

LIGHTING

PCR-3DMX-8Z LIGHTING CONTROLLER INSTRUCTIONS

DIMENSIONS





Use drill to open knockouts.

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-3DMX 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
- 3 Year Warranty Period

IMPORTANT INFORMATION

This PCR-3DMX Class 2 power supply is specifically designed to supply 24V DC to power the PAL 4 Wire UL Listed LED Pool lights.

The PCR-3DMX 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 8Z DMX Driver is a 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 front left entry connect the 100-240V power supply to NEC code requirements. Note: BLUE IS NEGATIVE (NEUTRAL) and BROWN IS POSITIVE (HOT)

Step 3. Using the remaining conduit entries at the bottom of the 8Zone DMX connect the 4 core wire from the PAL 4 WIRE LED LIGHTS. Please ensure the 4 cores are connected to the correct terminals.

INSTALLATION INSTRUCTIONS FOR PCR-3DMX RGB OUTDOOR DRIVER



Notes:

1. If using twist on wire connectors ensure the wires are not being pulled out from the JST (White) Clip in the back. Tightening wire connectors with too much tension on the PAL wires can cause them to pull out from the clip and not make a sufficient connection.

2. Driver can only be tested with a DMX signal present.

3. All dipswitches in the vertical orientation (SW 6, SW 7, SW 9, SW 5) should be in the "OFF" position.

PCR DMX Operation

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

Installation

Note: It is recommended to use shielded DMX wire/cable or shielded twisted pair cable (i.e. CAT5e or 6 cable)

- 1. Connect DMX input to "IN" screw terminal block, 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

Signal LED

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

The Signal LED is located at the first VERTICAL DIPSWITCH (SW 6) located below the ethernet port just to the left of the fuses. See diagram for location.

The next three LEDS along the VERTICAL dipswitches (SW 6, SW 7, SW 9, and SW 5) should be illuminated when the driver has power.

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 an additional 60 seconds of no DMX signal, the fan will turn 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.

If you are using only one driver for DMX you will only have the far right HORIZONTAL dipswitch (SW 1) in the "ON" position. Signifying the starting Channel is 1.

If you are using multiple drivers, Each 8 Zone driver has a total of 24 channels. For example, if you have one 8 zone driver and one 2 zone driver, Your 8 zone driver will be channels 1-24, and your 2 zone driver will start on channel 25. Following the Dipswitch chat given.

Starting Channel Table

		SWITCH NO	SW8			SW2			SW1		
		DIP SWITCH	9	8	7	6	5	4	3	2	1
	Verify These	VALUE	256	128	64	32	16	8	4	2	1
8 Zone Driver #	STARTING CHANNEL	STARTING CHANNEL									
1	1	1	OFF	ON							
2	25	25	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
3	49	49	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
4	73	73	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
5	97	100	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
6	121	124	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
7	145	148	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
8	169	172	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
9	193	196	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
10	217	220	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
11	241	244	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
12	265	268	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
13	289	292	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
14	313	316	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
15	337	340	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
16	361	364	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
17	385	388	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
18	409	412	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
19	433	436	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF
20	457	460	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
21	481	484	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
22	505	508	ON	OFF	OFF						

8 Zone Channel Allocations

ZONE 1			ZONE 2			ZONE 3			ZONE 4		
СНІ	CH2	CH3	CH4	CH5	CH6	CH7	CH8	СН9	СН10	СНІІ	CH12
RED	GREEN	BLUE									
	ZONE 5			ZONE 6			ZONE 7			ZONE 8	
CH13	ZONE 5 CH14	CH15	СН16	ZONE 6 CH17	CH18	CH19	ZONE 7 CH20	CH21	CH22	ZONE 8 CH23	CH24

Troubleshooting 8 zone driver

No Power?

Ensure your 120v power supply has good connection to the Blue and Brown Wires. Brown Should be connected on the TOP of the JST Clip (located behind the PCB board on the left) Blue on the bottom

No DMX Signal

Check and ensure connections VIA the Green BUS terminals.

Ensure the same wires are connected in the same spots. For example, BLUE is positive on driver, and blue is positive on DMX transmitter.

Ensure DMX transmitter has power

Ensure the DMX controller is programmed for the proper channels.

DMX Signal but no lights

Ensure your starting channel in your DMX controller is correct. Ensure dipswitches match

Colors are incorrect

Check coding in the DMX controller and ensure no numbers were skipped in programming of the Driver

8 Zone Programming channels for DMX controller (For Single 8 zone driver) Zone 1: Red 1 Green 2 Blue 3 Zone 2: Red 4 Green 5 Blue 6 Zone 3: Red 7 Green 8 Blue 9 Zone 4: Red 10 Green 11 Blue 12 Zone 5: Red 13 Green 14 Blue 15 Zone 6: Red 16 Green 17 Blue 18 Zone 7: Red 19 Green 20 Blue 21 Zone 8: Red 22 Green 23 Blue 24