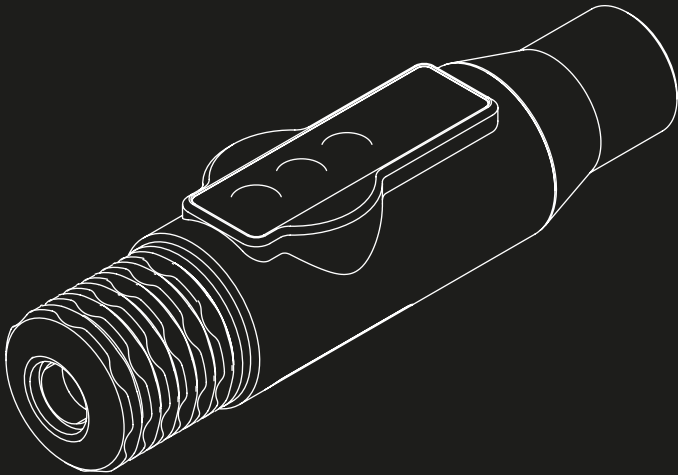




BLACKGOLD®  
TATTOO SYSTEMS

# MAGERO®

INSTRUCTION MANUAL



**Read carefully before operation!**

BLACKGOLD® & MAGERO®: brands of TCA Systems GmbH, Huttengasse 27/1/25, 1160 Vienna

# Foreword

Thank you very much for your purchase and your trust in us and our products!  
We are very happy that you have become a part of the BLACKGOLD® community.

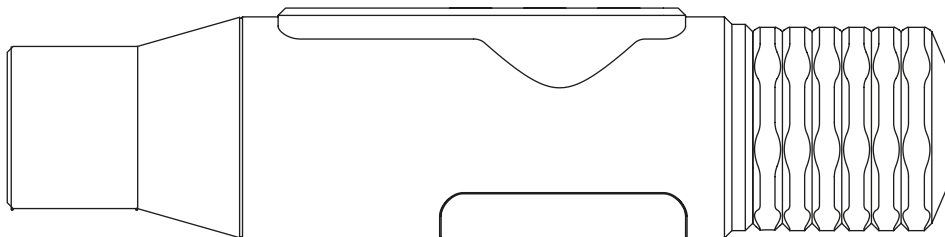
If you like the BLACKGOLD® tattoo system, please tell your friends. If you have any problems with the machine or accessories, or if you have any questions or suggestions, please contact us at [support@blackgold.tattoo](mailto:support@blackgold.tattoo).

We wish you a lot of fun and success with your new equipment!

Best regards from Vienna, your BLACKGOLD® team

## 1. table of contents

1. Table of contents
2. Warranty statement
3. Safety instructions
4. Scope of delivery
5. Description of the system/operating elements
6. Technical data
7. Operating conditions
8. Battery
9. Putting MAGERO® into operation
10. Setting needle protrusion
11. Setting the piercing frequency
12. Handle piece
13. Protective tubing
14. Cartridge
15. Cleaning MAGERO
16. Check MAGERO
17. EC Declaration of Conformity



## 2. warranty declaration

The device has been designed, built and manufactured in accordance with the directives and standards currently in force in the European Union.

The manufacturer therefore provides a warranty for the device (both electrical and mechanical components, battery excluded) when used as intended (see 3.) for a period of one year from the date of purchase.

However, if the device is not used as intended or if manipulations are made to the device that are not carried out by the manufacturer, any warranty claim to the manufacturer will expire.

## 3. safety instructions

The tattoo machine is used with a cartridge - in case of improper operation there is a risk of a puncture injury! It is therefore essential to read these operating instructions before commissioning!

- The MAGERO® may only be operated by persons who are authorized to perform tattooing and who are aware of possible side effects and dangers.
- Never modify/open/damage components of the MAGERO® or the accessories.
- No liquids may get into the MAGERO®.
- Always check before and after work whether the MAGERO® is contaminated by returning liquids. Proper cleaning and disinfection is absolutely necessary if this should happen.
- Use the MAGERO® only with original packed cartridges with membrane(!), which are approved in your country.
- Pack the MAGERO® properly with a protective sleeve and make sure that no liquids come into contact with the machine. Sleeves and cartridges are for single use only and must be changed after each customer!
- When handling, make sure that no puncture injuries occur. If the needle has already been in use and you prick yourself, seek medical attention immediately.
- If the frequency of pricks is too high, injuries (cuts) in the skin may occur.
- If hygiene rules are not observed, infections may occur, leading to illness.
- If used for too long, unacceptable heating may occur due to overheating.
- Always work cleanly and adhere to the hygiene guidelines in your country.
- Do not use expired or damaged cartridges.
- Make sure that the person or body part is allowed to be tattooed.
- For further safety instructions, see: 8. Battery

### **Intended use/application:**

The „MAGERO®“ device has been built and placed on the market for the creation of tattoos on the human skin surface through the use of tattoo needles and liquid dyes. Any use not in accordance with the intended purpose is not permitted and relieves the manufacturer of its responsibility.

## 4. scope of delivery

- 1 BLACKGOLD® MAGERO® tattoo machine
- 2 battery cells (18500 Li NMC 3,7V-2000mAh CID / PCT)
- 1 Dual Charger USB 5V 2A
- 1 USB Power Adapter 10W
- 1 USB cable
- 1 user manual
- 1 Quickstart guide incl. warranty card

## 5. description of the system

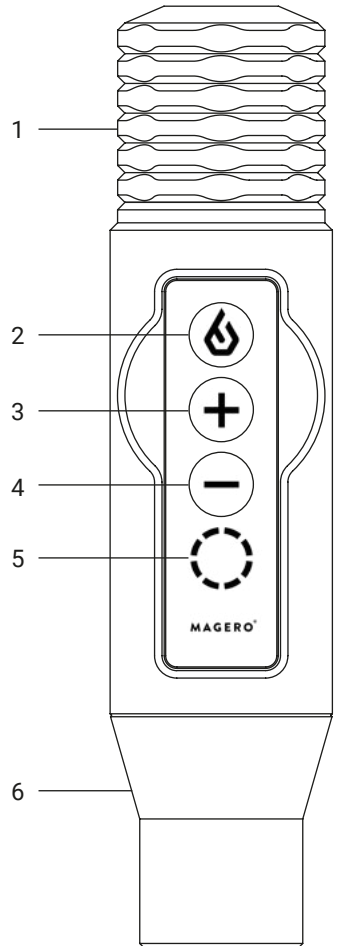
- 1 Handle (Twist-Lock)
- 2 Power/Standby
- 3 Plus - speed faster
- 4 Minus - speed slower
- 5 Display (speed/battery status)
- 6 Battery case

## 6. technical data

- Length: 125-128.5mm
- Diameter: 30mm
- Weight: 133g machine + 35g battery
- Rated voltage: 3.7V
- Drive: DC flat motor
- Power: 3W
- Stitching frequency: 50-135Hz
- Stroke: 3.5mm
- Needle protrusion: 1-4.5mm  
(varies according to cartridge manufacturer)
- Connectivity: Bluetooth 4.0

## 7. operating conditions

- Ambient temperature: +10 to +30°C
- Relative humidity: 30% to 75%



## 8. battery

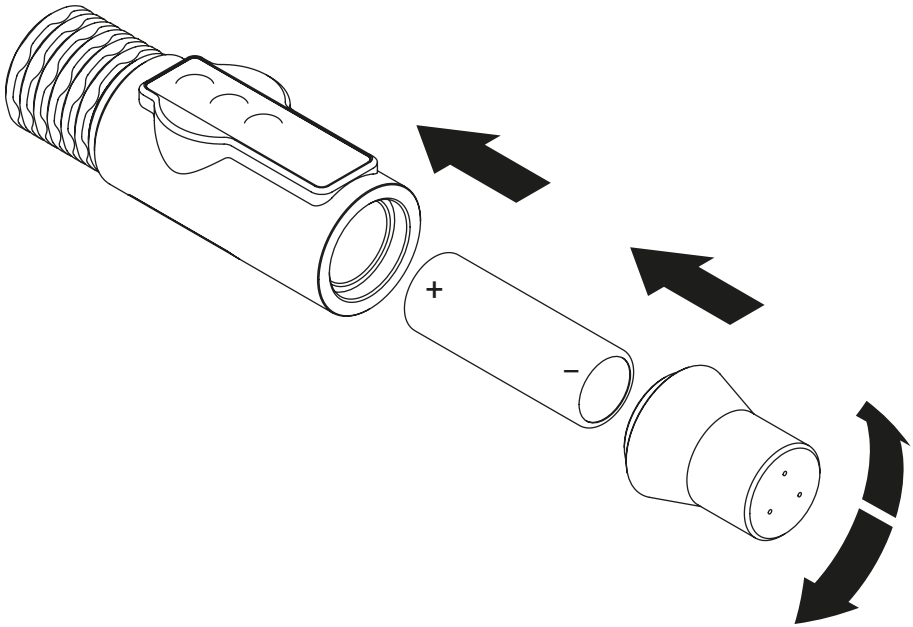
### Attention!

- Only the use of rechargeable cells supplied or offered by BLACKGOLD® is recommended. Cells from other manufacturers may work, but inaccuracies in the battery status display or other malfunctions and dangers may occur.
- Damaged cells must no longer be used.
- When replacing the battery, make sure that the positive terminal (+, white ring around the contact surface) is inserted first into the MAGERO®.
- If there are signs of a malfunction, the rechargeable battery must be removed immediately and must never be left unattended in the device.

If defective or other battery cells are used, the following errors will occur:

- The device control no longer works.
- The display is no longer correct.
- Danger of overheating and/or device explosion!

1. To insert the battery, unscrew the battery housing on the back.
2. Insert a fully charged battery into the opening with the positive pole (+, white ring around the contact surface) facing the machine.
3. Screw the battery housing back onto the machine as far as it will go.



## 9. putting MAGERO® into operation

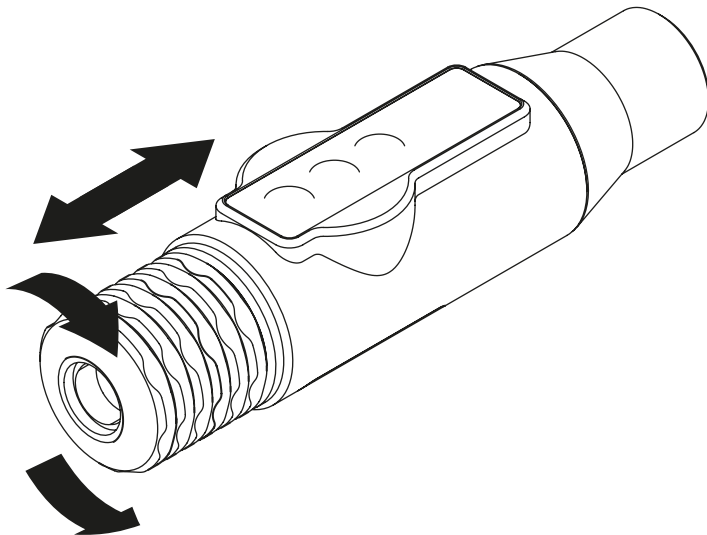
1. Insert battery (see 8.).
2. Switch on: Press Power for 2 seconds (battery status is displayed in blue for 4 seconds, then the speed level is displayed in orange).
3. Start: Press Power briefly.
4. Adjust speed: press +/- (see 11.).
5. Stop: Press power briefly.
6. (Battery level is displayed in blue for 4 seconds).
7. Switch off: Press Power for 2 seconds.

## 10. adjust needle protrusion

**Attention!** Risk of injury due to excessive needle projection. A large needle projection allows a large insertion depth. This may result in injuries to the subcutaneous fat tissue. Always start with a small needle projection!

**Caution.** The needle projection (standard 0-3.5mm) varies depending on the cartridge manufacturer. It may happen that the needle tips protrude slightly from the module when it is at a standstill. There is a risk of injury!

1. Switch on the MAGERO®.
2. Twist-lock mechanism: adjust the needle projection by loosening the handle (by turning it clockwise by about 10°).
3. Now set the desired needle projection by carefully moving the handle forward/backward.
4. Fix the handle again by turning it counterclockwise.
5. Check whether the grip piece is firmly seated and the needle projection no longer changes.



## 11. setting the lancing frequency

**Caution!** Risk of injury due to excessive piercing frequency. If the piercing frequency is too high, the skin is cut open. Make sure that the piercing depth, skin texture and needle projection are adapted to the working speed. Always start with the lowest level!

1. Switch on the MAGERO®.
2. Press + and - to set the piercing frequency/speed in eight preset steps (with the machine running or at a standstill).

## 12. handle piece

The handle piece can be changed if necessary or removed for cleaning.

1. Switch off the MAGERO®.
2. Use the allen key to loosen the worm screw on the underside of the handle.
3. Unscrew the handle.
4. Change/clean the handle.
5. Screw the handle back onto the machine as far as it will go.
6. Fix the handle piece hand-tight with the worm screw and the allen key.

## 13. protective covers

**Attention!** If liquids get inside the MAGERO®, this can cause damage to mechanical and electronic components. A contaminated machine can lead to cross-contamination. Therefore, always use protective sleeves!

- Make sure that the machine, handle and drive ram are clean.
- Use an approved protective hose and pull it properly over the machine and fix it as usual. Make sure that there is no gap after attaching the cartridge so that the machine cannot be contaminated.
- If liquids get inside the MAGERO®, it can cause malfunctions. Remove the battery and return the MAGERO® to the manufacturer, preferably in its original packaging. Do not use again!

## 14. cartridge

**Attention!** Risk of injury from needles! Injuries with contaminated needles may result in the transmission of diseases.

- Never touch the cartridge at the tip.
- Dispose of used and no longer required modules properly.
- Do not open the sterile modules until immediately before use.
- If you prick yourself with a contaminated needle, consult a doctor immediately.

### Attach cartridge: only use membrane modules!

- The cartridge may only be changed when the machine is at a standstill.
  - When changing the module, make sure that no liquids come into contact with the MAGERO®.
  - Used cartridges must be disposed of properly.
  - Sterile modules may only be opened immediately before work.
  - Observe the safety notes and instructions of the respective manufacturer!
1. Insert the module into the opening and turn it clockwise by approx. 45°.
  2. Make sure that the module is firmly held in place.
  3. To remove the module, turn it counterclockwise and pull it out of the MAGERO®.

### Pick up color

- Dip the tip of the module into the desired color for 2-3 seconds while the unit is running. Make sure that the sensitive needle tip does not come into contact with the ink container.

## 15. cleaning/disinfecting the MAGERO

**Attention!** Short-circuit hazard and risk of minor electric shocks. If liquids get inside, it may cause damage to the MAGERO®.

*Never soak the MAGERO® in disinfectant!*

- Switch off the MAGERO® before carrying out any cleaning or maintenance work.
- To be on the safe side, also remove the battery cell.
- Only use disinfectants that are approved in your country.
- To clean the machine, wipe it with a disinfectant cloth. Avoid stagnant moisture and dry areas that are too damp so that no moisture can get into the interior of the machine.

## 16. check MAGERO®

- Perform a visual inspection of the equipment. Is there any external damage visible?
- Switch on the MAGERO® and perform a listening test. Are operating noises or volume noticeable?

Contact us in case of any abnormalities or if the MAGERO® cannot be operated safely at [support@blackgold.tattoo!](mailto:support@blackgold.tattoo!)





EC Declaration of Conformity  
in the sense of the Machinery Directive 2006/42/EC  
the Low Voltage Directive 2006/95/EC  
the ROHS Directive 2011/65/EU



**BLACKGOLD**<sup>®</sup>  
TATTOO SYSTEMS

a Brand of  
TCA Systems GmbH  
Huttengasse 27/1/25  
1160 Vienna

hereby declares that the machine described below, based on its design and construction as well as the version placed on the market by it, complies with the relevant basic safety and health requirements of the above-mentioned EC Directive. In the event of a change to the system, system part not agreed with the manufacturer, this declaration loses its validity.

Designation of the machine:

**Tattoo machine**

Type: "MAGERO"  
Year of construction: 2021

Consisting of: Neodymium magnets, aluminum plastic housing, drive unit.

Relevant EC Directives:

EC Machinery Directive 2006/42/EC of the European Parliament on the safety of machinery.

EC Low Voltage Directive 2014/34/EU of the European Parliament on

EU Directive 2011/65/EU - Directive on the restriction of the use of hazardous substances in electrical and electronic equipment.

Applied harmonized European standards, in particular:

ÖNORM EN ISO 12100:2013 Safety of machinery - Basic concepts, general principles for design ÖNORM EN ISO

13849-1 Safety of machinery - Safety-related parts of control systems.

Vienna, 10.05.2022

(DI Roland Maria Reininger, Managing Director)

Dipl.-Ing. (BA) Josef Martin  
Eder Expert



**BLACKGOLD**<sup>®</sup>  
TATTOO SYSTEMS