LIGHTING

PCR-2DMX LIGHTING CONTROLLER INSTRUCTIONS

DIMENSIONS

13/16" / 21.0mm Knockout to connect power supply (2 available on each side of enclosure). Use drill to open knockouts.

6 x conduit holes

Remove cap to utilitise conduit hole. Leave unused conduits capped.
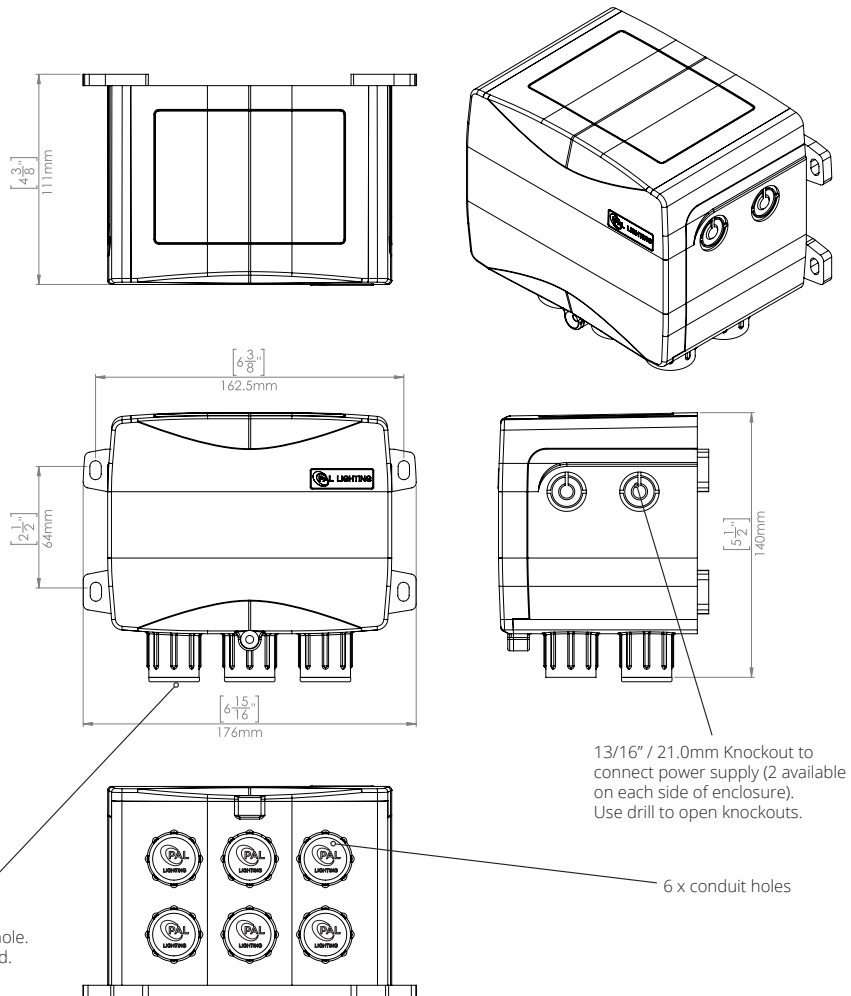
Knockout Instructions

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.

INSTALLATION & MAINTENANCE INSTRUCTIONS ON THE 16/35/65 WATT PCR-2DMX CLASS 2 OUTDOOR DRIVER/RECEIVER FOR 12V D/C PAL 4 WIRE LED LIGHTS

FEATURES
- Easy to Install
- UL Listed Class 2 Power Supply / Swimming Pool and Spa Transformer (WDGV)
- IP65 Wet Location Construction
- Constant 24V DC Output Voltage over the Supply

IMPORTANT INFORMATION
This PCR-2DMX Class 2 power supply is specifically designed to supply 24V DC to power the PAL 4 Wire UL Listed LED Pool lights.

The PCR-2DMX 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-2MX RGB OUTDOOR DRIVER
Step 1. The PCR-2DMX 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.
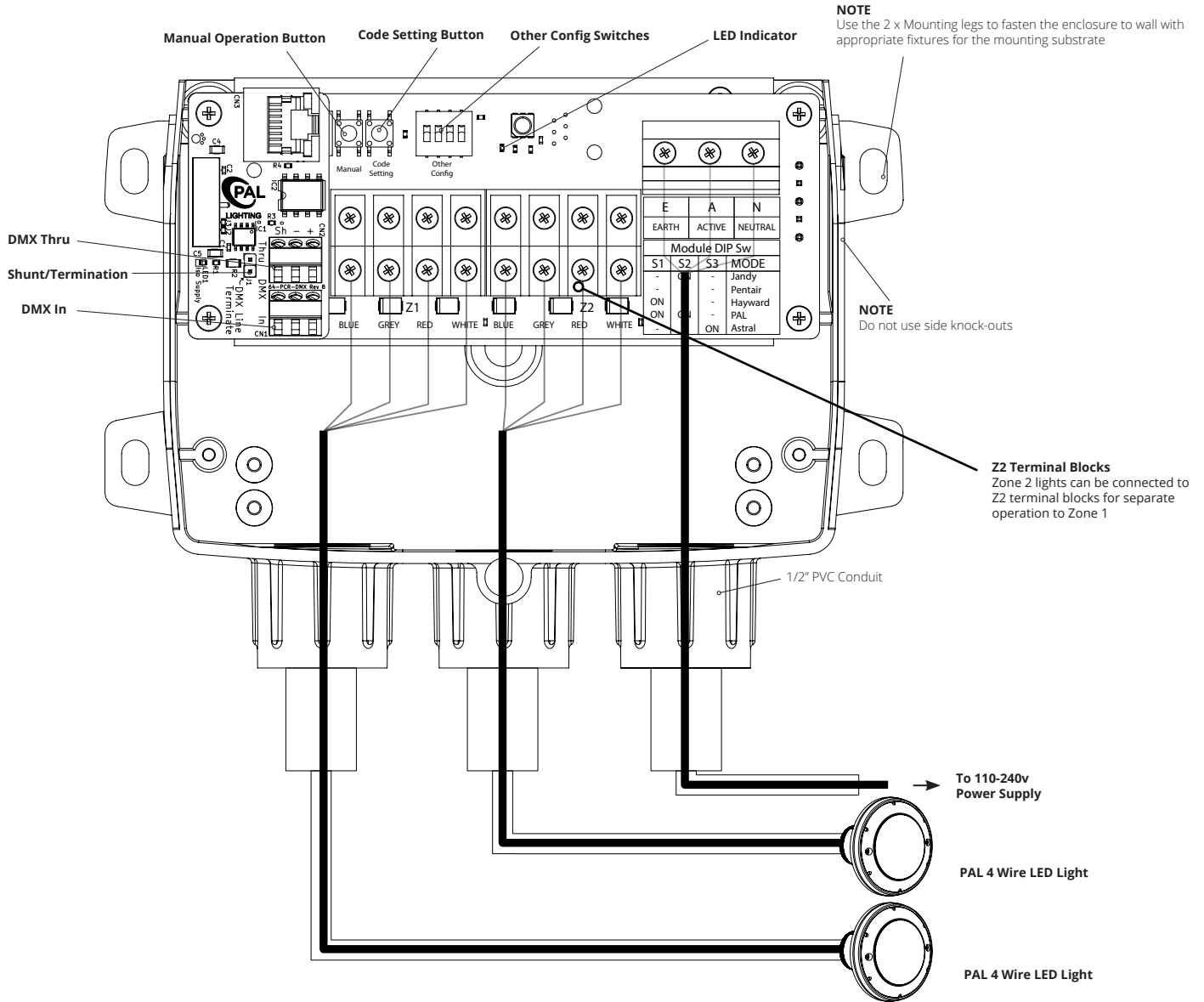
NOTE: The Driver Enclosure must be located a minimum distance of 5 feet measured horizontally from the inside wall of the pool and not less than 1 foot above the maximum pool water level measured to the top of the Driver Enclosure.

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-2DMX) right hand side of the PCR-2DMX (as shown) connect the 110-240V power supply to NEC code requirements.

Step 3. Using the remaining conduit entries at the bottom of the PCR-2DMX (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.

INSTALLATION INSTRUCTIONS FOR PCR-2DMX RGB OUTDOOR DRIVER

NOTE
Use the 2 x Mounting legs to fasten the enclosure to wall with appropriate fixtures for the mounting substrate

Manual Operation Button

Code Setting Button

Other Config Switches

LED Indicator

DMX Thru

Shunt/Termination

DMX In

E	A	N
EARTH	ACTIVE	NEUTRAL

Module DIP Sw			
S1	S2	S3	MODE
-	ON	-	Jandy
-	-	-	Pentair
-	-	-	Hayward
ON	-	-	PAL
ON	ON	-	Astral
-	-	ON	

BLUE GREY RED WHITE BLUE GREY RED WHITE

Z1

Z2

NOTE
Do not use side knock-outs

Z2 Terminal Blocks
Zone 2 lights can be connected to Z2 terminal blocks for separate operation to Zone 1

1/2" PVC Conduit

To 110-240v Power Supply

PAL 4 Wire LED Light

PAL 4 Wire LED Light

Note 1:
The PCR-2DMX 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.

PCR DMX Operation
The DMX input module allows remote DMX control over the two zone outputs in the PCR 2Z.

Installation
1. Connect DMX input to "In" screw terminal block, green connections as indicated on the PCB.
2. Connect DMX loop to "Thru" screw terminal block.
3. If no loop out is used, place supplied shunt across "Term" pins.
4. Set DMX address as per the table on the following page.

Operation
The DMX footprint of the PCR DMX is of two x 3 channel generic RGB lights, total 6 active channels. In 4 channel mode there is a vacant channel after each Blue, so each PCR4 occupies 8 channels. Refer to table below.

Signal LED
When in DMX mode the "CPU" Led on the PCB operates as a DMX signal indicator. This LED isilluminated during the DMX packet – its flash rate is therefor dependent upon the DMX controller being used. At high rates of refresh the signal LED may not appear to flash.

Loss of DMX
The output levels are held for 60 seconds after the DMX is lost, after which time the output is driven off. After a further 60 seconds of no DMX the fan (if fitted) is turned off.

Other
The software includes temperature limiting – if the temperature goes over about 60C the output levels are reduced.

The PCR DMX input does not support RDM.

DIP Switch Address Setting

2Zone Driver #	2Zone Start Address	"Module Config" Dip Switch #1	"Module Config" Dip Switch #2	"Module Config" Dip Switch #3	"Module Config" Dip Switch #4	"Other Config" Dip Switch #1	"Other Config" Dip Switch #2	"Other Config" Dip Switch #3	"Other Config" Dip Switch #4
1	1	On	On	Off	Off	Off	Off	Off	Off
2	7	On	On	Off	Off	Off	Off	Off	On
3	13	On	On	Off	Off	Off	Off	On	Off
4	19	On	On	Off	Off	Off	Off	On	On
5	25	On	On	Off	Off	Off	On	Off	Off
6	31	On	On	Off	Off	Off	On	Off	On
7	37	On	On	Off	Off	Off	On	On	Off
8	43	On	On	Off	Off	Off	On	On	On
9	49	On	On	Off	Off	Off	Off	Off	Off
10	55	On	On	Off	Off	On	Off	Off	On
11	61	On	On	Off	Off	On	Off	On	Off
12	67	On	On	Off	Off	On	Off	On	On
13	73	On	On	Off	Off	On	On	Off	Off
14	79	On	On	Off	Off	On	On	Off	On
15	85	On	On	Off	Off	On	On	On	Off
16	91	On	On	Off	Off	On	On	On	On
17	97	On	On	Off	On	Off	Off	Off	Off
18	103	On	On	Off	On	Off	Off	Off	On
19	109	On	On	Off	On	Off	Off	On	Off
20	115	On	On	Off	On	Off	Off	Off	On
21	121	On	On	Off	On	Off	On	Off	Off
22	127	On	On	Off	On	Off	On	On	On
23	133	On	On	Off	On	Off	On	On	Off
24	139	On	On	Off	On	Off	On	Off	On
25	145	On	On	Off	On	Off	Off	Off	Off