

***EK-85-2***

**DIGITAL MAGNETIC  
STIRRER HOTPLATE  
OPERATION MANUAL**

## **A) Introduction**

Thank you for your purchase of the EK-85-2 Magnetic Stirrer Hot Plate. The EK-85-2 is a quiet and powerful magnetic stirrer, Perfect for heating and stirring liquid for your kitchen recipes, home brew yeast starter, scientific research, lab experiments & vape juices. The digital display and adjustable temperature buttons ensure precise temperature setting and heating. The adjustable speed dial makes it easy to fine tune your mixing needs. The Clear English instructions with diagrams and troubleshooting section, make this magnetic stirrer set incredibly easy to set up and start using!

## **B) Technical Features:**

- Power source: 120V 60Hz
- Plug Type: US / Canada
- Speed Range: 0 – 1250 Rpm
- Motor Power: 40W
- XMTD-702 Temperature Control Module (an upgrade from our competitors)
- Heating power: < 300W
- Temperature Range: Room Temp – 100 Degrees Celsius
- Temperature Fluctuation: < 0.5 Degrees Celsius
- Temperature Accuracy: < 0.5 Degrees Celsius
- Hotplate Size: 12.5cm x 12.5cm
- Capacity: 20 – 3000ml

## **C) Stirrer Instructions**

1. Plug in your magnetic stirrer & flip the POWER switch on.  
The signal light will turn on.
  2. Place your glass (DO NOT use metal) container with liquid onto the mixing plate and drop your mixing bar into the container.
  3. Adjust your stirring speed by SLOWLY turning the Speed Dial from LEFT to RIGHT. If the stirrer gets jumpy, please reset the machine by turning it off and then back on.
  4. To turn on the hot plate & heating function, flip the on switch above TEMP.
- DO NOT touch the metal heating plate as it can get extremely hot.

### **XMTD – 702 DIGITAL HEATING MODULE**

**RED DIGITAL DISPLAY** = ACTUAL Temperature

**GREEN DIGITAL DISPLAY** = DESIRED Temperature

5. Adjust the temperature up and down with the digital display on the right side of the stirrer.
  - a) Press SET and you will see the GREEN digital display blink.

- b) Press Red Arrow Up = Increase in temperature. Press Red Arrow Down = Decrease in temperature. Hold down the buttons to increase quickly.
  - c) Once you have reached your desired temperature Press SET again and your temperature will be set.
  - d) The signal light above the Temperature Dial, let's you know it is heating. It will take up to 30 mins for the hot plate to reach your desired temperature.
  - e) **\*DISCLAIMER:** the metal stirrer plate reaches a max temperature of 100 Degrees Celsius, however the maximum temperature that the liquid will reach is dependent on the type of glass container being used, the thickness of the glass and the volume of liquid.
6. When finished using the magnetic stirrer please TURN OFF HEAT & POWER and unplug the machine.

## **D) Setting Up The Support Stand & Temperature Probe**

1. Screw the support rod into the plastic holder in the back of the machine base.
2. Insert the "right angle clamp" onto the top of the support rod and tighten.
3. Slide in the thermometer holder and tighten the knob.

4. Plug in the green thermometer probe cable into the matching plastic plug on the back of the mixing machine and insert the thermometer probe into the holder.

## **E) Safety Precautions**

1. Please keep your magnetic stirrer grounded at all times for safety.
2. Please DO NOT touch the metal stirring plate when HEAT is ON. It can get extremely hot and cause burns.
3. Please avoid using a metal container or container that does not have a flat bottom.
4. If any liquid splashes between the circular disk and the base, turn off the power immediately to prevent damage to the machine. Ensure all liquid is cleaned and the machine 100% dry before turning the machine back on.
5. Keep the magnetic stirrer clean at all times.
6. Please turn off the machine when not in use.

## **F) Troubleshooting**

1. Fixing An Incorrect Temperature: although rare, sometimes the digital temperature display will read a few degrees off from 100% true temperature. In this case, the following steps will help correct it.
2. Hold the SET button for 3 seconds. This will take to you the admin menu. You will see “E” on the display.
3. Press SET button again. The display will blink.
4. Now use the UP and DOWN arrow buttons to correct the temperature to the correct number.
5. Press SET button again to lock in the correct temperature. You will see “P” and then “T” on the display.
6. Press SET button one last time exit.

## **G) Certifications:**

- A. ISO9001: 2008
- B. ISO14001: 2004
- C. ISO13485: 2003
- D. CE
- E. SGS

## **H) Package includes:**

1 x EK- 85-2 digital magnetic stirrer hot plate

1 x North American Plug

5 pieces of PTFE magnetic stir bars

1 extra fuse

1 steel support rod 23 cm

1 x 20 cm thermometer / temperature & probe extension clamp holder

1 x grammatically correct & clear English instruction manual – printed paper format.

1 x grammatically correct & clear English instruction manual – digital PDF format.