

# User Manual of OES-20

## 1、 Product features:

1. Upgraded backlight color LCD for real-time display of speed and time, with 3 sets of speed memory functions, convenient and accurate reading, and easy operation. Mode 1-2 has a maximum speed limit of 2000 rpm, while Mode 3 has a maximum speed limit of 3000 rpm
2. Accurate control of speed, with a control accuracy of  $\pm 3$ rpm; Accurately display the true/set value of the rotational speed.
3. Constant speed, can automatically adjust torque according to changes in sample viscosity, and maintain the set speed.
4. Prevent sample overflow, start smoothly, and effectively prevent sample overflow.
5. The enclosed shell prevents liquid from splashing into the internal corrosion circuit of the machine, ensuring safe operation. Continuous and stable operation for an extended period of time.
6. Overload protection and motor protection automatically cut off the circuit and alarm in case of overload, short circuit, and abnormal speed, ensuring safe operation and laboratory safety.

## 2、 Key functions:

Selection key: Switch arrows pointing to a certain parameter

Keying: Increase the value of a certain parameter (long press to quickly increase)

Minus key: reduces the value of a certain parameter (long press to quickly decrease)

Start stop button: used to start or stop the device, long press for 3 seconds to turn off the power

## 3、 Notes:

When the parameters are changed and automatically saved, the instrument automatically defaults.

When starting work, the running time automatically changes to the countdown of working time.

3. When the equipment runs according to a set of parameters, the motor automatically stops running.

4. Zero speed: When the speed is set to the highest, the actual speed is still too slow, indicating sensor damage, PWM control pin damage, or low voltage.

5. Overspeed: When the speed is set to about 0, the speed is still too high, indicating that the motor is not controlled or the MOS transistor is damaged.

## 4、 Product parameters:

Model: OES-20

Mixing volume H<sub>2</sub>O: 20L

RPM: 100-3000

Speed control accuracy:  $\pm 3$ rpm

No timing range

Power supply: AC220~240V 50Hz

Power: 100

Stirring with a maximum viscosity of 10000mpas

Weight: 8KG