



Technical instructions



Brio WiL

Bluetooth and Wi-Fi controller for CCEI LED lights

P/N: PF10R08J

Table of Contents

1. Pack contents	2
2. Technical support	2
3. Warnings	2
4. Technical data	2
5. Description	3
6. Installation	3
6.1. General	3
6.2. Electrical connections for 12 VAC lights	4
6.3. Electrical connections with a socket Plug in Pool 24 VDC (PF10R24C)	5
7. Use of the Brio WiL	6
7.1. Control interface	6
8. iOS / Android app	7
8.1. App description	7
8.2. Set up an operating time range for your lights	8
8.3. Brio WiL connection	8
8.4. "Connection" light state	9
8.5. Voice assistants (Alexa)	9
8.6. Compatibility	10
A. Copyright	10
B. Declaration of conformity	10



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

1. Pack contents

- 1 Brio WiL with 3 feet (1.5m) of 3x2.5mm² pre-fitted cable
- 1 bag containing 2 screws, 2 wall plugs and 3 rapid connectors (2 x 3 pts + 1 x 5 pts)
- Technical instructions (this document)

2. Technical support

USA: na.ccei-pool.com/us / Tel: +1.213.425.5280

Canada: na.ccei-pool.com/ca / Tel : +1.514.963.4226

3. Warnings



This product must be installed by an approved or certified electrician or a qualified pool professional in compliance with the National Electrical Code (CEX), NFPA 70 or the Code Canadien de l'électricité (CCE), CSA C22.1. All local installation codes and by-laws must also be respected. Incorrect installation creates electrical hazards which can lead to death or serious injury for users, installers and other persons from electric shocks, and can also lead to damage to the power source. Always disconnect power at the circuit-breaker board before installation. Failure to do so can lead to death or serious injury for people using the swimming pool, installer and other persons from electrical shocks.



For countries which comply with the regulations of the International Electro-technical Commission (IEC): Light fittings must be installed by an approved or certified electrician or a pool maintenance professional, in compliance with the current IEC 364-7-702 standard and all local applicable codes and by-laws. Incorrect installation creates electrical hazards which can lead to death or serious injury for users, installers and other persons from electric shock, it can also lead to damage of the property.

4. Technical data

Power voltage	12V ~ AC or 24 VDC 50/60Hz (depending installation, see section 6)
Power consumption	5W maximum
Switching power (lights connected)	120W @ 12VAC or 60W @24VDC
Index of protection	IP-55
Dimensions	72 x 139 x 36 mm 2.5 x 5.5 x 1.6 in.
Installation	Box : wall fasteners (2 screws / wall plug supplied)
Bluetooth®	Low Energy (v4.x) FCC : 2AC7Z-ESPWOOM32 IC: 21098-EPSWROOM32
Wi-Fi	802.11 b/g/n (802.11n up to 150 Mbps) Wi-Fi certification: Wi-Fi Alliance

5. Description

Brio WiL remotely controls the colour changes of the CCEI LED lights.

The controller is installed in series to the light transformer.

Bluetooth or Wi-Fi devices (smartphone or tablet) allow distant communication with the controller which instantly transmits the information to the light plugged into it.

6. Installation

6.1. General



Installation of this product 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 safety and compliance reasons and according to the NEC directives, the Brio WiL must be installed:

- 1. over 3.50m (11.5 ') away (or more if required by local legislation) from the edge of the pool. This distance includes cable deviations around obstacles. If the Brio WiL box is installed behind a wall, this will then be the distance required to complete the loop and connect to the Brio WiL .**
 - 2. 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 case is resistant to water splashes but must not be installed in a place that may become flooded. The Brio WiL must be placed on a flat and stable surface and screwed to the wall using the screws and wall plug supplied.

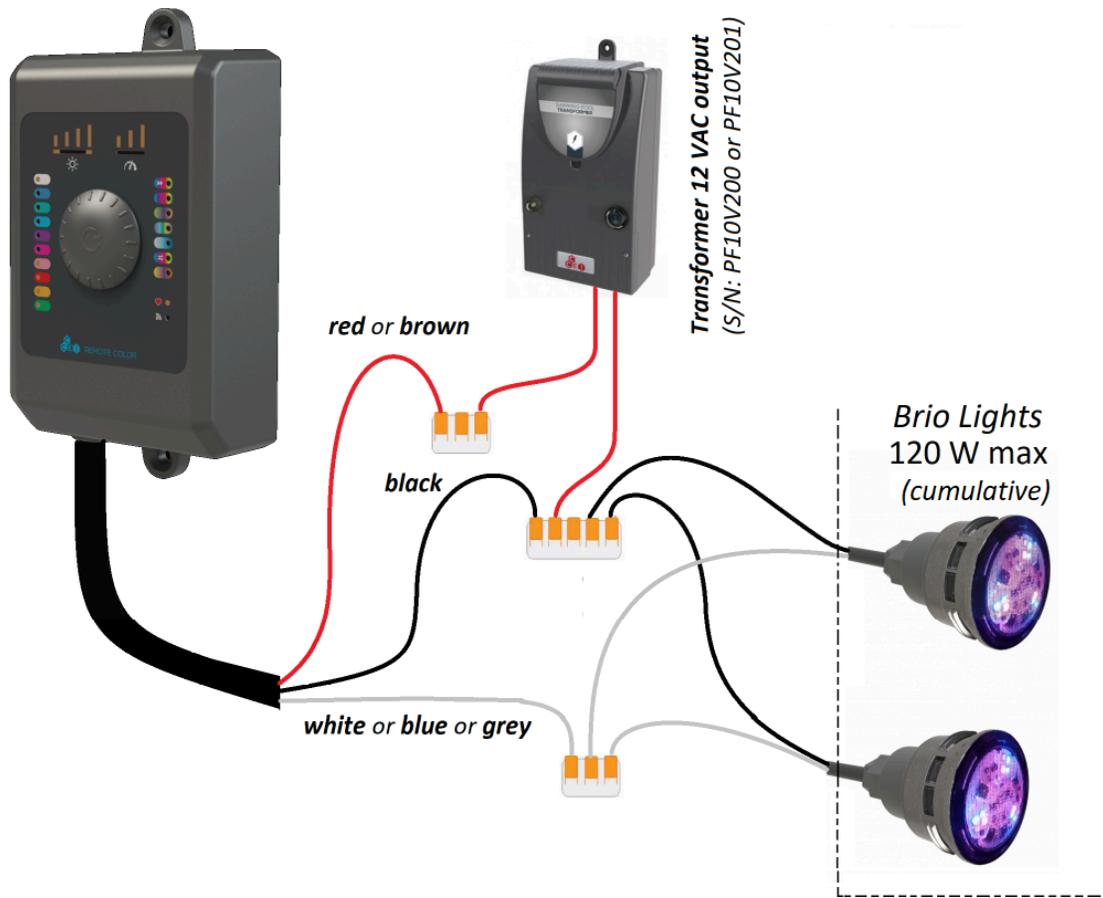
The Brio WiL must be connected to **the secondary output** of the light transformer.



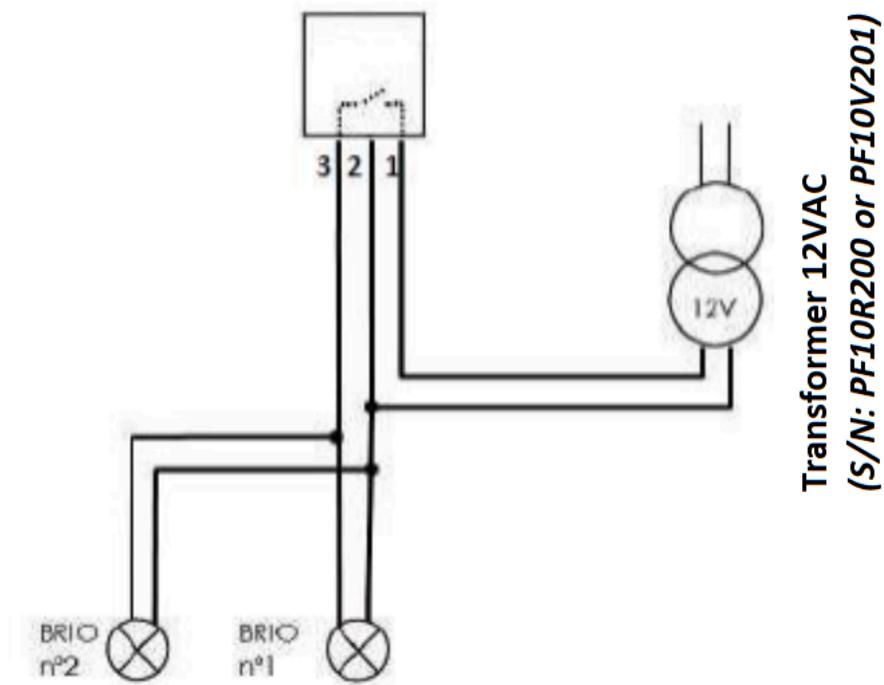
The total power of the connected lights must never exceed 120W with a AC power supply.

The total power of the connected lights must never exceed 60W with a DC power supply.

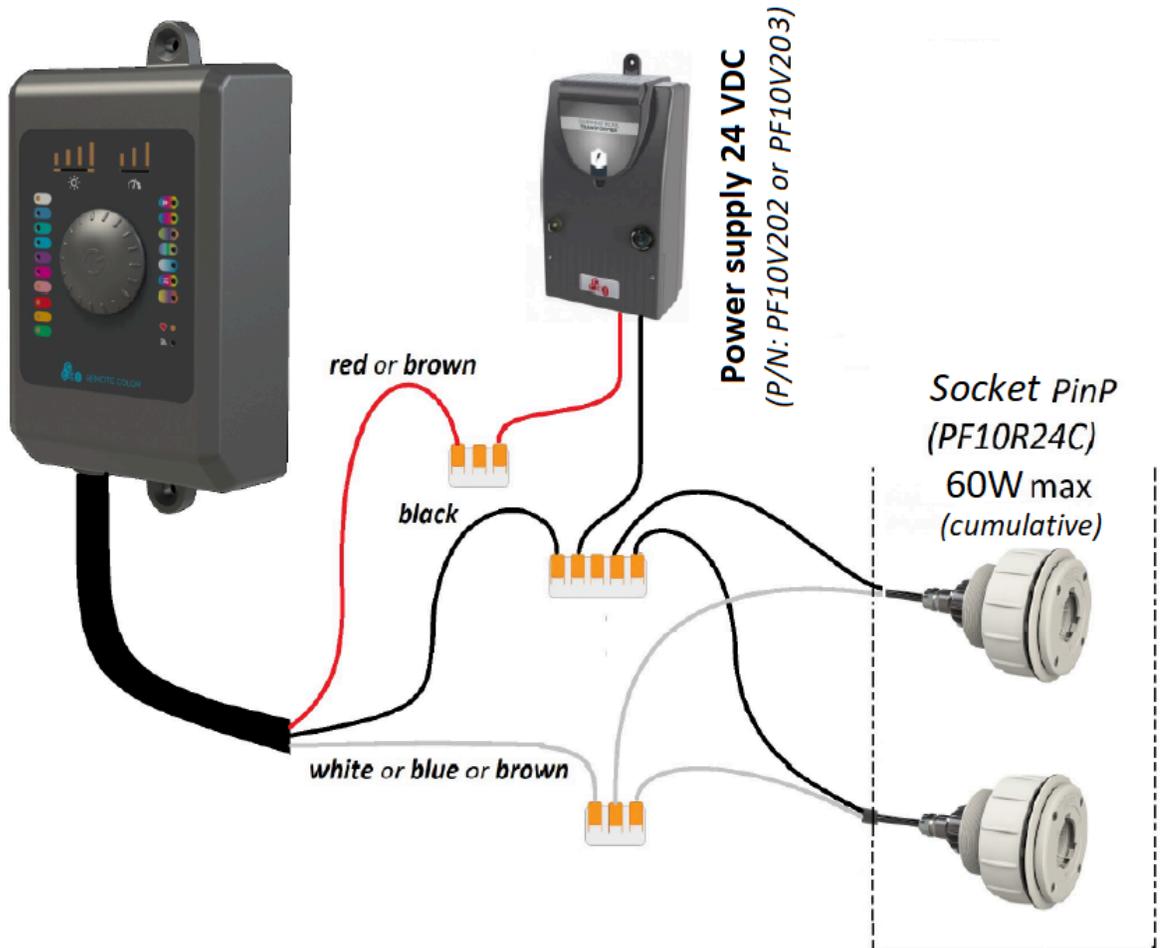
6.2. Electrical connections for 12 VAC lights



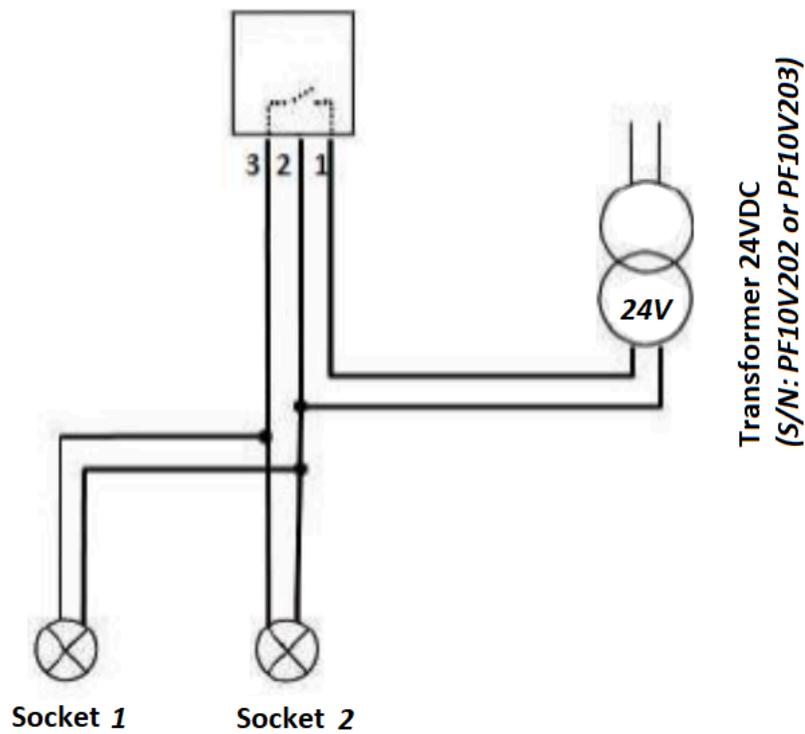
Electrical schematic



6.3. Electrical connections with a socket Plug in Pool 24 VDC (PF10R24C)



Electrical schematic

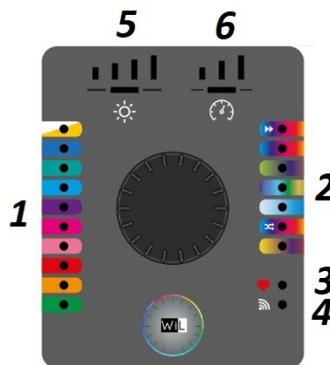


7. Use of the Brio WiL

7.1. Control interface

The interface is composed of one multi function selection button and 28 indicating lights describe below:

1. 10 lights for fixed colour selection
2. 7 lights for colour show selection
3. 1 light for favourite colour selection
4. 1 light for connection status
5. 5 lights for dimming selection (4 selectable levels)
6. 4 lights for show speed selection (3 selectable levels)



Element	Description
Colours and show lights	Turn the selection button and push 1 time on the desired colour / show.
Cold white / Warm white light 	You can choose between cold white or warm white. At the first click you are going to use the cold white. For warm white, click a second time.
Favourite light 	Select the first light show (in the top right corner), when the desired colour is selected, push the button one more time. To come back to this colour, click on the favourite button.
Dimming 	Select the dimming icon and click on it to adjust the light intensity. When dimming a solid colour or a show, the controller will automatically switch to solid cold white so that you can differentiate the 4 dimming levels available.
Show's speed 	Select the speedometer icon and click on it to adjust the colour show speed. When changing show speed, the controller will switch to the "Colourful psychedelic flashes" which is the best show to differentiate the 3 speed levels.

At any time, a long click (> 3sec) on the rotary button allows you to turn the lights on or off.

In case of current shutdown, the chosen program will be saved.

When a mode is validated, the corresponding code is sent to the light with micro current cut.

8. iOS / Android app

Search **BRiO WiL** or **WiL** in the App Store or Play Store search engine. Download and install the app.

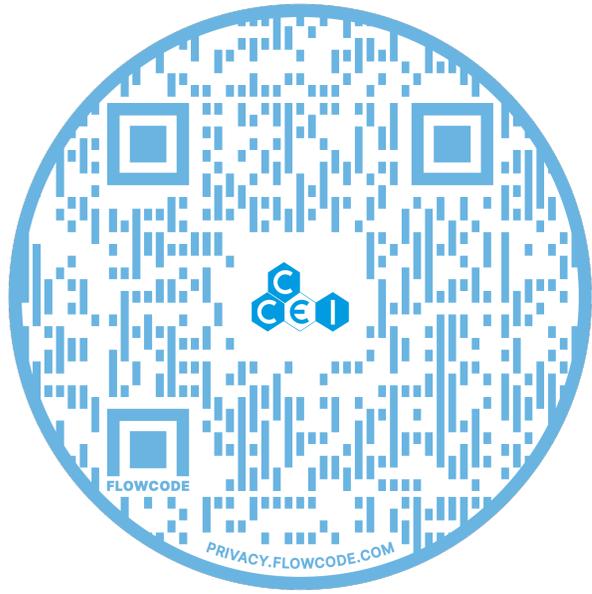
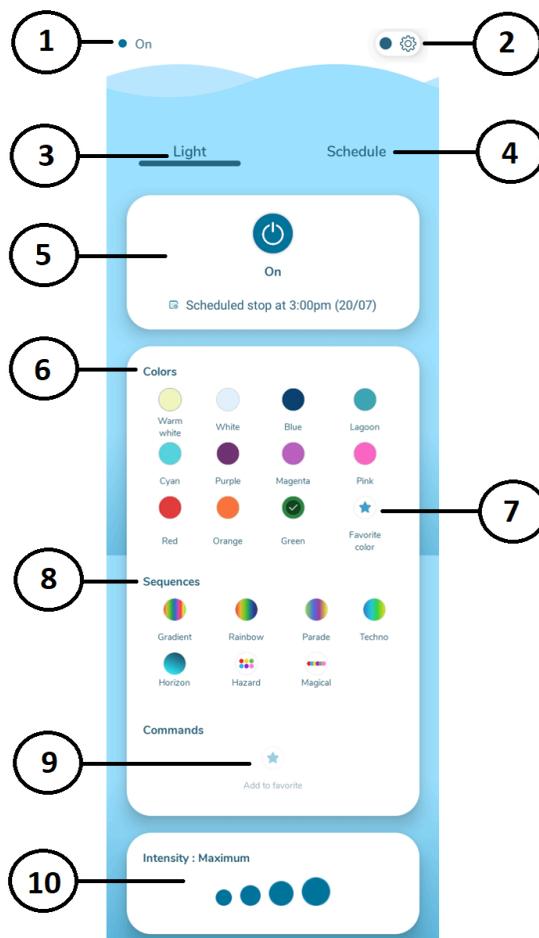
QR code for Android app	QR code for iOS app
	

Table 1.

8.1. App description



1	Indicates if the Brio WiL is ON or OFF
2	Access to settings, allows to configurate Wi-Fi connection and voice assistants (Alexa) if you're connected to Wi-Fi

3	General menu to select light colours / shows
4	Access to the programming menu to define operating time ranges
5	ON / OFF button and information and power ON and OFF hour information
6	Fixed colour choices
7	Light up your favorite colour
8	Show choice
9	Push this button during a show to save a colour and define it as your favourite colour
10	Allows you to choose the intensity of the light. During a show, a sub menu appears to modify the speed

8.2. Set up an operating time range for your lights

To set up an operating time range, go to "Schedule" menu (4)

Different options appear:

- **Timer:** Allows you to program the Brio WiL to turn off after a set period of time.
- **Schedule:** Allows you to define a daily operating range.
- **Weekend mode:** Allows you to set a second operating range for Saturday and Sunday
- **Twilight:** Your lights will turn on at dusk and turn off after a set time.



You can check when your lights are going to turn on or off in the light tab.

8.3. Brio WiL connection



Only one device (phone / tablet) can be connected to the Brio WiL.

Your phone's Bluetooth must be activated.

When the application opens, it scans the Brio WiL(s) in range and displays "Searching for Brio WiL".

- If only one Brio WiL is in range, the connection is automatic and done either in Bluetooth or Wi-Fi, depending on the last connection. (First connection must be in Bluetooth)
- If several Brio WiLs are available, a list of choices appears.
- If no device is detected, the app displays "No Brio WiL detected".
- If nothing happens, check that your device is Bluetooth Low Energy (4.x) compatible, try to connect closer from the Brio WiL, and try with another device. Push the centre screen button to launch a new search. The app may also suggests a switch in Wi-Fi connection.

8.3.1. Connection modes available (Wi-Fi or Bluetooth)

When you launch the app, a Wi-Fi or Bluetooth connection is set up. To verify the current connection mode, click on .

8.3.2. First Wi-Fi connection

If it's your first Wi-Fi connection; a router must be setup. For this go to " " and "Connection".



- **The Brio WiL use the Bluetooth connection to setup the Wi-Fi connection.**
- **The Brio WiL is compatible with Wi-Fi network 802.11 b/g/n (2,4 GHz) and "dual band", but not with 802.11 a/ac/ad (5 GHz).**

Select "To a new WiFi network"

Enter the SSID of the router (Network's name) and the password of the Wi-Fi network. By default, the SSID will be the one to which your phone is connected.

Each time a new network is configured it will be saved and accessible by clicking on "Get saved credentials".

When the Wi-Fi connection is done, you can continue to use your phone normally.

The  light lights up in different colours depending on the status of the control and can also flash. Here is a table listing all the states:

8.4. "Connection" light state

The  light lights up in different colours depending on the status of the control and can also flash. Here is a table listing all the states:

Light state	Meaning	Needed verification
Blue flash every 2 seconds	Device configured in Bluetooth®, waiting for a smartphone connection.	Check that your Bluetooth is activated and that your device is compatible with Bluetooth Low Energy (4.x).
Steady blue	Smartphone connected to the device in Bluetooth®.	
Green flash every 2 seconds	Device configured in Wi-Fi and connected to the router. Waiting for a smartphone connection.	Check that your phone is connected to the Wi-Fi network Launch a search with the app in Wi-Fi mode.
Steady green	A smartphone is connected to the Wi-Fi.	
Green flash 2 times per second	SSID Configuration in progress - Password needed to connect to the network.	Write the network password and click on "send".
Fast green flash	Connection issue: SSID mistake or unreachable router.	Verify the network name, the password and your internet connection.

8.5. Voice assistants (Alexa)

First, you will need to install and create an Amazon Alexa account.

Go to the application settings  then "My account & Voice assistants".

You will first need to create a Brio WiL account, enter your email and password.

Once connected, add the Brio WiL to Alexa.

Click on "install Vigipool NA skill".

Once installed, you can control your lights directly via Alexa (without going through the WiL application).



Alexa associates your pool lights with the name "Brio". Here are some possible voice commands:

Alexa...

- **Light Brio in blue**
- **Sets Brio's brightness to 50%**
- **Light up Brio in Rainbow**
- **Set the scrolling speed to 75%**
- **Turn Brio on / off**

8.6. Compatibility

All CCEI lights are compatible with the Brio WiL

A. Copyright

The Bluetooth® word mark and associated logo are registered trademarks owned by Bluetooth SIG, Inc.

The Apple trademark is a registered trademark of Apple Inc. and is used in the U.S. and other countries.

B. Declaration of conformity

CCEI Inc. (Quebec 1170122155) declares that the product Brio WiL is compliant with the safety and electromagnetic compatibility requirements .		
		Pierre-Yves Flattot Montreal, on 12/02/2020
Distributor's stamp		
<i>Date of sale:</i> <i>Batch N°:</i>		