lumenpulse™

lumenID™ V3 Software User Manual

Your fixture has a lot to say.

- Hello my name is Lumenbeam™ Grande
- My DMX address is 125
- My temperature is 32° C
- My personality is 16-bit
- Remaining hours till L70: 102,567
- My serial number is 06500005

DMXrdm

Table of Contents

lumenpulse™

I Introduction

Thank you for using Lumenpulse™ and the LumenID™ (LID). Lumenpulse offers a wide variety of architectural LED fixtures with DMX/RDM controllable capabilities for White and Color Changing fixtures. The LID is a tool that offers you, the end user, the capability to control, test and demonstrate these fixtures directly from your computer. Additionally, the LumenID is designed as a tool to assign DMX addresses to an entire installation of Lumenpulse DMX/RDM enabled fixtures quickly and easily.

Paired with Lumenpulse's LumenID™ V3 (LID V3) software, RDM provides a simple, efficient way to manage lighting systems and devices. With RDM, important system information is always just a click away, ensuring that you can easily and freely discover, address and program devices.

DMX/RDM provides a number of benefits for stakeholders throughout the construction, commissioning and property management stages, including: simplified fixture discovery; remote DMX addressing; improved error reporting; and easy firmware updates.

In this manual you will find detailed instructions to help you understand and use your LID as a part of every Lumenpulse sample demonstration or architectural installation.

II Set-Up

2.1 List of Materials - DMX/RDM Network

1. LID V3 software
   (Refer to the Lumenpulse website for the LID V3 software, downloaded for free).

2. PC/ laptop (not supplied)

   Minimum system requirements:

   - Windows XP, Windows 7, Windows 8 or Windows 10
   - 1024 x 768 screen resolution (1280 x 1024 recommended)
   - 512MB memory (1GB recommended)
   - Clock frequency: 1Ghz

3. USB cable

4. Lumenpulse LumenID Open DMX USB Box (LID device with latest firmware)

5. DMX cable

6. DMX/RDM enabled CBX (order separately)

7. RDM-enabled luminaire (order separately)

2.2 List of Materials - Ethernet Network

1. LID V3 software
   (Refer to the Lumenpulse website for the LID V3 software, downloaded for free).

2. PC/ laptop (not supplied)

   Minimum system requirements:

   - Windows XP, Windows 7, Windows 8 or Windows 10
   - 1024 x 768 screen resolution (1280 x 1024 recommended)
   - 512MB memory (1GB recommended)
   - Clock frequency: 1Ghz

3. Ethernet cable

4. Ethernet CBX (order separately)

5. RDM-enabled luminaire (order separately)

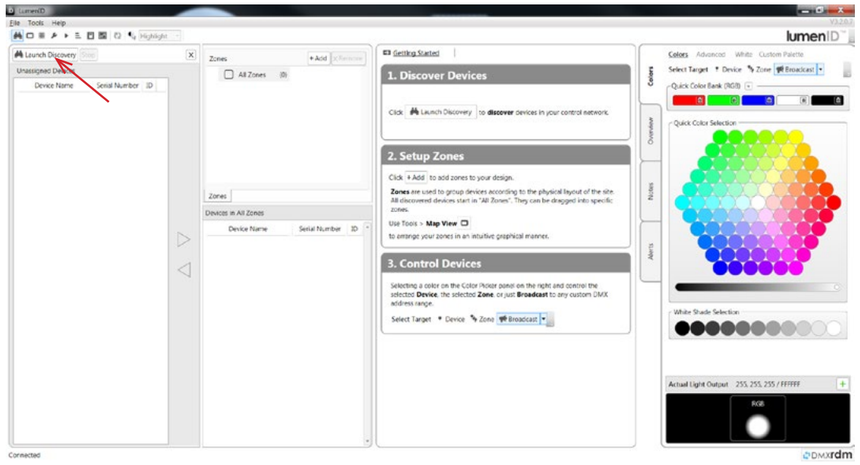
2.3 Install Software

1. Download LID V3 software from the Lumenpulse website.
2. Run the installer msi file.
3. Follow the instructions.

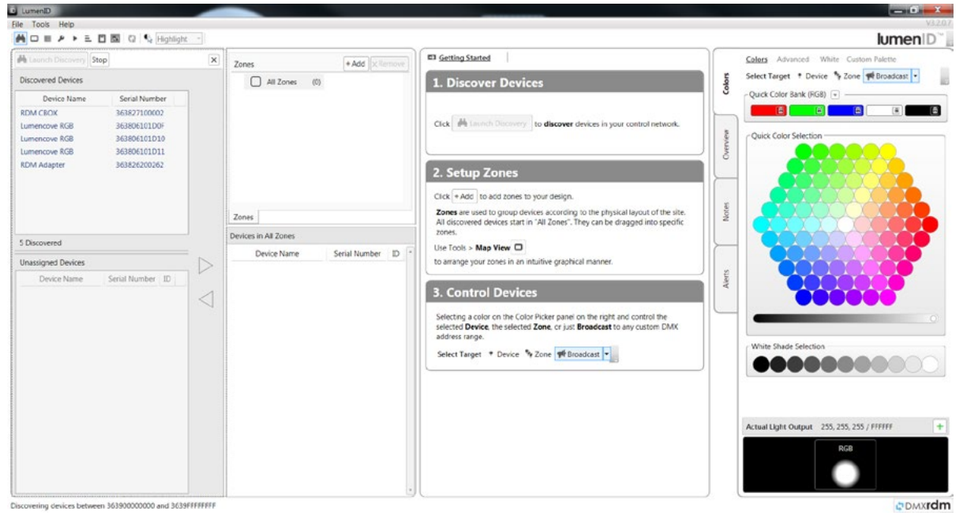
Note: When using DMX/RDM, make sure the LumenID USB Drivers option is selected at the custom setup step. The LumenID USB Drivers are not required when operating with Ethernet.

2.4 Starting Software and Discovering Devices - DMX/RDM Network

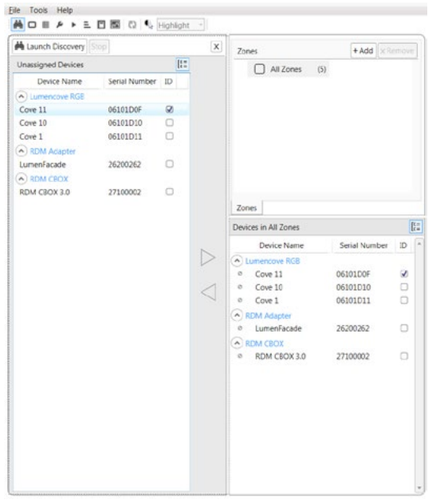
- Plug in LID to PC.
- Power on the DMX/RDM enabled CBX.
- Start LID V3 software.
- When the software starts, the Discovery window is open on the left-hand side of the screen. If you do not see this, click on to open the Discovery Panel.
- Click on the Launch Discovery button to discover fixtures over the RDM network.



- The Launch Discovery button, located on the top left-hand corner of the software window will be disabled when discovery is in progress.

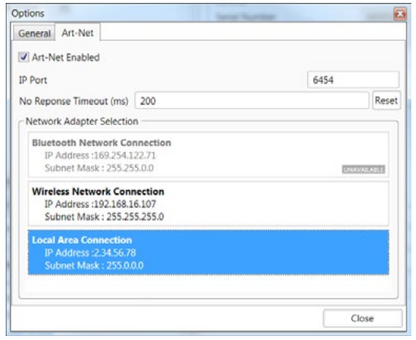


- Discovered devices will appear in the Unassigned Devices list.

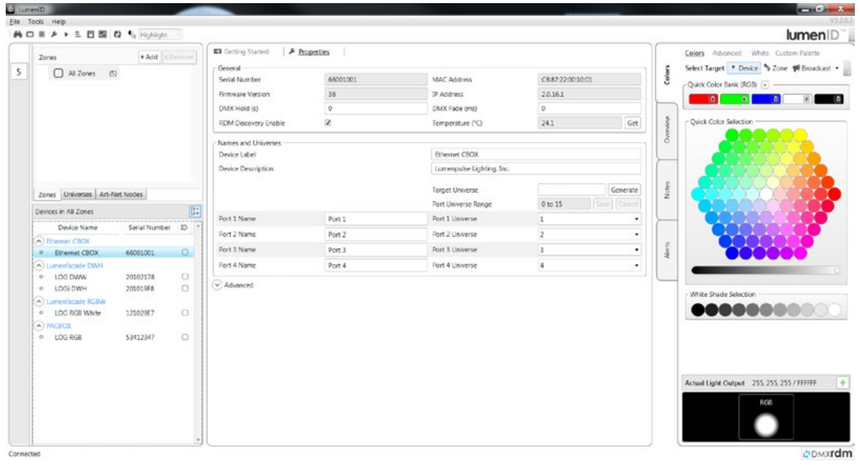


2.5 Starting Software and Discovering Devices - Ethernet Network

- Connect the Ethernet CBX to PC using an Ethernet cable.
- Power on the Ethernet CBX.
- Set up a LAN (Local Area Network) on the PC (Control Panel > Network and Internet > Network and Sharing Center):
  - Select the Local Area Network from the list of active networks.
  - Click on Properties.
  - Select Internet Protocol Version 4 (TCP/IPv4), and click on Properties to configure with the following settings:
    - IP address: 2.x.x.x
    - Subnet mask: 255.0.0.0
- Start LID V3 software.
- Enable Art-Net:
  - Go to Tools > Options.
  - In the Art-Net tab, click on the recently configured LAN to select it from the list of network adapters.
  - Check the "Art-Net Enabled" box, and close the window.



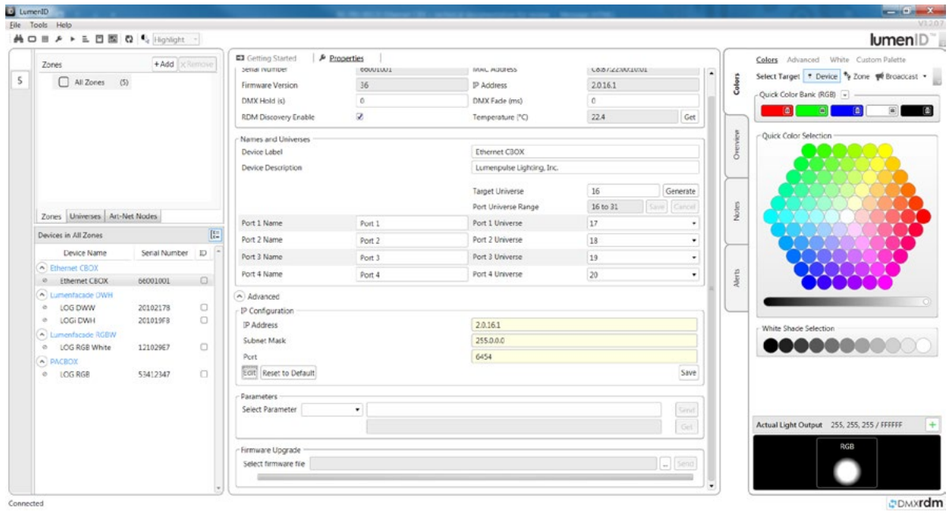
- Once Art-Net is enabled, the devices on the Ethernet network are automatically discovered.



2.6 Configuring an Ethernet CBX - Ethernet Network

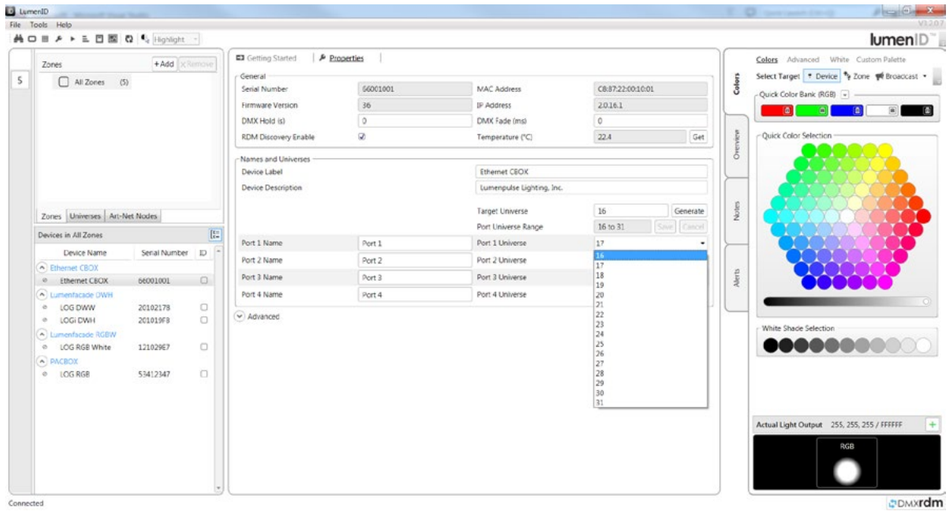
IP Configuration:

- To change the network configuration of an Ethernet CBX, go to the Properties tab (wrench icon or Tools > Device Properties).
- In the "IP Configuration" section, click Edit and enter the new information into the "IP Address" and "Subnet Mask" fields. Click save.

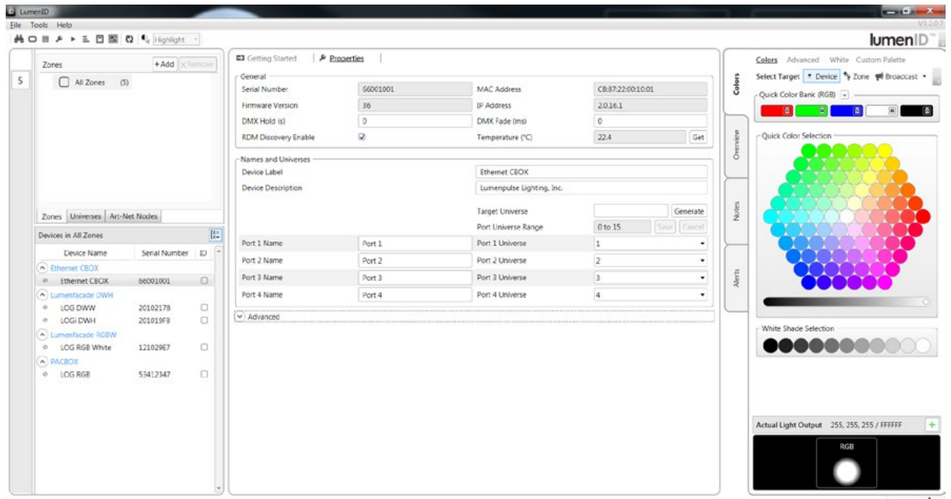


Names and Universes:

- Use "Target Universe" to define your universe range. Note that, as per the Art-Net specification, the ports must be assigned universes that occur within a contiguous block of 16 universes.
- The Generate button can also be used to generate a range of unused universes.



- Each individual port can then be set to the desired universe within the range specified in the "Port Universe Range" field. For each port, select the universe from the drop down menu and hit Enter to save. If desired, the name of each port can be customized.
- Note that, by default, all Ethernet CBX ports are pre-programmed to universe 1.



Firmware Upgrade:

- To update the Ethernet CBX firmware, in the "Firmware Upgrade" section, select the appropriate file by clicking on the "…" button, and then press Send.

2.7 Getting Started

For additional information, refer to the "Getting Started" instructions from the software by clicking on the Getting Started tab (Help > Getting Started).

Use the icons in the toolbar to jump between the different control features of LID V3.

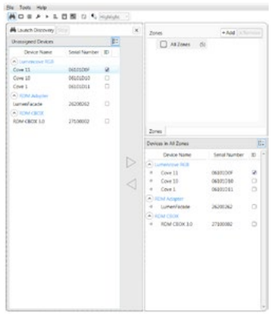
	Discovery
	Map View
	Patch View

	Properties
	LumenLive Player
	DMX Live View

	Logger
	Dashboard
	Refresh

III Features

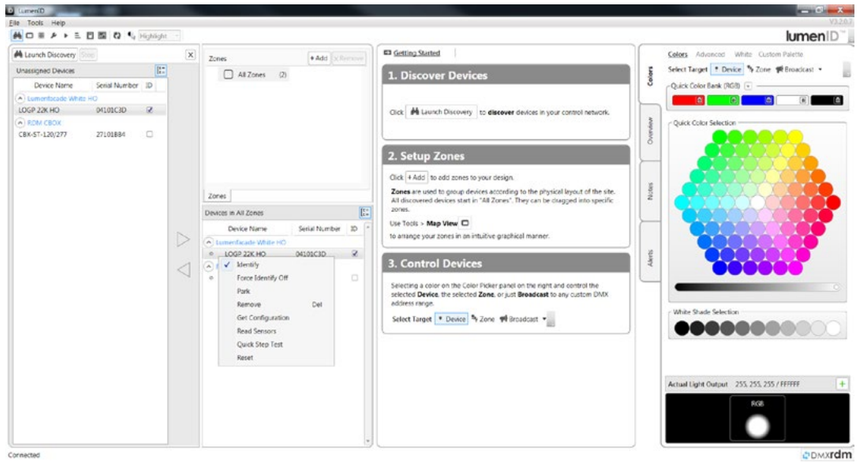
- Create zones by clicking on the "+ Add" button. These zones can then be named, resized, and have their background colors changed to user-specific colors using the Map View.
- Next the user can highlight and drag, or highlight and click the ▶ button to associate the fixtures/devices with a zone.
- Next close the Discovery panel by clicking on the "X".



3.1 Device ID

Device identification is used to physically locate fixtures.

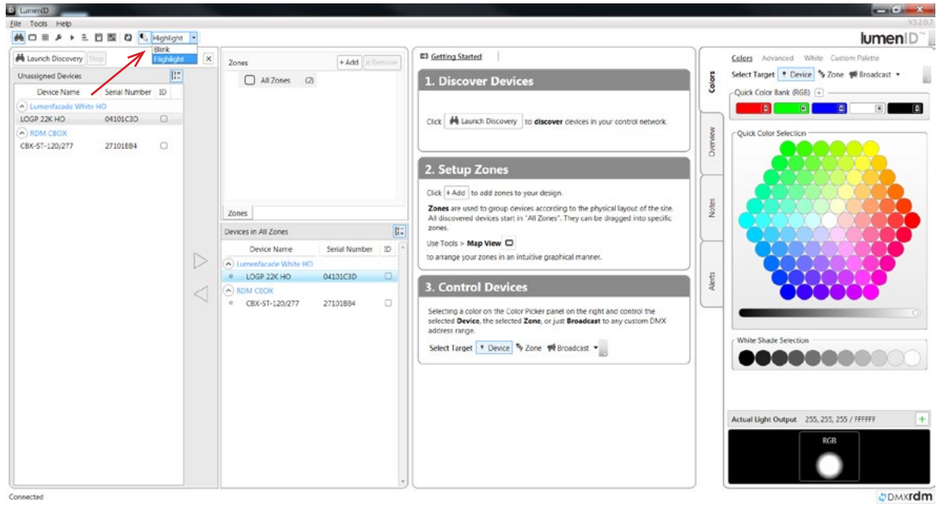
- To identify a fixture, check its "ID" checkbox. The fixture will start to blink.
- To stop fixture identification, uncheck the checkbox. The fixture will stop blinking.
- The identify on/identify off option is also available by right-clicking on a fixture, and selecting "Identify" from the menu.
- To identify numerous devices at a time, shift-click or control-click to select the desired fixtures from the list of devices. Once selected, right-click to access the "Identify" option.



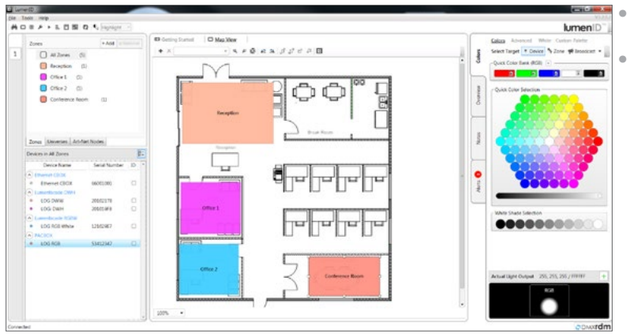
The "Device ID on Selection" feature can be used to accelerate the device identification process.

- Click on the "Device ID on Selection" icon in the toolbar to enable the feature. Now, anytime a fixture is selected, it will automatically be identified based on the type of device behavior chosen from the drop-down menu.

  - With "Blink", the selected fixtures will blink upon selection.
  - With "Highlight", all the fixtures in the universe will turn off except for the selected fixtures.



3.2 Fixture Mapping With Map View



- Image formats: JPG, PNG, BMP, TIFF, GIF
- Recommended size: 1024 x 768 pixels (minimum image width: 400 pixels, minimum image height: 300 pixels)

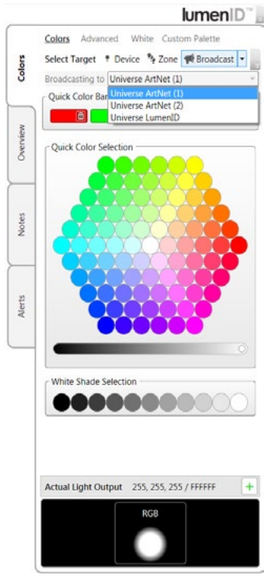
- To add Plan View of installation, click on the Background Image toolbar button and select the file from your folder.

3.3 Lighting Control Tools

Users can use "Select Target" to choose if they want to control either individual devices, zones, or to broadcast to an entire DMX Universe or a selected range in the 1-512 DMX range.

DMX/RDM Network:

- From here discovered devices can be tested by selecting either the "Zone" or the "Broadcast" button and selecting a color from the Quick Color Picker. To control by zone, select either the desired zone(s) or "All Zones" from the "Zones" panel.
- Note: upon initial discovery, all devices are pre-programmed to DMX start address 1.

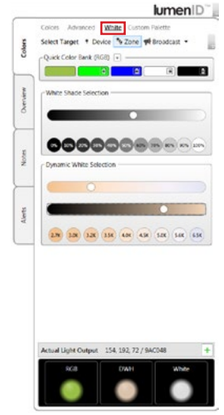


Ethernet Network:

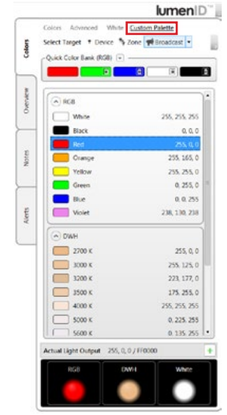
- When using Art-Net, all discovered devices can be controlled by selecting the "Zone" button and selecting a color from the Quick Color Picker.
- Selecting the "Broadcast" button will send packets to one universe at a time. Select the target universe from the drop-down menu. Note that the universe that is being broadcasted to is always synchronised with the universe of the fixtures selected from the list of devices.
- Universe selection through the "Broadcast" button is also available with the DMX Live View and Patch View features.
- Note: by default, all Ethernet CBX ports are pre-programmed to universe 1.

1. Simple Color Picker

2. Advanced Color Picker



3. Dynamic White Color Picker

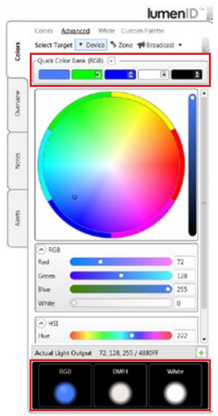


4. Custom Palette Picker

- **Simple Color Picker** (1) and **Quick White Shade Selection** (1) can be used for high-level color picking / sampling of outputs.
- **Quick Color Bank** (1-4) can be used as a comparison tool for up to 4 colors.
- **Advanced Color Picker** (2) allows you to move around the color picker and see the actual RGB or HSI values being output to the fixtures. Using the sliders you can anticipate what the color will change to by sliding to the left or right.
- **Dynamic White Color Picker** (3) allows for easy selection between color temperatures ranging for 2200K to 6500K, for DWH fixtures only.
- **Custom Palette Picker** (4) allows the user to save and rename colors for either comparison or to use later on as part of the show file.

Quick Color Bank:

- Right-click to save color to Custom Palette.
- Lock colors you like to compare up to 4 specific colors.
- Unlock the color to continue playing.
- Output Color shows across the bottom so that you can easily compare current colors with desired changes.



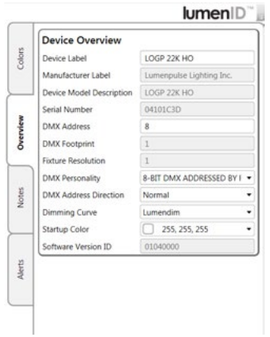
Actual Light Output:

- Enables the user to quickly understand what the output will be depending on if they are controlling RGB, DWH, or static white products.
- Right-click to save color to Custom Palette.

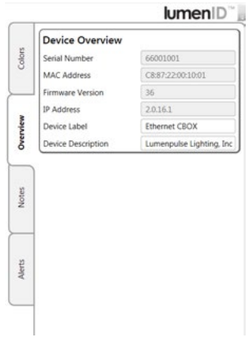
3.4 Device Overview

- The "Overview" tab allows the user to view high-level information about a device.
- Certain parameters of the device can be changed, such as Device Label, DMX Address, DMX Personality, DMX Address Direction, Dimming Curve and Startup Color.
- Other parameters are "read-only", including Manufacturer Label, Device Model Description, Serial Number, DMX Footprint, Fixture Resolution and Software Version ID.
- This device overview is available at any time on the right-hand side of the software.

Note: The device overview parameters are different for an Ethernet network.



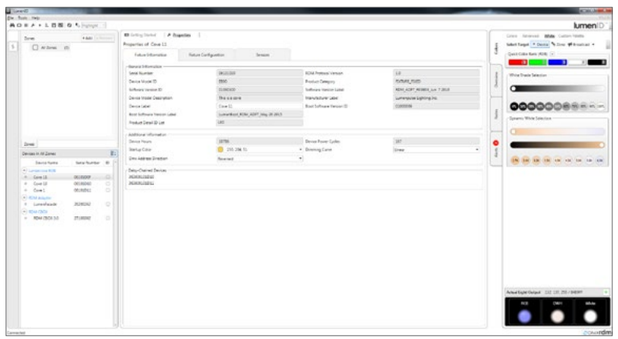
DMX/RDM network



Ethernet network

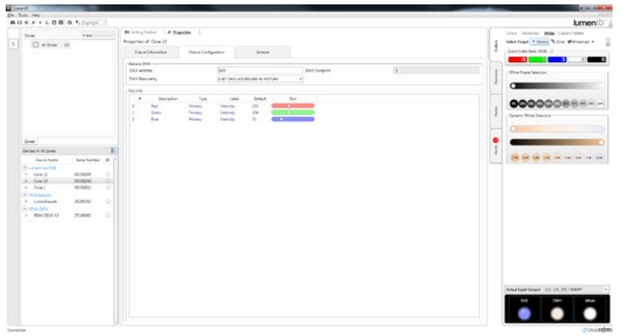
3.5 Properties View

3.5.1 Fixture Information Tab



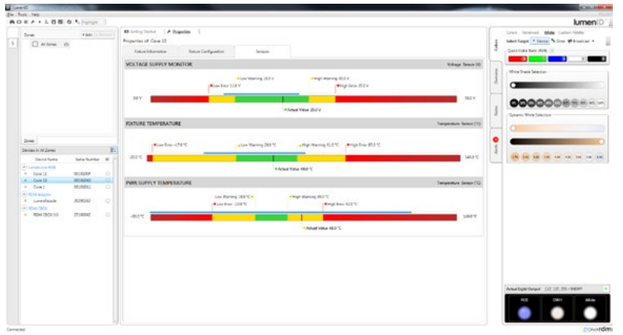
The Advanced Properties view is used to see all of the available RDM Parameters together. The above image is an example of the "Fixture Information Tab".

3.5.2 Fixture Configuration Tab



Here is the "Fixture Configuration Tab," which includes DMX Address, DMX Footprint, DMX Personality, and Slot Information.

3.5.3 Sensors Tab



The "Sensors Tab" is where you can find all the Sensor Feedback information. Voltage Supply Monitor, Fixture Temperature, and Power Supply Temperature can be monitored live. Here you are able to adjust your Low/High Warning levels for RDM Alerts.

Addressing:

DMX512 is a communication protocol which is standard in the lighting industry for controlling RGB and dimmable fixtures. The DMX signal is streamed from a controller, like the Lumentouch 2.0 or Lumencue, to every light fixture in an installation. If you want to individually control a single light fixture out of a group, then that fixture must be given a separate identity. In DMX512, this separate identity is called a DMX address.

Control Resolution:

Lumenpulse fixtures offer different resolutions of control, allowing a user to specify a fixture to be controlled as a whole (per fixture – 1FX), or to have finer resolution within a fixture. For our linear fixture, you can choose to control each linear foot independently (per foot – 1FT) while our Lumenbeam XLarge fixture allows individual control of each of the 3 LED boards (per board – 1BD).

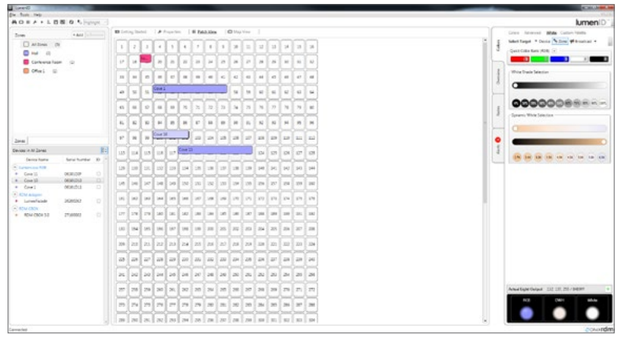
DMX Footprint:

A DMX footprint refers to how many DMX512 channels a fixture will require in order to achieve full control of a fixture. For example, a Lumendome RGB fixture is a single pixel, using a separate DMX512 channel for each color – Red, Green and Blue.

- R = 1
- G = 2
- B = 3

Therefore, we can state that the DMX footprint for a Lumendome RGB fixture is 3. Likewise, a 48" long Lumenfacade RGBW, with per foot resolution, will use 4 DMX512 channels (Red, Green, Blue, and White) for each 12" portion of the fixture. We can therefore determine that the DMX footprint of the fixture is 16, or 4 channels per foot.

3.6 Patch View



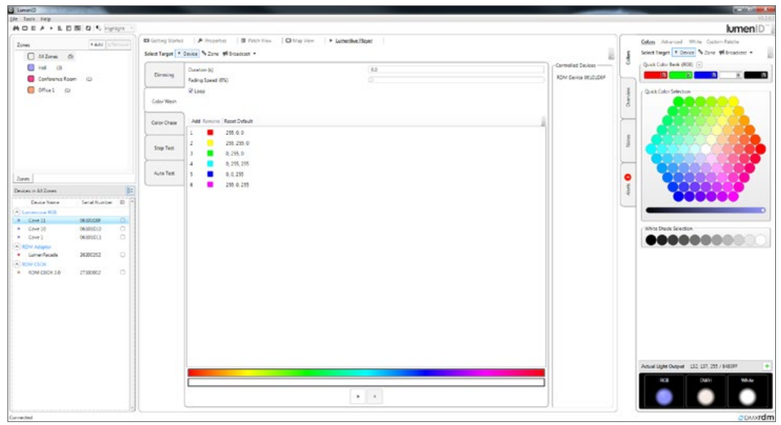
Note: upon initial discovery, all devices are pre-programmed to DMX start address 1.

- By using the Patch View, the user can see what DMX addresses a particular fixture is taking up in the DMX Universe. This can be viewed also by zone to see where fixtures are addressed in the DMX Universe.
- The user can drag and drop a fixture wherever they would like in the Patch screen and LID will automatically update the DMX Address of the fixture once you drop the fixture on a new address.
- The colors of the fixture groups are set by their association to a control zone.

Note: Make sure to set your fixture properties prior to patching. Adjustment of the fixture personality may shorten or expand DMX channel capacity of each fixture.

3.7 LumenLive Player ▶

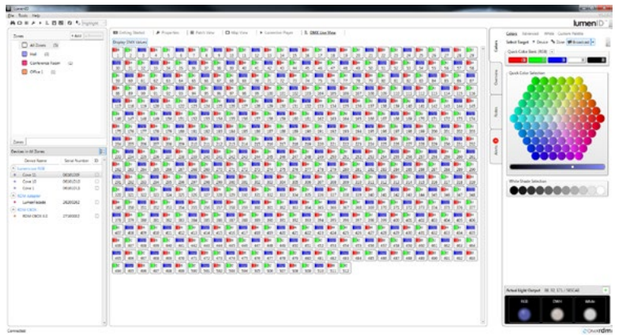
The LumenLive Player is used for demonstration shows, quick tests, channel checks and other quick-effect viewing needs.

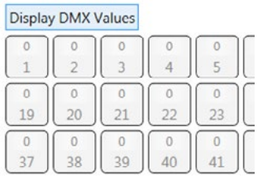


It consists of the following shows:

- **Dimming:** Ability to adjust the time of a Dim Up and Down of a white Light Output.
- **Color Wash**: Can be customized with different colors using a color picker, durations and fade speeds.
- **Color Chase**: Simple node chase with customized node color and background color. Node size, speed, fades and rest times are all adjustable.
- **Step Test**: Allows a user to step through their system fixture by fixture, like a channel check. Users can adjust the number of channels to step at a time, duration of step, intensity and loop.
- **Auto Test**: This is a simple test pattern to see the individual channels of a fixture. The user can adjust the step duration and fade speed as the effect steps through the 5 present outputs for Red, Green, Blue, White and Black.

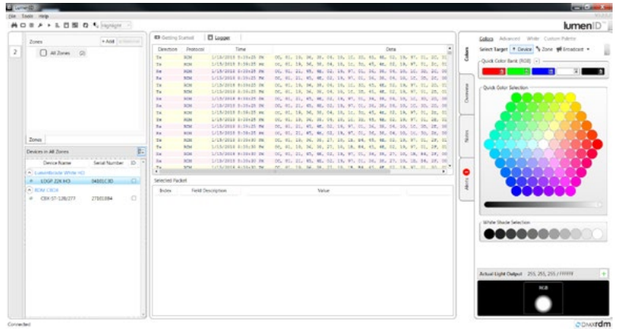
3.8 DMX Live View





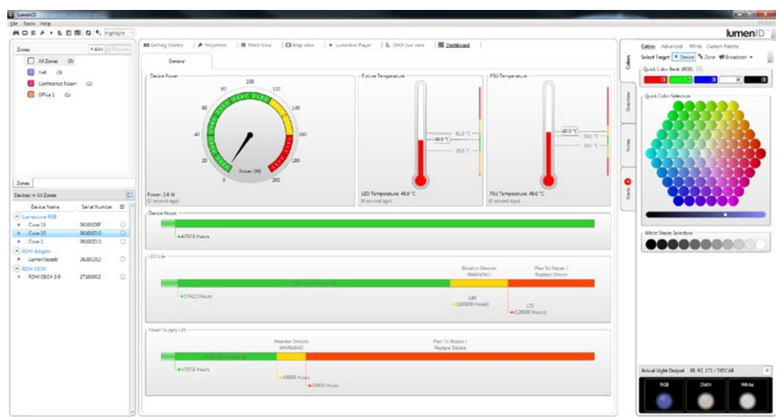
- DMX Live View acts like a DMX Sniffer on the data line. You can look at the values being output by the software or controller on the network and visually see what values and color levels are being output on the control signal.
- This enables a technician to try and view faulty data from a controller.

3.9 Logger



`• Using the Logger function a technician can go back and see the values output at a given time that was logged during their testing session.

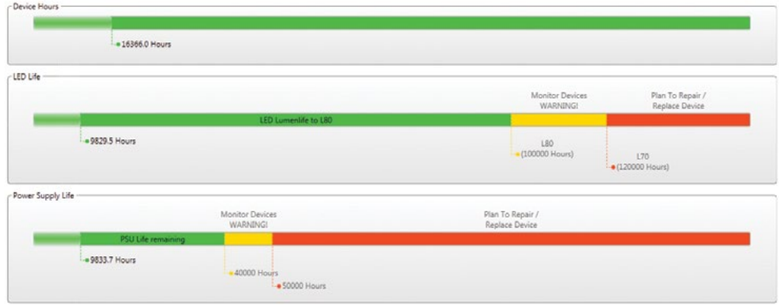
3.10 Dashboard



Simple monitoring of individual products and zones.

Note: Select either a zone or a group of fixtures from the list to view the average value you would like to monitor.

3.11 Lumenlife™



Lumenlife is a patented method for estimating the life expectancy of a fixture by taking into account the environmental factors that influence lifetime, rather than merely the past hours of operation. With Lumenlife, we can better estimate when a luminaire reaches L70 and even issue alerts as the luminaire starts to approach the end of its useful lifetime.

For more information, please consult the Lumenpulse Terms and Conditions:
http://www.lumenpulse.com/support/terms-and-conditions

IV LumenID Firmware Update

Note: LID V3 operates with the latest version of LID hardware only. If you are having trouble discovering please double-check your firmware version and follow the steps below.

Step 1: Update LID Hardware

- LumenID updated firmware is provided as part of the LID V3 software package. For additional support, please install Enttec's DMX PRO Manager – download link below:
  http://www.enttec.com/?main_menu=Products&pn=79003
- Run DMX Pro Manager, connect to your device, and update it to the latest firmware.
  The status screen will read the latest revision and you will have green checks for DMX and RDM.
  All set – note: you can also use this tool for sending and receiving DMX aka testing.

Step 2: Install LATEST LID Software

- Download and install the latest version – download link below, installation steps on page 7
  http://www.lumenpulse.com/en/products/46/lumenid

Step 3: Restart PC

Step 4: Enjoy your new software!

V Demonstration

If you have not already installed the LID software and drivers, please follow the steps in the Set-Up section.

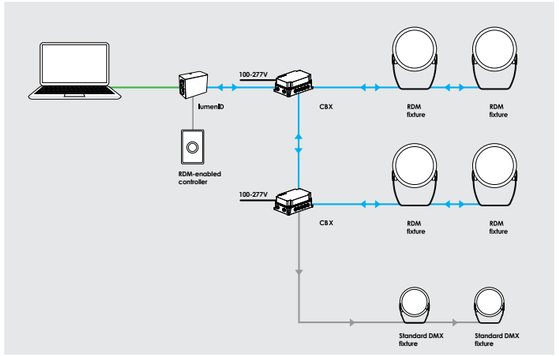
The LID is a powerful tool for table-top demonstrations or mockups of Lumenpulse DMX fixtures. It allows instant access to basic dimming, RGB colors and color fades, or the ability to dial in specific colors using the full Color spectrum. To prepare for a demonstration, you only need the LID controller and cable assemblies, and a Lumenpulse DMX/RDM-enabled fixture to demonstrate.

Parts needed:

1. LID device
2. USB cable
3. Laptop/PC with software install
4. DMX cable

Process:

1. Plug in LID to PC
2. Start LID V3 software
3. Plug in DMX cable
4. Plug in fixtures
5. Use LumenLive Player for demonstration



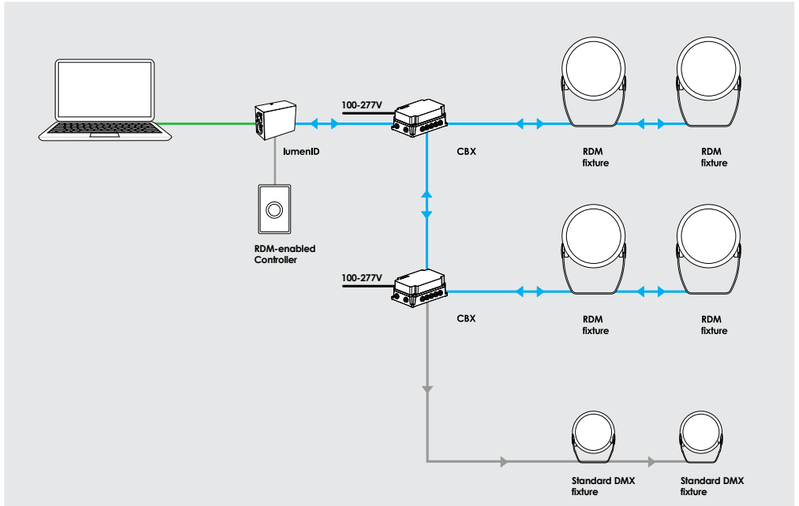
5.1 Connection for Commissioning and Monitoring

Before you begin addressing your fixtures, you must make sure that you are connected to your fixtures correctly. Refer to section II Set-Up for instructions.

DMX/RDM Protocol Limits

- Data length: 1000' between boosted devices
- Number of devices connected to a CBX: 32 per output
- Cascading CBX limit: 4

Typical Control Layout

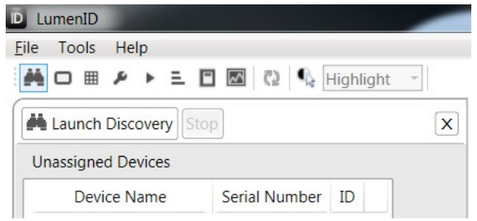


VI PACBOX and Optical Chamber Binding for Lumenfacade Inground

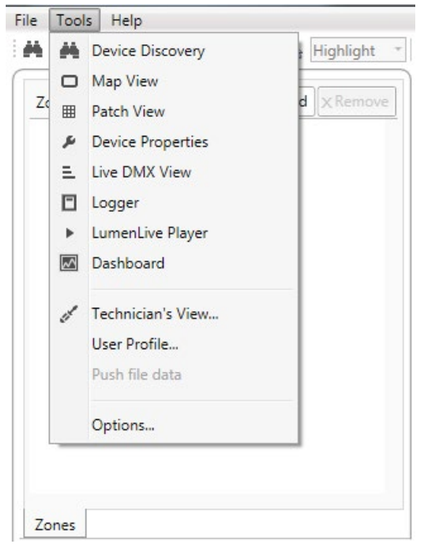
The PACBOX must be binded to the optical chamber for all DMX/RDM applications. Follow the steps below, accessible in "General Tech" mode of the LID V3 software, to complete the process.

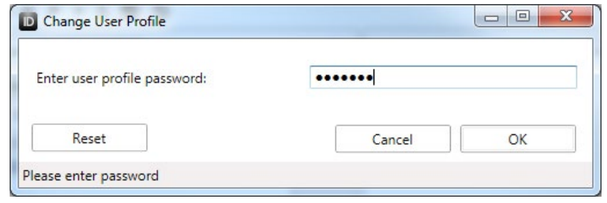
Process:

- Plug in LID to PC.
- Start LID V3 software.
- When the software is opened, the Discovery window is open on the left-hand side of the screen. If you do not see this, click on to open the Discovery Panel.
- Click on the Launch Discovery button to discover fixtures over the RDM network.

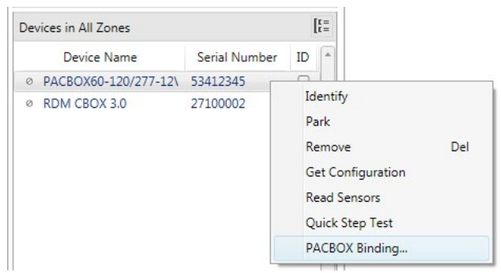


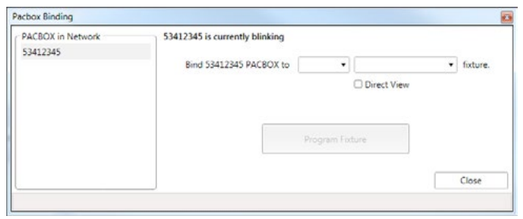
- Click on "Tools" and "User Profile" to access Tech Mode. Enter password and click "OK" to continue.





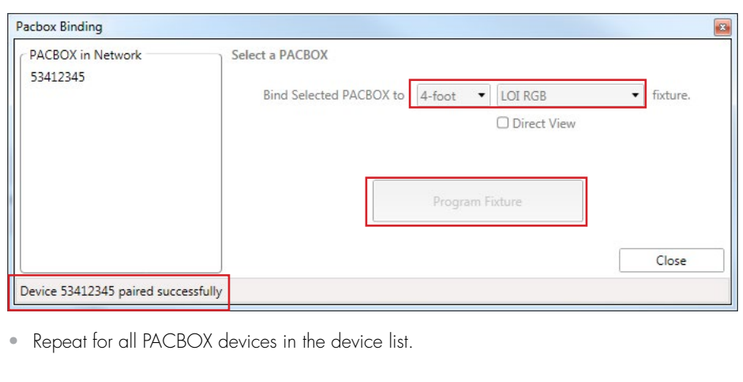
- Right-click on a PACBOX in the device list and select "PACBOX Binding". The PACBOX Binding window will open.





PACBOX Binding Window

- The fixture attached to the selected PACBOX will blink.
- Select the optical chamber's length and type.
- Click "Program Fixture" and wait for indication the device was paired successfully.



- Repeat for all PACBOX devices in the device list.

VII Technical Support

If, at any time, you encounter problems or have questions regarding your use of LID or any Lumenpulse products, please do not hesitate to contact Lumenpulse technical support. We are dedicated to customer service and seeing every Lumenpulse project turn out a success.

Contact
Technical Support
techsupport@lumenpulse.com
1.877.937.3003
1.617.307.5700

lumenpulse™

Sales Offices and Manufacturing Facilities

Corporate Headquarters

1220 Marie-Victorin Blvd.
Longueuil, QC
J4G 2H9 Canada

1.877.937.3003
T 514.937.3003
F 514.937.6289

Boston, United States

10 Post Office Square, Suite 900
Boston, MA
02109 United States

1.877.937.3003
T 617.307.5700
F 617.350.9912

Manchester, United Kingdom

4th Avenue, The Village
Trafford Park, Manchester
M17 1DB United Kingdom

T +44 (0) 161 872 6868
F +44 (0) 161 872 6869

London, United Kingdom

The Leathermarket
11/13 Weston Street
Unit no 13.3.2, London
SE1 3ER United Kingdom

T +44 (0) 2031 765370
F +44 (0) 2031 765377

Vancouver, Canada

9255 - 194th Street
Surrey, BC
V4N 4G1 Canada

T 604 549 9379
F 604 549 9555

Paris, France

19 Vivienne
75002 Paris
France

T +33 (0)1 40 41 60 10

Florence, Italy

Via della Chiesa, 38
50041 Calenzano
Firenze - Italy

T +39 055 541754
F +39 055 541757 5

SE Asia Partner

25 Tagore Lane, #03-10
Singapore Godown
787602 Singapore

T +65 6305 7680

info@lumenpulse.com
www.lumenpulse.com

Printed in Canada
2018 / 02
 # 118979