



# PAL LIGHTING PCR-1Z-SM Multi-Color Dual Zone Remote Control Transformer Instructions

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**PAL PCR-1Z-SM Multi-Color Dual Zone Remote Control Transformer**



## Product Information

The PCR-1Z-SM / PCR-1Z / PCR-2Z Lighting Controller is a device used to control lighting systems. It is designed to supply 24V DC power to PAL 4 Wire UL Listed LED Pool lights. The controller must be installed in accordance with the National Electrical Code by a Certified Electrician or Qualified Pool Technician. It is important to note that 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 NEC article 680 requirements.

## Dimensions

- 13/16 / 21.0mm Knockout to connect power supply (2 available on each side of enclosure).
- 3 x conduit holes.
- 6 x conduit holes.

## Product Usage Instructions

### Knockout Instructions:

1. It is recommended to fit the cover and tighten the cover screws when removing the knockouts.
2. To remove the knockouts, place a flat blade screwdriver with a 3/16 (4mm) blade as shown and lightly hit it with a hammer to the head of the screwdriver.
3. Alternatively, drill location points are located in the center of each knockout to allow the use of a hole saw to remove the knockouts.

### Installation Instructions for PCR-1Z-SM / PCR-1Z / PCR-2Z:

1. Install the PCR-1Z-SM / PCR-1Z / PCR-2Z Lighting Controller in accordance with the National Electrical Code by a Certified Electrician or Qualified Pool Technician.
2. The Driver Enclosure must be located a minimum distance of 5 feet measured horizontally from the inside wall

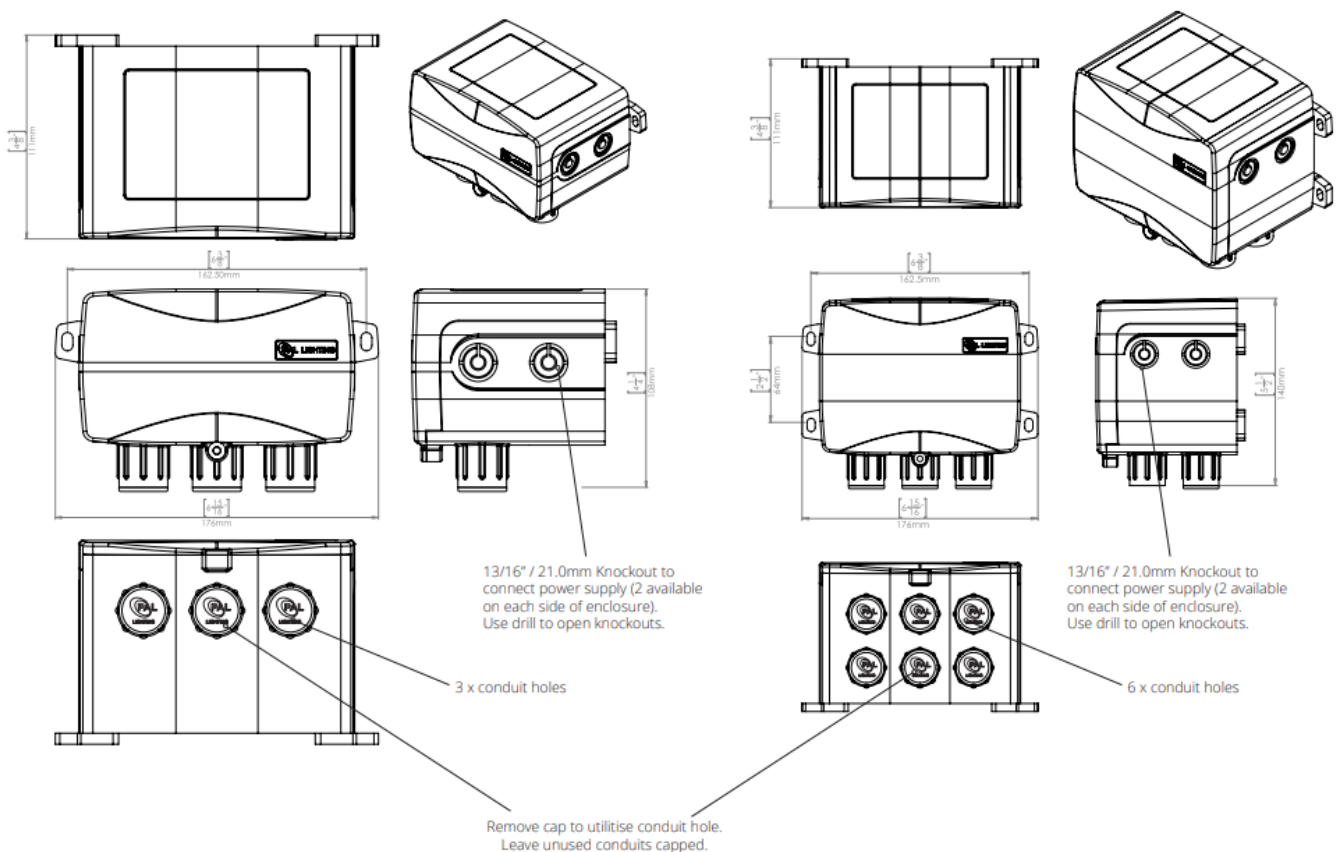
of the pool and not less than 1 foot above the maximum pool water level measured to the top of the Driver Enclosure.

3. Mount the enclosure using the mounting legs and screw set supplied. If mounting on a concrete or block wall, mark out the hole locations, drill 3/16-inch holes using a masonry drill, and fit the Star Plugs supplied into the holes. Secure with the stainless steel screws supplied.
4. Connect the 100-120V power supply to the bottom-right conduit entry on the PCR-1Z-SM / PCR-1Z / PCR-2Z.
5. Connect the 4 core wire from the PAL 4 Wire LED Lights to the remaining conduit entries at the bottom of the PCR-1Z-SM / PCR-1Z / PCR-2Z. Ensure that the 4 cores are connected to the correct terminals. Two output conduit entries are provided in the enclosure to connect up to 2 PAL-LED 4 Wire Pool Lights.
6. The PCR-1Z / PCR-2Z Driver / Receiver is factory set to operate with the PCZ-2 Transmitter supplied. Fit the 2 x batteries supplied with the PCZ-2. The PCR-1Z-SM does not operate with the PCZ-2 Transmitter. Refer to the information supplied with the PCZ-2 transmitter for full operating instructions and features of the system.

### Installation Instructions for PCR-1Z-SM / PCR-1Z RGB Outdoor Driver:

Use the 2 x Mounting legs to fasten the enclosure to the wall with appropriate fixtures for the mounting substrate. Please refer to the complete user manual for more detailed instructions and safety information.

## DIMENSIONS



## 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.

## FEATURES

- Easy to Install
- UL Listed Class 2 Power Supply / Swimming Pool and Spa Transformer (WDGV)
- Remote Control Operation from PCZ-2 hand-held remote
- Optional Wi-Fi Control from Apple iOS Devices
- IP65 Wet Location Construction
- Constant 24V DC Output Voltage over the Supply

## IMPORTANT INFORMATION

- This PCR-1Z-SM/PCR-1Z/PCR-2Z Class 2 power supply is specifically designed to supply 24V DC to power the PAL 4 Wire UL Listed LED Pool lights.
- The PCR-1Z-SM/PCR-1Z/PCR-2Z must be installed in accordance with the National Electrical Code by a Certified Electrician or Qualified Pool Technician.

**NOTE:** 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 NEC article 680 requirements.

## INSTALLATION INSTRUCTIONS FOR PCR-1Z RGB OUTDOOR DRIVER

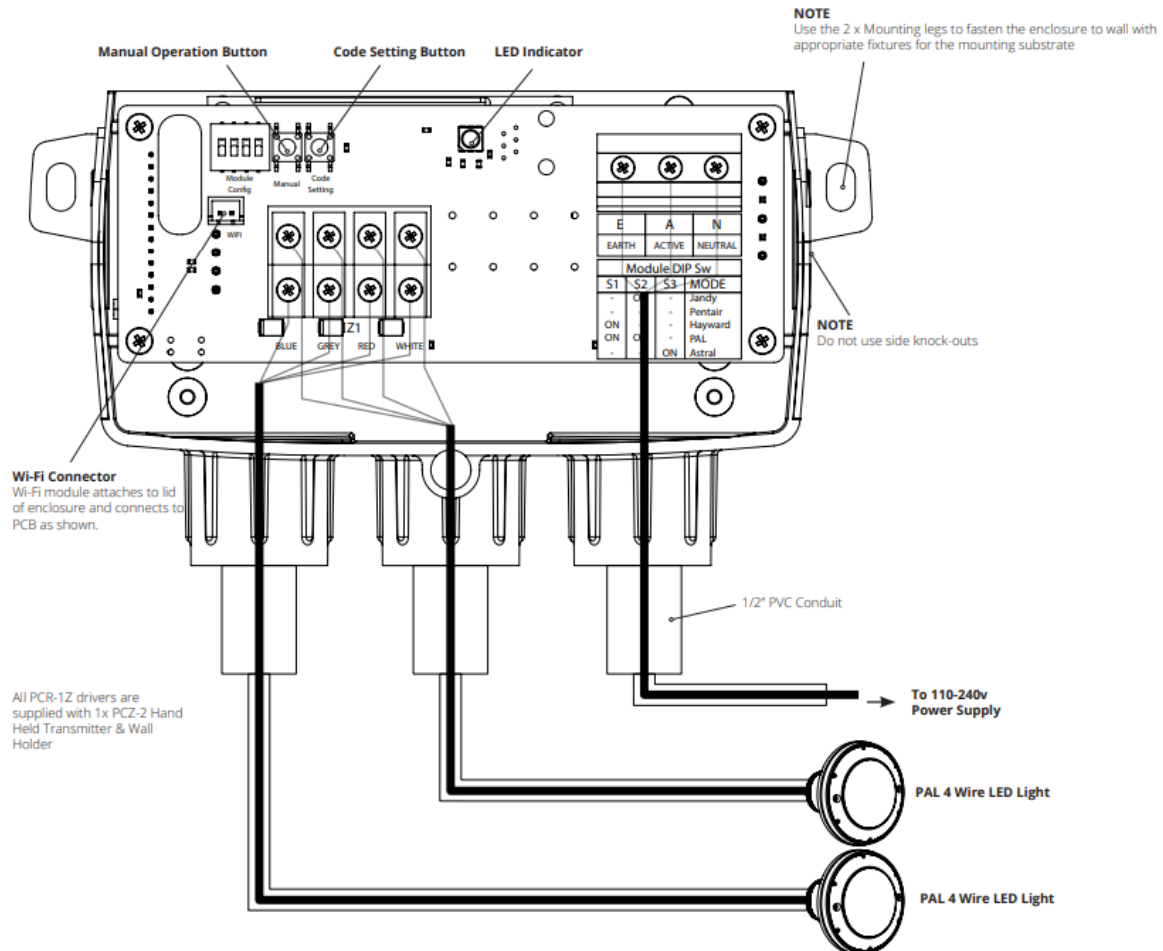
- **Step 1.** The PCR-1Z-SM/PCR-1Z/PCR-2Z Class 2 Power Supply is a Weatherproof construction (IP65) and should be mounted on a flat surface using the mounting legs on the enclosure with appropriate fixtures for the mounting substrate and in a suitable position to suit the intended location of the PAL 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.

**NOTE:** The Driver Enclosure must be located a minimum distance of 5 feet measured horizontally from the inside wall of the pool and not less than 1 foot above the maximum pool water level measured to the top of the Driver Enclosure.

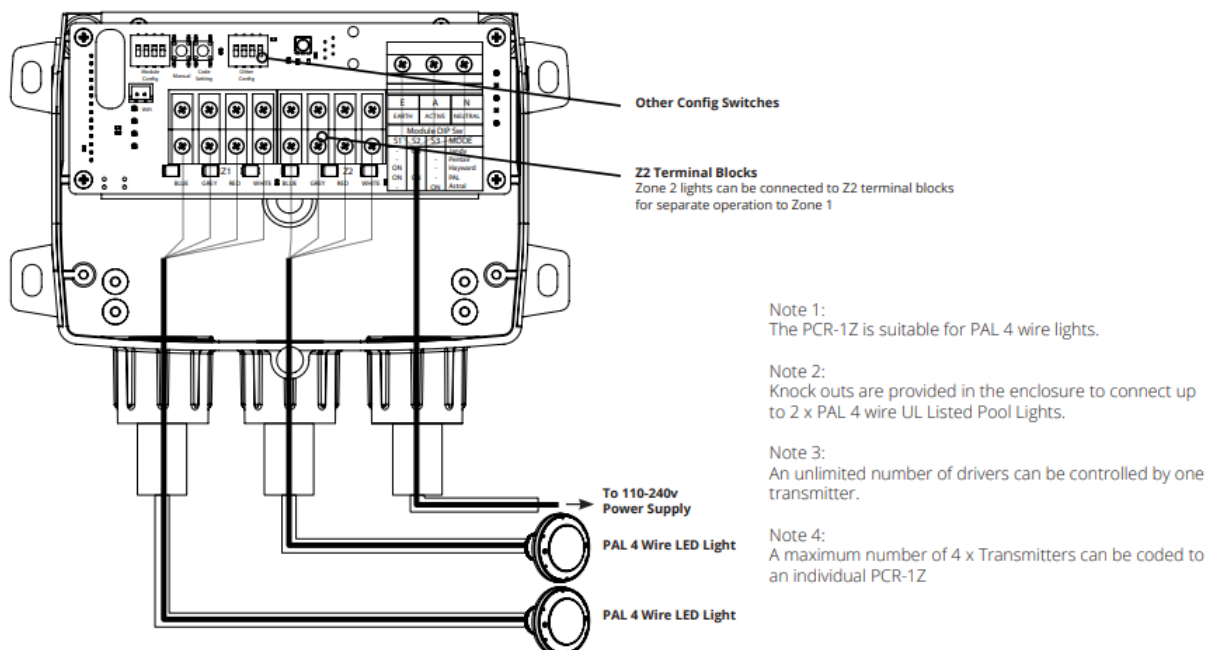
**NOTE:** The enclosure must be mounted using the mounting legs on the enclosure with the screw set supplied. If the enclosure is to be mounted on a concrete or block wall, mark out the mounting hole locations and drill 3/16" holes using a masonry drill then fit the Star Plugs supplied into the holes and fix using the stainless steel screws supplied??

- **Step 2.** Using the conduit entry on the bottom (bottom-front on PCR-2Z) right hand side of the PCR-1Z-SM/PCR-1Z/PCR-2Z (as shown) connect the 100-120V power supply to NEC code requirements.
- **Step 3.** Using the remaining conduit entries at the bottom of the PCR-1Z-SM/PCR-1Z/PCR-2Z (as shown), connect the 4 core wire from the PAL 4 WIRE LED LIGHTS. Please ensure the 4 cores are connected to the correct terminals. 2 x output conduit entries are provided in the enclosure to connect up to 2 x PAL-LED 4 Wire Pool Lights.
- **Step 4.** The PCR-1Z/PCR-2Z Driver / Receiver is factory set to operate with the PCZ-2 Transmitter supplied. Just fit the 2 x batteries supplied with the PCZ-2.  
The PCR-1Z-SM does not operate with the PCZ-2 Transmitter.  
Please refer to the information supplied with the PCZ-2 transmitter for full operating instructions and features of the system.

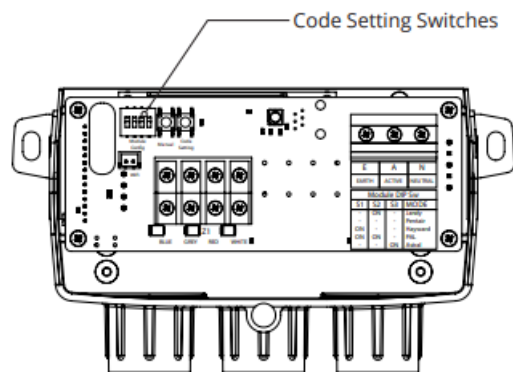
## INSTALLATION INSTRUCTIONS FOR PCR-1Z-SM / PCR-1Z RGB OUTDOOR DRIVER



## INSTALLATION INSTRUCTIONS FOR PCR-2Z RGB OUTDOOR DRIVER



## CLONING SETTINGS (PCR-1Z & PCR-2Z AUTOMATION AND PCR-1Z-SM)

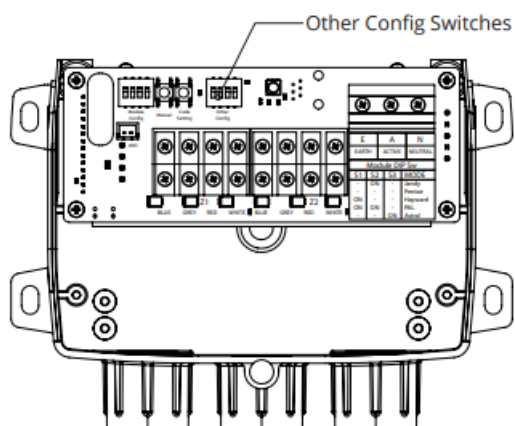


Switch 1	Switch 2	Switch 3	Switch 4	Mode
OFF	ON	OFF	ON	JANDY
OFF	OFF	OFF	ON	PENTAIR
ON	OFF	OFF	ON	HAYWARD
ON	ON	OFF	ON	PAL
OFF	OFF	ON	ON	ASTRAL

#### 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.

#### ZONE SETTINGS – PCR-2Z ONLY



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

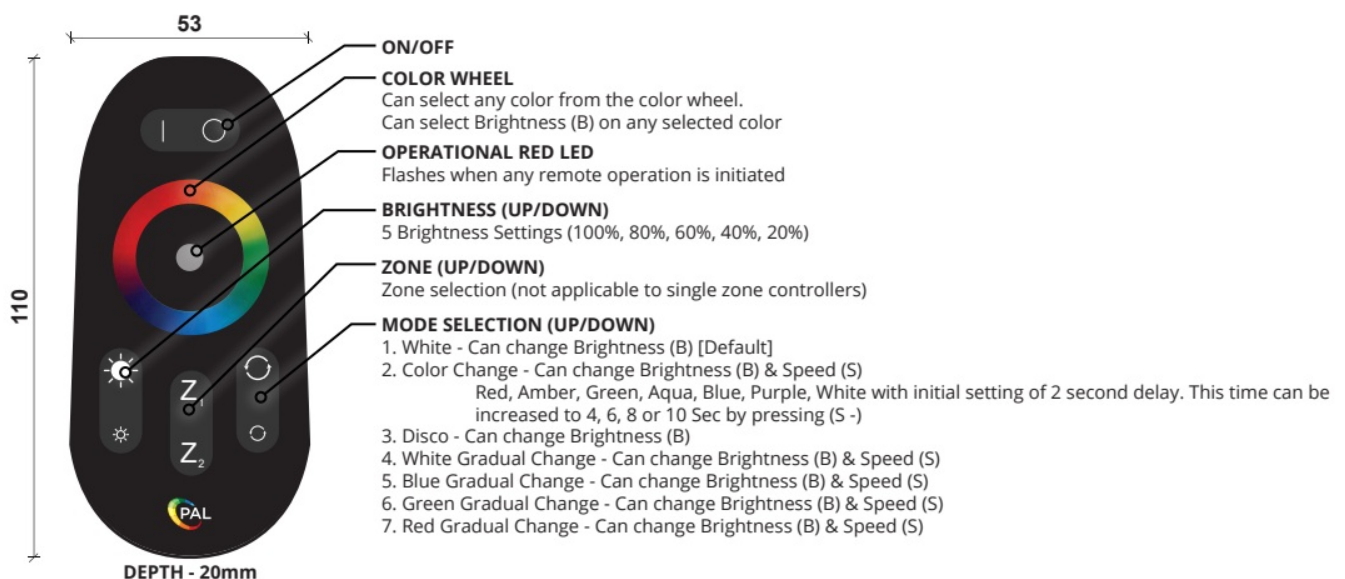
## Other Config Operation

- 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

## PAL TOUCH PCZ-2 TRANSMITTER HAND HELD REMOTE



## FEATURES

1. Matching Code – Apply power to the receiver. Then press Z1 once within 5 seconds. The output light will flash



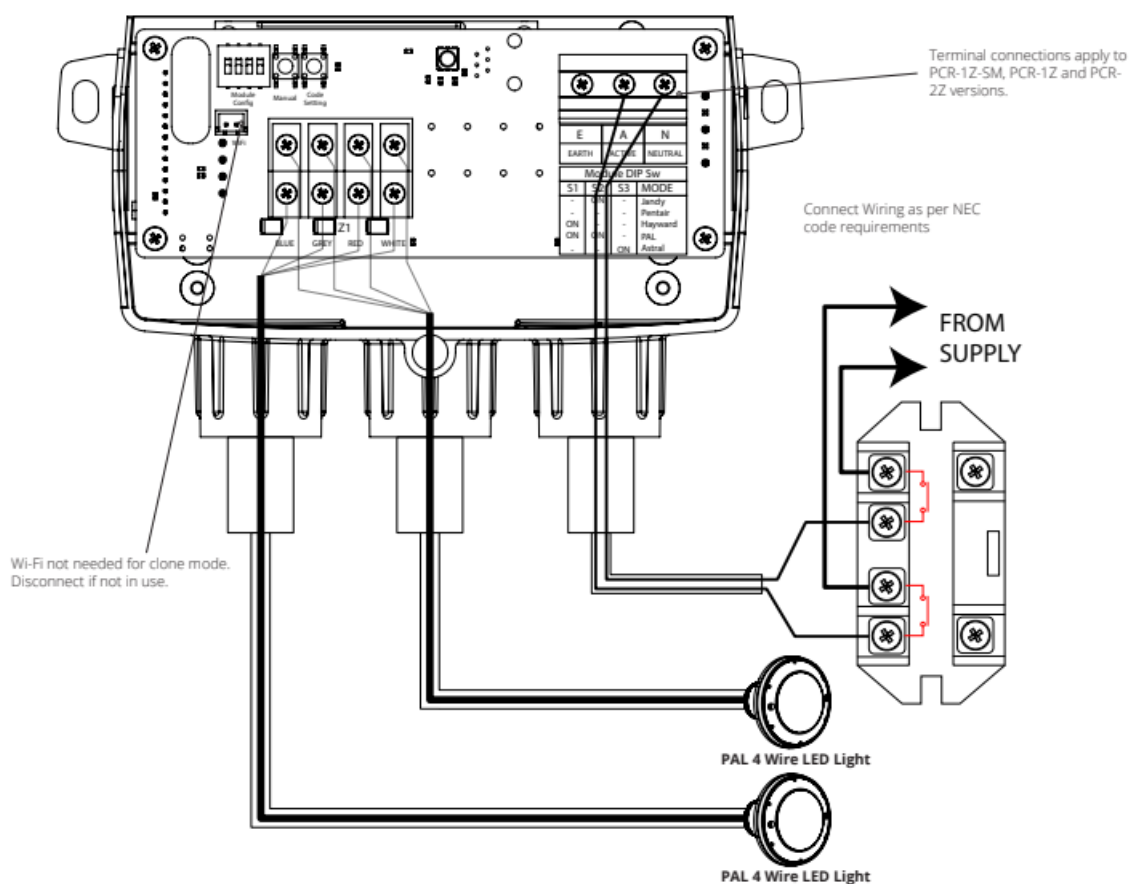
white 3 times if matching is successful.

2. Clearing Code – Apply power to the receiver. Hold down Z1 for 3 seconds. The output light will flash 6 times if clearing the code is successful.

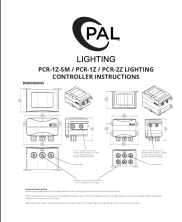
After successfully clearing the existing code a new code will have to be applied by following the matching code procedure above.

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.

## AUTOMATION DEDICATED LIGHT OUTPUT RELAY FOR CLONE MODE



## Documents / Resources

	<p><a href="#">PAL LIGHTING PCR-1Z-SM Multi-Color Dual Zone Remote Control Transformer</a> [pdf] Instructions</p> <p>PCR-1Z-SM, PCR-1Z, PCR-2Z, PCR-1Z-SM Multi-Color Dual Zone Remote Control Transformer, PCR-1Z-SM, Multi-Color Dual Zone Remote Control Transformer, Dual Zone Remote Control Transformer, Zone Remote Control Transformer, Remote Control Transformer, Control Transformer, Transformer</p>
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