Operating Instructions

Mini Magnetic Stirrer KING KONG

MI0102001D



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Safety Instructions

For your protection

- **Read the operating instructions in full before starting up and follow the safety instructions.**
- Keep the operating instructions in a place where they can be accessed by everyone.
- Ensure that only trained staff work with the appliance.
- Follow the safety instructions, guidelines, occupational health and safety and accident prevention regulations.
- Caution-Magnetism! Effects of the magnetic field have to be taken in to account (e.g. data storage media, cardiac pacemakers…).
- Wear your personal protective equipment in accordance with the hazard category of the media to be processed. Otherwise there is a risk from:
  - Splashing and evaporation of liquids
  - Ejection of parts
  - Release of toxic or combustible gases



- Use only the AC adapter supplied
- Set up the appliance in a spacious area on an even, stable, clean, non-slip, dry and fireproof surface.
- The base plate must be clean and intact.
- Check the appliance and accessories before hand for damage each time you use them. Do not use damaged components.
- Reduce the speed if
  - The medium splashes out of the vessel because the speed is too high

- The appliance is not running smoothly
- The container moves on the base plate

• Beware of hazards due to:
- Flammable materials
- Combustible media with a low boiling temperature
- Incorrect container size
- Overfilling of media
- Unsafe condition of container.

• The appliance may heat up when in use.
• Process pathogenic materials only in closed vessels under a suitable extractor hood. Please contact 4E's if you have questions.
• Do not operate the appliance in explosive atmospheres, with hazardous substances or under water.
• Only process media that will not react dangerously to the extra energy produced through processing. This also applies to any extra energy produced in other ways, e.g. through light irradiation.
• Safe operation is only guaranteed with the accessories described in the "Accessories" chapter.
• The centre of gravity of the assembly must lie within the surface on which it is set up.
• The appliance must only be disconnected from the mains supply by pulling out the plug-in power supply unit.
• Abrasion of the dispersion equipment or the rotating accessories can get into the medium you are working on.
• When using the PTFE-coated magnetic bars, the following has to be noted: chemical reactions of PTFE occur in contact with molten or dissolved alkaline and alkaline-earth metals, as well as with fine particle powders of metals of the 2. and 3. group of the

periodical system at temperatures above 300-400°C . Only elementary fluorine, chlorine trifluoride and alkaline metals do attack PTFE, halogen hydrocarbons have a reversible swelling effect.

To the protection of the equipment

Caution: Equipment may not be poured over with aggressive media! Equipment never under water set!

- The voltage stated on the nameplate must correspond to the mains voltage.
- Do not cover the device, even partially e.g. with metallic plates or film. This results in overheating.
- Protect the appliance and accessories from bumps and impacts.
- Ensure that the base plate is kept clean.

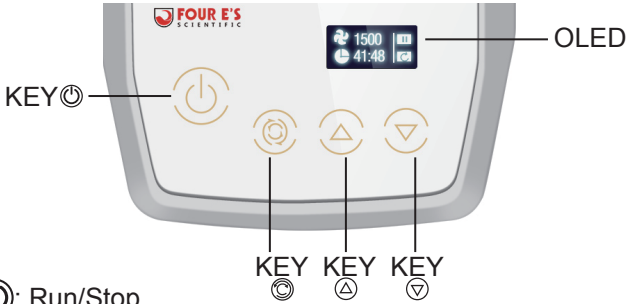
Unpacking

- Unpacking
- Please unpack the device carefully
- In the case of any damage a fact report must be set immediately (post, rail or forwarder)
- Delivery scope
- Magnetic stirrer
- Plug-in power supply
- Operating instruction

Correct Use

- Use
- For mixing liquids
- Range of use
- Laboratories - Schools - Pharmacies

Operator's Control



: Run/Stop

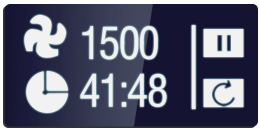
: 1) It works as the shift key to change the position of the cursor before the unit is running

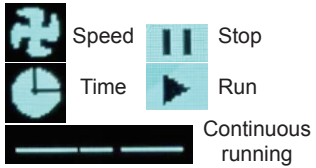
2) It works as the shift key to switch between the Non-reverse mode and Reverse mode when the unit is running.

: "+" Increase

: "-" Reduce

OLED Display





(When the cursor is switched to be at the time setting area, press for 3 times)

: Reverse mode
(The stirring direction will be inverted by 50 seconds)

: Non-reverse mode (Single-direction rotation)

Installation

- Connect the appliance to a socket (the voltages stated on the nameplates must correspond to the mains voltage).
- OLED is light and records the speed and time data of last running
- Set the timing operation and continuous operation before running. (Switch the cursor to the time setting area by ◎ and set the value by △ and ▽)
- Place a stirring bar in a vessel which is penetrable for magnetic field lines and fill the vessel with the medium to be processed.
- Place the vessel on the centre of the set-up surface.
- Start the unit by “Run/stop”
- Set the reverse mode only when the unit is running

Maintenance

The appliance is maintenance-free.

Cleaning

Only use cleansing agents which have been recommended by us

Use to remove

Dyes	isopropyl alcohol
Constructions materials	water containing tenside / isopropyl alcohol
Cosmetics	water containing tenside / isopropyl alcohol
Foodstuffs	water containing tenside
Fuels	water containing tenside

- Do not allow moisture to get into the appliance when cleaning.
- Wear protective gloves during cleaning the devices Before using another than recommended method for cleaning or decontamination, the user must ascertain with us that this method does not destroy the instrument.

Accessories

25mm*7mm Stirring bar
12V 1A Power adapter
Operating Instruction

Warranty

In accordance with our warranty conditions, the warranty period is 24 months. For claims under the warranty please contact your local dealer. You may also send the machine directly to our factory, enclosing the delivery invoice and giving reasons for the claim. You will be liable for freight costs.

The warranty covers the centrifuge and rotor. It is void in the event of incorrect operation, use of nonstandard spare parts or accessories and unauthorized modification of the rotor or centrifuge. The rotor warranty does not cover normal wear and tear or damage and/or weakening caused by radioactive contamination, cleaning agents, or over tightening of the allen screw.

Technical Data

Model	MI0102001D
Stirring Positions	1
Working plate material	Tempered glass
Speed range [rpm]	15 - 1500
Display	OLED
Max. Stirring quantity [H2O, mL]	1000
Motor rating input [W]	5
Motor rating output [W]	3
Max. Stirring bar [mm]	25
Set-up surface [mm]	Φ100
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity	80%
DIN EN60529 Protection class	IP 65
Voltage [VAC]	100 - 240
Frequency [Hz]	50/60
Input power	6W
Dimension [W x D x H, mm]	117 x 12 x 180
Weight [kg]	0.3