

Clean Hub for Orthora 200

CleanHub is an optional inherent part of the medical device Orthora.

The medical device Orthora is a inherent part of the procedure pack Orthora 200.

CleanHub does the morning rinse of water-bearing instruments for you!

Microorganisms can multiply in the water lines to the treatment unit. To reduce germs, it is recommended to flush the water lines of the water-carrying instruments for 3 minutes according to SSO and for 2 minutes according to RKI before starting work.

The use of the CleanHub is intended to reduce the risk of germs and stagnant water lines by forced flushing of all water-bearing instruments.

With the Clean function on Orthora 200, it is possible to automatically rinse all water-bearing instruments. The individual instruments are removed from their trays beforehand and positioned in the CleanHub for rinsing. The surgical aspirator or the saliva ejector can also be placed in the CleanHub to remove residual water.



Important: CleanHub does not have a device for permanent or intensive disinfection. There is no disinfection of the operating water!

What are the benefits of CleanHub?

The Clean Hub can hold up to seven water-carrying instruments, which can be rinsed simultaneously via a Clean Mode. (3F/6F Luzzani, micromotor MC3, micromotor MX, micromotor MX2, turbine connection with multiflex coupling, ZEG from EMS, ZEG Acteon)

Shape and design provide simple visual distinction for instinctive placement of individual instruments, so that the user can place them even without demonstration.

For the morning implementation of hygiene recommendations according to SSO and RKI, the use of the Clean Hub means more time for your practice team.

Simple reprocessing by rinsing and drying. If necessary, the Clean Hub can be cleaned with commercially available disinfectants. (e.g. FD300/FD312/FD366).

If necessary, the CleanHub can be reprocessed in a thermo washer disinfectator or dishwasher.

The Clean Hub is made of high-quality plastic (polycarbonate), which guarantees repeated, long-lasting use.

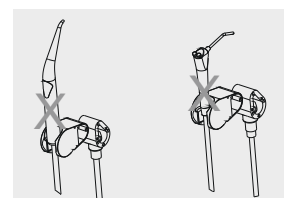
Its design and shape ensure easy handling at the treatment unit.

You can choose whether or not to leave the Clean Hub on the treatment unit during practice hours.

CleanHub, restrictions!



The Faro 3F syringe, the Faro 6F syringe and the M1600 syringe cannot be rinsed in the CleanHub.



Programming the automatic rinsing length for:

- Instruments (H1)
- Rinsing length of basin rinsing (H2)
- Rinsing length of glass filler (H3)
- Follow-up time of suction machine (H4)

H1. The basic setting for the flushing automation of the instruments (H1) can be set by the operator from 0 sec (no flushing active) to 990 sec. The flushing length for the instruments is to be programmed according to the diagram (p.4).

Factory setting for rinsing the instruments (H1):

a) with existing bottle system 30 sec.

(Attention: the syringe is rinsed as soon as the bottle is pressurised or under pressure).

b) if connected to the mains water supply 120 sec.

H2. The basic setting for the length of basin rinsing (H2) can be set by the operator from 0 sec (no rinsing active) to 990 sec. The flushing length for the spittoon is to be programmed according to the diagram (p.4). It is recommended to programme the flushing cycle for the spittoon to S1 and S2 to 0 min.

Factory setting for the rinsing length of the basin rinsing (H2):

a) with existing bottle system 120 sec.

b) if connected to the domestic water supply 180 sec.

H3. The basic setting for the rinsing length of the glass filler (H3) can be set by the operator from 0 sec (no rinsing active) to 99 sec. The rinsing length for the spittoon must be programmed according to the diagram (p.4).

Factory setting for the rinsing length glass filler (H3):

a) with existing bottle system 60 sec.

b) if connected to the domestic water supply 60 sec.

H4. The basic setting for the suction machine run-on time (H4) can be individually adjusted by the operator from 0 sec (no run-on time active) to 990 sec. The run-on time for the spittoon must be programmed according to the diagram.

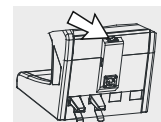
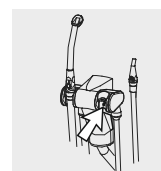
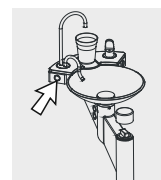
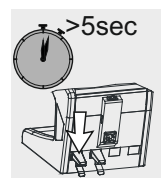
Factory setting for the suction machine run-on time (H4):

a) with existing bottle system 90 sec.

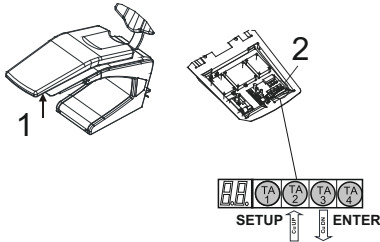
b) with direct connection to the domestic water supply 30 sec.

Safety

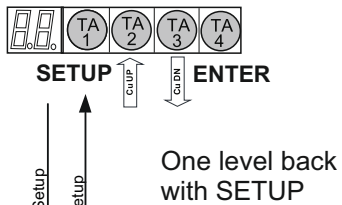
1. The rinsing cycle can be aborted at any time by pressing the left foot pedal for >5 sec.
2. The rinsing cycle at the glass filler or the bowl rinsing can be aborted by pressing the push button for tumbler filler.
3. Pressing of the storage switch causes a reset of the clean mode and the rinsing process starts again.
4. Pressing the main switch interrupts the rinsing cycle



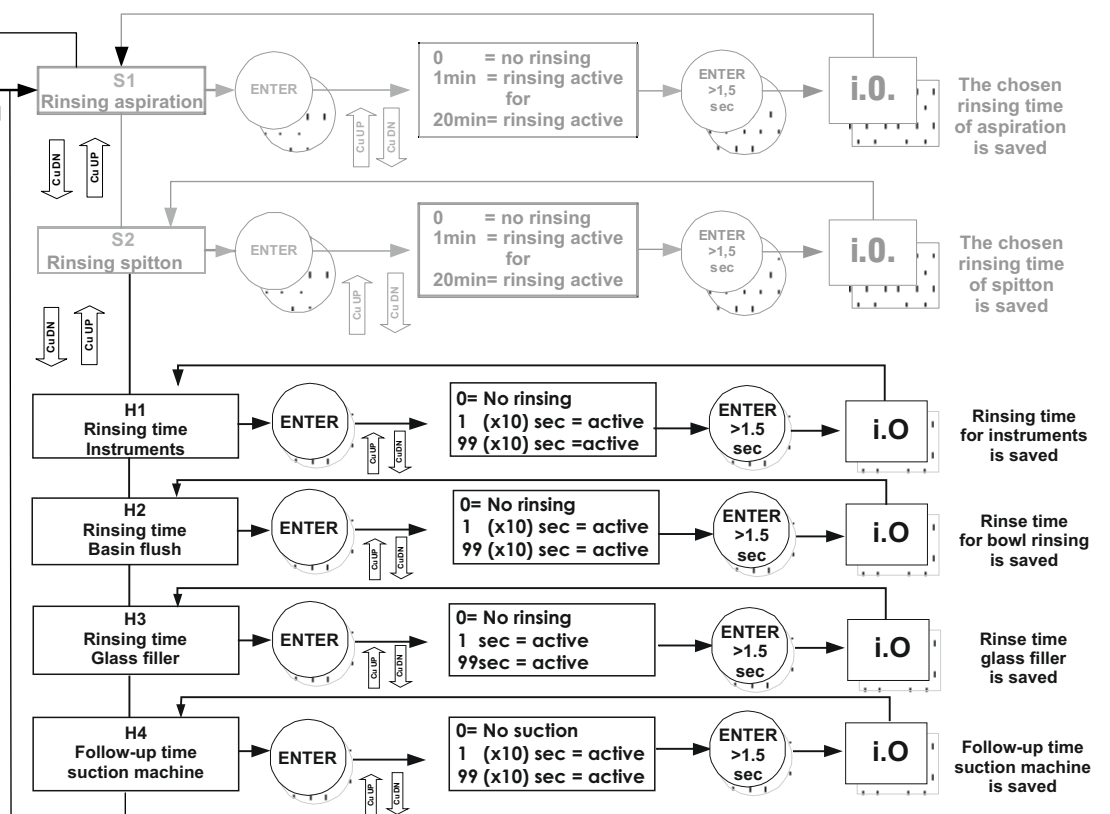
Programming the automatic rinsing length



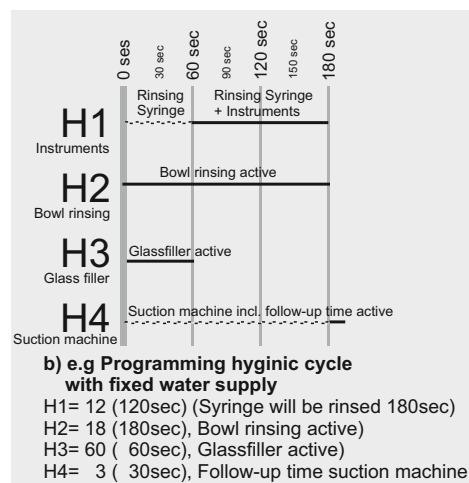
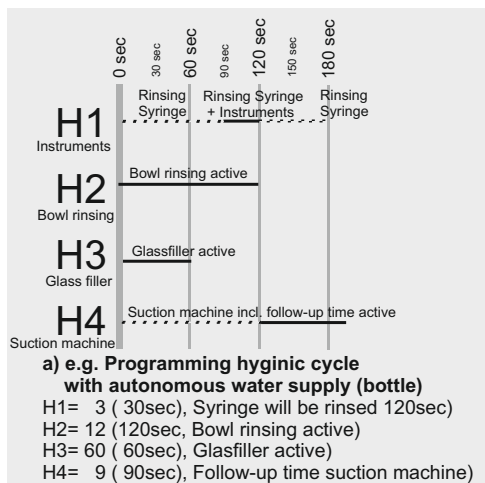
1. Pull the bed cushion (1) upwards and remove (snap lock).
2. Set using the buttons on the main computer (2) in the foot section of the bed.



- Press «Set Up», OP appears in the display
- Select «SP» with the arrow key ↓
- Select «Enter»
- «Display S1» appears
- Select with arrow key ↓ «H1»
- Press «Enter», the display shows 00
- Use the «arrow keys» ↑ ↓ to set the desired rinsing time for the instruments (1=10Sek)
- Press «Enter» >1.5sec, the display shows i.o. (value is saved)
- «Display H1» appears, desired time is stored
- Select «H2" with the arrow key ↓
- Press the «Enter» key, 00 appears in the display
- Use the «arrow keys» ↑ ↓ to set the desired rinsing time for the basin rinse (1=10Sek)
- Press «Enter» >1.5sec, the display shows i.o. (value is saved)
- «Display H2" appears, the desired time is saved
- Select «H3" with the "arrow key ↓
- Select «Enter» 00 appears in the display
- Use the «arrow keys» ↑ ↓ to set the desired rinsing time for the tumbler filler (1=1Sek)
- Press «Enter» >1.5sec, the display shows i.o. (value is saved)
- Display «H3" appears, the desired time is stored
- Select «H4" with the arrow keys ↓
- Select «Enter» 00 appears in the display
- Use the «arrow keys» ↑ ↓ to set the desired run-on time for suction (1=10Sek)
- Press «Enter» >1.5sec, the display shows i.o. (value is saved)
- Display «H4" appears, the desired time is stored.
- Press «Setup», SP appears in the display
- Press «Setup», treatment unit is in normal mode



Factory setting rinsing cycle



Description Use Scenario

1. Set the main switch to OFF

2. Take the CleanHub out of its storage place and place it on the tray arm of the Comfort shelf.

This activity can be carried out the evening before as preparation

3. If the autonomous bottle system is attached, fill the bottle with fresh water and mount it on the treatment unit.

4. Set the toggle valve for activating the pressure of the bottle to ON.

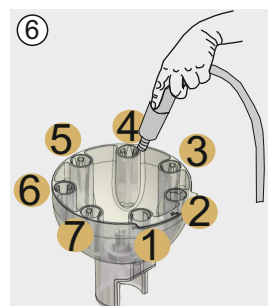
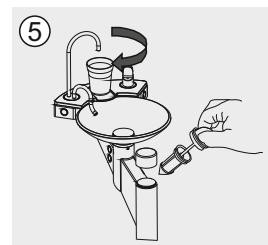
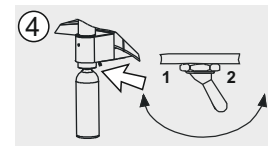
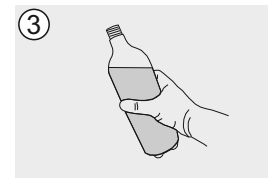
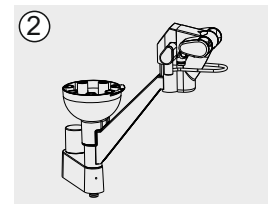
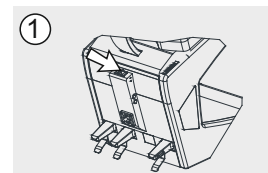
The bottle pressure should be min. 1 bar dyn.

5. Before activating the Clean function, make sure that the tumbler filler is swivelled over the spittoon bowl and that the hygiene filter is not clogged.

When the rinsing cycle starts, approx. 2.1 litres can be rinsed through the tumbler filler at maximum rinsing time.

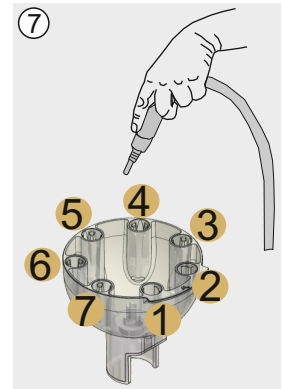
6. Remove the micromotor(s) from the parking position (without the transmission instrument in place) and position them in the CleanHub. (position 3-7).

Max. 2 micromotors, this activity can already be carried out the evening before as preparation. Please make sure that the instrument hose is not kinked.



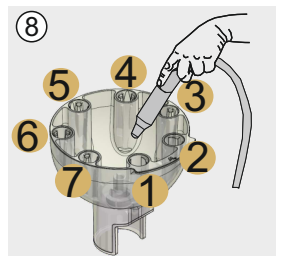
7. Take turbine connection with attached Unifix (multiflex coupling) out of the parking position (without attached transmission instrument) and position it in the CleanHub. Ensure that the water regulation on the Unifix (multiflex coupling) is open. (position 3-7)

max. 2 turbine connections, this activity can already be carried out the evening before as preparation. Please ensure that the instrument hose is not kinked.



8. Remove the ultrasound from the parking position (without the working tip on) and position the handpiece in the CleanHub (position 3-7).

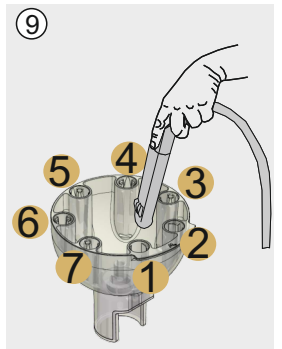
This activity can be carried out the evening before as preparation. Please make sure that the instrument tubing is not kinked



9. Take the multifunctional syringe(s) out of the parking position (without cannula attached) and position it in the CleanHub (position 1-2).

Max. 2 multifunctional syringes, this activity can be carried out the evening before as preparation. Please make sure that the instrument tubing is not kinked.

Caution: The Faro syringe or the M1600 syringe cannot be positioned and rinsed in the CleanHub.

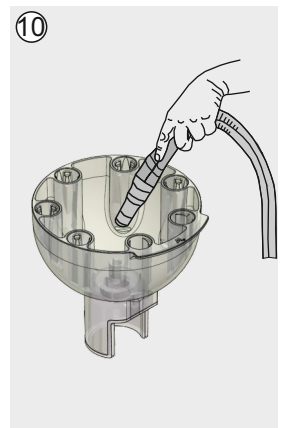


10. Take the suction hose (OP suction or saliva ejector) out of the park position and put it on the suction nozzle to suck off residual water.

Important: Clean mode cannot be activated if the suction hose is not connected to the suction nozzle in the CleanHub.

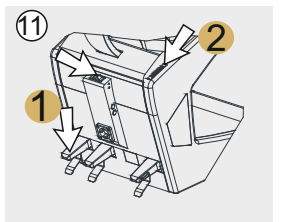
Important: Manually activating the storage switch resets the Clean mode and the rinsing process starts again.

Make sure that the suction hose is not kinked.

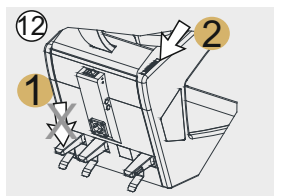


11. Press the ON/OFF switch and at the same time function 1 of the left foot pedal for approx. 3 seconds until the LED for the speed display on the right of the display starts to flash (2).

Wait approx. 3-4 seconds to start the system.



12. Release the foot pedal (do not press function 1 again). when the LED for the speed display flashes quickly (2)

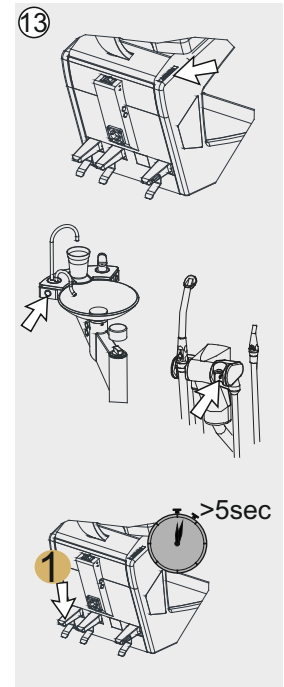


- 13.** The speed indicator in the display starts flashing, the rinsing cycle on the instruments or the spittoon starts.
 The pool rinse is activated between 10 sec to 990 sec.
 The instruments are rinsed between 10 sec to 990 sec.
 The tumbler filler is rinsed between 0-99 sec.

If the push-button for tumbler filler or basin rinsing is pressed during the rinsing cycle, the rinsing stops at the spittoon. The instrument rinsing continues. Manual operation of the deposit switch causes a reset of the clean mode and the rinsing process starts again..

After the preselected rinsing time has elapsed, the automatic instrument rinsing stops, the tumbler filler and the basin rinsing stop. With an individually adjustable run-on time of the suction machine (H4) between 1 sec and 990 sec, any residual water can be sucked out.

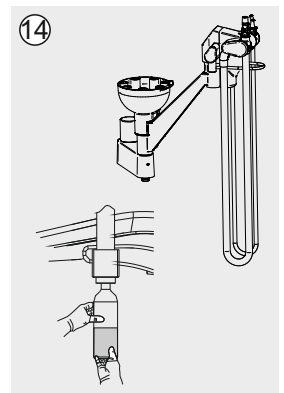
Important: The clean mode can be interrupted by pressing function 1 on the left foot pedal again for >5 seconds. The treatment unit is then in normal patient mode.



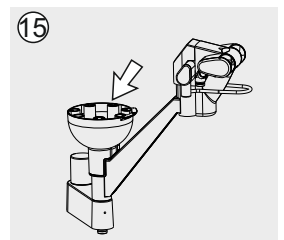
- 14.** After completion of the rinsing cycle, return all user parts to the instrument tray.
 a) Reset syringes
 b) Reset the motor, turbine and ultrasound.
 c) Reset suction hose

After placing the user parts in the instrument holder, the LED display goes out and the treatment unit is in "normal patient operation".

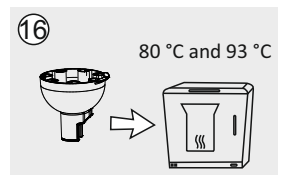
Important: If a bottle system is present, the bottle may have to be freshly filled depending on the bottle contents.



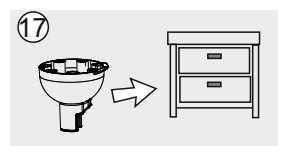
- 15.** Remove the hygiene unit and take it to the reprocessing room. If reprocessing is not possible at the end, completely empty the hygiene unit, rinse and dry it if necessary. Pre-rinse - with cold water without any other additives.
 Cleaning - if necessary, cleaning is carried out at a temperature of 40° - 60°C with the addition of a cleaning agent.



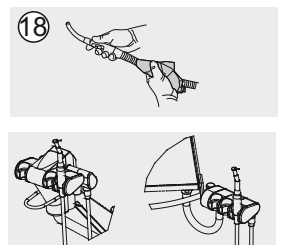
- 16.** If necessary, the CleanHub can be reprocessed by wiping disinfection (e.g. FD312, FD366) or by the thermo washer disinfector with fresh deionized water (=volatile water) at a temperature between 80° and 93°C.



- 17.** The CleanHub is not a medical device, reprocessing is complete. It can now be stored in the drawer/ cupboard or, if necessary, in the open (i.e. on the shelf) until the next use.



- 18.** Wipe disinfection is performed on all instrument tubing before patient use.





Order number for adaptation to Orthora 200 (> OT1.05000)

320.6790.01 CleanHub on Orthora 200 treatment unit

Order number for retrofitting to Orthora 200 (< OT1.04999)

320.6890.01 CleanHub on Orthora 200 with software upgrade (EPROM mc-cpu 6.0)* or higher!

  For upgrades < OT1.01000, the peripheral print (320.4102.10) must be replaced!



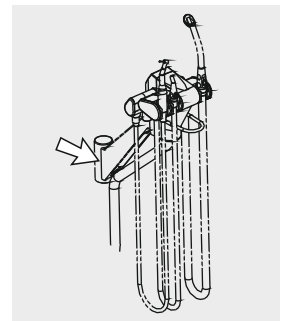
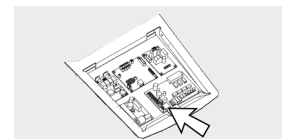
*When retrofitting, the microcontroller (MC-CPU 6.0) is programmed according to the original delivery (factory setting). Any retrofits and upgrades cannot be taken into account and must be programmed on site by a trained technician.
Estimated on-site work time approx. 0.5h

System requirements:Orthora 200 with software

EPROM mc-cpu in version 6.0 (320.4108.60), or higher!

....Peripheral print in version 3.1 or higher (as of OT1.01000)

....Treatment unit with attached assistant`s element



Technical data:

Dimensions.....D180mm/H=170mm

Weight.....480gr

Material.....Polycarbonat / mat

Care.....rinse with water

Disinfection.....e.g. FD312, FD366

Preparation.....Dishwasher safe, reprocessing by thermal disinfection is possible

Troubleshooting:

Error/Fault	Possible reason	Remediation
1. Rinsing process does not start	a) Waiting time when pressing the Foot pedal too short	a) Wait until LED flashes quickly (LED must flash quickly) (see p.6 / pt. 12)
	b) Suction tube not positioned in the CleanHub (suction nozzle)	b) Set the suction hose (OP suction or saliva) in the CleanHub on the suction nozzle (see p6/ pt.10)
2. Amount of water on the instruments too little during the rinsing process	a) Blocked pressure regulator	a) Set pressure regulator water inlet to min 2.5bar (dyn)
	b) Blocked pressure regulator Valve plate	b) Set pressure regulator on valve plate to min 80ml/min
	c) Closed needle valve Valve plate	c) Set needle valve on valve plate to min 50ml/min
	d) Bottle not filled	d) Fill bottle with fresh water
	e) toggle valve in position OFF	e) Set the toggle valve for activating the pressure of the bottle to ON