

Be sure to read the manual before using the system

- T21 + 1 step-in two-channel dedicated wire feeder user manual
- Read the manual carefully first to ensure the correct electrical connection

# T21+1

T21 + 1 step-in two-channel dedicated wire feeder user manual



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- User shall improperly use this manual or this product
- The loss caused by the user does not follow the relevant safety operating procedures

■ The loss caused by natural force makes the machine in the movement dangerous, the user has the responsibility to design an effective error handling and safety protection mechanism in the machine, and Qilin laser has no obligation or responsibility to be responsible for the incidental or corresponding losses caused thereby.

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# Certification statement

## The CE Certification Statement

This product has passed the European Union CE (Communate Europpene) safety, certification, has passed the corresponding conformity assessment procedures and the manufacturer's declaration of conformity, in accordance with the relevant EU directives.

## ROHS, the certification statement

This product has been approved by the European Union legislation on restricting the use of certain Hazardous ingredients in electronic and Electrical Equipment (Restriction of Hazardous Substances) safety certification, in accordance with the relevant environmental regulations of the European Union.

## FCC Certification statement

This product has passed the Federal Communications Commission (Federal Communications Commission) security certification and complies with the relevant safety regulations of American electronic products.

## security information

When using the system, please ensure that the operation is correct and safe. Some signs or text will be used to remind you of dangerous matters and some important information.

### **danger:**



Represents a serious danger. In the process of use, if the operation is improper or the use method is wrong, it may lead to serious injury or even death, please users and related personnel do not operate easily, until to ensure that the operation method and the correct way of use.

### **warn:**



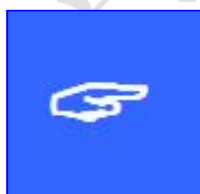
Indicates that a danger exists. In the process of use, if the operation is improper or the use method is wrong, which may cause injury to the personnel, please do not operate easily, until you ensure that the operation method is correct and the use method is correct.

### **prudent:**



Represents a product potential risk. During use, if the use method is wrong or improper operation, the product or some parts may be damaged. Please users and related personnel do not operate easily until the operation method is correct and the use method is correct.

### **important:**



Represents an important information to note during the product. Please do not ignore this information, which provides effective operational help.



This label indicates laser radiation, which will generally be affixed to the product output of laser. Please, be careful of laser and safety when using such equipment.

## Receiving goods, unpacking and inspection

The product uses shock-proof soft packaging. If the package has any external damage marks, please check the damage to the equipment and notify the carrier and the carrier of the damage in written documents.

**important:**



After receiving the product, please check whether the outer package is in good condition, and check whether the product is complete and all parts are intact after unpacking. If any damage is found, please contact the Qilin Laser immediately.

Remove all the goods from the packaging, and keep the packaging materials and wiring spare parts. When dismantling the package and removing the goods, Please be careful of the goods for safety. After removing the goods, please check if the parts are complete and intact. If any missing parts or parts are damaged, please contact Qilin Laser immediately. If any obvious damage to the equipment, do not install or debug the equipment.

The delivery list of T21+1 step-in double-channel special wire delivery machine is shown in the following table: (As the product will be updated and upgraded, the shipping list may also be adjusted.)

### Packaging list of T21 + 1 dual-channel special wire feeder

	component	quantity	explain
1	T21 + 1 step-in double-channel wire feeder	1	
2	3.2 m 600A wire hose (over 1.2-2.0mm wire) 2 + 1.2-1.6 V wire wheel 4	1	
3	6-m power cord (with 6-star aviation plug)	1	
4	Wire delivery wheel 1.6 / 2.0 (installed)	4	
5	Chassis handle + M8 screw (lock handle screw)	1	
6	Delivery lip + V (1.6-1.6)	2	
7	Delivery lip + V (2.0-2.0)	2	

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# An Overview of Chapter 1

**The main contents of this section are as follows:**

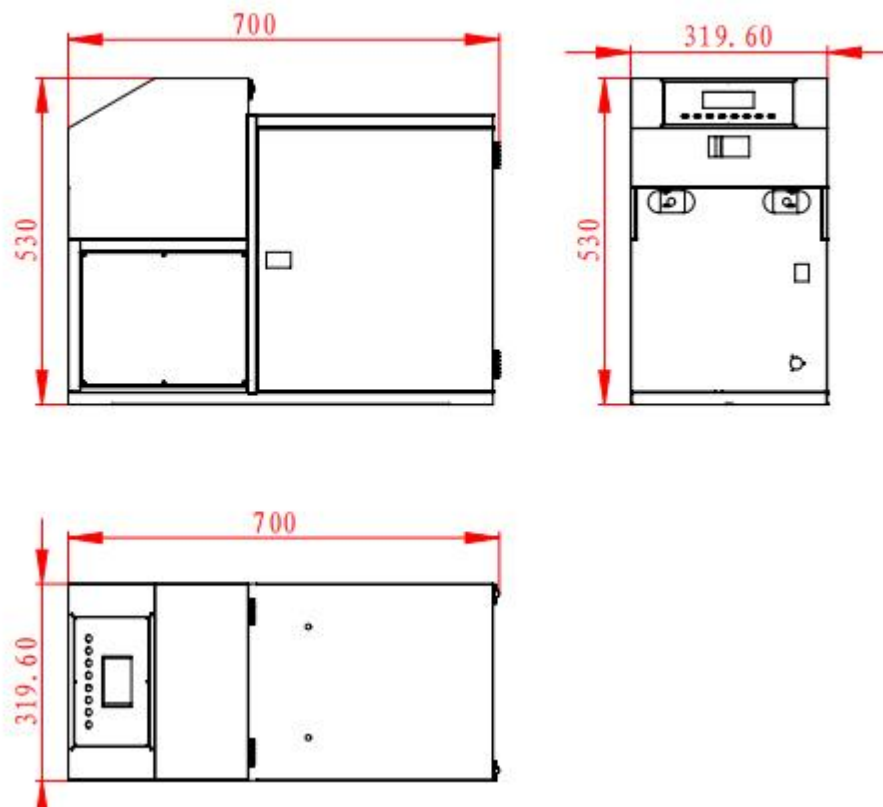
- T21 + 1 step in double-channel wire feeder
- Product size chart

## 1.1 T21+1 step double channel special wire feeder

T21 + 1 step two-in dual-channel special wire delivery machine is a wire delivery machine specially used for fiber laser and pulse wire welding combination developed by Qilin laser. Can achieve the fish scale welding, welding effect is uniform, no drag, no lag, with the handheld welding control system for welding, simple and easy can weld out the fish scale grain, greatly improve the effect of welding process.

## 1.2 Product dimension drawing

Wire delivery machine size:



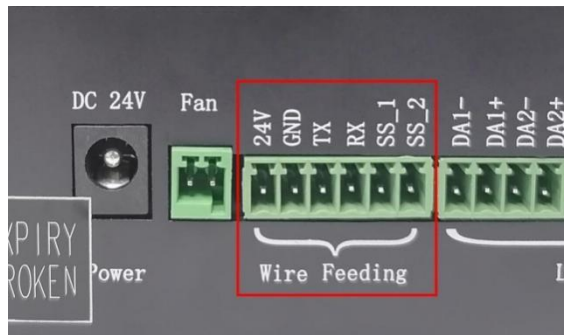


# Chapter 2. System installation and use

**The main contents of this section are as follows:**

- Silk delivery machine wiring
- Schematic diagram of the T21 + 1 installation
- Human-machine interface function
- Send wire structure description

## 2.1 Wire feeder wiring



The connection port of the external control box is connected to the control box of the wire feeding machine

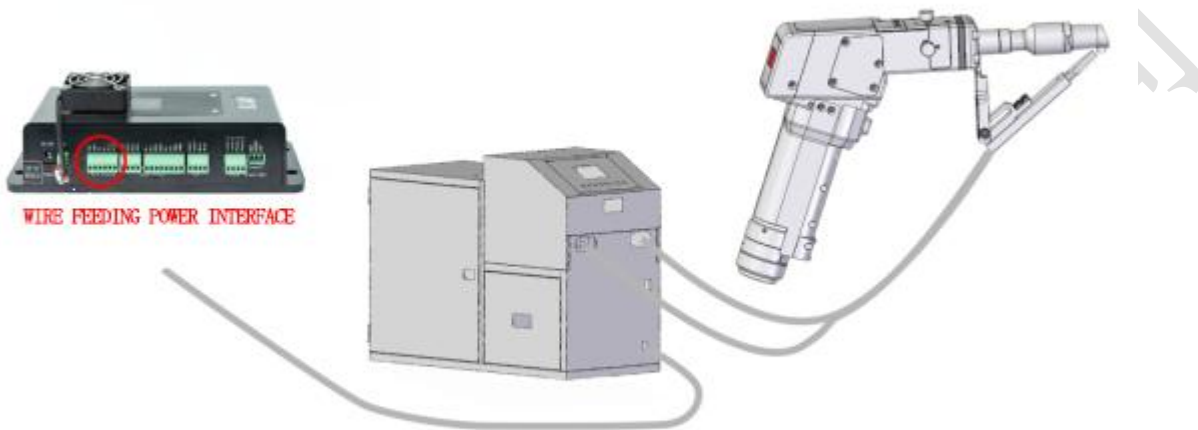
pin	signal	definition	explain
1	24V	Power supply output end of wire feeder	Wfeeder 24V + power interface
2	GND	GND	GND
3	TX	Silk feeder and board card communication port	The wire transmitter communicates with the control system on TX signals
4	RX	Silk feeder and board card communication port	The wire feeder communicates the RX signals with the control system
5	SS_1	Wfeeder trigger signal 1	When short circuit SS_1 and SS_2
6	SS_2	Wfeeder trigger signal 2	When short circuit SS_1 and SS_2



**important:**

Do not connect any instructions in the control box to other lines.

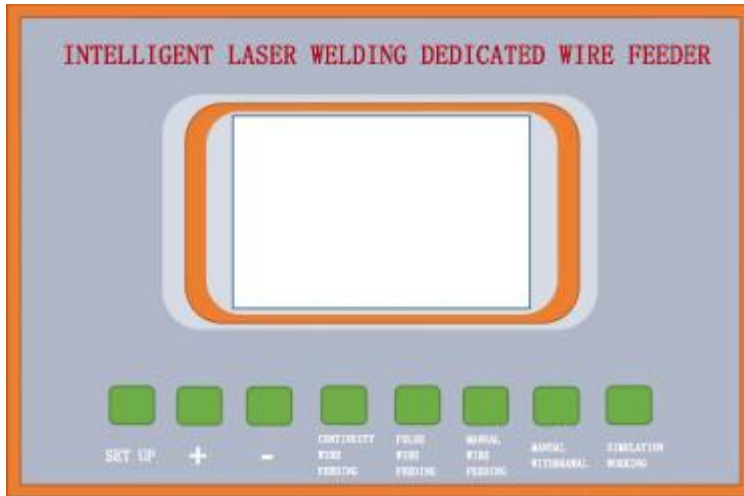
## 2.2 Installation diagram of T 21+1



remarks:

This picture is for reference only. The installation method can be installed according to the installation video of the wire feeder.

## 2.3 Human-machine interface function



Wfeeder panel:

- ①Silk feeding speed: wire feeding machine running speed (mm/s)
- ②Silk delay: first start the laser to the setting time, and then start the wire
- ③Silk filling distance: after the withdrawal stops, the wire compensation distance
- ④ Return distance: after the wire stops, the wire draws back distance
- ⑤ Pulse time: the pulse receiving time of the wire transmitter (wire delivery time)
- ⑥ Pulse interval: stop pulse time of the wire feeder (stop time)



Settings: Set the parameter button



+: Send wire setting selection +



-: Send wire setting selection-



Continuous wire delivery: set the continuous wire delivery mode.



Pulse wire: Set pulse wire mode.



Manual wire delivery: click manual wire delivery, wire delivery wheel to run wire delivery.



wire machine knob:

- L: knob to L position, left wire
- DBL: knob to the DBL position, double wire
- R: the knob to R position, right wire

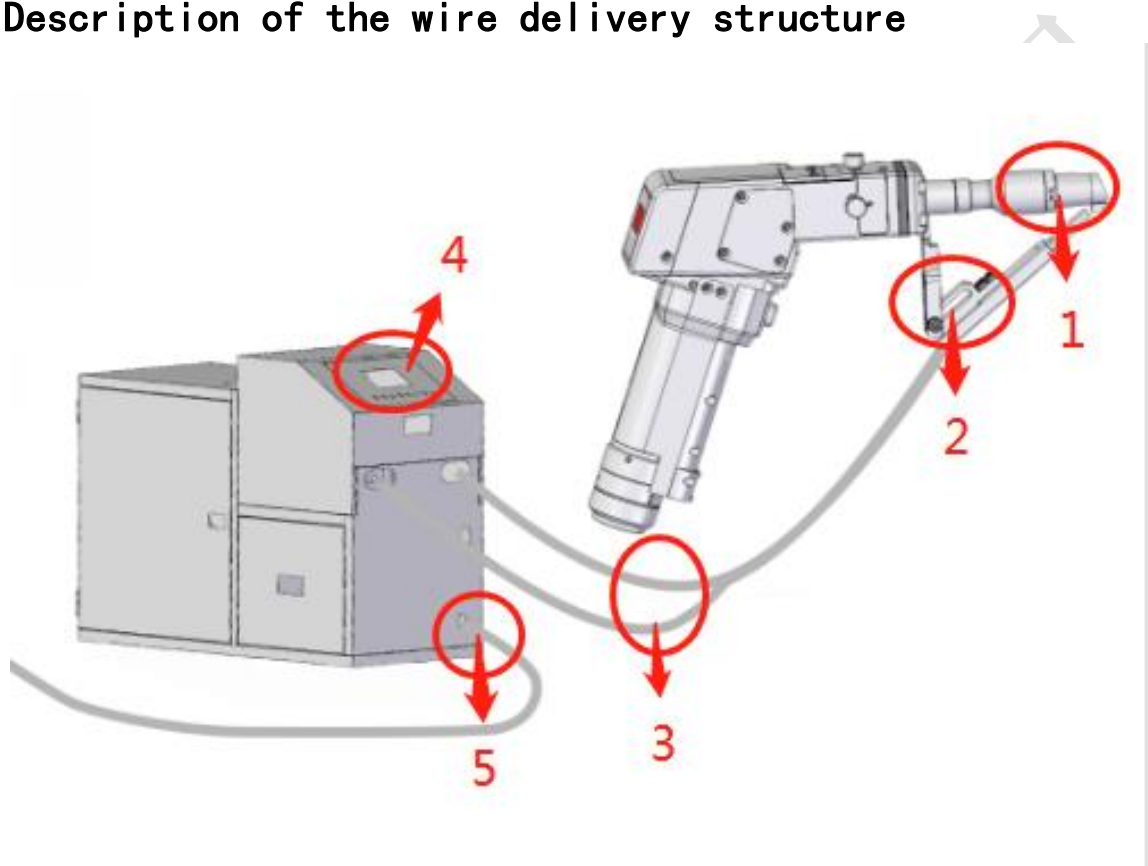


Manual withdrawal: click manual withdrawal to send the wire welding wire.



Simulated operation: manually trigger the wire machine during simulated welding.

## 2.4 Description of the wire delivery structure



1: wire copper mouth: wire delivery machine can send double 1.2-2.0 silk

2: Double wire delivery fixture: use with the wire delivery machine

3: Double wire delivery hose: use with the wire delivery machine

4: Control panel of wire feeder: parameter parameters of wire feeder to realize pulse or continuous wire feeder

5: Power cord of wire feeding machine: connect the power signal line of wire feeding machine

## Quality assurance description:

The warranty period of this product is 12 months, starting from the delivery date. If there is any fault of the product during the warranty period,

Can be sent back to our company, free maintenance, free of labor costs. Appearance parts (cavity) and consumables (copper nozzle,

Stainless steel pipe, such as easy wastage products) is not in the warranty range.

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If you have any comments or suggestions on the product and instructions during use, please call for consultation.

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Thank you for using Guangdong qilin laser, application technology Co., LTD.  
Products!