

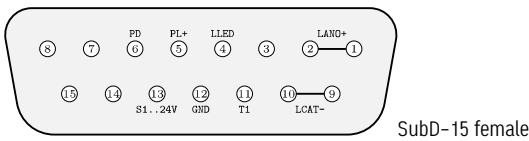
OEM Laser Controller

type: ls01-la1.5v14-o4400-v1-186



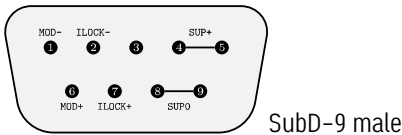
Laser max.: 1.5A, 14V
 trise-fall < 25us (optional < 5us)
 Supply Voltage: 24VDC
 - External, Analog and Digital Modulation
 - Internal Pulse Generator
 - Pulses and Bursts internally and externally triggered
 - Bias Current option
 - Pilot Laser Supply
 - External Fan Support
 - optional additional TEC-stages

Laser Connector



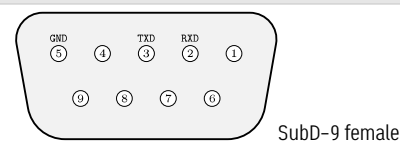
| PIN.No | Abbr. | Function |
|--------|-------|---|
| 1;2 | LANO+ | Laser Diode Anode(+) |
| 4 | LLED | Laser Active LED – Anode (+), 5V over 470R, v.s. GND |
| 5 | PL+ | Pilot Laser (+), v.s. GND |
| 6 | PDC- | Photo Diode Cathode (-), v.s. GND |
| 9;10 | LCAT- | Laser Diode Kathode (-) |
| 11 | T1 | Temperature Sensor 1 Input, default NTC10kΩ, v.s. GND |
| 12 | GND | Common Ground |
| 13 | 1-24V | 1 to 24V Supply, max. 500mA, vs. GND, supports fan etc. |

Power and Support Connector for o44 devices



| PIN.No | Abbr. | Function |
|--------|--------|--|
| 4;5 | SUP+ | Power Supply typ. +24V DC |
| 8;9 | SUP0 | Power Supply typ. 0V DC |
| 3 | ILOCK+ | ca. 5mA over 2V |
| 2 | ILOCK- | Laser runs only on closed Interlock |
| 6 | MOD+ | Digital and Analog Modulation Input; positiv Pin |
| 1 | MOD- | Digital and Analog Modulation Input; negativ Pin |

RS232 Connector



Standard RS232-Connector
 (No Null-Modem Cable !)
 9600-Baud-8N1

| PIN.No | Abbr. |
|--------|-------|
| 2 | RXD |
| 3 | TXD |
| 5 | GND |



OEM Laser Controller

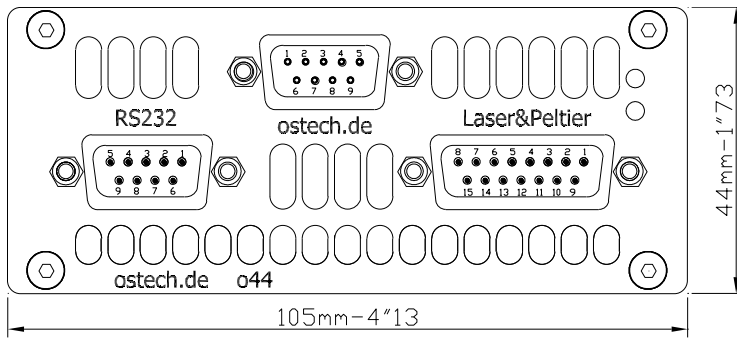


fig: ds01-Rear depth 160mm-6"3

Revision overview:

- 2017.10.10: "v0" - derived from type-501
- 2012.05.28: max. Voltage increased from 6V to 8V
- 2012.09.13: "v1" - Voltage increased from 8V to 14V

References:

- <http://www.ostech.de/en/products/laser-drivers/ds01-o44>
- <http://www.ostech.de/en/downloads/manuals/ds-en.pdf>
- <http://www.ostech.de/en/downloads/labview>

Accessories

- kab-lpa08-16pol-subd15m-oe-1.5m-39
cable 16x0.35qmm SUBD15-Gold-6,5A/Pin to open end length 1m5
- acc-converter-usb-to-rs232-1m5-iso-417
RS232 to USB converter optical isolated with FTDI-Chip cable 1.5m
- nt-90w-24vdc-oem-82
power-supply vout-24V-3.8A-90W for-OsTech-OEM
subd9-plug-for-ds01-o44-devices, vin-90~230AC"