



Technologies®  
**EMAG**

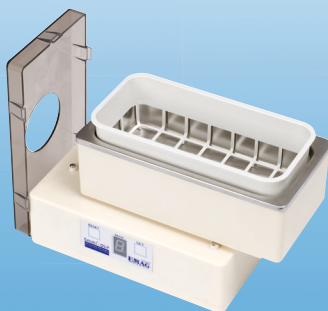
## OPERATING INSTRUCTIONS

### Emmi-04D, Emmi-05P, Emmi-D21

THE NEW GENERATION OF DIGITAL ULTRASONIC CLEANING EQUIPMENT

- Simple operation by ON / OFF switch
- Excellent cleaning efficiency with pure water

**\* NICE DESIGN - PRACTICALLY - HIGH EFFICIENCY \***

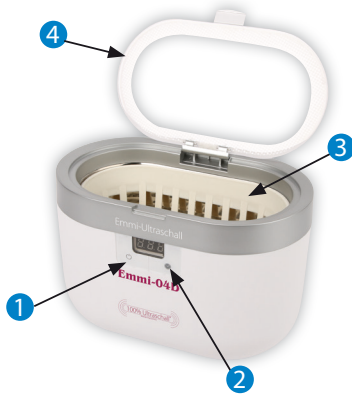


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DIN EN ISO 9001:2008



# 1. PRODUCT DESCRIPTION

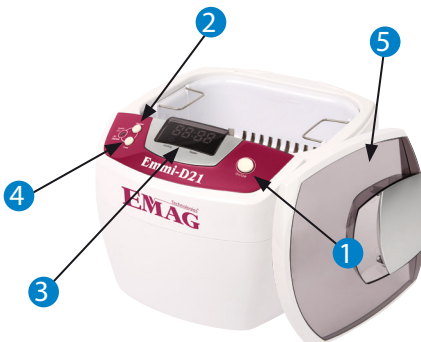
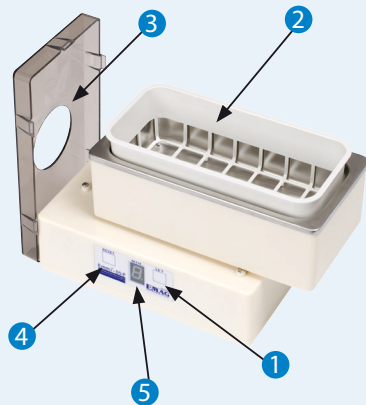


## 1.1 Emmi-04D

- 1. Start/Stop
- 2. Timer
- 3. Plastic basket
- 4. Plastic lid with hole for glass beaker

## 1.2 Emmi-05P

- 1. Start and timer
- 2. Plastic basket
- 3. Plastic lid with hole for glass beaker
- 4. Stop for cleaning time
- 5. Digital timer display



## 1.3 Emmi-D21

- 1. Start/Stop
- 2. Heater
- 3. Digital timer display
- 4. Timer
- 5. Plastic lid with hole for glass beaker

## 2. TECHNICAL DATA

	Emmi 04D	Emmi 05P	Emmi D21
Volume (l)	0,6	0,5	2,0
Dimensions Tank (mm)	160x90x50	175x80x40	185x150x80
Power Supply	230V~/ 50 Hz	230V~/ 50 Hz	230V~/ 50Hz
Protection Class	IP 20	IP 20	IP 20
Max. Power (W)	max. 50	max. 50	max. 80
Timer (Min.)	90-180-280-380-480 sek.	1 - 9	5-10-15

Technical changes reserved!

### Important Notes

- The equipment must ONLY be operated with the supply voltage indicated on the type label on the bottom of the equipment.
- The equipment is not suitable for permanent operation.
- The ultrasonic equipment must only be operated with sufficient water filling (approx.  $\frac{3}{4}$  of the tank volume shall be filled with water which is approx. 1 cm under upper tank rim).
- It is normal that the upper rims of the tank warm up during operation

### Operating Instruction

Fill tank with water and connect power connector with main source. For efficient cleaning of your goods we recommend to use certain of our cleaning adders (please refer to below listing of cleaning adders).

For the cleaning of looking glasses and prosthesis please use the inlet basket (2).

By pushing the ON switch (1) the cleaning operation can be started. The duration of cleaning depends on the kind of dirt on the goods to be cleaned. When operating a blue LED lights up and indicates the operation of the equipment. After approx. 7 minutes the equipment stops automatically. If you wish to stop the equipment earlier please push the OFF switch.

After termination of the cleaning remove cleaned goods from the tank and shortly wash them up under running water in order to remove dirt particles, which may still stick to the goods.

After termination of the one or more cleaning cycles it is recommended to empty the tank, to wash up the tank and to dry it with a cloth. Please make sure that no water can penetrate into the equipment through the slots in the bottom of the equipment.

### Important:

Please, note that when the tank is filled with fresh water - depending on the degree of hardness of the water - a certain operating time for the out gazing of the water shall be considered. The best efficiency is achieved when using out gazed or distilled water.

If no distilled water is available, please operate the equipment filled with water for approx. 5 to 10 minutes before putting goods in for cleaning.

### 3. CLEANING CONCENTRATES

#### Examples of goods to be cleaned with an ultrasonic bath

- Jewelry, looking glasses, components of hearing aids
- Indian ink pens, drawing equipment's and accessories
- Dentures, prosthesis, braces
- Razor heads, precision engineering parts, weapon parts, cartridges, springs

#### Cleaning adders

For the individual items to be cleaned individual cleaning adders are available which make cleaning more intensive and efficient. You can buy these cleaning adders from the source where you have bought your equipment, or you may buy it under [www.emag-germany.de](http://www.emag-germany.de).

We recommend for the individual applications the following highly concentrated adders:



**EM 070** -for dental applications in laboratories, or at home, 1%.

**EM 080** - looking glasses, jewelry, optical glasses, ink pens, ball heads, small tools and instruments, smallrecision engineering parts, razor heads etc. (except contact lenses).

**EM 100** - de-oxidation concentrate for silver.

**EM 200** - Disinfection concentrate for instruments etc., 1%.

**EM 202** - Recommended for: Lime, rust, silicate, metal oxide, phosphate 5%.

**EM 300** - Super plus - extreme cleaner for difficult cases (i.e. settings, sockets, shells, weapon parts, brass), 1%.

**EM 303** - Super, cleaner for printed circuit boards, 1 to 5 %.

**EM 404** - special cleaner for aluminum and cast iron (carburetor, motors etc.), 1 to 5%.

**EM 600** - Recommended for: Color mist, fats, oils, pigments, wax 1-10%.

**EM 700** - Recommended for: Contaminations, anti oxidizing 5%.

If above adders are used please observe application notes!

If cleaning adders of other manufacturers are used we cannot take any liability for the cleaned goods.

For detailed information you can contact us at any time.

## 4. WARRANTY

Warranty period for this product is 24 months – from date of purchase.

Defects occurring during the warranty period due to material or production failures will be corrected free of charge, either by repair or by replacement. In accordance with the applicable laws other compensation entitlements are excluded.

Warranty will be void in cases of opened products, physical damage, misuse, modification, repair by unauthorized persons, carelessness and using the product for other purpose than its intended use.

In any warranty case repair or replacement will not lead to an extension of the warranty period.

In case of unjustified complaints, i.e. due to wrong installation or wrong operation we reserve the right to charge the costs occurring to us. For demands of warranty it is necessary to keep the purchase receipt showing the purchase date. In order to allow quick handling of warranty cases you should send the defect product directly to the below address, postage paid. By logistical reasons we cannot accept any shipment with postage not prepaid.

Thank you for your cooperation.

EMAG AG  
Gerauer Str. 34, D-64546 Moerfelden-Walldorf  
Tel.: +49 (0)6105 - 40 67 00  
[www.emag-germany.de](http://www.emag-germany.de)

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