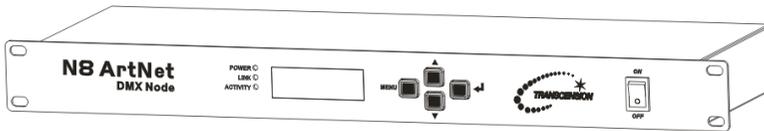




# N8 Art-Net™ Node



**Order code: CONT26**

## User Guide

*Please read these instructions carefully before use*

## CONTENTS

1. Features.....	2
2. General Instructions.....	3
3. Overview.....	4
3.1 Front View.....	4
3.2 Rear View.....	4
4. Operation Guide.....	5
4.1 Startup View.....	5
4.2 Main Menu.....	6
4.2.1 Rename Device.....	7
4.2.2 Set IP Address.....	7
4.2.3 Set Netmask.....	8
4.2.4 Set DMX Port.....	8
4.2.5 Set Device ID Number.....	11
4.2.6 Set LCD Backlight.....	11
4.2.7 User Preset.....	11
4.2.8 Firmware Version.....	13
5. Application Diagram.....	14

## 1. Features

Multi-purpose, eight universe DMX processor featuring three main modes of operation: Art-Net™ to DMX node, eight universe DMX to Art-Net™ processor or DMX splitter/buffer. It has eight optically isolated DMX outputs via 5-pin XLR, two Neutrik™ etherCON™ input/outputs and a fused IEC mains input.

- Eight way Art-Net™ to DMX processor
- Art-Net™ input/output via etherCON™ RJ45
- 4096 channels
- 4 push button menu with LCD display
- 6 user presets
- 10/100M LAN interface
- Supports TCP/IP protocol
- Manual IP address selection
- Eight DMX512 outputs via 5-Pin XLR
- RDM Support
- Electronically isolated inputs and outputs
- IEC power input
- 19"/1U rack mountable
- Power supply: 100~240V, 50/60Hz
- Dimensions: 45 x 484 x 152mm
- Weight: 1.98kg

**Please note:** Knowledge of DMX and Art-Net™ is required to fully utilise this unit. Please use this manual in addition to the manual for your lighting console. The N8 Art-Net™ Node requires the correct network and console settings to be implemented before operation. Please check the console being used is capable of outputting Art-Net™ data via the network and has the additional universes enabled, some lighting consoles require additional hardware or licenses to be able to do so. If you are in any doubt please contact your lighting console manufacturer.

## 2. General Instructions

Please read the user manual carefully, as it includes important information regarding details of operation, maintenance, and technical data. Keep this manual with the unit for future consultation.

### WARNINGS!

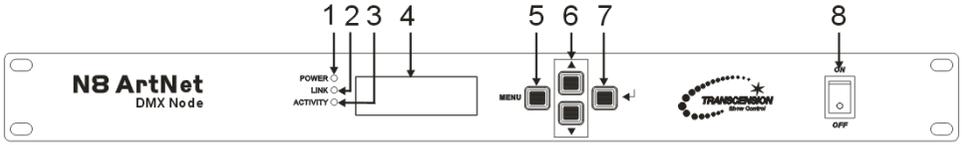
- DO NOT make any inflammable liquids, water or metal objects enter the unit.
- Should any liquid be spilled on the unit, DISCONNECT the power immediately.
- STOP using the unit immediately in the event of serious operation problems and contact with your local dealer for a check or contact us directly.
- DO NOT open the unit. There are no user serviceable parts inside.
- NEVER try to repair the unit by yourself. Repairs by unqualified people could cause damage or faulty operation.
- This fixture is for professional use only - it is not designed for or suitable for household use. The product must be installed by a qualified technician in accordance with local territory regulations. The safety of the installation is the responsibility of the installer. The fixture presents risks of severe injury or death due to fire hazards, electric shock and falls.
- WARRANTY: One year from date of purchase.

### CAUTIONS!

- After having removed the packaging, please check that the unit is NOT damaged in any way. If in doubt, DON'T use it and contact an authorised dealer.
- Packaging material (plastic bags, polystyrene foam, nails, etc.) MUST NOT be left within children's reach, as it can be dangerous.
- This unit must only be operated by adults. DO NOT allow children to tamper or play with this unit.
- DO NOT dismantle or modify the unit unless suitably qualified to do so.
- NEVER use the unit under the following conditions:
  - In places subject to excessive humidity.
  - In places subject to vibrations or bumps.
  - In places with a temperature of over 45°C/113°F or less than 2°C/35.6°F.Protect the unit from excessive dryness or humidity (ideal conditions are between 35% and 80%).

### 3. Overview

#### 3.1 Front View



- 1 POWER LED indicator**
- 2 LINK LED indicator**
- 3 ACTIVITY LED indicator**

To show the on/off status of the unit  
Network connect status indicate  
Network activity indicator, when there is any data present, it will flash.

- 4 LCD Display**

Display the present status and the available option

- 5 MENU Button**

Enter into main menu or back to last menu

- 6 UP/DOWN Button**

UP and DOWN

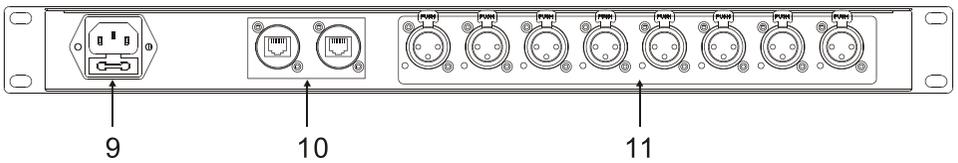
- 7 ENTER Button**

Enter and Confirm selection

- 8 Power Switch Button**

Power ON/OFF the unit

#### 3.2 Rear View



- 9. Power input**
- 10. RJ45 Neutrik™ etherCON™ connector**
- 11 DMX port 1-8**

Connect with the power cord  
RJ45 10/100 Network  
DMX input/output via 5-pin XLR socket

## 4. Operation Guide

Many of the modern lighting systems require thousands of DMX channels, often beyond the number provided on the direct DMX outputs located on the lighting console. And with the increased use of LED fixtures and video mapping, it is now necessary to have fast DMX response and proper network load management. N8 ArtNet can realize not only instant response but also lower network load. It allows users to increase the number of DMX universes and easily place DMX universes remotely on any TCP/IP Ethernet network. In addition, the N8 ArtNet can be used as a DMX merger, DMX splitter, backup device and so on.

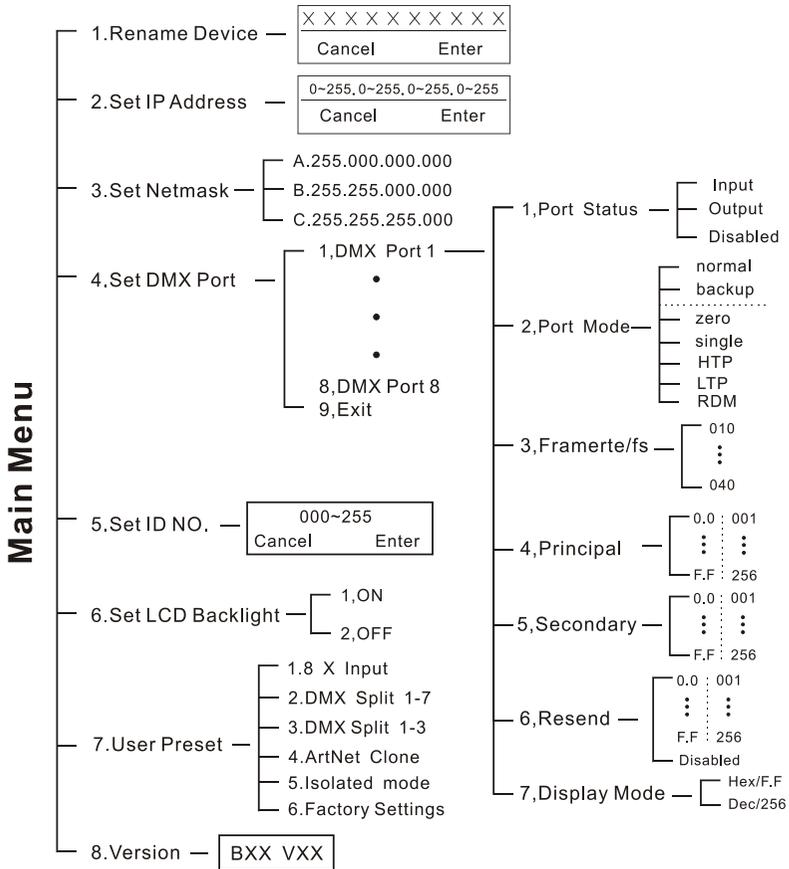
### 4.1 Startup View

Device Name ArtNet To DMX	IP Address 2.10.10.2																														
Device ID ID:001	Port Status <table border="1"><thead><tr><th>A</th><th>B</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th></tr></thead><tbody><tr><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td></tr><tr><td></td><td></td><td>-</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td></tr></tbody></table>	A	B	1	2	3	4	5	6	7	8	x	x	x	x	x	x	x	x	x	x			-			-				
A	B	1	2	3	4	5	6	7	8																						
x	x	x	x	x	x	x	x	x	x																						
		-			-																										

There are 4 different status (as pictures show) you can check when you power on your unit. You can change this by pressing the UP and DOWN buttons. All of the options can be changed in the main menu.

In the port status, A/B refers to the network port; “x” means there is no network connected. “√” means the network has been connected. 1-8 refers to the DMX port 1-8. In the status, “x” means the DMX port’s status is inactive. It will hold the current output. “√” stands the DMX port’s status is activity, it has connected to the network. “-” means the current port status is forbidden.

## 4.2 Main menu



### 4.2.1 Rename Device

Enter into the main menu by press MENU, then pressing the UP and DOWN to choose the **Rename Device** option and then press the ENTER to confirm your selection. Now you can rename the device by pressing UP and DOWN now. Confirm you change and move to next option by press the MENU.

..... <b>Rename</b> .....
ArtNet To DMX
Cancel      Enter

### 4.2.2 Set IP Address

Enter into the main menu by press MENU, then pressing the UP and DOWN to choose the **Set IP Address** option and then press the ENTER to confirm your selection. Now you can set **IP address** by pressing UP and DOWN now. Confirm your change by pressing the ENTER button.

..... <b>IP Address</b> .....
002.010.010.002
Cancel      Enter

Please note: Each of the IP address should be unique. If used in **8xInput** mode IP range may need to be set to synchronise with IP range of the lighting console. Please check this information with the lighting console manufacturer or their instruction manual.

### 4.2.3 Set Netmask

Enter into the main menu by press MENU, then pressing the UP and DOWN to choose the **Netmask** option and then press the ENTER to confirm your selection. Now you can set **Netmask** by pressing UP and DOWN buttons. Confirm your changes by pressing the ENTER button.

```
..... Netmask .....  
A. 255.000.000.000  
B. 255.255.000.000  
C. 255.255.255.000
```

### 4.2.4 Set DMX port

Enter into the main menu by press MENU, then pressing the UP and DOWN to choose the **set DMX port** option and then press the ENTER to confirm your selection. Then you can set the parameter of the each port by pressing UP /DOWN and ENTER now.

```
..... DMX Port .....  
1,DMX Port 1  
  :  
  :  
8,DMX Port 8  
9,Exit
```

```
..... DMX Port .....  
1,Port Status  IN  
2,Port Mode  Normal  
3,Framerte/fs  010  
4,Principal    0.0  
5,Secondary    0.0  
6,Resend      DIS  
7,Display Mode Dec
```

#### 1) 1-8 DMX Input

You can enter to any of the DMX port 1-8 and set as below:

- 1, Port Status, DMX port status can be set as IN / OUT/ DIS;
- 2, As the DMX port set as Input status, then the Mode only can be set as normal or backup.
- 3, Frame rate /fs
- 4, Principal Universe
- 5, Secondary Universe
- 6, Resend
- 7, Display Mode

**Normal mode** means it will send the data received from DMX IN port to the universe of network regardless if there is any data in the universe of the network.

**Backup mode:** In backup mode the N8 will detect data on the Network, if there is data present the N8 will not transmit data to the Network. If the data on the network fails and is not present the N8 will receive data from the DMX IN port and transmit the DMX data onto the Network.

## 2) 1-8 DMX output

..... DMX Port .....		
1.Port Status		OUT
2.Port Mode		HTP

..... DMX Port .....		
1,Port Status		OUT
2,Port Mode		LTP

..... DMX Port .....		
1.Port Status		OUT
2.Port Mode		Zero

..... DMX Port .....		
1.Port Status		OUT
2.Port Mode		Single

..... DMX Port .....		
1.Port Status		OUT
2.Port Mode		RDM

Any of the port 1-8 also can be set as Output or Disabled status. Upon the port has been set as Output status, there are **LTP, HTP, Zero, Single and RDM** these 5 modes can be selected.

**Zero** means the port output should be “0”;

**Single** means this port will only output one universe.

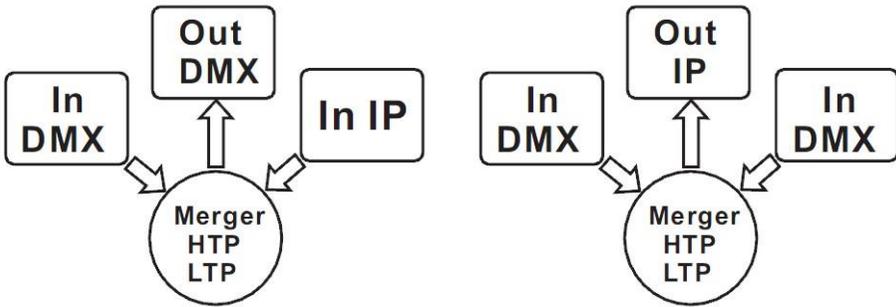
**LTP** means this port will output the latter one between the principle universe and secondary universe. The unit will compare the two universes and resend the later one to the network.

**Please note that in the LTP mode, you should ensure the Resend option is not set to the status of Disabled. Or it won't resend the data to the network.**

**HTP** means the port will output the one with higher value between the principal universe of principle and secondly. The unit will compare the two universes and resend the higher data to the network. They can be set within the range of 0.0-F.F./001-255. (These two formats can be change through Display Mode)

**Please note that in the HTP mode, you should ensure the Resend option is not set to the status of Disabled. Or it won't resend the data to the network.**

**RDM** means the port output can support Remote Device Management.



3) 1-8 DMX port disabled

..... <b>DMX Port</b> .....	
1.Port Status	DIS
2.Port Mode	Backup

Any of the port 1-8 can be set as Disabled status. Upon the port has been set as Disabled status, the DMX port will be disabled, it cannot send or receive any data from now on.

**Please note that the Frame rate/fs only available for Output status; The Secondly and Resend option only available for the HTP/LTP mode under the status of Output.**

#### 4.2.5 Set Device ID Number

Enter into the main menu by press MENU button, pressing UP and DOWN to choose the **Set ID NO.** option, then press the ENTER to confirm your selection. You can set the ID No. for the unit from 000 to 255. The ID is only used to recognize each of the unit easily.

..... <b>Device ID</b> .....
001
Cancel                  Enter

#### 4.2.6 Set LCD Backlight

Enter into the main menu by pressing the MENU button, then pressing the UP and DOWN to choose the **Set LCD Backlight** option and then press the ENTER to confirm your selection. You can choose its status as ON/OFF. ON means the LCD backlight will turn on all the time. OFF means the LCD backlight will turn off automatically after idle 30 seconds.

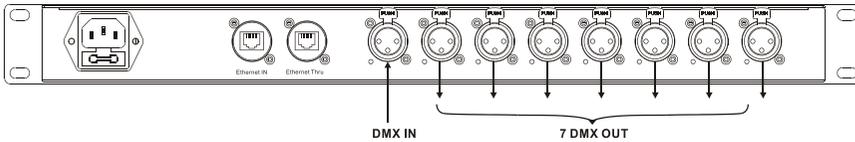
..... <b>LCD BackLight</b> .....
1.ON
2.OFF

#### 4.2.7 User Preset

Enter into the main menu by press MENU button, then pressing the UP and DOWN to choose the **User Preset** option and then press the ENTER to confirm your selection. This setting help you easily use the application avoid complicated setup procedure. You can simply choose you desired mode by pressing UP and DOWN, and confirm your choose by pressing ENTER.

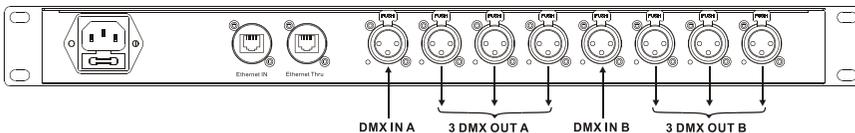
- 1) **Art-Net™ to DMX Processor (8 x Input):** In the “8 x Input” mode the N8 will function as an Art-Net™ processor, converting the inputted DMX signals into Art-Net™ output across 8 universes. Advanced user options include primary and secondary Art-Net™ universe input with LTP or HTP modes.
- 2) **DMX Split 1-7:** This setting allows the user to input one DMX signal and replicate across 7 isolated DMX outputs. Please note that the LED indicator of the DMX Output port will light up in green. The input DMX input will require a reverse gender Male-Male adaptor. The default setting for this mode will accept DMX input via port 1 and DMX outputs via ports 2 thru 8.

### DMX Split 1-7

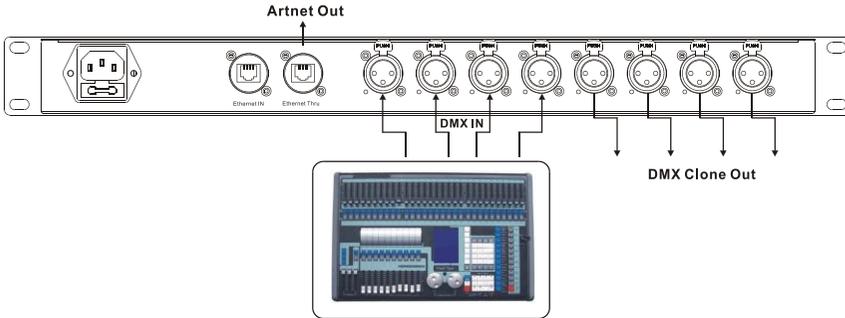


- 3) **Dual DMX Split 1-3:** This setting allows the user to use the N8 unit as two splitters, each with one DMX input to 3 isolated DMX outputs. Please note that the LED indicator of the DMX Output port will light up in green. The input DMX input will require reverse gender Male-Male adaptors. The default setting for this mode will accept DMX input via port 1 and DMX outputs via ports 2 thru 4 and DMX input via port 5 and DMX outputs via ports 6 thru 8.

### DMX Split 1-3



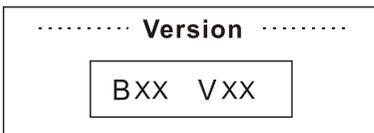
- 4) **ArtNet/DMX Clone:** The N8 can replicate four DMX inputs (1-4) to four DMX outputs (5-8) and simultaneously output the four DMX signals to the Art-Net™ output (thru) port. The input DMX inputs will require a reverse gender Male-Male adaptors.



- 5) **Isolated Mode:** In the “Isolated” mode the N8 will function as an Art-Net™ processor, converting the inputted Art-Net™ signal into DMX output across 8 universes. The port range of DMX outputs is 1-8 (0.0~0.7). Each will receive the signal from the network individually.
- 6) **Factory Reset:** All of the setting including the device name and device ID as well as device IP will be restored to the original factory status.

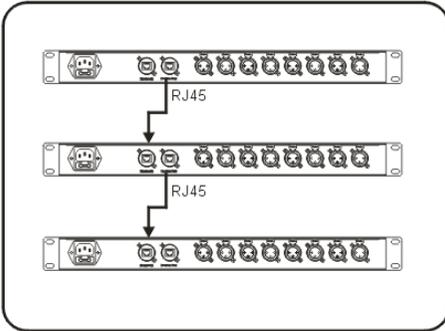
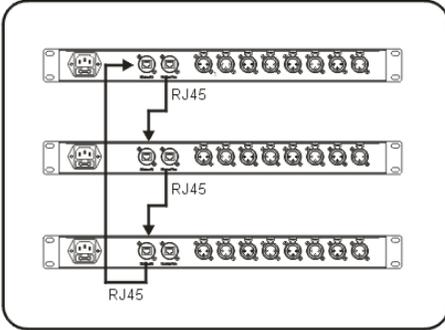
#### 4.2.8 Firmware Version

You can check the version number from this option.



## 5. Application Diagram

**Please Note: Do not connect Art-Net™ patch cables in any configuration which may cause a signal loop. Looped or ring connections may cause data errors affecting the performance of system.**



## Technical Specification

Power Supply .....AC100-240V, 50/60Hz  
Dimensions.....44x484x152mm  
Weight.....1.98kg

