



# R1

# USER MANUAL

# CONTENT

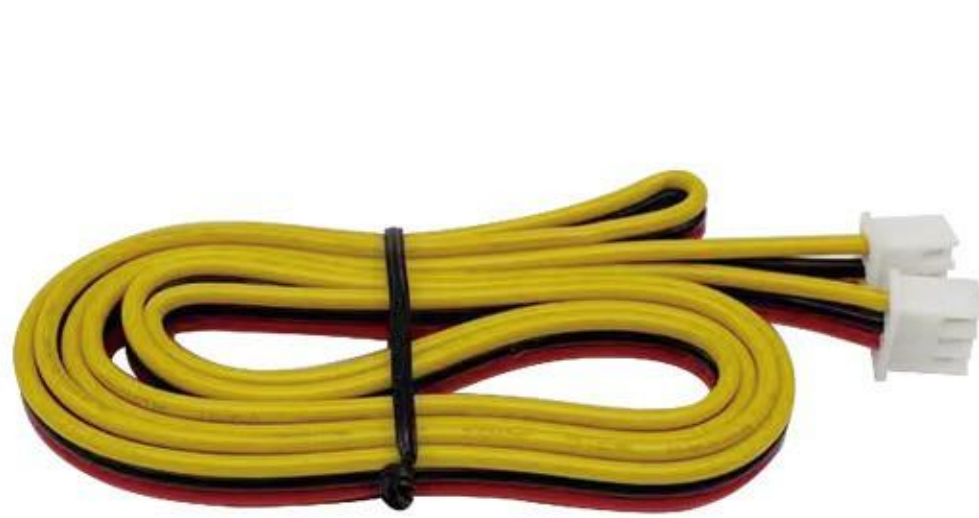
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# 1. Packing List



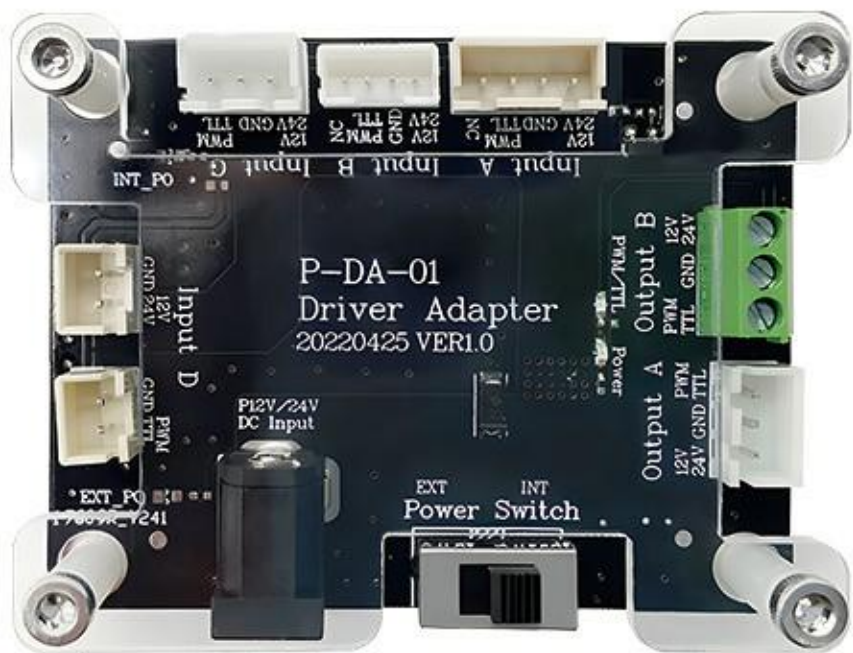
Laser Module



3PIN Cable



Sliding Plate

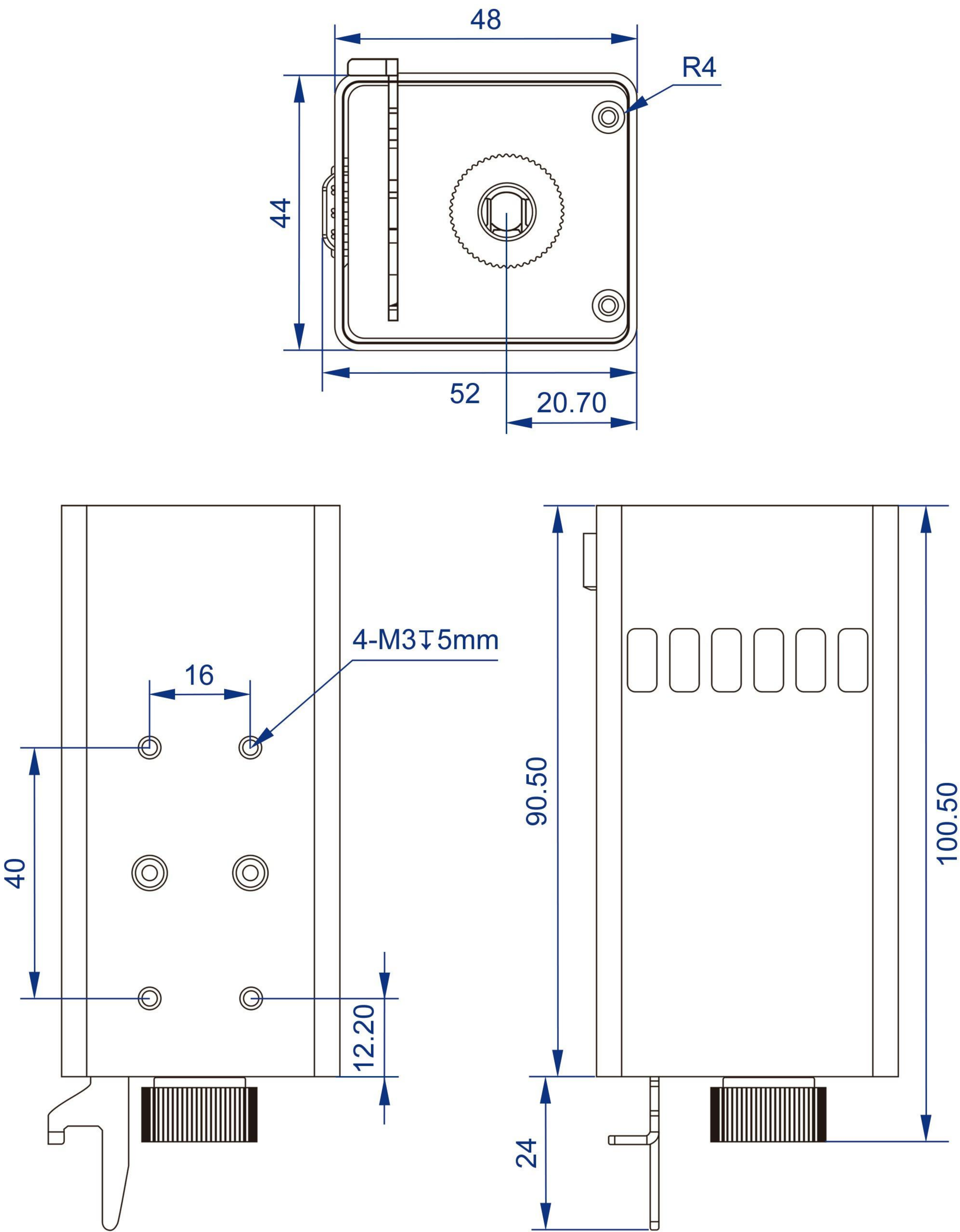


Driver Adapter

## 2. Parameters

|                       |                  |
|-----------------------|------------------|
| Product Name          | Engraving Module |
| Wavelength            | 1064nm±1nm       |
| Optical Power         | 1W               |
| Input                 | DC 24V 2.5A      |
| Input Port            | XH2.54 3PIN      |
| Operation Mode        | Pulsed Laser     |
| Focus Length          | 24mm             |
| Spot Size             | 0.03mm           |
| PWM Modulation        | 0-5, V0-5kHz     |
| Cooling Mode          | Air-cooling      |
| Operating Temperature | 0-60℃            |
| Module Net Weight     | 246g             |
| Module Size           | 52*44*100.5mm    |

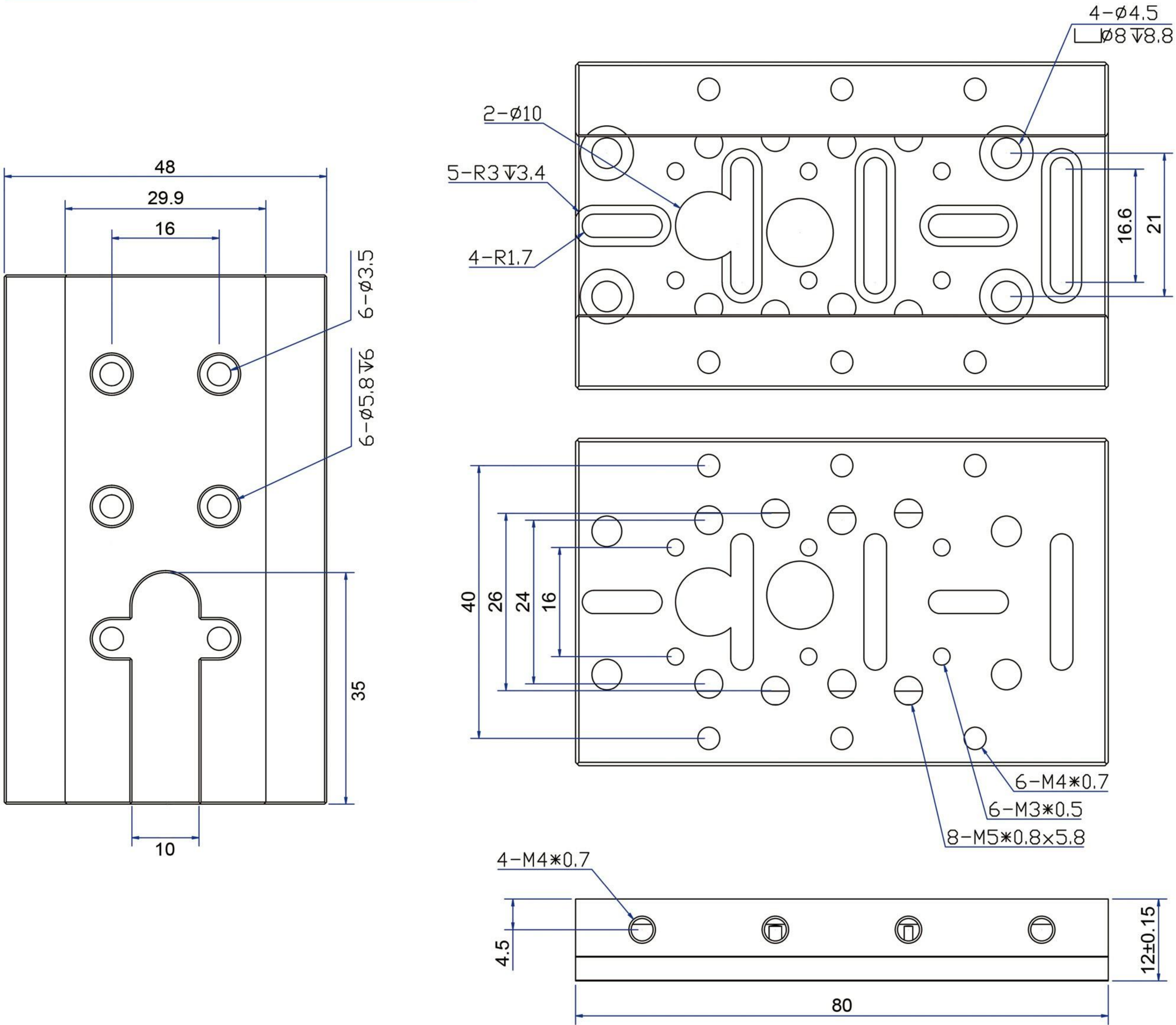
3. Outline Dimension (Unit: mm)



# 4. Sliding Plate

Multiple holes bring you widely installation compatibility.

Outline dimension (Unit: mm)



Accessories for sliding plate



M3x6 Fasten screw\*4

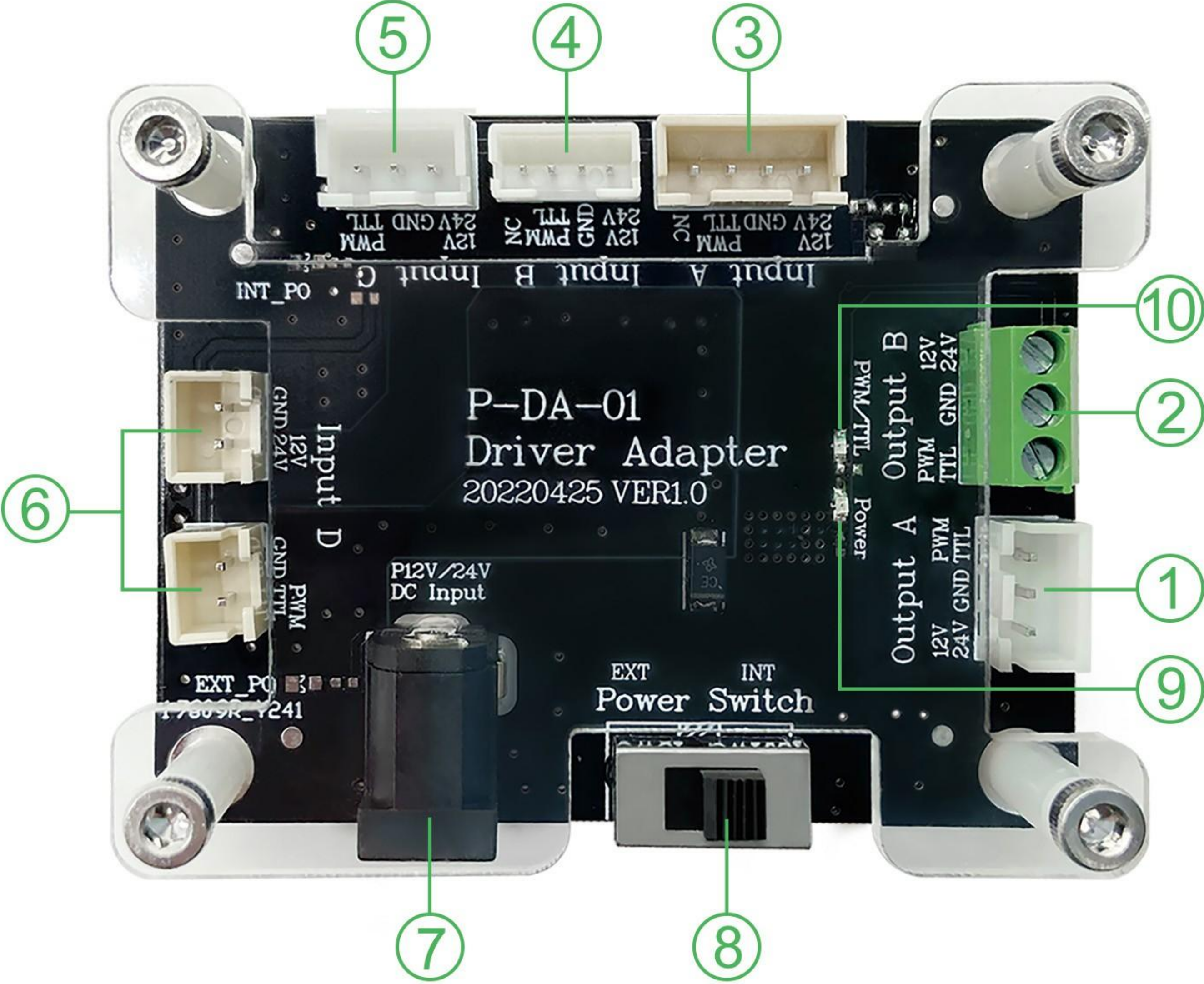


M4x20 Fasten screw\*2



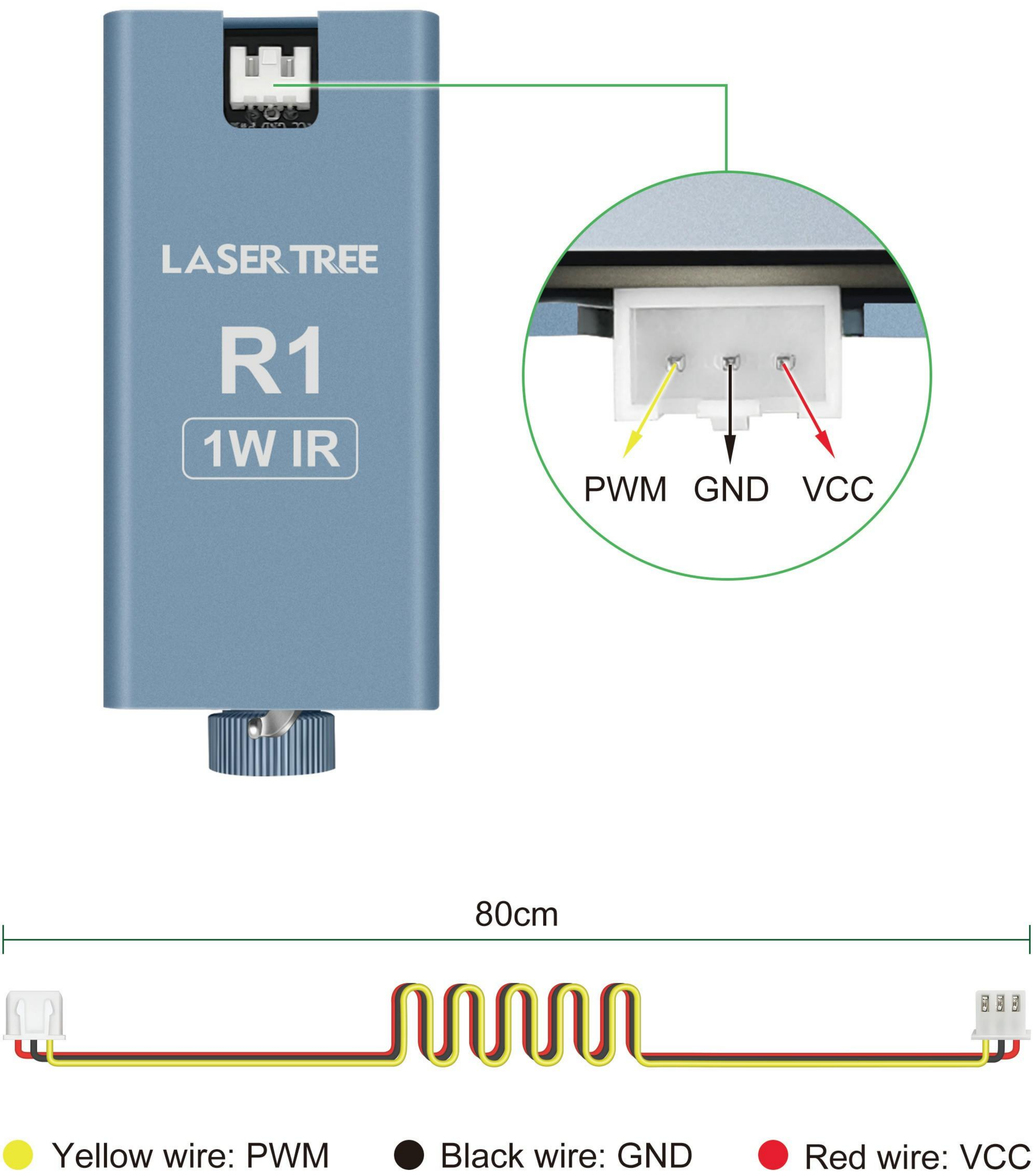
2.5mm L-wrench

## 5. Driver Adapter



|                                                                                 |                            |
|---------------------------------------------------------------------------------|----------------------------|
| ① Output A: 3PIN connector                                                      | ② Output B: 3PIN connector |
| ③ Input A: 4PIN connector                                                       | ④ Input B: 4PIN connector  |
| ⑤ Input C: 3PIN connector                                                       | ⑥ Input D: 2PIN connector  |
| ⑦ DC Input: 12V or 24V power adapter                                            |                            |
| ⑧ Power Switch: • EXT→External power supply • INT→Internal power supply         |                            |
| ⑨ Power indicator: It is red when the power cable is connected correctly.       |                            |
| ⑩ TTL/PWM indicator: It is green when the TTL/PWM cable is connected correctly. |                            |

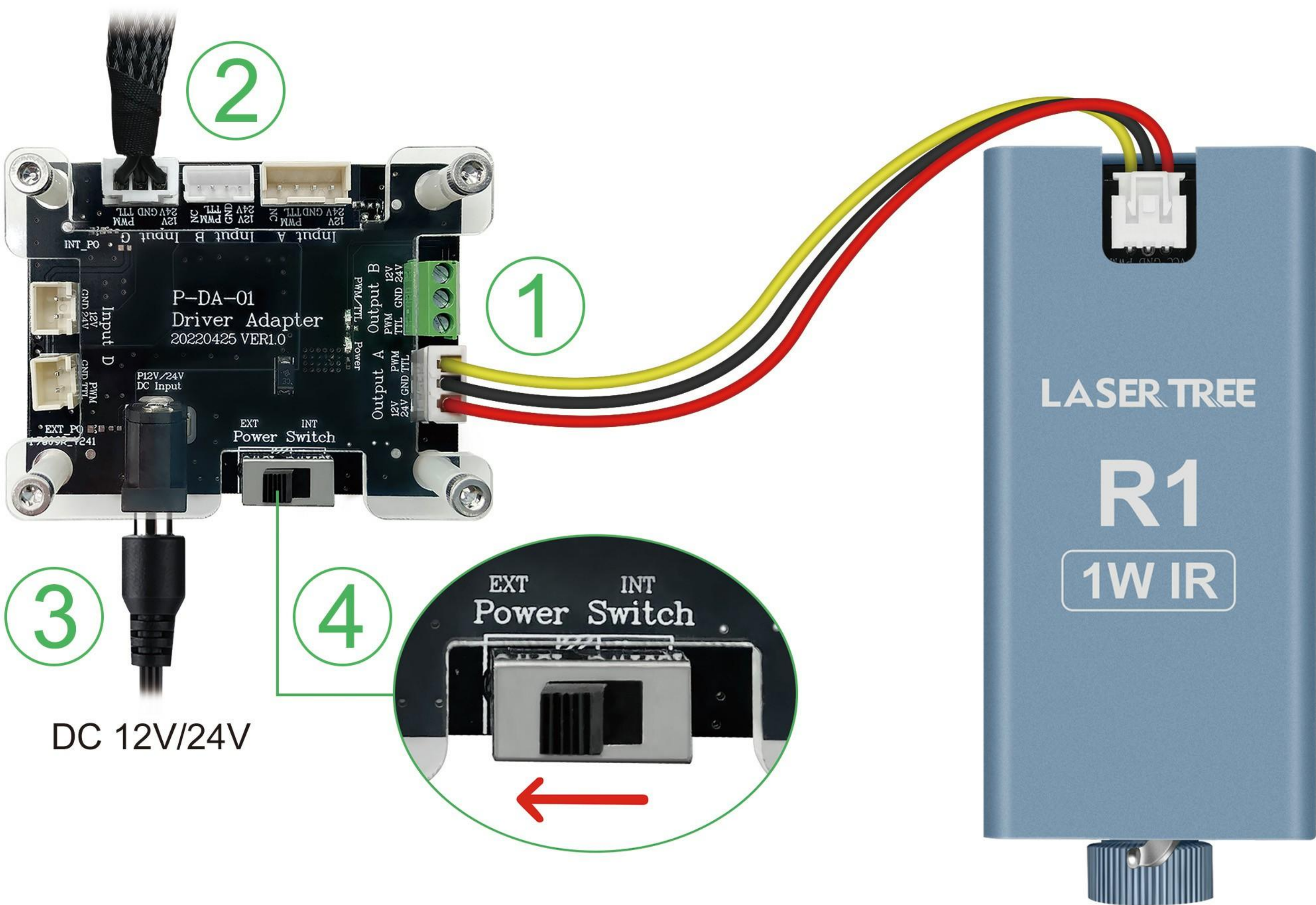
# 6. PIN Definiton



## 7. Connection

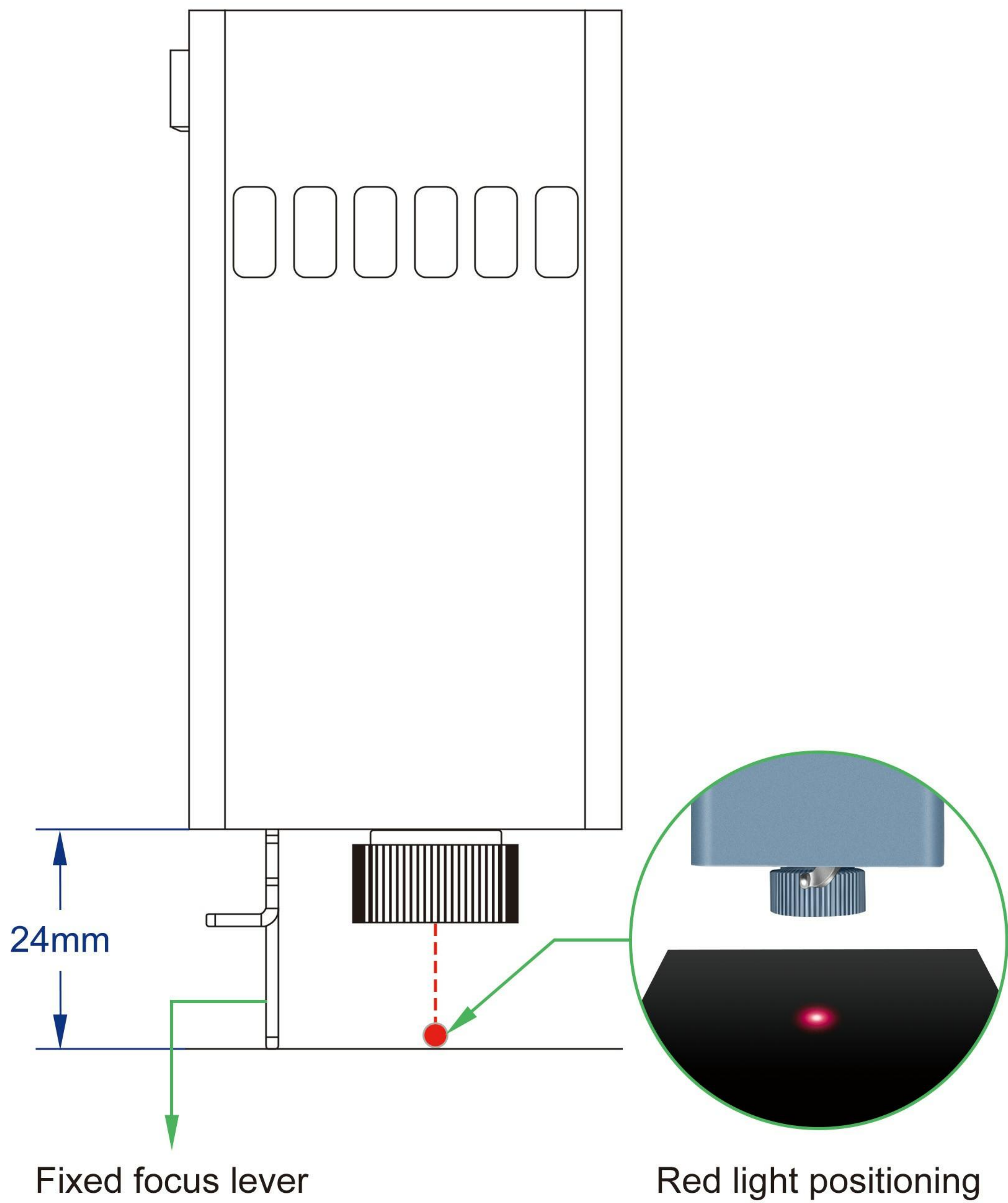
- ① Connect one end of the 3PIN connection cable to the engraving module and the other end to the corresponding output port of the drive adapter.
- ② Connect the engraver output cable to the corresponding input port of the drive adapter.
- ③ Connect the adapter to the DC input port of the drive adapter.
- ④ Switch to Ext (external power) mode on the drive adapter and then start to use the laser module.

Connection diagram



## 8. Engraving Focus Description

The R1 engraving module has a focal length of 24mm and is equipped with a fixed focus lever and a red light positioning device so that the engraving position can be easily positioned.



## 9. Safe Use & Maintenance



Laser can damage a person's skin. please do not expose your skin directly to the lase.



Children or teenagers are strictly prohibited from using the module alone.



Please wear laser goggles to protect your eyes when you use this laser module.



This module doesn't support hot plug. Hot plug may cause damage to the module.



When the laser module is not used for a long time, please ensure that the lens is not polluted by dust.

\* For more information about maintenance, please contact us at [lasertree@micost-optotech.com](mailto:lasertree@micost-optotech.com).



# LASER TREE

Enjoy pleasure of DIY

FDA FC C € RoHS  

MADE IN CHINA