

ACTAttek System

Fingerprint, Facial, RFID, QR Code, Web Camera, IoT & Intercom

Before Beginning

Power Supply Requirements

The ACTAttek Series requires a 12V DC/2A (or higher) switching power supply. Please **do not** share the power supply with other devices, including door locks. An unstable power supply may cause serious damage to the ACTAttek.

Warning: Modifying the power supply/DC jack or extending the DC cord may affect the stability of the ACTAttek.

Deciding Where to Install

The ACTAttek reader is a wall-mountable unit with a compact footprint and can be conveniently installed in various locations. When used as an access control system, it should be installed close to the door so users can open it within the timeout period after authentication (8 seconds by default).

Installing Your ACTAttek Reader

Power & External Control Connections

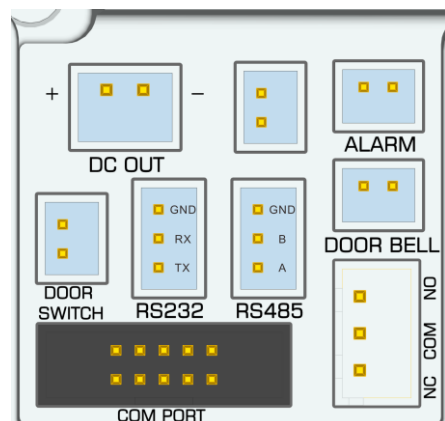
ACTAttek provides easy-access terminals for connecting to external controls, including door strikes, door sensors, door release switches, and external alarms.

When the device is used as an access control system, an additional diode is required to prevent back EMF from the door lock, which could damage the ACTAttek unit. Please refer to the attached diagram.

Power (12V DC):

DC Jack +12VDC

Terminals



Door Switch

A door release button can be connected to these terminals. It is used to open the lock from inside the premises or from the reception area.

It is strongly recommended to connect the Door Release Button directly to the Electric Lock and leave these terminals disconnected.

Quick Installation Guide

This sheet provides the basic steps to install the ACTAttek device and connect it to your network. If you encounter any issues during installation, please refer to the manual for more detailed instructions.

Door Strike

Terminals NO - COM Normal Open (Internal Relay)

Terminals NC - COM Normal Close (Internal Relay)

These terminals are connected directly to the internal relay, rated at **30V/5A**. If the door strike operates within this current limit, it can be connected directly to these terminals. If the system is used solely for time attendance, leave these terminals disconnected.

Alarm

Tamper Switch for External Alarm

This terminal is used to connect an optional external alarm. In the event of a forced opening (such as a break-in), an internal sensor will trigger this connection and activate the external alarm.

Doorbell

Connect both ends of the doorbell switch to these terminals. The doorbell will ring when the button is pressed.

Network Connection

You can connect the ACTAttek unit directly to your corporate computer network using standard RJ-45 cabling and TCP/IP protocols. Once connected, the unit can be managed and monitored through any standard web browser.

Before accessing ACTAttek, ensure that TCP/IP protocols are properly installed and configured on the PC or notebook you plan to use.

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 enter the ACTAttek IP address in the address bar.

Press **Enter**. The ACTAttek web interface should appear in the browser window.

* If you encounter any issues during these 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 fingerprint 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 fingerprint image does not have to be perfect. The only requirement is to obtain enough unique "information" (ie., minutiae) to match the fingerprint. Therefore, the above steps are usually necessary for the enrollment stage only.

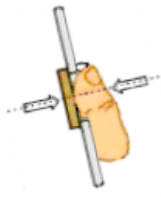
Instruction

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. A fingerprint 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 finger on the sensor until the screen displays "Please Remove Finger", then remove your finger.
- 5) Place your finger on the sensor and scan your fingerprint again until the screen displays "Please Remove Finger".
- 6) Place your finger on the sensor and scan your fingerprint for the final time.
- 7) If all images are OK, an acknowledge message "Completed" 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
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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

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



IP65 Water & Dust proof Approved