

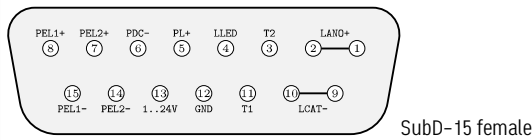
# Tabletop Laser & Peltier Controller

Type: ds11-la12v06-pa08v14-pa04v14-t9519-v1-135



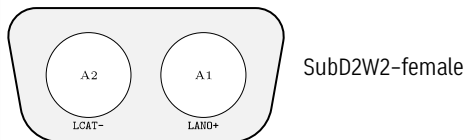
- Laser max.: 18A – 8V
- 1.TEC max.: 8A – 14V
- 2.TEC max.: 4A – 14V
- t-rise-tfall 7µs@12A / 10µs@6A / 15µs@2A
- Supply Voltage: 100~230VAC – 50/60Hz
- External, Analog and Digital Modulation
- Internal Pulse Generator
- Continuous Pulses, Single Pulse, Pulse Bursts,
- Internal or External Triggered
- Bias Current option
- Pilot Laser Supply
- External Supply max. 1..22V – 800mA for Fan etc.
- Photo Diode Current max. 4mA
- optional additional TEC-stages

## Laser & Peltier Connector

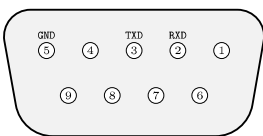
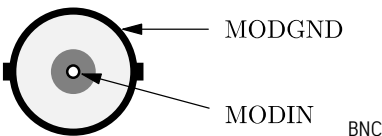
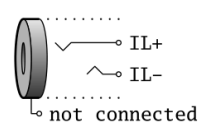


PIN.No	Abbr.	Function
1;2	LANO+	Laser Diode Anode(+)
3	T2	2.Temperature Sensor Input, default NTC10kΩ, v.s. GND
4	LLED	Laser Active LED – Anode (+), 5V over 470R, v.s. GND
5	PL+	Pilot Laser (+), v.s. GND
6	PDC-	Photo Diode Cathode (-), v.s. GND
7	PEL1+	1.Peltier element (+)
8	PEL2+	2.Peltier element (+)
9;10	LCAT-	Laser Diode Kathode (-)
11	T1	1.Temperature Sensor Input, default NTC10kΩ, v.s. GND
12	GND	Common Ground
13	1-24V	1 to 24V Supply, max. 500mA, vs. GND, supports fan etc.
14	PEL2-	2.Peltier element (-)
15	PEL1-	1.Peltier element (-)

## Laser Connector



PIN. No	Abbr.	Function
A1	LANO+	Laser Diode Anode (+)
A2	LCAT-	Laser Diode Cathode (-)

RS232 Connector	AMOD/DMOD Connector	Interlock Connector
 <p style="text-align: center;">SubD-9, female</p> <p>Standard RS232-Connector connected to PC 9600-Baud-8N1 (No Null-Modem Cable !)</p>	 <p style="text-align: center;">BNC</p> <p>Input-Impdanz 10kOhm Digital Modulation with TTL-Pegel Analog Modulation 0-4[V] =&gt; 0-Imax[A]</p>	 <p style="text-align: center;">Jack Connector 3.5mm</p> <p>Interlock - Laser runs only if closed (ca. 5mA over 2V -&gt; R<sub>Interlock</sub> &lt;=400R)</p>

# Tabletop Laser & Peltier Controller

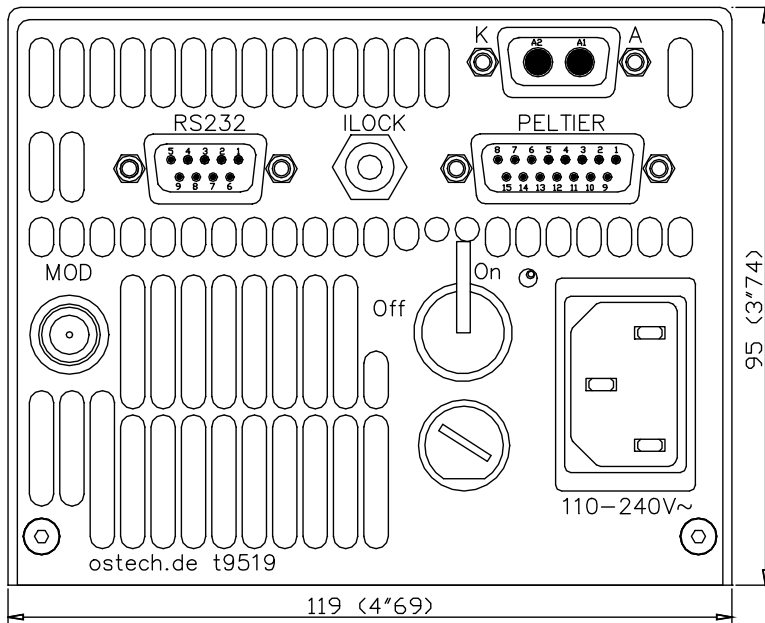


fig: ds01-Rear length 280mm (11")

## Rsevision overview:

2006.10.10: "v0" - base derivation in ds11-t95 series

2011.04.28: "v1" - Photo Diode max. Current increased from to 4mA, only 1 Pin for temperature sensor, software v2030

## References:

<http://www.ostech.de/en/products/laser-drivers/ds11-t95>

<http://www.ostech.de/en/downloads/manuals/ds-en.pdf>

<http://www.ostech.de/en/downloads/labview>

## Accessories

- acc-converter-usb-to-rs232-1m5-iso-417  
RS232 to USB converter optical isolated with FTDI-Chip cable 1.5m
- kab-lpa08-16pol-subd15m-oe-1.5m-39  
cable 16x0.35qmm / subd15-Gold-6,5A per pin to open end / length-1m5
- kab-la40-2pol-2W2male-oe-1.5m-286  
cable 2x4qmm / imax-40A subd-2W2m-male to open-ends / length-1m5