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LASER TREE LT-4LDS-V2-DB

LASER TREE LT-4LDS-V2 Driver Board Instruction Manual

Model: LT-4LDS-V2-DB | Brand: LASER TREE

1. INTRODUCTION

This manual provides detailed instructions for the LASER TREE LT-4LDS-V2 Driver Board, a key accessory for LASER TREE laser modules. It covers installation, operation, maintenance, and troubleshooting to ensure optimal performance and longevity of your laser module.

Please note that the upgraded LT-4LDS-V2 driver board interface may differ from original driver interfaces. Refer to the provided video for detailed installation steps to ensure correct setup.

2. SETUP AND INSTALLATION

Proper installation of the LT-4LDS-V2 Driver Board is crucial for the safe and effective operation of your laser module. Follow these steps carefully.

2.1 Driver Board Overview

LT-4LDS-V2 Driver Board

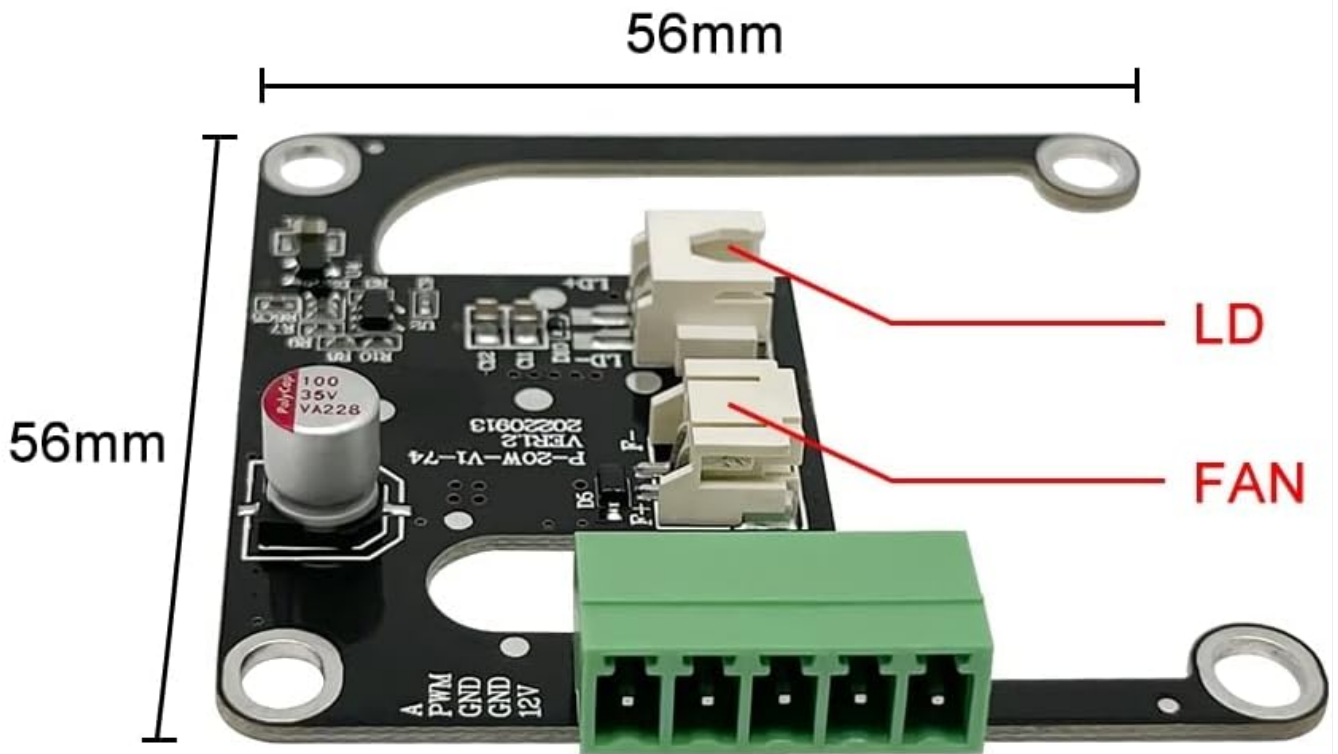


Image: The LASER TREE LT-4LDS-V2 Driver Board, showing its compact design and labeled ports for LD (Laser Diode) and FAN connections, along with dimensions of 56mm x 56mm.

2.2 Driver Board Replacement Tutorial

This video demonstrates the step-by-step process for replacing the driver board in your LASER TREE laser module. Pay close attention to the connection points for the LD cable and cooling fan.

Your browser does not support the video tag.

Video: A detailed tutorial on replacing the driver board for the LT-4LDS-V2 Laser Module. It shows how to disassemble the module, disconnect the old board, connect the new board's LD cable and cooling fan, and reassemble the unit.

1. **Disassembly:** Carefully remove the screws securing the fan cover and the laser module casing.
2. **Disconnect Old Board:** Gently disconnect the LD cable and cooling fan cable from the existing driver board. Note the orientation of the cables.
3. **Install New Board:** Connect the LD cable and cooling fan cable to the corresponding ports on the new LT-4LDS-V2 driver board. Ensure correct polarity for the LD cable (positive and negative cable transposition is critical).
4. **Reassembly:** Secure the new driver board in place and reassemble the laser module casing and fan cover.

3. OPERATING INSTRUCTIONS

Once the driver board is installed, connect your laser module to a compatible laser engraver or cutting machine. Ensure all connections are secure before powering on the device.

- **Power Connection:** Connect the power supply to the laser module. Verify the voltage and current requirements match

- your power source.
- **Signal Input:** Connect the control signal cable from your machine to the driver board's signal input. This typically controls laser intensity and on/off functions.
 - **Cooling Fan:** The cooling fan should operate automatically when the module is powered, ensuring proper heat dissipation.
 - **Safety Precautions:** Always wear appropriate laser safety glasses when operating the laser module. Never look directly into the laser beam.

4. MAINTENANCE

Regular maintenance helps prolong the life and performance of your driver board and laser module.

- **Cleaning:** Periodically clean the cooling fan and heatsink fins to prevent dust buildup, which can impede cooling efficiency. Use a soft brush or compressed air.
- **Cable Inspection:** Check all cables and connectors for signs of wear, damage, or loose connections. Replace any damaged components immediately.
- **Environmental Conditions:** Operate the laser module in a clean, dry environment with adequate ventilation. Avoid extreme temperatures and humidity.

5. TROUBLESHOOTING

If you encounter issues with your LT-4LDS-V2 Driver Board, refer to the following common troubleshooting tips:

- **No Power:**
 - Verify the power supply is correctly connected and providing the correct voltage.
 - Check for loose power cable connections.
- **Laser Not Firing:**
 - Ensure the LD cable is securely connected to the driver board and the laser diode.
 - Check the control signal input from your machine.
 - Confirm the laser module is receiving a valid signal to fire.
- **Fan Not Operating:**
 - Check the fan cable connection to the driver board.
 - Ensure the fan is not obstructed by debris.
- **Overheating:**
 - Clean the heatsink and fan to remove any dust or obstructions.
 - Ensure adequate airflow around the laser module.

If problems persist, contact LASER TREE customer support for further assistance.

6. SPECIFICATIONS

Feature	Detail
Product Dimensions	1.5 x 1.5 x 0.3 inches
Item Model Number	LT-4LDS-V2-DB

ASIN	B0C2C7HLKX
Item Weight	1.06 ounces
Manufacturer	LASER TREE
Date First Available	April 13, 2023
Brand	LASER TREE
Color	Lt-4lds-v2-db
Style	Laser

7. WARRANTY INFORMATION

LASER TREE products are manufactured to high-quality standards. This product is covered by the manufacturer's standard warranty against defects in materials and workmanship. Please retain your proof of purchase for warranty claims. For specific warranty terms and conditions, refer to the documentation included with your original laser module or contact LASER TREE customer support.

8. CUSTOMER SUPPORT

For technical assistance, troubleshooting, or any questions regarding your LASER TREE LT-4LDS-V2 Driver Board, please visit the official LASER TREE website or contact their customer support team. Contact details can typically be found on the product packaging or the brand's official online store. You can also visit the [LASER TREE Store on Amazon](#) for more information and products.

