

lumenIDTM user manual

lumenpulseTM

Sustainable architectural LED lighting systems

lumenpulse

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INTRODUCTION

Thank you for using Lumenpulse and the Lumen ID. Lumenpulse offers a wide variety of architectural LED fixtures with DMX controllable capabilities for White and RGB fixtures. The LumenID 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 fixtures quickly and easily.

The LumenID employs a proprietary control protocol that speaks directly to Lumenpulse fixtures over the same cables and hardware that are used for DMX communication. This means that no additional effort or materials are necessary beyond what is already installed and what is provided in this kit. It plugs directly into the USB port on your PC and the Lumenpulse LumenID software allows live access to all of its features.

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

SET-UP

List of material

1. LumenID
2. USB cable
3. Software Disk
4. Addressing cable
5. Demo cable
6. Adapter cable
7. PC

To be fully operational this package should be used with a pc having the following featured :

- Windows ME, XP or SEVEN
- 1024 x 768 screen resolution (1280 x 1024 recommended)
- 512Mo memory (1Go recommended)
- Clock frequency : 1Ghz
- Microsoft DirectX 9.0 compatible video card to use Easy View 3D software

8. CBOX
(note: CBOX included with installation not part of kit.)



Install Software

1. Insert LumenID CD
2. Run steup.exe.
3. Follow the instructions
 - I. Install lumenID program file:
Double click 'Setup' → Next → Enter username and organization → Specify 'save location' for program files
→ Select Setup Type (Typical is recommended) → Install → Finish
 - II Plug in LumenID
 - a. Use USB cable
 - b. Driver should install automatically
 - III. Navigate to Programs List from start menu → Launch LumenID software
 - IV. Install driver from CD: lumenID Driver

DEMONSTRATION

Demonstration Setup

If you have not already installed the LumenID software and drivers, please follow the steps in section the section Setup.

The LumenID 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 RGB spectrum. To prepare for a demonstration, you only need the LumenID controller and cable assemblies, and a Lumenpulse DMX fixture to demonstrate.

Parts needed

1. LUMENID
2. USB cable
3. Laptop with software install
4. DEMO cable
5. DEMO adapter

Process

1. Plug in LumenID to laptop
2. Start LumenID software
3. Plug in powercable
4. Plug in fixtures
5. Use System test or diagnostic tab for demonstration (see page 6)



SYSTEM TEST

The system test is the first step in establishing that a lighting configuration has been set up correctly. The color buttons will send a broadcast DMX signal to a full universe of fixture addresses - any fixture that responds to DMX should respond to these commands. If your system test is unsuccessful, corrections must be made to the configuration before continuing.

- For use with lumenID,
always ensure lumenID is selected

- For use with Entec DMX USB PRO,
ensure Entec is selected

To perform simple functionality test:

- Select Red: Fixture will turn on red channel
- Select Green: Fixture will turn on green channel
- Select Blue: Fixture will turn on blue channel
- Select White: Fixture will turn on all channels
- Select Black: Fixture will appear 'off'
- Select Color Wash: Fixture will cycle through random colors, fading from one to the next
- Select Auto Test: Fixture will cycle through Red, Green, Blue, White and Color Wash



ADDRESSING

If you have not already installed the LumenID software and drivers, please follow the steps in section the section Setup.

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 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.

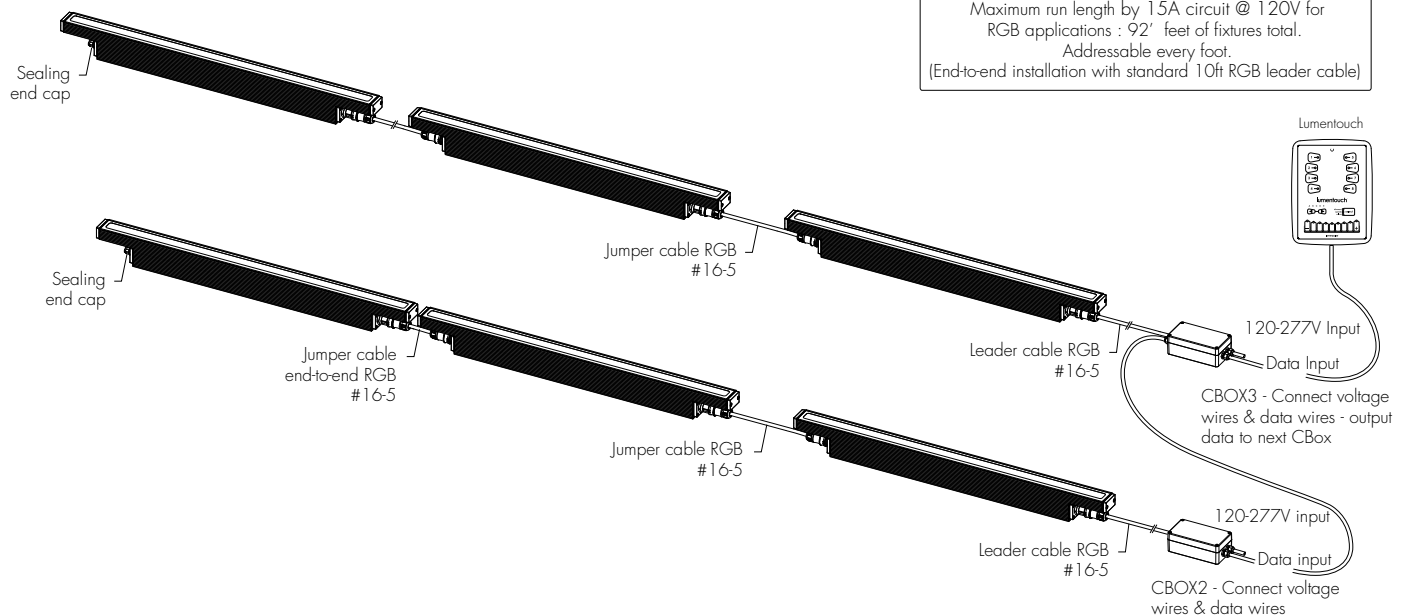
Lumenpulse fixtures can be assigned a single address per fixture at a minimum. Some Lumenpulse fixtures, like the Lumenfacade, can be given a separate DMX address per linear foot, allow a greater control resolution. Each Lumenpulse DMX address uses 3 DMX channels. Up to 512 channels (170 addresses) can be used on a single run of DMX.

All Lumenpulse DMX fixtures are shipped from the factory with DMX address 1. The LumenID provides an easy method of assigning new DMX addresses to each fixture in an installation, using the same DMX cables and hardware that are already in place. Just plug your LumenID directly into the programming port of your CBOX and addressing can begin.

The LumenID speaks to the Lumenpulse fixtures by using their serial number. With every Lumenpulse installation, a list of serial numbers of each fixture is provided as an EXCEL spreadsheet which can be imported into the LumenID software and the addressed immediately by following the step by step instructions below.

Parts needed

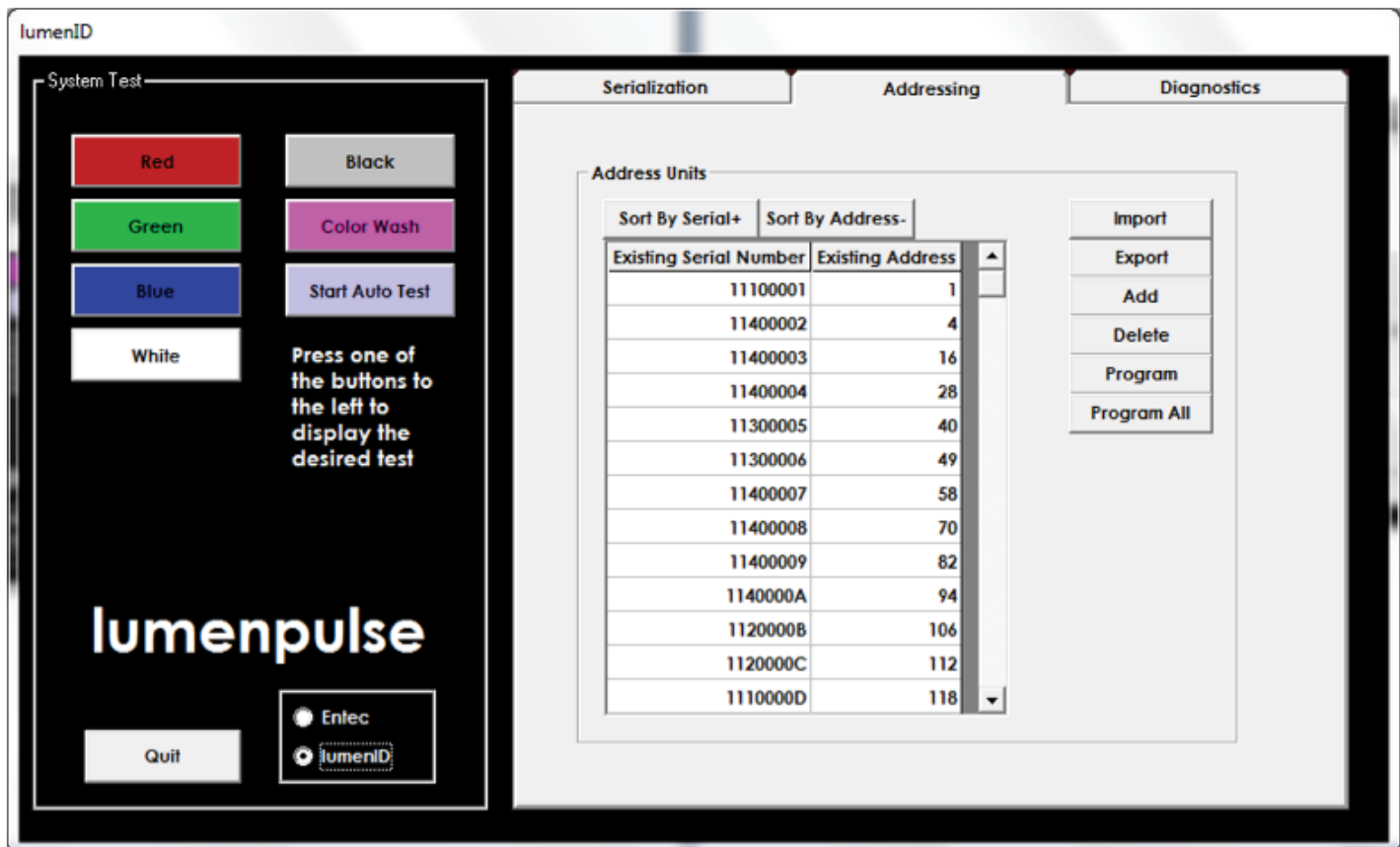
1. LUMENID
2. USB cable
3. Laptop with software install
4. Addressing cable
5. Lumenpulse CBOX with power and installed fixtures (show in diagram)



Process

1. Plug in LumenID to laptop
2. Start LumenID software
3. Make sure you are plugged into a fixture
 - a. for addressing permanent installations, go to **ADDRESSING section** (page)
 - b. For demonstration purposes, go to **DEMONSTRATION section** (page)
4. Go to "Addressing Tab"

Addressing Tab



To set address:

As part of your shipment of Lumenpulse DMX controllable fixtures, you have received a list of serial numbers which correspond to each fixture of your installation. The list is in the format of an EXCEL spreadsheet which is provided by email, as well as in printed form, shipped with the fixtures. A fixture's serial number is used by the LumenID software to identify and communicate with each fixture. This is valuable in any diagnostic processes while onsite, but also is the fundamental information used during the addressing process. If you lose or cannot locate your list of serial numbers, the serial number for each fixture can be located on the white sticker on the back of each Lumenpulse fixture.



The Lumenpulse serial numbers contain information about the type of fixture, and how many DMX addresses can be assigned to each fixture. This is explained below in more detail. To begin, simply import or manually enter your list of serial numbers into the LumenID software and assign the DMX addresses as required.

Note. For linear first determine if your installation is per foot or per fixture.

Addresses are preset in the drop down menu starting with 1 and incrementing by 3, ie: 1,4,7,10,13, etc.

1. Standalone fixtures:

- a. All standalone fixtures and 1 foot linear fixtures will increment by using the preset addresses.

2. Linear fixtures:

- a. The fixture length in feet is represented by the 3rd most significant digit in the serial number
- b. Each foot of fixture will reserve an address, and the entire fixture will be set to the address of the first foot
- c. Addressing for additional fixtures will increment from the last reserved address
- d. See example below in Figure 1.

	A	B	C
1	Existing Serial Number	Existing Address	
①	2	11100001	1
	3	11400002	4
	4	11400003	16
④	5	11400004	28
	6	11300005	40
	7	11300006	49
	8	11400007	58
	9	11400008	70
	10	11400009	82
	11	1140000A	94
	12	1120000B	106
	13	1120000C	112
	14	1110000D	118
	15	1110000E	121
	16	1110000F	124
	17	11400010	127
	18	11400011	139
	19	11400012	152
	20	11400013	164
	21	11400014	176
	22	11100015	188
	23	11100016	191
	24	11200017	194
	25	11200018	200

I. Referring to Figure 1 above, locate cell A2. The third most significant digit in this serial number is '1' indicating a 1 foot fixture. This will take address 1, and the next fixture will increment to the next available address.

II. Cell A3 indicates a 4 foot fixture, which will take address 4, and reserve the next 3 addresses; 7, 10, 13.

III. The next 2 serial numbers in the list correspond to 4 foot fixtures and will follow this addressing scheme; starting with 16, reserving 19, 22, 25, starting with 28, reserving 31, 34, 37.

IV. Cell A6 corresponds to a 3 foot fixture, taking the next available address, 40, and reserving 43 and 46, making the next available address 49. This addressing scheme continues through the list.

Figure 1: Addressing linear fixtures

The main function of this tab is to address fixtures at an installation site. It is also helpful for locating fixtures on an existing install to determine the addressing scheme.

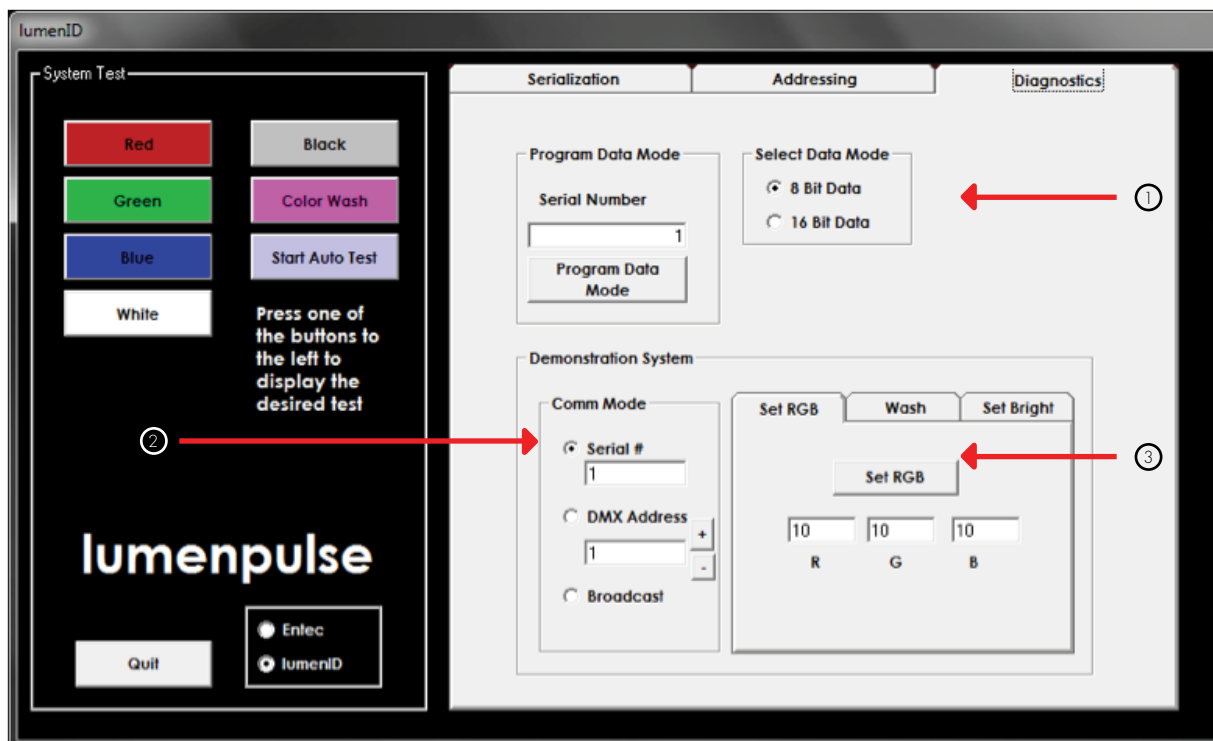
Functionality

1. To set addressing, the user must import an Excel spreadsheet, in the same format as shown in the screenshot page 8. This spreadsheet is provided by lumenpulse as a part of the product shipment. To begin, click the 'Import' button, locate the file to import, and select 'open.' The spreadsheet will appear in the Addressing tab as seen in page 8.
 - a. To select an address, click in the cell, a pull down menu will appear and an address can be selected.
 - b. Clicking a serial number will turn the corresponding fixture on all White
 - c. Clicking an address will turn on all fixtures with that address to all White
2. The user can delete a row using the 'Delete' button
3. To add a row, click the 'Add' button, and manually enter the serial number, and select an address from the pull down menu.
4. Once all addresses are selected, click the 'Program All' button to set addresses
 - a. The process will step through each serial number in the list from top to bottom
 - b. Fixture will turn on Blue when being addressed
5. The 'Program' button can be used to address only the selected line item
6. Once all addressing has been programmed, select 'Export' to generate an Excel spreadsheet, recording serial numbers and the corresponding addresses
 - a. The user will be prompted to name the file and select a location to save the file
 - b. It is recommended to keep this file at the install location as a map of the install

DIAGNOSTICS

The main functions of this tab are testing serialization, testing addressing and to provide manual control over general effects for demos and mock-ups.

1. Program Data Mode provides the user a way to switch the input data mode from 8bit to 16bit. This feature will be supported at a later time.
 - a. To control only one serial number, enter the serial number of the fixture in the box
 - b. Select a DMX address using the '+' and '-' to control all fixtures with specified DMX address
 - c. Select 'Broadcast' to control every DMX address
2. There are 3 methods for manually controlling fixtures
 - a. To control only one serial number, enter the serial number of the fixture in the box
 - b. Select a DMX address using the '+' and '-' to control all fixtures with specified DMX address
 - c. Select 'Broadcast' to control every DMX address
3. The user can manually create 3 effects
 - a. Set RGB
 - i. This effect provides manual color mixing. Enter a value from 0-255 in each box (R, G, B) to create desired color. 0 turns the color off, 255 sets the color fully on. All colors set to 255 will set the fixture to full White. Click 'Set RGB' to apply the effect.
 - b. Wash
 - i. This effect transitions through a series of pre-set colors. The user can set the transition speed, from 1-100, with 1 being the slowest. The speed number does not correspond to the loop time. Use the 'Start' and 'Stop' buttons to apply the effect.
 - c. Set Bright
 - i. The effect transitions from full brightness to dim, and back up to full brightness. The desired transition speed is set by the user, with 1 being the slowest speed. Use the 'Start' and 'Stop' buttons to apply the effect.



TROUBLESHOOTING

1. What if I get the error "Failed to open DMX device. Please cycle power on the unit and try again"?

This can mean one of two things:

- a. The Enttec driver was not correctly installed. Try reinstalling the Enttec driver and starting again
- b. The lumenID is not connected or did not properly enumerate with the PC. Verify that lumenID is plugged into PC.

2. The software opens up correctly but I cannot turn on any fixtures?

This is usually an issue with the DMX wiring and installation setup. Verifying all wiring to fixtures. If there is another DMX controller in series with the lumenID, there is a chance that controller is sending out data that is conflicting with the lumenID.

3. My lumenID was working properly, but during operation the fixtures stopped responding to the software.

This should not happen, however one note: If the USB cable connecting the lumenID hardware is unplugged from the PC while the lumenID software is running, the lumenID will not respond to the software and send out data to the fixtures. You will need to quit the lumenID program and restart the software.

Customer service

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

Contact

Customer Support
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