorized time period. (For information on Access groups and time settings, please refer to P. 31). In addition, if users do not have access to a particular terminal, and they try to access it, they will receive the "Unauthorized" message.

3. Primary Offine

Message will be displayed at the secondary unit and its Primary is unreachable. The secondary unit's LCD will continuously display "Primary Offline" and beep. The message will disappear as soon as the secondary can access primary unit.

4. Failed (to join Primary unit)

Failed -1: Primary unreachable, wrong Primary IP address.

Failed -2: Incompatible Firmware or Fingerprint module version.

Failed -9: Timeout



6.4. User Management

6.4.1. User Management – Activating A User

- After enrolling a few users into the system, you can manage them with the User Management option under the Administrator Menu.
- Select the second icon on the top left of the screen, which is for User Management.







- To activate a user, press the Previous or Next buttons until "Activate User" has been highlighted.
- Press Enter/Return
- · Enter the User ID for activation, e.g. 6
- Press Enter/Return
- If the user exists, and is successfully activated, the above screen will be displayed with the green LED blinking.
- Press Enter/Return to activate another user, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.



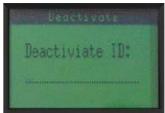


6.4.2. User Management – Deactivating A User

- After enrolling a few users into the system, you can manage them with the User Management option under the Administrator Menu.
- Select the second icon on the top left of the screen, which is for User Management.







- To deactivate a user, Press the Previous or Next buttons until "Deactivate User" has been highlighted.
- Press Enter/Return
- Enter the User ID for deactivation, e.g. 6
- · Press Enter/Return



- If the user exists, and is successfully deactivated, the above screen will be displayed with the green LED blinking.
- Press Enter/Return to deactivate another user, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.

6.4.3. User Management – Deleting A User

- After enrolling users into the system, you can manage them with the User Management option under the Administrator Menu.
- Select the second icon on the top left of the screen, which is for User Management.









- To Delete a user, press the Previous or Next button until "Delete User" has been highlighted.
- Press Enter/Return
- · Enter the User ID for deleting, e.g. 6
- Press Enter/Return



- If the user exists, and is successfully deleted, the above screen will be displayed with the green LED blinking.
- Press Enter/Return to delete another user, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.*

*WARNING: Deleting a user will remove ALL of his/her information from the system, including access logs, and personal details. Please make sure that you have backed up the information before making any changes to the user list, just so you have something to roll back to.



6.5. Auto Match

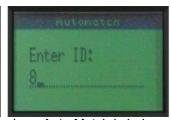
Auto Match - Enable/Disable

After enrolling users into the system via fingerprint, Auto Match may be enabled for individual users. The primary function of Auto Match is to allow users to access the system without inputting their ID first. All they need to do to gain access is to place their fingers on the scanner and let the ACTAtek2TM do the rest. Verification is quicker if few people are enrolled into the system, and if few people are allowed to use the Auto Match feature. It is highly recommended that Auto match be limited in use and if used for all users, it should be understood that the verification time will be longer than if you input your ID and then fingerprint. Authentication methods are discussed in earlier sections; please refer to Section 8 on P.18 for more information on authentication & verification of ACTAtek2TM.

6.5.1. To Enable Auto Match

- · Select the third icon on the top left of the screen, which is for Auto Match
- Press 'Enter/Return' once "Auto Match" is highlighted.







- Enter the ID of the user for whom Auto Match is being enabled, e.g. 8.
- Press 'Enter/Return'
- If the user exists in the system, and their Auto Match function was not previously enabled, the message "Automatch Enabled!" will be displayed with the blinking Green LED.
- Press 'Enter/Return' to enable Auto Match for another user, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.5.2. To Disable Auto Match

- · Select the third icon on the top left of the screen, which is for Auto Match
- · Press 'Enter/Return' once "Auto Match" is highlighted.







- Enter the ID of the user for whom Auto Match is being disabled, e.g. 8.
- · Press 'Enter/Return'.
- If the user exists in the system, and has previously enabled their Auto Match function, the message "Automatch Disabled!" will be displayed with the blinking Green LED.
- Press 'Enter/Return' to disable Auto Match for another user, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.6. Date & Time

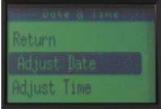
Date & Time Function

ACTAtek2TM can be used as both an Access Control system, as well as a Time Attendance System. For this reason, it is critical to set the correct date & time function, so that the unit works and records the correct time of the attendance data for payroll or other HR purposes. This part shows how to make changes to the Date & Time function directly at the unit.

6.6.1. To Modify the Date Settings

- Select the icon on the top right of the screen, which is for Date & Time Settings.
- · Press 'Enter/Return' once "Date & Time" is highlighted.







- · Press the 'Previous and Next Button'(s) until the "Adjust Date" option is highlighted.
- · Press 'Enter/Return'
- This shows the Current Date of the System, and you can enter the New Date to modify it in YYYY/MM/DD format.
- Press 'Enter/Return' to Save, if successful, the below screen with the message "Date Adjusted" will appear.



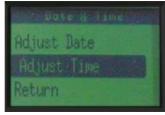
• Press 'Enter/Return' to modify the Time or other settings, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.6.2. To Modify the Time Settings

- Select the icon on the top right of the screen, which is for Date & Time Settings.
- Press 'Enter/Return once "Date & Time" is highlighted.







- Press the 'Previous and Next Button'(s) until the "Adjust Time" option is highlighted.
- · Press 'Enter/Return'
- This shows the Current Time of the System, and you can enter the New Time to modify it in HH:MM:SS format.
- Press 'Enter/Return' to Save, if successful, the below screen with the message "Time Adjusted" will appear.



 Press 'Enter/Return' to modify other settings in the Date & Time Menu option, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.7. IP Settings

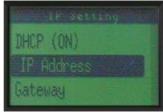
IP Settings Function

ACTAtek2TM is a web-based system, and works similarly to an Internet Appliance. In saying so, it has its own IP Address assignment, either by using Dynamic or Static Assignment. This would allow web browsing software, such as Internet Explorer, Netscape Navigator, Mozilla, or others to access the device without much hassle, as long as it is in the same network as the corporate LAN (Local Area Network). Below are the basic steps on how the IP Address for the ACTAtek2TM unit can be modified, so as to enable communication within a corporation's web browsing software.

6.7.1. IP Address Configuration

- · Select the icon on the bottom left of the screen, which is for IP Settings.
- Press 'Enter/Return' once IP Settings is highlighted.







- Press the 'Previous/Next' buttons to highlight "IP Address", press 'Enter/Return'.
- Once selected, the Current IP Address will be displayed, and the new modification can take place
- Enter the New IP Address and Press 'Enter/Return'.
- If successful, a "Success" message will be displayed and the green LED will be blinking.



 Press 'Enter/Return' to modify other settings in the IP Settings option, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.7.2. Default Gateway Configuration

- · Select the icon on the bottom left of the screen, which is for IP Settings.
- Use the 'Previous / Next' button until the "Gateway" option is highlighted
- · Press 'Enter/Return'







- The Current Default Gateway address will be displayed
- The New Default Gateway Address can be entered here.
- · Once entered, press 'Enter/Return'.
- If successful, a "Success" message will be displayed and the green LED will be blinking.



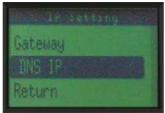
• Press 'Enter/Return' to modify other settings in the IP Settings option, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.7.3. DNS IP Configuration

- · Select the icon on the bottom left of the screen, which is for IP Settings.
- Use the Previous / Next button until the DNS IP* option is highlighted.
- Press Enter/Return







- · The Current "DNS IP" address will be displayed
- The New DNS IP Address can be entered here.
- · Once entered, press 'Enter/Return'.
- If successful, a "Success" message will be displayed and the green LED will be blinking.



 Press 'Enter/Return' to modify other settings in the IP Settings option, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.

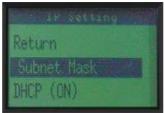
*Note: DNS IP is used to map names to IP Address and vice versa.



6.7.4. Subnet Mask Configuration

- · Select the icon on the bottom left of the screen, which is for IP Settings.
- Use the Previous / Next button until the Subnet Mask option is highlighted.
- Press Enter/Return







- · The Current "Subnet Mask" address will be displayed
- The New Subnet Mask Address can be entered here.
- Once entered, press 'Enter/Return'.
- If successful, a "Success" message will be displayed and the green LED will be blinking.



 Press 'Enter/Return' to modify other settings in the IP Settings option, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.7.5. DHCP IP Configuration

DHCP Configuration allows for IP Addresses to be dynamically assigned, and match with that of the corporate LAN settings. With this option, the IP Settings do not have to be statically assigned and the process can be simplified. Below are the steps for enabling or disabling the settings.

6.7.5.1. To Enable DHCP:

- · Select the icon on the bottom left of the screen, which is for IP Settings.
- Use the 'Previous / Next' button until the "DHCP" option is highlighted.







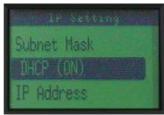
- · Press 'Enter/Return'.
- The Current status of the DHCP will be displayed, if it is "DHCP (OFF)", it will be enabled.
- If successful, a "DHCP Enabled" message will be displayed and the green LED will be blinking.
- Press 'Enter/Return' to modify other settings in the IP Settings option, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.7.5.2. To Disable DHCP:

- Select the icon on the bottom left of the screen, which is for IP Settings.
- Use the 'Previous / Next' button until the "DHCP" option is highlighted.
- Press 'Enter/Return'.







- The Current status of the DHCP will be displayed, if it is "DHCP (ON)", it will be disabled.
- If successful, a "DHCP Disabled" message will be displayed and the green LED will be blinking.
- Press 'Enter/Return' to modify other settings in the IP Settings option, or Press the 'Menu' button to go back to the Administrator Menu Screen, or hit 'Back' twice to exit from the system.



6.8. Terminal Settings

6.8.1. Terminal Settings Function

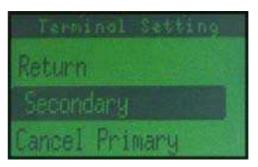
The terminal settings feature allows users to set the ACTAtek2™ in a multi-user environment, and to configure its Primary unit. This will allow units to be synchronized with one another and communication between the units will be enabled. This feature can also be configured in detail via the web interface.

Moreover, the Terminal Settings option can allow users to set the Security Level from High to Low, with High Fingerprint Security allowing for maximum minutiae to be accounted for during authentication. The Low settings take the minimum number of minutiae into accounting for the lowest security level. The settings can be modified for companies who are using the system primarily for Time Attendance purposes or even for those users whose fingerprint are difficult to read.

6.8.1.1. Check if your unit is configured to Primary or Secondary

- Select the second icon on the bottom left of the screen, which is for Terminal Settings.
- If it is a Primary unit, the phrase "Primary" will be displayed, as shown below.





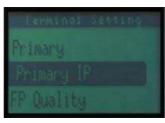
If it is a Secondary unit, the phrase "Secondary" will be displayed, as shown above. The
unit by default is a Primary unit, however, if you give it another Primary unit's IP Address
and ask it to follow those settings, it will turn itself into the Secondary unit, and the
appropriate message will be displayed. Below are the procedures on how to enable
another unit to be the Primary unit.

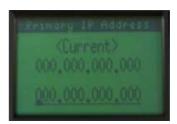


6.8.1.2. To Enable the Primary Configuration

- Select the second icon on the bottom left of the screen, which is for Terminal Settings.
- Use the Previous / Next button until "Primary IP" is highlighted.
- · Press Enter/Return







- · The Current Primary IP address will be displayed
- The New Primary unit's IP Address can be entered here.
- · Once entered, press Enter/Return
- If successful, a "Success" message will be displayed and the green LED will be blinking.
- Press Enter/Return to modify other settings in the Terminal Settings option, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.

6.8.1.3. To Disable the Primary Terminal Configuration

- Select the second icon on the bottom left of the screen, which is for Terminal Settings.
- Use the Previous / Next button until "Cancel Primary" is highlighted.
- · Press Enter/Return.







- If successful, a "Success" message will be displayed and the green LED will be blinking.
- Press Enter/Return to modify other settings in the Terminal Settings option, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.



6.8.1.4. Fingerprint Security Level Settings

- · Select the second icon on the bottom left of the screen, which is for Terminal Settings.
- Use the Previous / Next button until "FP Quality" is highlighted.
- Press Enter/Return





• The three options to select from include: High, Normal or Low. Each of which will give you the following display messages:







 Press Enter/Return to modify other settings in the Terminal Settings option, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.

HECTRIX LTD.



6.8.2. No. of FP Sample

- Select the second icon on the bottom left of the screen, which is for Terminal Settings.
- Use the Previous / Next button until "No. of FP Sample" is highlighted.
- Press Enter/Return



- The three options to select from include: Normal:3 (default), Accurate: 5, and Precise: 7. Once selected, the system will take that number of FP templates during enrollment of new users.
- · Select one and press 'Enter/Return' to save settings.
- Press Enter/Return to modify other settings in the Terminal Settings option, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.

HECTRIX LTD.



6.8.3. Unlock Door

- · Select the second icon on the bottom left of the screen, which is for Terminal Settings.
- Use the Previous / Next button until "Unlock Door" is highlighted.
- · Press Enter/Return to unlock the door.



 Press Enter/Return to modify other settings in the Terminal Settings option, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.

6.8.4. System Reboot

- Select the second icon on the bottom left of the screen, which is for Terminal Settings.
- Use the Previous / Next button until "Reboot" is highlighted.
- · Press Enter/Return to reboot the unit.



6.9. Reset

Reset Setting Function

Resetting the User Database and Event Log can be done from the unit directly. This is essential if for some reason the company would like to remove all data from the system completely. However, it is highly recommended to make a backup of the entire database before the system has been reset.



6.9.1. Resetting the Event Log

- · Select the third icon on the bottom left of the screen, which is for Reset Setting.
- · Use the Previous or Next button until "Event Logs" is selected
- · Press Enter/Return







- If successful, a "Success" message will be displayed and the green LED will be blinking.
- Press Enter/Return to modify other settings in the Reset Setting option, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.

6.9.2. Resetting the User Database

- · Select the third icon on the bottom left of the screen, which is for Reset System.
- Use the Previous or Next button until "User Database" is selected
- · Press Enter/Return







- If successful, a "Success" message will be displayed and the green LED will be blinking.
- Press Enter/Return to modify other settings in the Reset Setting option, or Press the Menu button to go back to the Administrator Menu Screen, or hit Back twice to exit from the system.

6.9.3. Factory Default

- · Select the third icon on the bottom left of the screen, which is for Reset System.
- Use the Previous or Next button until "Factory Default" is selected.
- · Press Enter/Return
- A message "System Reset" will be displayed once the system has been successfully reset.



6.10. Exit

Exit Function

Once all your settings have been completed, you can either exit the system using the Back button on the keypad or by using the Exit option in the Administration Menu, as shown below.



- Select the icon on the bottom right of the screen, which is to Exit from the Admin Menu.
- Press Enter/Return, and the Standby Mode will be displayed.



Chapter 7. Web Administration

Introduction

ACTAtek2TM works based on the TCP/IP networking protocol and web server technology, which allows for remote administration via any standard web browser, e.g. Internet Explorer or Netscape Navigator. We have used Internet Explorer as our demonstrative guide; it works the same way with Netscape or any standard web browser. For queries regarding this, contact us at support@hectrix.com.

ACTAtek2[™] permits for 4 access levels:

- Personal User
- · User Administrator
- Network Administrator
- Super Administrator



Personal User

The personal user login only allows for users to check their attendance records, and view their reports. No changes or modification is admissible through this configuration option. This is for employees who wish to check their attendance records or other reports generated by the system.

User Administrator

The user administrator access level lists a different set of configuration changes that can be made. More so, to pertain to HR or Payroll requirements. The changes can be made to Access levels of different departments, addition and monitoring of job functions, reporting, as well as, managing the employee list. Addition / deletion of employees can be done here, restricting access to rooms for different employees can also be done by the user administrator.

Network Administrator

The network administrator is in charge of system configurations, such as, networking settings, terminal settings, clock setups, or password setups. Everything that involves technical knowing will be done by the network administrator. This role is usually assigned to a techsavvy person, who is capable of making appropriate configuration changes and has basic knowledge of networking setup and IT-related issues.

Super Administrator

The super administrator login combines the functions of 1 - 3, so the administrator is in charge of the whole system, including technical and administration functionalities. This guide is focusing on the Super Administrator usage which essentially cover all the functions.



7.1. SSL Certification – Data Encryption

When http://192.168.1.100 (default IP Address of the ACTAtek2 $^{\text{TM}}$ unit) is typed on the address bar of IE or netscape or any other web browser, the login page will appear. Click on "Secure" to login using secure SSL data encryption, so that ALL the exchange of data is encrypted and secure.



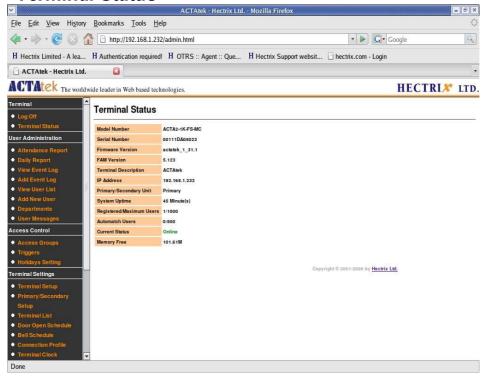
After selecting "Secure" login, the above screen will be displayed and to go on to login to view the web interface of ACTAtek2, select either "Accept this certificate permanently" or "Accept this certificate temporarily for this session". It is recommended to have the temporarily selected if you are not using your PC / laptop for this http session, so that others cannot use this site without the proper authentication. Make the selection and click "OK".

If you do not wish to continue in secure mode, select "Do not accept this certificate and do not connect to this Web site", or simply click "Cancel".

The login page will reappear, input the login ID and password, and login level to proceed.



7.2. Terminal Status



The first page displayed, as above, will be the same no matter which login is chosen. It will show a brief status of the terminal. The information displayed includes:

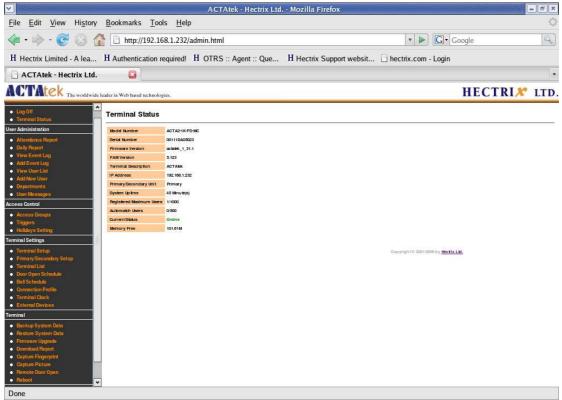
	<u>Feature</u>	<u>Description</u>
i.	Model Number	The Model Number of your ACTAtek2™ unit.
ii.	Serial Number	The Serial Number of your ACTAtek2™ unit.
iii.	Firmware Version	The software version installed in the unit. For ACTAtek2 only Firmware version 1.31.1 is installed by default.
iv.	FAM Version	The Fingerprint Software version installed in the unit.
V.	Terminal Description	A brief description of the terminal.
vi.	IP Address	The IP address assigned to the unit, Default: 192.168.1.100
vii.	Primary / Secondary Unit	This will let you know if the unit you are viewing is Primary / Secondary.
viii.	System Uptime	This informs you how long the system has been operating without a reboot
ix.	Registered/Maximu m users	This informs you how many users are Registered and the maximum no. of users supported by the system.
Χ.	Automatch Users	Number of users enabled with Automatch Feature. The maximum is 500 users for FAM 5.123 and above
xi.	Current Status	The current status of the unit.
xii.	Memory Free	The memory free on the unit.



Chapter 8. Super Administration Guide

8.1. Overview

After logging in under Super Administrator (Default ID: A999, password: 1), the left panel will differ from the other administrator(s), as can be seen below. All options will be available for configuration and modification of the system and user configurations.



The System Administrator is usually the person that takes charge of the whole system, which includes the networking and technical side of things, as well as the HR and administration side. The Super administrator option is either a top executive who has control over the company data and knows the technical aspect too. Moreover, for small companies the roles of both the User and Network administrator(s) may be combined to one, and this is where the Super Administrator comes to play.

HECTRIX LTD.



From the left panel, the user administrator will be able to choose from the following:

8.1.1. Terminal

2. Daily Report

Log off
 To log off from the system

2. Terminal Status - To view the overall terminal status

8.1.2. User Administration

1. Attendance Report - To view the attendance report of users in the sys tem

3. View Event Log - To view the event log of the users in the system

5. VIEW EVERT LOG - TO VIEW the event log of the disers in the system

4. Add Event Log - To add an event log in to the system

5. View User List - To view the list of users in the system

6. Add New User - To add a new user into the system

7. Departments - To view the list of departments or add a new de

partment

8. User Messages - To send personalized messages to individual

users during clock IN/OUT

- To view the daily report of users in the system

8.1.3. Access Control

1. Access Groups - To view or modify existing access groups or add a

new group

2. Triggers - To view or modify the trigger list.

3. Holidays - To setup the systems for recognizing holidays for

8.1.4. Terminal Settings

unique settings.

 Terminal Setup
 To view modify the terminal settings, e.g. IP / Gateway.

2. Primary / Secondary Setup - To setup the units in primary / secondary mode.

3. Terminal List - To view the list of terminals connected.

4. Door Open Schedule - To view or modify the door opening schedule.

5. Bell Schedule - To view or modify the bell schedule period.

6. Connection Profile - Use for manual Agent configuration.

7. Terminal Clock - To view or modify the terminal clock settings.

8. External Devices - To connect external devices to the ACTAtek2 unit.

HECTRIX LTD.



8.1.5. Tools

1. Backup System Data - To backup the system data.

2. Restore System Data - To restore the system data from a previous set

ting.

3. Firmware Upgrade - To upgrade the firmware provided by Hectrix Ltd.

4. Download Report - To download access log report in Excel or Txt for

mats.

5. Capture Fingerprint - To capture fingerprint images(for review purpose).

6. Remote Door Open - To open the door using the web interface.

7. Reboot - To reboot the unit remotely.

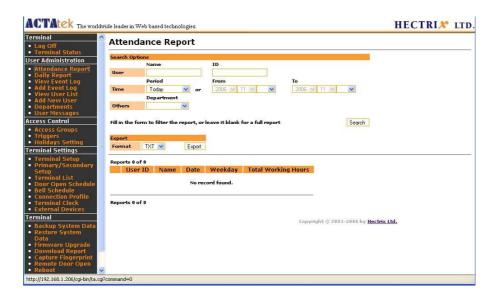
The above is a brief overview of what the features on the left panel are for, in the next session, you will be able to understand in more detail what each function does, and how to set up your ACTAtek2™ and manage the system settings.



8.2. User Administration

8.2.1. Attendance Report

Under User Administration, select the option listed as "Attendance Report", by clicking this following screen should be displayed:



This report will give you a summary of the IN/OUT of any given user (up to 10 sets of IN/OUT).

There are 4 different searching options available to view the Attendance Report which include "Name", "User ID", "Fixed Period" or "Specific Range of Date" and "Department".

The information that can be viewed as "User ID" followed by "Name", "Date", "Day of Weekday", "IN/OUT Time" and "Total Working Hours".

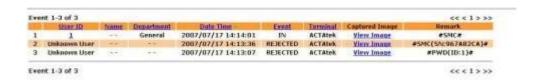
You get an overview of the Total Hours worked by any given employee on any day, provided the event logs haven't been deleted. This information can then be exported to Excel or text files.





8.2.2. View Event Log

Under User Administration, the first option listed is "View Event Log", by clicking this following screen should be displayed:



There are 6 different searching options available to view the Event Log which include "User Name", "User ID", "Department", "Event", "Period" or specify the "Dates To & From".

The information listed by an event log is "User ID" followed by "Name", "Department", "Date & Time", "Event", "Terminal", "Capture Image" and "Remark".

The Remark column shows how the user has gotten access by PIN, Fingerprint or Smartcard. It shows the login ID for PIN, the Smartcard number by card. If the Log Unauthorized Event is enabled, you can see which method the unknown user tried to gain access whether it is smartcard, fingerprint or PIN.

To sort the list, click on the column header, for instance, to sort by Event, click on the column header "Event", which is in blue, and the list will be sorted in alphabetical order. By default, the displayed list is sorted by Date/Time.

8.2.2.1. Deleting Event Logs

To delete event logs, click the drop-down menu at the bottom of the page, and you have an option to clear logs that are older than the available selection time. These are "this week", "last week", "this month" and "last month".

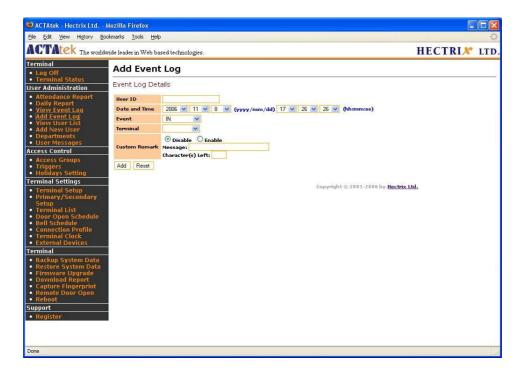
8.2.3. Adding An Event Log

There are many times when a user forgets to clock in or clock out from their terminal. This option is especially introduced for Administrators to make the export of the data more accurate so that it can be easily handled by any payroll system without much hassle.

Only User Administrators and Super Administrators have the power to add/modify an event log, which could cause changes to the report and must be treated carefully. The following shows you how to add an event log into the system.







Select "Add Event Log" under User Administration from the left of your screen, and the above screen should be displayed.

Enter the Employee ID for whom the event is being added, and enter the Date & Time in yyyy/mm/dd & hh:mm:ss formats. Select the Event & Terminal being added from the drop down menus. Select the radio button "Enable" to add a remark to this event log entry (optional).

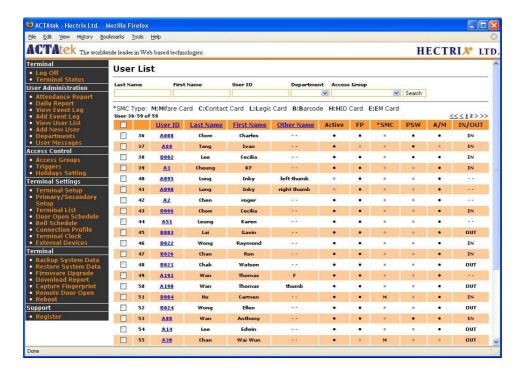
Click "Add" to append the event to your unit or "Reset" to cancel any changes made. Once Add is successfully completed, the confirmation message "Add Event Log Successful" should appear in red.

8.2.4. View User List

To view the users already enrolled in the system, either by fingerprint or smart card or PIN, click on "View User List" under User Administration from the left column.







There are 5 different searching options available to view the User List which include "Last Name", "First Name", "User ID", "Department" or "Access Group".

The information listed in a user entry is "User ID" followed by "Last Name", "First Name", "Other Name", "Active, FP", "SMC", "PSW", "A/M" and "IN/OUT".

Description of Information displayed:

Feature	Description
i. Active	The Status of the User: Black –Active, Grey - Inactive
ii. FP	Whether Fingerprint is an available authentication option.
iii. SMC	Whether Smart Card is an available authentication option.
iv. PSW	Whether Password / PIN is an available authentication option.
v. A/M	Whether Auto-match is an available authentication option.
vi. In/Out	Whether the user is currently In or Out of Premises.



8.2.4.1. To sort:

To sort the list, click on the column header, for instance, to sort by Last Name, click on the column header "Last Name", which is in blue, and the list will be sorted in alphabetical order. By default, the displayed list is sorted by ID.

8.2.4.2. To Delete/Deactivate/Activate Users:

To delete users from the system, you can select the checkboxes on the left of the ID under User List. If all the users need to be deactivated/deleted/activated, click the "Select All" to check ALL boxes. To cancel the selection, click on "Deselect All". Once selected, click the respective buttons at the bottom of the page, as shown below.



Once deleted, the user will no longer be in the system and all their relevant information will be removed from the system, so make sure you really want to delete them before carrying out the process. Deactivation can take place if users or employees are no longer required to use the system for a period of time to prevent unauthorized access to the premises. Once you deactivate a user, the dot in the column "Active" will appear grey. To activate them again, check the box next to their ID and click "Activate". This is a lot more flexible than deleting a user, since it will keep the user in the system but just restrict access for the specified time.

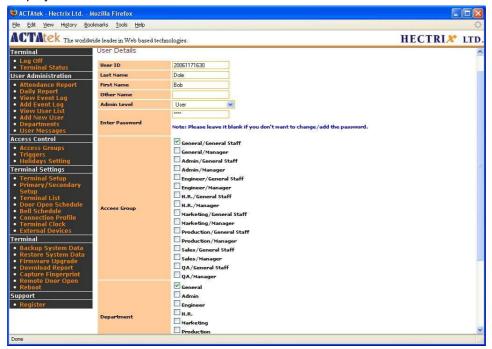


8.2.5. To Add New Users

There are 2 ways of adding users to the system; you can either add them directly at the web interface, or at the terminal. We have already discussed how to add a user at the terminal (in Section 5.2), now let us look at how to add a user directly from the web interface.

8.2.5.1. To Add A New User:

Click on "Add New User" from the left column under "User Administration", the following page will be displayed:



Enter the User ID, Last Name, First Name, Other Name, Admin Level and enter the password in the following field. Check the relevant boxes for the relevant Access Group, this will limit or give them access at different times or doors, depending on the configuration made.

Assign the Department for the user accordingly. Select a desired fingerprint security level which ranges from Low – Normal – High – Highest. This selection affect only to the ID match ONLY and does not affect to Automatch feature.







Select the status of the user, whether they can use Auto Match or Password, and click "Add" to add the new user.

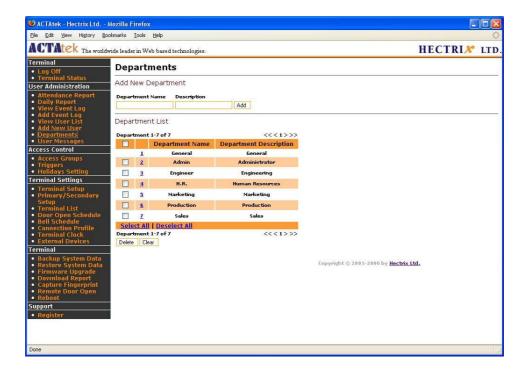


8.2.6. Departments

This option under User Administration can be used to Add new departments, modify existing departments or delete them.

8.2.6.1. To Add a New Department:

Click on "Departments" under User Administration from the left column. Enter the Department Name, and description and click "Add" to append the department to the existing list.



8.2.6.2. To Modify Existing Departments:

Click on the Department ID, which will fill in the blanks above and make any changes, after which, clicking "Modify" would confirm the modification, or "Reset" to abort the modification.

8.2.6.3. To Delete Existing Departments:

Select the check boxes of the Departments to be deleted, once selected, click "Delete" to remove them from the list of Departments, or "Clear" to abort the deletion. Please note deleting a Department will cause its underlying Access Groups to be deleted too.





8.2.7. User Messages

This option can be used to send personalized messages to individual users, who will be able to view them once they are authenticated at the ACTAtek2™ unit.

8.2.7.1. To Add a New Message:

Click on "User Messages" under User Administration on the left column, the following screen should be displayed.

Enter the User ID of the user this message is for, and enter the message in the User Message text box. Click "Add" to send the message to the user or "Reset" to abort the message. Please ensure that the message does not contain more than 21 characters per line, a maximum of 3 lines are accepted per message.

Optionally, the message can either be displayed on the LCD screen of the ACTAtek2 or sent directly to their E-mail address, or both.



8.2.7.2. To Delete an existing User Message:

Check the box of the relevant message, and if all need to be checked, click "Select All", and hit "Delete". If the delete does not need to be made, click "Deselect All" to uncheck all boxes.



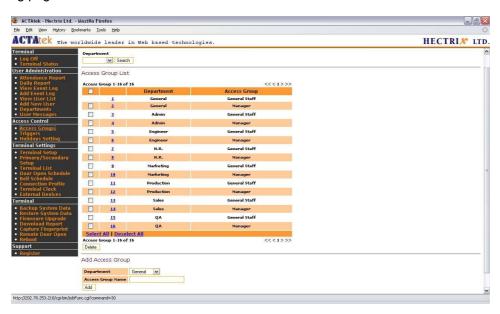
8.3. Access Control

8.3.1. Access Groups

An Access Group allows for users to be given standard access for the workplace. Different departments may have different access rights and some corporations have employers who are on shift duties, and may need different access levels for each shift, depending upon their time of entry and exit from the workplace. To fasten the procedure of giving access rights, it can now be done for groups, instead of individuals to simplify the process and give it more transparency. This option can only be configured by the User Administrator or the Super Administrator.

8.3.1.1. To View/Delete Existing Access Groups:

Click on "Access Groups" under "Access Control" from the left column, which will display the following page:



You can search the access groups by Department, and click "Search".

To Delete the Access Group(s), check the relevant box and click "Delete", or use the "Select All" option to select ALL the access groups; or use the "Deselect All" option to clear the selection.

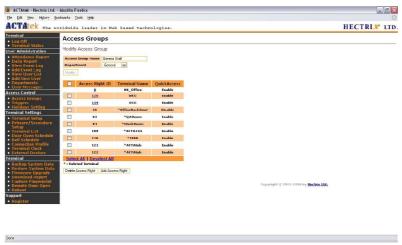


8.3.1.2. To Add a New Access Group

Under "Add Access Group", select the relevant Department from the drop down menu and input the name of the access group being added, and click "Add".

8.3.1.3. To Modify an Access Group

Click on the access group number to view the Access Group. There are two parts in this page.



The top part display the Access Group Name and associate Department. This can be modified by renaming the Access Group Name and/or assigning to a different Department.

The bottom part shows a list of Access Right exist under this Access Group.





8.3.1.4. To Add a New Access Right

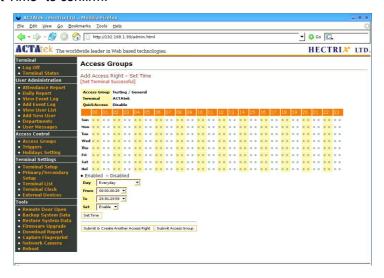
Click on "Add Access Right". Select which terminal this access right is for and whether Quick Access (Smart Card Access) is enabled or disabled for it. Click on "Set Terminal" for proceed, as shown in the following page.



On the next page select the days applicable for "Day". Check "Always" will apply to all days.

Then select the "From" and "To" time this access right is either enabled or disabled. (Disabled access means nobody is allowed access to the unit from the relevant access group. Each user is assigned an access group when they are added into the system.)

Once the timings are assigned, select whether the access is enabled / disabled in that period, and select "Set Time" to confirm.



By default all access is disabled.

You can now either add another time setting for the same access right by select "Set Time" or create another Access right by selecting "Submit & Create another Access Right" and repeat the above steps, or confirm this access group by clicking "Submit Access Group".





8.3.1.5. To Delete/ Modify Access Right

To delete any access right, under the Modify Access Group page, check the relevant box then click "Delete". If all access rights are to be removed, click "Select All" then click Delete to remove them from the system, or click "Deselect All" to undo the selection.

To Modify the Access Right, click on access right number under "Access Right ID".

The information that can be modified includes:

Quick Access: -Whether smart card option can be enabled.

The Access Time: -From what day to what time this Access Group is allow to access

to the terminal.

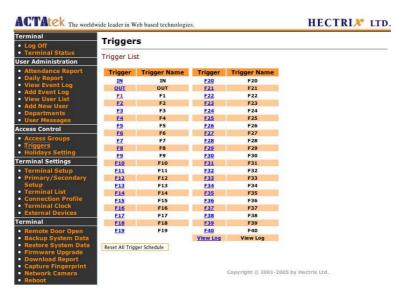


8.3.2. Triggers

8.3.2.1. To View or Modify Existing Trigger List

The "Triggers" option under Access Control shows you a number of different triggers preset into the system; this is for easy monitoring of attendance and other options. To view the list of triggers in the system, click on "Triggers" from the left column under Access Control.

To view or modify the details for the relevant trigger, click the "Trigger ID" on the left of the Trigger Name.



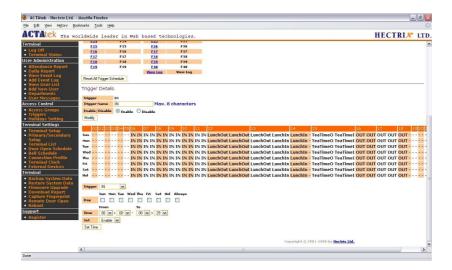
The Trigger status and description will be synchronized to all primary and secondary terminals. It may take a short while to synchronize all primary and secondary terminals status. A new secondary terminal joining a primary will initially copy the information from the primary unit's schedule. Users can then set each terminal's trigger schedule individually.

Setting a Trigger schedule will display the respective Trigger as the default Trigger on the bottom left corner of the ACTAtek2 unit, and will save the punch with that Trigger name. It has no relation with Access Groups.

This will display the following page that shows the time settings for the trigger, grey dots stand for disabled, while the black dots stand for enabled.







To modify the time settings & other information for the relevant trigger displayed, The information to be modified includes:

Trigger Name - Display name for the Trigger.

Day - The days for the setting to be adjusted.

From (Time) - Select the onset of this trigger.
To (Time) - Select the end of this trigger.

Set - Set whether to enable or disable it.

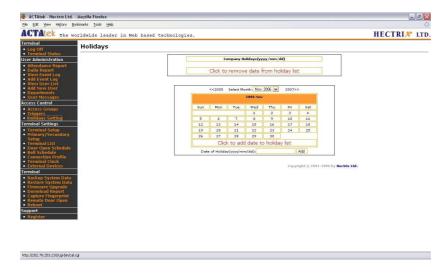
To confirm the change, click "Modify" to set the Trigger Name and "Set Time" to update the schedule.





8.3.3. Holidays Settings

The Holidays Settings option is for companies that have unique access rights or options for those days. Holiday setup can be done from "Access Rights Control" by clicking on "Holidays", which will show the following screen:



To add a new holiday, either click on the calendar to find the dates to add. Or type out the date in yyyy/mm/dd format and click "Add".

To remove holidays, click on the holidays already in the list and they will be automatically removed from the system.



8.4. Terminal Settings

8.4.1. Terminal Setup

To make any system configuration changes to the system, click on Terminal Setup under "Terminal Settings" from the left column. All system changes that are technically related will be available from this option for the network administrator.



The options that can be changed include Network Settings, Fingerprint Matching Setting & Miscellaneous Setting:

Terminal Description IP Address

Subnet Mask Default Gateway

DNS Server

Security Level (for Automatch)

No Log Event

Auto IN/OUT

Log Unauthorized Event

Door Strike 1/2 Option Relay Delay

Door Bell Bell Schedule

- The Description of the terminal
- The IP Address of the terminal (Dynamic or Static)
- If DHCP, it will be automatically inputted.
- The address for it to be connected over the internet.
- Used to map names to IP addresses and vice versa.
- -The Fingerprint Security level for the system. Lower the level for higher matching rate.
- Enable to ignore logging event.
- -this option automatically switches the users IN/OUT status without user intervention. Here you can also "Reject Repeated Event".
- This option will record every denied access to the system.
- Setting for Door Strike connectors.
- This will keep the door open for the seconds specified.
- To enable the door bell option on the unit.
- To enable the Bell schedule option.

HECTRIX LTD.



On Alarm When Open Door Exceed Limit

Network Camera

Weigand Output

Language

Webserver Port Allowed IP

2-digit Duress Code

SMTP Server

Administrator's Email Address

- Trigger the Alarm connector when door opened more than 30 seconds
- To enable external network camera during Remote Door Open.
- This option is to enable Weigand output from the unit.
- This option lets you select between various languages.
- Specify other port to use for the webserver.
- Restrict IP address(es) to access this web interface
- Numeric code use as duress code. This is used as prefix in the user password.
- SMTP Server for outgoing mail sent by the unit. Server with SMTP_AUTH server is not supported.
- Email for the system message to send to.



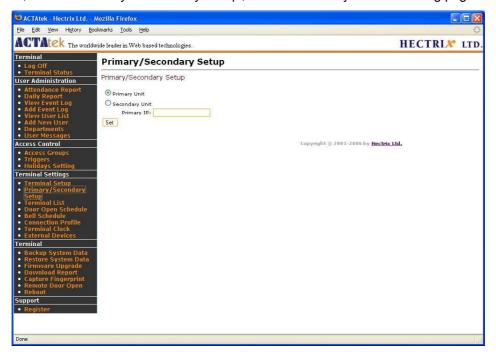


8.4.2. Primary / Secondary Setup

The Primary / Secondary option under "Terminal Settings" can be used to configure the Primary / Secondary configuration for a multi unit deployment of units.

To configure, first assign all the units in the network with a specific & unique IP address, once done, assign one unit as the Primary unit, and configure the rest of them as the secondary units.

To do so, click on 'Primary / Secondary Setup', which will show you the following page:



If the unit you are assigning is a secondary unit, then select the "Secondary Unit" radio button, and input the Primary unit IP Address in the text box.

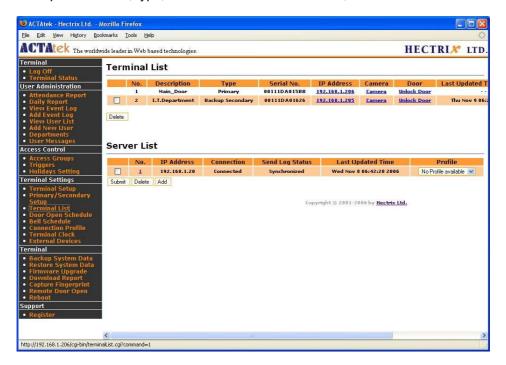
Click 'Set' to confirm. Once you have completed this step, the primary and secondary configuration should be configured successfully.





8.4.3. Terminal List

The "Terminal List" option under "Terminal Settings" can be used to view the list of terminals, and their respective name, type, serial number and IP Address, as shown below.



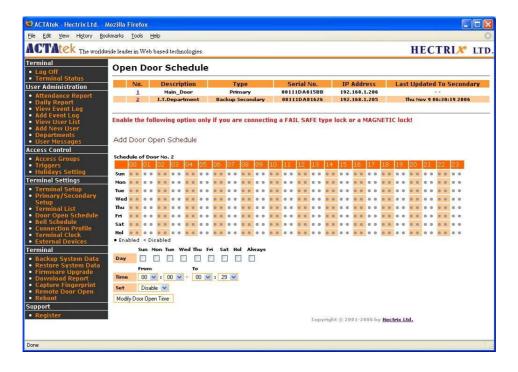
This will show all the units in connection with this unit, including all secondary and primary units connected through the network. Also, the Camera and Door can be viewed / unlocked from this page respectively. This link only allows for HTTP connection via Port 80.

8.4.4. Door Open Schedule

The Open Door Schedule is a feature to control the open access to the door entrance. Fill out the parameters in the page to set up the time for the open access time of the door entrance.





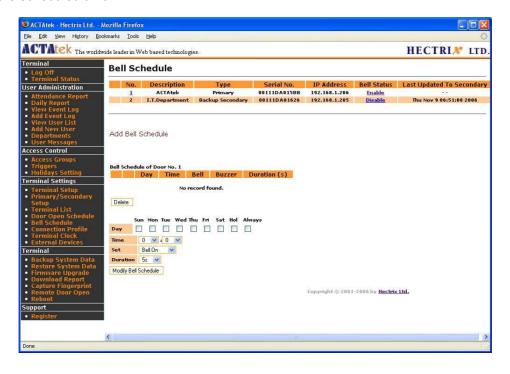






8.4.5. Bell Schedule

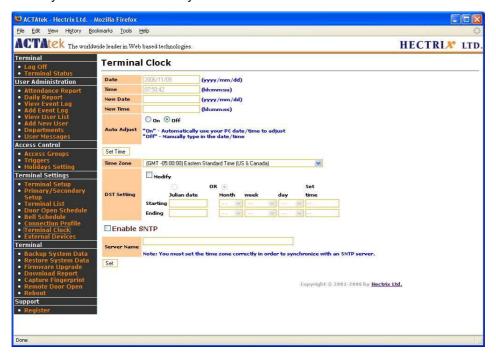
The Bell Schedule option needs to be enabled via Door Strike 2 Option under Terminal Setup page. Once enabled, ACTAtek2 is able to trigger a bell wired to the door strike 2 connector for the scheduled time.





8.4.6. Terminal Clock

The "Terminal Clock" can be modified according to the region you are in. It is extremely useful to have a correct timing for all time attendance purposes or for reporting purposes since that's the time the system will record for any access.



If the SNTP (Time server) is enabled, then the ACTAtek 2^{TM} will follow the time of the local time server, either provided by the government or other authorities in the region.

If the SNTP is disabled, the ACTAtek2™ will either have to follow the time on the PC or a time can be set for the device according to the local time settings.

To let ACTAtek2[™] to follow the time on the PC, select "On" for Auto Adjust. To disable this auto adjust, select "Off" and the time setting will be available for users to input the "New Date" and "New Time".

Also, time can be set according to regional Time Zones as presented here.

Click "Set" to save any modifications made.

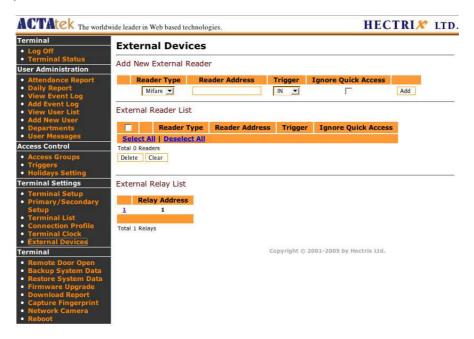




8.4.7. External Devices

To add any external devices, which include External Mifare Reader, or other smart card readers, the "External Devices" option can be used.

To do so, click on "External Devices" under Terminal Settings, and the following page should be displayed.



To add an external reader, select the 'Reader Type', the reader's Address, the trigger type and click Add once all fields are completed.

Once added, the reader will appear in the 'External Reader List'. To make any modifications to the reader configuration, select the number, and the page will be displayed where changes can be made. To delete the reader, select the check box and click 'Delete'.

When you connect external devices to the ACTAtek2, Firmware 1.31.1 and above will auto-detect the the devices.



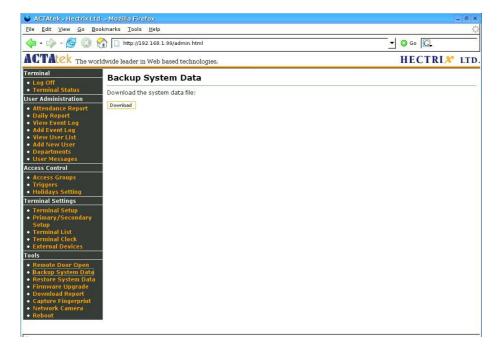
8.5. Terminal

8.5.1. Backup System Data

The system's configuration files can be saved, so as to share the configuration with different devices in the network. Or it could be helpful, just in case something goes wrong with the system, to rollback to a previous setting.

Backing up is an essential part of any computer parts or Internet Appliance; it can provide the added security and flexibility that is needed for these devices.

To backup the system configuration, click on "Backup System Data" under Tools from the left column of options.



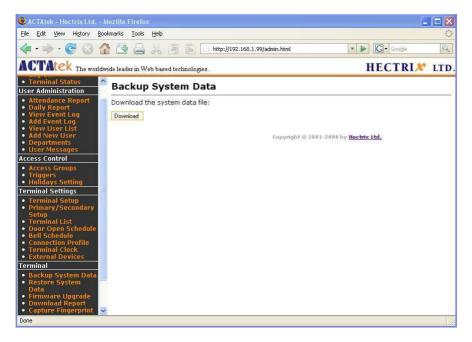
Once selected, click "Download" to download the data on to the PC. The system will then prompt to save the file in the PC, click on the specified location and save the file.





8.5.2. Restore System Data

Once backup is complete and the changes made to the system since the previous backup caused the system to work improperly or malfunction, you can always rollback to the previous setup by selecting the "Restore System Data" option under Tools in the left column.



Click "Browse" to locate the specified file, once located, click "Open".

Then click "Upload" to upload the file back into the system for the previous configuration to take place.



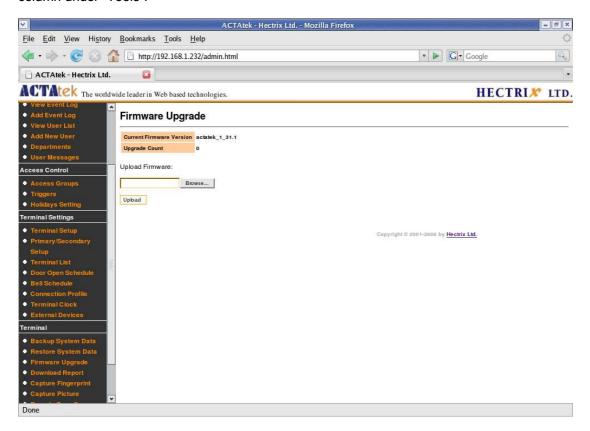


8.5.3. Firmware Upgrade

Firmware releases will be carried out on a regular basis, first with a monthly release, then quarterly and then an annual release.

Hectrix will continue to add new features to its unit and have a monthly firmware upgrade to include those features for our clients.

To upgrade your unit with the latest firmware, click on "Firmware Upgrade" from the left column under "Tools".



Click "Browse" to locate the firmware (once downloaded to your machine from our website). Click "Open" once the file has been located, and "Upload" to upload it to your system. You will then be prompted to upgrade your system, this should take a couple of minutes. Once upgraded, please do reboot the unit to take effect the new firmware.

Also from this page, the current firmware version can be seen, and the upgrade count is also available to show you how many times the system has been upgraded, for your reference purposes. Once upload is clicked, the system will install the new firmware and your system will reboot automatically to let the new changes take effect.

8.5.4. Download Report

The Download Report option allows for easy download of attendance reports of employees in excel (CSV) or text format.





Reports can be downloaded by various different options, as shown below.



Reports can either be downloaded by:

User Name User ID Department

Period

From/To (Date yy/mm/dd)

Event

Format - CSV or Text

Click "Download" for the report to be downloaded to your system for payroll or other management purposes.





8.5.5. Capture Fingerprint

The ACTAtek2™ can capture fingerprint in real time and help in analysis of why certain fingerprints are being rejected by the unit or what is causing the rejection. This option helps the technicians better understand the fingerprint issues and what they can do to improve readings.

This image is captured via the terminal menu under "User Management" --> "Capture Fingerprint". Once the fingerprint is captured, it can be viewed via the web interface, as shown below.

These images should only be used for analysis purposes, and Hectrix is not liable for any misuse of these images, please also note that all fingerprint data collected can only be used for scanner analysis and serve no other purposes.





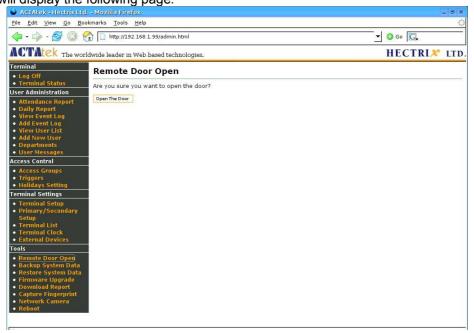


8.5.6. Remote Door Open

Most organizations or corporations or even small business have visitors coming in and out for meetings, or to drop parcels, etc. Those visitors are not enrolled in the system since they are not part of the company's payroll or should not have access to the office at odd hours.

For these reasons, the Remote Door Open feature comes in handy since visitors do not need to be enrolled in the unit to gain access, but the reception or someone near a computer can simply open the door using this feature, which enhances flexibility and convenience of the system.

To open the door remotely from any computer, click on "Remote Door Open" under Tools, which will display the following page:



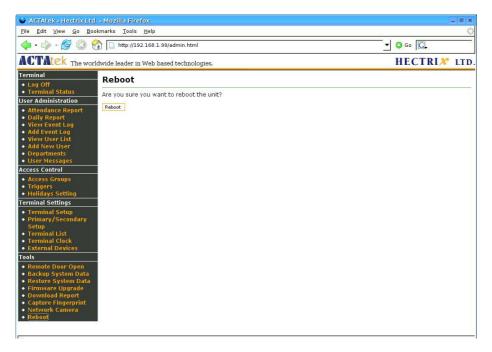
Once selected, click "Open the Door" to open the door remotely. If successful, the message "The door is opened" will be displayed.





8.5.7. Reboot

To reboot the ACTAtek2 remotely, the 'Reboot' option can be selected.



Click on the 'Reboot' button to reboot the unit.