

GK Magic 100

version 6.1

with side door and optional foot switch



User manual
02/2018

CE

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Congratulations on your decision to purchase a GK Bathtub. You have acquired an Austrian quality product which will considerably ease the strain involved in patient care.

Due to their advanced ergonomic design, GK Bathtubs are simple and straightforward to use. In spite of that, we would ask you to study the instructions carefully before operating the bathtub. The detailed information contained in this manual will facilitate your practical work.

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■ Intended use

Bathing system for bathing patients with restricted mobility in care institutes and hospital wards. It is operated by healthcare professionals. The possible height adjustment provides an ergonomic working environment for the personnel and helps keeping their spines healthy.

■ For your safety

- Ensure that this bathing system is operated and maintained only by trained personnel.
- Always check the water temperature with your bare hand (also when using the shower) before bringing the water in contact with the patient.
- Ensure that each client is assessed for its ambulatory capability, ensuring the client's safety when entering and exiting the bathing system (utilize handgrips, correct entry height, correct client transferring device, etc.).
- Never leave the patient unattended inside the bathtub.
- Ensure that the equipment is thoroughly cleaned after every use.
- When using disinfection, protect your skin and eyes. Heed all instructions on the disinfectant's container and material safety data sheet.
- Always make sure that the device is supplied with power. It may only be interrupted in emergency situations.
- Ensure that there are no objects right next to the tub to ensure a safe up and down movement. Disregarding this instruction can cause bad injuries or damage the device.
- Don't place any objects on top of the device, since due to movement or vibrations, they can fall off - also into the tub.
- Adjustments and repairs must be carried out by authorized and appropriately qualified persons only.

Caution:



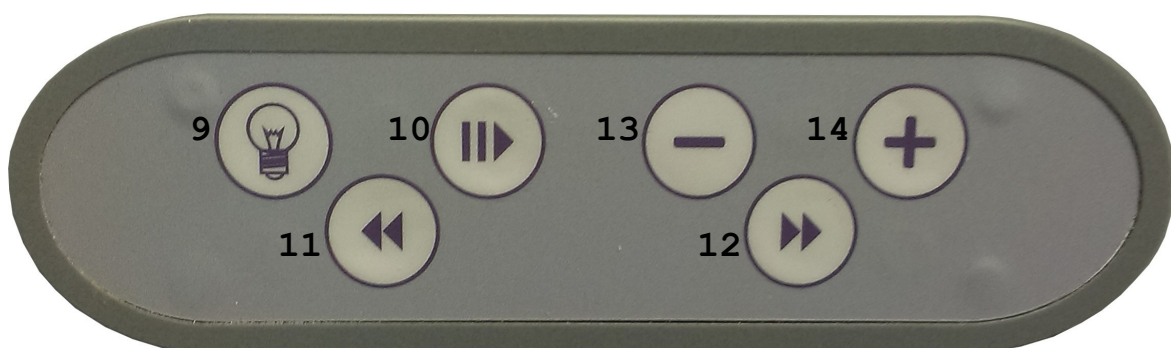
The safety rules and instructions in this operating manual must be observed in order to ensure safe and proper use of the equipment. All claims under guarantee become void if these requirements are not met.

■ Control panel overview



1. **Button** Up (with printed arrow)
2. **Button** Tub fill (lights up if configured)
3. **Button** Shampoo (lights up if configured)
4. **Display** Tub fill & Shower temperature
5. **Button** Hydromassage (lights up if configured)
6. **Button** Down (with printed arrow)
7. **Button** Bath additive (lights up if configured)
8. **Button** Disinfection (lights up if configured and needed)

Control panel for Sound & Vision:



7. **Button** Lights
8. **Button** Play/Pause
9. **Button** Back
10. **Button** Next
11. **Button** Volume "-"
12. **Button** Volume "+"

■ Components



- | | |
|---------------------|---------------------------------------|
| 1. Lid | 9. Control panel |
| 2. Shower | 10. Control panel for Sound & Vision |
| 3. Shower valve | 11. Tub fill valve |
| 4. Overflow | 12. Thermostat mixing valve |
| 5. Safety bar | 13. Fill in spout |
| 6. Door with handle | 14. Shampoo & Bath additive dispenser |
| 7. Adjustable foot | 15. Disinfection valve |
| 8. Foot switch | 16. Disinfection |

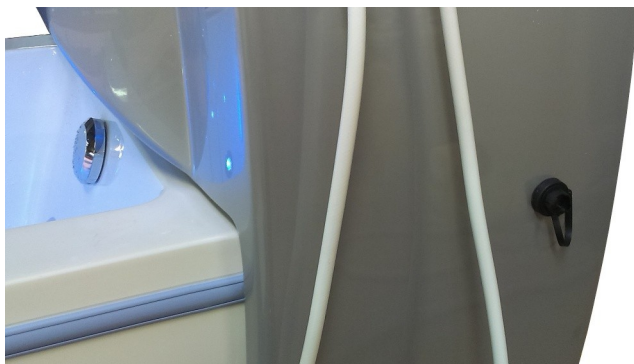


- Flowmeter with concentration table

- Box for care and disinfection liquids



- Hydromassage jets (blue)



- USB port

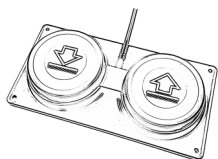
■ Functions

Raising & Lowering the tub



This tub allows caregivers to bathe patients in an ergonomic environment. Adjusting the tub to a comfortable working height enhances the bathing process. The "UP" and "DOWN" buttons are used to raise or lower the tub. The movement continues for as long as the button is pressed. When the button is released, the movement stops. In the upper and lower end positions the tub stops automatically. In the event of power failure you are still able to lower the tub with the integrated emergency battery.

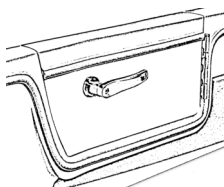
Note: The emergency battery is not integrated in every bathtub as it is an option.



Alternatively to the buttons on the control panel the tub can also be raised or lowered by means of the foot switch. It works with air pressure and is connected to the electronics through thin air filled plastic tubes. The higher air pressure, when stepping on the switch, activates the corresponding function on the electronics (inside the casing). Thus, the foot switch is separated from all electricity and may get wet without concerns.

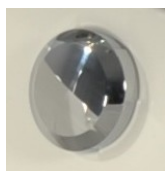
Note: The foot switch is not included with every bathtub as it is an option.

Opening & Closing the door



The door in the side of the bathtub can be opened and closed manually only. In order to open it the handle must be turned clockwise. In order to close it, counter-clockwise. From the open to the closed position of the handle, a rotation of about 60-70° is necessary (a bit less than a quarter of a circle).

Opening & Closing the drain



To close the drain, turn the chromed overflow knob in clockwise direction. To open, turn it in counter clockwise direction.

Setting the temperature



You can set the temperature for tub fill and shower continuously. To do that, turn the knob of the mixing valve to the desired position. The used temperature will be shown in the display.

Note:

For safety reasons the temperature is mechanically limited to 38 °C (standard mixer). To override this security appliance, press the button on the knob. Thus it is possible to turn the knob further and set a higher temperature.

Caution:



When setting the temperature to a value above 38 °C, set it back to 38 °C or lower as soon as possible! In the meantime, while the temperature is overridden, use extreme caution with the hot water.

Temperature display tub fill & shower



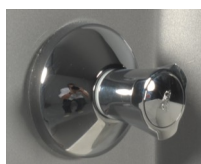
This display always shows the current tub fill respectively shower temperature.

Caution:



Always check the water temperature with your bare hand (also when using the shower) before bringing the water in contact with the patient.

Filling the tub



Open the "TUB FILL VALVE" (in counter-clockwise direction) to fill the tub with water. When your desired filling level is reached close the valve again to stop the water flow.

Filling the tub with control panel (if installed)



If the knob of the "TUB FILL VALVE" is not present, then the tub can be filled by pressing the button "TUB FILL". Now the water keeps flowing until the maximum filling level is reached or the button is pressed a second time. If the water level is not high enough after the automatic fill stop, you can press and hold the button "TUB FILL" for additional water flow.

Note:

If you want to use the door for entering the bathtub, then fill the bathtub at first only up to below the doorstep. To do that when using the control panel, you must actively press the button at the right time.

Shower



The shower can be used at any time. To do so, pick up the white hand shower from its holder and open the "SHOWER VALVE" (in counter clockwise direction). Press and hold the trigger on the hand shower's handle to begin showering. When you are finished showering, close the valve. Afterwards release the pressure from the hose by briefly pressing the trigger once again. Then put the hand shower back into its holder.

Shampoo & Bath additive



Both of these products, if installed, can be added at any time. By pressing one of the buttons "SHAMPOO" or "BATH ADDITIVE" the corresponding dispenser pump starts running for as long as you hold the button.

Note:

The tube for the shampoo has a red marking on its suction end - the tube for the bath additive a blue marking at the alike spot.

If there is no liquid coming out of the system, make sure that both boxes are full. After installing a new box it might take a while to get all the air out of the tubes. You possibly have to use the function for a longer period of time.

Underwater light



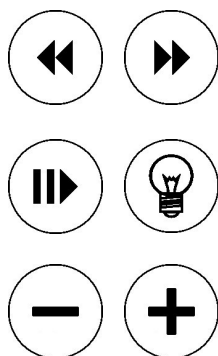
The underwater light, if installed, (being an alternative to the "Vision" function), is located at the foot end of the bathtub and is available at any time. It is operated by means of an air switch (see picture to the left) by which any contact of splash water with electric switch elements is prevented. Pressing the chromed button switches the underwater light on. The underwater light slowly changes between 7 colours. (It cannot be fixed to one colour.) By pressing the button again the underwater light is switched off.

Hydromassage



This function, if installed, is available only when the bathtub is filled with water. To activate it, press the button "HYDROMASSAGE". To deactivate it, press the button again. The maximum overall treatment time for each bathing cycle is 20 minutes. Once it has been used up the function cannot be used anymore until the next bathing cycle.

Sound & Vision



The optional feature "Sound & Vision" can playback music files which are stored on a USB stick on speakers build into the tub body. Furthermore, by means of LEDs on different sides it can suffuse the water with light in various colours.

If this feature is installed in your GK bathtub, then a USB port and an additional control panel are mounted to the outside of the console (USB on the side, control panel at the top right front; see pages 4 to 6).

Sound

First of all ensure that a USB stick with readable music files (mp2, mp3, wma) is inserted into the USB port. Now, pressing the button "PLAY/PAUSE" will play back all the recognized music files, sorted by name. Pressing the buttons "NEXT" and "BACK" switches to the next or previous (press 2x) track. After playing the last track playback continues again with the first track.

By pressing the button "PLAY/PAUSE" during playback, it is paused. When pressing it again, the playback continues. In case the pause exceeds 30 seconds, the player resets itself to ready mode automatically. Thereafter, a further playback would again start at the very beginning. (In case the USB stick gets pulled during playback or if it was not in the port at the start of playback, then this "empty playback" must be "paused" before (re-)starting a real playback.)

The volume can be adjusted by pressing the buttons "-" and "+".

Vision

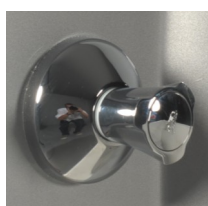
When pressing the button "LIGHTS", the LED lights are switched to "slow continuous colour change" mode. - When pressing the button "LIGHTS" again, the colour currently visible in that moment is fixed. - Pressing this button a third time will switch back to ready mode and the LED lights off.

Disinfection



Flowmeter

The flowmeter is used to adjust the mixture ratio between water and disinfectant. It is located at the back of the console. It can only be calibrated during a disinfection cycle while the disinfectant solution is flowing. The table next to it should help you to find the right value. Always follow the instructions of the disinfectant manufacturer. The Flowmeter must be calibrated after each connection of water tubes and after changes in water pressure and after changing the disinfectant's composition. During use of the tub, pay attention not to accidentally alter its setting.



Manually controlled disinfection procedure (model with disinfection valve)

The bathtub may only be disinfected when the tub is empty. To perform the disinfection procedure 1) take the **red** hand shower from its holder and 2) open the **disinfection** valve (in counter clockwise direction). 3) Press and hold the trigger directly on the hand shower and spray all internal tub surfaces with the disinfectant solution.

Caution:



Before every disinfection procedure, ensure that there is enough disinfectant available in its container.



Protect your skin and eyes from the disinfectant solution. Follow the instructions of the disinfectant manufacturer.

4) Close the disinfectant valve (in clockwise direction). 5) Afterwards, release the pressure from the hose by briefly pressing the trigger once again and 6) put the hand shower back into its holder.

After the necessary contact time (according to the manufacturer's specifications) the bathtub must be rinsed thoroughly. To do that 7) take the **white** hand shower from its holder, 8) open the **shower** valve (in counter clockwise direction) and 9) press and hold the trigger directly on the hand shower. Rinse all internal tub surfaces thoroughly. Ensure that no disinfectant solution residues are left behind inside the tub. 10) Close the shower valve (in clockwise direction). 11) Afterwards, release the pressure from the hose by briefly pressing the trigger once again and 12) put the hand shower back into its holder.



Electronically controlled disinfection procedure (model with disinfection button)

In order to be able to start the disinfection procedure there are two requirements which must be met:

a) The tub must be empty or almost empty. b) There must be enough disinfectant inside its container. If both requirements are met, then the disinfection button lights up.

Note: If the disinfection container should not contain enough disinfectant, then the disinfection button is flashing briefly in a rhythm of about 1.5 seconds.

To perform the disinfection procedure 1) take the **red** hand shower from its holder and 2) press the button "DISINFECTION". Now the button is flashing slowly (about 1x/sec.). 3) Press and hold the trigger directly on the hand shower and spray all internal tub surfaces with the disinfectant solution.

Caution: *Protect your skin and eyes from the disinfectant solution. Follow the instructions of the disinfectant manufacturer.*



After about 40 seconds the disinfection shower stops automatically. 4) If the 40 seconds were not long enough for you to spray all internal tub surfaces, press the disinfection button again twice. Thereby you are restarting the disinfection procedure and have another 40 seconds available. 5) After the 40 seconds are up and spraying is completed, ensure that the pressure is released from the hose by briefly pressing the trigger on the hand shower once again (without flowing disinfection solution). 6) Put the hand shower back into its holder. The disinfection button should still be blinking.

After the necessary contact time (according to the manufacturer's specifications) the bathtub must be rinsed thoroughly. To do so, 7) press the still blinking disinfection button. The button is now illuminated continuously. Now follow the steps 7 to 12 of the chapter "Manually controlled disinfection" on page 11.

Note: While spraying the disinfectant solution during an electronically controlled disinfection procedure the tub fill is disabled. If the disinfectant runs out while spraying, the whole procedure must be restarted after replacing its container. Otherwise it cannot be completed nor can it be stopped. Therefore, once the electronically controlled disinfection procedure is started, you cannot fill the tub again without enough disinfectant. However, the disinfection can be skipped altogether.

■ The bathing cycle

- Insert the drain plug into the drain. Close it.
- Adjust the tub shorter according to the body length of the patient and put the pillow into the right position.
- To fill the bathtub, open the inflow valve (turn in counter clockwise direction) or press, if installed, the button "TUB FILL" and select a pleasant fill temperature for the patient.

Caution: *Always check the water temperature with your bare hand (also when using the shower) before bringing the water in contact with the patient.*



- As soon as the water level reaches up to close below the doorstep, stop the inflowing water, help the patient into the bathtub and close the door.

Caution: *Never leave the patient unattended inside the bathtub.*



- Continue filling the bathtub and bring it to a comfortable working height. Once the desired filling level has been reached, stop, if necessary, the inflowing water.
- To add bath additive to the water (if installed) press the button "BATH ADDITIVE" for as long as you want to add more.
- If you want to use the shower during the bathing cycle, simply pick up the white hand shower from its holder, turn the shower valve in counter clockwise direction and press the trigger on the hand shower.
- To dispense shampoo (if installed) press the button "SHAMPOO" for as long as you want more, while keeping your hand under the shampoo dispenser.
- If so desired by the patient, activate any available therapy treatment.
- To finish, turn the chromed overflow knob in counter clockwise direction, in order to open the drain. Lower the bathtub and help the patient out of the water. BEFORE opening the door, ensure that the water level has dropped below the doorstep.
- Before you start a new bathing cycle you should thoroughly clean the bathtub.

■ Care & Cleaning

Always clean the plastic parts wet or damp but never dry.

Any product used to clean or disinfect your GK bath must be free from any abrasive, alcohol & corrosive ingredients. Never use any kind of customary glass cleansers, solvents (e.g. acetone) or similar detergents or dilutions. Never use harsh or pointed utensils, e.g. rough clothes, scrubbing sponges, scouring pads or any tools. If you are in any doubt about your usual cleaning products please contact your GK representative before use.

Caution: *Any damage caused by unapproved / unsuitable products will not be covered by the manufacturer's warranty.*



Dark grey and transparent plastic parts:

The dark grey and transparent plastic parts may only be cleaned with a maximum of lukewarm water and, if needed, a mild dishwashing soap. We especially recommend our special plastics intensive cleanser (details on request). For these parts of the tub **only use very fine textured chamois leather or a microfiber cloth.**

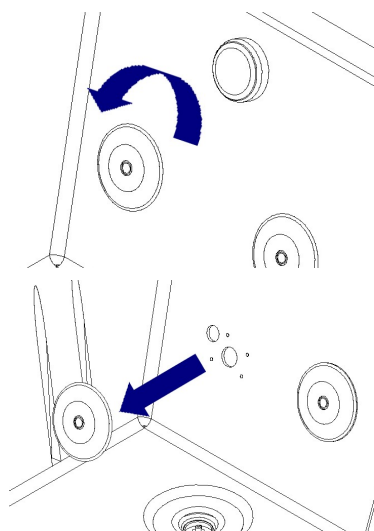
For the best care for these parts we recommend our special anti-static plastics care product (details on request).

Remaining tub body parts:

For the other mostly white parts, after use always rinse the bath tub thoroughly with the shower hose. Any dirt which adheres to the bathtub surfaces must be removed with a soft sponge or cloth and, if necessary, customary detergents (besides the above mentioned restrictions).

We recommend using our approved shampoo and bath additive products with your GK bath. Other products may cause more persistent dirt being harder to clean.

We also recommend for you to polish the white bath tub body once a month with car polish cream. This will give the bathtub a smooth, water repellent surface and will make routine cleaning considerably easier - it will also enhance the appearance of your GK bath.



From time to time the hydromassage jet covers should be removed and be cleaned together with the inlet and outlet apertures separately.

To do so, unscrew the jet covers in counter-clockwise direction off of the tub surface (see pictures). Now clean the covers, the inlet aperture and the outlet aperture thoroughly with a suitable cleaning cloth.

Note: Do not use excessive force when re-assembling the jet cover.

If you have any questions, please, contact your GK representative.

■ Troubleshooting

The temperature regulation by means of the thermostat mixing valve doesn't work properly.

The thermostatic mixer is adjusted at 3 bar flow pressure at both supplies. If you have different supply pressure it may be necessary to do a readjustment. If this does not help, clean the sieves behind the chromed cover of the thermostatic mixing valve. Also, the cartridge could be defective and might have to be changed.

The display reads F0 or F1.

The temperature sensor is defective and must be changed.

Very little water runs out of the tub.

Check the pressure of the hot and cold water supply because the mixing valve does not work if one of them is too low.

When using the disinfection shower, water is indeed flowing out but no disinfectant is being sucked into the water.

- Check if there is still enough disinfection liquid in the disinfection container.
- Check if the flowmeter is properly adjusted.
- If the Flowmeter shows nothing then the injector could be defect and can not suck any disinfectant into the water.

The display shows nothing and the up/down buttons are not working. Probably your bathtub does not have an emergency battery installed and either a fuse has burned out or the power supply broke down.

The water does not stop automatically at the maximum fill level. The fill level sensor is defective and has to be changed.

No bath additive or no shampoo is dispensed.

- Either the corresponding box is empty -> exchange the box
- or there is air in the tubes -> keep the button pressed for a longer period of time,
- or the dispenser openings are blocked -> clean them,

If you have any questions, please, contact your GK representative.

■ Maintenance

- Regularly (at your own discretion) monitor the fill level of the disinfectant container (if installed).
- Regularly (at your own discretion) monitor the fill level of the shampoo and bath additive containers (if installed).
- Once a month, check the sieves in the hand showers and clean them if necessary.
- Once a month, check the proper condition of the shower hose and, if installed, of the disinfection shower hose, as well as of any externally visible connections.
- Once a month, check the bathtub for any cracks or other damages.

Caution: *Should you notice any damage to the bathtub either during maintenance or at any other time, then the bathtub may not be used any further from that point onward, until the damage has been assessed and, if necessary, repaired.*



■ Service

At least **once a year** a service or safety inspection in accordance with Medical Device Directive (MDD) is mandatory.

- Remember that GK service is unmatched in quality and also with regards to warranty issues. GK will only consider itself liable for safety-related matters if repairs, modifications etc. are exclusively carried out by our service team or by agents authorized by us.

In the event of problems occurring, clear and detailed information about symptoms, type and serial number (see type plate) will help us to respond promptly.

■ Standards & Regulations

The bathtub complies with the essential requirements pursuant to Appendix I of the Medical Device Directive 93/42/EEC.

In accordance with the classification regulations pursuant to Appendix IX of the Medical Device Directive 93/42/EEC, the bathtub is a Class I medical device.



ISO 9001

Our production is subject to a quality management system according to ISO 9001.



CE mark

The CE mark has been affixed as proof of its compliance with the legal requirements of Appendix I of the Medical Device Directive 93/42/EEC.

■ Transport, Storage, Recycling

Operating conditions

Max ambient temperature:	40 °C
Max relative humidity:	80 % not condensed at 20 °C
Atmospheric pressure range:	500 hPa to 1060 hPa

Transport and Storage


Ambient temperature range:	-20 °C to 60 °C
Relative humidity range:	80 % not condensed at 20 °C
Atmospheric pressure range:	500 hPa to 1060 hPa

Recycling

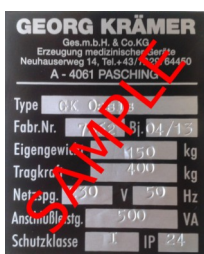
Package:	Wood and corrugated cardboard, recyclable
Product:	Electric, steel and plastic parts shall be separated and recycled

■ Technical data

- Bathtub **GK Magic 100:**

- Voltage: AC 230 V / AC 115 V
- Frequency: 50 Hz / 60 Hz
- Power consumption: 300 VA
- Fuses: 3.15 A time-delay (for 230 V)
6.3 A time-delay (for 115 V)
15 A time-delay (blade fuse)
- Protection class: I (connection of protective earth conductor necessary)
- Degree of protection: IPX4
- Protection type: Type B 
- Lifting weight: 400 kg
- Lifting height: 400 mm
- Maximum length: 2240 mm
- Maximum width: 930 mm
- Maximum height: 1250-1650 mm
- Time of guarantee: 2 years
(besides wear parts)
- Classification according to MDD 93/42/EEC): **Class I**

■ Identification plate



This plate give you some information's about the Product, for instance type, production date, serial number,...



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