## **User manual for Waterbed Heating Element**



### **Component Names and Functions:**

- **1. Waterbed Heating Element:** The white part is responsible for heating. The black plastic box contains temperature controller and temperature protector.
  - (1) **Temperature Controller:** When the heating element heats up to preset temperature, the temperature controller automatically switches off (red light turns off) and heater stops heating up.
    - **Temperature Protector**: When the heating element heats up to preset temperature, the temperature controller automatically switches off (red light turns off) and heater stops heating up. When temperature drops down more than 0,2°C of preset temperature, the red light goes on and the heating process begins all over again.
  - (2) **Temperature Protector:** When the heating element constantly heats up to an excessively high temperature approximating to 100°C, the temperature protector automatically turns off and the heating element will not heat up again. However, when temperature drops down below the temperature limit of the protector, heating process begins.
- **2. Temperature Control Box**: Sets the heating temperature.
  - (1) **Power Indicating Lamp (green light):** Desired temperature is reached.
  - (2) **HEAT Indicating Lamp** (**red lamp**): If it lights after plugged in, it means that heating is on. When the red lamp doesn't light up after plugged in, it means the temperature has been up to the preset temperature, so the heating element doesn't need to heat up. When the temperature drops down more than 0,2°C of preset temperature, the red light goes on and the heating process begins all over again.

## **Specifications:**

- 1. Used power: 110V or 220V (Use according to the markings of this product. The product has two different specifications which must not be connected wrong.)
- 2. Consumption of power: 300 W
- 3. Sizes: 850 x 310 mm

#### **Operating Instructions:**

- 1. Connect the control box to the heater plug of the waterbed and the power socket. (Our company has two specifications: 110 and 220 V for this product. Pay attention to the voltage specification. Do not connect with the wrong source of power!)
- 2. Lay the heating element flat underneath the waterbed.
- 3. Make sure the waterbed covers the heating element completely.
- 4. Adjust the temperature setting of the temperature control box, in which the clockwise setting is for a high temperature.

#### **Cautions:**

- 1. Before you have not laid the waterbed heating element flat yet, do not plug in for the use, to prevent the heating element from too high temperature may result in burning off.
- 2. The heating element must be laid flat in use. Do not fold, distort or deform to avoid any damage caused from the improper use.
- 3. When the heating element of the waterbed already lays, you should notice if there is any foreign matter underneath. It's important to keep the heating element in normal use.
- 4. Do not stab or scratch the heating element with a sharp article to avoid the danger being caused by a leakage.
- 5. The heating element must not be placed on the wet place to assure the service life.
- 6. The heating element should be fastened to the wiring of the control box without movement before use to assure the normal operation.
- 7. Make sure the voltage of the socket in use is correct first and then plug in the unit. The plug and socket cannot move.
- 8. When setting the temperature of the control box, make sure the knob has been pressed tightly, as it will idle running when you set.

**Important:** Heating system can not come into contact with the foam frame, as this may cause overheating. The heater should be positioned below the water mattress center retaining several centimeters [cm] of distance from the frame foam.

# I. Simple Maintenance and Repair

Breakdown Situations	Parts to be Inspected	Solutions
Strations	Notice: Does the power "green light" on the control box light up?	Green Light On: Check if the temperature set position of the control box is correct.
Dead (No power.)	Control Box Green Light Red Light	Green Light Off:  1. Check the socket to see if there is voltage and the voltage is correct.  2. Check if the plug is plugged in securely.  3. The plug is inserted in the socket without movement.  4. If the green light is not on with heating, it means the bad green LED.
Live without heating	Notice: Is the "red light" for heat on the control box turned on?  OHM Measuring Method  Clamp Meter	The red light is not on: Check if the temperature set position of the control box is correct.  The red light is on: 1. Check if the heating element has an OHM value. If there is an OHM value, it means normal. If no OHM value, it means the bad heating element. 2. Clamp a power cord by a current clamp meter (An extended line can be added. By pushing aside two power cords, it is convenient to use the clamp meter.) The clamp meter shown with current represents the normal. No current shown represents the bad control box. 3. If the red light is not on with heating, it represents the bad red LED.