# URAMIX Easy-Jet Irrigator BT100-02

Peristaltic Pump User Manual

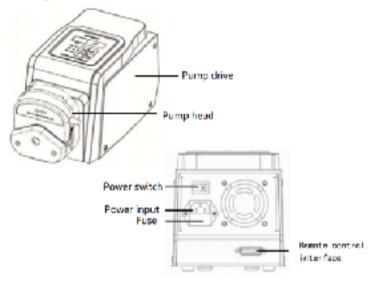


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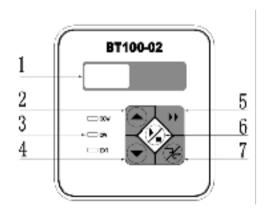
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#### 1. Introduction

The URAMIX Easy-Jet Irrigator, BT100-02, peristaltic pump is a basic type peristaltic pump developed for our company. Operation can be controlled both on the pump control panel and by remote control through a foot pedal.



! Before using the peristaltic pump, ensure that the ground wire of the power cord is reliably grounded to ensure personal safety in a humid environment.



## 2. Basic Operation

The Control Panel is as follows:

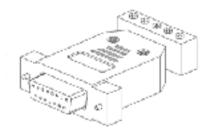
- 1. Digital display speed: speed precision is 0.1/1rpm.
- 2. **Speed up key:** press the "speed up key" once to increase the working speed by 0.1 rpm. Keep pressing the "speed up key" to achieve desired flow. This key is invalid at full speed.
- 3. **Indicator Light:** when the motor is running, the corresponding indicator light (refers to the CW and CCW indicator light) is always on; when the motor has stopped, the corresponding indicator light flashes.
- 4. **Speed down key:** press the "speed down key" once to decrease the working speed by 0.1 rpm. Keep pressing the "speed down key" to achieve desired flow. This key is invalid at full speed.
- 5. **Prime key:** in normal operation, press the Prime key, the pump runs at the max speed 150 rpm displaying "———" for emptying, filling, cleaning operation; press prime key again to original state.
- 6. **Star/stop key:** press the Start/stop key to start or stop the pump. This key is invalid at full speed. After re-powering, you need to press the start-stop button again to start the pump.
- 7. **Direction key:** press the direction key to change the direction of the pump, This key is invalid in prime speed state.

## 3. Acceptable pump head and tubing

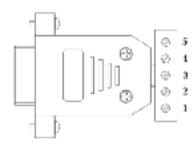
Pump head	Tubing(mm)	Flow Rate(ml/min)
YZ1515	13#14#19#16#25#17#18#	0.007-570
	Regular Irrigation Tubing can be used - flow through the endoscopic instruments	0.007-140

#### 4. Remote Control Interface

The Remote Control interface is a standard DB15 plug; when using the remote control function just trigger the in remote control position and insert remote control module to the remote control interface, which is in the rear panel of the peristaltic pump drive.

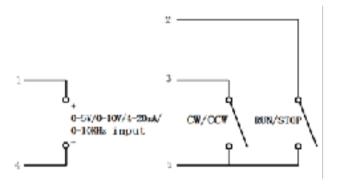




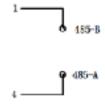


Terminal number	Instruction
1	Analog speed control input, for remote speed control in remote control modules or 485-B.
2	Remote control start/stop input. When disconnected with common terminal, the pump runs; when connected, the pump stops.
3	Remote control direction cw/ccw . When disconnected with common terminal, the pump rotates cw, when connected , the pump rotates ccw.
4	Common ground terminal of analog input, or 485-A.
5	Common terminal for remote control start/stop and direction.

## 4--20mA , 0--5V , 0--10V , 0--10KHz Remote Control Module Wiring Diagram:



#### **485** Module Wiring Diagram:



## 5. Optional Accessories

#### 1. Remote controller

Remote controller connects with remote control interface to control the pump operation and interval time.

#### 2. Foot pedal

Foot pedal connects to remote control interface. It controls the start and stop of the pump.

#### Note:

Dispensing controller and foot pedal are optional accessories. They can only control the start and stop of the pump. The speed and direction of the pump are controlled by switches on front panel.

### 6. Special Attention

- The rollers should be kept clean and dry to reduce abrasion
- The surface of pump drive and some types of pump heads cannot bear chemical solvents and strong corrosive liquids.
- If you think the pump need maintenance or repair, please turn off the power and unplug it.
- The bottom part is metal. To prevent electric shock, please make sure the power cable is grounded before use.

• Turn off the power before installing external control devices.

#### 7. Warranty Terms

- •The warranty period for this product is one year, but damages due to misuse and abuse are not included.
- •Contact the manufacturer or distributor before sending it back to the factory for repair.
- •Use original package or other reliable packing if it needs to be returned
- •Please write down the problem clearly and your contact information.

#### 8. Flow Rates for reference

Endoscope	Comparison List of Flow Rates						
	Flow rate gravity	Flow rate Easy-Jet 150 rpm	Flow rate Easy-Jet 100 rpm	Change from gravity at 100, and 150 rpm	Flow rate Easy-Jet 75 rpm	Flow rate Easy-Jet 50 rpm	Ranking
Micro6 2F port	12 ml/min	28 ml/min	18 ml/min	50%, 133%	14 ml/min	13 ml/min	3
Micro6 3F port	46 ml/min	112 ml/min	72 ml/min	57%, 143%	56 ml/min	55 ml/min	1
Micro6 3F port with Stone Basket 2.8F	2.5 ml/min	6 ml/min	4 ml/min	60%, 140%			4
Flexible Ureteroscope 3.6F	30 ml/min	62 ml/min	40 ml/min	33%, 107%			2
Flexible Ureteroscope with Stone Basket 2.8F	1 ml/min	3 ml/min	2 ml/min	100%, 200%			5

These numbers are approximate and may vary slightly based on the instruments used.

## 9. Technical Specification

Prime key	Fast filling and emptying		
Speed adjustment	Membrane button		
Applicable pump head	YZ1515 YZ2515 DG-1 DG-2		
Remote control	4-20mA 0-5V 0-10V 0-10KHz RS485		
Remote Control function	Start/stop, direction control and speed control		
Display	3digit LED displays current rpm		
Direction Control	CW, CCW REVERSIBLE		
Speed	0.1-150 rpm		
Speed precision	0.1rpm		
Speed control	Membrane keypad adjustment or remote control adjustment		
Applicable power	100V-240VAC		
Power consumption	<35W		
Operating condition	temperature 0-40 °C, relative humidity <80%		
Dimensions of length, width and height	280.8mm×210mm×246.5mm		
Drive weight	3.5kg		
IP Rating	IP31		