

# **Shenchen Precision Pump Manual of OEM-KTB004**



**Note:**

- Please read the manual carefully before operating the product.



**Warning:**

- Tubing may have crack due to wear. It results in the overflow of fluid from tubing. In that time human body and instruments may be harmed. So users must check frequently and change tubing in time. Please replace the tubes for the dual channel pump head, the dual channel must change in the same time.
- Connect the power cord to the wall socket directly, and avoid using the extended electric wire.
- If the power cord or plug had wear and other damage, please disconnect the plug. (Hold the plug instead of the wire)
- If following situations happened, please turn off the power supply and disconnect the plug. (Hold the plug instead of the wire)
  1. Fluid splash on the pump.
  2. You think the pump need to maintain or repair.
- The user's power socket must have ground wire, and have reliable grounding.

**Catalogue**

- 1. Product Introduction ..... - 1 -
- 2. Product Interface Definition ..... - 1 -
- 3. Technical Specification ..... - 4 -
- 4. Main Functions and Features ..... - 4 -
- 5. Pump Head Instruction ..... - 4 -
- 6. Dimension Drawing ..... - 5 -
- 7. Maintenance ..... - 7 -
- 9. Warranty and After Sales Service ..... - 8 -

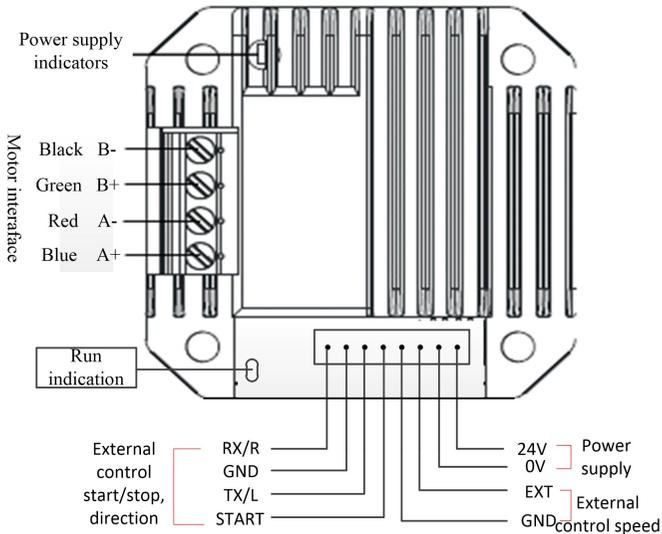
### 1. Product Introduction

Driven by stepper motor, the main board control module has the function of 0-10V external analog speed regulation.

Suitable pump head: KT15 pump head

### 2. Product Interface Definition

#### 2.1 Main board Control module wiring diagram and classification



**2.2 Main board interface instruction**

Name	Definition	Note
24V	Power supply positive terminal	DC9V~32V(It is recommended DC24V)
0V	Power supply negative terminal	
EXT	External control speed analog signal input	0-10V external control analog signal
GND	Analog signal ground	
START	External control start/stop interface	Low level start (start when short-circuited to GND and stop when disconnected)
TX/L	Direction signal (counterclockwise)	Low level is valid; TX/L and GND short-circuited, run counterclockwise; RX/R and GND short-circuited, run clockwise;
GND	External control start/stop, direction ground	
RX/R	Direction signal (clockwise)	



### 2.3 Operation instruction

- Start/stop: START short-circuited to GND to start, disconnected to stop running (only the direction signal short-circuited to GND, the pump will start);
- Direction: TX/L short-circuited to GND to run in counterclockwise; RX/R short-circuited to GND to run in clockwise;
- External control analog speed: EXT is positive terminal of the analog signal 0-10V, GND is the negative terminal of the analog signal.

### 3. Technical Specification

Speed range	0.1-400rpm
Control method	Switch signal to control the start/stop, direction.
Speed control	External analog speed regulation 0-10V
Power Supply	DC9V~DC32V (Recommend DC24V) $\geq 24W$
Environment temperature	0-40°C
Environment humidity	$\leq 80\%$ RH no condensation
Work environment	Keep away from heating device, avoid dust, oil, corrosion gas and strong vibration site.

### 4. Main Functions and Features

4.1 Simple to operation.

4.3 External analog speed control signal is 0-10V.

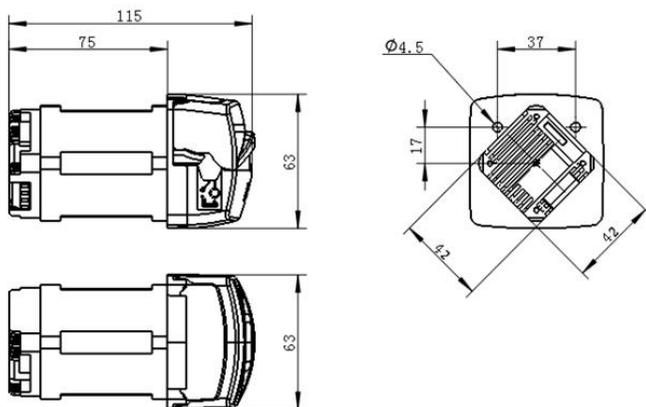
4.4 External switch signal control the start/stop and direction, convenient remote control.

### 5. Pump Head Instruction

For details, please refer to <<Shenchen Pump Head Instruction Manual>>.

### 6. Dimension Drawing

(Unit:mm)







## 7. Maintenance

- (1) When pump does not work, please loose the cartridges of pressing the tubing for avoiding changing the shape of tubing because of longtime extrusion.
- (2) Keep the rollers of pump head clean and dry, otherwise it can quicken the tubing wear, reduce the useful life of tubing and lead the rollers to damage in earlier.
- (3) Pump head cannot resist organic solvent and super corrosive liquid. Please pay attention to it when using.
- (4) The stepping motor generates high heat, it is recommended to air-cool the product.

## 9. Warranty and After Sales Service

We support 1 year warranty for the pumps, subject to the exceptions below. Our company shall not be liable for any loss, damage, or expense directly or indirectly related to or arising out of the use of its products. This warranty does not obligate our company to bear any costs of removal, installation, transportation, or other charges which may arise in connection with a warranty claim.

If the pump fails during the warranty period, after confirmation by our technical department, we will provide spare parts free of charge. Customers will need to bear the shipping cost.

### **Exceptions:**

- The warranty shall not apply to repairs or service necessitated by normal wear and tear or for lack of reasonable and proper maintenance.
- All tubing and pumping accessories as consumable items are excluded.
- Electrical surge as a cause of failure is excluded.
- Chemical attack is excluded.
- Improper operation or man-made damage as a cause of failure is excluded.

MADE IN CHINA

Baoding Shenchen Precision Pump Co., Ltd.

Address: No.103, Building 2, ZhiDian Industrial Park, FuXing East Road 999,  
Baoding, China. 071000

Tel: 0086-312-5958380

Fax: 0086-312- 6780636

Website: [www.good-pump.com](http://www.good-pump.com)

Email: [info@good-pump.com](mailto:info@good-pump.com)