



Mini Brio 2 M12 & X12

Underwater LED lighting

Ref: PK10R311 / PK10R312 / PK10R313

Table of Contents

1. Pack contents	1
2. Technical specifications	1
3. Installation	1
3.1. Electrical connection	2
3.2. Installation into a threaded 2" wall conduit (with PF10R294 only for concrete pool)	2
3.3. Installation into a CCEI wall inlet	2
4. Monochromatic lights: dimming / luminous intensity variation (Only PK10R311-312)	3
5. RGB & RGBW lights: Use - Autonomous mode (Only PK10R313)	3
6.	3
7. Projector Protection	3
A. Declaration of conformity	4



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

Immersed use only.

Only use a safety transformer.

1. Pack contents

1 light Mini Brio 2 (white or multicoloured) with cable (3m pre-fitted) + technical instructions + screwing tool ref MPBT0942

2. Technical specifications

Dimensions	Ø 49mm / depth 63mm
Installation	In a 2" brush socket (with trim PF10R294) In a CCEI crossing PF10R291 (shell) or PF10R292 (liner)
Power supply	Voltage: 12 V ~ (AC) / Frequency: 50Hz/60Hz
Power consumption	12W (Version M12 and M12K) - 1200 lm
Max. luminous flux	12W (Version X12 RGBW) - 900 lm (depending on the colour) <i>Take into account the total power for all lighting to determine which 12V (100 / 300VA) transformer to use.</i>
LED type	Risk group 1 (low risk) as per IEC62471:2006
Protection rating	IP-68

3. Installation

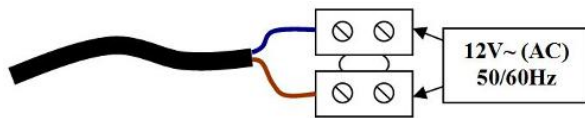
Different kind of installation are available for Mini Brio 2 M12 & X12 : in 2" wall inlet (for concrete pool) with PF10R294 bezel and adapter or in CCEI 1.5" wall inlet for one-piece pool (PF10R291) or liner pool (PF10R292). The installation should be performed by a professional.

3.1. Electrical connection



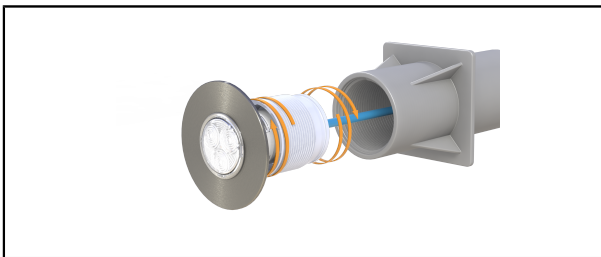
Installation of this project involves a hazard of electric shocks. We strongly recommend you contract a professional installer. An installation error can put you in danger and may irreversibly damage the product and the equipment connected to it. In compliance with the NF C 15-100 standard, pool lights installed in Volume 0 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 breaker . If you are not sure if these types of device are fitted, contact a qualified electrician.



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

3.2. Installation into a threaded 2" wall conduit (with PF10R294 only for concrete pool)



1. Screw the light in the 1,5" adapter then pass the cable through the wall conduit
2. Push and screw it thoroughly

3.3. Installation into a CCEI wall inlet

If you prefer to install a Mini Brio 2 into a CCEI wall inlet (see next images), you have to place the O-ring inside the wall inlet (use some grease during the installation). Once compressed during tightening, the O-ring allows a dry sheath between the back of the light and the connection box above the water level.

This allows to increase the watertightness of the connection box and limit frost risk in sheath. This O-ring will not guarantee the watertightness of the installation. It will improve the protection of the connection box. If the light is not well screwed and under the water level, the sheath will be filled directly with water.

<p>One-piece or concrete pool (PF10R291)</p>	<ol style="list-style-type: none"> A. Set the O-ring in the wall inlet and pass the cable B. Push and screw the light C. Use the supplied tool to screw the light thoroughly
<p>Liner pool (PF10R292)</p>	<ol style="list-style-type: none"> A. Set the O-ring in the wall inlet and pass the cable B. Push and screw the light C. Use the supplied tool to screw the light thoroughly D. Clip the supplied flange on the wall inlet

4. Monochromatic lights: dimming / luminous intensity variation (Only PK10R311-312)

You have the possibility to manage the luminous intensity of your lights with micro-power cuts (<1s). 3 levels are available :

- 1 micro-cut = 100% of power
- 2 micro-cuts = 75% of power
- 3 micro-cuts = 50% of power
- 1 micro-cut = Back to 100%

When the projector is re-powered after being switched off for more than 5 seconds, it switches back on at the last selected power level.

5. RGB & RGBW lights: Use - Autonomous mode (Only PK10R313)

In the absence of a control unit, the bulbs operate autonomously and the user can choose between 18 modes: 11 colour sets and 7 programs (with shorts cutting power supply).

Change of mode and reset

- A small cut of power supply (less than 1s) switches to the next colour / sequence. Once all the colours are displayed, the light goes back to the first colour (pure white).
- A cut of supply (2s) resets the light synchronization and switches them to the second colours (blue)
- After a long stop (more than 4s) the light show the last displayed colour.

Fixed colours and available sequences

The colours and sequences are displayed in a preassigned order:

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





		CROSS-SECTION (mm ²)			
		1,5 mm ²	2,5 mm ²	4 mm ²	6 mm ²
The voltage drop in the supply cable of the Mini Brio 2 M12 & X12 cable should be limited in order to comply with the applicable standards and ensure optimal illumination. Follow the table opposite (one projector per cable)	Max. length (m)	12 (M12 / X12)	20 (M12 / X12)	30 (M12 / X12)	50 (M12 / X12)
		10,9	18,2	29,1 25 (X19)	43,6 35 (X19)

7. Projector Protection

Independent protection is necessary for each Mini Brio 2 M12 & X12 (even if several projectors are connected to the same transformer). Protection must be ensured in the secondary of the transformer using fuses or breakers at 2A or 3A . The cable cross-section must be adapted accordingly.

A. Declaration of conformity

<p>CCEI declares that the Mini Brio 2 M12 & X12 product meets the safety and electromagnetic compatibility requirements of European directives 2014/35/EU and 2014/30/EU.</p>		
		<p>Emmanuel Baret Marseille, on 10/07/2020</p>
<p>Distributor's stamp</p>		
<p><i>Date of sale: Batch N°:</i></p>		