



LUMINUS SERIES

ABS PLASTIC LED LAMPS FOR SWIMMING POOL

V1.0
26/09/2024

INSTALLATION MANUAL

Abstract

INSTALLATION MANUAL

Thank you for your preference when purchasing our PANDA LUMINUS series ABS LED pool lamps.

With the help of this instruction manual you can carry out a correct installation of this product, so we recommend that you follow the instructions included here. Keep this manual in a safe place for future reference.

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1. SAFETY WARNINGS

Before installation, please read the following instructions carefully. Failure to follow the safety measures outlined may result in material damage, serious injury, or even death.



CAUTION

- This appliance is not intended for use by persons (including children) with physical, sensory, or mental impairments, or those lacking experience or knowledge, unless they are supervised or trained to operate the appliance by a responsible person ensuring their safety.
- Children should be closely supervised to prevent them from using the device as a toy.



CAUTION

- The LED lamp is designed solely for complete submersion, and must be properly and securely connected to the control transformer to ensure safe operation.
- For these models, the operating voltages are: alternating current (AC) at 12 Vac and direct current (DC) at 12 VDC (see specifications). Using a different voltage may damage the product.
- This manual provides crucial information regarding installation, operation, and safe use of the product.

2. INSTALLATION

Then perform the following steps for a successful installation:



CAUTION

- These LED lamps are designed to be installed in concrete pools.
- Maximum submergence: 1 - 5 meters (3.28 - 16.4 feet)
- Maximum operating temperature: -4°F - 100°F

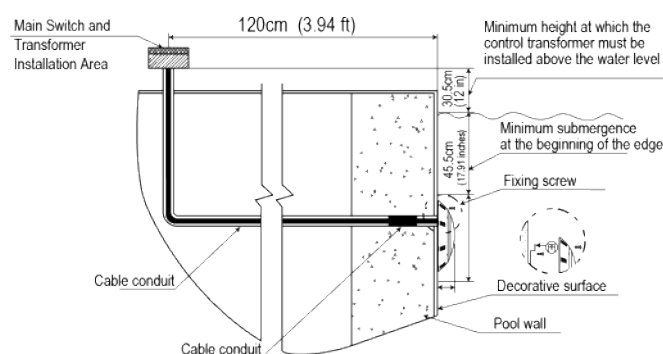
- Ensure that the pool where the LED lamp will be installed meets all necessary conditions for proper installation. A qualified electrician or technician should assess any existing risks and correct them before proceeding with the installation.
- Verify that the pool's electrical circuit has a method for completely disconnecting the power supply, using a main switch and a ground fault circuit interrupter (GFCI).
- Remember, these lamps require a control transformer (sold separately). Ensure that the power supply voltage and output meet the product specifications and installation requirements.
- Please follow the installation diagram shown in the figure [INSTALLING MODELS WITHOUT A NICHE \[5\]](#) (for lamp without a niche).
- Both the lamp and all electrical components of the pool must be correctly connected for proper operation.

MODELS WITHOUT A NICHE

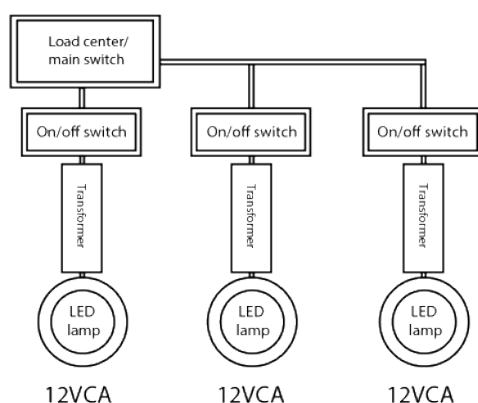
- The mounting bracket must be correctly installed so that the top edge of the LED lamp is positioned no more than 17.72 inches (45 cm) below the water surface of the pool, but no deeper than 16.4 ft (5 meters).

MODELS: LMS-8-B-12W-12A, LMS-8-B-25W-12A, LMS-11-C-18W-12A, LMSF-8-CB-6W-12A, LMSF-8-CB-15W-12A, LMSF-10-CB-25W-12A, LMSF-10-CB-35W-12A, LMSF-8-CB-6W-12A, LMSF-8-CB-15W-12A, LMSF-10-CB-25W-12A, LMSF-10-CB-35W-12A

INSTALLING MODELS WITHOUT A NICHE



ILLUSTRATIVE REPRESENTATION OF THE LOCATION OF ELECTRICAL COMPONENTS



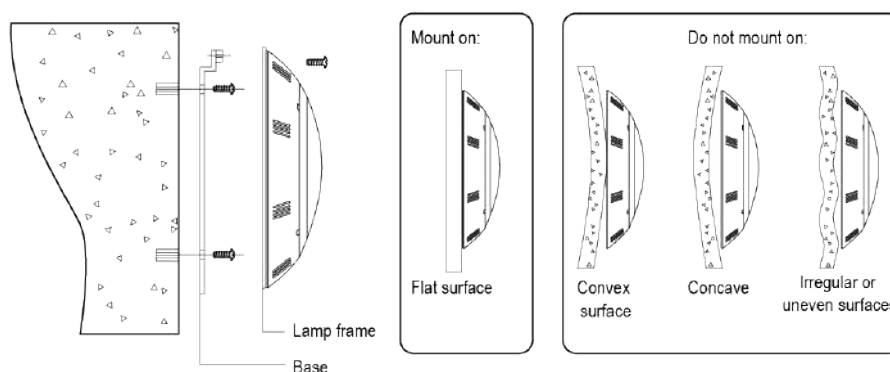
WARNING

The distance between the transformer and the LED lamps must not exceed 30 meters.

2.1. LAMP ASSEMBLY

STEPS TO FOLLOW FOR WALL MOUNTING THE LAMP WITHOUT A NICHE.

1. The lamp must be installed on a vertical wall, following the specifications provided.



2. If the pool surface where the LED lamp will be installed is finished, ensure that the lamp is flush with the concrete to prevent leaks.



CAUTION

The area where the mounting base will be installed must be flat and flush with the lamp to ensure a perfect fit between the lamp and the pool wall.

3. Remember that the power cable passed through the tube to the control transformer must be at least 47.24 inches (120 cm) away from the lamp. Leave a sufficient cable length to wind it around the LED lamp, which will allow us to maneuver it out of the water if necessary.
4. Cut the insulating cover of the LED lamp cable that reaches the control transformer, leaving at least 5.91 inches (15 cm) of cable to make the connections.
5. Remove the insulating cover from the lamp cables to expose the connecting lines and install them on the transformer terminals. Be careful not to damage the cable during cutting.
6. Connect the corresponding cables to the control transformer. The cables of the alternating lamp have no polarity, so they can be connected in any orientation.



WARNING

Never turn on the LED lamp for more than 60 seconds if it is not completely submerged. Without full submergence, the LED lamp will overheat, which can cause injury to users, installers, or damage to the equipment. The lamp is designed to operate underwater, using the water to cool its internal components.

7. Fill the pool until the LED lamp is completely submerged before turning it on.
8. The lamp's power cable cannot be replaced. If the cable is damaged, the entire lamp must be replaced.

2.2. LED LAMP REPLACEMENT



DANGER

Always disconnect the power supply to the pool lamp before performing any repairs. Failing to do so could result in injury.

1. Open the main electrical switch and ensure there is no voltage output to the control transformer that powers the LED lamp.
2. Remove the fixing screw of the lamp to detach it from its base or niche.
3. Disconnect the lamp cables from the control transformer and pull the cable through the duct to completely remove the LED lamp (use a rope, wire, or cable strong enough as a guide at the tip of the lamp's power cable for the next step).
4. Pass the new LED lamp's cable through the conduit to the control transformer using the guide. Install the replacement LED lamp as indicated in the "INSTALLATION" step.

2.3. CONTROL TRANSFORMERS

The control transformer and the static electrical converter (sold separately) are required to power the LED lamps. There are two options available based on your project needs:

1. Alternating current transformers
2. Static electrical converter

AC TRANSFORMERS

The TRAFO series alternating current transformers are classified by model according to their power. For detailed specifications, it is recommended to review the corresponding technical data sheet. Each transformer includes a connection plate, which allows the lamps to be powered. It is important to note that the maximum number of lamps that can be installed depends directly on the transformer's power in relation to the selected lamps' power.

STATIC ELECTRICAL CONVERTER

The TRAFO series static electric converter is available in a 500W model. It includes a connection plate for powering the LED lamps (the maximum number of lamps that can be installed depends directly on the converter's power relative to the power of the lamps to be installed). In many cases, it will be necessary to connect a remote-controlled controller before connecting the lamps. For detailed specifications, it is recommended to review the corresponding technical data sheet.



CAUTION

- The transformer must be installed by a licensed electrician and/or qualified personnel.
- The transformer must be installed in an environment free of moisture and any flammable materials or substances.
- Both direct and alternating current converters must have a switch to ensure complete disconnection.
- If the power cord is damaged, it must be replaced by the manufacturer, an authorized service agent, or qualified personnel to avoid a hazard.



NOTE

- For alternating current transformers (TRAFO series), the connection terminal has no polarity, so the order of connecting the lamp cables does not matter.
- For the static electrical converter (TRAFO series), the connection terminal does have polarity, so it is important to respect the order when connecting the lamp cables.

3. OPERATION



WARNING

Remember that both direct and alternating current transformers must have a switch that ensures complete disconnection.

1. To turn on the LED lamps, you must operate (close) the main switch.
2. In color models, it is possible to make all the lamps light up in the same color. This operation is known as SYNCHRONIZATION. To perform this process, all the lamps that you want to synchronize must be turned on and off three times, ensuring that no more than two seconds pass between each shutdown and startup cycle. Once this is done, de-energize the lamps for 10 seconds. After this time, turn on the main switch, and the lamps will be synchronized to show the same color. If synchronization was not successful, repeat the process.
3. To change the color, once all lamps are synchronized, it is only necessary to turn the main switch off and on within two seconds for the lamps to change color following the sequence of colors and shows (as shown below). This also applies when only one lamp is installed.
4. To turn off the LED lamps, you must disconnect the main switch.

COLOR SEQUENCE AND SHOWS (AC)

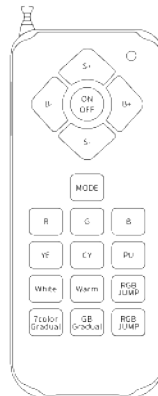
#	MODE	#	MODE
1	Static blue	9	Red/Red-Green/Green Quick Change
2	Static red	10	Quick Change Green/Green-Blue/Blue
3	Static green	11	Quick Change Blue/Red-Blue/Red
4	Static purple	12	Gradual change between Red-Green/Green-Blue/Red-Blue
5	Static Cyan	13	Red/Green/Blue slow flashes
6	Static yellow	14	Red/Blue/Green slow flashes
7	Static white	15	Fast 7-color change
8	Gradual change between Green/Red/Blue	16	Gradual change between Red/Green/Blue



NOTE

- LUMINUS FLAT (LMSF) lamps are only compatible with other models using the transformer and controller.
- The following models already include remote control (see section →DESCRIPTION OF THE REMOTE CONTROL):
 - K-LMSF-8CB-6-12A
 - K-LMSF-8CB-15-12A
 - K-LMSF-10CB-25-12A
 - K-LMSF-10CB-35-12A

4. DESCRIPTION OF THE REMOTE CONTROL (LUMINUS FLAT KIT)



Boton	Description	Boton	Description
	<ul style="list-style-type: none"> Turn the lamp on and off. 		<ul style="list-style-type: none"> Yellow light
	<ul style="list-style-type: none"> When in show mode, the speed of switching between lights increases. 		<ul style="list-style-type: none"> Cyan blue light.
	<ul style="list-style-type: none"> When in show mode, the speed of switching between lights decreases. 		<ul style="list-style-type: none"> Purple light.
	<ul style="list-style-type: none"> It increases the brightness of the light. 		<ul style="list-style-type: none"> Pure white light.
	<ul style="list-style-type: none"> Decreases the brightness of the light. 		<ul style="list-style-type: none"> Warm white light
	<ul style="list-style-type: none"> Change the lighting mode of the lamp. 		<ul style="list-style-type: none"> Light show (red, green and blue).
	<ul style="list-style-type: none"> Red light. 		<ul style="list-style-type: none"> Show of 7 colors (they change gradually).
	<ul style="list-style-type: none"> Green light. 		<ul style="list-style-type: none"> Light show (blue and green changing gradually).
	<ul style="list-style-type: none"> Blue light. 		<ul style="list-style-type: none"> Light show (red, blue and green).



NOTE

- To use the remote control you must activate it by placing the side button in position N.
- The controller includes a 12 VDC battery. When it runs out, it can be replaced with a 12 VDC model A23 battery.

5. USES AND PROHIBITIONS

USES

Exclusive installation in concrete pools.

Recommended depth range: Between 1 and 5 meters deep.

Operating temperature: Between -20°C and 38°C.

Suitable voltage with 12 V AC or 12 V DC, depending on the model.

PROHIBITIONS

Do not use voltages other than those specified, as this may damage the equipment.

Do not replace the power cable: If the cable is damaged, the entire lamp must be replaced.

Do not install on curved or irregular surfaces that prevent a perfect fit of the lamp.