



# INSTALLATION, OPERATION AND CARE MANUAL

REMEMBER TO COMPLETE THE ONLINE  
WARRANTY REGISTRATION



**ALL SCIENTECH EQUIPMENT COMES WITH A ONE  
YEAR WARRANTY ON COMPONENTS AND  
DEFECTIVE WORKMANSHIP**



**REGISTER ONLINE TODAY**

- ❑ Register your warranty on-line at [www.scientific.co.za](http://www.scientific.co.za) today and learn how to get the best out of your Scientech product.

**NO WEB ACCESS?**

- ❑ If you do not have access to the Web, register by completing this form and Email it to the Scientific head office in South Africa. Email: [sales@scientific.co.za](mailto:sales@scientific.co.za)

**ONLY COMPLETE IF YOU DO NOT HAVE WEB ACCESS**

Company \_\_\_\_\_

Name \_\_\_\_\_

Surname \_\_\_\_\_

Telephone \_\_\_\_\_

Cellphone \_\_\_\_\_

Email Address \_\_\_\_\_

Country \_\_\_\_\_

Postal address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Scientech products purchased \_\_\_\_\_

Product Code (see box label) \_\_\_\_\_

Serial number (see back of machine) \_\_\_\_\_

**INTENDED USE**

- |                                       |  |   |
|---------------------------------------|--|---|
| <input type="checkbox"/> Agriculture  | <input type="checkbox"/> Genetics        | <input type="checkbox"/> Pharmaceutical Physics |
| <input type="checkbox"/> Automotive   | <input type="checkbox"/> Industrial      | <input type="checkbox"/> Power Generation       |
| <input type="checkbox"/> Biochemistry | <input type="checkbox"/> Medical         | <input type="checkbox"/> Special Metals         |
| <input type="checkbox"/> Botony       | <input type="checkbox"/> Microbiology    | <input type="checkbox"/> Sugar                  |
| <input type="checkbox"/> Chemistry    | <input type="checkbox"/> Mining          | <input type="checkbox"/> Water                  |
| <input type="checkbox"/> Cosmetics    | <input type="checkbox"/> Nuclear         | <input type="checkbox"/> Zoology                |
| <input type="checkbox"/> Electronics  | <input type="checkbox"/> Paper/Packaging | <input type="checkbox"/> Other (Specify): _____ |
| <input type="checkbox"/> Food         | <input type="checkbox"/> Petrochemical   | _____   |



**ALL SCIENTECH EQUIPMENT COMES WITH A ONE  
YEAR WARRANTY ON COMPONENTS AND  
DEFECTIVE WORKMANSHIP**

## MAGNETIC STIRRER/HOT PLATE

### LIMITED WARRANTY

The manufacturer guarantees that this unit is free from defect in materials and workmanship when it leaves the factory and undertakes to replace or repair the unit if it proves defective in normal use or during servicing for a period of 1(one) year. The date of original installation and is for the benefit of the original purchaser only. The liability under this warranty is limited to repairing the defective unit or any part of the unit provided it is sent carriage paid to an authorized dealer. All other Warranties ,expressed or implied , statutory or otherwise, including without limitations any implied Warranty of Merchantability or fitness for purpose are excluded .The Seller shall in no event be liable for direct,indirect or consequential damages in connection with the products.

This unit is at all times to be used according to the instruction manual and for its normal purpose.

This Warranty is not effective if damage occurs because of accident, carelessness,improper installation,lack of proper set-up,supervision when required or if the equipment is installed or operated in any manner contrary to the installation and operating instructions. In these cases,repairs will be made at a reasonable cost. Work performed by unauthorized personnel or unauthorized service agencies voids this Warranty.



**INSTALLATION OPERATION AND CARE OF  
CERAMIC MAGNETIC STIRRER/HOT PLATE  
MODEL: 725**

## UNPACKING

Unpack the product and check for any damage incurred during transit. This should be reported to the responsible carrier, railway or postal authority, and a request for a damage report should be made.



THESE INSTRUCTIONS MUST BE FOLLOWED FOR US TO GUARANTEE OUR FULL SUPPORT OF YOUR CLAIM FOR PROTECTING AGAINST LOSS FROM CONCEALED DAMAGE. THE FORM FOR FILING SUCH A CLAIM WILL BE PROVIDED BY THE CARRIER.

## GENERAL INSTALLATION AND OPERATION INSTRUCTIONS

1. Position the magnetic stirrer on a level surface in a area where drafts and rapidly changing ambient conditions are not present.
2. Leave at least 200mm clearance all around the unit to allow for ventilation and access.

## OPERATING INSTRUCTION

### 1. START-UP

The display will illuminate as soon as the unit is plugged in. Place the vessel containing the liquid to stirred on the top of the magnetic stirrer. NOTE: vessel must be non-magnetic. Drop the stirrer bar into the vessel.

### 2. SETTING THE STIRRER SPEED

Adjust the speed control knob until the desired speed is reached. Turning the knob clockwise will increase the speed of the stirrer bar.

### 3. SETTING THE HOT PLATE TEMPERATURE AND PROBE SENSORS.

The unit has two options of controlling the temperature. The default is via the built in plate sensor. The other method is via the external plug in sensor which can be placed directly into the liquid.

**PARTS LIST****CERAMIC MAGNETIC STIRRER/HOT PLATE****MODEL: 725**

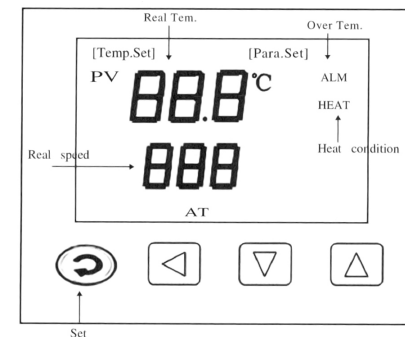
Part No.	Description
1	CERAMIC SURFACE COVER
2	HEATING ELEMENT
3	ELEMENT SUPPORT PANEL
4	MAIN SPACER
5	SPACER PANEL
6	CIRCULAR VENT
7	SECONDARY SPACER
8	CONTROL DECAL
9	BUTTONS
10	CONTROL KNOB
11	DIGITAL DISPLAY
12	CONTROL KNOB BRACKET
13	CONTROL KNOB BASE
14	FAN
15	FEET
16	BOTTOM COVER
17	CIRCUIT BOARD
18	MOTOR BRACKET
19	TRANSFORMER
20	MOTOR
21	PROBE PLUG
22	WIRE
23	THERMOSTAT PROBE
24	PLASTIC CONNECTOR BLOCK
25	SECONDARY PLUG
26	STAND MOUNT
27	MAIN PLUG
28	BASE SHELL
29	CLAMP CONNECTOR
30	FIXED STAND
31	THUMBSCREW
32	CLAMP

**3. Continued.**

To select which temperature sensor to use, press and hold the "SET" key. The Letters "Lc-" will display this is a prompt to unlock the parameter settings. Use the up arrow key to show a value of "9" and then press the "SET" key. The Letters "EnS" will display use the up and down key to change the value from "0" or "2" Where "0" is the plate sensor (default) and "2" is the external sensor. Press and release the SET key to exit.

**4. Changing the temperature**

Press and release the "SET" key and the temperature display digits will start flashing. Use the up or down arrow keys to change the value. Press the shift arrow key to move to the next digit and so on. When you are finished changing the value, press and release the SET key.

**CONTROL PANEL**

- SET KEY
- SHIFT ARROW KEY
- DOWN ARROW KEY
- UP ARROW - BACKLIGHT

## ELECTRICAL CONNECTION INFORMATION

MODEL	DESCRIPTION	VOLTS (V /Hz)	POWER (W)
725	CERAMIC MAGNETIC STIRRER	100-240/50	600



## WARNING

### Burn Hazard.

Do not touch hot, liquid or heating surfaces while equipment is heating or operating

Hot surfaces and liquid can burn skin. Allow the hot surfaces to cool before handling

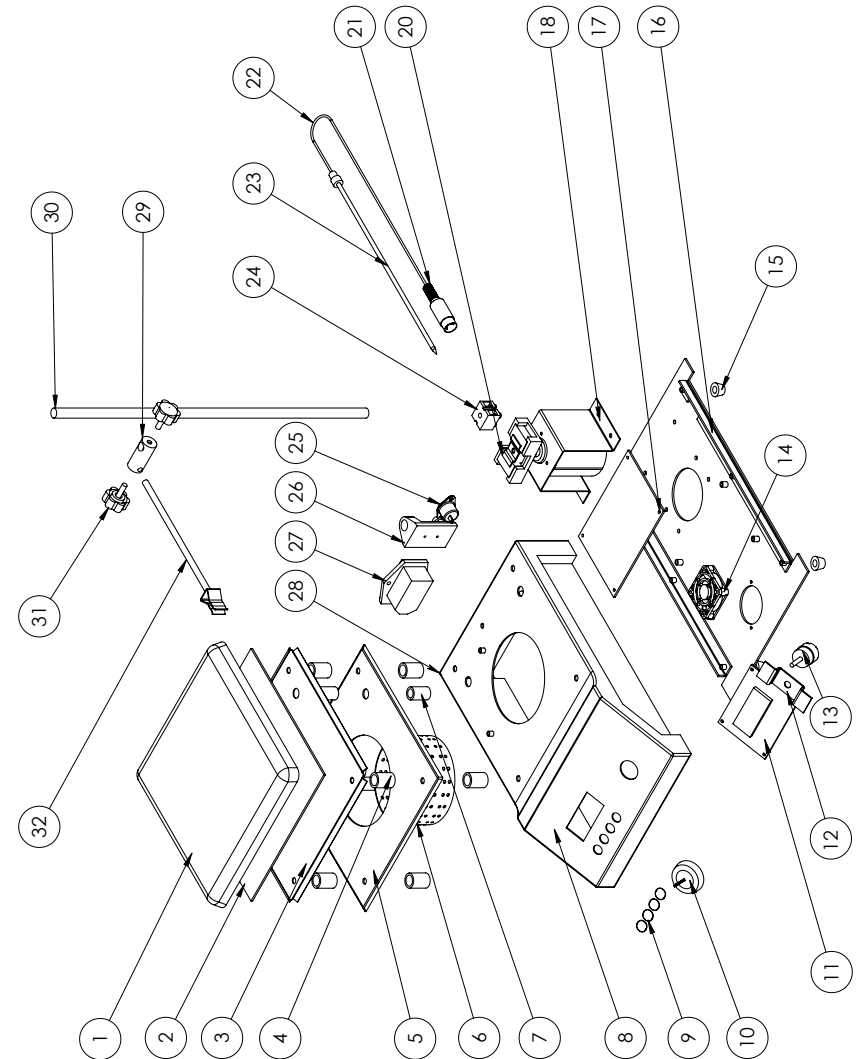
## CLEANING

1. Always ensure that the unit is disconnected from the main power supply before cleaning.
2. This unit should not be cleaned with a water jet or immersed in water. Use only a damp cloth or sponge dipped in soapy water.
3. Wipe off the unit with a dry cloth and wait at least a half an hour before re-connecting to the main power outlet.

## SPECIFICATIONS

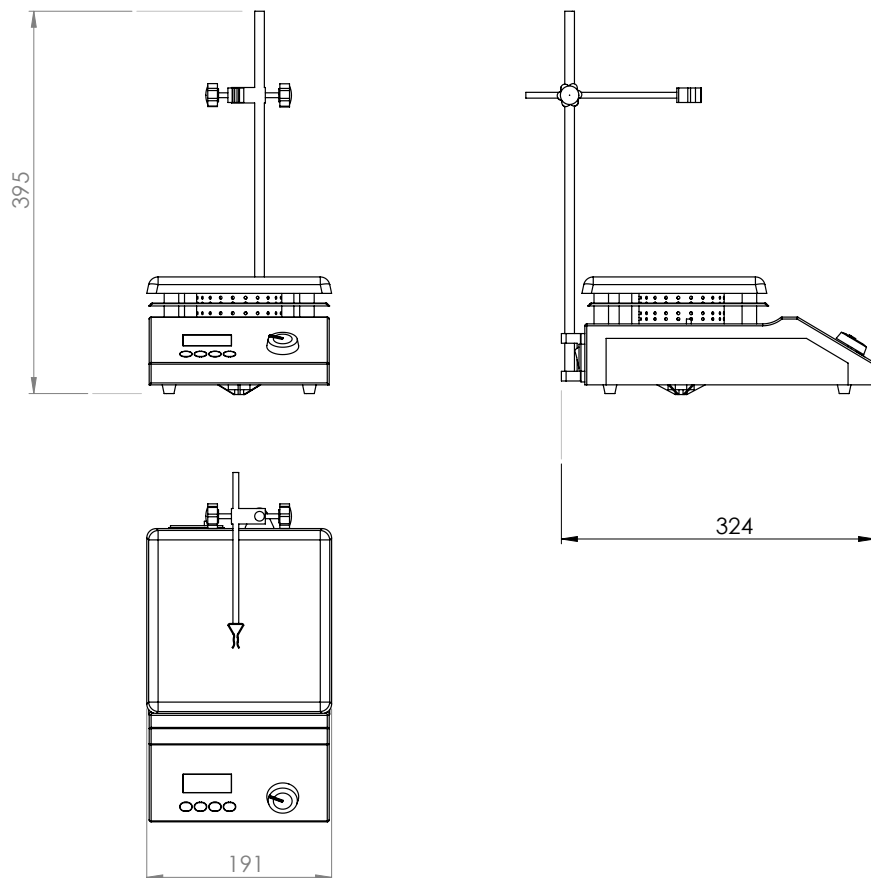
MODEL 725	DESCRIPTION
Max load (kg)	20
Stirring capacity(Litre)	5
Speed (rpm)	100 to 2000
Temperature range of heating plate	50-350°C

## EXPLODED DIAGRAM MAGNETIC STIRRER/HOT PLATE MODEL 725



**POSITIONING DIAGRAM**  
**CERAMIC MAGNETIC STIRRER/HOT PLATE**  
**MODEL: 725**

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4



## WARNING

### Electric Shock Hazard.

Keep water and other liquids from entering the inside of the equipment. Liquid inside the equipment could cause an electrical shock.

Do not spray water or cleaning products. Liquid could contact the electrical components and cause a short circuit or an electrical shock. Do not use equipment if power cord is damaged or has been modified.

## SAFETY

**READ ALL INSTRUCTIONS BEFORE USE. FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN INJURY TO YOURSELF AND OTHERS**

1. Use the Magnetic Stirrer on an individual 15A mains outlet only. **DO NOT OVERLOAD THE CIRCUIT.**
2. Ensure that the equipment and the power supply cord does not come into contact with hot surfaces.
3. This unit is only to be used by properly trained laboratory staff.
4. If the supply cord is damaged, it must be replaced with a new cord assembly available from the suppliers agent.
5. Use only earthed outlets matching the serial plate voltage.
6. Have equipment installed by a qualified personnel in accordance with local codes and ordinances.
7. Use equipment in a flat level position.
8. The equipment may be hot, even though the pilot light is not on.
9. Do not operate if equipment has been damaged or is malfunctioning in any way.
10. These units are designed to run only on alternating current (A.C.) **DO NOT CONNECT TO DIRECT CURRENT (D.C)**

## MAINTENANCE

**NOTE:** When using the following chemicals, limit the time to a maximum of four hours and then clean surfaces immediately.

ALUMINIUM CHLORIDE	BICHLORIDE OF MERCURY
BARIUM CHLORIDE	PHENOL
CALCIUM CHLORIDE	POTASSIUM THIOCYANATE
FERROUS CHLORIDE	CHLORINATED LIME
MERCURIC CHLORIDE	DANIN'S SOLUTION
STANNOUS CHLORIDE	LYSOL
CITRIC CHLORIDE	MERCURY SALTS
CARBOLIC ACID	POTASSIUM PERMANGANATE
TARTARIC ACID	SODIUM HYPOCHLORIDE

### AVOID USING THE FOLLOWING:

AQUA REGIA  
 IODENE  
 COPPER SULPHATE  
 FERRIC CHLORIDE  
 SULPHURIC ACID  
 HYDROCHLORIC ACID



CARE MUST BE TAKEN WHEN USING THESE CHEMICALS. ALWAYS WORK IN A WELL VENTILATED AREA AND WEAR THE CORRECT PROTECTIVE CLOTHING



SWITCH OFF UNIT WHEN NOT IN USE. EXTENDED OPERATION WITHOUT A FILLED BEAKER ON THE HOT PLATE SURFACE WILL SHORTEN THE LIFE OF THE ELEMENTS



WHEN USING HAZARDOUS CHEMICALS ENSURE THAT THE UNIT IS OPERATED UNDER A FUME HOOD AS THE HAZARDOUS FUMES MAY AFFECT THE OPERATOR

## WIRING DIAGRAM

**MODEL: CERAMICMAGNETIC STIRRER/HOT PLATE**  
**MODEL CODE: 725**

### CERAMIC STIRRER WIRING

