

# Installation, Operating and Maintenance Manual

The serial number of your Kinos Plus  
pool is



## Congratulations for your purchase of Kinos Plus cold pool!

Avant°pool Kinos Plus is an easy-to-use and compact indoor cold pool, which gives you the benefits of winter swimming all year round. It enables optimal and high-quality cold recovery, eases muscle pain and inflammations, helps sleep and improves immune system. Avant°pool Kinos Plus is made in Finland.

**IMPORTANT BASICS:**

- NEVER LET KINOS PLUS TO RUN WITHOUT THE FILTER
- MAKE SURE THE ELECTRICITY SOCKET IS GROUNDED (230V / 50Hz/60Hz)
- LEAVE 10-15cm SPACE BETWEEN THE LONG SIDES OF THE POOL AND THE WALL TO ENSURE SUFFICIENT VENTILATION
- DO NOT COVER THE VENTILATION GRILLS
- MAKE SURE THE WATER LEVEL IN THE POOL IS SUFFICIENT BEFORE TURNING ON THE POWER
- DO NOT USE SALT OR OTHER MINERALS IN THE POOL
- DO NOT USE SALT WATER IN THE POOL, ONLY FRESH TAP WATER
- CLEAN / FLUSH THE FILTER AT LEAST ONCE A WEEK
- CHANGE THE FILTER EVERY 2-6 MONTHS DEPENDING ON USE OF THE POOL
- CHANGE THE WATER EVERY 3-8 WEEKS DEPENDING ON THE USE OF THE POOL
- DO NOT OPEN THE ELECTRIC CABINET
- DO NOT USE THE KINOS PLUS POOL OUTDOORS WITHOUT A PROPER COVER, IT SHOULD BE PROTECTED FROM RAIN AND SNOW AT ALL TIMES
- DO NOT USE SLEEP MODE, IF AMBIENT TEMPERATURE IS BELOW 4°C

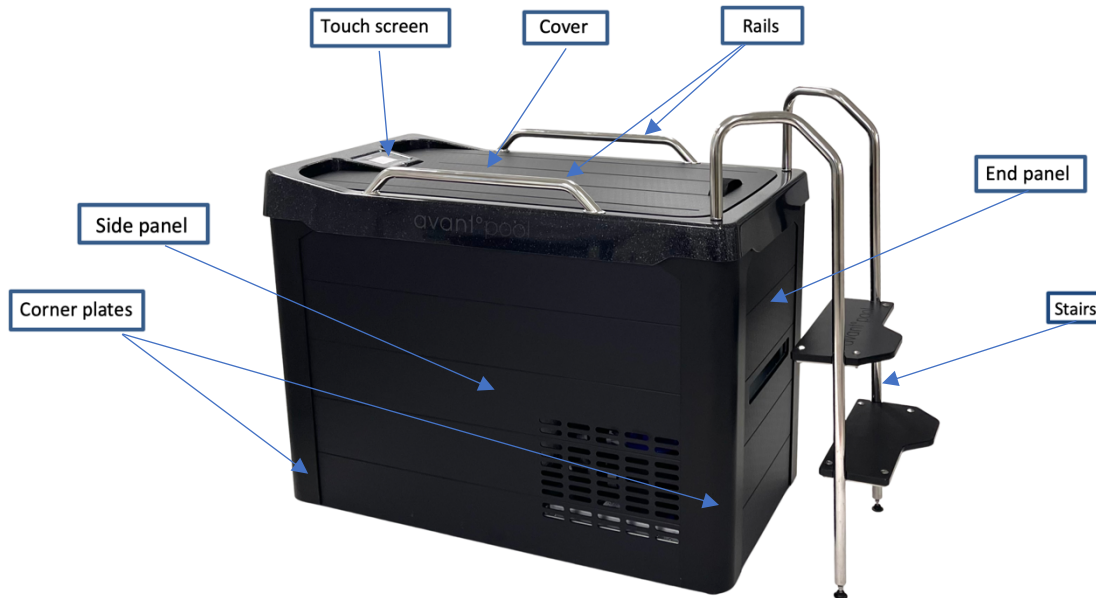
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## General safety instructions

- Before you start using the pool, read all instructions and follow them carefully.
- Do not let children use the pool unless they are always closely supervised by adults. Do not leave the pool without the cover if children have access to the room where it is stationed. Make sure the cover is always on when the pool is not in use.
- Persons with reduced physical or kinematic capabilities should not use the pool without sufficient instructions and/or supervision.
- Do not use the pool if the plug or supply cord is damaged. Order a new one from your dealer and make sure it is properly installed before re-starting to use the pool.
- Do not use the pool if the cover of the skimmer is damaged or not properly in place. If the cover of the skimmer is damaged, order a new one from your dealer and make sure it is properly in place before re-starting to use the pool.
- Do not use any electrical devices while in the pool or while at immediate distance of the pool.
- Check the water temperature always before entering the pool. The water temperature may not exceed +40 °C or be less than +4 °C.
- Persons with a history of heart disease, low or high blood pressure, circulatory system problems, diabetes, or any condition requiring medical treatment should consult a physician or a doctor before using the pool.
- Persons using medication should consult a physician or a doctor before using the pool since some medication may induce drowsiness while other medication may affect heart rate, blood pressure and circulation.
- Pregnant women should consult a physician or a doctor before using the pool.

## Main external parts of Kinos Plus pool



## Technical information

- Measurements, without stairs: Length 1400 mm, width 790 mm, height 1050 mm
- Measurements, including stairs: Length 1400/1740 mm, width 790/1130 mm, height 1220 mm
- Capacity: 320 l
- Weight when filled: 480 kg
- Weight when empty: 160 kgs, with the rails and the stairs
- Water temperature range: Continuous variation between +4°C - +38°C
- Cooling power: 0,7 kW
- Heating power: 1,5 kW
- Average energy consumption: When reached target water temperature approx. 5 kWh/day
- Refrigerant: R290
- Control panel: Digital touch control panel with water temperature guided timer for cold recovery
- Electric coupling: 230V/50Hz/60Hz, 1-phase. Plug equipped with residual-current device
- Sound pressure level: 54 dB (A)
- Degree of protection: IPX5

## Transportation, installation, electrical connection

Kinos Plus pool is packed in covering, durable and easily transportable carton container. It can be easily moved with a pallet jack. There are inset handles at both ends of the pool to help manual moving. The package container can be stored or re-used when needed.

The pool should be placed on even ground supportive to the legs in each four corners. We recommend the pool to be placed in premises suitable for handling water, ideally with a tiled floor, floor drain and sufficient ventilation. Adjustable feet enable placing the pool to premises with an inclined floor. When placed beside a wall, make sure to leave at least a 10-15 cm gap between the wall and the pool to ensure sufficient ventilation.

There should be a grounded and preferably wall mounted power socket (240V/50Hz/60Hz) within 5 m range of the pool. *Do not connect the plug to the power socket until the pool is filled completely with water (15 cm below the edge of the pool).*

*Do not use the pool if the plug or supply cord is damaged. Order a new one from your dealer and make sure it is properly installed before re-starting to use the pool.*

## Detaching and attaching the panels

The side and end panels may need to be detached before installing the rails and the stairs, and during transportation, service and repair work. No tools are needed to detach or attach the panels. The panels are locked in with the aluminum corner plates, which are attached to the pool body with their inner shape.

### Detaching the panels

1. Take a grip from the low section of the corner plate and raise it up appr. 3 cm and then pull it towards yourself (Fig. 1a, 1b and 1c).
2. Slide the corner plate downward and the upper part of it will be released from under the bowl's collar. Now you have detached the corner parts.
3. Repeat the same procedure for all four corner parts.
4. Now the panels can be easily detached by pulling them out slightly and sliding them down from under the bowl's collar.



Fig. 1a



Fig. 1b

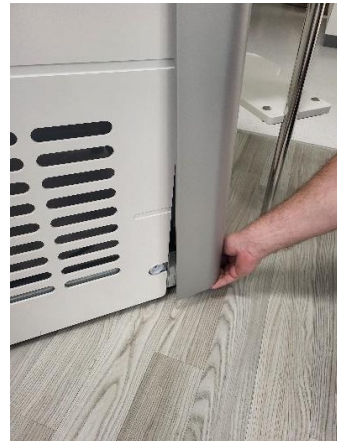


Fig. 1c

#### Attaching the panels

1. Attach the panels back to fasteners (grooved side out). *NOTE that the side panels have openings to be placed in front of the machinery to ensure proper air circulation and avoid overheating of the machinery.*
2. Push the top of the corner plate approx. 4 cm under the basin collar.
3. Push then the low section of the corner plate towards the pool and push down until it stops.
4. Repeat the same for all corner plates.

#### Installing the stairs

Attach the stairs to the pool as follows:

1. The stairs can be placed to either of the long sides or to the front end of the pool. One of the rails can be placed to the front end as well, should the stairs be placed on the long side.
2. Place the pins of the stairs (or rail) through the holes. If needed, fasten to the frame using the pipe bushings and nuts.
3. Adjust the height of the stairs to correct level by screwing the pads.





## Start-up instructions

- Clean the pool from possible dirt and stains.
- Fill the pool with water from the nearest faucet using a hose.
- **Note!** Do not use salt or any other ingredients in the water which may harm the materials or cause blockage to the machinery.
- The minimum level of the water must be above the minimum level sticker of the filter cover. The maximum level is about 13 cm below pools top level. (Fig. 2a).

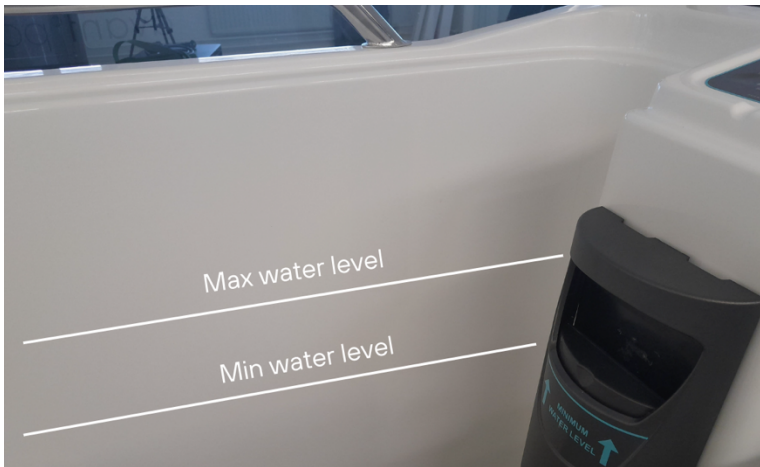


Fig. 2a

- Do not connect the plug to the power socket until the pool is filled with water! Then connect the plug to the power socket and push the green residual-current device button.
- Set the existing time of the day with the arrows on the screen and press Save – or bypass time setting by pressing Save

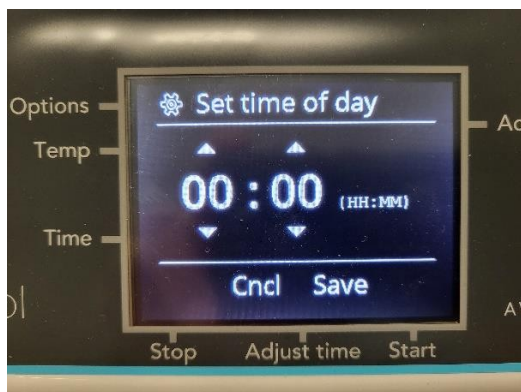


Fig. 3a



Fig. 3b

- The touch screen and the water circulating turn on and the water starts circulating in the pool. You should see bubbles coming out of the jet in the bottom of the pool. If this does not happen, stop and restart the device. This may happen due to air locks in the pipes. Repeat if needed until the water starts circulating and you can see the bubbles.
- Stopping the device can be done by pressing shortly the upper left corner cogwheel and then Stop (Fig. 4a and 4b). To restart, press Start.



Fig. 4a

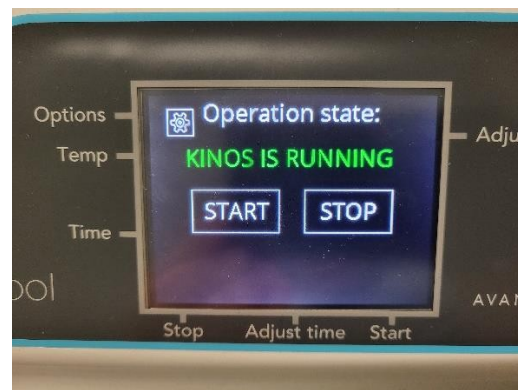


Fig. 4b

- In upper left corner of the touch screen, you can see the current temperature of the water and on the right corner the target temperature. The default target is set to 10°C. (Fig. 5)



Fig. 5

- Now the Kinos Plus cold pool is successfully turned on!
- *Note! There is approx. 7 min delay before the cooling starts.*

## Operating instructions

### Setting the water temperature

On the left part of the touch screen you can see current water temperature.

You can portably set the water temperature between +4°C - +38°C. The desired target water temperature can be seen on the right part of the touch screen. Set the target temperature by using the + and - buttons.

The water cools down and warms up approx. 3-4°C per hour. It is recommended to keep the pool cover on when the pool is not in use to save energy and to maintain the desired water temperature.

### Timer

In bottom of the touch screen there is a bath timer for setting the immersion time and following the time spent in the pool. Once the target water temperature is set, a recommended cold recovery time is proposed. The white triangle shaped area suggests the minimum and maximum time for cold recovery time in that water temperature. The suggested cold recovery times are directional only and are based on general recommendations made by University of Jyväskylä faculty of Sports and Exercise Medicine. Set the timer by using the + and – buttons.

The timer starts by pushing the Start button (triangle) and can be stopped and cleared by using Stop button (square).



### **Entering and exiting the pool**

In Kinos Plus pool you can immerse partly or fully to the neck level. During entering and exiting the pool pay close attention as the surfaces might be slippery from water. Use the stairs and lean on the rails while entering and exiting the pool. Notice that you might feel temporary stiffness in limbs caused by the cold water, especially after a longer immersion time.

## Display options

### Stop/start

In the upper left corner of the display, there is an Options button (cogwheel). By pressing it shortly, you can stop and restart the unit.



Fig. 6a



Fig. 6b

### Temperature mode

By pressing the cogwheel icon long, "Temperature mode" –menu will appear (Fig. 7). Options are: show only Celsius or only Fahrenheit, or both. Desired choice is made by pressing the corresponded icon and then Save.



Fig. 7

### Set temperature

By pressing the cogwheel icon long and then < or > buttons, you can change the menu to "Set temperature"-mode (Fig. 8), where you can set the desired target temperature after restart (e.g. after power cut). System will propose the existing target temperature, but it can be changed by - and + buttons. Save button will confirm the choice.



Fig. 8

### Lock temp setting

By pressing the cogwheel icon long and then < or > buttons, you can change the menu to "Lock temp setting"-mode (Fig. 9a), where you can hide temperature setting in the touch screen. Desired choice is made by pressing the corresponded icon and then Save.

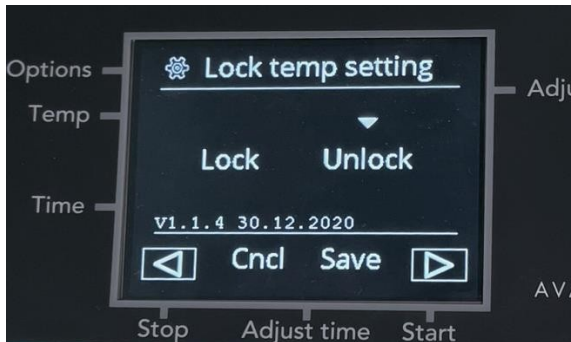


Fig. 9a

If you choose Lock and Save, then the + and - buttons in touch screen will disappear (Fig.9b). They can be returned by choosing Unlock and Save.



Fig. 9b

**Sleep mode**

By pressing the cogwheel icon long and then < or > buttons, you can change the menu to “Sleep mode” (Fig. 10a). In sleep mode, device will automatically shut down and restart in set time. Start time = shutting down, Stop time = restarting. Set the desired time, change Off-mode to On-mode by pressing it and then Save (Fig. 10b). Sleep mode time is restored in the memory of the device and will be repeated every day, until On/Off-mode is changed to Off.

**Note! Do not use sleep mode, if ambient temperature is below 4°C.**



Fig. 10



Fig. 10b

When device is in sleep mode, touch screen will show the remaining time (Fig. 11). Sleep mode can be interrupted (that time) by pressing Cncl.

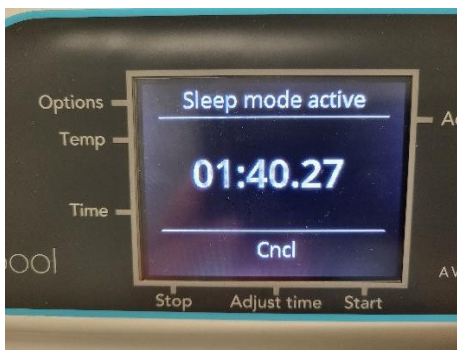


Fig. 11

## Time of day

Precondition for Sleep mode to work properly is, that Time of the day is set. By pressing the cogwheel icon long and then < or > buttons, you can change the menu to “Set time of day”-mode (Fig. 12). If necessary, set the time and press Save.



Fig. 12



## General maintenance and quality of water

Maintenance of Kinoss Plus pool is easy. Automated and constant filtering accompanied with ozone cleaning make sure the water stays clean and clear. Depending on the utilization frequency, occasional use of chlorine might be needed to disinfect the water (especially in heavy public use). *Should Kinoss Plus pool be in public use, the requirements set by local authorities for the water quality must be obeyed.*

On daily basis: Check the water level. It should ideally be approx. 15 cm from the basin top but not more than 8 cm below that. Too low water level may allow air in the pipes and cause breaking of the water pump. Also check the approximate water quality on daily basis as well the water circulation (lots of bubbles out of the jet).

On weekly basis: Clean the possibly stained water line and the filter. The filter cartridge can be easily accessed behind the cover of the skimmer. The cover is released by simply lifting it directly up (Fig. 13a). The cartridge is released by turning it counterclockwise (to the left, Fig. 14a). **Note that the power must be turned off (see instructions on page 9, Stop/start) before releasing the filter cartridge!** Make sure no objects enter the skimmer. Flush the filter cartridge thoroughly under warm running water or shower (Fig. 15) (*do not use pressure washers as it may damage the filter material*).

The filter cartridge should be replaced always, if after cleaning the filter, the water circulation is not at normal level. Depending on the rate of usage, filter should be replaced every 2 to 6 months.

Check the water pH level which should be maintained on normative level (7,2 – 7,6). When needed you can finetune the pH level by using pH+ or pH- chemicals. Should the pool be in heavy daily use it is recommended to add half teaspoon of chlorine (natriumdiklorisocyanurat, dihydrat) to the water to reach the 0,3 – 1,2 ppm free chlorine level.

*If the number of the users exceeds 10 users/day, or if the water temperature exceed 15°C, it is recommended to add chlorine (natriumdiklorisocyanurat, dihydrat) frequently to the water in order to maintain 0,3 – 1,2 ppm free chlorine level*



Fig. 13a



Fig. 14a



Fig. 15

## Replacing the water

The frequency for changing the water depends on various factors, e.g. use rate, water temperature, maintenance etc., so there is no general rule for it. The water should latest be changed when the water is visually unclear. If the pool is in heavy daily use, filtering and ozone cleaning or even the added chlorin might not keep the water clean for a long period of time. The frequency for changing the water may vary from couple of days to several months. However, we recommend changing the water at least every two months.

Before emptying the pool turn the power (see instructions on page 9, Stop/start). Empty the pool with a submersible pump to the nearest floor drain or sink. You can alternatively use simple siphon method. Should you not be able to fully empty the pool, use for example a wet vacuum cleaner or simply a bucket and cloth. Clean the pool with mild washing agent and rinse properly. *Do not use a pressure washer for cleaning the pool!*

The pool may be filled again after it has been emptied.

**Note!** Do not use salt or any other ingredients in the water which may harm the materials or cause blockage to the machinery.

## Problems and solutions

### No flow-error

If the water is not circulating properly, the device will stop itself and an error message will appear (Fig. 16). Check the water level and condition of the filter cartridge. Add more water if needed. Clean the filter cartridge or replace it if needed. Should problem remain, please contact the retailer or manufacturer.

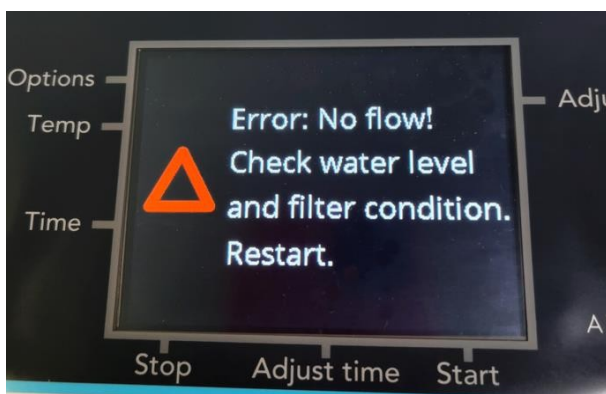


Fig. 16

**Tip!**

If for any reason, dirt has entered the piping system, it may disrupt the water flow and cause No flow -error. Take off the filter and flush piping system counterclockwise with fresh water through the pool's inlet nozzle (Fig. 17).



Fig. 17

**Temp measure err (Hi)**

Should the water temperature exceed 40°C, the device will stop itself and an error message will appear. Add cooler water to the pool to lower the temperature.

**Blank screen**

If the touch screen is blank and the pool machinery is not running, check the power supply and/or if the residual-current device has activated. If the power supply is ok but the residual-current device has turned off the power, push the green button to de-activate. Should the problem remain, unplug the device and contact the retailer or manufacturer.

## Warranty

### 3 years

These materials have a 3-year warranty, which applies to fractures and breaking without external influence or other misuse of the device (see below limitations):

- pool (basin), frame, rails, steps, panels and lid
- piping

### 2 years

These parts and combinations (aggregate) have a limited 2-year warranty which applies to breaking without misuse of the device (see limitations below):

- cooling unit (aggregate) as a whole
  - components: pump, heat exchanger, condenser, compressor, heater, ozonator
- touch screen control panel and control system

### Terms and conditions

The warranty is valid for the first owner of the device, and it cannot be transferred to another party without the permission from Avantopool Oy. When presenting a claim, the serial number of the device must be addressed. The warranty applies to repairing or replacing the defected material or part. The warranty of repaired or replaced parts expire at the same time as the general warranty for the device or its parts as mentioned above, unless otherwise agreed with Avantopool Oy.

### Warranty covers:

By discretion of the manufacturer, the defected part will be compensated by replacing or repairing it appropriately.

### Warranty does not cover:

Damages caused by incorrect use of the device or by not following the user instructions, e.g. damages caused by poor water chemistry or machine breakage caused by too low water level.

The warranty does not cover damages caused by or during transportation. You should address your claim immediately to the transportation / Freight Company. More detailed conditions in separate Avantopool Warranty sheet.