

# Users manual for

dmXLAN node3  
dmXLAN node6x  
dmXLAN node8s  
dmXLAN node8gb



### **dmXLAN node3 / node6x / node8s / node8gb**

DMX Ethernet node with integrated Ethernet switch.

All nodes have the same user interface: a graphical LCD screen and an encoder with push function.

#### **Connections:**

##### **dmXLAN node3 WM and SM**

3 Bi-Directional DMX ports on the front  
1 10/100mBit Ethernet port (Ethercon) on the front  
1 10/100mBit Ethernet port (RJ45) internally  
Power over Ethernet should be supplied to the internal Ethernet port.

##### **dmXLAN node3 TM / TM-POE**

3 Bi-Directional DMX ports on the back  
2 10/100mBit Ethernet ports (Ethercon) on the back  
In case of the TM version, AC power is supplied via a fix mains lead (100-240 Vac).  
In case of the TM-POE version, Power over Ethernet should be supplied on the first port.

##### **dmXLAN node6x**

6 Bi-Directional DMX ports on the front  
3 10/100mBit Ethernet ports (Ethercon) on the front  
2 10/100mBit Ethernet ports (RJ45) on the back  
AC power is supplied via a fix mains lead (100-240 Vac).

##### **dmXLAN node8s**

8 Bi-Directional DMX ports on the back  
2 10/100mBit Ethernet ports (Ethercon) on the back  
AC power is supplied via a fix mains lead (100-240 Vac).

##### **dmXLAN node8gb**

8 Bi-Directional DMX ports on the back  
2 10/100/1000mBit Ethernet ports (Ethercon) on the back  
AC power is supplied via a fix mains lead (100-240 Vac).

#### **Network 10/100 MBit Ethernet (on Ethercon or RJ-45)**

The network connection uses a standard UTP network connection.

#### **DMX port pin out**

<i>Pin</i>	<i>Description</i>
1	Ground/Screen
2	Data -
3	Data +
4	-
5	-

All DMX ports have the following options:

- Male or Female
- XLR 5-pin or 3-pin
- Normal or Fully Isolated (FI option in the order code)

All DMX ports can act as Input or Output with RMD preparation. The port also has an internal 120 Ohm terminator resistor and line biasing for RDM.

This product may only be used for controlling dimmers and moving lights. Using the product out of these specifications will remove all responsibility from the supplier

# Operation

The dmXLAN nodes can be operated in 2 ways.  
Either through the front panel or the dmXLAN control software. The software can be downloaded from the website at [www.elclighting.com](http://www.elclighting.com)

Control via the front panel.

## Main display

dmXLAN node3



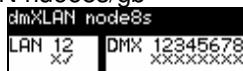
```
dmXLAN node3
Output ✓ Output ✓ Output ✓
0.0      0.0      0.0
```

dmXLAN node6s



```
dmXLAN node6s
LAN 12345 DMX 123456
xxx/x    ✓✓xxxxx
```

dmXLAN ndoe8s/gb



```
dmXLAN node8s
LAN 12   DMX 12345678
x✓      xxxxxxxxx
```

Encoder +/- change the view on the display, to see the ID, IP address, status, software version, etc

Press Encoder Enter the setup menu

## Setup Menu



```
Setup
Exit Setup
View DMX
```

Encoder +/- select one of the setup items:

- Exit Setup
- View DMX
- DMX port 1
- DMX port 2
- DMX port 3
- DMX port 4 (on node6x/node8s/node8gb only)
- DMX port 5 (on node6x/node8s/node8gb only)
- DMX port 6 (on node6x/node8s/node8gb only)
- DMX port 7 (on node8s/node8gb only)
- DMX port 8 (on node8s/node8gb only)
- Set ID
- Network Options
- Backlight

Press Encoder activate the selected option

## DMX View menu



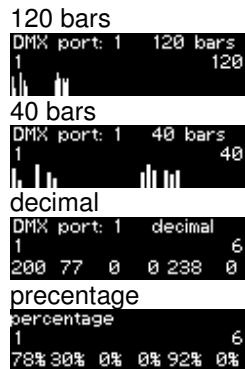
```
View DMX
Mode: 40 bars
View Port 1
```

With this menu, you can visualize all the DMX channels going in or out of a DMX port.

In select mode:

Encoder +/- select one of the options

- Set view mode



- Select one of the ports to view
- Back (go back to the setup menu)

Select the view mode (press encoder when on Mode, and change it to the desired setting and press the encoder again).  
Next scroll to the DMX port and press the encoder to view it.

When viewing, use the encoder to change the start channel or press it to go back.

### DMX port menu



In select mode:

- Encoder +/- select different item
- Press Encoder goto Edit mode

In Edit mode:

- Encoder +/- change the value of the item
- Press Encoder goto Select mode

### DMX port as output

When a port is set up as a DMX output, then you can select the working mode of that port. Modes are:

- disabled → the DMX output is disabled
- outzero → the DMX sends out a DMX test signal with all channels at 0%
- single → the output sends out the DMX values of the selected (primary) ArtNet universe. The DMX output is enabled the first time it detects the DMX universe on the network (or internal DMX inputs). If the universe on the network fails, the DMX output will go into DMX hold.
- dual HTP → like single, but merge two DMX universes (primary and secondary) in highest take precedence.
- dual LTP → like dual LTP, like dual HTP but in latest takes precedence (on a channel by channel basis)
- dual Custom → setting used when programmed via dmXLAN software
- Priority → As long as the primary universe is active, it will be on the output. Otherwise the secondary universe is send on the output.
- Softpatch → setting used when programmed via dmXLAN software
- Flexpath → setting used when programmed via dmXLAN software

The primary and secondary universes can be set to either Art-Net or sACN (streaming ACN, both Draft R2 and Release R3 are supported)



```
Mode: dual HTP
Primary: Art-Net 0.1
Secondary: sACN 1
```

Select the primary or secondary and press the encoder to change it. The universe edit screen appears



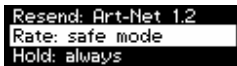
```
Primary
Type: Art-Net
Subnet: 0
```

Here you can change the universe type (Art-Net, sACN or disabled)

for Art-Net you can set the Subnet and Id

for sACN you can set the universe and the range.

the range is to easily go to higher number of universes in steps of 100 up to 65000



```
Resend: Art-Net 1.2
Rate: safe mode
Hold: always
```

The **Resend** option can be used to send the merged signal onto the network again as a new universe. This will help if you need to make a merge of 3 universes for example.

The **Rate** option can be used to set it to either

**Sync**, the DMX output is synchronized to the universe data on the network. This is the fastest (lowest latency) setting. Note some equipment might not work with it nicely.

**Fixed rate** (40fps/33fps/25fps), use this setting if the sync mode doesn't work

**Safe mode**, this mode has a long break and mab. To be used if none of the above settings work

The **Hold** option, by default to DMX port will send it's last value for always when it doesn't get new data from the network. This setting can be changed to timeout.

## DMX port as input

When a port is set up as a DMX input, it can be operation in the following modes.

- disabled → the DMX input does nothing
- normal → any valid DMX is sent onto the network (and internal use) using the selected universe (ArtNet)
- backup → the DMX input will not send data if the selected universe is present on the network. If the selected universe is not present on the network for several seconds and the input has valid DMX, then it will send DMX data. If another sender starts sending the same universe, the input will go back input backup mode.



```
Port: input
Mode: normal
Universe: Art-Net 0.1
```

## Set ID

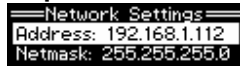


```
ID: 000
Save Cancel
```

And ID can be assigned to the unit, if using it with dmXLAN software. The ID can be use full when doing a preprogramming of the network.

Use the encoder in "Select" and "Edit" mode to change the 3 digits of the ID The digits are in hexadecimal (16 possibilities 0-9, A-F). This means you can have up to 4095 different ID's in the system (ID 000 means that the ID is not used ---).

## Network Options



Select the Address and press the encoder to change the Ip Address



(use the edit/select mode to change it)

Next set the netmask to Ethernet 255.0.0.0 / 255.255.0.0 / 255.255.255.0 or select Set to Default

**Note** For normal Art-Net operation, the netmask should be 255.0.0.0 and the ip address between 2.0.0.1 and 2.254.254.254.

## Backlight



The backlight can be set to be on always or timeout

## Factory Default



Set to unit back to it's default values

## General Information

### ***CE – Product***

The dmXLAN node3/node6x/node8s/node8gb permits to the CE requirements set up by the European Community. This can be recognized by this label on the outside of the product.



#### **Technical Specifications nodes 3 wm / sm:**

Power: Power over Ethernet required on the internal connection  
Dimensions 140 x 55 x 87 mm

#### **Technical Specifications nodes 3 tm:**

Power: 100-240 VAC 47-440 Hz 10VA max  
Dimensions 200 x 44 x 150 mm

#### **Technical Specifications nodes 6 ad 8:**

Power: 100-240 VAC 47-440 Hz 10VA max  
Dimensions 483 x 44 x 150 mm (19"1HE)