NETRON

EtherDMX Node
Connections & Ports

Input Ports:

Any **NETRON** (pronounced: NET-tron) **EtherDMX Node** can configure a port, whether XLR 5-PIN, RJ-45, or Phoenix connectors, to be a physical DMX-512 Input. Flexibility when it comes to data distribution is key; therefore, NETRON is designed to be easily configured to meet the many needs of different installations or venues. RDM should not be enabled on the DMX source. When a port is configured as an input, **the port is identified with a Green LED.**

Output Ports:

Over the years, as DMX-512 controlled lighting fixtures have become more complex, the need for multiple universes in a given location has greatly increased. By default, the ports on a NETRON EtherDMX node are configured to output DMX-512, starting at universe 1 and increasing based on the number of ports the device has. Each port can be configured to a specific universe to maximize output or be set to an already assigned universe to create an RDM splitter. Again, flexibility is of high importance and NETRON EtherDMX nodes are able to fit a wide variety of data distribution needs. When a port is configured as an output, **the port is identified with a Blue LED.**

Send Value (not a connection or port):

If necessary, a port can be configured to output a DMX-512 value from 0-255. When a port is configured to send a static DMX value, **the port is identified with a Purple LED.**

Cue Output (not a connection or port):

For the models of NETRON EtherDMX nodes that support cue storage and playback, **the port is identified with an Amber LED**.

Power Input / Thru:

Many NETRON EtherDMX nodes can be powered via line power through the IP-65, locking power connection. For convenience, several of the NETRON line of nodes feature a power output as well - which reduces the amount of cabling needed in tight spaces or racks.

Network / PoE:

The integrated unmanaged network switch within many of the devices makes networking simple. When powered via line power, simply connect from one NETRON EtherDMX node to the next with a short Cat5 jumper cable. Again, this makes for a much cleaner installation - lending to a simpler troubleshooting process if necessary. Additionally, it is not adviseable to netowrk more than 10 devices. All NETRON EtherDMX nodes are capable of being powered via **Power over Ethernet (PoE)** through the network - with a device such as the **NETRON NS8 Managed Gigabit Switch** that has a 100W PoE power budget.

NOTE: Though many NETRON devices have more than one network port, PoE will not pass through the device. To power via Ethernet, each device must make a cable run back to the network switch. This is the recommended setup as the connection to each device is not dependent upon the other devices in a daisy chain in the event of a failure.

USB-C:

Many devices feature a USB-C connection as a way to power the device. This was designed as way to quickly power the device for bench testing and configuration and is not recommended as a long-term power method for installation.

NOTE: No data is transmitted through the USB-C connection. A connection via the network is required for DMX-512 output/input.

DC Voltage Input:

The DIN Rail series of NETRON nodes may be powered via a DC Voltage input through a phoenix connector.

Contact Closure Inputs:

Certain models feature a set of contact closures to trigger/toggle a set of functions or actions. The EN12i features a proprietary RJ-45 port that can mirror those same inputs on the BS10 Button Station. The DIN rail series features a single contact closure for UL 924 Emergency control.

EtherDMX Node
Connections & Ports Table

	Input / Output Ports			Power						Network			Remote Input Triggers				
	Number of Universes Supported	Dedicated DMX In / Thru	0 - 10V Outputs (sinking)	AC Voltage Input (100-240V)	AC Voltage Thru (100-240V)	DC Voltage Input	USB-C	Power Over Ethernet (PoE)	Max Power Consumption	Number of Ports	Network Speed	Cue Storage	DMX / Art-Net / sACN	API	Contact Closures	Emergency Contact Closure	BS10 Remote Port
EP1	1	0	0			●	●	●	3w	2	1GB						
EP1D	1	0	0			●	●	●	2w	1	1GB						
EP2	2	0	0			●	●	●	3w	1	100MB						
EP4	4	0	0				●	●	4w	2	1GB	●	●	●			
EN4	4	0	0	●	●			●	5w	2	1GB	●	●	●			
EN6D	6	0	0			●	●	●	5w	2	1GB	●	●	●		●	
EN6 IP	6	0	0	●	●			●	8w	2	1GB	●	●	●			
RDM10	2	2 / 2	0	●	●			●	10w	2	1GB	●	●	●	10		
EN12	12	0	0	●	●			●	10w	2	1GB	●	●	●	10		
EN12i	12	0	0	●				●	10w	3	1GB	●	●	●	10		●
DA2410V	1	1 / 1	24			●		●	3w	2	1GB	●	●	●		●	

OBSIDIAN™
CONTROL SYSTEMS

EtherDMX Node
Port LED Color Table

	LED Color	Solid	Blink	Flashing
EtherDMX Nodes	Blue	DMX Out	No Signal	
	Green	DMX In	No Signal	
	White			RDM
	Purple	Send DMX Value		
	Amber	Cue Playback		
	Red	Error		
	Blue/Red		Lost Signal	

	LED Color	Solid	Blink	Flashing
RDM10	Blue	DMX A	No Signal	
	Green	DMX B	No Signal	
	Cyan	Merger		
	White			RDM
	Purple	Send DMX Value		
	Amber	Cue Playback		
	Red	Error		
	Blue/Red		Lost DMX A	
	Green/Red		Lost DMX B	

OBSIDIAN CONTROL SYSTEMS