

FAMU SAET – Equipment Operation Guidance Manual

At the FAMU School of Architecture & Engineering Technology (SAET), hands-on learning is at the core of our programs. Whether working in the fabrication lab, woodshop, or welding area, students are expected to engage with equipment that mirrors professional tools used in industry settings.

To ensure student safety, promote best practices, and support skill development, it is critical that all users understand the proper setup, operation, and maintenance of each tool and machine. The resources below serve as your **required reference guides** for lab orientation, classroom assignments, and independent fabrication work. They have been carefully selected to include **manufacturer manuals**, **training videos**, and **professional safety protocols** from trusted industry and academic sources.

Students are strongly encouraged to review these materials **before using any equipment**, and faculty may assign specific videos or manuals as part of studio courses or lab sessions. This manual also supports SAET's ongoing efforts to maintain a safe, professional, and nationally accredited learning environment.

Cutting Equipment

Table Saw

- [Table Saw Basics & Safety \(WWGOA\)](#)
- [Operating a Table Saw \(OSHA & CTE Guide\)](#)

Panel Saw

- [Saw Trax Panel Saw – Operation Manual \(PDF\)](#)
- [How to Use a Panel Saw \(YouTube – WoodWorkers Guild\)](#)

Miter Saw

- [How to Use a Miter Saw \(Home Depot\)](#)
- [Miter Saw Operation \(Rockler\)](#)

Band Saw

- [Band Saw Safety and Operation \(Fine Woodworking\)](#)
- [Jet Tools – Band Saw User Manual](#)

Scroll Saw

- [Scroll Saw How-To \(The Spruce Crafts\)](#)
- [Scroll Saw Video Tutorial \(YouTube – Steve Good\)](#)

Sanding & Drilling

Sanders

- [Types of Sanders and Their Uses \(Acme Tools\)](#)
- [Belt & Disc Sander Safety \(YouTube – WWGOA\)](#)

Drill Press

- [Drill Press Safety & Setup \(Make:\)](#)
 - [Drill Press Operation \(MIT Machine Shop\)](#)
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Planing & Jointing

Planer

- [Using a Wood Planer \(Lowe's\)](#)
- [Planer Setup Manual \(Grizzly Tools\)](#)

Jointer

- [Jointer Fundamentals \(WWGOA\)](#)
 - [How to Use a Jointer \(Stumpy Nubs YouTube\)](#)
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Welding & Metal Fabrication

Arc Welder

- [Arc Welding Overview \(Lincoln Electric\)](#)
- [Arc Welding Tips \(WeldNotes\)](#)

Mig Welder

- [MIG Welding Training \(Lincoln Electric\)](#)
- [MIG Welding Video Basics \(YouTube – Weld.com\)](#)

Oxy/Acetylene & Gas Welding

- [Oxy-Acetylene Welding Safety \(Washington State\)](#)
 - [Gas Welding Basics \(YouTube – WeldFever\)](#)
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Sheet Metal Tools

Bending Brake

- [Using a Box & Pan Brake \(Baileigh\)](#)
- [How to Use a Sheet Metal Brake \(Kevin Caron YouTube\)](#)

Chop Saw

- [Chop Saw Basics \(Family Handyman\)](#)
- [Safe Metal Cuts with Chop Saw \(YouTube – Practical Engineering\)](#)

Beverly Shear

- [How to Use a Beverly Shear \(Trick Tools\)](#)
 - [Beverly Shear Demo \(YouTube – Blacksmith Channel\)](#)
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Portable Tools

Hand Tools

- [Intro to Hand Tools \(MIT MakerWorks\)](#)
- [OSHA Safety Guide: Hand Tools](#)

Power Tools

- [Power Tool Basics \(Lowe's\)](#)
- [How to Use Power Tools \(Family Handyman\)](#)

Air Compressor

- [Air Compressor Safety & Setup \(Craftsman\)](#)
 - [Air Compressor Tutorial \(YouTube – HowToLou\)](#)
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Digital Fabrication & Plotting

Epilog Fusion Pro 16000 Lasers

- [Fusion Pro User Manual \(PDF\)](#)
- [Laser Training Videos \(Epilog\)](#)

Epilog Fusion Pro 131000 Lasers

- [Laser System Setup Guide \(Epilog\)](#)
- [How to Use Epilog Lasers \(YouTube\)](#)

Canon TX-9100 Plotters

- [TX-Series User Manual \(PDF\)](#)
- [Canon Plotter Setup \(YouTube\)](#)

Canon IPF850 Plotters

- [iPF850 Online Manual \(Canon\)](#)
 - [Canon iPF850 Printing Workflow \(YouTube\)](#)
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3D Printing

Ultimaker S3

- [S3 User Guide \(Ultimaker\)](#)
- [Ultimaker S3 Video Overview \(YouTube\)](#)

xTool F1 Pro

- [xTool F1 Pro Manual \(xTool Support\)](#)
- [F1 Pro Getting Started Video \(YouTube – xTool\)](#)