

CO2 Laser Controller

Operation Manual



Sintec Optronics Pte Ltd

196 Pandan Loop #07-26

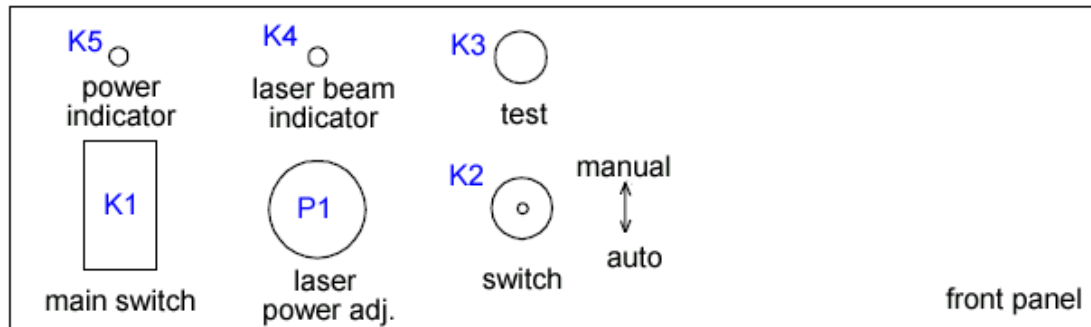
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1. Description of Front Panel



K1: main switch. Turn on/off electricity input.

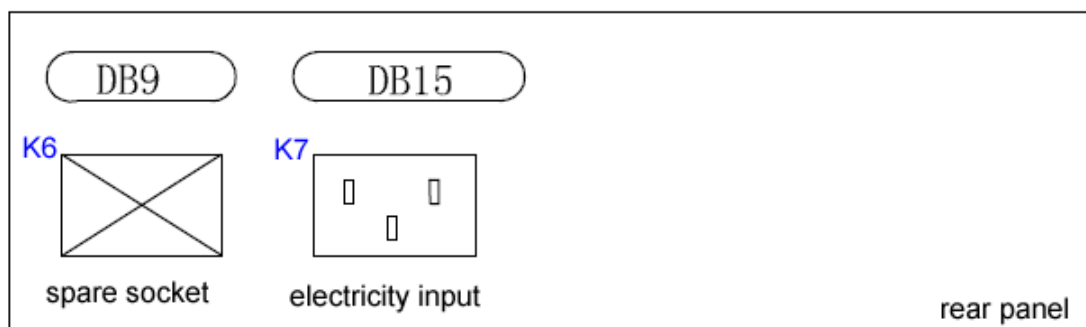
K2: to select manual or auto control. “manual control” means that the output laser power is adjusted by P1 and laser beam on/off is controlled via pressing K3. “auto control” means that the laser power and beam on/off is controlled via TTL signal from DB9 on the rear panel.

K3: button for beam on/off. When K2 is turned to “manual”, pressing K3 button is beam on.

K4: laser beam indicator

K5: main power indicator

2. Description of Rear Panel



K6: spare socket for output 220VAC.

K7: electricity input 220VAC.

DB9: control input.

TTL: When K2 is turned to “auto”, the laser beam is modulated at the frequency of TTL.

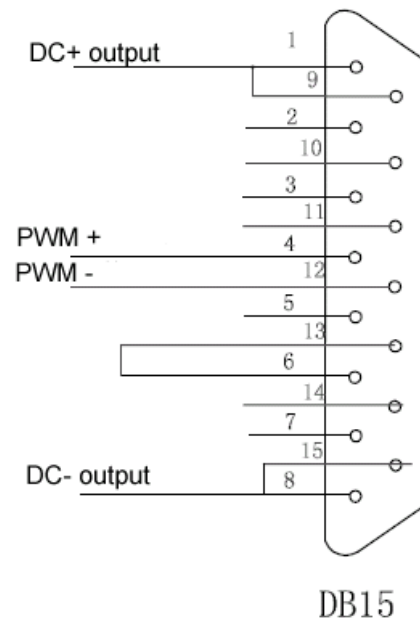
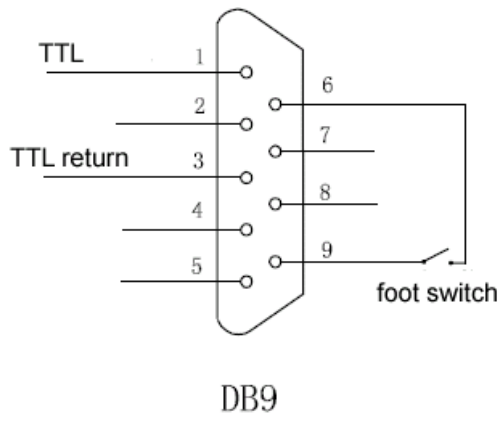
The laser power is the maximum power of the laser times the pulse ratio between the pulse width and the period of TTL signal.

Foot switch: the laser beam is on when it is short and the laser beam is off when it is open.

DB15: it is used for laser markers made by us.

PWM: to control laser beam power and on/off.

DC output: to supply DC power supply for laser.



Sintec Optronics Pte Ltd

We, Sintec Optronics Pte Ltd, are a Singapore-based supplier of a wide range of photonics products (lasers & parts, optical components, and relevant accessories). We provide various high-quality low-price lasers, parts & optics for OEM and end users. The company is managed by experienced professionals with engineering & servicing backgrounds. Our customers range over 32 countries around the world.

1. Lasers & Machines

- 1.1 Sealed CW CO2 lasers
- 1.2 CW Nd:YAG laser systems
- 1.3 Diode-pumped YAG lasers
- 1.4 Diode pumped green lasers
- 1.5 Pulse Nd:YAG lasers
- 1.6 High-power diode lasers
- 1.7 Red diode lasers
- 1.8 Diode-pumped green lasers
- 1.9 Laser cutting machines
- 1.10 Laser marking machines
- 1.11 Laser engraving machines

2. Optical Components

- 2.1 Focusing lenses
- 2.2 Mirrors & output couplers
- 2.4 Beam expanders
- 2.5 Zoom beam expanders
- 2.6 Beam splitters
- 2.7 Scan mirrors
- 2.8 Scan lenses (f-theta lenses)

3. Accessories

- 3.1 Laser lamps (Kr and Xe lamps)
- 3.2 CW and pulse Nd:YAG laser power supply
- 3.3 Diode laser drivers
- 3.4 Laser chillers/heat exchangers
- 3.5 Laser crystals & optical crystals (YAG rods, KTP, BBO, ZnSe etc)
- 3.3 AO & EO Q-switches & drivers
- 3.4 AOMs
- 3.5 Laser power/energy meters
- 3.6 Laser safety goggles
- 3.7 Optical scanners/galvanometers
- 3.8 Motorized or manual adjustable XYZ stages & rotary stages
- 3.9 Vertical translation stages
- 3.10 Mirror mounts, holders, posts & holders
- 3.11 Optical tables
- 3.12 CNC control software
- 3.13 Laser marking heads and marking software
- 3.14 Laser pump chambers

We are a leading company in Singapore to provide quality laser systems & optical components and excellent services at attractive prices. We always try our best to make our products reliable, safe, easy to use, flexible and economical. We believe our continuing advances in technologies will make us the best choice to provide the solutions to make you remain competitive and be a leader in your own field.

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