

Congratulations on purchasing a Light-O-Rama Pixel Tree! This document will show you how to display patterns of light on your tree that are sure to delight everyone who sees it.

Additional Items Needed

In addition to the tree you purchased, you will need a few more items to make the lights blink.

1) You will need a way to connect the Pixel Tree's controller to your computer. We recommend the Light-O-Rama "High Speed USB to RS485 Adapter" (red color). If you already have an older LOR USB Adapter (black color), that can work too.



http://store.lightorama.com/usbrs485hs.html

2) You will need a "Cat5", "Cat5e", or "Cat6" cable to connect the USB Adapter to the controller. These are commonly used for Ethernet connections so you may already have one. If not, you can purchase one from the Light-O-Rama online store in any of several lengths.



http://store.lightorama.com/accessories.html

3) You will need the 4.3.16 version (or later) of the Light-O-Rama Software Suite. In order to use the Pixel Editor module within the suite, you will need a PRO license level. If you already own the Light-O-Rama Software Suite, but have a lower license level, you will only need to purchase the upgrade to the PRO level.



Purchase the license here: http://store.lightorama.com/sopr.html

The latest version is always announced and available for download from here: http://forums.lightorama.com/index.php?/forum/15-important-announcements/

4) OPTIONAL: this document assumes you will run your light show from a Windows computer. However, if you do not want to dedicate a computer to that task, you can save your show to an SD card and run it from one of our standalone controllers. Light-O-Rama offers 2 such controllers: the Gen3 Mini Director with 1 port, and the G3 MP3 Director with 2 ports.



http://store.lightorama.com/midiwimp3pl.html



http://store.lightorama.com/g3mp3director.html

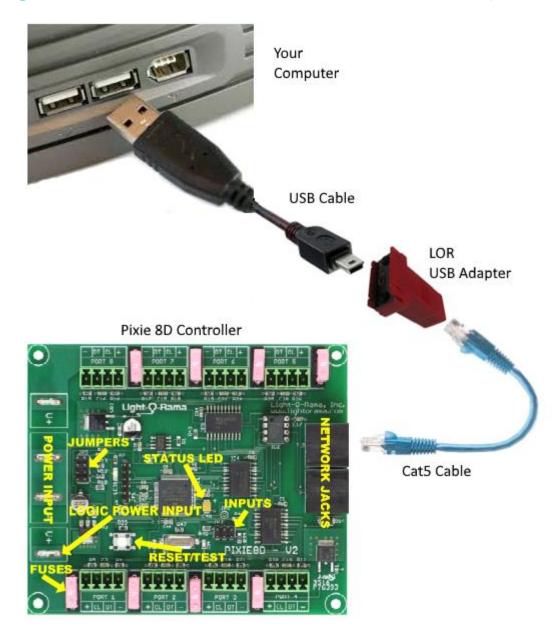
Initial Setup

Install the LOR Software Suite if you haven't already done so. It must be version 4.3.16 or later.

Register the software if you haven't already done so. Instructions are here:

http://www.lightorama.com/help/registering_light-o-rama.htm

Connect your Pixel Tree to your computer as shown below. Do not connect any other controllers.



Apply power to the controller.

Which Network?

The LOR software supports up to 16 LOR networks attached to a single computer. These are labelled "Regular", "Aux A", "Aux B", "Aux C" and so on, up to "Aux O". For every LOR network attached to your computer, you need a separate LOR USB Adapter. So if you are using 2 networks, you would need 2 LOR USB Adapters.

- If the Pixel Tree is the only element in your display, it should be placed on the "regular" network.
- If you already own other LOR controllers, putting the Pixel Tree on its own LOR network might be desirable for reducing network load, and in other cases it might be required. When would it

be required? It is required if you have older controllers that are not compatible with the "enhanced LOR" protocol (ELOR for short). In this case, the older controllers must be placed on a separate network from the Pixie controller. To see a list of which controllers are ELOR compatible, see this page:

http://www1.lightorama.com/network-speeds/

Which Unit ID?

Every LOR controller is assigned a "Unit Id". The LOR Hardware Utility is used to assign unit ids to many types of LOR controllers, including the Pixie controllers. The Pixie 8D controller actually uses 8 consecutive unit ids. The following table shows the unit ids assigned to each string for a sampling of possible unit ids assigned to the controller in the Hardware Utility.

Unit ID assigned in Hardware Utility	1	8	10	11	18	20	21
Unit ID of string on Port 1	01	80	10	11	18	20	21
Unit ID of string on Port 2	02	09	11	12	19	21	22
Unit ID of string on Port 3	03	0A	12	13	1A	22	23
Unit ID of string on Port 4	04	0B	13	14	1B	23	24
Unit ID of string on Port 5	05	0C	14	15	1C	24	25
Unit ID of string on Port 6	06	0D	15	16	1D	25	26
Unit ID of string on Port 7	07	0E	16	17	1E	26	27
Unit ID of string on Port 8	08	0F	17	18	1F	27	28

If the Pixel Tree is the only element in your display, the you can just assign unit id 1 to the controller. However, if you have additional LOR controllers, you will want to assign the Pixie 8D controller to a unit id that is unique and does not overlap any of your other LOR controllers.

Once you decide on the unit id for the controller, write it down! One or more of the following is recommended:

- Write it on a sticker and place the sticker on the controller board.
- Write it on the controller's case.
- Keep a spreadsheet with all of your controller unit ids.

Detailed instructions for setting the unit id for the Pixie controller can be found in the Pixie manual:

http://www1.lightorama.com/PDF/Pixie_Man_Web.pdf

Additional information about setting unit ids can be found in the help file for the Hardware Utility:

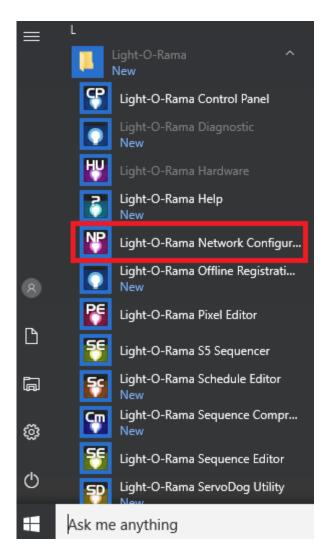
http://www.lightorama.com/help/setting_unit_ids.htm

Here is what the Hardware Utility looks like when connected to the Pixie controller:

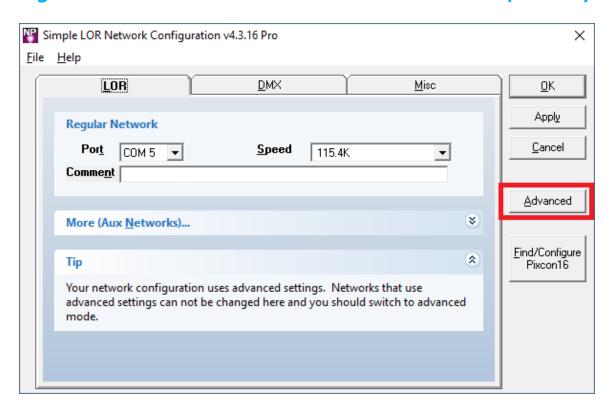


Network Configuration

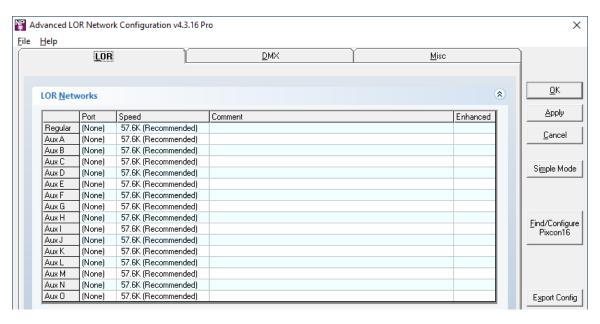
Now that you have decided which network the controller will be placed on and which unit id it will have, you need to tell the LOR software about your network configuration. To do this, open the LOR Network Configuration program:



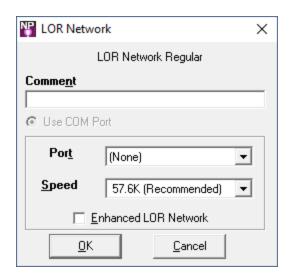
LOR Network Configuration has 2 modes: simple and advanced. If the program opens in simple mode (like the screen below), then you will need to go into Advanced Mode by clicking the "Advanced" button.



Now you should see something like this:



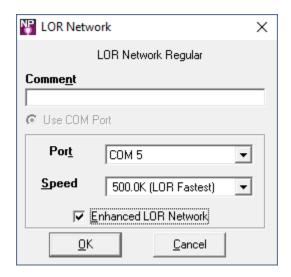
To enter the settings for a network, click on the desired row in the Port or Speed column. Then a window will open where you will be able to enter the settings for that network:



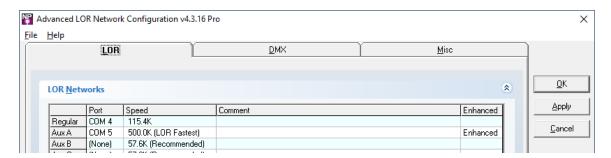
Set the Port field to the comm port that Windows has assigned to your USB Adapter. If you are unsure which comm port Windows has assigned, you can go back to the Hardware Utility and click the "Auto Configure" button in the upper left corner.

If you have a single LOR network, the configuration should look very similar to the picture below

- Port should be specific to your computer
- Speed should be 500K (or perhaps 1000K if supported by your hardware)
- Enhanced LOR Network must be checked



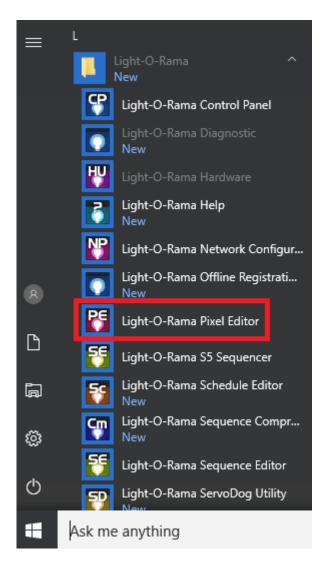
If you are putting pixel controllers (like the Pixie) on one network and other controllers on a different network, then the following configuration is often used (the ports shown in the first column should be specific to your computer). 16 and 24 channel controllers would be attached to the "regular" network, and pixel controllers would be attached to "Aux A".



Click OK to save the configuration and close the program.

Creating a Pixel Editor Preview

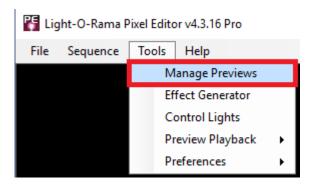
Start the Pixel Editor.



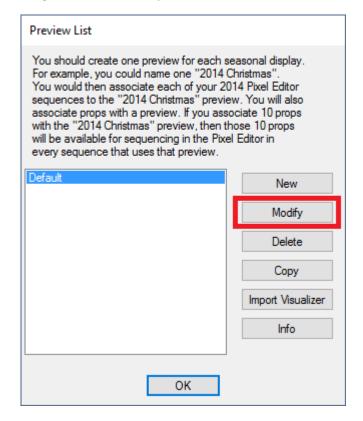
You will be using the Pixel Editor to create the light patterns (sequence) for the Pixel Tree. However, before you can do that, you first need to create a "preview". A preview is a diagram of your light display

- it describes where each display element is placed and which unit ids and channels it uses.

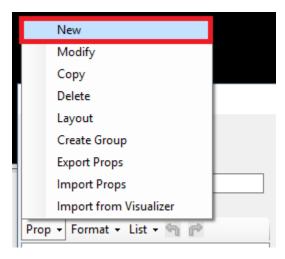
Select Tools > Manage Previews from the Pixel Editor's main menu.



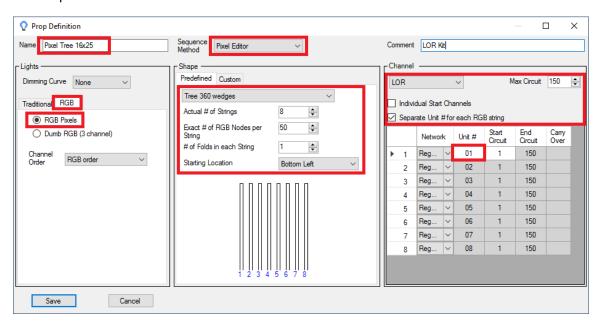
If you are new to the Pixel Editor, you will see a single preview called "Default" already exists - click on "Default" to select it. If you have already used the Pixel Editor, select your current preview. Click the Modify button to make changes to the selected preview.



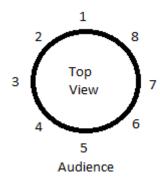
Select Prop > New to a create a new display element (prop).



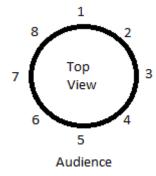
The Prop Definition window should be set as follows:



- Set the name to something meaningful for you
- The left section defines the type of lights used by the prop. The Pixel Tree is composed of RGB Pixels. You might try setting the Dimming Curve to "PixelCurve" for more linear dimming. The pixels should be in RGB order. However, if you start playing effects on your tree and selecting blue in the software makes the actual lights turn red or green, then you should probably revisit the Channel Order setting.
- The **center** section defines the prop's shape. In this case, the Pixel Tree is a 360 degree tree. String 1 will be behind the tree, away from the audience.
 - Specifying a starting location of "Bottom Left", tells the program that the string numbers will
 go around the tree counter-clockwise. This must match the way you have physically wired
 the tree.



• If the starting location is set to "Bottom Right", then the string numbers proceed in a clockwise direction.

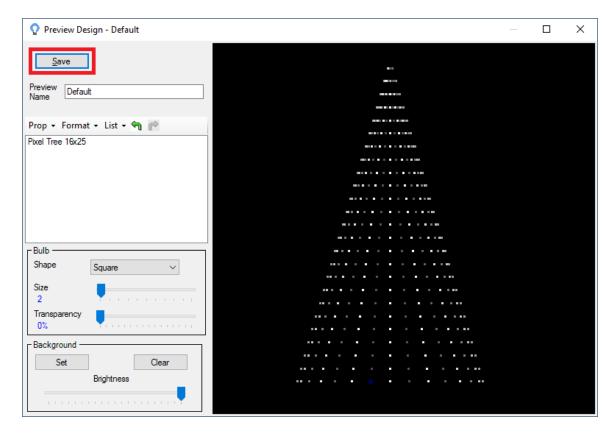


- The **right** section specifies the network, unit id, and starting circuit for the controller.
 - Ensure "Individual Start Channels" is unchecked.
 - Ensure "Separate Unit # for each RGB string" is **checked**.
 - Ensure "Max Circuit" is set to **150**.
 - Enter settings on the first row of the table. All of the subsequent rows will be calculated automatically.
 - Set the network in the first column (Regular, Aux A, etc.). The value you set must match the enhanced network that you set up in LOR Network Configuration.
 - Enter the unit id in the first row of the table. The unit id you enter here must match the value you set in the Hardware Utility.
 - Leave the "Start Circuit" value as 1.

Once all values for the prop have been entered, click the Save button. You can now move the prop by clicking anywhere inside the prop and dragging the mouse. You can resize the prop by clicking on any of the 4 red corners and dragging with the mouse. You may want to increase the bulb size to make the pixels on the tree easier to see on your computer screen.

If you have other props in your display, you can add them now.

After you are finished, click the Save button to save your preview.

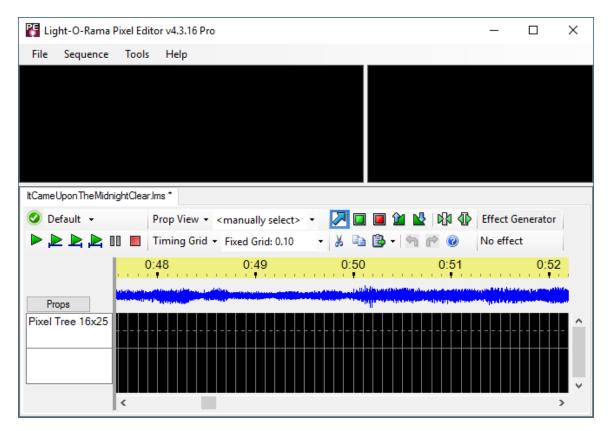


Then click OK to close the Preview List window.

Opening a Sequence

- To add the Pixel Tree to an existing sequence, simply select File > Open from the Pixel Editor's
 main menu; then select the LOR sequence file (files with an LMS or LAS extension). Do NOT add
 the Pixel Tree channels to your existing sequence using the Sequence Editor. The Pixel Tree
 channels will only exist in the Pixel Editor sequence.
- To create a new sequence, use the Sequence Editor to start a new sequence, add timing marks
 etc. Once the new sequence has been saved, you can close the Sequence Editor and open the
 sequence in the Pixel Editor.
- You should NOT have a sequence open in the Sequence Editor and Pixel Editor at the same time. If you want to see a sequence open in both editors at the same time, make a copy of the sequence file; then open the copy in the Sequence Editor and the original file in the Pixel Editor.

Populating a Sequence



Learn how to create a Pixel Editor sequence by watching this video (you can skip the part about creating a preview since you have already done that step):

http://youtu.be/5unlkAJjauU

If you would prefer learning from a written presentation, read this PDF document:

http://www1.lightorama.com/PDF/LOR-PixelEditorIntroduction-RevA.pdf

You can control the Pixel Tree lights as you sequence by running the LOR Control Panel program (you will see a red light bulb in the system tray while it is running) and then select Tools > Control Lights from the Pixel Editor main menu.

- If the lights are the wrong color, for example you select blue but the lights on the tree display red or green, then go back to the Prop Definition and change the Channel Order.
- If the lights do not come on at all, one cause could be that the Unit ID you entered in the Prop
 Definition does not match the Unit ID you set the controller to using the Hardware Utility. Other
 causes are listed here:

http://www.lightorama.com/help/control_lights.htm

After you have finished your sequence, select File > Save Intensity Data from the main menu. This creates a file that is required for playback of the sequence from the Sequence Editor or the Show

Player, or when creating an SD card for the Mini- or MP3-Director. If you have other items in your display that you have sequenced with the Sequence Editor (SE), then the SE sequence and the intensity data file will be played back together.

Need more help?

Checkout the Light-O-Rama helpdesk at http://helpdesk.lightorama.com