ALFA MODEL C1500

Manufactured by ELVIOMEX Ltd. for ULTIMO STAINLESS PRODUCTS INC.

www.ultimostainless.com

Operating and Installation instructions

CONTENTS

Warranty

3.1

1.	Installation instructions
1.1 1.2 1.3 1.3.1 1.4 1.4.1	Introduction Advantages Installation Installation suggestions Water supply connection Drainage connection Electrical connection
2.	Operating instructions
2.1	Technical data
2.2	Instructions for the dishwasher's regular operation
2.3	Preparation of dishes for washing
2.4	Filling of basket
2.5	Manual filling of detergent
2.6	Rinse-aid dozer
2.7	Starting the washing program - Filling the boiler
2.8	Safety arrangements
2.8.1	Daily operation
2.9	Maintenance / Care / Repair
2.9.1	Unloading dishwasher (dispenser)
2.9.2	Regular maintenance and cleaning works
2.10	Customer service
2.11	Spare parts, Accessories and Components
2.12	Wiring Diagram
2.13	Troubleshooting
3.	Warranty

1. **Installation instructions**

1.1 **Introduction**

This appliance complies with the needs of gastronomy and professional cuisine and is intended for use by professionals familiar with its safe operation

Before using this appliance, please read the operating instructions carefully.

This is the only way to ensure correct operation of the appliance and avoid inconvenience and extra repair expenses.

Keep this manual in a safe place for future reference.

1.2 Advantages

- It is made of Stainless Steel 18/8 304
- Suitable for continuous operation.
- Easy and simple cleaning
- Easy door operation
- Perfect dish and glass washing
- Less environment pollution.
- Economical water consumption
- Very efficient electrical consumption
- Easy to service when necessary

1.3 **Installation**

Check the appliance for any damages during transportation.

The unit should be installed by licensed and approved personnel according to all local codes.

This dishwasher is delivered with water inlet and outlet hoses.

Be sure all electrical supply specifications correspond to information label on machine.

The manufacturer/ distributor is not responsible for any possible damages or risks due to improper connection of this appliance.

1.3.1 Installation suggestions

- Place the dishwasher in the desired location.
- The appliance should leveled. Adjustable feet are provided for this adjustment.

1.4 Water supply connection

ATTENTION: Connection with the water supply should be made according to all applicable codes.

This dishwasher intended for use with a hot water supply but will also operate (at slightly reduced hourly capacity) with a cold water supply.

- The water supply hose/pipe should be ½ or ¾" and terminate in a ¾ NPT fitting. (not garden hose)
- The water supply hose/pipe should be flushed before final connection.
- Minimum flow pressure is 30 PSI (2 bars) and maximum is 75 PSI (5 bars).
- Connect hose supplied with machine to the inlet at the rear of the machine and the ³/₄ NPT fitting on the water supply line.

Note to plumbing installer: If local codes require a vacuum breaker, one must be locally supplied and installed in the supply line.

1.4.1 Drainage connection

Outflow is accomplished by gravity (natural flow) in the C1500. The outlet hose should be connected either **directly** to a floor drain or drain which must not be higher than the level of the outlet at the rear of the machine. An open drain connection or one to a vented drain pipe is recommended

1.5 Electrical connection

The dishwasher operates under specific voltage as noted on the attached Technical Specifications label. Note: A licensed electrician should be used for the connection according to local codes.

A 208 or 230 volt, one (1) phase, 60cy, 50A power circuit is required as unit draws 43A using 2 wire plus ground. **No neutral (115 volt service) is required**. The ground line must be connected at the junction block.

Prepare power line with about 35" (95 CM) of wire with the shielding removed. Install either a $\frac{3}{4}$ " connector or $\frac{1}{2}$ " with $\frac{1}{2}$ x $\frac{3}{4}$ bushings,

Open front control panel by removing two nuts and open inside cover by removing 4 nuts holding cover.

Insert power line in appropriate ¾ hole in rear panel, or if suitable, a ½ connector with bushings can be used, mount connector, and feed wire to front control box terminals. Mounting posts are provided to hold wires with "Tye Wraps". Allow sufficient slack at panel end to allow wire to move when control panel is repositioned to closed,

Connect power line to junction block. Be sure connections are tight

Close control panel cover with the 4 nuts, and close the front panel with the two acorn nuts.

After installation, the dishwasher should be cleaned thoroughly before putting into operation.

2. **Operating instructions**

2.1 Technical data

Power requirements: 208/230 volts, 60 cycles Two (2) wire + Ground Single Phase 43 Amps Water supply: 120F / 50C recommended, Can be used on almost any water supply.

Supply pressure must be between 30 PSI (2 Bars) and 75 PSI (5 Bars)

Drain: Drain should be vented type with connection not higher than outlet pipe of

washing machine, or floor drain

Dimensions: 28" W x 32" D x 56" H (720mm W x 815mm D x 1412mm H)

2.2 Instructions for regular operation

The appliance is intended to clean dishes, cups, glasses, silver, etc. Be sure the items placed to be washed are suitable for dishwashing. Silver should be cleaned of heavy food residues, if not washed right after use. This machine is not intended for use with items which were used with acids, mineral oil, grease, gasoline or colors.

2.3 Preparation of dishes for washing.

For best results avoid allowing food residues to dry. Remove bulk food residues, olive pips, lemon peels, tooth picks, etc., before placing the dishes in the basket.

If washing is delayed, we recommend that you soak dishes and/or glasses which have food residues.

2.4 Loading baskets

Place glasses and cups, with the opening facing down and not piled one on top of the other, in the appropriate baskets. Glasses should not touch each other (damage to glass or stains due to contact may occur).

Plates should be stacked vertically in appropriate baskets and not touching each other.

Place tableware in the supplied plastic basket, with handles downwards or placed freely in a level plastic basket.

In any case, avoid overloading.

2.5 Automatic filling of detergent

Use non-foaming liquid detergent suitable for commercial dishwashers exclusively.

Insert correct detergent plastic line (clear or whitish) in container of detergent.

Prime detergent system by filling wash tank, draining, and refilling two times if the system is not already full of detergent. After priming line, empty machine completely, refill normally and operate several cycles. Verify amount of detergent solution in wash water and adjust mixture using small screw located under white cover on pump between inlet and outlet plastic hoses. (Note: this is a pulse variable pump and not a variable speed unit for superior pump operation and trouble free operation).

Use of detergent and rinse-aid from the same manufacturer/supplier is recommend for compatibility.

2.5.1 Manual filling of detergent

Use only non-foaming detergent suitable for commercial dishwashers.

In the event of non use or malfunction of the automatic detergent injection system, put the detergent suppliers recommended amount directly into the wash compartment tank after the machine has reached its operating temperature,

The correct dosage depends on the water hardness and the amount of dirt on the dishes.

Follow the detergent manufacturer's recommendations.

Less detergent deters good washing results and more detergent usually does not provide better results, but rather more unnecessary consumption and environment pollution.

Do not use granular detergent. Poor results usually occur.

Do not use caustic products. This will void the guarantee

2.6 Rinse-aid "dozer"

Before you perform these adjustments, turn off the power supply.

This model has an automatic rinse-aid dozer for use with a container of liquid rinse aid. It is a round black unit with a chrome adjusting screw in the centre, and is located n the right side of the control compartment.

The dozer is adjusted from the manufacturer's premises at its maximum value for easy initial priming and must be adjusted accordingly (depending on water hardness, water pressure, how dirty the dishes are, and the detergent used).

For initial priming of dozer, during the initial filling of the wash tank, start by switching on machine normally. While the wash tank is filling, during the initialization only, open and close the door in 5 second intervals. Be careful of spraying water. Do this for about 10 times, and the rinse system will be primed. Empty wash tank and fill normally. Operate 2 or 3 wash cycles and machine is now ready to be calibrated or ready for normal use.

To reduce (-) the amount of rinse aid, turn the center screw clockwise. To increase (+), turn counterclockwise. **Note:** this is a 15 revolution adjusting screw to provide fine adjustments as required.

Hint to installing personnel: After priming system by operating machine through several cycles, rotate adjusting screw gently to full closed position (clockwise) and adjust (counter-clockwise) about 7 full revolutions. Empty wash tank and refill with fresh water. Operate for two or three cycles and verify concentration level. Adjust dozer to achieve final desired results.

2.7 **Operation**

- •Check that the pump inlet filter has been placed in the correct position if it was removed for cleaning.
- •Check that the overflow stand pipe is inserted correctly in its outlet.
- •Close door.
- •Turn power switch to 'ON" (switches should now illuminate)
- •The dishwasher will fill automatically.
- •The booster indicator should come on to indicate that the inlet water to the rinse and fill system is being heated to the required rinse temperature (usually 185F/ 84C).
- •When the booster water has reached the correct temperature, the corresponding light switches off and the wash tank light comes on if the wash water temperature is not sufficiently hot (usually 140F/60C).
- •At initial daily start, allow about 10 to 20 minutes for machine to stabilize water temperatures to their proper temperatures. Note: After warm-up, one initial wash cycle should be performed to thoroughly mix soap and water and be sure unit is fully warmed up and ready to wash properly.
- •After initial warm-up, when all heater lights are off, the dishwasher is ready to wash.

 Note: If door is opened during operation, the safety control will turn off the timer. Washing or rinsing will restart from beginning of wash cycle.
- •Open the door, insert the basket with the items (dishes, glasses, etc.) noting that heavy food residue has been removed. (If the automatic soap injection system is not used, pour the proper amount of liquid detergent manually into the wash tank). Close the door.
- •To start the washing program, select the program desired and close the door. The automatic program commences, with the green program indicator light in the program selector switch changing from flashing to steady.

 Note: This unit is equipped with a "positive rinse temperature control and will not advance from wash to rinse unless the rinse water is at the preset temperature (usually about 185F (85C)).
- •When the program is finished, the green program light returns to flashing.
- •Promptly open the door and remove the basket with the clean items. Use caution with hot items
- •Allow to dry.

If, after washing, there are stains from dirt or water spots, the cause may be one of the following:

- •Wrong ratio of detergent to water.
- •Rinsing water with very high mineral content.
- •Improper quantity of rinse-aid.
- •Wrong arrangement of items in the basket.
- •Low water pressure during rinsing.
- •Low water temperature during washing.
- •Clogged or miss-positioned filters.
- •Clogged jets

2.8 Safety.

A door safety switch interrupts the appliance's operation during washing, if the door is opened in error. The pump motor winding has integrated thermal protection which interrupts power supply to the pump, in case of overload or overheating. A thermal safety fuse interrupts power supply in case of booster or wash tank overheating. No technical modifications are allowed in this appliance. The manufacturer is not responsible for any resulting damages due to modifications. The same applies if the appliance is used for any other purpose, except the ones indicated.

Dishwasher Water is not potable.

Use, maintenance, and repair of dishwasher should be performed only by competent and informed persons familiar with this machine.

2.8.2 **Daily maintenance operation**.

- Turn the power switch off.
- Empty the wash tank by removing the overflow standpipe.
- Remove and clean the pump inlet filter and the four sediment filters.
- Rinse the washing compartment to remove any dirt residues.
- Reassemble the parts in reverse order.

The appliance should never operate without the pump filter in place.

2.9 **Maintenance / Care / Repair**

Proper operation and safe use may be ensured only through the correct use of the appliance, as well as the compliance with the operation instructions, the corresponding specifications and the care and cleaning indications.

Notice: Before cleaning or performing any maintenance, other than daily interior cleaning, power and water supply must be turned off. The appliance should never be sprayed with water or high pressure cleaning solution, because any water or solution which may get into the electrical components will affect operation of the appliance as well as present a potential for electrical shock.

No safety systems should be disabled.

2.9.2 Regular maintenance and cleaning works

Depending on local water hardness, the nozzles on the rinse arms should be cleaned regularly. Caution must be exercised to not damage the nozzles.

PAY ATTENTION TO THE CORRECT POSITION OF FILTERS AND WASH ARM INSTALLATIONS AND BE SURE TEFLON BUSHINGS ARE NOT WORN

Clean the appliance with warm water and conventional cleaning aids.

Stainless steel parts should never be cleaned them with "steel wool", wire brush, etc, since even the lightest contacts on the surfaces with steel may contaminate the stainless steel and cause rust formation. Use brushes made of polymer plastic, natural bristles, or thin brass wire. Always keep brush movements in line with grain in the Stainless Steel so that you will not affect the appearance. Finally, rinse with clean water and dry thoroughly.

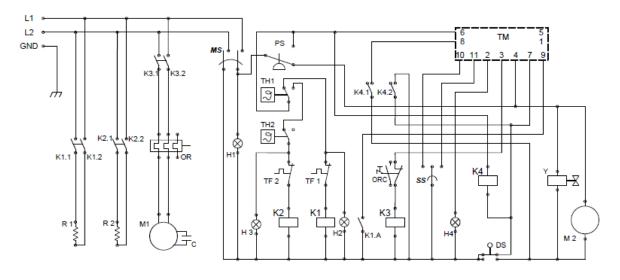
We remind you that corrosion (rust formation) on stainless steel surfaces is not created by itself, but rather due to the use of improper cleaning products (e.g. whitening or particularly caustic cleaning products based on chlorine). Occasionally calcium sediments will form on the internal walls of the dishwasher (due to mineral particles in the water), which may affect the correct operation of the appliance and requiring regular removal.

2.11 Spare parts, Accessories and Components

Spare parts and components are usually available at the authorized local service agency, or directly from ULTIMO STAINLESS PRODUCTS INC, In case of claims or complaints, you must supply the model and serial number of the appliance / machine found on the specification label of the appliance.

For parts references, and due to periodical changes in those references, please visit www.ultimostainless.com

2.12 Wiring Diagram



MS: Main switch ORC: Overload's relay breaking contact OR: Overload relay **ELECTRICAL DIAGRAM** DS: Door switch Program selector switch K1/2/3 : Magnetic contactors M1: Wash pump motor K1.A: Aux contact : Microrelay M2 : Detergent pump motor K4 C - 1500 TURBO : Pressure switch Booster's heating element TH: Thermostat R2 : Tank's heating element Thermofuse : capacitor 220-240 Volt AC 2pH 60 Hz TM : Electronic Timer Indicator lamp : Water inlet valve

Note: Contact Ultimo Stainless Products website for field information on connection and use of machine with 208/230 Volt, 60 Cy, 3 Phase power. www.ultimostainless.com

Timer connection functions,

Terminal 1 not used

Terminal 2 to power pilot light

Terminal 3 output to wash motor contactor K3

Terminal 4 output to rinse water solenoid

Terminal 5 not used

Terminal 6 power line L1 from switch

Terminal 7 power line L2 from door switch or control relay K4.2

Terminal 8 start signal when power removed by K4.1

Terminal 9 rinse advance delay until rinse water up to temperature

Terminal 10 power from wash selector switch 2 minute

Terminal 11 power from wash selector switch 1 minute

2.13 **Troubleshooting**

PROBLEM	CAUSE	SOLUTION
The dishwasher does not	No power to the machine	Check the connection.
operate.		Breaker or fuse has not been
		activated or is faulty
	Control switch S1 not activated.	Turn switch S1 on.
	Switch S1 is faulty	Refer to the authorized service
		agency, local dealer, or Ultimo
	Water seember of terms day	Stainless Products inc.
	Water supply not turned on.	Turn the supply on.
	Door is not closed.	Close the door.
	Water inlet valve is faulty	Refer to the authorized service
		agency, local dealer, or Ultimo
T211		Stainless Products inc.
Fill water runs continuously	Overflow drain stand pipe not	Install overflow drain stand
	installed properly	pipe Verify that overflow drain
		stand pipe is installed properly
		with overflow slots upwards.
The appliance operates, but	The pilot light is faulty.	Change the pilot light.
the green operating pilot light	Wire lead to lamp disconnected	Reconnect power lead
does not illuminate.	Lamp is out of it's socket	Insert lamp
Booster not heating	Switch S1 or main switch or	Check the switch S1 of the
	fuse has not been activated.	appliance and the main switch
		or fuse.
	The booster thermostat is faulty	Refer to the authorized service
		agency, local dealer, or Ultimo
	TI 1	Stainless Products inc.
	The booster 99°C thermal fuse is faulty.	Refer to the authorized service agency, local dealer, or Ultimo
	lauity.	Stainless Products inc.
	Pressure switch is faulty	Refer to the authorized service
	11000010 0 WINGIN 10 110010y	agency, local dealer, or Ultimo
		Stainless Products inc.
	Booster heating contactor is	Refer to the authorized service
	faulty	agency, local dealer, or Ultimo
		Stainless Products inc.
Booster heating operates, but	The pilot light is faulty.	Change the pilot light
pilot light does not turn on.	Wire lead to lamp disconnected	Reconnect power lead
	Lamp is out of it's socket	Reconnect power lead
Wash tank heating does not	The wash tank thermostat is	Refer to the authorized service
operate.	faulty	agency, local dealer, or Ultimo
	The 60°C thermal fuse is burned	Stainless Products inc. Refer to the authorized service
	or defective	agency, local dealer, or Ultimo
		Stainless Products inc.
Pump motor does not operate.	Main switch or fuse is not	Activate main switch or fuse.
- -	activated.	
	The door is not closed.	Close the door.

	Main relay is faulty	Refer to the authorized service
	Main relay is faulty	
		agency, local dealer, or Ultimo
		Stainless Products inc.
	Pump motor is faulty	Refer to the authorized service
		agency, local dealer, or Ultimo
		Stainless Products inc.
	Program timer is faulty.	Refer to the authorized service
		agency, local dealer, or Ultimo
		Stainless Products inc.
Motor operates, but pump	An object has jammed the pump	Refer to the authorized service
does not rotate	impeller	agency, local dealer, or Ultimo
		Stainless Products inc.
	Hard water deposits or detergent	Loosen deposits by rotating
	have been petrified following	screw on rear side of pump
	non operation of the appliance.	motor
Washed items do not dry	Rinse aid supply is empty	Replace or refill rinse aid
(dishes, glasses, etc.)	The state of the s	container
(distres, grasses, ever)		
	Rinse aid "dozer" valve is	Refer to the detergent supplier,
	defective.	authorized service agency,
		local dealer, or Ultimo
		Stainless Products inc.
	Timer is faulty.	Refer to the authorized service
		agency, local dealer, or Ultimo
		Stainless Products inc.
	Rinse arms (upper and/or lower)	Clean nozzles
	do not rotate.	
		Replace Teflon bushings if
		worn. Note: take caution to not
		install rinse arm without
		bushings.

If a problem is not listed or corrected by any of the above, please refer to your local authorized service agency, dealer, or ULTIMO STAINLESS PRODUCTS INC.

3.1 Warranty



PROFESSIONAL DISHWASHERS

Ultimo Stainless Products inc. warrants the product sold to be free from defects in material and factory workmanship under normal conditions of use and maintenance for a period of one year from the date of installation at the end user, but not to exceed fifteen months from date of shipment unless agreed to by **Ultimo Stainless Products inc.** with a written extension.

In the event of a defect in material or factory workmanship covered by this warranty, Ultimo Stainless Products inc. or its authorized representative will authorize repair when notified, and repair or replace the defective part of the equipment that has become defective, and will cover labor and material cost within the warranty period or fifteen months from shipment date, whichever occurs first. Travel charges may not exceed a total of two hours or one hundred and fifty kilometers (one hundred miles). All defective parts must be retained or returned at the discretion of **Ultimo Stainless Products inc.** and warranty claims will be evaluated upon inspection of defective component. Overtime rates, or other sundry charges, must be approved in advance by **Ultimo Stainless Products inc.** or are generally not under warranty.

This unit must be properly maintained and operated in accordance with **Ultimo Stainless Products inc.** maintenance and operating procedures.

Ultimo Stainless Products inc. retains the right, at its own expense, to have its representatives inspect the unit(s) at the end user's premises and to request all records pertaining to such unit(s) to determine whether a defect is the result of defective material, or improper use of the unit.

This warranty does not cover parts or accessories which carry the warranty of an original supplier, or improper uses, which includes inappropriate detergents. It is also voided by improper installation not in accordance with **Ultimo Stainless Products inc.** instructions.

Modification or alterations of this unit from its condition at the date of original sale will void all warranty. Labor charges associated with the replacement of minor items such as, but not limited to, wash arms, switches, pilot lights, gauges, etc. or replacement of normal wear items is not included. Adjustments and/or calibrations are not warranted. **Drain or water supply hoses are not guaranteed.**

Failure due to improper water supply is not covered by this warranty.

This warranty is void if failure is a direct result of improper handling, fire, water, acts of God, insurgencies, and also improper repair or misuse by authorized or unauthorized persons, or improper installation.

This warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether expressed or implied by application of law or otherwise, including, but not limited to, any representation as to performance, and any implied warranties of fitness for a particular purpose,

THIS EQUIPMENT IS INTENDED FOR PROFESSIONAL FOOD SERVICE USE ONLY AND NOT FOR ANY OTHER USE WHETHER FOR INDUSTRIAL, PERSONAL, OR HOUSEHOLD, (UNLESS SPECIFICALLY AGREED TO BY ULTIMO STAINLESS PRODUCTS INC.), OR OTHER UNINTENDED USE, AND SUCH USE WILL IMMEDIATELY CAUSE THIS WARRANTY TO BE NULL AND VOID. THE SALE FOR THESE PURPOSES SHALL BE DEEMED TO HAVE BEEN EFFECTED WITHOUT ANY WARRANTY OR LIABILITY OF ANY KIND, INCLUDING, AND WITHOUT LIMITATION OR REFERENCE TO WARRANTY AS TO SUITABILITY FOR ANY OTHER THAN INTENDED PURPOSE.

Warranty registration must be effected within 30 days of purchase. If installation is delayed, warranty period commencement may deviate if requested by the dealer that the circumstance requires extension of this period. However this must be agreed and confirmed by Ultimo Stainless Products inc.

The best engineers are those who listen to their end users needs and come up with solutions to problems to meet those needs.

In this regard we invite you to suggest improvements, changes, or remedies to make the product the best available in it's field. Your suggestions and recommendations are welcome at the email address below.

THE COMPANY RESERVES THE RIGHT TO MAKE CHANGES OR MODIFICATIONS WITHOUT PRIOR NOTIFICATION.

ULTIMO STAINLESS PRODUCTS INC.

info@ultimostainless.com www.ultimostainless.com 514-481-8665 561-372-5221