Luminex
Lighting Control Equipment

Luminet Monitor

User Guide - V2

Luminet Monitor User Guide - V2
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Warranty information

Limited warranty

Unless otherwise stated, your product is covered by a two (2) year parts and labor limited warranty. It is the owner's responsibility to furnish receipts or invoices for verification of purchase, date, and dealer or distributor. If purchase date cannot be provided, date of manufacture will be used to determine warranty period.

Returning under warranty

Any Product unit or parts returned to Luminex LCE must be packaged in a suitable manner to ensure the protection of such Product unit or parts, and such package shall be clearly and prominently marked to indicate that the package contains returned Product units or parts. Accompany all returned Product units or parts with a written explanation of the alleged problem or malfunction.

Freight

All shipping will be paid by the purchaser. Items under warranty shall have return shipping paid by the manufacturer only in the European Union. Under no circumstances will freight collect shipments be accepted. Prepaid shipping does not include rush expediting such as air freight. Air freight can be sent customer collect in the European Union.

Warranty is void if the product is misused, damaged, modified in any way, or for unauthorized repairs or parts.

General

Description

LumiNet Monitor V2 is a free cross platform application to monitor and manage all Luminex devices on the network.

The application is designed to give you an overview of the complete configuration/routing of the Luminex Ethernet-DMX nodes. It also offers a basic monitoring of any ArtNet compliant source (software or appliance).

The software is composed of several widgets that can be enabled /disabled, or moved to offer the user a greater display experience (dual monitor view for instance).

Each widget runs a different process, and offers important informations related to its task. The application embeds the following widgets:

- ArtNet generator
- ArtNet universes
- ArtNet statistic
- ArtNet log
- Device schedule
- Lamp library
- Lamp control (requires Ethernet-DMX firmware 4.1.1 or later)
- Network devices
- RDM devices

Each of these widgets will be detailed in the widget chapter, page 11.

System Requirement

Decription	Minimum Requirements	Recommended
Operating system	MAC OSX Leopard or Snow Leopard	Windows XP, Vista, Seven (32 & 64 bits)
Computer Processor	1Ghz processor min.	1.3Ghz Processor min.
Computer Memory	1GB or more	1GB or more
Disc usage	90MB or more	90MB or more
Screen Resolution	1024x600	1024x600

Installation

Download

Download the software from our Web site at www.luminex.be
Check the support page, and select LumiNet Monitor V2. Click on the software version you wish to download. Once the software is on your computer, click on the downloaded file to start the installation :

- **Windows**

Extract the downloaded archive, and click on the .exe file to launch the installer. Follow the installer instructions until the installation to be completed.
To launch the software : click on the Windows start-up menu > All Programs > Luminex > LumiNet Monitor

- **Mac OSX**

Click on the downloaded pkg file, and follow the installer instructions.
To launch the software : click on the Applications folders > Luminex > LumiNet Monitor

Start LumiNet Monitor

Start-up

At start-up, the application will display a pop-up windows (see illustration 1) , for you to select which IP address the software need to use. In order to "listen" to the network, the software needs to be associated to an IP address set on your computer, and thus to the associated network interface. You can then specify to LumiNet Monitor Software to listen through a Wifi interface for instance.
Please note that LumiNet Monitor software doesn't need a specific address to discover Luminex converters running V4.x.x firmware. The selected address will be mainly used to discover all other ArtNet devices running on the same IP range.

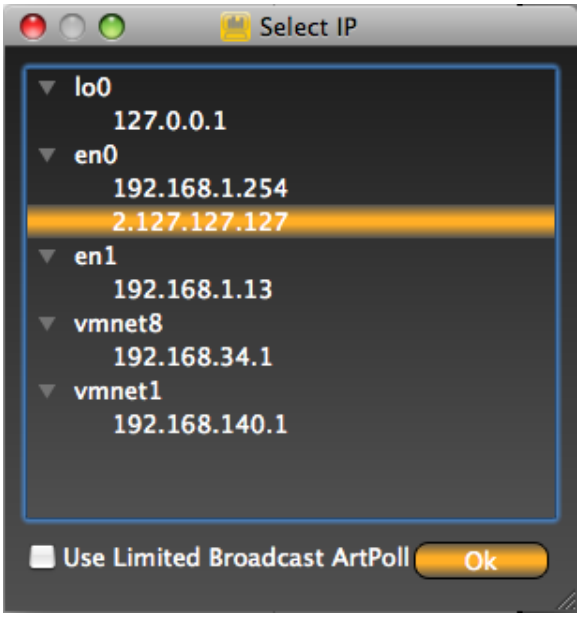


Illustration 1: IP address selection

"Use Limited Broadcast ArtPoll" : Please tick this box if you wish Luminet monitor only to use Limited Broadcast Artpoll packets for device discovery. Using limited broadcast will restrict the device discovery only to the IP range.

Interface

The Luminet Monitor software is composed of a main workspace, where it is possible to enable/disable widgets at your convenience.
Each widget is represented with a specific icon on the top left of the software, within the toolbar. Click on the desired icon to display the associated widget.

Illustration 2: Toolbar

The toolbar is composed of two separate parts:
- The file toolbar
- The windows toolbar

Each module can be easily place wherever you want, all around the software workspace. The modules will automatically dock to the workspace. Simply drag each module by their respective handle.

Each widget can be placed anywhere you want in the workspace. You can leave it free or link it to one of the four docking space located in the working space (see illustration 3). Mind these areas are not visible, until you move a widget close to it.

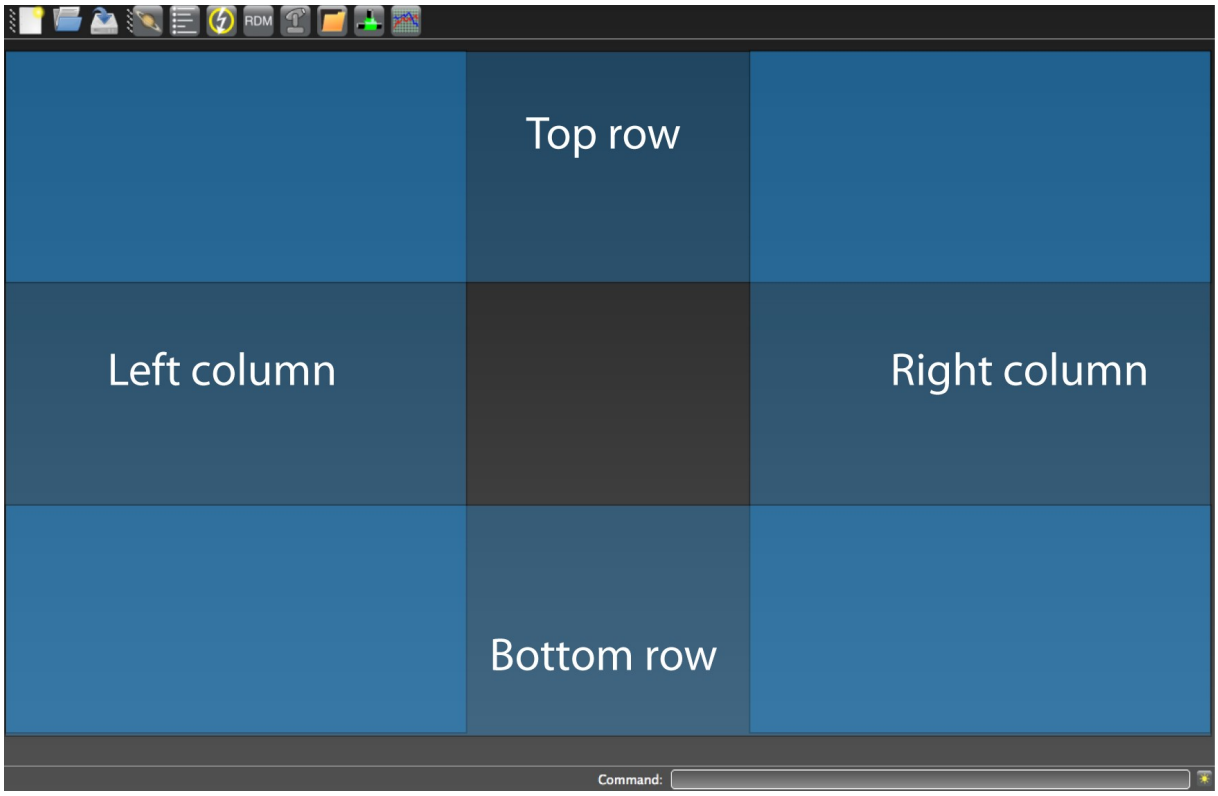


Illustration 3: Docking areas

You can stack several widgets in one docking area. But you can also merge several widgets into one single docking window in order to minimize working space (see illustration 4).

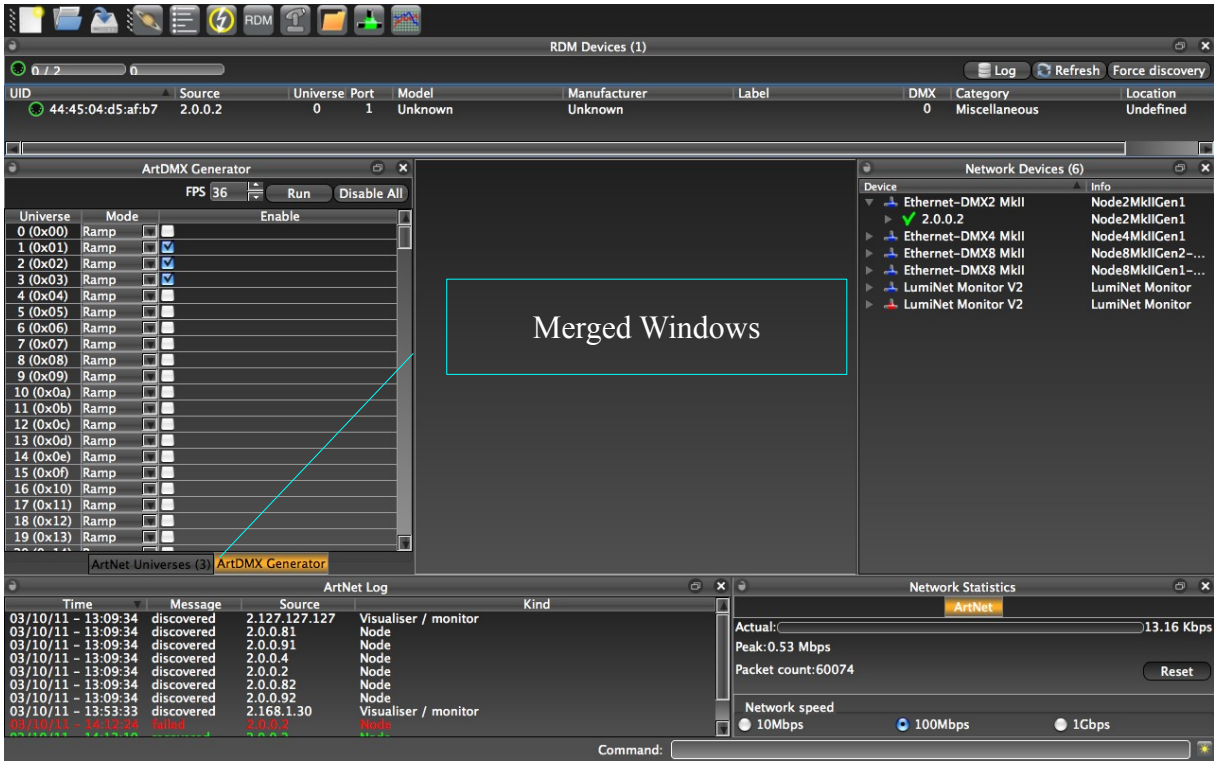


Illustration 4: Merged windows

If you're using a dual display (see illustration 5), you can also place the widget outside of the working space, on the second screen for instance. This solution offers the best user experience.

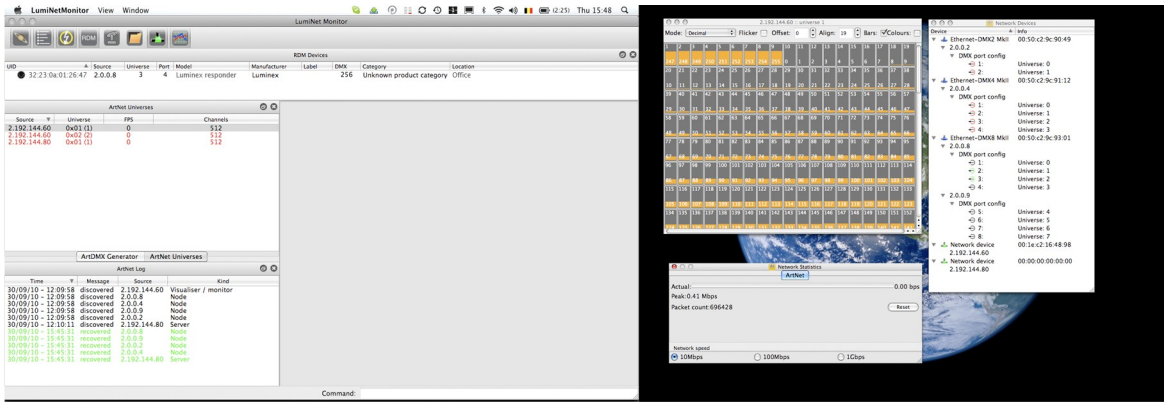


Illustration 5: Dual Screen usage

Widgets

Common features

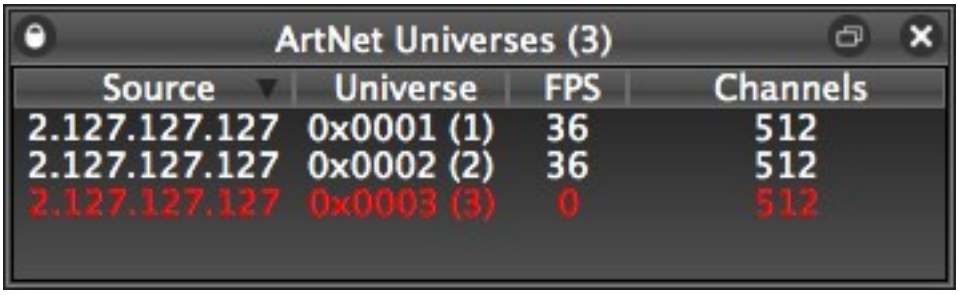
Each widget will be displayed with columns and rows. Each column order can be changed at your convenience. Each column content can be sorted by clicking on the title of the column (up and down).

Each widget got a padlock on the top left. The widget can't be docked to the workspace when padlock is closed. Click on the padlock to unlock it (it is sometimes good to move the widget a little bit to get access to the padlock)

Styles

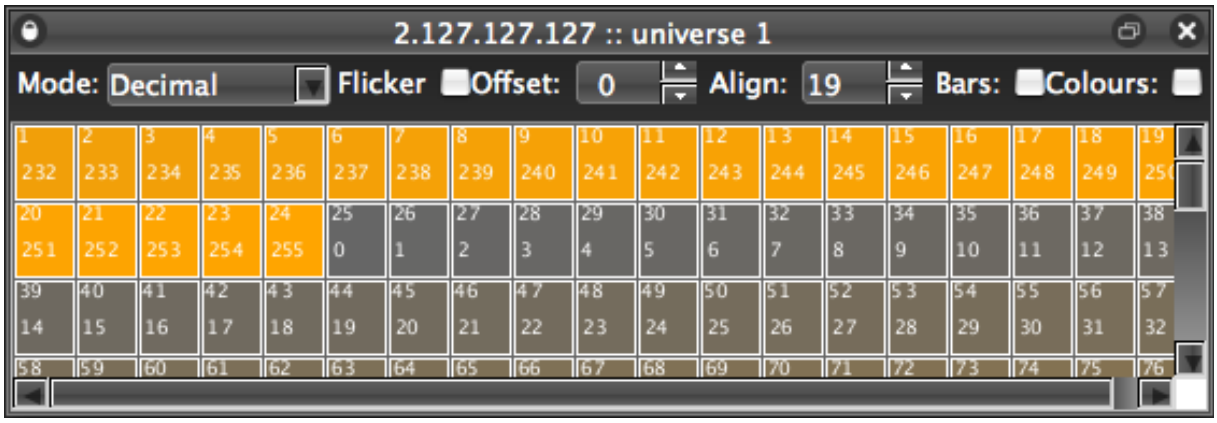
LumiNet Monitor embeds two styles: Day and Night styles. To select your favorite style, simply click on the moon or the sun on the bottom right corner of the application.

Universes View



This widget gives an overview of the ArtNet universes available on the network (see the number of available universes on the network between brackets). Each universe is labeled with its source IP address, universe number (decimal and hexadecimal), frame rate, and number of channels included in this universe.
A universe will turn red if not available anymore on the network.

Right clicking in the widget offers the following options:
- *View DMX*: display all related DMX values. Can also be achieved by double-clicking on the corresponding universe. See DMX View for more explanation.
- *Reset counters*: if you pass your cursor over a universe, you'll notice the number of packets streamed by this source since its discovery within the software. "Reset counters" will set back this counter to zero.
- *Clear*: This function will delete all failed universes (red ones).



This table gives a complete overview of the 512 channels of the selected universe (see the window title).

Mode : The complete table of values can set in Decimal, Hexadecimal or percentage. Use the drop down menu on the top left to select the mode that fits your need. If you need to display a specific channel in a specific mode, just right click on the channel you wish, and select the mode you want to apply.

Flicker finder :
You can enable/disable the flicker finder in the DMX view. Flicker finder is a great tool that helps you troubleshooting your ArtNet/DMX network. If you encounter flickering on your ArtNet/DMX network, flicker finder will help to see if the problem is on the ArtNet source side.
When you enable the flicker finder, LumiNet monitor take a snapshot of the values. If the then values change, LumiNet monitor will display the changed values with a new colored background, to easily identify the channels. If the channel values went upper than the original ones, then the channel bar will turn green. If the channel values went lower than the original ones, then the channel bar will turn blue. Channel bar will turn red if the values come back to there original values. All these color parameters can be changed in the preference menu.

Offset :
The DMX view table is set with a number of channel per row. This number is defined by the value included in the Align field.
However, LumiNet software lets you create an offset for the first row of case. This can be useful if you wish to align the first parameters of one of your moving head with the beginning of the second row for instance.

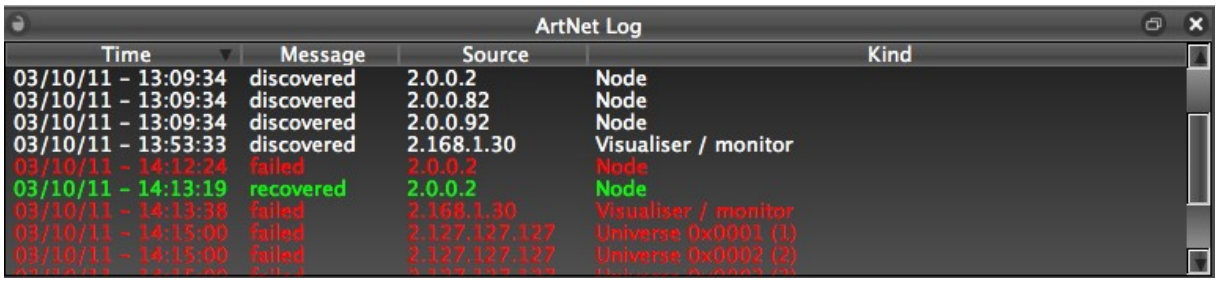
Align:
Assign the number of the channel per row.

Bar:
Enable/Disable the bar view per channel.

Colours:
Enable/disable the Colours mode. This mode can work with Flicker Finder mode enabled. A changed value on a channel will change the color of this channel.

Mind all the colors and default settings of the DMX view can be changed in the DMX view tab of the Preferences menu.

ArtNet Log



This widget gives you informations about all discovered ArtNet devices on the network : Time when the device was first seen on the network, when he left the network, when he was recovered, type of device.... This widget is very useful to monitor an installation and check if there is any connection issue on the network. A disappeared device will turn red, a recovered device will turn green.

ArtNet Generator

This tool allows you to easily stream ArtNet universes on the network. Up to 256 universes, depending on your computer processing power. You can select within 5 different patterns to apply on the streamed universe(s) : Ramp, Alternate, Zero, Full, Block. Tick the box(es) to enable the selected universes, then press "Run" to start streaming ArtNet. Use the Shift key if you wish to select a group of universes in the universe column, by selecting the first one and then the last one. Then right click and select "enable" to enable all universes. Use the Ctrl or Cmd key to select different universes among the 256 available. Once you'll press "Run", you'll see your selected universes in the Universes View widget.

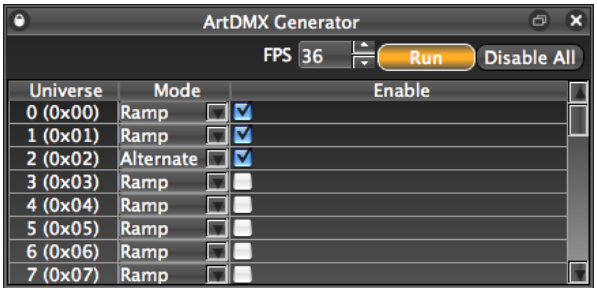


Illustration 6: ArtNet Generator

RDM

This widget displays all discovered RDM devices on the network. It gives the user all necessary information about connected devices at a glance. The widget embeds a bunch of RDM functions, available by right clicking on the discovered devices

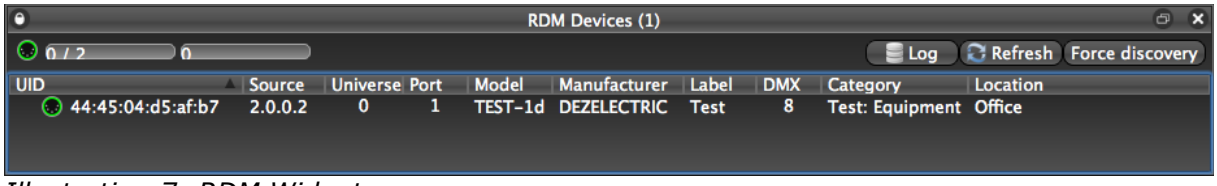


Illustration 7: RDM Widget

The number of discovered RDM devices also appears in the title bar of the RDM widget.
On the top left of the widget, one icon and two scroll bars indicates the following:

- DMX outlet icon: enable / disable RDM communication. The outlet ring turns green when communication is enable.
- Left scroll bar: Number of RDM outlets processed in parallel
- Right scroll bar: Number of queued RDM messages to be processed

On the top right of the widget, three buttons are available:

Log: to force the writing of the RDM devices status in the log file

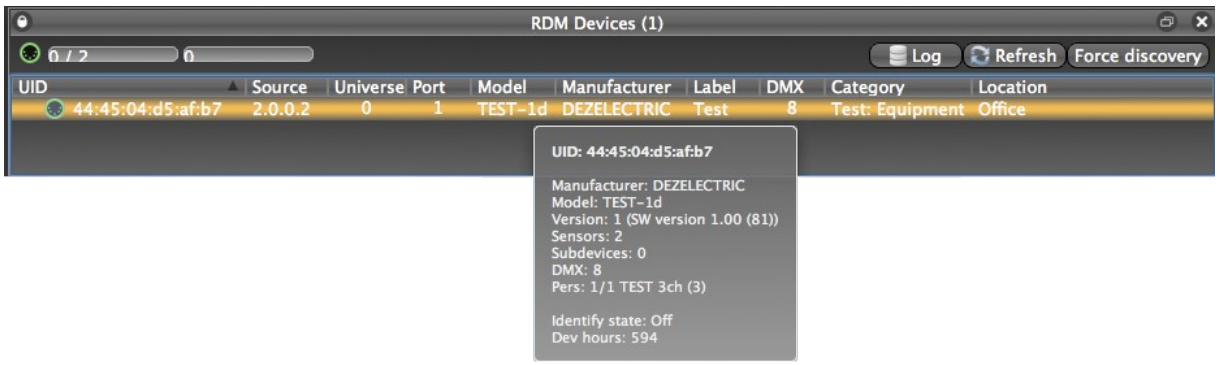
Refresh: to refresh the RDM devices status

Force discovery: launch a complete discovery process. This can delete some information entered in some field of the widget

The RDM widget contains the following fields:

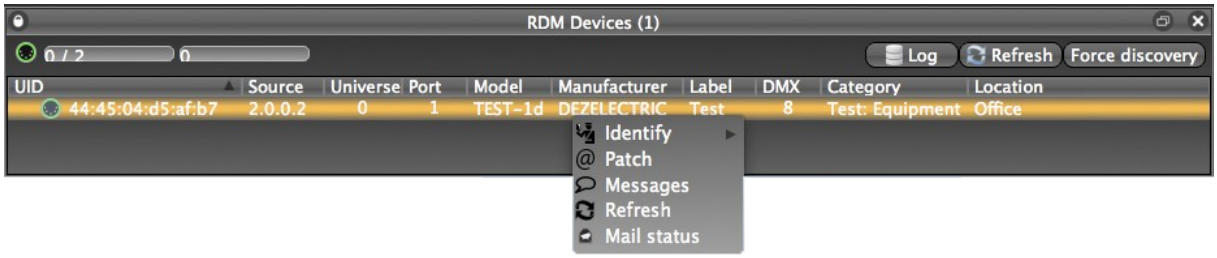
- *UID*: Unique identifier of the RDM device
- *Source*: IP address of the node where the RDM device is connected to. The node acts as a proxy, and gives LumiNet Monitor all the informations.
- *Universe*: ArtNet universe used to get the RDM info of the device
- *Port*: Port number of the node where the RDM device is connected to
- *Model*: Model of the RDM device
- *Manufacturer*: Manufacturer of the RDM device
- *Label*: Custom label that can be set within LumiNet Monitor. Double click in the field to enter a new string of characters
- *DMX*: DMX address of the device
- *Category*: Label set by the manufacturer
- *Location*: Custom label that can be set within LumiNet Monitor. Double click in the field to enter a new string of characters

By passing your mouse over the RDM device row, tooltip will display all information concerning the monitored device.



Right click menu

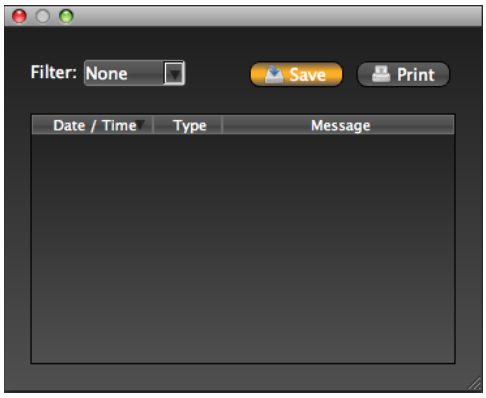
When selecting RDM device in the widget, right click will give you access to the following functions :



- **Identify**: enable/disable identification of the RDM devices. This will allow you to easily identify a RDM device in a group of devices.
- **Patch**: this menu allows you to change the DMX address of your devices

- All: tick this box if you wish all devices to be set with the same DMX address
- Auto-increment: tick this box if you wish the next address to be patched to be set with a dedicated offset
- Auto-identify: allows you to identify each selected device in the group
- DMX start address: set here the start address for the selected unit
- Use the left and right arrow keys to switch from one device to another

- **Messages**



- **Refresh:** Refresh only the selected device
- **Mail status**: Send the status of the selected device by email (see Preferences)

Lamp Library

The LumiNet Monitor V2 lamp library is meant for technician to service and check any DMX or ArtNet compliant device. Coupled with the Device Schedule and the control widget, this gives a technician an ideal tool to test any lighting fixture. The principle remains the same as a generic lighting controller :
- Select the type and the number of fixture you wish to control
- Select the ArtNet universe you wish to work on (Mind the fixture takeover doesn't use ArtNet. ArtNet universe is here only to locate on which node port to bind the controller)
- Select the fixtures you wish to control

Mind the fixture take over has the highest priority of control on the network.

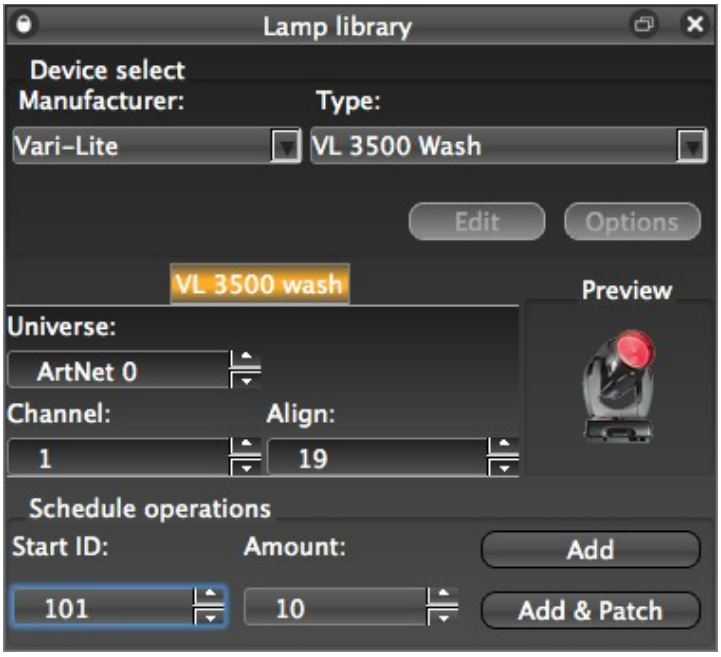


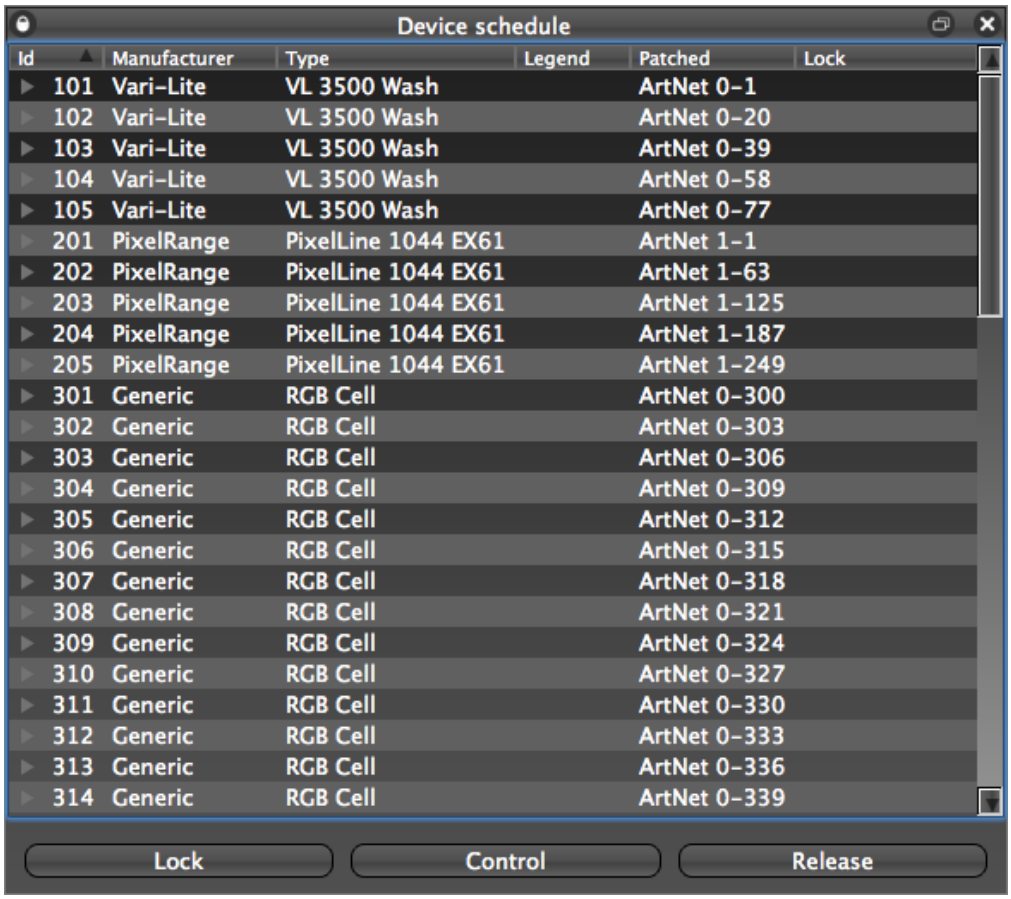
Illustration 8: Lamp Library Widget

The lamp library widget is composed of the following fields:

- Manufacturer: Select here the fixture manufacturer
- Type: Select here the type of lighting fixture (manufacturer related)
- Universe: ArtNet universe associated to the port where the lighting fixture is connected to. The Luminex node outlet needs to receive the same ArtNet universe in order to take over control of the lighting fixtures.
- Channel: DMX start address
- Align: Number of channel used per selected fixture
- Start ID: ID used to identify the fixture in the device schedule
- Amount: number of fixture you wish to add to the device schedule

Device Schedule

The device schedule is the pool where to take control of all patched devices.



The device schedule widget is composed of 5 columns:

- *ID*: Identifier of the patched device
- *Manufacturer*: Manufacture of the patched device
- *Type*: Type of the patched device
- *Legend*: N/A
- *Patched*: Gives the patch info: Universe/DMX address
- *Lock*: N/A

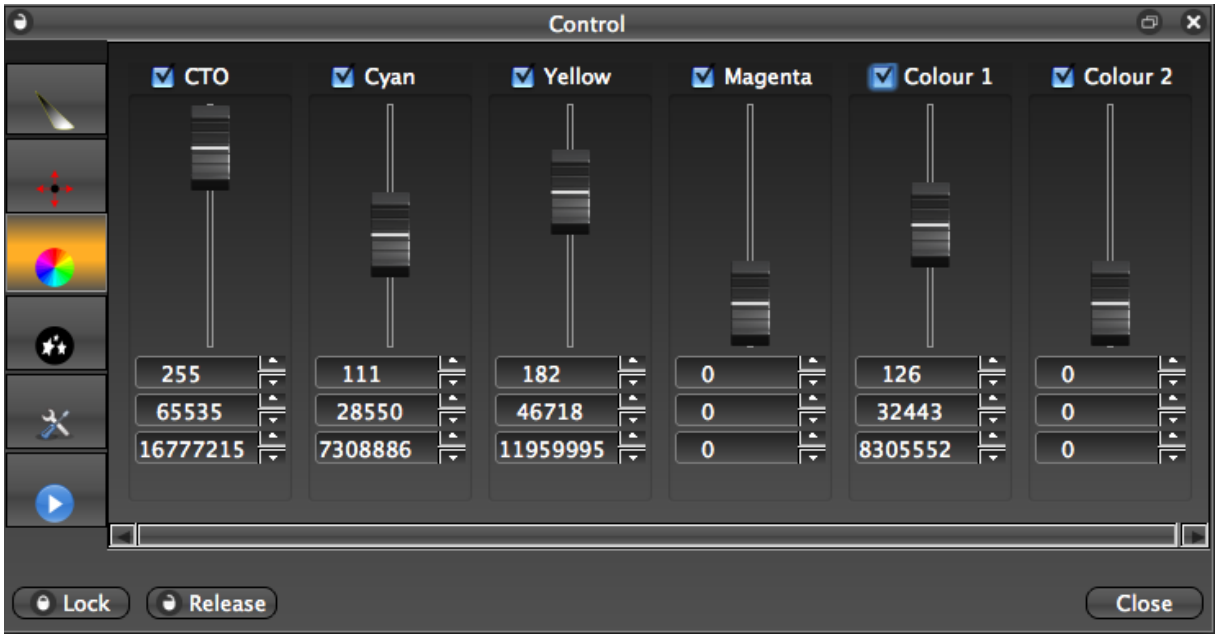
Three main buttons are located at the bottom of the widget:

- *Lock*: N/A
- *Control*: Open the control panel for the selected device(s)
- *Release*: N/A

If the selected device is composed of several sub-devices, simply expand the device tree to take control of the desired sub-device.

Control Panel

The control panel offer a user friendly GUI to access all the lighting fixture parameters.



On the left hand side are the IFCB sections, each represented by an icon:

- Intensity
- Focus
- Colours
- Beam
- Control
- Macros

Click on the desired section to get access to the related parameters. Click on the tick box located on the top of each fader, to take over control of the channel. If you wish to take a complete control of the fixture, simply click on the lock button, located on the bottom left of the panel.

Each channel value is represented in both 8bits, 16 bits and 24 bits.

Once you're done with the control of the lighting fixture, simply click on release, to give back control to the Artnet source.

Network Devices

This widget displays all ArtNet compliant devices and Luminex devices available on the network. The number of available devices will appear in the title bar of the widget.

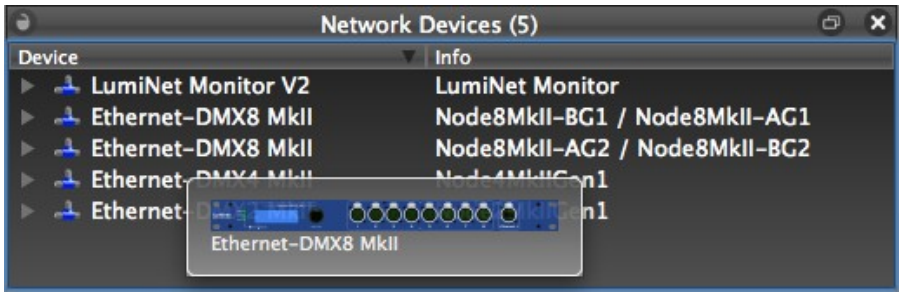


Illustration 9: Network Devices widget

A blue icon represents a Luminex device, while a green icon represents an ArtNet compliant device. If your Ethernet-DMX converter is not running the latest V4.x.x firmware, then your node will be seen as a green icon.
Each Luminex device comes with the following information:
- Model, ArtNet short name, IP Address, DMX port configuration.

The port configuration icon shows the direction of the outlet (input/output), if the outlet is actually transmitting DMX (green icon), or if the outlet is disabled (red icon). An enabled outlet, not transmitting any DMX packet, will be seen as a black icon

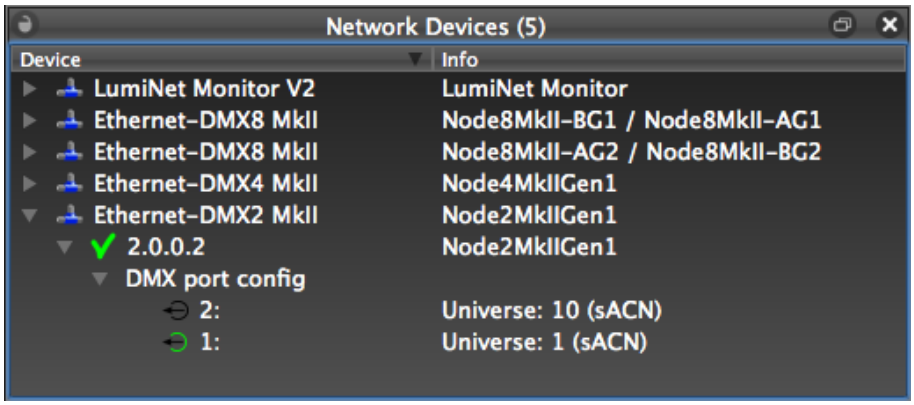
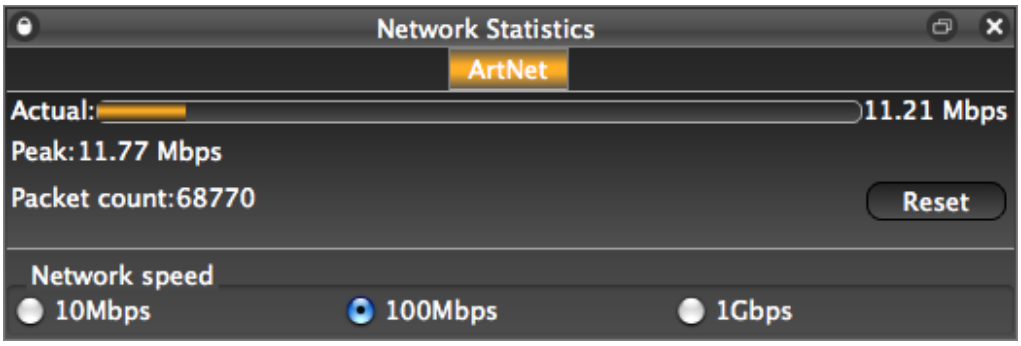


Illustration 10: Outlet Configuration

You can also overview the model of Luminex device your system is running by passing your mouse over the name of the device (see illustration 9).

ArtNet Statistics



This tool gives you an overview of the bandwidth used by the ArtNet data on your lighting network. You can select to compare this amount of data to a 10Mbps, 1000Mbps or 1000Mbps Ethernet link.

If your ArtNet system is using ArtNet I data transmission scheme, then this value will be representative of the amount of data received by any device on the network. However, when using ArtNet II protocol, the data transmission scheme will mainly be based on Unicast communication. The indication of the ArtNet Statistics widget will only represents the amount of ArtNet data your computer is actually receiving.

Preferences

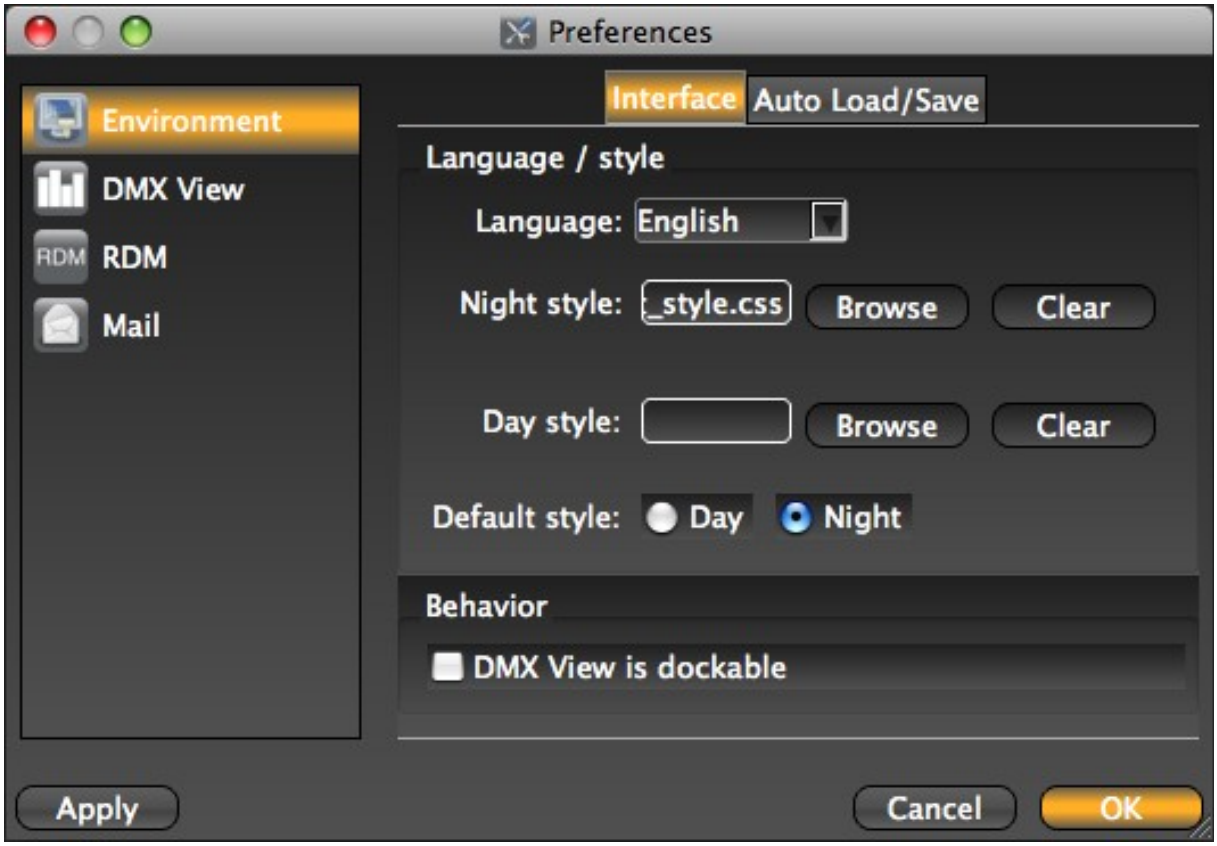


Illustration 11: Preferences Menu

You can reach this menu :
Mac OsX: Click on LumiNet Monitor>Preferences
Windows: Click on Tools>Option
This panel lets you configuring the default values of some of the widgets.

Environment

- Interface

Language: Select here the appropriate language for the user interface

Night/Day Style: Select here the path to load the night style sheet

Default style: Select here the default style sheet to load at startup

Behavior: tick this case if you wish the DMX view window to automatically dock to the workspace.

- Auto Load/Save

Select here the LumiNet Monitor behavior when loading/saving project.

DMX View

View: Set here the default values of the DMX view window.

Colours: Set here the default colours for the flicker finder and the colour mode.

Refresh: Enable/disable the synchronization of the DMX view with the frame rate of the associated universe. When disable, you can manually set the desired default frame rate for the DMX view

RDM

- General

Set here the behavior of the application regarding RDM protocol.

- Automatically enable/disable RDM at the startup of the application
- Get the list of attached RDM devices from a discovered node
- Automatically get the default info

- Timing

Outlet traffic interval: set here the time between two RDM packets on the outlet

Keep alive interval: Set here the timing between two keep alive packets. Keep alive is in charge of RDM device presence monitoring

- Logging

Options: Select here to log the device in a file after discovery

Storage location: Select here the directory to record the log file

Email daily online status: Tick here if you wish LumiNet Monitor to send a daily email to a dedicated recipient. The email with report a status of online or offline RDM devices. This can be very useful for fixed installation maintenance.

Mail

Set here all the SMTP server detail for LumiNet Monitor to send a mail out to a dedicated recipient.

Additional Documentation

All additional documentation can be downloaded from our web pages in the support section.

Http://www.luminex.be

--> Support