

AtomStack Software Manual

catalogue

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1. SD

You can scan the qr code below to download the APP.

Andorid:



iOS:

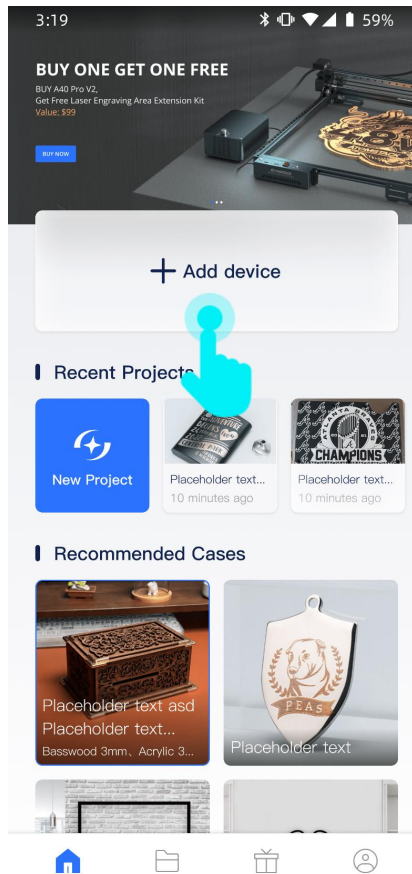


Android apps can also be downloaded from the Google App Store and app Store, while iOS apps can also be downloaded from the Apple App Store.

2. Add devices manually

1、WiFi distribution network connection:

1) After entering the APP home screen, you can click the "Add Device" button above to enter the process of adding devices.



2) If your device supports the enable networking mode, you can network the device through the network button on the device. The following will be explained with the device Hurricane as an example.

After turning on, press the "RESET/PAUSE" button for 5 seconds. When you hear a "beep" and the box door status light flashes, you will enter the distribution network mode.



3) Enter the device networking process by clicking the device icon in the "Nearby Devices" list in the interface.



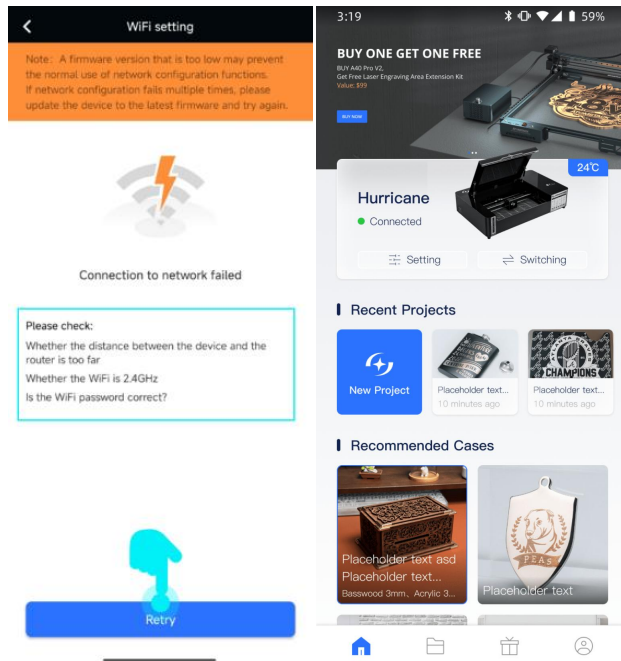
4) Fill in the WiFi name and password in the interface and click "Next".



5) If the interface prompts that you cannot connect to the network, please check the following. After the check is completed, click the "Retry" button and reconfigure the WIFI.

- Whether the device is too far away from the router
- Whether WiFi is 2.4GHz
- Whether the WiFi password is correct

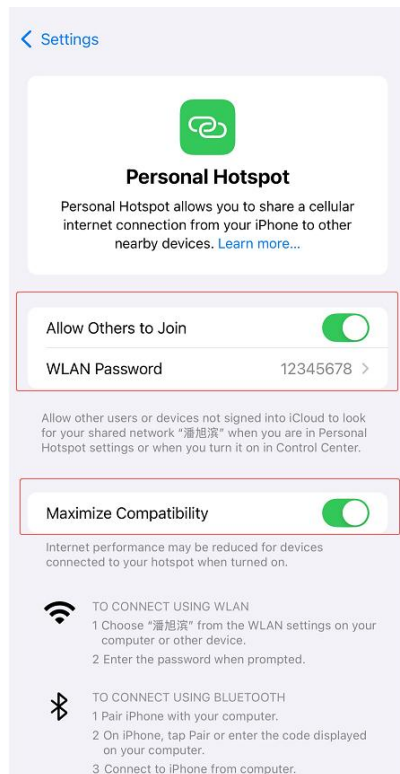
If the WIFI configuration is successful, the interface is switched to the APP home page, and the user's phone can connect to the device through WiFi for remote control.



2、 Mobile hot spot distribution network connection:

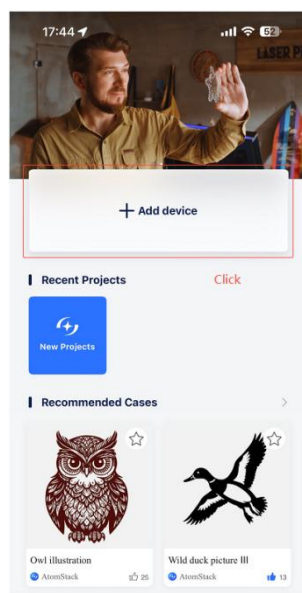
If you use your mobile hotspot as a Wi-Fi connection, you need to check:

- 1) Whether the hot spot name and password are correct
- 2) For IOS system users, whether the personal hotspot setting is enabled to "maximize compatibility"
- 3) For Android users, whether the hot band is set to 2.4GHz



Here's an example of the Atrelia model:

1、Click Add Device

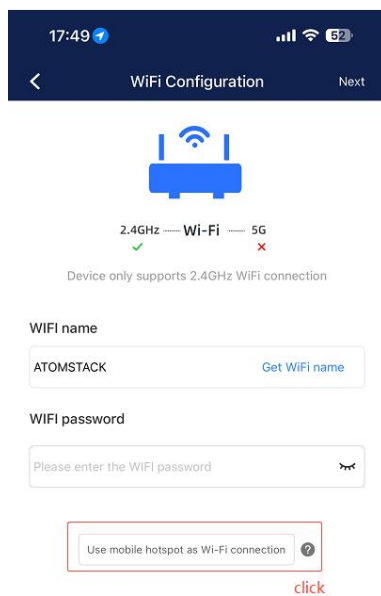


2、Long press the machine distribution button to activate Bluetooth.

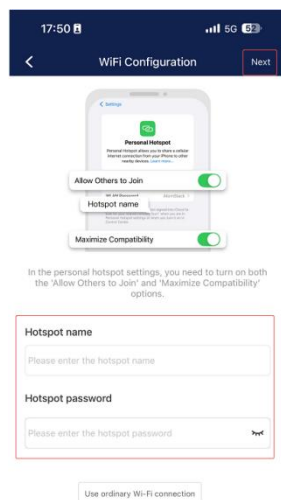
3、Find and click on the machine in the nearby device.



4、Connect to the phone hotspot:



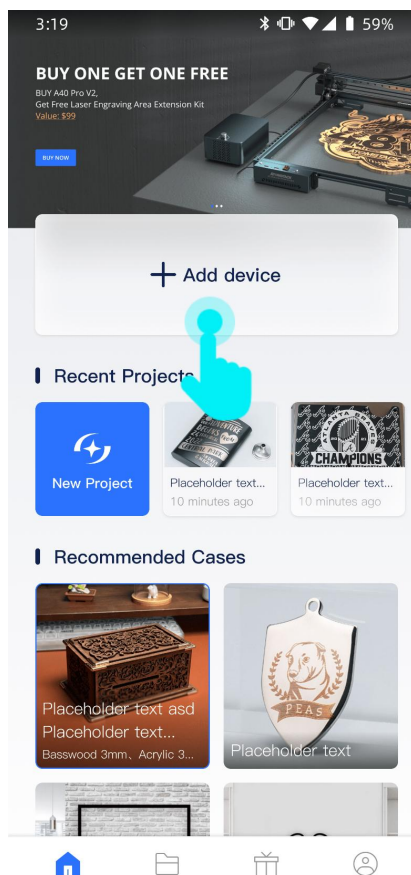
5、Enter the hotspot name and password, then click Next:



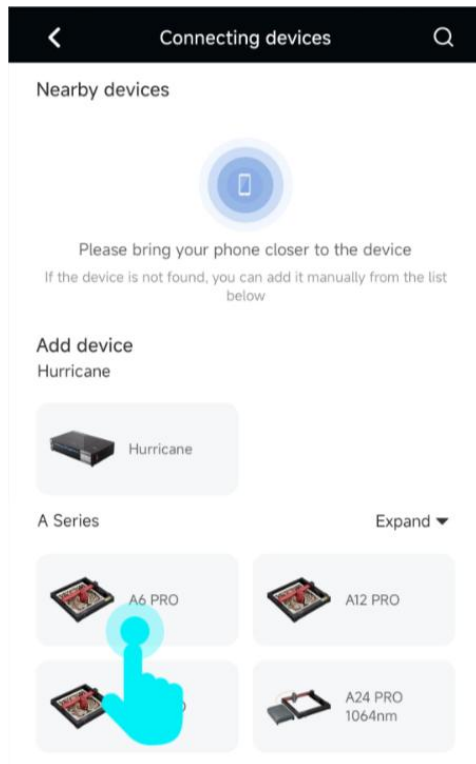
6、 After the connection is successful, the system will return to the home page and prompt the connection is successful. At this time, you can use the mobile app to operate the machine and carry out the carving work.

3、 Machine Hotspot Connection:

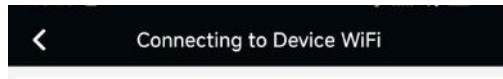
1) After entering the APP home screen, you can click the "Add Device" button above to enter the process of adding devices.



2) Select the model you want to add in the interface, then click "Next".



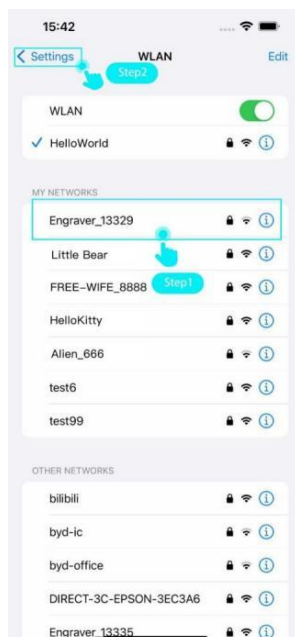
3) Please record the device hot spot name and password prompted by the interface. The initial password is 12345678, then click the "Set WLAN" button.



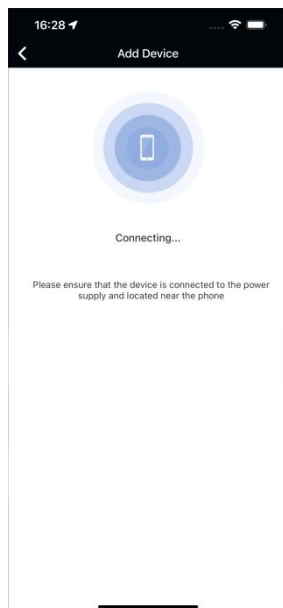
Please connect the mobile phone WIFI to "Engraver_###", password: 12345678, after the connection is successful, return to the APP manually.



4) In the WLAN selection interface of the mobile phone system, select the device hotspot name. After the device hotspot is successfully connected, click the return button in the upper left corner to return to the APP.



5) Please wait patiently for the phone to establish a connection with the device and try to keep the phone close to the device.



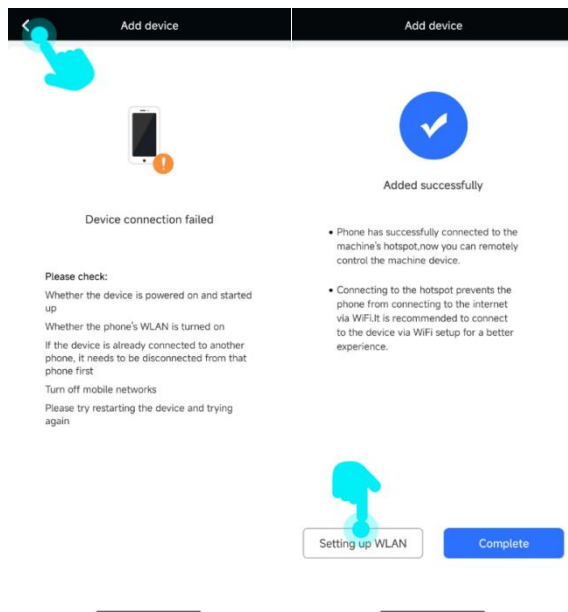
6) If the connection fails, please check:

- Whether the equipment is powered on and started
- Whether the mobile phone WLAN is enabled
- If the device has been connected to another phone, disconnect it first
- Turn off mobile Internet
- Try restarting the device

If the add is successful, it means that the phone has successfully connected to the device. Now you can remotely control the device from the phone.

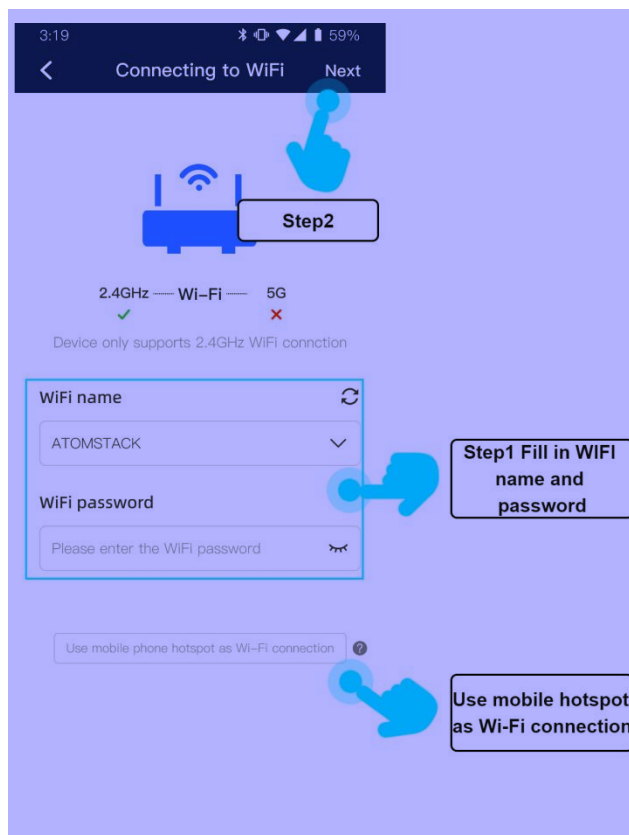
If you want to connect the machine through WiFi at this time, you can click the "WiFi Settings" button in the interface to configure the WiFi network for the machine.

We will continue to introduce the WiFi configuration process.



7) After entering the WiFi configuration interface, you need to correctly input the WiFi name and password, and then click the "Next" button.

Note: The WIFI configuration only supports 2.4 GHz WIFI band connection. In the absence of WiF environment, you can also click the "Use mobile hotspot as WIFI connection" button below to connect the network through the mobile hotspot.

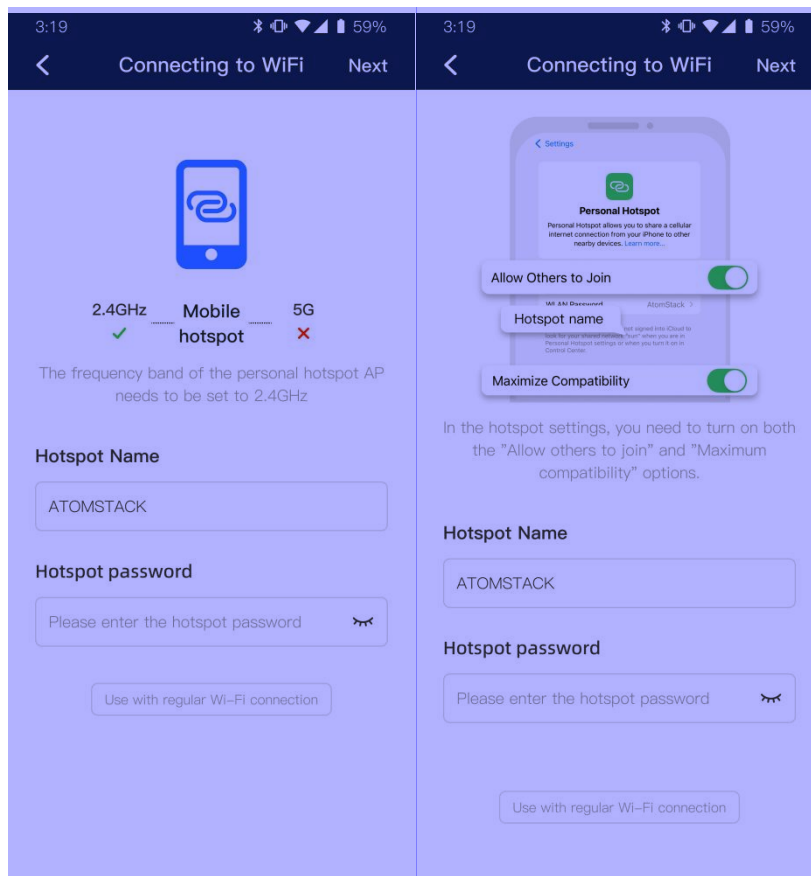


To use the mobile phone hotspot for network distribution, you need to enter the

"hotspot name" and "hotspot password" of the phone in the mobile phone hotspot network distribution interface, and then click "Next".

matters need attention :

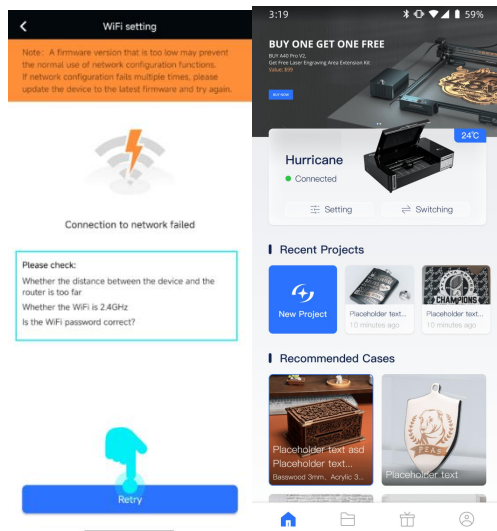
- Users of IOS systems need to turn on "Personal Hotspot" and also turn on "Allow others to join" in the Settings for maximum compatibility.
- Android users need to turn on the "hotspot" and set the "2.4GHz band" for the AP band.



8) If the interface prompts that you cannot connect to the network, please check the following. After the check is completed, click the "Retry" button and reconfigure the WIFI.

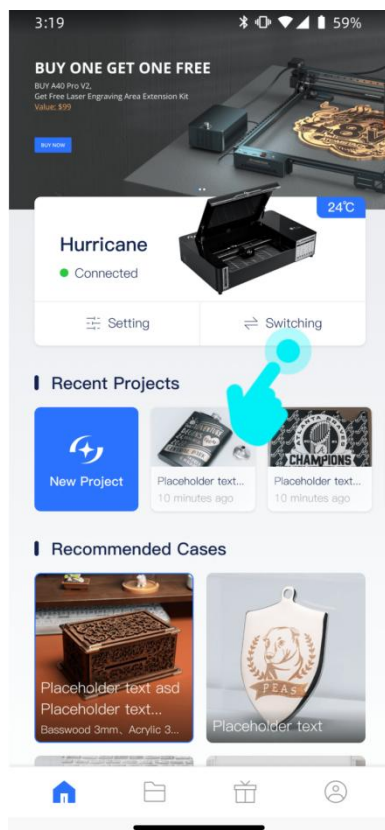
- Whether the device is too far away from the router
- Whether WiFi is 2.4GHz
- Whether the WiFi password is correct

If the WIFI configuration is successful, the interface is switched to the APP home page, and the user's phone can connect to the device through WiFi for remote control.



3. Replace/add equipment

1) If you need to replace the connected device, you can click the "Switch Device" button in the upper right corner of the main interface.

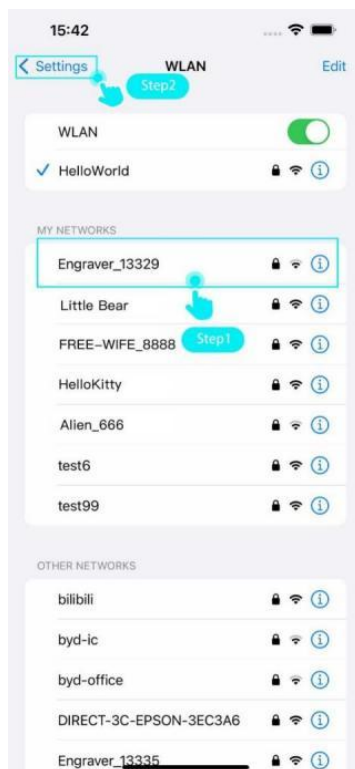


2) The "My Devices" icon at the top of the interface shows the devices that have been added, and you can click these device icons to switch between devices.

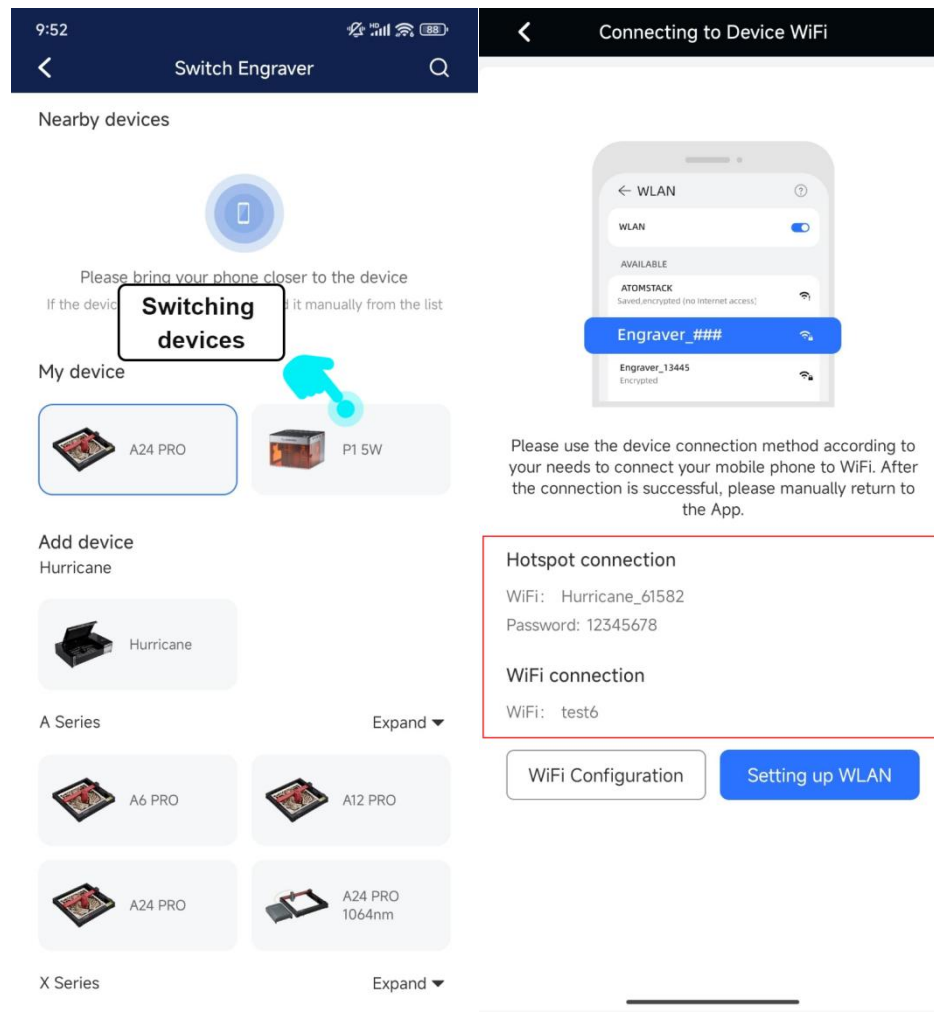


4. Change hotspot / WiFi connection

1) If you need to change the current connection mode of the device (hotspot, WiFi), you can directly modify the current WiFi signal of the mobile phone system to change the connection mode of the device.

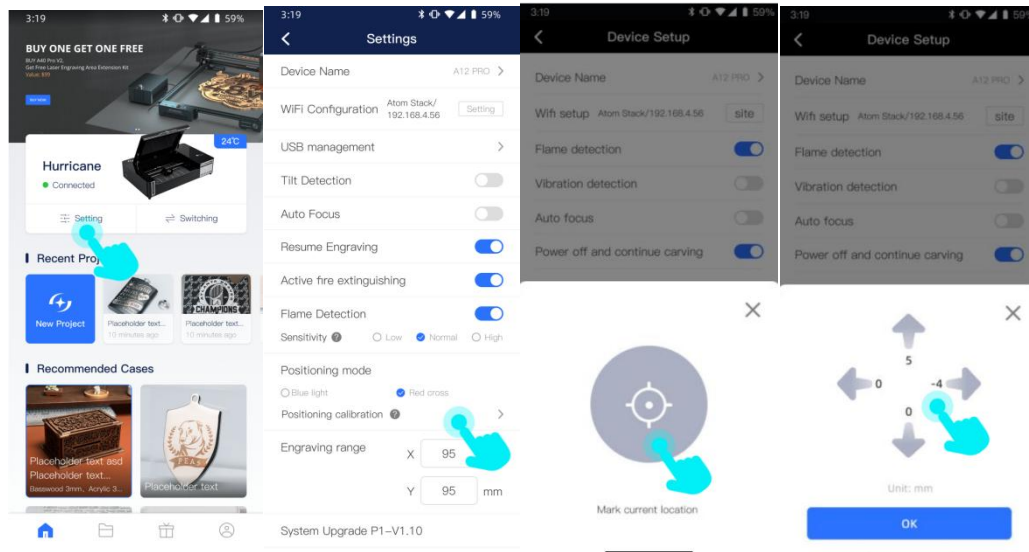


2) If you forget the device hotspot or the name of the network WiFi, you can check it by switching the device interface.



5. Machine function introduction

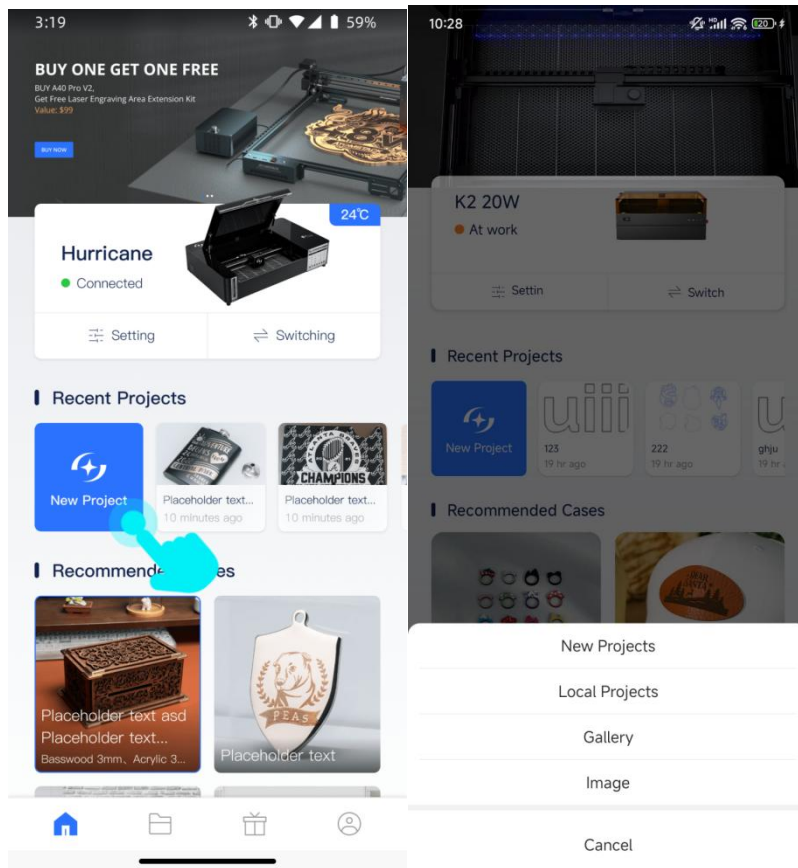
After connecting your device, tap "Device Settings" on the APP homepage to configure machine functions. If your device doesn't support this feature, the option won't appear in the menu. When your Red Cross laser deviates, use the "Position Calibration" feature in the menu to adjust its alignment (recommended using black marker paper). Click "Mark Current Position" to engrave a cross on the material. If the laser's red cross doesn't align with the engraved cross after carving, use the arrow keys (up/down/left/right) to move the red cross until it overlaps. Finally, click "Complete" to finish the process.



- **Flame detection:** When this function is enabled, if a fire occurs directly below the laser, this function will be triggered. The laser module will automatically return to the origin and the buzzer will sound. The machine can be used normally after restarting (if this function is supported).
- **Sensitivity:** The higher the sensitivity, the easier it is to trigger the flame detection function (if this function is supported).
- **Active fire suppression:** When this function is enabled, it will be triggered when a fire occurs directly below the laser and the device will actively suppress the fire (if supported).
- **Auto-focus:** When this feature is enabled, click "Start" and the machine will automatically start focusing before starting carving (if this feature is supported).
- **Tilt detection:** When the machine is at an Angle of 15° -20° from the horizontal plane, this function will be triggered and the machine will automatically stop working and the buzzer will sound. Click "OK" on the device screen to remove the alarm (if this function is supported).
- **Power-off continuation:** If the machine is stopped during the carving process due to power failure, the unfinished carving work can be continued after reconnection (if this function is supported).

6. Creation and sculpture

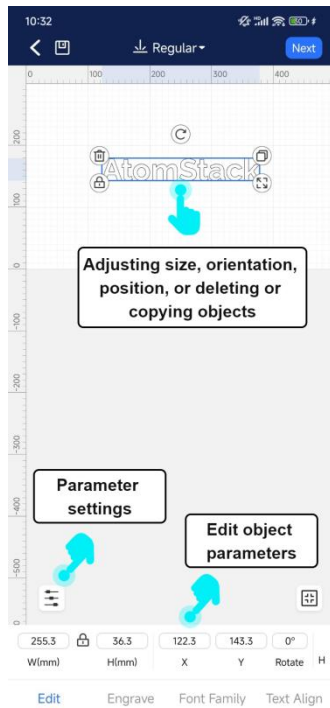
1) On the APP home page, click on new projects to start creating and carving.



2) In the creation interface, you can add text, material, pictures, hand drawings, bar codes to the canvas.

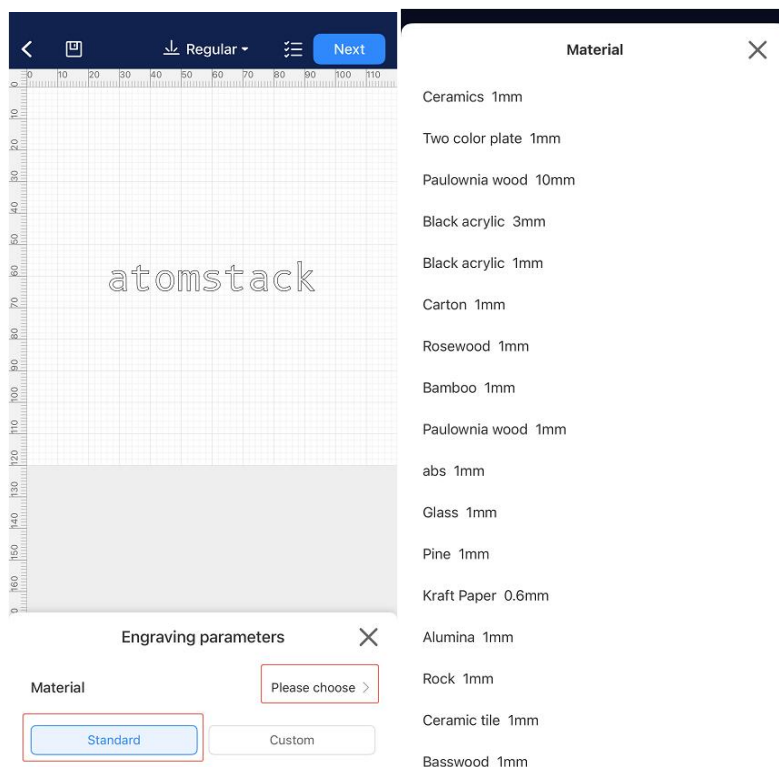


3) After adding graphics, you can edit parameters of selected objects through the bottom editing bar. Clicking an object allows you to adjust dimensions, orientation, and position using its peripheral buttons, while also enabling deletion and copying functions. Upon completing graphic design, click the "Parameter Settings" button in the lower-left corner to configure carving parameters.



4) In the carving parameter setting interface, you can select different "standard" and "custom" to set the carving parameters.

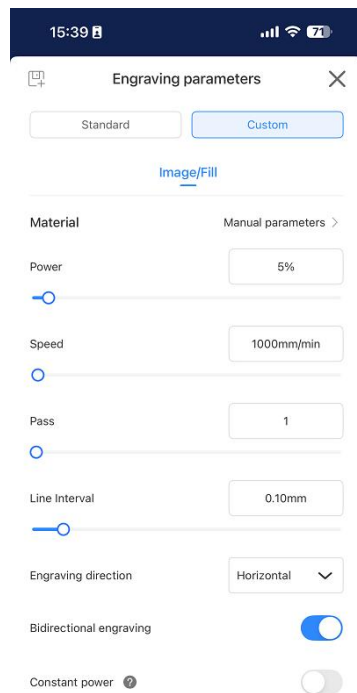
- Standard mode: Use the best carving parameters provided by the official according to the material you have selected.



- Customization mode: You can set the carving parameters of the canvas

pattern by yourself. For details, see below.

- A. Image: When you import a material as an image, you can set the parameters of

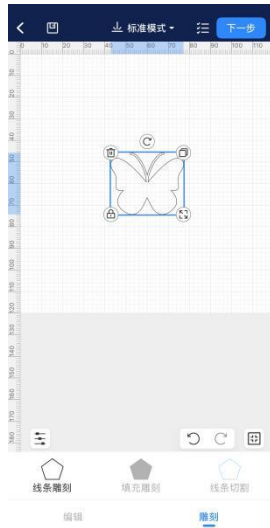


the image carving mode on the custom parameter page.

- Power: The power used in pattern carving.
- Speed: The speed at which the pattern is carved.
- Processing times: the number of times the pattern is carved repeatedly.
- Line spacing: The spacing between continuous lines carved by a laser.
- Carving direction: Set the carving direction of the positioning map, which is divided into "horizontal" and "vertical".
- Two-way carving: Set the carving mode of the positioning map. The carving efficiency of two-way carving is higher, while the carving efficiency of one-way carving is lower, but the effect is better.
- Variable light spot: If the equipment supports, the maximum power of the laser can be set to affect the effect of the carving light spot.
- Over scan: If the device supports it, the laser module will add an additional movement distance when carving the bitmap to avoid burning the edges of the carved area, but this will reduce the carved range of the bitmap in the carved area.
- Constant power: After this function is enabled, the laser power is forced

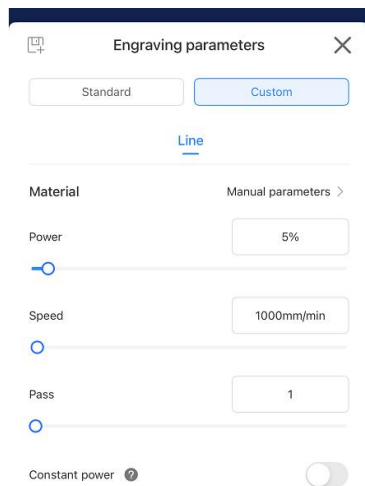
to remain constant regardless of the current moving speed.

B. Vector pattern: When you import a vector pattern, select the pattern and then select "Line mode", "Fill mode", and "Cut mode".



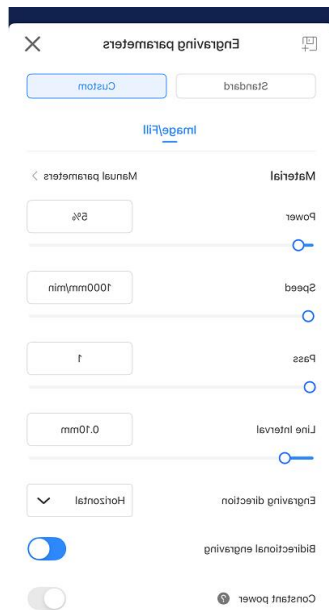
a. Line mode: In line mode, you can click to select a material scheme, or you can set the following parameters.

- Power: The power used in pattern carving.
- Speed: The speed at which the pattern is carved.
- Variable light spot: If the equipment supports, the maximum power of the laser can be set to affect the effect of the carving light spot.
- Processing times: the number of times the pattern is carved repeatedly.
- Constant power: After this function is enabled, the laser power is forced to remain constant regardless of the current moving speed.



b. Fill mode: In fill mode, you can click to select a material scheme or set the following parameters.

- Power: The power used in pattern carving.
- Speed: The speed at which the pattern is carved.
- Processing times: the number of times the pattern is carved repeatedly.
- Variable light spot: If the equipment supports, the maximum power of the laser can be set to affect the effect of the carving light spot.
- Line spacing: The spacing between continuous lines carved by a laser.
- Carving direction: Set the carving direction of the positioning map, which is divided into "horizontal" and "vertical".
- Two-way carving: Set the carving mode of the positioning map. The carving efficiency of two-way carving is higher, while the carving efficiency of one-way carving is lower, but the effect is better.
- Over scan: If the device supports it, the laser module will add an additional movement distance when carving the bitmap to avoid burning the edges of the carved area, but this will reduce the carving range of the bitmap in the carved area.
- Constant power: After this function is enabled, the laser power is forced to remain constant regardless of the current moving speed.



c. Cutting mode: In line mode, you can click to select a material scheme, or you can set the following parameters.

- Power: The power used in pattern carving.
- Speed: The speed at which the pattern is carved.
- Processing times: the number of times the pattern is carved repeatedly.
- Variable light spot: If the equipment supports, the maximum power of the laser can be set to affect the effect of the carving light spot.
- Constant power: After this function is enabled, the laser power is forced to remain constant regardless of the current moving speed.
- Start cutting Z-axis sinking distance: If the equipment supports, the laser Z-axis sinking distance before the start of cutting.
- Z-axis depth of cut: If the equipment supports, the depth of the laser's Z-axis after each cut.

Engraving parameters

Standard Custom

Cut

Material Manual parameters >

Power 5%

Speed 1000mm/min

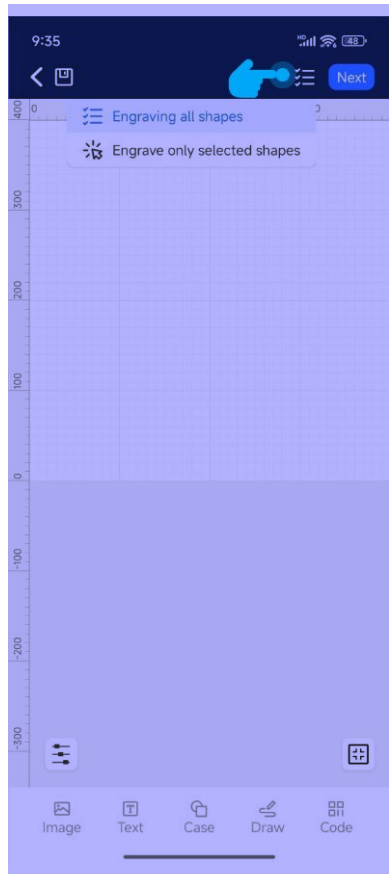
Pass 1

Constant power ? ☐

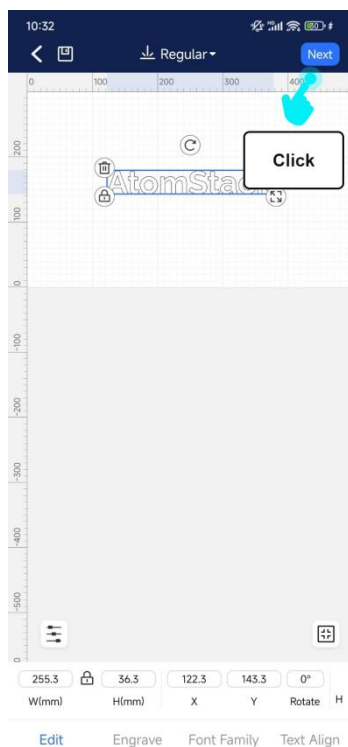
After setting, click the X button in the upper right corner to apply the parameters and return to the canvas. You can also click the save button in the upper left corner to save the current setting of carving parameters to the local, and you can find this scheme in the Custom-Material List next time when carving.

5) Output mode selection: You can click the "show below" button at the top to select the carving output mode.

- Carve all graphics: Carve all graphics on the canvas.
- **Carve only the selected graphics: Carve only the graphics selected in the canvas.**

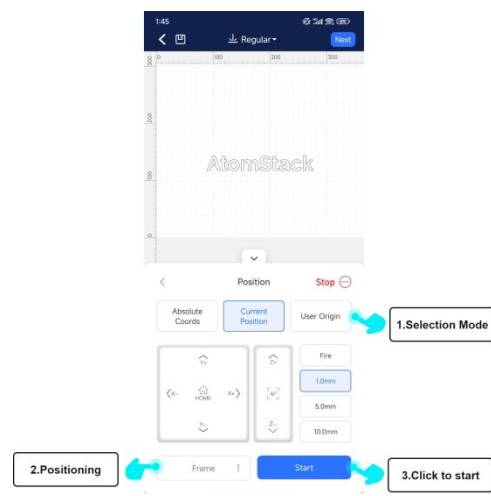


6) After completing the setting of the carving parameters, you can click the "Next" button to enter the positioning interface.



7) In the positioning interface, you can patrol the carving pattern and determine

its position in the carving area, and complete laser reset, auto-focus and other operations. After positioning, you can click the "Start" button to start the laser carving of the pattern.



- **starting position**

Absolute coordinates: According to the coordinate position of the object in the canvas, the carving is carried out at the corresponding coordinate position in the machine working area.

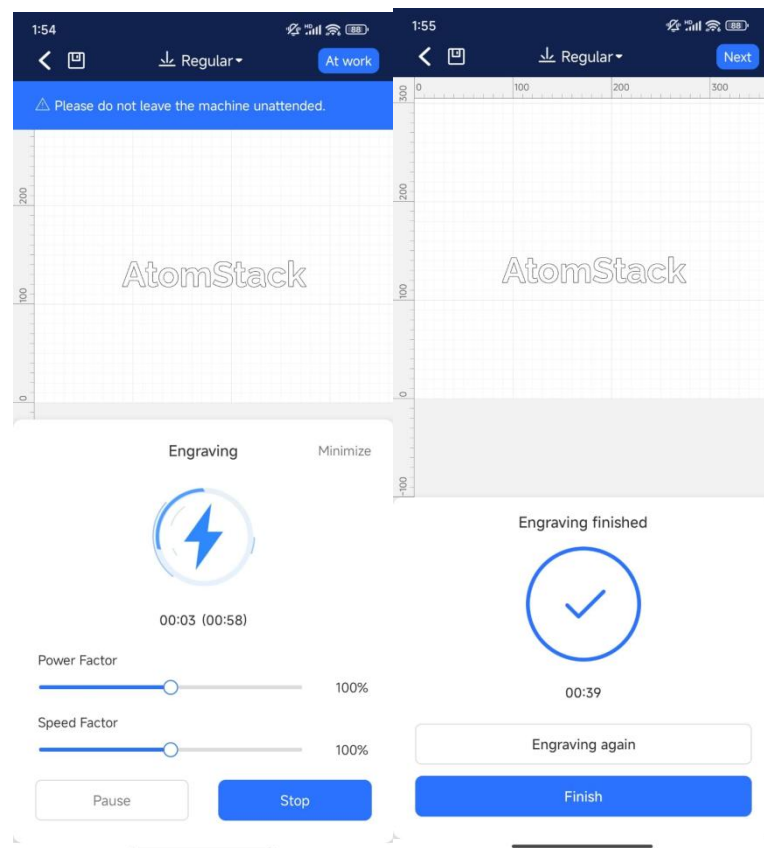
Current position: The laser's current coordinate position is used as the starting point of the carving work.

User origin: The user sets the origin coordinate position as the starting position of the carving.

- **Patrol:** The laser moves along the rectangular boundary of the pattern on the material, allowing you to preview the carved area.
- **Stop:** Forcefully terminate any movement of the laser.
- **Set the origin:** Set the starting carving position of the carving object with the current position coordinates of the laser.
- **Move to the origin:** Move the laser to the user's set origin position.
- **Distance:** The distance the laser moves along the XYZ axis.
- **Ignition:** The laser can be tested under different power.
- **Auto-focus:** The laser module will perform Z-axis auto-focus according to the best focal length for the engraving material (if this function is supported).

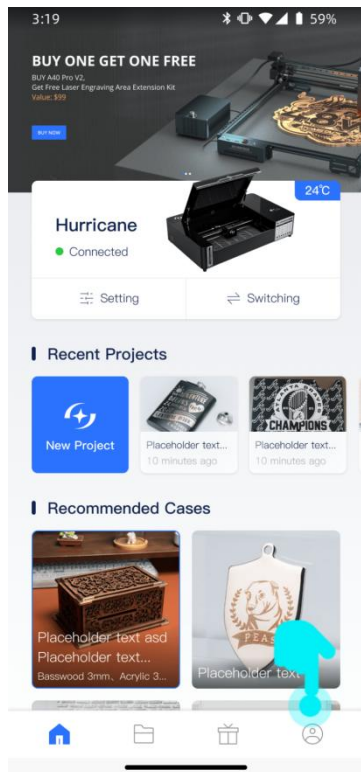
8) After entering the carving interface, you can adjust the current carving power

and speed in real time, or pause or stop the current carving project. After the project is carved, the interface will display the prompt message "Carving is complete".

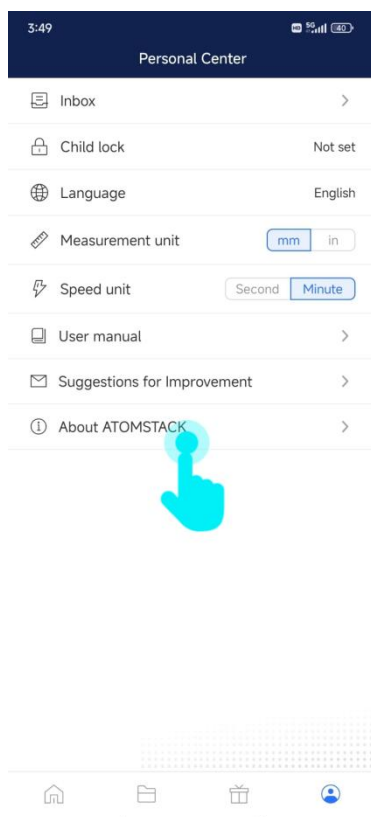


7. software update

1) Click the "Personal Center" button in the lower right corner of the APP home page.

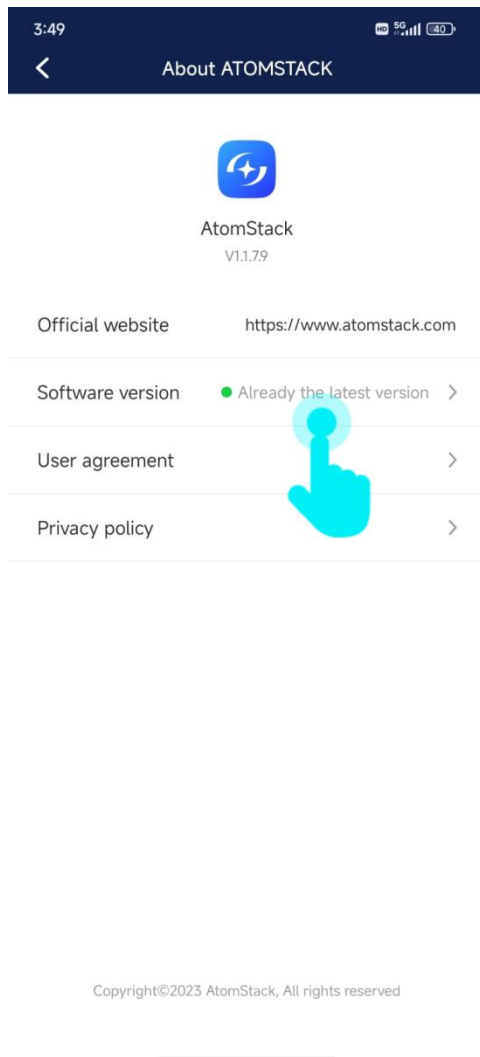


2) Click the About ATOMSTACK button in the interface.



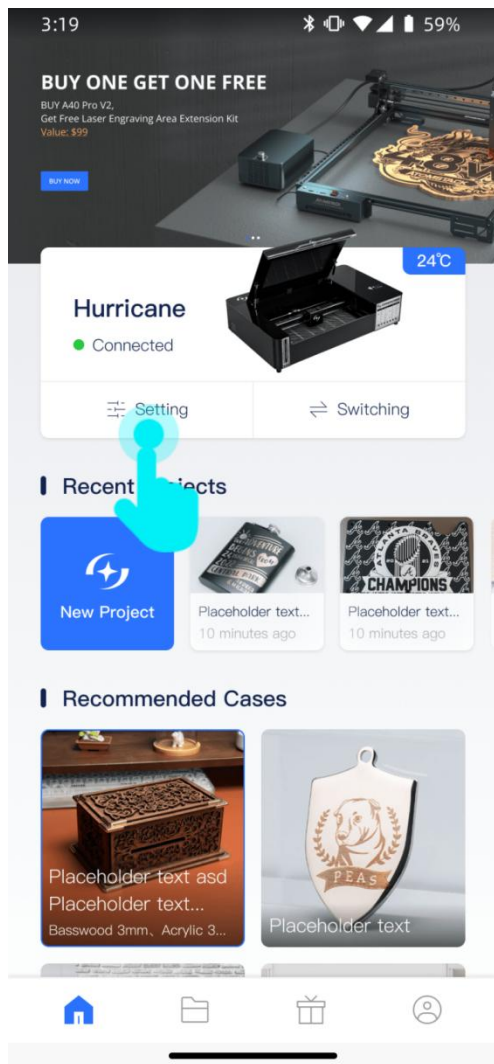
3) Click the "Software Version" button to check whether the current software

version is the latest. If there is a new version, you will be prompted to update the software version.



8. Firmware update

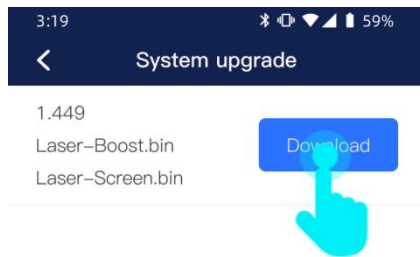
1) After adding the device, click the "Device Settings" button on the APP home page.



2) Click the "Firmware Update" button in the device Settings interface.

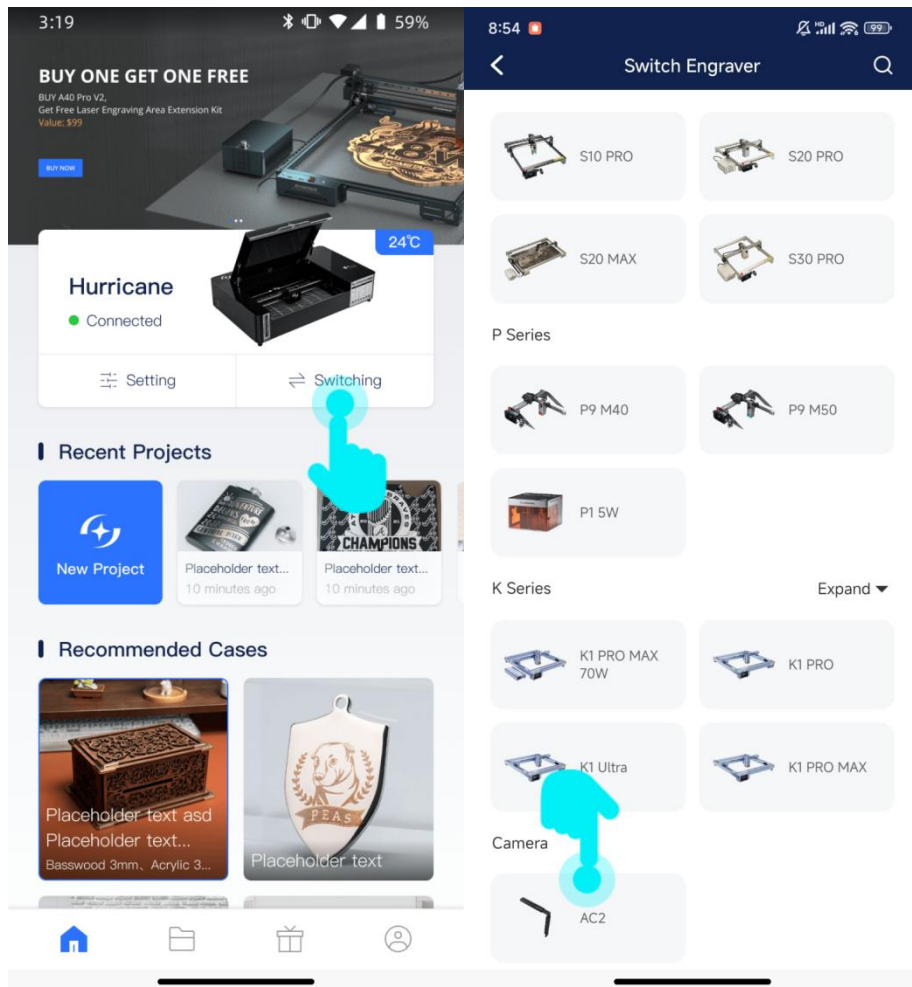


If the system detects that the device has an updateable firmware, the firmware version information will be displayed in the list. At this time, click the "Download" button to enter the firmware update process.



9. Add a camera

1) After entering the APP home page, you can click the "Switch Device" button, and then click the corresponding model camera button in the switch device interface.



2) On the camera connection page, click the "QR code configuration" button.

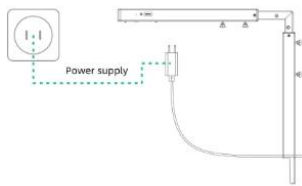


3) Connect the camera power cord to the power slot and wait one minute. You will hear the sound "Camera is ready for WiFi connection". After hearing the sound, click "Yes, I heard that sound".

< Generate QR code

Prepare for QR scan connection

1. Please insert the camera power cord into the power slot as shown below.



2. Wait for one minute, you will hear the voice of "Camera is ready for wifi connection".

No, I didn't hear the voice.

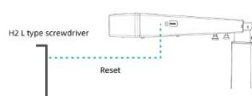
Yes, I heard the Voice.

If you do not hear the prompt "The camera is ready for Wifi connection", you need to reset the camera according to the interface instructions. After hearing the voice prompt "Successfully reset the camera", click the "Yes, I heard that sound" button and repeat the camera addition steps.

< Generate QR code

Reset the Camera

1. Press and hold the reset button for 5 seconds, then you will hear the sound of "Successfully reset the camera".



No, I didn't hear the voice.

Yes, I heard the Voice.

4) In the WIFI configuration page, fill in the name and password of the Wifi that the camera needs to be configured, and then click the "Next" button.

WIFI setting

Please configure the WIFI name and password for the camera connection.

WIFI name

test6 [Get WIFI name](#)

WIFI password

Please enter the WIFI password [next](#)

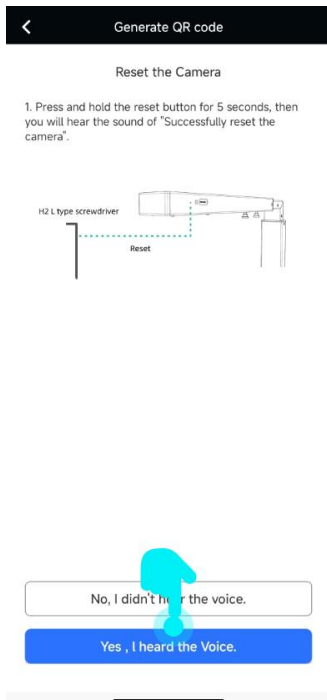
Next

Progress indicator: 1 of 2 steps completed

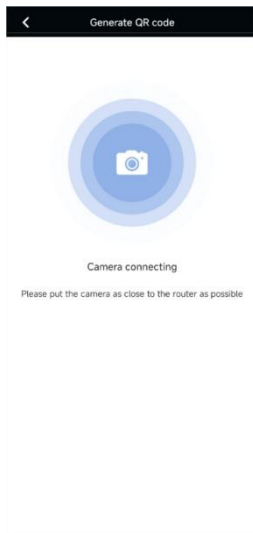
5) Point the QR code generated on your phone at the camera and keep a distance of 10 to 20cm. Then you will hear a "beep" sound. After hearing the sound, click "Yes, I heard that sound".



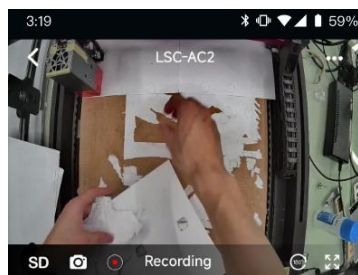
If you do not hear a "beep" sound, you need to reset the camera according to the interface instructions. After hearing the sound of "Successfully reset the camera", click the "Yes, I heard that sound" button and repeat the camera addition steps.



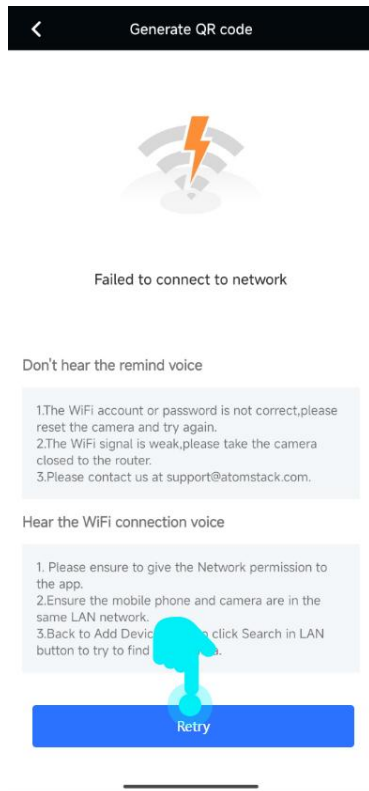
6) Move the camera as close to the router as possible and wait for the Wifi configuration results.



7) The Wifi configuration is successful, and the interface is switched to the camera management interface. Now you can use all the functions provided by the camera.

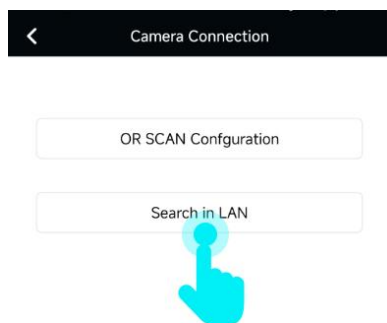


If the Wi-Fi configuration fails, troubleshoot according to the reasons listed in the interface. After troubleshooting, click the "Retry" button below to reconfigure the Wi-Fi.

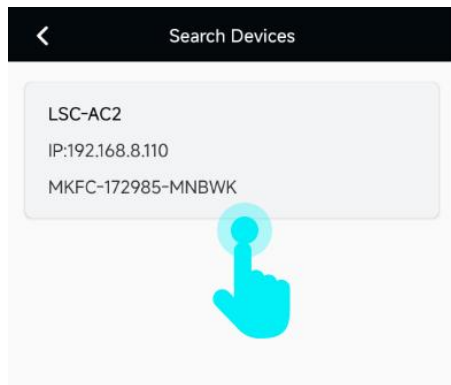


10. Search cameras on the LAN

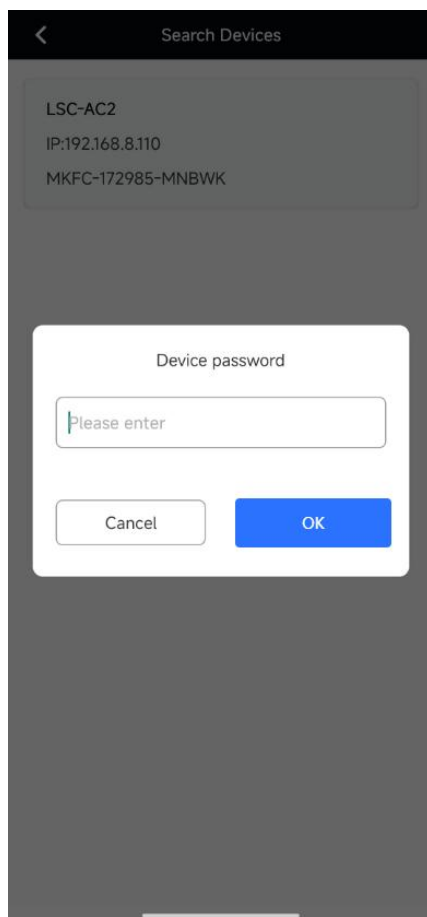
1) When the camera is added through Wifi configuration, other mobile phones can add the camera by "searching the camera in the local area network". In the camera connection interface, click "search in the local area network".



2) After entering the "Find Device" screen, click on the "Camera" information card in the list.



3) The camera password input box will pop up on the interface. After filling in the correct camera password (the default camera password is admin), the camera can be connected.



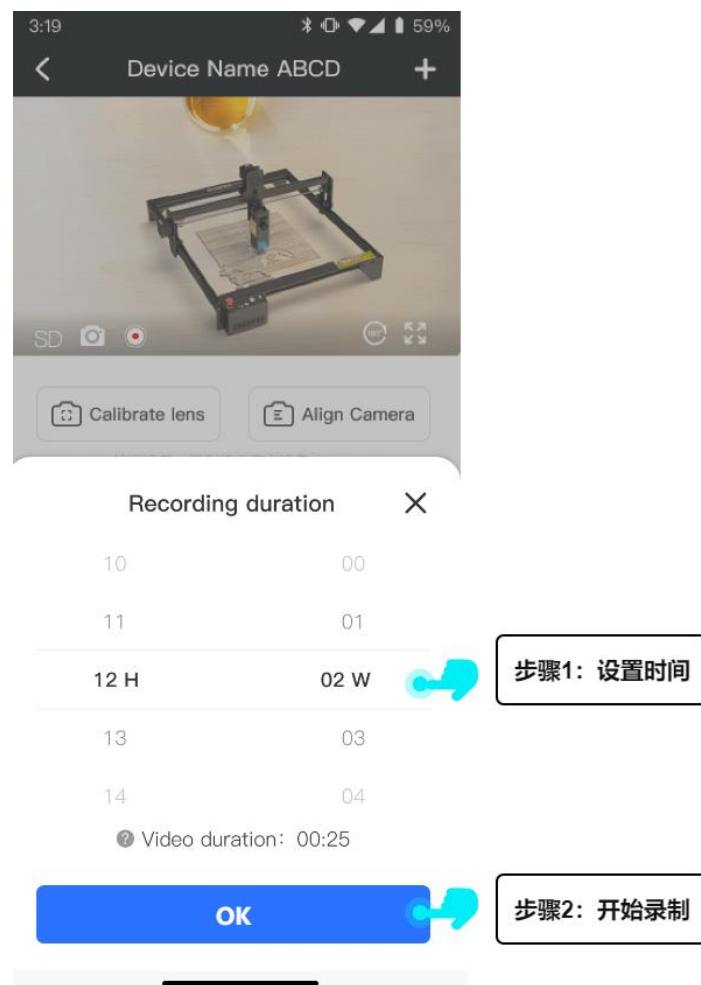
11. video recording

1) On the home page of the camera, you can click the SD/HD button to switch the video clarity of the camera, where SD stands for standard definition video and HD stands for high definition video. Click the video recording button on the interface to

record the video.

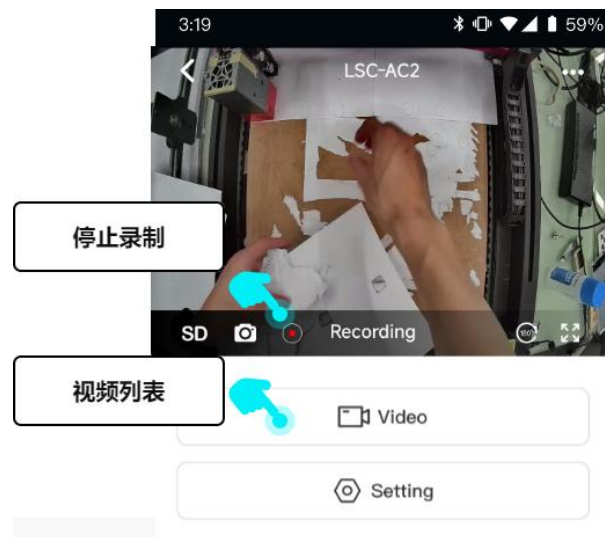


2) First, you can set the duration of the video recording, and then click the "OK" button to complete the setting.



3) During video recording, you can click the record button again to stop recording the current video.

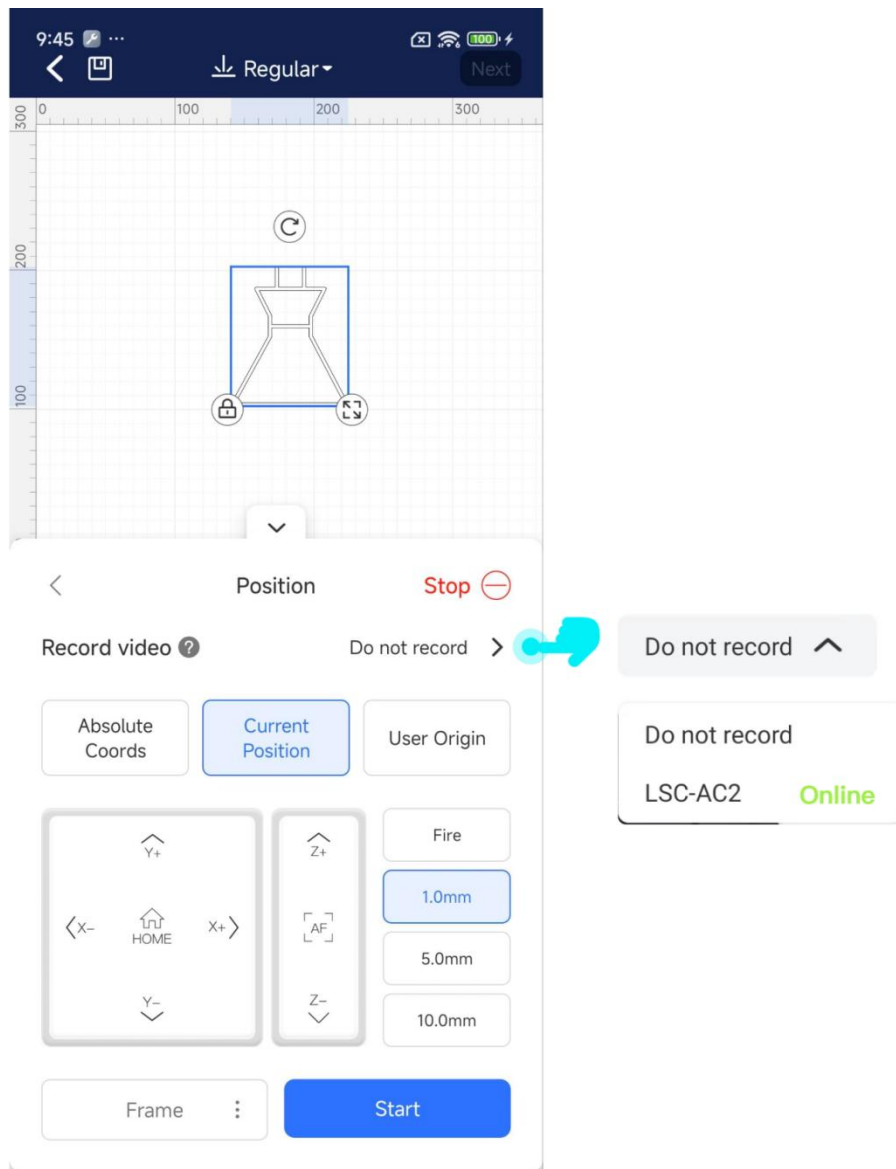
If you need to view the recently recorded video, click the "Video" button on the main interface to enter the video list interface.



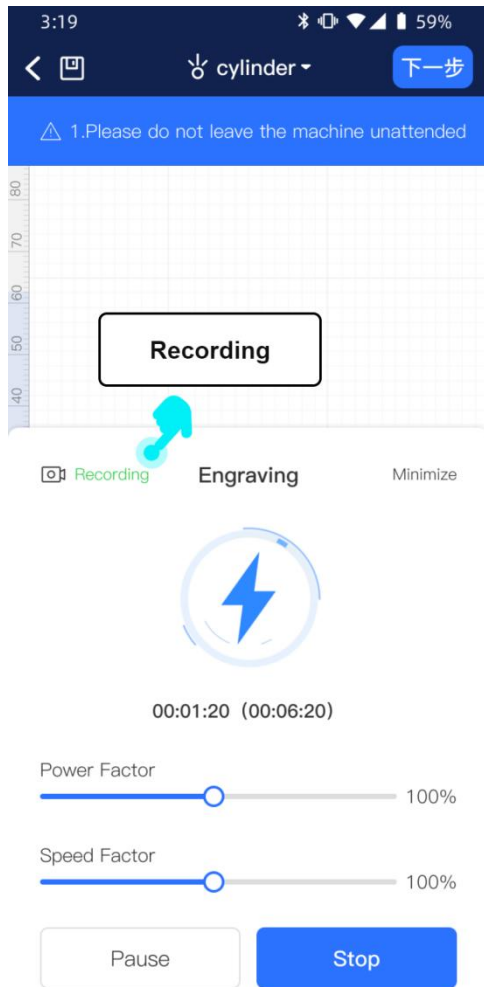
4) In the video list interface, you can view all recorded/recorded videos, and can download and delete videos.



5) In addition to the camera home page, you can also click "Record video" at the top of the interface in the carving control interface to select the camera that needs to record the carving process.

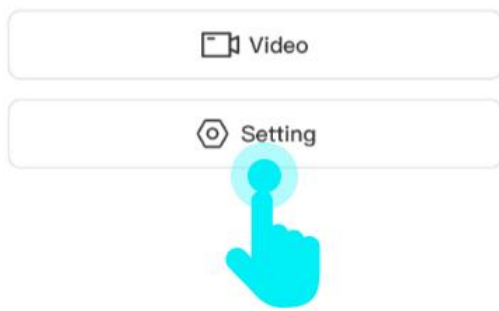
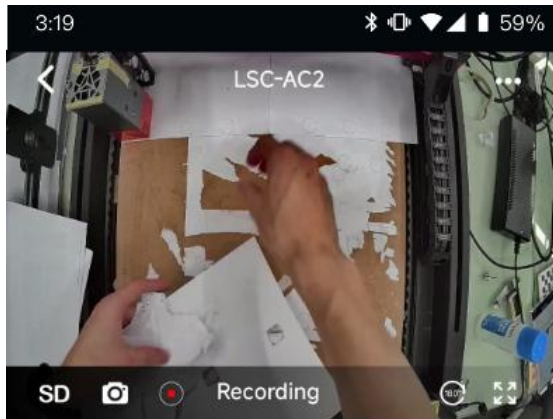


6) After selecting the camera, start the carving work. The camera will automatically record the whole process of carving until the end of carving.

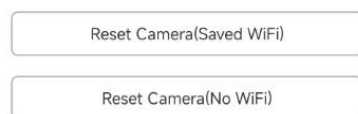
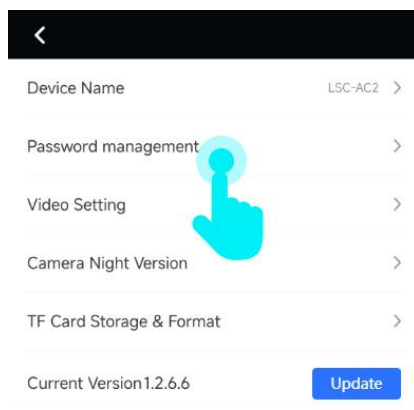


12. Change the camera password

1) If you need to change the camera password, you can click the "Settings" button on the camera home page.



2) In the Settings interface, click the "Password Management" button.



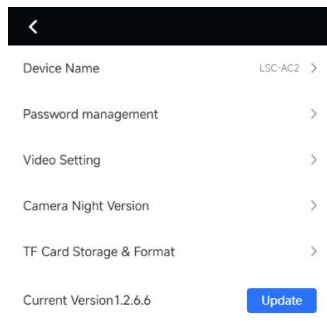
3) In the password management interface, first set the new camera password, and then click the "Save" button to save the camera password.

The screenshot shows a mobile application interface for password management. At the top, there is a dark header bar with a back arrow, the text "Password management", and a "Save" button. A blue arrow points from the "Save" button to a callout box labeled "步骤2: 保存" (Step 2: Save). Below the header, there are two input sections. The first section is labeled "New Password" and contains a text input field with a placeholder "The new password must not be less th...". A callout box labeled "步骤1: 设定密码" (Step 1: Set password) points to this section. The second section is labeled "Confirm the new password" and contains a text input field with a placeholder "Fill in the password again".

13. Reset the camera

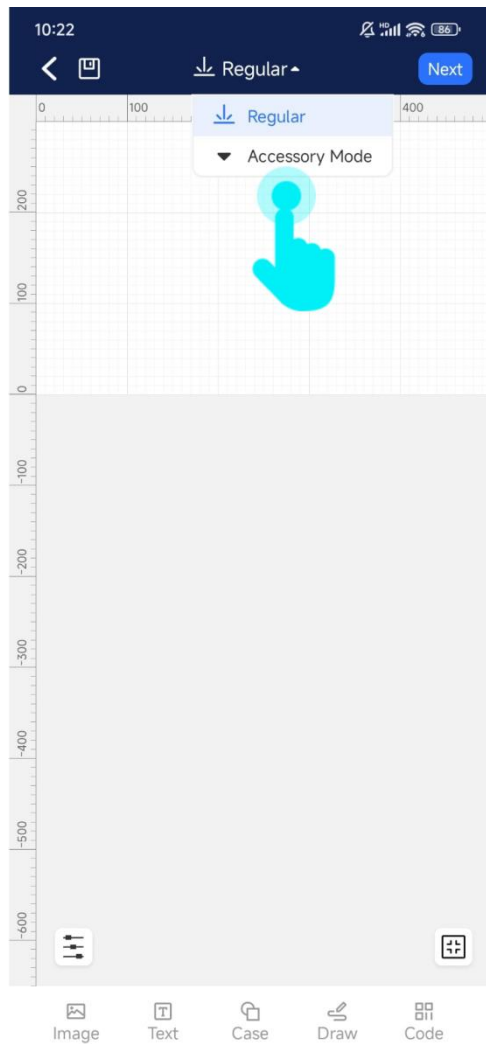
You can reset the camera by selecting "Reset Camera (Keep WiFi)" or "Reset Camera (Delete WiFi)" in the camera Settings interface.

- **Reset Camera (Keep WiFi):** This will reset the camera while keeping WiFi configuration data. After the camera restarts, the phone will remain connected to the camera and all camera parameters will be restored to their default values.
- **Reset camera (remove WiFi):** This will reset the camera and remove WiFi configuration data. After the camera restarts, the phone needs to add the camera again, and all camera parameters will be restored to default values.

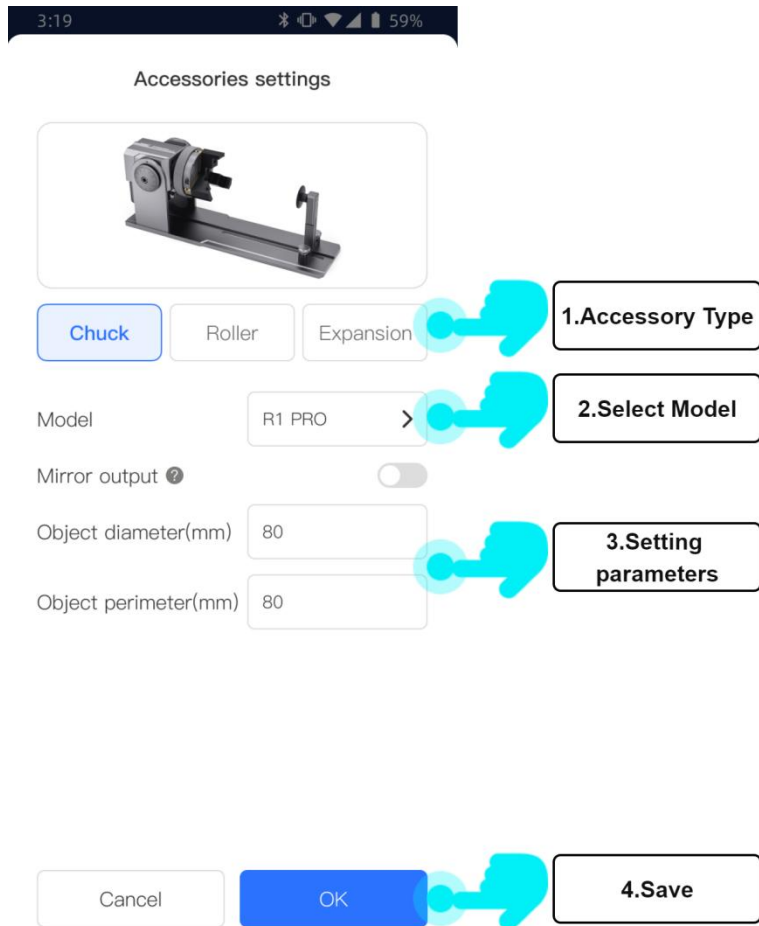


14. Part swap

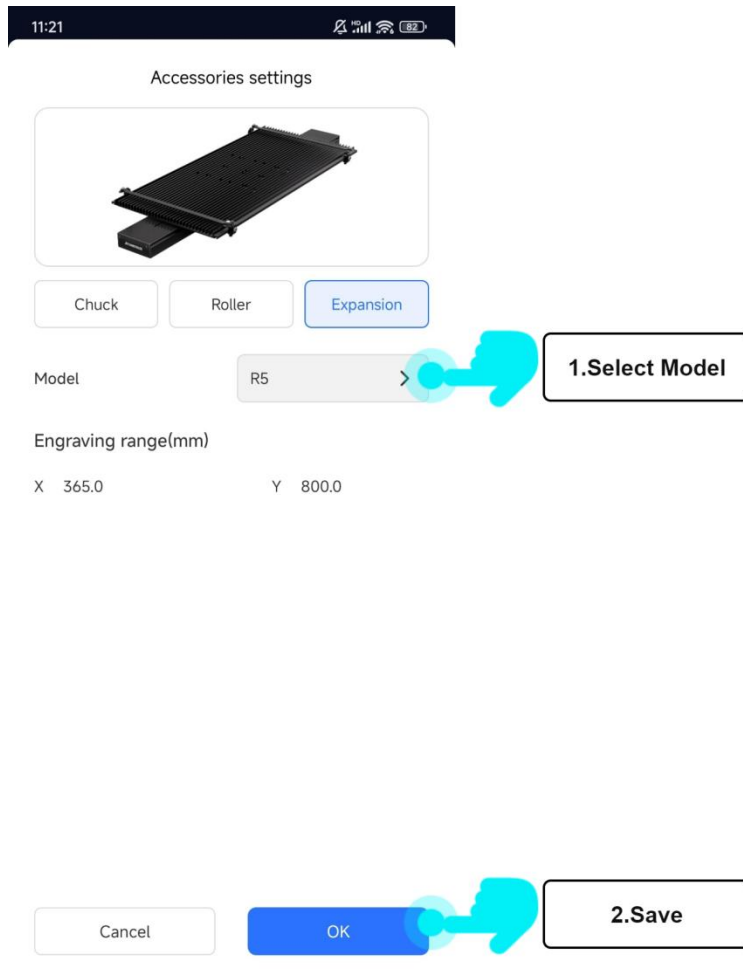
1) After connecting the device, you can switch between accessory modes at the top of the creation interface. If your device supports automatic accessory recognition, the accessory will be automatically configured after being connected, without manual switching.



2) You can switch between the three modes: "standard", "cylinder" and "expansion". If you use a chuck or roller, first select the model number of the accessory, then set the corresponding parameters according to the prompts on the interface, and finally click "OK" to complete the setting.



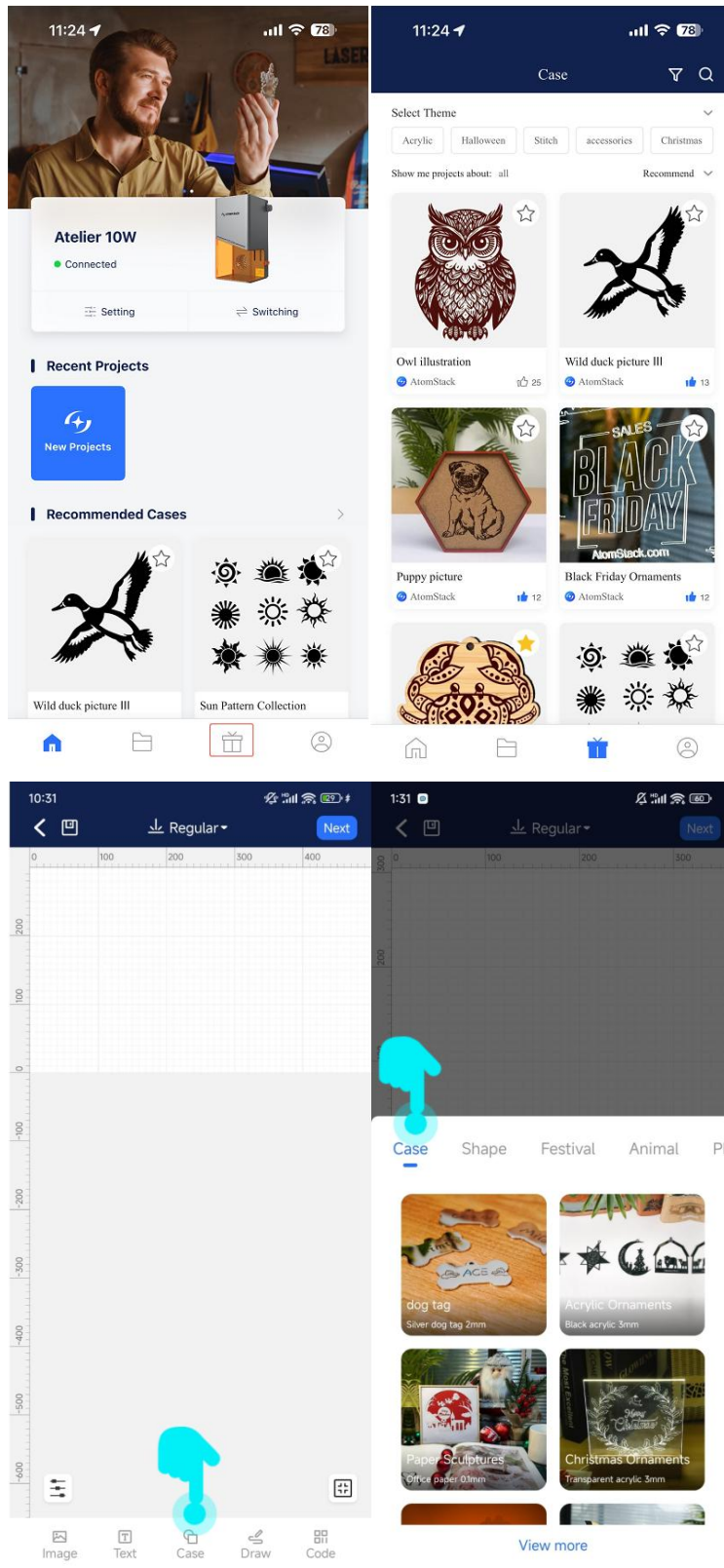
3) If you use the amplification mode, you need to select the model first and then click "OK" to complete the setting.



15. Case use

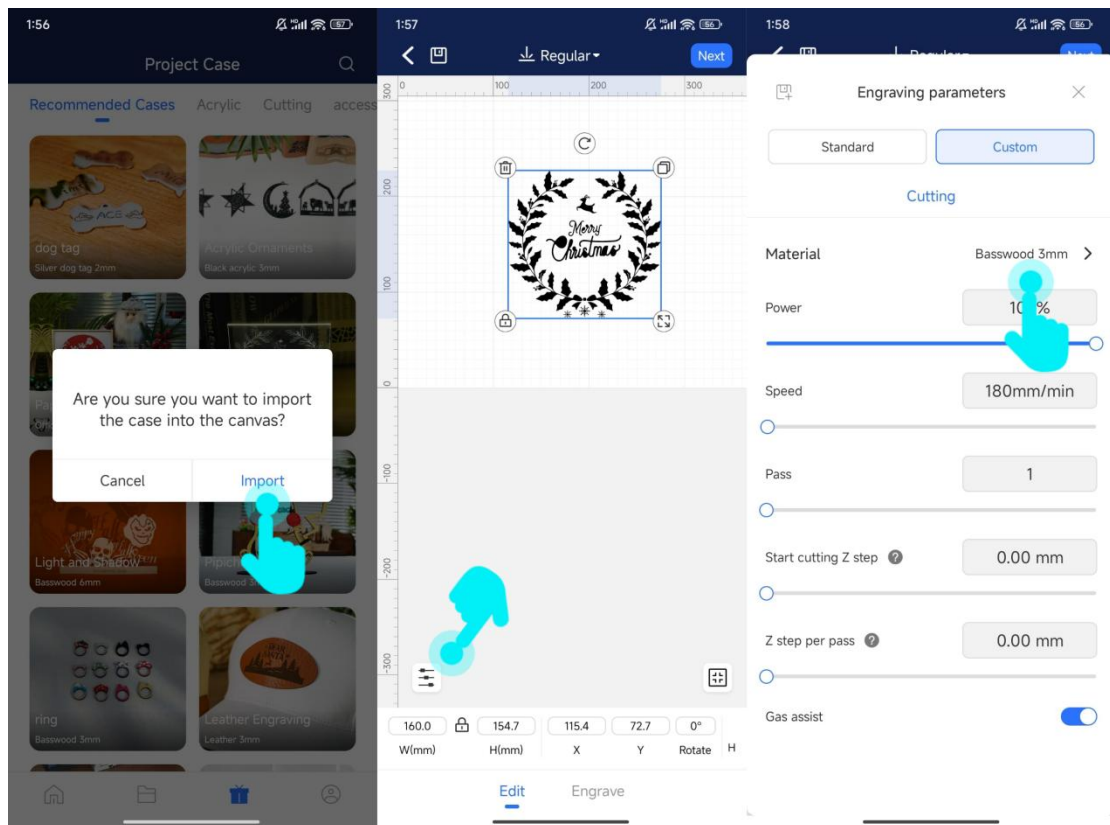
1) You can click the "Case" button at the bottom of the APP home page to read or use cases.

You can also click the "Case" button at the bottom to import cases during the creation process.



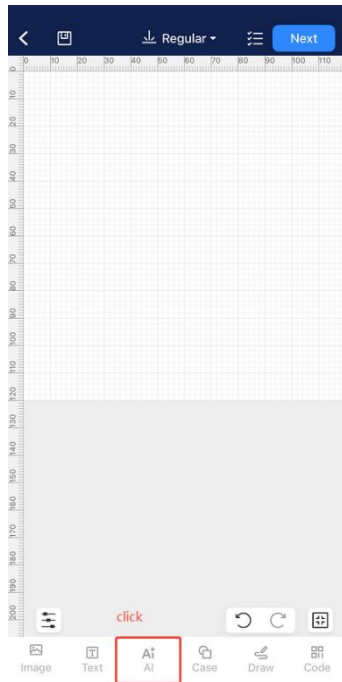
2) After selecting a case, you can import the case pattern into the canvas. If your device is successfully connected and supports the material used in this case, the system will automatically set the carving parameters for that material. You can also click the parameter setting button in the lower left corner of the canvas to customize

the carving parameters yourself.



16. AI generates images

You can go to the project edit page, find the text to generate a picture function, click to enter.



On the text-to-image page, you can set the following information:

- Prompt: Describe to the AI what you expect the image to look like
- Image style: Specify the style of the image to be generated
- Image ratio: Set the ratio of the image to be generated
- Number of images: Determines the number of images to be generated
- Upload reference pictures: Upload pictures for reference

AI (Beta)

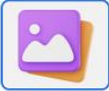
AI-Generated Content

History

Prompt

Please describe your image, for example: "A lion playing basketball."

Style



No style



Logo



Relief



Paper Cutting



Pixel



Cartoon



Neon Punk



Fantasy Art

Upload reference image (optional)

 Click to upload image
Support .jpg/.png

Image aspect ratio

□ 1:1

Image count

-

1

+

Generate

1