Technical instructions







Remote control for LED lighting

Réf: PF10R088 (RC+) - PF10R08E (RC+ BT)







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

1. Pack contents

- 1 Brio RC+ or RC+ BT control box with 1.5m of 3x2.5mm² pre-fitted cable with screws and wall plugs
- 1 "BRiO®" 4 way radio-frequency remote control
- Technical instructions (this document)

2. Technical characteristics

Power voltage	12V ~ AC 50/60Hz
Power consumption	5W maximum
Switching power (spots connected)	120W maximum
Ingress Protection	IP-55
Dimensions	110x160x42 mm
Radio-frequency remote control (range 30m)	4 way - Frequency: 433.92Mhz
	Battery: 12V 23A alkaline
	Consumption when sending: 18 mA max
	Power rating < 0.1 mW
	M/N.: MPRD0105
Bluetooth®	Low Energy (v4.x)
Diuctoonie	Conforms to the R&TTE Directive 1999/5/EC

3. Description

Brio RC+ or RC+ BT enables to change remotely the colours of Brio® LED lights. It can control up to 120W (3 X30 or 8 X15) and must be connected to a control panel fitted with a 230/12V transformer to supply the controlled lights.

You can control the lights either with a radio remote control or with a smartphone thanks to a Bluetooth® app (*Ref. PF10R08E _ BRiO RC+ BT*)

3.1. Bluetooth® Control

The **BRIO RC+ BT** includes a Bluetooth® transmitter, which allows your lights to be controlled by a smartphone or tablet. To be able to control the **BRIO RC+ BT**, you will need an iOS (Apple®) or Android device with Bluetooth® Low Energy (v4.x) connectivity. Other operating systems (Windows Phone®,...) or devices equipped with Bluetooth® versions older than 4.0 **will not work with it**.

3.2. Lights compatibility

To get all lights synchronized in your pool you have to combine with RC+ and RC+ BT system compatible lights. All after November 2016 manufactured CCEI lights (all X30 and X15 models) are compatible.



4. Installation

4.1. Electrical connections



Installation of this project involves a hazard of electric shocks. We strongly recommend you contract a professional installer. Incorrect installation places you in danger and may irreversibly damage the product and the equipment connected to it.



For reasons of safety and compliance with the NF C15-100 standard, the Brio RC+ or RC+ BT box must be installed

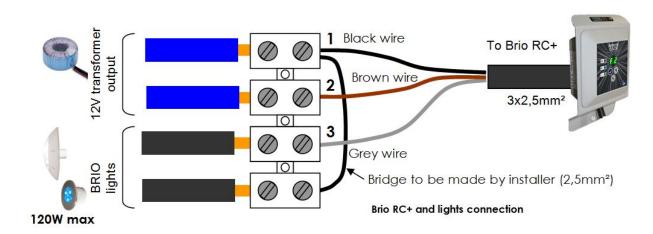
- over 3m50 from the edge of the pool. This distance includes cable deviations around obstacles. If the box Brio RC+ or RC+ BT is installed behind a wall, this will then be the distance required to complete the loop and connect to the box.
- or in an underground space immediately next to the swimming pool. In this case the space must be accessible via a hatch which requires a tool to open it.

The box is resistant to splashing but must not be placed in a place that may become flooded. The box Brio RC+ or RC+ BT must be placed on a flat and stable surface and attached to the wall using the screws and wall plugs supplied.

The Brio RC+ or RC+ BT must be connected **to the secondary output** of the lighting transformer. Only Brio-compatible lights (see description) may be connected to this transformer.



The total power of the connected lights must never exceed 120W.





5. BRIO RC+ operation

5.1. Control interface

The interface includes a two-digit multi-function display, 3 indicator lights and 3 keys;



Component		Description
Indicator ((*)	lamp	"Radio": This indicator light lights when receiving radio commands (from the 4-way remote controller)
Indicator	lamp	Flashes rapidly during initialisation (Bluetooth® unavailable)
Indicator	lamp	"Lights": Off when the lights are turned off Flashes when commands are sent (micro-drops) to the lights Continuously on when the lights are turned on
Key		"Up / Plus" Increases a value and scrolls up the settings Long tap (after cut see 5.3): enables to access to the intensity settings
Key		"Down / Minus" Decreases a value and scrolls down the settings Long tap (after cut see 5.3): enables to access to the sequencing speed settings
Key 🚺		"Confirm / OK" Confirms selection of a parameter / colour / colour change sequence Long tap (after cut - see 5.3): enables to access to the selection of the radio code Short tap: enables to to turn on and off the lights



Brio RC+ or RC+ BT v2.0EN Technical instructions

5.2. Power on

When the unit is turned on, various types of information will be successively displayed on the multi-function display, and all indicator lights and segments of the display will flash in sequence.

Message	Meaning	
10	Software version loaded in the Brio RC+ or RC+ BT . (12 = version 1.0)	
-1/-2/-3/-4	Current radio code	
L 1/L2/L3/L4	Current Luminous intensity	
d 1 / d2 / d3	Speed of colour sequence	

5.3. Intensity and sequencing speed settings

Turn off the power of the control panel and press the relevant scrolling key to display the intensity (() or sequencing speed settings ((L)). Turn on the control panel and release the key.

Use then the keys and to select the right setting.

Confirm with \(\oldsymbol{\pi} \) and wait for the signal to be sent out to the lights. The latter done, the control box displays:

- Fo if the intensity has been set
- H if the sequencing speed has been set

In these modes it is easier to verify the changes.

If you have a RC+ BT (Ref. PF10R08E) it is possible to make the changes easily with the app.

5.4. 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.See green
- 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

Reset: -L. Deletes the favorite colour, intensity settings, sequencing speed, sets the lights to blue and the **Brio RC+ or RC+ BT** displays **F**1.





































In H animation mode, several colour nuances are played. The user may save a colour he particularly likes while pressing the "pause key" of the remote control when the colour is currently played. The colour is then stored under $\digamma U$. The storage is possible only with the animation mode $\digamma U$.



5.5. Radio-frequency remote control

The radio-frequency remote control can be used to control colour changes from a distance. A wall mount is also supplied. This mount is attached to a wall using two screws, it holds the remote control unit when not in use.



Key	Function
Ф	On / Off This key turns the lights on and off. When turning back on they will be the same colour or in the same sequence as when they were turned off.
•	Set / Program When the lights are on, this key will switch between "set" and "sequence" modes. When the pool is lit in set mode, pressing this key will start sequence n°1 (FI). If a sequence is running when the key is pressed, the pool lighting will switch to white (FI).
₩	Last and Next These keys are used to scroll through colours and sequences.

To replace the battery, open the device (using a screwdriver as illustrated in the drawing) and replace the battery ($12V\ 23A\ alkaline$).



Check the polarity is correct as shown on the bottom of the device.





5.6. Selecting the radio code

In the event that another radio device is in the vicinity, it may interfere with the operation of your installation (e.g. a neighbour also has a Brio RC+ or RC+ BT), the code can be changed. You will also need to change the code on the Brio RC+ or RC+ BT and inside the remote control unit. To do this it is necessary to

- 1. Cut the power to the Brio RC+ or RC+ BT,
- 2. Press the key and hold it,
- 3. Turn on the Brio RC+ or RC+ BT,
- 4. Release the key,
- 5. Change the current radio code which appears on the screen (/ / 2 / 3 / 4),
- 6. Use the keys and to set it again,
- 7. Press the key to confirm.

There are 10 switches inside the remote control unit (under the battery cover) which are used to set the code. To open the device, use a screwdriver as illustrated in the drawing.



The code displayed on the screen (-1/-2/-3/-4) must correspond to the positions of switches n°5 and 6.

- A "0" corresponds to the "OFF" switch position
- A "1" corresponds to the "ON" switch position

The other switches must always stay in the same position.

Display	Code	Positions of the switches
<u>- 1</u>	0011 00 1010	ON
r2	0011 01 1010	ON
r∃	0011 10 1010	ON
-4	0011 11 1010	ON



6. Bluetooth® connection (RC+ BT_PF10R08E)



Only one device can be connected to a BRIO RC+ BT at a time.

When the application is opened it scans the **RC+ BT** in its range and displays "Looking for **RC+ BT**".

- If only one **BRIO RC+ BT** is in range, it will connect automatically.
- If there are several available, a selection list will appear.
- If no devices are detected, the application will display the message "No **Brio RC+ BT** detected". In this case, check that your device is compatible with Bluetooth Low Energy (4.x), get closer to the **BRIO RC+ BT** or try with another device. Press the button in the centre of the screen to launch a new search.

A. Copyright

The Bluetooth® trademark is associated with the protected marks belonging to Bluetooth SIG, Inc.

The Apple® trademark is a protected mark belonging to Apple Inc., filed in the United States and other countries.

The Windows Phone® trademark is a protected mark belonging to the Microsoft Corporation., filed in the United States of America and/or in other countries.

B. Declaration of conformity

CCEI S.A.S (FR 47 40 35 21 693) declares that product Brio RC + or RC+ BT is compliant with the safety and electromagnetic compatibility requirements of European directives 2006/95/CE and 2004/108/CE.		
CE		Emmanuel Baret Marseilles, on 23/02/2017
Distributor's stamp		
Date of sale:		

