PX842 PxSpotBar

User manual



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Manufacturer reserves the right to make modifications in order to improve device operation.

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BDO register number 000005972	www.pxm.pl	12.09.2023

1 Description

The PxSpotBar lamp is designed to illuminate museum or exhibition displays.

PX842 is a device powered by 230V AC. The lamp uses efficient LEDs that can be controlled using the DMX protocol. They provide many color variants and achieve different brightness levels. The device is produced in an RGBW version or with white diodes of a selected color temperature (or Dynamic White). Spots can be equipped with lenses with light flux angles of 10°, 25° or 40°. Each spot may have a different type of diodes and different lenses. PX842 is placed in an aluminum housing that ensures tightness at the IP54 level.

Each spot can be freely positioned thanks to the ability to change the direction of light in two axes.

The user can disassemble and assemble the spots in the lamp himself, depending on needs (1 - 4). The PX842 uses a simple spot assembly / disassembly system. Just plug in / unplug the plug connecting the spot with the lamp (*WEIPU ST12 Series – 6 pin*) and screw / unscrew one screw.

Example configurations of spot arrangement in the lamp:



2 Safety conditions

Caution! Before installing, connecting and using the lamp you have to absolutely read this document.

The following symbols are used to underline important information on security on the product and in this manual.



Danger! Risk of loss of life and health



Warning! Fire hazard



Warning! LED light emission, the risk of eye damage



Warning!



Warning! The risk of burns Read the instruction manual

Caution!

Do not look at the LEDs, LEDs can cause damage or eye irritation. Do not look

at the light source with any optical devices that focus the light rays.



Light is harmful to unprotected eyes, can cause irritation, eye damage or even loss of eyesight.

While working outdoors in normal conditions, the housing unit can heat up to +65°C. Make sure that accidental contact with the device during use is impossible.

In case of improper usage of the product it may cause a risk of serious injury or death because of the threat of fire.

The PX842 device is powered directly from 230V power grid. Failure to comply with the safety rules may result in electric shock and may endanger the user's life. Therefore it is necessary to observe the following:

- 1. Installation should be performed by a person holding the appropriate qualifications, according to the instruction manual.
- 2. The electrical installation to which the lamp is to be connected must meet the safety requirements (the installation must be 3-wire and equipped with a residual current device).
- 3. All the conductors should be protected against mechanical and thermal damage.
- 4. In the event of damaging any conductor, it should be replaced with a conductor of the same technical data.
- 5. All repairs, should be made with cut off power supply.
- 6. Do not connect to the power supply to device with visible damage.
- 7. All sudden shocks, particularly dropping, should be avoided.
- The device cannot be used in places with temperature lower than +2°C or higher than +40°C.
- 9. Clear with damp cloth only.

3 Information on version

When ordering a lamp, please choose:

base color for spots (PX842-B PxSpot),



• number of spots and their configuration (PX842-S),



• number of plugs bridging the DMX signal (PX842-C), if fewer than 4 spots are used in the lamp.



Below is a description of the PX842-B model designations and their explanation:

PX842-B – Z

- Z housing color:
- 1 gray
- 2 black
- 3 white

Below is a description of the PX842-S model designations with their

explanation:

PX842-S – WW – YYY – Z		
<u> WW – beam angle:</u>	YYY – CRI / LED color / color temperature:	
10 - 10°	RGBW – RGBW	
25 – 25°	927 – CRI 90, 2700K	
40 - 40°	930 – CRI 90, 3000K	
	940 – CRI 90, 4000K	
<u>Z – housing color:</u>	950 – CRI 90, 5000K	
1 – gray	965 – CRI 90, 6500K	
2 – black	DW – Dynamic White	

3 - white

NOTE! The configuration of the lens angle (**WW**) and diode type (**YYY**) applies to a single spot in the lamp. Each spot can be freely configured (lens angle / diode type).

4 Control – DMX

The spot can be controlled using a DMX signal:

• MONO:

- 1 channel brightness,
- Dynamic White:
 - 1 channel color temperature,
 - 2 channel brightness,
- RGBW:
 - 1 channel red (brightness),
 - 2 channel green (brightness),
 - 3 channel blue (brightness),
 - 4 channel white (brightness).

5 RDM – available parameters

PX842 supports the DMX-RDM protocol (each spot individually). The DMX protocol is intended to enable unidirectional data flow, while its extension – the RDM protocol – can send information in two directions. Thanks to this, it is possible to receive and send information simultaneously, which makes it possible to monitor the operation of devices compliant with the RDM protocol and possibly change the configuration of their operating parameters. Individually in each spot via RDM you can:

- set the starting DMX address in the range 1 512,
- restore factory settings,
- change the *No Signal* mode settings (spot behavior after the DMX control signal disappears):
 - 0 OFF (complete shutdown),
 - **1 ON** (switching on 100%),
 - 2 SCENE (switching on a defined scene),
 - 3 HOLD (maintaining the last DMX signal value),
- program the scene activated in the No Signal parameter in SCENE mode:
 - MONO: 1 channel in the range 0 255 (brightness),
 - Dynamic White: 2 channels in the range 0 255 (brightness / color temperature),
 - *RGBW*: 4 channels in the range 0 255 (brightness of individual colors),
- define the time during which the No Signal mode is to be activated, in the range of 0 - 100 (0 - 10s),
- set the smoothing level in the range 0 4 (OFF / L1 / L2 / L3 / L4),
- set an additional device description (max. 32 ASCII characters),
- <u>read parameters:</u>
 - serial number,
 - spot temperature.

6 Installation

- 1. Before assembling the spot, place a rubber washer on the pin [1].
- 2. Place the spot on the pin [2].
- 3. Screw on the nut [3].

4. After screwing the spot, connect it to the base using a cable coming from the spot with a Weipu plug.



7 Connection scheme



NOTE! The user can enter the DMX signal / power supply from any side, please remember that there will be a DMX signal / power output on the opposite side of the lamp.

Connection diagram of the DMX control signal and power supply inside

the base:



NOTE! If all lamps are not installed in the lamp, a DMX signal bridging plug (PX842-C) should be screwed in place of the empty output connector.

In the last lamp on the DMX line, connect a terminator (120 Ohm resistor) to the DMX+ OUT and DMX- OUT connectors:



8 Dimensions





9 Technical data

type	PX842
power supply	230V AC
number of spots*	1/2/3/4
number of LEDs / spot	4
LEDs type**	RGBW Mono: 2700K / 3000K / 4000K / 5000K / 6500K DW: 2700K – 5000K
power consumption	25W (4 spoty)
lens angle***	10°, 25°, 40°
control	DMX / RDM
housing	aluminum
available housing colors	white, gray, black
lamp-spot connection	WEIPU ST12 Series connector
tightness class	IP54
dimensions	lenght: 480mm width: 60mm depth: 173mm

* - the customer can assemble / disassemble the spots in the lamp himself

- ** different types of diodes can be used in each spot
- *** different lenses may be used in each spot



DECLARATION OF CONFORMITY

PXM Marek Żupnik spółka komandytowa Podłęże 654, 32-003 Podłęże

we declare that our product:

Product name:

PxSpotBar

Product code:

PX842

meets the requirements of the following standards, as well as harmonised standards:

PN-EN IEC 63000:2019-01 PN-EN 60598-1:2015 PN-EN 62471:2010 PN-EN 61000-4-2:2011 PN-EN IEC 61000-6-1:2019-03 PN-EN 61000-6-3:2008 EN IEC 63000:2018 EN 60598-1:2015 EN 62471:2008 EN 61000-4-2:2009 EN IEC 61000-6-1:2019 EN 61000-6-3:2007

and meets the essential requirements of the following directives:

2011/65/UE **DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment Text with EEA relevance.

2014/30/UE **DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast) Text with EEA relevance.

2014/35/UE **DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits



mgr inż. Marek Żupnik.