

SPECIFICATIONS

Description	Digital Ultrasonic Cleaner
Item No.	(115V) 7631700 (230V) 7631702
Rating voltage	AC 220~240V ~ 50-60 Hz
& Frequency	AC 100~120V ~ 50-60 Hz
Consumption Power	160 Watts 170 Watts
Ultrasonic Frequency	42,000 Hz
Material of tank	Stainless Steel SUS304
Plastic Housing	ABS 757
Tank Size	9.84 x 5.90 x 3.15 in. 250 x 150 x 80 mm
Tank Capacity	2500ml (MAX-) 2100ml 4.44pt (5.29 pt) (MIN-) 600ml 1.27pt
5 Recycle digital timer	180s —280s—380s—480s—90s
Net Weight	5lbs, 8.18oz. (2.5 Kg)
Gross Weight	6lbs, 9.82oz. (3.0 Kg)

Raytech Industries®

A Division of Lyman Products
475 Smith Street
Middletown, CT 06457

1-800-243-7163
www.raytech-ind.com

Raytech®

Turbo® Sonic 2500 Ultrasonic Cleaner



Operating Instructions

READ BEFORE OPERATING

- Ultrasonic cleaners are very easy to use. To get the best results from your new purchase we recommend that you read this users guide before getting started. After reading instructions, if you do not fully understand the operation of machine you may contact Raytech customer service at 1-800-243-7163 for further assistance.

MAIN FEATURES

- This machine is the newest generation of ultrasonic cleaners, featuring 5 timed cleaning cycles with a built in heater.
- With a larger fluid capacity of approximately 70 oz (2500 ml) and larger 160 watt transducer unit, cleaning power and capacity has been increased.
- 2.5 Liter stainless steel tank: greater holding capacity and durability
- Engineered Plastic Basket: Improves the flow of Ultrasonic waves and provides greater durability and will not scratch cases or parts.
- Powerful Transducer: More Effective Cleaning
- 5 Cleaning Cycles: For All Your Cleaning Needs
- Circuit Protector: Prevents Damage
- Fan Cooled: Prevents Overheating
- Durable Plastic Housing: Resists Dampness and Shock

SAFETY INSTRUCTIONS

CAUTIONS!

- Do not use for loaded ammunition cartridges.
- Always unplug this unit when not in use.
- Always keep unit in a safe place to avoid having it fall into water or other liquids.
- Do not immerse in water or other liquids.
- Always unplug unit immediately if unit has fallen into water or other liquid.
- Always keep unit and power cord away from heated surfaces.
- Never use unit with damaged power cord.
- Always place unit on dry level surface for use.
- Do not disassemble unit.
- Always unplug unit before filling and never exceed the maximum fill mark.
- Do not fill tank with abrasive or corrosive materials, use only manufacturers recommended cleaning solutions.
- Follow all instructions in manual.
- Do not use if there is no water or cleaning solution in cleaning tank.

- Always use basket when cleaning. Never let items being cleaned make contact with tank.

Raytech offers two different cleaning solutions:

RAYTECH® CR CONCENTRATED

CORROSION REMOVING SOLUTION

- Can be used to restore surface appearance on metals
 - Removes tarnish, oxidation, rust, and scale build up.
 - Parts to be cleaned should not have excessive oil – remove bulk oil before cleaning in this solution.
 - For best cleaning action, avoid multiple layers – keep as much space between parts as possible.
 - For best results when cleaning parts with cavities, remove the basket from the unit and load the parts into the basket. Lower the basket into the solution and shake the basket slightly to help dislodge any bubbles that might be present inside the parts.
 - Not recommended for cleaning silver, sterling silver or silver plating.
 - Will effectively clean gold jewelry, but avoid immersion of gemstones in the solution as they may be damaged by the solution or sonic energy or both.
 - When starting with a new batch of parts and new cleaning solution preheat the solution and run the ultrasonic for 5 minutes to “degas” the solution. Dissolved gas in the solution can diminish the ultrasonic energy. Once degassed, it is not necessary to degas again until the solution is changed.
 - Discard the solution when it becomes highly discolored or murky. Rinse the unit with clean water before recharging.
 - Do not mix with other cleaners or chemicals.
- (Caution- removes bluing from steel, coated surfaces can be damaged by excessive ultrasonic action)

RAYTECH® GP CONCENTRATED

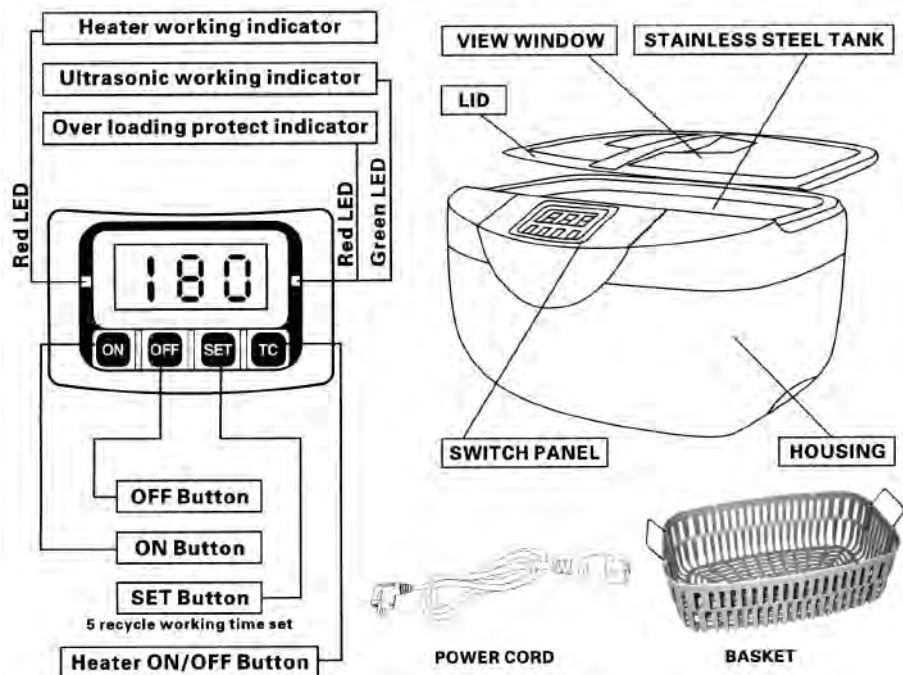
GENERAL PURPOSE CLEANING SOLUTION

- Can be used as a general purpose cleaner for most metals
- When cleaning aluminum, keep the use of the sonics to the minimum time needed. The part(s) can be allowed to soak (no sonics) to help in decreasing the time required for sonic cleaning. Aluminum can be damaged by excessive sonic energy.

- Designed to clean oil, grease, and grime buildup on parts.
- Not recommended for cleaning silver, sterling silver or silver plating.
- Avoid cleaning jewelry, particularly gemstones in this cleaning solution.
- Will provide limited corrosion protection – after cleaning, do not rinse the part(s). The part(s) should be properly drained and allowed to air dry. Not meant as a long term inhibitor – part(s) should be oiled for long term corrosion protection.
- When starting with a new batch of parts and new cleaning solution, preheat the solution and run the ultrasonic for 5 minutes to “degas” the solution. Dissolved gas in the solution can diminish the ultrasonic energy. Once degassed, it is not necessary to degas again until the solution is changed.

(Caution: can cause discoloration on aluminum and pitting when used for extended periods of time)

FEATURES AND ACCESSORIES:



OPERATING INSTRUCTIONS

- Open lid by pulling straight up.
- Follow instructions on cleaning solutions for proper mixing ratios.
- Add water or water and cleaning solution but do not exceed “MAX” fill line, taking into account that when items and basket are placed in tank fluid level will rise.
- Fluid should cover surface of items being cleaned.
- Do not overlap items that may scratch.
- Never let items come in contact with tank.
- Plug the power cord into side of unit and then plug unit into wall.
- When unit is first powered up the 180 second (3minute) cleaning cycle will appear. Pressing the “Set” button will display the next highest cleaning cycle, all the way up to 480 seconds (8 minutes).
- A short 90 second (1 minute 30 seconds) cleaning cycle at the end of the menu will appear, this option may be used as a rinsing cycle with plain water and the heat setting to remove any leftover cleaning solution or if the desired cleaning result has not been achieved and a full 180 second(3 minutes) is not needed.
- Using the “Heater” function; Pressing the TC button on the unit turns on built in heating unit. The red LED will illuminate on the left side of the display. The water will heat to 65 degrees Celsius (approximately 150 degrees Fahrenheit) in approximately 20 to 30 minutes.

Hint: By using warm water the heating time will be decreased and your cleaning cycle can start sooner.

- Once the unit has been filled with desired fluids place items to be cleaned in basket. Then slowly insert basket into tank and shake it slightly to dislodge air bubbles. Replace cover. You may press the “SET” button to choose your desired cleaning cycle.
- Press the “ON” button to start your cleaning. You will hear a “BUZZ” sound from the machine. This means it is working. The timer will count backwards showing you how much cleaning time is left for the chosen cycle.
- Pressing the “OFF” button will pause the cleaning cycle. It does not turn off the power to the unit. You must unplug the unit from the wall to power off!!!
- When cleaning cycle is finished, unplug and open lid.
- Remove basket carefully remembering that if you used the “HEATER” function water will be HOT. Tip the basket side to side over the tank as it is removed from the solution. This will help to pour out any trapped water or solution in the parts. Place basket on some sort of moisture absorbing material (paper towel, shop rag).
- Parts should be rinsed in clean water before continuing. A bucket with clean water may be used to dunk basket and rinse parts. Shake basket over bucket to help in removing excess water and cleaning

solution. You may speed up the drying process by utilizing a hair dryer or compressed air. Caution do not use any heat source that will overheat the parts.

- The unit is also equipped with overheating protection. If “ON” button is pressed and the red LED illuminates and no “BUZZ” is heard overheating has occurred, let unit stand for 15 minutes before using again.
- Do not turn unit on without any fluid in cleaning tank!!!
- Pour water out following the solution manufacturer’s disposal instructions and wipe tank clean.

USER MAINTENANCE

- Unplug and empty unit after using. Do not store water or cleaning solutions in cleaning tank for any long periods of time.
- Keep unit in cool dry location.

WARRANTY/REPAIR POLICY

Your Raytech Product has been produced under rigid standards of manufacture and inspection. However, if your Raytech product is found to be defective in material or workmanship within one year of delivery to the first retail purchaser, we will repair or replace it without charge.

If you require service under this warranty, please contact Raytech for a return authorization. Return the complete item along with a letter of explanation, including your complete name and address, freight prepaid to the factory at the address listed below, be sure to write the RMA number on the outside of the package. Your Raytech product will be repaired or replaced and returned to you within 30 days of our receipt. In making any return of a Raytech product to the factory, please be sure it is packaged with proper care to protect it from damage in transit.

We are sorry, but our warranty cannot apply to a defect which results from misuse, abuse, neglect, accident or improper care, or if your Raytech product has been altered or repaired by anyone other than factory personnel.

If the item is out of warranty and is in need of repairs, the Raytech product should also be returned to the same address listed below. Appropriate charges will apply for parts and labor. Estimates are available only when the item has been thoroughly inspected by our repair personnel.

Raytech IND, Div. of Lyman Products Corporation
475 Smith Street, Middletown, CT 06457
Attn: Service Department

ULTRASONIC APPLICATIONS

Your Raytech Turbo® Sonic Ultrasonic Cleaner offers a new and innovative approach to cleaning small intricate parts. Ultrasonic cleaning is widely used in the industrial, medical, automotive, and firearms industries. Ultrasonic cleaners may also be used for a variety of general purpose applications for the hobbyist and professional alike. It is extremely important when using the Turbo Sonic for uses other than ferrous metals that you use the correct cleaning solution or you risk damage to the item you are cleaning. Raytech offers a special jewelry cleaning solution. Other recommended uses for your Turbo Sonic are listed below. For items questionable about their suitability for ultrasonic cleaning we suggest contacting the manufacturer of the item to determine if ultrasonic cleaning is appropriate for that item.



Jewelry

Recommended for: Gold, silver, platinum, diamonds, sapphires.
Not recommended for: Porous stones such as pearls, opals, rubies, turquoise.
Do not wash oil treated stones in chemicals.
Suggested Directions: 3-5 minutes using Lyman Jewelry Cleaning Solution.
Caution: Silver tarnish must be removed using a silver tarnish remover. It cannot be removed by an ultrasonic using only tap water.

Eye Glasses/Camera Lenses

Recommended for: Eye glasses, sunglasses, camera lenses.
Caution: If cracks exist in coating or glasses, they may become more noticeable after ultrasonic cleaning. Screws may loosen during ultrasonic cleaning.
Suggested Directions: 2 minutes using tap water.

Contact Lenses

Recommended for: Hard contact lenses.
Not recommended for: Soft contact lenses.
Caution: Use saline water.

Watches

Recommended for: Waterproof watches may be submerged in water.
Caution: Use watch stand (supplied with TS-700 Model) to keep watch body above water if not waterproof.
Suggested Directions: 3-8 minutes using Lyman Jewelry Cleaning Solution.

Dentures/Retainers/Mouth Guards

Caution: Use tap water for daily cleaning.
Suggested Directions: 5 minutes using tap water.

Shavers/Razors

Recommended for: Shaver/razor heads can be submerged in water for cleaning.
Caution: Do not submerge electronic parts or motors.
Suggested Directions: 3-8 minutes using tap water.

CD/DVDs

Caution: Use CD stand (supplied with TS-700 Model).
Suggested Directions: 3-5 minutes using tap water.

Firearms and Ammunition Case Cleaning