Embedded Web Server
ACTAtek System
Access Control   Time Attendance

Quick Installation

This sheet will guide you through the basic steps needed to install the ACTAtek and connect with your network. If you have any problems during installation, refer to the manual in CD for more information.

Before Beginning

Power Requirement

The ACTAtek Series requires a 12V DC/2A(or above) Switching Power Supply. Please **DO NOT** share the power supply with any other devices, including Door Lock. Unstable power supply would damage the ACTAtek seriously.

Warning: Modification of Power Supply/DC Jack or Extension of the DC Cord of Power Supply may affect the stability of ACTAtek.

Deciding where to install

ACTAtek is a wall-mountable unit with a very small footprint, and can be conveniently installed anywhere. If used as an access control system, the product should be installed close to the door, so the user can open the door within the timeout period after authentication (8 sec. by default).

Installing Your ACTAtek

Power & External Controls Connections

ACTAtek provides easy-access terminals for connections to external controls, including Door Strikes, Door Sensor, Door Release Switch, and External Alarm.

If the device works as Access Control System, an additional diode is required, to avoid the Back EMF from the Door Lock, which may damage the ACTAtek unit. Refer to the diagram attached.

Power (12V DC):
DC Jack   +12VDC

Door Sense #1 (optional)
Terminals A & B
It provides ACTAtek with the current status of the door (open / close). If the door is left open for over 25 seconds, ACTAtek will generate beep sounds to alert others.

Door Sense #2 (optional)
Terminals A & B   Same as above

Door Switch #1 (optional)
Terminals A & B
An optional door switch (Door Release Button) can be connected to these terminals. It is used to open the door from the inside of the business premises, or from the reception area.

It is highly suggested to connect the Door Release Button to Electric Lock directly, and leave these terminals disconnect.

Door Switch #2 (optional)
Terminals A & B   Same as above

Door Strike #1
Terminals NO - COM   Normal Open (Internal Relay)
Terminals NC - COM   Normal Close (Internal Relay)

These terminals are connected directly to the internal relay, which rating at **30V/5A**. If the door strike rates within this current limit, it can be connected to these terminals directly. If the system is used solely for Time Attendance, leave these terminals disconnect.

Door Strike #2 (Default) /Door Bell (Optional)
Terminals # NO - COM   Normal Open (Internal Relay)
Terminals # NC - COM   Normal Close (Internal Relay)

If these terminals are used for Door Bell, please login the ACTAtek unit as a Super Admin via a Browser; enable the "Door Bell" option at "Terminal Setup" page.

Alarm (optional)
Terminals A & B   Tamper Switch for External Alarm

This is used for connecting an optional external alarm. If in the case of a forced opening during operation (such as a break-in), an internal sensor will trigger this connection, and it will sound the external alarm.

Network Connections

You can connect ACTAtek unit directly to your corporate computer network via standard RJ-45 cabling & TCP/IP protocols. By connecting it to the network, you can manage & monitor the unit via any standard Web Browser (such as Microsoft Internet Explorer or Netscape Navigator).

First, make sure the TCP/IP protocols have been installed and configured correctly on the PC or Notebook which you want to use to access ACTAtek.

Setting the Network & TCP/IP address

Press "**Menu**", enter "**A999**" (Super admin ID), then press "**1**" (Default password), select the "**IP Setting**" icon.

Enter IP address   Press "**Enter**" to continue.
Enter Subnet mask   Press "**Enter**" to continue.
Enter Default Gateway   Press "**Enter**" to continue.
Enter DNS (if required)   Press "**Enter**" to continue.

Or: Enable DHCP (if required)   Press "**Enter**" to continue.

Open your PC's web browser and key in the ACTAtek's IP address into the browser's address bar.

Press "**Enter**" ACTAtek's web interface should be appearing in the browser windows.

* If you have any problems during above steps, please consult your network administrator.

Fingerprint Enrollment

Finger Position. Place the center of finger in the sensor center. The fingerprint may be positioned far left, far right, far up or far down. For instance, if a user enrolled a far left fingerprint. During verification, the user may press far right. Since there is no overlap between enrollment and verification templates, the user may be rejected. If the user enrolls the finger in the middle, there is a better chance of being accepted.

Finger area. The best advice is to cover the sensor area completely with finger to ensure the maximum fingerprint surface contact area. A common mistake is to touch the sensor with the tip of the finger, which contains too few information (ie., minutiae). It is also preferable to use the thumbs rather than other fingers.

Finger rotation. It will be good for the user to keep the fingerprint rotation minimal during the enrollment. The rotation should be within +-10 degrees during enrollment.

Finger pressure. Use medium pressure. Excessive pressure may distort the image and adhere ridges together. Too little pressure would lead to a small fingerprint area or dry fingerprint.

Finger condition, very dry or wet finger. Although ACTAtek's fingerprint sensor is designed to handle dry or wet conditions, it is wise to handle specially of very dry or wet fingers. The user can wipe wet fingers with cloth or paper towel. For dry finger, the user can moisturize the finger by breathing on it, by touching the forehead to pick up surface oil, or by applying small amount of skin-moisturizing lotion. The image quality could be improved tremendously by taking care of the dry/wet condition during enrollment.

It is important that the user store a high quality image when enrolling a fingerprint, because this is the fingerprint that the user will be compared with in all the verifications afterwards. If the users enrolled fingerpirnt image is of low quality, the user may get unexpected results during the verification stage.

Please note that during the less critical verification stage, the fingerpirnt image does not have to be perfect. The only requirement is to obtain enough unique "information" (ie., minutiae) to match the fingerpirnt.   Therefore, the above steps are usually necessary for the enrollment stage only.

Instruction

It is highly recommended for the fingerprint core 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. Afingerprint core is a point located within the innermost recurving ridge of any given finger.
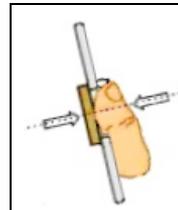
Also, to obtain a higher success rate, enroll the same finger 3 times in a slightly adjusted angle, one to the center, one inclined slightly to the left and the third inclined slightly to the right.

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

Adding User

1) Press "**Menu**" button, then enter "**A999**" (admin. ID) and password "**1**"(default password), select "**New User**" icon.

2) Select "**Fingerprint**".

3) Enter the ID No., press "**Enter**".

4) Place the right-hand thumb and place it on the sensor until the screen displays "**Template Stored**", then remove your finger.

5) Press "**Enter**", repeat the above step for the 2nd fingerprint image.

6) Press "**Enter**", repeat the above step for the 3rd fingerprint image.

7) If all images are OK, an acknowledge message "**User Added**" will appear. Press "**Enter**" to quit.

Guide for Using Fingerprint Sensor

Place your finger firmly on the sensor and align the core of the fingerprint to the center of the sensor. The sensor will scan your fingerprint automatically.

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

Note: In order to obtain required quality fingerprint images, you may need to move and rotate your finger a little.

AVOID RUBBING THE SENSOR AS THIS WOULD DISTORT THE IMAGE.

Verification

ID Match: Key in your User ID No. place your enrolled finger on the sensor. If you are authenticated, the device will open the door.

Auto Match: Place your enrolled finger on the sensor, the system will scan your fingerprint automatically.

WARNING

Please be reminded to clean the sensor surface with a cotton cloth or tissue, using alcohol or contact cleaner.

Do NOT use any sharp or rugged material to clean the sensor.

FCC STATEMENT

IP65 Water & Dust proof Approved