Operation manual of TT lock

1. Introduction

.Introduction
SN-9161 adopts Telink Micro 8251 bluetooth chip as the main control, supports low energy SN-9161 adopts Telink Micro 8251 bluetooth. bluetooth (BLE5.0), which can manage door locks (password, electronic key, IC card, fingerprint)

Password unlocking, IC card unlocking, and fingerprint unlocking are all supported. The door lock Password unlocking, ic card unlocking, and software functions can be extended through firmware upgrade, and software functions can all set the validity period (start to APP electronic key, password, IC card, fingerprint can all set the validity period (start time - end time). Unlocking is only supported within the validity period.

1) Unlock by mobile phone Bluetooth sensor

1) Unlock by mobile phone Bluetooth Jensel Based on low-power Bluetooth technology, the lock can be easily unlocked through the mobile APP.

2) Electronic keys distributed remotely

The electronic key can be sent to the tenant at any time. The validity period of each electronic key can be flexibly set. The electronic key can also be frozen or thawed.

3) Password lock

A password valid for a certain period can be entered by touching the numeric keypad to unlock.

4) Fingerprint unlock

The entered fingerprint information can be used to unlock.

5) IC card unlock

IC cards with entered information can be used to unlock.

6) Unlock record monitoring

Passwords, IC cards, fingerprints, and APP unlocking are all kept records. After connecting to the network and synchronizing the information, the administrator APP can see all the unlocking records, no matter which mobile phone is operated through the APP.

2. Performance parameters

Bluetooth standard	Bluetooth 5.0BLE	
Supported phone system	Android4.3/I0S7.0 and above	
Power supply	4 alkaline dry batteries	
Low battery alarm voltage	4.8V±0.1	
Voltage range	4.5-9V	
Stand-by current	83 microamps	
Working current	less than 200mA	
Unlock time	≈1.5 seconds	
Range of working temperature	-25~70°C	
Keytype	Capacitive touch buttons	
Number of passwords	Custom and permanent passwords	250
	Other dynamic passwords	No Limit

Types of supported cards	MIFARE M1Card
IC card quantity	1000
How to unlock	App, password, fingerprint, IC card, mechanical key
Output voltage of motor interface	Battery voltage minus 0.3V
Types of Fingerprint Heads	Semiconductor fingerprint head
fingerprint capacity	120 pieces (specifically determined by the actual fingerprint head)
False Recognition Rate (FAR)	<0.001%
Authenticity Rejection Rate (FRR)	<1.0%
Local storage operation log	2000 (including door opening records)

3. Online operation

Function	Actual Operation
1. Factory reset	Long press the reset button on the lock, and enter 000# after hearing the voice prompt of "Please enter the initialization password". After the lock is reset to factory settings, all fingerprints, passwords, cards and mobile phone administrators will be cleared.
2.Set the administrator password	When the administrator password is not set and the mobile phone administrator is not added, enter *12#123456#->enter the administrator password#->enter the same password# again. Note: When you need to use the mobile App to manage, this step is not selected on the APP -> click Settings -> click "Administrator unlock password" to enter a new administrator password. Note: Must be operated on the lock edge.
3.Modify the administrator password	Enter *12#original administrator password#new administrator password#same new administrator password# on the locked keyboard to modify the administrator password. When the administrator password has not been set and the mobile administrator has not been added, touch the bright panel. After hearing the voice prompt of "Please add a mobile phone (Bluetooth) administrator", add a door lock on the APP.
4.Add a mobile phone administrator	After setting the administrator password or adding a mobile phone administrator, you can enter *83#administrator password# on the lock to make the lock enter the mode where mobile phone administrators can be added again. Other App accounts are allowed to add this lock and become new administrators. Note: After adding an administrator to a new APP account, the previous account will be automatically deleted, that is, only one first-level mobile phone administrator is allowed.
5.Delete the phone administrator	In the APP, select the lock that needs to be deleted by the phone administrator, click Settings, and then click Delete. Note: After deleting the administrator on the App, the lock will be reset to factory settings. All fingerprints, passwords and cards previously added are invalid.

6. Add fingerprint	On the APP, click "Fingerprint" -> Add Fingerprint -> Enter the fingerprint name and validity period -> Click Next -> Click Start to add Press your finger on the fingerprint collector several times according to the phone screen and voice prompts. Enter *80#->Enter the administrator password#->According to the voice prompt, press your finger on the fingerprint reader several times. Note: The fingerprint added directly on the lock can be uploaded to the App through the "Upload fingerprint in the lock" function in the App for management. After adding fingerprints directly on the lock, you can continue to add other fingerprints. You can also exit the add mode by pressing a key or waiting for a timeout. Note: This function is only supported on firmware versions 5.0.1 (inclusive) and above.
7.Remove fingerprints	Click the fingerprint on the App -> click the fingerprint to be deleted -> click delete. Note: Must be operated on the lock edge.
8.Rename the fingerprint	Click "Fingerprint" on the App -> click the fingerprint to be renamed -> click the name -> enter a new name.
9.Modify the fingerprint validity period	Click "Fingerprint" on the APP->click the fingerprint whose validity period needs to be modified->click the validity period>input a new validity period>click save Note: After setting the validity period, the fingerprint can only be unlocked within the specified validity period. Must be operated on the lock edge.
10. Add a password	Click "Get Password" on the App -> select the password type: Custom -> select the validity period> click to set a password> enter the password to be added Note: "Custom" passwords must be operated on the edge of the lock Click "Get Password" on the App -> select the password type: permanent/period/single/clear/cycle -> click to get password Note: These types of codes do not require operation on the edge of the lock. Clear password is used to delete all passwords that have been in effect on the lock. Enter *80# on the lock->enter the administrator password#->enter the new password to be added#->enter the same password# again. Note: To lock the directly added password, you can upload the password in the lock in the password management of the App. Upload the password to the App for management. After the passwords is added directly on the lock, you can continue to add other passwords. You can also press the * key or wait for a timeout to exit the add mode. Note: This function is only supported on firmware versions 5.0.1 (inclusive) and above.
11.Remove the password	Click "Password Management" on the APP -> click the password to be deleted -> click delete. Note: Must be operated on the lock edge.

	Enter *71#administrator password# on the lock to delete all unlock passwords (administrator passwords are not deleted). On the App, click "Password Management" -> click the password you want to modify and click Password -> enter a new password. Note: Must be operated on the lock edge.	
Rename password	Enter *10#original password#new password#new password# on the lock to change the password (to change the administrator password, please use *12#) Click "Password Management" on the APP -> click the password that needs to be renamed -> click the name -> enter the new name.	
validity period of the password	Click "Password Management" on the App -> click the password whose validity period needs to be modified -> click the validity period -> enter a new validity period -> click Save. Note: Must be operated on the lock edge. Click "IC Card" on the App -> Add IC Card -> Enter the name and select the validity period -> Click OK, then swipe the card to add. Note: Must be operated on the lock edge.	
15. Add IC card	Enter *80#->enter administrator password# on the lock, then swipe the card to add. Note: To lock the directly added IC card, you can upload the IC card to the App by going to "IC Card"->Upload the IC card in the lock in the App. After adding the IC card directly on the lock, you can continue to add other IC cards. You can also press the * key or wait for a timeout to exit the add mode. Note: This function is only supported on firmware versions 5.0.1 (inclusive) and above.	
16. Delete IC card	Click "IC Card" on the APP -> click the card to be deleted -> click delete. Note: Must be operated on the lock edge. Enter *69#administrator password# on the lock to delete all IC cards.	
17. Rename IC card	Click "IC card" on the App -> click the 1C card that needs to be renamed -> click the name -> enter the new name.	
18. Modify the validity period of the IC card	Click "IC card" on the APP -> click the IC card whose validity period needs to be modified -> click the validity period> enter a new validity period -> click save. Note: Must be operated on the lock edge.	
19. Unlock	App unlock: Click the lock icon on the App to unlock. Note: The lock must be unlocked on the lock side. When there is a gateway, you can also open the remote unlocking function on the lock, and then unlock it remotely (remote unlocking is disabled by default) Touch to unlock: When the App has "touch to unlock" enabled, open the App and touch the door lock. IC card unlock: Put the added IC card in the card swiping area to unlock. Fingerprint unlock: Press the added finger on the fingerprint reader to unlock.	

Password unlock: Enter the unlock password on the password pad and press the # key to unlock. Note: During the password input process, you can press the * key to delete the last entered number. When no administrator is added, the default unlock password is 123456.
After unlocking, it will be automatically locked after a 5-second timeout (except for temporary normally open). In normally open mode, long press the # button to lock.
Click "Send Key" on the App to send electronic keys to other users. The electronic key is authorized a second time, making it a secondary administrator.
Select the door lock on the App, and click the operation record to view it. Note: When there is no gateway, the unlock record of fingerprint/IC card/password can only be viewed after unlocking through the App. Click a fingerprint/IC card/password on the APP, click the operation record, you can view all the records of the fingerprint/IC card/password.
Additional numbers can be added before and after entering the correct combination on the lock. The total length of the virtual password is 16 bits.
After the unlock password is entered incorrectly for 5 consecutive times, the system will lock the password keyboard. After 2 minutes, the lock will be released.
During the locking period, the correct fingerprint, IC card, and App unlock can unlock the keyboard lock state. When the battery voltage is lower than 4.8V, touch the panel and the voice prompt "When the battery is low, please replace the battery. At the same time, the screen backlight will flash quickly for 1 second. Before unlocking with fingerprint/IC card/password, if the voice prompts that the battery is low, please replace the battery before unlocking.
During the password input process, press the button once to delete the last entered password number. After all deleted, if you are in add mode, you can exit this mode. After all the entered numbers are deleted, press the * key three times again, and the screen will turn off.
in Chinese: enter "*39#administrator password#1#" in English: enter "*39#administrator password#2#" Note: the administrator password would be 123456 if no administrator is added
After the correct password, fingerprint, and swiping card to unlock, before automatic locking, enter 123# on the keyboard to enter the temporary normally open mode. The temporary normally open mode will be invalid the next time the lock is unlocked or closed.

A lock with an anti-camera switch is installed. After the switch is triggered, the horn will sound an alarm for 1 minute.

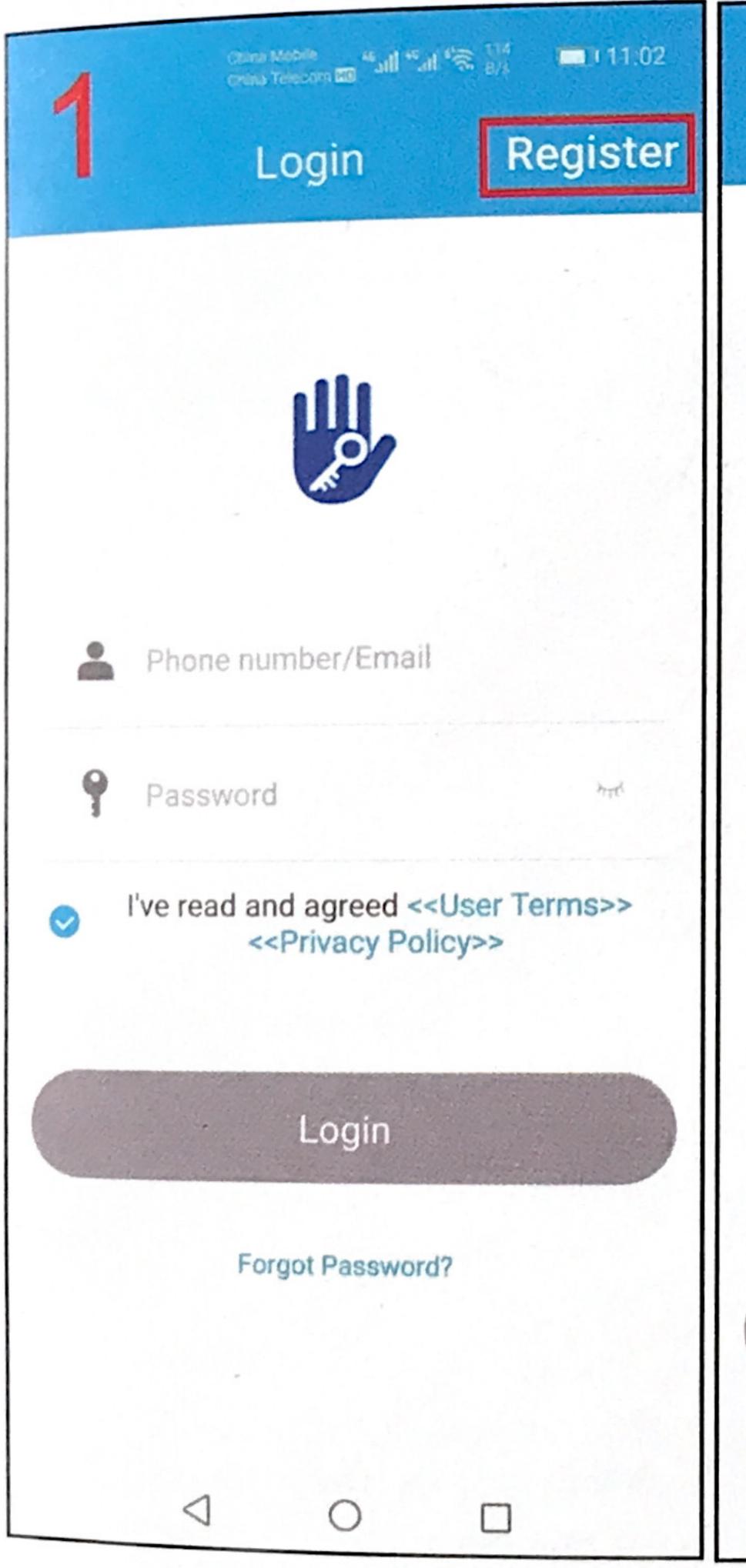
To turn off the anti-camera alarm: enter *32#administrator password#0# on the lock
Turn on the anti-camera alarm: enter *32#administrator password#1# on the lock
Note: When no administrator is added, the administrator password is replaced by 123456.

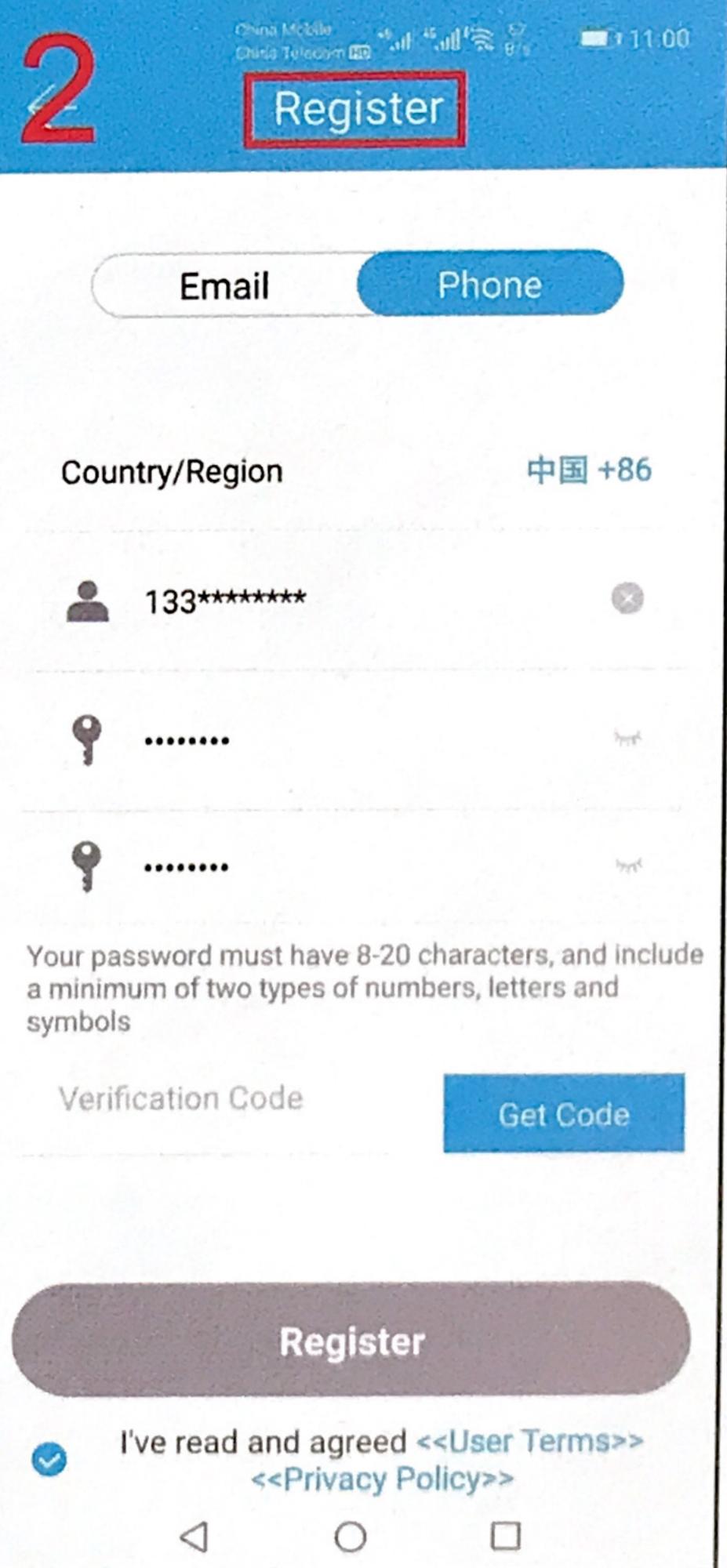
The lock sound can be turned off in the App. When the lock sound is turned off, when the button is touched, the screen will flash to remind the user that the button has been pressed.

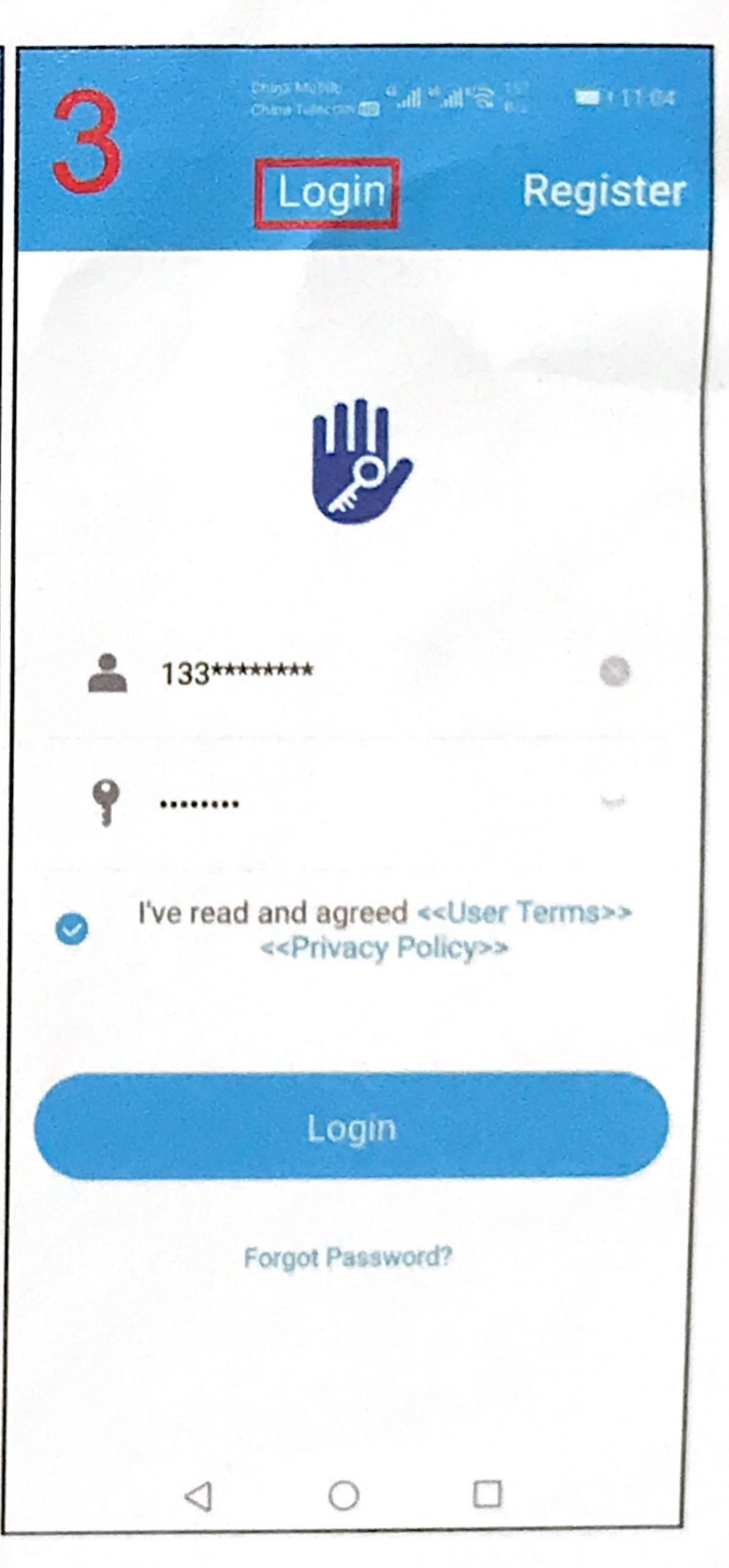
4. App supporting

- 1. TTLock: Scan the QR code to install the app.
- 2. Register and log in to your account:
 Registering an account: Entering the App page for the first
 time, in the registration state, enter your mobile phone
 number, set a password, obtain a mobile phone verification
 code, and check "I have read the privacy policy and agree" to
 complete the registration. Enter your mobile number and
 password to log in. Each account can add several smart lock
 devices.









3.Add door lock: After logging in to the App, click the icon to the left of TT Lock. Follow the program prompts to install the lock and install the battery. To touch after the screen lights up, match the blue icon to the lock, and set the name of the lock. Note: If the smart lock is in a non-reinstallable state, remove the battery for about 5 seconds. Then, turn on the power and long press the manual button on the panel for about 10 seconds. After hearing the beep, the lock is reset successfully. Add again. After the addition is complete, it will be managed by this lock, as shown in the figure:

