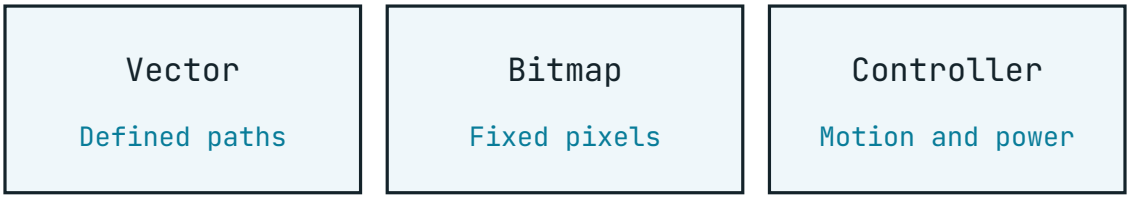
FROM ARTWORK TO THE MACHINE

How your laser and Beam Bench work

Connect artwork, processing modes and controller commands before preparing a job.

Software practice and review

Keep **No Machine** selected and stay **disconnected** for project exercises. Supplied operation values are software examples, not tested material recipes. Keep originals and save your own work separately.



Commands describe the planned job. They do not measure optical output or establish material compatibility.

1. Beam Bench prepares paths, speed and power commands. The controller interprets them. Record its family and supported connection method from the machine documentation.

2. Record optical output separately from electrical input. Leave unknown specifications marked unknown. A twenty-watt optical rating is not the power supply rating.

3. A Power percentage is a command within the configured range. It does not measure the optical power reaching the work.

4. Line follows outlines. Cutting and scoring describe intended results using suitable Line settings. **Cut and Score are not Mode choices.**

5. Fill covers closed vector areas. Image processes the tones of a bitmap. An imported SVG or PDF can contain either or both.

6. Focus, wavelength and the identified material affect the result. Preview checks the planned paths and time, not material suitability or finished darkness.

COMPARE A VECTOR AND BITMAP

Compare a vector and bitmap

Start a New project and import **vector-sample.svg** and **owl-illustration.png**. Keep both visible. Select each separately and inspect Properties, then compare **artwork-demo.lzrproj**.

☐ Find VECTOR on the tag and IMAGE on the owl. Inspect the actual layer and operation for each.

☐ Zoom into the vector curve. Enlarging the bitmap cannot add source detail. Keep the original image available.

☐ Save a separate copy. Treat name-tag-finished.lzrproj as another saved design example.

Which artwork supplies a cutting outline?

Which modes match a scored line, a filled name and the tonal owl?

What controller and optical-output details are still unknown for your setup?

EXPLAINED ANSWERS AND SETUP RECORD

Explained answers and setup record

Cutting outline
The vector tag supplies paths. A bitmap requires a separate vector outline for an outline cut.

Process choices
Line for a scored or cut path, Fill for a closed filled name, Image for the tonal owl. Settings determine the intended effect.

Setup evidence
Record exact laser/module, optical output, controller family, supported connection method and required driver. Keep unverified details unknown.

Laser/module and optical output, with documentation source:

Controller, connection method and matching driver:

Material, preparation and intended effect:

Unresolved details before any later operation:

FILES AND COMPARISONS

Files and comparisons

Vector and bitmap
Folder vector-and-bitmap. **artwork-demo.lzrproj**, **owl-illustration.png**, **vector-sample.svg**. Keep this chapter's inputs and comparisons together.

What Beam Bench does
Folder what-beam-bench-does. **name-tag-finished.lzrproj**. Keep this chapter's inputs and comparisons together.

Use the comparison after your attempt. Check the specified dimensions, settings and object structure.