

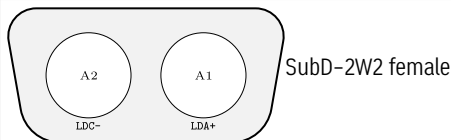
# Tabletop Laser & Peltier Controller

Type: ds11-la14v24-pa12v24-t12735-v3-578



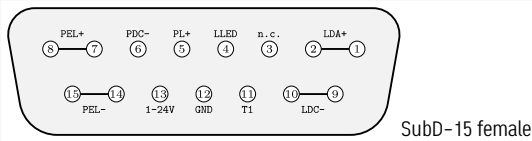
- Laser max.: 14A, 24V
- TEC max.: 12A, 24V
- trise-tfall < 25us (optional < 5us)
- Supply Voltage: 100~230VAC - 50/60Hz
- External, Analog and Digital Modulation
- Internal Pulse Generator
- Pulses and Bursts internally and externally triggered
- Bias Current option
- Pilot Laser Supply
- External Fan Support
- Photo Diode Current Monitor max. 4mA
- Laser Current Monitor
- optional additional TEC-stages

## Laser Connector

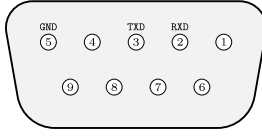
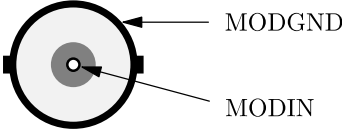
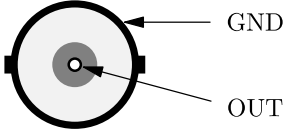
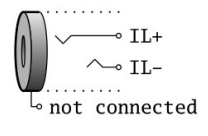


PIN. No	Abbr.	Function
A1	LDA+	Laser Diode Anode (+)
A2	LDC-	Laser Diode Cathode (-)

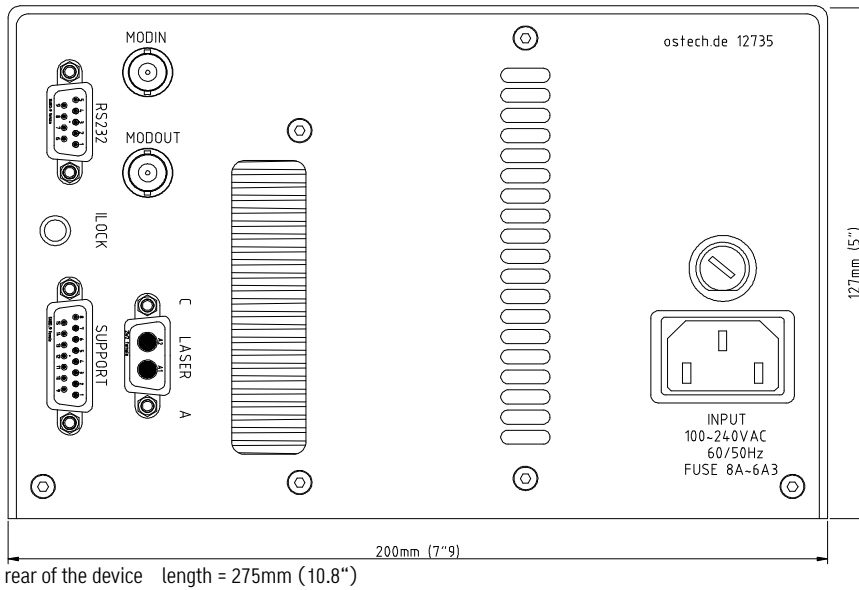
## Laser & Peltier Connector



PIN.No	Abbr.	Function
1;2	LDA+	Laser Diode Anode (+)
4	LLED	Laser Active LED (+), ca. 5mA, 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	LDC-	Laser Diode Kathode (-)
11	T1	Temp. Sensor 1 Input, default NTC10kΩ
12	GND	Common Ground
13	1-24V	1..24V Supply, max. 500mA, vs. GND, supports fan etc.
14;15	PEL-	Peltier element (-)

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)

## Tabletop Laser & Peltier Controller



### Revision overview:

2017.10.10: "v0" - derived from type-501

2017.08.26: "v2" - Photo Diode max. Current increased from 2mA to 4mA, MODOUT BNC-socked supported  $V_{out}=0..4[V] < 0..I_{max}[A]$

2021.11.24: "v3" - max. laser current to 15A, max. LASER and TEC voltage to 24

### References:

<http://www.ostech.de/en/products/laser-drivers/ds11-t127>

<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