

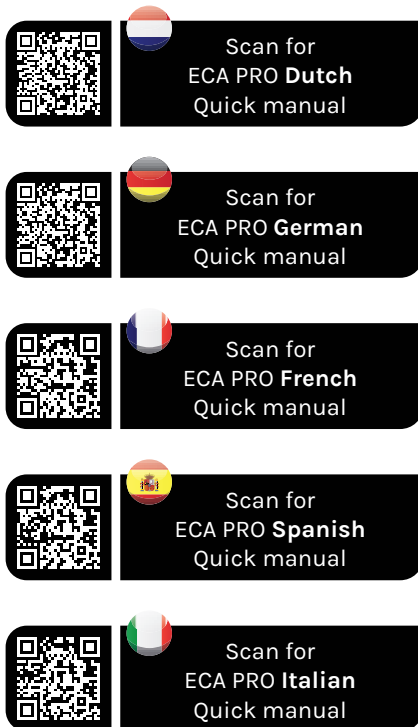


MOUNTING MANUAL ECA CONTROL

A step-by-step guide for operating the EVA LED underwater lighting and the EVAstream with remote control and the EVA Experience web app

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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 original language of this manual is English. All versions of this manual in other languages 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.

 DANGER	This symbol indicates a hazardous situation which, if not avoided, will result in death or serious injury.
 WARNING	This symbol indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 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

Follow the NEN1010 guidelines. Follow the specific installation requirements of IEC 60364-7-702: 2010 (Electric low-voltage installations - Part 7-702: Requirements for special installations, spaces, and areas – Swimming pools and fountains). Install the controller in or outside of zone 2 (NOT in zones 0 or 1) according to IEC 60364-7-702: 2010. The power supply must be equipped with an earth leakage circuit breaker (ELCB) with a nominal differential current $\leq 30\text{mA}$.

3. PRODUCT - ECA CONTROL

ECA Control Eco



EVAsstream
NEXT 175

ECA Control 1 Essential



EVAsstream
NEXT 225 - 275 - 350
EVAsstream
NEXT 450 - 550

Suitable for
EVAsstream type

Available
EVA web app functions

Start / stop
Speed / timer

Start / stop
Speed / timer

Connection EVA LED
underwater lighting

Not available

Optional
(extension)

Connection EVA
Remote control

Optional

Optional

ECA Unit

Dimensions	158 x 119 x 75 mm (lxbxh)	158 x 119 x 75 mm (lxbxh)
IP rating	IP20	IP20
Working temperature	-20°C tot 32°C, dry/ condensation-free	-20°C tot 32°C, dry/ condensation-free
Warranty	2 years factory warranty	2 years factory warranty

Electrical specifications (input)

Connection voltage (Vac)	230 Vac 5W	230 Vac 10W
Pulse input (piezo-ready)	Not available	3x Piezo ready

Electrical specifications (output)

PPM output	PPM 1	PPM 2
Lighting control output	Not available	DMX
Fan output 5W (power box ventilation)	Not available	24 Vdc 5W

ECA Control 2 Training



EVAsstream
NEXT 225 - 275 -350
EVAsstream
NEXT 450 - 550

Start / stop
Speed / timer
3 swim workouts

Optional (extension)
Compatible with
swim workouts

Optional

ECA Control 3 ProTrainer



EVAsstream
NEXT 225 - 275 -350
EVAsstream
NEXT 450 - 550

Start / stop
Speed / timer
20 swim workouts

Optional (extension)
Compatible with
swim workouts

Optional

158 x 119 x 75 mm (lxbxh)	158 x 119 x 75 mm (lxbxh)
IP20	IP20
-20°C tot 32°C, dry/ condensation-free	-20°C tot 32°C, dry/ condensation-free
2 years factory warranty	2 years factory warranty

230 Vac 10W	230 Vac 10W
3x Piezo ready	3x Piezo ready

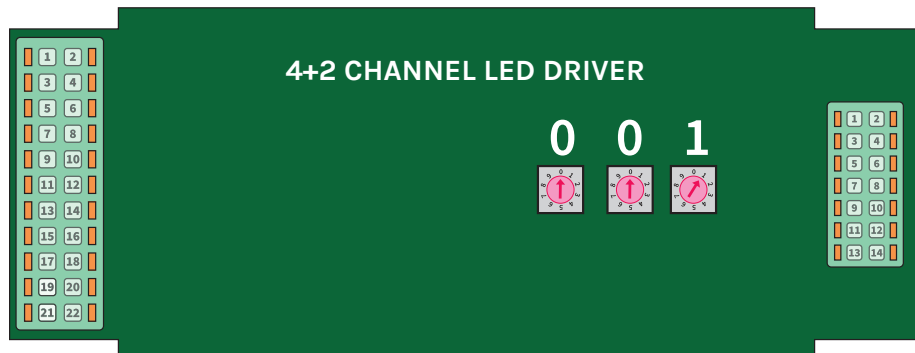
PPM 2	PPM 2
DMX - EVA	DMX - EVA
24 Vdc 5W	24 Vdc 5W

4. CONNECT ECA CONTROL TO EVA LED UNDERWATER LIGHTING (WITHOUT EVASTREAM)

To control the EVA underwater lighting with the EVA Experience web app and optional the EVA Remote Control, connect the ECA Control to the EVA LED underwater lighting.

4.1 Connect the ECA Control to separate PSU's

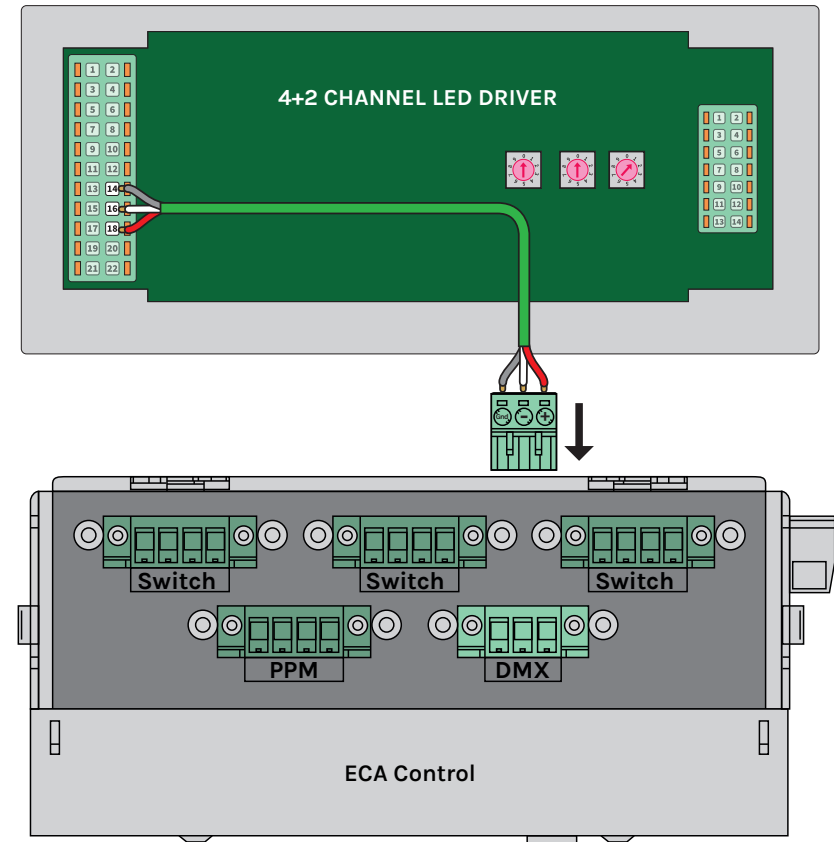
In this case the ECA Control is the master control. The EVA LED underwater lighting's PSUs must be set in slave mode.



Setting the 4+2 channel led driver:

Set the Rotary switches at **001 (Slave mode)**

It is possible to connect multiple lighting groups to the ECA Control. In addition to 001, 3 more groups can be created with the following settings in the rotary switches: 011 / 021 / 031. The remote control only works on group 001. All groups can be controlled in the EVA Experience web app.



DMX cable connection

Connect the supplied DMX cable from the ECA Control to the 4+2 channel led driver (14,16,18) of the EVA underwater lighting PSU on the numbers indicated.

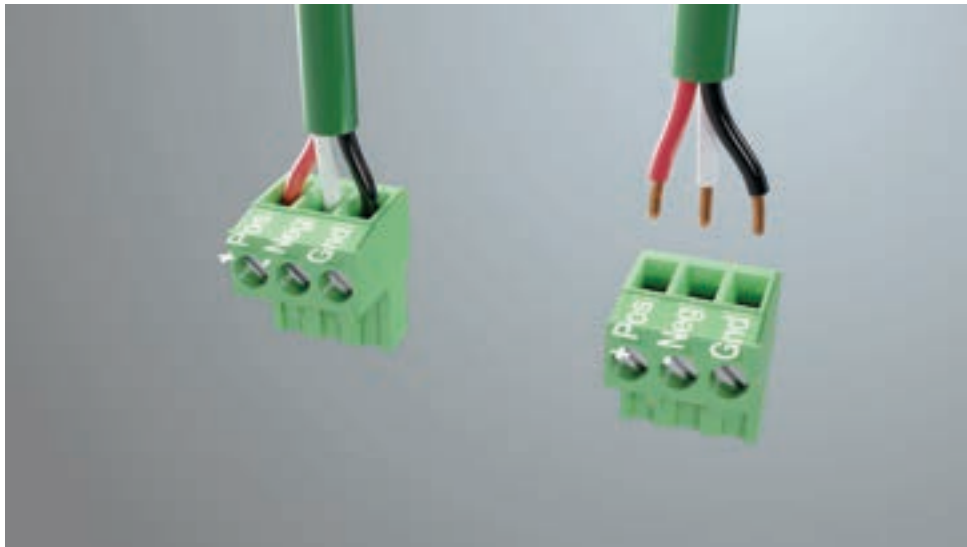
Connect the EVA underwater lighting PSUs to each other using DMX cable

- Connect the DMX-cable (2-wires + shield) to the 4+2 channel led driver on the left side of the PSU on the numbers indicated (14,16,18).
- Connect the same DMX-cable to the 4+2 channel led driver on the left side of the following PSU on the numbers indicated (13,15,17).
- Repeat this for all PSUs (13-14: Shield, 15-16: DMX-, 17-18: DMX+).

4.2 Connect the ECA Control to the PSU box



Connect the included DMX cable from the EVA Control to the PSU box



You can install a longer cable if the supplied cable is not long enough. Ensure proper connections: connect the positive wire to the red cable, the negative wire to the white cable, and the ground wire to the black cable.



If you use the remote control, install the antenna outside the technical room for optimal range.

4.3 Functions

Remote control



ON/OFF button	On/off EVA LED underwater lights
Button +	Change light scene +
Button -	Change light scene -

EVA Experience web app

Use the EVA Experience web app to manage all EVA LED underwater lights. For correct operation, the app must indicate that there is no EVAstream and how many lighting groups you want to operate. You can choose the correct setting in the installation wizard. In addition, these settings can always be adjusted under the 'advanced settings' tab.



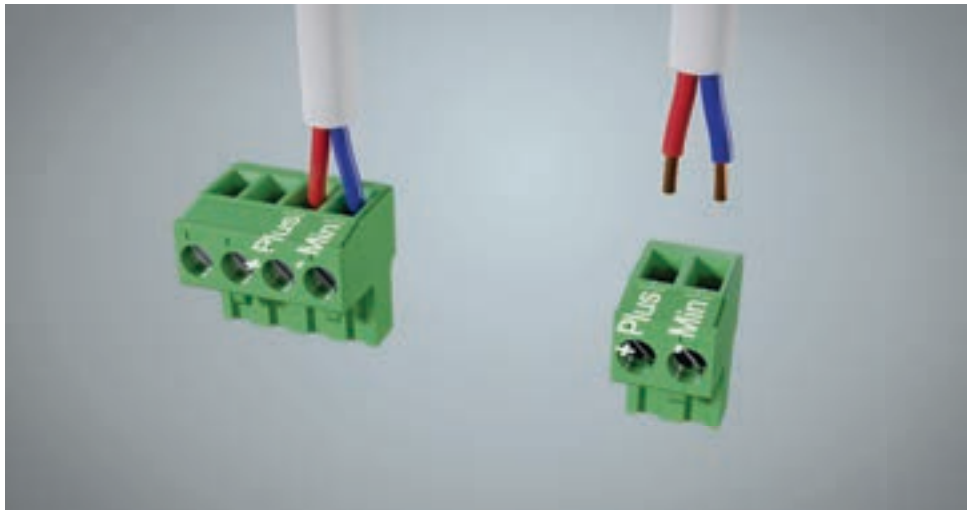
How to use the
EVA Experience
web app

5. CONNECT ECA CONTROL TO EVASTREAM

To control the EVAstream with the EVA Experience web app and optional the EVA Remote Control, connect the ECA Control to the EVAstream.



Connect the ECA Control to the Motor Control Unit (MCU) using the supplied 2-core signal cable.



If the supplied cable is not long enough, a longer cable can be installed. Important: connect plus to plus and minus to minus.

5.2 Functions

Remote control

The EVA Remote control has the following functions:



ON/OFF button	On/off EVAstream
Button +	Short press: increase intensity 5% Long press: increase intensity as long as you press for a stepless increase of in speed
Button -	Short press: decrease intensity 5% Long press: decrease intensity as long as you press for a stepless decrease in speed

If the remote control is also used for the lighting, the on/off button can be used to switch between controlling the EVAstream and the lighting.

To change: press and hold the on/off button for 3 seconds:

- When you see the blue light, the remote starts controlling the EVA LED underwater lighting
- When you see the white light, the remote starts controlling the EVAstream

EVA Experience web app

Use the EVA Experience web app to manage all EVA LED underwater lights. For correct operation, the app must indicate that there is no EVAstream and how many lighting groups you want to operate. You can choose the correct setting in the installation wizard. In addition, these settings can always be adjusted under the 'advanced settings' tab.



How to use the
EVA Experience
web app

OPTIONAL: CONNECTIONS TO ECA CONTROL

1. Additional options



The ECA 1 Essential, 2 Trainer, and 3 ProTrainer models offer the following additional options:

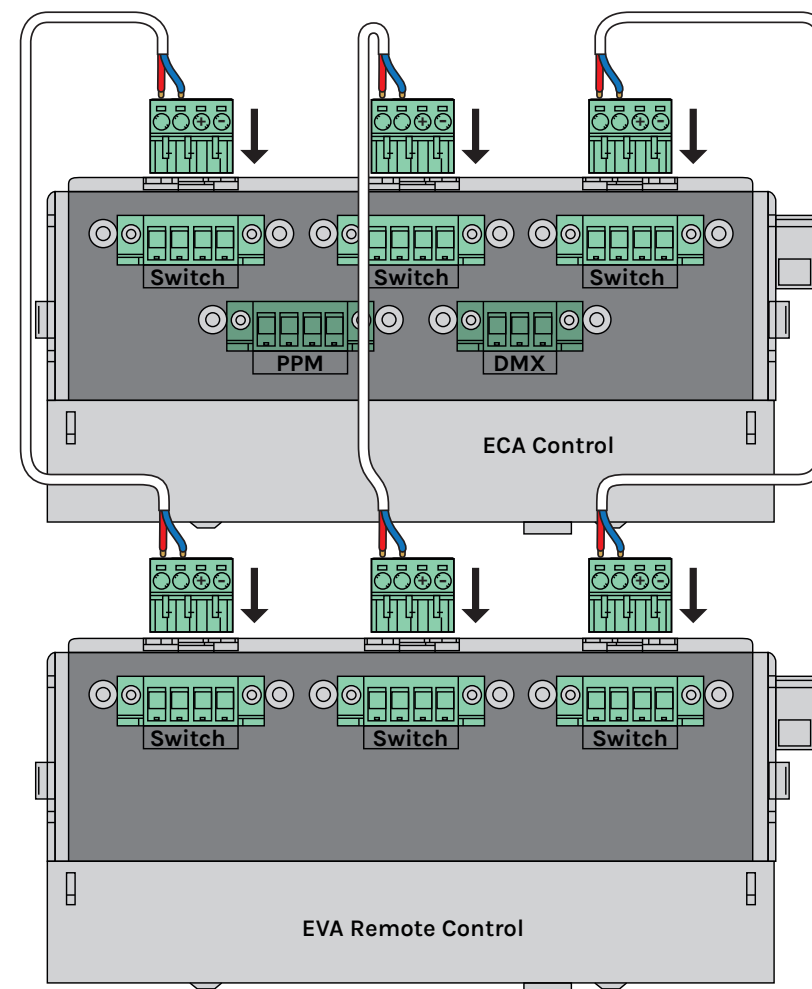
- **DMX:** for connecting underwater lighting,
- **FAN:** for connecting an external fan,
- **3x Switch:** for connecting an external EVA Remote Control or Piezo buttons.

2. Connect the router to the ECA Control



If the wireless connection is too weak, a wired connection can be made by connecting a UTP cable from the router to the ECA Control.

3. Connect an external EVA Remote Control to the ECA Control



Connect the supplied 2-core signal cables from the EVA Remote Control to the ECA Control. Connect Switch 1 to Switch 1 on the ECA Control, Switch 2 to Switch 2, and Switch 3 to Switch 3.



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