



Technical instructions

Mini Brio X15CA

Underwater LED lighting

Réf : PK10R303



No-Niche Underwater Luminaire for Swimming Pool

UL FILE E471596



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Read all of this leaflet carefully before installing, operating or using this product.

1. Packaging Contents

1 Mini Brio X15 projector with

- Locking/unlocking tool
- 2xAWG18 cable: Depending model
 - 4,6m (15ft)
 - 15,2m (50ft)
 - 30,4m (100ft)
- Wall through: Depending model
 - Wall through PF10R191 for fiberglass or concrete pool (supplied with 2" gasket + 2" locknut)
 - Wall through PF10R192 for liner pool (supplied with 2" gasket + 2 liner gasket + 4 inox screws + liner flange + 2" locknut)
- Projector / Wall through O-ring (D35xd3,5mm)
- Technical manual (this document)

2. Technical features

Sizes	Ø 47 mm (1-11/16in) / length 84mm (3-5/16in)		
Installation	Only in a threaded 1.5" niche ref. PF10R191 or PF10R192		
Power supply	12 V ~ (AC) 50Hz/60Hz		
Power consumed	12W maximum (according to colour)		
Weight	Cable lenght	Projector only	Complete box
	4,6m (15ft)	0,5kg (1,1lb)	1,2kg (2,6lb)
	15,2m (50ft)	1,2kg (2,6lb)	1,9kg (4,2lb)
	30,4m (100ft)	2,2kg (4,4lb)	2,9kg (6,4lb)
LED type	3 powerful RGB LEDs Risk group 1 (low risk) according to IEC62471:2006		
Protection index	IP-68		
Max. luminous flux	According to colour/411 lm maxi (white)		
Color control	By BRIO-RC+ or by toggle switch		



The projector must never be powered other than in water.

3. Description

The Mini Brio X15 power LED projectors are designed to replace incandescent lighting, reduce your energy consumption and light up your pool in any colour.



They come with powerful LED to improve the quality and reliability of the lighting of your pool while reducing your energy consumption.

The colours are created by mixing 3 primary colours: Red, Green and Blue (RGB Technology).

By adjusting the intensity of these three colours, it is possible to create an endless amount of shades.

3.1. 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 adhered to. 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 power source. 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 to service person, pool users or others due to electrical shock.



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 user, installer or other due to electrical shock and may also cause damage to the property.

3.2. Technical support

Website : www.ccei.ca / Phone : +1.514.649.7748

4. Use - Autonomous mode

In the absence of a control unit, the projectors operate autonomously and the user can choose between 18 modes: 11 set colours and 7 programmes;

Mode	Type	Description
1	Set colour	Pure white
2	Set colour	Blue
3	Set colour	Blue lagoon
4	Set colour	Cyan
5	Set colour	Violet
6	Set colour	Magenta
7	Set colour	Pink
8	Set colour	Red
9	Set colour	Orange
10	Set colour	Green
11	Set colour	Sea green
12	Sequence	Quick "Rainbow"
13	Sequence	Slow "Rainbow"
14	Sequence	Procession of 11 set colours
15	Sequence	Colourful psychedelic flashes
16	Sequence	Blue/White/ Cyan
17	Sequence	Random sequence 1
18	Sequence	Random sequence 2

Change of mode

The mode can be changed by cutting the power supply of the projectors for a very short space of time (less than 1s).

By successive interruptions, it is possible to display the 18 operating modes. After mode 18, the Mini Brio X15 return to the first colour (mode 1)

Reset

To reset the projectors and take them to mode 2 at the same time, the power supply should be cut for approximately 2s.

When the projector is started up after a cut of several seconds (more than 4s), the Mini Brio X15 loads back up in the mode displayed at the time it was last shut down.

5. Safety

If the temperature inside the Mini Brio X15 is abnormally high, a safety device shuts off the lighting and produces a red flashing light. As soon as the normal temperature returns, the projectors return to normal working order.

6. Installation

6.1. Wall through installation

6.1.1. Fiberglass pool

Prior to installing, drill a hole in the pool using a 60-mm (2 3/8-in) diameter cylinder saw. The wall through is connected on the rear to a 1,5" threaded coupling.



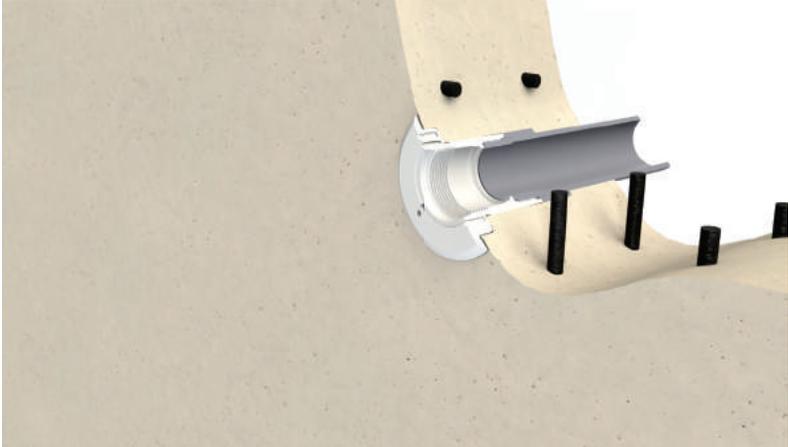
6.1.2. Concrete pool

Assemble a pipe of sufficient length with a 1,5" threaded coupling onto the wall through before sealing the assembly.

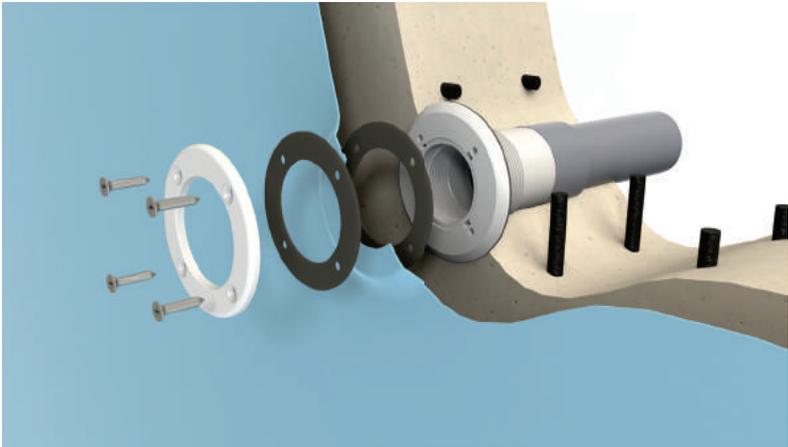


6.1.3. Concrete + liner pool

Assemble a pipe of sufficient length with a 1,5" threaded coupling onto the wall through before sealing it.



Then glue a first gasket before placing the liner ;



6.1.4. Panels + liner pool

Prior to installing, drill a hole in the pool using a 80-mm (3 1/8-in) diameter cylinder saw. Think to glue the first liner gasket before installing it.

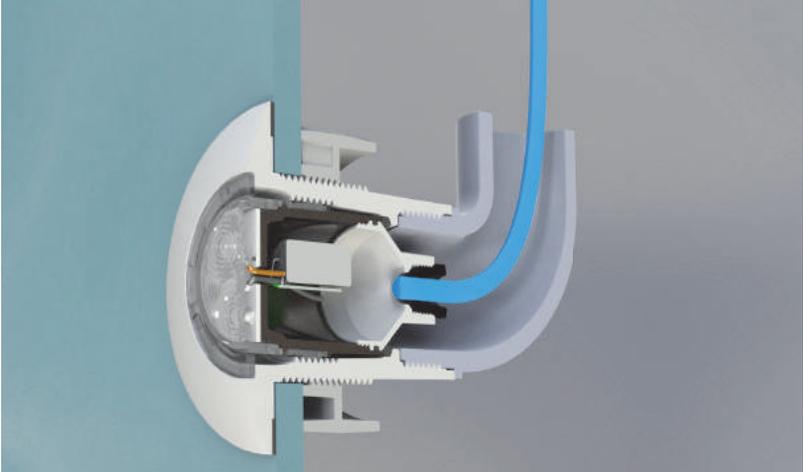


The wall through is connected on the rear to a pipe with a 1,5" threaded coupling.

6.2. Placement in a wall



BRIO Mini Brio X15CA LED projectors must only be installed in a threaded 1.5" niche ref. PF10R191 or PF10R192. We recommend that installation is performed by a professional.



6.2.1. In wall through



1. Pass the gasket and the projector cable through the wall passage up to the connection box.
2. Push and screw the projector to the back.
3. Use provided tool to securely screw the projector.

6.3. Electrical Connections



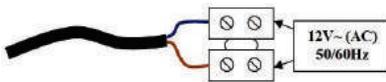
Installing this product could expose you to an electric shock. We strongly recommend that you use a qualified professional. An installation error could put you at risk and irreversibly damage the product and the equipment connected to it.

In compliance with the current National Electrical Code (NEC), underwater lighting must always be supplied with SELV (Safety Extra Low Voltage). Turn off the power supply upstream before doing anything to the electrical installation.

Risk of Electrical Shock. Connect only to a circuit protected by a ground-fault circuit-interrupter (GFCI). If you cannot verify that the circuit is protected by a GFCI, contact a qualified electrician.



THE LED LIGHT AND PLASTIC NICHE FORM A COMPLETE NON-METALLIC LOW VOLTAGE LIGHTING SYSTEM. THIS CONFIGURATION DOES NOT REQUIRE BONDING OR GROUNDING WHEN POWERED BY A LISTED TRANSFORMER AND INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC).



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.

Once startup and the operation tests are complete, it is recommended to drown the connection with a reusable soft hydrophobic insulating gel. (ref. CCEI PNSP0002)



The soft external cable of this lighting system cannot be replaced.

If this cable is damaged, the lighting system must be disposed of or returned to the manufacturer for possible reconditioning.

7. Transformer power

The transformer to be used should have a secondary voltage of 12V (12.5V according to the model). Its power should be in keeping with the power of the projectors to be connected. At any rate, the sum of the powers of the projectors should remain below or equal to the power	Transformer power	Max. no. of X15
	50	4
	100	8
	300	25



It is preferable to use power supplies from the same manufacturer.

A. Declaration of Conformity

The Company CCEI Inc. (Québec 1170122155) declares that the product Mini Brio X15CA satisfies the safety and electromagnetic compatibility requirements of European directives 2006/95/EC and 2004/108/EC and is UL listed under file E471596.		
 		Pierre-Yves Flattot Montreal, 05/02/2016
Distributor's stamp		
<i>Date of Sale:</i> <i>Serial No.:</i>		