



# PicoBrio

The new addition to the Brio range

Technical information sheet



Réf: PF10K500/ PF10K501/ PF10K502/  
PF10K503

---

# Table of Contents

1. Pack contents .....	3
2. Technical specifications .....	4
3. Description .....	4
4. Electrical Installation .....	5
4.1. Connection to electricity .....	5
4.2. Projector Protection .....	6
4.3. Cable section .....	6
4.4. PicoBrio X3 electrical connection .....	6
4.5. Connectors and wiring .....	7
5. Installation Hydraulique .....	8
5.1. Installation in a standard 1.5 mm wall conduit / inlet .....	8
5.2. Installation in special PicoBrio inlets .....	10
6. Monochrome Floodlights: Dimming / Light Intensity Adjustment .....	11
7. RGBW lights: Use - Autonomous mode (colour models only) (PK10R501) .....	11
8. Safety .....	12

Declaration of conformity .....



## Avertissement

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

Immersed use only.

Only use a safety transformer.

---

## 1. Pack contents

1 PicoBrio (white or multicoloured) + technical instructions

- with cable (3m pre-fitted)
- screwing key

## 2. Technical specifications

Dimensions	<p>Light: Ø 720mm/depth 280mm</p> <p>Crossing part diameter: Ø 85mm</p> <p>Height 280mm/depth 44mm</p>	
Swimming pool installation	<ul style="list-style-type: none"> <li>• PicoBrio special liner inlet:PF10R560</li> <li>• PicoBrio special hull inlet:PF10R550</li> <li>• PicoBrio special concrete inlet:PF10R570</li> <li>• PicoBrio special adapter to screw into a 1.5" wall inlet:PF10R590</li> </ul>	
Garden installation	<ul style="list-style-type: none"> <li>• Garden Kit + WallPF10R580</li> </ul>	
Power supply	Voltage: 12 V ~ (AC)/Frequency: 50Hz/60Hz	
Power consumption	PK10R502	PicoBrio Cool White: 160 lm
	PK10R503	PicoBrio Warm White: 160 lm
	PK10R501	PicoBrio RGBW : 150 lm
	PK10R501	PicoBrio X3 : 150 lm
LED type	PK10R502	PicoBrio Cool White
	PK10R503	PicoBrio Warm White
	PK10R501	PicoBrio RGBW
	PK10R501	PicoBrio X3
Protection rating	IP-68 (once installed)	

## 3. Description

The Pico BRiO is the latest innovation in CCEI's Brio lighting range, joining the Mid Brio and Mini Brio models. Thanks to Pico, bring a touch of sophisticated and personalised

light to your pool with a minimal power consumption. Pico BRiO is ideal for installation in stairwells or to create illuminated water lines, while blending discreetly into your pool environment. Thanks to its small size, you can install a large number of them without disrupting the aesthetics of your aquatic area. Its ability to be placed in tight spaces makes it the ideal choice for precise, targeted illumination.

**Pool lighting:** Create a magical atmosphere in your pool by multiplying the light points.

**Steps and coping:** Illuminate your steps for added safety and a striking visual effect.

**Flexible installation:** Its small size makes it easy to install in a variety of ways, depending on your needs and wishes.

The Pico BRiO is not just for underwater use. It is also perfectly suited to outdoor use. Garden Kit brackets allow these lights to be placed in the garden, synchronising the lighting of the pool with that of the green areas. This versatility harmonises the light throughout your outdoor space, creating a perfectly harmonised atmosphere.

**Garden and outdoor areas:** With Garden Kit brackets, integrate your pool and garden lighting harmoniously

## 4. Electrical Installation

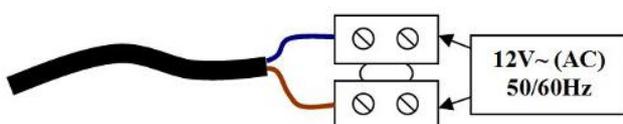


### Avertissement

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.

### 4.1. Connection to electricity



It is imperative to connect to the electricity supply in a dry environment, in a sealed connection box of which the cable

glands must be tight to prevent any water ingress.

## 4.2. Projector Protection

Independent protection is necessary for each PicoBrio (even if several lights 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.

## 4.3. Cable section

Voltage drops in the PicoBrio power cable must be limited to comply with applicable standards and guarantee optimum lighting.  Use the information in the table opposite (one light per cable)		Cable cross-section (mm <sup>2</sup> )			
	Max. length (m)	1,5 mm <sup>2</sup>	2,5 mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>
		15	25	40	60

## 4.4. PicoBrio X3 electrical connection



### Avertissement

The Vigibrio is an essential controller for powering and controlling PicoBrio X3 lights. It not only provides the power supply, but also manages and controls the lights for optimum operation. Here's how the Vigibrio and the PicoBrio X3 interact:

**Power supply:** The Vigibrio provides the power supply needed to operate the PicoBrio X3 lights. Without the Vigibrio, the lights cannot be powered correctly.

**Control:** The Vigibrio is used to control the PicoBrio X3 lights. It can control the various aspects of the lights' operation, such as light intensity, colour (if applicable), and possibly specific lighting effects.

**Additional control:** In addition to power and control, the Vigibrio can also offer more advanced management features, such as synchronisation of multiple lights, remote management via a user interface or application, and real-time diagnostics to ensure trouble-free operation.

## 4.5. Connectors and wiring

### Vigibrio-compatible light

X3 lights are manufactured with a 3-wire cable for easier connection! DMX /PWM / KNX lights are usually supplied with 6 wires. We have developed a gateway that combines the signal for the 3 primary colours and white in a single wire. This saves you time as connecting the lights is simpler.



### Vigibrio power supply

1. - VigiBrio 12VAC power supply
2. - 1.5m pre-wired cable supplied

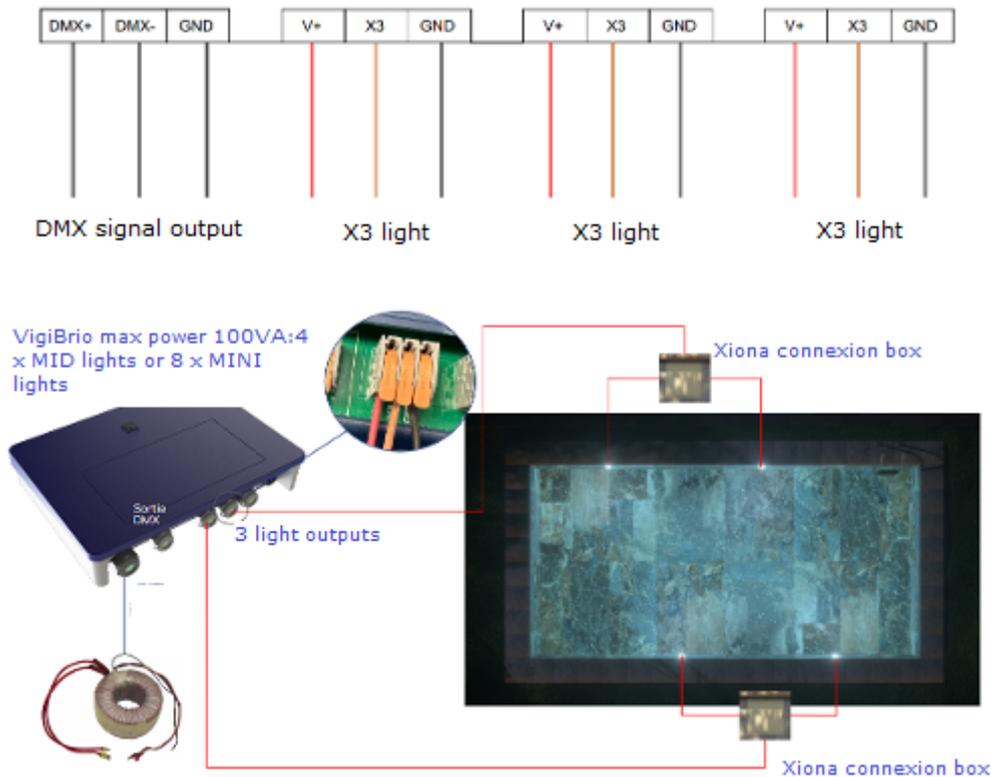


### Avertissement

#### Connector and connection description

The maximum power that can be controlled by the VigiBrio is 100W. If you have a lighting project that exceeds 100W in total power for the lights, contact your sales representative.

Up to 8 MiniBrio 2 X3 lights or 4 MidBrio X3 lights can be connected per VigiBrio



## 5. Installation Hydraulique

Only 28 mm in diameter, this ultra-compact light is designed to offer maximum flexibility in lighting your swimming pool, allowing you the option of creating several different light zones. The PicoBrio is designed not only for underwater use. It's also perfectly suited for outside use. Kit Garden holders allow these lights to be placed in the garden, synchronising the lighting of the swimming pool with that of the green areas. This is a versatile solution that will harmonise the lighting throughout your outdoor area, creating a perfectly harmonised atmosphere.

### 5.1. Installation in a standard 1.5 mm wall conduit / inlet

For an installation with a 1.5' outlet, the special 1.5" PicoBrio adaptor (CCEI reference: PF10R590) is required to screw the PicoBrio light fitting in correctly. Here are the important details to know

**Wall conduit compatibility:** This adapter is designed specifically for installations with a 1.5-inch inlet. It ensures perfect compatibility and a secure connection between the inlet system and the PicoBrio light.

**Adaptor reference:** PF10R590

**Easy installation:** The adapter makes it possible to install the PicoBrio light quickly and safely.



**Avertissement**

Please remove the two seals supplied on the PicoBrio before fitting it into the PicoBrio adapter to a 1.5' wall conduit.

Once a PicoBrio has been installed in the adapter, it is no longer possible to remove the PicoBrio from the adapter without breaking the adapter.



## 5.2. Installation in special PicoBrio inlets

When installing the PicoBrio with CCEI inlet (pictures below), you can fit the O-ring between the PicoBrio and the inlet (use suitable oil when assembling). Once compressed by the tightening of the light fitting, this seal provides a dry tube between the rear of the light fitting and the junction box above the water level.

Ceci permet notamment de renforcer l'étanchéité au niveau de la boîte de raccordement et limite les risques de gel dans la gaine. Ce joint ne peut pas à lui seul garantir l'étanchéité de la piscine, comme dit plus haut il permet simplement de mieux protéger la boîte de raccordement. En cas de dévissage du projecteur, si le niveau d'eau est au-dessus du projecteur, la gaine se remplira d'eau instantanément.

<p><b>One-piece inlet (PF10R550)</b></p> 	<ol style="list-style-type: none"> <li>1. Place the seal in the inlet and pass the cable through the inlet.</li> <li>2. Push and screw the light firmly in place</li> <li>3. Use the clamping tool supplied to secure the screw.</li> </ol> <p><b>Available colour :</b> White, Grey, Sand and Anthracite</p>
<p><b>Liner inlet (PF10R560)</b></p> 	<ol style="list-style-type: none"> <li>1. Place the seal in the inlet and pass the cable through the inlet.</li> <li>2. Push and screw the light firmly in place</li> <li>3. Use the clamping tool supplied to secure the screw.</li> <li>4. Clipsez le cache fourni par dessus la traversée de paroi</li> </ol> <p><b>Available colour :</b> Blanc, Gris, Sable et Anthracite</p>
<p><b>Concrete inlet (PF10R570)</b></p>	<ol style="list-style-type: none"> <li>1. Place the seal in the inlet and pass the cable through the inlet.</li> <li>2. Push and screw the light firmly in place</li> <li>3. Use the clamping tool supplied to secure the screw.</li> </ol>

	
<p><b>Kit Garden + Wall (PF10R580)</b></p> 	<ol style="list-style-type: none"><li>1. Screw the picket with the light support plate</li><li>2. Push and screw the light firmly in place</li><li>3. Use the clamping tool supplied to secure the screw.</li></ol>

## 6. Monochrome Floodlights: Dimming / Light Intensity Adjustment

You can adjust the light intensity of your bulbs via short power interruptions (<1 second). Three 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.

## 7. RGBW lights: Use - Autonomous mode (colour models only) (PK10R501)

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.Tech-no rhythm | 16.Blue variations | 17.Random parade | 18. Random colours



## 8. Safety

If there is an abnormal temperature rise inside the PicoBrio, a safety device automatically reduces the lighting intensity. If the heat is too high, even following a reduction in the intensity, the light cuts the lighting and emits red flashes (only colour models). The light power supply must be cut to return to normal operation.

CCEI declares that the product meets the safety and electromagnetic compatibility requirements of European directives electromagnetic compatibility requirements of European Directives 2014/35/EU and 2014/30/EU EU and the Radio Equipment Directive 2014/53/EU.



Emmanuel Boret  
Marseille, on 30/07/2024

Distributor's stamp

*Date of sale:* ..... *Batch N°:* .....