# Portable Incubator

# User Manual

TankClean Partner

**www.tankcleanpartner.com**

Mini thermostatic metal bath is also called dry thermostat, dry bath, dry heater. The metal bath adopts microcomputerPIDA constant temperature metal bath product manufactured by the control and semiconductor refrigeration technology. The instrument can be configured with a variety of modules and can be widely used in sample preservation, the preservation and reaction of various enzymes, the denaturation of nucleic acids and proteins,PCRReaction, pre-denaturation of electrophoresis and serum coagulation, etc.

## 1. Product Features

1.PID single-segment and multi-segment program control;

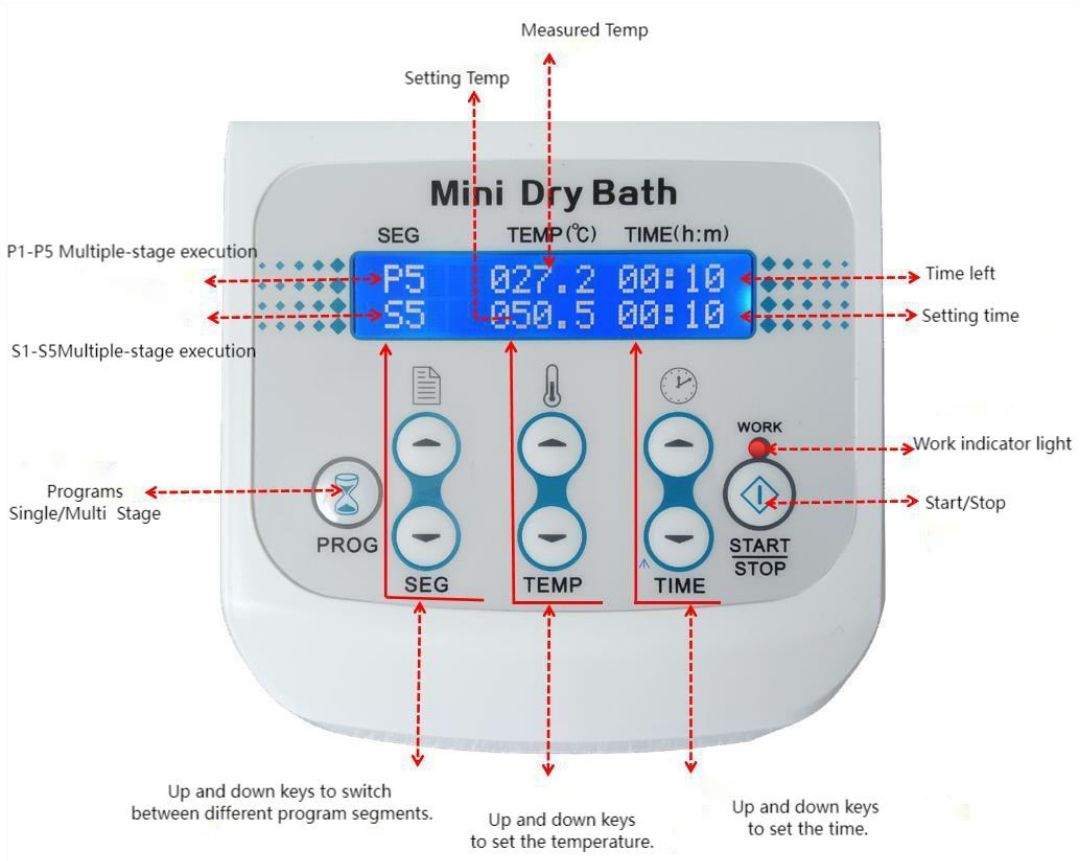
2. The screen has two rows of real-time temperature display and time decreasing display;

3. Temperature deviation calibration function;

4. Convenient module replacement, easy to clean and disinfect;

5.Transparent cover keeps constant temperature and is easy to observe.

## 2. Instrument panel diagram



### 3. Schematic diagram of instrument structure

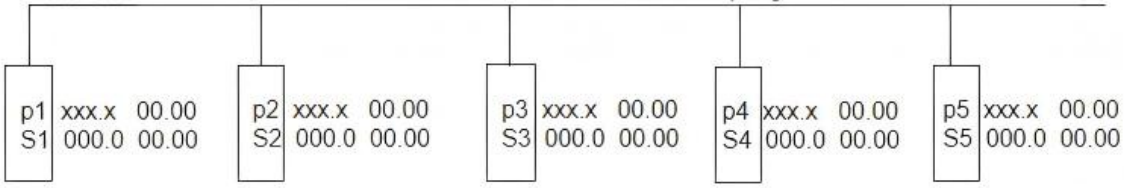
**4. Technical Parameters**

| Product Code | M-JSY-HL | M-JSY-H | M-JSY-HF |
|---|---|---|---|
| Cooling method | Heating + cooling dual energy | Natural cooling | Rapid air cooling |
| Temperature control range | 10～100℃ | RT+5～100℃ | RT+5～100℃ |
| Time setting range | 1min-99h59min | | |
| Temperature fluctuation | ≤±0.5℃ | | |
| Uniform module temperature | ≤±0.5℃ | | |
| Temperature control accuracy | ≤±0.3℃ | | |
| Temperature display accuracy | ±0.1℃ | | |
| Temperature deviation correction | With temperature deviation correction | | |
| Multiple-point temperature/procedure control | The programmable function enables control at multiple temperature points, with a maximum of 5 temperature points for temperature and constant temperature time settings, as well as continuous operation. | | |
| Maximum Power | 60W | 30W | |
| power supply | 24V/5A | 12V/5A | |
| Dimensions | 110*170*140mm | | |
| net weight | 1.8kg | 1.2kg | |
| Number of modules | 1 block | 1 block | |
| Heat Module selection: Refer to the list | | | |
| Module Code | capacity | Aperture × Depth | |
| L01 | 40 wells × 0.2ml | φ6×16mm | |
| L02 | 24 wells × 0.5ml | φ8×23mm | |
| L03 | 15 wells × 2.0ml | φ10×30mm | |
| L04 | 12 wells×5.0ml | φ13×33mm | |

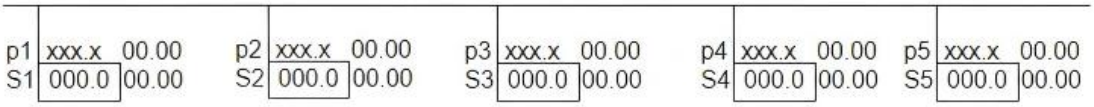
## 5. Operation Instructions

After connecting the power, turn on the power switch on the back of the machine to enter the main interface.

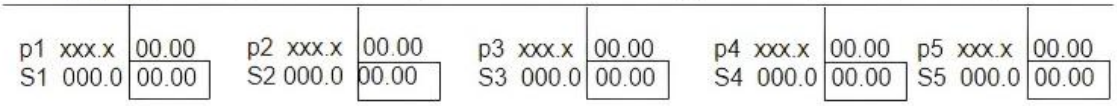
**SEG** Use the up and down keys to select the working section. You can choose S1...S5, a total of 5 different execution programs.




**TEMP** Use up and down key to set work temp, long press to speed up the adjustment




**TIME** Use up and down key to set work time, long press to speed up the adjustment




**WORK START STOP** Press Work Start/Stop key, the work indicator light is on, while other keys on the board will not response

**PROG** program flow work：S1 to S(1...5) Flash

PROG: In this command, select single-segment or multi-segment working mode through SEG.

program flow work：S1 to S1 → p1 xxx.x 00.00 S1 000.0 00.00

program flow work：S1 to S2 → p1 xxx.x 00.00 S1-2 000.0 00.00

program flow work：S1 to S3 → p1 xxx.x 00.00 S1-3 000.0 00.00

program flow work：S1 to S4 → p1 xxx.x 00.00 S1-4 000.0 00.00

program flow work：S1 to S5 → p1 xxx.x 00.00 S1-5 000.0 00.00

After selecting the corresponding working mode, press PROG to enter the page of the work to be executed, and press Start (the Work indicator light is on) to start the work.

## 6. Precautions for use

1. Before and after each use, the cone hole of the module must be kept clean to ensure that the test tube is in full contact with the cone hole wall.
2. When the equipment is used, the ambient temperature is 8-30 ℃ and the relative humidity is less than 70%. When the ambient temperature is higher than 25℃, the cooling speed will be relatively slow.
3. The instrument is equipped with ventilation and heat dissipation ports, and the distance from the external device during operation cannot be less than 15cm.
4. It should be kept away from high-temperature heat sources; it cannot work in a high-temperature box.
5. When the equipment is working, it should be covered with a heat preservation cover (except for the 6-hole module, the applicable temperature of the 6-hole module is RT+5-70℃). The heat preservation cover has a heat preservation effect and can reduce the condensation of moisture in the air on the aluminum block. (Note: It is normal for water droplets to condense on the aluminum block of the working plate of the hot and cold instruments. Excess water can be dried with a paper towel). The display value and set value of the equipment are determined by the temperature of the cold plate. Not using a heat preservation cover will cause a difference between the sample temperature and the set value. The device is only waterproof and drains condensed water, not absolutely waterproof. Large amounts of water may cause damage to the instrument.

## 7. Packing List

1. Host 1 unit
2. Standard module 15 holes 1 unit (optional)
3. Transparent insulation cover 1 unit
4. Power cord 1 unit
5. Module lifting rod 1 unit
6. Manual 1 unit