



INSTRUCTION MANUAL

Primo 110



www.juwel-aquarium.com

Introduction

Thank you for choosing a JUWEL Aquarium product.

Our products represent over 50 years experience in the manufacturing of aquariums and their accessories applying most modern production techniques bringing together the JUWEL Aquarium system, which is both easy to use and simple to maintain.

Please read this instruction manual carefully and completely to make sure you have received all components before setting up the aquarium. Please observe the safety instructions and maintenance guidelines given in this manual.

This instruction manual has been carefully prepared to provide you with accurate and complete information. All efforts have been made to ensure that the information given is correct. However, we cannot accept responsibility for printing or other errors. Technical details are always approximate and are not warranted characteristics and may be subject to change without notice.



SAFETY INSTRUCTIONS:

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- The power plugs of the electrical devices must not become moist. Connect the power plugs to the power supply at such a height that the connection cable forms a loop which would enable the water to drip down.
- At all times, only operate the electrical devices for your aquarium (lighting, heater, pump etc.) using an earth leakage circuit breaker (EL circuit breaker) with a maximum tripping current of 30 mA. If the socket that you are using in your home installation is not safeguarded with such a circuit breaker, please use a commercially available power strip with an integrated earth leakage circuit breaker.
- The electrical devices may only be operated in rooms.
- Pull the power plug of all devices operated in water before coming into contact with the water.



This product fulfils the guidelines issued by the European Union (EU) and is therefore entitled to carry the CE mark.
www.juwel-aquarium.de/en/declaration-of-conformity/

Setting up the Aquarium

We have produced your JUWEL Aquarium with the utmost care using most advanced production techniques. Extra strong packaging has been used to prevent damage to the aquarium. Please note however, that your aquarium has been transported and handled several times prior to reaching its final destination. We recommend therefore, that you test the aquarium for leaks in a suitable area (e.g. garage), by filling it with water and checking it very carefully.

Having made your checks, you should select the most suitable and desirable position for your aquarium. The position selected should have an even and level surface and should be able to support the weight of the filled aquarium. In order to prevent excessive algae growth, we recommend that you select a position that is not exposed to direct daylight.

We strongly recommend that the appropriate JUWEL Aquarium cabinet is used. They have a water-repellent surface and they have been made to match the dimensions and to bear the weight of the filled aquarium. The cabinet must be positioned on a level surface. The JUWEL Aquarium is built with a special bottom frame for security. The aquarium should be placed directly onto the cabinet. **DO NOT** place any additional support, e.g. polystyrene, under the aquarium since this is not necessary with our aquariums.



i Notice:

- Please ensure that any air stones or similar aeration devices used are placed in the centre of the aquarium. The use of such equipment may cause water to splash and condense on the lighting unit and frame, which may then run down on the outer wall of the aquarium. The occurrence of such effects does not constitute a defect in the product.
- Do not transport the aquarium when full.
- Make sure that maintenance of the aquarium does not damage the bonding.
- Do not use any toxic substances to clean the aquarium.

TIPP JUWEL Backgrounds

For decorative designs on the rear wall of your JUWEL aquarium, we recommend the JUWEL rear walls and posters for various sizes of aquariums.

JUWEL rear wall motifs

With an attractive 3D rock motif that creates a powerful impression of depth.

JUWEL textured rear walls

With an attractive and distinctive bark texture.

Juwel Conexo Adhesive

The JUWEL motif and structure back panels are affixed to the rear wall of the aquarium using the special Conexo silicon before it is filled with water.

JUWEL Posters

JUWEL Posters are printed on both sides and provide attractive motifs to create a simple and highly effective background design for your aquarium.

JUWEL Poster Fix

JUWEL PosterFix is an oil that will enhance the three-dimensional effect of your film backgrounds. JUWEL PosterFix prevents unattractive light refraction, thus increasing the colours and structure of your motif to great effect. The poster can be easily removed.

These JUWEL accessories are available from your specialist retailer.



i Set-up suggestions for JUWEL aquariums

Let our sample designs inspire you; set up your aquarium in just a few steps.

Follow our step-by-step instructions to create wonderful underwater worlds. Naturally all our suggested set-ups can be used in every JUWEL aquarium. Watch the corresponding set-up video on our website and download the step-by-step set-up plan as a PDF file.



Setting up your JUWEL Aquarium

Perform the following steps when putting the aquarium into operation:

1. Assemble the cabinet if necessary.
2. Arrange the inspected aquarium in a suitable place.
3. Affix the JUWEL structured backgrounds if necessary, please observe the drying time of between 48 and 72 hours.
4. Prepare the filter for operation as described in the chapter "Putting the JUWEL filter system into operation".
5. Complete the decoration with ground material etc. as desired.
6. Plant the short plant species in the aquarium if applicable.
7. Slowly fill the aquarium with water through the filter to half way up.
8. Plant higher plant species in the aquarium if applicable.
9. Slowly fill the aquarium with water through the filter up to the water level line.
10. Connect the circulating pump and the heater to the power supply.
11. Install the lamp unit and connect it to the power supply.
12. If appropriate, close the aquarium with the designated flaps.
13. We recommend introducing fish in steps. You may put in the first fish (4-5) after a few days. These also ensure that the biological filter develops. The run-in period of the filter may last 6 - 8 weeks. You may increase the number of fish in steps during this time.

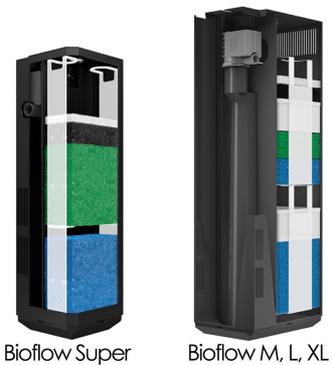
The JUWEL filter system Bioflow

The JUWEL filter system Bioflow is a highly effective biological filter system with two stages that includes components complementing each other in an ideal manner. Installing the filter in the aquarium makes hose connections unnecessary and prevents leaks. The pump output is not negatively affected by hose couplings, intake tubes etc.

The capacity of the pump is designed in such a manner that an ideal level of biological filtering is ensured by a sufficient level of percolation through the filter material.

In that context, the large filter volume ensures excellent mechanical filtering and facilitates long cleaning intervals.

The construction of the filter system enables you to quickly access the individual heater, pump, and filter media components. This way, the filter system may comfortably be operated during cleaning and while performing maintenance work.



All Bioflow filter systems are delivered with five top-quality filter media:

1. bioPad – filter wadding (white)

The fleece wadding acts as a mechanical pre-filter. It stops coarse dirt, such as dead plant parts, from penetrating deeper into the filter.

2. bioCarb – activated carbon sponge (black)

The sponge containing bound activated carbon removes toxins from the water, e.g. harmful heavy metals and organic impurities.

4. Nitrax – nitrate remover (green)

The sponge contains micro-organisms that are able to break down nitrates. The JUWEL filter offers a particularly good environment to this end.

5. bioPlus coarse – coarse filter sponge (blue)

The coarse-pored filter sponge in the middle of the filter causes the biological clarification of the water through the accumulation of bacterial cultures.

7. bioPlus fine – fine filter sponge (blue)

The fine-pored filter sponges in the lower section of the filter retain even the smallest suspended particles and ensure crystal-clear water.

Other optional filter media round off the options that are available for the optimum use of your JUWEL inside filter:

6. Amorax – ammonium remover

Amorax is a highly efficient filter medium made of natural zeolite. It quickly and effectively binds ammonium, thereby preventing the formation of ammonia and promotes the vitality of your fish.

3. Carbox – highly effective activated carbon

Carbox's excellent absorption properties permanently and quickly bind discolourations, odours and toxic substances and ensure crystal-clear water.

6. Cirax – ceramic granules

Cirax is a biological filter medium which creates the perfect colonisation conditions for useful bacteria, due to its large, highly porous surface.

6. Phorax – phosphate remover

JUWEL Phorax is a highly effective filter medium used to break down phosphates in your aquarium. This effectively reduces the growth of algae and can contribute to improved plant growth.



Getting Started - The JUWEL filter system Bioflow Super

You should prepare the filter for operation prior to setting up the aquarium. However, do not yet connect the electrical components to the power supply.

Please observe the following notes regarding commissioning the JUWEL filter system Bioflow Super:

The JUWEL filter system Bioflow Super consists of:

- 1 heater (included in complete aquariums only)
- 1 heater holder
- 1 pump
- 1 white filter wool - bioPad
- 1 carbon sponge, packaged - bioCarb
- 1 green nitrate remover sponge, packaged - Nitrax
- 1 blue filter sponge fine - bioPlus fine

1. Insert the base of the pump into the pump holder of the filter and firmly push it into position. In that context, the pump outlet faces in the direction of the nozzle opening. Confirm the proper arrangement of the gasket in the nozzle opening (it is used to minimize the transmission of vibrations).

2. Click the heater bracket onto the heat and insert both into the guide rails of the filter divider.

3. Now start preparing the filter sponges by removing the plastic packaging from the carbon sponge and the nitrate remover sponge. Thoroughly rinse the blue filter sponge only under running water.

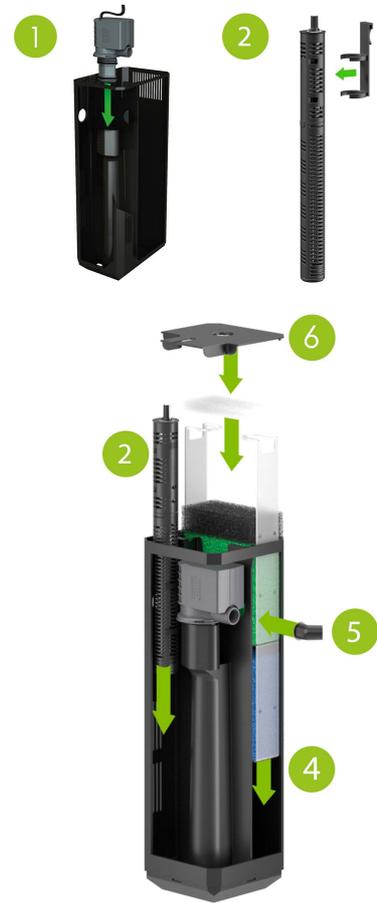
4. After that, insert the blue filter sponge, the nitrate remover sponge, the carbon sponge and the filter wool on top into the filter basket and push it into the filter housing.

5. Carefully attach the nozzle from the outside through the opening to the pump outlet and ensure its firm connection.

6. Place the filter cover on the filter housing.

7. The JUWEL filter system Bioflow Super is now ready for operation.

Please note that the filter system takes approx. 14 days for the blue filter sponges to have formed a bacteria culture which biologically cleans the water.



JUWEL FilterGrid

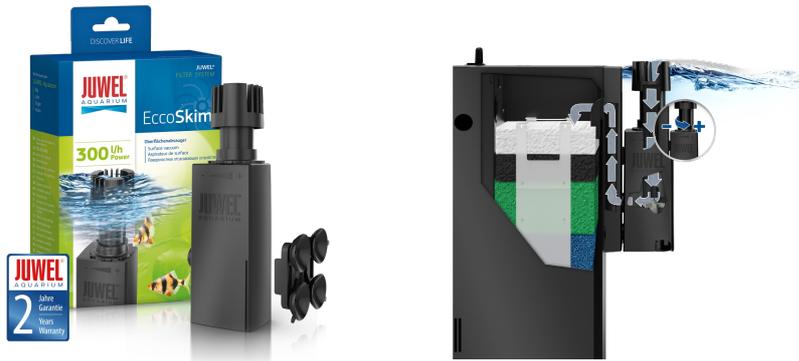
The JUWEL FilterGrid prevents very small shrimp and fish from entering the JUWEL Bioflow Filter.

The JUWEL FilterGrid is available as an original accessory (Article Number 87099) for JUWEL aquariums.



Notice:

JUWEL EccoSkim combines the benefits of a surface skimmer with a compact design and great adjustable surface-skimming capacities. With a performance of 300 l/h at a consumption of only 4.5 W, the JUWEL EccoSkim guarantees effective surface skimming for freshwater and salt-water aquariums. Film and other surface-active substances are effectively removed and conveyed to the JUWEL filter system and stored there. This can be ordered from your JUWEL Aquarium retailer (Part No. 87025).



Recommendation

OxyPlus - O2 Air Diffuser

The special OxyPlus - O2 Air Diffuser provides additional oxygen to the aquarium if desired. This can be ordered from your JUWEL Aquarium retailer (Part No. 85145).



Care and maintenance of the JUWEL Filter System

The JUWEL Filter System requires very little maintenance if you follow the following instructions.

bioPad

Replace the white filter wool pad once a week. If you have large fish, then this may require changing slightly more frequently. This will ensure that the filter sponges will not be clogged by larger dirt particles.

bioCarb

Replace the black activated carbon sponge every 4-6 weeks. Again, if you have large fish then this may be to be more frequent. This ensures that any chemical impurities from the water will be removed. Please note that the chemicals which are absorbed by the activated carbon contained in the sponge, will be released to the water again if the change intervals are too long.

bioPlus coarse/bioPlus fine

If the filter wool and the activated carbon sponge are replaced as suggested, then it is sufficient to carefully clean or replace the coarse blue sponges at 6-12 weeks and the fine blue sponges at 3-9 months only.

- Cleaning or replacing the blue sponges or the Cirax filter medium affects the impact of the bacterial culture. For that reason, it is recommended not to clean or replace the blue sponges and the Cirax filter medium at the same time, but rather successively in an alternating manner.

You do not need to worry about the liquid dirt accumulating at the bottom of the filter housing. Normally, this dirt contains important biological substances which enhance the water quality.

Please do not worry if some dirt gets into the water during the cleaning process causing cloudiness. After the filter system is back in operation, the water will soon clear again.

Nitrax

In order to allow a proper level of micro-organisms in the filtration system it is recommended to exchange the sponge every 8 weeks. The nitrate removal sponge contains bacteria, which will after a while reduce the nitrate level in the aquarium significantly.



OPTIONAL:

Amorax

Amorax is a highly efficient filter medium made of natural zeolite. It quickly and effectively binds ammonium, thereby preventing the formation of ammonia and promotes the vitality of your fish. Replace the JUWEL Amorax every 3 months.

Carbox

Carbox's excellent absorption properties permanently and quickly bind discolourations, odours and toxic substances and ensure crystal-clear water. We recommend replacing JUWEL Carbox every 2 months.

Cirax

Cirax is a biological filter medium which creates the perfect colonisation conditions for useful bacteria, due to its large, highly porous surface. We recommend changing JUWEL Cirax every 12 months.

Phorax

JUWEL Phorax is a highly effective filter medium used to break down phosphates in your aquarium. This effectively reduces the growth of algae and can contribute to improved plant growth. Change JUWEL Phorax every 2 weeks.



Important:

Always use original JUWEL Aquarium filter media to ensure the optimum performance of your system.



JUWEL AquaHeat Pro - Installing the heater in the JUWEL filter system

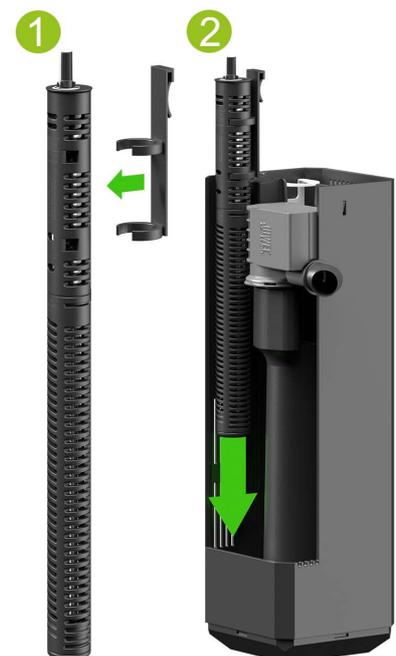
The JUWEL aquarium heater is supplied with the heater holder (fig. 1) which you will need for the installation.

Please perform the following steps for all JUWEL Aquarium filter systems: (You may need to start by removing an installed separation wall holder.)

1. Install the heater holder.
2. Attach the heater to the filter housing on the inside of the filter and/or initially insert the heater holder into the guide rail of the separation wall.

The heater is properly positioned if the heater holder rests on the upper edge of the housing and/or the separation wall.

The heater is now operational.



JUWEL AquaHeat Pro- Operation and maintenance of the heater

The JUWEL adjustable aquarium heater is an essential component of the JUWEL filter system. Its positioning within the filter housing and consequently in the water stream facilitates even warming of the water in the aquarium.

You control the temperature of the water via the adjusting knob in the heater head. You may specify the temperature the heater is supposed to heat the water to in accordance with your individual requirements. The centre position between "+" and "-" corresponds to a water temperature of approximately 23 – 26°C or 74 – 78°F depending on the ambient temperature.



THE HOUSING CANNOT AND MUST NOT BE OPENED!



Recommendation:

The JUWEL automatic heater warms the water of your aquarium up to 28°C depending on a normal room temperature of 21°C. If you keep your aquarium in rooms below this or your fish need a higher temperature, we recommend to purchase a second heater.



Safety instructions:

- Only connect the heater once the aquarium is filled with water at least to the minimum water level of the heater.
- Maximum operating depth 80 cm.
- Never use the heater outside the aquarium.
- Operate the heater indoors only.



SAFETY INSTRUCTIONS:

- Always unplug the heater and allow it to cool before removing it from the filter.
- Never attempt to open or repair the heater. Any signs of damage or malfunction and the heater should be replaced with an original JUWEL Aquarium heater.
- Never repair the electrical cord or plug. In case of damage replace the complete heater.
- Once removed never place on a flammable surface.

JUWEL DigitalThermometer 3.0

With the digital thermometer 3.0, you can check the water temperature in your aquarium conveniently and precisely. The thermometer is integrated perfectly into the JUWEL design and the large display allows for comfortable temperature readings.

The JUWEL DigitalThermometer 3.0 is available as an original accessory (Article Number 85703) for JUWEL aquariums.



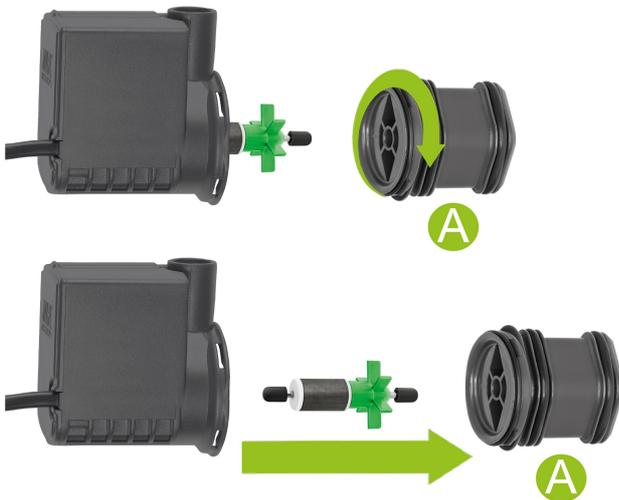
Maintenance of the pump JUWEL Eccoflow in the filter system Bioflow Super M, L, XL

The JUWEL Eccoflow pump should be checked with regard to functionality and cleaned at regular intervals (at least once a month).

Please proceed as follows to this end:

1. Disconnect all electrical devices that are operated in the water from the power grid.
2. Remove the outlets.
3. Remove the pump from the pump retainer of the filter.
4. Disconnect the adapter (A) from the motor by turning it counter-clockwise and remove the impeller from the chamber.
5. Now clean all components thoroughly. Deposits and dirt should in particular be removed from the pump chamber, the impeller and pump shaft. Otherwise the functionality of the pump will be impaired.
6. Check the impeller for damage and possible signs of wear of the magnet. You should also ensure that the two rubber bearings are located on the ends of the pump shaft.

After that, please reinstall the pump in reverse order in the filter.



Recommendation:

We recommend that you replace the parts subjected to wear and tear, e.g. the impeller, axle and the rubber axle holders, at intervals of approx. 12 months in order to ensure the optimum function and operating quietness of the pump. Inquire at your specialist retailer for assistance.



SAFETY INSTRUCTIONS:

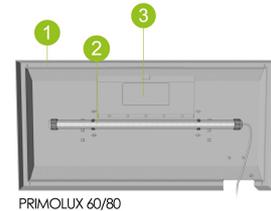
- Never operate the power head out of water.
- Always unplug the power head from the power supply before removing it from the filter.
- The power head is intended for indoor use and for use in fluids up to 35°C.
- Never repair the electrical cord or plug. In case of damage replace the complete power head.

JUWEL PrimoLux 60 / 80

You achieve the optimum energy-saving lighting for your aquarium with the PrimoLux 60 / PrimoLux 80 cover light by JUWEL Aquarium, and it simultaneously offers you access to the aquarium for maintenance measures while being lit.

The PrimoLux 60 / PrimoLux 80 cover light by JUWEL Aquarium consists of

- Covering hood (1)
- JUWEL NovoLux LED with charger (2)
- Service hatch/es (3) for the supply of feed and water treatment agents etc.



PRIMOLUX 60/80

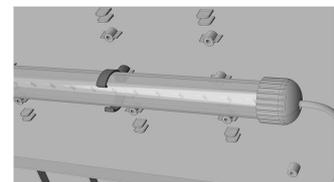
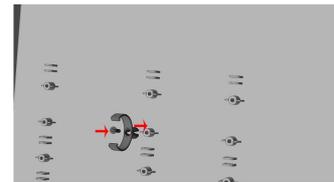
Putting the PrimoLux 60 / Primolux 80 into operation.

Position the enclosed brackets onto the cover light mountings according to the illustration and screw them tight.

Now insert the NovoLux LEDs into the brackets and place the cover light on the aquarium.

Then insert the service hatch and connect the PrimoLux 60 / PrimoLux 80 to the power supply.

Ensure that the upper edge of the aquarium and the guide rails of the service hatch/es are free of foreign objects, e.g. sand or gravel.



Maintenance and care JUWEL PrimoLux 60 / 80

The PrimoLux 60 / Primolux 80 cover light requires very little maintenance and attention.

If necessary, we recommend cleaning with a soft cloth and mild detergent.

During care and maintenance activities, always disconnect the Novolux LED from the power supply.



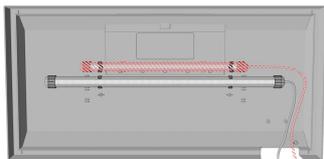
Lichtquelle austauschbar
Exchangeable light source



Betriebsgerät austauschbar
Control gear interchangeable

TIPP Tip:

The PrimoLux 60 / Primolux 80 offers you the option of using additional NovoLux LEDs to enhance the illumination or achieve special colour effects in the aquarium. Inquire at your specialist retailer to that end.



i **JUWEL SmartFeed 2.0 Futterautomat**

The JUWEL SmartFeed 2.0 is a convenient automatic feeder for granulate and flake feed with an extended range of functions.

Three different feeding intervals (24/48/72 hours), as well as the desired feeding time and quantity can be programmed individually (up to 8 levels). The device allows for up to 3 feedings per day. The feeder is equipped with a micro USB interface for external power supply.

The JUWEL SmartFeed 2.0 is available as an original accessory (Article Number 89020) for JUWEL aquariums.



PrimoLux symbols



NovoLux LED symbols



Bioflow Filter symbols



AquaHeat Pro symbols



Filtermedia symbols



PLEASE RECYCLE AS REQUIRED!

Please do not hesitate to contact our competent administration if you have any questions.



Proper disposal (electrical waste)

The labelling on the product or on the accompanying literature declares that it must not be disposed of, at the end of its service life, together with household rubbish. Please dispose of this equipment separately from other waste, to protect the environment or public health from damage by unregulated waste disposal.

Recycle the equipment and support the sustained recycling of material resources.

Private users should contact the dealer who sold them the product or the responsible authorities, for a demonstration on how to recycle the equipment in an environmentally friendly way.

Guarantee

We guarantee the performance of the JUWEL-Aquarium product or its accessories to the purchaser for a period of 24 months from the date of purchase according to the following conditions:

§ 1 Extent of the guarantee

(1) This guarantee extends to the JUWEL-Aquarium product and its components excluding items subject to wear and tear such as T5 and T8 light tubes and filter media. It is limited to the product as such and does not cover damage to other property and/or individuals. In addition, the provisions of the product liability law apply. These provisions are not limited by the aforementioned arrangement.

(2) It is the prerogative of JUWEL-Aquarium to decide whether the guarantee is performed by means of repair or replacement. If neither repair nor replacement can ensure the performance of the JUWEL-Aquarium product the purchaser is entitled to demand a reduction in price or to return the product against repayment of the purchase price.

§ 2 Guarantee period and settlement procedure

(1) The guarantee period begins on the day of the purchase of the JUWEL Aquarium product from the retailer. Claims under this guarantee will not be honoured, if

- (a) the damage is caused as a result of improper use or maintenance or nonobservance of the instructions given in this manual
- (b) the product or its components have been maintained by persons or companies not authorised by the manufacturer to do so
- (c) the product or its components have been damaged by mechanical means of whatsoever kind, in particular broken glass

(2) All claims under this guarantee have to be notified to the retailer, from whom the aquarium has been purchased without delay, however, not longer than 2 weeks from the day of first occurrence of defects. Rights under the consumer protection laws will remain unaffected.

(3) Guarantee claims will only be accepted if the validity of the claim is supported by evidence of purchase of the JUWEL-Aquarium product. This declaration of guarantee is a translation only. In case of doubts the original German language version prevails.

We reserve the right to make technical alterations.

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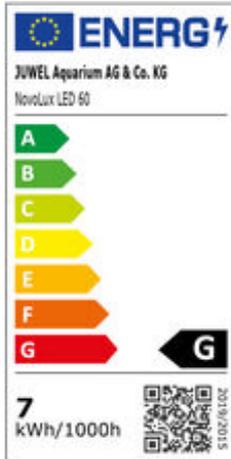
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E-Mail: info@juwel-aquarium.co.uk
Service-Mail: info@juwel-aquarium.co.uk

This product contains light sources of the energy efficiency classes:

PrimoLux LED

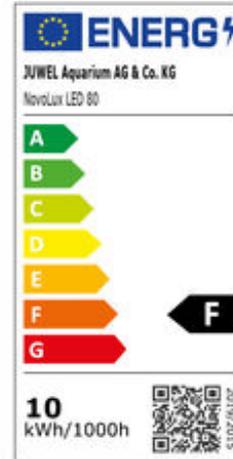
NovoLux LED 60
Primo 60 LED



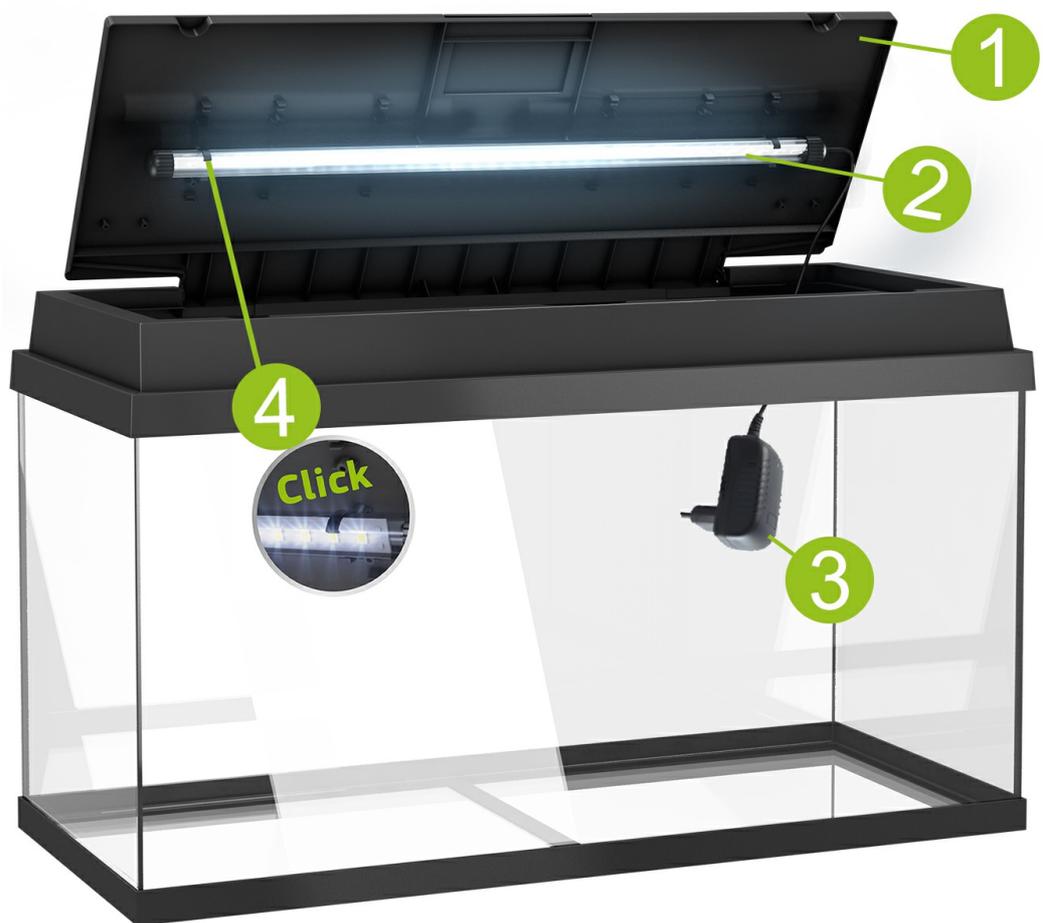
NovoLux LED 60
Primo 70 LED



NovoLux LED 80
Primo 110 LED



AQUARIUM PASS Primo 110



1



1

Primo 110



2



3



4



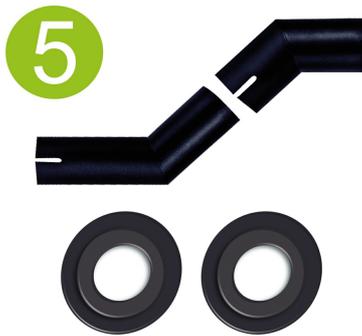
	Primo 60 & 70	Primo 110
	Product Code	Product Code
1.	black:	black:
	INT: 36360	INT: 36380
	AU: 36363	AU: 36383
	UK: 36362	UK: 36382
	white:	---
	INT: 36460	---
	AU: 36463	---
	UK: 36462	---
2.	49260	49280
3.	49205	49205
4	49200	49200



FILTERPASS **Primo 110**



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Aquarium	Primo 110
Filter Type	Bioflow Super
	Product Code
1.	Eccoflow 500
	INT: 85752
	UK: 85762
	AU: 85772
2.	85091
3.	AquaHeat Pro 100 W
	INT: 85625
	UK:85825
	AU: 85875
4.	85990
5.	90046
6.	90016



FILTERMEDIA **Primo 110**

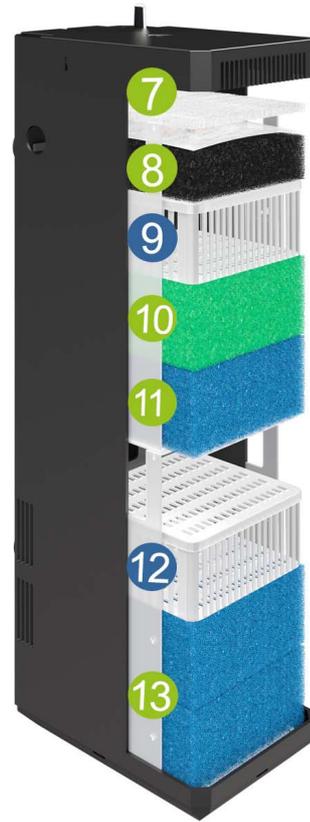


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Bioflow ONE

Bioflow Super

Bioflow M, L, XL



Aquarium:		Primo 60 & 70	Primo 110	Rio 125, 180, 240 / Lido 120, 200/ Vision 180/ Trigon 190	Rio 350/ Vision 260	Rio 450/ Vision 450/ Trigon 350
Filter Type:		Bioflow ONE	Bioflow Super	Bioflow M	Bioflow L	Bioflow XL
		Product Code	Product Code	Product Code	Product Code	Product Code
7.	bioPad	-	88038	88049	88099	88149
8.	bioCarb	-	88037	88059	88109	88159
9.	Carbax	-	88058	88058	88108	88158
OPTIONAL						
10.	Nitrax	-	88055	88055	88105	88155
11.	bioPlus coarse	-	-	88050	88100	88150
12.	Amorax	-	88054	88054	88104	88154
	Cirax	-	88056	88056	88106	88156
	Phorax	-	88057	88057	88107	88157
OPTIONAL						
13.	bioPlus fine	88021	88051	88051	88101	88151