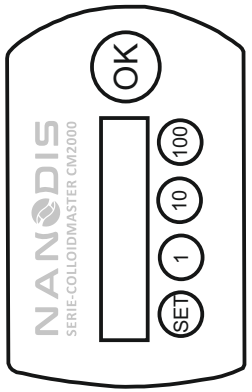
NANODIS

Serie COLLOIDMASTER

Universal Kolloidgenerator

CM2000



HOT-LINE (+49) 038231 666 274

MADE IN GERMANY

NANODIS GmbH & Co. KG
D - 18356 Barth Gewerbegebiet am Betonwerk 35/37
WEB:www.nanodis.de Mail: info@nanodis.de

Intended Use

The CM2000 is used to produce dispersions by electrolysis with water and metal electrodes. Depending on the electrode metal used, produce appropriate dispersions. Only use metals with at least 99.95% purity and preferably double distilled Water. Do not use any solvents or liquids containing alcohol.

Function of the CM2000

Your CM2000 runs a self-test before each use through. The concentration is calculated according to the 1st Faraday law of electrolysis. Your CM2000 works with CMT and true-ppm - Technology. NOTE: Colloid generators can basically no possibly existing colloid concentrations, e.g. in a purchased dispersion. At the electrodes is after starting the CM2000 a voltage of approx. 50 V DC on. This is unsafe for the human body Dangerous but can in contact with moist skin produce a startle reaction.

colloids

Due to the voltage and current flow through it water, colloids (particles) detach from the metal electrodes off. The colloids have different Average sizes from 1 - >100nm. The colloids are electrically charged, collide mutually and thus float in the water. A fresh The dispersion produced should always be filtered off. A coffee filter or kitchen paper is sufficient for this. paper towel off.

durability

Manufactured dispersions are usually 6 months and longer usable. In the course of the storage time, a form sediment. Just filter this out. The dispers sion can then continue to be used.

preparation

For the successful production of dispersions, acidic more material necessary. Clean your vessel and rub your electrodes with a paper towel away. Fill your vessel with double-distilled water (room temperature). You don't need the water beforehand boil. NOTE : Especially with homemade water (Osmosis system or distillation) it may happen error message "DENDRITES! SWITCHING TIME SHORTER". Shorten the switching time or please use test bought water.

Make settings see page 2

Your CM2000 is configured with basic settings (see right). delivers. You can adopt these (experience) values or change. Changed values are automatically saved and the next time you use your CM2000 automatically table called.

conductivity

After each start, your CM2000 measures the conductivity of the water and shows you this in µS.

Tip: Especially for the production of colloidal gold Water with high conductivity required.

Note: The principle of measuring the conductivity of your CM2000 deviates from normal conductivity meters away. For a specific measurement of the conductivity use please copper or gold electrodes.

The conductivity of the water influences the product tion speed, but not the concentration.

Protection against dendrites

Your CM2000 is equipped with a protection function against dendrites equipped. These are caused by the formation of electrode sludge. If dendrites have formed, your CM2000 switches automatically into PAUSE mode. Then clean the electrodes with kitchen paper paper towel, then insert the electrodes into the Water back and press the OK button. Production continues automatically.

A NOTICE

When production starts, your CM2000 shows you the error message "DENDRITES !.....", the conductivity bility of your water is too high. Please use a different water.

Modulation of the electrode current

A specially developed by COLLOIDMASTER/NANODIS your CM2000 with frequencies or audio signals and their dispersion with these be informed by these signals. Optional is from NANODIS the frequency generator CM WAVE, or that Connection module CM CONNECT available. In the CM WAVE are healing frequencies according to RIFE, BECK, CLARK, among others, and can be used with the CM2000 be used. With the CM CONNECT you can Your own audio source, e.g. Use MP3 player. For information on effectiveness, please refer to the Internet. Keyword "Inform water, energize water"

Alternative energy supply

You can also connect your CM2000 via the USB port connected to a (solar) power bank.

Basicsettings for a new device

Silber Ag
Volumen: 250ml
Konzentration: 25ppm
Strom: 10mA
Umschaltung: 10 Sek

Kupfer Cu
Volumen: 250ml
Konzentration: 20ppm
Strom: 10mA
Umschaltung: 60 Sek

Magnesium Mg
Volumen: 250ml
Konzentration: 100ppm
Strom: 20mA
Umschaltung: 60 Sek

Gold Au
Volumen: 250ml
Konzentration: 20ppm
Strom: 30mA
Umschaltung: 60 Sek

Chrom Cr
Volumen: 250ml
Konzentration: 10ppm
Strom: 50mA
Umschaltung: 120 Sek

Eisen Fe
Volumen: 250ml
Konzentration: 10ppm
Strom: 30mA
Umschaltung: 120 Sek

Silizium Si
Volumen: 250ml
Konzentration: 20ppm
Strom: 5mA Maximal
Umschaltung: 120 Sek

Germanium Ge
Volumen: 250ml
Konzentration: 30ppm
Strom: 50mA
Umschaltung: 120 Sek

Zink Zn
Volumen: 250ml
Konzentration: 20ppm
Strom: 50mA
Umschaltung: 120 Sek

You can find production tips here of colloidal dispersions !

HANDBUCH DER KOLLOIDALEN METALLE

von Ralf Kuhn
ISBN 978-3-86445-587-2

Keep the device away from children - Risk of injury !

Water recommendation

Depending on the electrode metal, it may be advantageous to use water with higher conductivity. Silver and magnesium e.g. when in contact with water conductive ions and make the water go away made of conductive. Gold and copper do not. here conductive water is recommended, e.g. "ION+" or "Gold base water" is a dispersion with several ppm to produce promptly (not to be used with silver electrodes). Medically pure water (for infusion ions or eye drops) is extreme because of its low conductivity not recommended. To make colloidal silver, use please use distilled or double-distilled water or also osmosis water, with a conductivity up to 10µS.

TDS meter

With a TDS meter, colloid concentrations cannot functions can be measured.

Technical specifications

Power supply..... 100-240V 50/60Hz max. 12W
CM2000..... 5V max 5W
Electrode voltage..... 15-50 volts
Electrode current..... .... 5-50mA
Electrode diameter (without adapter)..... 2mm
amount of water..... ..... 0.1-0.99L
switching time..... .. 0 sec- 10 hrs

DECLARATION OF CONFORMITY

We NANODIS GMBH & Co. KG

Address Gewerbegebiet am betonwerk 35
D-18356 Barth, MV

declare under our sole responsibility that the product with the label

CM2000

conforms to the following standards and regulations

EMC Directive 2004/108/EG
EN61000-6-3: 2007
EN61000-6-1: 2007

The device was designed according to the RoHS directives 2001/65/EU manufactured.

Manufacturer Ralf Kuhn, Managing Director

NANODIS GmbH & Co. KG
(formerly COLLOIDMASTER / KOLLOIDE24)
Gewerbegebiet am Betonwerk 35
D-18356 Barth, MV
Tel: (+49) 038231 666 274
Web www.nanodis.de
Email info@nanodis.de
WEEE 63332832

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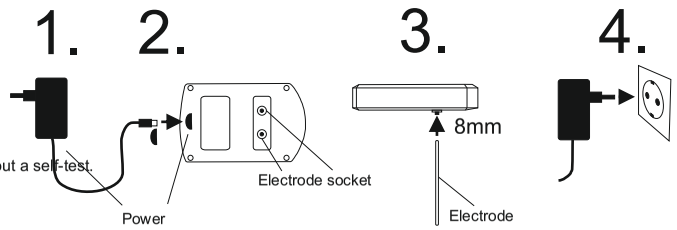
Installation

1. Connect the small USB connector to your CM2000.
   Make sure it is plugged in the right way round.

2. Now insert the electrodes of your choice boldly, with a slight back and forth twisting motion, into the sockets at the bottom of your CM2000. They must be inserted approx. 8mm, otherwise the Danger of falling out during operation.

3. Plug the power cord into the power outlet. After a short welcome text, your CM2000 carries out a self-test.

   It tests voltage, current and switching and confirms perfect function with a triple beep.

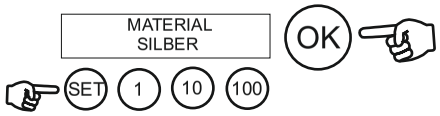


NOTE Only put the device with the electrodes into the water AFTER THE SELF-TEST, otherwise the error message "No voltage" will be displayed.

IMPORTANT: Remove electrodes from the device after use!

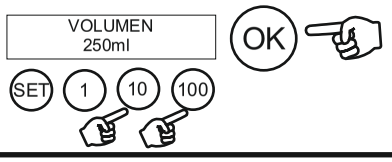
5. MATERIAL SELECTION

Repeatedly press the SET button until the desired metal appears on the display.
Or accept the metal shown.
Then press the OK button.



6. QUANTITY OF WATER

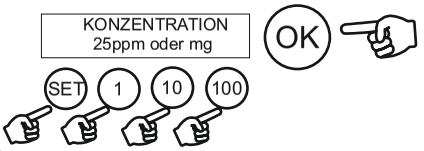
Select the amount of water used (volume). You can use them in 10ml - increments between 10ml and set 990ml. Ideally, there should be a gap between the water surface and the electrode sockets. stand from 5 - 10mm. The electrode sockets must not be immersed in water.
To do this, press the 10s and 100s keys or accept the default value.
The digits are counted up each time a button is pressed and start again at 0 after 9.
Then press the OK button.



7. CONCENTRATION
NOTE: In practice, colloidal SILVER can only be produced up to approx. 100ppm (recommended 50ppm)
To produce colloidal GOLD you need a water conductivity of at least 10 µS (see point 10)

Select the desired concentration in ppm OR mg by pressing the SET button.
Then press the 1, 10 and 100 keys or accept the default value.
NOTE If you select the concentration in ppm, your CM2000 calculates the concentration depending on the volume of water, in mg / liter. If you select the concentration in mg, your calculates CM2000 the entered value in mg (milligrams), regardless of the water volume. This choice has

following advantage: If you want to use 100mg of magnesium, for example, your CM2000 calculates the amount of metal released from the electrodes into the water. In this example, the CM2000 then releases 100mg of magnesium into the water, regardless of how much water you use.
NOTE : Production times may be significantly longer in mg mode.
Then press the OK button.

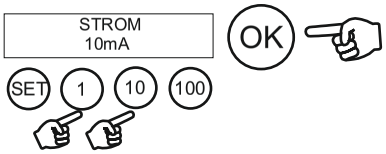


8. ELECTRODE CURRENT (mA = milliamps)

Select the desired electrode current. This can be set in 5mA steps.
A maximum of 50mA is recommended. A higher current is only possible with plate electrodes and 1 liter of water sensible. The higher the electrode current selected, the lower the switching time should be.
See point 9.

NOTE : For silicon electrodes please choose max. 5mA !

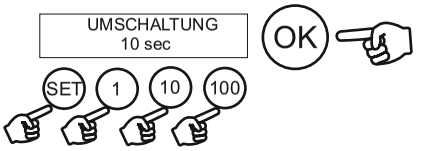
To do this, press the 1 and 10 keys or accept the default value.
Then press the OK button.



9. ELECTRODE SWITCHING

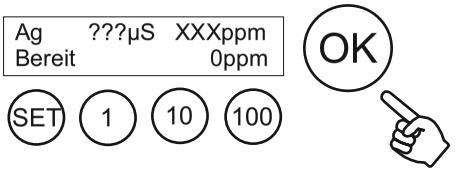
Now select the desired switching time of the electrodes. By switching, the electrodes evenly worn and dendrite formation avoided.

By pressing the SET button you can choose between seconds, minutes and hours. Press then the 1s, 10s and 100s button to set the time or accept the previous given value. For SILVER, select an electrode current of up to 10mA - 10s and >10mA - 5s. For all other metals, use the default values or select >60 seconds.
Then press the OK button.



10. STARTING PRODUCTION

After you have made all the settings, the display shows the image on the right.
Your selected metal is displayed in abbreviated form at the top left (e.g. Ag for SILVER). In the middle will the subsequently measured conductivity is displayed in microsiemens (???µS). On the right is your selected concentration (XXXppm). Your CM2000 is READY and waiting to start.



NOW put the CM2000 with the electrodes in the water and press the OK button.

The CM2000 measures the current conductivity (µS) of your water and displays it after 3 seconds, after which production begins.
The ideal conductivity of the water for SILVER is 1-15 µS. For all other electrodes, this can also be higher.
The 0 starts flashing at the bottom right. The ACTUAL value of the concentration is displayed here. If the ACTUAL value corresponds to the TARGET value, your CM2000 off automatically and the display flashes until you press the OK button. Your CM2000 can easily run indefinitely.