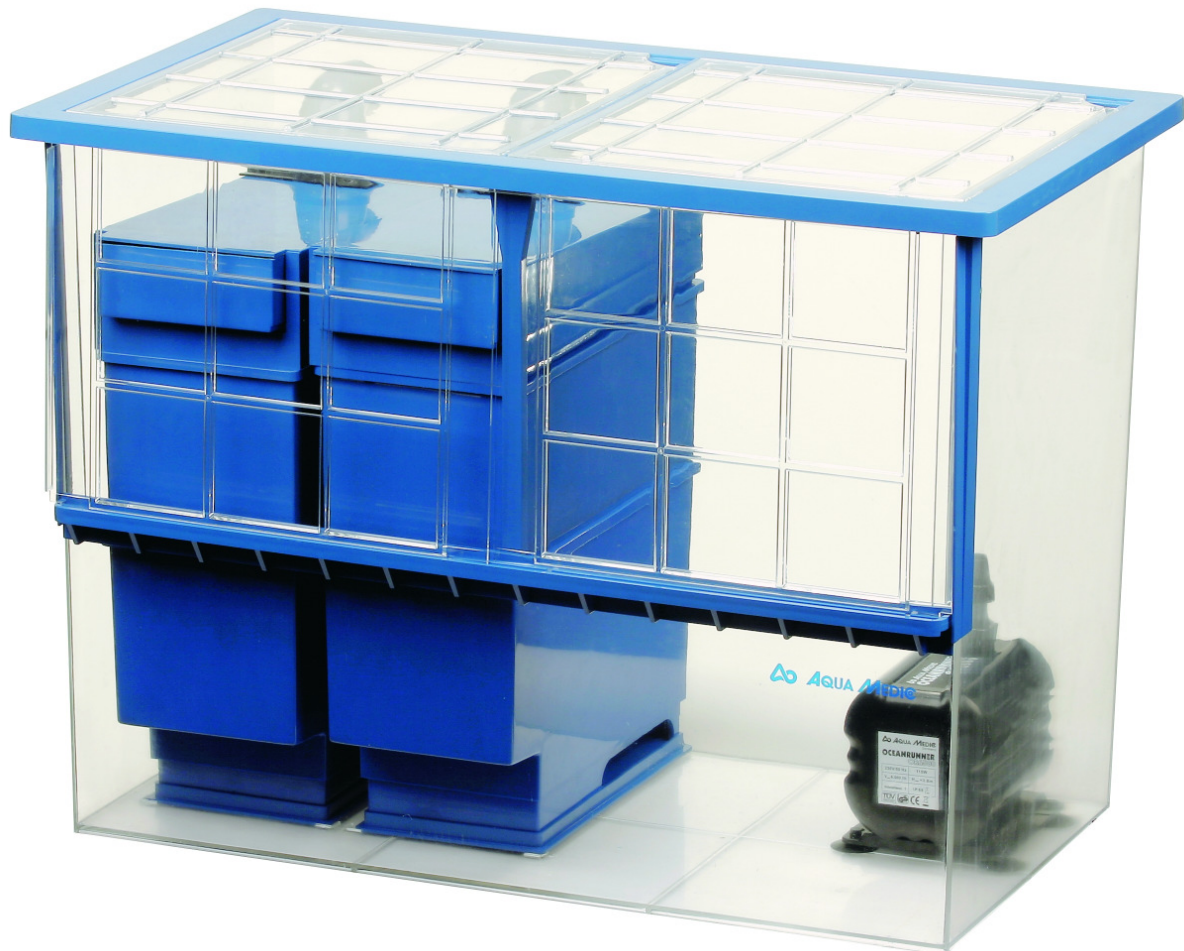


Operation Manual GB

With the purchase of this filtration system you have selected a top quality product. It has been specifically designed for aquaristic purposes and has been tested by professionals. With this unit - if used correctly - you are able to reduce organic substances and other pollutants of your aquarium water to non-toxic levels. The filter can be used as the only filter in freshwater aquariums or, combined with an external protein skimmer (e.g. Aqua Medic Turboflotor 5000 Baby) as well in saltwater aquariums. The filtration system Blue Malawi 1000 convinces by its compact and functional design and its clear arrangement.

1. Product description

The outside filtration system Blue Malawi 1000 is placed in a separate Acrylic tank. The system consists of the following components:

- Acrylic filter sump with lids and sliding doors
- 2 Patented prefilter modules with drawer and Wet dry filter with trickle plate, filled with AB Aqua Medic Bactoballs.
- Circulation Pump Or 3500 (3500 l/h)

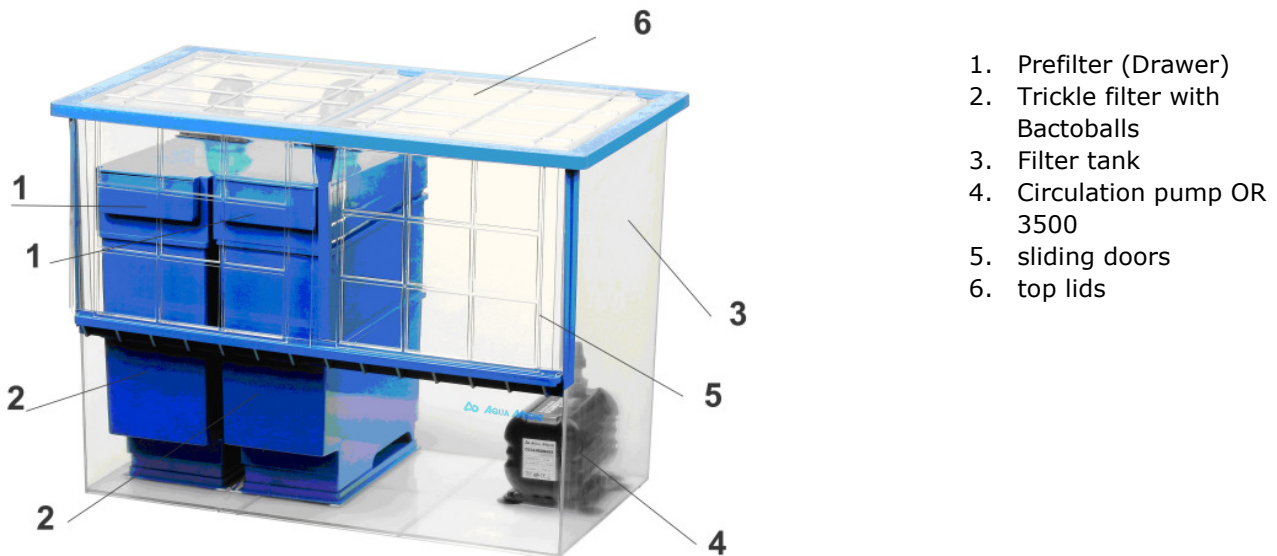


Fig. 1: Blue Malawi 1000

2. General description of the system

The water flows out of the aquarium via the overflow chamber - or another overflow device (e.g. an AB Aqua Medic Overflow Box) into the prefilter with the drawer. There, the water is cleaned mechanically. The drawer is filled with a blue filter sponge, covered by white filter floss. Below the drawer, 2 containers, filled with Bactoballs work as wet dry bio filter. From the Biofilter the water flows into the sump.

The circulation pump OR 3500 is placed inside the filter sump, next to the skimmer. It is connected to the bulkhead in the filter sump with a flexible hose. However, the pump may as well be set up besides the sump and connected to the aquarium with hard PCV pipes. During the installation of the pumps and the plumbing it has to be ensured that no resonance bodies are created because these may cause -depending on the type of pumps used- nasty noises. Besides the skimmer enough room is left for the installation of a Nitratrreductor NR 1000 or a Calcium reactor KA 1000.

3. Set-up of the filter

The under counter filtration system Blue Malawi 1000 is delivered ready to use in a filter sump made from Acrylic glass. The dimensions are 82 x 47,5 x 59,5 cm (l x w x h). It can be placed inside of the cabinet of most standard aquariums. The lids on the sump and the sliding doors close the filter sump, so the evaporation is reduced.

Mounting



Fig. 2



Fig. 3

Lids and sliding doors are removed and the bulkheads(2 and 3) are mounted into the filter sump. If the bulkhead (2) is not used it is closed with the included cap.



Fig. 4

The filter tower is now placed into the filter sump of the Blue Malawi 1000

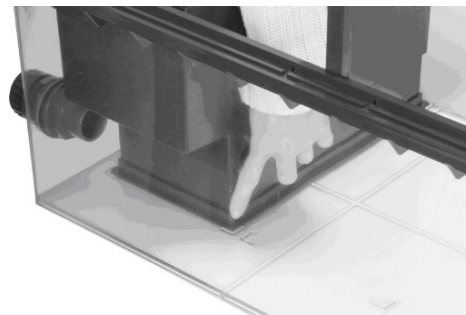


Fig. 5

Take care, that the filter tower is placed exactly towards the marks on the bottom of the sump



Fig. 6

The prefilter with the drawer is placed on top of the filter tower and filled with the filter sponge and the filter floss.



Fig. 7

The inlet at the backside is supplied with the rubber protection to avoid splashes. The inlet fitting is placed to the protection piece.



Fig. 8

The circulation pump OR 3500 is mounted at last. It is placed on the bottom, besides the filter tower. The pump is connected to the bulkhead, using the included flexible hose.

The filter is now ready mounted. Just place the lids on the top and mount the sliding doors.

Piping

The piping from the aquarium to the filter and back is not included.

Backflow, from the aquarium to the filter:

The aquarium should be connected to the inlet bulkhead of the filter sump with a PVC pipe or a flexible hose (not included). The connection is a bulkhead of 40 mm diameter. With this bulkhead, the piping can easily be separated, if necessary. We recommend mounting a ball valve between the filter and the aquarium to prevent dripping water, when the filter is disconnected.

Pressure line, back to the aquarium:

The pressure line of the pump is connected to the bulkhead in the filter sump with the included flexible hose. From the bulkhead to the aquarium, the connection can be made by PVC pipe or flexible hose (1")

4. Water reservoir - Water level in the filter tank

All open filter systems have to be planned in a way that in case of a circulation pump failure they can take up water flowing back from the aquarium without creating an overflow. The volume of water is depending from the construction of the overflow device, the pump capacity and the aquarium surface. The water volume can be calculated by taking the aquarium surface (length x width) and the build-up above the overflow level resp. the overflow comb. In most cases, the build-up is 2-3 cm.

During normal operation, the filter tank can be only filled to a height that this water volume is taken up in case of emergency. The minimum water level is determined through the height of the pump suction opening. It has to be made sure that the pump does not suck any air. Otherwise fine air bubbles are blown into the water which creates a lot of slurp noises. If the pump runs dry, it may get damaged irreversibly. The water which evaporates within the aquarium is only missed in the filter chamber - in the aquarium itself, the water level will be maintained. For this reason, the water level has to be controlled and replenished regularly. The refilling can be made easier by using the AB Aqua Medic Niveaumat and a reservoir in order to keep the water level constant. Nevertheless, it is suitable to mark the minimum and maximum levels directly at the tank. We recommend using only pre-treated tap water (reverse osmosis) for the refilling.

5. Large aquaria - equilibration tank:

If with aquaria with a big surface or build-up the reserve volume of the filter tank is not sufficient to take up the water during a pump failure, an equilibrium tank has to be added. Almost, you can get an appropriate tank from your local aquarium manufacturer. This tank has to be fixed at the filter tank with a pipe connection. The circulation pump sucks the water from the equilibration tank and pumps it into the aquarium.

6. Warranty

Should any defect in material or workmanship be found within twelve months of the date of purchase AB Aqua Medic GmbH undertakes to repair or, at our option, replace the defective part free of charge – always provided the product has been installed correctly, is used for the purpose that was intended by us, is used in accordance with the operating instructions and is returned to us carriage paid. The warranty term is not applicable on the all consumable products.

Proof of Purchase is required by presentation of an original invoice or receipt indicating the dealer's name, the model number and date of purchase, or a Guarantee Card if appropriate. This warranty may not apply if any model or production number has been altered, deleted or removed, unauthorised persons or organisations have executed repairs, modifications or alterations, or damage is caused by accident, misuse or neglect.

We regret we are unable to accept any liability for any consequential loss.

Please note that the product is not defective under the terms of this warranty where the product, or any of its component parts, was not originally designed and / or manufactured for the market in which it is used.

These statements do not affect your statutory rights as a customer.

If your AB Aqua Medic GmbH product does not appear to be working correctly or appears to be defective please contact your dealer in the first instance.

Before calling your dealer please ensure you have read and understood the operating instructions. If you have any questions your dealer cannot answer please contact us

Our policy is one of continual technical improvement and we reserve the right to modify and adjust the specification of our products without prior notification

AB AQUA MEDIC GmbH - Gewerbepark 24 - D 49143 Bissendorf/Germany

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