# Http://www.mtops.co.kr e-mail:misung@mtops.co.kr

Heating Mantle

# EAMS Series

# MANUAL

Thank you very much for selecting Mi-sung products.

For your safety please read the following before using.

#### Main products

Temp controller
Heating Tape
Hot plate
Digital

Mantle, Analog
 Mantle, Rota Mantle

Digital Stirrer
Analog stirrer

#### Head Office

#691-4,Duckkye-dong,Yangjusi,Kyounggi-do 482-850 REPUBLIC OF KOREA

Tel:82-31-866-3808

Fax:82-31-866-3810

Seoul Office

Tel: 82-2-2277-3811,3812

Fax: 82-2-2277-3813

# **General Information**

Unpack your item carefully and inspect for damage and report such damage or missing parts to your supplier right away.

Read your instruction manual carafully. Take time to save time while working with you item.

Make sure that every user has read and understood the instruction manual.

Please store the instruction manual in a place easily accessible to every user.

## **Safety Information**

Please comply with all safety and accident-prevention regulations as in force for laboratory work!

Use extra care when working with flammable substance; refer to safety data sheets.

When connecting your item with your local power supply, please make sure your item is designed for your local supply voltage; go by data plate on the item.

Turn your power switch OFF whenever the item is not used, or before disconnecting the plug.

Use extra care when working in the vicinity of flammable and explosive substances. Motor are non-sparking type, however, the item itself is not explosion proof.

Please do not connect your instrument without a protective ground outlet.

Your item requires a solid stand.

#### Warning

#### To avoid electrical shock, always:

- 1. Use a properly grounded electrical outlet of correct voltage and current handling capacity.
- 2. Disconnectfrom power supply before servicing.

#### To avoid personal injury:

- 1. Do not use in the presence of flammable or combustible materials; fire or explosion may result. This item contains components which may ignite such materials.
- 2. Keep the item clean. Use non-abrasive cleaner. Alkali spills, hydrofluoric acid spills or phophoric acid spills may damage the item and lead to thermal failure. Unplug unit and remove spills promptly. Do not immerse unit for cleaning.
- 3. Do not remove or modify grounded power plug. Use only properly grounded outlets to avoid shoch hazard. Not rated for use in hazardous atmospheres.
- 4.Use appropriate hand and eye protection when handling hazardous chemicals.
- 5. Do not use in highly corrosive atmospheres; corrosive fumes and spill may damage your item and internal components,

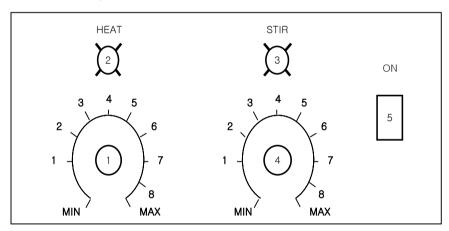
## Caution

Space instrument 12 inches away from combustible materials under any conditions.

### 2. Specifications

Model	Capacity	Watts	Number of positions	Dimensions	Internal (height : mm)	Weight (kg)
EAMS9502-03	250ml	150W x 3	3	520 x 280 x 150	60	9.2
EAMS9503-03	500ml	260W x 3	3	580 x 300 x 165	75	9.6
EAMS9504-03	1000ml	350W x 3	3	670 x 330 x 175	85	11.3
EAMS9502-06	250ml	150W x 6	6	1040 x 280 x 150	60	18
EAMS9503-06	500ml	260W x 6	6	1150 × 300 × 165	75	18.7
EAMS9504-06	1000ml	350W x 6	6	1340 x 330 x 175	85	21.8

# 3. Functional Description



- 1.Temperature Controller
- 2.Lamp for heater
- 3.Lamp for motor

- 4.Spped controller
- 5.Lamp for main power

#### 4. How to use

- 1. Connect power cord on the rear side and turn on using No.5 button on the front side.
- 2. Adjust the required setting value using No.1 dial.
  - ( Out put is maximum on No.8 or MAX position)
- 3.No. 2 lamp is flickerd automatically as per the time and is continuousely lighten on maximum output.
- 4. Turn No. 4 dial, then the motor runs with the lightening of No. 3 lamp.
- 5. To stop the motor run, turn No. 4 dial to MIN counterclockwise.
- **X**Smoke could be happened for 1 -2 hours when heater runs, so, make a ventilation.
- \*To take out the vessel softly, heat the veseel and take it out when 70% of the heat remains.
- \*▼Take out the vessel from the mantle in 5-10 minutes after the work is finished.
- \*Heating and Stirrer is controlled separately and has power cord respectively.

# 5. Temperature control

Heating temperature is controlled by analog temperature controller (Built-in K Type sensor)