



# STS C3135 FLATBED

## CUTTER USER MANUAL

[WWW.STSINKS.COM](http://WWW.STSINKS.COM)

## QUICK DIRECTORY

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Operation Examples

16.1 Manual – Blank

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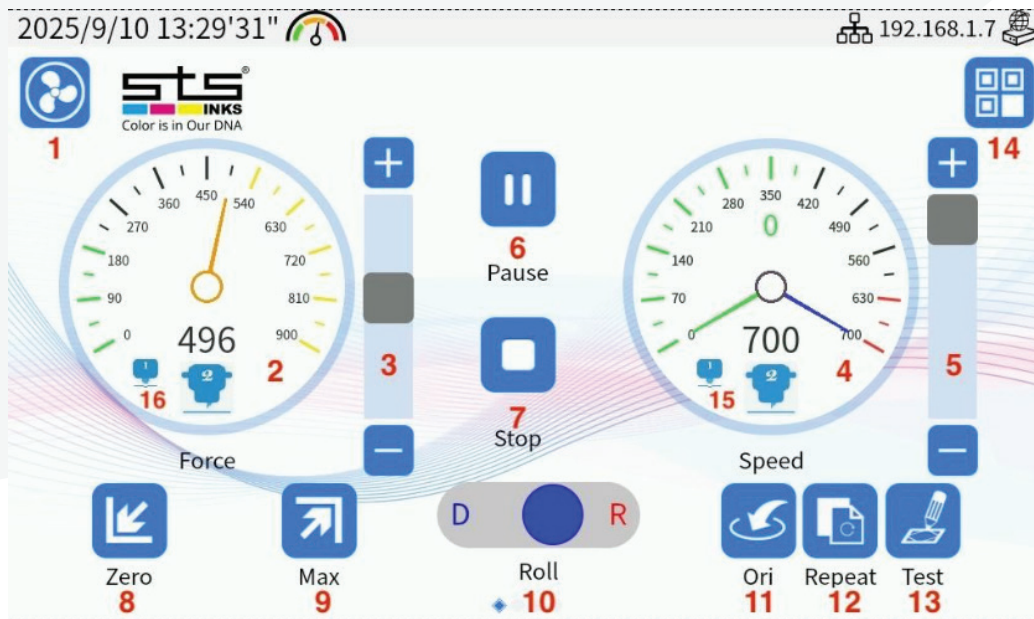
16.3 Auto – Blank Roll

16.4 Auto – Arms (2-pt / 4-pt / QR)t

## QUICK DIRECTORY

- Test cuts first
- Optimize camera settings
- Keep material flat & tensioned
- Use official firmware only

## MAIN SCREEN CONTROLS



## CONTROL PANEL FUNCTIONS

### 1. Pump Switch

Turns the vacuum pump on or off.

### 2. Cutting Force Display

Shows the current cutting/creasing pressure value.

### 3. Pressure Adjustment

**a.  $\pm$  Buttons:** Use these for precise, fine adjustment of the cutting or creasing pressure.

**b. Pressure Slider:** Drag the slider for large, rapid changes to the pressure.

### 4. Cutting Speed Display

Shows the current cutting speed value.

### 5. Speed Adjustment

**a.  $\pm$  Buttons:** Use these for precise, fine adjustment of the cutting/creasing speed.

**b. Speed Slider:** Drag the slider for large, rapid changes to the speed.

## 6. Pause / Start Button

- a. During cutting, click to **pause** the current job.
- b. Click again (now showing "Start") to **resume** cutting.

**Note:** While paused, the operation interface cannot be moved or adjusted.

## 7. Stop Button

Immediately stops the current cutting task.

After stopping, you must re-select the file and re-feed the material to start a new job.

## 8. Zero Point Button

One-click reset: Moves the machine head to the machine's default zero point (left front corner).

## 9. Max Button

One-click movement: Moves the machine head to the farthest position (right rear corner).

## 10. Conveyor Belt Rotation

Rotates the conveyor belt. The rotation distance/value can be set in the Settings menu.

## 11. Origin Button

One-click return to the user-defined origin point.

You can set any position as the custom origin; clicking this button returns the machine to that saved location.

## 12. Repeat Button

Re-runs the last successfully cut file (repeats only once).

## 13. Test Button

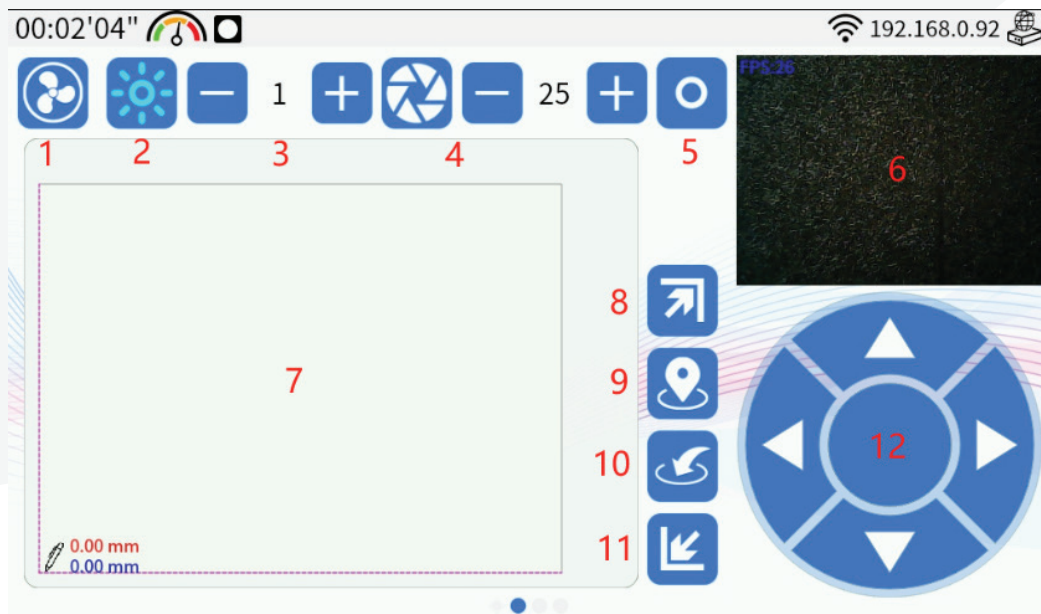
Performs a test cut to check knife pressure and creasing quality/effect.

## 14. QR Code Mixed Cutting Function

Used for batch processing files with QR codes.

- a. On the file management page, switch to QR code mode.
- b. (Offline mode only) Create a folder named **"qrplt"** in advance.
- c. Click this icon to start the QR mixed cutting process.
- d. Select the number of copies using the left/right arrows or choose a preset value. =
- e. Click **Cancel** to abort, or **Confirm** to begin processing.

## OFFLINE SCREEN



## CAMERA AND CARRIAGE CONTROL INTERFACE

### 1. Air Pump Switch

Turns the suction (vacuum) air pump on or off.

### 2. Camera Supplementary Light Switch

Turns the auxiliary camera lighting on or off.

### 3. Camera Light Intensity Adjustment

Knob used to adjust the brightness of the supplementary light.

Adjustable range: 0–100.

### 4. Camera Exposure Adjustment

Adjust this value to make registration marks clear and easily recognizable by the camera.

Recommended setting for white cardboard: 20.

### 5. Marker Recognition Test Button

Used to test and verify marker (registration point) detection when files are not scanning correctly.

After clicking, a green frame will appear around each detected mark if recognition is successful. This confirms the marks can be scanned and cutting can proceed normally.

#### **6. Camera Preview Window**

Displays the live view from the camera to check its status and the material/marks in real time.

#### **7. Carriage Position Preview & Manual Control Area**

Shows the current coordinate position of the carriage/tool head.

Press and hold anywhere in this area to move the carriage directly to that specified position.

#### **8. Max Position Button**

One-click movement: Moves the carriage to the machine's maximum/farthest position (right rear corner).

#### **9. Set Memory Point (Custom Origin)**

Sets the current carriage position as a custom origin (memory point).

After moving elsewhere, click this button to return the carriage to the saved custom origin position.

#### **10. Return to Origin Button**

One-click return: Moves the carriage back to the user-defined origin point.

You can set any desired position as the origin, then use this button to return to it.

#### **11. Zero Point Button**

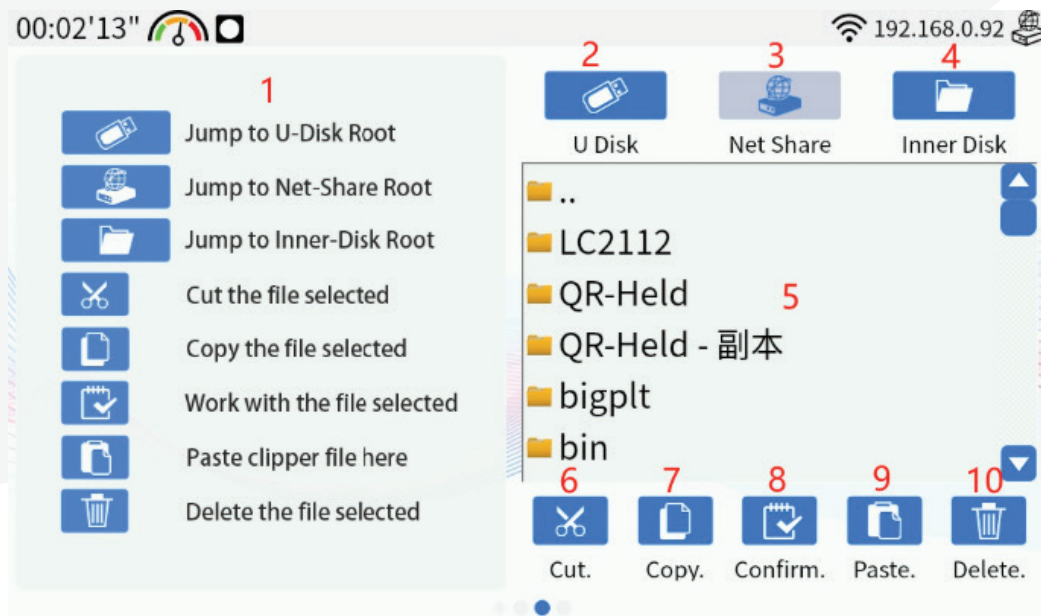
One-click reset: Moves the carriage to the machine's default zero point (left front corner).

#### **12. Manual Carriage Movement Control**

Features a central joystick-style "remote sensing ball" (trackball).

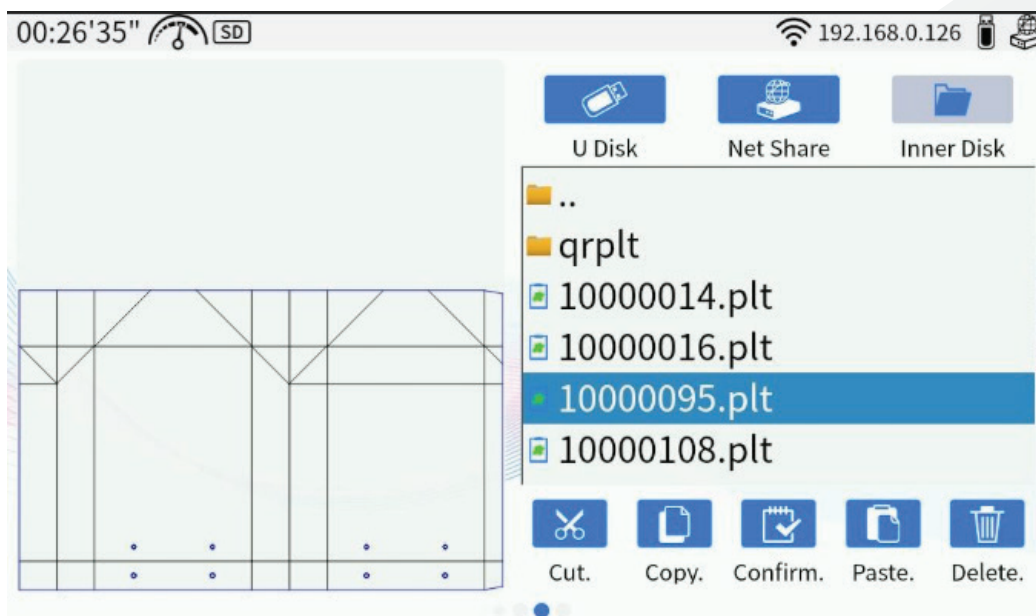
Drag the ball in any direction to manually move the carriage in real time. This version uses clear, consistent terminology, improves grammar and flow, and organizes the descriptions logically for better readability in a user manual or interface guide.

## FILE READ MANAGEMENT



### 1. File Preview Area / Key Description

- If no file is selected, or if the selected file is empty/has no valid content, a key description (help text or instructions) will be shown in this area.
- When a valid file is selected, the left side of the interface displays a preview of the file's cutting path (outline of the cut/crease lines).



## FILE MANAGEMENT INTERFACE

### 2. U Disk (USB Drive)

When a USB drive is inserted, this section displays the contents of the USB drive.

Only supported file types (PLT format) will appear.

### 3. Network Sharing

Displays files from a configured network shared folder.

This feature becomes available after setting up the network sharing connection.

Refer to the "Network Share Configuration" section for setup instructions.

### 4. Internal Disk

Shows files stored in the machine's built-in 128 MB internal storage.

### 5. File List

Displays the contents of the currently selected folder (from U disk, network share, or internal disk).

Note: Only files in PLT format are shown. Other file types are hidden.

### 6. Cut Button

Starts the cutting process for the selected PLT file.

### 7. Copy Button

Copies the selected PLT file.

Long-press this button to copy an entire folder (including its contents).

### 8. Confirm Button

Selects the highlighted PLT file and begins the cutting job.

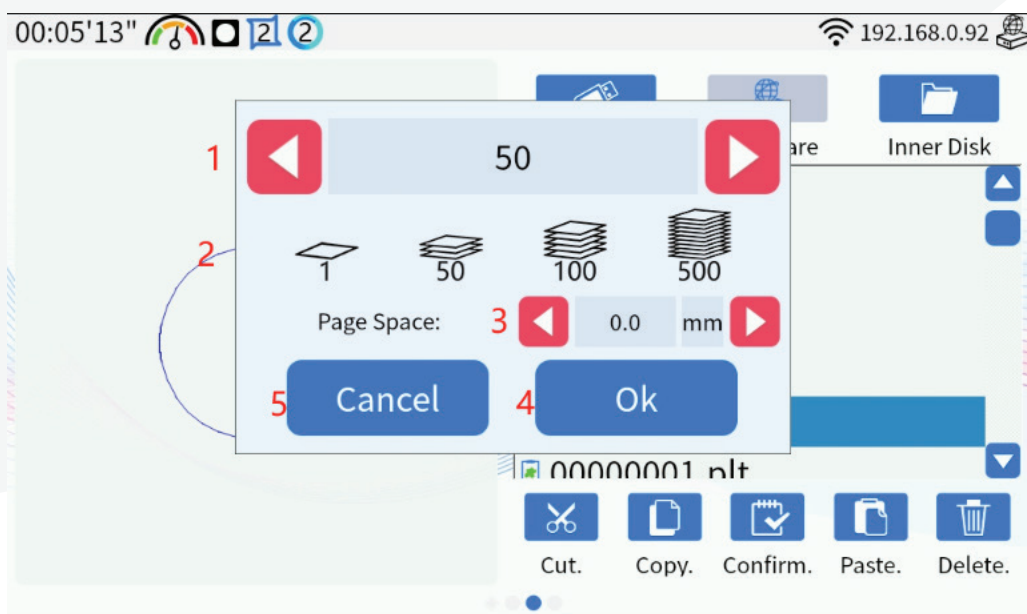
### 9. Paste Button

Pastes the previously copied PLT file (or folder) into the current location.

### 10. Delete Button

Deletes the selected PLT file (or folder, if applicable).

## FILE CHOOSE MANAGEMENT



## NUMBER & LAYOUT SETTINGS

### 1. Number Selection

Allows you to set the quantity (number of copies) for the selected file or job.

### 2. Quick Number Selection

Provides preset or fast-access options to quickly choose common quantities (e.g., 1, 10, 50, 100) without manual entry.

### 3. Paper Spacing Settings

Controls the gap between consecutive files when cutting multiple copies or nested layouts.

- a. Default value: 0 (used when processing two standard files side by side with no intentional gap).
- b. If there is unwanted spacing or overlap between files during output, enter the measured spacing value here.
- b. Measurement guideline: Use the shortest distance between the rear row reference point center of the previous file and the front row reference point center of the next file.

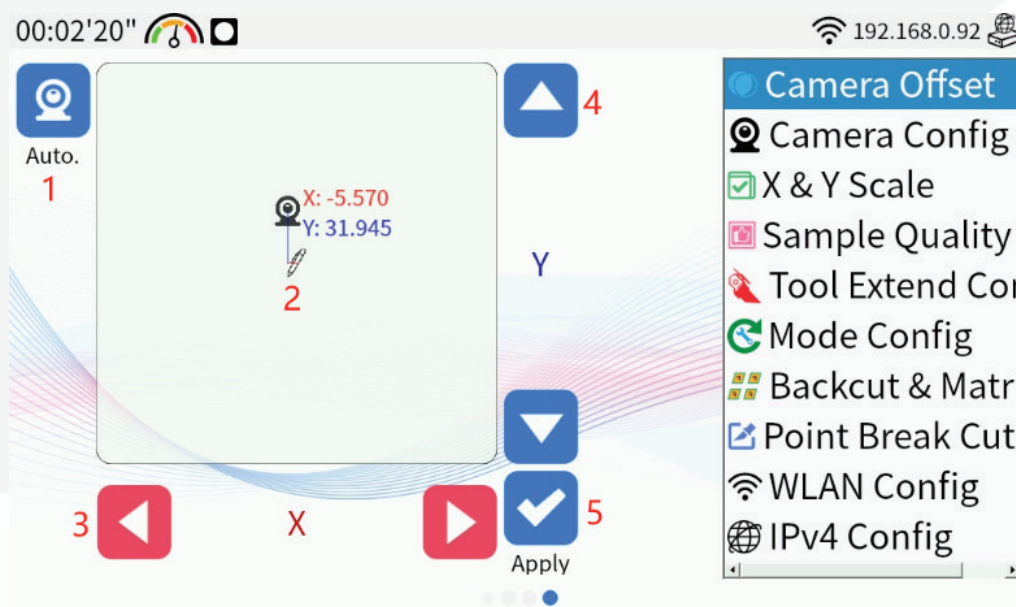
#### 4. **Confirm Button**

Applies the current settings (quantity, spacing, etc.) and proceeds to the next step or starts the job.

#### 5. **Cancel Button**

Discards any changes made in this screen and returns to the previous menu or interface.

## SETTINGS – CAMERA OFFSET



## SETTINGS – CAMERA OFFSET (CALIBRATION & ADJUSTMENT)

### 1. Automatic Camera Calibration

- Automatic Camera Calibration
- Install a pen (or suitable tool) into the blade holder.
- Click the Auto button to start automatic camera calibration.
- The machine will perform the calibration process.

### 2. Current Camera Offset Parameters

Displays the currently saved X and Y offset values for the camera (used to align the camera's view with the actual cutting origin/tool position).

### 3. X Offset Adjustment

Manually fine-tune the camera's X-axis offset value.

Adjust this parameter if the recognized registration marks are consistently misaligned horizontally.

### 4. Save Button

Saves the currently modified camera offset values (both X and Y) to permanent memory. Changes will take effect only after saving.

## 5. Y Offset Adjustment

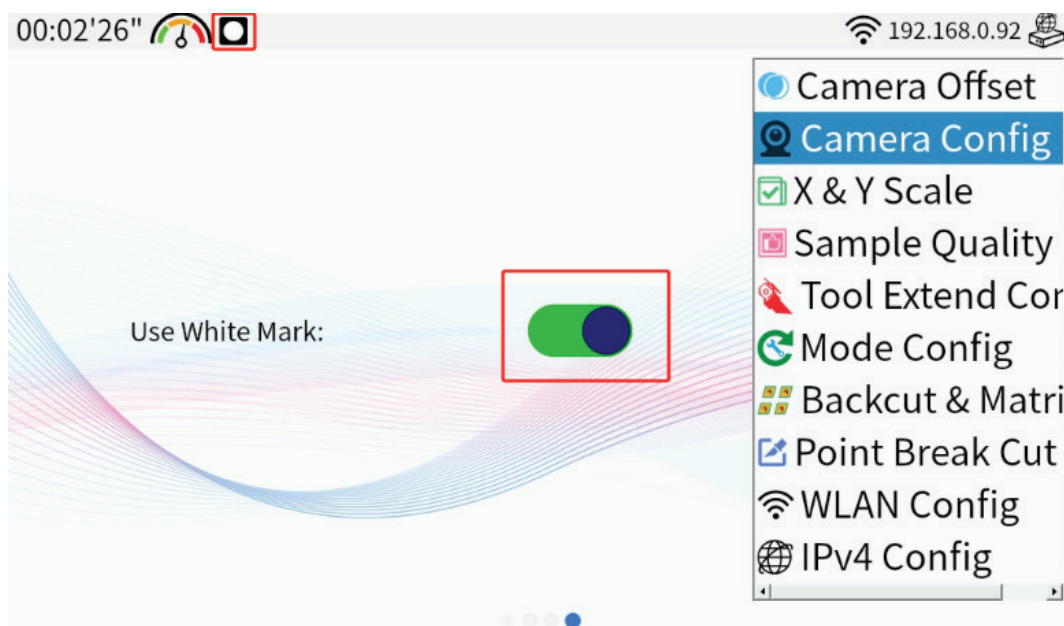
Manually fine-tune the camera's Y-axis offset value.

Adjust this parameter if the recognized registration marks are consistently misaligned vertically.

### RECOMMENDED WORKFLOW

- Perform Automatic Calibration first (with a pen installed).
- If the automatic result is Successful but alignment is still slightly off, use the X and Y adjustment fields to make small corrections.
- Always click Save after making manual adjustments.
- Test with a simple file and registration marks to verify accuracy.

## CAMERA CONFIG



## WHITE MARK POINT (REGISTRATION) FUNCTION

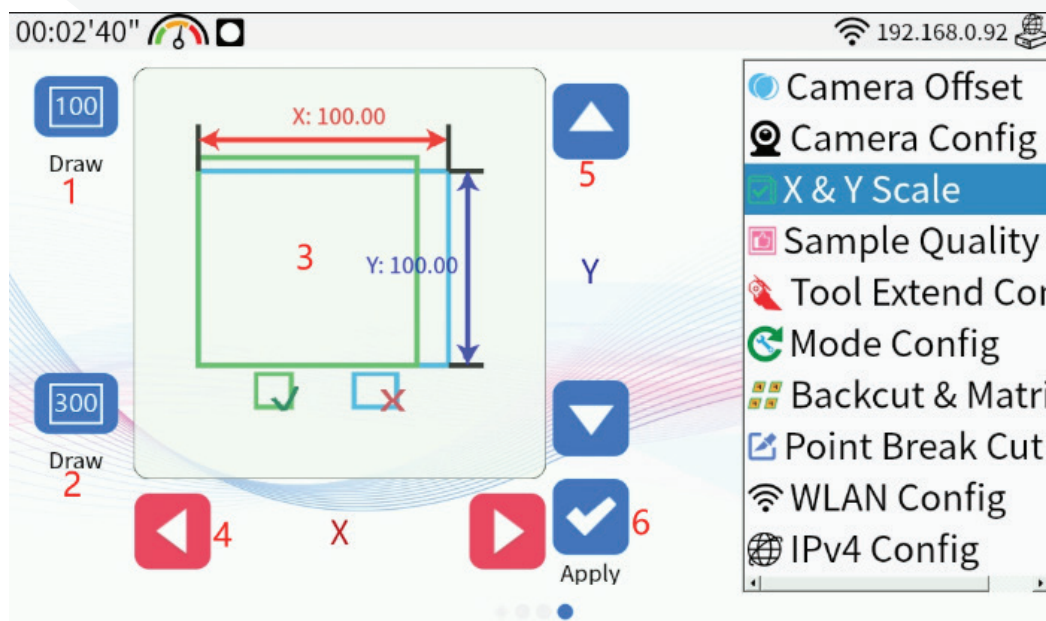
### 1. After enabling the White Mark Point function:

- The corresponding status icon will appear at the top of the interface (indicating that white mark recognition mode is active).
- The machine/camera can now detect and recognize white registration marks (also called white mark points) on the cutting material.

This mode is specifically designed for materials with white-colored registration marks (e.g., on dark or colored media where standard black marks may not be reliably detected). Once activated, place your material with white marks in the cutting area, and the system will attempt to scan and align using those marks.

**NOTE:** Ensure the camera exposure and supplementary light settings are properly adjusted (refer to earlier sections) for optimal detection of white marks.

## X&Y SCALE



## ACTUAL SIZE CALIBRATION / SCALE COMPENSATION SETTINGS

(This section is typically used to correct minor scaling discrepancies between the designed file size and the actual output size on the material.)

### 1. Theoretical Value – 100 mm × 100 mm Graphic

Displays or references the standard/test square of 100 mm × 100 mm (the expected design size).  
Used as a small-scale reference for calibration.

### 2. Theoretical Value – 300 mm × 300 mm Graphic

Displays or references the standard/test square of 300 mm × 300 mm (the expected design size).  
Used as a large-scale reference for calibration (helps detect scaling errors that vary with size).

### 3. Current / Modified Value Display

**a.** Shows the currently measured or adjusted actual output size while you are editing the parameters.

**b.** After you successfully save the changes, the display reverts to the default/theoretical values (100 mm × 100 mm and 300 mm × 300 mm).

### 4. Actual Measured Value – X Adjustment

Enter or fine-tune the real measured length (in mm) of the test graphic along the X-axis (horizontal

direction).

Measure the printed/cut 100 mm or 300 mm line with a precise ruler and input the actual value here.

#### 5. **Actual Measured Value – Y Adjustment**

Enter or fine-tune the real measured length (in mm) of the test graphic along the Y-axis (vertical direction).

Measure the printed/cut 100 mm or 300 mm line with a precise ruler and input the actual value here.

#### 6. **Save Button**

Saves the entered X and Y actual measurement values.

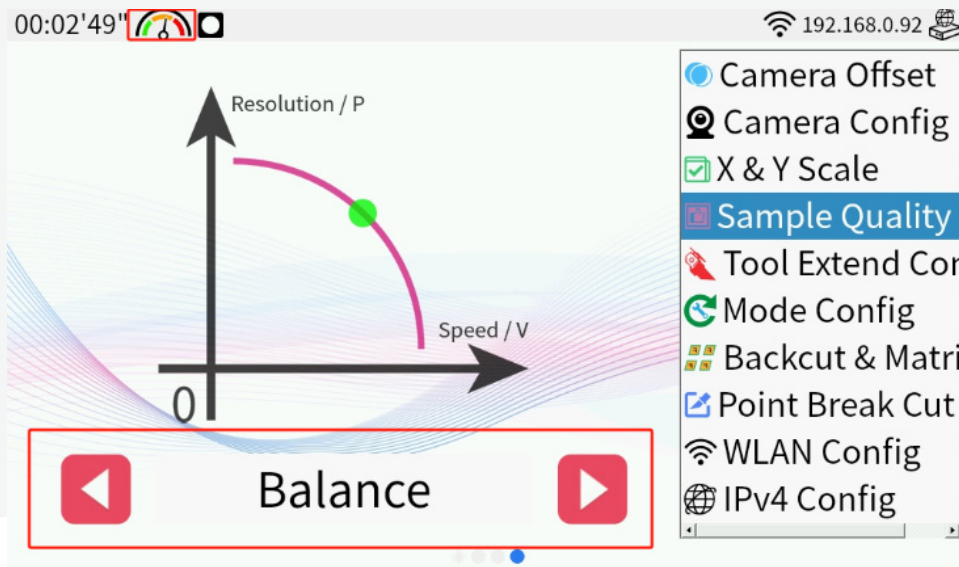
The machine uses these to calculate and apply internal scaling compensation (stretch/compression correction) for more accurate output sizes in future jobs.

After saving, the displayed values return to the theoretical defaults (100 mm and 300 mm).

## RECOMMENDED WORKFLOW

- Cut or plot a test file containing both a 100 × 100 mm square and a 300 × 300 mm square.
- Measure both squares carefully with a high-precision ruler (preferably digital caliper).
- Enter the actual measured dimensions into the X and Y fields for each size if separate compensation is needed, or use the most representative one.
- Click Save to apply the correction.
- Run another test cut to verify the output now matches the theoretical 100 mm and 300 mm sizes closely.

## SAMPLE QUALITY



## CUTTING QUALITY MODES

The machine offers three cutting quality modes to balance speed, edge finish, and precision:

- **Priority (likely Speed Priority)**  
Emphasizes faster cutting speed. Suitable for jobs where production time is more important than perfect edge quality.
- **Balance**  
Provides a compromise between speed and cutting/creasing quality. Recommended for most everyday jobs.
- **Accuracy (High Precision mode)**  
Prioritizes the highest edge quality, smoothness, and dimensional accuracy. Ideal for detailed work, fine creasing, or materials that require clean, precise cuts (may run slower).

### Interface Indication

When a quality mode is selected or active:

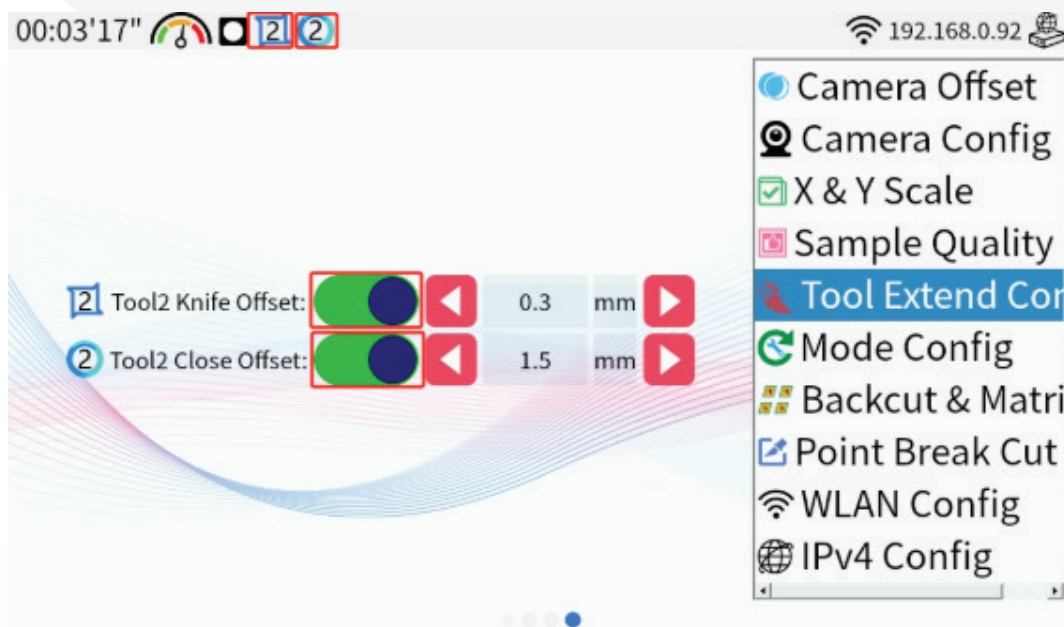
- The corresponding mode icon will appear in the notification bar at the top of the screen.
- This visually confirms which quality setting is currently applied to the job.

### Typical Usage Tips

- Use **Priority** for high-volume, less critical jobs.
- Use **Balance** for general-purpose cutting (most common default).
- Use **Accuracy** when working with intricate designs, thin/vulnerable materials, or when edge

(Priority of speed  , balance  , accuracy first  )

## TOOL EXTEND CONFIG



## KNIFE OFFSET & CLOSE OFFSET SETTINGS

The cutting compensation settings are divided into two independent parameters:

- Knife Offset (also known as blade/knife compensation or kerf compensation)  
Compensates for the physical width (kerf) of the cutting blade to ensure accurate contour cutting, especially on closed shapes and detailed outlines.
- Close Offset (likely refers to closed-path or overcut/undercut compensation for closed contours)  
Adjusts the start/end point overlap or slight extension on closed paths to prevent gaps or overcutting at the join point.

### How to Access

- Click the corresponding button (usually labeled “Knife Offset” or “Compensation Settings”) on the front/main interface to open these settings.

### Status Indication

- When a function is turned on, its status icon appears green in the interface (and/or in the top status/notification bar).
- When turned off, the icon appears gray.
- Once enabled, the corresponding icon(s) will also display in the status bar at the top of the screen to indicate the active compensation mode(s).

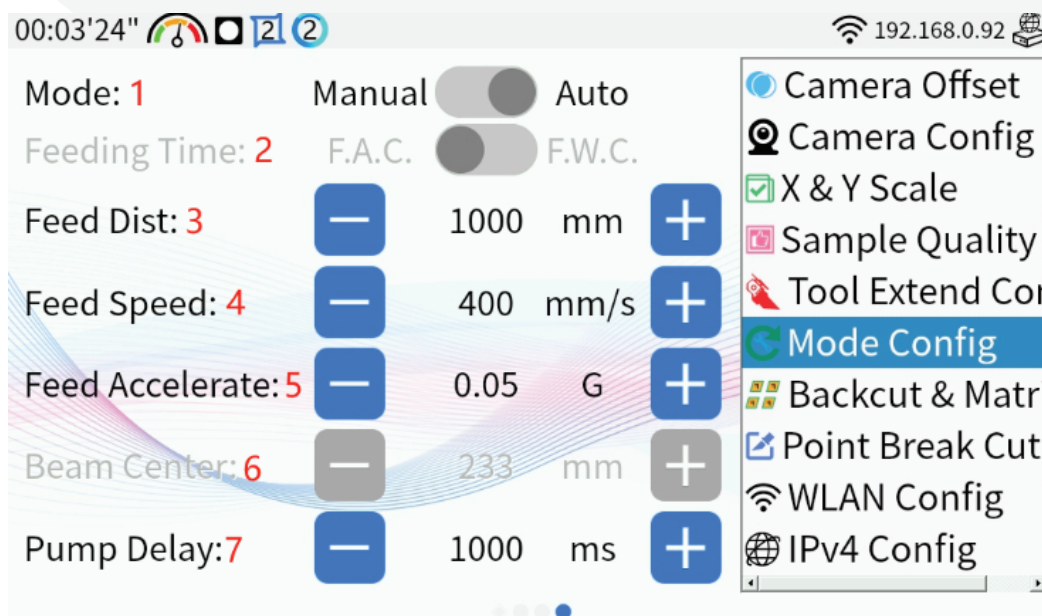
## Adjustment Ranges

- Knife Offset: Adjustable from 0.1 mm to 1.5 mm  
(Typical values: 0.2–0.8 mm depending on blade type and material thickness; start with manufacturer-recommended value for your blade.)
- Close Offset: Adjustable from 0.1 mm to 5.0 mm  
(Used to fine-tune closure on looped/contour paths; higher values may be needed for thicker materials or materials that stretch during cutting.)

## Quick Tips

- Enable Knife Offset for any job requiring precise outline cutting (vinyl, stickers, cardstock, etc.).
- Use Close Offset mainly when you notice small gaps or overlaps at the start/end point of closed shapes.
- Always perform a small test cut after adjusting these values to verify the result on your specific material and blade.
- Save changes if required (some interfaces have a separate “Save” or “Apply” button).

## MODE CONFIG



## FEEDING & CONVEYOR BELT SETTINGS

### 1. Feeding Mode Selection

The machine supports two feeding modes:

#### a. Manual Mode (Sheet Cutting)

Used for individual sheets or small batches.

The operator must manually place each piece of material, align the registration marks (if using camera), and start the cut.

After cutting is complete, manually remove the finished piece and place the next sheet to continue the job.

#### b. Automatic Mode

(Description not provided in this section; typically used with continuous roll/conveyor feeding — refer to relevant sections for details.)

### 2. Feeding Time Configuration

This parameter controls timing aspects of the automatic feeding process.

**NOTE:** Automatic feeding is not currently enabled on this machine (feature may be locked, under development, or disabled by default).

### 3. Paper Feed Distance (Single Feed Length)

Sets the rotation distance of the conveyor belt for one feeding cycle.

This value determines how much material is advanced each time the conveyor moves forward.

The same value can also be set/tested directly from the homepage using the conveyor belt rotation control.

### 4. Paper Feed Speed

Controls the rotation speed of the conveyor belt during material feeding.

Adjust this setting when working with special/difficult materials (e.g., slippery, thick, or stretchy substrates) to prevent issues such as:

- a. Material slipping
- b. Misalignment
- c. Uneven feeding
- d. Abnormal movement during advance

### 5. Conveyor Belt Acceleration

Sets the acceleration rate for the conveyor belt movement.

Adjustable range: 0.01 – 0.20 (units typically in g or  $m/s^2$ , depending on internal firmware scaling).

- a. Lower values = smoother, gentler starts/stops (better for delicate or slippery materials).
- b. Higher values = faster ramp-up (suitable for quicker production but may increase slipping risk).

### 6. Beam Center Configuration

This setting defines the center reference point of the crossbeam/tool carriage.

It is pre-configured/fixed for this specific machine model and is not normally user-adjustable.

### 7. Air Pump Delay (Vacuum Release Delay)

After a cutting job finishes, the material remains adsorbed (sucked down) to both the cutting belt and the platform due to vacuum.

This creates extra resistance when the conveyor belt tries to move forward.

The air pump delay adds a short pause (after vacuum is turned off or reduced) to allow:

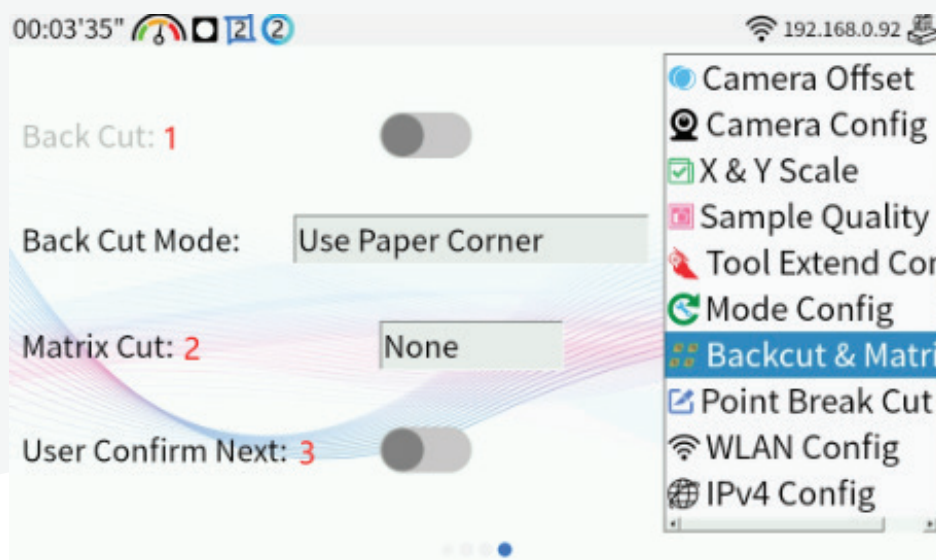
- a. Pressure to equalize.
- b. Material to release more easily.
- c. Reduced resistance between the conveyor belt and platform.

This helps prevent belt strain, material tearing, or feeding errors on the next cycle.

## Quick Tips

- For manual sheet cutting, use Manual Mode and rely on camera registration for precise placement.
  - When using the conveyor for roll materials, fine-tune Feed Distance, Feed Speed, and Acceleration together to achieve smooth, slip-free operation.
  - If material slips or feeds inconsistently, first try lowering acceleration and increasing feed speed slightly before making major distance changes.
- Always test small adjustments on scrap material.

## BACKCUT & MATRIX



## ADDITIONAL CUTTING & JOB SETTINGS

### 1. Back-Cut Configuration

Back-cut (or reverse-side cutting) functionality is not currently available on this machine.  
(This feature may be added in a future firmware update or is model-specific.)

### 2. Matrix Cut (Multi-Up / Array Cutting)

Allows cutting multiple copies arranged in a grid pattern from a single file.

Three available options:

- a. Closed (or Disabled): No matrix — cuts only one copy at a time (default single layout)
- b. 1×2: Arranges two copies side by side (1 row × 2 columns).
- c. 2×2: Arranges four copies in a square grid (2 rows × 2 columns).

Select the desired layout based on material size and how many duplicates you want to produce efficiently in one pass.

### 3. User Confirm Next (Job Continuation Prompt)

When this option is enabled:

- a. After the first copy/job completes, the machine will display a confirmation prompt asking the user to confirm before proceeding to the second (and subsequent) copies.
- b. Click Confirm (or the equivalent button) on the prompt to continue cutting the next copy/job.
- c. This feature is useful for:

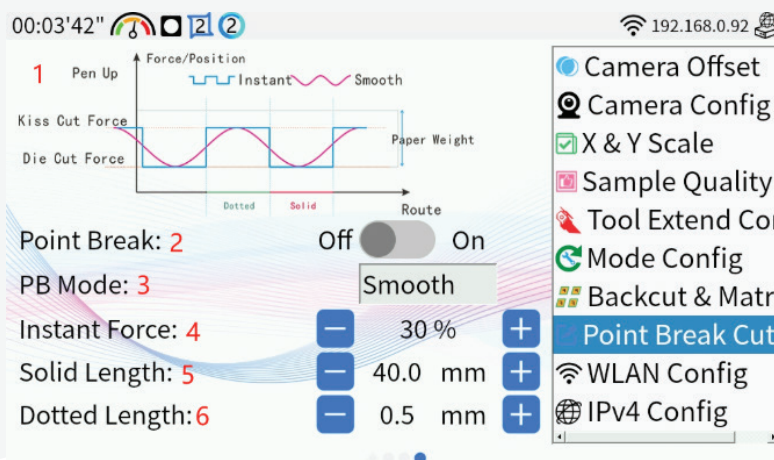
- i. Manual material checks between copies
- ii. Verifying registration/alignment after the first piece
- iii. Preventing automatic continuation on jobs where operator intervention is needed

**NOTE:** If this prompt is not desired (for fully unattended batch cutting), disable the option or set it to auto-continue (if available in your firmware version).

### Quick Tips

- Use Matrix Cut (1×2 or 2×2) to maximize material usage and reduce setup time when producing small repeated items (stickers, labels, cards, etc.).
- Measure your material and test the layout in preview mode first to ensure everything fits without overlap or waste.
- Enable User Confirm Next during initial testing or when working with expensive/fragile materials.

## POINT BREAK CUT



## PERFORATED / POINT CUT MODE (DASHED OR KISS-CUT PERFORATION)

**Point Cut** (also known as perforated cut, dashed cut, or micro-perforation mode) is a special cutting mode that creates intermittent cuts along the path. Instead of a continuous solid cut, the blade alternates between cutting segments (solid lines) and uncut gaps (breakpoints). This is useful for:

- Easy-tear perforations (e.g., tickets, labels, coupons)
- Partial-depth or kiss-cut effects where the material stays connected until manually separated
- Preventing small pieces from falling out prematurely during handling

### 1. Point Cut Cutting Mode Schematic Diagram

(This section typically includes or references a visual illustration showing the cutting pattern.)

**a. Solid line** = actual cut segment (real line length).

**b. Gap** = uncut portion (breakpoint length).

**c.** The pattern repeats continuously along the contour or path.

Example schematic (text representation for clarity):

**Cut** \_\_\_\_ **Gap** \_\_\_\_ **Cut** \_\_\_\_ **Gap** \_\_\_\_ **Cut** \_\_\_\_ ...

**(Real line length) (Breakpoint length)**

The machine alternates pressure or blade depth to create the perforation effect. In some interfaces, a preview or diagram appears when this mode is selected.

### 2. Point Cut Switch

Turns Point Cut mode on or off.

- When enabled (ON), the machine applies perforated cutting to the current job or selected paths.
- When disabled (OFF), the machine performs standard continuous cutting.
- The status may be indicated by an icon in the notification bar or settings panel.

### 3. Point Cutting Mode Selectio

Choose between two perforation styles:

#### a. Instant mode

Creates sharp, abrupt transitions at breakpoints (sudden pressure drop to zero).

Results in cleaner, more defined perforations with distinct cut/gap edges.

Suitable for materials requiring precise tear lines (e.g., paper, thin cardstock).

#### b. Smooth mode

Uses gradual pressure changes or ramping at breakpoints for a more blended transition.

Produces softer, less abrupt perforations (may appear slightly feathered or tapered).

Ideal for flexible or stretchy materials (e.g., vinyl, fabric) to avoid tearing during cutting.

### 4. Instant Pressure

Sets the cutting pressure applied only at the breakpoints (when using Instant mode).

a. Typically lower than normal cutting pressure (or zero) to create the uncut gap.

b. Adjust this value to control how cleanly the perforation starts/stops.

c. Higher values may reduce gap effectiveness; lower values ensure a true break.

### 5. Real Line Length (Cut Segment Length)

Defines the length of each cut segment (the solid/continuous part of the perforation).

a. Measured in mm (or the machine's unit).

b. Example: 5 mm means the blade cuts for 5 mm, then creates a gap, then repeats.

c. Longer values = fewer perforations (longer tear strips); shorter values = more frequent breaks (easier tearing).

### 6. Breakpoint Length (Gap / Perforation Length)

Defines the length of each uncut gap (the perforation point or break).

a. Measured in mm.

b. Example: 2 mm means a 2 mm uncut section between cut segments.

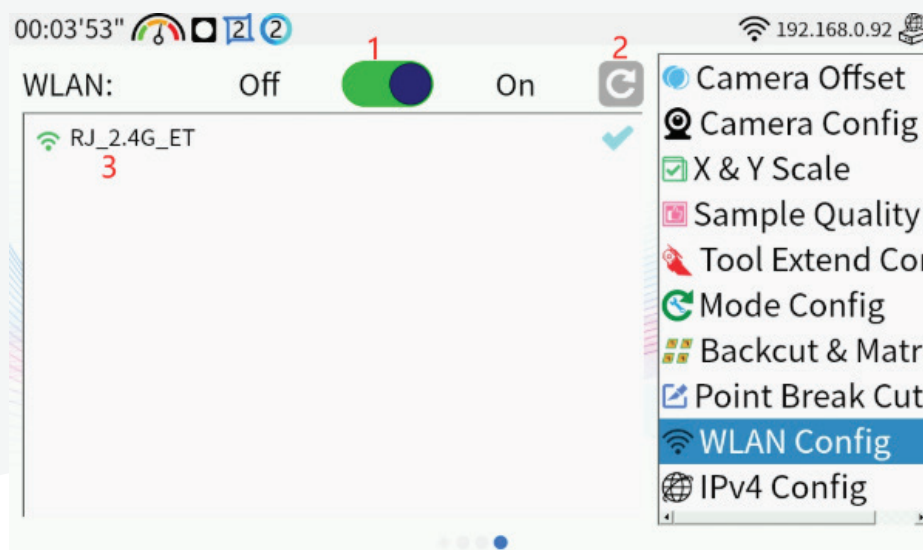
c. Shorter gaps = stronger connection (harder to tear); longer gaps = easier separation.

d. Balance this with real line length for the desired tear strength.

### Quick Tips

- Always run a small test cut on scrap material after adjusting these parameters to verify the perforation strength and appearance.
- Use Instant mode for crisp, ticket-like perforations; Smooth for materials prone to fraying or distortion.
- Combine with knife offset and pressure settings for best results on thick or multi-layer media.
- If the mode is grayed out, ensure the tool/condition supports perforation (some blades or tools may not).

## WLAN CONFIG



## WLAN (WI-FI) SETTINGS

### 1. WLAN Switch

Turns the machine's Wi-Fi module on or off.

- a. On: Enables Wi-Fi scanning, connection, and network features (e.g., network sharing, online mode, firmware updates if supported).
- b. Off: Disables all Wi-Fi functions to save power or when using wired/USB-only operation.

### 2. Refresh Wi-Fi List

Manually refreshes/scans for available wireless networks.

Click this button to update the list of nearby Wi-Fi networks (especially useful after turning Wi-Fi on or if the list appears outdated/empty).

### 3. Wi-Fi Network List

Displays all detected Wi-Fi networks in range.

- a. Click on the desired network name (SSID) to connect.
- b. If the network is password-protected, a password input field will appear.
- c. Enter the correct Wi-Fi password and confirm to establish the connection.
- d. Connection status (e.g., Connected, Connecting, Failed) is typically shown next to the network or in a status bar.

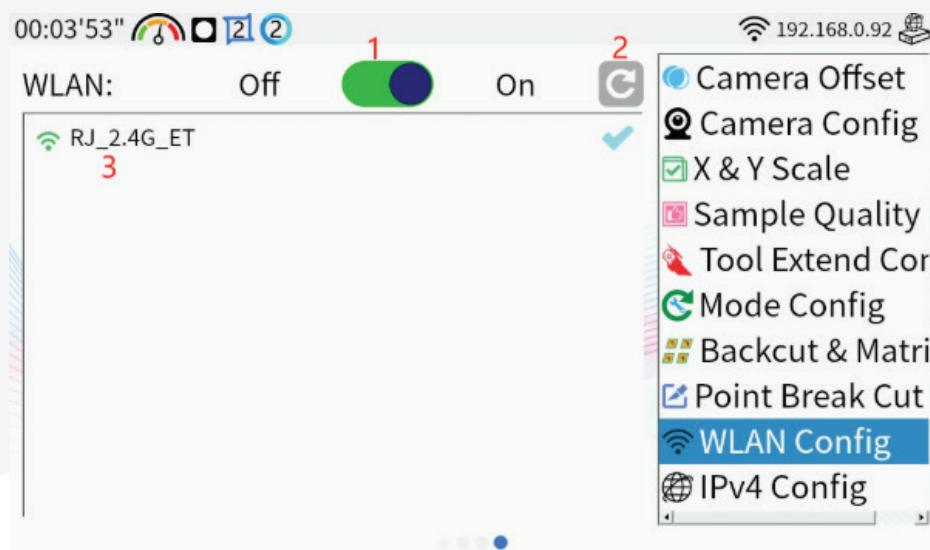
## Important Note

- This machine supports only the 2.4 GHz frequency band for Wi-Fi. 5 GHz networks will not appear in the list or be connectable.
- Ensure your router is broadcasting a 2.4 GHz network (many modern routers use dual-band;
- check your router settings if the desired network is not visible).  
For best performance: Place the machine within good range of the router and avoid heavy
- interference (e.g., microwaves, thick walls, crowded 2.4 GHz channels). Always test small adjustments on scrap material.

## Quick Tips

- After connecting successfully, the machine may display the connected SSID and signal strength in the status bar or network settings.
- If connection fails repeatedly: Double-check the password (case-sensitive), refresh the list, restart Wi-Fi on the machine, or try moving closer to the router.
- Once connected, features like network file sharing, online file access, or remote monitoring (if supported) become available.

## IPv4 CONFIG



## NETWORK CONFIGURATION

### 1. Interface

Select Cable LAN (wired) or Wireless LAN (Wi-Fi) based on your connection.

### 2. MAC Address

Shows the machine's network physical address (read-only).

### 3. Method

- DHCP: Automatic IP assignment (recommended).
- Static: Manually set fixed IP (use values from your router).

### 4. IP Address

Enter static IP (e.g., 192.168.1.100) when using Static mode.

### 5. Subnet Mask

Usually 255.255.255.0 – match your network.

### 6. Gateway

Router's IP (e.g., 192.168.1.1).

### 7. DNS Server

DNS address (e.g., 8.8.8.8).

### 8. Apply

Click to save and activate settings.

**NOTE:** Use DHCP for most setups. Only switch to Static if you need a fixed IP.

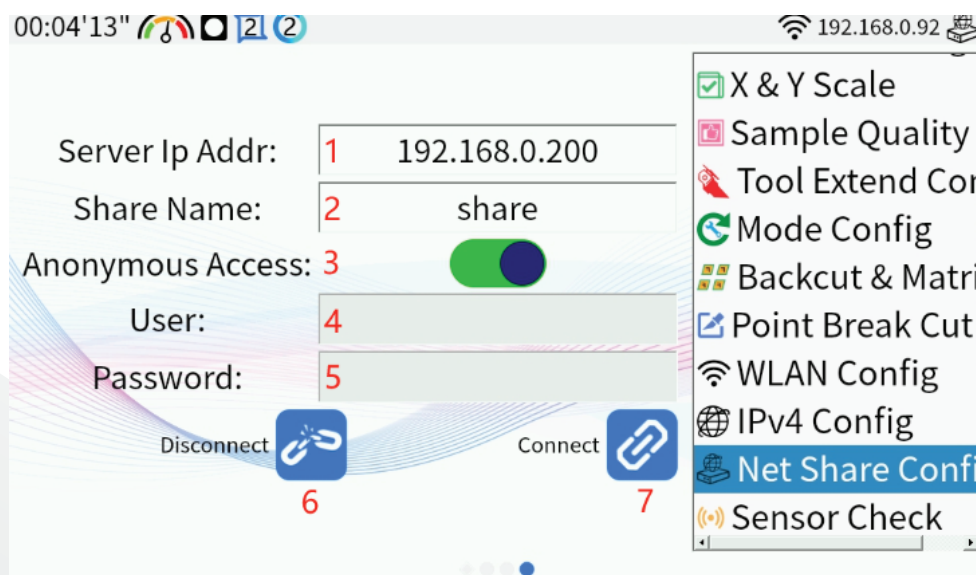
## NET SHARE CONFIG

From the machine's File Management interface, directly access and load PLT cutting files from that shared folder over the network. Basic Setup

- Create and share a folder on your PC (enable file sharing, note the path: [\\computer-name\sharename or \\IP\sharename](#)).
- On the machine: Go to Network Sharing > enter path, username/password (if needed) > connect.
- Shared PLT files will then appear in the file list.

### Requirements

- Machine and computer on same network.
- Computer stays on during use.
- Allow SMB/file sharing in firewall if blocked.



## SERVER IP ADDRESS (FOR NET SHARE)

### Server IP Address

1. Enter the IP address of the computer where the shared folder is located. **How to Find Your Computer's IP Address (Windows)**

### MAC Address

1. Press Windows key + R at the same time to open the Run dialog.
2. Type cmd and press Enter to open Command Prompt.
3. In the Command Prompt window, type ipconfig and press Enter.

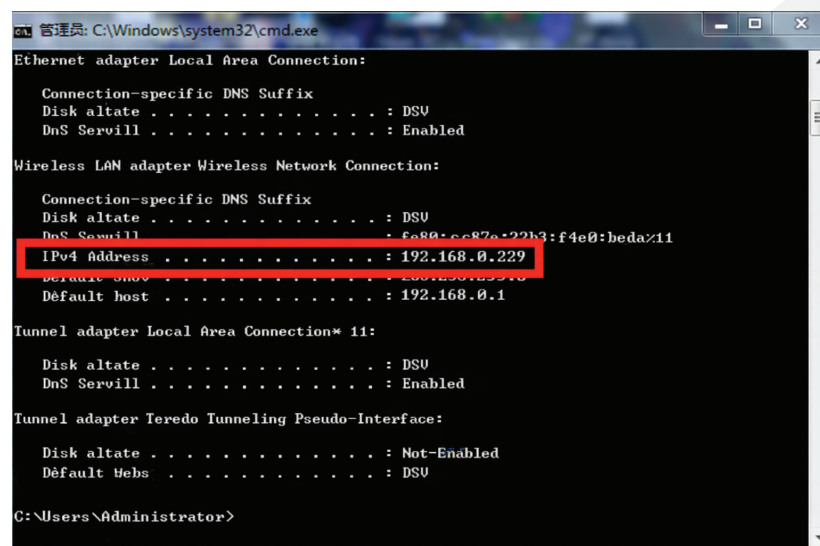
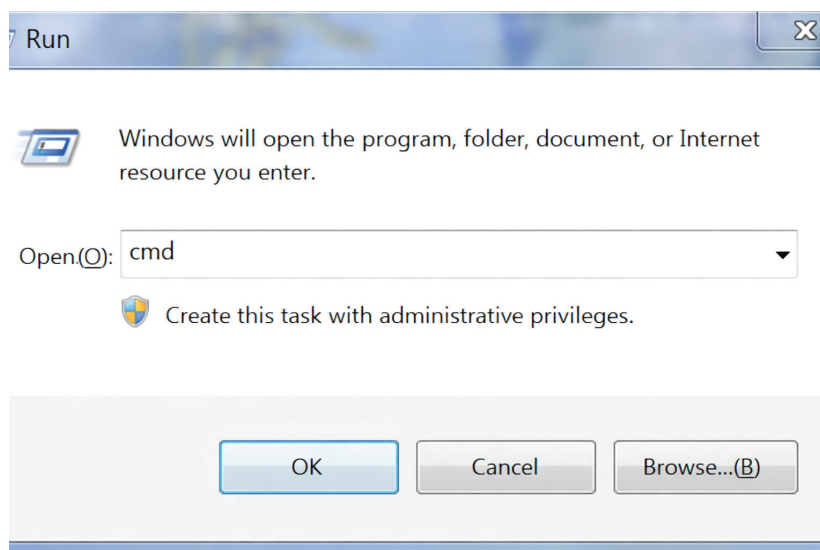
4. Look for:

- a. **IPv4 Address** (e.g., 192.168.1.100) under your active network adapter (usually “Ethernet adapter” or “Wireless LAN adapter Wi-Fi”).

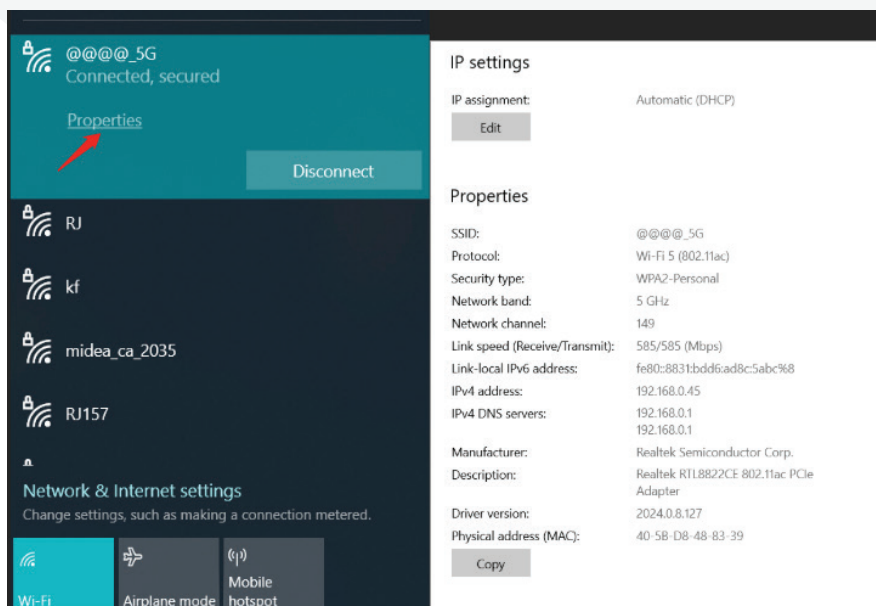
Use this number as the Server IP Address on the machine.

### Quick Tip

- Make sure the machine and computer are on the same network.
- Use the IPv4 address (not IPv6).
- If the IP changes frequently, consider setting a static IP on your computer or reserving it in your router.



## ENTER NETWORK SETTINGS.



## NETWORK SHARE CONNECTION SETTINGS

### 2. Share Name

Enter the name of the shared folder on the computer (e.g., "CuttingFiles", "PLT\_Share").

### 3. Anonymous Access

**On:** No username/password required (easier, but less secure).

**Off:** Requires username and password (recommended for security).

### 4. User

Enter the computer's username with access to the shared folder.

If not customized, use the default: **Administrator**.

### 5. Password

Enter the password for the above user account.

(This is typically the Windows login password or PIN used at startup.)

### 6. Disconnect

Click to end the current network share connection.

### 7. Connect

After filling in the above fields, click Connect to link to the shared folder.

Once successful, the shared PLT files will appear in the File Management list. **Quick Notes**

- Use the computer's IPv4 address (from ipconfig) as the Server IP.
- Test with anonymous access first if you're having trouble.
- Computer must stay on and connected to the same network.

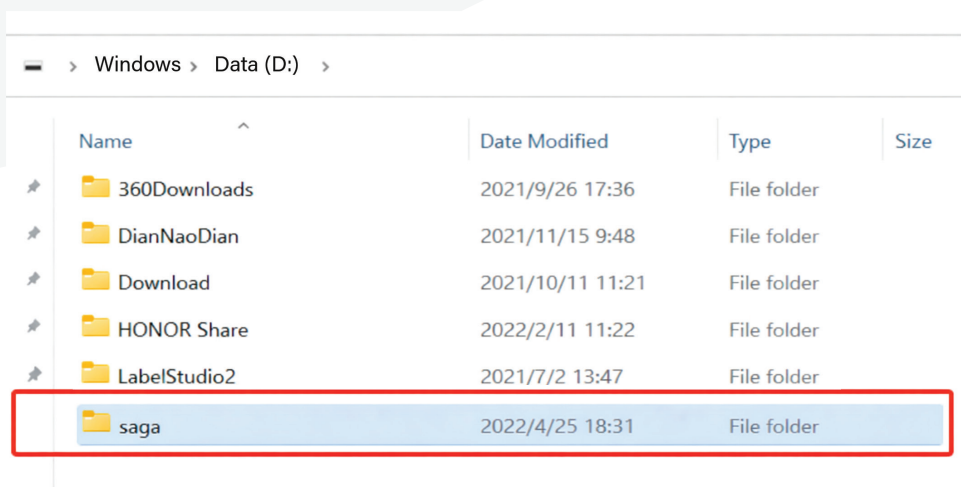
## NETWORK SHARING SETTING METHOD:

### HOW TO SET UP A NETWORK SHARED FOLDER ON YOUR PC (WINDOWS)

#### 1. Create the Folder

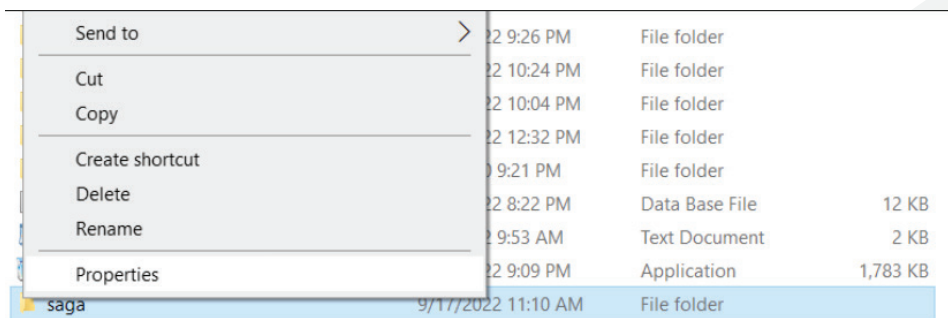
Create a new folder on your computer.

Use an English name only (e.g., "saga").



#### 2. Open Properties

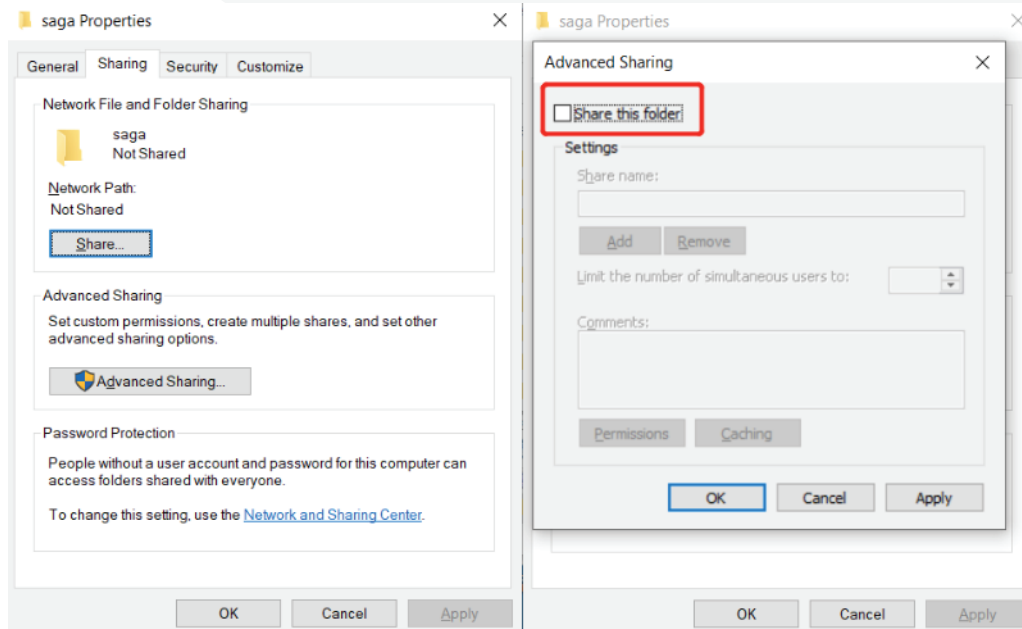
Right-click the "saga" folder > select **Properties**.



### 3. Enable Sharing

Go to the Sharing tab › click **Advanced Sharing**.

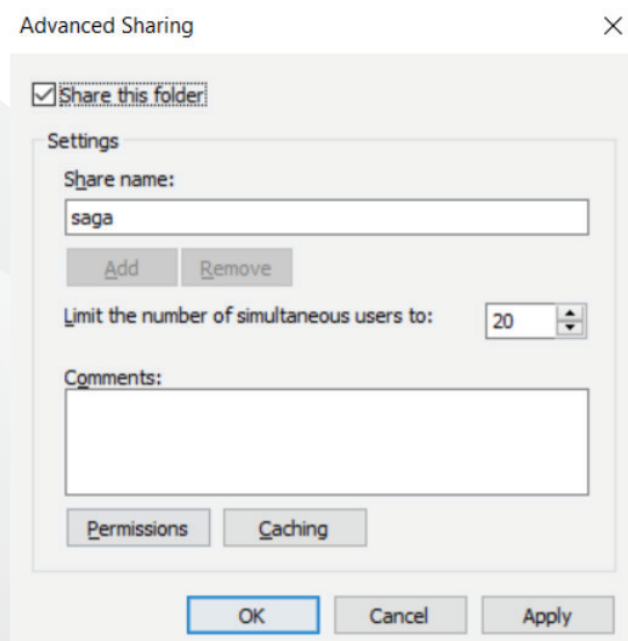
Check the box: **Share this folder**.



### 4. Set Share Name

In the Share name field, enter saga (or keep the default if it matches).

Click **Apply** › **OK**



## Next Step on the Machine

In the machine's Network Share settings:

Server IP: your computer's IPv4 address

Share Name: **saga**

Connect (with username/password if anonymous access is off)

## Quick Tips

- Folder name must be simple English letters (no spaces, Chinese characters, or special symbols recommended).
- After setup, keep the computer powered on and connected to the same network.

## CONTINUE SETTING UP SHARING PERMISSIONS (WINDOWS)

### 5. Open Share Permissions

In the Advanced Sharing window (still open from step 3):

Click the Permissions button.

### 6. Choose People / Users to Share With

In the Permissions window:

- Click Add (or "**Add...**" button).
- In the "Select Users or Groups" dialog, type the username you want to allow access (e.g., **SagaZYS** or your actual Windows username).
- Click **Check Names** to verify it resolves correctly.
- Click **OK** to add the user.

### 7. Set Permission Level

Select the added user (e.g., SagaZYS) in the list.

Choose the desired access level:

- Read** › Sufficient for the machine to retrieve PLT files (recommended).
  - Read/Write** › If you also want the machine to save files back (optional).
- Click **OK** to confirm.

### 8. Finalize Sharing

Click **OK** › **Apply** › **OK** in each open window to save changes.

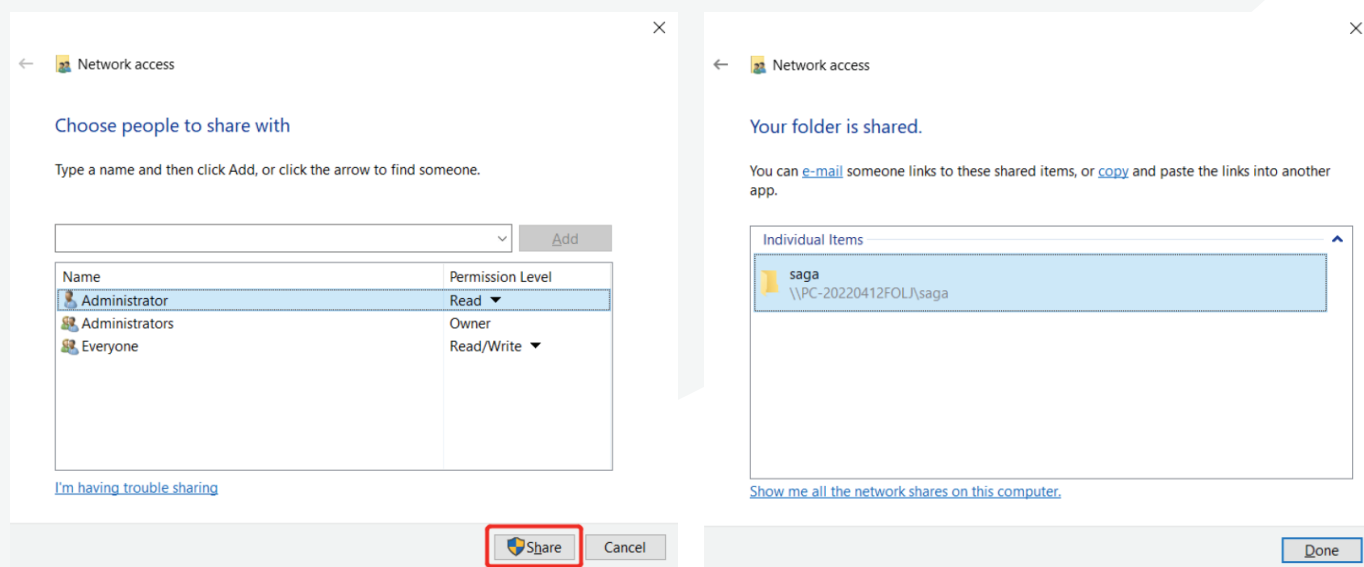
### Summary of Full Flow So Far

- Created folder "saga"
- Enabled sharing Share name: "saga"
- Added user (e.g., SagaZYS) with Read permission
- Now the folder is properly shared over the network.

### Summary of Full Flow So Far

In Network Share settings:

- Server IP: your PC's IP
- Share Name: saga
- User: SagaZYS (or the username you added)
- Password: the login password/PIN for that user
- Click Connect



## SETTING UP NETWORK SHARE ON THE MACHINE PREREQUISITE

- The machine must have Wi-Fi capability.
- The PC (with the shared folder) and the machine must be connected to the same network (same Wi-Fi or same LAN).

## STEPS ON THE MACHINE

### 1. Open WLAN Config

Go to the **WLAN Config** page and ensure Wi-Fi is turned on and connected to your network.

### 2. Open Net Share Config

Navigate to Net Share Config and fill in the following fields:

#### a. Server IP Addr

Enter your computer's IPv4 address (obtained from Step ① in the PC setup: Windows key + R > cmd > ipconfig).

#### b. Share Name

Enter the exact share name you set on the PC (e.g., saga from Step 4 in the PC sharing setup).  
Or use your own custom share name if different.

#### c. User

Enter the Windows username that has access to the shared folder (e.g., SagaZYS from Step 6–7 in the PC setup).  
Or use your own username.

#### d. Password

Enter the login password (or PIN) for the above Windows user account.

### 3. Connect

After filling in all fields, press Connect.

**a. Success:** A connection icon appears in the notification/status bar at the top of the screen.

### 4. Access Shared File

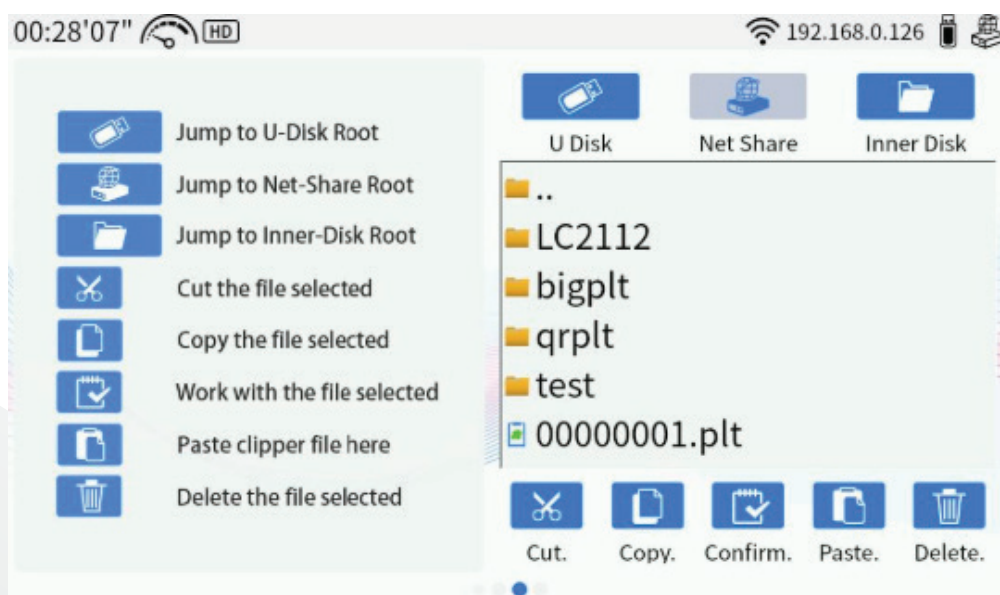
Go to the **File Management** screen.

Press the **Net Share** button (or tab).

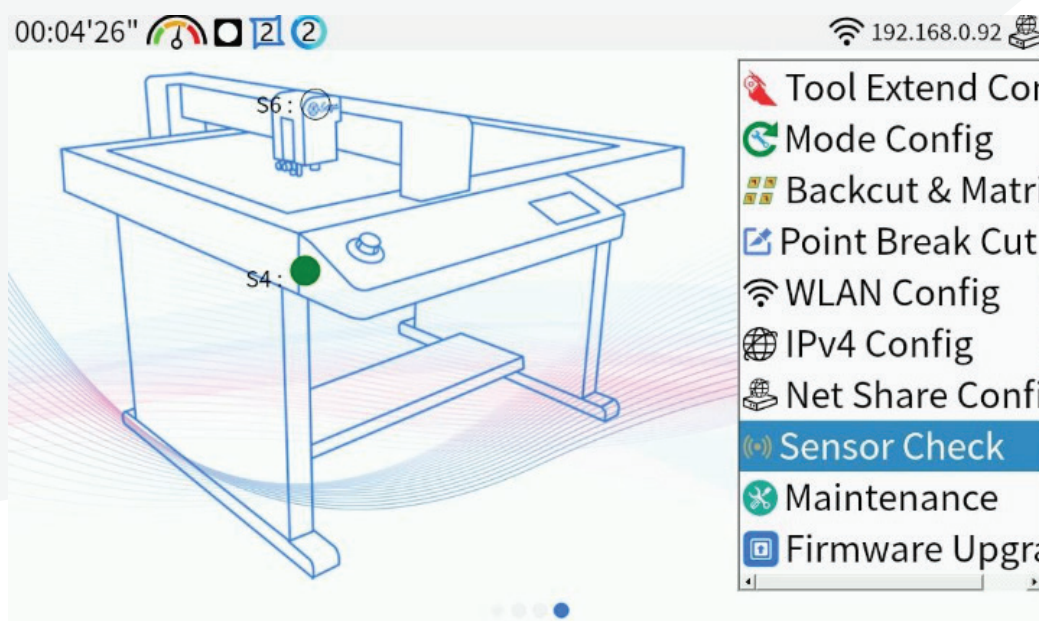
All PLT files from the shared folder on your PC will now appear in the list and can be selected for cutting.

### Quick Troubleshooting

- No icon after Connect? › Double-check IP, share name (case-sensitive), username, and password.
- Files not showing? › Ensure the folder is still shared, computer is on, and firewall allows SMB/file sharing.



## SENSOR CHECK



### Limit Sensor Descriptions

- **S6:** Carriage-limited board sensor  
Detects the position limits of the tool carriage (tool head/X-axis movement).
- **S4:** Beam reset limit sensor  
Detects the reset/home position of the beam (Y-axis or main gantry reset).

### NOTE

These sensors are used to verify normal operation.

Their status changes when the sensor is obstructed (triggered/blocked) or unobstructed (clear/free).

- Obstructed › Sensor typically shows "active" or "triggered" (e.g., signal ON).
- Unobstructed › Sensor returns to "inactive" or "normal" (e.g., signal OFF).

This allows the machine to confirm:

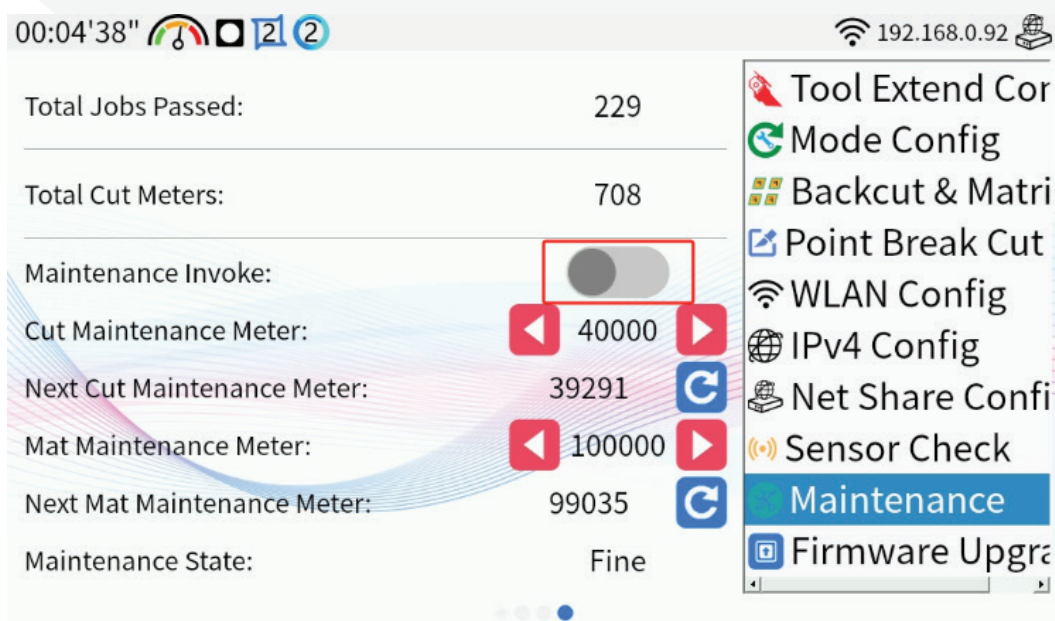
- The carriage/beam has reached its physical limit or home position.
- No mechanical blockage or sensor failure is present.

### Quick Test Tip

Manually move the carriage or beam to trigger each sensor (e.g., push gently against the limit).

Check the machine's diagnostic screen or status indicators to confirm the state change occurs correctly. If no change is detected, the sensor may be faulty, dirty, misaligned, or disconnected.

## MAINTENANCE



### Maintenance Reminder Settings

After enabling this function:

- When the machine's accumulated mileage (total distance traveled by the tool/carriage) reaches the preset value, a pop-up reminder will appear at the start of the next job.
- The reminder prompts the user to perform maintenance (e.g., inspect/replace blade, clean carriage, lubricate rails, etc.).

### Adjustable Ranges

After enabling this function:

- **Carving Knife (Blade) Maintenance Mileage:** 100 – 10,000 meters
- **Cutting Mileage Maintenance:** 100 – 10,000 meters

### Recommended Usage

- Set lower values (e.g., 500–2,000 m) for heavy daily use or abrasive materials.
- Set higher values (e.g., 5,000–10,000 m) for light or occasional use.
- Reset the mileage counter manually after performing the recommended maintenance (check the machine's maintenance or reset menu).

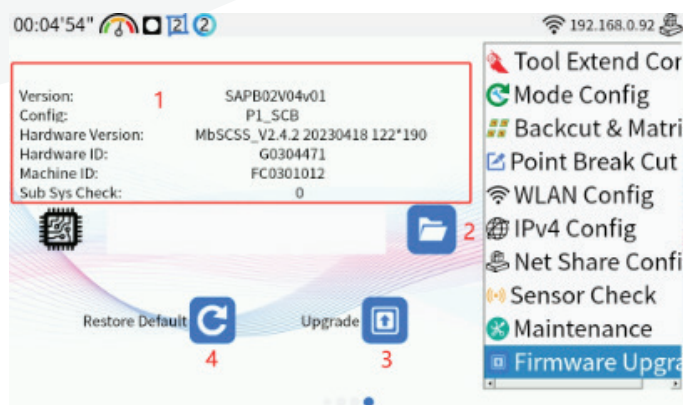
## Firmware & System Info

View on this page:

- Firmware version
- Hardware version
- Motherboard ID
- Machine ID

## Functions:

- **Firmware Upgrade** – Upload and install new firmware (via USB/network).
- **Factory Reset** – Restore all settings to defaults (user settings only; files/firmware unaffected).



### 1. Displayed Information

- Version** — Current firmware version number
- Configuration** — Machine model and feature configuration
- Hardware Version** — Hardware compatibility/firmware layer version
- Hardware ID** — Unique hardware board identifier
- Machine ID** — Machine serial number / body code (used for after-sales service and support).

### 2. File Selection

Browse and select the firmware upgrade file (provided by manufacturer).

### 3. Upgrade

After selecting the file, click Upgrade.

The machine installs the firmware and automatically restarts.

**Do not power off during the process.**

### 4. Restore Default

Resets all user parameters to factory default values.

(Firmware version and stored files remain unchanged.)

## Operation Example – Manual Sheet Mode Blank Cutting (No Registration Marks)

1. Go to Settings › Work Mode › select Manual.
2. Place the material flat on the cutting table, ensuring it is fully within the effective working area.
3. Manually move the carriage to the upper-left corner of the material.
4. Align the installed pen tip (or laser pointer) precisely with the top-left edge/corner of the sheet.
5. In File Management, select the desired PLT file.
6. Click Start to begin cutting.

When finished:

- a. Remove the cut material.
- b. Place the next sheet.
- c. Repeat steps 2–5.

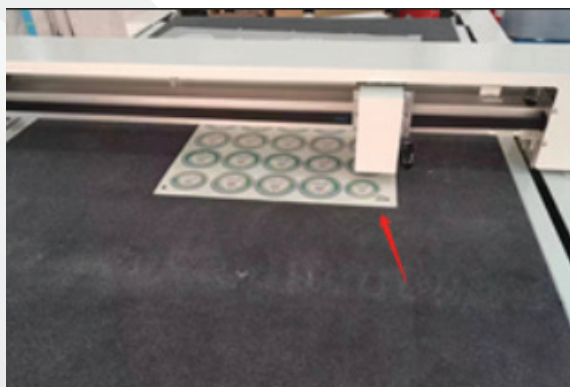
## Operation Example – Manual Sheet Mode (continued)

### 1.2 Arms Cutting (Four-Point / QR Code Mode)

1. Settings › Work Mode › Manual
2. Place printed material flat on platform (within cutting area)
3. Move carriage so first mark is centered in camera view (use preview)
4. Load file:
  - a. Four-point mode: Select matching PLT file (with 4 marks or 4 hollow marks)
  - b. QR mode: Click main interface QR code button (no spacing needed)
5. Start cutting (camera auto-aligns via marks/QR)
6. Finish › remove material › place next sheet › repeat

### Notes

- Adjust camera exposure/light if marks/QR not detected
- Test marker recognition (green box = OK) if alignment fails
- QR mode supports batch copies via arrows/presets after clicking QR icon



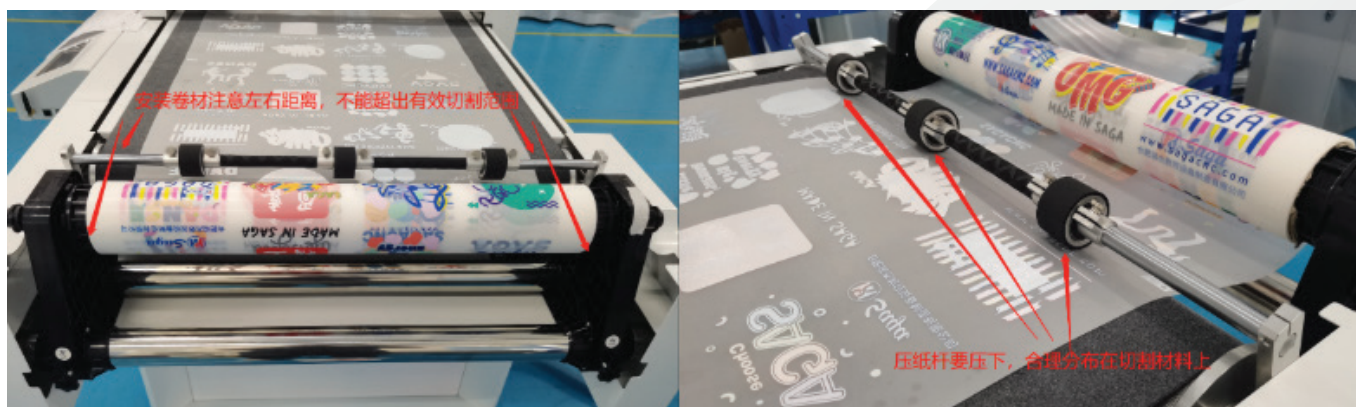
## Operation Example – Automatic Continuous Mode

### 2.1 Blank Cut (No Registration Marks – Roll/Continuous Material)

- Settings › Work Mode › select Auto (Automatic Continuous / Conveyor mode)
- Load roll material onto the feeding mechanism (conveyor belt / paper delivery system) as required.
- Ensure material is flat, aligned, and within the effective cutting range.
- Manually move the carriage to the **upper-left** corner of the material.
- Align the pen tip (or laser pointer) precisely with the top-left edge of the sheet.
- In File Management, select the appropriate **PLT blank cutting file**.
- Set the desired number of copies (quantity to cut continuously).
- Click **Start**.
  - The machine cuts the first piece.
  - Automatically feeds material forward by the set distance.
  - Continues cutting the next piece until the selected number is complete, then stops.

### Important Notes

- Refer to conveyor settings (Feed Distance, Feed Speed, Acceleration, Air Pump Delay) for smooth feeding.
- Ensure material tension is correct to avoid slipping, wrinkling, or deviation.
- Use vacuum/suction to hold material firmly during cutting.
- Test a short run (e.g., 2–3 copies) first to verify alignment, feed accuracy, and cut quality.
- See safety/precaution diagram (not shown here) for loading, tensioning, and potential hazards.**



## Operation Example – Automatic Continuous Mode (continued) 2.2 Arms Cut (Two-Point Mode, Four-Point Mode & QR Code Mode)

Used for continuous roll feeding with camera registration (printed marks or QR codes) for precise contour/alignment cutting. Workflow

1. Settings › Work Mode select Auto (Automatic Continuous / Conveyor mode)
2. Load roll material onto the feeding mechanism as required.  
Ensure flat, aligned, and within effective cutting range.
3. Manually move carriage so the first registration mark is centered in the camera view (use live preview for accurate positioning).
4. Load the file:
  - a. **Two-point mode:** Select matching PLT file (circular or hollow marks)
  - b. **Four-point mode:** Select matching PLT file (circular or hollow marks)
  - c. **QR code mode:** Click QR code button on main interface
5. Set Page Interval / Paper Spacing (in settings):
  - a. Two-point files: Usually set to 0 (or enter measured gap if printed files have spacing)
  - b. Four-point files: Measure shortest distance between rear mark center of first file and front mark center of next file enter value (shortest distance must be >18 mm)
  - c. QR code files: Add number of copies via arrows/presets after clicking QR button (spacing usually auto-handled)
6. Set desired number of copies.
7. Click **Start**.
  - a. Machine cuts first piece
  - b. Automatically feeds material forward
  - c. Moves to next appropriate position
  - d. Auto-scans marks/QR › auto-aligns › cuts next piece
  - e. Repeats until set quantity is reached, then stops

## Important Notes

- Adjust camera exposure/light for reliable mark/QR detection
- Use Marker Test (green box = OK) if recognition fails
- Ensure material tension & vacuum to prevent slipping/deviation
- Test short run (3–5 copies) first to verify feed distance, spacing, alignment, and cut quality
- Refer to precaution/safety diagram (not shown here) for roll loading, tension, and hazards

