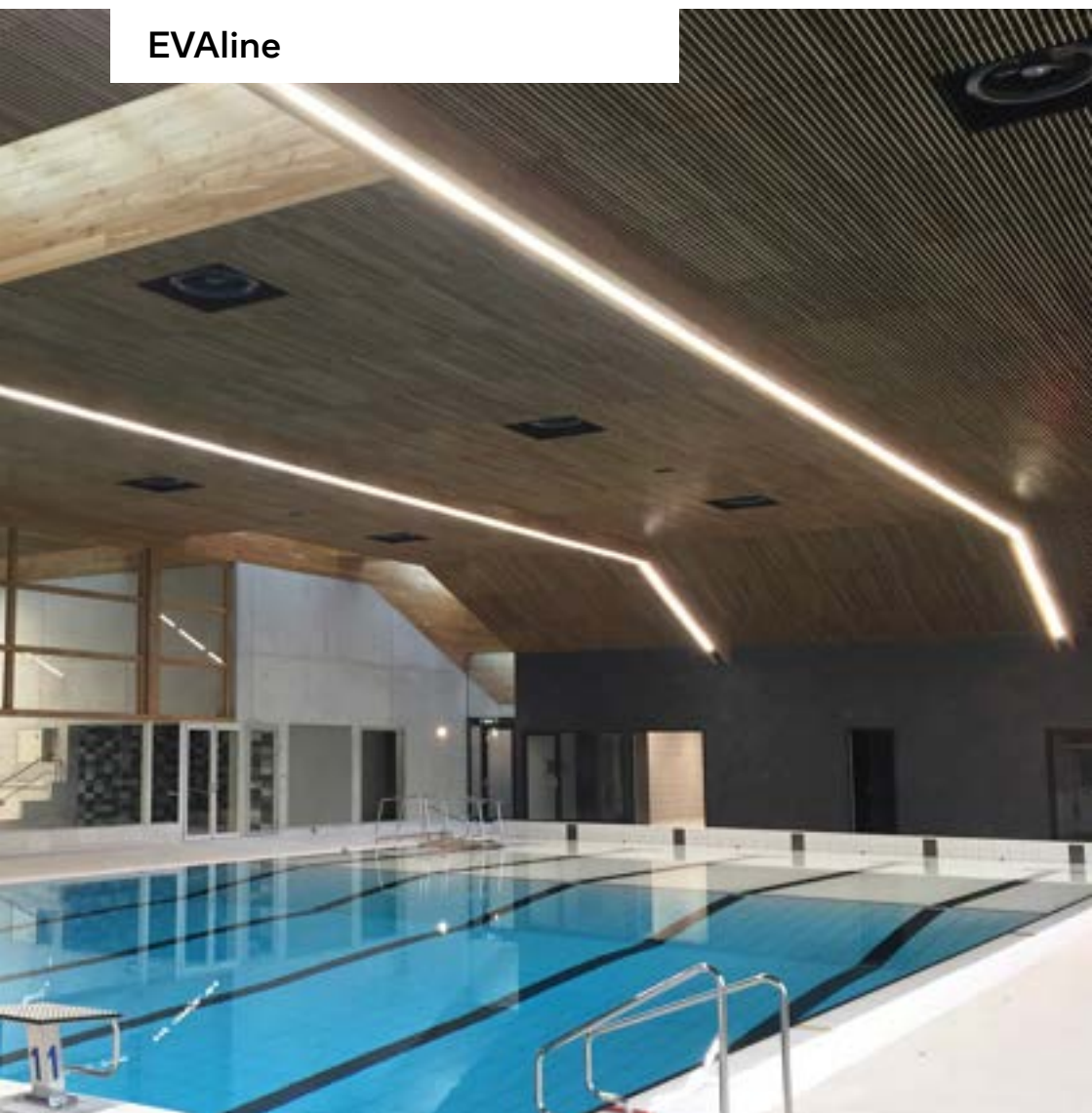


EVALine



MOUNTING MANUAL

A step-by-step guide to mounting EVALine

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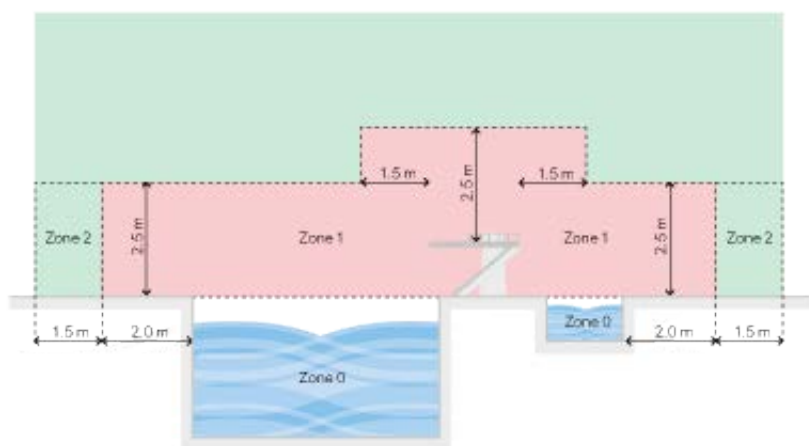


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SAFETY INSTRUCTIONS

Important! Safety instructions

1. Follow the installation instructions carefully. For questions or queries, please contact your distributor or reseller, or visit www.evaoptic.com
2. This lighting system must be installed by a certified electrician in accordance with all applicable local rules and regulations. Improper installation may cause electrical hazards.
3. Switch off all relevant live electrical circuits before starting the installation.
4. Please retain these instructions for future reference.



This lighting system must be installed in accordance with the zones specified in the international safety standard IEC 60364-7-702.

Mount EVALine in swimming pools above zone 1 and not within zones 1 or 2.

GENERAL MOUNTING INSTRUCTIONS



Important! General mounting instructions

1. Use only materials suitable for your specific application. Please ensure that all mounting materials comply with the requirements and guidelines applicable to your installation. For example, in swimming pool environments most stainless steel are not permitted.
2. Do not cover the heat sink of the types of armature, as it is essential for efficient cooling.
3. Ensure a minimum clearance of 6 cm on all sides of the armature. This space is required for proper air circulation and cooling of the system. EVAline consist of hinged modules; for maintenance purposes, this hinge function must remain accessible. Therefore, a minimum of 6 cm of free space around the luminaire is required.
4. Before installation, please check the delivery before assembly for accuracy and completeness. Also ensure that the numbering of parts for the project is strictly followed.
5. EVA Optic BV warrants its products to be free from defects in material and/or workmanship, under normal conditions of use, operation and maintenance for a period of four (4) years from the original invoice date for LED luminaires and four (4) years for drivers/ power supplies. Visit www.evaoptic.com for datasheets and the full warranty terms.

EXPLANATION SYSTEM EVALINE

Explanation system EVALine

EVALine is a modular LED line system, manufactured from clear anodized aluminium. The modular system consists of three types of modules:

- The base module is connected to the ceiling.
- The light modules are connected to the base module at every spot where illumination is desired. The empty places between the light modules are covered with cover modules.
- EVALine is also available as complete armature, consisting of equal parts of base modules and light modules.

EVALine is available in three different versions:

- EVALine for standard applications.
- EVALine Sport for indoor sport centres
- EVALine Aqua HE for swimming pool accommodations, where the resistance to chlorine, moisture, and heat is required. EVALine Sport and EVALine Aqua HE are also available in matt black anodized aluminium.



Example base module



Example light module



Example V4 cover module



Example cover module

EXPLANATION SYSTEM EVALINE

System assembly EVALine

The modules are attached to each other, by using a hinge system with a snap closure. When installing the base modules, please ensure that the hinges are positioned on the water side. This is essential for correct placement as well as for easy access during service and maintenance.

When installing the base modules, also ensure that the system remains easily accessible for maintenance.

Important: Do not use a screwdriver or any other materials to open or close the fixture, as this may damage the material and cause corrosion.

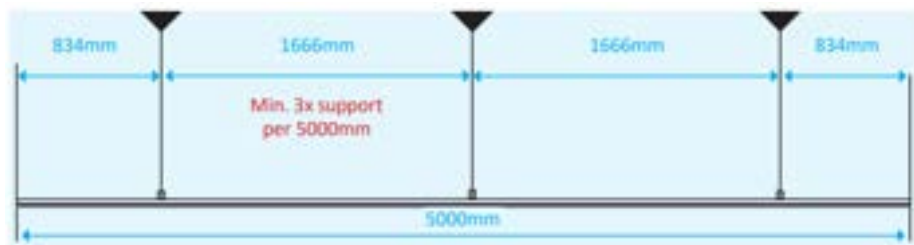


STEP 1: MOUNTING THE BASE MODULE

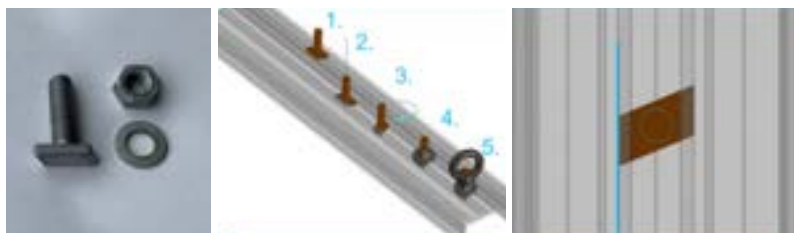
The most common way for mounting EVAline is by using T head bolts, sometimes in combination with additional mounting materials. There are various types of T-head bolts available, the supplied type depends on the specific application.

The most common mounting option is direct installation using T-head bolts attached to the ceiling beams.

For every 5 metres of base module, a minimum of three T-head bolts must be used.



Placing T-head bolts



Place the T-head bolts as shown above and tighten them securely using a wrench.

Position

Make sure that all mounting points are firmly fixed and that the base module is properly aligned before continuing with the installation of the light and cover modules.

STEP 1: MOUNTING THE BASE MODULE

Additional mounting materials

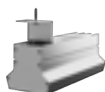
Option 1: Eye bolt with T head bolt.

For pendulum mounting using a chain.



Option 2: T-head bolt with coupling nut and lag screw.

For direct mounting to the ceiling.



STEP 2: LINKING BASE MODULES

Linking base modules

EVALine base modules have a maximum length of 5 metres. Base modules can be mutual coupled to each other by using special coupling pieces.

Mounting couple joint

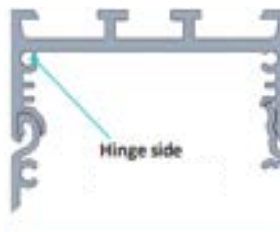


Slide before linking the base modules per 5 meter base module the required fall protection in the system. Before linking the base modules, slide the required fall protection into the system for each 5-meterbase module.

Mounting fall protection

EVALine Sport and EVALine Aqua HE are equipped with fall protection:

1. Slide the safety cable head into the base module on the hinge side of the luminaire.
2. Connect two fall protection cables per light module inside the base module.
3. Position the fall protection inside the base module at the position of the light modules.



STEP 3: MOUNTING THE WOERTZ CABLE

Mounting Woertz cable

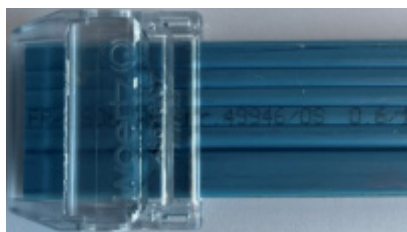
The Woertz flat cable is supplied on rolls. After assembling the base module, the Woertz flat cable and the light modules can be installed.

Only one type of Woertz cable is used for EVAline systems:

Woertz Dali flat cable 5G2.5 + 2x1.5 mm²



7-wire Woertz cable



At our factory the Woertz cable is pre-cut to length and supplied with an end cap.



When installing the Woertz cable in the base module, pay close attention to the correct orientation of the cable in the connector. As shown in the image on page 10 (7-wire Woertz cable), the Woertz cable has a slot on one side.

The connector is provided with a corresponding recess for this slotted side.

STEP 4: ELECTRICAL CONNECTION

Electrical connection

After the base modules have been mounted, the wiring can be connected to the Woertz connector box on the light modules.

Use one (1) connector per light module.

Supplies

Black Woertz connector blocks are used to connect the light modules to the Woertz flat cable.

Use one (1) Woertz connector per light module to connect the wiring from the driver.



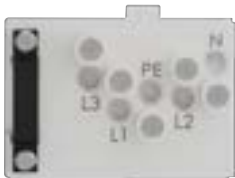
Install the correct installation schedule

Install the power supply to the Woertz cable in the light module according to the installation schedule applicable to your situation.

Number of groups:

- 1 x 16A B maximum 20 drivers per group
- 1 x 16A C maximum 28 drivers per group.

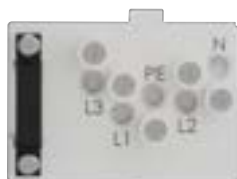
Scheme A | 1 Phase



-  N Neutral Blue
-  PE Ground Green-Yellow
-  L1 Phase Black switched phase (power)

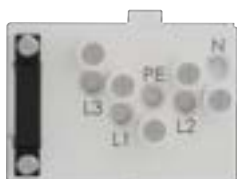
STEP 4: ELECTRICAL CONNECTION

Scheme B | 3 Phase



-  N Neutral Blue
-  Ground Green-Yellow
-  L1/2/3 Choice L1 / L2 / L3 switched power phase 1, 2 or 3 black

Scheme C | 1 or 3 Phase with dimming



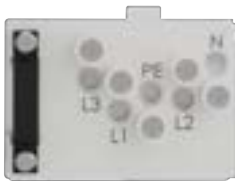
-  N Neutral Blue
-  Ground Green-Yellow
-  L1/2/3 Choice L1 / L2 / L3 switched power phase 1, 2 or 3 black



-  + DIM+ (dimming)
 -  - DIM- (dimming)
- 0 - 10V or DALI dimming

STEP 4: ELECTRICAL CONNECTION

Scheme E | 1 or 2 Phases with emergency power and optical dimming



-  N Neutral: (earth) Blue
-  PE Ground: Green-Yellow
-  L1 Constant power for emergency power: Brown
-  L2/3 Switched power (select L2/L3, phase 1, 2 or 3): Black



-  + DIM+ (dimming)
-  - DIM- (dimming)
- 0 - 10V or DALI dimming

Connecting the power connector

Strip the wires 7 mm and plug the wiring as deep as possible into the connector.

Place a connector at the beginning of the cable to connect it to the main power. Ensure that the connector is positioned in a location with sufficient available space. After completing the electrical connection, fully tighten all white screws on the black Woertz connector.



STEP 4: ELECTRICAL CONNECTION

Position the connector correctly

Position the connector in a location where sufficient space is available.

Do not place the connector in the same position as the power supply (red area). Place the connector next to the power supply (green area) or in locations where a cover module will be installed.

Tip: For easier connection to the main power supply (step 7), position the connector with the connection side facing the power supply.



Do not place the connector in the same place as the power supply!

STEP 5: MOUNTING THE LIGHT MODULES

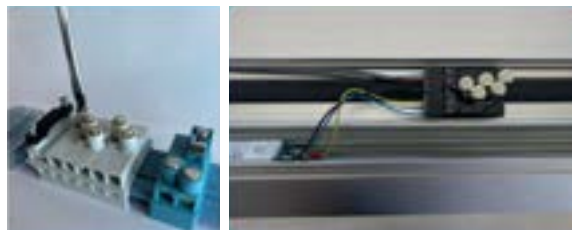
Mounting the light module to the hinge

Position the light module at the correct location on the base module using the hinge system. Refer to the diagram in step 1 for correct positioning.



Connecting the connector to the Woertz cable

In step 4, the connector was connected to the power supply inside the light module. Connect the connector on the Woertz cable by using a screwdriver.



Place the Woertz cable correctly into the base module, as described in step 3.

Connecting the fall protection

In step 2, two fall protection cables per light module were inserted into the base module. Now securely fasten the cables to the light module by tightening the screws.



STEP 5: MOUNTING THE LIGHT MODULES

Ensure that all materials used are suitable for the specific application. For example: swimming pool environments require materials that meet high performance.

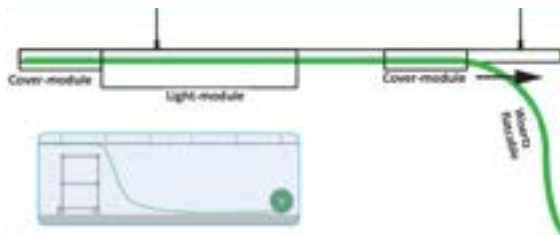
Closing the Module

After connecting the connector to the cable and securing the fall protection, snap the light module into the base module.

Make sure that no cables or wires are trapped during the process.

Securing the cable with a cover module

Use a section of cover module to keep the cable positioned inside the base module and secured to the ceiling. Reposition as necessary to allow easy installation of the light modules. Afterwards, install the light and cover modules alternately, in accordance with the lighting plan.



STEP 6: MOUNTING THE COVER MODULES

Install the light modules alternately with the cover modules, as shown in the drawing on page 16.

After completing this step, the end covers of the modules can be installed.

Connect cover modules using the system

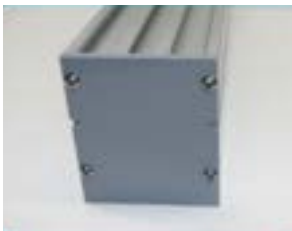
Attach the cover module to the base module next to the light module using the hinge system. Ensure no cables or wires are trapped when snapping the cover module into the base module.



Assembling the end covers

Screw the end caps onto the light modules, cover modules and base modules.

Insert the supplied rubber seal only when starting with a light module, not when starting with a cover module.



STEP 7: CONNECTING TO THE MAIN POWER

Disable main power

SWITCH OFF THE MAIN POWER SUPPLY!

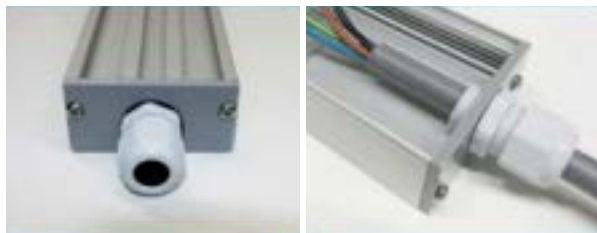
Before connecting to the power supply, ensure that the main power supply is switched off.

Failure to disable the main power supply can result in serious injuries or even death.

Connecting to main power

Route the main power cable through the end cover of the base module.

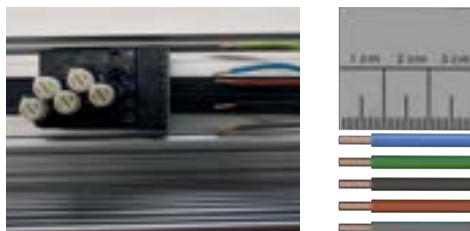
Screw the end cover to the base module, using the appropriate screws.



After connecting the cable, firmly tighten the cable gland in the base module end cover.

Connecting the wiring

Strip the wires 7 mm and insert them as far as possible in the connector. After completing the wiring, firmly tighten the cable gland into the connector.



For product information, software for DMX controllers and warranty details, please visit our website: www.evaoptic.com

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