

Yoidesu Yoidesu2kos7tghew

Yoidesu 2 Axis GRBL Control Board User Manual

Model: Yoidesu2kos7tghew | Brand: Yoidesu

1. PRODUCT OVERVIEW

The Yoidesu 2 Axis GRBL Control Board is a high-performance controller designed for CNC engraving and milling machines. Featuring a 32-bit MCU, it offers enhanced accuracy and versatility for carving projects. This control board supports GRBL 1.1 firmware and is compatible with LaserGRBL (for Windows) and LaserWeb (for Windows, Linux, OS X) software. Its advanced algorithms ensure stable operation by reducing vibration during high-speed movements, and the powerful Y-axis dual drive allows for intricate designs.

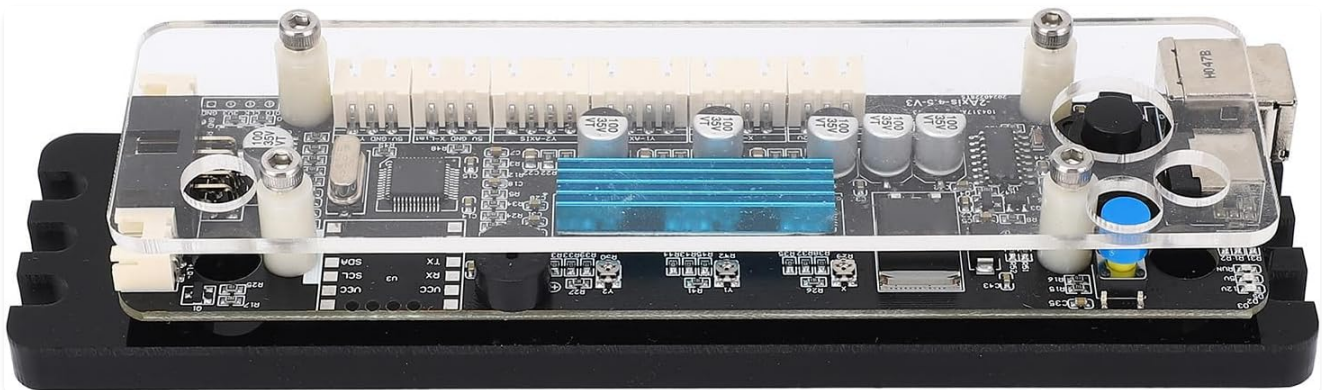


Image 1.1: Top view of the Yoidesu 2 Axis GRBL Control Board, showcasing its compact design and various components.

2. SPECIFICATIONS

Feature	Description
Axes	XY (2 Axes)

Controller	32-bit MCU
Driver	A4988
Firmware	GRBL 1.1
Max No-Load Speed	40000mm/min
Operating System Compatibility	Windows, Linux, OS X
Interface Type	Type-C USB
Power Supply Voltage	DC 12V-5A
Software Support	LaserGRBL (for Win), LaserWeb (for Win, Linux, OS X)
Product Dimensions	Approx. 133mm x 40mm (5.24in x 1.57in)
Item Weight	5.9 ounces

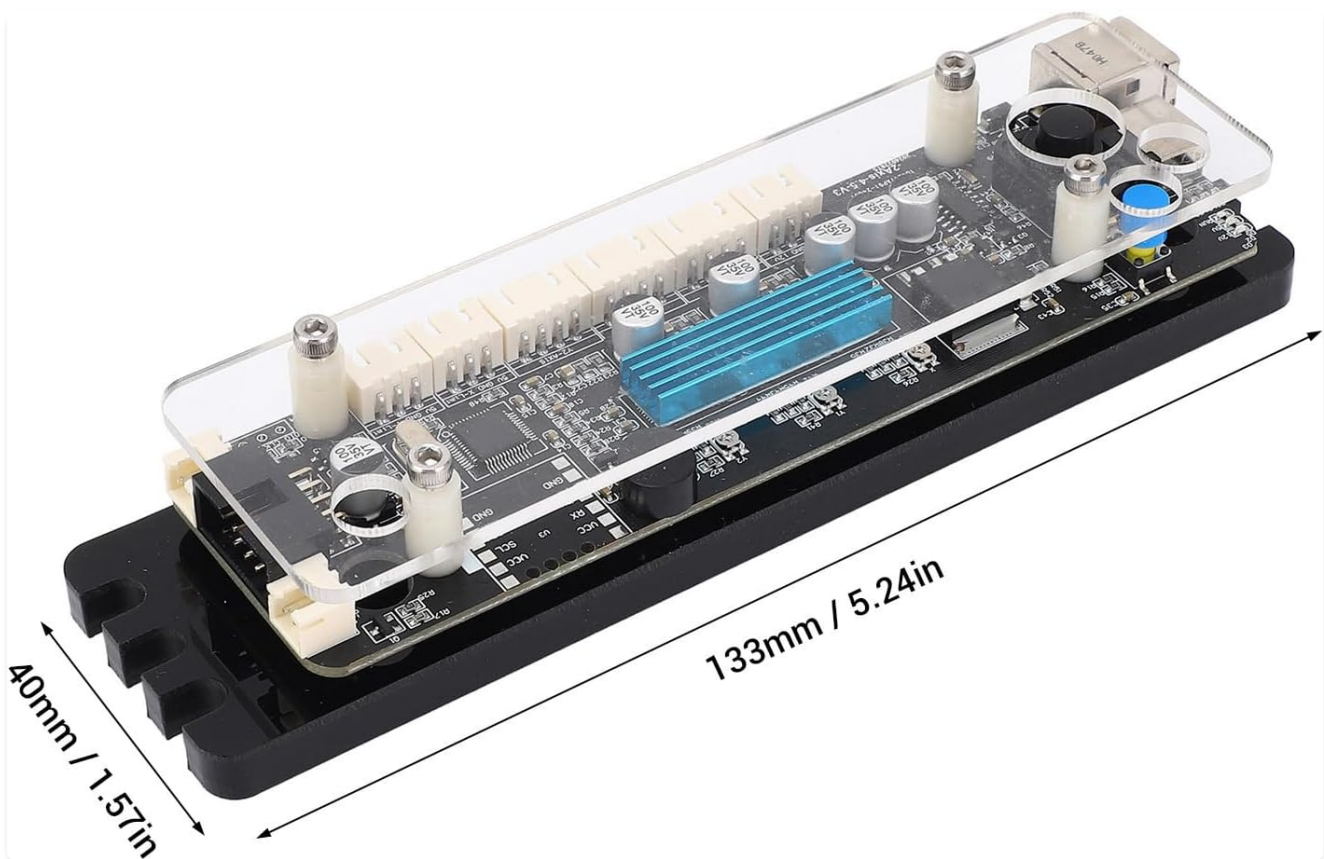


Image 2.1: Diagram showing the dimensions of the control board.

3. PACKAGE CONTENTS

Please verify that all items listed below are included in your package:

- 1 x GRBL 32Bit 2 Axes Control Board
- 1 x Connection Cable (Type-C USB cable)

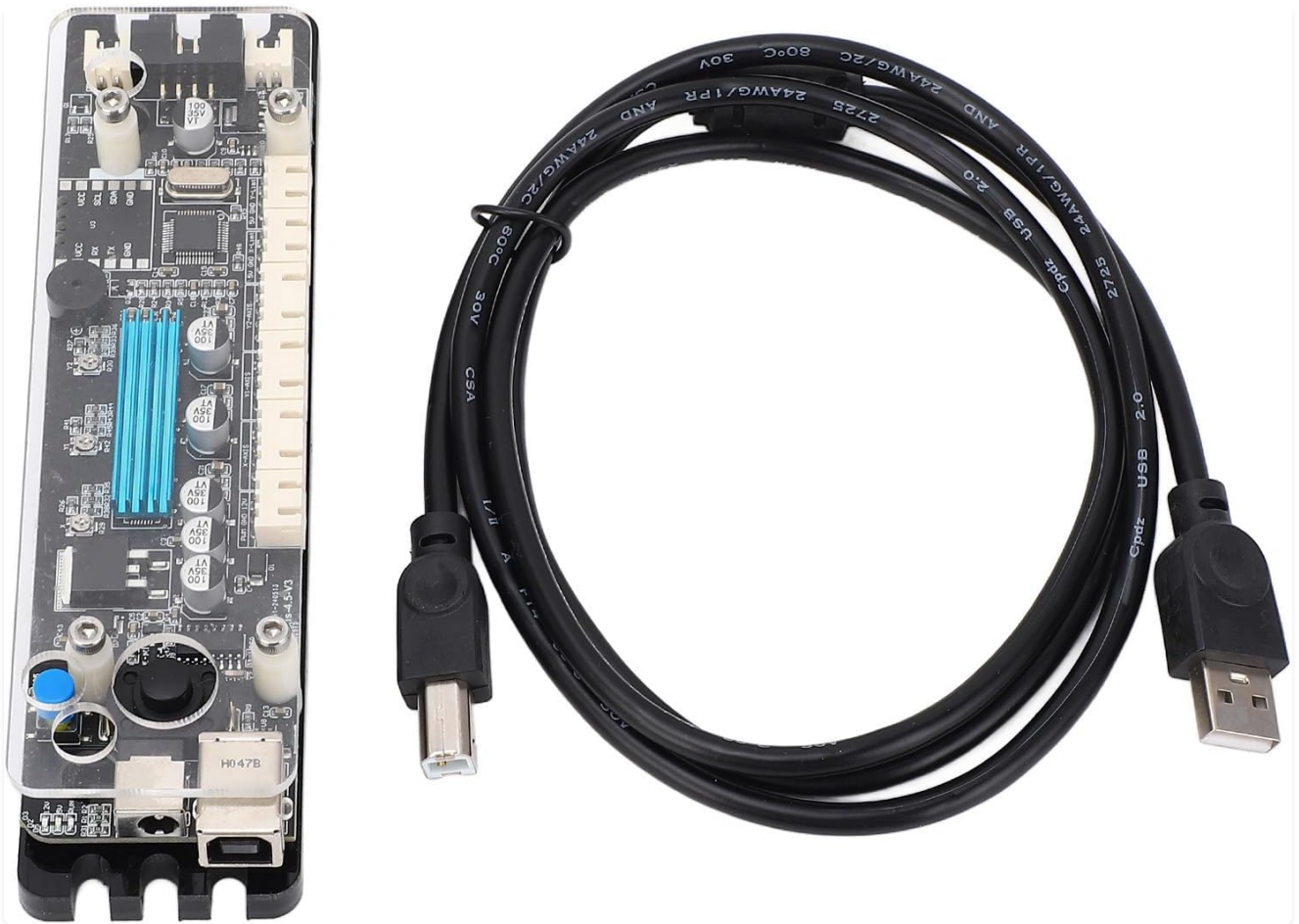


Image 3.1: The control board and its accompanying Type-C USB connection cable.

4. SETUP GUIDE

Follow these steps to set up your Yoidesu 2 Axis GRBL Control Board:

1. **Identify Components:** Familiarize yourself with the various ports and components on the control board. Refer to Image 4.1 for a detailed layout.
2. **Connect Power:** Connect a DC 12V-5A power supply to the 'Power Source 0-12V' input port on the board.
3. **Connect Motors:** Connect your X-axis and Y-axis stepper motors to the corresponding 'X Axes', 'Y1 Axes', and 'Y2 Axes' ports. Ensure the motor line sequence (1A, 1B, 2A, 2B) is correctly followed as indicated in Image 4.2.
4. **Connect Limit Switches (Optional):** If using limit switches, connect them to the 'Limit 5V/GND/S' ports for X and Y axes.
5. **Connect Laser/Spindle (Optional):** For laser engraving or spindle control, connect to the 'Beam PWM/GND/12V' port.
6. **Connect to Computer:** Use the provided Type-C USB cable to connect the control board to your computer. The board features auto USB recognition, which will automatically disable offline interfaces upon connection to prevent data interference.

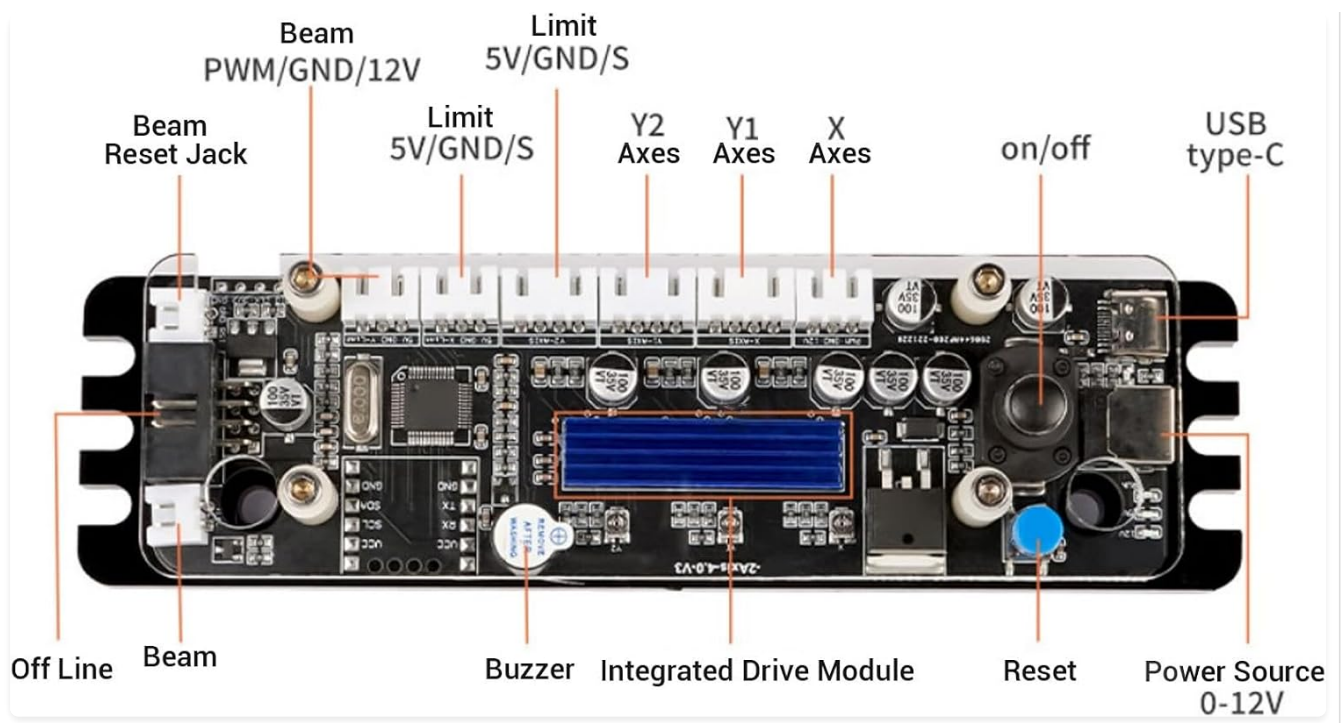


Image 4.1: Detailed view of the control board with key components and ports labeled.

Motor line sequence: 1A, 1B, 2A, 2B

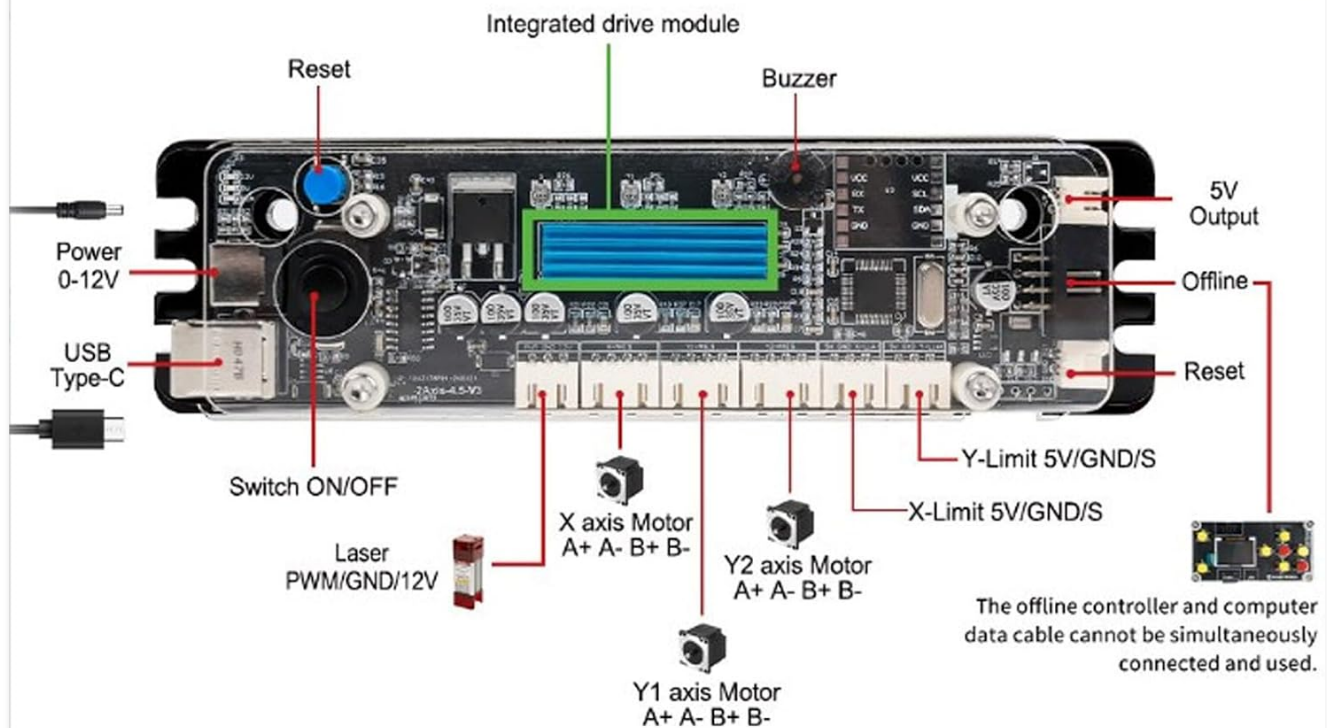


Image 4.2: Overview of the control board's connections, including motor wiring sequence and input/output ports.

5. OPERATING INSTRUCTIONS

Once the control board is set up and connected to your computer, you can begin operating your CNC machine:

1. **Software Installation:** Install the appropriate software on your computer. For Windows users, LaserGRBL is recommended. For Windows, Linux, or OS X users, LaserWeb is also supported.
2. **Load G-Code:** Open your chosen software and load the G-code file for your desired engraving or milling project.
3. **Initiate Operation:** Follow the software's instructions to start the engraving or milling process. The 32-bit MCU ensures faster work speeds of up to 40,000 mm/min.
4. **Offline Engraving:** The board supports offline engraving. When the USB cable is connected to a computer, the offline interface is automatically disabled to prevent data interference. This ensures a smooth transition

between online and offline modes.

Offline 1 click engraving

When you plug in the USB connection to the computer, the offline interface is automatically shielded to avoid offline interference data.



Image 5.1: Illustration of the offline engraving feature, highlighting the automatic shielding of the offline interface when USB is connected.

6. MAINTENANCE

Proper maintenance will extend the lifespan and ensure optimal performance of your control board:

- **Keep Clean:** Regularly clean the board with a soft, dry brush or compressed air to remove dust and debris. Ensure no conductive materials accumulate on the board.
- **Avoid Moisture:** Keep the control board in a dry environment. Moisture can cause short circuits and damage components.
- **Handle with Care:** Avoid dropping or subjecting the board to physical shocks, which can damage internal components or solder joints.
- **Power Off Before Disconnecting:** Always power off the control board and connected devices before

disconnecting any cables or making changes to the wiring.

7. TROUBLESHOOTING

If you encounter issues with your Yoidesu 2 Axis GRBL Control Board, refer to the following common problems and solutions:

- **Board Not Powering On:**

- Ensure the 12V-5A power supply is correctly connected and functioning.
- Check the power cable for any damage.

- **Computer Not Recognizing Board:**

- Verify the Type-C USB cable is securely connected to both the board and the computer.
- Try a different USB port on your computer.
- Ensure necessary drivers are installed (often automatically with GRBL software).

- **Motors Not Moving or Moving Incorrectly:**

- Check motor wiring connections for correct sequence (1A, 1B, 2A, 2B).
- Confirm that the power supply is adequate for both the board and the motors.
- Verify G-code commands are correct and software settings match your machine configuration.

- **Offline Interface Interference:**

- This board features automatic shielding. Ensure only one interface (USB or offline controller) is actively connected for data transmission at a time.

8. WARRANTY AND SUPPORT

Yoidesu products are manufactured with quality and reliability in mind. For any technical support, warranty claims, or inquiries not covered in this manual, please contact Yoidesu customer service through the retailer where the product was purchased or visit the official Yoidesu website for contact information.

Please retain your proof of purchase for warranty purposes.

© 2024 Yoidesu. All rights reserved.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question