NTS
NESPA TILED SPAS

SPA LIGHTING

PAL™ LIGHTING

DUAL ZONE LIGHTING SYSTEM

OPERATIONS MANUAL



PAL 65W MULTI COLOR DUAL ZONE REMOTE CONTROL TRANSFORMER & WI-FI 24VDC

MODEL: 64-PCR-2ZW-65

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⚠ IMPORTANT INFORMATION

Improper installation carries the potential for electrical hazards, presenting a risk of severe or even fatal injuries to pool users, installers, or bystanders due to the threat of electrical shock, and may also result in property damage.

For your safety, it is imperative that this product be installed and maintained by a licensed and qualified contractor specializing in pool equipment, adhering to local regulations. The individual responsible for maintenance should possess extensive experience in pool equipment installation and upkeep to ensure precise adherence to the instructions outlined in this manual. Prior to installation, thorough comprehension, and compliance with all provided warning notices and instructions are crucial. Failure to do so may lead to property damage, personal injury, or loss of life. Any improper installation and/or operation may void the product's warranty and pose significant electrical hazards, potentially resulting in severe harm, property damage, or fatality. It is strictly advised not to modify this equipment. Installer, please be aware that this manual contains vital information concerning the installation, operation, and safe utilization of this product, which should be communicated to the equipment's owner/operator.

PREPARATION

This manual provides installation and operational instructions for the PAL Lighting PCR-1Z, PCR-2Z, PCR-1ZW, PCR-2ZW & PCR-1Z-SM Lighting Controllers.

Read the installation & operational manual before proceeding with the installation. Keep this manual for future reference.

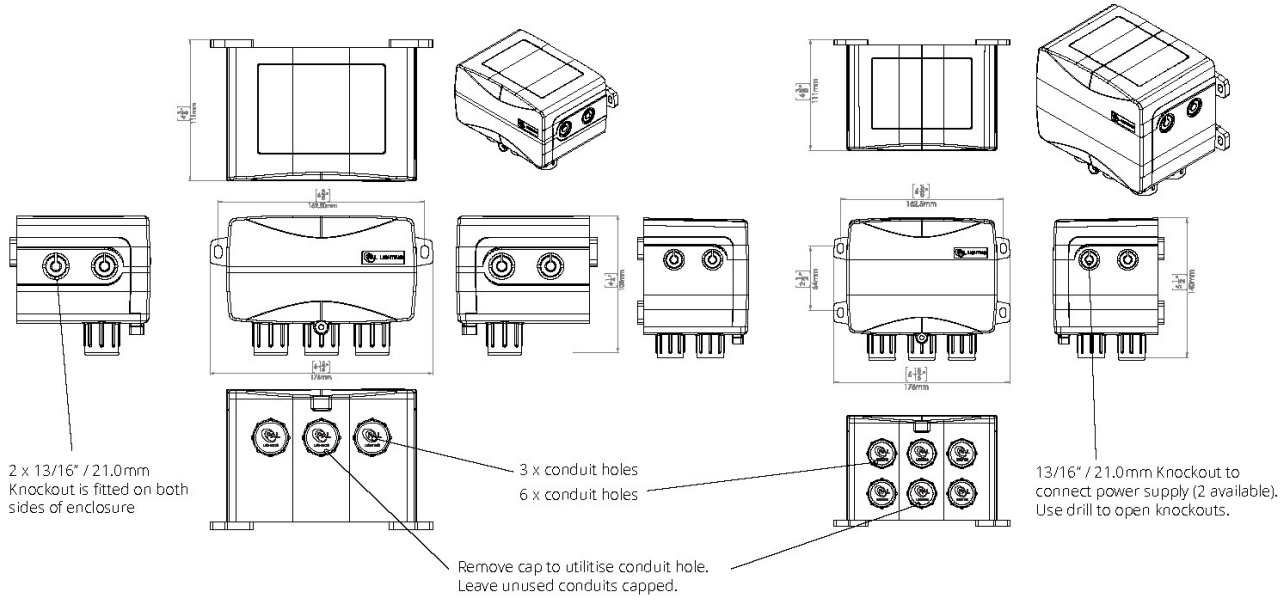
IMPORTANT NOTICE

No bonding is required from this Class 2 power supply to the UL Listed PAL Pool Light fixtures as they are made of an all-plastic construction and comply with the NEC article 680 requirements.

HARDWARE INSTALLATION

HARDWARE INSTALLATION INSTRUCTIONS FOR RGB LIGHTING CONTROLLERS

1. The PCR -1Z-SM/PCR-1Z/PCR-2Z Class 2 Power Supply is a weatherproof construction (IP65) and should be mounted on a flat surface using the mounting legs on the enclosure with appropriate fixtures for the mounting substrate and in a suitable position to suit the intended location of the PAL 4 Wire LED Pool Lights and installed to comply with all the requirements of the National Electrical Code (NEC) and all relevant local codes and ordinances.



Knockout Instructions
It is recommended that the cover is fitted and the cover screws tight when the knockouts are being removed.

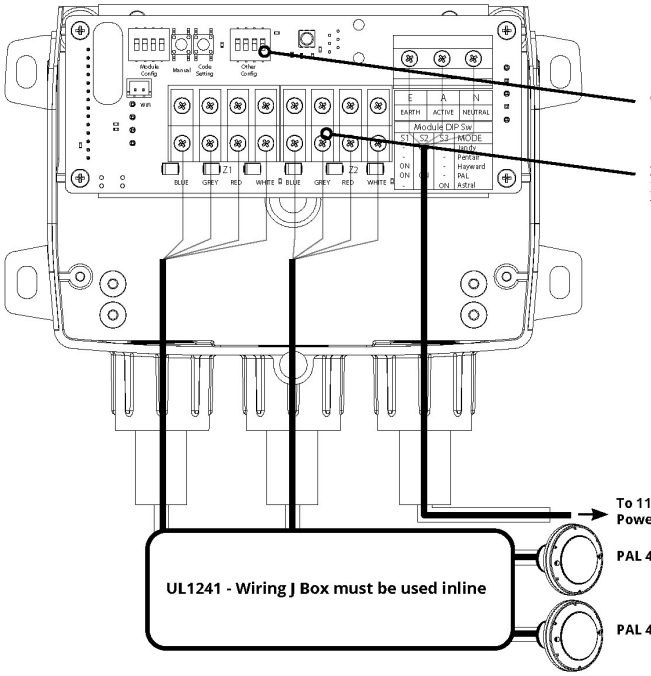
When removing the knock outs place a flat blade screwdriver with a 3/16" (4mm) blade as shown and a light hit with a hammer to the head of the screw driver will allow the Knockout to be removed.

Alternatively drill location points are located in the centre of each Knock out to allow the use of a hole saw to remove the knockouts.

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INSTALLATION INSTRUCTIONS FOR PCR-2Z RGB OUTDOOR DRIVER



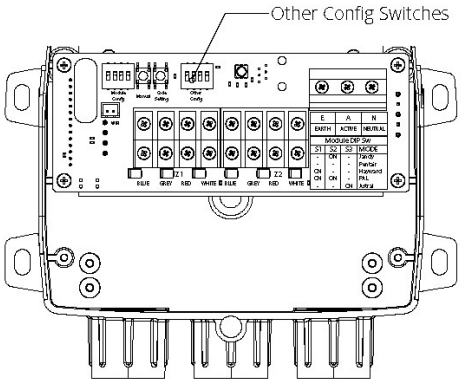
Note 1:
The PCR-1Z is suitable for PAL 4 wire lights.

Note 2:
Knock outs are provided in the enclosure to connect up to 2 x PAL 4 wire UL Listed Pool Lights.

Note 3:
An unlimited number of drivers can be controlled by one transmitter.

Note 4:
A maximum number of 4 x Transmitters can be coded to an individual PCR-1Z

ZONE SETTINGS - PCR 2Z ONLY



Switch 3	Switch 4	Mode
OFF	OFF	6000K
ON	OFF	5000K
OFF	ON	4000K
ON	ON	3000K

Other Config Operation

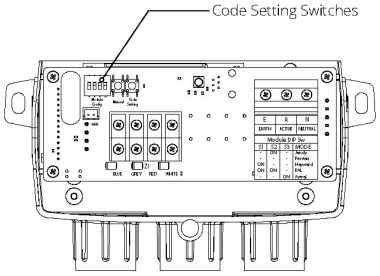
- Must turn off power before making DIP switch selection.
- Dip Switch 2: Toggles between 1 and 2 zone operation
- Dip Switch 1: When in single zone mode, this switch selects whether the driver operates entirely as Z1 or Z2 on the remote.
- Dip Switches 3 & 4 change the approximate color temperature of mixed white lights.

Switch 1	Operation
ON	Zone 2
OFF	Zone 1

Switch 2	Operation
ON	Single Zone Operation
OFF	Two Zone Operation

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CLONING SETTINGS (V2 PCR-1Z-SM, PCR-1Z & PCR-2Z AUTOMATION)

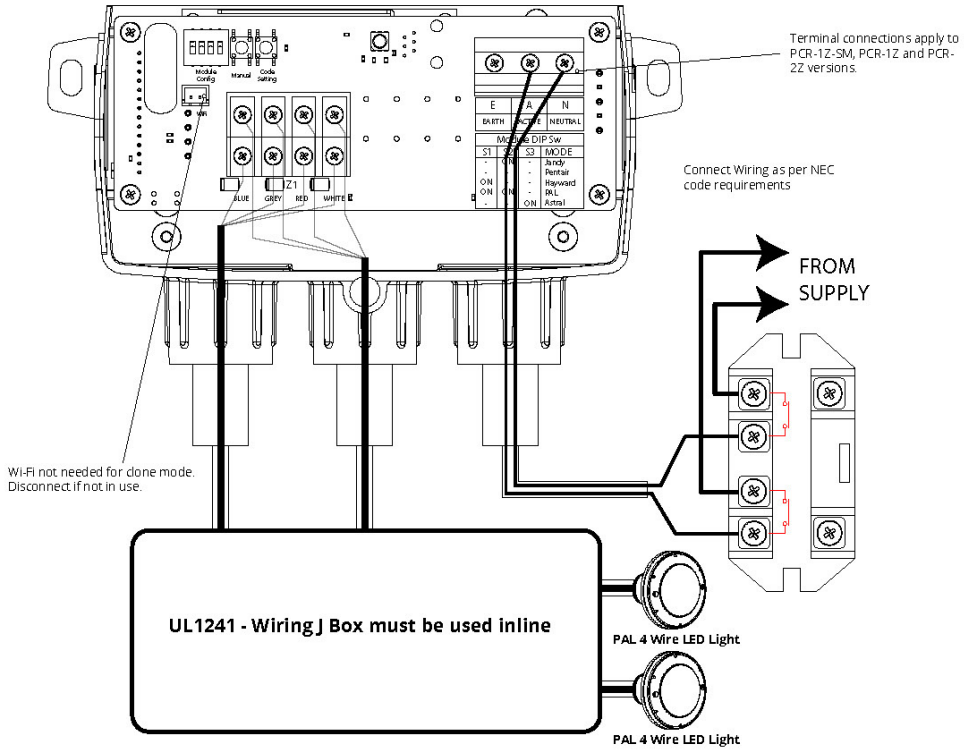


Switch 1	Switch 2	Switch 3	Switch 4	Mode
OFF	ON	OFF	ON	Jandy
OFF	OFF	OFF	ON	PENTAIR
ON	OFF	OFF	ON	HAYWARD
ON	ON	OFF	ON	PAL LIGHTING
OFF	OFF	ON	ON	ASTRALPOOL

Note:

- Must turn off power before making DIP switch selection.
- When synching PAL lights to other OEM lights, static colors will match but color change mode timing may vary.
- If the PAL Lights are to be used with Automation, do not use the handheld remote control and disconnect the WiFi module from the board if so equipped.
- If the Automation does not turn the PAL lights on or off and there is power to the driver, press the Z1 button one time to turn on the PAL Driver.
- Note that the PAL features of infinite color selection and dimmability are not available while in Cloned mode.

AUTOMATION DEDICATED LIGHT OUTPUT RELAY FOR CLONE MODE

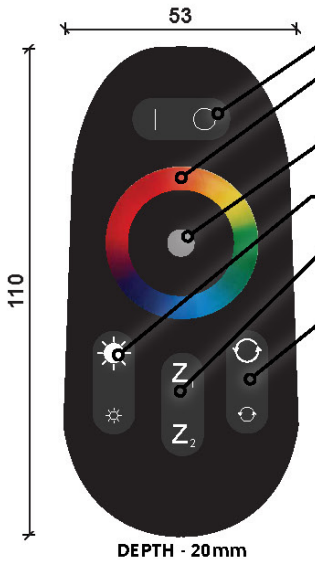


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PCZ TRANSMITTER REMOTE

PAL TOUCH PCZ-2 TRANSMITTER HAND HELD REMOTE



ON/OFF

COLOR WHEEL
Can select any color from the color wheel.
Can select Brightness (B) on any selected color

OPERATIONAL RED LED
Flashes when any remote operation is initiated

BRIGHTNESS (UP/DOWN)
5 Brightness Settings (100%, 80%, 60%, 40%, 20%)

ZONE (UP/DOWN)
Zone selection (not applicable to single zone controllers)

MODE SELECTION (UP/DOWN)
1. White - Can change Brightness (B) [Default]
2. Color Change - Can change Brightness (B) & Speed (S)
   Red, Amber, Green, Aqua, Blue, Purple, White with initial setting of 2 second delay. This time can be increased to 4, 6, 8 or 10 Sec by pressing (S -)
3. Disco - Can change Brightness (B)
4. White Gradual Change - Can change Brightness (B) & Speed (S)
5. Blue Gradual Change - Can change Brightness (B) & Speed (S)
6. Green Gradual Change - Can change Brightness (B) & Speed (S)
7. Red Gradual Change - Can change Brightness (B) & Speed (S)

FEATURES
1. Matching Code - Apply power to the receiver. Then press Z_1 once within 5 seconds. The output light will flash white 3 times if matching is successful.
2. Clearing Code - Apply power to the receiver. Hold down Z_1 for 3 seconds. The output light will flash 6 times if clearing the code is successful. After successfully clearing the existing code a new code will have to be applied by following the matching code procedure above.
3. 1 Transmitter (PCZ-2) can operate an unlimited number of Receivers (PCR-1Z)
4. 1 Receiver (PCR-1Z) can be controlled by a maximum of 4 Transmitters (PCZ-2)
5. Touching the color wheel will reset any Mode selection.
6. Memory Feature - Remembers color selection after being switched off.
7. Once the transmitter and receiver are successfully coded the receiver will remember the code if powered off.

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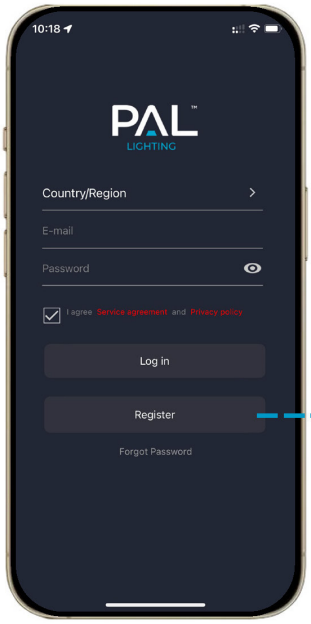
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SETTING UP YOUR COLOR TOUCH APP

PCR-1ZW / PCR-2ZW WIFI ONLY

Creating a New Login

1. If you have not already done so, create an account.
2. If you have not already done so, accept all permissions.



NEW ACCOUNT SETUP

Step 1 Select 'Register'

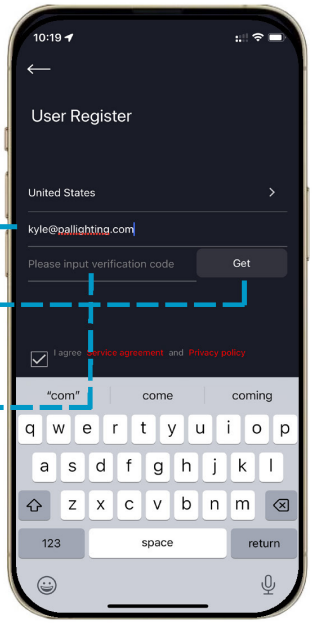
Step 2 Enter homeowner's email

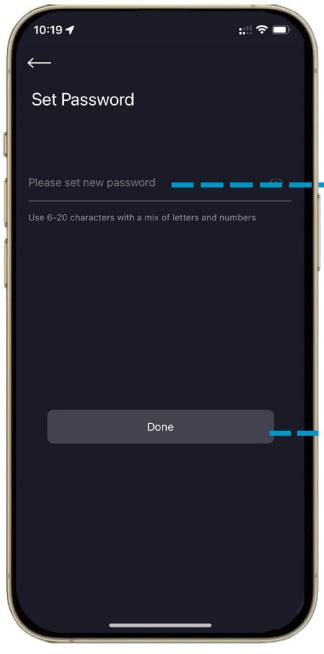
Step 3 Select 'Get'

(A verification code will be sent to the email addre

Step 4 Enter the verification code

Step 5 Click 'Next'





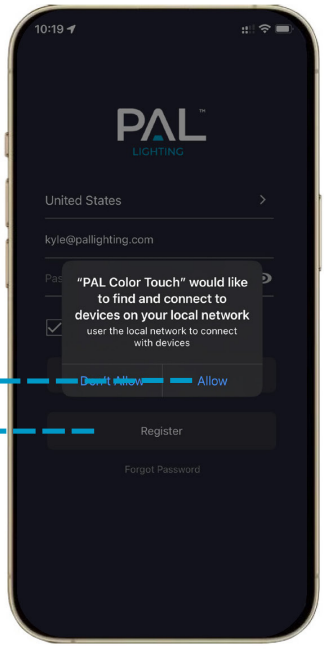
NEW ACCOUNT SETUP

Step 1 Enter Password

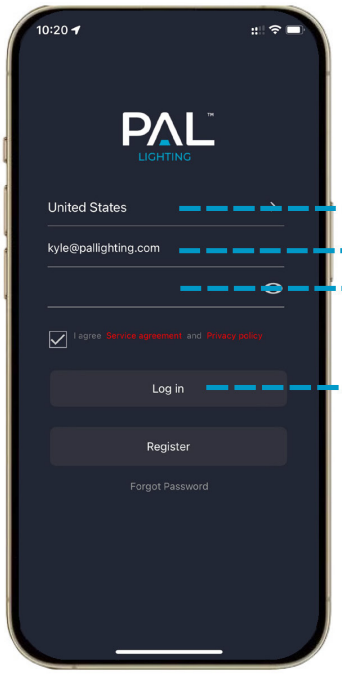
Step 2 Select Done

Step 3 Select 'Allow'

Step 4 Select 'Register



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LOGGING IN

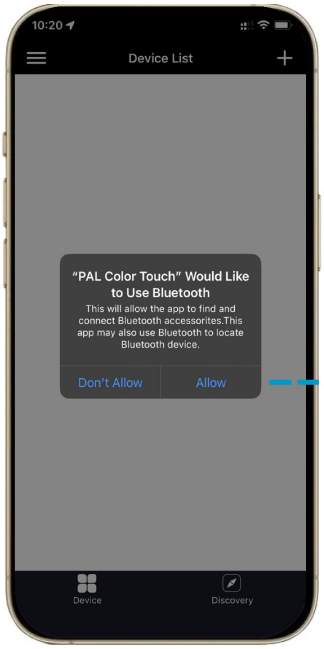
Step 1 Select Country

Step 2 Done

Step 3 Enter Password

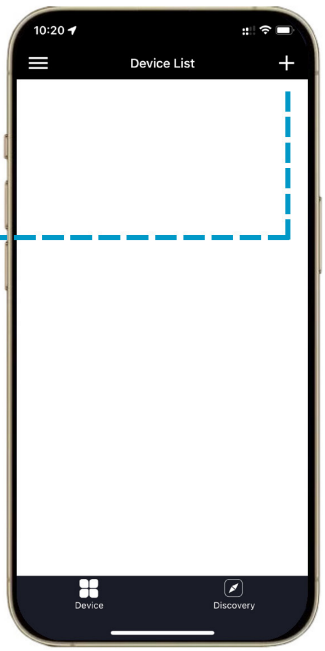
Step 4 Select 'Login'

Connecting to a New Driver

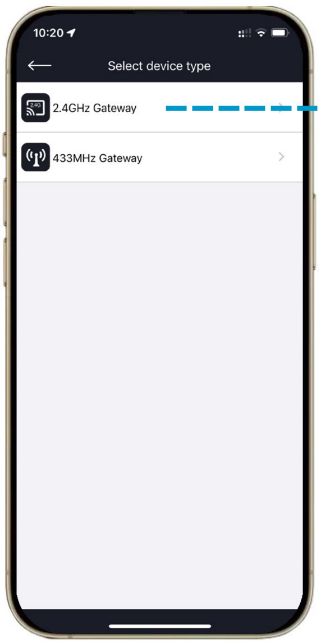


Step 1 Select 'Allow'

Step 2 Select '+'



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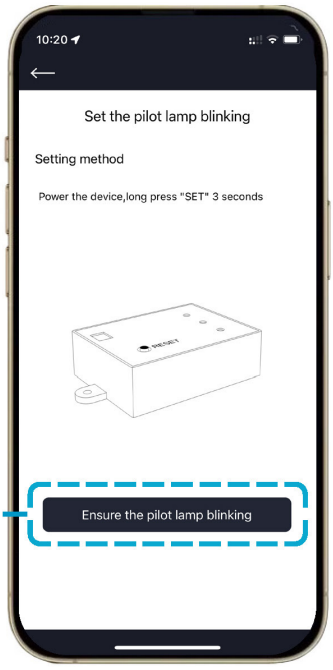


Step 1 Select ‘Allow’



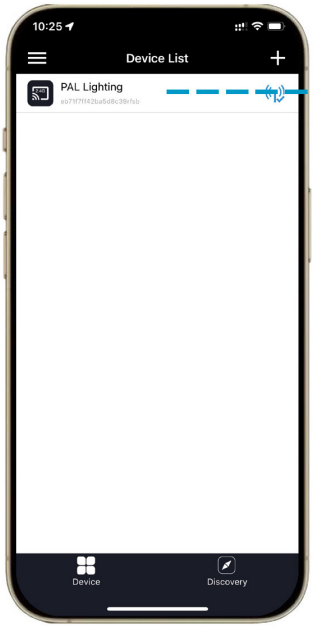
Step 1 Select ‘Allow’

Step 2 Hold ‘Reset’ button for 3 seconds until light starts to flash



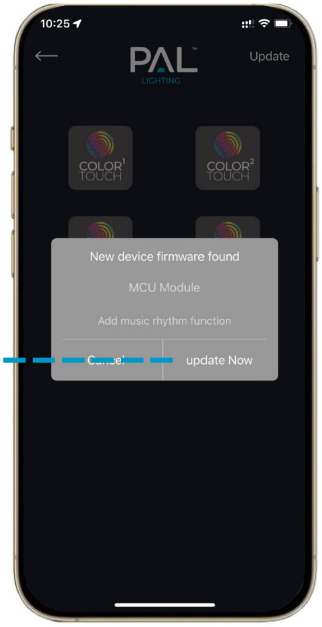
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Updating the App

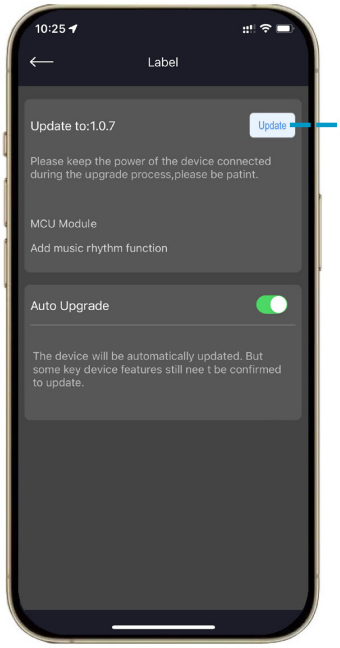


Step 1 Select Driver

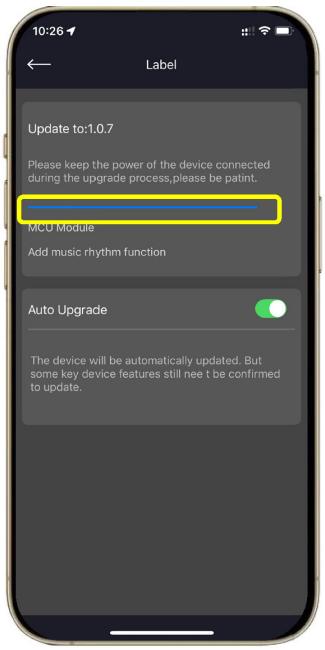
Step 2 Select 'Update Now' (if necessary)

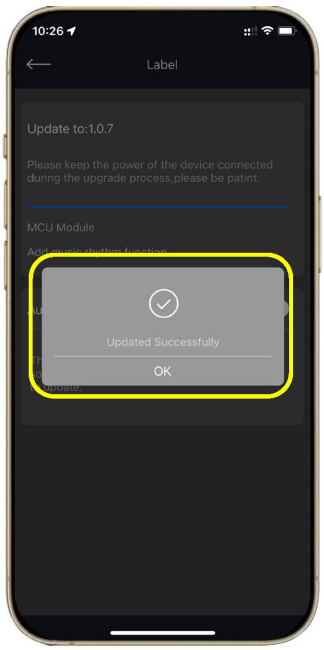


Updating the Color Touch App



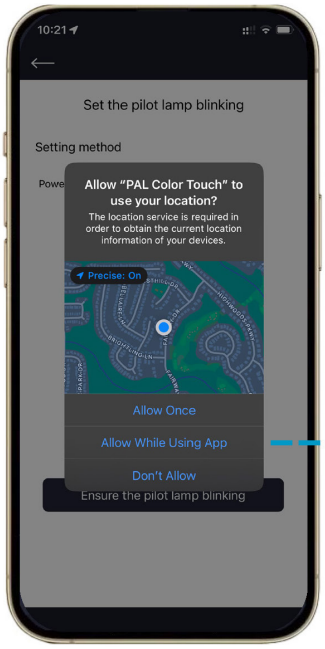
Select Update





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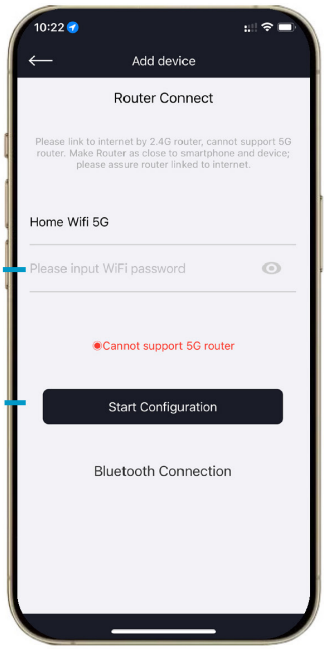
Setting Up a New Driver

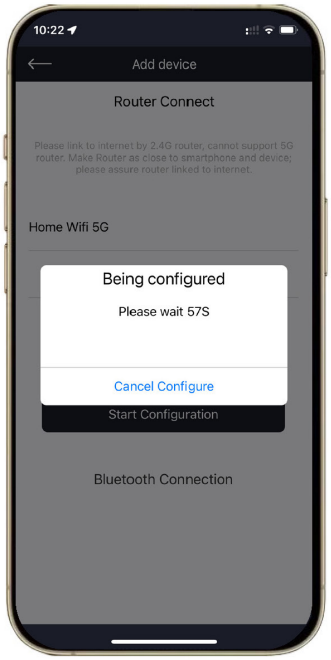


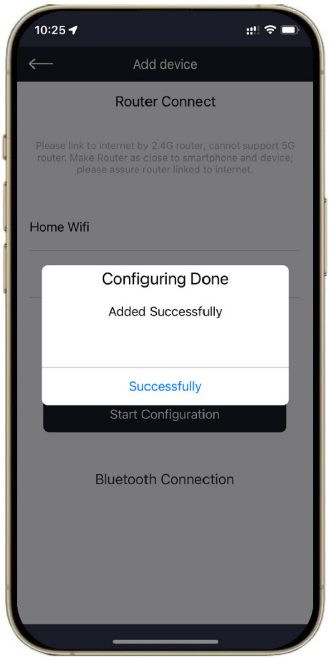
Step 1 Select 'Allow'

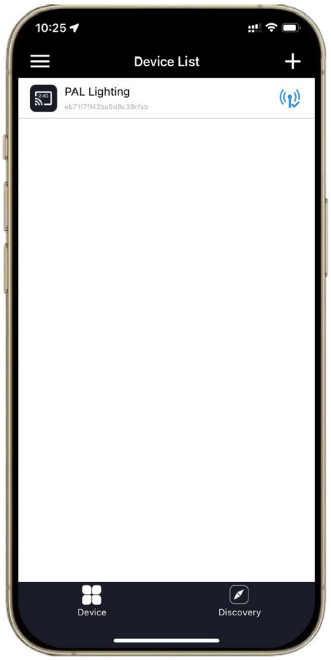
Step 2 Enter WiFi Password

Step 3 Select 'Start Configuration'







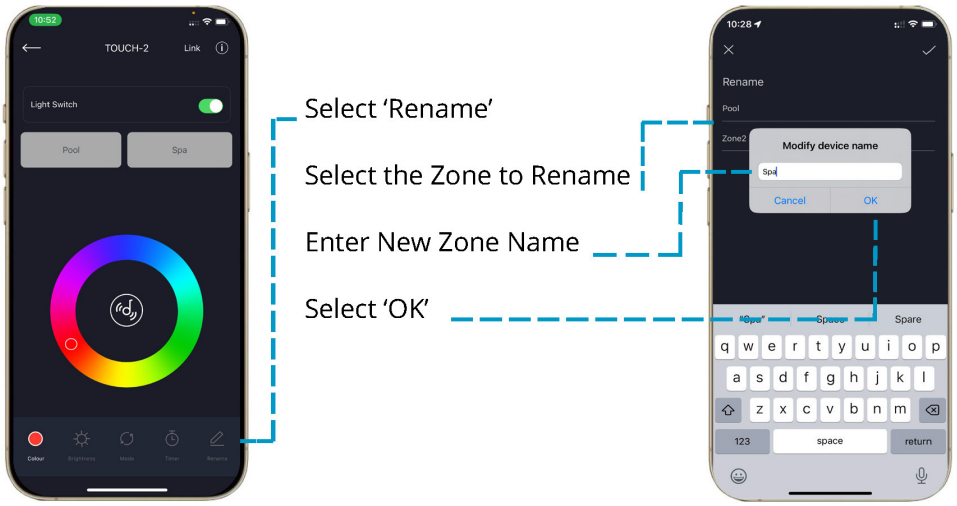


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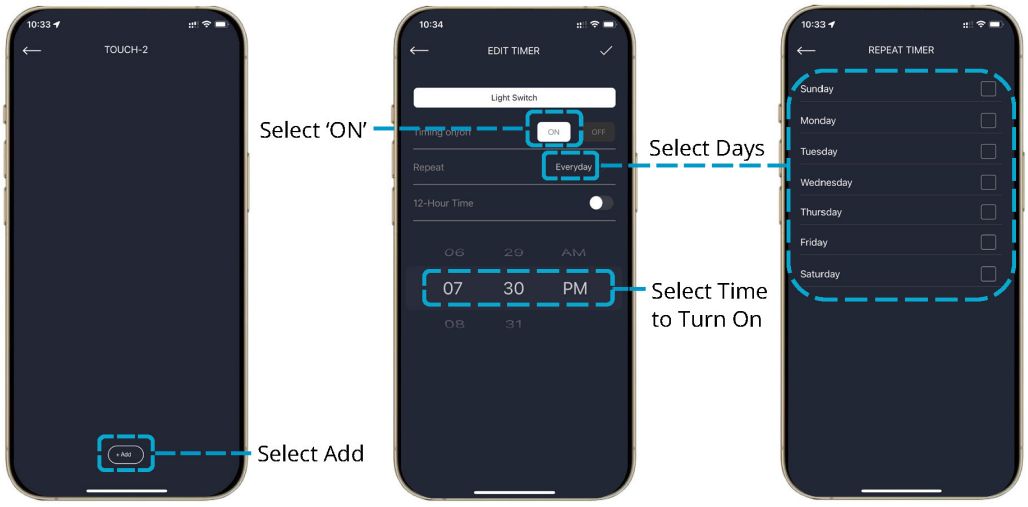
Operating the Color Touch App



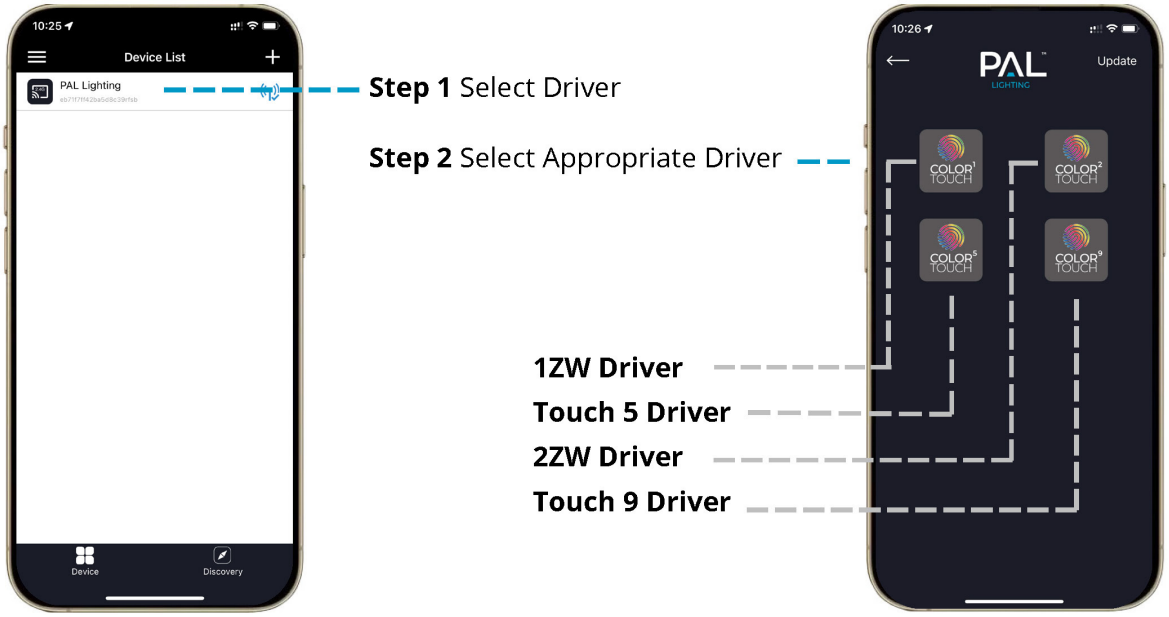
Changing Zone Names



Creating Schedules



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Coding a 1Z & 2Z Driver with a Standalone Wi-Fi Module

1. Connect the Wi-Fi Module to the Driver
   - o Ensure the Wi-Fi module is properly connected to the driver.
2. Download the PAL Color Touch App
   - o Go to your app store and download the PAL Color Touch app.
3. Connect to Wi-Fi
   - o Open the PAL Color Touch app and connect your device to the Wi-Fi network.
4. Add the Driver
   - o In the app, tap the "+" button in the top right corner.
   - o Select "2.4g" from the list of options.
   - o The PAL driver should appear; select it to connect.
5. Link the Driver
   - o Open the app and navigate to "Touch 2."
   - o Tap the "Link" button in the top right corner.
6. Configure the Transformer
   - o On the transformer, press the "Code Setting" button.
   - o Press the "Link" button on the bottom left of the transformer three times.

Following these steps should help you set up the driver and connect it using the PAL Color Touch app.