PX094-3 PX094-5

# DMX Splitter

# OPERATION 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

Splitter DMX allows for creating splits in complex DMX installations. According to the requirements of the standard, DMX route must be made by DMX receivers connected in series, creating a chain ended with a terminator. It is not permissible to create splits of this route by simple "splitting on the wire". Because connecting of the receivers in one chain may be very troublesome, in the case of complex installation a possibility of splitting the DMX route with the Splitter has been envisaged, that ensures their proper operation.

Using the PX094 Splitter, it is possible to split the input DMX signal into 6 independent control branches. Particular output routes are galvanically separated and appropriately strengthened, which guarantees proper operation of the entire installation. Certainly, connection of the receivers to particular output routes must be performed according to the principle of the series chain with a terminator at the end.

Installation of the Splitter is limited to power connection and attachment of the DMX signal cables. After turning on the device, the input DMX signal is safely multiplied to 6 outputs. The device is made in the standard casing of 19" 1U, adjusted to be set in the stand.

## 2. SAFETY CONDITIONS

DMX Splitter is directly powered from standard 230 V grid, what can cause electric shock when safety rules are not observed. Therefore it is necessary to observe the following:

- 1. Splitter can be conected to the mains through enclosed cable only.
- 2. Splitter can be connected to socket which has protecting instalation in working order only (3 wire grid).
- 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 and attestations.
- 5. All repairs demanding casing opening should be made with cut off power supply.
- $6.\,Splitter\,should\,be\,strictly\,protected\,against\,contact\,with\,water\,and\,other\,liquids.$
- 7. All sudden shocks, particularly dropping, should be avoided.
- 8. Device with damaged (cracked) casing should not be connected to the mains.
- 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. Cleaning with damp duster only splitter has to be cut off the power supply.

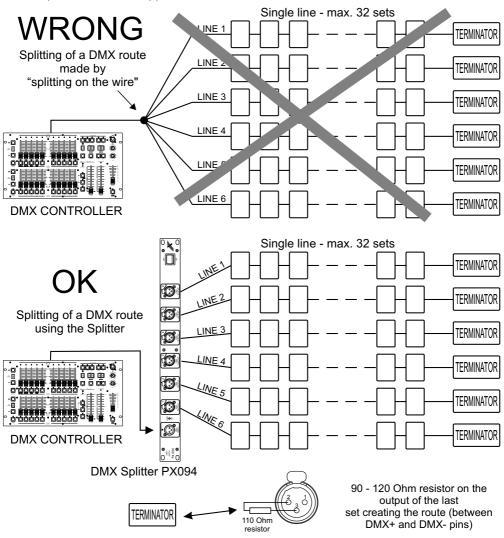
### 3. RULES FOR CREATING DMX INSTALLATION

Frequently, the seemingly faulty operation of DMX devices is caused by their incorrect connection in the DMX network. DMX protocol strictly defines the rules for creating a control installation: below is the drawing of a correct splitting of a DMX route using the splitter.

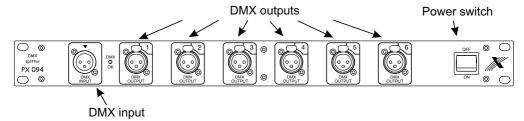
Connection of the PX094 Splitter in the DMX control route is made using the couplings of the input and the outputs, placed at the front of the device. You must remember about the correct termination of each split route with a terminator. In complex DMX installations several splitters can be applied.

### **CAUTION:**

If a single route comprises more than 32 receivers, or if its physical length exceeds 500 meters, DMX Repeaters should be applied.



### 4. FRONT PANEL VIEW



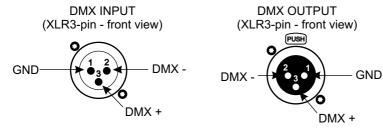
### **DMX INPUT**

XLR 3- or 5-pin serves for connection of the input DMX signal. The signal is then correctly multiplied into 6 independent outputs, thus allowing for splitting of the DMX route. Particular outputs are galvanically separated from the input (optical insulation). The input coupling is tipped with a resistor of the route terminator.

### DMX OUTPUTS

Set of 6 XLR 3- or 5-pin jacks allowing for connection of cables created from splitting of the DMX route. Each of the outputs is to be treated as a beginning of a separate DMX route, thus a chain of receivers correctly ended with a terminator.

### 5. DMX CONECTION



### ATTENTION:

Input socket has built-in terminator.

# 6. SPECIFICATIONS

- DMX input

- DMX output

- optical isolated input

- optical isolated each output

- power supply

- weight

- dimensions:

- width

- height

- depth

XLR 3- or 5-pin

6 x XLR 3- or 5-pin

YES

YES

 $230\ \text{V}\ /\ 50\ \text{Hz},\ 630\ \text{mA/T}$  fuse in rear panel

2 kg

483 mm (19")

44 mm (1U)

120 mm





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# DECLARATION OF CONFORMITY according to guide lines 73/23/EWG and 89/336/EWG

Name of producer: PXM s.c.

Address of producer: ul. Przemysłowa 12

DIGITAL DIMMERS

30-701 Kraków

declares that the product:

Name of product: **DMX Splitter** 

Type: PX094-3

PX094-5

answers the following product specifications:

LVD: PN-EN 60065

EMC: PN-EN 55103-1

PN-EN 55103-2

Additional informations: 1. All DMX512 inputs and outputs must be shielded and the shielding must be connected to pin 1 XLR plug.

2. A ground wire of the splitter power cable must be

connected to efficient ground installation.

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Kraków, 01.09.2005

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