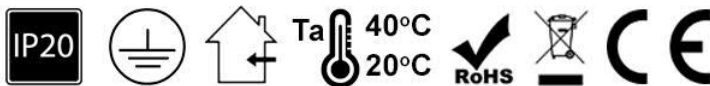
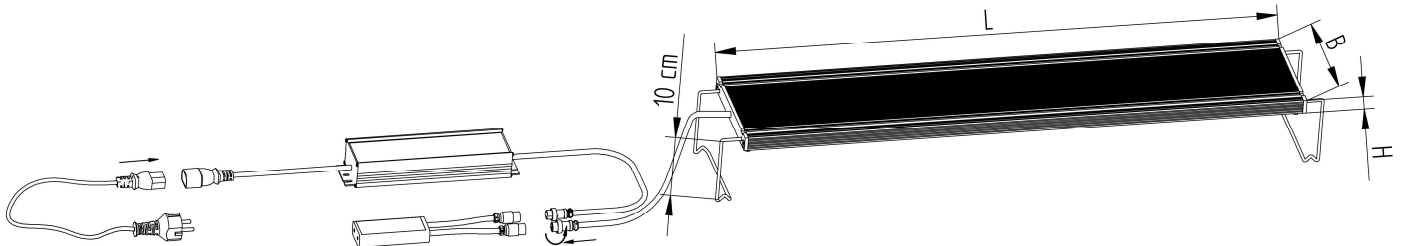


LRW165-...H

User manual and warranty card

Thank you for choosing our product! Before using your new led lighting system, please carefully read it's instructions for safe and correct usage!

Model	Voltage	Power	Suitable for aquarium	Lamp dimensions LxBxH	Light power	PAR (PPF)	PAR/W
LRW165-400H	24 V	78.5 W	40-50 cm	40x16,5x2 cm	4200 lumen	94 $\mu\text{mol/s}$	1,2 $\mu\text{mol/s/W}$
LRW165-600H	24 V	151 W	60-70 cm	60x16,5x2 cm	7300 lumen	165 $\mu\text{mol/s}$	1,1 $\mu\text{mol/s/W}$
LRW165-800H	24 V	160 W	80-90 cm	80x16,5x2 cm	8050 lumen	178 $\mu\text{mol/s}$	1,12 $\mu\text{mol/s/W}$
LRW165-1000H	24 V	204 W	100-110 cm	100x16,5x2 cm	10.600 lumen	237 $\mu\text{mol/s}$	1,16 $\mu\text{mol/s/W}$
LRW165-1200H	24 V	257 W	120-130 cm	120x16,5x2 cm	12.800 lumen	288 $\mu\text{mol/s}$	1,12 $\mu\text{mol/s/W}$
LRW165-1500H	24 V	328 W	150-160 cm	150x16,5x2 cm	16.000 lumen	360 $\mu\text{mol/s}$	1,1 $\mu\text{mol/s/W}$



Made in Serbia

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Safety instructions and usage of led lighting system

Please adhere to the following:

- The led lighting system is only installed when it's not connected to the power source (the cable is not in power connector)!
- The led lighting system does not contain serviceable parts. Do not disassemble the led lighting system by yourself! Repairs of device may only be performed by the manufacturer, otherwise the warranty will not be valid.
- The LED console does not contain replaceable LED modules!
- Do not look directly into the emitting light of led lighting system!
- Use the power supply only at the specified mains voltage (110 or 230V)!
- The led lighting system is intended for indoor use only. It must not be used under water and in places that are not protected from direct spraying of water and moisture!
- Do not use it on terrariums, because the emitting light of led lighting system is not suitable for reptiles or amphibians!
- Do not use led lighting system near flammable materials!
- Do not remove the lighting cover or any part of it.
- If the led lighting system or any part of it is damaged, unplug it and stop using it immediately.

Contact us as soon as possible!

- Handle this product with care and use it only according to the enclosed instructions!

Protect it from bumps, shakes and falls, otherwise physical damage or malfunction may occur!

- The led lighting system can only be cleaned when it's not connected to the power source (the cable is not in power connector)! Do not use aggressive cleaning chemicals! Remove dust with a slightly damp cloth or alcohol-based products.
- When performing regular aquarium maintenance, it is recommended to move or push the led lighting system in a place where the led lighting system is stable, thus avoiding the possibility of the led lighting system falling into the aquarium or falling to the floor!

If the led lighting system is hanging type, check the parts or components used for hanging led lighting systems, to make sure that the led lighting system is properly secured against unwanted falls.

- Due to the heat energy that is released during the operation of the led lighting system, do not use the led lighting system in covered aquariums, ie. their hoods, for safety and functional reasons (overheating and failure)! Cooling of led lighting system must be provided continuously. Large fumes can cause moisture to condense inside the led lighting system, causing damage to electrical components and the risk of a short circuit failure.
- Do not cover the led lighting system and do not use it as a shelf for storing fish food or chemicals for the aquarium. Objects placed on the led lighting system can reduce the area for releasing of heat energy into the space (cooling), and can cause overheating and failure.
- Do not store aquarium tools, chemicals, fish food, etc. on the led lighting system. Plants fertilizers and other liquids placed on the lighting can leak, which can cause damage to the anodized surface, and thus degrade the level of heat release and the aesthetics of the led lighting system itself. Due to the heat, plant fertilizers and fish food deteriorating faster.
- Body of led lighting system is heated during use. The operating temperature must not exceed +80 °C.
- Do not use the led lighting system if the light source is defective or damaged
- If any part of the led lighting system comes into contact with water, immediately disconnect it from the power supply and remove the water, only after you have made sure that all the water / moisture has been removed you can connect the led lighting system to the power supply again!
- Make sure the led lighting system works as intended. In case of an error please do not experiment, do not hesitate to contact us.
- Make sure the power sources and connections are properly connected and installed. The installation of connections and power sources should be planned so that they are not accessible to children and pets.
- Do not leave a child unattended beside the led lighting system!
- In moment of purchasing of our led lighting system, please check the condition of the led lighting system. If you find that there is any damage to the led lighting system itself, please notify the store where you purchased the led lighting system immediately. Do not use faulty led lighting systems.

The use of led lighting system is not allowed in extreme conditions. Under such conditions are considered:

- water source directed directly at the lighting (dripping or spraying),
- too high humidity (> 95%),
- too high ambient temperature (> + 40 ° C),
- the presence of large amounts of dust and flammable gases and vapors and solvents

Such or similar circumstances mentioned above are not allowed as they may result in malfunction of the lighting itself. In addition, there is a risk of short circuit failure, electric shock, fire, etc.

We do not accept any responsibility for material or personal injuries due to improper handling or non-compliance with safety regulations. Modifications and / or any repairs to the device by the end user or third parties are strictly prohibited for safety reasons and for licensing (CE). If you have any doubts about installation, operation, safety, etc. led lighting system itself, we kindly ask you to contact us, we will always be happy to help you.

Statement of responsibility: The manufacturer reserves the right to change this document. The manufacturer accepts no liability in the event of incorrect use of the device!

Recycling

This product must be disposed of in accordance with European regulations in order to reduce its impact on the environment. Contact your local or regional waste management representative for more information on how to dispose of them. Electronic products that are not included in the selective treatment of waste can be dangerous to the environment and human health. All components in the light comply with the ROHS directive. All components in the light comply with the ROHS directive and recyclable.



Areas of application

Our led lighting system is designed exclusively for lighting plant aquariums. Under proper lighting and with proper nutrition, plants thrive beautifully and properly. The intensive reproduction of light produced by our led lighting system, the warm and vivid colors it gives, affect both the human eye and illuminated plants, because the emitting light is optimized to fulfill both of these tasks.

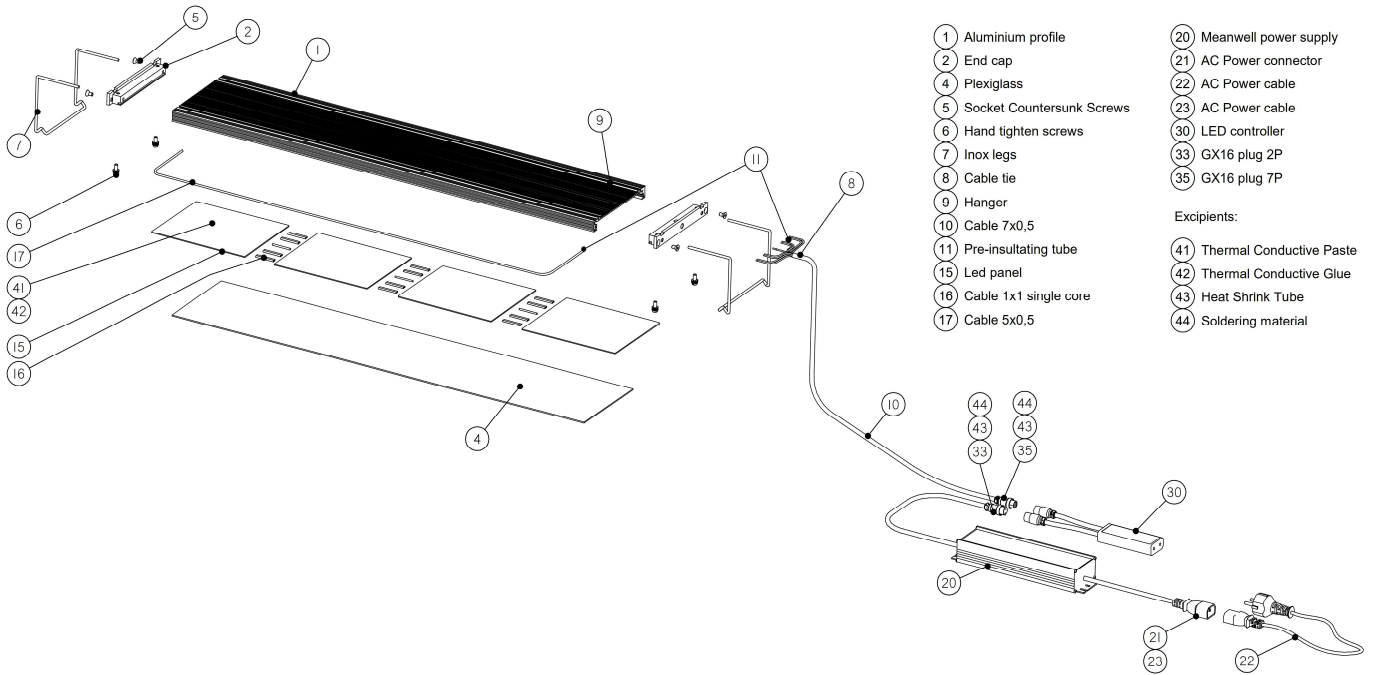
Specially designed for planted aquariums, our led lighting systems are designed to match the length and illumination of the existing standard aquarium sizes. They also meet the requirements for proper illumination for both, low-tech and high-tech aquariums. The above means that each liter of a standard aquarium will have the appropriate amount of light, taking into account the previously set requirements of the aquarium.

Example: An aquarium with dimensions 80 cm x 35 cm x 40 cm has a volume of 112 liters, the led lighting system LRW165-800H gives 8050 lumens and 178 $\mu\text{mol/s}$, so growing even demanding plant species is no challenge anymore.

Special characteristics of led lighting system

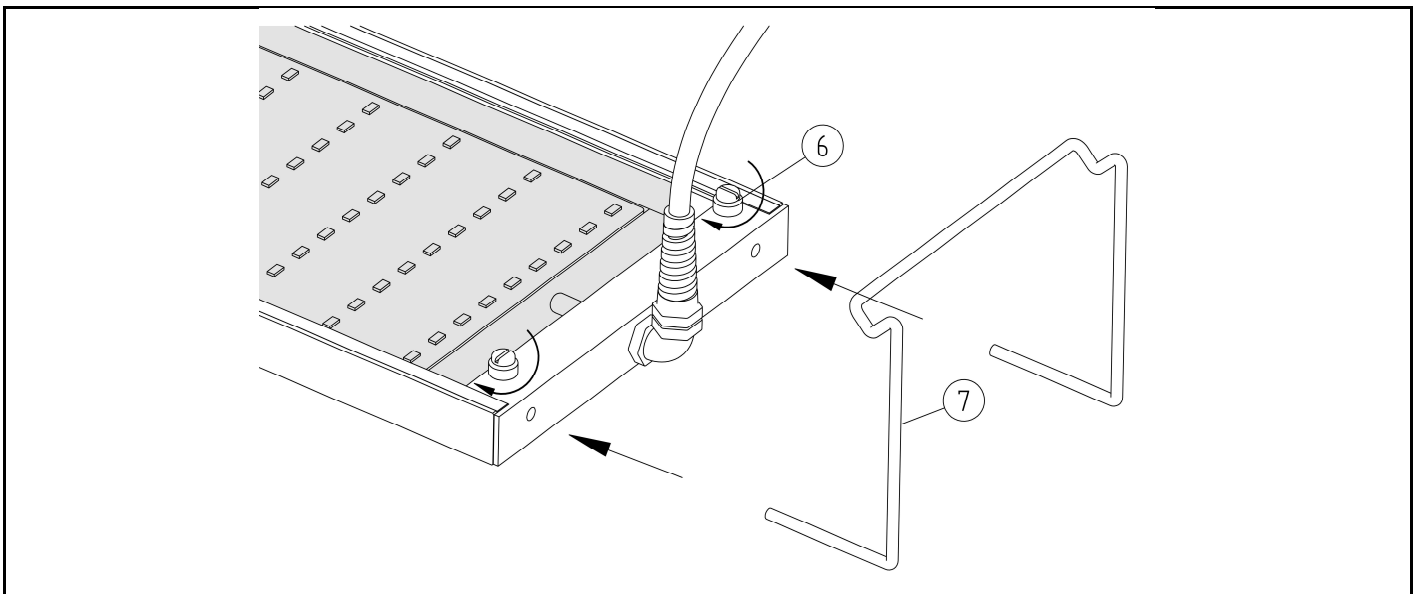
- Durable anodized aluminum design
- Best passive cooling thanks to the ribbed thick aluminum profile
- Long service life of LED chips
- Protection against splashes of water and moisture over the entire surface that protects diodes and electronic circuit's
- Stainless steel legs, for safe placement on the aquarium
- Innovative and elegant design
- Lighting is also available in a dimmable version (optional)
- Kit does not include a timer (timer is not required with optional built-in LED controller)

Installation steps

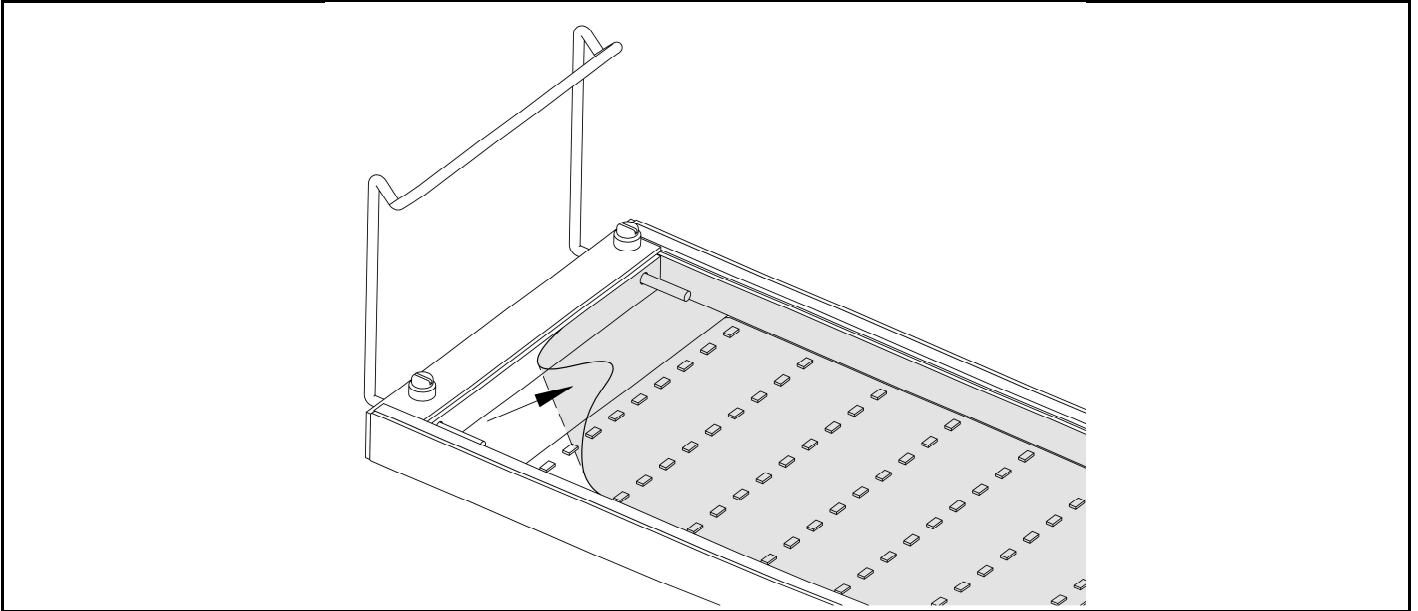


- ① Aluminium profile
 - ② End cap
 - ④ Plexiglass
 - ⑤ Socket Countersunk Screws
 - ⑥ Hand tighten screws
 - ⑦ Inox legs
 - ⑧ Cable tie
 - ⑨ Hanger
 - ⑩ Cable 7x0,5
 - ⑪ Pre-insulating tube
 - ⑮ Led panel
 - ⑯ Cable 1x1 single core
 - ⑰ Cable 5x0,5
 - ⑳ Meanwell power supply
 - ㉑ AC Power connector
 - ㉒ AC Power cable
 - ㉓ AC Power cable
 - ㉔ LED controller
 - ㉕ GX16 plug 2P
 - ㉖ GX16 plug 7P
- Excipients:
- ㉗ Thermal Conductive Paste
 - ㉘ Thermal Conductive Glue
 - ㉙ Heat Shrink Tube
 - ㉚ Soldering material

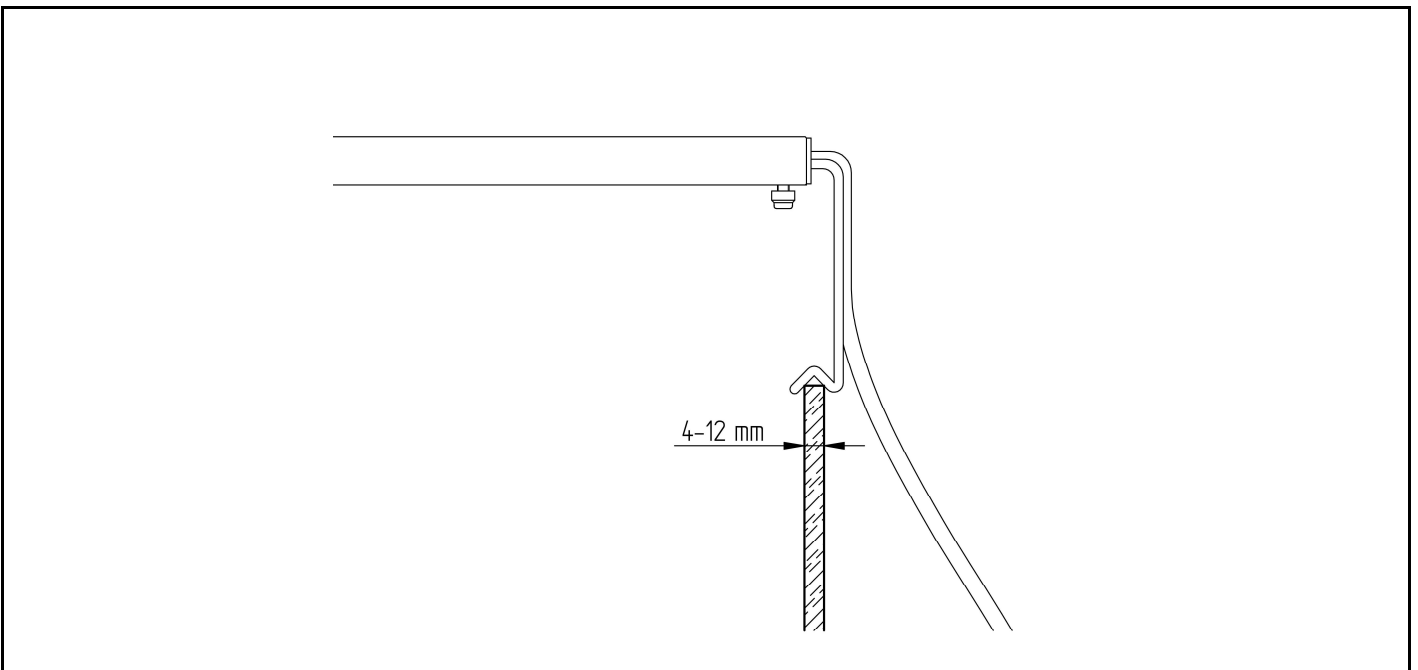
- Unpack the led lighting system, check that it is not damaged or that all belonging accesories are complete (contact your dealer or manufacturer for any defects)
- Place the two stainless steel legs (7) in the holes on the side of the bracket and tighten them with the hand screws (6) below.



- Remove the protective film from the plexiglass!



- Place the led lighting system with pre-assembled legs on the edges of the aquarium and adjust the legs so that they fit perfectly on both sides of the aquarium.



- In case you opt for the hanging type of mounting of our LED console above your aquarium, the package includes a set of cables for this type of mounting. With this set of cables, it is possible to quickly and easily adjust the height and inclination of the LED console.

Installation:

NOTE: Installation may only be performed by a qualified person who understands the installation procedure described in this manual. When drilling screw holes, make sure that there is no live mains cable under the surface you are drilling! Always use suitable dowels and screws suitable for the ceiling / wall on which the cable set is mounted. Make sure that the ceiling / wall can withstand the full load of the LED console.

1. Mounting of bracket on the body of the LED console

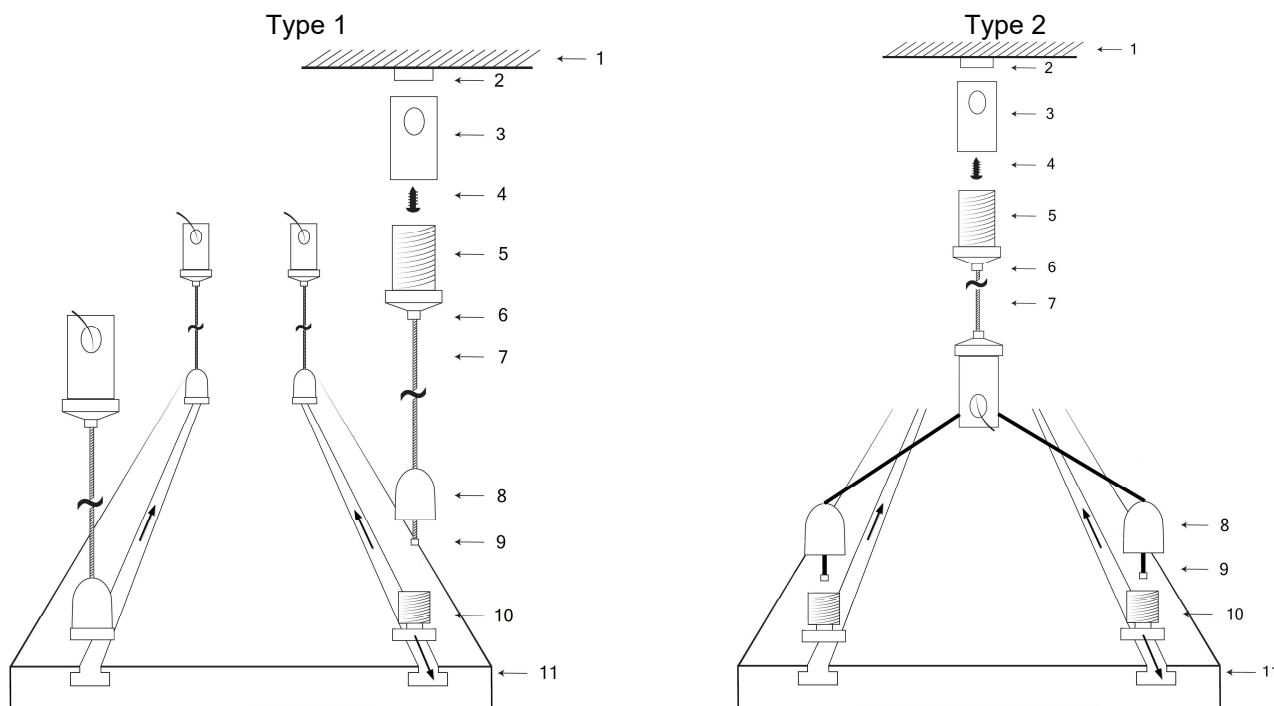
It is necessary to fix the four sliding brackets (10) on the body of the LED console (11) as in the picture. Pass the cable (7) through the cap of the bracket (8) so that the end of the cable that has a thickening (9) remains in the cap. The other end of the cable is passed through the cable fixing part (5).

2. Mount the cable set on the ceiling

Before mounting the cable set on the ceiling / wall, it is necessary to drill holes in the ceiling (1) and install dowels (2) (they are not in the set). When drilling holes in the ceiling / wall, pay attention to the presence of network cables to avoid their direct damage, which can lead to an unwanted case or even an accident! After drilling the holes, it is necessary to place dowels (2) in the holes. Secure the part of the cable set that is mounted on the ceiling (3) with the screws (4) (not included in the set) to the ceiling. The screw (4) needs to be tightened, but not too tightly, which can significantly weaken the connection between the dowel and the screw.

Pass the cable (7) through the cable fixing part (5) and screw this part into the part that is mounted on the ceiling (3). The cable fixing part (5) can subsequently be used to fine-tune the height of the LED console.

For greater height adjustment, it is necessary to press the spring (6), so that the cable is unlocked and can move again. When adjusting the height while the cables are already loaded (LED console), make sure that the cable is not released completely. Hold the LED console with one hand, otherwise the cable may be pulled out of the cable fixing part (5) and the LED console may fall, damage the aquarium and cause many other undesirable consequences.



- 1. Ceiling
- 2. Dowels
- 3. Ceiling mounting part
- 4. Screw

- 5. Cable securing part
- 6. Height adjustment spring
- 7. Cable
- 8. Carrier cap

- 9. Thickening on the cable
- 10. Sliding bracket
- 11. LED console body

NOTES:

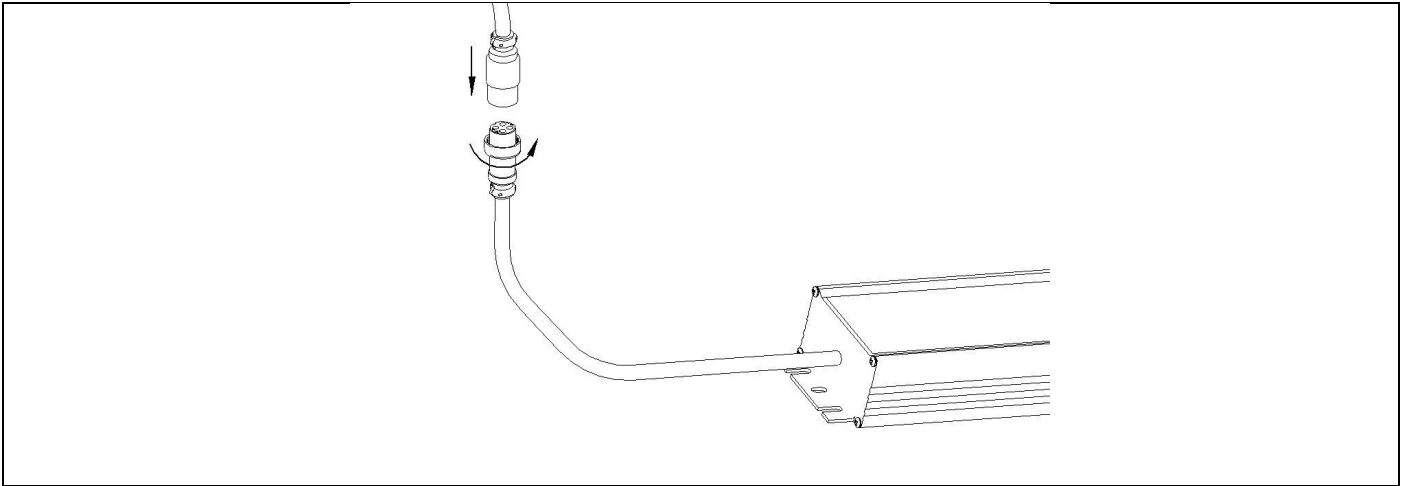
- Make sure that the product is not damaged during transport.
- Adhere to standard protection measures.
- Leave the installation to a professional.
- When choosing a mounting location, pay attention to the load-bearing capacity of the ceiling / wall on which you want to mount the LED console.
- If there is any damage to the cable set, relieve it immediately.
- Periodically check the condition of the cable set and the tightness of the screws.
- The manufacturer is not liable for any damage or malfunctions caused by incorrect installation. Contact an expert for any installation advice.

- Place power and mains connections in the aquarium cabinet, out of the reach of children. The power supply and connectors must not be placed in tight spaces or covered with anything to ensure proper ventilation.



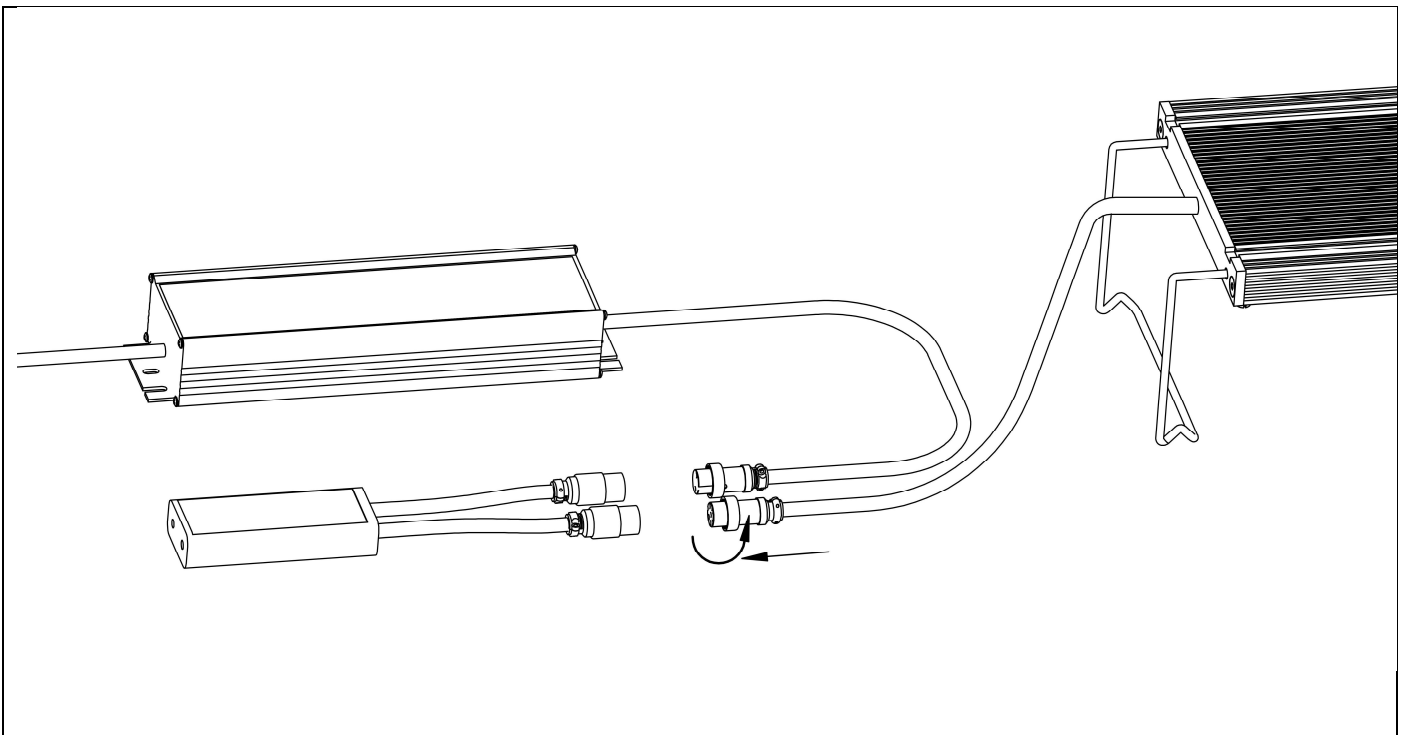
- Connect the led lighting system to the power supply (this requires a separate connecting cable, which is included in the package for lamps without controller). Check that the sockets are installed correctly and that the safety lock nut is in correct position. It is important that the connection are properly assembled, because an incorrect connection can lead to melting of the socket, damage to the cable, power supply or the LED panel it'self, and in extreme cases it can also cause ignition. Sockets that are damaged, deformed or incorrectly connected report to the dealer or manufacturer immediately. Do not use lighting with damaged connectors.

There is no risk of electric shock, because direct current (DC) flows through the connector, but a faulty connector can cause overheating and also skin burns.

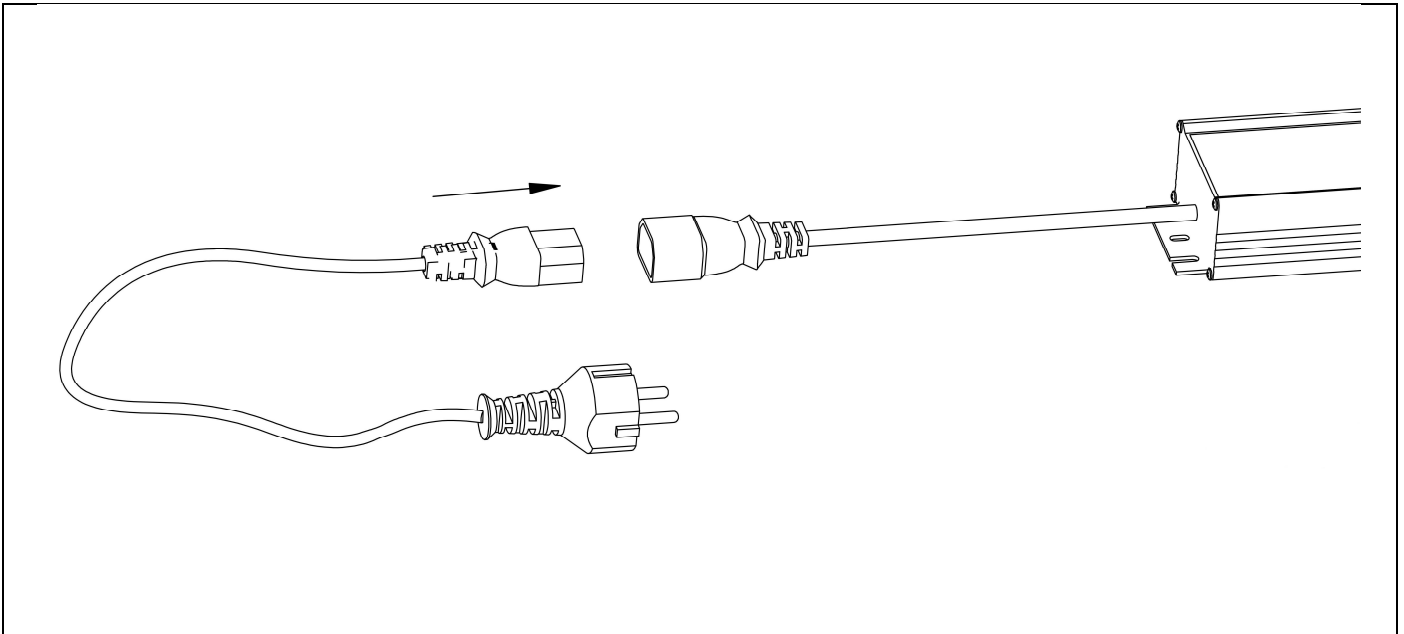


- If the led lighting system is equipped with an external controller, the power and lighting connectors are connected in the controller. From the power supply, the connector is connected to the "INPUT" socket on the controller, and the lighting connector is connected to the "OUTPUT" socket of the controller. The connectors cannot be mixed because they are different shapes and designs and have special grooves for positioning. Check that the sockets are correctly installed and that the safety nut is in place.

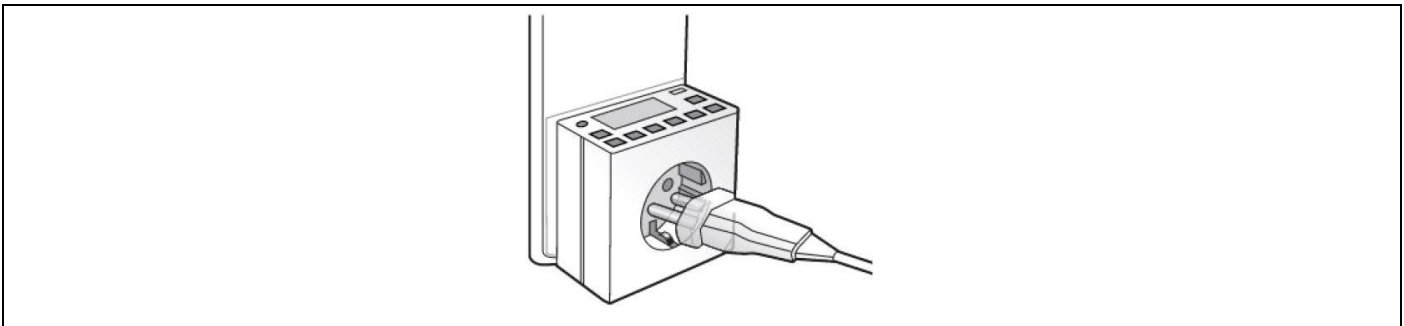
There is no need for an additional timer in addition to the controller, as the controller can control the brightness as well as the time intervals expressed in minutes. Further descriptions and instructions can be found in the control unit manual and the component programs can be accessed or downloaded from the official Lumen-aquatech website (www.lumen-aquatech.com).



- Connect the power cord to the AC power connector and make sure it is connected properly.



- Plug the timer into a wall outlet and set it to "OFF", then plug the led lighting system plug into the timer. If the led lighting system has a built-in controller, no special timer is required for led lighting system.



- After connecting all connections, switch the timer from "OFF" mode to "AUTO" or "ON" mode.
- When installing the led lighting system, make sure that all parts / components of the led lighting system work according to the given instructions
- After 15 minutes of operation, disconnect the led lighting system from power supply and check that all parts / components have not accidentally overheated ($> + 80 \text{ }^{\circ} \text{C}$) and that the area around the LED chips has not been physically changed. In case of overheating or malfunction, do not use led lighting system, but contact the dealer or manufacturer as soon as possible!

Warranty card

Lumen led lighting systems has a full warranty of 2 years and for the power supply is 5 years from the date of purchase. Save your invoice as proof of purchase. Complaints about led lighting systems that do not have an invoice will not be accepted.

No part of this device may be changed or modified. Be sure to follow the safety instructions! Improper use, incorrect installation, mechanical damage due to carelessness, poor maintenance, connection to a faulty power source and similar, void the warranty on the device. Repairs, modifications or any interventions by the customer or unauthorized parties will void the warranty on the device.

Led lighting system repairs may only be carried out by personnel selected by Lumen Aquatech, service centers or direct service from Lumen Aquatech. In case of a complaint about the led lighting systems, the led lighting systems must be delivered to the service in the appropriate packaging (in order to avoid damage during transport). The transport risk is borne exclusively by the sender.

Before sending led lighting system, please contact your dealer or Lumen Aquatech directly.

Led lighting systems that are sent incorrectly packaged will not be accepted for service.

Company name	
Company address	
Product name	
Product type	
Product serial number	
Date of purchase	
Stamp, signature	

IN CASE OF DEVICE REPLACEMENT

The device was replaced with new one on date:.....

IN CASE OF DEVICE REPAIR

Repair request and date of receipt of the device for service:.....

Cause of fault:

Fault and service description:.....

Date of return to the customer:.....

Warranty conditions

The warranty period for Lumen lighting is 24 months from the date of purchase.

The warranty can be verified by the buyer of the product at the dealer or at the manufacturer.

In the case of a transfer of ownership of a product, the warranty passes to the new owner where the warranty period is reduced by the period in which the led lighting system has already been used.

Customer may choose to repair or replace the led lighting system, unless satisfying the customer's choice would not be possible or would involve unreasonably high additional costs.

Lumen Aquatech always strives to repair or replace the device within a maximum of 15 days.

If the manufacturer does not perform the repair or replacement within the period corresponding to his obligation, if he cannot satisfy the interests of the customer or customer's interest in repair or replacement are no longer valid, the customer may (at his request) request payment in proportion to the purchase by the price of the product, it may repair the defect independently or with the help of a third party, or it may withdraw from the contract altogether.

A minor defect in the product cannot be considered as a reason to cancel the purchase.

The warranty period does not include the part of the repair time during which the consumer cannot use the product as planned. In the event of replacement (repair) of the product or any part thereof, the warranty period begins again in relation to the replaced (repaired) product (part of the product) and to the defect that occurs as a result of the repair.

The costs associated with fulfilling the warranty obligation and establishing the contracted condition of the product (including in particular the costs of materials, labor and equipment) are borne by Lumen Aquatech.

The warranty does not affect other legal rights. The warranty claim can be confirmed with a warranty card. In case that the customer does not have a warranty card, the conclusion of the customer contract will be considered proven if the customer submit's proof of purchase (invoice).

The customer can change the decision from one choice to another. If he change the choice, he is obliged to pay the incurred costs to the manufacturer only if the manufacturer did not state the reason for the change or the transition to another choice was justified.

If the customer requests the replacement of the led lighting system within 3 working days from the date of purchase due to damage to the device, the manufacturer is obliged to replace the device, provided that the defect occurred exclusively in addition to the proper use of the device.

Contact



www.facebook.com/Lumenlightforaquascaping/



>>> Messages on Facebook



office.lumen-aquatech.com



www.lumen-aquatech.com

Manufacturer: Lumen Aquatech DOO Subotica

Petra Drapšina 11, 24000 Subotica

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