

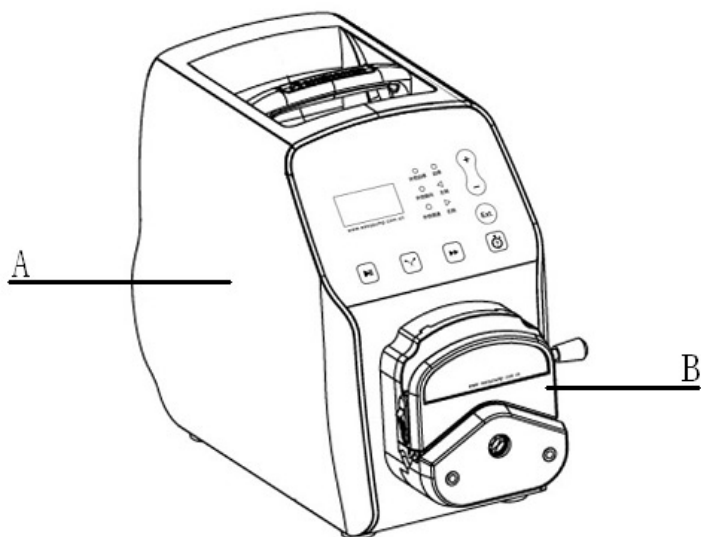


# Precision Peristaltic Pump

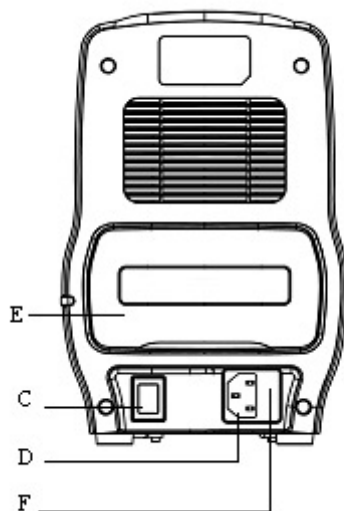
## **6000 Series Manual**



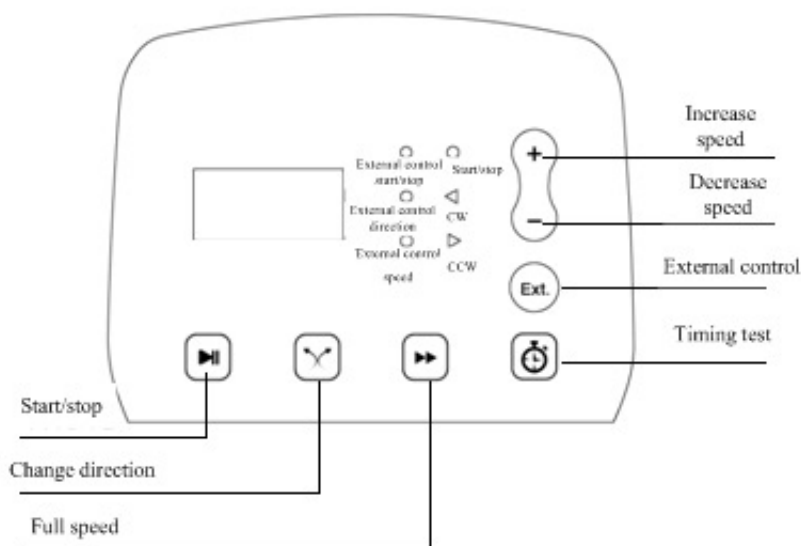
## 6000 Series Pump Appearance



- A — Drive
- B — Pump Head
- C — Power Switch
- D — Power Socket
- E — External Control Interface
- F — Fuse



## 6000 Series Operating Manual



### Operating Instruction

**Start/Stop button** – press this button to start or stop the pump

**Change Direction button** – press this button to reverse the transfer direction

**Increase/Decrease button** – use this button to increase or decrease the pump speed

**Full Speed button (Prime)** – pump will run at full speed by pressing this button

#### External Control button

The button of external control mode functions only when the pump is in stop mode. It is used for changing different kinds of external control modes. The pump is in internal control mode when the indicator of external control start/stop, cw/ccw and speed are all dark.

Note: When the display indicator of external control is light, the relevant button of internal function will be shielded

### Timer button

The timer button only works when the machine is in internal control mode. Press the timer button, the pump will work for 60 seconds at current speed (default time is 60 seconds). Press the timer button for over 5 seconds, the digital display will blink, press increase/decrease button to set the timer time.

## 6000 Series Technical Specification

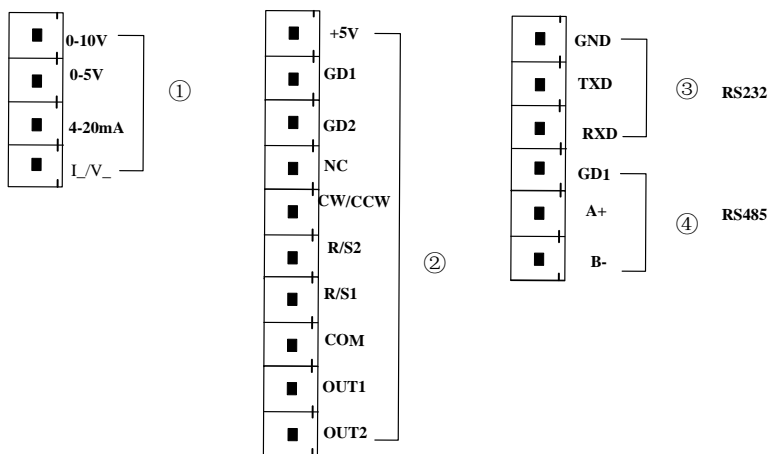
- Flow range: Model 6001: 0.035 - 570 ml/min  
Model 6003: 0.035 - 1330 ml/min  
Model 6006: 0.035 - 2280 ml/min
- Speed range: Model 6001: 0.5 - 150 rpm  
Model 6003: 0.5 - 350 rpm  
Model 6006: 0.5 - 600 rpm
- Speed resolution: 0.1rpm(1~100rpm); 1rpm (100~600rpm) ;
- Control method: Membrane keypad
- External control: TTL level control start/stop and change direction  
0-5V/0-10V/4-20mA control speed
- Communication: RS232/RS485 interface. Support standard MODBUS communication protocol.
- Power supply: AC 220V $\pm$ 10%,50Hz/60Hz,  
AC110V $\pm$ 10%, 50Hz/60Hz
- Consumption: <50W
- Working condition: Temperature:0~40℃, Relative humidity < 80%
- Pump weight: 4.8Kg
- IP rate: IP31

## 6000 Series Main Function and Features

- Membrane keypad control speed, also can be controlled with external control interface. Easy operation.
- Can connect with dispensing controller, reach dispensing function.
- Full speed button, fast filling and empty function.
- Big torque, low consumption.
- Good performance, low noise, working stable, power down memory function.

## External control interface

External control interface diagram:



① **Analog signal input port:** when you use the external control, first choose the external control indicator light on. Then the external control is effective.

**0-10V:** 0V ~10V voltage signal input port.

**0-5V:** 0V~5V voltage signal input port.

**4~20mA:** 4~20mA current signal input port.

**I-/V-:** Analog signal negative port.

**Note:**

1. External control speed default signal is 0-5V voltage signal. If need to use other signal, contact us. Pump may be damaged without proper instructions.
2. Turn off the pump first when you connect the external control.

**② External control start/stop, change direction signal input port:**

When use the external control start/stop, change direction function, choose the external control start/stop, change direction mode indicator light on first.

**+5V:** blank pin

**GD1:** Passive signal start/stop, change direction signal common port.

**GD2:** Active signal start/stop, change direction common port.

**NC:** Active change direction signal input port ( default 24V)

**CW/CCW:** Passive change direction signal input port.

**R/S2:** Active start/stop signal input port ( default 24V)

**R/S1:** Passive start/stop signal input port.

**COM/OUT1/OUT2:** blank pin

**③ RS232 Communication interface definition (option)**

**TXD:** Master send data port, connect with pin3 of DB-9 connector.

**RXD:** Master receive data port, connect with pin2 of DB-9 connector.

**GND:** Ground wire, connect with pin5 of DB-9 connector.

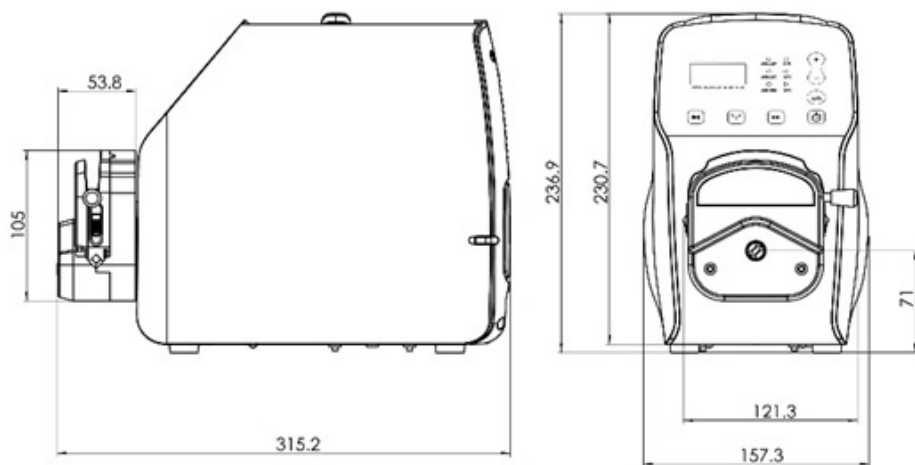
**④ RS485 communication interface definition (option)**

**GD1:** Ground wire, connect with RS485 transformer GND.

**B:** 485 communication signal port, connect with 485 transformer B-.

**A:** 485 communication signal port, connect with 485 transformer A+.

**Note:** 6000 series pump can connect with foot pedal switch and dispensing controller, if you need, please contact us.

**Dimension**

## **Maintenance**

When pump is not in use, loosen the cartridge to avoid damage to the tube. Keep the rollers of the pump head clean and dry. Make sure pump head & rollers do not come in contact with any corrosive liquid.

## **Warranty and After Service**

This pump comes with a one year warranty. The warranty does not include the tubing. Misuse of this product by the user will void the warranty.



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