

Brio White and Color

Underwater LED light

P/N:PK10R400 (White) / PK10R402 (Color) /
PK10R404 (White LT) / PK10R406 (Color LT)



No-Niche Underwater
Luminaire for Swimming Pool



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Read these instructions carefully before installing, commissioning and using this product.

Lights must never be turned on outside of water.

For supply connection, use only an isolating low voltage power supply with ungrounded output, evaluated for swimming pool use.

1. Packaging contents

1 Brio with:

- 2xAWG18 cable pre-mount depending model:
 - 50 ft (15,2m)
 - 100 ft (30,4m)
- Included trim ring (depending model):
 - White; Grey and Anthracite trim ring (P/N: MPBT108BG; MPBT108BW; MPBT108BA (for concrete pool))
 - White; Grey and Anthracite trim ring (P/N: MPBT108HG; MPBT108HW; MPBT108HA (for liner pool))
 - Stainless steel trim ring (P/N: SFPL0313 (for concrete pool)) (optional)
- Technical manual (this document)

2. Warnings



This product must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be respected.

Always disconnect the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury.

For countries in compliance with International Electrotechnical Commission (IEC) regulatory standards: The light fixture must be installed by a licensed or certified electrician or a qualified pool service person, in accordance with current IEC 364-7-702 and all applicable local codes and ordinance.

Improper installation will create an electrical hazard, which could result in death or serious injury to pool users, installers or others due to electrical shock and may also cause damage to the property.

3. Technical features

Sizes	Ø 70 mm (2.75") / depth: 80 mm (3.14")
Installation	Horizontally or vertically in standard 1.5" return fittings for swimming pools (watertightness is not guaranteed for this type of installation) CCEI return fittings are available for concrete, fiberglass (PF10R291) or liner configurations (PF10R292)
Power supply	Voltage: 12 V ~ (AC) / Frequency: 50Hz/60Hz
Power consumed - Max. luminous flux	24W (Color X24 version) - 1800 lm (according to color) 12W (Color X24 LT version) - 900 lm (according to color) 24W (White M24 version) - 2400 lm 12W (White M24 LT version) - 1200 lm <i>"Take into account the cumulative power of all the lights to determine the 12V AC transformer (75 / 150W) needed."</i>
LED type	PK10R400 (M24): 18 LED Power Cold White (~6500°K) PK10R404 (M24 LT): 9 LED Power Cold White (~6500°K) PK10R402 (X24): 24 LED Power Monochromatic (6R/6G/6B/6W) PK10R406 (X24 LT): 12 LED Power Monochromatic (3R/3G/3B/3W) <i>Risk group 1 (low risk) according to IEC62471:2006</i>
Protection index	IP-68

4. Installation



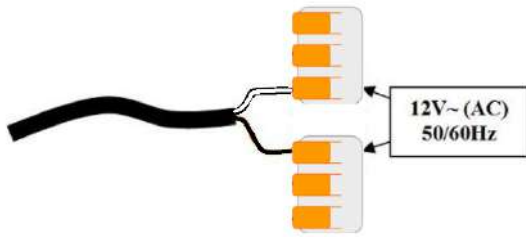
Except when the fixture is installed in an area of the swimming pool that is not used for swimming and the fixture is adequately guarded to keep anyone from contacting it, the fixture shall be installed in or on a wall of the pool, with the top of the lens opening not less than 457 mm (18") below the normal water level of the pool.

4.1. Electrical connection



Installation of this product involves a hazard of electric shocks. We strongly recommend you to contact a professional installer. Incorrect installation places you in danger and may irreversibly damage the product and the equipment connected to it. In compliance with the National Electric Code (NEC), pool lights must always be powered by VLSV (Very low safety voltage). Always cut off the power upstream before handling the electrical installation.

Risk of electric shock! Only connect to a circuit which is protected by a ground fault circuit interrupter (GFCI). If you are not sure if these types of devices are fitted, contact a qualified electrician.

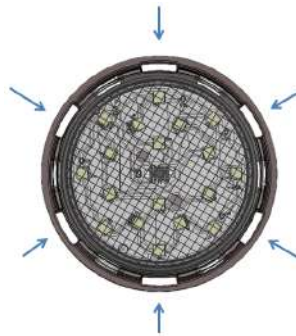


The electrical connection must be performed in a dry, sealed connection box with cable fittings that must be tightened in order to avoid any water infiltration.

4.2. Installation of the flange

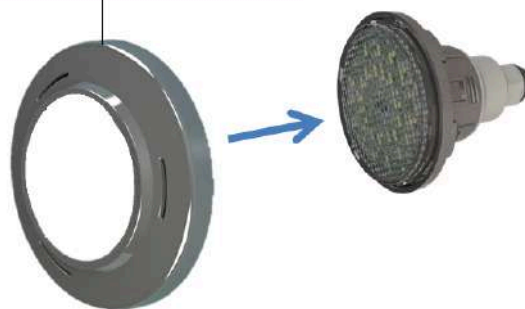
Before mounting the product into the return fitting, install the flange (provided separately)

The flange has to be clipped on the product using the holes as shown below.



For plastic flange:

MPBT108B A/G/W (depending on color) for fiberglass / concrete pool
 or
MPBT108H A/G/W (depending on color) for liner pool



For stainless steel flange


1. Put the transparent part (1) on the stainless steel flange (2)
2. Put these parts (1 + 2) on the light (3)



4.3. Installation in CCEI return fitting

When you install a Brio with a CCEI return fitting (see images below), you can mount the O-ring between the Brio and the return fitting (use grease during installation). Once you tighten the fixture, the O-ring allows for a dry casing between the rear of the fixture and the connection box above the water level.

This increases the watertightness of the connection box and reduces the risk of freezing in the shaft. This seal alone cannot guarantee the watertightness of the swimming pool but provides better protection for the junction box. If the fixture is unscrewed when the water level is above it, the shaft will instantly fill with water.

<p>Return fitting for concrete pool or liner pool (PF10R291 / PF10R292)</p> 	<ol style="list-style-type: none"> 1. Set the O-ring in wall through and pass the cable through the return fitting. 2. Set the O-ring around the rear part of the light. 3. Push and screw it thoroughly until the flange is in contact with the wall of the pool.
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5. Operation - Standalone Mode (PK10R402 and PK10R406 only)

In the absence of a control box, the Brio operates autonomously and the user can choose between 18 modes: 11 fixed colors and 7 programs with micro power cuts.

Mode change and reset

- A power failure of <1s allows you to switch to the next color / sequence. Once every color appears, the lighting returns to the first color (pure white).
- Two cuts under 1 second resets the lights synchronization and switches them all to the second colors (blue)
- Restarting after a long outage (>4s) turns the lights back on to the last color selected.

Fixed colors and available sequences

The colors and sequences are displayed in a preassigned order:

- **1 to 11: fixed colors.** 1. Pure white | 2. Blue | 3. Blue Lagoon | 4. Cyan | 5. Purple | 6. Magenta | 7. Pink | 8. Red | 9. Orange | 10. Green | 11. Sea green
- **12 to 18 : sequences.** 12..Fast gradient | 13..Slow rainbow | 14..Colors parade | 15.Techno rhythm | 16.Blue variations | 17.Random parade | 18. Random colors



6. Wintering



If your pool is subject to be full of snow or frozen during winter, your light must be unscrewed and put on the side of the pool.

Not doing this operation can damaged the light and make it unusable.

We recommend to wrap the product in bubble wrap and cover it to protect it from snow. (with a backward fool for example)



A. Technical support

USA: na.ccei-pool.com/us / Tel: +1.213.425.5280

Canada: na.ccei-pool.com/ca / Tel: +1 514.963.4226

B. Declaration of conformity

CCEI Inc. (Québec 1170122155) declares that the product Brio is compliant with the safety and electromagnetic compatibility requirements .		
		Pierre-Yves Flattot Montreal, on 08/04/2021
Distributor's stamp		
Date of sale: Batch N°:		