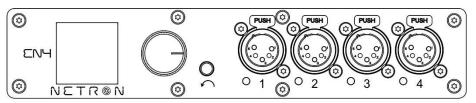
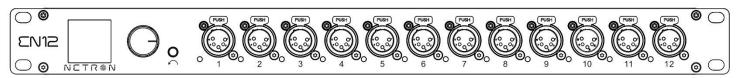
# 0 3 5 1 3 1 A N<sup>\*</sup>

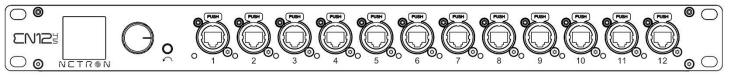
CONTROL SYSTEMS



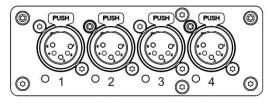
# $\mathsf{E} \mathsf{N} \mathsf{A}$



# $\square$



# **EN12** 4



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# NETR®N User Guide

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#### **ELATION PROFESSIONAL B.V.**

Junostraat 2 | 6468 EW Kerkrade, The Netherlands +31 45 546 85 66

#### Art-Net

This device incorporates Art-Net™, Designed by and Copyright Artistic License Holdings Ltd

#### **FCC STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be deter- mined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.



Consult the dealer or an experienced radio/TV technician for help.

#### Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

Document Version: An updated version of this document may be available online. Please check <a href="https://www.obsidiancontrol.com">www.obsidiancontrol.com</a> for the latest revision/update of this document before beginning installation and use.

Date	Document Version	Note
12/17/19	1.0	INITIAL RELEASE
12/27/19	1.5	Added Art-Net copyright
01/06/20	2.0	DateUpdated software
01/21/20	2.5	Updated Menu Options
09/21/20	3.0	Updated Firmware to V2.4
02/02/21	3.5	Updated Firmware to V2.6 for EN4, EN12, EP4; & updated silkscreens for EN4 & EN12
03/29/21	4.0	Added EN12-45
05/25/22	4.5	Updated FCC Statement

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### **GENERAL INFORMATION**

#### INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information.

#### **CUSTOMER SUPPORT**

Contact your local Obsidian Controls Systems dealer or distributor for any product related service and support needs. Also visit forum.obsidiancontrol.com with questions, comments or suggestions.

OBSIDIAN CONTROL SERVICE EUROPE – Monday – Friday 08:30 to 17:00 CET +31 45 546 85 63 | support@obsidiancontrol.com

OBSIDIAN CONTROL SERVICE USA – Monday – Friday 08:30 to 17:00 PST (866) 245 – 6726 | <a href="mailto:support@obsidiancontrol.com">support@obsidiancontrol.com</a>

# OVERVIEW INTRODUCTION

The Netron devices offer unique and powerful DMX management features. Most settings can be accessed from the intuitive display and menu system.

All settings are available from the integrated web page, which allows remote access to this device from any web-browser. The multi-purpose EN4, EP4, EN12, and EN12-45 EtherDMX Gateways essentially package Art-Net and sACN conversion, Merger, DMX patch-bay, and a DMX scene recorder into one device.

#### **KEY FEATURES**

- sACN and Art-Net to DMX conversion
- Factory defined NETRON presets
- 10 User Presets
- 99 Cues with Fade Time, Hold Time and Cue linking
- External contact closures to trigger cues and preset recall (EN12 only)
- DMX Monitor
- DMX and Ethernet Test Generator

#### SOFTWARE AND OPERATION

This document provides safety information and mechanical installation instructions.

For setup and operation of all software features, please update the devices to the latest release. Download and study the full user guides from <a href="http://obsidiancontrol.com/netron">http://obsidiancontrol.com/netron</a>.

The NETRON Ether-DMX devices offer a comprehensive and easy to use feature set, and are continuously improving. It is advised to periodically check for updates on the Obsidian product pages.

#### CONNECTIONS

#### **DMX CONNECTIONS (EN12)**

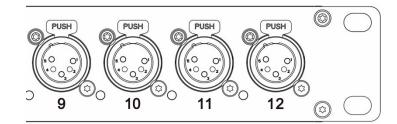
All DMX Output connections are 5pin female XLR; however, the pin – out on all sockets is pin 1 to shield, pin 2 to cold ( – ), and pin 3 to hot (+). Pins 4 and 5 are not used.

Carefully connect DMX cables to the respective ports.

To prevent damaging the DMX ports, provide strain relief and support. Avoid connecting FOH Snakes to the ports directly.

Certain functions may require adapters (purchased separately), such as a 5 pole XLR male to 5 pole XLR male.

Pin	Connection					
1	Com					
2	Data -					
3	Data +					
4	Not connected					
5	Not connected					

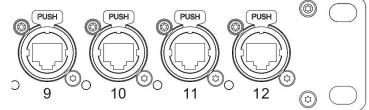


#### **DMX CONNECTIONS (EN12-45)**

All DMX Output connections are RJ45; Pin1: DATA+, Pin2: DATA -, Pin7+8; Ground (ESTA Compliant) Carefully connect RJ45 cables to the respective ports.

To prevent damaging the ports, provide strain relief and support. Avoid connecting FOH Snakes to the ports directly.

L	Connection
1	Data +
2	Data -
3	Not connected
4	Not connected
5	Not connected
6	Not connected
7	Com
8	Com
Shield	Earth



#### ETHERNET DATA CONNECTION

The Ethernet cable is connected on the back of the gateway into the port labeled A or B. Devices can be daisy chained, but it is recommended not to exceed 10 Netron devices in one chain. Because these devices use locking RJ45 connectors, and the use of locking RJ45 ethernet cables is recommended, any RJ45 connector is suitable.

To connect multiple devices to an EtherDMX Source, an Ethernet switch is required to split the data into the desired number of streams.

The Ethernet connection is also used to connect a computer to the Netron device for remote configuration via a web browser. To access the web interface, simply enter the IP address shown in the display in any web browser connected to the device. Information about the web access can be found in the manual.

# **CONNECTIONS: EN4 (FRONT & REAR PANELS)**

#### FRONT CONNECTIONS

- (4) 5pin DMX/RDM optically isolated ports
- Ports are bidirectional for DMX In and Output
- Full color OLED display
- Encoder w. Push to Select / Exit Button 5-Pin DMX/RDM optically isolated port **OLED Display** (\$3) PUSH PUSH PUSH PUSH (\$3) FN3NETR®N (\$ Turn to scroll, push-to-select DMX Port Status Indicator LED Menu return button

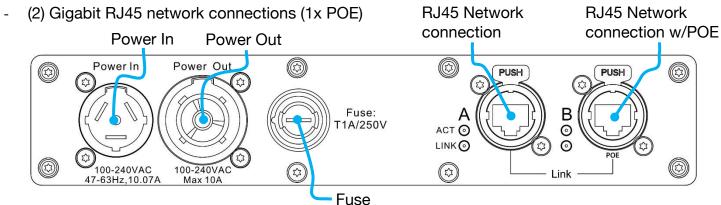
#### DMX PORTS STATUS INDICATOR LEDS

LED Color	Solid	Blink	Flashing/Strobing
DMX PORTS RED	Error		
<b>DMX PORTS GREEN</b>	DMX In	DMX Lost	
DMX PORTS BLUE	DMX Out Stable	DMX Lost	
DMX PORTS WHITE			Flash on RDM packets

All LEDs are dimmable and can be turned off via the Menu/System/Display menu.

#### REAR CONNECTIONS

- Power In/Thru

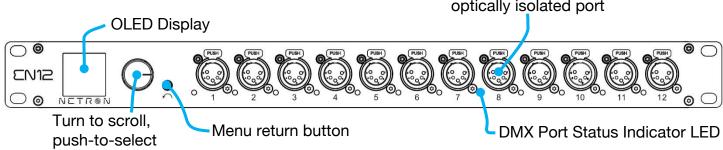


# **CONNECTIONS: EN12 (FRONT & REAR PANELS)**

#### FRONT CONNECTIONS

- (12) 5pin DMX/RDM optically isolated ports
- Ports are bidirectional for DMX In and Output
- Full color OLED display
- Encoder w. Push to Select / Exit Button

5-Pin DMX/RDM optically isolated port



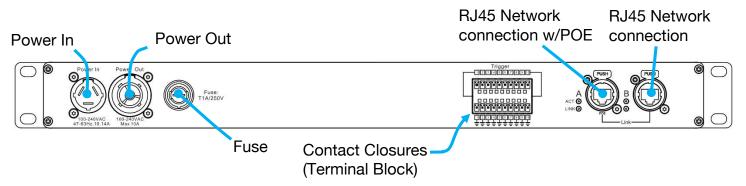
#### DMX PORTS STATUS INDICATOR LEDS

LED Color	Solid	Blink	Flashing/Strobing
DMX PORTS RED	Error		
<b>DMX PORTS GREEN</b>	DMX In	<b>DMX Lost</b>	
DMX PORTS BLUE	DMX Out	DMX Lost	
<b>DMX PORTS WHITE</b>			Flash on RDM packets

All LEDs are dimmable and can be turned off via the Menu/System/Display menu.

#### REAR CONNECTIONS

- (2) Gigabit RJ45 network connections (1x POE)
- (10) Contact Closures (Terminal Block)

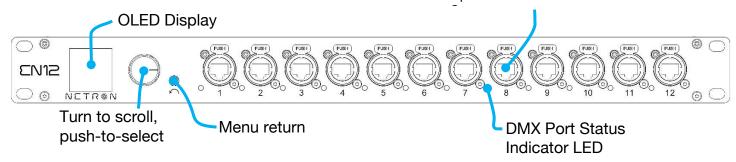


### **CONNECTIONS: FRONT & REAR PANELS EN12-45**

#### FRONT CONNECTIONS

- (12) RJ45 DMX/RDM optically isolated ports
- Ports are bidirectional for DMX In and Output
- Full color OLED display
- Encoder w. Push to Select / Exit Button

Locking RJ45 Ethernet Opto-Isolated DMX



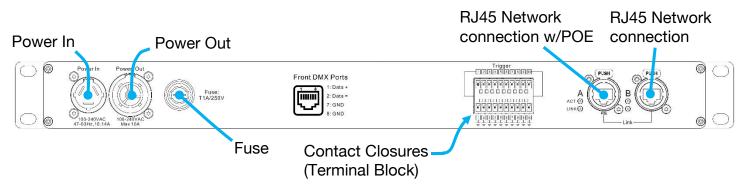
#### **RJ45 PORTS STATUS INDICATOR LEDS**

LED Color	Solid	Blink	Flashing/Strobing
DMX PORTS RGB	Error		
DMX PORTS RGB	DMX In	<b>DMX Lost</b>	
DMX PORTS RGB	DMX Out	DMX Lost	
<b>DMX PORTS WHITE</b>			Flash on RDM packets

All LEDs are dimmable and can be turned off via the Menu/System/Display menu.

#### REAR CONNECTIONS

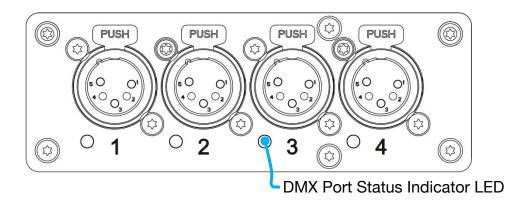
- (2) RJ45 network connections (1x POE)
- (10) Contact Closures (Terminal Block)



# **CONNECTIONS: EP4 (FRONT & REAR PANELS)**

#### FRONT CONNECTIONS

- (4) 5pin DMX/RDM optically isolated ports
- Ports are bidirectional for DMX In and Output



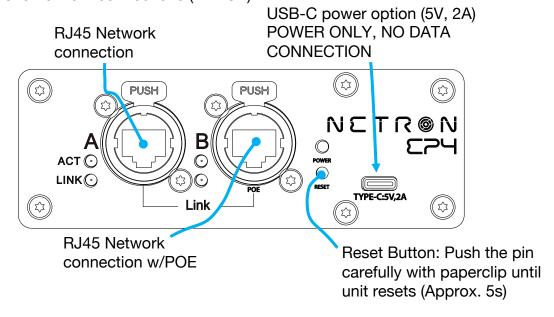
#### DMX PORTS STATUS INDICATOR LEDS

Ports	<b>LED Color</b>	Solid	Blink	Flashing/Strobing
DMX	RED	Error		
DMX	GREEN	DMX In	<b>DMX Lost</b>	
DMX	BLUE	DMX Out Stable	DMX Lost	
DMX	WHITE			Flash on RDM packets

The LEDs are dimmable from the System – Display menu and can be turned off completely if desired.

#### REAR CONNECTIONS

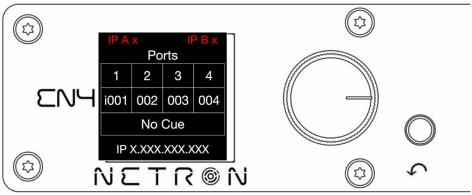
- USB-C power option (5V, 2A). POWER ONLY, NO DATA CONNECTION
- (2) Gigbabit RJ45 network connections (1x POE)



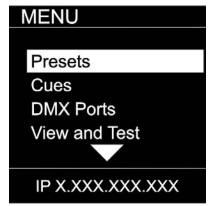
#### **MENU: NAVIGATION**

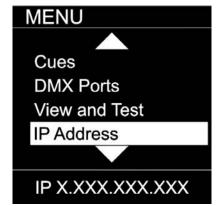
The Netron devices use a small OLED display for feedback and setup. The encoder dials up and down through the menu, a push of the encoder selects an item or saves an entry. Revert to a previous menu or cancel an entry with a single push of the back arrow.





Wheel Right	Scroll down in menu list / increase values
Wheel Left	Scroll up in menu list / decrease values
Wheel Push	Enter Menu, Select menu item, go down one level in menu, confirm values.
Back Arrow	Go up one level in menu tree, cancel change of values, hold for 2 seconds to return to home screen



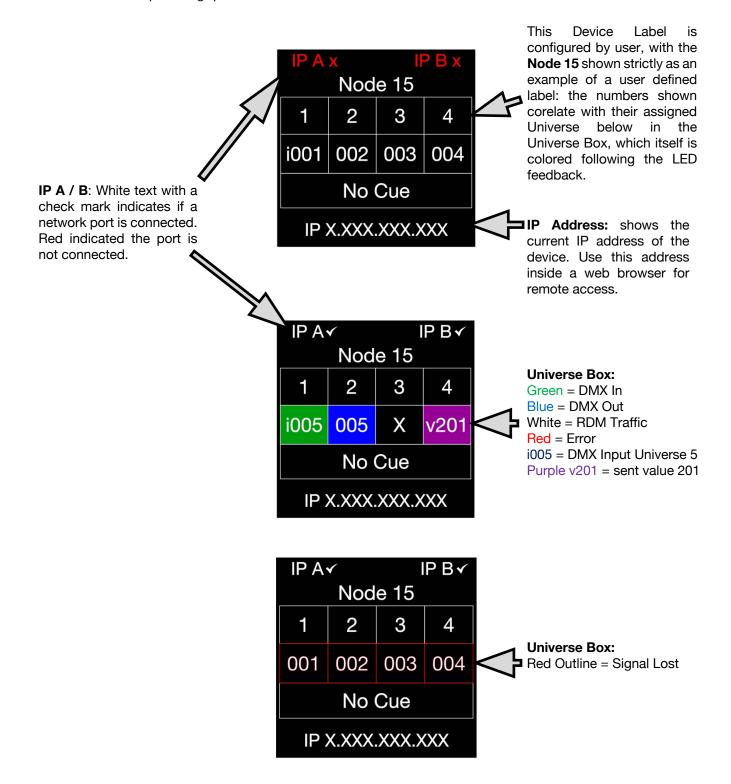




As you scroll up or down the menu, the arrows indicate that more items are available above or below that which is displayed, and only show when needed.

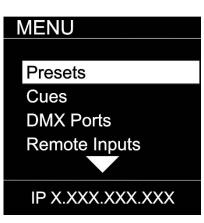
#### **MENU: HOME SCREEN**

This is the default screen providing quick status feedback and indicates IP and DMX traffic.



# **MENU: PRESETS**

Several simple presets are preprogrammed into the device for fast setup. Some presets require additional input like a start Universe.



SUB MENU	OP	TION / VALU	JES	DESCRIPTION
	1 :ArtNet 2.x	Universe 1 – 327	767	
MENU	2 :ArtNet 10.x	Universe 1 – 327	767	
	3 :ArtNet 192.x	Universe 1 – 327	767	
NETRONER	4. ArtNet 172.x	Universe 1 – 327	767	
	5. ArtNet DHCP	Universe 1 – 327	767	
USER PRESETS	6. ArtNet In	Universe 1 – 327	767	
	7. :ArtNet In/Thru	Universe 1 – 327	767	See NETRON Presets
	8. sCAN 2.x	Universe 1 – 327	767	See NETHON Flesets
	9. sCAN 10.x	Universe 1 – 327	767	
		Universe 1 – 327	767	
	11. :sACN 172.x	Universe 1 – 327		
IP X.XXX.XXX.XXX	12. sACN DHCP	Universe 1 – 327	767	
IF A.AAA.AAA.AAA	13. sACN DHCP In	Universe 1 – 327	767	
	14. :Splitter Port1		T	
MENU			Preset Saved	
		Load Preset	Preset Loaded	
NETRON Presets				
USER PRESETS	1 .M.:Duanat 1			
OCENTINECETO	1 :MyPreset 1			
	 10 :MyPreset 10	Danama Dragat	12 Character Label	
	TO .IVIYFTESEL TO	Rename Preset	12 Character Laber	
IP X.XXX.XXX.XXX				

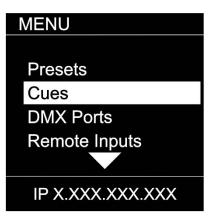
# **MENU: NETRON PRESETS**

These simple presets are preprogrammed into the device for fast setup. Some presets require additional input like a start Universe. Note that DMX Ports 1-12 apply to model EN12, and that greyed DMX Ports 1-4 apply to EN4/EP4 models.

Label	Ether	net								DMX	Ports					
	IP Address	Subnet	Protocol	Option	1	2	3	4	5	6	7	8	9	10	11	12
Artnet 2.x	Automatic 2.x	255.0.0.0	Artnet	Universe #	Output		Output		Output	Output	Output	Output	Output	Output	Output	Output
	2.7			Х	Х	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
			RDM		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Artnet 10.x	Automatic 10.x	255.0.0.0	Artnet	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
		l		Х	Х	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
			RDM		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Artnet 192.x	Automatic 192.x	255.0.0.0	Artnet	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
				Х	X	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
			RDM		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Artnet 172.x	Automatic 172.x	255.0.0.0	Artnet	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
				Х	Х	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
		1	RDM		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Artnet DHCP	DHCP	DHCP	Artnet	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
			DDM	X	X	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
		ı	RDM		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Artnet In	Automatic 2.x	255.0.0.0	Artnet	Universe #	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input
				Х	X	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
Artnet In / Thru	Automatic 2.x	255.0.0.0	Artnet	Universe #	Input	Input	Input	Input	Input	Input	Output	Output	Output	Output	Output	Output
				X	X	X+1	X+2	X+3	X+4	X+5	Clone 1	Clone 2	Clone 3	Clone 4	Clone 5	Clone 6
sACN 2.x	Automatic 2.x	255.0.0.0	sACN	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
				Х	Х	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
			RDM	not supported												<u> </u>
sACN 10.x	Automatic 10.x	255.0.0.0	sACN	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
				Х	Х	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
			RDM	not supported												
sACN 192.x	Automatic 192.x	255.0.0.0	sACN	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
				Х	Х	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
			RDM	not supported												
sACN 172.x	Automatic 172.x	255.0.0.0	sACN	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
	1	1		Х	Х	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
			RDM	not supported												
sACN DHCP	DHCP	DHCP	sACN	Universe #	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output
		•		Х	X	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
			RDM	not supported												
sACN DHCP In	DHCP	DHCP	sACN	Universe #	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input
				X	Х	X+1	X+2	X+3	X+4	X+5	X+6	X+7	X+9	X+10	X+11	X+12
Splitter Port 1	Automatic	255.0.0.0			Input		Output			Output		Output				Output
Spintor Fort 1	2.x	_00.0.0.0	Artnet		Х			Clone 1	Clone 1		·		·	Clone 1	·	·
1						J.5110 1	3.0110 1	2.0110 1	2.0/10 1	0.0110 1	, 5.5110 1	3.5110 1	, 5.5110 1	, 5.5110 1	3.0.10 1	3.3.10 1

### **MENU: CUES**

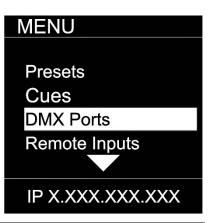
A cue is a full static snapshot of all DMX values of all ports. The device supports 99 cues with fade and hold times, plus a link option to loop multiple cues together. This allows small "mini" cuelists to be created. Cues are used for standalone operation, as a backup for signal loss or can be assigned to one of the switch inputs. This is often used for fire alarm situations where a system has to go to a defined state and stop all console playback. Cues can be sent as Ethernet Universes so one device can drive many other Netron nodes.



SUB MENU		OP	TIONS /	VALUES	DESCRIPTION
MENU	Run Cue	1 – 99 Go/Off			Select the desired cue
Run Cue Save Cues Rename Cue Link Cues	Save Cue	1:Cue 1  99:Cue 99			Save all values on all ports to a cue slot
IP X.XXX.XXXX	Rename Cue	1 – 99			Edit name of cue
Save Cues Rename Cue Link Cues	Link Cues	1 – 99		0s - 99.59min 0s - 99.59min Disable, 1 - 99	Set the fade time of the cue Set the time to hold the cue until the next cue is started Set the next Cue
Resend Ethernet	t	Disable			Cue data is not sent over Ethernet
IP X.XXX.XXX	Resend Ethernet	Enable			Cue data is sent on the Universe number and protocol assigned to the ports.

# **MENU: DMX PORTS**

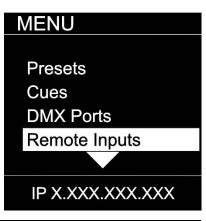
Select a port number to adjust its settings. Depending on the Mode, certain options are not relevant and hidden from the display or web interface.



SUB MENU	OPTIONS / VALUES			DESCRIPTION	
		Disable		The port is disabled.	
	NA I .	Input		The port receives DMX values and assigns them to the selected Universe.	
	Mode	Output		The port sends out DMX Values on the selected Universe	
		Send Value	0 – 255	Send a static DMX value	
	Universe	1 – 32767		Select the EtherDMX Universe	
MENU	Protocol	Art-Net, sACN, Nor	ne	Select the EtherDMX protocol per port	
	FrameRate	10, 15, 20, 25, 30, 3	<b>35</b> , 40	Select the desired frame rate.	
	RDM	Disable, <b>Enable</b>		Disable / Enable RDM traffic for this port	
Port 1		OFF		The merger is disabled	
Port 2		НТР		The sources are merged by Highest Takes Precedence	
Port 3	Merge	LTP		The sources are merged by Last Takes Precedence	
Port 4	Merge	Toggle		The complete source Universe is switched as soon as a single value changes	
ID V VVV VVV VVV		Backup		The merge universe is activated if the main universe has no valid traffic	
IP X.XXX.XXX	Clone	None, Port 2, Port 3, Port 4		Replicates the identical DMX data from another port	
	Range	From: 1 – 512		To limit the DMX range, set the first address of the DMX port	
		To: 1 – 512		To limit the DMX range, set the last address of the DMX port	
	Offset Addr	Off, 2 - 511		Offset start address, incoming channel X value is sent on this port as channel X+Offset, Channels are cut off if they exceed 512	

### **MENU: REMOTE INPUT**

The device supports ten remote assignments that can trigger specific actions like recalling a cue or preset. These events are recalled using local contact closures, DMX In, or a specific EtherDMX Universe / Address.



SUB MENU	OPTIONS / VALUES			DESCRIPTION	
MENU	Cue	1 – 99		Recall a specific cue number	
		Trigger		The cue is activated, and all times and links are processed even if the contact is opened again	
Input 1	Cue Mode	Toggle a,b,c,		The cue is activated, and all times and links are processed only if the contact is closed. Once	
Input 2 Input 3				toggle is opened, device will assume DMX traffic or No DMX status. This allows to alternate between two cues for example with the toggle switch.	
Input 4	Netron Preset			Recalls this Netron preset when the contact is closed	
IP X.XXX.XXX	User Preset	1 – 10		Recalls this user preset when contact is closed	
MENU	Disable DMX	0 – 255		Stops all DMX output for as long as contact is closed	
	Send Value			Sends specific DMX value on all ports for as long as contact is closed	
Input 1		disabled		Input is disabled	
Input 2		DMX Port	1 – xx	Use DMX Port. Port must be set as Input	
Input 3		Art-Net		Art-Net Trigger	
Input 4	Source	sACN		sACN Trigger	
Input 4				Set Universe for remote trigger	
IP X.XXX.XXX		Address		Set DMX Address for remote trigger	

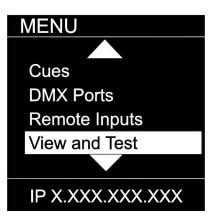
#### **DMX Map for Remote Trigger**

Inputs can be remotely activated over DMX, Art-Net, or sACN. The input is activated if the DMX value is at the value shown below.

Value	Action
0 – 10	Idle
11 – 20	Input 1
21 – 30	Input 2
31 – 40	Input 3
41 – 50	Input 4
51 – 60	Input 5
61 – 70	Input 6
71 – 80	Input 7
81 – 90	Input 8
91 – 100	Input 9
101 – 110	Input 10
111 – 255	Idle

# **MENU: VIEW AND TEST**

This Netron device provides a variety of tools right from the front display to monitor and test the system. Colors indicate changing values.



SUB MENU		OPTIO	ONS / VALUE	Description	
		View	Port 1 – 4	View the DMX values of a specific port	
	DMX View	Danga	From: 1 – 512	default 1	
	Š	Range	To: 1 – 512	default 512	
	×			Start Monitoring Values. Use Encoder to dial to the	
		Start Monitor		desired DMX address. Push Encoder to change	
MENU				display readout style (Grid, List, Address)	
IVILIAO	>	Universe	1 – 32767	View a specific Art-Net Universe	
	<u>je</u>	Range	From: 1 – 512	default 1	
DAAYA#	Art-Net View	Tange	To: 1 – 512	default 512	
DMX View	Ž			Start Monitoring Values. Use Encoder to dial to the	
Art-Net View	Art	Start Monitor		desired DMX address. Push Encoder to change	
				display readout style (Grid, List, Address)	
sACN View	>	Universe	1 – 32767	View a specific sACN Universe	
DMX Port Test	sACN View	Range	From: 1 – 512	default 1	
	>		To: 1 – 512	default 512	
	Ş	Start Monitor		Start Monitoring Values. Use Encoder to dial to the	
IP X.XXX.XXX.XXX	s/s			desired DMX address. Push Encoder to change	
			D. I.d. 4	display readout style (Grid, List, Address)	
MENU	ll to	Output	Port 1 – 4	Send generator values on specific port	
MENTO	<u>0</u>		All Ports	Send generator values on all ports	
	OMX Port Test	Range	From: 1 – 512	default 1	
- A ON I \ (i	ď		To: 1 – 512	default 512	
sACN View	ĕ	0	1 10 Manual	Coloot the arroad of generator	
DMX Port Test		Speed	1 – 10, Manual	Select the speed of generator	
Art-Net Test		Universe	1 – 32767	Select Art-Net Universe	
	est		From: 1 – 512	default 1	
sACN Test	ΙË	Range	To: 1 – 512	default 512	
IP X.XXX.XXX.XXX	Art-Net Test	Speed	1 – 10, Manual	Select the speed of generator	
		Universe	1 – 32767	Select sACN Universe	
	est	Dange	From: 1 – 512	default 1	
		Range	To: 1 – 512	default 512	
sACN Test		Speed	1 – 10, Manual	Select the speed of generator	

# MENU: VIEW AND TEST (continued)

#### Monitor (DMX View, Art-Net View, sACN View)

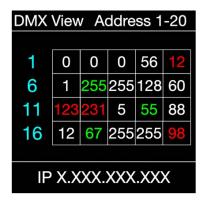
The monitoring options are helpful to find faults, or simply watch incoming traffic. Three styles are available by clicking the encoder wheel. Dial the wheel to change the display to the desired address, and exit the monitor with the back button.

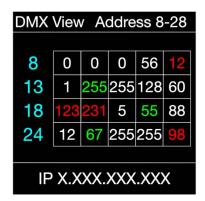
#### DMX Test Display - Grid

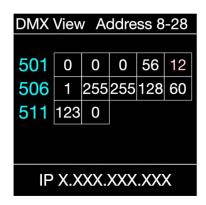
The color coding helps to quickly identify changing DMX values.

Cyan: DMX Address
Green: Value Decreased
Red: Value Increased

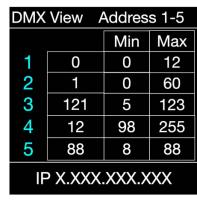
White: Value stable (after 10 seconds)



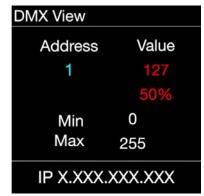




#### **DMX Test Display - Line**

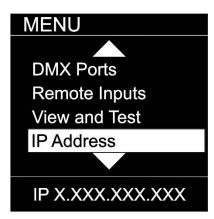


**DMX Test Display - Address** 



### **MENU: IP ADDRESS**

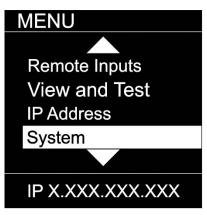
Set the desired device IP address in this menu. Every Netron device is set to a unique 2.x.x.x address at the factory, and after every reset to this default. For Art-Net systems, it should never be necessary to adjust this IP. Any custom address and subnet can be assigned so the node can operate within any network environment. EP4 devices default to 2.0.0.1 as they contain no display. Configure each EP4 to a unique IP using the web remote access.



SUB MENU		<b>OPTIONS / VALUES</b>		Description	
MENU	DHCP IP			The device waits for a DHCP server address After 30s it assigns itself a unique 169.254.x.x address but continues to monitor DHCP server requests.	
	Automatic 2.x			The device is set to a unique 2.x.x.x Address, Subnet 255.0.0.0	
DHCP IP Automatic 2.X	Automatic 10.x.x			The device is set to a unique 10.x.x.x Address, Subnet 255.0.0.0	
		IP Address	x.x.x.x		
Automatic 10.x Custom IP	Custom IP	Subnet Mask	x.x.x.x	Assign any desired numbers. The device does not check the validity of address and subnet values.	
IP X.XXX.XXX	Automatic 192.x			The device is set to a unique 192.x.x.x Address, Subnet 255.0.0.0	
	Automatic 172.x			The device is set to a unique 172.x.x.x Address, Subnet 255.0.0.0	

# **MENU: SYSTEM**

This menu contains all the settings to configure and manage the device.



SUB MENU		OPTIONS / VALUES			Description	
	Device Name	12 Character Label			Set a device name	
	Device ID	0 – 999			Set an optional device ID	
MENU		Display	Disable		Display stays on indefinitely	
		Timeout	10s, 30s	, 1m, 5m, 10m	Display goes dark after this time	
Device Name	lay	Screen Brightness	1-10		Adjust the brightness of the internal display	
Device ID	Display	LED Brightness	0-10		Adjust the brightness of the front LEDs. Set to 0 to disable them.	
Display			Device Ir	nfo	The display shows port and connectivity information	
ArtNet Start		Home Screen	Cue Bro	wser	The display shows a list of stored cues which can easily be browsed and started by the encoder wheel	
IP X.XXX.XXX	ArtNet Start	<b>Universe 0</b> Universe 1			Universe 1 is sent to Art-Net 0-0 Universe 1 is sent to Art-Net 0-1	
	Φ		Lock	Disable	The device does not require a pin	
MENU	Š.			Timeout	The device asks for a pin after the display times out	
Lock Device	Lock Device	PIN: 000 ( <b>011</b> )	Manual Lock: 000 ( <b>011</b> )	Lock / Unlock	Lock the device immediately	
Startup		Cue			Run a specific Cue at startup	
Signal Loss Backup Config	Startup	Wait for Data			No DMX is sent until valid data is received for the ports. The last incoming values continue to be sent on the ports until the time is expired. Once timeout has completed the device will perform one of the below actions	
IP X.XXX.XXX.XXX		Send 0				
MENU	Signal Loss	Hold Last Look <b>Forever</b> , 0s, 10s, 30s, 1m, 5m, 10m, 60m			The last incoming values continue to be sent on the ports until the time is expired. Once timeout has completed the device will perform one of the below actions.	
	gna	Fade to 0	0-60s <b>(3</b>	0s)	Crossfade to DMX 0. Set to 0s for instant out.	
Signal Loss	Š	Cue	No Cue		Start Cue X	
Backup Config	<u> </u>	Disable DMX Save Config	Config S	Saved	DMX traffic is turned off on all ports  Save current configuration including all cue data	
RDM Processing	Backup Config		Config Saved Config Loaded		Reload configuration. Backups can be exported and imported from the web interface	
Factory Reset	<u> </u>	All Disable			Disables RDM processing on the device	
	RDM Processing	All Enable			Enables all RDM processing on the device	
IP X.XXX.XXX	y Reset	Pin: 000 ( <b>011</b> )	Confirm	Device will be reset to factory defaults. Yes/ <b>No</b>	Reset the device to factory default. It will reload NETRON Preset 1. All cues are deleted, and all settings are set to default.	
	Factory	Pin: 000 ( <b>007</b> )	Confirm	Device will be reset to User Preset 1. Yes/ <b>No</b>	Reset the device to User Preset 1.	

# **MENU: INFORMATION**

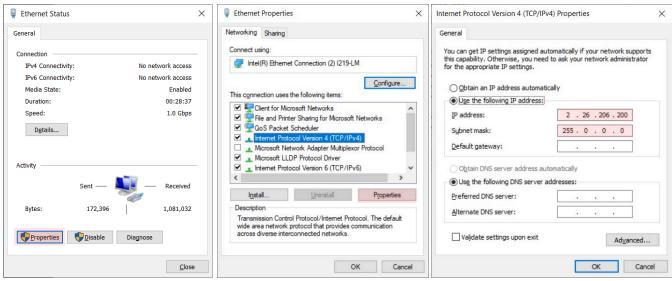
This menu provides information about the device.



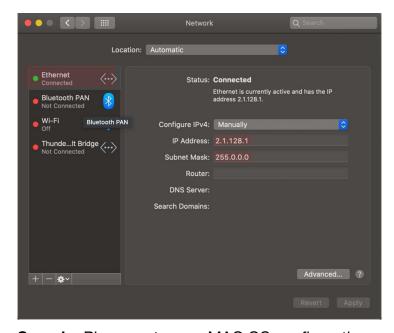
SUB MENU		OPTIONS / VALUES	DESCRIPTION	
MENU	i an	Boot SW V# Firmware: V#	Display the current software version	
Software Version Product On Time MAC Address RDM UID	Product On Time	Time: XXXXX(H)	Total time the device has been powered on.	
IP X.XXX.XXX	MAC Address	x:x:x:x:x:x	Displays MAC address	
	RDM UID	UID1: xxxx	Displays product RDM UID.	

#### WEB REMOTE CONFIGURATION

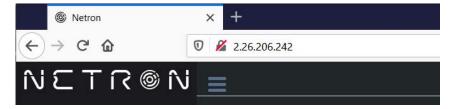
Ensure the device and a computer are do not share IP address, but are in the same IP address range and connected.



PC Configuration Sample: Please note your PC configuration results may vary.



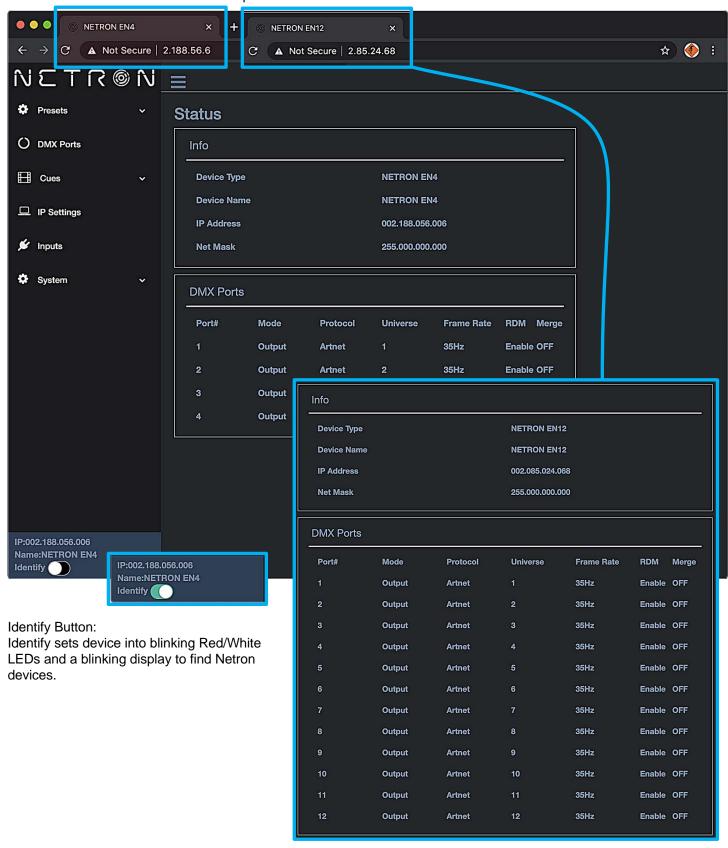
MAC OS Configuration Sample: Please note your MAC OS configuration results may vary.



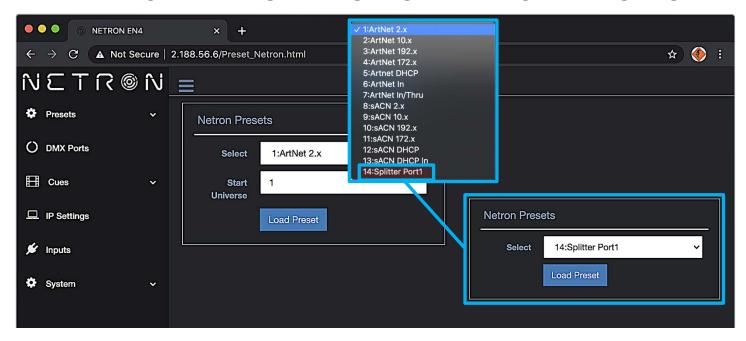
Browser Sample: Enter the device IP address into a web browser to access the device page.

#### **WEB REMOTE MENU: HOMEPAGE**

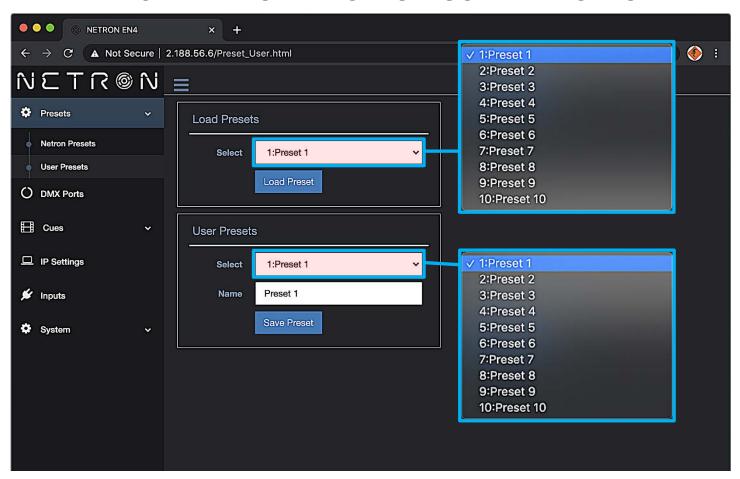
Please note that Netron devices are not compatible with Microsoft Internet Explorer. Also, the antivirus software AVAST is known to block important communication with NETRON, and must be disabled for the web interface and firmware updates to function.



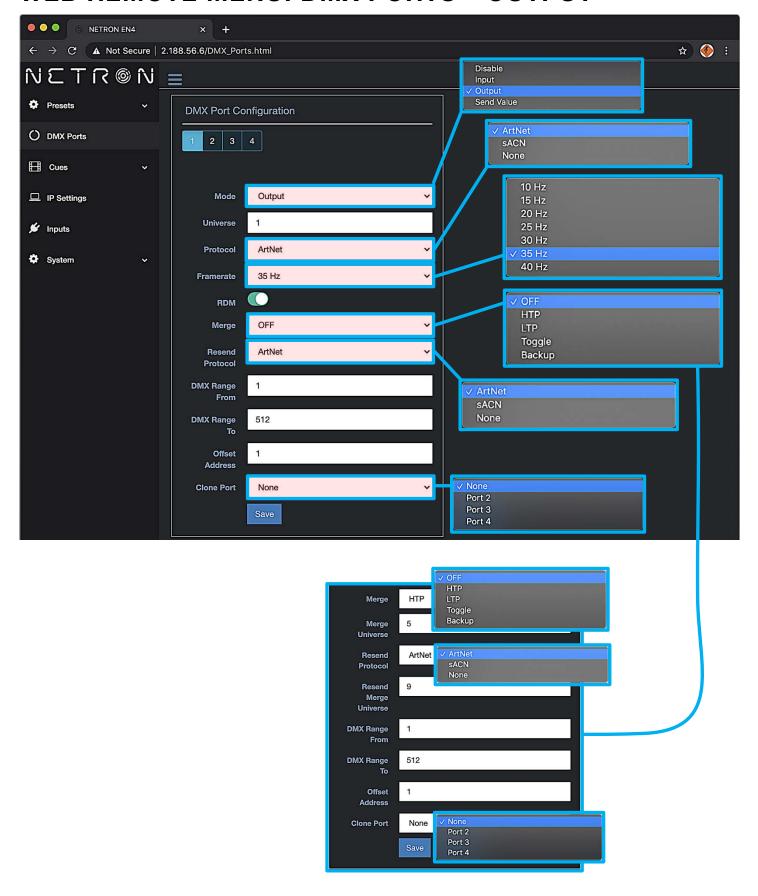
#### **WEB REMOTE MENU: PRESETS - NETRON PRESETS**



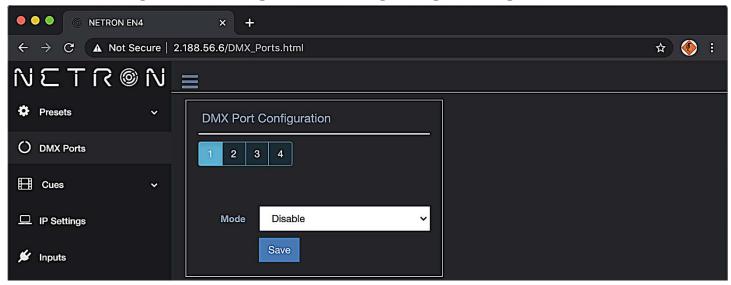
#### **WEB REMOTE MENU: PRESETS – USER PRESETS**



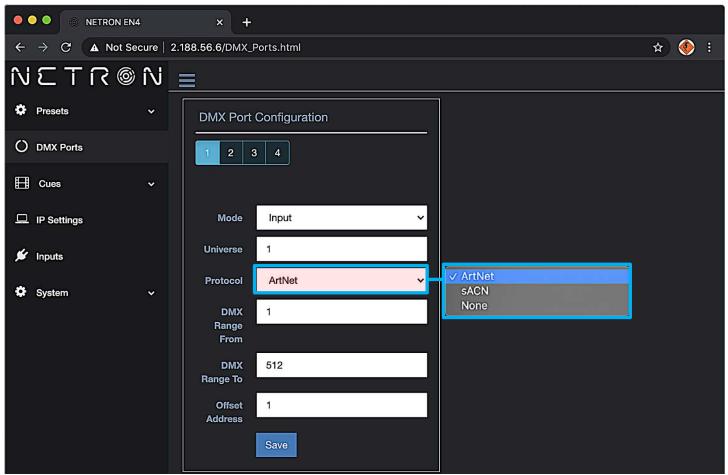
# **WEB REMOTE MENU: DMX PORTS - OUTPUT**



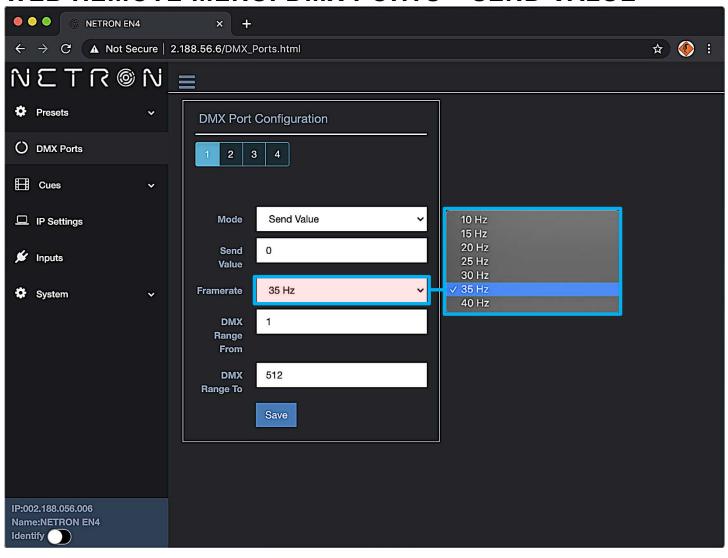
# WEB REMOTE MENU: DMX PORTS - DISABLE



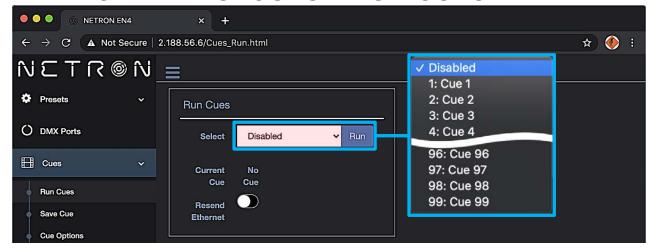
# **WEB REMOTE MENU: DMX PORTS - INPUT**



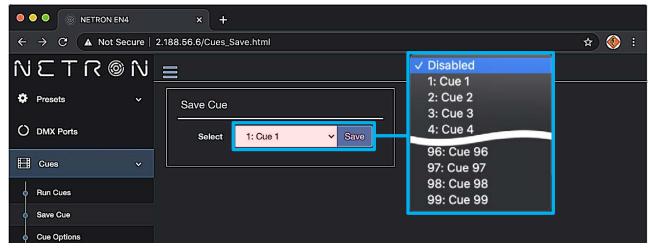
# WEB REMOTE MENU: DMX PORTS - SEND VALUE



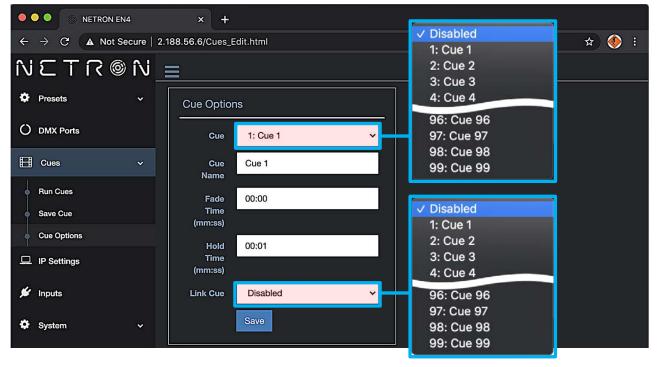
### **WEB REMOTE MENU: CUES - RUN CUES**



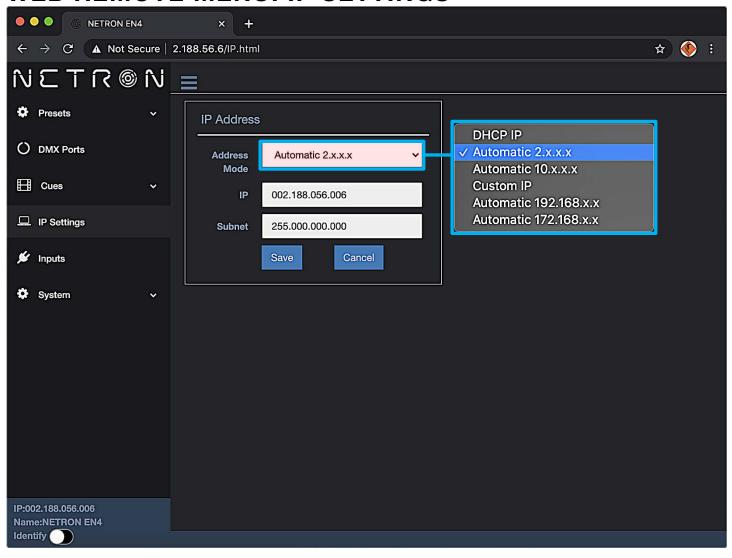
### **WEB REMOTE MENU: CUES - SAVE CUES**



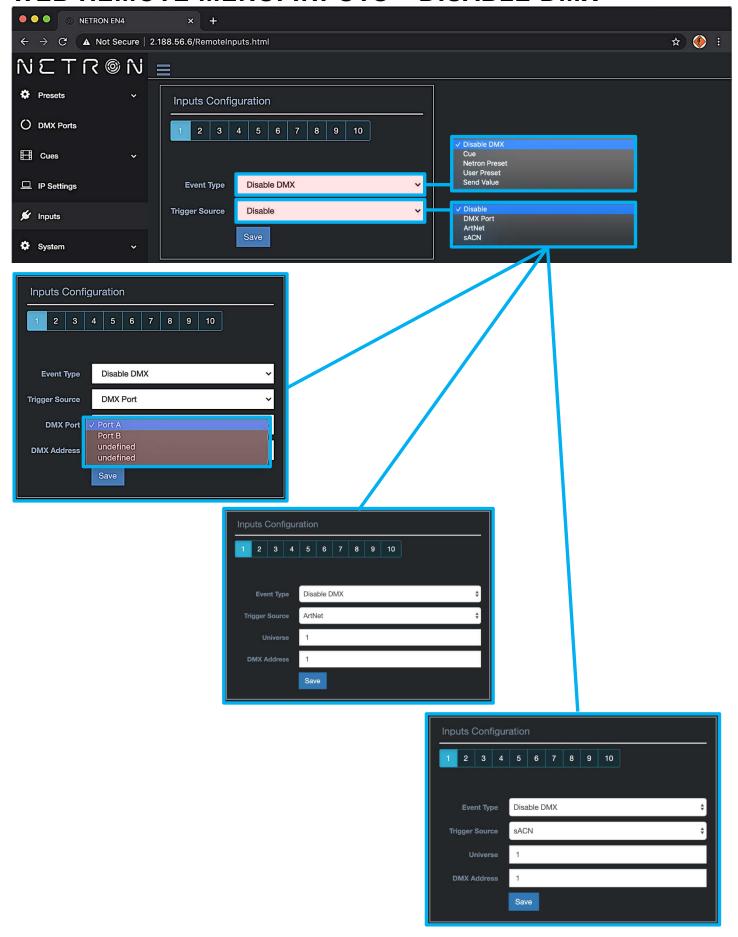
### **WEB REMOTE MENU: CUES - CUE OPTIONS**



# **WEB REMOTE MENU: IP SETTINGS**



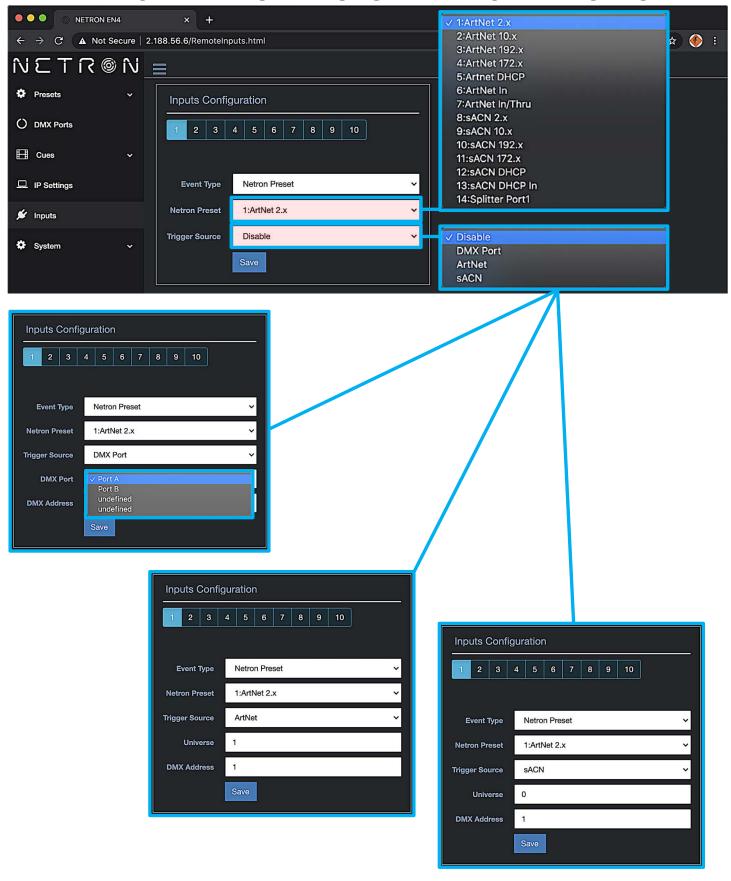
# **WEB REMOTE MENU: INPUTS - DISABLE DMX**



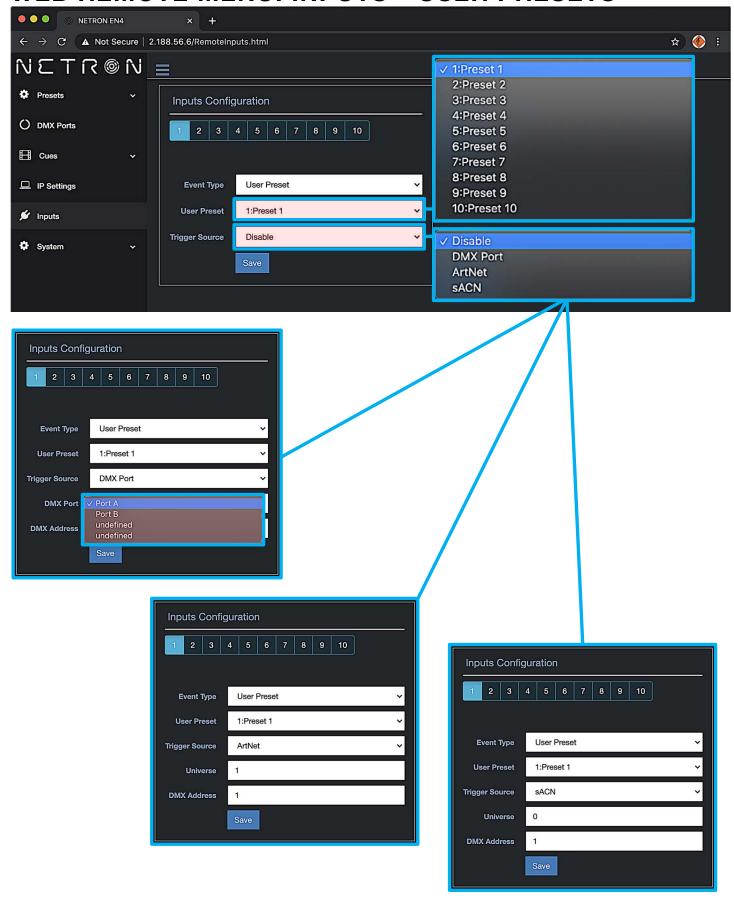
# **WEB REMOTE MENU: INPUTS - CUE**



# **WEB REMOTE MENU: INPUTS - NETRON PRESETS**



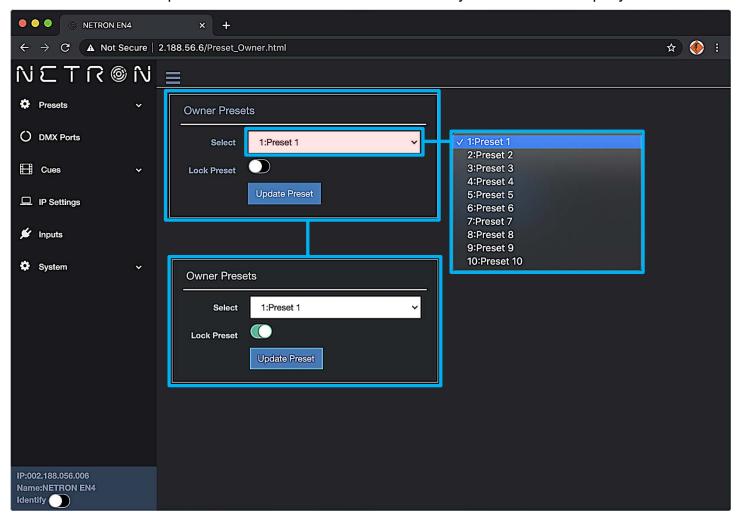
# WEB REMOTE MENU: INPUTS - USER PRESETS



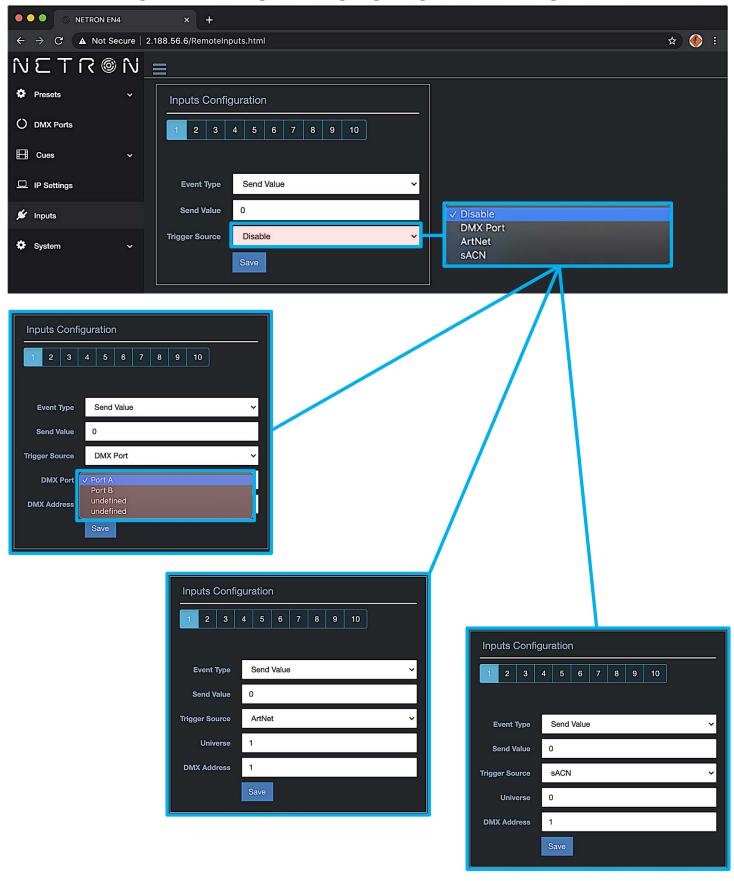
#### **WEB REMOTE MENU: INPUTS - OWNER PRESET**

Device owners can lock any of the user presets so they cannot be overwritten. This is especially useful for rental equipment to ensure a company specific preset can be reloaded and is not edited by any user.

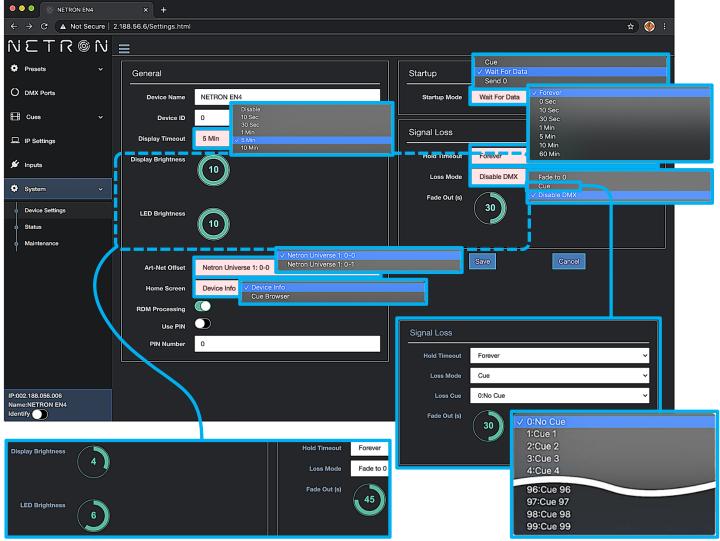
To access this function, use the specific URL IP\_Address/Preset\_Owner.htm, which is not part of the main interface. Select the desired preset, activate the lock, and Update to confirm. Owner presets are indicated with a lock symbol in the display.



# WEB REMOTE MENU: INPUTS - SEND VALUE

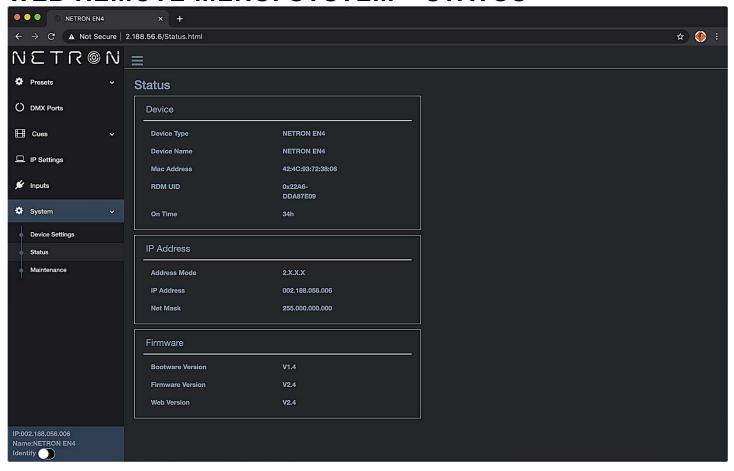


# WEB REMOTE MENU: SYSTEM - DEVICE SETTINGS

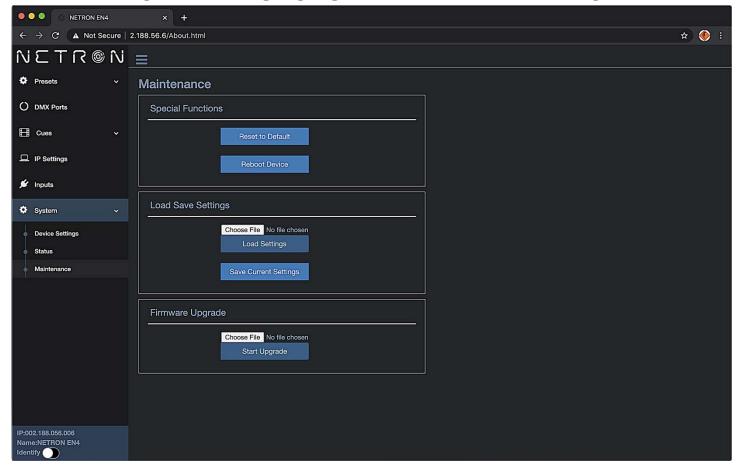


Use cursor to click and drag around to desired time.

# **WEB REMOTE MENU: SYSTEM - STATUS**



# **WEB REMOTE MENU: SYSTEM - MAINTENANCE**



#### FIRMWARE UPDATES

Updates for improved performance or to add additional features may be available on <a href="https://www.obsidiancontrol.com">www.obsidiancontrol.com</a>.

To install a firmware upgrade, connect to the device through a web browser and open the System – Maintenance menu.

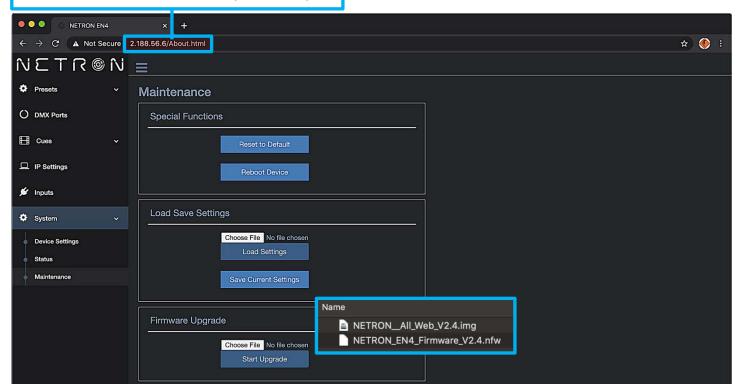
Always back up the configuration first. Export to a file using the web interface.

- Upload the firmware file, then update the device. Do not power cycle during the update process. The update
  is provided in two files, Display NFW and Web IMG. Both need to be installed for a full upgrade.
- Reset to factory defaults.
- Reload the configuration file from the web interface.

Confirm the upgrade is installed from the Information/Software Version Display.

If the system menu is corrupt and or cannot be opened, then the Netron device can be updated from an IP address e.g. 2.26.206.242/update.html.

Each device has a unique Device IP Address; the one shown is only an example.



Each device has a unique Device IP Address; the one shown is only an example.

