

Batteries

The batteries shall always be sufficiently charged.

Caution

Weak batteries of wireless footswitch

Discontinuation of interventional treatment

- ◆ Make sure that the batteries are charged before starting an examination.
- ◆ In case of empty battery, use the provided power adapter to continue treatment.

The batteries of the wireless footswitch must be exchanged **once a year** by authorized and trained staff. Please call Siemens Service. Unauthorized exchange may cause severe damage.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2.4 Cleaning and disinfection

Caution

Use of harsh cleaning agents, liquids or sprays.

Risk of electrical hazard or damage to the system

- ◆ Use only substances for cleaning and disinfection, which are recommended.
- ◆ Do not let cleaning liquids seep into the openings of the system, e.g. air openings, gaps between covers.
- ◆ Observe the following cleaning and disinfection instructions.

2.4.1 Cleaning agents for all LCD displays, Large Display and Artis Cockpit only

The following active ingredient classes can be used for LCD displays:

Active ingredient class	Tested cleaning agents and disinfectants	Additional examples
Alcohol	Ethyl alcohol 96%	Hospiset cloth Microcide liquid
Aldehyde	Melsitt Cidex	Aldasan 2000 Kohsolin Gigasept FF
Chlorine derivates	Terralin	Quartamon Med

Active ingredient class	Tested cleaning agents and disinfectants	Additional examples
Disinfectants	Taski DS5001 (Diverseylever Labs) Morning Mist Surfanios Fraicheur Citron (Anios Labs)	
Guanidine derivatives	Lysoformin	
Quaternary compounds	Incidur spray, full strength	
Commercially available dishwashing liquid	Tempo	Fairy Ultra, Palmolive
Benzine	Petroleum ether	
Pyridine derivatives	Active Spray, full strength	
Water	Tap water Distilled water	

2.4.2 Special instructions for all LCD displays, Large Display, and for Artis Cockpit only



- LCD displays are very sensitive to mechanical damage.
Avoid scratches, bumps, etc.
- LCD displays are very sensitive to liquids.
Longer contact with the liquids can cause discoloration or can leave calcium residue on the surface.
Droplets that run down between the panel and the frame can cause damage or total failure of the panel!

- 1 If possible, immediately clean any droplets of liquid.
- 2 If a cleaning agent is sprayed directly on the display surface, make sure that any droplets that run down are wiped off with a microfiber cloth before they reach the edge of the panel.
- 3 If the front of the panel is soiled, clean it with a microfiber cloth and, if necessary, with a glass cleaning agent. Clean housing parts with a cleaning agent for plastics only.

2.4.3 Cleaning agents for all other system parts



- Some substances contained in disinfectants are known to be **hazardous to health**. Their concentration in the air must not exceed the legally defined limit.
- Always follow the manufacturer's instructions when using the disinfectants.

The following active ingredient classes can be used:

Active ingredient class	Cleaning agents and disinfectants
Aldehyde	Incidin Perfekt
Alkylamine	Lysoformin Plus
Chlorine derivatives	Clorina
Commercially available dishwashing liquid	Tempo, Fairy Ultra, Palmolive
Guanidine derivatives	Biguacid S
Organic acids	Apesin SDR san
Quaternary compounds	Oasis Pro
Peroxides	Sanosil
Pyridine derivatives	Bacoban WB

The following products should **not** be used:

- All alcohol-based products
- All chlorine-releasing products
- Benzine / phenole-based products
- Products: Banicide Advanced, Wavicide, Terralin, Cidex OPA

2.4.4 Instructions for cleaning and disinfection



Sprays can penetrate the interior of equipment.
It can cause damage to electronic components and the formation of flammable mixtures of air/solution vapor.



Use gloves to avoid infection.

- 1 Before cleaning the system, block radiation and block unit movements.
(→ Page 228 *Blocking radiation*)
(→ Page 229 *Blocking unit movements*)
- 2 Use a lukewarm detergent solution and a soft cloth to remove slight contamination.
- 3 Clean all contaminated parts and all parts which may or have come into contact with the patient.
- 4 Remove contrast medium spots best of all with warm water.
- 5 Remove major contamination first with a cloth soaked in alcohol, then wipe off with clear water.
- 6 After using disinfectants, always wipe off with clear water.

- 7 Remove any contamination of Velcro tapes using a plastic comb.
- 8 Keep the ventilation slots of **all** components unobstructed.
- 9 Regularly clean the dust off all rails and joints etc.

2.4.5 Sterilization

Please observe your hospital's regulations concerning sterilization.

2.5 Information about unit movements

Because of the possible speed of movement of the stand and C-arm and the tabletop, this system must be operated with particular care.

2.5.1 Collision protection

For reasons of safety the systems are equipped with collision sensors.

(→ Page 138 *Safety equipment*)

If one of the collision sensors is activated, further unit movements are blocked and a message indicating that appears.

2.5.2 Dead man's grip

All unit movements are controlled with a **dead man's grip** (DMG), that is, movements are performed only while the operating element is being actuated. In the event of danger, the movement can be stopped immediately by releasing the dead man's grip.

2.5.3 Danger of crushing

The patient and operating personnel must grip only the handles which are intended for the proper handling of the equipment or positioning of the patient. When it is not possible, attention must be paid to possible risks of injury by crushing in the vicinity of moving parts.

- Pay special attention to the risks of crushing fingers/hands between moving parts and their guide openings.
- Before performing unit movements make certain that the patients do not grasp the frame of the tabletop.

2.5.4 Abnormal movements

If any part of the system moves although that movement was not released, for example, if the display ceiling suspension moves downward by itself, there might be a fault.

- Shut down your system and call Siemens Service.