



# 3.5 Gallon Ultrasonic Cleaner Model E888

(Shown below as cleaner/rinser/dryer system)

**Tank Dimensions:**  
12"L x 10"W x 8"H  
3.5 gallons



**Unit Dimensions:**  
Tank: 12"L x 10"W x 8"H  
Unit: 12"L x 18"W x 12"H

**Power Requirements:**  
120vac, 60hz, 400watts  
Ultrasonic power: 300watts



## Standard Features:

- \*15 minute timer
- \*CPVC ball valve drain 1/2"
- \*All Stainless Steel Construction
- \*RFI Filtered
- \*Continuous Complete Square Wave Ultrasonic Circuitry
- \*Stainless Steel cover include

## Optional Features

- \*Heated Bath with Internal Preset control 200W or 400W adjustable
- \*Integrated Pump Filter Systems
- \*Rinsing Unit Capability
- \*Electronic Timers with Push button start

## ESMA, INC.

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*Tabletop equipment can be manufactured as; pump/filtered cleaners, ultrasonic rinsers, Hot air dryers, spray chambers, heated soaking baths, etc. to form multi-chambered cleaning systems*

**ESMA Warranty**  
\*Lifetime on transducer bonds and weld seams  
\*Two years on ultrasonic power circuit boards  
\*One year unconditional

# ESMA Inc.

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## Instructions for Vale-1-14Q Model E888 Ultrasonic Cleaning Unit with 14 Qt. Tank

### **Introduction**

The VALE-1-14Q ultrasonic unit with ESMA cleaning solutions will effectively handle your cleaning needs. The all-solid state unit is housed in a stainless steel cabinet and carries a one-year unconditional guarantee. The ultrasonic circuit board carries an additional year of guarantee, and the transducer bonds & weld seams have a lifetime guarantee.

The unit features self-tuning with a device for load optimization, potting transducers, modular circuit board, built-in tank drain with valve, and an optional thermostatically controlled tank heater. The unit has a built-in fan for cooling the electronics and an RFI filter to eliminate high-frequency noise feedback. This VALE-1-14Q unit is designed and built to give you years of reliable service, high power, and fast, effective cleaning.

VALE-1-14Q can be combined with model E988 (14 Qt. Ultrasonic rinser) and with model E9881 (Betman Dryer) for a complete system where parts are ultrasonically cleaned, rinsed, and dried. Cabinets for these three models are of identical size and can be permanently fixed together with a supplied joining strip.

### **Installation**

Place unit on bench, preferably close to a sink. DO NOT PLACE THE UNIT ON A TOWEL, PAPER, OR LOOSE FABRICS (the cooling fan draws from the bottom of the unit and these objects will be pulled up against inlet, slowing the air flow and resulting in overheating of electronics).

Fill tank with approximately 6" of liquid. NEVER OPERATE UNIT WITHOUT LIQUID IN TANK.

The unit must be electrically grounded. Connect to a three-way grounded outlet. If you have a 2-wire service, an adapter with external ground wire is necessary. Connect the green grounding wire of the adapter to the screw which holds the electric outlet plate cover to the socket.

**DO NOT OPERATE UNIT WITHOUT PROPER GROUNDING.**

## Operation

The basic principle of operation is the enhancement and acceleration of the chemical cleaning through cavitation created by ultrasonic waves.

Parts to be cleaned are placed in rack (basket) and rack is positioned into the ultrasonic tank. Never place parts directly on bottom of tank (tank could eventually be perforated).

1. Heater – If unit is supplied with heat (optional), the heater switch, located on lower left of unit, will activate heater when turned ON (Red indicator light is ON). The heater is thermostatically controlled to keep liquid in tank at approximately 120°F

Timer – Turn timer knob clockwise to desired time to start ultrasonic action. When set time expires, the ultrasonic action is terminated. Green indicator light is ON during cleaning

Never try to remove tank from cabinet. The tank is sealed into the cabinet in order to prevent any liquid from penetrating inside and damaging the electronics.

## Maintenance

Periodically, the ultrasonic cleaning solution in the tank must be changed:

- Unplug unit from 115VAC outlet.
- Drain liquid into a container or sink by opening the valve at the rear of unit.
- After tank is empty, flush out tank and drain it.
- Wipe tank clean and dry.
- Close drain valve and add fresh solution.

The cabinet is made of stainless steel. Clean with a commercially available cleaner for stainless kitchen appliances.

## **Modular Circuit Board**

The VALE-1-14Q Unit model E888 is equipped with a modular circuit board that is easily replaced if a problem occurs. If the ultrasonic action in the tank stops, (and most of it is due to failures occurring in the circuit board) call us and a replacement circuit board will be shipped immediately. This way the need for shipping the unit back for repairs is eliminated, and the disruption is minimal.

The circuit board is replaced as follows:

- Unplug unit from 115VAC outlet and drain liquid from tank.
- Remove screws, which hold back panel to cabinet and lay back panel down.
- Loosen and remove the four wires connecting the circuit board to the terminal connector.
- Circuit board can be removed from back panel by removing four holding nuts.
- Fasten new circuit board to back panel with four nuts. Make sure circuit board is properly spaced from back panel.
- Connect and tighten the four wires to terminal connector by matching colored wires to corresponding color on the terminal block inside the unit.
- Make sure wires from circuit board do not touch fan blades.
- Close back panel (first insert two screws in bottom of panel, then screw tighten cabinet insides).

In case of any questions or problems contact the manufacturer.  
Call 1-800-276-2466.

WARRANTY: One year

Two years on circuit boards

Lifetime on transducer bonds and tank weld seams.