



# **MOUNTING MANUAL**

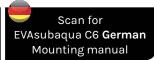
A step-by-step guide to mounting EVAsubaqua C6

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# 1. ABOUT THIS MANUAL



# 1.1 Language

This manual is meant for qualified installers. Read and understand the information in this manual before mounting and using this product. The manual is originally written in English. All versions of this manual in other languages versions are translations of the original manual.

# 1.2 Symbols used

This manual contains safety instructions. Ignoring these instructions may lead to injury or damage to the appliance. Each safety instruction is indicated with a signal word. The signal word corresponds with the level of risk of the described hazardous situation.

A	DANGER	This symbol indicates a hazardous situation which, if not avoided, will result in death or serious injury.
Â	WARNING	This symbol indicates a hazardous situation which, if not avoided, could result in death or serious injury.
A	CAUTION	This symbol indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	NOTICE	Indicates a situation that, if not avoided, could result in damage to the product or to the environment.

#### 2. SAFETY



#### 2.1 Safety warnings and regulations



#### DANGER

Electrical shock hazard. Fatal injury will occur. Switch off all electricity near the pool before performing the electrical installation.



#### WARNING

Electrical shock hazard. Risk of electric shock and injury. The product must be installed by a certified electrician. Incorrect installation will cause electrical hazards.



#### WARNING

Electrical shock hazard. Risk of electric shock due to incorrect mounting.

- Make sure you read the enclosed documents carefully.
- Never connect the product to the mains before connecting all loose wires properly.
- Always disconnect the product from the mains before servicing.

#### WARNING

Electrical shock hazard. Risk of electric shock due to current leakage...

- Make sure to install the turbine with a PE-earthing.
- It's important to connect the installation niche to the pool earthing, never to the house earthing.

#### NOTICE

Risk of product damage. Prolonged disturbance of frequency may permanently damage the equipment.

- Never place control and power cables together in one conduit, according the Electrical Standards.

#### 2.2 General safety instructions

- 1. Follow the instructions in this guide carefully. For questions or enquiries, please contact your distributor/reseller or visit www.evaoptic.com
- 2. This lighting system must be installed by a qualified installer in accordance with applicable local rules and regulations. Improper installation can cause electrical hazards.
- 3. Switch off all relevant live electrical wiring before starting the installation.
- 4. Please retain these instructions for the user.
- 5. EVA Optic BV guarantees that its products will be free from defects in materials and/or workmanship, under normal conditions, operation and maintenance for a period of four (4) years from the original invoice date for LED lights and four (4) years for drivers/ power supplies. Visit www.evaoptic.com for datasheets and our full warranty.

#### 2.3 Materials used

- 1. Ensure that any materials you use meet the requirements and guidelines that apply to your specific application.
- 2. Use only EVA Optic gaskets/bolts/screws/nuts.
- 3. Use only original EVA Optic mounting accessories. Warranty will be irrevocably voided if other materials are used.

### 2.4 Electrical safety installation instructions

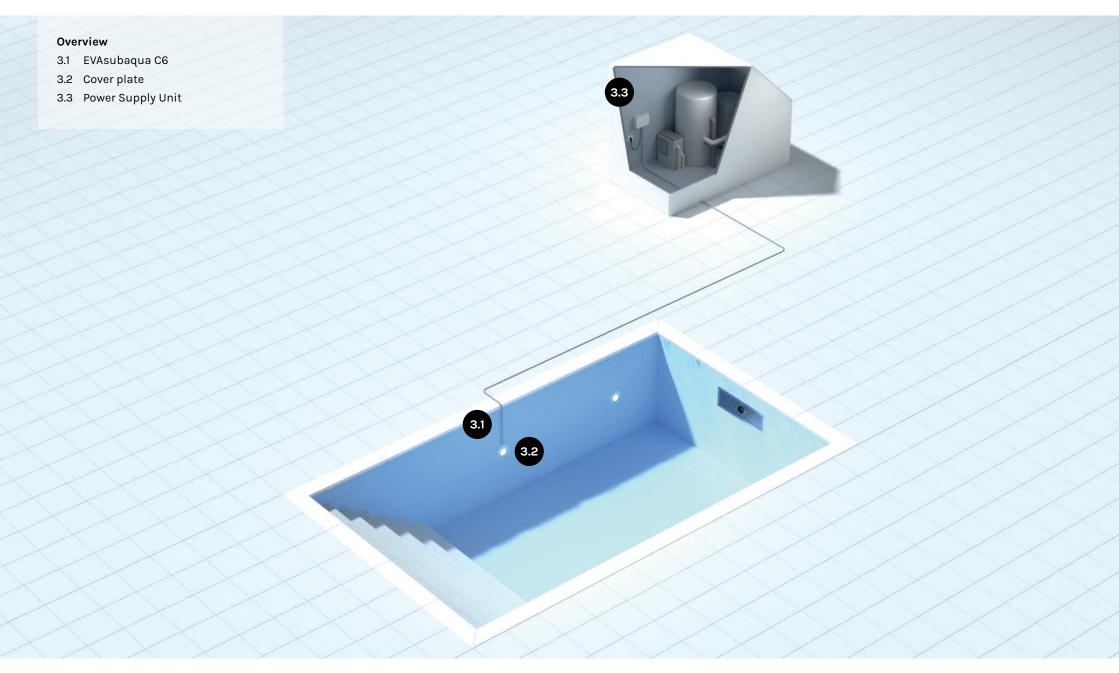
### IMPORTANT! Switch off all relevant live wiring before starting the installation!

- 1. Always use one power supply per light.
- 2. Mount the power supply box in a cool, dry area.
- 3. Allow at least 5 cm of space around the power supply box for efficient thermal management.
- 4. Always mount the power supply box with cable glands downwards.
- 5. Electrical connections must be executed according to the supplied wiring diagram.
- 6. It is important that the NTC is connected. This protects the lamp if the cooling is not sufficient.
- 7. Always take care to lay the cable from the technical room to the lamp in a conduit/ tube so that it can be easily replaced.

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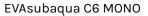
# 3. PRODUCT





# 3.1 EVAsubaqua C6







EVAsubaqua C6 RGBW

Type of light	EVAsubaqua C6		
Applications	Residential pools, instruction pools		
Luminaire type	IP68 / IPX8 (zone 0)		
Type of water	Fresh water, chlorinated water		
Cooling	Water cooling (only use in water)		
Max. water temperature	40 °C		
Max. installation depth	25M		
Minimum cable length	3 meters		
Cable length light (ex-works)	10/20/30 meter (7 wires: 5x0,5mm², 2x0,25mm²). Cable is fixed to the light to ensure watertightness.		
Max. cable length	The 10m cable can be extended to a total length of 50 meters maximum (7x 1.5mm³) or a maximum of 100 meters (7x 2.5mm²)		
DMX Cable	2 wires > 0.22mm² + shield 110 0hm		

# 3.2 Coverplate



EVA-AA-26-FL Cover plate Stainless steel (SS316)

# 3.3 Power Supply Unit (PSU)

The Power Supply Unit (PSU) should be installed in the technical area near the pool (a dry and condensation-free environment, zone 2). Ensure that the PSU is placed with the cable glands facing down.







PSU - 10W/25W MONO

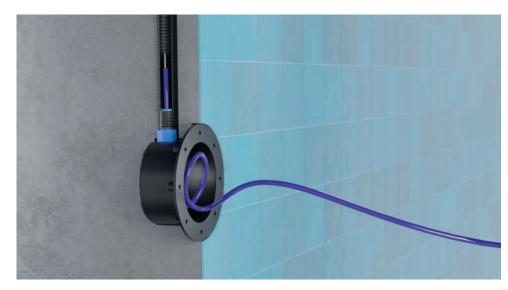
PSU - 10W/25W RGBW

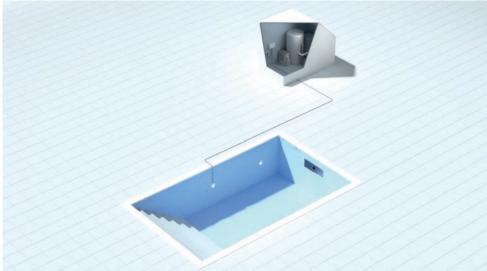
PSU box - 10W/25W RGBW

Driver - Input / Outpu	ıt	MONO	RGBW
Voltage range inpu		100-240 Vac	100-240 Vac
	output	< 30Vdc	< 30Vdc
Driver technology		0-10 Vdc (dimming)	DMX512
Power box operating t	emperature	-20°C to + 40°C	-20°C to + 40°C
Power box protection	rating	IP65 housing	IP65 housing

# 4.1 General mounting instructions







Always insert the lamp cable through a conduit to the PSU

Please note that the minimum cable length from underwater lamp to PSU must be 3 meters for warranty reasons. Keep approx. 1 meter of the cable length in the niche (to be able to mount the underwater light in the side of the pool).





Do not turn on the light when amovable floor or other item is in front of the light. This may disrupt the function of the light.





# EVAsubaqua LED lamps are water-cooled

It is important that the lamp niche is filled with water before the lamp is turned on. The lamp is cooled by the water and quickly overheats circulation water.

# Use of mounting materials:

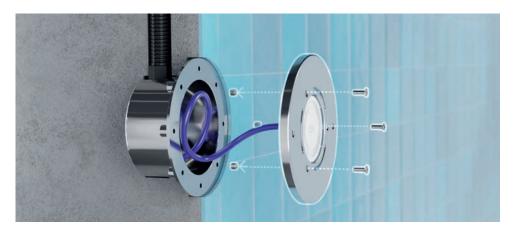
- Only use the accessories/bolts/screws/nuts that are supplied by EVAstream.
- Only use the original mounting accessories. Warranty will be irrevocably voided if other materials are used.

# 4.2 EVAsubaqua C6 - recessed mounted - tiled pools



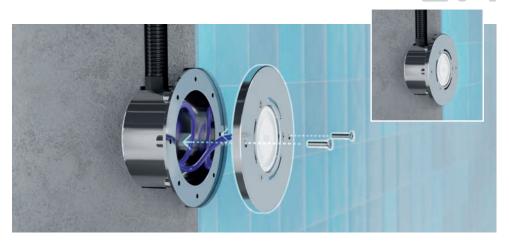
# 1. Insert the lamp cable through the conduit to the PSU

Please note that the minimum cable length from underwater lamp to PSU must be 3 meters for warranty reasons. Keep approx. 1 meter of the cable length in the niche (to be able to mount the underwater light in the side of the pool).



# 2. Mount the lamp cover plate

Mount the coverplate to the underwater lamp with 3x M4\*10 mm screws.



# 3. Mount the coverplate to the niche

Mount the cover plate (incl. underwater lamp) to the niche with 2x M5\*40 mm screws and hand-tighten them.

# 5. ELECTRICAL INSTALLATION



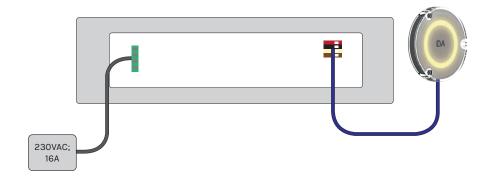
#### DANGER

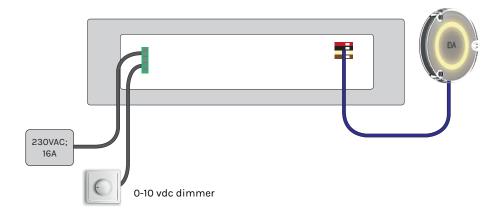
Electrical shock hazard. Fatal injury will occur. Switch off all electricity near the pool before performing the electrical installation.

#### 5.1 MONO - EVAsubaqua 25W

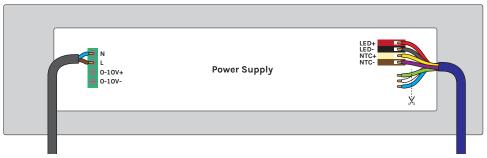


Electrical installation SubAqua MONO

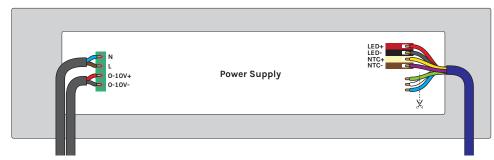




Overview - Combination of MONO EVAsubaqua lights and Power Supply Units



Connections to the Power Supply Unit of the MONO underwater light (excl. dimmer)



Connections to the Power Supply Unit of the MONO underwater light (inlc. 0-10vdc dimmer)



Electrical shock hazard. Risk of electric shock due to current leakage: Never connect the product to the mains before the installation is finished.

### Connect the MONO EVAsubaqua light to the Power Supply Unit:

- Connect the red, black, yellow and purple wires of the 7-wired cable from the MONO SubAqua underwater light to the colours indicated on the PSU.
- The blue, white and green wires are not needed, they can be cut off.

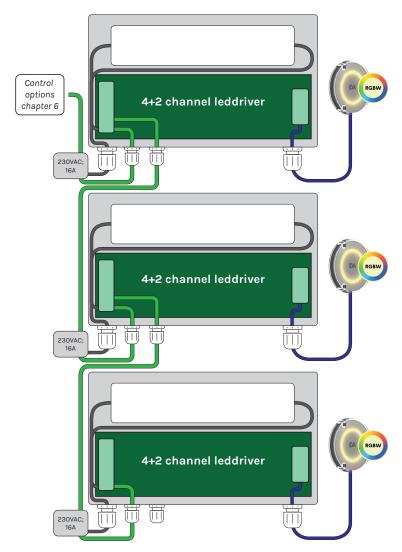
# Connect the Power Supply Unit to the mains (230 VAC; 16 A)

- Without dimmer: Connect the 2-wired cable to the colours indicated on the PSU. Connect the cable from the PSU to the mains (230 VAC: 16A).
- With dimmer: Connect the 2x 2-wired cables to the colours indicated on the PSU. Connect a 0-10V dimmer to the black/red cable and connect the blue/brown cable to the mains (230 VAC: 16A).

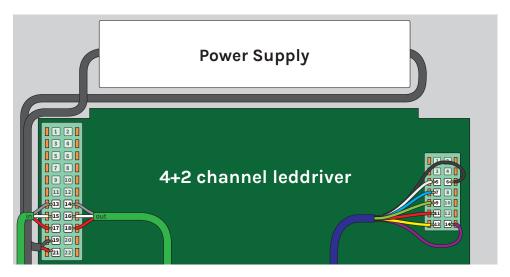
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#### 5.2 RGBW - EVAsubaqua 25W separate PSU's





Overview - Combination of RGBW EVAsubaqua lights and Power Supply Units



#### Connect to the Power Supply Unit (PSU) of the RGBW underwater light:



Electrical shock hazard. Risk of electric shock due to current leakage:

Never connect the product to the mains before the installation is finished.

#### Connect the RGBW light to the Power Supply Unit (PSU):

• Connect the 7 wired cable from the RGBW light to the 4+2 channel leddriver on the right side of the PSU on the numbers indicated (5,6,7,9,11,13,14).

#### Connect the Power Supply to the 4+2 channel leddriver:

• Check if the 2-wire cable of the Power Supply is correctly connected to the 4+2 channel leddriver on the left side at the indicated numbers (19, 21).

#### Connect the PSU's to each other using DMX cable:

- Connect the DMX-cable (2-wires + shield) to the Control Print on the left side of the PSU on the numbers indicated (14,16,18).
- Connect the same DMX-cable to the Control Print on the left side of the following PSU on the numbers indicated (13,15,17).
- Repeat this for all PSU's.

#### Connect the PSU's to the mains (230 VAC; 16 A)

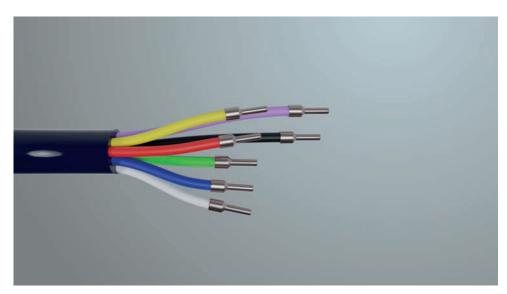
• Connect the cables of the Power Supply to the mains (230 VAC; 16A).

# EVA

#### 5.3 EVAsubaqua 25W PSU-box



1. The PSU-box can accommodate 2, 3, or 4 underwater lights



**2. Before connecting the cables, cable sleeves must be installed** Refer to the video "Connecting PSU RGBW" at www.evaoptic.com



**3.**Connect the **7-core cables from the underwater lights to the PSU-box** Ensure they are inserted into the correct ports.



**4.Optinal: installation with more than 4 lights in the pool**Link the PSU-box to an additional PSU-box using the DMX output.

# 6. CONTROL OPTIONS

The EVAsubaqua lights can be controlled with various control options:

### Remote control and EVA Experience web app (recommended):

The EVAsubaqua lights can be controlled with the remote control and the EVA Experience web app. To connect the app and the remote control, an ECA Control must be connected to the EVAsubaqua lights .







Scan the QR-code to go to the ECA Control installation manual

#### **EVA-AA-75 or EVA-AA-77**

The EVAsubaqua lights can be controlled with an external DMX advanced controller (EVA-AA-75 or EVA-AA-77).







# 7. DISPOSAL



#### 7.1 Decommissioning

#### WARNING

Electrical shock hazard. Risk of electric shock and injury. Make sure to disconnect the product from the mains cable before decommissioning.

- 1. Switch off the power.
- 2. Switch off the power around the swimming pool.
- 3. Disconnect the mains cable.
- 4. Disconnect all other cables.

#### 7.2 Disposal

Before disposing of the different materials, separate them into recyclables, normal waste and special waste. Comply with local legal regulations and provisions when disposing of the product and the individual components. A product marked with the WEEE symbol must be sent for separate collection of electrical and electronic devices. Contact your supplier for more information.



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