

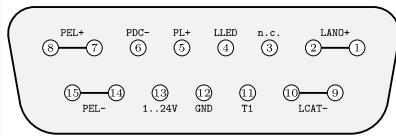
Tabletop Laser & Peltier Controller

Type: ds11-la12v26-pa08v24-t9527-1114 ver:01



- Laser max.: 12A – 26V
- TEC max.: 8A – 24V
- rise-fall < 25us (optional < 5us)
- 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

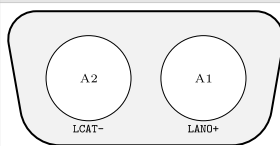
Laser & Peltier Connector



SubD-15 female

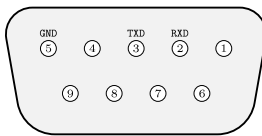
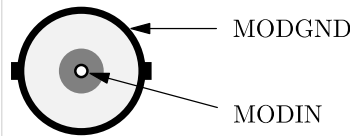
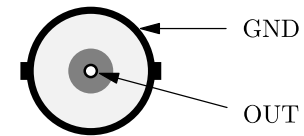
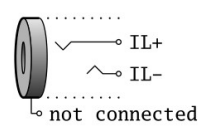
PIN.No	Abbr.	Function
1;2	LANO+	Laser Diode Anode(+)
4	LLED	Laser Active LED – Anode (+), 5V over 470R, v.s. GND
5	PL+	Pilot Laser (+), v.s. GND
6	PDC-	Photo Diode Cathode (-), v.s. GND
7;8	PEL+	Peltier element (+)
9;10	LCAT-	Laser Diode Kathode (-)
11	T1	Temperature Sensor 1 Input, default NTC10kΩ,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

Laser Connector



SubD2W2-female

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

RS232 Connector	AMOD/DMOD-IN Connector	MOD-OUT Connector	Interlock Connector
			
SubD-9 female Standard RS232-Connector 9600-Baud-8N1 (No Null-Modem Cable !)	BNC-Socket Input-Impdanz 10kOhm Digital Modulation with TTL-Pegel Analog Mod. 0-4[V] => 0-Imax[A]	BNC-Socket, current monitor 0-Imax[A] -> 0-4[V] Take care for laser isolation if you connect GND potential to an oscilloscope f.e.	Jack Connector 3.5mm Laser runs only if closed (ca. 5mA over 2V -> R <= 400R)

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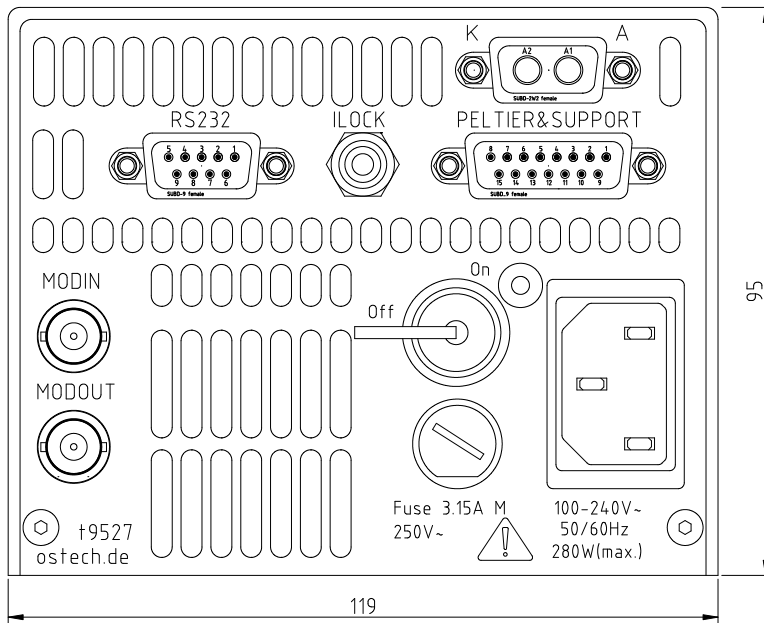


fig: ds01-Rear length 280mm (11")

Revision overview:

2024.01.01: "v0" - New derivation from 947 with laser 12A 24V max.
 2025.03.20: "v1" - max. laser output voltage increased to 26

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