

MYJG-40W Laser Power Supply Instruction Manual



Read Carefully Before Use
Keep for Future Reference

With its high efficiency, frequency, and speed, this power supply is an essential part of your laser engraver, converting standard AC power into the high-voltage DC power needed for your laser tube. The lightweight, compact MYJG-40W laser power supply is easy to operate and highly compatible with a variety of 40W CO₂ lasers. It connects directly to your system and works without similar devices' usual heat-generating heavy ballast resistance. Using this power supply ensures quick operation and maximizes the performance of your laser device, extending its service life.

Specifications

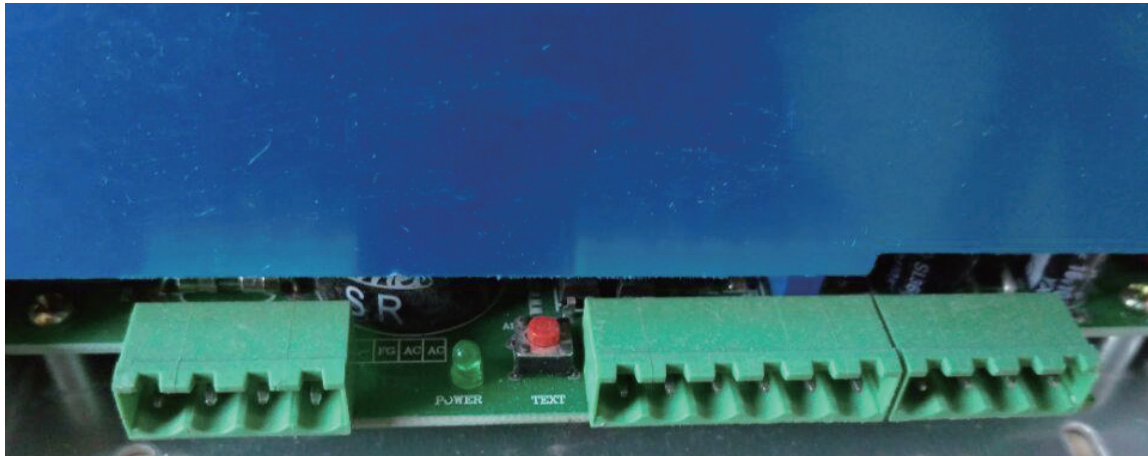
Model		MYJG-40W	
Input Power	A	110–120 V~ 60 Hz	
	B	220–240 V~ 50 Hz	
Output Power		20 kV DC	
Max. Current		20 mA	
Max. Response Time		1 Millisecond	
Max. Safe Humidity		85%	
Operational Temp. Range		14 to 104°F	–10 to 40°C
Dimensions		6.5×5.6×3.1 in.	165×142×78 mm
Net Weight		2.4 lb.	1.1 kg

Safety Information

Warning!

- The input voltage for this device is controlled by a switch on the right side. Make sure that the selected voltage matches your country's power supply prior to use.
- **ONLY** install, adjust, or remove this device when all power to your engraver is turned off and unplugged.
- Similarly, make sure that your engraver is properly grounded prior to use. Use only with engraving machines that employ a three-prong plug with a ground terminal. For best results, use with an EMI filter.
- Be careful that the positive and negative output terminals are properly connected to the proper poles of your laser device prior to use.
- Be **EXTREMELY** careful around the high-voltage anode wire and its connections. The connection to the laser tube should be sealed to prevent sparking.
- Ensure that your CO₂ laser's water cooling system is operating properly during use. In systems equipped with a protective sensor in their water system, this power supply will automatically cut off power to the laser if a malfunction is detected on the sensor's circuit. In systems without such a circuit, however, the water cooling system is no less important and its proper operation should be manually ensured prior to each use.
- There is a bleeder resistor inside your power supply. It generally discharges harmlessly into the ground connection, but do not open this device without specialized training.
- Just like your CO₂ laser, this power supply should be kept in an environmentally-controlled room to ensure proper operation. Do not use the device outside of its approved temperature and humidity ranges.

Terminals



L – F G A C₁ A C₂

G₁ P L₁ G₂ I N 5V₁

24V G₃ 5V₂ L₂

The first bank is a screw terminal block that connects your laser power supply to the laser tube's cathode and the power input from your home or business's main power. If you are assembling your laser, you will need to install the wiring correctly yourself. Place the wires into the proper slot & tighten them into place with the block's built-in screws. If this is a compatible replacement part, you can simply plug in your current block.

L–: Laser Return: Connection to the Laser Tube Cathode (and usually Ammeter)

FG: Ground Wire for the Mains & Case

AC₁: Neutral Wire to 110/220V Power

AC₂: Live Input from 110/220V Power

The second & third bank connect your laser power supply to the engraver's control system. Just like the first bank, if you have one already set up, you can simply plug in your old screw terminal block directly. Otherwise, take care to install the wiring correctly. Use of separately colored wiring is recommended.

G₁: Ground Wire for the Laser Trigger & Water System

P: Line to the Laser Trigger, Water, & Other Systems (such as a door switch)

L₁: Active Low Pin₁: Line to the Engraver's Test Switch for Alignment and Checking

G₂: Ground Wire for the Engraver Laser Trigger & Test Switch Circuit

IN: Input Power for PWM Level Shifters or Potentiometers

5V₁: 5V Connection for PWM Level Shifters or Potentiometers

24V: 24V Connection to the Motherboard

G₃: Ground Wire for the Motherboard

5V₂: 5V Connection for Digital Signals

L₂: Active Low

Pin₂: L0 Control Line to Motherboard

In the event that your laser is powered but fails to fire, the Test Button (possibly mislabeled TEXT) can be used to see if the problem lies with the display panel, controller, or their wiring (if it successfully fires a test beam) or if the problem lies with the power supply or its connection to the laser (if the laser fails to fire). In the event of a problem with the power supply or connection, contact customer service.

Contact Us

Thank you for choosing our products! If you have any questions or comments, contact us at **help@cs-supportpro.com** and we'll resolve your issue ASAP!

For a .pdf copy of the latest version of these instructions, use the appropriate app on your smartphone to scan the QR code to the right.



L P S - 0 0 4 0 - U S
L P S - 0 0 4 0 - U K
L P S - 0 0 4 0 - 0 1
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