

# NIC-DMX NASPLIT-4

DMX SPLITTER 4 channels

## Data Sheet



### FEATURES

- Power supply 12-24-48 Vdc
- 5 x Bus DMX512+RDM
  - NSC, SIP, RDM
  - Functional Insulation - Bidirectional data communication
  - Signal regeneration
- 32 bit ARM processor (RDM Variant)
- Extended temperature range
- 100% functional test

## ➤ PRODUCT DESCRIPTION

This Device includes 2 different types of operation: operation as only DMX Splitter and operation as DMX/RDM.

The **DMX Operation** is a 4 way DMX splitter, features one DMX input/THRU and 4 DMX outputs. This unit takes the incoming DMX signal and splits the signal into 4 separate output channels. Each output channel and the input channel are completely electronically isolated from each other, all channels have independent line drivers to boost the DMX signal. In this configuration the RDM signal packets are discarded and are not transmitted to the 4DMX outputs.

The **DMX/RDM operation** is a 4 way DMX/RDM splitter, features one DMX/RDM input/THRU and 4 DMX/RDM outputs. This unit takes the incoming DMX/RDM signal and splits the signal into 4 separate output channels. Each output channel and the input channel are completely electronically isolated from each other, all channels have independent line drivers to boost the DMX/RDM signal.

In addition, the timing of outputs are regenerated in digital mode from a 32bit ARM processor. The RDM return messages are in turn amplified and redistributed on the other outputs and they are redistributed on other splitters connected through the input, crossing up to a maximum of 3 different splitter.

An LED indicates the presence of the signal (LED on) or absence (LED blinking).

| PART              | Supply voltage | Channels | DMX Universe   | DMX Channels | Protocol       | Function |
|-------------------|----------------|----------|----------------|--------------|----------------|----------|
| NIC-DMX-NASPLIT-4 | 12-48V DC      | 4        | 1 DMX Universe | 4 x 512      | DMX or DMX/RDM | SPLITTER |

# NIC-DMX NASPLIT-4

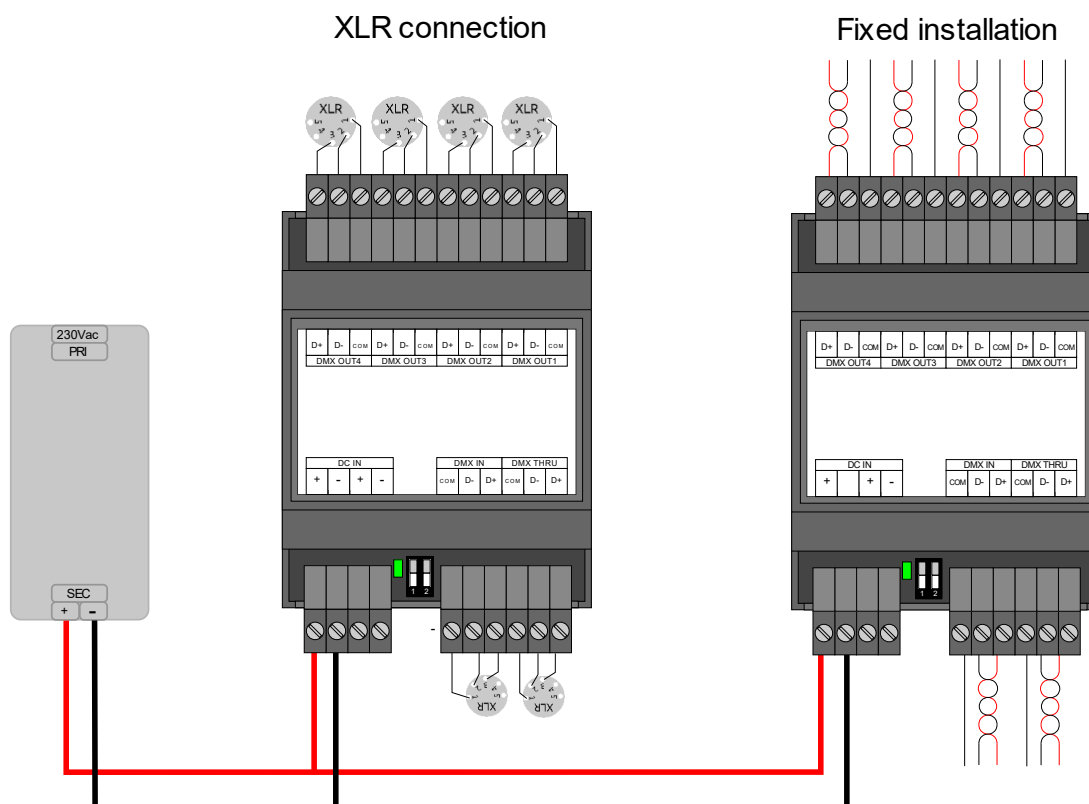
DMX SPLITTER 4 channels

## ➤ TECHNICAL SPECIFICATIONS

|                              |        | Technical   |  |       |
|------------------------------|--------|---|--|-------|
| <b>Supply Voltage</b>        |        | min: 10.8 Vdc .. max: 58.2Vdc   |  |       |
| <b>Input Current</b>         |        | min   | Typ<br>(DMX+RDM input,<br>4 x 120ohm load outputs) | max   |
|                              | @12Vdc | 10mA (0,12W)  | 70mA (0,84W)                                       | 500mA |
|                              | @24Vdc | <10mA (<0,12W)  | 40mA (0,96W)                                       |       |
|                              | @48Vdc | <10mA (<0,12W)  | 20mA (0,96W)                                       |       |
| <b>Storage temperature</b>   |        | min: -40 max: +60 °C  |  |       |
| <b>Ambient temperature</b>   |        | min: -40 max: +60 °C  |  |       |
| <b>Protection grade</b>      |        | IP10  |  |       |
| <b>Wiring</b>                |        | 2.5mm <sup>2</sup> solid – 1.5mm <sup>2</sup> stranded – 30/12 AWG                    |  |       |
| <b>Mechanical dimensions</b> |        | 72 x 92 x 62 mm – DIN RAIL 4mod.  |  |       |
| <b>Packaging dimensions</b>  |        | 124 x 85 x 71 mm  |  |       |
| <b>Weight</b>                |        | 125g  |  |       |
| <b>DMX</b>                   |        | 512 slots NSC, SIP, RDM<br>Max units: 32 standard<br>Open fail safe – short fail safe |  |       |

# NIC-DMX NASPLIT-4 DMX SPLITTER 4 channels

## ➤ INSTALLATION



## ➤ SETTING DMX or DMX/RDM SPLITTER

|   |  |  |  |
|---|--|--|--|
| <p>Funzionamento solo DMX<br/>DMX Operation</p> |  | <p>Funzionamento DMX/RDM<br/>DMX/RDM Operation</p> |  |
|---|--|--|--|

By setting DIP 1 and 2 in the OFF configuration, the device is configured as a DMX SPLITTER. With this configuration, the input DMX signal to the DMX Splitter is divided, amplified and regenerated for the 4 output channels. The RDM signal is discarded and is not sent to the outputs.

By setting DIP 1 and 2 in the ON-OFF configuration, the device is configured as SPLITTER DMX / RDM. With this configuration, the input DMX / RDM signal to the DMX / RDM Splitter is divided, amplified and regenerated for the 4 output channels.

# NIC-DMX NASPLIT-4

DMX SPLITTER 4 channels

---

#### Installation:

- Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- The product must be installed inside an electrical panel protected against overvoltages.
- The product must be installed in a vertical or horizontal position with the cover / label upwards or vertically; Other positions are not permitted. It is not permitted to bottom-up position (with the cover / label down).
- Keep separated the circuits at 230V (LV) and the circuits not SELV from circuits to low voltage (SELV) and from any connection with this product. It is absolutely forbidden to connect, for any reason whatsoever, directly or indirectly, the 230V mains voltage to the bus or to other parts of the circuit.

#### Power Supply:

- For the power supply use only a SELV power supplies with limited current, short circuit protection and the power must be dimensioned correctly. In case of using power supply with ground terminals, all points of the protective earth (PE = Protection Earth) must be connected to a valid and certified protection earth.
- The connection cables between the power source "low voltage" and the product must be dimensioned correctly and they should be isolated from every wiring or parts at voltage not SELV. Use double insulated cables.

#### Command:

- The length and type of the connection cables at the BUS (DMX512 or other) use cables as per specification of the respective protocols and regulations and they should be isolated from every wiring or parts at voltage not SELV. Use double insulated shielded and twisted cables.
- All the product and the control signal connect at the bus (DMX512 or other) must be SELV (the devices connected must be SELV or supply a SELV signal)

#### Outputs:

- The length and type of the connection cables at the BUS output of splitter (DMX512 or other) use cables as per specification of the respective protocols and regulations and they should be isolated from every wiring or parts at voltage not SELV. Use double insulated shielded and twisted cables.
- The presence of opto-isolation in a DMX512 network does not guarantee protection from damage or injury, including fatal electrocution, caused by severe faults.