



Mini-BRiO +

Mini Brio + & Switch M7 & X7

Underwater LED lighting

Ref: PK10R314 / 315 / 316 / 324 / 325 / 326 (Mini+) et
PK10R321 / 322 / 323 (Switch)



Mini-BRiO Switch

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

Immersed use only.

Only use a safety transformer.

1. Pack contents

1 Mini Brio + & Switch (white or multicoloured) + technical instruction + screwing tool ref MPBT0942

- with 2x0.75mm² cable: 3m (pre-fitted): **Mini-BRiO+**
- without cable: **Mini-BRiO Switch**

2. Technical specifications

Dimensions	Ø 49mm / depth 63mm	
Installation	In a standard 1.5" brush socket 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	7W (Version M7) - 700 lm	
Max. luminous flux	7W (Version X7 RGB) - 450 lm (depending on the colour)	
LED type	PK10R314 (M7 +) PF11R321 (M7 Switch)	3 Power LEDs Cold white (~6000°K)
	PK10R315 (MK7 +) PF11R322 (M7K Switch)	3 Mid Power LEDs Warm white (~3000°K)
	PK10R313 (Xx) PK10R323 (Xx Switch)	9 Power LEDs monochrome (3R/3G/3B)
	Risk group 1 (low risk) as per IEC62471:2006	
Protection rating	IP-68	

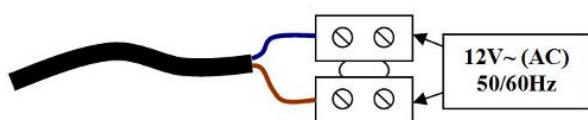
3. Installation

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.



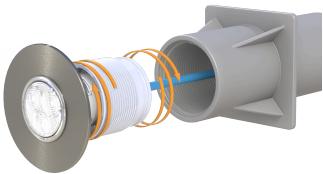
The electrical connection must be performed dry, in a sealed connection box whose cable glands must be tightened in order to avoid any water infiltration.

3.2. Installation into 1.5" standard wall conduit / nozzle

In case of installation into 1.5" other brand nozzle, you can screw your light into the nozzle. For customization, you can use the supplied cover with nozzle or install a Mini-BRiO 2 specific bezel (see catalog).

WARNING : in case of installation with Mini-BRiO 2 bezel, it is necessary to pass the wall through the bezel before screwing. Reverse is impossible.

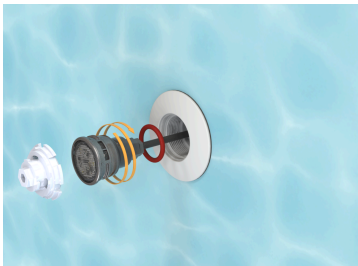
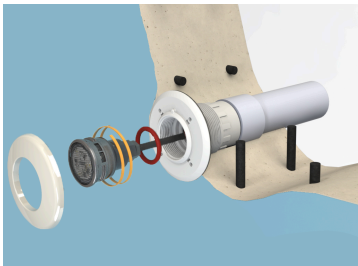
3.3. Installation into a threaded 2" wall conduit (with PF10R294 only for concrete pool)

	<ol style="list-style-type: none"> 1. Screw the light in the 1,5" adapter then pass the cable through the wall conduit 2. Push and screw it thoroughly
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3.4. Installation into a CCEI wall inlet

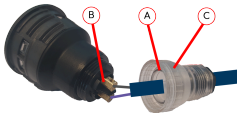

If you prefer to install a Mini Brio + & Switch into a CCEI wall inlet (see next images), you have to place the O-ring inside the wall inlet (use some grease during the installation). Once compressed during tightening, the O-ring allows a dry sheath between the back of the light and the connection box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

3.4.1. Disconnectable version - Mini-BRiO Switch

Use the **Mini-BRiO Switch** light by reusing the existing cable. Do do that, proceed as follows:

	<ol style="list-style-type: none"> 1. Cut the cable behind the existing light 2. Strip the wires (be careful not to strip them too much) 3. Pass the cable through the cable gland behind the light. Check the watertight seal is in position (A) 4. Grease the seal before assembly 5. Connect the two wires to the lugs at the back of the light (B) 6. Close the back cap using nut (C) and screw in the assembly 7. Screw the light back into the 1.5" backflow <div data-bbox="758 1937 853 2027">  </div> <p>If you use a trim. Remember to pass the light though the trim before connecting the light to the power supply wire</p>
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4. RGB & RGBW lights: Use - Autonomous mode

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. Random colours



5. Cable Cross-Section



The voltage drop in the supply cable of the Mini Brio + & Switch M7 & X7 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)	CROSS-SECTION (mm²)			
		2,5 mm²	4 mm²	6 mm²	
		15	25	40	60

For references PK10R324 / 325 / 326 with 10 meters cable, decrease 10 meters on length given in the chart.

6. Projector Protection

Independent protection is necessary for each Mini Brio + & Switch M7 & X7 (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. The cable cross-section must be adapted accordingly.

A. Declaration of conformity

CCEI S.A.S (FR 47 40 35 21 693) FR47 403 521 693 declares that the Mini Brio + & Switch M7 & X7 product meets the safety and electromagnetic compatibility requirements of European directives 2014/35/EU and 2014/30/EU.		
		Emmanuel Baret Marseille, on 27/01/2021
Distributor's stamp		
Date of sale: Batch N°:		