

aquaristik



Operating instructions

Instructions for installation

V.25.1



The LEDaquaristik GmbH offers powerful and natural LED lighting in an incomparably large variety of versions. This brilliantly sets the scene for your aquarium or terrarium and opens up an exceptionally lively and colourful underwater, plant and animal world. Of course, all our LED bars are waterproof, as well as dimmable and suitable for light control/daylight simulation.

Due to decades of experience in aquaristics, LEDaquaristik offers you above-average product competence and know-how. We produce our lighting systems according to the latest LED technology, whereby reliability and service life are always the focus. High-quality materials and

components precisely matched to each other, as well as careful processing, form the foundation for a high standard of quality.

Our company is characterised by in-house development and production, resulting in innovative and unique products. These include energy-efficient LED modules with water cooling and heat recovery, or exclusive lighting controls with an impressive range of functions and operating concept. Elegant lamp housings, flexible mounting solutions and the innovative aquarium cover made by custom size round off the product range.





Based on the principle of a modular system, you can assemble your LED lighting flexibly and individually according to your personal requirements and wishes. Whether a simple starter set for 1:1 replacement of old fluorescent tubes or a sophisticated complete system with daylight simulation. There is an almost infinite number of possible combinations, and the lighting can be expanded at any time.



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Important notes on use

We are pleased that you have decided to purchase our products and thank you for the confidence you have placed in us. Our products are always manufactured with the utmost care and using the latest technology.

Please read all chapters of these instructions for use carefully first and check your order for completeness. Please observe the safety instructions as well as the recommendations for maintenance and care.

We have taken the greatest care in the development of these operating instructions. However, we cannot accept any liability for possible printing errors and mistakes. Technical specifications are approximate. We reserve the right to make technical changes.

Intended use

Our products and all parts included in the scope of delivery are intended exclusively for the illumination of aquariums, terrariums and plant cultivation in compliance with the technical data.

Safety instructions



The purchased devices may pose a risk to persons and property if they are used improperly or not in accordance with their intended use or if the safety instructions are not followed. Remove the packaging before putting the unit into operation!

- The devices can be used by children aged 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 device in a safe way and understand the hazards involved. Children must not play with the device and must be supervised during cleaning and user maintenance.
- Before use, visually inspect the device to ensure that it is undamaged, especially the power cord and plug.
- Check that the LED bar is firmly seated before use.
 - The electrical devices may only be operated indoors.



- Power supply unit, dimmer, controls or splitter must not be placed on or inside the aquarium cover!
- Always disconnect the mains plug before working on the LED bar!
- Operation only with the FI circuit breaker, max. 30 mA.
- The mains plugs of the electrical devices must not get wet. Connect the mains plugs to the mains at a height so that there is a loop in the connecting cable where water could drip off.

- The minimum distance of the LED bar to the water surface should be 50mm or the LED bar must not get wet permanently or repeatedly.
- The light sources manufactured according to protection class IP67 can also be used inside an aquarium cover. Explicitly not suitable for underwater use! LED spotlights manufactured to protection class IP44 must not be used inside a damp environment or even inside the aquarium cover.
- LED bars of protection class IP67 cannot be opened and must be completely replaced if defective.
- Avoid looking directly into the switched-on LEDs for a longer period of time, otherwise you risk eye injuries! This applies in particular to UV LEDs.

Our products comply with the directives of the European Community (EU) and are therefore CE-compliant.

Suspended mounting

When installing hanging lights, choose a fastening that matches the existing ceiling and construction. Our cable systems come with standard dowels and screws, these may not be suitable for your situation on site.

The right power supply



Only LED power supplies with a 12V DC output voltage may be used. Unsuitable power supply units lead very quickly and inevitably to a defect of the LEDs - any warranty claims are void!

To determine the power your power supply unit must have, proceed as follows. Add the power values (watts) of the LED bars to be connected plus a 10% reserve. The next larger power supply unit is then the right choice. You can find our power supply calculator at: tools.ledaquaristik.de

Please also note the information on overvoltage protection on page 40.

Commissioning and operation

Connecting the LED light with the accessories

Connect the LED luminaire to the power supply adapter or distributor, dimmer or day simulation. See graphic on the right for connection sequence. Recommended tool: phase tester / screwdriver.



Always observe the maximum load capacity and power of the individual products depending on the power supply unit used and the number of LED bars. Performance data can be found in the product descriptions / technical data. Always avoid overloading and incorrect polarity!

Colour coding of the connection cables





Maintenance and care

The following sections describe maintenance work that is required for optimal and trouble-free operation. Regular maintenance extends the service life and ensures the function of the products over a long period of time.

- During maintenance and servicing, always disconnect the lighting from the mains.
- If necessary, we recommend cleaning with a soft cloth and mild detergent.
- Permanent moisture as well as limescale and dirt deposits can negatively affect the light quality, performance and service life of the LED bars.
- For closed covers, we recommend using the CleanCover.
- For light sources that cool passively via the ambient air, choose a well-ventilated location. Complete enclosure leads to a build-up of heat and impairs the service life. With closed aquarium covers, the existing openings for cables and hoses are usually sufficient for ventilation; observe the heat development and create additional openings if necessary.
- Compared to fresh water, seawater is an extremely aggressive medium and only very few materials can withstand direct and permanent contact. To avoid unnecessarily shortening the life of the LED bars, appropriate precautions should be taken when using them in seawater. A glass cover on the aquarium is probably the best protection for the lighting. The water cooling system can only be used in saltwater areas with the TITAN extension!

In addition, please note and follow the instructions for the individual products on the following pages of these operating instructions!

Troubleshooting

1. The LED bar does not light up or flickers.

Possible causes: The LED power supply unit does not supply voltage, is defective or the mains plug is not plugged in.

A failure of a complete LED bar is very unlikely. Mostly, such a failure is due to a defective connection or cable extension.

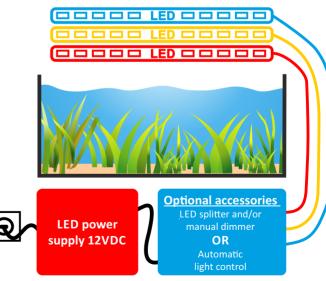
Therefore, please check the connection to the power supply/control unit to ensure that the terminals are correctly and firmly connected.

An improper cable extension/connection can lead to reduced performance, flickering or failure (loose contact).

2. In case of other malfunctions

please contact us by Email: support@ledaquaristik.de Or visit our FAQs: faq.ledaquaristik.com

Connection sequence



Warranty declaration

Fith regard to our LEDaquaristik products, we provide the purchaser with a guarantee for a period of 24 months, provided that the purchaser is a consumer, in the event that our product should be defective, in accordance with the following provisions:

§1 Scope of warranty

(1) The warranty covers the LEDaquaristik product purchased by you together with all the individual parts belonging to it, with the exception of consumable parts such as hoses, soldering connectors, extension cables and filter media. It is limited to the product itself and does not extend to damage to other property and/or persons. In addition, the provisions of the Product Liability Act shall apply, which are not limited by the above provision.

(2) The warranty is provided in the form that, at our discretion, the complete product or individual parts thereof will be replaced or repaired. In the event of failure, the purchase price shall be reduced or the product shall be taken back against reimbursement of the purchase price, at your discretion.

§ 2 Warranty period and procedure

(1) The warranty begins on the day of delivery of the LEDaquaristik product to the customer. A prerequisite for the granting of the guarantee is that our product has been used for its intended purpose and has not been improperly handled or maintained, in particular that the relevant instructions for use have been observed, and furthermore that the product or its individual parts have not been repaired by workshops or persons not authorised to do so. Furthermore, the guarantee does not apply if the product shows mechanical damage of any kind, in particular glass breakage.

(2) If defects become apparent within the warranty period, the warranty claims must be asserted immediately, but at the latest within a period of fourteen days from the occurrence of the defect, with the specialist dealer who supplied the product. The statutory warranty rights shall remain unaffected.

(3) Warranty claims will only be considered if the invoice for the LEDaquaristik product is presented.

Subject to technical changes

Order withdrawal and return

Consumers have the following right of withdrawal:

You have the right to withdraw from this contract within fourteen days without giving any reason. The revocation period is fourteen days from the day on which you or a third party named by you, who is not the carrier, has or has taken possession of the goods.

In order to exercise your right of withdrawal, you must inform us (LEDaquaristik GmbH, Schierbusch 2, 33161 Hövelhof) of your decision to withdraw from this contract by means of a clear declaration. Please use the cancellation form at withdrawal.ledaquaristik.com, which is, however, not mandatory. If you make use of this option, we will send you confirmation of receipt of such revocation without delay (e.g. by e-mail). To comply with the revocation period, it is sufficient that you send the notification of the exercise of the right of revocation before the expiry of the revocation period.

If you withdraw from this contract, we must refund all payments we have received from you, including delivery costs (with the exception of additional costs resulting from the fact that you have chosen a type of delivery other than the cheapest standard delivery offered by us), without delay and at the latest within fourteen days from the day on which we received the notification of your withdrawal from this contract. For this repayment, we will use the same means of payment that you used for the original transaction, unless expressly agreed otherwise with you; in no case will you be charged for this repayment. We may refuse repayment until we have received the goods back or until you have provided proof that you have returned the goods, whichever is the earlier.

You must return or hand over the goods to us without delay and in any case no later than fourteen days from the day on which you notify us of the cancellation of this contract. The deadline is met if you send the goods before the expiry of the period of fourteen days. You shall bear the direct costs of returning the goods.

You only have to pay for any loss in value of the goods if this loss in value is due to handling of the goods that is not necessary for testing the quality, properties and functionality of the goods and that goes beyond the testing of the properties and functionality. Testing the properties and functionality" is understood to mean testing and trying out the respective goods, such as is possible and customary in a shop.

The right of withdrawal does not apply to contracts for the delivery of goods that are not prefabricated and for the manufacture of which an individual selection or determination by the consumer is decisive or which are clearly tailored to the personal needs of the consumer.

Return costs

Insofar as you make use of an existing right of revocation, you must bear the regular costs of the return shipment. This also applies if you have not yet paid the consideration or a contractually agreed partial payment at the time of the revocation.

Electrical and electronic equipment

- Please dispose of old appliances properly -

Information for private households

The Electrical and Electronic Equipment Act (ElektroG) contains a large number of requirements for the handling of electrical and electronic equipment. The most important ones are summarised here.

1. separate collection of old appliances

Electrical and electronic equipment that has become waste is referred to as WEEE. Owners of WEEE must dispose of it separately from unsorted municipal waste. In particular, WEEE does not belong in household waste, but in special collection and return systems. 2.

2 Batteries, rechargeable batteries and lamps

Owners of WEEE must, as a rule, separate spent batteries and accumulators that are not enclosed in the WEEE, as well as lamps that can be removed from the WEEE without causing damage, from the WEEE before handing them in at a collection point. This does not apply if WEEE is prepared for re-use with the involvement of a public waste management authority.

3 Options for the return of WEEE

Owners of WEEE from private households can return it free of charge to the collection points of the public waste management authorities or to the take-back points set up by manufacturers or distributors as defined by the ElektroG.

Shops with a sales area of at least 400 m² for electrical and electronic equipment as well as those grocery shops with a total sales area of at least 800 m² which offer electrical and electronic equipment several times a year or on a permanent basis and make it available on the market are obliged to take it back. This also applies to distribution using means of distance communication if the storage and dispatch areas for EEE are at least 400 m² or the total storage and dispatch areas are at least 800 m². Distributors shall, in principle, ensure take-back by providing suitable return facilities within reasonable distance from the respective end-user.

The possibility of returning an old device free of charge exists for distributors who are obliged to take it back, among other things, if a new device of the same kind, which essentially fulfils the same functions, is supplied to an end user. If a new device is delivered to a private household, the similar WEEE may also be handed over there for collection free of charge; this applies in the case of distribution by means of distance



communication for devices of categories 1, 2 or 4 according to Article 2(1) ElektroG, namely "heat transmitters", "display screen equipment" or "large appliances" (the latter with at least one external dimension exceeding 50 centimetres). End-users are asked about their intention to return electrical and electronic equipment when they conclude a purchase contract. In addition, there is the possibility of free return to the collection points of the distributors, irrespective of the purchase of a new appliance.

In addition, there is the possibility of free return at the collection points of the distributors, irrespective of the purchase of a new device, for such old devices which are not larger than 25 centimetres in any external dimension, and this is limited to three old devices per type of device.

4. data protection notice

Old appliances often contain sensitive personal data. This applies in particular to information and telecommunications technology devices such as computers and smartphones. In your own interest, please note that each end user is responsible for deleting the data on the end-of-life devices to be disposed of.

5. Meaning of the symbol "crossed-out dustbin



 The symbol of a crossed-out wheeled bin regularly displayed on electrical and electronic equipment indicates that the respective device must be collected separately from unsorted municipal waste at the end of its service life.

Producer information according to § 18 para. 4 ElektroG (new)

LED bar eco+ Great performance, low price!

1

Eco+ LED Bars: Perfect Lighting for Aquariums and Terrariums.

Here's the English translation:Our eco+ type LED bars are specially designed for lighting aquariums and terrariums. With LED bars, you enjoy targeted light that, unlike fluorescent tubes, is not scattered. Reflectors become unnecessary, and you can place the bars individually over your aquarium - front, back, center, or diagonally. Experience fascinating depth effects and unparalleled optical design possibilities.

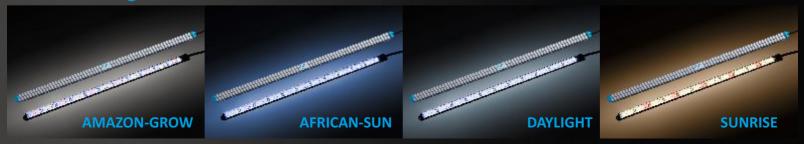
Choose the optimal length, with 7 different options ranging from 20 to 140cm. Whether used individually or in multiple combinations, with the same or different light colors, the application is versatile. The recommended combination depends on the lighting needs of the habitat: size, furnishings, planting, and stocking. You can find more information in our FAQs, and our light comparison shows possible combinations with other light colors in photo comparison. Learn more about our high-quality LED bars and create a lively, natural ambiance for your underwater world.

Our LEDs are directly and inseparably connected to the heat sink, which optimally dissipates heat. This efficient cooling eliminates the need for loud fans that would consume electricity. Thanks to their slim dimensions, the eco+ LED bars fit even in the tightest spaces - only 18 mm wide and 12 mm high.

With our modular construction system, you can tailor the LED lighting to your individual needs - from minimal to maximum lighting requirements. You can also easily expand the system later, whether by adding more LED bars, moonlight, or a light control system. Dive into a stunning underwater world full of color and vibrancy.

Tip: Using a dimmer allows for gentle adjustment of brightness without visible loss of luminosity. This reduces energy consumption and extends lifespan, effects that can also be achieved through automatic light control or daylight simulation.

New eco+ Light Colors



LED-bar PRO²

Heating with Light



PRO² LED Bars: Innovative Lighting with Heat Recovery

Experience revolutionary LED technology with our PRO² LED bar. Unlike the eco+ version, this model is equipped with a double row of LEDs, delivering exceptional light output per unit.

Our PRO² LED bars are available in lengths from 47 to 135 cm and are perfectly suited for aquariums of any size. They dramatically showcase your habitat and create a vibrant, colorful underwater world. Additionally, the innovative heat recovery system relieves your aquarium heater.

Depending on your specific lighting needs, you can combine multiple PRO² LED bars of the same or different light colors. We recommend combining them with another light color for visually impressive simulations. The ideal selection and combination depend on various factors such as the size, equipment, and planting of the habitat.

Features

✓ Powerful & Effective: High-power LEDs create a natural ripple effect on the aquarium floor.

- ≪ Individual Control: Manual or automatic dimming for realistic daylight simulations.
- Scompact & Versatile: Slim 32x18mm profile, available in six lengths and eleven color variants.
- ☆ Robust Quality: Solid aluminum heat sink for optimal heat dissipation and long lifespan.

HIGHLIGHT – The Heat Recovery System: Each PRO² LED bar offers the option of water cooling. You can choose whether to use this unique water cooling technology or not. The temperature-optimized aluminum profile ensures effective passive cooling. However, with active water cooling, you achieve optimal LED cooling, use the waste heat efficiently, and additionally heat your aquarium—a dual function unmatched in this industry. Details and a useful calculator can be found under Energy Saving.

Tip: Using a dimmer allows for gentle adjustment of brightness without visible loss of luminosity. This reduces energy consumption and extends lifespan, effects that can also be achieved through automatic light control or daylight simulation.



eco+ LED bar

Technical data

The following data refer to the variant "eco+ LED bar DAYLIGHT 5000K" as an example, other variants and light colours differ!



Variant	LxWxH (mm)	LEDs	System output	Lumen	Effiziency	Energy consumption	Ra/CRI	PAR/PPFD at 30 cm
140cm	1400x18x12	84 pcs	35 W	3.587 lm	103 lm/W	35 kWh/1000h	86,7	64 [µmol/m²s]
116cm	1156x18x12	81 pcs	37 W	3.782 lm	103 lm/W	37 kWh/1000h	86,6	70 [μmol/m²s]
100cm	995x18x12	69 pcs	32 W	3.471 lm	109 lm/W	32 kWh/1000h	86,6	71 [µmol/m²s]
80cm	790x18x12	54 pcs	26 W	2.972 lm	115 lm/W	26 kWh/1000h	86,6	68 [µmol/m²s]
50cm	500x18x12	33 pcs	18 W	2.059 lm	115 lm/W	18 kWh/1000h	86,8	59 [µmol/m²s]
30cm	295x18x12	18 pcs	11 W	1.200 lm	110 lm/W	11 kWh/1000h	87,0	39 [µmol/m²s]
20cm	210x18x12	12 pcs	8 W	816 lm	103 lm/W	8 kWh/1000h	87,0	26 [µmol/m²s]



Beam angel	120°, effective 160° due to ClearSealing		
Voltage	12V DC (direct current)		
Cable	150 cm		
LED chip service life	~50.000 h		
Switching cycles	until premature failure: approx. 100,000		
Light souce	LEDs not replaceable due to design.		
Switching time	none		
Ingress protection class	IP67 – not suitable for underwater use!		
Dimmable	yes		
1 Cooling	Passive via solid aluminium heat sink		

PRO² LED bar

Technical data

The following data refer to the variant "PRO² LED bar SUNSET 3500K" as an example, other variants and light colours differ!



Connections for water cooling and heat recovery

Variant	LxWxH (mm)	LEDs	System output	Lumen	Effiziency	Energy consumption	Ra/CRI	PAR/PPFD at 30 cm
135cm	1354x32x18	156 pcs	55 W	6.804 lm	98 lm/W	55 kWh/1000h	84,4	98 [μmol/m²s]
106cm	1062x32x18	126 pcs	47 W	5.690 lm	100 lm/W	47 kWh/1000h	84,3	100 [µmol/m²s]
96cm	962x32x18	132 pcs	53 W	6.503 lm	121 lm/W	53 kWh/1000h	85,8	121 [µmol/m²s]
75cm	755x32x18	102 pcs	42 W	5.460 lm	117 lm/W	42 kWh/1000h	84,4	117 [µmol/m²s]
67cm	674x32x18	90 pcs	38 W	5.036 lm	113 lm/W	38 kWh/1000h	84,3	113 [μmol/m²s]
47cm	467x32x18	60 pcs	28 W	3.764 lm	101 lm/W	28 kWh/1000h	84,2	101 [µmol/m²s]

12

Further data and diagrams on the light spectrum are available in the product description under ("Data sheet & key figures") of the respective LED bar.

*The light measurement of the product was carried out according to the scope of delivery in a dry environment at 100% output. The use of dimmers, light controls, other power supplies, focusing lenses, protective covers or reflectors may lead to deviating results. In addition, slight deviations from the test sample may occur due to the batch. PPFD - Photosynthetic Photon Flux Density. PAR - Photosynthetically active radiation. PPE - Photosynthetic photon flux per watt of electrical energy.

Beam angel	120°, effective 160° due to ClearSealing
Voltage	12V DC (direct current)
Cable	150 cm
LED chip service life	~50.000 h
Switching cycles	until premature failure: approx. 100,000
Light souce	LEDs not replaceable due to design.
Switching time	none
Ingress protection class	IP67 – not suitable for underwater use!
Dimmable	yes
Cooling	Passive via solid aluminium heat sink Alternatively by water cooling

CleanCover

The optional CleanCover provides splashwater protection and is made of highly transparent, ultra-thin, impact-resistant plastic. It also protects your LED bars from limescale and dirt deposits and is very easy to clean.

Recommended where LED bars are used within a closed, moist cover or on open aquariums without cover plates.

Advantages and characteristics:

- Click&Go quickly installed and removed without the need for tools
- Manufactured out of glassfibre-reinforced polycarbonate (PC). The material is impact-resistant, flexible, ultra-thin, UV-stable and highly transparent.
- Keeps limescale and dirt deposits off the LED bar.
- Makes cleaning simple and problem-free, with no risk of damaging the silicone coating.
- Also suitable for use with mounting clips.

Best protection

• Installation: CleanCover clicks into the longitudinal groove in the LED bar. Then the protective film must be removed.

Cleaning advice / tips:

- Wash CleanCover with lukewarm water.
- Dirt and other deposits can be removed with a soft cloth or sponge. A microfibre cloth moistened with plain water cleans well and is largely scratch-free.
- Other suitable methods: Household cleaners such as vinegar (acetic acid)/vinegar essence diluted in water, mild soap solutions (detergents) or plastic cleaners approved for use on PC
- Rinse with water and dry with a soft cloth to avoid water marks.
- Any mechanical cleaning system, e.g. brushes etc., is not suitable because it will scratch the surface. The use of corrosive cleaning materials and sharp-edged objects must be avoided because they could damage or scratch the surface. Cleaners containing solvents can cause the surface to become matt.

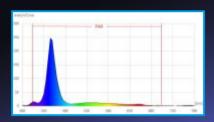


PRO² LED-Leiste SEAWATER für Meerwasser Aquarien

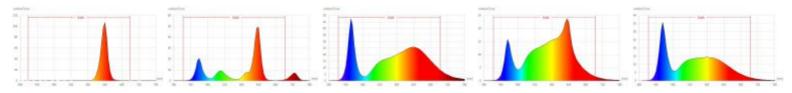
The SEAWATER variant has been specifically developed for marine aquariums and features a composition of LEDs with wavelengths of 365nm, 400nm, 420nm, 450nm, 660nm, and 13,000K. This specially tailored light spectrum of SEAWATER causes corals to fluoresce intensely and stimulates the photosynthesis of zooxanthellae. The result? Perfect growth and a stunning display of marine life.

Additional products with SEAWATER spectrum for marine lighting include:

- spotBEAM Page 21
- aquaLUMix Page 25
- powerBEAM Page 63
- flexBEAM Page 69



Available light colors:



RED Light color 625nm

A red light with 625nm can be used as an addition to the main lighting to promote plant growth, but it is also very well suited for daylight simulation as light for sunrise and sunset.

GROWx5 Light color for plants

A unique light composition of 5 wavelengths! Promote healthy plant growth and enhance the color brilliance in your aquarium. Be enchanted by the blue and red light, perfectly complemented by green, orange, and ultraviolet.

PLANT-GROW Light color for plants

Light spectra essential for optimal plant growth and photosynthesis combined in a single chip. The result: Brilliant, even light that intensifies the color brilliance in your aquarium.

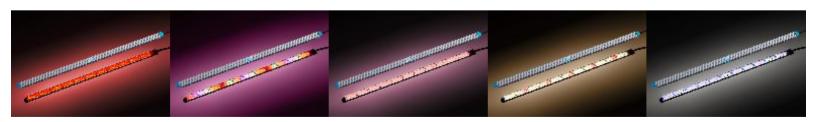
SUNRISE Light color 2800K Ra/CRI = 91,7

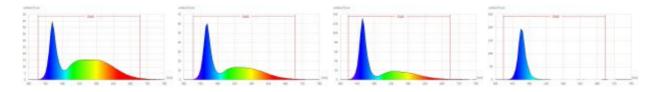
A warm light with a high red component thanks to individual 620nm LEDs, which is perfect for plants and ideally used in daylight simulation as sunrise and sunset light in combination with white light.

AMAZON-GROW Light color 4700K

Ra/CRI = 89,2

A slightly warm, tropical light specifically developed for planted aquariums that creates an impressive ambiance. It is excellent as the main lighting and includes PLANT-GROW LEDs.





DAYLIGHT Light color 5000K Ra/CRI = 86,7

A combination of two light colors offers a broad light spectrum and is particularly suitable as a neutral main lighting. The pure, white light of a cloudless sunny day provides a natural-like illumination for both animals and plants.

AFRICAN-SUN Light color 8000K Ra/CRI = 86,3

A cool, white-blue light combined from two light colors that particularly enhances the colors of Malawi and Tanganyika cichlids, and is ideal as the main lighting for keeping Malawi and Tanganyika cichlids.

MARINE Light color 13000K

An ice-cold light with a high blue component, ideal for saltwater and as a moonlight alternative to ROYAL-BLUE. In specialized freshwater aquariums, particularly with Tanganyika/Frontosas, it impressively highlights deep or cave characteristics.

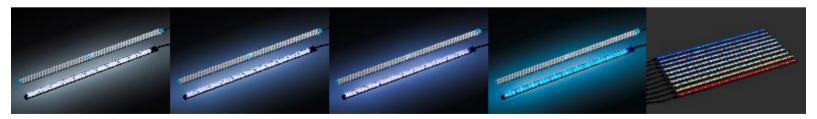
ROYAL BLUE Light color 460nm

A pure blue light for moonlight effects and special marine lighting. Create unique deep-sea impressions. For gentle lighting, especially as moonlight, we recommend using a dimmer or daylight simulation.



Expert Tip

For optimal results, we recommend combining different light colors and LED bars. This approach covers a broad spectrum of colors and offers extensive possibilities, especially for daylight simulation. Yes, subsequent expansions are also possible.



Plant light GROWx5 and PLANT-GROW

These light colours are an innovation in LED aquaristics and are used in our eco+, ${\sf PRO}^2$ and aquaLUMix products.

GROWx5 is a unique light composition of 5 different wavelengths that promote optimal photosynthesis and healthy plant growth. Essentially, a balanced proportion of blue and red light spectrum is responsible for this, supplemented by three other specially matched colour spectra: green, orange and ultra-red.

In contrast to the GROWx5, the PLANT-GROW combines these light spectra in just one chip. Thus, the PLANT-GROW is more discreet (less colourful), but also somewhat less specialised, but produces a brighter and more even light compared to the GROWx5.

Both versions are designed more as optional light in combination with other "white" light colours, as these light colours appear slightly purple/violet on their own. Thus, this special LED plant light is comparable to the well-known and universally popular GROLUX fluorescent tube. The overall colourfulness of the aquarium is enhanced.

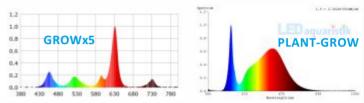
The colour spectra in detail:

Red and ultra-red - For optimal photosynthesis, both red and ultra-red must be available to the plant. A high red and a comparatively low blue content ensure magnificent plant growth.

Blue light is ideal for the growth phase and ensures lush green with strong, compact growth. Exclusively blue light, on the other hand, causes the plant to become stunted. The more light components from the blue-violet and blue spectrum, the larger the leaves will grow.

Green - A widespread assumption is that green and **orange** are absorbed by the plant only slightly or not at all. The green light would be reflected by the leaves and give them their green colour. However, recent studies show that plants absorb the majority of wavelengths in the green range through carotenoids and other auxiliary pigments, thus significantly enhancing photosynthesis.





Working principle of GROWx5 and PLANT-GROW

Photosynthesis is the process that plants use to extract energy from sunlight and eventually grow. The absorption spectrum, i.e. the plant's light uptake, shows that photosynthesis is primarily determined by blue and red wavelengths. However, a broader light spectrum is much more effective

than a narrow-band light spectrum with only blue and red. For this reason, GROWx5 and the PLANT-GROW go one step further.



UVA / SKY-GROW as PRO² LED bar: UV light + plant light = full spectrum 2.0

This LED bar with its highly specialised light colours was developed for advanced users. Two independently controllable channels with UV light on the one hand and SKY-GROW light on the other make it an extraordinary full-spectrum lamp whose mixing ratio can be adjusted to the situation by light control. The UVA / SKY-GROW should never be used as the sole light source. Ultraviolet light should be used as supplementary lighting and serves to fine-tune the light spectrum as well as for targeted and coordinated growth promotion.

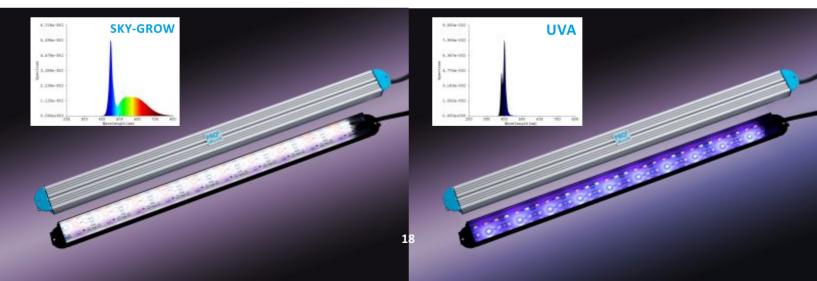
Plants

Adding moderate amounts of ultraviolet light to the lighting signals to the plant that it is now receiving intensive light. It reacts by synthesising photolyase, i.e. by producing enzymes, proteins and amino acids that are supposed to protect it from UV damage ("sunburn"). The leaf becomes thicker and smaller, the growth becomes more compact and concentrated, as the energy supplied is used to produce the sun protection instead of rapid growth. This protective reaction already shows that UV light should be well dosed.

Corals

Sunlight is elementary for the corals' food supply, which is why they live in relatively shallow water and are exposed to UVA and UVB light. Unlike conventional HQI lamps, the UVA output of our UV LEDs can be controlled, potentially harmful UVB and UVC is not present. By using UV LEDs at the edge of the visible range with a wavelength of 385nm to 400nm, just enough UV radiation is generated to produce a bluish-purple light that causes the corals to fluoresce and stimulates and optimises photosynthesis within the corals.

Tips for use: Glass or acrylic covers can filter out the UV light. Our CleanCovers are UV-transmissive, but the ageing process is accelerated.



SpotBEAM The full spectrum LED spot

With compact dimensions of just 10x12 cm, these spotlights are true powerhouses. Whether you have a small or large aquarium, spotBEAM spotlights offer stunning full illumination or precise spotlighting.

What makes them truly special is each spotBEAM spotlight is equipped with a unique 3-channel COB LED chip, meticulously designed for simulating natural daylight and offering precise dimming control. Choose from the three light compositions – PLANT-MIX, AFRICAN-SUN, and SEAWATER – to create the perfect ambiance for your aquarium.



Technical data

Full spectrum

PLANT MIX

L	ımen	Outpu	it/consumption	Efficiency		
3.5	543 lm	26W =	=26 kWh/1000h	137 lm/W		
Channel 1	L (main light)	Channe	el 2 (moon light)	Channel 3 (sun)		
Power	Light colour	Power	Light colour	Power	Light colour	
15 W	6.000K	7 W	465nm / 12.000K 2:1	8 W	2.700K / 630nm 2:1	





AFRICAN-SUN

L	ımen	Outpu	u/consumption	Efficiency		
3.4	63 lm	26 W =	= 26 kWh/1000h	134 lm/W		
Channel 1	L (main light)	Channe	el 2 (moon light)	Channel 3 (sun)		
Power	Light colour	Power	Light colour	Power	Light colour	
15 W	8.000K	78 W	465nm / 12.000K 2:1	8 W	2.700K / 630nm 2:1	



SEAWATER

Lumen	Output/consumption	Efficiency
1.549 lm	27 W = 27 kWh/1000h	58 lm/W

Channel 1 (main light)		Chann	el 2 (blue)	Channel 3 (blue+UV)		
Power	Light colour	Power	Light colour	Power	Light colour	
11 W	20.000K	12 W	465nm	8 W	405, 450, 425nm	



spotBEAM

Installation is a breeze: opt for the optional gooseneck mount for versatile positioning along the aquarium's edge, or seamlessly integrate the spotBEAM with our range of mounting solutions, including deLUX covers, lamp housings, and adapter profiles. To harness the full potential, we recommend pairing spotBEAM with our light controllers such as SunRiser or SimuLUX, allowing for personalized adjustment of brightness and color temperature, resulting in a mesmerizing light display.



Scope of delivery

- spotBEAM LED spotlight, in light colour and housing colour of your choice
- Cable length 250cm
- Glass lens with 90° beam angle included, other lenses (40°, 60°, 120°) available separately.

A power supply unit and light control must be ordered separately according to the number and scope of the lighting.



simultaneously at full power, the surface temperature of the cooling or lamp body increases. Caution when touching! Before cleaning and maintenance work, switch off the device and disconnect it from the mains. Never cover the luminaire with objects and make sure that there is always sufficient heat exchange in any case.

Technical data

- Chip: COB
- Voltage: 12V DC (direct current)
- LED chip life: ~50,000 hours
- Switching cycles until premature failure: ~100,000
- LEDs not replaceable due to design
- Switch on time: none
- Connection cable approx. 250cm (6x 0,50mm²)
- Connections to further accessories will be delivered according to the scope of order
- Protection class: IP67 not suitable for underwater use!
- Dimmable: yes

Available in the housing colours black and silver matt.

Changeable Lens



Solid + passive heat sink for silent operation

Optional spotBEAM accessories

Mounting set "Gooseneck

for mounting e.g. on the edge of glass





In heavy, stable design. Suitable for glass thicknesses of up to 15mm with vertical or horizontal mounting. Length gooseneck: 485mm Materials: Gooseneck steel. silicone coated. Clamping piece anodised aluminium Clamping screw plastic (nylon) When mounting, the short thread of the gooseneck goes to the spotBEAM, the long thread to the clamping piece. The cable is fed through the gooseneck!

Alternative glass lenses

If required, the 90° lens included in the standard scope of delivery can be replaced by an alternative lens with a beam angle of 40°, 60° or 120°.

Tip: The smaller the beam angle, the stronger the curling effect. The larger the The larger the beam angle, the more homogeneous the effect of the different light colours.

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aqualUMix Top-quality LED compact light



Full spectrum

With aquaLUMix, perfect color combinations are at your fingertips.

The aquaLUMix LED bars make choosing the right light color for your aquarium a breeze. Based on years of experience, we have developed four carefully configured lights suitable for both freshwater and marine aquariums. Available in lengths from 24 to 144 cm, we offer the perfect lighting solution for aquariums of any size. For aquariums over 144 cm, simply combine two lights.

Our aquaLUMix LED bars offer unparalleled lighting options. In addition to light colors that mimic natural daylight, we also integrate LEDs for moonlight and sunrise. Each bar comes with mounting hardware, a splash guard, and an optional water cooling system to ensure your aquatic inhabitants always enjoy the ideal light. A suitable power supply and optional light control or splitter can be ordered separately.

Our aquaLUMix LED bars are equipped with 4 separately controllable light channels, providing you with limitless lighting possibilities. Whether you want to replicate natural daylight or create spectacular effects like moonlight and sunrise, aquaLUMix gives you complete control.

To meet individual needs, we offer three different color combinations:

AMAZON-GROW

A bright tropical light, focused on optimal plant growth, including Grow LEDs. (Ideal for community tanks, well-planted Amazon or Asian tanks)

AFRICAN-SUN

Increased blue component in daylight, complemented by a color-enhancing light composition.(Ideal for cichlid tanks with Malawis or Tanganyikas)

SEAWATER

A fundamentally strong blue component in white and blue light, with additional features like red, violet, and UV. (For marine aquariums)









Highest Performance and Flexibility

aquaLUMix LED bars utilize proven high-power LEDs of the latest generation. With up to 498 individual LEDs, they offer more light than most other aquarium lights available on the market. The sophisticated design guarantees reliable and long-lasting performance. Thanks to full dimming capabilities and separate channel control, you can craft your own unique lighting scenarios.

HIGHLIGHT - aquaLUMix LED bars don't just provide impressive lighting; they also optimize heat dissipation. The temperature-optimized aluminum profile allows for effective passive cooling, while the optional water cooling efficiently cools the LEDs and heats your aquarium simultaneously.

See page 33.

Easy Installation and Stylish Design

aquaLUMix LED bars are incredibly versatile and easy to install. The factory-adjustable bracket allows for hanging or placement. Alternatively, various brackets are available for customized mounting. The optically optimized CleanCover not only shields the LEDs but also widens the beam angle to up to 180°, creating a natural shimmer effect on the aquarium floor.

The lateral blue mounting brackets with holes are also suitable for individual mounting.

In addition, the aquaLUMix is compatible with the deLUX aquarium cover as well as with our stylish lamp housing in the colours black and silver for use as a pendant, floor-mounted or top-mounted luminaire. Of course, the LEDaquaristik adapter profiles for JUWEL and EHEIM aquariums can also be used for mounting the aquaLUMix lamp.

Experience aquaLUMix LED bars: The perfect fusion of top-notch lighting, flexibility, and premium design for your aquarium.



Dimming and simulation

Of course, the aquaLUMix can be dimmed without restriction and has 4 separately controllable channels for the main lighting including integrated effect colours to simulate e.g. moonlight and sunrise and sunset.

To make the most of the aquaLUMix's full range of features, we recommend using one of our lighting controllers, e.g. SunRiser 6, SunRiser 10 or SimuLUX 24, so that the brightness of each individual channel and the resulting colour mix of the entire lamp can be adjusted individually. There are almost infinite possibilities thanks to the infinitely variable SunRiser light controls.

Alternatively, our manual 6-channel dimmer DIMIX6 offers the possibility of infinitely variable dimming and mixing of light colours via slider.

Whether automatic SunRiser light control or manual DIMIX6 dimmer - the dimming curve is always stepless, flicker- and jerk-free.



DIMIX6 page 42



SunRiser 6 page 49



SunRiser 10 page 44

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Quality

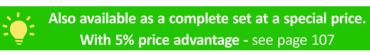
The imposing and solid aluminium lamp body has a high-quality finish and shows its value through its weight alone. At the same time, the aquaLUMix is slim and unobtrusive in its dimensions. All aluminium parts of the lamp are anodised and thus have the best surface protection. All other screws, mounting parts and brackets are made of rustproof V4A stainless steel.

The LEDs are sealed watertight inside the lamp by ClearSealing: UV and temperature stable! This means that the aquaLUMix will survive even accidental submersion in water without damage.

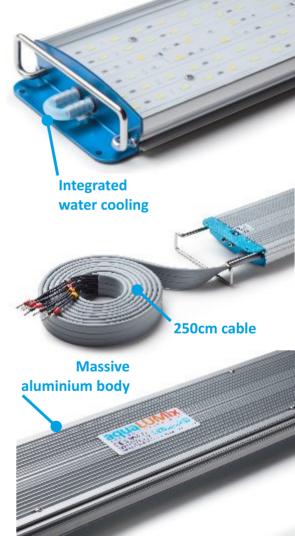
The already mounted CleanCover is a splash guard made of highly transparent, ultra-thin and impact-resistant plastic. It additionally protects the aquaLUMix from limescale and dirt deposits and is very easy to clean.

The connection cable is a particularly high-quality and rubberised 8-core flat cable with a length of 250cm. (2 cores +/- per channel)

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The following technical data refer to the "aquaLUMix FRESHWATER" variant as an example, other variants may vary!



Variant	LxWxH (mm)	LEDs	System output	Lumen	Effiziency	Energy consumption	Ra/CRI	PAR/PPFD at 30 cm
144 cm	1434x98x28	498 pcs	152 W	19.238 lm	127 lm/W	152 kWh/1000h	84,7	272 [µmol/m²s]
115cm	1144x98x28	390 pcs	127 W	16.135 lm	128 lm/W	127 kWh/1000h	85,0	274 [µmol/m²s]
89cm	884x98x28	300 pcs	102 W	13.198 lm	130 lm/W	102 kWh/1000h	84,5	284 [µmol/m²s]
74cm	734x98x28	246 pcs	92 W	12.040 lm	131 lm/W	92 kWh/1000h	85,2	288 [µmol/m²s]
54cm	534x98x28	174 pcs	73 W	9.516 lm	131 lm/W	73 kWh/1000h	85,2	246 [µmol/m²s]
34cm	334x98x28	102 pcs	47 W	5.978 lm	128 lm/W	47 kWh/1000h	85,2	180 [µmol/m²s]
24cm	234x98x28	66 pcs	32 W	4.075 lm	128 lm/W	32 kWh/1000h	84,8	125 [μmol/m²s]

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Further data and diagrams on the light spectrum are available in the product description under ("Data sheet & key figures") of the respective LED bar.

*The light measurement of the product was carried out according to the scope of delivery and light control in a dry environment at 100% output. The use of dimmers, light controls, other power supplies, focusing lenses, protective covers or reflectors may lead to deviating results. In addition, slight deviations from the test sample may occur due to the batch. PPFD - Photosynthetic Photon Flux Density. PAR - Photosynthetically active radiation. PPE - Photosynthetic photon flux per watt of electrical energy.

Beam angel	120°, effective 160° due to ClearSealing
Voltage	12V DC (direct current)
Cable	250 cm
LED chip service life	~50.000 h
Switching cycles	until premature failure: approx. 100,000
Light souce	LEDs not replaceable due to design.
Switching time	none
Ingress protection class	IP67 – not suitable for underwater use!
Dimmable	yes
Cooling	Passive via solid aluminium heat sink Alternatively by water cooling

Reflector - Shutter - Mirror unit for aquaLUMix

This reflector for our aquaLUMix serves as a glare shield and maximises the lighting intensity, especially in the front or rear edge areas of the aquarium. Precisely fitting in size and colour, it blends in perfectly with the design of the aquaLUMix: Anodised aluminium-grey on the outside, with a highly reflective mirror on the inside.

Installation is very simple, the reflector is hooked into the aquaLUMix and fixed in place with the screws provided. But please note: When using the aquaLUMix in our adapter profile, lamp housing or support profiles, it is not possible to use the reflector.

Is the reflector used on both sides, only on the front or only on the back?

When used on the rear side, the decisive benefit is the reflection of the light and thus the increased brightness in the rear area of the aquarium. The scattered light is effectively used by the mirror unit and fed to the background planting, which is otherwise not optimally illuminated. The mirror also reveals a completely new angle of view of the aquarium, quasi a top view from a comfortable position.

If the reflector is used on the front, it also serves as a glare shield. This is particularly pleasant and advantageous for observers in a sitting position or children in front of the aquarium.

With reflectors on the front and back, the efficiency of the aquaLUMix is increased to the maximum. Even when using the aquaLUMix in a hanging position, we recommend using it on both sides so that the lamp hangs level and is balanced.

Scope of delivery:

- 1 piece reflector according to the selection.
 (For use on both sides, 2 pieces must be selected).
- Fixing screws

Total height of the lamp (without holder) with reflector: 5cm





2x Reflector: for light optimisation and as glare protection

TALE

1x Reflector: For optimising the background planting.

Which LED bars or light colours should I choose, especially for light control / day simulation?

Module system eco+/PRO²

Even with 2 light colours, an appealing daytime sequence is possible, e.g. SUNRISE and DAYLIGHT. SUNRISE is used for sunrise and sunset, DAYLIGHT is switched on for the main lighting. For higher lighting requirements, a colour combination of SUNRISE, DAYLIGHT, PLANT-GROW (or optionally AMAZON-GROW) is a good choice, as the colour spectrum is well and widely covered. Our experience with these combinations and planted aquariums has been very good. In addition, these light colours are ideal for daylight simulation. So this is a recommendable standard configuration. Whether you use 3 light rows and colours or leave it at 1-2 depends on your lighting needs. Depending on the requirements, additional effect colours (RED = dawn, ROYAL BLUE = moonlight) could be combined. However, an extension would also be possible at any later time without any problems. (Provided the appropriate power supply unit is available)

aquaLUMix

With the aquaLUMix, the question of the best colour choice no longer arises, because we have already equipped these compact luminaires with the optimum light composition based on years of experience. Depending on your aquarium in terms of stocking, furnishings and personal taste, you can choose one of 3 colour combinations, a suitable solution for all areas:

AMAZON-GROW, AFRICAN-SUN and SEAWATER. Each of these aquaLUMix is equipped with 4 separately controllable light channels, which open up incomparable lighting possibilities. In addition to light colours for general daylight illumination, LEDs for moonlight and sunrise are already integrated.

Further questions and answers under faq.ledaquaristik.com

We will also be happy to help you personally: Mon.-Fri. 8:30-12:00 and 13:00-16:30

Perhaps you will find the answer in our FAQ: faq.ledaquaristik.com

How many LED bars do I need for my freshwater aquarium?

The correct number of LED bars does not only depend on the size of the aquarium. Decisive factors are also the degree of planting, furnishing and, last but not least, personal taste and expectations. Here is a non-binding overview to help you decide on the number of LED bars:

Planting	Light requirements	Quantity eco+	Quantity PRO ²	Quantity aquaLUMix
None to little		1	1	1
Unpretentious		2	1-2	1
Much, Promising		3-4	2-3	1
extreme(AquaScaping)		4+	3+	1-2

The values refer to average pool heights and depths around 60cm. The arrangement of the strips, whether centrally, offset, split, parallel or side by side, is entirely up to you. Just like the choice of light colours!

Please bear in mind that every aquarium, including yours, is an individual item, so the question of lighting cannot usually be answered in a general way from a distance. We will be pleased to prepare a personal quotation for you. In order to be able to better take your wishes and ideas into account, please follow the link to our website: **quotation.ledaquaristik.com**

More questions and answers at faq.ledaquaristik.com

Email: support@ledaquaristik.de | Live-Chat on www.ledaquaristik.de | Phone: 05257/9366650



Heating with light = heat recovery

Each PRO² LED bar can optionally be used with the innovative heat recovery system, although this is not mandatory. The temperature-optimized aluminum profile also ensures effective passive cooling

without this technology. However, with active water cooling, not only is optimal cooling of the LEDs achieved, but the waste heat is also efficiently used to additionally heat the aquarium through heat recovery. This dual function is unique in the industry.

Advantages:

- ✓ Optimal Temperature Control: The LEDs operate within the optimal temperature range to maximize luminous duration and performance.
- ✓ Heat Recovery: The LED water cooling utilizes the waste heat from the LEDs to supply warm water to the aquarium.
- ✓ Energy Efficiency: The power consumption of the aquarium heater is significantly reduced. LED bars with heat recovery pay off much faster.
- ✓ Efficient Water Cooling: Two integrated XL channels for water cooling provide high flow rates, excellent cooling properties, and maximum efficiency. The system is virtually maintenance-free.
- ✓ Flexibility: Connect the water cooling of several PRO² LED bars together.
- ✓ Noiseless Operation: Our system offers noiseless operation for an undisturbed aquarium experience.

Special Features:

- ✓ Integrated Water Cooling: Our aluminum profile allows unhindered heat exchange between LED and cooling water, while competitors have lower efficiency.
- ✓ High-quality Construction: The XL channels carry 56% more water for superior cooling properties. Easy accessibility simplifies cleaning. Silicone hose and 180° bend are made of high-quality material for durability and shape stability.

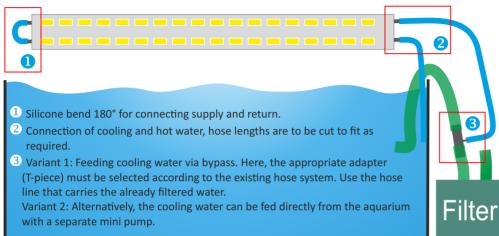






Calculate heat output: tools.ledaquaristik.com

Water cooling connection:





Mini pumps for running the water cooling system

These small and very economical pumps supply the water cooling system with aquarium water for cooling. Two variants are available:

The 230V pump for conventional operation at a socket.

The "12VDC controllable" variant allows the pump to be connected directly or indirectly with the power supply of the LED lighting. In addition, this pump is compatible with our lighting controls and can be operated with them. This makes it possible to use the pump in a time-controlled manner (e.g. switch off at night). It is also possible to dim/throttle the pump output (flow rate). Optionally, a separate channel of the control unit can be used for the pump, or alternatively, a channel already occupied by an LED bar can be shared.



For the operation of the 12VDC pump on our light controllers, the supplied connection cable is mandatory. The polarity of the connection must also be strictly observed (red=PLUS, black=MINUS)! It is not possible to operate the CO2 valve and the mini pump at the same output of a light control unit and this can lead to a defect in the light control unit.

Tip: Install the pump so that the suction opening does not point downwards - otherwise disturbing noises may occur.



Cleaning the cooling system by air

Depending on the quality of the aquarium water, regular maintenance / cleaning of the water cooling system is recommended to ensure the best possible function at all times. With this air pump, the system can be "blown through" quickly and easily without having to disconnect hoses, etc.

We recommend doing this regularly to prevent stubborn contamination.

As a supplement and for coarser use, suitable cleaning brushes made of stainless steel are also made of stainless steel are also available.

Seawater - TITAN Upgrade

VIDEO

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Compared to fresh water, seawater is extremely aggressive and would permanently damage the aluminium of our LED luminaires if the water cooling system was not used.

The optional TITAN extension for a seawater application of the water cooling system contains two titanium tubes, made of 100% pure titanium, which are inserted into the cooling channels of the lighting. Contact between aluminium and seawater is thus excluded. The titanium tubes are 100% resistant to seawater.

The installation is very simple. The four existing hose connections are to be removed/screwed off. The titanium tubes are pushed in, the hoses are pushed on and additionally secured with the enclosed hose clamps.

CO2 Druckminderer und Diffusor

This pressure reducer for CO2 regulation is optimised for switching through our light controls (SunRiser & SIMU-LUX).

The **pressure reducer** consists of a working pressure gauge and a bottle pressure gauge. This means that not only can the working pressure be regulated down to the desired level, but the pressure in the bottle is also displayed, making it easy to see when it is time to refill. A bubble counter is integrated for visual control of the inflowing Co2.

The solenoid valve can be switched with our light controls (0%=closed, 100%=open), and can only be used with a voltage of 12VDC. The solenoid valve is connected like an LED to one of the outputs of the control unit.

Thread/bottle connection Standard: W21.8

Material: blue anodised aluminium



Thanks to its fine ceramic membrane, the stainless steel CO2 diffuser dissolves up to 98 % of the supplied CO2 in the aquarium water. The resulting tiny CO2 bubbles spread easily and are ideally absorbed by the aquarium plants.

The recommended working pressure is 1.5 bar (22 psi).

Tip: It may take several hours before the ceramic membrane is optimally flushed and the CO2 bubbles are released, as the membrane must first adjust or "soak". You can speed up this process by soaking the **membrane in a water bath for one night before use.**



It is not possible to operate the CO2 valve and the mini pump at the same output of a light control unit and this can lead to a defect in the light control unit.



Accessories More at www.ledaquaristik.de/Zubehoer

LED Splitter. This splitter makes it possible to operate up to 6 LED bars with only one power supply unit. We offer a variety of adapter cables to enable the connection of third-party products. For more information, visit: adapter.ledaquaristik.com

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With a length of up to 90cm, these very robust and highquality tongs are particularly suitable for larger systems where your own arm is no longer sufficient.

Our high-quality self-adhesive sealing tape made of neoprene is the ideal solution for special situations where an unusually large amount of splashing or condensation water accumulates inside the aquarium cover due to diffusers or significant temperature differences.

Various individual and spare parts

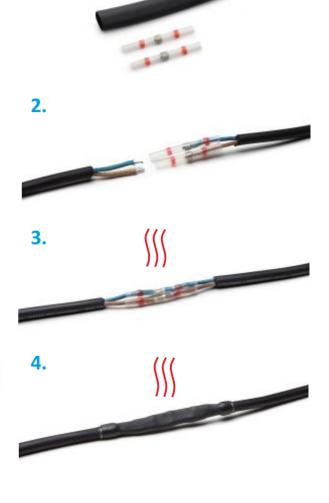
Verbinder zur Kabelverlängerung

Heat-shrinkable soldering connectors for extending connection cables: Connecting - soldering - insulating - sealing - in one simple operation.

Child's play! All without soldering iron and solder. You get a waterproof and better durability than with crimp connectors or luster terminals.

Instructions: Remove approx. 5mm of insulation from the cables to be connected. Now twist the stripped cable ends and insert them from both sides into the solder connector until the bare ends are parallel under the silver ring of solder in the middle of the connector. Heat the soldering connector evenly to approx. 110°C (at best with a hot air blower, with caution also with a lighter or similar). The soldering connector starts to narrow and sticks to the cable. Now let the solder melt completely and then hold the cables in position until the solder has cooled down and become solid. You can visually check the connection thanks to the transparent heat shrink tubing. As an additional protective measure and to make the connection visually inconspicuous, now shrink the entire connection with the enclosed black shrink tubing. This is coated on the inside with an adhesive, which ultimately ensures an absolutely tight connection. DONE.

Matching: Rubberised premium cable by the metre for individual extension of the connecting cables of our LED bars.



1.

High performance LED switching power supplies for the operation of our LED bars (12VDC)

An extremely high-quality LED switching power supply that sets standards in quality and performance. High-quality workmanship, solid design in aluminium housing, durability, high efficiency and low heat generation. This excellent LED power supply puts the usual plastic desktop power supplies in the shade and is therefore our clear recommendation to buy!

These power supplies* are compatible with all lighting controls*, dimmers* and distributors from our range. *Please note the maximum connected load!

What power is required?

This is how it is calculated: To determine the power the power supply unit must have, the power values (watts) of the desired LED bars are added, plus a min. 10% power reserve. The next larger power supply unit is then the correct choice. To avoid overloading the power supply unit, always allow for a power reserve of at least 10%! (Our computer automatically takes this into account!) To avoid misunderstandings: The power supplies themselves do not consume 35, 100 or 150W of power! But they are capable of delivering this power! The power consumption depends solely on the connected LEDs and the efficiency of the power supply! In idle mode (i.e. when the power supply unit is only plugged into the socket, not connected to LEDs or in operation) it only consumes approx. 1W.

Technical data:

- Input voltage 85 ~ 265 VAC
- Output voltage: 12 VDC
- Output power: depending on selection: 35W to 264W
- Frequency: 47 ~ 63 Hz
- Efficiency >90
- Aluminium housing, Ip67
- Protected against short circuit, overload protection
- Cooling by natural convection
- Working temp. at -40 to + 70° C
- Cable lengths:
- 230V input 50cm with EU Schuko plug,
- 12V output 50cm (connection according to scope of order)





Calculate the correct power supply: tools.ledaquaristik.com

VIDEO

Observe overvoltage protection!

Even if one immediately thinks of a thunderstorm and a lightning strike, overvoltage damage to LED lighting usually has other, less noticeable and insidious causes.

A lightning strike leads to a short-term overvoltage and immediate failure and irreversible defect of the lighting. Cause and effect are immediately and clearly recognisable. But there is also the long-term overvoltage. This remains unnoticed at first, but significantly impairs the service life of the LED lighting until visible damage and progressive failure occurs after only a few weeks and months.

Voltage peaks in the nanosecond or microsecond range, i.e. short-term increases in the mains voltage caused by switching operations in the electrical circuit or electrostatic discharges, can sometimes reach well over 10.000 volts, although only for fractions of a second, but this is already enough to irreparably damage LED modules, electrical components or power supply units.

The exact effect of such an event on the mains in your house and consequently on the LED lighting depends on the type of installation and the protective circuits installed by the electrician.

Our LED lighting can easily reach the value of a computer or television set, so you should also protect them at least equally against overvoltage. Damage to LED lighting caused by overvoltage is expressly not covered by the warranty. This is why the EMZ 504 broadband mains filter with overvoltage protection is our recommendation in the event of an unclean mains supply and/or overvoltage problems, or should also be seen as a kind of "insurance" as a preventive measure.







Manual 1 channel LED dimmer

With manual stepless LED dimmers, the brightness (and thus also the power consumption) of the LED bar(s) can be manually adjusted with a rotary knob or remote control.

These dimmers are designed for a maximum output power of 360 watts (30A), so a maximum of 12x 100cm LEDs can be dimmed from 0-100%. All power supplies up to and including 264W power, as well as the LED splitter are compatible with these dimmers.

Technical data:

- Input voltage: DC12V-24V
- Dimming control: PWM
- Connection input/output: Screw terminals
- Dimensions:
 - L85xW62xH35 mm with rotary knob
 - L85xW62xH20 mm with remote control
- Weight: 132g
- Working temperature: -20 to +70°C
- Power consumption: <1W
- Output voltage max. 30A / 360W(12VDC)

Variant with remote control

Function: up, down, on/off Info: When switched on again, the dimmer starts with the last brightness value set.





VIDEO



IN/INPUT: power supply unit OUT/OUTPUT: LED

Manual 6 Channel LED Dimmer & Mixer

 	000	

For all those who prefer it simple and without automatic control, who want to change and re-mix the lighting as required at any time.

DIMIX6 is a manual 6-channel dimmer that offers you 6 sliders for stepless dimming and mixing of the connected LED bars and light colours.

Technical data:

- Suitable for a maximum of 48W (4A/12V) power per channel multiple use up to maximum possible.
- Possible total power channel 1-6 maximum 264W (22A/12V).
- Dimensions LxWxH: 140x110x30mm





MIX DEIN LICHT

Light control & Daylight simulation



An automatic light control system offers great advantages for you and your animal!

Aquarium lights switching on and off suddenly is a source of recurring shock and stress to which your animals are exposed on a daily basis. The inhabitants would be much less nervous if they were gently brought out of their night-time rest. Moreover, a gradual, dimmed sunrise and sunset is not only closer to nature and visually very appealing, it also ensures that you are not suddenly plunged into darkness yourself at some point in the evening.

Our automatic light controls have between 2 and 10 singly and individually programmable channels, depending on the model. This allows each connected LED lamp to be controlled separately in terms of time and brightness. Therefore, in addition to simply modelling the sun rising and setting, you can add details such as stormy weather, clouds, moonshine and many other programs and simulations. See page 57



Another big advantage: During daylight simulation, it is only very seldom that all your LED bars are operating simultaneously at full power, which has positive consequences for the electricity they consume. With only a slight throttling of the output (dimming), the power consumption drops almost in direct proportion without the light appearing noticeably less bright. A secondary effect is an extension of the service life of the LED lamp.

SunRiser 10

The premium light control





SunRiser 10 – Smart control for your LED lighting

Experience natural lighting transitions and stunning effects with the SunRiser 10 – the intelligent control unit for your LED aquarium lighting. Design custom daily routines, realistic weather simulations, and an atmospheric ambiance tailored to your preferences.

Smooth lighting transitions – just like in nature. Start the day with a gentle sunrise, let the full brightness shine at midday, simulate passing clouds or a brief thunderstorm in the afternoon with impressive lightning effects. In the evening, your fish enjoy a calming sunset – at night, a subtle moonlight provides a peaceful atmosphere.

Maximum flexibility – fully programmable. The SunRiser 10 offers you ten individually controllable channels, each with up to 60 watts of power. Each channel can be programmed with any number of time windows. Whether you want a consistent weekly schedule or different lighting profiles for each day – you have complete control. The system is compatible with all our LED bars, including aquaLU-Mix, spotBEAM, and powerBEAM.

Modern control – simple and intuitive. Configuration is done easily via your local network, either by LAN or WLAN. All you need is a modern web browser – on a smartphone, tablet, laptop, or PC. The user interface is visually designed, and easy to navigate.

Realistic weather simulations – for a natural light experience. With just a few clicks, you can create detailed daily routines and dynamic weather scenarios: sunrises and sunsets, shifting clouds, rain, lightning storms, or soft moon phases at night – the possibilities are nearly limitless.

This creates a truly natural atmosphere in your aquarium that will delight not only your fish but also you.



Test it now, for free! srdemo.ledaquaristik.com

45

Features

- Compatible with our LED bars, aquaLUMix, spotBEAM and powerBEAM
- 10 separately and individually programmable channels, each max. 60W (double assignment up to maximum possible)
- WiFi and LAN connection for integration into the local network.
- microSD for storage of configuration and runtime data. (Accessible from the outside)
- Connection for optional temperature sensor.
- Maintenance function (unscheduled light on) can be activated by servicebutton.
- Preloaded example programs available directly in the web interface.
- Solid aluminium housing with dimensions of 160x135x45mm.

Function

- Separately adjustable daily schedules with any number of time windows, per channel.
- Each day of the week can be programmed separately and individually if required!
- **SmartControl** for an optimal lifetime of the LEDs, they are never controlled with maximum voltage.
- SunRiser algorithm for an absolutely smooth and jerk-free dimming curve
- Configuration and control via modern, pleasant web interface, optimised for all end devices such as tablet, smartphone or PC
- Clear, graphical and intuitive German user interface.
- Simple creation of day and weather simulation with sunrise, sunset, moon phases, rain, clouds, thunderstorms and lightning!
- Online help, always up-to-date and in German
- Update via internet (optional, the device does not force you to update).
- Automatic integration into any IPv4 network with DHCP.
- Automatic clock synchronisation via Internet using NTP.
- Open source software, customer extensions possible, continuous further development with customer feedback.

Firmware updates with extensions and improvements appear regularly and free of charge!

SunRiser 10 - Start-up



Suitable for maximum 60W (5A/12V) power per channel - total power channel 1-10 maximum 240W (20A/12V) Double assignment per channel is possible taking into account the maximum connected load in total and per channel. Not compatible with an LED splitter.

Quick start / initial configuration

- The LED power supply must be connected to the corresponding socket on the SunRiser using its yellow connector plug. The device powers on and boots automatically when power is supplied.
- The LEDs do not need to be connected in order to configure the device!
- Connect the SunRiser 10 to your local router via LAN or WiFi.



Once the network and power supply are connected and the SunRiser has booted, it can be accessed from any device (PC/Mac, smartphone, or tablet) within the same network via the SunRiser Finder website: http://sunriser.ledaquaristik.de/



Please use an up-to-date web browser for setup and configuration of the SunRiser 10 - we recommend Firefox.

An internet connection is only required during initial setup and for firmware updates—for example, to register the SunRiser with the server or to use the ,SunRiser Finder' function. For daily use, a local network connection via LAN or Wi-Fi is sufficient. The system can operate fully offline, as all software and settings are stored directly on the device.

Once the SunRiser has been detected and assigned an IP address, it will automatically redirect to the web interface after about 10 seconds. If this does not happen, additional information will be shown on the page. Alternatively, access is also possible via http://sunriser/ or http://sunriser.local/, provided your browser and router support the required functions.

The entire configuration of the SunRiser is carried out via the web interface, which also provides helpful information and guidance on how to use the device. This quick start guide therefore covers only the basic setup and the initial connection to the web interface.

Tip: It is recommended to create a backup of your configuration so that it can be restored if needed. The web interface also provides further details on this process.

Privacy notice - SunRiser Finder

The information transmitted by the SunRiser from your network to the SunRiser Finder server is only stored temporarily in our server's memory and can only be accessed from the same IP address that provided it. The function can be disabled in the Expert Settings under System Settings. The transmitted data includes the SunRiser's local IP address, hardware MAC address, and firmware information.

Web Browser Requirements

The web interface and its features are designed for modern web browsers. Outdated browsers that no longer receive updates are not supported. If you experience issues with connectivity or display, please check for a browser update first. We recommend using the Firefox browser. Other browsers (e.g., Chrome, Safari) may show display inconsistencies in certain cases.

Firmware Update

If a new firmware version is available, it can be found in the web interface menu (gear icon) or directly on the home screen.

Direct LAN connection (without router)

A direct LAN connection to the SunRiser is also possible. If the SunRiser cannot obtain an IP address within the first 2–3 minutes, it will automatically assign itself the IP address 192.168.0.2 To access it, configure your device's network settings as follows: IP Address: 192.168.0.1 Subnet Mask: 255.255.255.0 (DNS and Gateway settings are not required). You can then access the SunRiser via: http://192.168.0.2/

Troubleshooting

If the SunRiser restarts sporadically, fails to save settings, controls the LEDs unintentionally, or the web interface does not load completely, this may indicate a defect on the microSD card (e.g., due to read/write errors).

Despite thorough functionality tests before shipping, such issues with memory cards unfortunately cannot be completely ruled out.

In many cases, the issue can be resolved using our Factory Tool:

http://sunriser.ledaquaristik.de/factory.html

This tool reformats the SD card, installs the latest firmware, and restores the last saved configuration.

If problems occur during the configuration recovery, please skip that step and complete the process.

After rebooting, your personal backup file can be imported as usual.

Alternatively, the SD card can be removed (make sure to disconnect the power first!) and formatted or replaced using a suitable device.

Important: Format as FAT32 and do not use quick format! Then copy the latest firmware file to the SD card: http://sunriser.ledaquaristik.de/NEW.BEE Reinsert the SD card and reconnect the power. The firmware will install automatically, and the SunRiser will reboot. After that, your personal backup file can be imported as usual.



SunRiser 6

The smart lighting control





SunRiser 6 Bring your aquarium to life!

Experience gentle sunrises and sunsets, customized scenarios, and energy-efficient control all in one device.

⊘ Easy to operate!

 \checkmark Big on functionality!

Designed in Germany.

Do you value a lighting control system that is ready to use immediately and tailored to your needs?

Opt for our "Programming Service".

Further details can be found on page 58

Features:

- Immediate start possible with pre-installed lighting programmes.
- Programming without PC etc., settings are made directly on the device via multibutton and LED display.
- Assistance function for easy and quick programming of a daily schedule.
- Compatible with all our LED bars
- 6 separately and individually programmable channels
- Individual lighting programmes can be created and in turn assigned to one or more channels. This guarantees maximum flexibility and functionality.
- Each day of the week can be programmed separately and individually if required!
- SmartControl for an optimal life span of the LEDs, they are never controlled with maximum voltage.
- SunRiser algorithm the dimming function is based on a unique algorithm that provides an absolutely smooth and jerk-free dimming curve unique to all our SunRiser lighting controls!

Functions:

- Time for switching on/off
- Sunrise and sunset
- Duration of dimming phases
- Light output adjustable 0-100
- Function test per channel
- Change of summer/winter time
- Static dimming periods (cloudy, rainy day, etc.)
- If required, **lunch break** with start time, duration, light output 0-100%
- Maintenance function: Temporary full output for work on the aquarium

Example of a light composition:

Channel 1: Main lighting, light colour: DAYLIGHT, AFRICAN-SUN etc. Channel 2: Main lighting, light colour: AMAZON-GROW, PLANT-GROW etc. Channel 3: Moonlight, light colour: e.g. ROYAL BLUE Channel 4: Sunrise and sunset, light colour RED or SUNRISE. Channel 5: Mini pump for water cooling Channel 6: Reserve for future LED upgrade

SunRiser 6 Operation / function

SunRiser 6

Use the Multibutton to make the settings by the "press and turn" method or page through the menu. .

-set inuten

-set inutes

> Prg. A Yes

LEDaquaristik.de				
	Programs 4/26 Program D 6/24	Program D 6/24 1/ 6 07:30 0%	Delete? D 07:30 Yes => No	Program Each of t
			Houn? D 07:30 07:30 0%	brightne: 4 progra
Example of a simple lighting routine: :	daily		Minute? D 07:30 07:30	Program point 1/6
Time Outp 08:00 0%	ut		Brightness 0% 07:30 0%	switches brightne
10:00 100% 20:00 100%		Program D New point	Hour? Prg.D 09:00	The devi to time a
22:00 0% Result: The light switches on	n at 08·00		Minute? Prg.D 09:00	the light current p
Sunrise from 08:00 to From 10:00 to 20:00	o 10:00		Brightness Prg.D 09:00 80%	program Save you
Sunset from 20:00 to The light switches co		Program A Copy	Copy Program A to Program B	edit to su
at 22:00		Program A Assistant	Assistant A SunRise Standard	Sunrise Hour: 08
100%				Sundawn Hour: 20
Sunf	Rise Standard			Sunrise/- In 120 Mi
0		24h	Assistant A SunRise Effect	Sunrise Hour: 08
100%	nRise Effect			Sundawn Hour: 20
	/	24h		Sunrise/- In 120 m
0		24n	Program A Delete?	Delete? No

Programs is a sequence of timed events and contains up to 24 program points. Each of these points contains a time (Hours:Minutes) and the associated brightness value in %.

A programs A, B, C, D are preprogrammed on the unit as supplied (4/26). Program D contains 6 individual program points (6/24). Program point 1/6 gives the brightness value of 0% at 07:30. See left. Thus the light switches on at 07:30 because the following program point 2/6 schedules a prightness value of 80% at 09:00. **(see table right!)**

The device dims (dims or brightens) the light evenly and linearly with respect to time as the program runs from one program point to the next. In this case, the light is brightened from 0% to 80% within 90 minutes (07:30-09:00). The current program can be deleted, amended or added to with new points or a program. **Each of the 26 programs (A-Z) can have a maximum of 24 points!** Save yourself work and **copy a complete program**, which you can then either edit to suit your needs or use unchanged.

> The **Assistant function** allows you to quickly and easily create the daily lighting routine. All you have to specify are the times for sunrise (Start or Light on), Sunset (beginning of the dimming phase) and the duration of these phases. All the rest of the **program points are automatically set for you**. The assistant adds these points to existing programs! The assistant offers two variants: Standard and Effect. "SunRise Effect" is particularly good at allowing effect colours such as morning reds (RED) to be introduced for short periods. "

> SunRise Standard" on the other keeps the light of the sunrise (e.g. SUNRISE) on at a high value over the whole day. See the graphs on the left! You can also edit the program manually.

Monday 11:55 Assign LED

Assign LED. Every channel or every LED (#1 to #6) is assigned a previously created program. More than one programme can be assigned: e.g. if you wish to have different lighting scenarios on different days of the week.



In this example the programs ABCHHHH are assigned to LED #4. The sequence of letters ABCHHHH provides an overview of the week. Monday: A, Tuesday: B, Wednesday: C, the rest of the week (everyday): H

LED #4 ABCHHHH Everyday H



Monday 11:55	Maintenance	The maintenance fu
Maintenance	for XXX minutes	not necessary. The o
Monday 11:55	LED off	are activated. LED c
LED off	for XXX minutes	suspended for this p
Monday 11:55	Function test	Function test #3
Function test	LED #3 776	Power: 1000
Monday 11:55	Settings	Weekday Thu
Settings	Set time	Thursday d
	Settings Maintenance	Maintenance N Power: 1000
	Settings Summertime	One hour V forward S
	Settings Switch-on point	Switch-on point T LED #1 0
	Settings Display	Shutdown in XXX minutes

The **maintenance function** is suitable for times when you are working on the aquarium, and full lighting output is bot necessary. The current light program is suspended manually and the duration set by the user. All 6 LED channels e activated. **LED off**. Using this option, you can switch off the light for a specific period. The light program is uspended for this period and then continued. Suitable, e.g. for introducing new fish etc.

> A **function test of individual LED channels** can the very helpful. An output value between 0-1000 is entered. If the menu point is quit, the current light programme continues. **Settings.** An important and crucial point: The **setting of the current time**:

day of the week, hours, minutes

Maintenance function. Enter the light output (0-1000) that you wish to be provided during the maintenance function period. As with the function test, the brightness level is not a percentage value but a PWM or output value. Thus a value of 500 is not 50% brightness!

Summer/winter daylight-saving time The current time can be put back or forward.

The **switch-on point** only affects powerBEAM / High-Power-Solution! This PWM value is processed processed as the lowest (1%) setting when the light is switched on. See page 62.

If the lighting of the display malfunctions, the complete display switched off when it is inactive.

Monday Info

11:55

Info. This displays current information about operating time, brightness and output values as well as the assigned weekly lighting routine for LED #1 to #6. You can also reset the device including the example program by double-clicking in the factory default settings.

Pre-installed example program	07:30	08:00	09:00	10:00	20:00	21:00	22:00	22:30	Function	
Program A - LED #1	-	0%	-	100%	100%	-	0%	-	Daylight	
Program B - LED #2	-	-	0%	100%	100%	0%	-	-	Daylight Moonlight	
Program C - LED #3	5%	0%	-	-	-	-	0%	10%		
Program D - LED #4	0%	-	80%	100%	80%	50%	-	0%	Sunrise /sunset	



Suitable for maximum 60W (5A/12V) power per channel - total power channel 1-6 maximum 240W (20A/12V). Double assignment per channel is possible, taking into account the maximum total and maximum connected load in total and per channel. Not compatible with an LED splitter.

SunRiser 6 Principle of operation

1. Create a program

A program is the time sequence that controls brightness values at the set times. Example using the pre-installed program A, which comprises 4 points:

1/4	08:00	Uhr	- 0%
2/4	10:00	Uhr	100%
374	20:00	Uhr	100%
374 474	22:00	Uhn	- 0%

◀ The light switches on from 8 o'clock and slowly dims up to 100% within 2 hours. From 10 to 20 o'clock the light shines constantly with 100%. From 8 pm the light dims down again until it reaches 0% at 10 pm and thus switches off.

For example, to add a lunch break, the program is expanded to eight points as follows

1/8	08:00	Uhr	0%
2/8	10:00	Uhn	100%
378	11:45	Uhn	100%
478	12:00	Uhr	- 0%
5/8	13:45	Uhr	- 0%
6/8	14:00	Uhn	100%
7/8	20:00	Uhr	100%
8/8	22:00	Uhr	- 9%

✓ Now the light is dimmed to 0% within 15 minutes from 11:45 and remains switched off from 12 to 13:45. It then switches on again at 13:45, dims up within 15 minutes and reaches 100% again at 14:00.

It is important that a program is covered by "0% points", otherwise the light will never switch off completely.

If in the example above the 1/8 point would be missing, the illumination would only be at 0% at exactly 22:00 o'clock, already one second later the brightness increases again until 100% is reached at 10:00 o'clock.

Up to 26 separate programs (A-Z) can be created, each containing up to 24 points. These programs are then assigned to the LEDs and weekdays...

2. Assign LED

The SunRiser 6 has 6 connectors on the rear side where up to 6 LEDs can be connected and controlled separately. In the factory setting 4 programs (A, B, C, D) are stored on the device, which are assigned to these channels LED #1 to LED #4. This means that channel LED #1 is assigned program A on all days of the week. LED #2 B, LED #3 C and the channel LED #4 the program D.

On page 60 of the operating instructions, the table shows the individual switching times, assignment, brightness and function of these programs in the daily schedule.

It is mandatory that a created program is assigned to one (or even several) LEDs, only then the program will be started. As soon as the assignment has been made, the program starts automatically according to the current time.

Attention: In the factory state, LED #5 and LED #6 are not yet assigned a programme!

Assignment of the pre-installed programs (factory setting):



For special lighting times on LED #1 and LED #2 at the weekend, two new programs E and F are created and assigned as required:



On LED #1 to 3 the same light settings should run daily, on LED #4 e.g. a moonlight should be operated with its own time/program:



SimuLUX 24

Your tool for individual daylight simulation. Create a harmonious and natural lighting experience with the SimuLUX 24 daylight simulator. With 5 individually programmable channels, this mid-range model offers flexible options for every requirement. In direct comparison with its predecessor, the SIMU-LUX (blue device), the new SimuLUX 24 has some impressive new features:

- Up to 48 steps programmable per 24-hour cycle
- Modern USB-C interface
- Protective cover for terminal connectors
- Compact dimensions, only 7x11cm in size

Simple programming and updates are made possible via a USB connection with a Windows PC. Design a 24-hour cycle entirely according to your wishes. From dawn to moonlight, you can simulate:

- Dawn
- Sunrise
- Static darkening periods (e.g., cloudiness)
- Noon sun
- Dusk
- Sunset
- Moonlight

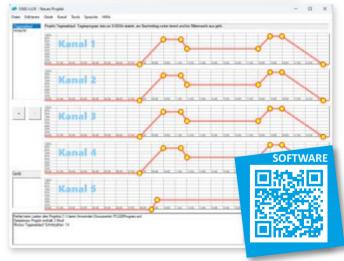
Save multiple daily routines and start them conveniently at the push of a button directly on the device. We also offer sample programs for an optimal and convenient start. With the free SimuLUX software (for Microsoft Windows), you can also program the device yourself in no time.



Suitable for maximum 48W (4A/12V) power per channel - total power channel 1-5 maximum 240W (20A/12V) . Double assignment per channel is possible, taking into account the maximum total and maximum connected load in total and per channel. Not compatible with an LED splitter.



The device contains a replaceable CR1220 lithium button cell battery



NEW: Alternative software with graphical interface Software download: download.ledaquaristik.com For operating instructions, see separate booklet.

SunRiser 2XL

Small, Simpel, Functional.



The dimming function is based on a unique algorithm that produces an absolutely gentle and smooth dimming curve - unique to all our SunRiser light control systems!

SmartControl

The LEDs are never controlled at maximum voltage, thus ensuring an optimum service life. Maintenance function

A simple press of a button sets the brightness to 0%, 100% or back to the programmed setting for any time you wish to work on the aquarium/terrarium.

SunRiser 2XL (EBStuart

Description

Characteristics:

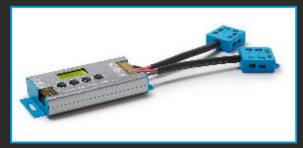
- Simplicity itself to program without a PC etc. The settings are made directly on the device.
- **2** separate and individually programmable channels
- Compatible with all our LED bars
- SmartControl for the optimum service life of your LEDs
- SunRiser algorithm for an absolutely gentle and smooth dimming curve

Functions / settings:

- Time for switching on/off
- Sunrise/-set, moonrise/-set
- Dimming phase duration freely selectable
- Maximum brightness freely selectable
- Maintenance function

Technical data SunRiser XL

- Suitable for maximum 120W (10A/12V) output per channel Total output channels 1+2 maximum 240W (20A/12V).
 <u>A multi use per channel is possible under consideration of</u> <u>the maximum connected load by using the LED splitter.</u>
- Dimensions LxWxH: 150x70x25mm



Setting

1. The current time needs to be set when switching the SunRiser 2+ on for the first time: First set the hour value using the $\blacktriangle \lor$ buttons and confirm with OK. Then set the minute value in the same way using the $\blacktriangle \lor$ buttons and confirm with OK.

2. Set the switching times, dimming duration and maximum brightness for the connected LEDs (at LED#1 and LED#2):

Start Setup by pressing \blacktriangle or \blacktriangledown .

Select LED#1 using the ▲▼ buttons and confirm with OK.

- AN/ON LED1 is the switch-on time for LED#1, set with ▲▼ and confirm with OK.
- Aus/Off LED1 is the switch-off time for LED#1, set with ▲▼ and confirm with OK.
- Dimzeit1/Dimtime1 is the dimming duration in minutes for the sunrise and sunset. The maximum peak value resulting from the ON and OFF times is displayed on the right. Set using ▲▼q and confirm with OK.
- Max LED1 is the maximum brightness value (10-100%), set with ▲▼ and confirm with OK. And that's it done. The simulation for LED#1 is now running.

3. To make the settings for channel LED#2, start Setup again and set the appropriate values for LED#2, see 2.

4. The maintenance function, button

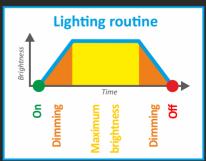
- 1. Press: all LEDs are switched off 0%
- 2. Press: all LEDs are switched on 100%
- 3. Press: the simulation continues.
- **5.** To return the device to the factory settings, press button for approximately 5 seconds.

Example of a full range of settings:

Channel 1: Sunrise and sunset, e.g. SUNRISE Channel 2: Main lighting, e.g. DAYLIGHT

or

Channel 1: Main lighting with sunset Channel 2: Moonlight: e.g. with ROYAL BLUE



Overview: Our lighting controls in comparison













Functions	SunRiser 10	SunRiser 6	SimuLUX 24	SunRiser 2XL
Max. Brightness freely selectable	Х	Х	Х	Х
Duration of dimming phase freely selectable	Х	Х	Х	Х
Sunrise and sunset	Х	Х	Х	Х
Moonlight possible	Х	Х	Х	Х
Natural phases of the moon	Х			
Interruption or change in the daily routine (e.g. midday break)	Х	Х	Х	
Weekdays individually programmable	Х	Х	Χ2	
Maintenance function (full power for work on the aquarium)	Х	Х	Х	Х
Weather effects static (cloudy, rainy day)	Х	Х	Х	
Thunderstorm simulation, lightning	Х			
Automatic dynamic effects (e.g. flying clouds, lightning, thunderstorms)	Х			
Individually programmable channels	10	6	5	2
Characteristics				
Networkable	Х			
Programming directly on the device		Х		Х
Programming with Windows PC	Х		χ ³	
Programming and control via web browser, all operating systems	Х			
Interface, connection possibility	LAN, WiFi		USB	
Automatic clock synchronisation via the Internet	Х			
Regular software updates	Х		Х	
Software language	DE	DE / EN +8	DE / EN +5	DE / EN
Operating instructions	EN	DE / EN	DE / EN	DE / EN
Saving the settings and time in the event of a power interruption	Х	Х	Х	Х
Open source software = customer extensions possible	Х			
Output				
Maximum total power LED 12VDC	240W (20A)	240W (20A)	240W (20A)	240W (20A)
Maximum power per channel 12VDC	60W (5A)	60W (5A)	48W (4A)	120W (10A)
Options				
Temperature sensor	Х			
Power expandable through High-Power Solution (see page 61)	Х	Х		

²Requires manual switching between programmes. | ³macOS/OSX use possible via Windows emulator if needed.

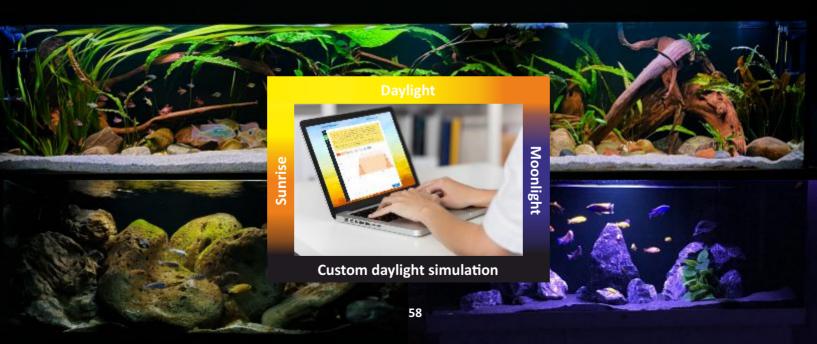
Service: Programming from € 4,99

Do you want the lighting control system to be ready to go straight away? And exactly according to your ideas? Then the "Programming service" is just the thing!

Depending on the selection and device in your order, we program the lighting control system with a

- Daytime planning (Mon-Sun same sequence plus time and brightness) or
- weekly planning (possibility of creating different sequences Mon-Sun, e.g. a later switch-off time at the weekend).

You can either send us detailed specifications for your desired programming, or we will programme the device according to our experience and your other orders with what we consider to be the optimum lighting programme.





Temperature sensor for SunRiser 8 / 10

For temperature monitoring, the sensor returns the temperature value of water and/or air in °C to the SunRiser. The SunRiser 8 or 10 can then influence the output channels according to the settings made in the web interface. For example, the heat recovery mini pump is switched on or off, the light is dimmed or an email is sent when the water temperature reaches a critical value. In order to be able to monitor different areas, such as air and water or water inlet and outlet, it is also possible to connect 2 sensors by means of a Y-cable.

Possible functions based on the temperature value

- Switch off channel
- Dim channel down to preset value
- Dim channel up to preset value
- Switch channel on
- Execution only in certain months, e.g. summer
- · Alarm e-mail when critical temperature is reached
- Regular status e-mail

Scope of delivery:

1x waterproof temperature sensor for fresh and seawater in black, incl. 200cm cable and plug

Connection:

Connection to "1-Wire" or "Sensor" port of the SunRiser (front). Please disconnect the SunRiser from the power supply before connecting!



Aktueller Sernar Wert:		
Sensor Aktiv		AN
Serrust Marrier	42 Temperatur	
Gewünschter Minimum Wert:		
Gewünschter Maximum Wert:	28	
finals für Status (kommatepariert):	into@arrail.co	
Aðe X Stunden Status Email senders		
Sentor nur in diesen Monaten nutzen (porst allei:	Januar O Februar O M April & Mai B Juni B Ju August0 September Oktober O November Dozember	*
Feste Abweichung:	2	
LED #1 Wert bei unter Minimum Wert:		
LED 41 Wert bei Liber Maximum Wert		
LED #2 AUS/AN bei unter Minimum Wert:		All
LED #2 AUS/AN bei über Maximum Wert:		All

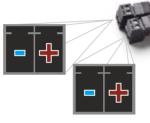
Y-Cabel

The Y-cable is used for double assignment of a channel of the SunRiser or DIMIX 6, taking into account the maximum connected load per channel! (See operating instructions / technical data light control)

For the SunRiser 8 or 10, it can also be used to connect a second temperature sensor to "1-Wire" or "Sensor".

Scope of delivery:

1x 30cm Y-cable (2x socket + plug, 1x open wire)



Flexible wall mount for lighting controls

The 3M Dual Lock Velcro Pads are a very high quality, self-adhesive, Velcro, flexible pressure fastener for easy and re-releasable connecting or fastening. Perfect for attaching our lighting fixtures to the wall or ceiling of the aquarium cabinet. Without drilling! Stick, attach, done! Remove again if necessary!

- Diameter: 48mm
- Quantity: 2 (1 set)
- Colour: black

Important: The surface must be cleaned thoroughly and free of grease before application.



High-Power-Solution for SunRiser

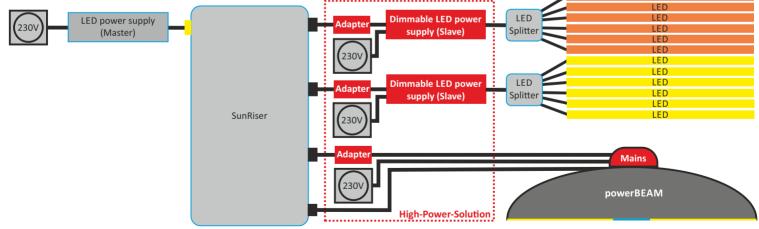
With the High-Power-Solution, a specially configured and dimmable LED power supply unit is used on an output channel of the SunRiser lighting control system. This so-called master/slave operation enables a **connected load of up to 192W (-10%) per channel** on a SunRiser!

Functional description:

In the standard application, a SunRiser draws power from an LED switching power supply and sends it to the LEDs via its output channels. Thus, the maximum possible number of LED bars to be connected is limited by the maximum power of the power supply unit, or by the maximum connected load of the control unit and the individual channel. In the example of the SunRiser 10, this means a maximum of 240W/12V. For extensive projects, the limit of feasibility is quickly reached and a second or third system must be used.

High-Power-Solution: The master/slave solution described below offers a considerable increase in performance. One of our "standard" LED switching power supplies of any power serves as the master. The 35W model is already sufficient, and only supplies power to the lighting control system itself. As slaves, specially configured LED power supplies are connected to the output(s) of the lighting control system. These are available with a connected load of either 120W or 192W (minus 10% reserve). A single SunRiser 10 can thus control a maximum of 10x 192W/12V (-10%), which would correspond, for example, to approx. 60 eco+ LED bars of 100cm each. Even 10x aquaLUMix 144cm on one SunRiser 10 can be realised in this way.

In addition, the slave power supply units can be set up decentrally for lighting control. This means that only the control cable needs to be extended and the cables of the LEDs can be kept short. This neither impairs the efficiency of the LEDs nor increases their susceptibility to interference due to extreme cable lengths. To connect several LED bars to one power supply unit, you will find the LED splitter in our shop. Of course, all LEDs connected to a slave power supply unit are dimmed/controlled together.



High-Power-Solution

Please note:

The power supply unit may only be used with the supplied adapter plug on the SunRiser 4+ to 10 or DIMIX6.

The power supply units should be operated with LEDs that require at least 60% of the max. connected load.

The dimming function of the power supply units cannot technically implement the 1-10% dimming range. A very weak glow of the LEDs, as allowed by the SunRiser in normal operation, is not possible here. For this minimum range, an LED bar connected directly to the lighting control system should be used.

Compatible with: SunRiser 4+ to 10 and DIMIX6

Scope of delivery: 1x power supply unit including connection adapter to an output/channel of the products listed above.



The switch-on point

Using the High Power Solution or powerBEAM with the SunRiser

The lower or fine dimming range between 1-10% is technically not possible with the High-Power-Solution or the main channel of the powerBEAM. However, to ensure that the light switches on at 1% according to the programming and not only with a time delay from an undefined range >10%, a compatible SunRiser controller offer the option of setting the "switch-on point" individually in their settings. The switch-on point is used to determine the lowest possible PWM value at which the connected LED (powerBEAM / High-Power-Solution) switches on. This value is then saved and from now on processed as the lowest (1%) setting when the light is switched on.If several channels are used with powerBEAM or High-Power-Solution, the switch-on value must be set individually in each case.

powerBEAM

Powerful Full Spectrum Light

Installation made by NEW WAVEW concepts

LED pendant lamp for large aquariums

Meet the high lighting needs of your aquariums and terrariums with the powerBEAM LED pendant light. With a system performance of approximately 125W or 240W, the special features of these lights lie in the specially tailored light colors for your application. Available options include AMAZON-GROW for demanding planting, AFRICAN-SUN for moderately to un-planted habitats, and SEAWATER for marine aquariums. Thanks to the three-channel dimming function (3K or 2K for SEAWATER), the powerBEAM LED lights are perfect for daylight simulations.

- The extremely powerful main light (100W or 200W) guarantees excellent brightness and color reproduction during the day. In addition, the lamp features two separately dimmable effect colors:
- Sunrise with warm white/red LEDs, ideal for simulating an appealing sunrise and sunset, thus supporting the natural rhythm of your inhabitants. (not SEAWATER)
- Moonlight, which provides a stunning effect predominantly in intense blue during the evening and night, thus emphasizing the tranquil nighttime atmosphere in the aquarium.

The powerBEAM, designed as a pendant light, is mounted with an elegant steel cable suspension from the ceiling. Our optional reflector optimizes the beam angle from 110° to 90°, reduces stray light, and also acts as a glare shield and design element. The beautifully integrated power supply has a die-cast aluminum heat sink with excellent thermal conductivity, so the powerBEAM does not require active fans for cooling and is therefore absolutely silent.

Dimmability

- Main light, via enclosed adapter to SunRiser 4+ to 10 and DIMIX6, dimming range 10-100%, <10%=off. See "Switch-on point" on page 62. Not compatible with SunRiser 2.
- Moonlight and Sunrise, directly via a dimmer or light control from our range and separate 12VDC power supply unit, dimming range 0-100%.



powerBEAM - Variants







AFRICAN-SUN

AMAZON-GROW

SEAWATER

Effect Colors

For a perfect and comprehensive daylight simulation, the Sunrise and Moonlight channels of the powerBEAM can be controlled separately and continuously dimmed from 0-100%.

*SEAWATER without Sunrise, but with double Moonlight power.





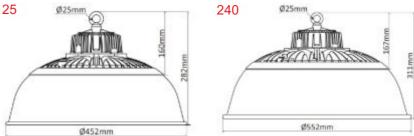
powerBEAM - Details

Scope of delivery

- powerBEAM light
- Steel cable 150cm for suspension with safety carabiner and heightadjustable ceiling fixture
- Adapter for connecting the main light to a lighting control system, ٠ see connection plan

Features

- Colour rendering index: up to 86 Ra (CRI)
- Voltage: main light 230V. moonlight/sunrise 12V DC
- LED chip life: ~50,000 hrs.
- Light source can be replaced by qualified personnel
- Ambient temperatures: -30°C to +50°C, 10% to 90% RH.
- Switching cycles until premature failure: approx. 100,000
- Connections to further accessories according to the scope of order
- Protection class: IP65 not suitable for underwater use!



Anschluss

- Main light with its own integrated and dimmable MeanWell power supply. Control cable 250cm open wire, as well as 250cm cable for mains connection to 230V with Schuko plug, connection according to the principle of the SunRiser-High-Power-Solution (see page 63).
- (Power supply unit and adapter are already included with the powerBEAM!)
- Attention: The main light may only be used with the supplied adapter plug on the SunRiser or DIMIX6.
- Moonlight and Sunrise with 250cm connection cable to 12VDC each, power supply is thus via the switching power supply unit of the light control.
- Use with compatible light control systems, see page 62 as well as the • separate info sheet for the powerBEAM.

Version			Hauptlicht		м	oon light	Sunrise		
version	LEDs total	Lumen	Output/consumption	Efficiency	PAR at 30cm	LEDs total	Lumen / Watt	LEDs total	Lumen / Watt
125	165 pcs	17.321 lm	102 W = 102 kWh/1000h	170 lm/W	670 μmol/m²s	20 pcs	701 lm / 24 W	12 pcs	818 lm / 16 W
240	322 pcs	33.330 lm	203 W = 203 kWh/1000h	165 lm/W	1184 µmol/m²s	40 pcs	1.307 lm / 41 W	24pcs	1.185 lm / 22 W

Light composition

Version	Main light												Moon light		
	ø	RED 730nm	RED 660nm	GROW	3500K	4500K	5500K	6500K	11000K	13000K	UV 380nm	UV 410nm	BLUE 450nm	13000K	BLUE 450nm
AMAZON-GROW	5500K	2%	8%	15%	15%	15%	10%	35%	/	/	/	/	/	20%	80%
AFRICAN-SUN	7500 K	2%	8%	/	/	/	15%	30%	30%	15%	/	/	/	20%	80%
SEAWATER	>20.000K	/	2%	/	/	/	/	/	/	44%	5%	5%	44%	10%	90%

Technical data based on the AMAZON-GROW

125

easyBEAM LED spot with E27

With easyBEAM, experience an incredible depth effect in your aquarium that brings your underwater landscape to life. Our high-quality CREE LEDs provide precise illumination, showcasing your fish and plants in the best light.

Our simple concept offers a user-friendly installation thanks to the standard E27 bulb socket. Whether you are an experienced aquarist or just starting out, easyBEAM adapts to your needs.

By combining innovative technology with intelligent design, easyBEAM provides an optimal light source for any type of aquarium. Create stunning visual effects in your aquarium while your underwater world shines in a new light.

Experience the revolutionary aquarium lighting of easyBEAM now and

Equipped with 12 ultra-bright CREE LEDs. Choose from 3 different light colors:

PlantMix - The PlantMix light colour consists of a combination of 6x 6500K XPE, 4x 5000K XPE, 1x RED XTE, 1x BLUE XTE LEDs. Ideally suited for planted freshwater aquariums or any terrarium.

DayLight - The light colour DayLight produces a pleasant clear white light with 12x 6500K XPE LEDs, neutral like daylight.

DeepBlue - with Bridgelux LEDs. The DeepBlue light colour provides a deep blue light with 8x BLUE, 3x 12000K, 1x RED LEDs, whereby the 12000K LEDs still provide a proportionate basic brightness, e.g. for saltwater aquariums or to achieve a special depth effect.



PlantMix



Daylight

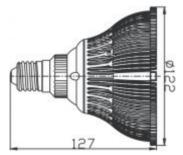


DeepBlue

Technical data easyBEAM (based on the PlantMix light colour)

- Dimensions: d=122mm, h=127mm
- Equipped with: 12x CREE LEDs
- Luminous flux 2830 lm
- Efficiency approx. 146 lm/W
- Dimmable: NO
- Base: E27
- Beam angle: 90
- Power: ~18 W
- Weighted energy consumption: 18 kWh/1000h
- Voltage: 230V
- Lifetime: > 50,000 hours
- Light source can be replaced by qualified personnel
- Switching cycles until premature failure: approx. 100,000
- Switch-on time: <0.5s









An easyBEAM cools itself independently via the ambient air. Make sure that the lamp can dissipate the heat generated unhindered. If the lamp is used in a housing that is too narrow or too closed, there is a risk of premature failure due to excessive operating temperature.

flexBEAM for aquariums LED Spotlight and HQL Replacement



flexBEAM

The flexBEAM LED Spotlight is synonymous with versatility and adaptability. It provides you with a tailor-made solution, whether as a replacement for traditional HQL lights or as a pendant light with an elegant steel cable suspension. With its high-quality components, it is perfectly suitable for various environments.

Power and Light Colors: The Right Light for Every Need

- Choose between two power options: approx. 40W or 75W.
- Diverse light colors enable usage in different scenarios:
 - ★ For Plant Lovers: PLANT-MIX and AMAZON-GROW.
 - * For Cichlid and Community Aquariums: DAY and AFRICAN-SUN.
 - ★ For Marine Enthusiasts: SEAWATER



AMAZON-GROW

PLANT MIX

AFRICAN-SUN

SEAWATER

flexBEAM

Beam Angle and Lens

- Solidly constructed and easily replaceable glass lenses offer choices between 60° or 90° beam angles.
- For more flexibility, a polycarbonate cover is also available, allowing for a 120° beam angle.
- Please note that illumination varies depending on the height of the spotlight above the ground.

Optional Accessories

- Pendant Light with E27 Socket: Our inconspicuous metal mounting set allows for a stylish installation above the aquarium (incl. E27 lamp socket, sturdy and shorten-able braided fabric cable, ceiling mount for 230V direct connection).
- Reflector: Minimize scattering losses and direct the light exactly where it's needed. Our reflector shade is optionally available depending on your needs.



Beam angle:







flexBEAM Koi

The ideal lighting for indoor Koi keeping.

The flexBEAM "Koi-Edition" features a unique COB-LED, particularly suitable for specific applications such as lighting indoor Koi ponds. Not only does it **maintain the colors** of your Koi, but it also **restores the vibrant colors to faded animals**. For successful keeping without natural sunlight.

Configure your flexBEAM LED spotlight as needed with a power of 40W, 75W, or 150W.

The COB chip of the flexBEAM "Koi Edition" was specially developed for its purpose in indoor Koi keeping, aiming to maintain and enhance color. Independent long-term tests by well-known importers, dealers, and private customers from the Koi community uniformly rate this spotlight as "very good".



Configure and order: koi.ledaquaristik.com





flexBEAM

The flexBEAM LED Spotlight stands for quality, flexibility, and innovative technology. With its wide range of options and accessories, it's more than just a light – it's your custom configurable lighting system. Explore the possibilities and take your lighting to the next level!

Installing a reflector



Do not touch the LED! Do not touch the inside face of the lens!

1. Remove the lens from the lamp body.

2. Now insert the reflector between the lamp body and the lens. Ensure that the holes for the connecting screws align with one another.

3. Now connect all the parts together again with the 4 previously removed screws.

Ventilation

The spotlights have an active-passive cooling system: the patented aluminium heat sink provides the necessary heat dissipation passively, while a quiet magnetic fan cools actively. The fan as well as the integrated and highly efficient power supply unit can be easily replaced if necessary.



A radiator that is housed too tightly will lead to insufficient cooling and overheating, resulting in a shortened service life. A very dusty environment can also lead to a shortened service life.

Steel cable suspension with height adjustment











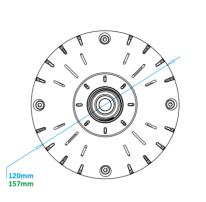
E27 suspension for the Aquarium Variant 40/75

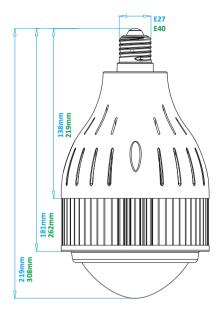


flexBEAM base with 40, 75, or 150W

Technical data flexBEAM LED spotlight

- Weight approx. 840g (40/75W), 1450g (150W)
- Diameter reflector 33cm (40/75W), 41cm (150W)
- Dimmable: NO
- Base: E27 (40/75W), E40 (150W)
- Beam angle: 60°, 90° or 120° (not for 150W) by changeable lens
- Light colour according to choice
- Luminous flux up to approx. 12.000 lm (75W model)
- Power according to selection
- LED efficiency: approx. 185 lm/W (75W model)
- PAR/PPFD at 30cm: 675 μmol/m²s (75W model)
- Efficiency of power supply unit: approx. 93%
- Weighted energy consumption: 41, 76 or 152 kWh/1000h
- Voltage: 230V
- Service life: > 50,000 hours
- Light source can be replaced by qualified personnel
- Switching cycles until premature failure: approx. 100,000
- Switch-on time: 0.5s
- Operating noise of fan: 14.5 dBA





Variante 40 and 75 Variante 150

Further data and diagrams on the light spectrum are available in the product description under ("Data sheet & key figures") of the respective variant.

*The light measurement of the product was carried out according to the scope of delivery in a dry environment at 100% output. The use of focusing lenses, protective covers or reflectors may lead to deviating results. In addition, slight deviations from the test sample may occur due to the batch. PPFD - Photosynthetic Photon Flux Density. PAR - Photosynthetically active radiation. PPE - Photosynthetic photon flux per watt of electrical energy.



Mounting and fixing solutions

LED adapter profiles for modernizing JUWEL and EHEIM aquariums. Page 102

Modern aluminum lamp housing for various applications. Page 95 SLIM brackets for limited space situations like OASE aquariums. Page 79

U-profiles for flexible LED bars mounting. Page 81

Special brackets for T5 or T8 damp-proof fixtures. Page 77

> TRIO brackets for hanging in the cover. Page 79

Integration into our aquarium cover. Page 86

Silicone feet

The feet (2 per set) enclose the LED bar precisely and can be moved freely on it. Made of transparent and non-slip silicone, they give the LED bar a firm hold. This makes it easy to place the LED bar, for example, on the transverse or longitudinal struts or on the cover pane.

We recommend using a CleanCover to protect the silicone sealing of the LED bars.



This minimalist holder made of stainless steel can be used as an alternative for water cooling of the PRO² LED bars. Also compatible for mounting in the frame profiles of the deLUX and pure covers. Total length 20cm for a continuous length adjustment of approx. 15cm per side.

To use and mount the bracket holders, the hose nozzles of the PRO² LED bars are removed and the bracket holders are inserted into the free channels instead. The possibility of water cooling is no longer given!

Total height of LED bar with holder: 3cm



The holders to allow our LED bars to be mounted in your existing waterproof tube sockets.

There are two versions available, one for T5 and one for T8 sockets:

1 Set SOLO: For one LED bar per tube 1 Set DUO: For two LED bars per tube (only eco-+)

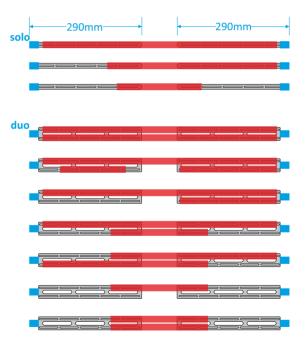
The holders are all the same length and can be withdrawn from the socket to the appropriate extent. The table below shows which fluorescent tubes can be replaced by which LED bars. A small refinement is that the LED bars including the holders may be rotated through 360° in the tube sockets. In this way you can set a special lighting accent, such as highlighting the back of the tank etc.

Fluorescent tubes (Length in mm)	compatible with	eco+ LED bars with solo & duo holders	PRO ² LED bars only with solo holders		
361 to 438		20cm, 30cm	/		
549 to 590		20cm, 30cm, 50cm	47cm		
849 to 895		50cm, 80cm	47cm, 67cm, 75cm		
1047		80cm, 100cm	75cm, 96cm		
1149		100cm	96cm, 106cm		
1200		100cm, 116cm	106cm		
1449 to 1500		116cm, 140cm	135cm		

Scope of supply: Mounting rails, protective sleeves, fastenings

Suitable only for ordinary waterproof tube sockets! Not compatible with aquaLUMix lamps! **Possible configuration of the holders with LED bars:** There are many different possible combinations. It is important that at least one LED bar forms a connection between the two mounting rails. The distance between the mounting rails varies according to the tube length and the LED bar.

Examples:



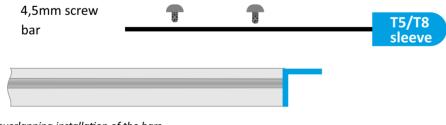
T5/T8 brackets Mounting instructions / Function

The brackets can be easily and directly attached to the back of the LED bar by screwing the included self-tapping screws into the central groove of the bar. The bars are pulled out beyond the end of the LED bar and positioned until the total length of the former fluorescent tube (without contact pins) is reached. (For 361 and 438mm tube lengths, the bars are mounted overlapping). Do not tighten the screws yet. Put the blue protective sleeves supplied onto the two ends of the bars. These prevent the ingress of moisture and protect the electrical contacts of your tube lighting. After the total length has been correctly adjusted, tighten the screw connections and make sure that the bars are firmly attached to the LED bar.

The power supply of your tube lighting must now be switched off permanently; the future power supply will be provided by an external LED power supply unit.

Now remove the fluorescent tube from the sockets and place the prepared LED bar with brackets and protective sleeves into the sockets. Be sure to use the protective screw connections of the damp-proof lampholder as usual. Align the LED bar horizontally. That's it.

PRO² LED bars are only compatible with the "solo" version of the holders! Not compatible with aquaLUMix lamps!



For overlapping installation of the bars 6.5mm screws are included in the scope of delivery



TRIO mounting

The TRIO holder for e.g. **Eheim VivalineLED or Proxima** aquariums has an angle on one side which is held in the groove of the aquarium cover. Just like the original lighting of this aquarium. This makes it possible to use any number of holders and LED bars, and to position them as desired.

For up to three eco+ or two PRO² LED bars, or one aquaLUMix. Can also be used inside the deLUX and pure aquarium cover. Also available as XL version: made of 50% thicker material, and especially suitable for the aquaLUMix.

Dimensions: 245x58x2mm, angle height 18mm

AddON Adapter plate

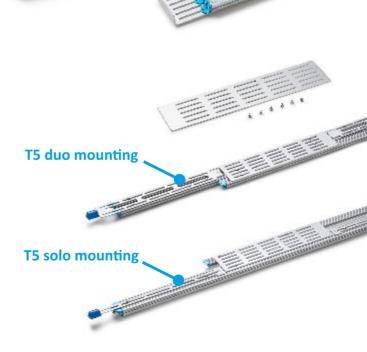
The AddON adapter plates can be used in a variety of ways. Examples:

- As a fastening and for lateral support of the lighting on existing glass bars, especially with low heights and little space, e.g. with Oase Highline.
- For fastening/extending the aquaLUMix, the AddON plates are screwed to the back and serve as a support. As an adapter for mounting in Aquatlantis profiles.
- For mounting up to 2 additional LED bars when using our T5/T8 brackets or the DUO bracket as the main bracket. *
- etc.

* At least one 75cm (or longer) LED bar should be mounted on the main brackets in order to be able to position the addON adapter plate centrally between them. See pictures. The prerequisite is sufficient stability of the existing damp-proof lampholders.

Dimensions: 265x58x2mm

The brackets can be easily and directly attached to the back of the LED bar by screwing the included self-tapping screws into the central groove of the bar.



Flexible mounting solutions, (almost) anything is possible

This allows for various combinations, for example, to retrofit an **aquatlantis / tecatlantis** light bar (left) or to equip one of our adapter profiles massively with lighting.

Adapter compatible with aquatlantis light bar

4

XXL holding bridges for our JUWEL and EHEIM adapter profiles.

Retrofit of the original aquatlantis aluminum profile

. . .

U-profile as longitudinal or transverse support for LED bars, in custom sizes up to 200cm

For easy and flexible installation of the lighting, even inside a cover. Advantageous for larger aquariums to span the entire length. And ideally suited for lighting concepts that include several short LED bars or spots. In combination with a "TRIO holder for U-profile", the U-profile can be hooked in laterally, e.g. within our aquarium covers. But also in EHEIM Proxima, Incipria and VivalineLED aquariums.

Compatible with the products: eco+, PRO², spotBEAM and aquaLUMix.

Mounting:

The LED lighting is directly screwed to the U-profile by turning the included self-tapping screws into a suitable groove of the aluminum heatsink on the back of the LED lighting.



Perforated, anodised U-profile, Versatile

Technical data:

Colour: silver grey Material: anodised aluminium, 2mm Length: as desired up to 200cm Width approx. 104mm leg height: 20mm Hole diameter: 3mm (suitable for our 3mm or 2.9mm screws)

Scope of delivery:

1 piece U-profile made to measure, without further fixing material.

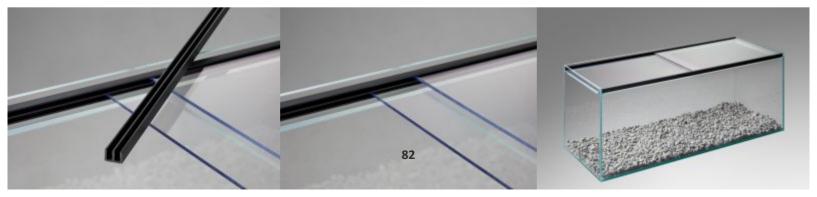
When used within our aquarium cover, a length of length of the aquarium minus 9cm. Plus the TRIO holder

Can be used depending on the situation with or without TRIO holder for can be used depending on the situation.

E-profile as guide rail for cover panes, on request up to 300cm in size

Thanks to these guide rails made of high-quality and solid plastic, cover panels can be easily and conveniently slid onto the aquarium. This makes feeding, water changes and any other aquarium maintenance much easier. The guide rails are suitable for 4mm panes and are ideally placed on the longitudinal struts of your aquarium. Fixing by gluing is not absolutely necessary. Length adjustment is possible with a simple hand saw. Please note that you need 2 guide rails per cover!





Aquarium Covers



Discover the perfect solution for your underwater paradise with our premium aquarium covers. Choose between the **deLUX version**, entirely made of aluminum, with anodized or powder-coated frame and carrier profiles in titanium gray or white and matte brushed surfaces, or the **Vario version**, which impresses with a high-quality plastic frame with a high-gloss finish in white, gray mottled, or black. Note that with deLUX, custom sizes are not possible and only standard sizes are offered, while Vario allows for millimeter-precise adjustments and can be complemented with a matching gravel blend on request for a stylish look.

Both models, deLUX and Vario, are compatible with our state-of-the-art LED bars and offer practical handling with the **Flap or Slide lid systems**, as well as precise processing for maximum stability. The reflective insides of the cover plates ensure efficient light usage, while the robust frames and connections made of aluminum and the covers made of aluminum composite panels guarantee long-lasting resistance.



What are the differences between Flap or Slide covers?

Slide Sliding lid

Flap with folding lid	Slide with sliding lid			
With hinged cover system optionally with 1-3 support profiles	With purist sliding lid consisting of 2 elements, Supplied optionally without cover plates.			
The lighting can be set up in the frame or freely attached to the support profiles.	The lighting is set up in the frame, e.g. with the TRIO bracket for eco+and PRO ² .			
The maximum length of the lighting is tank length -9cm	The maximum length of the lighting is basin length -5cm			
The minimum length of the lighting, none.	The minimum length of the lighting when using the TRIO bracket is pool length -30cm.			

Aquariums with a long side of >= 120cm require a cross brace (glass) to support the support profile for the stability of the Vario flap cover. Therefore, for pool tanks >= 120cm (without cross brace), a slide cover is preferable. (deLUX from 160cm)

Flip Open and Marvel Stylish Aquarium Covers

The deLUX and Vario aquarium covers with Flap system with foldable lids for easy access, offer elegant design and sophisticated functionality for enhanced aquarium care. The deLUX series is distinguished by its durable aluminum design in titanium gray or white, but is only available in standard sizes. In contrast, the Vario series offers a high-quality plastic frame and the flexibility of custom sizing, complemented by an optional gravel blend for a unified aesthetic.

Both series support our innovative LED lighting, allowing for adaptable use. Suitable for aquarium sizes from 30x30 to 400x150 cm, they feature an XL dirt and water level blend for clear visibility. The reflective inner sides maximize the light from the LED bars, ensuring optimal illumination without light loss. Choose from over 20,000 possible combinations to find your ideal aquarium cover that is not only functional but also visually impressive. Whether it's deLUX in aluminum or Vario with a plastic frame, both options transform your aquarium into a breathtaking underwater world.

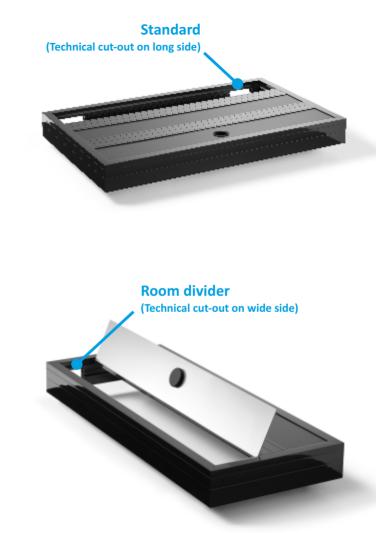
Individual selection options:

Cutout for equipment:

- Standard = Cutout on the long side (long side is against the wall)
- Room divider = Cutout on the short side (short side is against the wall)
- Freestanding or internal equipment shaft = without cutout

Lid division:

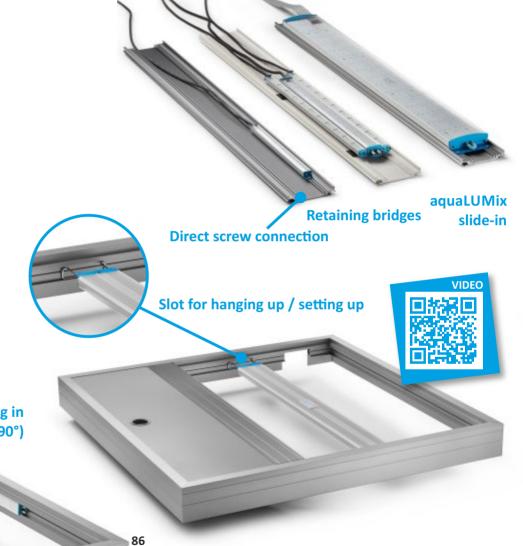
The lid division determines the number of support profiles and depends on the measurement of the short side. The position and distances are always evenly distributed, an exception is possible through the service: Individual lid division.



Flap

The Flap aquarium cover has, depending on the selection, 1 to 3 support profiles for accommodating our LED systems eco+, PRO^2 , spotBEAM, and aquaLUMix. This ensures ideal light distribution depending on the depth and area of the tank. The eco+ and PRO^2 LED bars are attached with the included mounting brackets, while the aquaLUMix and spotBEAM are slid directly into the support profile and secured.

The frame profile also offers a continuous groove as an alternative attachment point. Direct attachment in the frame 90° to the water surface is also possible. For the very special effects of light simulation, e.g., for horizontal shining moonlight above the water surface.

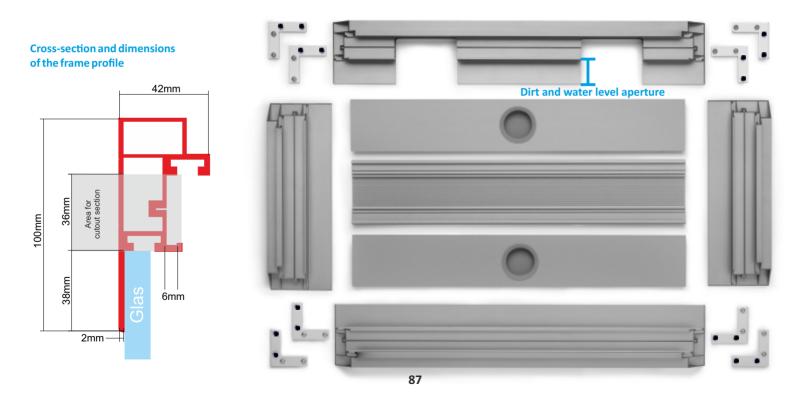


Mounting in Frame (90°)

Flap

The integrated XL dirt and water level baffle (-38mm from the glass top edge) ensures a clean and undisturbed view all around.

The well-thought-out design also allows easy access to the aquarium. The lid flaps can be set up individually or even completely removed with just one hand. The highlight is the insides of the lid panels, which have a mirror-like highly reflective surface that minimizes scattering losses and makes the maximum LED light usable.



Flap

Important to know:

- The glass thickness of the aquarium is not relevant, the cover fits any glass thickness.
- The specified dimensions for length and width always refer to the outer edge to outer edge of the aquarium and do not allow any leeway to exceed these. 1mm clearance is taken into account on each side.
- The support profile (centre beam) always runs parallel to the selected length of the cover.
- Aquariums with a long side of >= 120cm require a cross brace (glass) to support the support profile for the stability of the flap cover. Therefore, for pool tanks >= 120cm (without cross brace), a slide cover is preferable.
- The support profile is always planned and supplied by us centrally to the width or, in the case of several support profiles, evenly distributed over the width. This then results in the cover sizes accordingly.
- The maximum length of an LED light is: edge length of aquarium minus 9 cm (when mounted in the support profile), or minus 5 cm (when mounted/hanging in the frame profile)
- The lid flaps are produced in two parts from a length of 126cm, in three parts from 246cm, and in four parts from 366cm.
- Size and position of the technical cut-outs: See the respective product description in the online store.
- The Flap aquarium cover is made to order according to he customer's wishes, which is why this article is xpressly excluded from the right of withdrawal. If you are nsure about the selection, we recommend our sample ase!



Assembly instructions for flip-top lids

- Place a soft underlay to avoid scratching the cover during assembly.
- Included in delivery: 8 corner connectors and 32 M4x6 hex socket screws 16 silver with **right-hand thread**, 16 black with **left-hand thread**. The connectors are marked with their respective threading directions and are screwed into the slots of the frame profiles using the included hex key (2 per corner).
- Slide the profiles completely onto the connectors until a right angle is formed this helps prevent gaps or misalignment of the cover. Before tightening the screws, we recommend measuring the diagonals. If both are equal, the frame is correctly aligned. For larger models, assembly is easier with two people.
- Once the frame is assembled, it can be placed on the aquarium. Ensure the glass edges are clean (no sand or debris). If an effect light is to be mounted on the side, do so before placing the frame. Silicone is not required for fixing. Seal strips are available in the shop if needed. If the entire cover is frequently removed, adhesive tape can protect the glass edges from scratches. Cables and hoses are routed through the technical cutouts.
- According to the lid layout, one or more support profiles are equipped with LED lighting and placed into the frame. Each support profile includes 2 mounting brackets for lengths up to 120 cm, and 4 brackets from 121 cm in length. If you're using multiple LED bars along the length, additional mounting brackets are required (see p. 99/100). The position of the LED bars within the profile is freely selectable.
- Self-adhesive silicone cubes (11×11 mm) are included in the delivery and should be placed in the four corners of the frame. They ensure that the lid flaps close flush. Remove the protective film from the lid flaps and insert the silicone handles. Then insert the lid flaps and, if applicable, center flaps (when multiple support profiles are used).
 - Depending on the aquarium size, each support profile includes a heightadjustable nylon support. This is placed on the central glass brace to prevent the profile from sagging.

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Individual layout for flap lids

As standard, the covers have a symmetrical lid division:

- With one support profile there are 2 cover elements of the same width, the support profile halves the width of the aquarium.
- With two support profiles, there are 3 cover elements of the same width, the support profiles divide the width of the aquarium into thirds.
- With three support profiles, there are 4 cover elements of the same width, the support profiles quarter the width of the aquarium.

Deviating from this, lid elements are possible in size and division according to individual customer requirements.

What is possible with an individual lid division?

- The support profile(s) can be arranged asymmetrically to concentrate the light in certain areas (front, middle, back). This results in ceiling elements of different sizes.
- Additional narrower lining flaps are possible, see photo.
- Round holes (up to 68mm) for feeders at desired position
- For covers 130cm and longer and multi-part covers, the lengths can be chosen differently.

What has to be considered or where are the limits?

- The minimum strip width of the covers is 8.5cm.
- The maximum possible dimension per element is 122x122cm.
- The total area of the individual cover elements must be equal to or smaller than the area of the standard cover elements.
- The hinged lid is made in two parts from a length of 130cm and in three parts from a length of 250cm. This cannot be changed even with an individual division.

What is not possible?

• Adjustments of any kind to the frame profiles.

How to order the individual lid division?

- Roughly plan your desired division.
- Order the cover, as well as the individual cover partitioning in addition.
- Send us a dimensioned sketch with your wishes by email. You will find a template in the shop. If you need further advice, please contact us by phone.

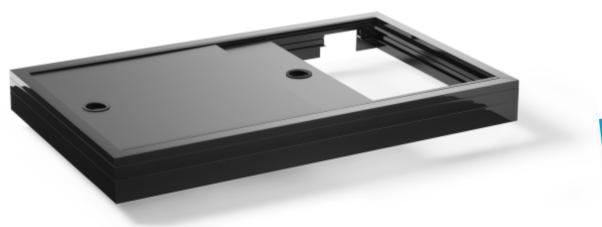
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Simply Slide - Comfortable Aquarium Covers

The deLUX and Vario "Slide" aquarium covers with its puristic and sleek design as well as the child-friendly sliding technology, the pure model sets standards in the aquarium world. The **deLUX series** is distinguished by its durable aluminum design in titanium gray or white, but is only available in standard sizes. In contrast, the **Vario series** offers a high-quality plastic frame and the flexibility of custom sizing, complemented by an optional gravel blend for a unified aesthetic.

Both series support our innovative LED lighting, allowing for adaptable use. The **Slide system, in which lid elements are moved to the side**, is suitable for aquarium sizes from 60x30 to 400x70 cm, they feature an XL dirt and water level blend for clear visibility. The reflective inner sides maximize the light from the LED bars, ensuring optimal illumination without light loss. Choose from over 20,000 possible combinations to find your ideal aquarium cover that is not only functional but also visually impressive. Whether it's deLUX in aluminum or Vario with a plastic frame, both options transform your aquarium into a breathtaking underwater world.





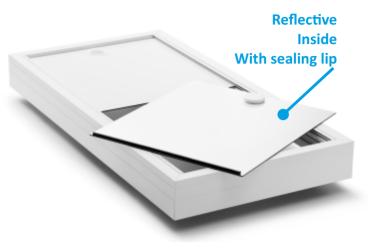
Individual selection options:

Technical cutout: Standard = On the long side (long side is against the wall), Room divider = On the wide side (short side is against the wall) or Free-standing or inner technical shaft = without technical cutout

Cover plates: As an alternative to our aluminum composite panels, the cover can also be ordered "for self-glazing" if you want to use, for example, real glass. Suitable glass/panel thickness: 3 mm

Slide

The Slide Aquarium Cover with sliding lid impresses with quality, functionality, and an impressive price-performance ratio. The frame has a continuous groove as a mounting point for our LED systems eco+, PRO², spotBEAM, and aquaLUMix. The separately available TRIO bracket or the U-profile are the ideal accessories and the perfect complement. This allows the lighting to be positioned freely in the frame and moved as needed. Direct mounting in the frame at 90° to the water surface is also possible. For the very special effects of light simulation, e.g., for a horizontally shining moonlight above the water surface. The two-part sliding lid with grip holes ensures easy handling and maximum accessibility. A sealing lip for the top plate ensures that dripping condensation water is drained off the lower plate. And the special thing: The insides of the cover plates reflect the light, so no beam of light is lost. The integrated XL dirt and water level screen (-38mm to the glass edge) ensures a clean and undisturbed field of vision throughout.



Groove for hanging

Quality and Design

Our products stand for top quality. Thanks to precise manufacturing, all components are characterized by minimal gap dimensions and impressive stability. The elegant frame profiles are not only attractive but also easy to maintain and corrosion-resistant. Other components, such as the internal aluminum corner connectors, V4A stainless steel screws, and a lid made of aluminum composite panels, guarantee longevity. Integrated silicone handles in the lid complete the appealing design.



Sample Box - Order and test!

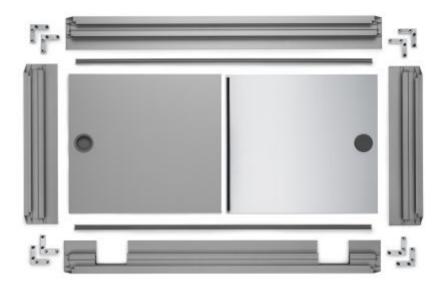
This unique box give you a precise idea of the color, size, and texture of our Vario covers and gravel panels.

Assembly instructions for cover with sliding lid

- Place a soft underlay to avoid scratching the cover during assembly.
- Included in delivery: 8 corner connectors and 32 M4x6 hex socket screws – 16 silver with right-hand thread, 16 black with left-hand thread. The connectors are marked with their respective threading directions and are screwed into the slots of the frame profiles using the included hex key (2 per corner).
- Slide the profiles completely onto the connectors until a right angle is formed – this helps prevent gaps or misalignment of the cover. Before tightening the screws, we recommend measuring the diagonals. If both are equal, the frame is correctly aligned. For larger models, assembly is easier with two people.
- Once the frame is assembled, it can be placed on the aquarium. Ensure the glass edges are clean (no sand or debris). If an effect light is to be mounted on the side, do so before placing the frame. Silicone is not required for fixing. Seal strips are available in the shop if needed. If the entire cover is frequently removed, adhesive tape can protect the glass edges from scratches. Cables and hoses are routed through the technical cutouts.
- Now is the ideal time to integrate the lighting and other equipment.
- Insert the guide rails flush with the top edge of the frame on the long sides. These are not screwed in, so that the lid panels can be removed completely later – they are held in place by the lid panels themselves. Remove the protective film from the lid



panels and insert the silicone handles. When sliding them in, make sure the upper panel includes the sealing lip and the handle holes are positioned on the outside.



Important to know:

- The glass thickness of the aquarium is not relevant, the cover fits any glass thickness.
- The specified dimensions for length and width always refer to the outer edge to outer edge of the aquarium and do not allow any leeway to exceed these. 1mm clearance is taken into account on each side.
- The maximum length of an LED light is: edge length of aquarium minus 5 cm (when mounted/hanging in the frame profile)
- The minimum length of the lighting when using the TRIO bracket is tank length -30cm.
- Size and position of the technical cut-outs: See the respective product description in the online store.
- The slide aquarium cover is made to order according to the customer's wishes, which is why this item is expressly excluded from the right of withdrawal. If you are unsure about the selection, we recommend our sample case!

Vario custom-size aquarium cover up to 400cm

Tailored to your needs: The Vario Aquarium Cover with the Flap or Slide lid systems impresses with quality, functionality, and an impressive price-performance ratio. For aquariums ranging from 30 to 400cm in length, we deliver millimeter-precise covers according to your specifications.

Our cover impresses with its minimalist design and a frame made of high-quality plastic with a glossy surface. The covers made of aluminum composite panels with reflective inner sides maximize the light from the LED bars, ensuring optimal illumination without light loss. Additionally, you can order a matching gravel panel to give your aquarium a uniform and stylish look.

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Available sizes: From 30x30cm to 400x150cm to the exact millimeter on request



Custom-size, here's how:

In the shop, we offer a variety of sizes in 5-10cm increments, covering 90% of the common aquarium sizes. However, if your aquarium has a special dimension, that's no problem. Simply choose the next larger standard length and specify your exact dimension when checking out. For example, for a 97,5cm aquarium, select 100cm and then specify the exact 975mm at the final step at checkout. Our experts take care of details like the safety margin and ensure that your cover fits perfectly!



Vario - Gravel Panels

To perfect the overall look, we additionally offer a color-coordinated gravel trim. This lends your aquarium a harmonious and appealing look.

Our innovative gravel trim – the perfect border for all rectangular aquariums! Experience a clear, un-disturbed aquarium design and focus the view exclusively on what truly matters: your magnificent underwater inhabitants and plants. Depending on the use case, the gravel trim can be used for one to four sides of the aquarium.



Your advantages at a glance:

- Aesthetics & Design: Conceal the lower edge of your aquarium and everything below it. Whether sand, gravel, or unsightly deposits everything remains out of sight, and your aquarium presents itself in the best light.
- High-quality Finish: A simple yet elegant design meets a shiny high-gloss surface. This understated profile perfectly harmonizes with the Vario aquarium covers.
- Robust Quality: With a 2mm thick plastic profile, we guarantee you durability. Choose between a height of 50mm or 70mm.
- Color Variety: Choose between elegant white, timeless black, and marled gray to perfect your aquarium's appearance.
- Easy Installation: Thanks to the self-adhesive back, installation is a breeze. Simply peel, attach, and voilà – your aquarium shines in a new light!
- Perfect Fit: Thanks to precise miter cuts, we guarantee utmost precision in fit. And the best part? We custom-make your gravel trim to the exact millimeter of your desired dimension!

Lend your aquarium that special touch and opt for timeless elegance. Our gravel trim not only offers functionality but also a touch of luxury for your underwater palace.



Lamp housing

Individuality and design with our customizable lamp housing. This housing is the perfect platform for LED lighting and can be used as a pendant, standing, or hanging light.

- Space for individual LED bar combinations from PRO² and eco+
- Compatible with aquaLUMix and spotBEAM models
- LED bars of different lengths can be positioned freely
- Housing lengths from 25 to 195 cm suitable for nano and large aquariums

The temperature-optimized aluminum housing, in a timeless and modern design, is not only aesthetically pleasing but also functionally designed to provide the best possible protection and efficient heat dissipation for your LED lighting



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Versatile Use...



Side-mounted lamp = supported on the sides (glass edges) of the aquarium.

The correct housing length: The supports increase the overall length of the housing by between +3cm and +20cm

Example: The 105cm housing can be used as a side-mounted lamp for tank lengths of 108cm to 125cm



Frame-mounted lamp = supported on the cover plate or glass struts on the aquarium ² The supports are available in three different heights – which makes them also suitable for

use within the cover, e.g. EHEIM Proxima or Incpiria. The correct housing length: The supports increase the overall length of



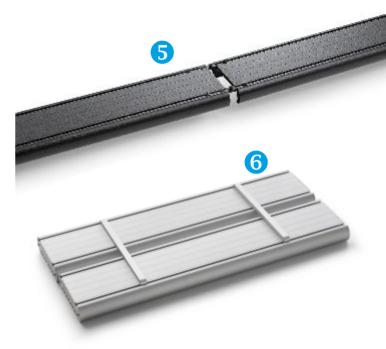
the housing by between +2.5cm and +22.5cm

The supports are fastened in the locating grooves in the housing using the supplied hexagon socket screws and are easily adjustable in position.



Suspended lamp = lamp hanging freely above the aquarium, fastened by steel suspension wires to the ceiling. The suspension wires are attached to the locating grooves in the housing. The distance between the wires is flexible and can be freely chosen. Use the included silicone stops to secure the suspension wires in the locating rooms against unintentional movement. The steel wires can be shortened and adjusted with the quick release clamp.

The ends of the lamp housings are closed with the included end panels. The LED bar connection cables are fed from outside through openings in the end panels ④ and bundled together for neatness to form a cable harness using the accompanying spiral hose. When using the cable extension and connectors, feed the cables through the openings before connecting them together.



Longitudinal connectors Housings can be connected together to make longer ones suitable for use with unusually dimensioned or large aquariums. When longitudinal connectors are used, the lamp housings are not fitted with end panels at the connection points. **S** Place the cables over the retaining clip bridges if you wish to have all the cables on one side of the lamp.

Parallel connectors Where extremely high amounts of light are required or the aquarium is particularly deep, two or more lamp housings may be connected parallel to one another. **6**

Clamp mount with flexible gooseneck for lamp housings

Perfectly suitable for open aquariums, our lamp housing can be mounted using a flexible gooseneck in a heavy and stable design. The gooseneck can be attached to both vertical and horizontal glass edges with a clamp. The position of the mount on the lamp housing, whether on the front or back slot, is freely selectable.

- Suitable for aquariums up to a maximum depth of 70cm for centered lighting alignment.
- For housings 55 cm or longer, we recommend using 2 mounts for stability. For lengths of 145 cm or more, 3 mounts may be needed. The number of mounts depends on the configuration (number/model of LED bars) of the lamp housing. Load capacity per mount: approx. 2 kg.

Features / Delivery contents

- Gooseneck 500mm made of steel, silicone-coated
- Clamp (anodized aluminum) for aquarium mounting, suitable for glass thicknesses up to 15 mm for vertical or horizontal installation. The clamp is 7 cm wide
- 2 clamping screws (Plastic Nylon)
- Adapter to the lamp housing: Anodized aluminum with stainless steel screw.

Assembly

The bracket should first be mounted to the lamp housing. To prevent damage from sliding or shifting, the transparent washer must be placed on top of the housing. Once fully assembled, the lighting unit can be attached to the aquarium. The cable is routed through the end(s) of the lamp housing.

aquaLUMix

A combination of lamp housing and aquaLUMix is not possible with this bracket due to weight limitations. However, direct mounting of the bracket to the aquaLUMix without a lamp housing is possible.



Retaining bridges for aquarium cover, lamp housing & LED adapter profile

Retaining bridges for fixing the eco+/PRO² LED bars in the aquarium cover with central bar, the lamp housing and in the LED adapter profile for JUWEL and EHEIM aquariums.

Please note that retaining bridges are already included in the standard scope of delivery of the various fixing solutions: 2 pieces up to and including 125cm length, 4 pieces from 126cm length. You need more than 2 pieces of holding bridges if you want to use more than one LED bar along the length (see page on the right). The position within the lamp housing can be freely selected!

Installation (aquaLUMix Lampen werden direkt und ohne Haltebrücken eingsetzt!)

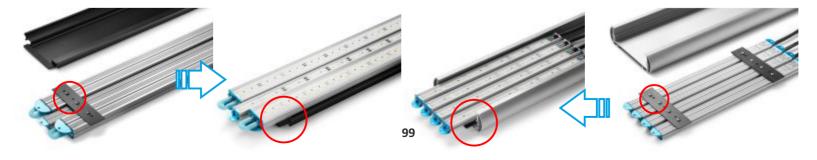
- 1. Place the lamp housing with the opening facing upwards on a soft surface (e.g. packing material). If several lamp housings are used, connect them now.
- 2. now place the LED bars (LEDs pointing towards the floor) next to the housing and arrange them as desired, taking into account the total length of the components. (Any hose connections between the PRO²s must now be made).

4. All LED bars are inserted into the housing or profile together when connected.

3. Now position the retaining bridges and screw them in place with the enclosed screws. To ensure that the eco+ and PRO² LED bars are at the same height/level, the eco+ is fastened with the longer (9.5mm) screws and spacers, the PRO² with the short 4.5mm screws. The screws are screwed into the central groove of the LED bar. If only PRO² or only eco+ LED bars are installed, only the 4.5mm screws are to be used.







Example of a possible configuration of a mounting solution with retaining bridges

Example based on a 125cm lamp housing or the JUWEL adapter JU1192

1

4x 116cm LED bars, (2 No. retaining clip bridges required).

2

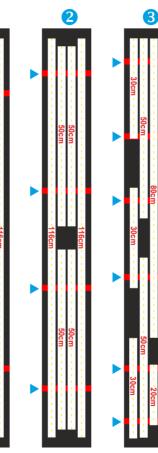
2x 116cm, 4x 50cm LED bars, (4 No. retaining clip bridges required).

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1x 116cm, 1x 80cm, 2x 50cm, 3x 30cm, 1x 20cm LED bars, (6 No. retaining clip bridges required).

The scope of supply of the

housing and adapter includes 2 No. retaining clip bridges for lengths <125cm, >125cm 4 No. retaining clip bridges. Any additionally required retaining clip bridges must be ordered separately





LED retrofit kits for JUWEL and EHEIM aquariums

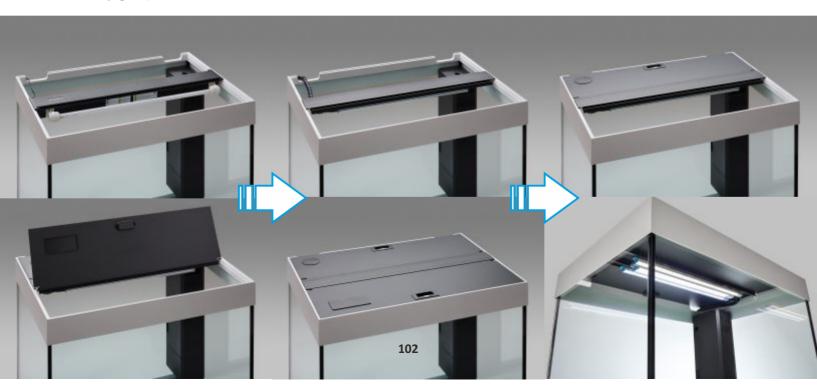
LED-Adapterprofile für JUWEL, EHEIM & Co.

Our LED adapter profile allows you to upgrade your JUWEL or EHEIM aquarium very quickly to a modern LED lighting system.

The LED adapter profile replaces your existing conventional T5 or T8 batten fittings 1 for 1. The existing cover plates are retained and used in conjunction with the new LED adapter profile.

It offers room for a maximum of 1x aquaLUMix OR 4x eco+ OR 1x PRO² and 2x eco+ OR 2x PRO² and 1x eco+ LED lighting bars placed in parallel next to one another (see below!). The LED adapter profile offers great flexibility of use and is individually configurable with combinations of different lengths of our LED lighting bars because the retaining clip bridges for the LED lighting bars are freely positionable!

The adapter profile is made of high-quality aluminium and manufactured specially for various models of JUWEL and EHEIM aquariums. Best quality. In contrast to other adapter profiles available on the market, the LEDaquaristik product has no exposed, unfinished saw cuts or machined edges! Installation see page 99/100



LED adapter profiles: Models and compatibility

	Model	Profile length	Tank length	Compatible with	Max. length LED		
					eco+	PRO ²	aquaLUMix
-	JUWEL	11					
	JU0536 / JU0543	536mm / 543mm	-/-	Trigon 350 (back)	50cm*	47cm*	34cm
	JU0593	593mm	61cm	Lido 120	50cm*	47cm*	54cm
	JU0693	693mm	71cm	Trigon 190 Lido 200	50cm*	67cm*	54cm
	JU0793	793mm	81cm	Rio 125	50cm*	75cm*	74cm
	JU0903	903mm	92cm	Vision 180	80cm*	75cm*	89cm
	JU0993	993mm	101cm	Trigon 350 (front) Rio 180, 290	80cm*	96cm*	89cm
	JU1192	1192mm	121cm	Rio 240 Vision 260 Rio 350 (1x), 300 (2x)	116cm*	106cm*	115cm
	JU1492	1492mm	151cm	Rio 450 (1x), 400 (2x) Vision 450 (2x)	140cm*	135cm*	144cm
	EHEIM for an I	ncpiria choose the lamp	housing as floor lam	o, for vivalineLED and Proxim	a the TRIO h	olders!	
	EH0493	493mm	50cm	scubacube 125	30cm*	-/-	34cm
	EH0543	543mm	55cm	scubacube 165 marine	50cm*	47cm*	34cm
	EH0643	643mm	65cm	scubacube 270	50cm*	47cm*	54cm
	EH0771	771mm	-/-	scubacorner 200	50cm*	67cm*	54cm
	EH0793	793mm	80cm	scubaline 140 vivaline 126	50cm*	75cm*	74cm
	EH0993	993mm	100cm	scubaline 200 vivaline 180	80cm*	96cm*	89cm
	EH1193	1193mm	120cm	scubaline 240 vivaline 240	116cm*	106cm*	115cm
	EH1293	1293mm	130cm	scubaline 460	116cm*	106cm*	115cm
	EH1493	1493mm	150cm	vivaline 330	140cm*	135cm*	144cm
	EH1793	1793mm	180cm	scubaline 640	140cm*	135cm*	144cm
	Also suitable for aquariums with a similar lid construction from			*Or a combination of various			

Also suitable for aquariums with a similar lid construction from other manufacturers. In every case, please check your tank dimensions and the length of the lamp battens before ordering. *Or a combination of various shorter lengths of LED lighting bars. See page 99/100

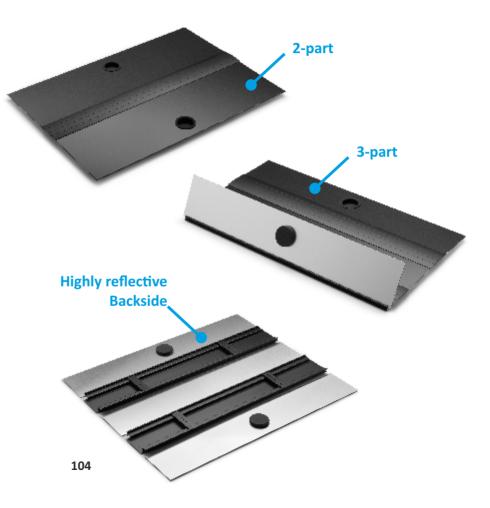
Cover for JUWEL and EHEIM aquariums (cover flaps incl. middle bar)

For replacing the existing light bars and cover flaps of JUWEL and EHEIM aquariums. The frame of the existing cover is still used.

Our light profile is used to hold the cover flaps and lighting. Depending on the selection, 1 piece (2-part cover) or 2 pieces (3-part cover). A light profile offers space for a maximum of 1x aquaLUMix OR 4x eco+ OR 1x PRO² and 2x eco+ OR 2x PRO² and 1x eco+ LED bars in parallel next to each other (see below!). In addition, the light profile is flexible and can be individually equipped with combinations of different lengths of our LED bars, as the retaining bridges for the LED bars can be freely positioned! The light profile is made of high-quality aluminium, anodised in black, accurately fitting and specially manufactured for the various aquarium models from JUWEL and EHEIM.

The lid flaps are made of aluminium composite panels and stand for durability at the highest quality level. Beautifully shaped silicone handles integrated into the lid complete the overall package. If required, the lid flaps can be opened very easily, set up vertically or removed completely.

The highlight is the inside of the lid panels, which have a mirror-like, highly reflective surface to minimise scattering losses and make the maximum use of LED light. The hinged lid is produced in two parts from a length of 120 cm.



Services

Order check

You are unsure whether the selected products are compatible with each other or whether something important has been forgotten?

We will be happy to take a close look at your order before dispatch and check whether all the items required for operation are present. Should something be inconsistent we will contact you!

Cutting the lamp housing to length

As standard, our lamp housings are available in predefined lengths from 25 to 195cm. However, this article can be cut to length according to individual customer requirements.

How to order the cut to length?

- Order the next longer lamp housing plus this service
- Example: The desired length is 110cm. To order a 125cm lamp housing + service
- Please check that the desired LEDs are compatible with the desired dimension!
- Inform us of the desired size in the order comment when completing the order. (Will be displayed automatically)

Pre-assembly

This ensures the quickest possible start with your new lighting!

Depending on the service selection, our scope of services includes, if your order includes these items:

- Installation of the LED bar(s) in the lamp housing or adapter profile
- Installation of cable extensions, the ordered quantity and length will be distributed evenly to all LED bars of the order scope.
- Installation of screw terminals for connecting the LED lighting to dimmers and lighting controls.
- Connecting the LED bars to the LED splitter and power supply unit
- Mounting CleanCover on the LED bars

€ 0,00



€ 14,99



from € 9,99



LED sample case Decision support - home loan

Our range is very large indeed! This allows our customers to have a very individual as well as perfect lighting.

The selection, online via the website, can therefore understandably also appear difficult to you.

So why not take advantage of our service and test LEDs, light colours, fixtures, controls, etc. in the comfort of your own home to make the best purchase decision for you!

Availability

Only within Germany!

The number of our sample cases is limited. If the desired case is not currently available, please be patient. We will be happy to inform you immediately by email when the case is available again. To do so, please use the "Notify me when available" function, which you will find in the respective product description directly above the price information.

Prices and rules

Price: 14,99 € (packing, shipping & return by DHL)

Deposit: 250,00 € (will be refunded after return!)

Loan period: maximum 7 days. (On the 7th day after receipt, the case must be returned to a DHL branch with the enclosed return label. If the period is exceeded, ≤ 10.00 will be charged for each day exceeded and retained from the deposit amount)!

We send you high quality goods and expect you to handle them accordingly. Missing or damaged samples will be charged.

Thank you for your understanding and have fun trying them out!



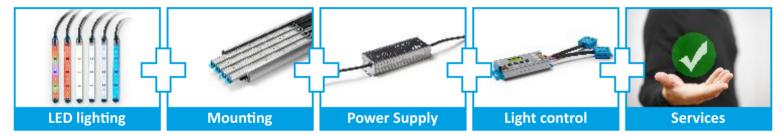
All-in-One Combo Sets

Illuminate your aquarium – now at a discount price!



Treat yourself to the best lighting for your aquarium with our versatile complete sets. Whether you own a standard aquarium or prefer a model from leading manufacturers such as Juwel, Eheim, Fluval, Oase, or Aquatlantis, our sets are specifically tailored to meet your needs. For open aquariums, we offer elegant solutions in the form of hanging lamps, floor lamps, or clamp-on lights that stylishly showcase your aquarium. Our LED lighting systems come with a dimmer or light controller if desired, and every order is checked by us for free to ensure that your new lighting system is technically flawless and that your aquarium shines in new splendor immediately. Thanks to our modular system, you can customize the lighting individually and easily expand it if needed.

Configuration of all required and optional components:



Choose your LED system:

eco+ impresses with an unbeatable price-performance ratio and an impressive selection of variants.

PRO² features a double row of LED fixtures, thus delivering outstanding light output.

Optional with heat recovery through water cooling.

spotBEAM is perfect for targeted spot lighting up to full illumination of aquariums, optimized for an attractive daytime simulation.

aquaLUMix with 4 individually controllable light channels:

powerful daylight and effect colors for moonlight and sun cycles, optimized for an appealing day simulation.

Take advantage of an **exclusive 5% discount** on all our complete sets

and let your aquarium shine cost-effectively and effectively. Find the perfect lighting set for your aquarium.



Free & Personalized Offer

We're happy to create a custom, no-obligation offer just for you.

To ensure we can take your wishes and ideas into account, please follow the link to our request form:



offer.ledaguaristik.com

This way, we'll have all the information we need to provide you with a tailored offer that fits your needs perfectly.

For price information please visit our shops:



www.ledaquaristik.de



Www.ledterraristik.de



Shipping costs



to EU countries from 6,95€ The price depends on the package length and the destination region.

*Subject to change - prices of the WebShop are valid. All prices incl. 19% VAT plus shipping. The statutory rights of liability for defects according to German law apply.

Customer opinions

Tobias H.: Hi, I installed the lamps this evening. A really easy process, push the LEDs in, clamp, plug-in and WOW! As different as night and day - as they say ... In next to no time, my plants had tiny bubbles - something I have not seen since my old 360 tank with HG lamps. *Happy* I'm really pleased that I didn't buy new fluorescent tubes but treated myself to two 47cm PRO²s and a 20cm GROWx5 instead. I can't wait to see how things go with the tank temperature: I've alreadv turned down the heater. True the tank cools down at night because the LEDs are on only during the day; but in nature there is also no heat at night.

Thomas W.: I've had the GROWx5 working for a good week now! Awesome! I had no idea how extraordinarily beautiful the light would be. And the plants are assimilating like mad! I have an 80cm bar in use with an eco+ DAYLIGHT I already had... I intend to put something together for my Juwel Vio 40 now... I'm amazed! **Gert G.:** I would just like to express my thanks for the expert advice! My tank looks a winner and I am very satisfied with the lighting system: Good quality, easy to install and I've even mastered programming the SunRiser :-)

J. Honring.: Dear Team, I ordered the standard kit for my Juwel Vision 450 a long time ago - I'd say April 2016 - and now, because everything was manufactured carefully by hand, the tank is finally complete. Installing the lights was really easy - even for me - and I can definitely recommend their lighting effect. Thank you!

Matthias H.: Thanks very much for the super LEDs. Very quick delivery and top-class service! I had wanted to switch to LED for some time, but it was much too expensive for me until I hit on your website :) where I found top-quality at super prices! The difference in the colour of the fish compared with before is truly amazing!! I have 2x 50cm SUNRISE and 2x 80cm DAYLIGHT bars controlled with SIMU-LUX! A. Flemmer.: I just wanted to say a sincere thank you for your good advice and great products. I set up a 1400 litre tank with dimensions 200x100x70 ... This tank is illuminated by 3 eco+ DAY bars, 80cm in length placed transversely... The result is spectacular... So bright that I have to dim them... Incredible! 1400 litres and lit with 3 eco bars - I would never have thought it possible... Thank you for everything, until the next time...

Christian A.: I run a 100x40x50 aquarium with one 80cm AFRICAN-SUN LED and even that is dimmed to 75%. Because the tank was planted only with Cryptocorine, Anubias and mosses, the new lighting intensity needed to be rather low. But even with these plants, you can design a fantastic aquarium. My experiment to design a weakly lit aquarium has finally come to an end and, most notably, there is absolutely no algae growth. These LED bars work like a dream.

More customers' opinions with extensive descriptions and customer photographs can be found feedback.ledaquaristik.com

References & Partner





Institut für Marine Ressourcen GmbH



Marine and Environmental Sciences Centre Funchal, Madeira



Bayrisches Landesamt für Umwelt Zoologisches Institut der Universität Basel www.salzburgerlab.org







Helmholtz-Zentrum für Ozeanforschung Kiel

Fisch und Fitz Aquariendesign Isarmoosweg 49 DE-84130 Dingolfing **Der Aquarienbauer** Andre Geschwill Hans Böckler Str. 39a DE-67454 Haßloch



Tipp:

In the AQUAHAUS-GAUS, all 21 show tanks from 160 to 300cm in length are illuminated with our LED systems.

Almost our entire product range can be seen, from eco+, PRO², aquaLUMix and FlexBeam LEDs to free-hanging lamp housings and our aquarium covers. So it's well worth a visit to what is probably the world's largest cichlid breeding facility!

isabi.de Melanchthonstr. 10a DE-14612 Falkensee Aqua-Treff Camesallee 15 DE-40670 Meerbusch WEBLU Aquarienbau Weserstraße. 98 DE-32547 Bad Oeynhausen

and many more...



More customer photographs, descriptions and customers' opinions: feedback.ledaquaristik.com





eco+ GROWx5, AFRICAN-SUN, DAYLIGHT, AMAZON-GROW













Show tank Malawi Predator Bay 2200 litres 302x86x84cm with deLUX cover titanium grey aquaLUMix AFRICAN-SUN 74cm & 34 cm per SunRiser 10

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Have fun with your new lighting, from LEDaquaristik







LEDaguaristik GmbH Schierbusch 2 - 33161 Hövelhof - Germany WEEE-Reg.-Nr.: DE25420047 - BattG De74524241



EnabLED



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