

4-INS-701



**INSTALLATION,
OPERATION AND
CARE MANUAL**

REMEMBER TO COMPLETE THE ONLINE
WARRANTY REGISTRATION

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REGISTER ONLINE TODAY

- Register your warranty on-line at 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

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**



ULTRASONIC CLEANER

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
ULTRASONIC CLEANER
MODELS: 701, 702, 703, 704 and 705**

UNPACKING

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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 ultrasonic cleaner on a level surface in a area.
2. Never operate the unit if the tank is empty.
3. Always disconnect the power when adding liquid or detergent.
4. Do not use flammable or corrosive solutions in these units.

OPERATING INSTRUCTION

1. START-UP

Place the object to be cleaned in the basket provided.
Fill the tank with water to completely immerse the object, for best results the tank should be filled to half or two thirds capacity.
Add a small amount of detergent. The object should never touch the bottom or sides of the tank.

2. SELECTING THE FUNCTION SETTINGS

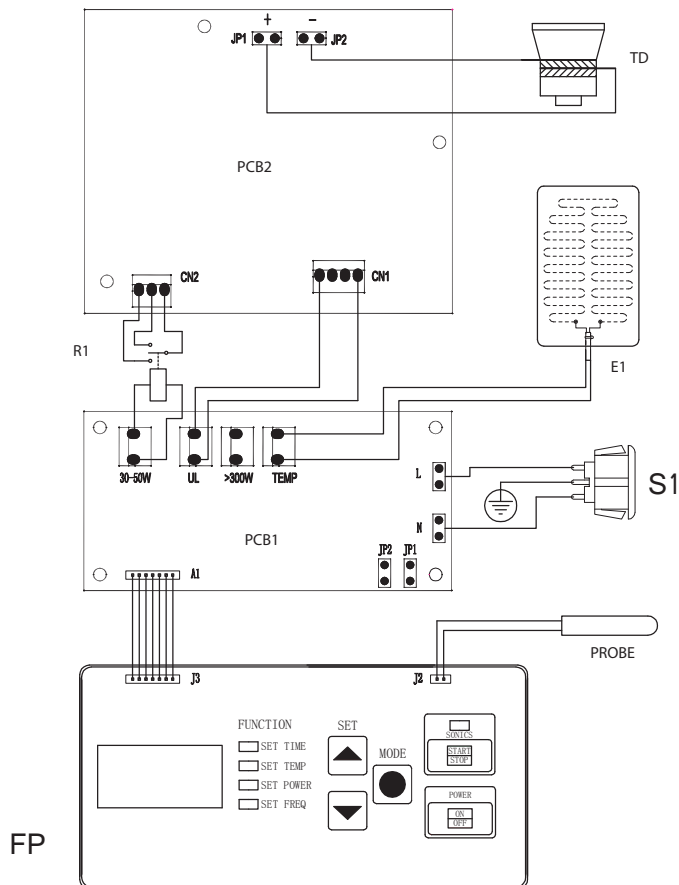
Press the $\frac{\text{ON}}{\text{OFF}}$ button to switch on the machine. The function indicator lamps are not illuminated, the display will show the current water temperature. Press "MODE" once and the "SET TIME" indicator lamp will illuminate. This allows the settings to be adjusted via the up and down arrow keys. ▲ ▼
Each press of "MODE" will advance to the next function.
SET TIME → SET TEMP → SET POWER → SET FREQ

WIRING DIAGRAM

MODEL: ULTRASONIC CLEANER

MODEL CODE: 702, 703, 704, 705

LEGEND	DESCRIPTION
S1	ROCKER SWITCH
TD	TRANSDUCER
PCB1	PC RELAY BOARD
E1	ELEMENT
PROBE	TEMPERATURE PROBE
FP	FASCIA CONTROL PANEL
PCB2	PC CONTROL BOARD



3. TIMER SETTING :

Press "MODE" once and the "SET TIME" indicator lamp will illuminate. The display will show "060" indicating 60 minutes. time may be adjusted via the up and down arrow keys. ▲ ▼ from 0 to 60 minutes. If set on the "000" position, the unit will run continuously.

NOTE: when operating at time setting "000" the unit must not be allowed to run continuously for longer than 8 hours.

4. TEMPERATURE SETTING :

Press "MODE" twice and the "SET TEMP" indicator lamp will illuminate. The display will initially show current water temperature. Temperature may be adjusted via the up and down arrow keys. ▲ ▼

Temperature is adjustable from 0 to 80°C displayed as 000 - 080
NOTE: This is a heated unit only, so will only heat from ambient water temperature +7°C and higher. If the temperature is set lower than the water temperature in the unit, it will not heat. The unit will not reset itself and the set temperature will remain unless changed by the operator.

5. POWER SETTING :

Press "MODE" Three times and the "SET POWER" indicator lamp will illuminate. There are 5 power levels 001 -005. The display will initially show "005" . This setting reduces or increases the size of the cavitation bubble implosion force which effects the aggression of the cleaning action, where 005 is the strongest.

Power may be adjusted via the up and down arrow keys. ▲ ▼

6. FREQUENCY SETTING :

Press "MODE" Four times and the "SET FREQ" indicator lamp will illuminate. There are two options LO and HI. The display will initially show "LO" . This setting effects the size and spread of the cavitation bubbles. This influences the erosion and cleaning action on surfaces. The "HI" setting provides the most even and minimal erosion of surfaces and is suitable for cleaning smaller particles. The "LO" setting cleaning and erosion is more aggressive. Frequency may be adjusted via the up and down arrow keys. ▲ ▼

ELECTRICAL CONNECTION INFORMATION

MODEL	CAPACITY (Litres)	VOLTS (V /Hz)	POWER (W)	TEMP RANGE (°C)	TAP FITTED
701	2,5	230/50	50	AMB +7°C to 80°C	NO
702	4	230/50	100	AMB +7°C to 80°C	NO
703	5,7	230/50	150	AMB +7°C to 80°C	YES
704	12	230/50	300	AMB +7°C to 80°C	YES
705	25	230/50	600	AMB +7°C to 80°C	YES



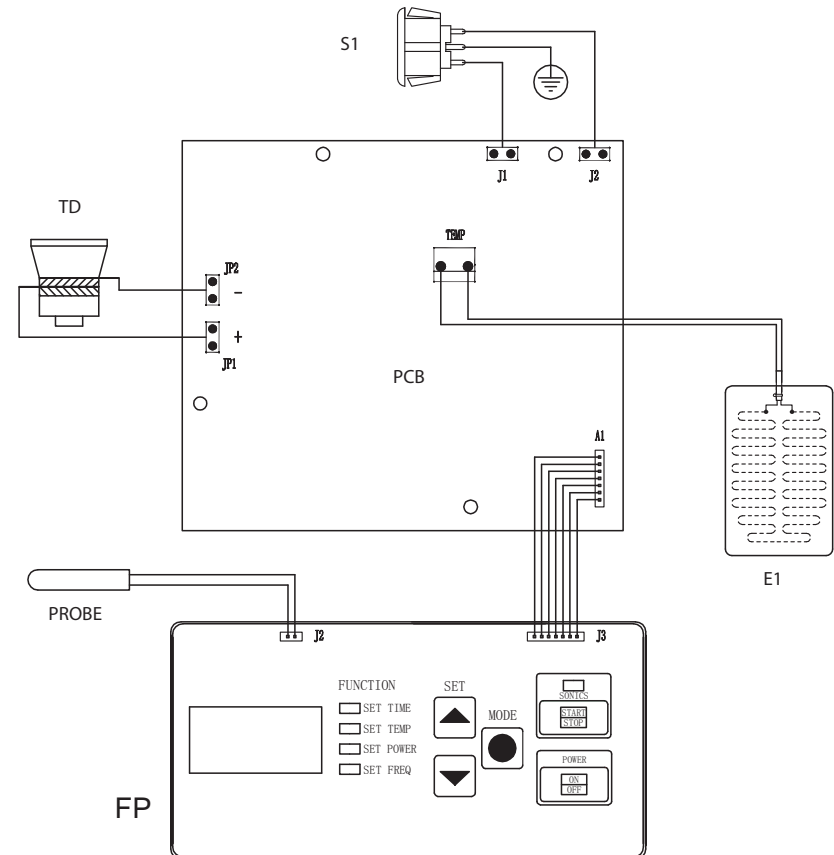
IT IS ESSENTIAL TO MAKE SURE THAT THE INCOMING VOLTAGE IS THE SAME AS THE RATED VOLTAGE OF THE UNIT AS FOUND ON THE SERIAL PLATE. THE SERIAL PLATE IS LOCATED AT THE REAR OF THE UNIT ADJACENT TO THE INCOMING CABLE ENTRY.



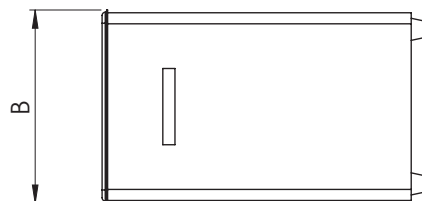
DO NOT OPERATE IF THE TANK IS EMPTY, DO NOT USE WITH FLAMMABLE OR CORROSIVE LIQUIDS.

**WIRING DIAGRAM
MODEL: ULTRASONIC CLEANER
MODEL CODE: 701**

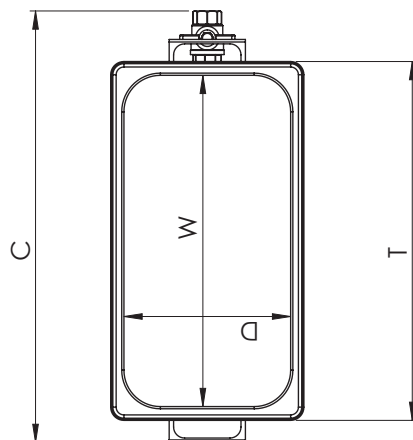
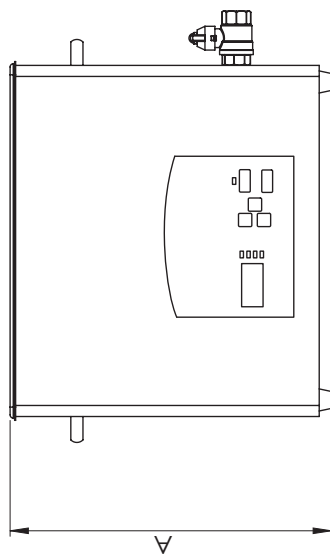
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PCB	PC CONTROL BOARD
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PROBE	TEMPERATURE PROBE
FP	FASCIA CONTROL PANEL



**POSITIONING DIAGRAM
ULTRASONIC CLEANERS
MODELS 703, 704, 705**



Model	Size A mm	Size B mm	Size C mm	Size D mm	Size W mm	Size T mm
703	294	175	394	153	300	318
704	355	325	418	300	330	342
705	415	325	591	300	500	515



CLEANING

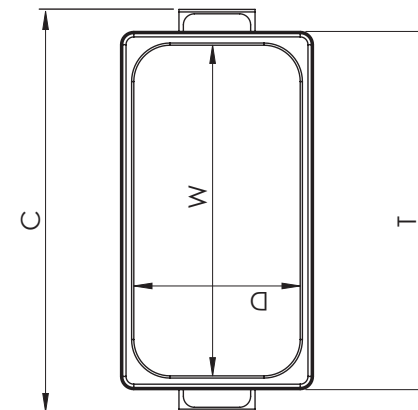
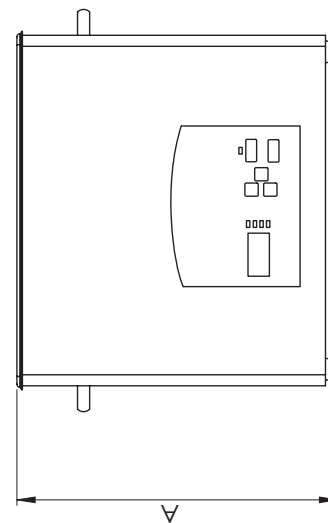
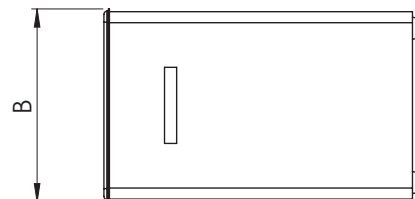
1. Always ensure that the unit is disconnected from the main power supply before cleaning.
2. This unit should not be cleaned with a water jet or immersed in water. Use only a damp cloth or sponge dipped in soapy water.
3. Wipe off the unit with a dry cloth and wait at least a half an hour before re-connecting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

SAFETY

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

1. Use the Ultrasonic cleaner 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 control panel 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)**

POSITIONING DIAGRAM ULTRASONIC CLEANERS MODELS 701, 702



Model	Size A mm	Size B mm	Size C mm	Size D mm	Size W mm	Size T mm
701	250	165	206	137	150	175
702	294	165	309	137	150	265