XTOOL



Use xTool Creative Space (XCS) to Operate xTool M1







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Obtain and install XCS

(1) Download the xTool Creative Space software applicable to the operating system that runs on your PC.

Windows (Win7+):

https://res-us.makeblock.com/xtool/download/xTool%20Creative%20Space.exe macOS (Mojave 10.13+):

 $\underline{https://res-us.makeblock.com/xtool/download/xTool\%20Creative\%20Space.dm} \ \underline{g}$

(2) Double-click the software you've downloaded to install it.



Click **Yes** when you are asked "**Do you want to allow this app to make changes to your device?**" and then continue the installation as prompted.



Quick start example

1. Select a language

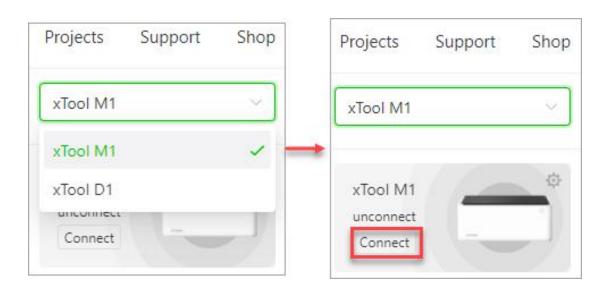
Click **Settings** and select a language.



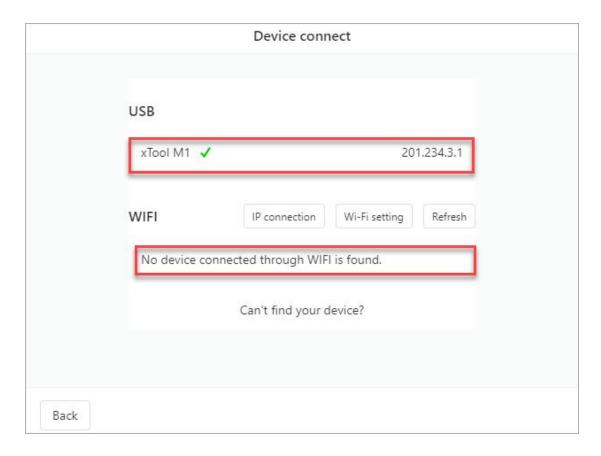
2. Connect xTool M1 to XCS

- (1) Use the USB cable to connect your device to your computer.
- (2) Turn on your device.
- (3) Open XCS. select **xTool M1** from the device list, and then click **Connect**.





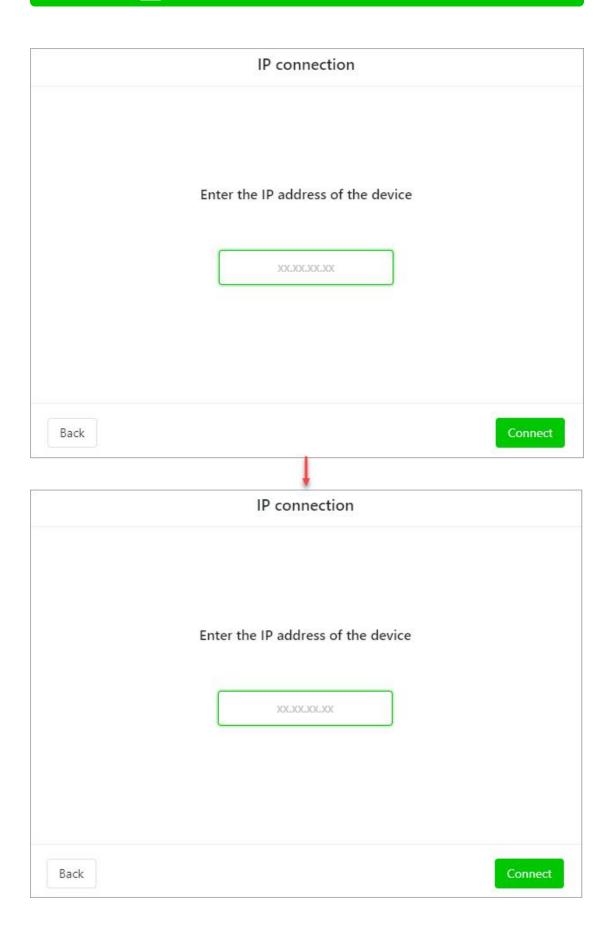
XCS automatically searches for devices and displays devices connected through USB port or Wi-Fi.



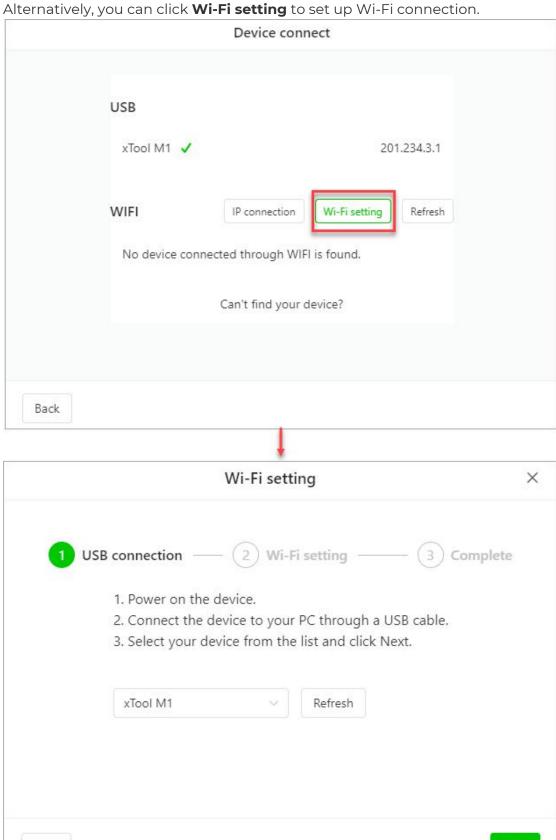
Click the device you want to connect.



If you want to use your device wirelessly, you can click **IP connection** to set up IP connection.



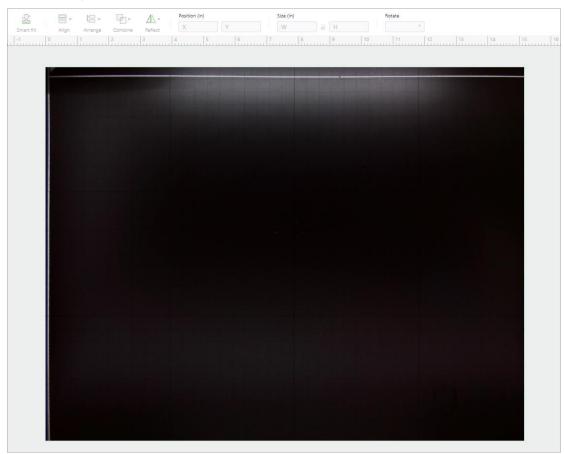




Back

Next

After your device is connected to XCS, you can see the image captured by the camera of your device on XCS.



3. Place a material

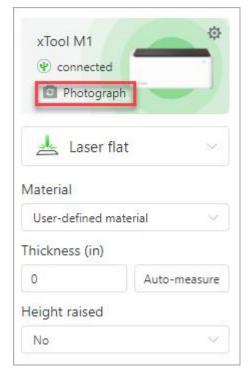
(1) Place the material to be processed in the working area of your device.

Note: Place the material at the red light spot, so that the device can measure the thickness of the material.

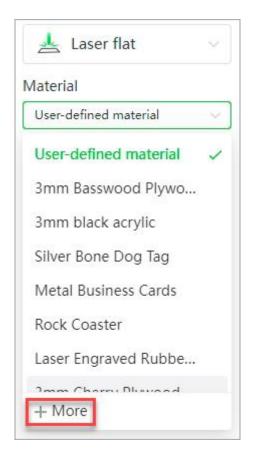




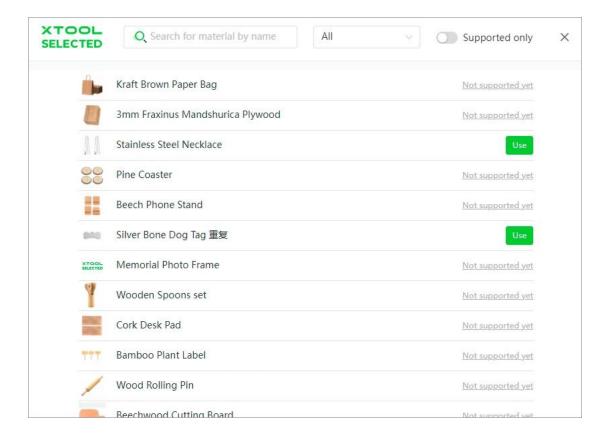
If the camera doesn't capture the material, you can open the lid and then close it to refresh the image, or click **Photograph** to refresh the image.



(2) Select your material from the **Material** drop-down list box.



If you can't find your material in the list, you can click **+ More** to find more materials. In the **xTool SELECTED** window that appears, you can search for and view more materials, or view only materials that are supported.



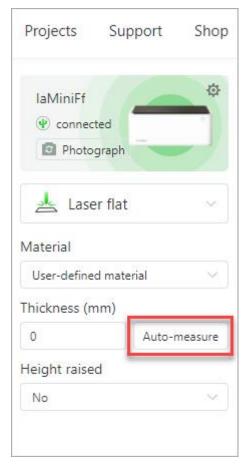
Note:

- Whether a material is supported depends on the device model, power of the laser module, processing mode, or other factors.
 For example, kraft paper can be processed only in blade cutting mode by xTool M1; and some thicker materials can be cut only by using the laser module of 20W.
- You can visit the xTool SELECTED online material center only when your computer has connected to the Internet.
- Parameter settings provided in the xTool SELECTED online material center are applicable only to the official xTool materials. For materials, of the same names, purchased from

other manufacturers, the parameters settings recommended in the material center may not be the best choices.

•

If it is not included in the list, click **Auto-measure** to automatically measure the thickness of your material.



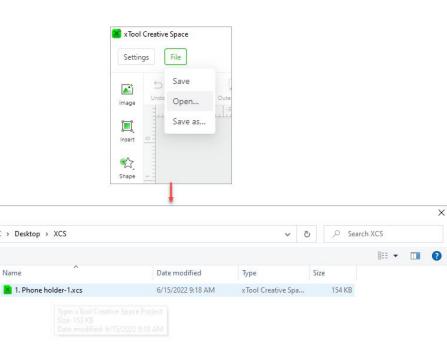
Wait for the measuring to complete.



4. Open a project file, import an image, or create your design on XCS

• Open a project file





file (*.xcs)

Open

Cancel

• Import an image

File name:

← → ✓ ↑ 📙 > This PC > Desktop > XCS

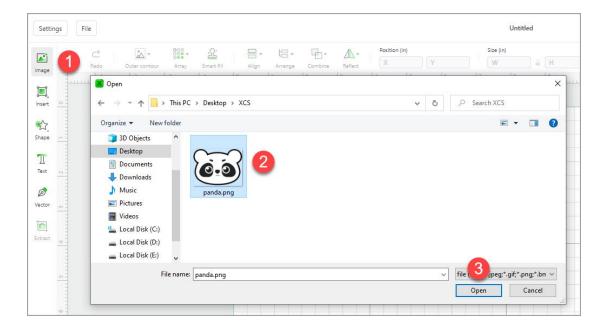
Organize ▼ New folder

3D Objects ^

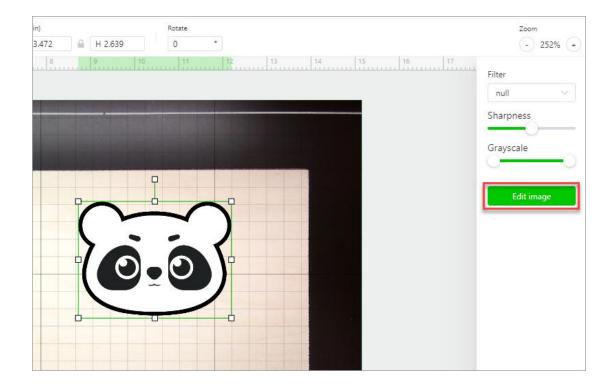
Desktop

Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
Local Disk (E:)

🔀 Open

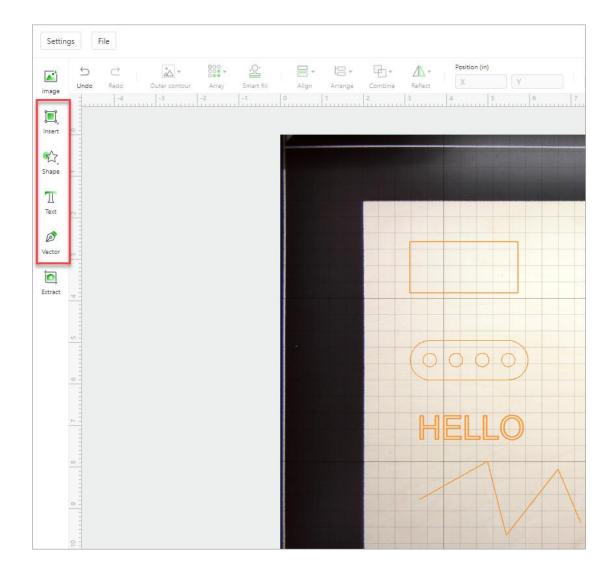


After importing an image, you can directly use the image or edit it to make your own design.



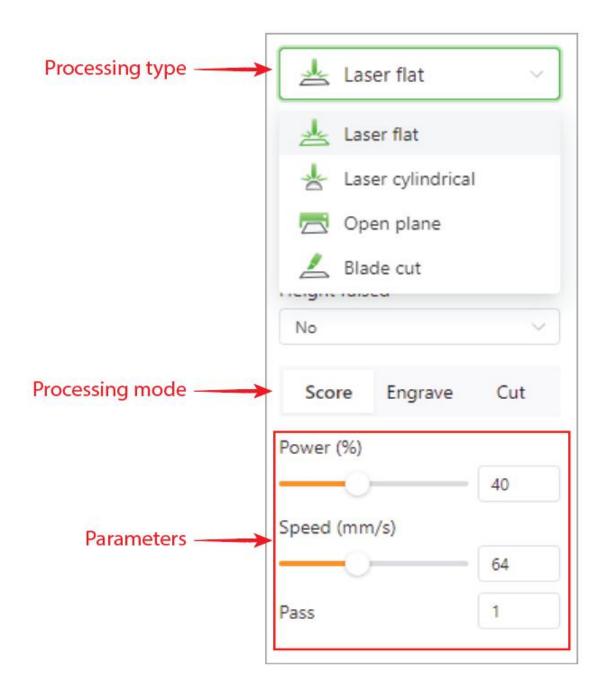
• Create your design

You can insert a shape, enter a text, or draw vector paths on the canvas.



5. Set the processing type, mode, and parameters

Select each design element and set the processing type, mode, and parameters for it.



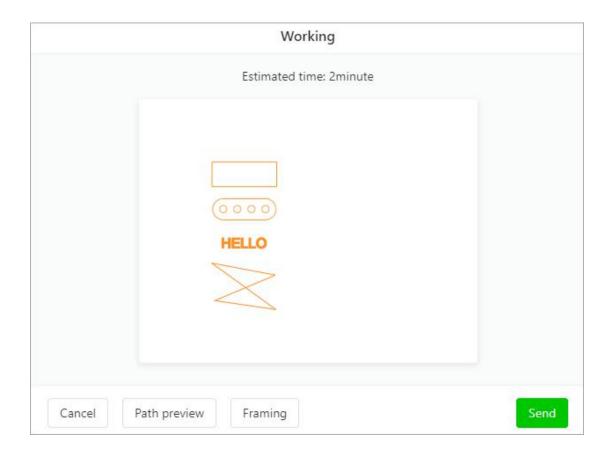
6. Start processing

Click **Start** to start processing.





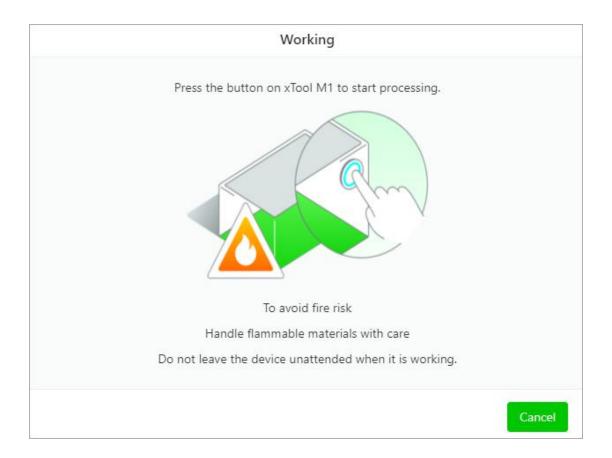
On the Working window, click **Path preview** to preview the processing path and click **Framing** to preview the processing area on your material.



If the design elements are to be processed as expected in the expected area, click **Send** to send the file to your device.

Press the button on your device to start processing and wait for the processing to complete.

You can click **Cancel** to cancel the processing.



This is the general process of using XCS to create your works. For details of the functions of XCS, see Function description.

Function description

Shortcut keys

Navigation

Zoom in Ctrl + =

Zoom out Ctrl + -

Hand Space + Drag mouse

Editing

Copy Ctrl + C

Paste Ctrl + V

Delete Backspace or Del

Undo Ctrl + Z

Redo Ctrl + Y

Moving artwork

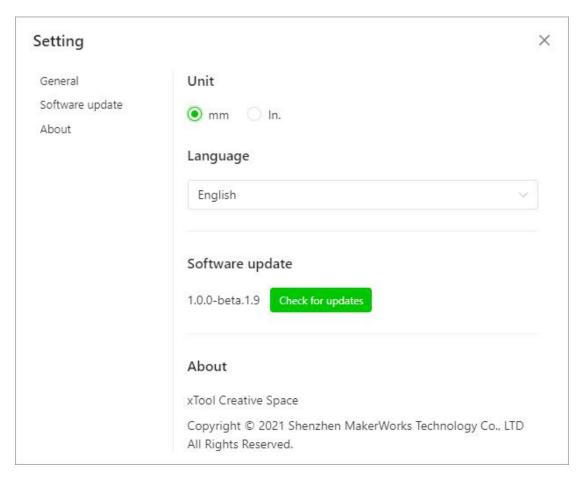
Nudge $\uparrow \downarrow \leftarrow \text{or} \rightarrow$

Big nudge Shift + ↑ ↓ ← or →

Menus

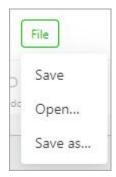


① Settings



- **Unit:** sets the unit for displaying the size and position of a design element
- Language: sets the language of the UIs
- Software update: displays the software version and checks for later versions
- About: displays information about the software

② File



- Save: saves all the changes to the project
- **Open:** opens a local project file, supporting only .xcs files
- Save as: saves the project to another file

Project name

It displays the name of the project.



Links



- Projects: links to the example project center, where you can find various example projects
- **Support:** links to the xTool support website, where you can find online help for xTool products
- **Shop:** links to the xTool online store, where you can purchase xTool products, accessories, and materials

Tools

Vertical toolbar

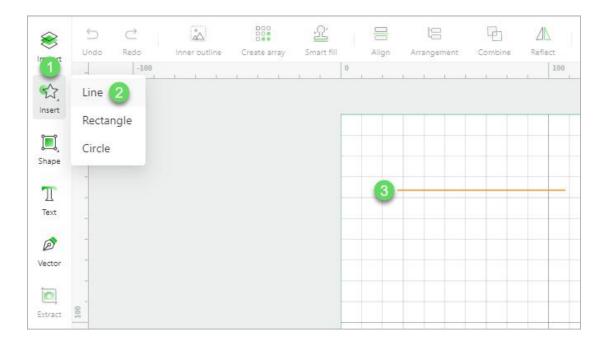


• **Import:** import an image. After importing an image, you can set the properties of the image.

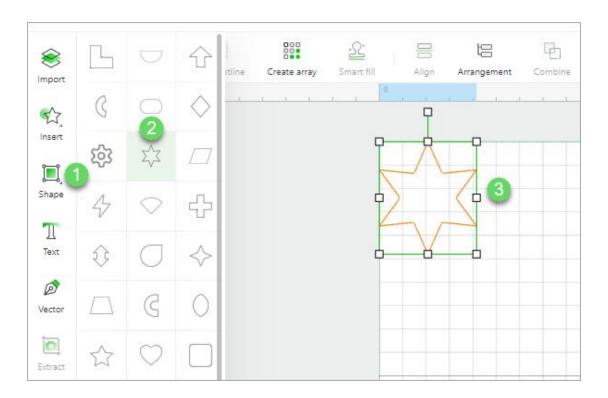


.

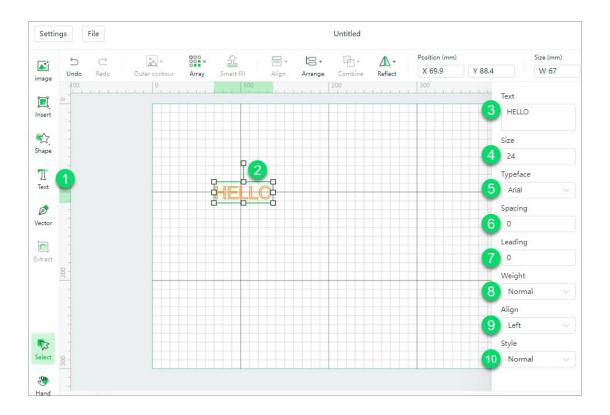
- o **Filter:** You can add a grid filter for the image.
- Sharpness: With other settings unchanged, sharpness is related to the clarity of detail in an image.
- Grayscale: The grayscale is related to the contrast of light and shade. Slide the block on the left to the middle to enhance the shade. Slide the block on the right to the middle to enhance the light.
- Insert: selected to draw a common shape



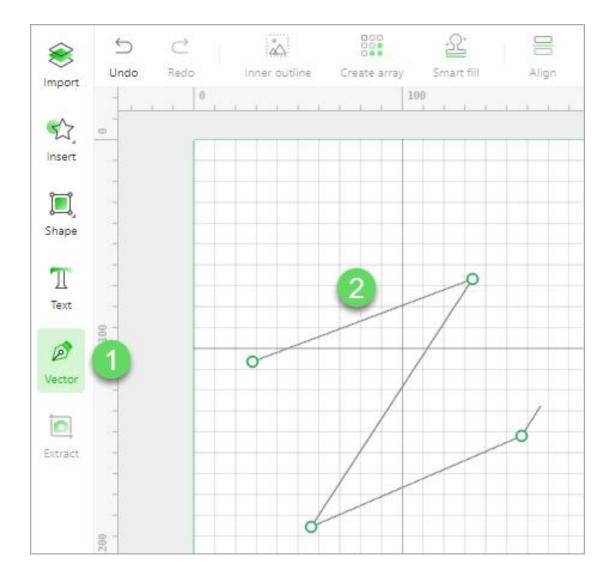
• **Shape:** inserts a shape



• **Text:** inserts a text. The default text is **HELLO**. After insert the text, you can change the words, set the font size, typeface, spacing, leading, weight, aligning mode, and style.

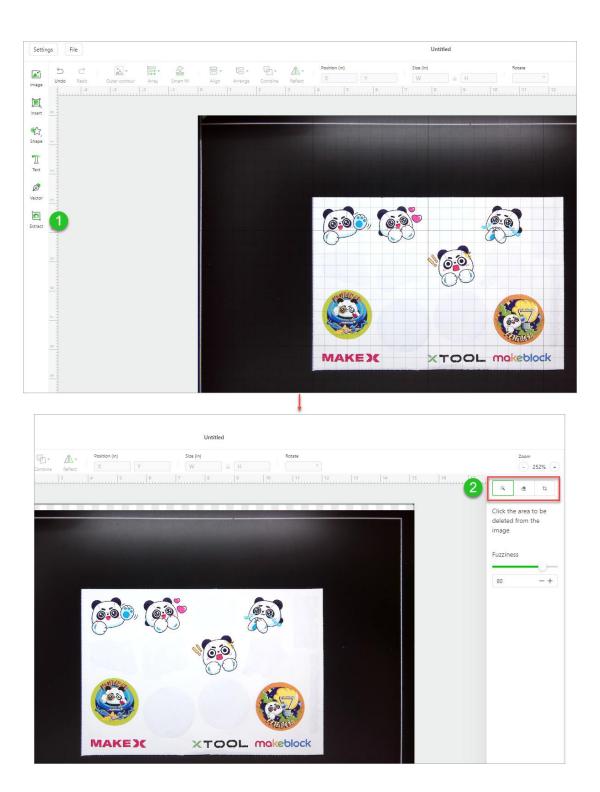


• **Vector:** selected to draw a vector path



After drawing a vector path, you can double-click an anchor point to convert it to a rounded corner or back to a corner, and adjust the curvature.

• Extract: extracts images from the image captured by the camera of a device. This function is available only when XCS has connected to a device with a camera. You can use the magic wand, eraser, and crop tools to extract the image you want, and then you can use the image for processing.



Magic wand: deletes the area you want to delete from the image

Eraser: erases the area where you click from the image



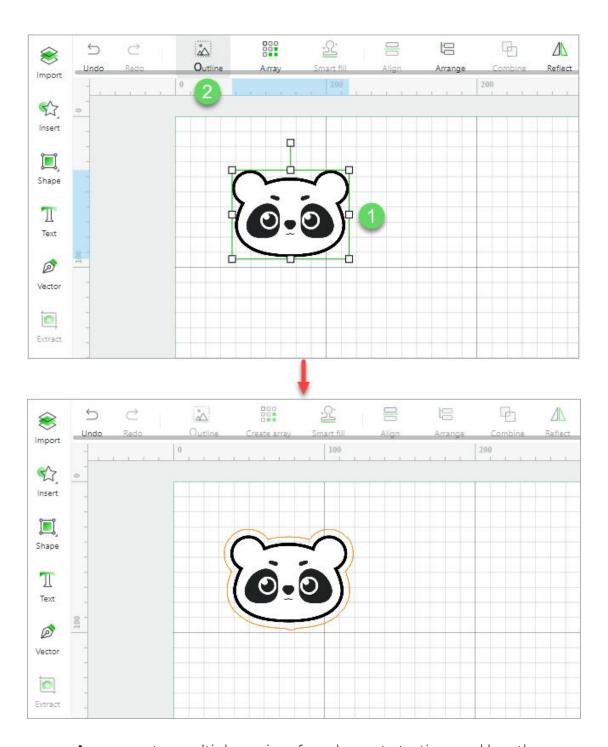
Crop: keeps the area you select

- **Select:** selected to select an item or drag the mouse pointer over the items to select them.
- Hand: selected to move the canvas by dragging the mouse.

Horizontal toolbar



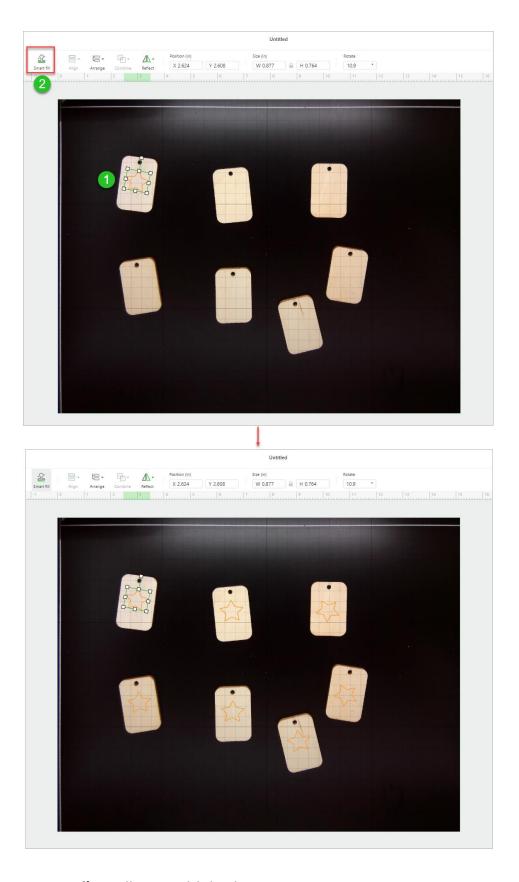
- Undo: cancels the last action
- **Redo:** performs the last action again
- **Outline:** extracts the outline of an image, including the inner and outer outline. Select an image and click **Outline**.



Array: creates multiple copies of an element at a time and lays them
out in grid or circular mode. Select an element, choose an array mode,
and complete the settings.

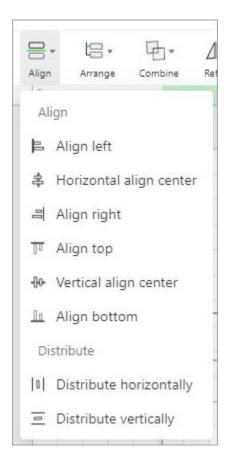


• **Smart fill:** duplicates a design element for multiple materials, helping you process multiple materials at a time. Edit your design for one material, and then click **Smart fill**. The same design is generated for other materials.

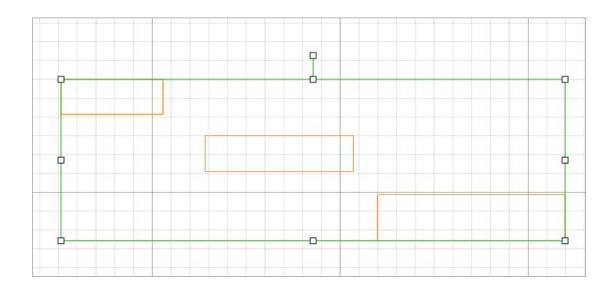


• **Align:** aligns multiple elements.

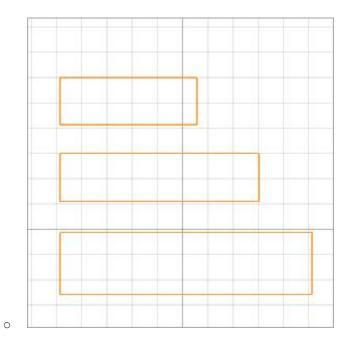




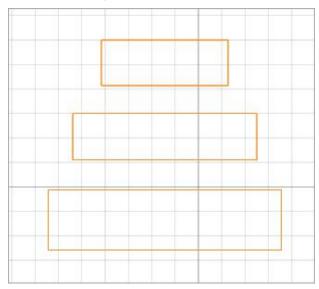
For example, to align the elements shown in the following figure.



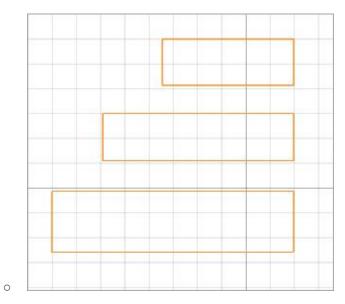
Align left



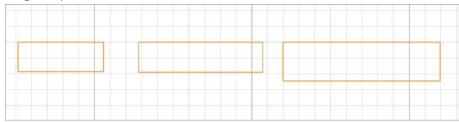
Horizonral align center



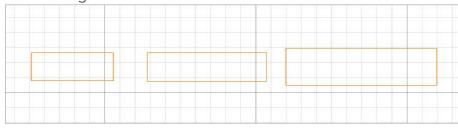
Align right



o Align top



o Vertical align center



o Align

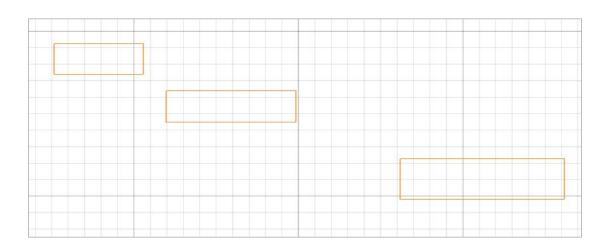
0

0

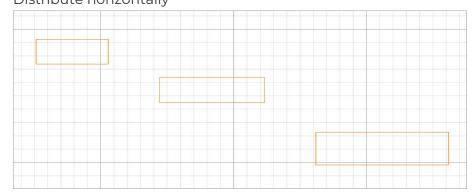




For example, to distribute the elements shown in the following figure.

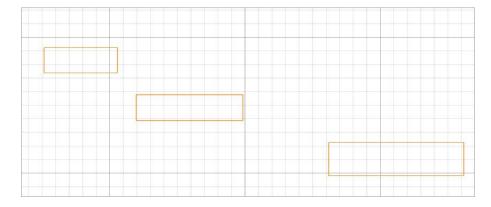


o Distribute horizontally



Distribute vertically

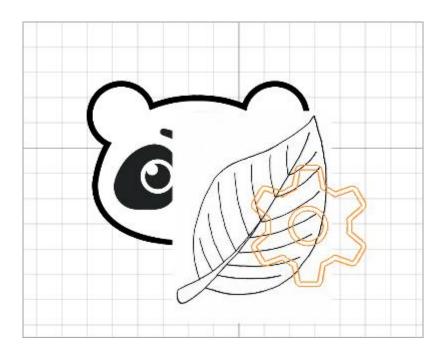
0



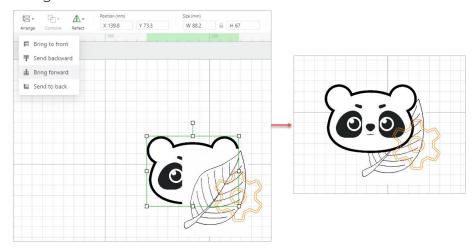
• **Arrange:** arranges the order of elements. You can bring an element to front or send it to back, or bring it forward or send it backward one layer by one layer.

For example, to arrange the elements shown in the following figure.



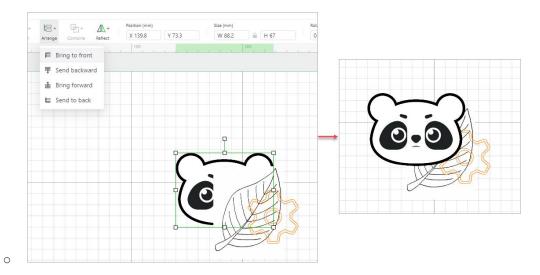


Bring forward

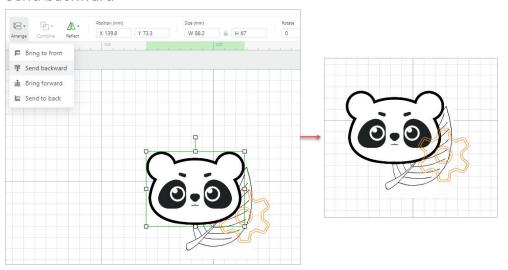


Bring to front

0

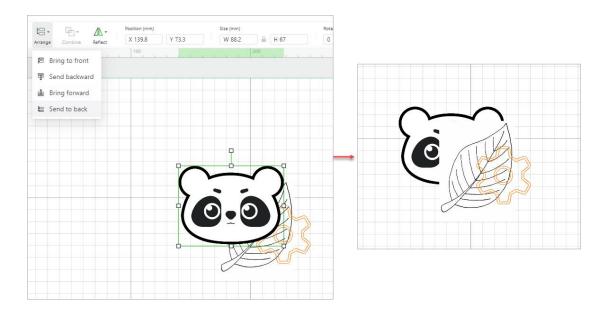


Send backward

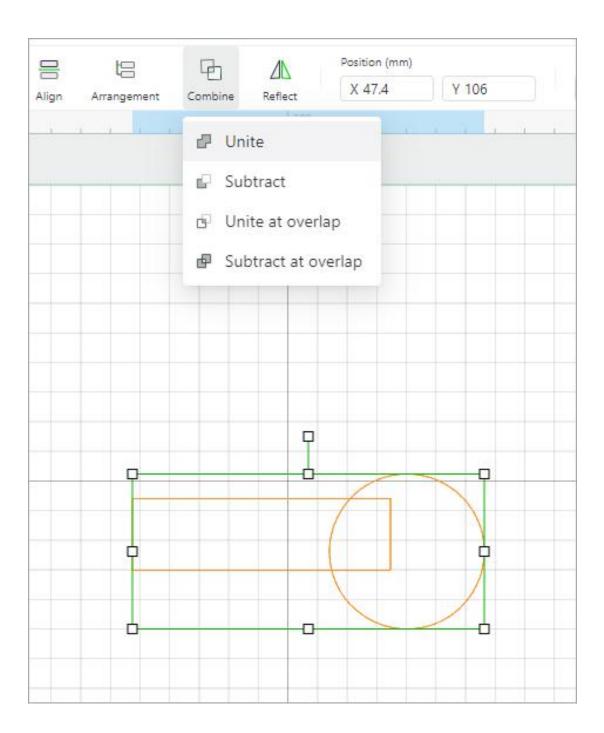


o Send to back

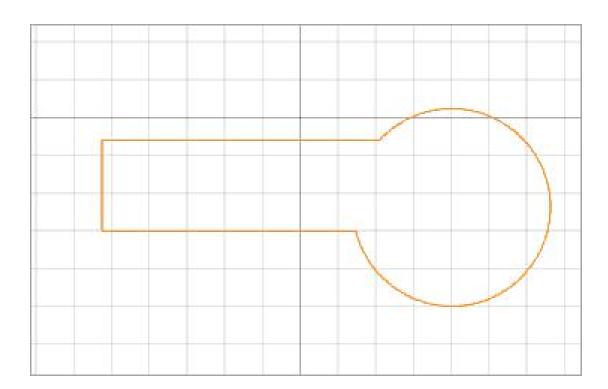
0



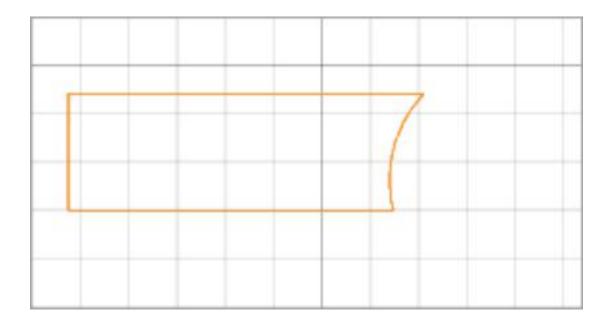
• Combine: combines two or more elements



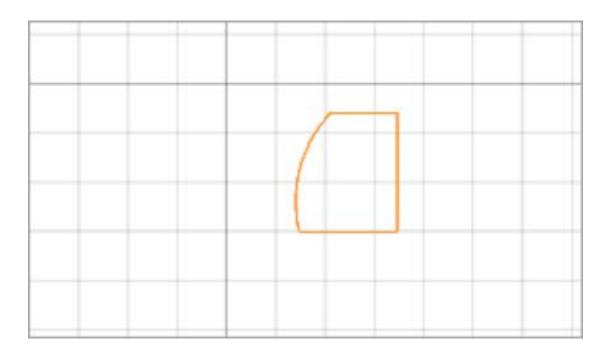
When you unite the two elements:



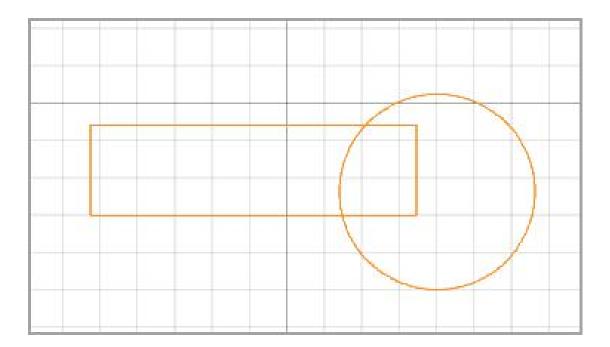
When you subtract the two elements:



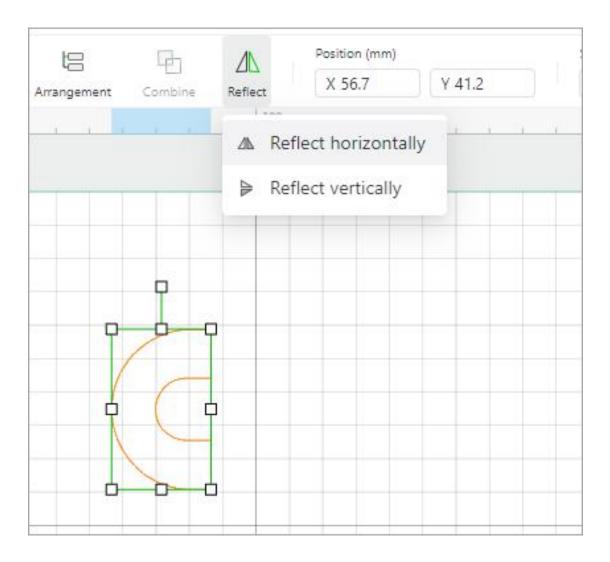
When you unite the two elements at overlap:



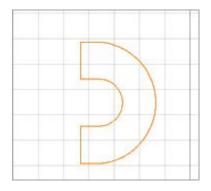
When you subtract the two elements at overlap:



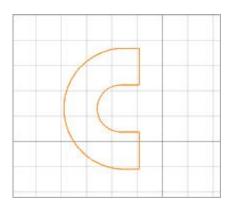
• **Reflect:** reflects an element horizontally or vertically



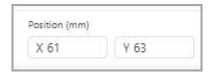
When you reflect the element horizontally:



When you reflect the element vertically:



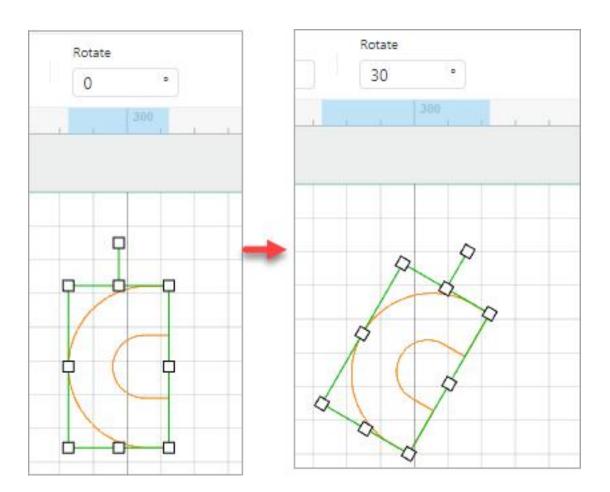
• **Position:** sets the position of an element on the canvas by the x and y coordinates. The point (0, 0) is in the upper left corner. The unit can be set in **Settings**.



• Size: sets the size of an element. The unit can be set in Settings.



• **Rotate:** rotate an element by angle. A positive value indicates rotating clockwise, and a negative one indicates rotating counterclockwise.

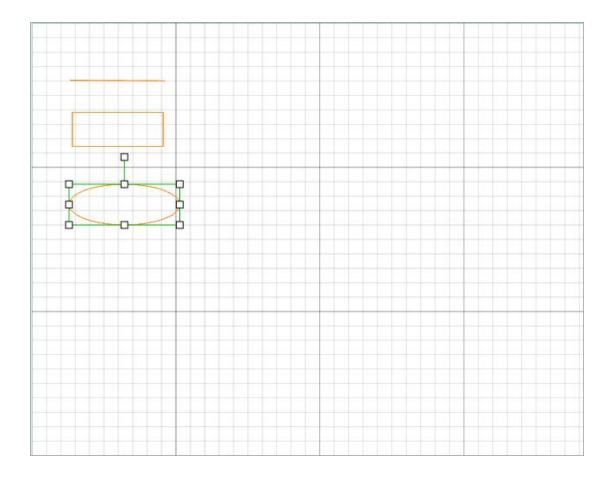


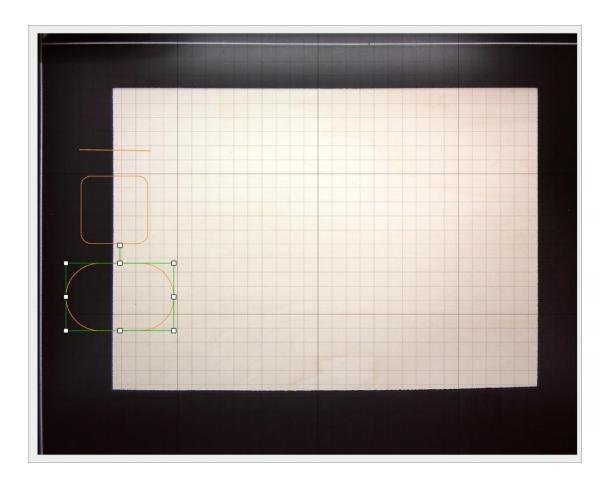
• **Zoom:** zooms in or out the canvas or fit the canvas on screen



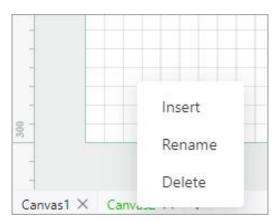
Canvas

On the canvas, you can design your elements to be processed, and preview the positions of the design elements and the material to be processed.





Canvas management



You can add, delete, or rename a canvas.

Device settings

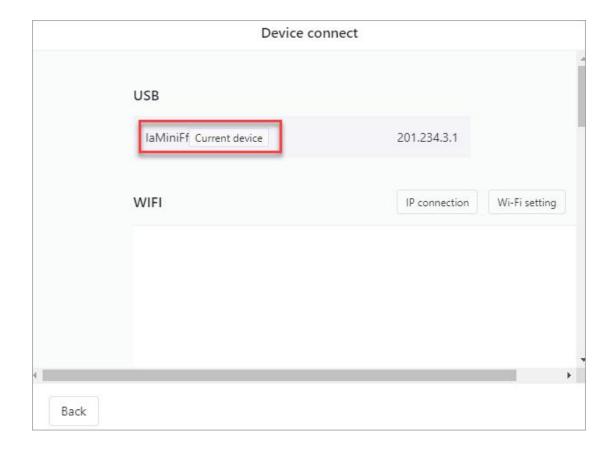
Connect a device

- 1. Use the USB cable to connect your device to your computer, turn on your device, and open XCS.
- 2. Click **Connect** on XCS.



Wait for XCS to search for available devices.

3. Select your device.

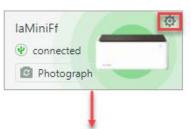


View device information and set its functions

After connecting a device to XCS, you can view operating

information and set functions for it.







- **Device name:** sets the name of your device
- Serial number: displays the serial number of your device
- Standby time: displays the total time the device is on standby
- **Operating times:** displays the total number of times the device has been operated
- Working time: displays the total time the device processing materials
- **Firmware version:** displays the firmware version of the device. You can click Updates to check for later versions and update the firmware.
- **Parameters:** sets the fill light brightness of the device and the time the fan continues to work after the processing ends
- **Backlash:** You can click **Test** to test the engraving deviation when the laser module moves in a reverse direction.
- Work log: You can click **Export** to export the work log of the device.





- Process what you draw: This is an offline function. The device can recognize what you draw and process it without connecting to XCS, and you can set how it works.
 - Laser engrave black patterns: engraves patterns that you draw in black
 - o Laser cut black outline: cuts outlines that you draw in black
 - o Laser cut red outline: cuts outlines that you draw in red

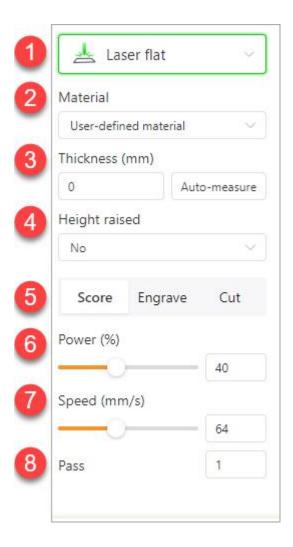
Processing settings

Note:

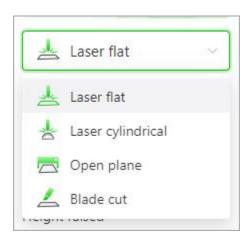
If you use a material launched by xTool, you can select it from the material list and use the default parameter settings.

If you use a material from another manufacturer, you can modify the parameters based on the settings recommended for xTool materials or your own tests.





① Processing type

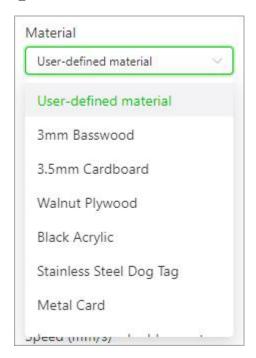


- Laser flat: processes flat materials by using laser beams
- Laser cylindrical: processes cylindrical materials by using laser beams



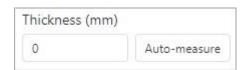
- **Open plane:** processes large-area materials, with the baseplate of the device removed
- Blade cut: processes materials by using a blade module

2 Material



If you use a material launched by xTool, select your material from the drop-down list box. If you use one purchased from another manufacturer, set it to **User-defined material**.

3 Thickness



If you use a user-defined material, you can click **Auto-measure** to enable XCS to measure the thickness of the material. If

auto-measure fails, use a caliper to measure it and enter its thickness.

4 Height raised



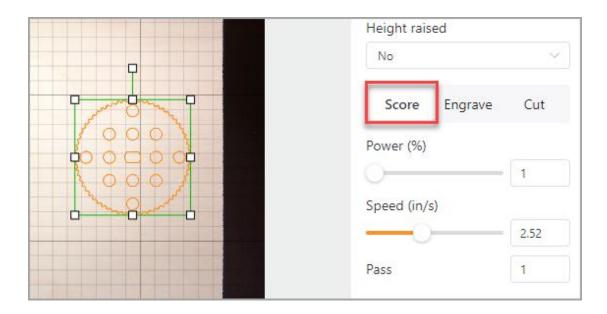
If you have raised your material by using triangular prisms, select **Triangular prism**.

⑤ Processing mode

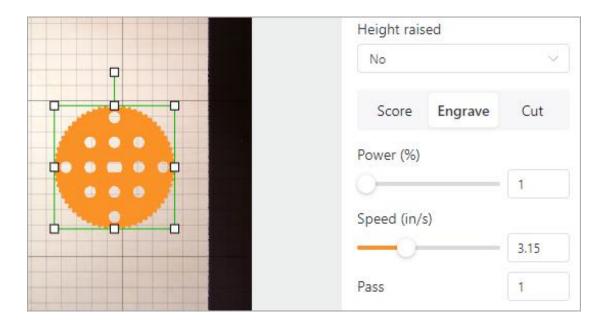


Select an element and set the processing mode.

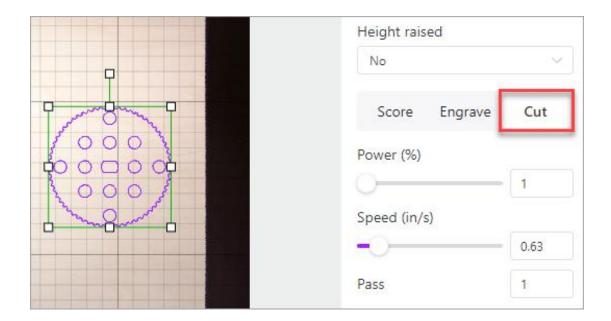
• **Score:** engraves only the outline of an element



• **Engrave:** engraves the fill of an element



• Cut: cuts the outline of an element



6 Power

Sets the power for engraving or cutting

⑦ Speed

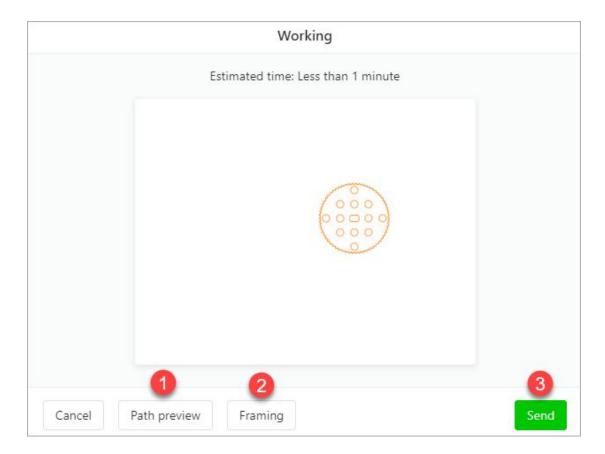
Sets the speed at which engraving or cutting is to be performed

8 Pass

Sets the number of processing times

Start processing

After setting the parameters, click **Start** to start processing the material. The **Working** window is displayed.



- Path preview: displays the processing path of your design elements
- Framing: shows the area to be processed on the material
- **Send:** sends the design elements to the device

If the design elements is to be processed as expected in the expected area, click **Send** to send the file to your device.

Press the button on your device to start processing and wait for the processing to complete.

If you are to modify your design, you can also click **Cancel** to go back to the canvas.

XTOOL

