

# Bantam Tools

# NextDraw

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The **Bantam Tools NextDraw** is a pen-plotter designed for precise drawing on various materials using a digital file. It works by following vector paths from an **SVG file** to produce clean, accurate line work.

The necessary software is already installed on the machine in **CTH**, so just log in using your **UAL credentials** and have your **SVG file** ready before proceeding. Your drawing could have been created in Photoshop or Illustrator, or if you're using **TouchDesigner**, follow the relevant tutorial to convert your generative artwork into an SVG.

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## 1. Setting Up Inkscape

Inkscape is a free, open-source vector graphics editor that works well with the Bantam Tools extension. It's similar to Adobe Illustrator and is ideal for preparing your file for plotting.

1. **Open your SVG file**
  - Open Inkscape and go to *File > Open*, then select your SVG file.
2. **Set the document size**
  - Go to *File > Document Properties* and set the page size to **A4 (210mm x 297mm)**.
3. **Resize your drawing**
  - Adjust your artwork to fit within the A4 page, leaving at least a **5mm margin** from all edges.
4. **Open the Bantam Tools extension**
  - With your drawing selected, go to *Extensions > Bantam Tools > Prepare Drawing for Plotting*.
5. **Set your plotting parameters**
  - Pen up/down height: Leave default unless advised otherwise.
  - Speed: 40–60% is a good starting point.
  - Stroke order: Choose **Optimize Path**.
  - Click **Apply**, then close the dialog.
6. **Save your file**
  - Save the file to keep the changes made by the extension. You may be prompted to overwrite or create a new version.

## 2. Setting Up the Paper and Pen (Plotter Off)

1. **Make sure the plotter is OFF**
  - The power light should be off. If not, turn the machine off before continuing.
2. **Load your paper**

- Place an A4 sheet of paper aligned within the red rectangle on the board.
  - Secure the paper down using paper tape at the four corners, to prevent any movement during plotting.
3. **Insert your pen**
    - Insert a pen or pencil into the pen holder, pointing straight down.
    - Adjust it so the tip just hovers about 1mm above the paper.
    - Tighten the clamp gently to hold the pen in place.
  4. **Final check**
    - Once your paper has been secured and pen is set, make sure to **keep yourself safe** before turning the pen plotter on: You **MUST** remove any loose jewellery such as earrings or necklaces that could get entangled with any moving part of the machine. If you have long hair, make sure to **TIE** it up. **Move away from the drawing area**, the pen plotter moves quickly and should not be touched once on.

### 3. Setting Up the Paper and Pen (Plotter Off)

1. **Make sure the plotter is OFF**
  - The power light should be off. If not, turn the machine off before continuing.
2. **Load your paper**
  - Lift the clamps or clips on the plotter bed.
  - Place an **A4 sheet** of paper aligned with any guides or markings.
  - Secure it using the clips to prevent movement during plotting.
3. **Insert your pen**
  - Choose a compatible pen (e.g., a fine liner or felt-tip pen).
  - Insert it into the **pen holder**, pointing straight down.
  - Adjust it so the tip **just touches** the paper or hovers about **1mm above**.
  - Tighten the clamp gently to hold the pen in place.
4. **Final check**
  - Is the paper flat and secure?
  - Is the pen firmly in place, with correct height?
  - Are your hands and tools clear of the plotter arm?