ArgoLab Ultrasonic Baths

CE-6200A

Operation and Maintenance Manual



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1 Security Information

1.1 Definitions of warning words and symbols

The safety information in this manual is very important to avoid personal injury, damage to the instrument, accessories, malfunctions or incorrect results due to non-compliance. Please read this manual carefully in its entirety and make sure you familiarise yourself with the device before you start working with it.

This manual must be kept close to the instrument in an easily accessible place, so that that the operator can consult it if necessary.

Always enclose the instruction manual when transferring the device to a third party.

Safety instructions are indicated by warning terms or symbols.

1.2 Reporting deadlines

WARNING for a medium-risk hazardous situation, which could lead to serious injury or death if not avoided.

CAUTION for a hazardous situation with reduced risk which, if not avoided, may result in minor or moderate material damage, loss of data or injury.

NOTICE for important product information.

NOTE for useful product information.

Warning symbols:



Attention

This symbol indicates a potential risk and warns of proceeding with caution



Attention

This symbol draws attention to a possible danger due to **to the electric current.**



Attention

This symbol draws attention to a possible danger from a hot surface.



Attention

This symbol draws attention to a possible health hazard due to contact with the oscillating liquid.



Attention

This symbol draws attention to a possible danger to hearing due to the lack of use of ear protectors.



Attention

The instrument must be used according to the instructions in the reference manual. Read the instructions carefully.



Notice

This symbol draws attention to possible damage to instruments or instrument parts.



Notes

This symbol highlights further information and tips.

1.3 Basic requirements for s a f e use

The proper functioning of the instrument and the safety of the operator are only guaranteed if all the following points are observed:

- The device may only be used for the purposes for which it was constructed and only in accordance with the specifications mentioned in this manual. Any other use may result in serious damage and consequences.
- The instrument must only operate under the environmental conditions described in this manual.
- The mains plug must always be freely accessible. Pull out the power plug or disconnect the power supply in an emergency.
- The instrument may only be connected to properly earthed sockets using the supplied power cord.
- Check that the electric power and the frequency match the values indicated on the instrument's identification label.
- The device must not be opened by the user for any reason. Only perform this operation if explicitly authorised to do so by the manufacturer.
- Do not use unsuitable disinfectants or detergents.
- Do not expose the bath to corrosive influences.
- Only move the ultrasonic bath when it is empty.
- Only empty the tank when the bath is switched off.
- Do not meet oscillating liquid during operation, this could cause damage to health.
- Wear ear protection when standing for prolonged periods in the immediate vicinity of the device.
- Do not operate the bath without liquids inside.
- Do not place objects on the bottom of the tank without using the basket.

1.4 Unauthorised use

The instrument must not be operated if:

- It is visibly damaged (e.g. due to transport);
- It has been stored for a long period of time under adverse conditions (exposure to direct light, heat sources or in places saturated with gas or vapours) or in environments with conditions other than those mentioned in this manual.
- For structural reasons and due to environmental conditions, this instrument is not suitable for use in a potentially explosive atmosphere or in environments where explosive substances are worked on.

1.5 Responsibility of the instrument owner

The person who owns and uses the instrument or authorises its use by others is the owner of the instrument and as such is responsible for the safety of all users of the instrument and third parties.

The owner of the equipment must inform users on how to use it safely at their place of work and to manage potential risks, as well as provide the required protective equipment.

When using chemicals or solvents, follow the manufacturer's safety data sheets.

In the following cases, the protection provided for the bathroom may be impaired. Liability for personal injury and damage to property rests with the user if:

1.5.1 The instrument is not used in accordance with the operating instructions.
1.5.2 The device is used outside the field of application described here.
1.5.3 The instrument is used with accessories or consumables not recommended by the supplier.
1.5.4 The bathroom was serviced and repaired by a person not authorised by the supplier.
1.5.5 The user makes unauthorised modifications to the device.

2 General Warnings



	Observe general safety warnings. This product should only be used by qualified personnel.
	Do not use the instrument more than 30 min continuously and wait at least 30 min before next use, otherwise the life of the ultrasonic bath may be reduced. Do not block or restrict ventilation slots.
	This instrument is intended for ultrasonic cleaning of objects immersed in liquids only. **Do not use this instrument without liquid.**
	Connect this unit to a grounded electrical outlet! Do not dismantle the unit! Maintenance must only be carried out by authorised personnel! Use this product on a stable, dry work surface! Disconnect the power cable in case of malfunctions!
	Do not use the unit with flammable material!
	Do not use acid or chlorine materials in the stainless-steel tub. Do not place objects directly into the tub but use the basket!
	Do not touch the liquid when operating the instrument. Do not move the tub, basket, objects, lid or accessories during operation.
	Ultrasonic cleaning can produce disturbing noises. However, within the tolerance ranges established by current regulations. Use personal hearing protection.
	Exclusion of liability: The manufacturer cannot be held liable for damage to persons, machines or cleaning objects caused by improper use and failure to observe the operating instructions. The operator is responsible for the instructions of the operating personnel. If you have any questions, please contact the supplier.
	Before filling the tank, make sure the ultrasound is switched off. Only use distilled or deionised water.
	Do not pour boiling water into the tub.
	Water without any kind of additive is not suitable for ultrasound treatment. Giorgio Bormac recommends the use of the Mucasol preparation.
	The filling level must still reach or slightly exceed the appropriate operating level indication. If the level is lower, there is a risk of damage to the ultrasonic bath.
	Do not use flammable liquids (e.g. petrol, solvents) and no chemicals that contain or release chloride ions (some disinfectants, household cleaners and dishwashing detergents) for ultrasonic treatment in the stainless-steel tank.

⚠	When working with aggressive preparations in the collecting vessels or suspension tanks, avoid splashing in the contact liquid or on stainless steel surfaces, if necessary, replace the liquid immediately. contact, clean the surfaces and dry them.
⚠	If preparations are used, the safety instructions in the respective product information must be strictly adhered to.
⚠	Replace used ultrasound treatment fluids, do not refill.
⚠	Ultrasound can damage sensitive surfaces when operated for an extended period and especially when operating at low wash frequencies.

3 Intended use 

Ultrasonic baths are intended for the ultrasonic treatment of aqueous liquids.

They work based on low-frequency ultrasound and their uses are manifold. The main use is the intensive but gentle cleaning of objects of different shapes, sizes and types. Alternatively, it is possible to support and accelerate chemical processes in the ultrasonic bath e.g. in test treatment and preparation.

Ultrasonic treatment always takes place in conjunction with a suitable preparation that is poured into the bath liquid. For proper use, it is also necessary to have at least a basket or other receptacle in which to place objects during ultrasonic treatment. This is the only way to ensure optimal ultrasonic propagation.

The ultrasonic bath is fed from the side of the instrument, and operation usually takes place on a table.

The CE-6200A ultrasonic bath is used for a variety of applications and fields, listed below:

Jewellery	Dental / surgical instruments
Pens / Nibs	Laboratory glassware
Watchmaking	Nozzles
Calligraphic pens / nibs	Hypodermic needles
Lenses and others optical components	Printed circuits

4 CE Compliance

The CE-6200A digital ultrasonic bath fulfils the CE marking criteria of the European Union.

5 Warranty

Thank you for purchasing a CE-6200A ultrasonic bath. Under normal conditions of use this instrument is guaranteed for a period of 24 months from the date of purchase.
The guarantee is only valid if the purchased product remains original.
It does not apply to any product or parts thereof which have been damaged due to incorrect installation, improper connections, misuse, accident or abnormal operating conditions.
No liability is accepted for damage caused by use not in accordance with instructions, lack of maintenance and any unauthorised modification

6 Unpacking the instrument

Carefully unpack the ultrasonic bath and accessories and check the integrity of the components and any presence of transport damage. If damage or defects are discovered, notify the appointed courier and to the retailer.
Note: When sending the instrument for repair, the user is obliged to pack it in its original packaging and if this is not available, to pack it appropriately for transport.
Any damage caused by inappropriate packaging will not be covered by warranty.

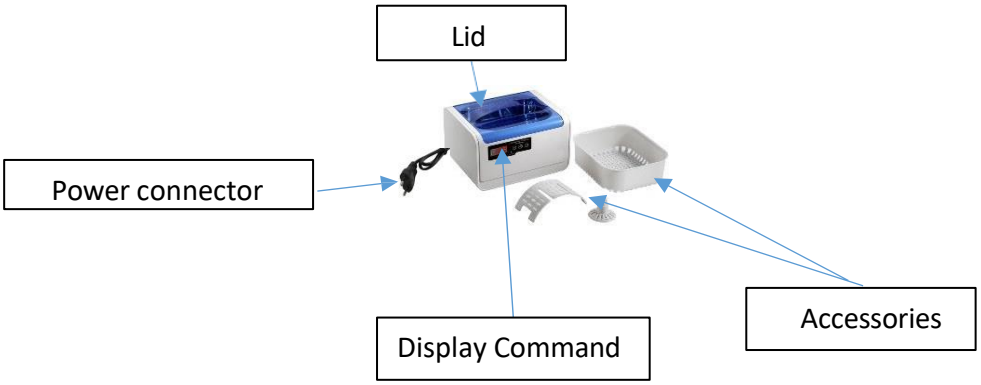
6.1 PACKAGE CONTENTS

	
Ultrasonic bath and accessories	User's Manual

7 Operating principle

The ultrasonic cleaning process consists of creating high-frequency waves in a tank containing water and detergents. The vibration waves propagate uniformly throughout the entire volume of the tank, reaching the surface of the objects to be cleaned, forming compression and decompression waves that give rise to 'micro-bubbles' (cavitation), which implode reaching very high pressures. This phenomenon favours the detachment of dirt from submerged objects.

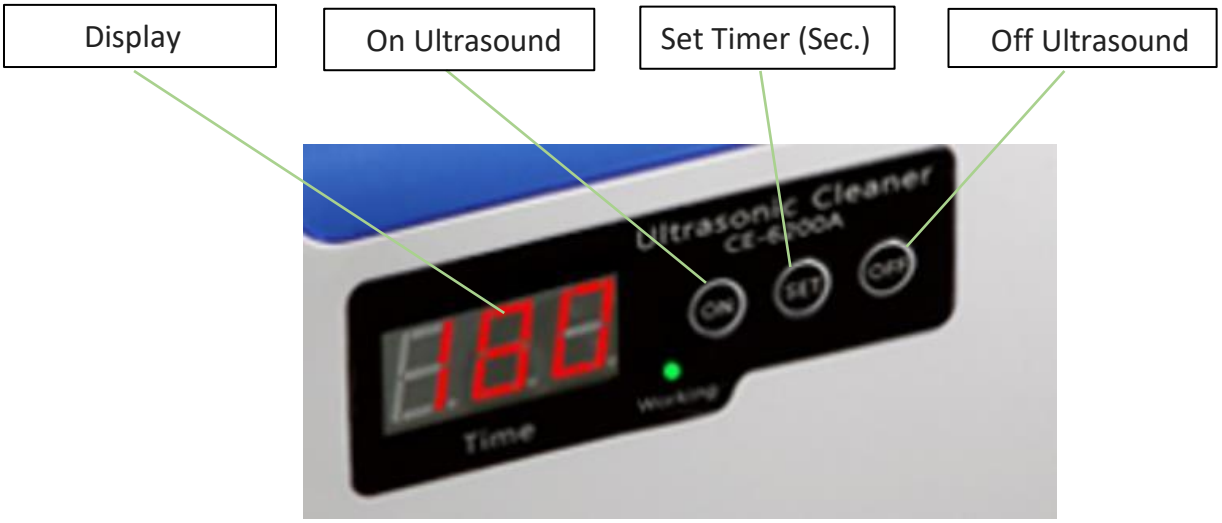
7.1 Instrument parts



8 Technical specifications

Features	CE-6200A
Capacity (L)	1,4 L
Max. temperatures (°C)	-
Timer (Sec.)	90 - 180- 280 - 380 - 480
Power control	-
Ultrasound power	70 W
Ultrasound frequency (kHz)	42
Power supply	220- 240 Hz, 50 Hz
Tank size (L x W x H) mm	175x135x70
Tank material	Stainless steel SUS 304
Housing material	ABS
Unit size (L x W x H) mm	225x85x160
Weight	1,55 kg

9 Display and Control



8.1 Setting the timer

1. Press the SET button to set the desired time (90 - 180- 280 - 380 – 480) sec.

8.2 Start/Stop cycle

1. Press the ON button to start the cycle

2. Press the OFF button to end the cycle

10 Care and maintenance

	Maintenance or repair work may only be carried out by specialised and authorised personnel. Disconnect the power cable before carrying out maintenance work! Do not immerse the device in water! For repairs, contact the supplier of the product. The manufacturer accepts no liability for any damage caused by unauthorised tampering. It is recommended to keep the supporting surface and body of the instrument dry to avoid electrical injuries and damage to the device.
	Deposits in the stainless-steel tank must be removed frequently and gently using non-abrasive objects. Remove especially abrasive particles left behind by previous cleaning processes. Replace cleaning fluid and cleaning agent if necessary. Do not keep the ultrasound switched on when the cleaning cycle is finished.

	The instrument can be cleaned with a mild detergent or limescale remover Do not use harsh detergents or abrasive objects.
	If the instrument is used in the medical sector, it is necessary to disinfect the tank and surfaces regularly for hygienic purposes (use surface disinfectants).

11 Cleaning processes 

Observe all national safety regulations that may apply to the following instructions.
The operator is responsible for controlling the cleaning result.
Contact with fluctuating liquids could cause damage to health. Do not put your hands in the liquid. Set the cleaning time and switch on the ultrasound. Check the result and repeat the cleaning process if necessary.
Rinse objects if necessary.

12 Troubleshooting Guide

Defect	Possible causes	Resolution
The instrument does not switch on	Supply voltage missing Power cable damaged Electronic component failure	Check that the power cable is not damaged and that the socket is supplied with mains voltage Contact the supplier's technical support.
Ultrasounds do not work Noisy ultrasounds Weak ultrasounds	Electronic component failure Insufficient water level	Fill the tank with distilled water to the 'Operating level'. Contact the supplier's technical support
Unsatisfactory washing result	Missing or inappropriate detergent Insufficient washing time	Add or replace detergent. Repeat the interval or increase the washing time.
Missing instrumental functions	Electronic component failure	Contact the supplier's technical support

13 Disposal of electronic equipment

	This equipment is subject to regulations for electronic devices. Dispose of in accordance with local regulations. Illegal disposal of electrical and electronic equipment is punishable by an administrative fine.

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