





lumenpulse

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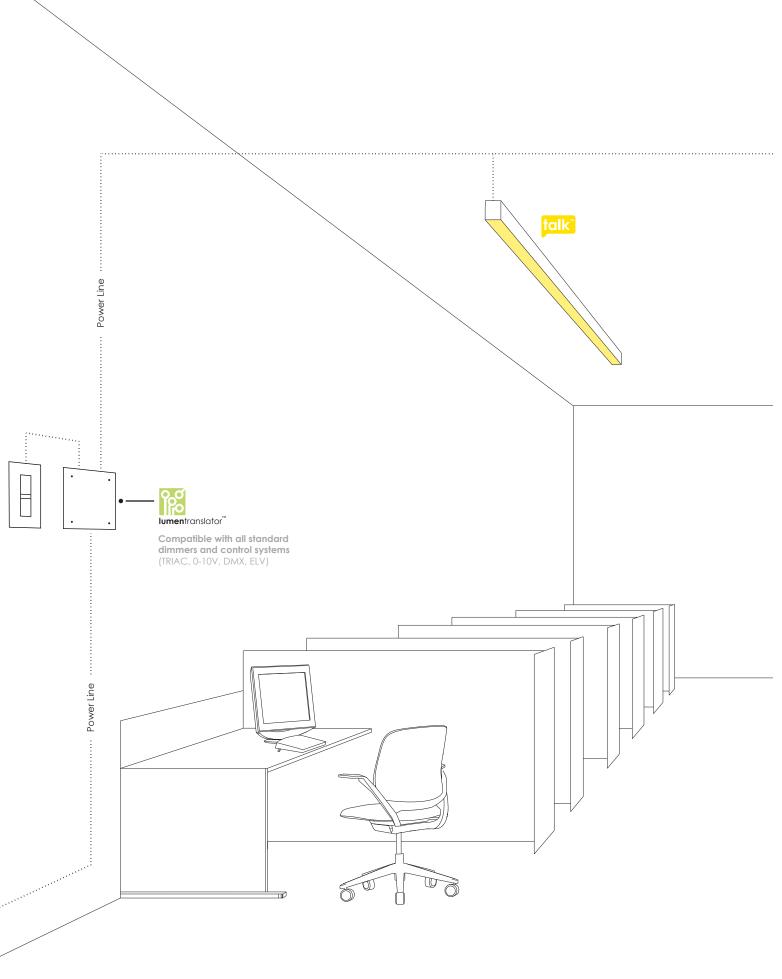


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Introduction

Welcome to the User Manual for Lumentalk $^{\text{TM}}$ ID commissioning software. This guide will give you a brief introduction and walk-through of all the functionality of the LumentalkID software and provide you with the tools you need to complete a successful installation. To begin, make sure you have ordered your LumenID kit from Lumenpulse $^{\text{TM}}$.

Let's get started. Lumentalk™ is a revolutionary new lighting control technology that allows control and configuration of luminaires directly over the powerline.

There are 3 components to a Lumentalk installation:



1. Lumentalk-enabled luminaire

Lumentalk is available as an embedded feature in Lumenpulse luminaires or in other manufacturers' luminaires through our Lumentalk licensing program. Simply select Lumentalk as a dimming option when ordering a luminaire.



2. **Lumen**translator[™]

Lumentranslator is the gateway for bringing lighting control to the Lumentalk network. It translates input coming from any control source – Triac, ELV, O-10V or DMX512 – and converts it to a robust digital signal that is carried over the power line.



3. **Lumen**link[™]

Lumenlink is the bridge that carries Lumentalk communication across multiple circuits and phases, allowing for the creation of a seamless lighting control network across an entire project.

Install Software

- 1. Download LumentalkID software from the Lumenpulse website
- 2. Run setup.exe
- 3. Follow the instructions

Note: Turn off anti-virus software before installing the LumentalkID software.

How to Connect

A LumenID hardware kit is required in order to connect to your Lumentalk network. To begin, first connect your LumenID to your computer via the USB cable provided. LumenID™ drivers should automatically install as part of your LumentalkID installation. If you have connection issues, you may need to manually install drivers. Please see the FAQ for more information on this issue.

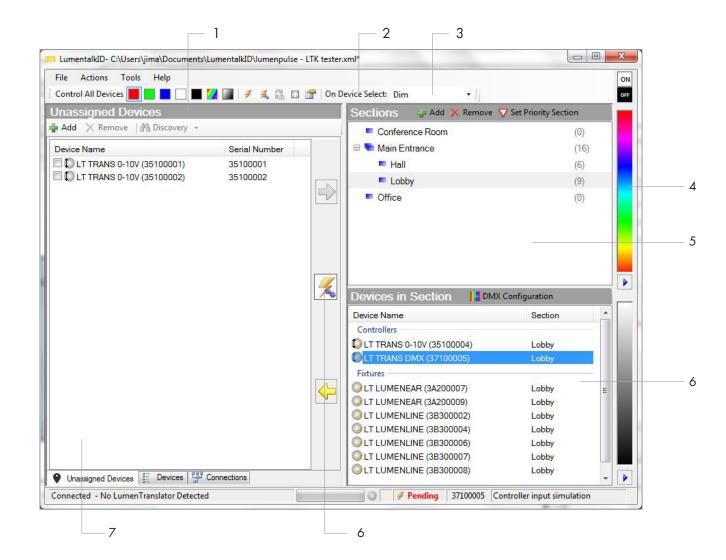
After you are successfully connected to your LumenID hardware, you can use the LumentalkID cable to plug directly into a Lumentranslator.

See the image below.



- 1. Computer
- 2. USB Cable
- 3. LumenID
- 4. Lumentalk ID Cable
- 5. Lumentranslator

Overview



- 1. Automatically Discover Devices on your network before assigning them to your lighting groups
- 2. Test your fixtures and upload changes to your project file
- 3. Choose how a selected fixture identifies itself visually
- 4. Use color bars to test specific groups of fixtures
- 5. Set up and manage your fixture groups by section. Just drag and drop from your Unassigned Device list
- 6. View, edit and control devices by section
- 7. Quick buttons for easy project editing
- 8. View status of unassigned devices as well as edit the device properties

Adding Lumentalk Devices

All Lumentalk hardware is discoverable over the powerline using Lumentalk's bi-directional communication protocol. With your LumenID plugged into a Lumentranslator, you can use the *Discovery* tool to populate a list of all Lumentalk-enabled fixtures and devices on your Lumentalk Network.

3 Ways to Add a Fixture

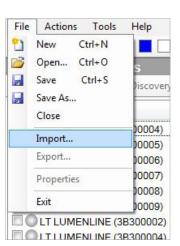
Discover

Use the **Discovery** tool to quickly populate a list of all unassigned fixtures.



Import

Use the **Import** function to import a .csv formatted list of your lumentalk fixtures and devices. Contact Lumenpulse to have your product list sent to you.



Add

It is also possible to manually add a device for testing or trouble shooting purposes.



Understanding Your Device List

Your *Unassigned Devices* list is the starting point to commissioning your Lumentalk project. Here is where you will find all Lumentalk devices prior to organizing them into groups and sections. The icons to the left of each device indicate valuable information about whether the device is online, and if it needs to be updated with the latest project changes. By accessing device properties, you can easily customize your project file to be easy to understand and manage, making the commissioning process easy and fast.

Icon Definitions

- Lumentalk-enabled fixture
- Lumentranslator
- **Lumenlink**
- Changes made requires programming
- Software configuration does not match device settings
- Cannot connect to device

Note – The Lumentranslator that you are using as your access point (connected directly to it) will be shown in **Bold.



Unassigned

Shows a full, unordered list of unassigned devices. This is the default view.

Devices

Shows a list of all project devices, organized by device type. Use this to quickly locate device assignments in your Sections window.

Connections

Shows all connected devices on your Lumentalk network. This list is organized to show which devices act as gateways to the

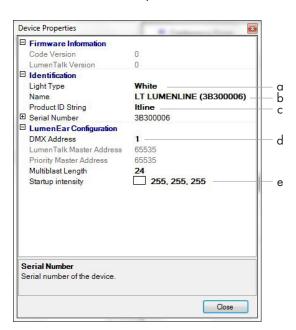
Properties

By double-clicking on a device, you can bring up its *Properties* dialog. Here you can access important information about the device, configure settings and change device names to help organize your project.

**Note - The right-click menu will bring up special tools for the advanced user:

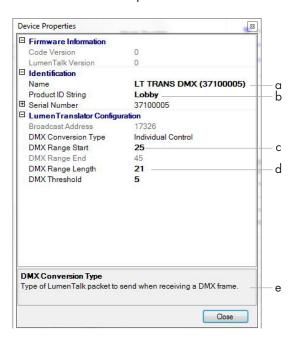
- Send Configuration Apply changes to this fixture only
- Refresh Data Request update on current fixture settings from the fixture
- Set as Up-to-Date Manually mark fixture as up-to-date with network
- Start Active ID Force fixture to physically identify itself using light
- Identify On-Click Toggle if fixture will adjust light level when selected

Lumentalk Fixture Properties



- a. Light Type: White or color changing (currently White is the only option)
- b. Name: Editable device name stored as part of the project file
- c. Product ID String: Editable fixture ID that is stored separately from the project file
- d. DMX Address: DMX Address of the fixture
- e. Start-up Intensity: Starting 3 channel value for fixture

Lumentranslator Properties



- a. Name: Editable device name stored as part of the project file
- b. Product ID String: Editable fixture ID that is stored separately from the project file
- c. DMX Range Start (DMX Lumentranslators only): First address of DMX512 range that Lumentranslator listens to.
- d. DMX Range Length (DMX Lumentranslator only): Length of full DMX range the Lumentranslator listens to – 48 is the maximum channel count allowed
- e. DMX Conversion Type Choose whether Lumentranslator is controlling fixtures as a group or individually

Sections

The Sections window is where you organize your project by space and by control groups. By assigning a fixture and Lumentranslator into the same section, there is an automatic link formed assigning control of that fixture to the Lumentranslator in the section.

If you have multiple sections that you want to group together under one *master* control, it is possible to *Set a Priority Section*. This automatically assigns the *priority section* controller to the sub-sections assigned to it.

Add

Add a new section to your project. Double-click to edit the name.

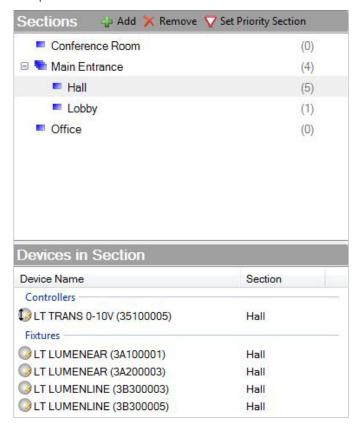
Remove

Remove a section from your project. All fixtures previously assigned to this section will be moved back to the *unassigned* category.

Set Priority Section

Allows you to set a priority section for the currently selected section. This allows multiple Lumentranslators to be assigned to the same group of fixtures.

Example:



Assigning Sections and Programming

Assigning and programming sections is the stage at which your project takes form.

There are two key components needed to give you control of your section over Lumentalk:

- Lumentranslator
- Lumenpulse-enabled fixtures.

Each fixture assigned to a section will listen to every Lumentranslator which is also assigned to a section.

Note that any changes you make to your project file will not be applied until you program the changes to the Lumentalk network.

There are 4 easy steps to assigning and programming your sections.

1. Select 2. Identify 3. Assign 4. Program

1. Select

Selecting devices is easy. Simply point and click on an unassigned device from your list. If you wish to select multiple devices, you can use the checkboxes located to the left of your fixture names.

Device Name	Serial Number	
LT LUMENEAR (3A200004)	3A200004	
☑ ○ LT LUMENEAR (3A200005)	3A200005	
☑ ○ LT LUMENEAR (3A200006)	3A200006	
LT LUMENEAR (3A200007)	3A200007	
LT LUMENEAR (3A200008)	3A200008	

2. Identify

Each Lumentalk device has a method of physically identifying itself to you when it is selected. Since you will not necessarily know the physical location of a device in your installation, this identification signal helps you find it in your space.

I. Lumentalk Fixture

Lumentalk fixtures, when selected, will automatically adjust their light level down to 50% output and remain that way until you have de-selected the fixture.

II. Lumentranslator

Lumentranslators will blink their identification LED red for as long as the Lumentranslator device is selected.

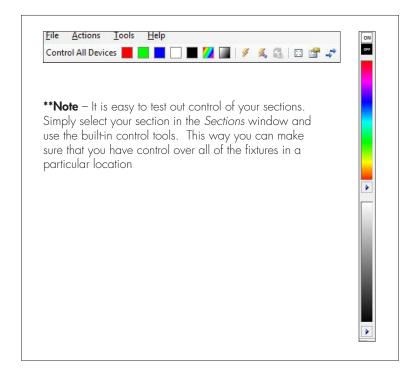
III. Lumenlink

Lumenlinks will blink their identification LED red for as long as the Lumenlink device is selected.

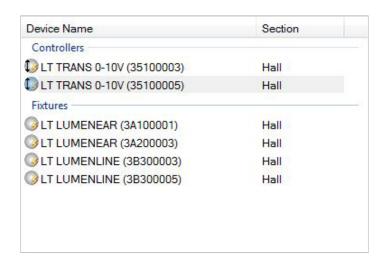
3. Assign

Assigning fixtures to sections is how you tell Lumentalk lights which controllers to listen to, and how they will be grouped for final control. Either use the quick-button arrows (located in the central bar) or simply drag and drop your devices into place.

Sections with multiple Lumentranslators in them will have to establish a shared control of the lights of that section between the two Lumentranslators. This control obeys a LTP (latest takes precedence) approach to control, meaning that whichever Lumentranslator has most recently sent a control command will have control over the lighting levels.



In the example below, the *Hall* section has 2 Lumentranslators, and 4 Lumentalk-enabled fixtures. *Both* of these Lumentranslators will have control over *all* of the fixtures in this section.



4. Program

Until this point, any work that has been completed has *only* been saved to your project file. In order for your work to take effect on your lighting equipment, you must program your changes to the Lumentalk network.

**Note – that your changes can only be uploaded to devices that your LumentalkID software can see. If you are not connected to a device through the Lumentalk network, LumentalkID will notify you of which devices were not able to receive your updated programming.

It is also important to note that all previous settings will be replaced by your current project file as soon as you program them to the network.

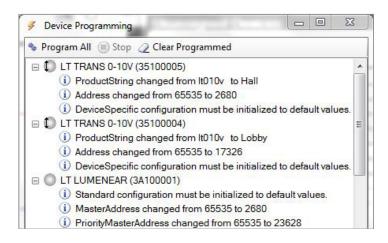
There are 3 main ways to program your work to the Lumentalk devices on your network.



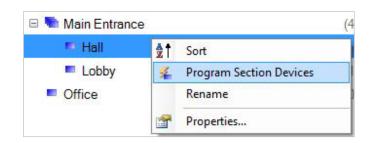
Program all changes to all devices currently visible to your LumentalkID



Program Dialog: This brings up the programming dialog, allowing you to review what changes will be made prior to programming



3. Right-click + Program Selected: By *right-clicking* a specific section, you can choose to program your work *only* to the select section of Lumentalk devices.



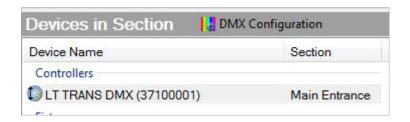
DMX Addressing of Fixtures

When using a DMX512 signal as your control source, it is necessary to assign your DMX512 addresses to your both your Lumentranslator and your Lumentalk-enabled fixtures to coincide with the DMX512 channel mapping of your controller.

When you have assigned a DMX512 Lumentranslator to a section, that section will now display a DMX Configuration button above your Devices window.

Your DMX Configuration menu is broken into 3 parts:

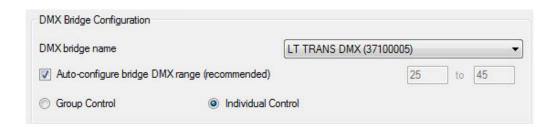
- 1. Controller Configuration
- 2. Fixtures Configuration
- 3. DMX Address Map



DMX Controller Configuration

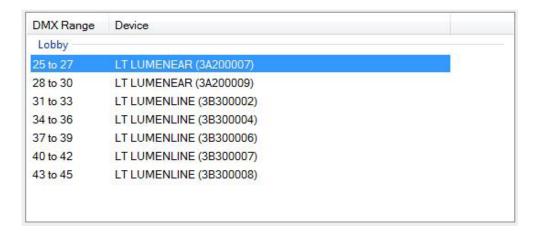
Use this section to configure your DMX512 Lumentranslator.

- Auto Configure Range: Set by default, this will automatically set the DMX range to match
 your Lumentranslator configuration. You can uncheck this to manually select a different
 range, choosing up to 48 DMX512 channels of output. Note that the smaller the range,
 the less bandwidth the Lumentranslator will take up on your Lumentalk network.
- **Group Control**: Choose this setting if you would like all of your Lumentalk-enabled fixtures to function as a synchronized group. This conserves bandwidth and DMX channels.
- Individual Control: Set by default, this setting allows you to map individual Lumentalkenabled fixtures to a specific DMX address set.



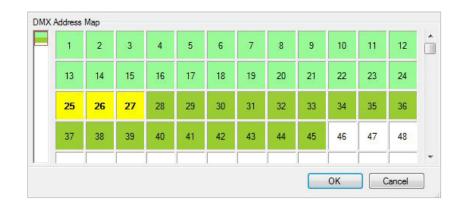
DMX Fixtures Configuration

In this section you can see information on the channel mapping assigned to your Lumentalk-enabled fixtures.



DMX Address Map

In this section, you can set the DMX512 address mapping for your Lumentalk-enabled fixtures. Fixtures you select in the *Fixtures Configuration* section will highlight their channel range as yellow. DMX addresses assigned to this Lumentranslator will be highlighted *dark green*. DMX addresses already assigned in the same section, but to a different Lumentranslator will be highlighted *light green*. To change a range, simply select your *fixture* in the *Fixtures Configuration* section, click on a new start channel and click on a new end channel for the fixture.



Advanced

Syncing a Project File with the Lumentalk Network

The Lumentalk network is able to save many of the changes and project settings directly on the network. Devices will retain their Product ID string, zoning assignments, start-up intensities, and many other settings. However, there are certain project settings that are only retained in your project file.

These are:

- Section Names
- Device Names
- Light Type

It is, therefore, important to always keep an updated project file on hand so that you can make changes to your Lumentalk network when needed.

However, it is also possible to download information directly from your Lumentalk network and save it to your project file, or create an entirely new project directly from the network. To do so is a process called *syncing*.

Syncing allows you to download project and device settings directly from the Lumentalk network. This can be performed in 3 different ways.

LumenPulse Device Discovery

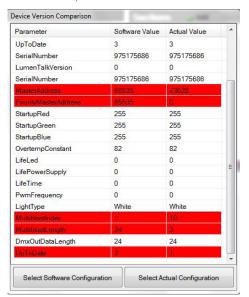


Version Configuration

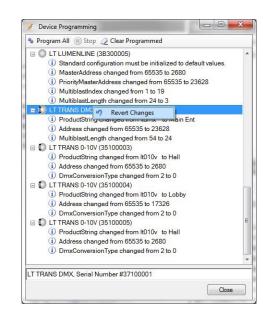
In the event that your project file is out of date from the settings which have been uploaded to the Lumentalk network, it is possible to see a comparison between the settings in your project file and the settings stored in your device.

Simply *right-click* a device in your LumentalkID software and choose the option *View Version*. This will open up a comparison dialog between the *software version* and the *actual version*. The *software* version represents the settings stored on your computer and the *actual version* represents the settings stored in your device.

See the example below:



- By selecting the *software* version, you will upload new settings from your computer to the Lumentalk device.
- By selecting the *actual* version, you will download these settings from your Lumentalk device and update your project file.



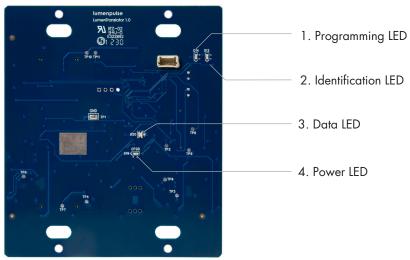
Selective Programming

It is possible to be very precise about which settings are uploaded or downloaded between your project file and Lumentalk network. This can be very useful if you are only making minor changes to your device list or project file.

Open your programming window using the *Program Dialog* button. This will open a list of all fixtures which are not unassigned or have differences detected between the *software* and *actual* device settings.

By right-clicking on a single fixture or setting, you can bring up the *Revert Changes* dialog box. Choosing this command will set your project file to match the most recently applied version of the device setting.

Lumentranslator Status LEDs



Lumentranslator™

1. Programming LED

• Solid Green when programming cable is plugged in

2. Identification LED

- Blinks Green when the Lumentranslator is selected in LumentalkID
- Does not blink under any other circumstances

3. Data LED

- Blinks Green when data is being transmitted from this Lumentranslator
- Blinks Red when data is being transmitted by another Lumentranslator and being sent out over the Lumentalk network

4. Power LED

• Solid Green when there is power



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FAQ

Where can I get the .csv import file for my project?

A .csv file can be sent to you via email by contacting your local Lumenpulse representative or by writing to techsupport@lumenpulse.com.

Where can I purchase a LumenID kit?

LumenID kits, which are required for commissioning a project, can be purchased through your Lumenpulse distributor. Please contact your local Lumenpulse representative for pricing information. If you do not know your representative, you can find them at http://www.lumenpulse.com/en/contact.

What is a Lumentalk network?

A Lumentalk network consists of all Lumentalk devices - fixtures, Lumentranslators and Lumenlinks – which can communicate with each other over the power line. Sometimes, your project may be composed of several separate Lumentalk networks. This only means that one network cannot communicate directly with the other, but it is still possible to commission the entire project using the same project file.

Troubleshooting

If you have any questions, you are always welcome to contact techsupport@lumenpulse.com.

I cannot connect to my LumenID hardware.

This is almost always due to missing or incorrect drivers. The Lumenpulse software comes with manual installers for all Lumenpulse hardware. Locate the installer for the LumenID hardware and perform the installation. Reboot your computer and try reconnecting.

It is also possible that your USB port has been reserved for another device or software package. Try plugging your LumenID into a different USB port on your computer, rebooting and reconnecting.

I am connected to my LumenID, but I cannot discover anything on my Lumentalk network.

If you are using an older version of the LumenID, it is possible that it is using firmware which is not compatible with Lumentalk products. Please contact your Lumenpulse technician for information on how to update your LumenID firmware.

I am selecting a device, but I don't see it identified anywhere.

Keep in mind that your Lumentalk network may expand beyond the room you are in and the devices you can see. If you have run a full network discovery, you may have found devices on a separate power circuit. Leave the device selected and check other locations until you locate your device. Or, mark this device as unidentified and come back to it later, once you have assigned a section to everything else.

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