

INTERFACES USB-DMX

PRO NET 16 / 64 / 128

V.1.1



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1024 CHANNELS USB TO DMX INTERFACES

HARDWARE TECHNICAL SPECIFICATIONS

Input	USB 2.0 via Mini USB
Number of DMX Outputs	up to 1024 on 3 pin XLR (XLR5 optional)
DMX Modes	2x512 (splitter), 1024, 512 in/out
DMX Input	Yes (PC mode only for DMX in record or DMX in trigger and control)
DMX Speed	1 to 45 Hz, MaB, Bk
Stand Alone Mode	Yes, 512 channels on DMX A, fine DMX channels (16 bits)
Internal Memory	Yes (40 Kb)
Memory Capacity	2600 steps with 16 ch., 155 steps with 256 ch., 375 steps with 512ch.
Infra-red Receiver	Yes, (IR remote control for triggers available in option)
Infra-red Options	10 scene selection, scene speed, general dimmer and next scene
Dry Contact Triggers	Yes (4 contacts port on 3.3V or 5V)
Next Scene Trigger Button	Yes
Power Supply Input	5V via USB
High voltage Protection	Yes
Housing	Strong Aluminum
Infra-Red remote	No
Usb Mode	Yes
Display of signal states	USB LED
Power	2 W
CPU's technology	32 bits
Dimensions	H : 47mm(1.85in) / W : 70mm(2.76in) / D : 88mm (3.46in)
Weight	0.115 Kgs
Package total weight	0.3 Kgs
Color	Black
IP rating	IP20
Place of Use	Indoor
Storage	Keep in dry place
Compatibility	8 and 16 bits DMX fixtures
Operating Temperature	- 25 to +70 C°
Certifications	CE, RoHS, Fcc
International Warranty	Yes, 36 months (since 2015)

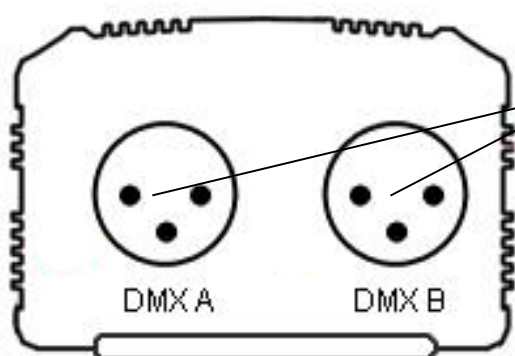
Software features:

LED Player	Yes, 1024 channels DMX + Art-Net, full mode, Stand Alone mode, Live Board mode
Studio DMX 3D viewer	Yes, Ultimate mode, Shadows, 2D ground map, video record, etc...
Pro DMX	Yes, 1024 channels, full mode, 24 Hours loop of Audio and Video Timeline, PC Clock triggers, Midi Time Code (MTC), Timeline Live record, etc...
Art-Net Output from PC	Yes, 16, 64 or 128 Universes (DMX + Artnet)
Wi-Light 2016 App	Yes, Basic LED Player and Pro DMX commands with a WIFI connection
System Compatibility	Windows, MAC Os X (10.6 and higher) and Linux (64 Bits)
Free Software Updates	Yes

Package Content:

Small package + 1 USB cable + 1 USB to DMX Interface (3 Pin XLR, 5 pins in option)

FRONT FACE



XLR DMX Signal Connector

Can be configured to Output or Input mode.

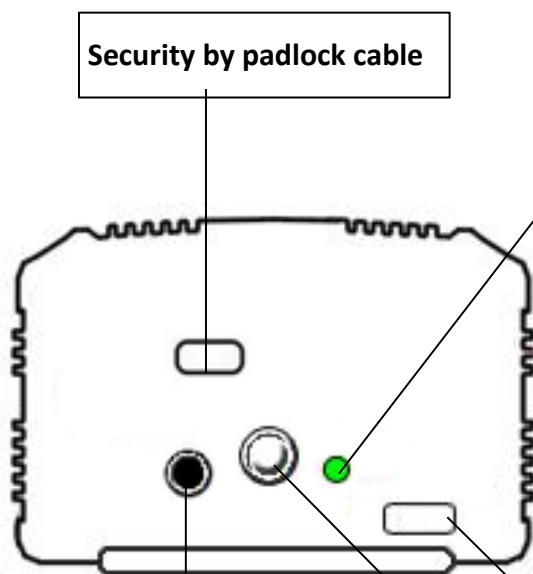
3 Pins

1: Ground

2: Data -

3: Data +

REAR FACE



Security by padlock cable

Green USB Signal LED

OFF: Interface not powered (check the USB cable or the power supply).

ON: Interface powered

Flashing Slow: USB communication ready. Drivers are installed correctly. The software has detected and is communicating with the interface.

Flashing Fast: The Stand Alone mode is activated and is playing a scene. (Available with 2012 and subsequent versions)

Flashing very fast : The interface is waiting for a new firmware from the software

Mini USB connector and power connector

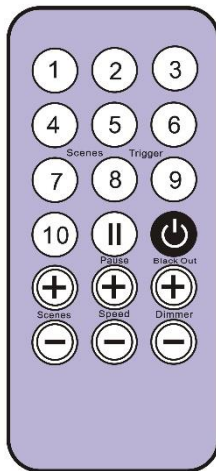
IR Receiver LED

Optional feature. Requires an IR remote control unit. (IR receiver LED available from the 2012 product version)

Next Button : Allows to skip to the next scene in stand alone mode

(Available on products sold since 2016)

IR RECEIVER AND REMOTE



Button 1 to 10 must be assigned to a scene via the software.

Each button can trigger a different scene. With the remote control, a scene cannot be stop directly with the assigned button. To stop it you must press the Stop/Black Out button or trigger another scene.

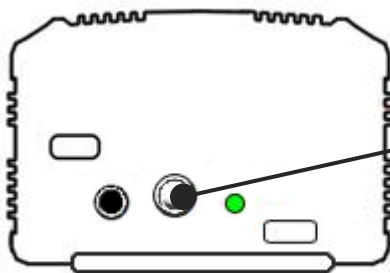
Pause button to freeze the current scene to its actual state.

Stop/Black Out button to stop the current scene and play the empty scene number 00. All DMX channels are set down to 00 levels.

+/- for scene trigger. Select the next or previous scene automatically. You don't need to hold the button to validate and play a scene. The next or previous scene will play directly after selected.

+/- for Scene speed. Increase or decrease the speed of the current scene. A different speed can be chosen separately for each scene.

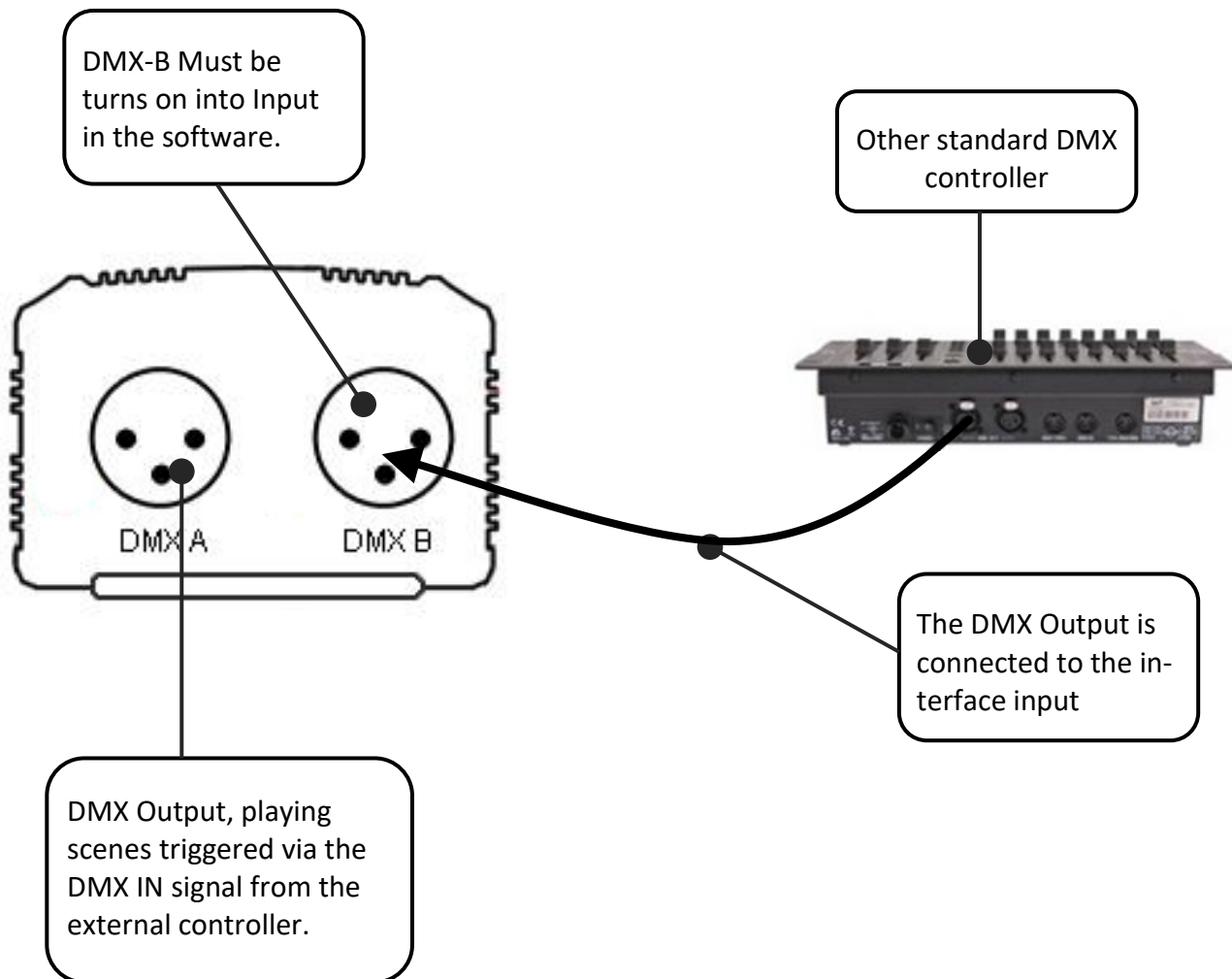
+/- for General dimmer. Increase or decrease the RGB, CMY and dimmer channels of the fixtures. The CMY, RGB, Dimmer channels are defined in the Profile of the fixture.



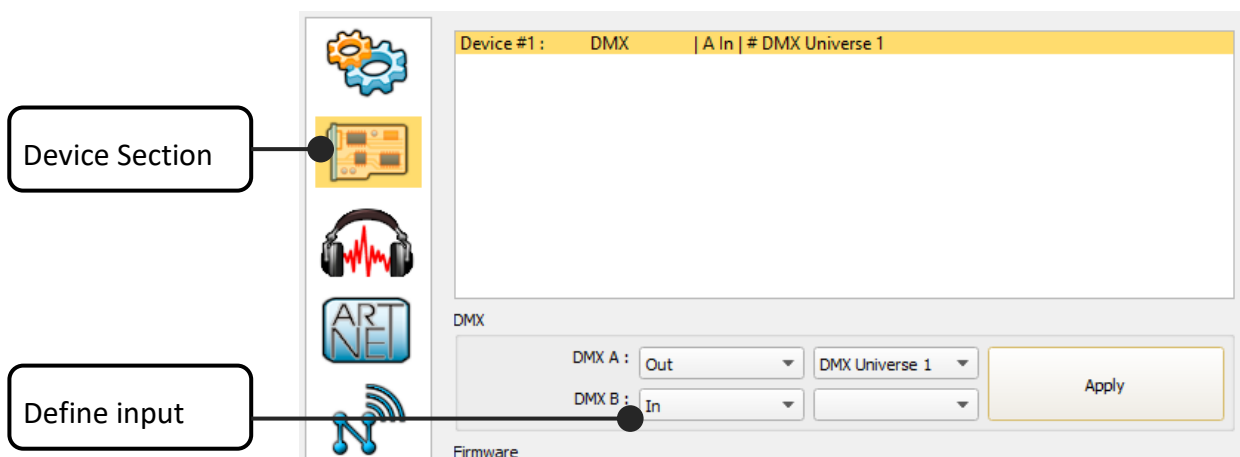
IR Receptor at the back of the interface



DMX-IN RECORD AND TRIGGER



One DMX Output must be turns on into an input in the Options windows. To access this window click on the software menu: Tools > Options. Then click to select the device section as following:



Then it is possible to record a DMX signal with the software options and create a new scene with the data received from the DMX input.

DMX-IN TRIGGER SOFTWARE CONFIGURATION

Follow those steps to set a DMX-IN trigger on a scene or on a program:

Step 1: Go to the scenes list if the editor view.

Step 2: Double click the "Key" cell of the scene to be triggered.

Scenes

Programs

Name	Cross fade time	Loops	Jump	Duration	Key	Live
Scene 1	00m 00s 000	Always loop	Stop	00m 15s 040	[...]	✓
Scène 2	00m 00s 000	3 Loops	Stop	00m 17s 160	[...]	✓
Scène 3	00m 00s 000	Always loop	Stop	00m 01s 800	[...]	✓

Key

Shortcut

Select shortcut :

Midi trigger

☒ No Midi trigger

☐ Midi Note

☐ Midi Ctrl Change

☐ Midi Prog Change

Channel :

Value :

Min :

Max :

DMX

☒ No DMX trigger

☐ DMX Level

☐ DMX Scale

DMX Universe :

Channel :

Value :

Min :

Max :

SA Triggers

Buttons :

Remote :

External Contacts :

☐ Auto release

☒ On / Off

✓ ✗

Step 3: Go to the DMX section of the Key window.

Two DMX-IN trigger options are available: DMX Level and DMX Scale, let's see what the differences are:

Option DMX Level

DMX

☐ No DMX trigger

☒ DMX Level

☐ DMX Scale

DMX Universe : DMX Universe 1

Channel : 1

Value : 127

Min :

Max :

Choose the input universe and channel

Choose the trigger level with one if you go over it the scene starts and under it the scene stops.

Option DMX Scale

DMX

☐ No DMX trigger

☐ DMX Level

☒ DMX Scale

DMX Universe : DMX Universe 1

Channel : 1

Value :

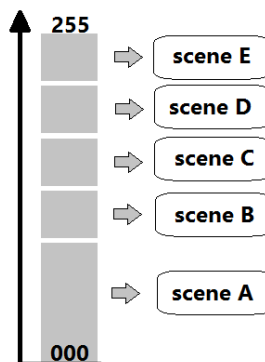
Min : 127

Max : 255

Choose the input universe and channel

Choose the trigger range of levels. With one if you go inside it the scene starts and outside it, the scene stops.

With the DMX Scale you can create many triggers presets on a same DMX-IN channel and so starts a suite of scenes on the DMX fader way.



TRIGGERS CONFIGURATION WITH THE SOFTWARE

The Stand Alone mode of the software enables to configure and personalize all the triggers.

The information will be directly saved in the DMX interface memory with the memory writing function.

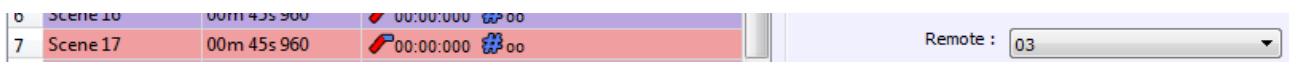
SWITCH TO STAND-ALONE MODE

When the device isn't connected to the software or has just been powered, it enters in Stand Alone mode after five (5) seconds.

INFRA RED REMOTE TRIGGERS

Standalone mode offers up to 10 triggers with the Infrared remote. By selecting a scene in the list, it's possible to choose the remote button number (from 01 to 10) to trigger the scene.

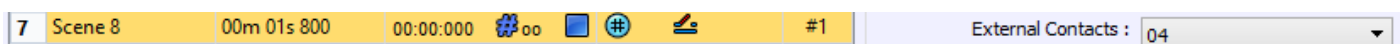
The other IR remote functions will work as well as the SLIM DMX interface. (Speed, dimmer, scene +, scene -, off).



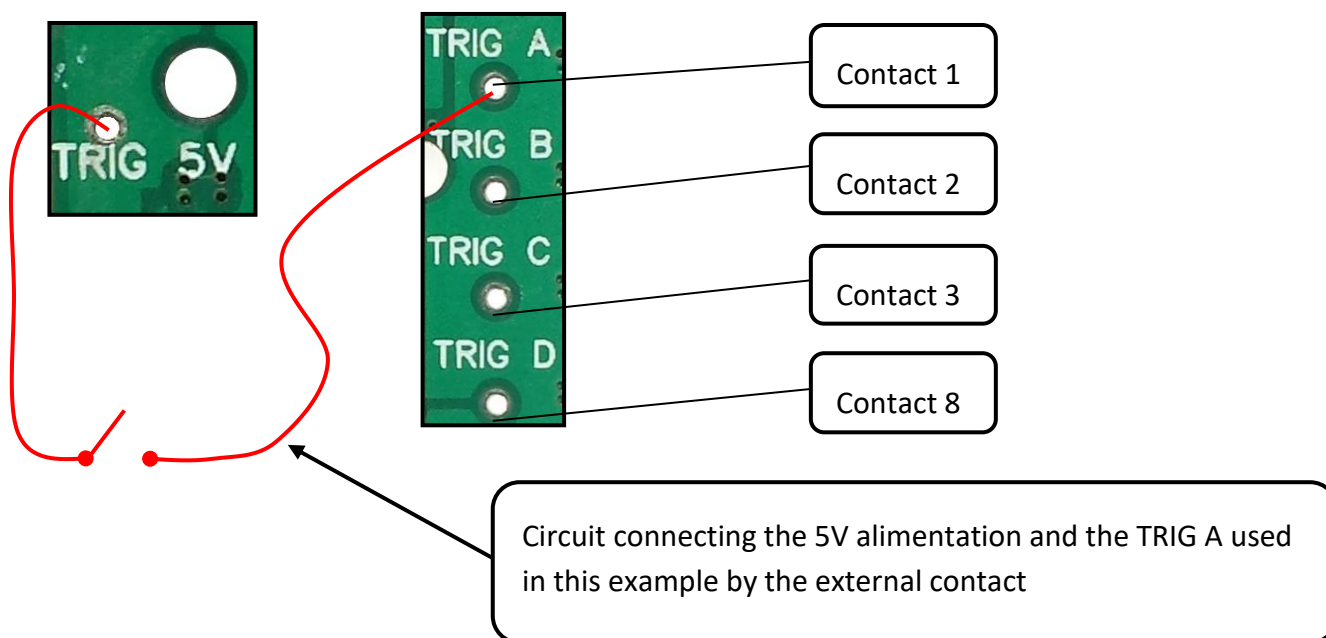
EXTERNAL CONTACT TRIGGERS

The Stand Alone mode offers up to 15 external possible triggers. By selecting a scene in the list, it's possible to choose the external contact number (from 01 to 31) to trigger the scene.

By default, the interface gives 5 external contacts (01, 02, 04, 08). To obtain 15 external contacts, you have to use a de-multiplexing interface in order to go from 4 to 15 possible combinations.

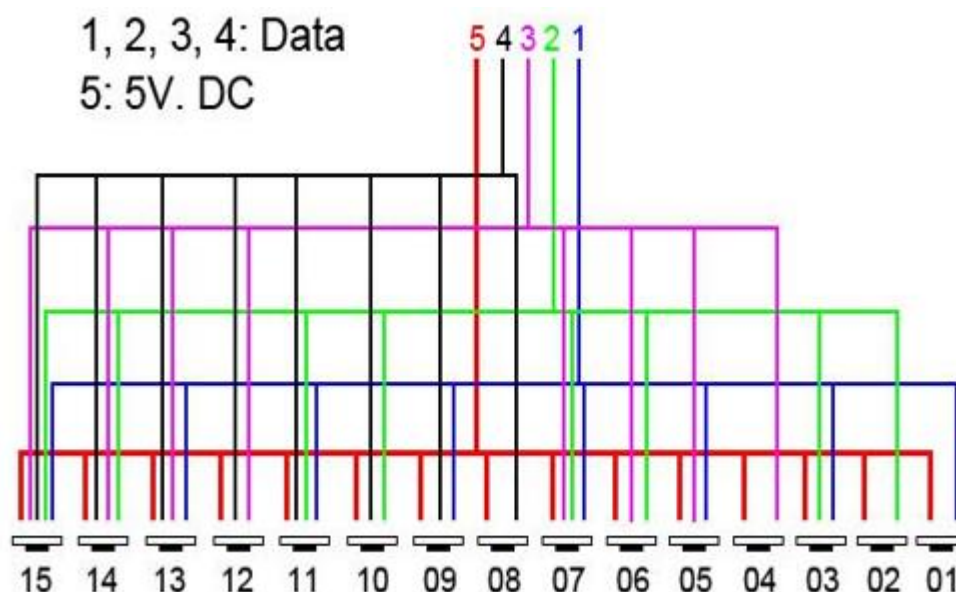


The 4 contacts are situated on the printed circuit board. It's necessary to open the interface for access to it. You can use simply 4 direct contacts for triggered 4 scenes. You have to create a bridge with interruptor from the 5v Alimentation (TRIG 5V) of the printed circuit board to the « TRIG » that you will use (A,B,C,D).

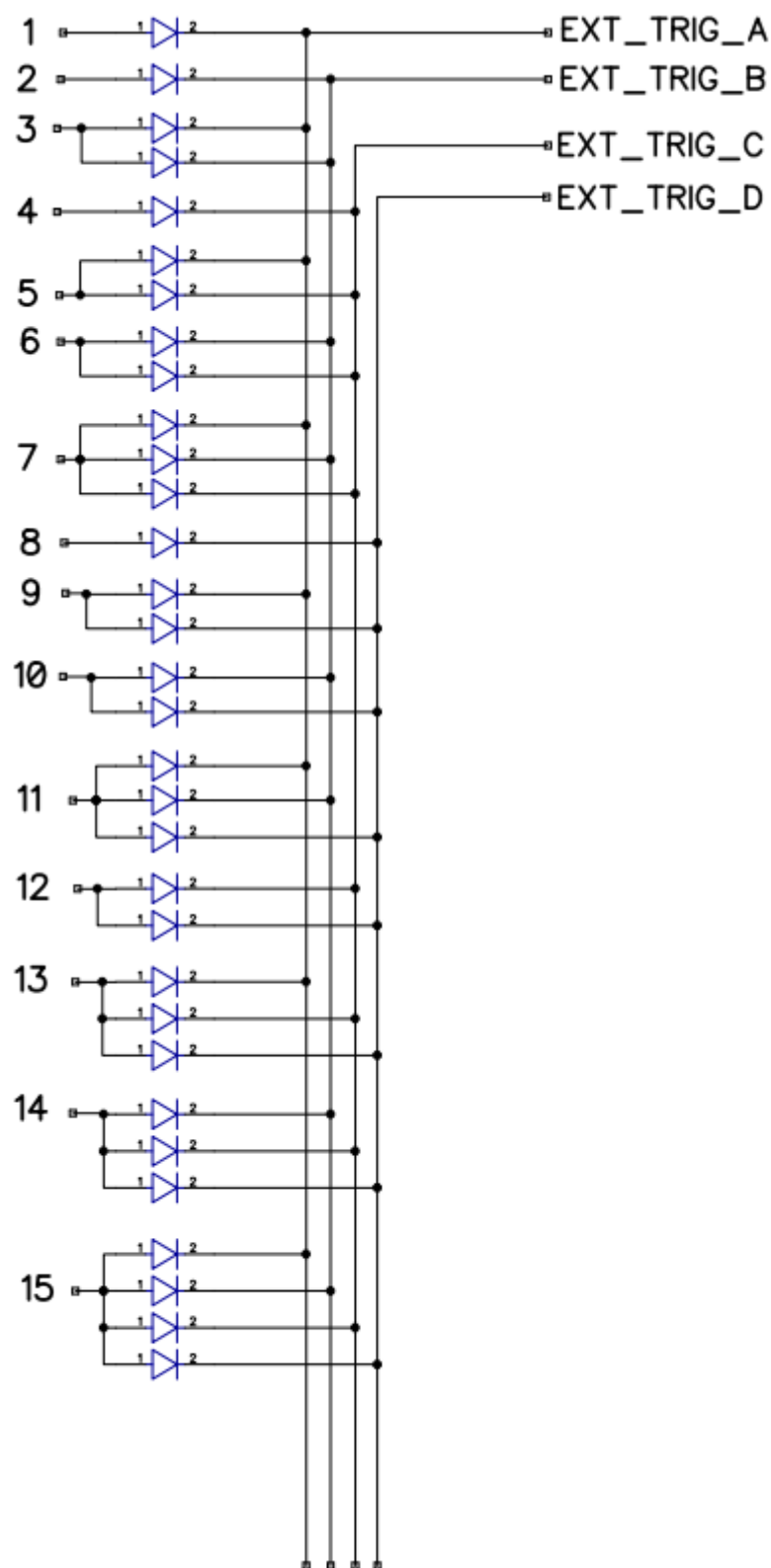


Dry contact option : On (star scene only)

To extend to 15 triggers you can use the multiplexing to reach to a maximum of 15 binaries combinaisons as following :



Dry contact reaction time : 5ms (0.005s)



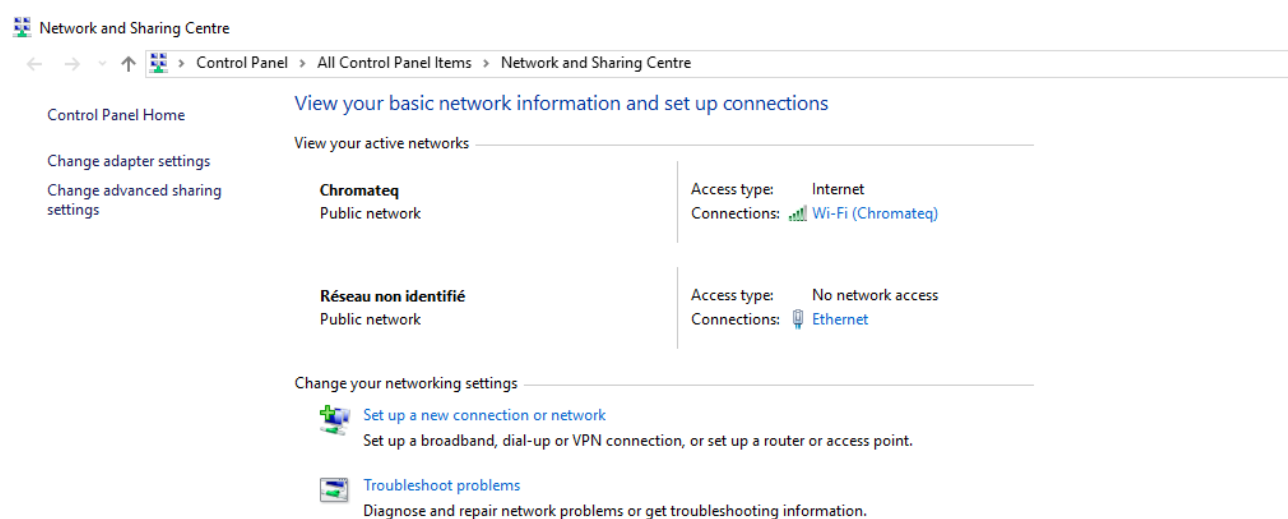
Art-Net protocol usually requires subnet mask 255.0.0.0 with an IP address of the following types : 2.x.x.x. As a result, fixtures compatible with Art-Net protocol shall always have a default IP address of 2.x.x.x. In reality, default address may sometimes differ ; that is why our software allows to send Art-Net frames with any network configuration. However, it is paramount to check the compatibility between the configuration of your Art Net fixtures and your computer. Be careful to apply the same subnet mask with common class for each fixtures on the network.

Examples :

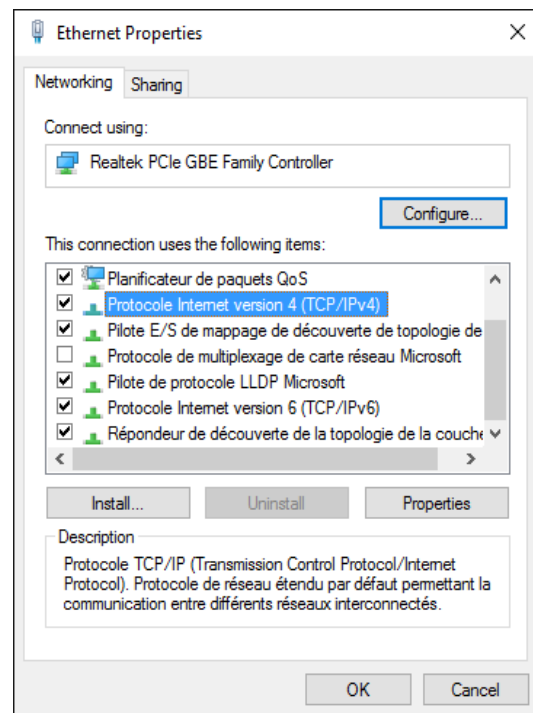
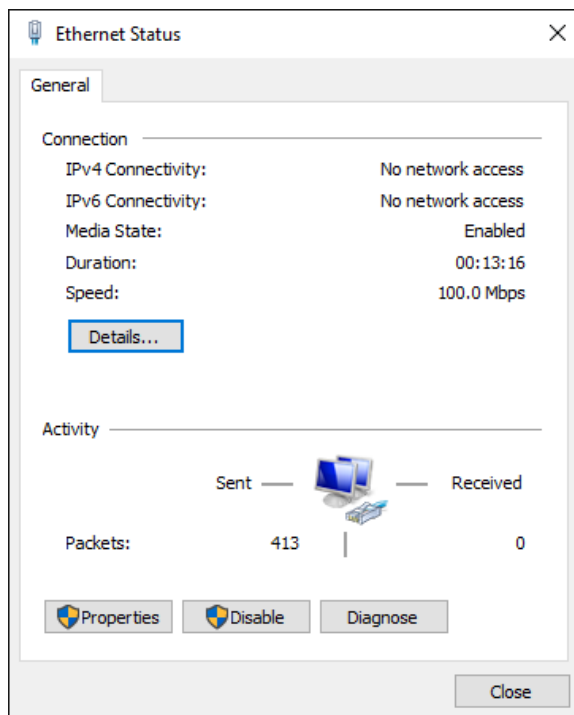
- If you are using an **Art-Net** fixture with the IP address 2.0.0.4. and a subnet mask of 255.0.0.0, your computer shall have a subnet mask of 255.0.0.0 with an IP address 2.x.x.x (2.0.0.5 for example).
- If you are using an Art-Net fixture with the IP address 192.168.0.4 and a subnet mask of 255.255.255.0, your computer shall have a subnet mask of 255.255.255.0 with an IP address 192.168.0.x (192.168.0.5 for instance)

Follow the steps below to configure your network interface with Windows.

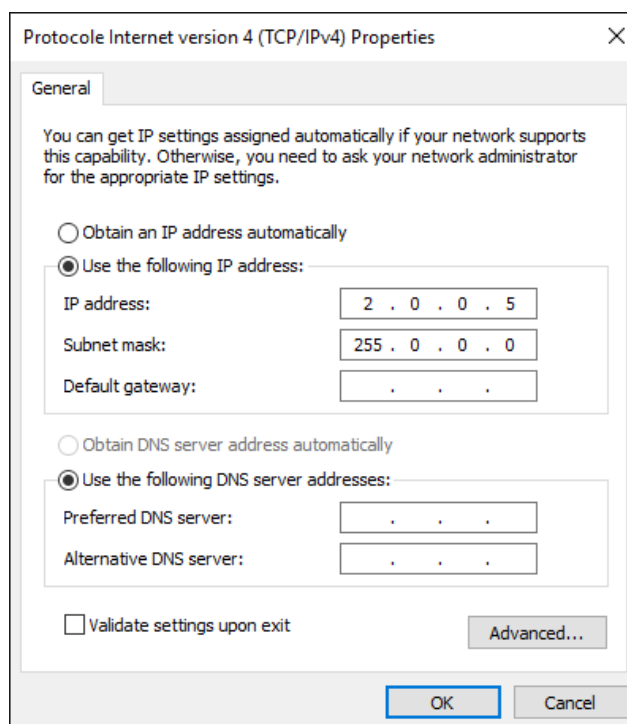
Open the **Network and sharing center** and click on the **Ethernet** link (you must have connected a device to the Ethernet port of your computer to allow the Ethernet network to shown)



In the following windows, click on **Properties** then **Protocole Internet version 4 (TCP/IPv4)** :



Finally, select **Next IP** and enter your IP address as well as the subnet mask corresponding :

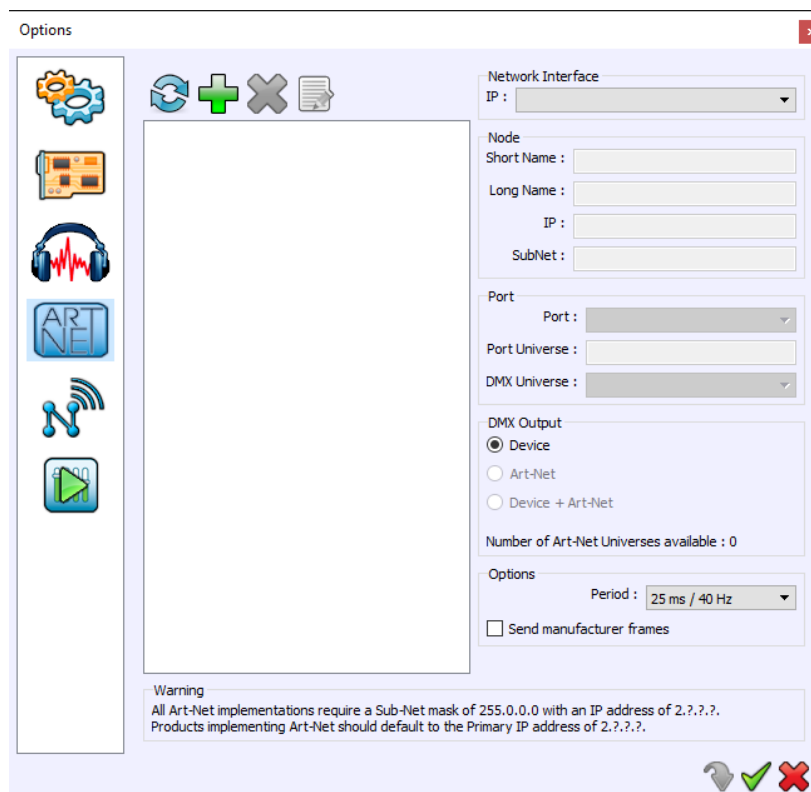


Your computer is now configured and you can use our software to communicate with Art Net devices.

SOFTWARE SETTINGS

From the Tool/Options menu, select the **Art-Net** section.

To detect the devices on the network, click « refresh ».



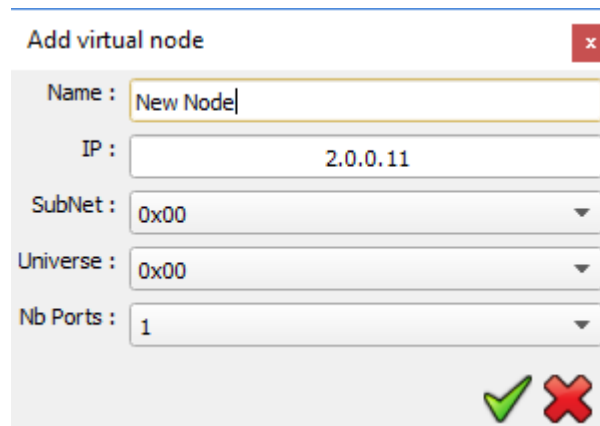
An **Art-Net** device is represented by a node which contains 1 to 4 ports, each ports can receive 1 DMX univers. A simple **Art-Net** fixture shall be shown as a single port while an Art-Net convertor/ DMX with 4 DMX outputs shall be shown as a 4 ports.

Warning : If an Art-Net/DMX convertor contains more than 4 DMX outputs (8 for example) it shall act as several distinct nodes (2 nodes of 4 ports each for instance).

ADD A VIRTUAL NODE

In addition, it might happen that depending on the equipment used, an Art-Net/DMX only recognizes the very first node within the network (refers to the manufacturer notice). In this case, user must manually add a virtual node from the software.

To manually add a virtual node from the software, you must specify which IP address is used by your fixture, its sub network, its Art-Net universes and the number of ports used (Univers DMX).

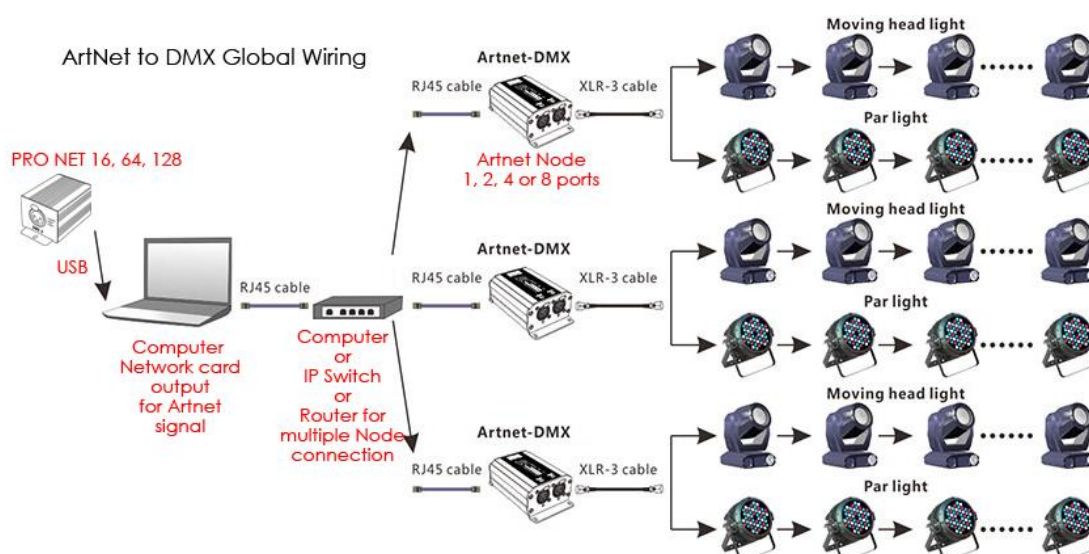


NB : The principle of the Art-Net protocol is that a fixture with several ports shall use consecutive universes for each of its ports. That is why it is needed to inform one universe only (the one which belongs to the device, same as for the SubNet). However, it is possible to send any software universe to each used ports.

DMX UNIVERS

For each fixture, you can choose the DMX univers/universes you wish to send.

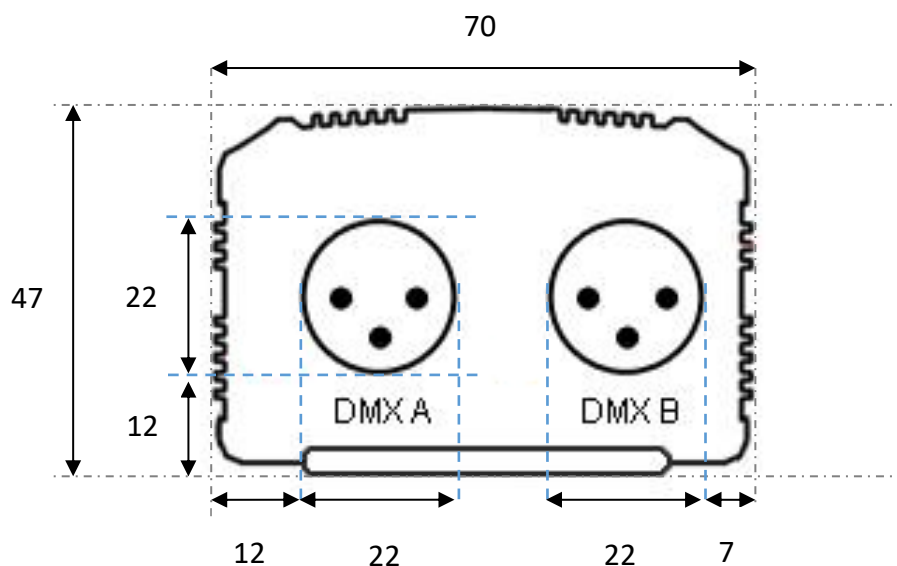
Select the relevant node in the list, choose for each port, which software universe should be applied.



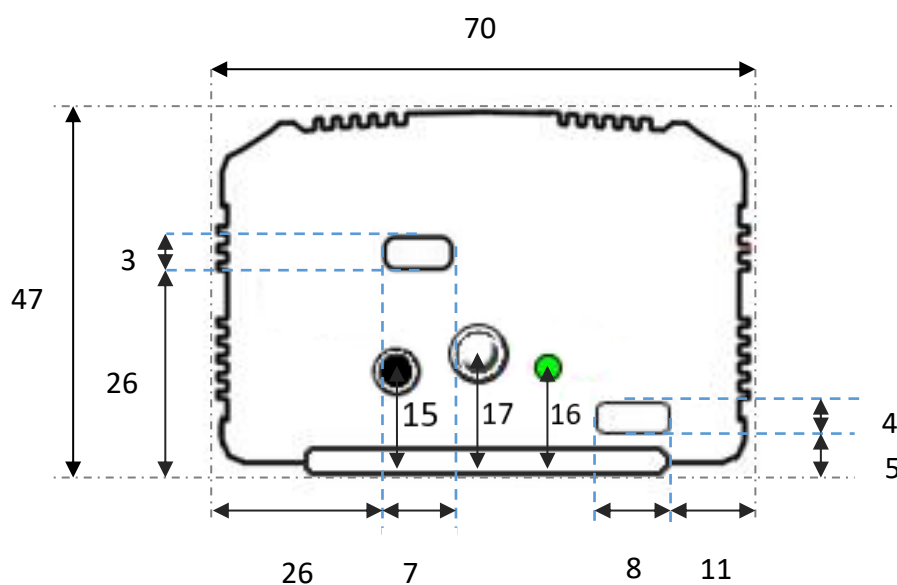
DIMENSIONS OF THE INTERFACE

The metric system is used. The unit is mm.

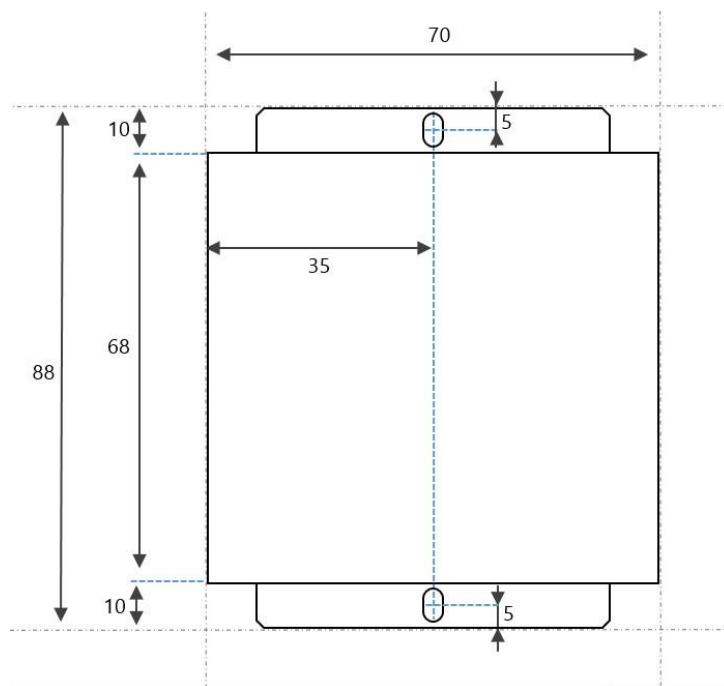
FRONT FACE



REAR FACE

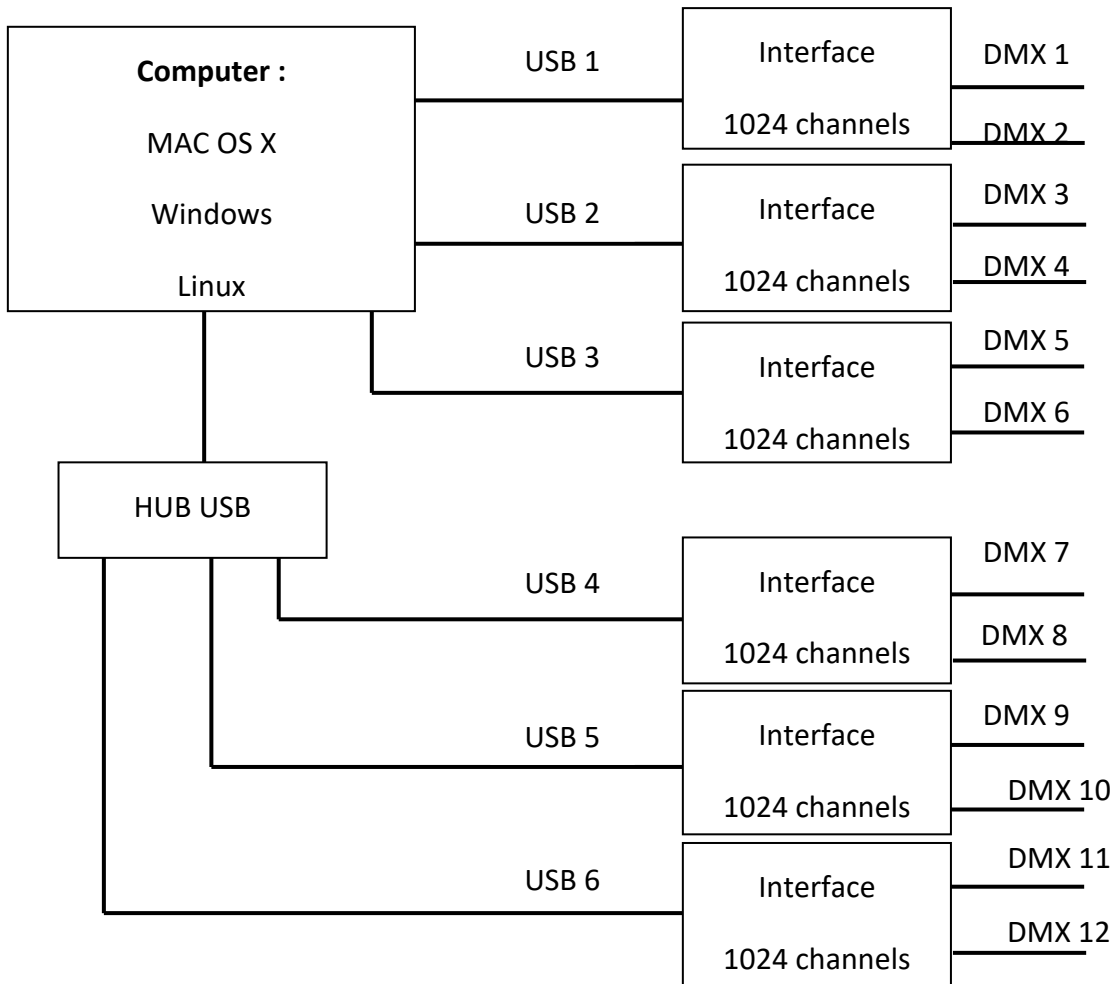


BOTTOM FACE

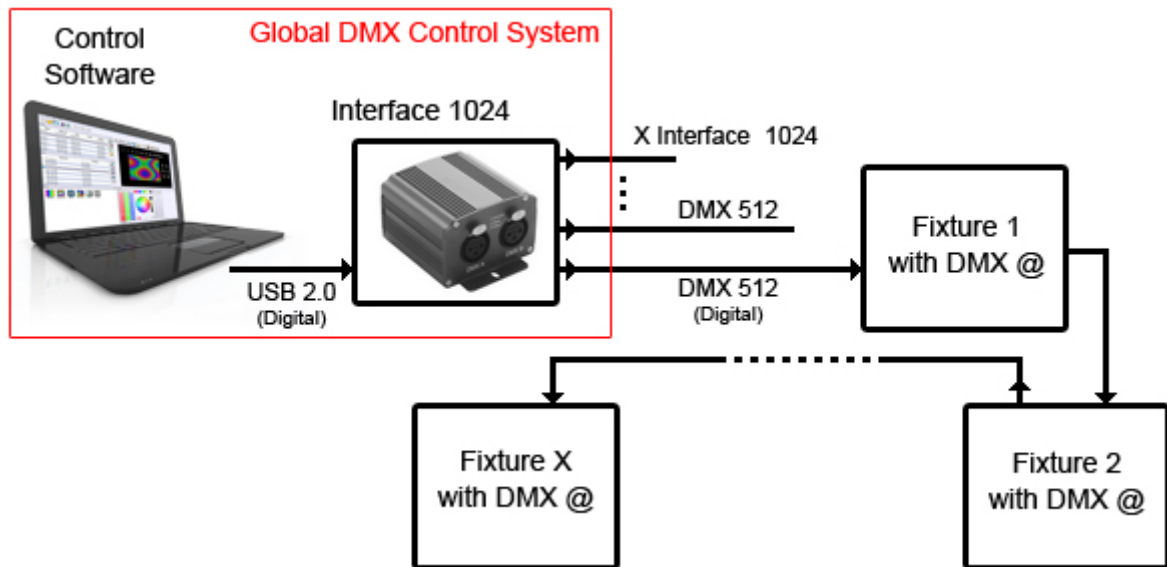


MULTIPLE USB DEVICES CONNECTIONS

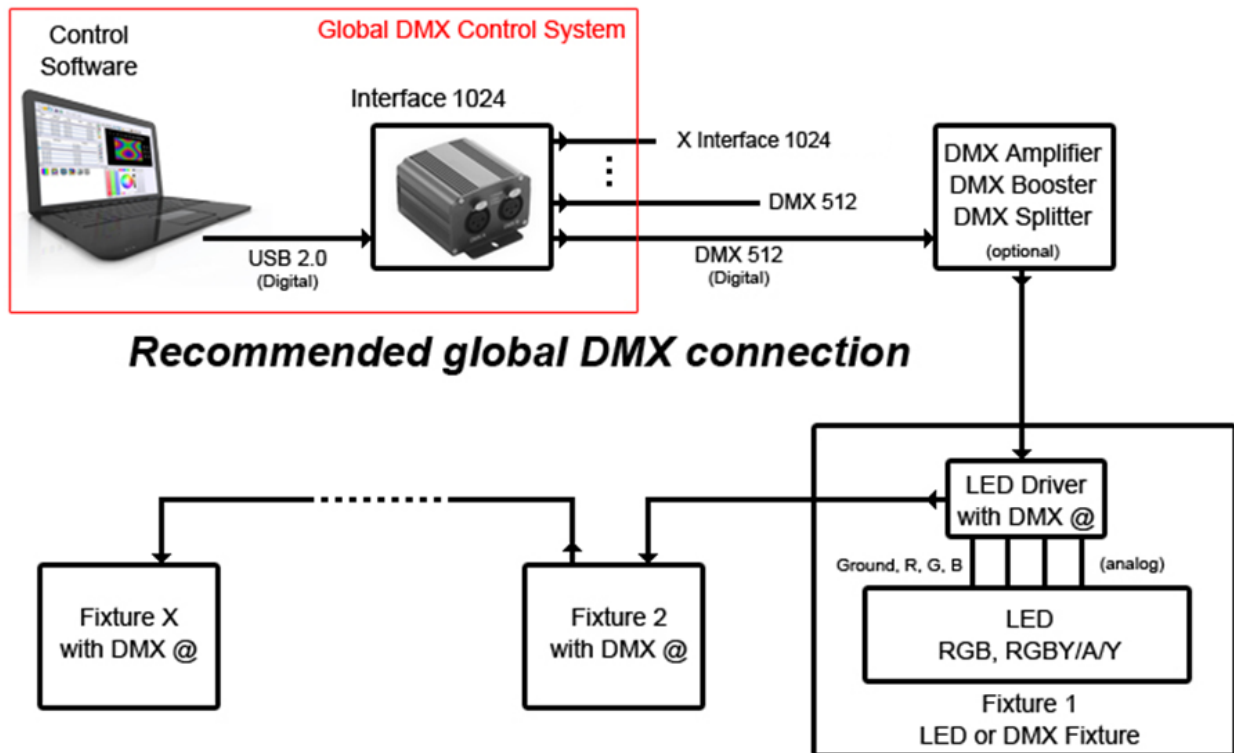
Example of Multiple interface connections



STANDARD DMX 1024 INSTALLATION

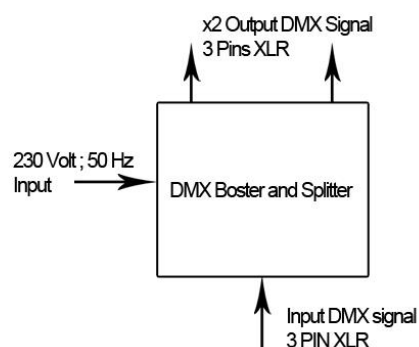


RECOMMENDED DMX 1024 INSTALLATION



GLOBAL SYSTEM INSTALLATION WITH DMX BOOSTER

DMX Booster Global schematic



Global system installation for 1 DMX Universe

