Users manual for

dmXLAN node3
dmXLAN node6x
dmXLAN node8s
dmXLAN node8gb

ELC

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

Pin	Description
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

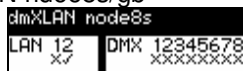Control via the front panel.

Main display

dmXLAN node3

dmXLAN node6s

dmXLAN ndoe8s/gb

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

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
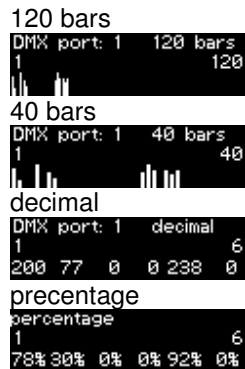
DMX View menu

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

120 bars

DMX port: 1   120 bars
1   120

40 bars

DMX port: 1   40 bars
1   40

decimal

DMX port: 1   decimal
1   6
200 77 0   0 238 0

precentage

percentage
1   6
78% 30% 0% 0% 92% 0%

    - 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

```
====DMX port 1====
Port: output
Mode: single
```
Select mode

```
====DMX port 1====
Port: output
Mode: single
```
Edit mode

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 of 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 it 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

```
═══Network Settings═══
Address: 192.168.1.112
Netmask: 255.255.255.0
```
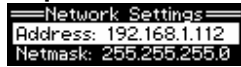
Select the Address and press the encoder to change the Ip Address

```
═══════Address═══════
192.168.1.112
```
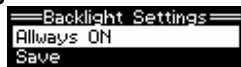(use the edit/select mode to change it)

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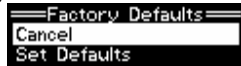or select Set to Default

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

```
═══Backlight Settings═══
Allways ON
Save
```
The backlight can be set to be on always or timeout

Factory Default

```
═══Factory Defaults═══
Cancel
Set Defaults
```
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.

$$C \in$$

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)