

PX206

Electronic Switch 8x1 A OC

MANUAL



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

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1. GENERAL DESCRIPTION

PX206 module is the 8-channel electronic digital switch with the 1A maximum load of each output. It allows to switch the stage effects or architectural illuminators through the DMX-512 control signal. PX206 module is powered with 12 -24V external supplier and controls 12 - 24V outputs. Manufactured in dedicated case module is ready for direct mounting with standard electric boxes 35 mm DIN rails.

8 outputs of PX206 are controlled through DMX signal. The device menu allows to program the DMX address for each of the output channel and select PX206 reaction to DMX signal absence or interruption. The switching method include hysteresis protection against unstable operation near switching levels.

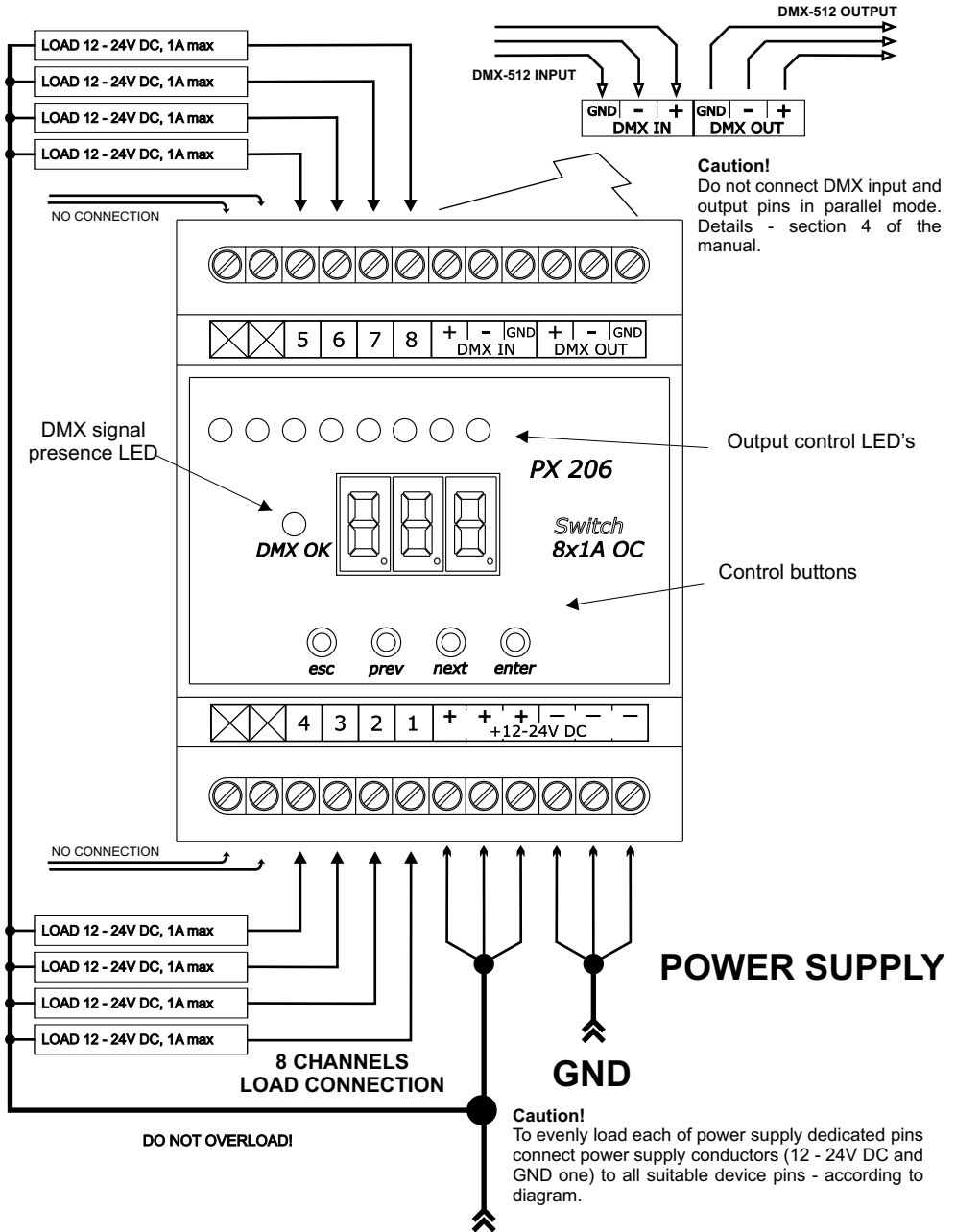
The device is equipped with the separate DMX-512 signal input and output. It is manufactured in a 70mm wide casing.

2. SAFETY CONDITIONS

Electronic switch PX206 is powered with safe voltage 12 - 24V; however, during its installation and use the following rules must be strictly observed:

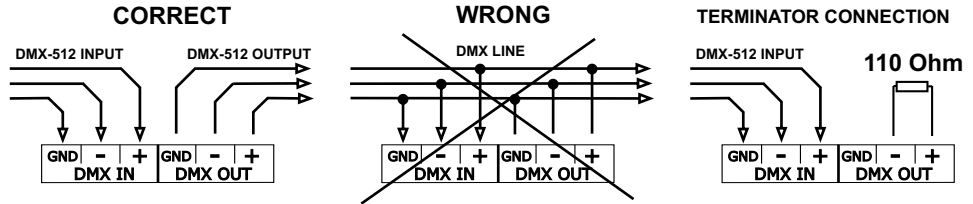
1. The device may only be connected to 12 - 24V DC current (stabilized voltage) with current-carrying capacity compatible with technical data.
2. All the conductors should be protected against mechanical and thermal damage.
3. In the event of any conductor damaging, it should be replaced with the one of the same technical data and attestations.
4. Connection of DMX signal should be made with shielded conductor.
5. All repairs and connections of outputs or DMX signal can only be made with power off.
6. PX206 should work inside the standard, closed trusses.
7. PX206 should be strictly protected against contact with water and other liquids.
8. All sudden shocks - particularly dropping - should be avoided.
9. The device cannot be turned on in places with humidity exceeding 90%.
10. The device cannot be used in places with temperature lower than 2°C or higher than 40°C.
11. Clean with damp duster only.

3. COUPLINGS AND CONTROL ELEMENTS DESCRIPTION



4. DMX SIGNAL CONNECTION

PX206 must be connected to DMX line in serial mode, with no branches on DMX control cable. That means that DMX line, from the signal source, must be connected to DMX IN pins of PX206 and later, directly from DMX OUT pins to the next device in DMX chain. If the PX206 is the last DMX chain receiver there should be terminator (resistor 110 Ohm) mounted between "DMX+" and "DMX-" pins of DMX OUT section.



5. DISPLAYED MESSAGES MEANING

ALL	DMX address setting for all channels concurrently.	PR2	Built-in program no. 2 (in case of DMX interruption).
1nD	Setting the individual DMX addresses for each channel.	PR3	Built-in program no. 3 (in case of DMX interruption).
Ad1	DMX address - channel 1.	PR4	Built-in program no. 4 (in case of DMX interruption).
Ad2	DMX address - channel 2.	SPd	Program speed setting.
AdH	etc. - DMX addresses for channels 3 to 7 (X=3 do 7).	ScB	Scene programming.
AdB	DMX address channel 8.	001	Output 1 for scene programming.
AdF	DMX address for the first channel in concurrently setting ALL.	002	Output 2 for scene programming.
n05	PX206 programming for DMX control interruption (4 built-in programs or 1 scene).	00H	etc. outputs 3 to 7 for scene programming.
oFF	All the outputs OFF (in case of DMX interruption).	00B	Output 8 for scene programming.
oNB	All the outputs ON (in case of DMX interruption).	SEe	Set channel output ON for scene programming.
PR1	Built-in program no. 1 (in case of DMX interruption).	CEP	Set channel output OFF for scene programming.

6. PROGRAMMING

When you turn the module on, the display will show the software version number, and - after approximately 2 seconds - PX206 is ready to start programming procedure, categorised to 2 divisions:

1. DMX address setting (all channels in sequence or individual addressing, as "patching")
2. Programming PX206 reaction to DMX signal interruption (to choose from: all channels ON/OFF, 4 built-in programs with the speed programming, 1 static scene defined by user).

There are 4 buttons dedicated to realise PX206 programming: ENTER, ESC (Escape), NEXT and PREV (Previous). Any programming level output is realised by pressing ESC button. Finally the first channel address is displayed.

6.1. DMX ADDRESS SETTING

DMX channel address you can set in two ways: group and individual addressing.

1. Group addressing - **RL L** :

Press ENTER to switch to the function **RL L**. Press ENTER next time and the display will show **R d r**. Press button the third time to display the current DMX address for the first channel. With the PREVIOUS or NEXT buttons select suitable value (from the range 1 to 504) and finally press ENTER to confirm your selection. Making selection for the first channel will automatically set consecutive addresses for the remaining 7 channels.

NOTICE! Group addressing automatically overwrites the previous individual addressing.

2. Individual addressing - **I n d** :

It is possible to set individual address for each of PX206 channel. The same address may be set to more than only one channel. With the active function **RL L** press NEXT button to get individual programming mode **I n d**. Confirm the mode with ENTER button and **R d i** will be displayed, that means that PX206 is ready to get DMX address for the first channel. Press ENTER to display the current address and modify it with NEXT or PREV buttons (choose from the range 1 to 512). Confirm your choice with ENTER and the next channel is ready to choose with NEXT or PREV buttons. Repeat programming procedure for all channels you need address modification as above.

6.2. OUTPUTS INCLUSION OR EXCLUSION - DMX VALUE LEVEL

The output will be switched on when value of DMX signal will reach 141 or above.
The output will be switched off when value of DMX signal will reach 115 or below.

6.3. PX206 REACTION TO DMX SIGNAL INTERRUPTION

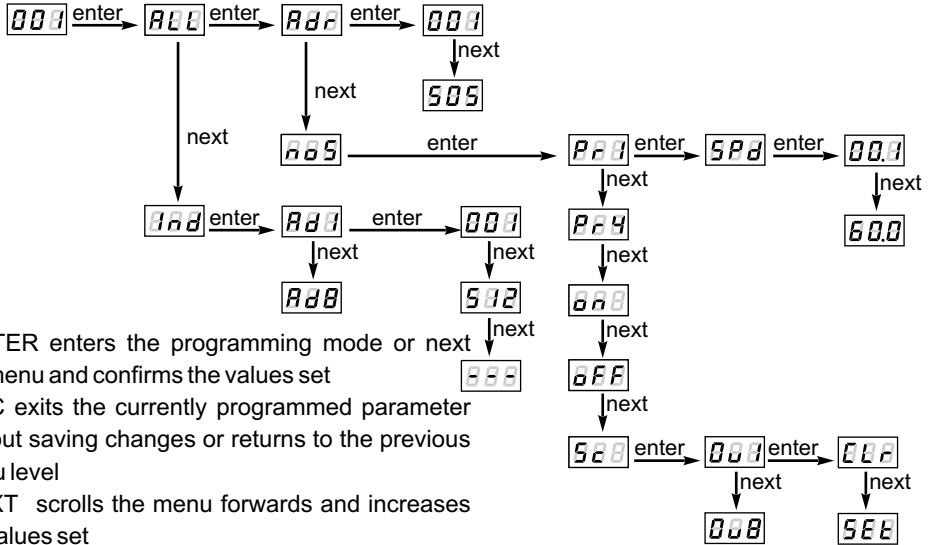
This feature is used not only to protect the installation from DMX signal interruption, but also to control the outputs without the external controller. After the feature is programmed, when the DMX signal is not present, the module will realize the selected function independently. When the DMX signal is connected again, the module stops playing the function and starts working according to the commands transmitted through the DMX line.

With the PX206 you can choose one from the following options: all channels ON or OFF, 4 built-in programs and 1 user-defined static scene. Make your choice from **n o S** menu, so confirm **RL L** with the ENTER button and with displayed **R d r** change it to required option with NEXT button. With **n o S** active go to the options submenu with ENTER and choose desired function with NEXT/PREV buttons. Respectively:

1. All channels ON or OFF. With NEXT/PREV choose **o n** (all outputs set to ON) or **o f f** (all outputs set to OFF). Confirm decision with ENTER.
2. Built-in program selection. With NEXT/PREV choose one from 4 programs **P r 1** to **P r 4** respectively. Confirm desired option with ENTER, the display will show **S p d** (program playback speed). Press ENTER and set suitable playback speed with NEXT/PREV. Make final confirmation with ENTER.

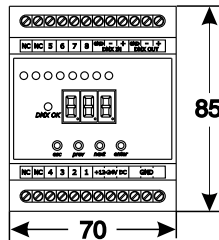
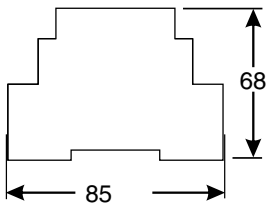
3. Scene programming. Get to the **no5** menu level and choose suboption **Sc** with NEXT/PREV. Confirm with ENTER, **001** will be displayed (output 1 ready to set). Confirm with ENTER and choose one of **SEE** (output ON) or **CLR** (output OFF). Confirm decision with ENTER and repeat the same for the rest of outputs **002** to **008**. Choose the output to be programmed with NEXT/PREV buttons.

7. MOVING AROUND THE PX206 MENU



1. ENTER enters the programming mode or next submenu and confirms the values set
2. ESC exits the currently programmed parameter without saving changes or returns to the previous menu level
3. NEXT scrolls the menu forwards and increases the values set
4. PREV scrolls the menu backwards or decreases the values set

8. DIMENSIONS [mm]



9. TECHNICAL SPECIFICATION

- control input
- output channels number
- each output load
- power supply
- current consumption (all outputs OFF)
- dimensions
- DMX-512
- 8
- 1A constant load
- 12-24V DC / 8A max. (external source)
- 320 mA max
- as above



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DECLARATION OF CONFORMITY according to guide lines 89/336/EWG

Name of producer: PXM s.c.

Address of producer: ul. Przemysłowa 12
30-701 Kraków, POLAND

declares, that the product:

Name of product: **Electronic Switch 8 x 1A OC**

Type: **PX206**

answers the following product specifications:

EMC:

**PN-EN 55103-1
PN-EN 55103-2**

Additional informations:

PX206 module should be installed in close electrical boxes.

Kraków, 01.04.2008

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