WUC-N

Ultrasonic Cleaner
Operating Manual

written for
WUC- N30H/ -N47H/ -N60H/ -N74H

witeg Labortechnik GmbH

Contents

1 Introduction

Thank you for purchasing our **WUC-N Ultrasonic Cleaner**. You did a good choice buying a **Wisd** product.

Before use, please read this manual and use it properly.

To cover the user's health and avoid the product's destruction you have to follow the safety instructions of the second chapter.

Please keep this operating manual in a save place for future reference and hand it out if you consign the device to a third person.

Witeg reserves to modify the capsule or make amendments for the improvement of quality and efficiency without prior notice.

2 Safety Instructions

2.1 Description of symbols

WARNING
Information for avoiding injuries or fatal accidents.

ATTENTION
Safety instruction to avoid a damage of the product.

ATTENTION
Information about technical parameters.

Environment
Information about the operating environment.

WARNING of explosions
Safety instruction to avoid explosions.

ATTENTION to high temperatures
Instructions to avoid injuries caused by high temperatures.

2.2 Instructions

For a safety and faultless using of the device it is indispensable that you read the following instructions purposely and follow them by the use.

➢ Connect the device only to the suitable power supply. Please have a look to the identification plate.
➢ Use the device only in electric circuits with ground fault circuit interrupter.

➢ Check the power supply cord before you stick it into the electrical outlet.
➢ Do not use power bars to extend the power supply cord.
➢ Only use extension cables with sufficient cable cross section.
➢ Do not touch the device with wet hands during the usage because this might cause an electrical shock.
➢ If unexpected sound, smell or smog is generated by the device, pull out the main plug and contact the manufacturer or your supplier immediately.
➢ Disconnect the power supply plug before cleaning or maintenance.
➢ If you use radiation or contaminated samples the responsibility is only up to you.
➢ Switch the device of during when you load the device.
➢ Avoid injuries: never put your hands or other parts of your body in the working device.
➢ Do not clean living creatures in this device.

➢ It is important that the device stands up on a horizontal, stabile and firm subsurface to avoid vibrations.
➢ Make sure that the device can not slip away.
➢ To avoid heat congestion or fires make sure that there is enough space for air circulations.
➢ Avoid direct solar radiation.
➢ Do not use the device near highly combustible materials.
➢ Do not set the device outdoors.
➢ It is superiorly to set the device in a good illuminated place to avoid accidents engendered by handling errors.
➢ To set the device in wet or dusty places could cause overheating, short circuits or fires.

➢ Do not use this device in area with potentially explosive atmosphere.

➢ Reparations and amendments should only made by **witeg** authorized people. Contraventions exclude the warranty.

➢ Do not put heat-sensitive items at the device.
➢ Warn all attendees if you leave the device unattended.
➢ Pay attention when you lift up the lid, hot condensation water may drop down or hot steam could come out.
➢ Do not clean the hot device.

➢ Use this device only if you read the whole safety instructions.

> This device should only used by persons who are familiarized with safety instructions made for laboratories.
> Pay attention that no liquid reaches the controller or inward of the capsule.
> You have to keep the device clean if you want to get a longer life of it.
> Wear corresponding protective work clothing during the usage.
> Pull out the power cable if you didn't want to use the device for a longer time.

3 Packing content

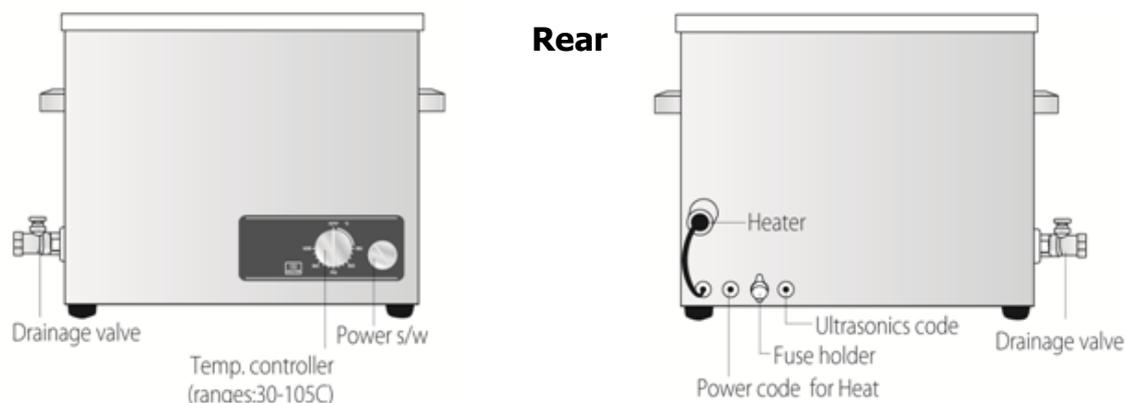| quantum	denomination
1	**WUC Ultrasonic Cleaner**
1	**Remote Generator**
1	**Spare Fuse**
1	**Foot Switch**
1	**operating manual**

4 Product description

Ultrasonic Cleaner uses for cleaning with the various kinds of dirt like finger marks or oils on the surface located in the irregular narrow spaces at the corner. Built in Heat-on mode to maximize the cleaning efficiency. This product was developed and manufactured considering the best possible ease for use and safety, and has the following features.

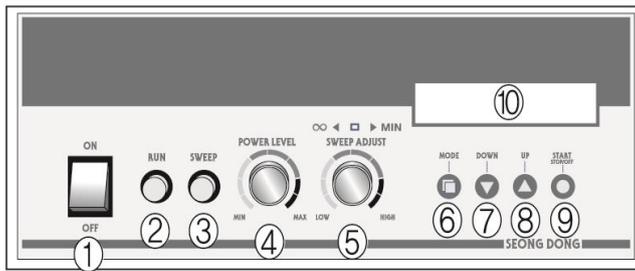## 4.1 Key features

> Digital timer and temperature adjustment.
> Frequency 40 kHz.
> Temperature up to 105 °C adjustable.
> Stainless steel bath.
> Stainless Steel lid inclusive.
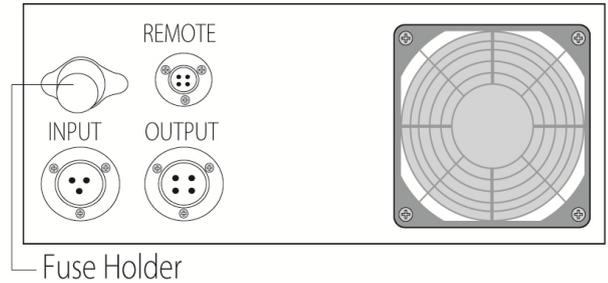> Over temperature protection by safety switch.

4.2 General survey

Front — Drainage valve, Temp. controller (ranges:30-105C), Power s/w

Rear — Heater, Ultrasonics code, Fuse holder, Power code for Heat, Drainage valve

4.3 Operating panel

Front   **Rear**

No.	Name	Description
①	Main Power Switch	Equipment power ON/OFF
②	Ultrasonic Switch	Ultrasonic Operation ON/OFF
③	Sweep Switch	Sweep function ON/OFF
④	Ultrasonic Knob	Ultrasound output adjustment Knob (variable adjustment of 5% to 100%)
⑤	Sweep adjustment	Ultrasonic frequencies output adjustment Knob (variable adjustment 0 to 500 Hz)
⑥	MODE Button	Timer Setting Button
⑦	DOWN(▽) Button	Decreased Button of Set time
⑧	UP(△) Button	Increased Button of Set time
⑨	START Button	Ultrasonic Operation ON/OFF , Timer minute / second adjustment
⑩	LCD Display	Input and operation information are displayed.
⑪	Input	Connecting the power cord
⑫	Output	Ultrasonic tank terminal connection portion
⑬	Remote	Foot switch connection

5 Job description

* Caution

- Ultrasonic Cleaner is 2 types are available.
 1) Direct type : Clean the targets in the tube directly.
 2) Indirect type : Clean the targets in the tube after clean outside beaker or cup.
    (This type are used for acid or corrosion materials.)
- Do not operate over 30min.
- Do not operate without liquid in the Bath.
- Please use water or water and washing solution mix of accordance with the washing object.

* Usage Instructions

- Please put in the bath to water or water and washing solution mix of accordance with the washing object. (About 2/3)
- Put the stuff to be clean in a bath.
- Connect the power cord to the proper power socket and Turn on the Main Power Switch.
- The operating of product according to the method used by the model below.
- After the completion of cleaning, take out the cleaned materials. Rinse them carefully to remove all the remained cleaning liquid on them, and wipe out with towel.

5.1 Set Ultrasonic Operation

➢ Turn on the Main Power Switch of Remote Generator.
➢ Push the Ultrasonic Switch of Remote Generator.
➢ Turn to adjust the desired ultrasound output capacity Ultrasonic Knob of Remote Generator. (5% to 100%)
➢ After washing turn off the Remote Generator Main Power Switch.

5.2 Set Heating Operation

➢ Turn on the Main Power Switch of WUC.
➢ Turn the Temperature Control device to adjust the temperature of the WUC. (+30°C to 105°C)
➢ After heating completed, turning the Temperature Controller to stop the WUC.

5.3 Set Sweep Function

➢ This is to distribute the cleaning range of the ultrasonic frequency to the variable continuously in the vicinity of the resonance frequency function.
➢ Turn On the Remote Generator Sweep Switch.
➢ Turning the Sweep adjustment of Remote Generator to want adjust the sweep frequency size. (0~500Hz)

5.4 Set Timer

➢ Pressing the MODE Button of Remote Generator will change the temperature setting mode.
➢ Press the MODE Button to Move the cursor to the right.
➢ Set the set time using the UP (△) or Down (▽) Button.
➢ Convert minutes and seconds to press the START Button.
➢ The range of setting time is from 1 min to 10 hr.
➢ When done, press the MODE Button to change to the Wait state.
➢ After timer setting, Press the START Button will start the timer operation.

6 Positioning the device and commissioning

1. Follow especially the safety instructions marked with following symbol:
2. Remove the package and perhaps soiling carefully.
3. If there are any unexpected transport damages, please inform your forwarder and your costumer service.
4. Before you connect the device with the electrical outlet, please let some time laps until the device is acclimatised.
5. Make sure that you follow all safety instructions.
6. Fill enough cleaning liquid in. Minimum fill the half of the bath. Maximum filling level is 3 cm under bath edge.
7. Close the drain valve.
8. Connect the device with the power outlet.
9. Fill enough operating liquid in.
10. Switch the device on and start the process (look at job description).

7 Maintenance and cleaning

➢ Please read the whole safety instructions before you start to maintain or clean the device.
➢ Pull the power plug out of the electrical outlet.
➢ Only use care cleaning agents and soft cleaning rags.
➢ Organic lotions, strong chemicals and rough cleaning rags can damage the device.
➢ If you not want to use the device for a long time, pull of the power plug and keep it dry in the package.
➢ Only use original spare parts.
➢ There is no need to maintenance the device.

8 Troubleshooting Guide

Situation	Confirmations and Solutions
Power Failure	✓ Check the supplied voltage is present. ✓ Check the power connection and the power cord for proper connection and integrity. ✓ Check if the MAIN Power Switch is "ON". ✓ Fuse is blown.
Increasing temperature in Bath	✓ During the operation, temperature should be up to max. 105℃ with no damages of equipment
Off Heat-on indicator during Heat-on mode	✓ Normal state (The time for sensor adjustment of the temperature to keep)
No Ultrasonic operation during Heat-on indicate	✓ Caused the damages from Ultrasonic circuit and request A/S repair service.

If other problems arise, or one of the above not solves problems, please contact your official agent or the manufacturer.

Reparations and amendments should only made by witeg authorized people. Contraventions exclude the warranty.
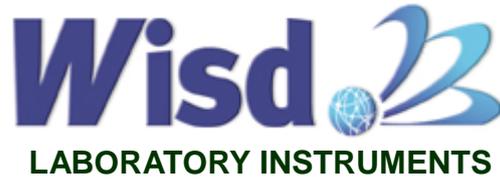
9 Technical data

	WUC-N30H	WUC-N47H	WUC-N60H	WUC-N74H
Capacity	30 l	47 l	60 l	74 l
HF-Frequency	40kHz			
HF-Peak Out	704 W	990 W	1.210 W	1.430 W
Heating Temperature	Ambient to 105°C			
Heating Power	990 W			
Timer	0~99 min			
Tank Size inner (w x d x h) (mm)	400X300X250	450X350X300	500X400X300	550X450X300
Tank Size external (w x d x h) (mm)	480X380X400	530X430X450	530X430X450	580X480X450
Power Consumption	1.694 W	1.980 W	2.200 W	2.420 W
Weight net	26 kg	31 kg	36 kg	41 kg
Packing Dimension (w x d x h) (mm)	620X520X640	670X570X710	720X620X710	770X670X710
Gross Weight	32 kg	37 kg	42 kg	47 kg
Power Supply	AC 230 V, 1N~, 50/60 Hz			

	Remote Generator			
Display	LCD			
Power Consumption	600W	900W	1.200 W	1.500 W
Weight net	9 kg	10 kg		

10 Certificate

Certificate

for

LABORATORY INSTRUMENTS

The quality and all features were checked by the manufacturer before the shipment.

We grant from date of purchase

two years guaranty.

This certificate excludes damages by natural disasters or incorrect usages by the costumer.

Please look on your account and complete following table:

Article	WUC-N Ultrasonic Cleaner
Typ	
Serialno.	
Date	

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