PX097

DMX Repeater

INSTRUCTION MANUAL



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

1. GENERAL DESCRIPTION

The PX097 DMX Repeater allows to create ramifications in the complex stage DMX installations and to amplify the DMX signal, that means, enables to connect next 32 receivers and to lengthen the DMX line. According to the DMX standards, the receivers in a DMX route must be connected in series. In addition, in the last device a terminator must be installed. It is impermissible to split the DMX line by simply "splitting the wire". As connecting the receivers in one line can be very troublesome in complex installation, it is possible to create ramifications of the DMX route and amplification of the control signal. The proper maintenance of these features is ensured by application of the Repeater.

With the PX097 DMX Repeater you can split the incoming DMX signal into two independent branches and amplify the DMX signal. The device has an optical isolation between input and two outputs. Obviously, connecting the receivers to particular output routes must be performed according to the rule of line in series, with the terminator installed in the last device.

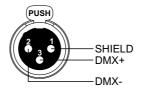
2. SAFETY CONDITIONS

PX097 DMX Repeater is powered directly from standard 230 V grid, what can cause electric shock when safety rules are not observed. Therefore it is necessary to observe the following:

- Repeater installation must be performed by a person holding the appropriate qualifications, according to the manual.
- Repeater can be connected only to socket which has protecting instalation in working order (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. Repeater 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 only with damp duster repeater has to be cut off the power supply.

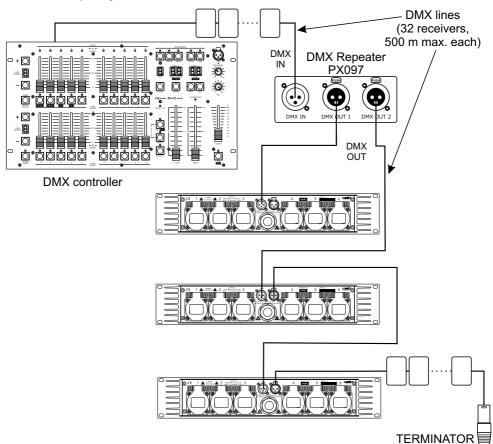
3. DMX SIGNAL CONNECTION

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 repeater.

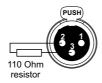


ATTENTION!! The DMX cable shield cannot be connected to the device ground!

3.1. Exemplary DMX line



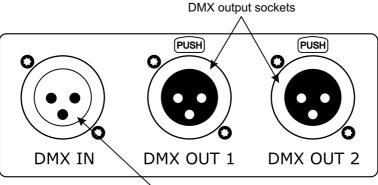
3.2. Terminator



3.3. Rules for creating DMX connections

- 1. To connect the devices application of the microphone cable is strictly recommended (two strands in a shield).
- 2. The devices have to be connected in series.
- When the PX097 repeater is applied, each of two outputs is treated as a beginning of a new DMX line.
- 4. The maximal number of devices in a DMX line is 32.
- 5. The maximal lenght of a DMX line is 500 meters.
- 6. In the last device of each DMX line between 2nd and 3rd pin of an XLR output socket a terminator (110 Ohm resistor) must be installed.

4. FRONT PANEL



DMX input socket

5. TECHNICAL SPECIFICATION

- isolation IN / OUT breakdown voltage > 5000 V

- DMX input / output socket 3-pin XLR plug / socket

- power supply 230 V. 50 Hz

- power consumption 5 VA

- weight 1 kg

- dimensions:

- width 103 mm - height 47 mm - depth 92 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 Repeater**

Type: PX097

answers the following product specifications:

LVD: PN-EN 60065

PN-EN 55103-1 EMC:

PN-FN 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 repeater power cable must be connected to efficient ground installation.

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Kraków. 01.09.2005

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