

installation and operating instructions | english

AeroBoxClassic AeroBoxXL



AeroBoxClassic und AeroBoxXL
installation and operating instructions

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When operating products from KK OG, national law must be regarded. The KK OG accept no responsibility and assume no liability for any improper or illegal use of their products!

Congratulations!

You are now the owner of a high-tec product!

Aeroponic, Aeroculture – there are a lot of names for the most modern technology of plant breeding. Yet every one of them describes the same method: A cultivation technique for plants without a medium, where the roots are hanging in the air and sprayed with a nutrient solution. Not only is this the most efficient cultivation method regarding water and nutrition, it is so promising, organisations like NASA and other space agencies use this technology for research on cultivation farming in space.

This makes us sure: You will achieve peak results with the AeroBox.

On that note – LET IT GROW!

Handwritten signature of Marco Keibinger in black ink.Handwritten signature of Nico Kullinger in black ink.

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AeroBoxClassic includes

1. Circulation pump: HYDOR Centrifugal Pump Pico 1000
- 2a. High pressure pump: M.R.S. Whisper PowerPump Small
- 3a. Water reservoir: 45 liter
4. Root vessel
5. Seal set
6. Double filter (pre-assembled)
7. Hose – Ø-8mm
8. Hose – Ø-6mm
9. 8 x valve and adapter (pre-assembled)
10. 8 x extra valve
11. Water distributor (pre-assembled)
12. 2 x Strainer
13. 2 x Rivet
14. Perforated top cover (7,8 or 15 void)
15. 15 x Net pot
16. Hydrocorrels 3L
17. T-joint

AeroBoxXL includes

1. Circulation pump: HYDOR Centrifugal Pump Pico 1000
- 2b. High pressure pump: M.R.S. Whisper PowerPump Professional
- 3b. Water reservoir: 100 liter
4. 2 x Root vessel
5. Seal set
6. Double filter (pre-assembled)
7. Hose – Ø-8mm
8. Hose – Ø-6mm
9. 16 x valve and adapter (pre-assembled)
10. 16 x extra valve
11. 2 x Water distributor (pre-assembled)
12. 4 x Strainer
13. 4 x Rivet
14. 2 x Perforated top cover (7,8 or 15 void)
15. 30 x Net pot
16. 2x Hydrocorrels 3L
17. T-joint



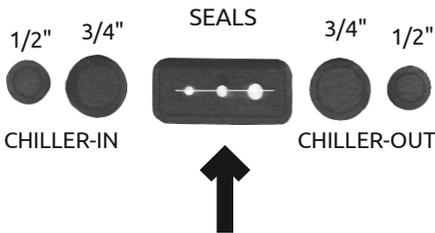
	AeroBoxClassic	AeroBoxXL
M.R.S. Whisper PowerPump	Small - 8.3 bar / 60 l/h	Professional – 10.3 bar / 165 l/h
HYDOR Centrifugal Pump	Pico 1000 (1000 l/h)	
Root vessel	60 x 40 cm	
Water reservoir	45 liter / 60 x 40 cm	100 liter / 80 x 60 cm

Assembling

All you need to set up your AeroBox is a few minutes of time, just follow the instructions in this manual.

STEP 1

Thread the flat plug terminal of your circulation pump through the big seal with three holes.



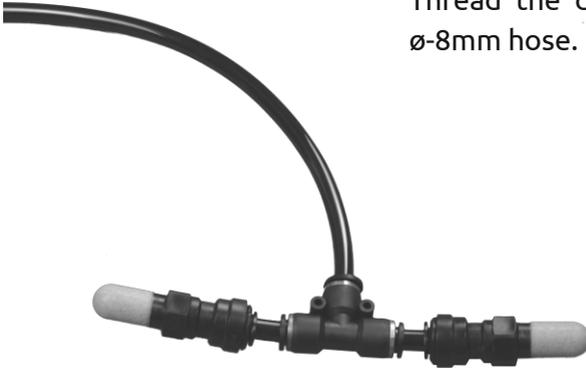
Note:

You can find additional options to connect optional Chiller/cooling devices, or other devices such as (e.g. Biofilters), beside the big seal with three holes.



STEP 2

Thread the doublefilter to the \varnothing -8mm hose.



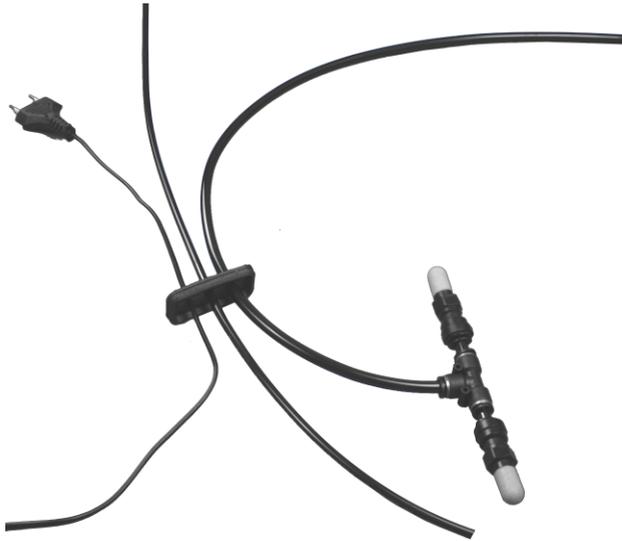
STEP 3

Thread the \varnothing -8mm hose through the big seal with three holes.



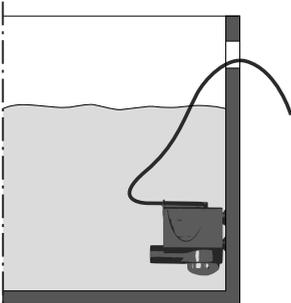
STEP 4

Attach the \varnothing -6mm hose through the middle hole.



STEP 5

Replace the seal in the water reservoir and mount the circulation pump and doublefilter as shown below.



STEP 6



AeroBoxClassic

Attach both hoses to the openings on your circulation pump.

Make sure that the connection is airtight.



AeroBoxXL

Information for **AeroBoxXL**:

You will receive the pressure adjustable pump of your AeroBoxXL preset optimally. If you, for what ever reson, want to adjust the pressure elsewise, make sure to follow the included instruction manual form M.R.S..

Select the location to operate your pumps respecting the included instruction manual. In general, make sure that the high pressure pump is operated in a dry and splash guarded location.

STEP 7

Thread the hoses of the spray valves through the holes of the root vessel from the inside.



STEP 8

Attach the hoses of the spray valves to the water distributor. For AeroBoxXL repeat step 7 and 8 with the second root vessel.



Information for **AeroBoxXL**:
For AeroBoxXL repeat step 7 and 8 with the second root vessel.



STEP 9A (AeroBoxClassic)

Attach the loose end of the \varnothing -6mm hose to the water distributor.



STEP 9B (AeroBoxXL)

Join the water reservoirs with the T-joints hoses.

Now attach the T-joint to the loose end of the \varnothing -6mm hose.

Release connectors:

To release the connectors, pull on the hose and push the movable ring against the direction of pull.



Attach



Release

STEP 10

Place the root vessel on the water reservoir and put the strainers in the intended holes.



AeroBoxClassic

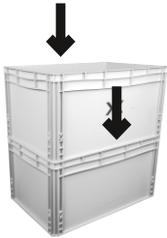


AeroBoxXL

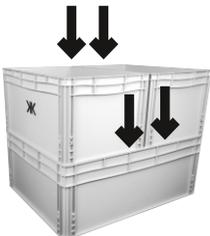


STEP 11

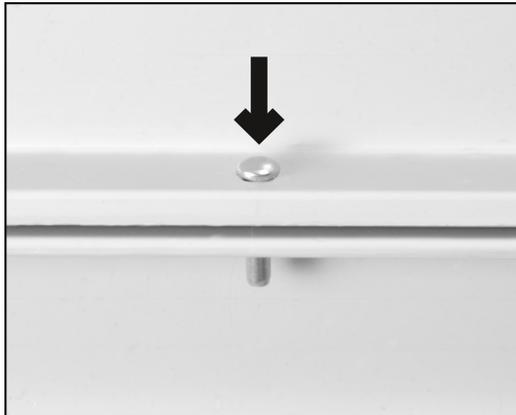
Put the rivets in the holes on the sides of the box.



AeroBoxClassic

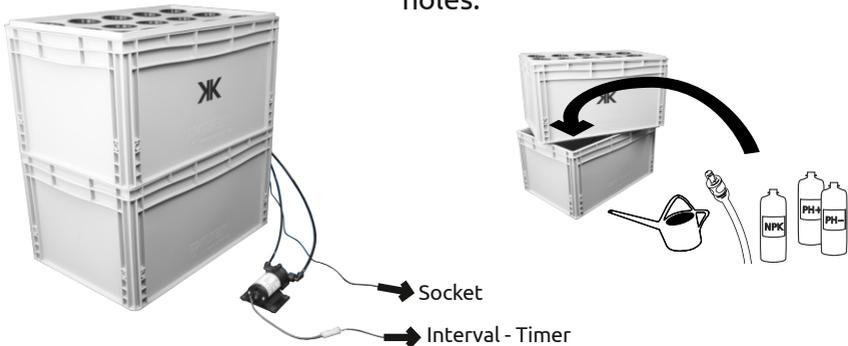


AeroBoxXL



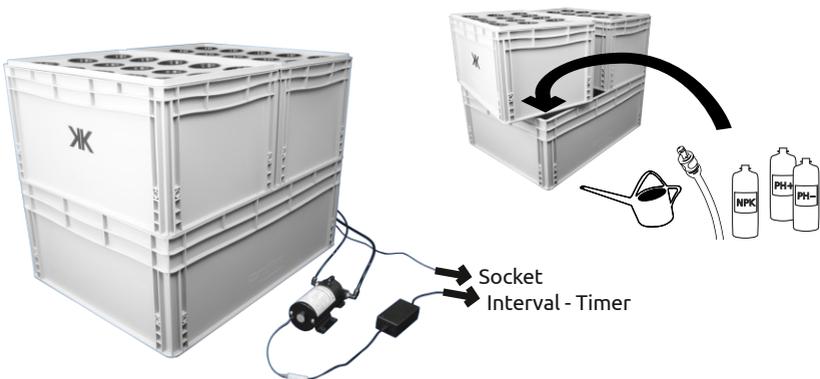
STEP 12A (AeroBoxClassic)

Put the lid on the root vessel and place the net pots in the holes.



STEP 12B (AeroBoxXL)

Put the lids on the root vessels and place the net pots in the holes.



Fill the net pots with hydrocorrels. Then fill the water reservoir of your AeroBox with water up to 3cm under the rubber seals.

Your AeroBox is now ready-to-operate.

Operation

This manual is only a technical overview for operating an AeroBox. For more in depth operational procedures, tips and tricks visit us on our homepage:

www.kkfarming.com/de/guide/

Please follow the safety references in this manual.

Water/nutrient solution

ATTENTION – Never operate AeroBox without water!



This can severely damage the pump.

You can fill the water reservoir up to 3cm under the rubber seals, but be aware that a high fill level will increase the risk of spilling over.

The circulation pump will make sure the nutrient solution is stirred and replenished with oxygen. This is why it should be activated 24 hours a day.

This way nutrients and pH regulators can easily be added. Do keep in mind that it may take a few minutes for all data to show accurately. Additional agitation will accelerate this process.

ATTENTION – Only use nutrients that have a good solubility!



Especially many organic fertilisers can clog the spray valves and should be used with caution. The spray valve size is 0,61mm and produces a liquid droplet size of around 65 µm.

Operating time

ATTENTION – Never use your high pressure pump permanently!



Not only can it damage the pump but also, advantages of aeroponic can be inhibited. Operating in an ON/OFF interval is required.

Achieve best results by experimenting with operation intervals. If u have no experience with aeroponic systems we would recommend a standard value of 15 second ON and 15 minutes OFF.

Such operation intervals can be accomplished by using an interval-timer. Interval-timers are available in our online shop:

www.kkfarming.com/de/shop/

Maintenance

ATTENTION – Life threatening situation!



Before servicing your AeroBox, make sure all power plugs have been removed. High voltage can cause life threatening events.

Maintaining double filter

Normally servicing every two to three months is sufficient, this depends on your individual use.

When your pump starts changing the sound it makes, pay attention to a „knocking“ sound in particular, then it is time to service your coarse filter.

For this, remove both single filters.



Rinse the filters, contrary to their suction direction, thoroughly. For this you can use a normal hosepipe with a connecting piece.



Maintaining spray valves

While servicing the spray valves you can use the second set of spray valves to keep operating your AeroBox. We recommend using the spray valve sets in turns.

Simply pull the spray valves you want to service off the adapter.



Take apart the valve by turning the grey valve head anti clockwise. Clean all parts using tap water and manually remove rough soiling.

To get rid of persistent soiling such as limescale, you can lay the parts of the spray valves in vinegar or other biocompatible detergents. Make sure to rinse all parts thoroughly with tap water afterwards.



When the parts are dry you can put them back together. When screwing together be sure of correct latching.

Clean the water reservoir and root vessels regularly. When growing cyclically you should clean your boxes after every cycle.

Normally cleaning just with tap water and a sponge should do the trick. If you use any other cleaning agents please note that this could effect your plants!

Maintaining circulation pump

Even though the circulation pump was designed for continuous use, a minimum of maintenance is necessary. Open the pump every 30-60 days and remove all soil and dirt. For this a soft brush or pipe cleaner can be helpful.

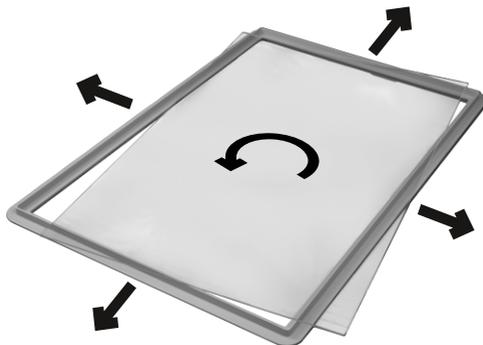
Set of cuttings (optional)

With the set of cuttings from KKfarming you upgrade your AeroBox to a cuttage box, without any extra effort. Achieve high root quota - without adding any hormones!



Available in our KKfarming Onlineshop:
www.kkfarming.com/de/shop/

The loose and flexible plexiglass pane allows infinitely variable ventilation and therefore humidity adjustment.



The divider allows cuttings to be placed in the net pots at an early stage, keeping a high humidity level.



Thanks to the reusable cutting discs, you produce cuttings and no waste! All parts can be reused after purification!



Warnings

Attention, water combined with high voltage can cause life threatening events! Especially if leaks occur you must always switch off all electricity, before any further actions. Be aware that water can conduct high voltage.

Follow the references of maintenance in this manual!

Follow the enclosed safety instructions of the circulation and high pressure pump!

Check your plug in connections regularly or whenever you take any actions on your AeroBox. The hoses must be pushed into the connector firmly.

Please prevent Children and people that are not qualified, from tampering with your AeroBoxXL.

M.R.S. high pressure pump

Never operate your high pressure pump continuously, only operation in intervals guarantees a long life-span of the pump.

Water reservoir

The water in the water reservoir can slop over when being moved. Avoid moving AeroBox when filled. Water and high voltage can cause life threatening events! For this reason respect the following information:

Taking any actions on your AeroBox, all power plugs must be removed!

Magnets

The magnets included in your set of cuttings can damage electronic devices and magnetic data mediums permanently. Keep the magnets away from such devices.

People with pacemakers or implanted defibrillators should stay clear of magnets.

Place of installation

In rare cases of damage, water can leak out of the high pressure pump. Therefore, make sure no consequential damages, such as damage on floors and furnitures, can occur when selecting your place of installation. KKfarming assume no liability caused by selecting an unsuitable place of installation.

Contact / Support

For any questions or concerns please do not hesitate to contact us.

Use our contact form on our Homepage:

www.kkfarming.com/de/info/support/

or send us an e-mail:

office@kkfarming.com

Purchasing spare parts and accessories

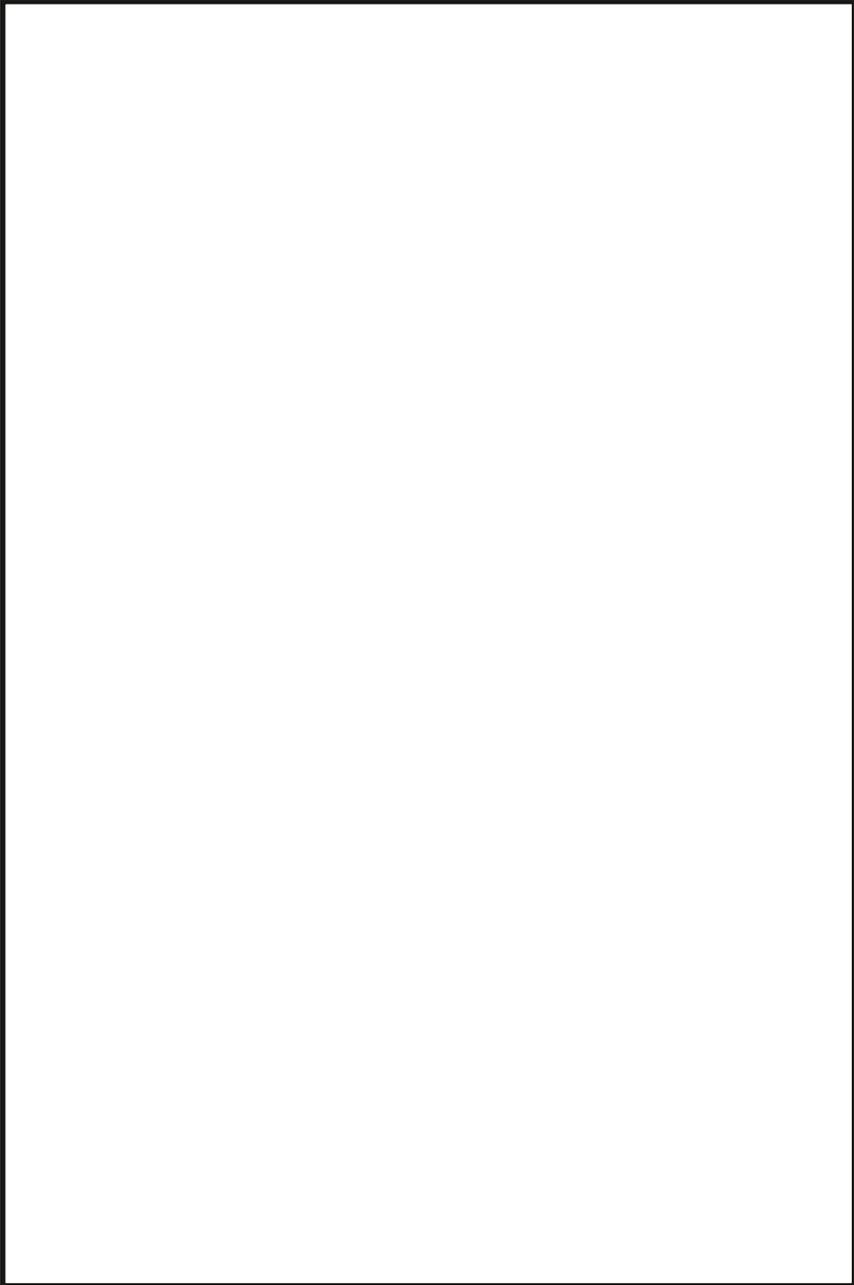
Spare parts and accessories for your AeroBox can be found in our onlineshop:

www.kkfarming.com/de/shop/

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