Small Animal Temperature Controller

Instruction Manual

Référence SA416

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1. Introduction

During and after the surgery of small animals, it is necessary to keep the animals warm and monitor their temperature changes in real time to maintain their vital signs, thus to reduce the mortality of the animals. SANS temperature controller adopts high quality LCD touch screen, allows researchers to view the animal real-time body temperature. Easy operation by setting the target temperature directly, view the heating state. It equips with 1 main unit, 2 probes and 2 pads.

Features

- ✧ Support two rodents to conduct experiment at the same time, each channel can start the experiment independently.
- ✧ Heating range: 20~50℃.
- ✧ Temperature control accuracy: 0.1℃.
- ✧ Time setting: 0.1min-9999min.
- ✧ Alarm function: Our temperature controller equips with buzzer alarm.
  If the rectal temperature probe temperature is 1℃ lower or higher than the pad temperature, and the pad temperature reaches more than 50℃, the device gives alarm.
- ✧ Rectal temperature probe: diameter 2mm, length 30mm, wire length 150cm.
- ✧ Controller size: 150×163×71mm.
- ✧ Heating pad
  Small: 7×10cm, wire length 150cm, power: 12W
  Large: 12×20cm, wire length 150cm, power: 36W.

Ordering Information

Item No.	Product Description	Remarks
SA416	Small Animal Temperature Controller (including main unit, 2 probes, 1 pad for Rat and 1 Pad for Mouse)	Completed system, 2 probes and 2 pads
SA416-01	Temperature Probe	
SA416-02	Heating Pad 7×10cm	
SA416-03	Heating Pad 12×20cm	

2. Safety

Please read the following safety precautions carefully to avoid personal injury and prevent damage to this product or any products connected to it.

To avoid possible danger, please use this product in accordance with the instructions.

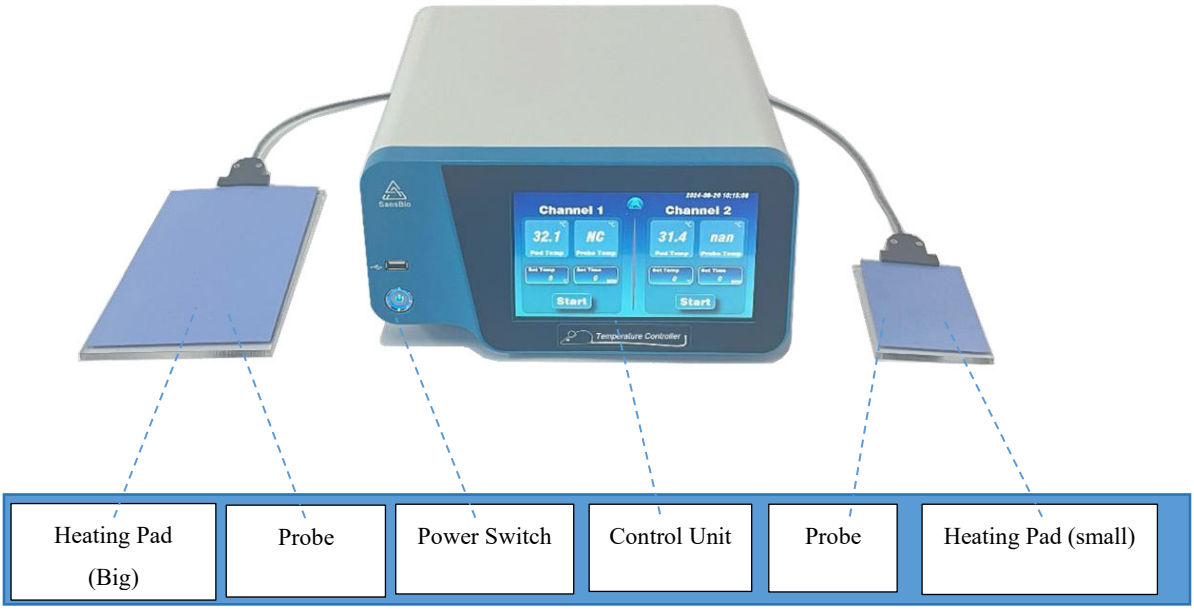
Do not disassemble or repair this product without authorization from our company.

- **Please use a suitable power cord**: Please use a power cord that is dedicated to this product and certified by your country/region.
- **Correct connection**: Before using the instrument, please refer to this manual to correctly connect the instrument and ensure that the correct wiring is performed when the power supply is disconnected.
- **Grounding:** This product is grounded through the grounding conductor of the power cord. To avoid electric shock, the ground conductor must be connected to the ground.
- **Do not use when the product is faulty**: If the product is damaged, please contact our company's technical personnel for maintenance. Do not disassemble and repair the product without authorization.
- **Do not use in humid environments.**
- **Please keep the product surface dry.**

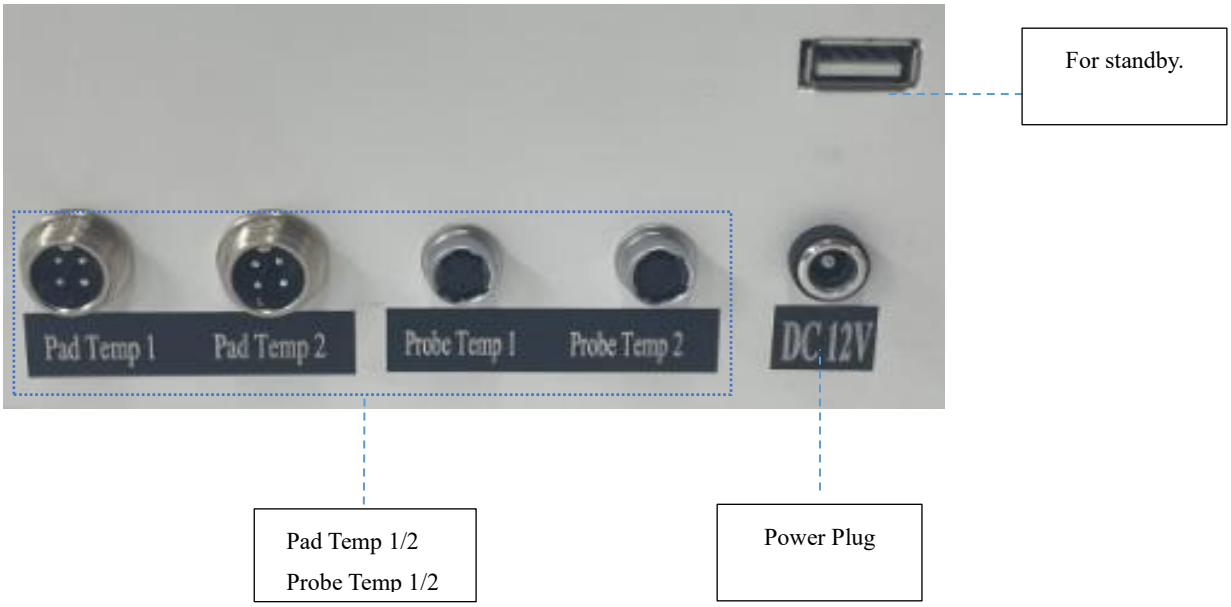
The device is to be used only for animal experiments and pre-clinical scientific research.

3. Device Introduction

3.1 Configuration



3.2 Rear Panel



3.3 Connection Cable

Power cord (1ea)
Temperature probe connection cable (2ea)
Heating pad connecting cable (2ea)

3.4 Power connection

1. Rectal temperature probe connection: connect the controller real panel Probe Temp1/2 through the rectal temperature probe connecting cable.
2. Heating Pad connection: connect the controller real panel Pad Temp1/2 through the heating pad connecting cable.

3.5 Connection

1. Connect the sensor with the main unit;
2. Use the commutation cable to connect with the main unit and the PC USB port (If for only the main unit, do not need to connect with the communication cable, connect it when use with the software.)

4. Operation

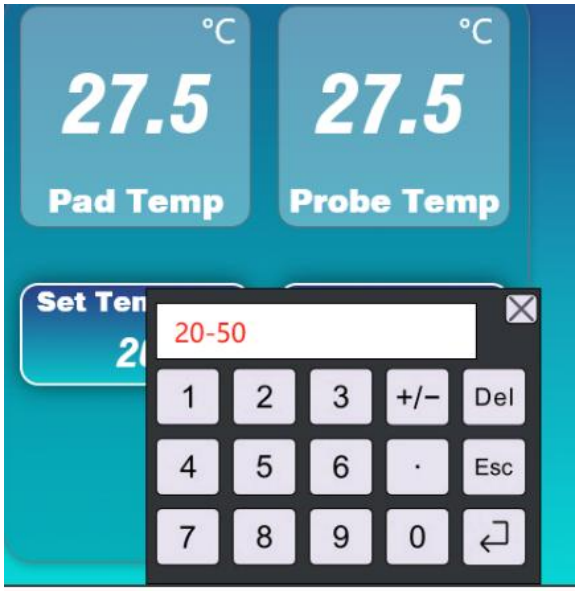
4.1 Interface Introduction

Turn on the power switch to enter the experimental interface, temperature setting, experimental time setting and experiment start can be performed.

4.2 Experimental Setup

4.2.1 Temperature setting

Click Set Temp to submit the target temperature required by the experiment in the pop-up window, and click Start. (Temperature range 20~50℃)



Note: For two-channel experiments, the parameters need to be submitted separately in Channel 1/2.

4.2.2 Experimental time setting

Click Set Time, input the experimental time in the pop-up window, and click Start.

4.2.3 Alarm and backlight

Click the gear icon to enter the setting interface.

Over Temp	Rectal temperature probe temperature is 1℃ higher than the pad temperature.	ON/OFF
Under Temp	Rectal temperature probe temperature is 1℃ lower than the pad temperature.	ON/OFF
Max Temp	Pad temperature reaches more than 50℃	ON/OFF
ALL OFF	All function turn on/off.	

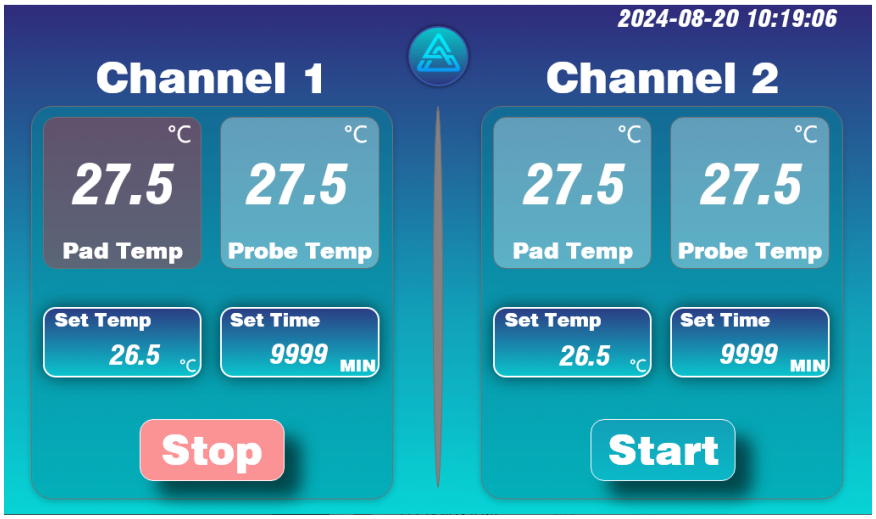
Alarm: buzzer sound.

As shown on the left: Probe1_no_check!
If selecting the CH1 Probe, and the controller does not connect the rectal probe, it will prompt: Probe 1 no check

Probe Temp is shown as NC

4.2.4 Start the experiment

After setting the parameters, click Start.
(Pad Temp is shown as a gray background after starting the experiment)



4.2.5 Stop the experiment

In the experimental state, click Stop to stop the experiment manually, or wait for the experiment to stop automatically.

5.Maintenance & Care

Please do not place the equipment in a humid environment.
Please place the heating pad in horizontal surface.
Please do not over bend the temperature probe and the heating pad.
Clean water is recommended rather than alcohol in cleaning the LCD screen.
Heavy object is not allowed to press the temperature controller.
Please be sure to turn off the power when you clean the pad and the probe.
For long time not use, please unplug the power cord and keep device well.