

Node User Manual

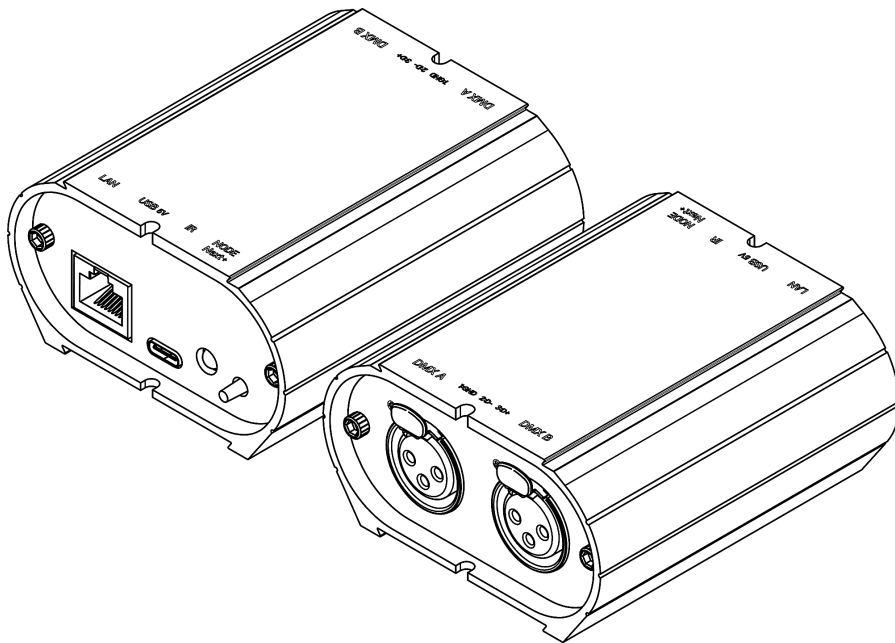


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! Knowledges of DMX universes, Networking, LAN and Art-Net is required to set up an ArtNet or sACN installation and configure correctly the Node.

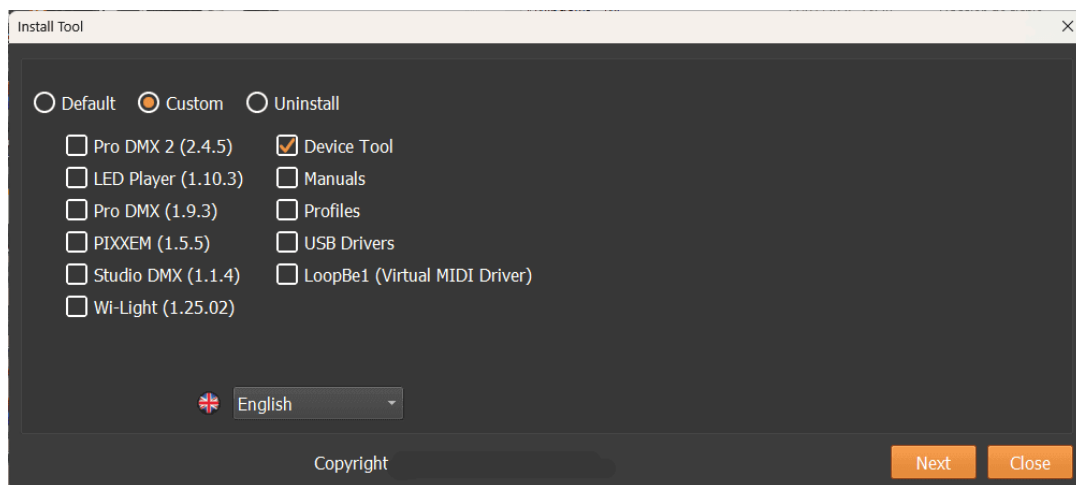
1st Step: Software Tools Installation

To configure the Node by USB or Ethernet (setup IP settings, universes, modes) you must install and use the DeviceTool software. Node is compatible only with the DeviceTool and not with the lighting control software. It is not possible to open the Node with the control software.

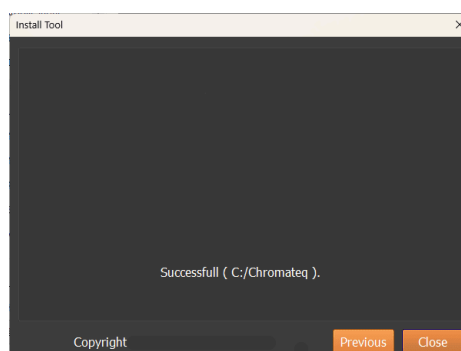
During installation, selecting the **Default** option installs the DeviceTool and the USB drivers together with the control software. If you do not need the control software, you can choose the **Custom** option to install only the DeviceTool and the USB drivers.

DeviceTool Installation

- 1-** Download the setup from the website according to your computer operating system.
- 2-** Unzip the setup and run it.
- 3-** Select Custom and select DeviceTool only (other software are not needed and compatible to configure the Node).
- 4-** Click to Next.



- 4-** Select the default installation directory and click Next to install.
- 5-** Once finished with success click to Close.



Device detection

You can connect the Node to your computer via USB or via the local network and Ethernet port.

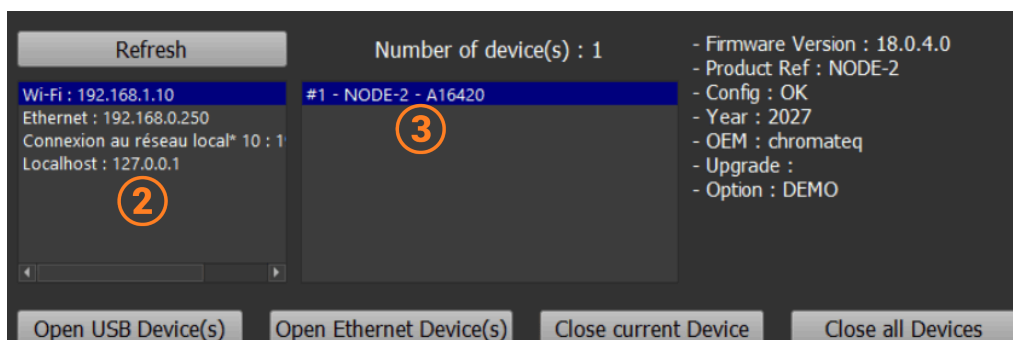
USB Connection

- 1- Connect the Node and USB cable to your computer.
- 2- Start the Device Tool and click to "Open USB Device(s)".
- 3- The Node is detected and displayed in the Device list.

If the Node is not open by the Devicetool then refer to the troubleshooting page below to check the USB drivers and USB communication.

Local Network Connection

- 1- Connect the Node and the computer with a RJ45 cable or connect the NODE to our LAN (switch or router). Power the Node with the external Power Supply Unit or with the USB cable.
- 2- Start the DeviceTool. Select the network card in the list and click to "Open Ethernet Device(s)". Default Node Network settings is DHCP (IP address are managed by the network server). In fix IP setting, the parameters are:
Ip : 192.168.0.5
Mask : 255.255.255.0
Gateway : 192.168.0.1
- 3- When the Node is detected, it is displayed in the Device list.
if it is not detected then refer to the troubleshooting page below.



Node Configuration

Network Settings

- 1- DHCP: Activate or not the DHCP (IP give by the router or IP switch) or Fix IP.
- 2- Set Node static IP, mask and gateway.
- 3- Set the default settings.
- 4- Apply changes (Must be used after changes).
- 5- Node name on the network.
- 6- Server ip (not used by node devices).

The screenshot shows the 'DMX Device Tool - V4.4 - ARM' window. The main title is 'Configure the device and setup its Network configuration.' The interface is divided into several sections:

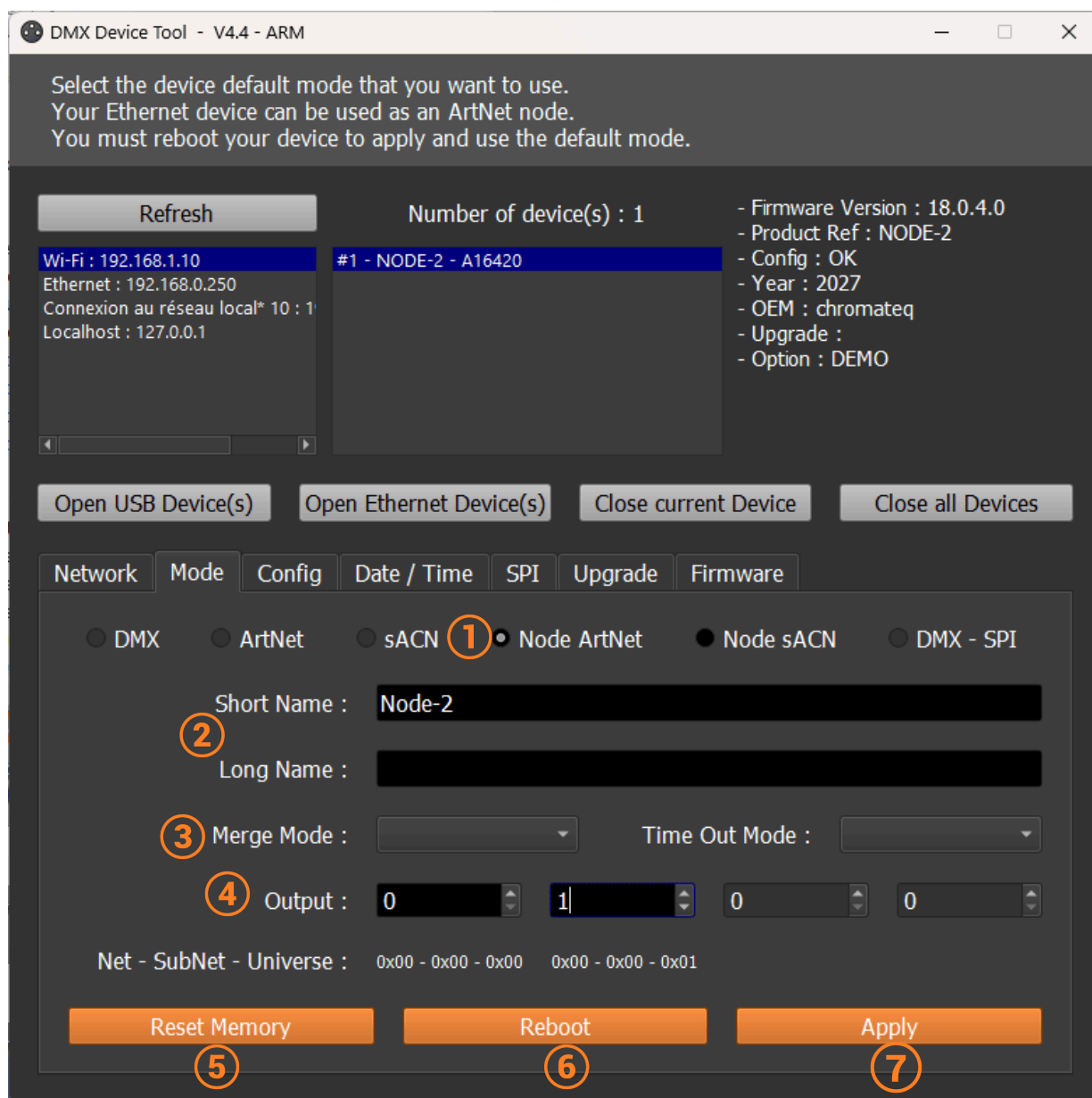
- Refresh** button and a list of network interfaces: Wi-Fi : 192.168.1.10, Ethernet : 192.168.0.250, Connexion au réseau local* 10 : 1, Localhost : 127.0.0.1.
- Number of device(s) : 1** and a list of devices: #1 - NODE-2 - A16420.
- Firmware Version : 18.0.4.0**, **Product Ref : NODE-2**, **Config : OK**, **Year : 2027**, **OEM : chromateq**, **Upgrade :**, **Option : DEMO**.
- Open USB Device(s)**, **Open Ethernet Device(s)**, **Close current Device**, and **Close all Devices** buttons.
- Network** tab selected, with other tabs: **Mode**, **Config**, **Date / Time**, **SPI**, **Upgrade**, **Firmware**.
- 1** ☒ **DHCP** (Default IP : 192.168.0.5)
- 2** **IP :** 192.168.0.5
- Mask :** 255.255.255.0
- Gateway :** 192.168.0.1
- 3** **Default** button
- 4** **Apply** button
- Name :** DMX_Ethernet_Interface
- 5** **Apply** button
- Server IP :** 217.160.187.41
- 6** **Apply** button

Mode Settings

Node Art-Net

- 1- Select the Node Art-Net mode.
- 2- Set Node Long and Short names, they will be displayed when detected.
- 3- Merge mode and Time Out Mode (only used for Node PoE).
- 4- Choose the DMX universes received by the Node.
- 5- Reset standalone memory (not used by Node).
- 6- Reboot the node.
- 7- Apply changes.

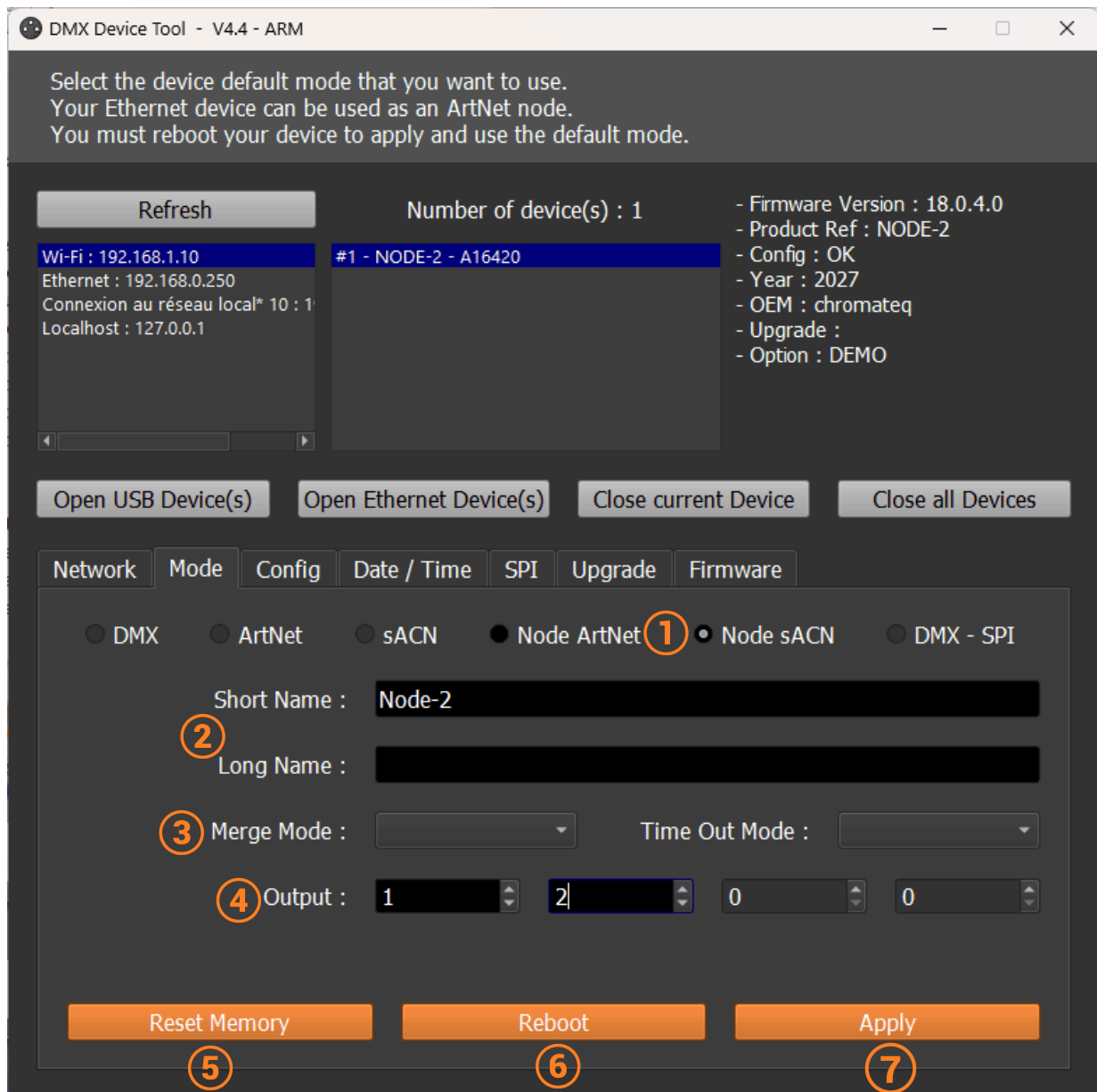
LED operating state in ArtNet mode : Green on + Orange slow blink x1.



Node sACN

- 1- Select Node sACNt mode.
- 2- Set Node Long and Short name displayed when detected on network.
- 3- Merge mode (not available with Node).
- 4- Choose universes received by the Node.
- 5- Reset standalone memory (not used by Node).
- 6- Reboot the Node.
- 7- Apply changes (Must be used after changes).

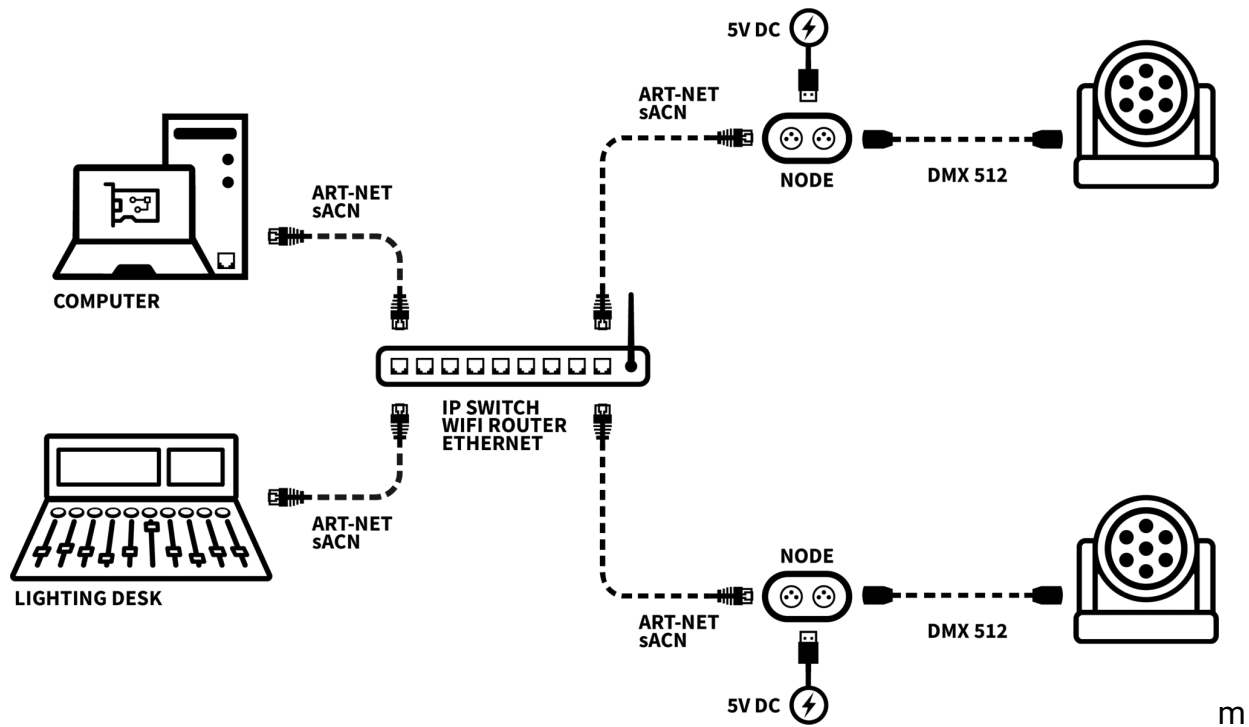
LED operating state in sACN mode : Green on + Orange slow blink x2.



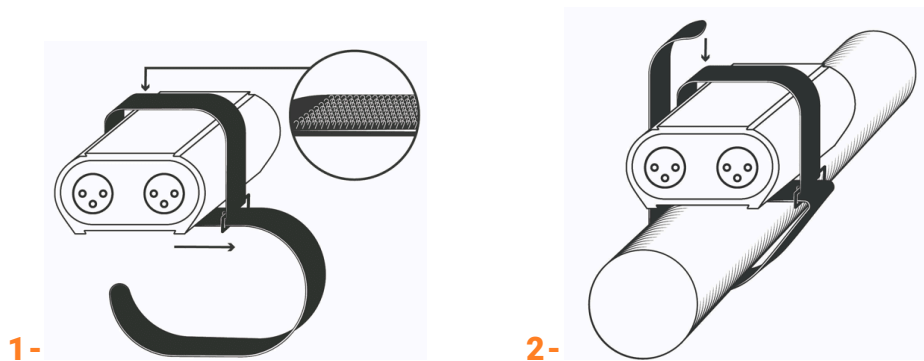
Physical Installation

You can connect several devices to the same local network in order to multiply the DMX output universes.

Wiring Diagram



Strap Mounting



Detecting Nodes on the Network

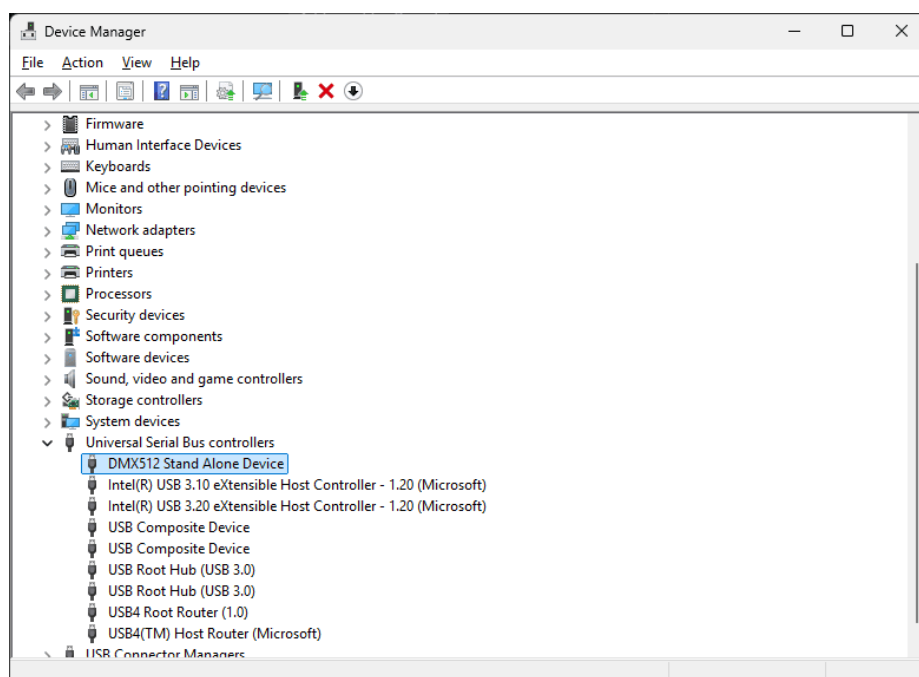
Once the Nodes have been properly configured and installed you can detect them into your ArtNet / sACN controller (software, lighting desk...). Refer to your controller user manual for all the Node detection details. Main steps are:

- 1- Go into the Art-Net and Node configuration page of the controller.
- 2- Select the correct network card connected to the LAN
- 3- Refresh the Nodes detection, all Nodes found on the network will be displayed.
If some Node are missing, double check each Node network configuration.
If all Nodes are missing refer to trouble shooting page below.
- 4- Configure each Nodes to assign the DMX universe needed on each port. (for ArtNet only, when in use without Broadcast communication)
- 5- Send ArtNet / sACN to the network from the DMX/Art-Net controller.

Manual Drivers Installation (Windows)

- 1- Go to the DeviceTool installation directory and open the "Drivers" folder.
- 2- Right click then run as administrator the "usb dmx drivers.exe".

When finished, connect the Node by USB to the computer and open the Windows Device Manager in USB part the line "DMX512 Stand Alone Device" should be displayed and without warning.



Troubleshooting

The Node is not detected by the DeviceTool with USB	Unplug to reboot the Node.
	Change the USB cable.
	Change computer USB port.
	Check in the computer Windows device manager (Material part for MAC). Search in the USB part the line "DMX512 Stand Alone Device" should be displayed and without warning. If not, refer to the "Manual Drivers installation (Windows)" part.
The Node is not detected by the DeviceTool on local network	Unplug to restart the device.
	Change the Ethernet cable.
	Check the selection of Ethernet networks card before opening in DeviceTool. Check the computer network configuration (DHCP or Fix IP).
The Node is not detected on the network	Check the mode of communication with LED operating states and check the Devicetool setting of the device via USB if necessary.
	Verify that the IP addresses and subnet mask are configured correctly and are in the same range.
	Check full network installation wiring and configuration.
	Update the firmware of the device via the latest software and Devicetool version.
	Open and allow the Communications Ports used by the Node. Some local networks may require manual opening of the following UDP Ports: - 8011 + 8012 for communication between the Node and Device tool. - 6454 for ArtNet - 5568 for sACN

If you experience unlisted issues, contact your reseller or the manufacturer directly to indicate your problem and get a technical support and a solution.