



ArdanShield

SMART ACCESS / USER MANUAL

SecureWaveTM

Installation & user guide



Fit. Connect. Manage access.

Installation • TTLock • Everyday use



Your guide to SecureWave

An English guide to installing and using SecureWave with TTLock. Follow the section you need, and keep this guide for future reference.

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Before you begin

Keep the door open while fitting and testing. Keep a mechanical key accessible outside the secured space.



Choose your internal option

SecureWave uses an external fingerprint/keypad reader and an internal rim-lock body. Two internal lock options are shown below.



Thumbturn internal lock body.



Digital keypad + fingerprint + key internal lock body.

Check your supplied configuration

Check which internal lock body is fitted to your door. Follow the controls and connection markings on that unit.

Check the internal release

With the door open, have your installer demonstrate how to operate the internal release. Test it before closing the door.



Before you fit the lock

Important safety information

Do not install this lock in a fire exit door. Keep the mechanical key with you or in a secure place outside the locked space for emergency access.

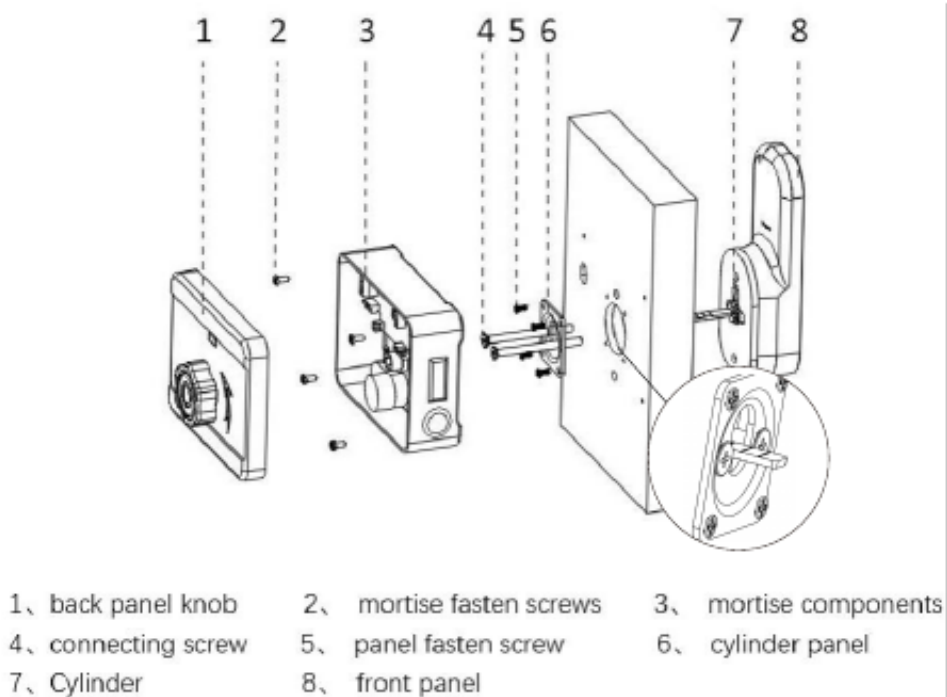
- 1 Use a professional installer. Check the supplied body, cylinder, strike and fixings before starting.
- 2 Keep the door open throughout installation and the lock-function test.
- 3 Do not crush or sharply crumple the cable. Keep wiring clear of screws and moving parts.
- 4 Confirm the fitting dimensions on the actual unit before cutting or drilling. This guide is not a full-size drilling template.

Commissioning checks

The initial passcode is **123456 #**. After fitting, check fingerprint, card, passcode, mechanical key and the internal knob where fitted. If any function fails, check cable connections and installation before closing the door.

Add the lock to TTLock and set your administrator passcode before putting it into everyday use.

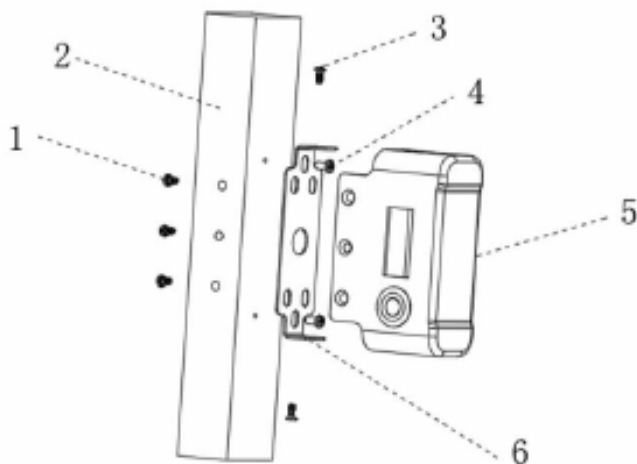
Fit the panels and rim lock



Panel and rim-lock assembly, with numbered components. Thumbturn configuration shown. Not to scale.

- 1** Measure the actual door thickness. Cut the cylinder spindle to **2 cm longer than the door thickness**. Confirm the fit before cutting.
- 2** Open the front panel and insert the cylinder (diagram items 7 and 8).
- 3** Use the studs to connect the front panel and cylinder panel, then tighten the fixing screws (items 4, 5 and 6).
- 4** Fix the rim mortise to the door, fit the rear panel and secure it (items 1, 2 and 3). Keep the cable clear as you assemble.

Align and fit the strike



- | | |
|-----------------------------|------------------------|
| 1、 buckle fastening screws | 2、 Door frame |
| 3、 buckle connecting screws | 4、 buckle plate fixing |
| 5、 buckle | 6、 buckle plate |

Strike assembly and fixing components.

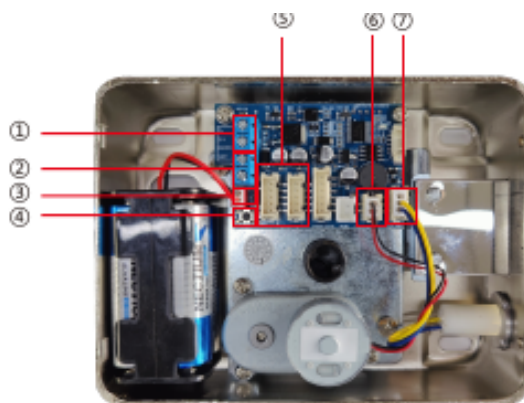
- 1 Fix the strike plate to the door frame using the supplied screws.
- 2 Secure the strike body to its plate.
- 3 Test the rim-lock knob with the door open, then check the bolt lines up with the strike opening.
- 4 If the action is not smooth, adjust the strike position. Complete all electronic and mechanical checks before relying on the lock.

Avoid binding

The bolt must enter the strike cleanly. Do not force the mechanism to compensate for misalignment.

Connections and power

- ① Visual doorbell switch
- ② 12V power input(12V: +, GND: -)
- ③ 6V power input(4 AA alkaline batteries)
- ④ Factory reset button
- ⑤ front panel connection port
- ⑥ motor
- ⑦ Magnet sensing port



Controller connections. Match each numbered connection to the unit before wiring.

Power connection	Power rating
Battery input	6 V input: four AA alkaline batteries.
External input	12 V input: terminal marked 12V is positive; GND is negative.
Emergency power	DC 5 V. Confirm the marked emergency connection on the unit.

The map identifies the visual-doorbell switch, factory-reset button, front-panel connection, motor and magnet-sensing port. Accessory connections are used only with compatible fitted equipment.

Keep power inputs distinct

The battery, external-power and emergency inputs have different ratings. Have the installer verify the correct connection and polarity. Do not connect 12 V to a 6 V or 5 V input.



Connect to TTLock

- 1 Install TTLock from your phone's app store. Register with a mobile number or email address and enter the verification code when prompted.
- 2 Log in. If needed, use Forgot password to verify your phone or email and reset your account password.
- 3 Stand beside the lock and enable Bluetooth and an internet connection on your phone.
- 4 Use the + control to add the lock and follow the app prompts. The first account to add it becomes the phone administrator.
- 5 Keep the door open and test the app connection before continuing.

Bluetooth pairing

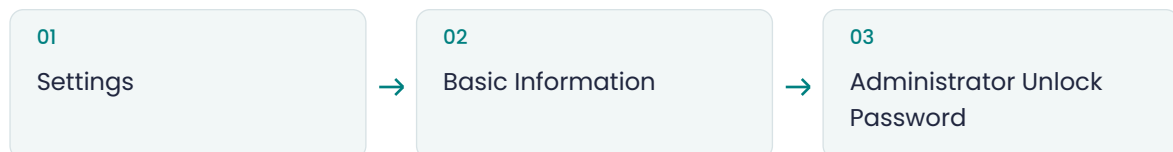
The lock pairs with your phone over Bluetooth. Remote access uses a separately connected compatible gateway; see page 14.

Menu labels may vary with the installed TTLock version. Use your phone's current app-store compatibility information when installing.



Administrator and app controls

IN TTLOCK / ADMINISTRATOR PASSCODE



TTLock generates an administrator passcode when the lock is added. View it in the path above, change it to your chosen passcode, then use it at least once.

Unlock and lock in the app

Tap the lock icon to unlock and press and hold it to lock. Begin beside the lock and check the physical action with the door open.

Choose the right credential

The administrator unlock passcode opens the lock. Your TTLock login password protects the app account and is requested when deleting the lock. Keep both private.

Confirm the door is secure

After closing the door, check that the bolt has engaged. An app command does not by itself confirm that the door has physically closed.



Choose a passcode

Use Generate Passcode in TTLock and choose the access type you need.

Type	Validity
Permanent	Does not expire after activation. A newly generated code becomes invalid if not used within 24 hours.
Time-limited	Valid for the chosen period. A newly generated code becomes invalid if not used within 24 hours.
One-time	Works once, with a validity of one hour.
Custom	Choose a passcode of 4-9 digits.
Cyclic / recurring	Repeats within a schedule, such as daily, weekly or weekends.

Check generated-code instructions

Check the validity and activation instructions displayed for the generated code in TTLock before sending it to a visitor.



Use passcodes carefully

Unlock at the keypad

Enter the passcode and press **#** to confirm.

PIN → **#** → **Open**

Conceal the passcode

You can enter random digits before or after the correct passcode to help conceal it. The masked entry must contain no more than 16 digits. Finish with **#**.

Erase passcodes remove access

An Erase passcode is valid for 24 hours. When used to unlock, it permanently invalidates previously set user passcodes. Do not send an Erase code as an ordinary guest passcode.

Test before sharing

Test new access with the door open, then share the correct code and its validity period privately. SecureWave stores up to 150 customised passcodes.



Cards and fingerprints

Enrol an IC card

- 1 Add the lock to TTLock before enrolling a card. Stand beside the lock.
- 2 Open IC Cards and choose Add IC Card. Follow the prompts to enrol the card.
- 3 Choose permanent or temporary validity. You can change the validity period later.

Enrol a fingerprint

- 1 Stand beside the lock with Bluetooth and internet enabled on the phone. Open the fingerprint function in TTLock.
- 2 Follow the enrolment prompts. Complete **4 registration scans**.
- 3 Test the enrolled finger with the door open.

Supported credentials

SecureWave supports M1 cards, with capacity for 200 IC cards and 200 fingerprints.

Review named credentials in TTLock so you can identify the correct access record when making changes.



Share electronic access

The first phone administrator has the highest management authority and can send Bluetooth e-keys to other users.

IN TTLOCK / SHARE A KEY



Access option	Use
Permanent	Ongoing access.
Timed	Access within the selected period.
One-time	A single-use electronic key; check the app's displayed validity.
Recurring	Repeated access within the selected schedule.

E-keys can be sent to unregistered users. The administrator can send, clear, reset and change key validity, and inspect unlocking data.

Review expiring access

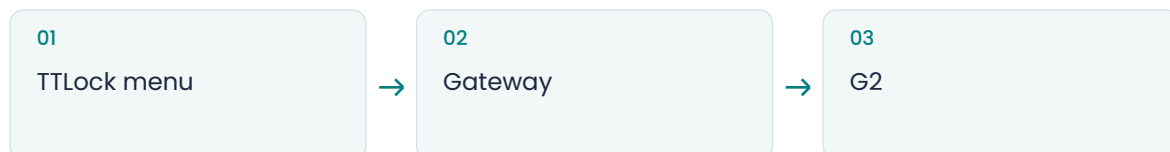
Soon-to-expire users appear in yellow with days remaining, and expired users in red. Check the validity dates too; do not rely only on colour.



Connect a G2 gateway

Use a compatible G2 gateway to connect the lock for remote access. The gateway is a separate accessory.

IN TTLOCK / GATEWAY SETUP



- 1 Connect power to the gateway. Red and blue lights flash alternately during setup.
- 2 Select + in TTLock and follow the prompts to configure the network.
- 3 Check that setup completes for the intended lock before relying on gateway-dependent features.

Network requirements

Follow the instructions supplied with your G2 gateway for the correct power supply, network requirements and remote-access setup.

Local Bluetooth access and gateway access are different connection paths. Test each feature you intend to use.



Language and settings

English voice prompts

Use the SecureWave TTLock keypad sequence:

*** 39 # [administrator passcode] # 2 #**

Replace the bracketed text with your own administrator passcode; do not enter the brackets.

Chinese voice prompts

Enter:

*** 39 # [administrator passcode] # 1 #**

App settings

Settings include Auto Lock, Passage Mode, Lock Sound, Lock Clock, operation records and Firmware Update. Available options depend on the connected unit and app version.

Check settings on your unit

Follow the controls and prompts in your installed app. Test changes with the door open and check the lock behaves as intended before relying on a new setting.



Reset and ownership

Restoration returns factory status

Reset only when you intend to restore the lock. Keep the door open and have mechanical access available. Reconfigure and test access before returning it to use.

Physical reset

- 1 Open the rear panel and locate the factory-reset button shown on page 7.
- 2 Press and hold it until the voice asks for the initialisation passcode.
- 3 Enter **000 #** to restore the lock.

Restore through TTLock

- 1 Open the lock's Settings and scroll to Delete.
- 2 Confirm using your TTLock login password. The lock returns to its initial factory state.

The initial passcode is **123456 #**. Set up TTLock and the administrator passcode again before everyday use.



If you need help

Keypad lockout

5 incorrect passcode entries cause a 5-minute keypad lock. A correct passcode, registered IC card or app unlock can release that state. If it remains locked, wait for the timeout.

The lock does not operate smoothly

Keep the door open. Check the strike alignment, cable connection and fitting against pages 4-7. Check the installation again if the key, knob or electronic functions do not work correctly.

Power or battery issues

Use four AA alkaline batteries. For emergency power, use the designated DC 5 V connection and check the markings on your unit. Replace depleted batteries promptly.

App connection issues

Stand beside the lock, enable Bluetooth and check the phone has internet access. For gateway functions, check the G2 setup separately.

Contact ArdanShield

Provide the product name, internal-lock option and any voice prompt. Do not share administrator passcodes or app passwords.

Visit ArdanShield for support



Technical reference

Power, access capacity and operating conditions for SecureWave.

Parameter	Specification
Bluetooth	4.1 or above
Power	DC 6 V / DC 12 V
Battery type	Four AA alkaline batteries
Emergency power	DC 5 V
Static current	Up to 60 microamps
Operating temperature	-20 °C to 60 °C
Operating humidity	20% to 90% RH
Keypad	Capacitive touch buttons
Customised passcode capacity	150
App passcode sending	Listed as unlimited sending; not unlimited stored custom codes.
Fingerprint capacity	200
IC card / capacity	M1 card / 200

Access methods listed: app, fingerprint, passcode, IC card and mechanical key.
Internal release depends on your selected body.