Light-O-Rama

presents the

"Select-A-Prop" Commercial Animation Package

SD Card

for the ShowTime N4-G4 Director
used with Light-O-Rama Pixie Series controllers
and smart pixels

Read Me First!

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ABOUT THIS PACKAGE

The "Select-A-Prop" Commercial Animation package allows you to build **one of 11 different smart pixel props** for your venue using Pixie series controllers and Light-O-Rama smart pixels. Your selected prop will connect to a Light-O-Rama N4-G4-MP3 Director, then showcase a pre-loaded **10-minute animation sequence** of looping pixel effects after the included SD card is inserted into the director. The animation sequence will begin playing whenever you provide power to the N4-G4-MP3 Director (manually or with a timer) and stop playing whenever power is cut or the SD card is manually removed. Please view the N4-G4-Mp3 Director manual (available online) for information about setting a specific schedule.

Music should be played independently of the animation effects included in this package, which means you can use any playlist of music for your venue and broadcast it over an FM transmitter, wired speakers, or even just tap into a local radio station for broadcasted music. No music or sound is included with the SD card in this package since the animation effects are not synced to music, so your audio transmission device should NOT be plugged into the N4-G4 MP3 Director.

The animation in this package does not listen to then auto-sync to your broadcasted music. This animation package is designed to "wow the crowd" in a plug-n-show fashion for a variety of commercial-sized props, without the cost of customized musical synchronization. If you have other elements or sections of your display that ARE synchronized to music, they should NOT be connected to the controller of the prop used by this Director or to another network port on this Director. This package is a **standalone system** that can be used in a venue that has other synchronized or non-synchronized shows.

COMPATIBLE PROPS SHAPES

You can create 11 different prop shapes that will work "plug-n-show" fashion with this package when using Pixie series controllers and smart pixels. Pixie controllers and pixel packages can be purchased on the Light-O-Rama website. Each Pixie controller must be set to a specific starting Unit ID and plugged into the correct network on the N4-G4-MP3 Director to properly function, depending on the prop.

Pixels may be spaced at any inch interval allowed by the pixel string. Pixel extension maximums depend on if you use 5V or 12V pixels. The shortest distance possible is recommended (See page 18).

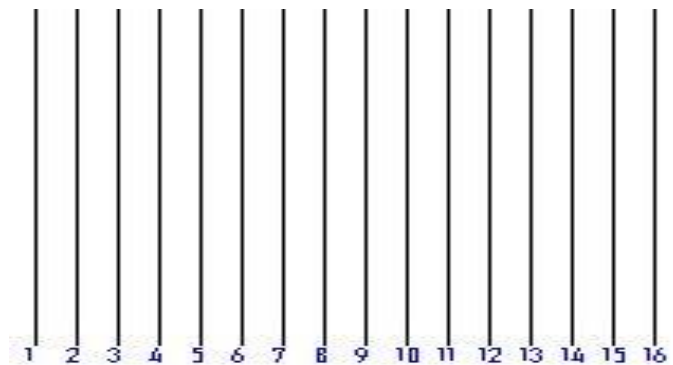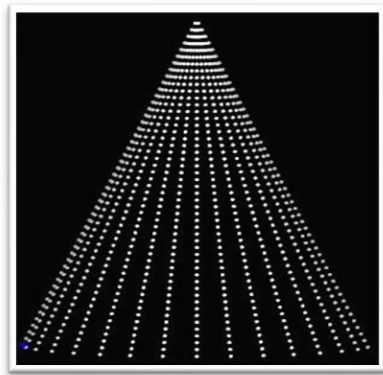| Mega Tree	Vertical Matrix	Tunnel of Arches
16 by 50 Pixels (180°)	16 by 50 Pixels	16 Arches with 50 Pixels Each
16 by 100 Pixels (180°)	32 by 50 Pixels	32 Arches with 50 Pixels Each
32 by 50 Pixels (180°)		
32 by 100 Pixels (180°)		
16 by 25 Pixels (360°)		
32 by 50 Pixels (360°)		
32 by 100 Pixels (360°)		

180° PIXEL TREE – 16 X 50 PIXELS - CONFIGURATION

Additonal Materials:

- One Assembled Pixie16 controller
- 16 strands of 50 pixels (bullets, bulbs, squares or ribbons)
- Tree Frame (self-constructed)
- *Optional: Pixel Mounting Strips*
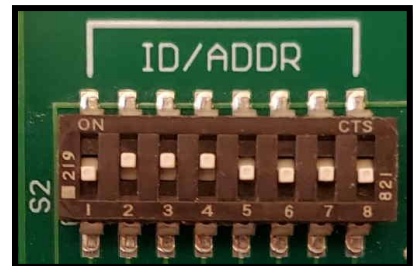- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

The Pixie16 controller should be located at the bottom of the tree. All 16 strands should connect to the Pixie16 controller from the bottom of the strand. The first strand should be on the left side of the tree when viewing it as the audience, and the 16th strand should be farthest to the right.

Pixie DIP Switch Settings:

On the Pixie16 board, set the DIP switches in the following on/off pattern. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 (see page 18).

Director Settings:

Plug a standard Cat5 line from one of the network ports on the Pixie controller to **Network 3** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
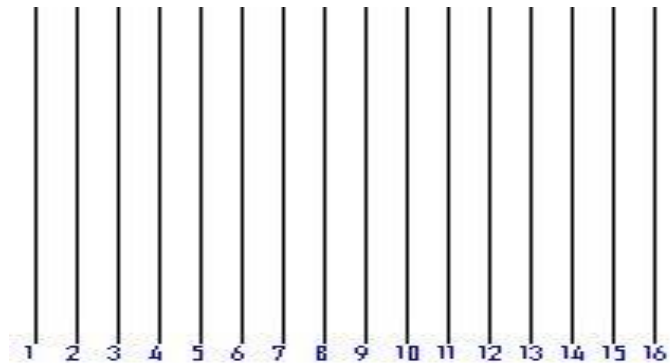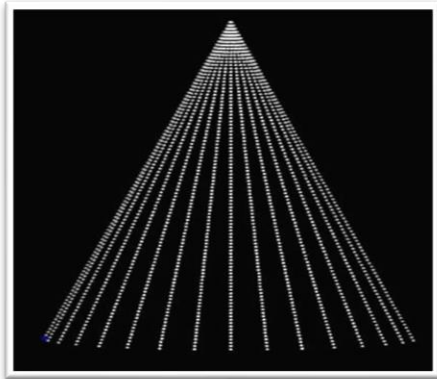
Additonal Materials:

- One Assembled Pixie16 controller
- 16 strands of 100 pixels (bullets, bulbs, or squares)
- Tree Frame (self-constructed)
- *Optional: Pixel Mounting Strips*
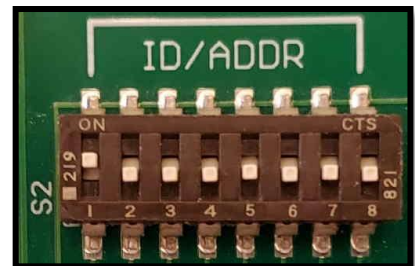- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

The Pixie16 controller should be located at the bottom of the tree. All 16 strands should connect to the Pixie16 controller from the bottom of the strand. The first strand should be on the left side of the tree when viewing it as the audience, and the 16th strand should be farthest to the right.

Pixie DIP Switch Settings:

On the Pixie16 board, set the DIP switches in the following on/off pattern. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 (see page 18).

Director Settings:

Plug a standard Cat5 line from one of the network ports on the Pixie controller to **Network 3** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
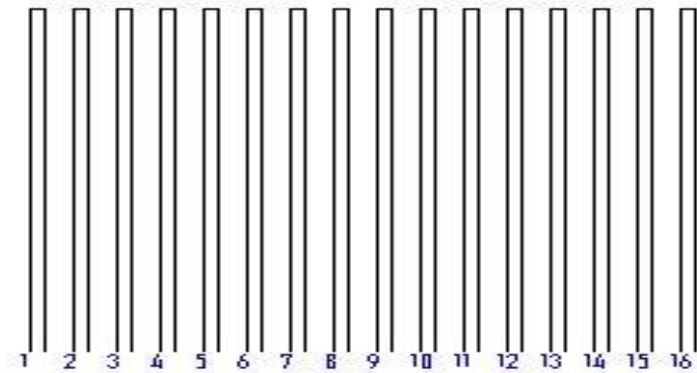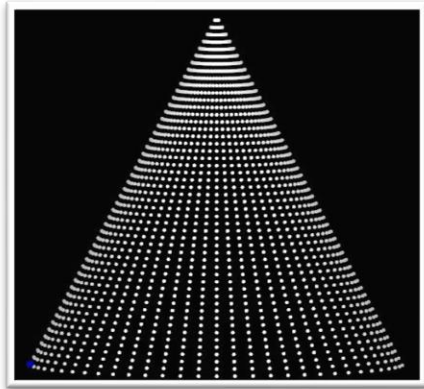
180° PIXEL TREE – 32 X 50 PIXELS - CONFIGURATION

Additonal Materials:

- One Assembled Pixie16 controller
- 16 strands of 100 pixels (bullets, bulbs, or squares)
- Tree Frame (self-constructed)
- *Optional: Pixel Mounting Strips*
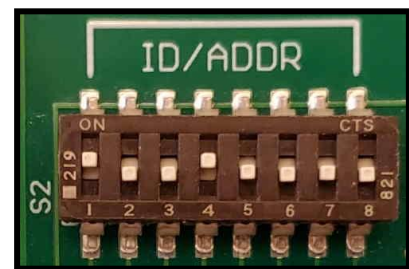- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

All 16 strands connect to the controller from the bottom of the strand. The first strand should be on the left side of the tree when viewing it as the audience. Strands go up the tree for 50 pixels, "fold" at the top, and have 50 pixels come back down adjacent to the "up" portion of the string.
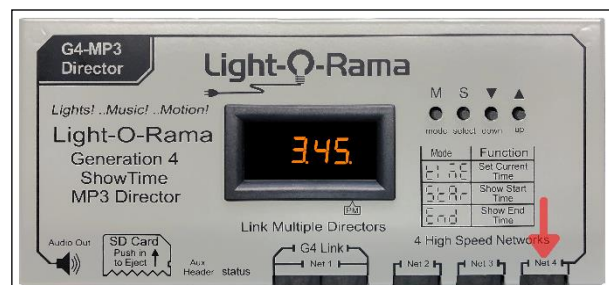

Pixie DIP Switch Settings:

On the Pixie16 board, set the DIP switches in the following on/off pattern. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 (see page 18).

Director Settings:

Plug a standard Cat5 line from one of the network ports on the Pixie controller to **Network 4** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
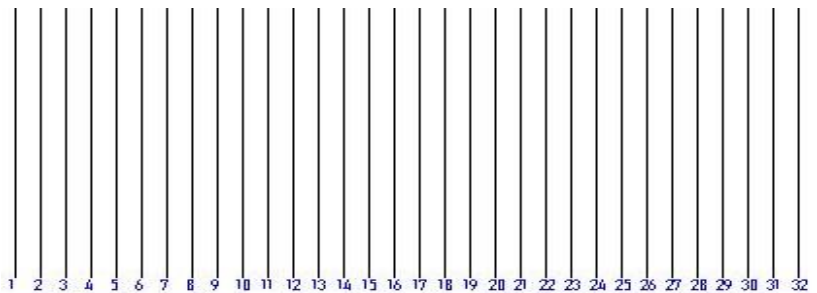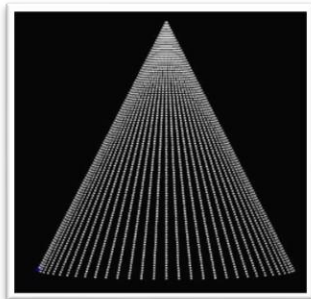
180° PIXEL TREE – 32 X 100 PIXELS - CONFIGURATION

Additonal Materials:

- Two Assembled Pixie16 controllers
- 32 strands of 100 pixels (bullets, bulbs, or squares)
- Tree Frame (self-constructed)
- *Optional: Pixel Mounting Strips*
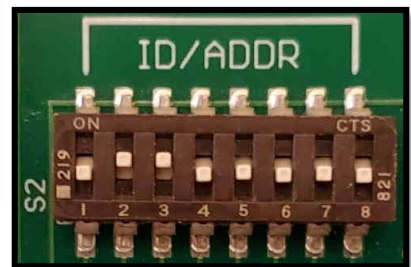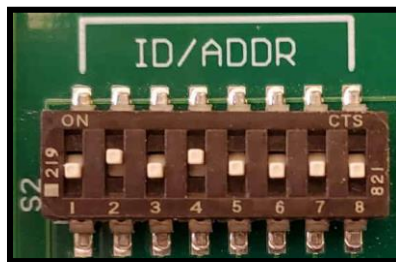- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

All 32 strands connect to the controller from the bottom of the strand. The first strand should be on the left side of the tree when viewing it as the audience. The first Pixie controller will be connected to strands 1-16, and the second Pixie controller will connect to strands 17-32.

Pixie DIP Switch Settings:

On the Pixie16 boards, set the DIP switches in the following on/off patterns. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 of the last controller in the chain (see page 18).

Director Settings:

Connect the two Pixies together with a standard Cat5 line, then plug a Cat5 from the other network ports on the first Pixie controller to **Network 2** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
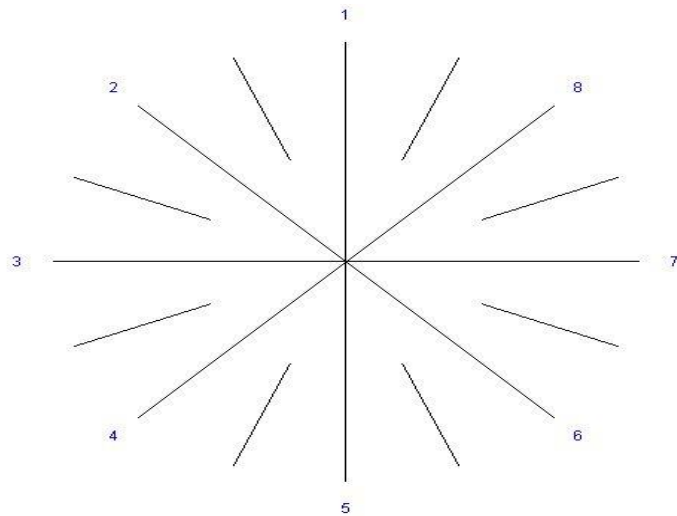
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360° PIXEL TREE – 16 X 25 PIXELS - CONFIGURATION

Additonal Materials:

- One "Complete Pixel Tree Kit" from Light-O-Rama
- OR One Pixie8 controller and 8 Strands of 50 Pixels
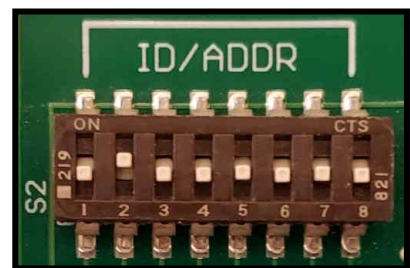
Prop Orientation / Configuration:

The tree should be fabricated in accordance with the instructions provided in the "Plug-n-Show: Complete Pixel Tree Kit" package.
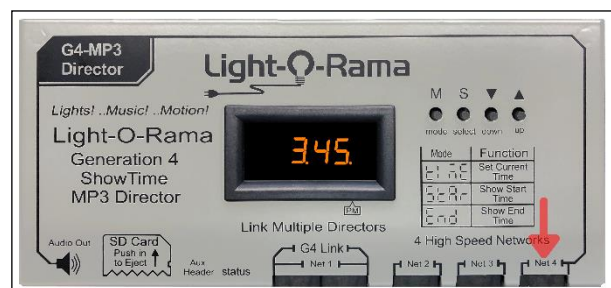

Pixie DIP Switch Settings:

On the Pixie8 board, set the DIP switches in the following on/off pattern. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 (see page 18).

Director Settings:

Plug a standard Cat5 line from one of the network ports on the Pixie controller to **Network 4** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
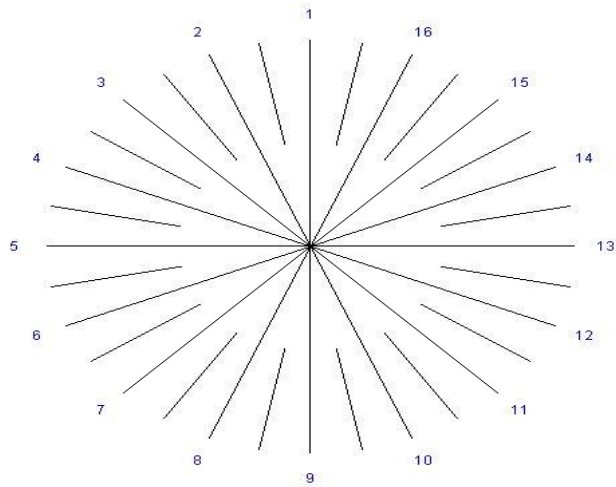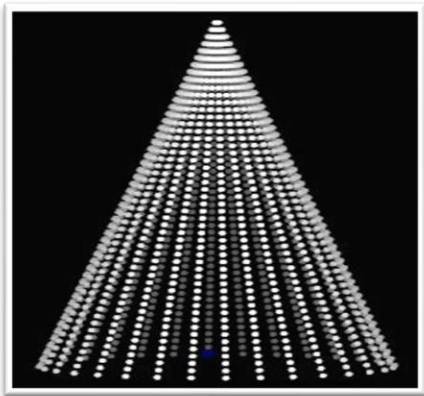
Additonal Materials:

- One Assembled Pixie16 controller
- 16 strands of 100 pixels (bullets, bulbs, or squares)
- Tree Frame (self-constructed)
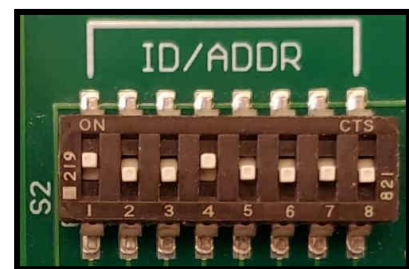- *Optional: Pixel Mounting Strips*
- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

All 16 strands connect to the controller from the bottom of the strand. The first strand should start at the back of the tree and go counterclockwise when viewing it as the audience. Strands go up the tree for 50 pixels, "fold" at the top, and have 50 pixels come back down adjacent to the "up" portion of the string.
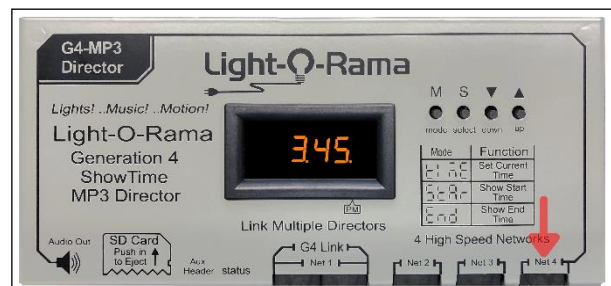
Pixie DIP Switch Settings:

On the Pixie16 board, set the DIP switches in the following on/off pattern. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 (see page 18).

Director Settings:

Plug a standard Cat5 line from one of the network ports on the Pixie controller to **Network 4** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
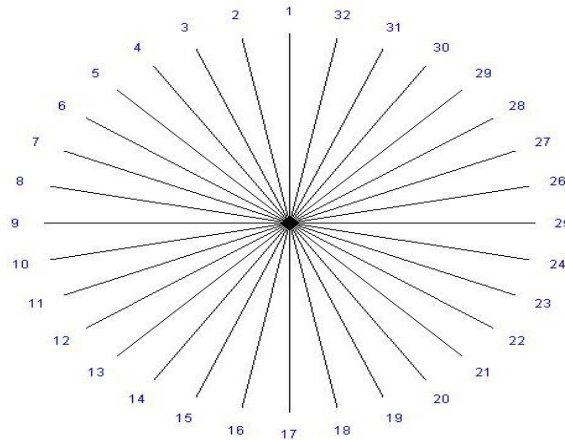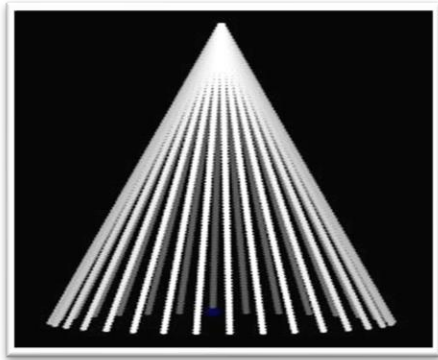
360° PIXEL TREE – 32 X 100 PIXELS - CONFIGURATION

Additonal Materials:

- Two Assembled Pixie16 controllers
- 32 strands of 100 pixels (bullets, bulbs, or squares)
- Tree Frame (self-constructed)
- *Optional: Pixel Mounting Strips*
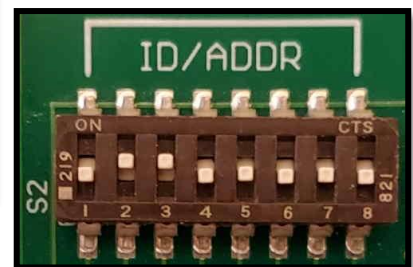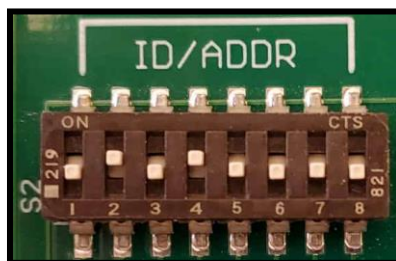- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

All 32 strands connect to the controller from the bottom of the strand. The first strand should start at the back of the tree and go counterclockwise when viewing it as the audience The first Pixie controller will be connected to strands 1-16, and the second Pixie controller will connect to strands 17-32.
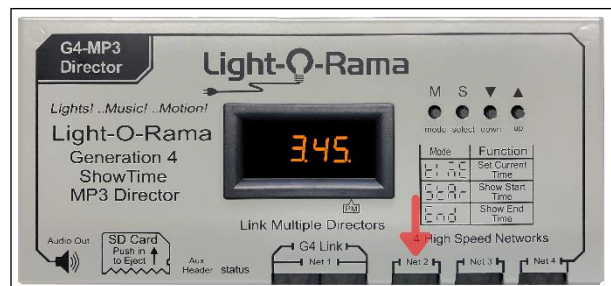
Pixie DIP Switch Settings:

On the Pixie16 boards, set the DIP switches in the following on/off patterns. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 of the last controller in the chain (see page 18).

Director Settings:

Connect the two Pixies together with a standard Cat5 line, then plug a Cat5 from the other network ports on the first Pixie controller to **Network 2** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
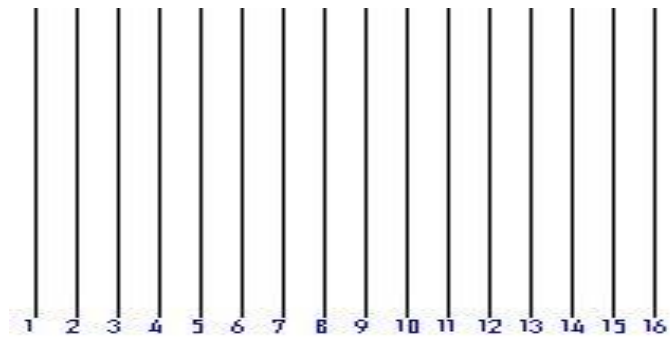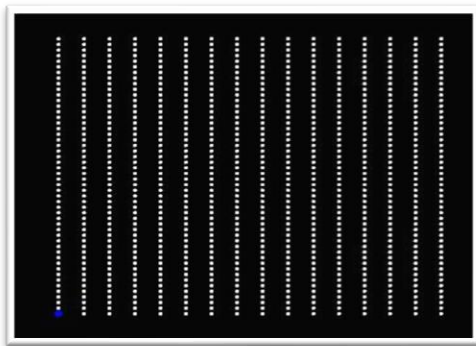
VERTICAL PIXEL MATRIX – 16 X 50 PIXELS - CONFIGURATION

Additonal Materials:

- One Assembled Pixie16 controller
- 16 strands of 50 pixels (bullets, bulbs, or squares)
- Matrix Frame (self-constructed)
- *Optional: Pixel Mounting Strips*
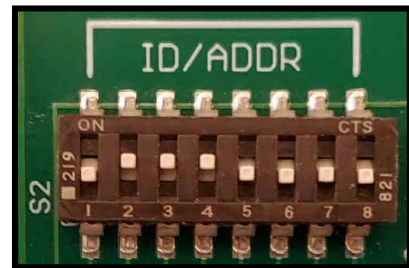- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

The Pixie16 controller should be located at the bottom of the matrix. All 16 strands should connect to the Pixie16 controller from the bottom of the strand. The first strand should be on the left side of the matrix when viewing it as the audience, and the 16th strand should be farthest to the right.

Pixie DIP Switch Settings:

On the Pixie16 board, set the DIP switches in the following on/off pattern. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 (see page 18).

Director Settings:

Plug a standard Cat5 line from one of the network ports on the Pixie controller to **Network 3** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
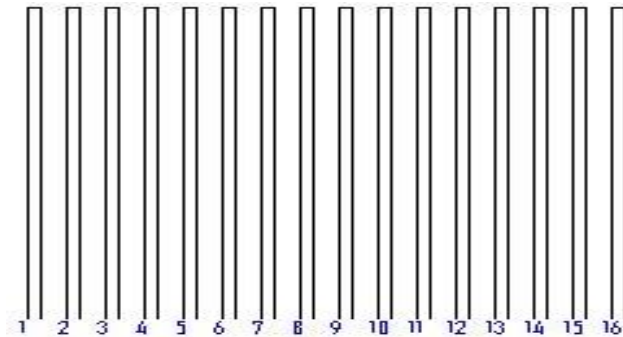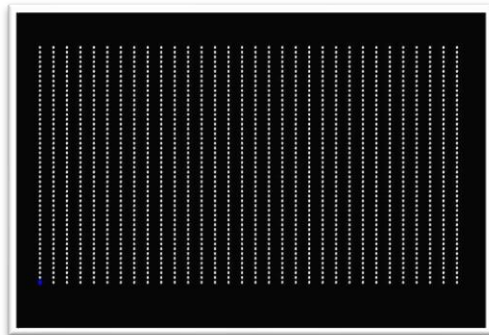
Additonal Materials:

- One Assembled Pixie16 controller
- 16 strands of 100 pixels (bullets, bulbs, or squares)
- Matrix Frame (self-constructed)
- *Optional: Pixel Mounting Strips*
- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

All 16 strands connect to the controller from the bottom of the strand. The first strand should start at the left of the matrix. Strands go up the matrix for 50 pixels, "fold" at the top, and have 50 pixels come back down adjacent to the "up" portion of the string.


Pixie DIP Switch Settings:

On the Pixie16 board, set the DIP switches in the following on/off pattern. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 (see page 18).
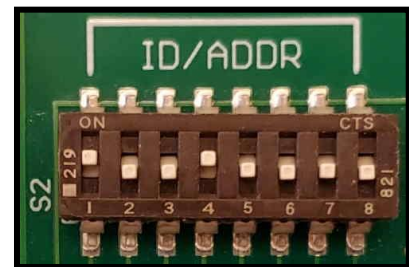
Director Settings:

Plug a standard Cat5 line from one of the network ports on the Pixie controller to **Network 4** on the N4-G4-MP3 Director. The shortest necessary Cat5 line length should be used (1000' maximum).
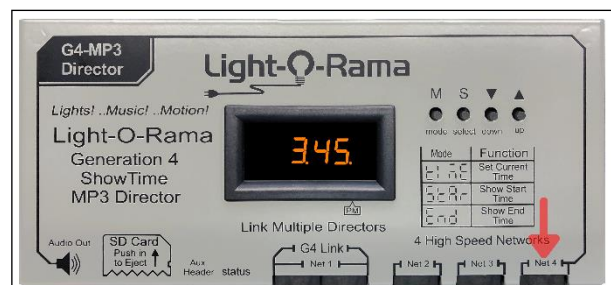
TUNNEL ARCHES – 16 ARCHES X 50 PIXELS EACH - CONFIGURATION

Additonal Materials:

- Two Assembled Pixie8 controllers OR Four Assembled Pixie4 Controllers
- 16 strands of 50 pixels (bullets, bulbs, squares, or ribbons)
- 16 Arch Frames (self-constructed)
- *Optional: Pixel Mounting Strips*
- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

Each strand connects to the Pixie on the left of the arch when viewing the tunnel from the audience; "Arch 1" is at the entrance to the tunnel. The minimum pixel extension length necessary should be used to connect to each arch from the controller.
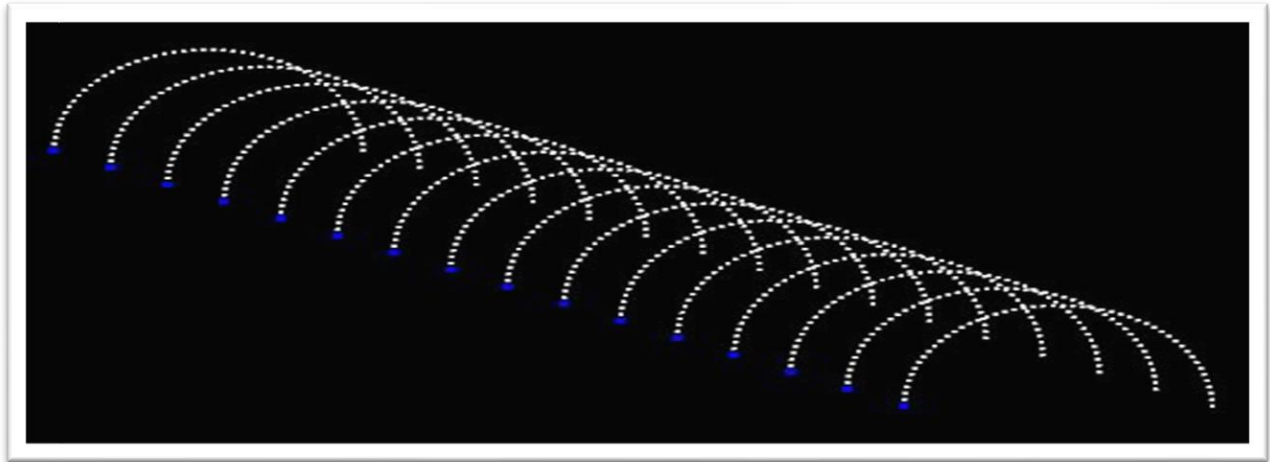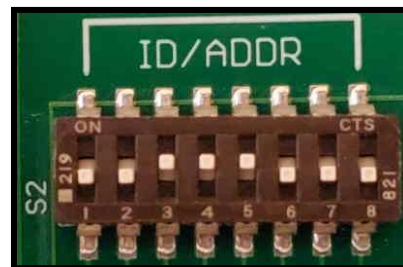

Pixie DIP Switch Settings (Two Pixie8s):

On the Pixie8 boards, set the DIP switches in the following on/off patterns. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 of the last controller in the chain (see page 18).
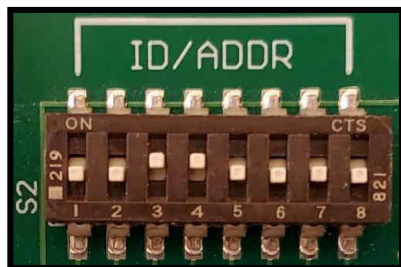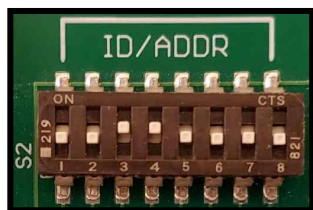

Pixie8 - A

Pixie8 - B

Pixie DIP Switch Settings (Four Pixie4s):

On the Pixie4 boards, set the DIP switches in the following on/off patterns. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 of the last controller in the chain (see page 18).
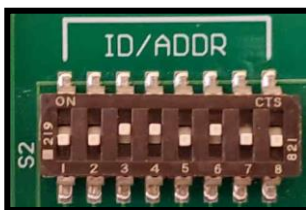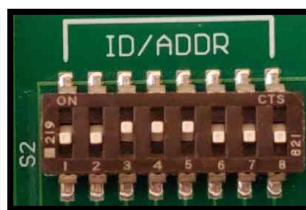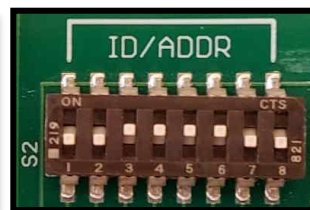

Pixie4 - A   Pixie4 - B   Pixie4 - C   Pixie4 - D

Director Settings:

Plug a standard Cat5 line from one of the network ports on the first Pixie controller to either port on **Network 1** on the N4-G4-MP3 Director. Connect the next Pixie controller to the first controller using a Cat5 line and follow that daisy-chain pattern until all controllers are connected. The shortest necessary Cat5 line length should be used (1000' maximum).

Tunnel Lengths:

Two Pixie Eight Controller (8 Arches Each): For best results and reduced voltage drop, the recommend maximum distance (factoring in pixel extensions) between Arch 1 and Arch 16 using Pixie8 controllers and 12V pixels is ***100 feet.*** Each pixie should be located between the 4th & 5th connected arches of the controller. Each controller should connect to 8 arches.

Four Pixie Four Controllers (4 Arches Each): For best results and reduced voltage drop, the recommend maximum distance (factoring in pixel extensions) between Arch 1 and Arch 16 using Pixie4 controllers and 12V pixels is ***200 feet.*** Each pixie should be located between the 2nd & 3rd connected arches of the controller. Each controller should connect to 4 arches.

TUNNEL ARCHES – 32 ARCHES X 50 PIXELS EACH - CONFIGURATION

Additonal Materials:

- Four Assembled Pixie8 controllers OR Eight Assembled Pixie4 Controllers
- 32 strands of 50 pixels (bullets, bulbs, squares, or ribbons)
- 32 Arch Frames (self-constructed)
- *Optional: Pixel Mounting Strips*
- *Optional: Pixel Extensions*

Prop Orientation / Configuration:

Each strand connects to the Pixie on the left of the arch when viewing the tunnel from the audience; "Arch 1" is at the entrance to the tunnel. The minimum pixel extension length necessary should be used to connect to each arch from the controller.
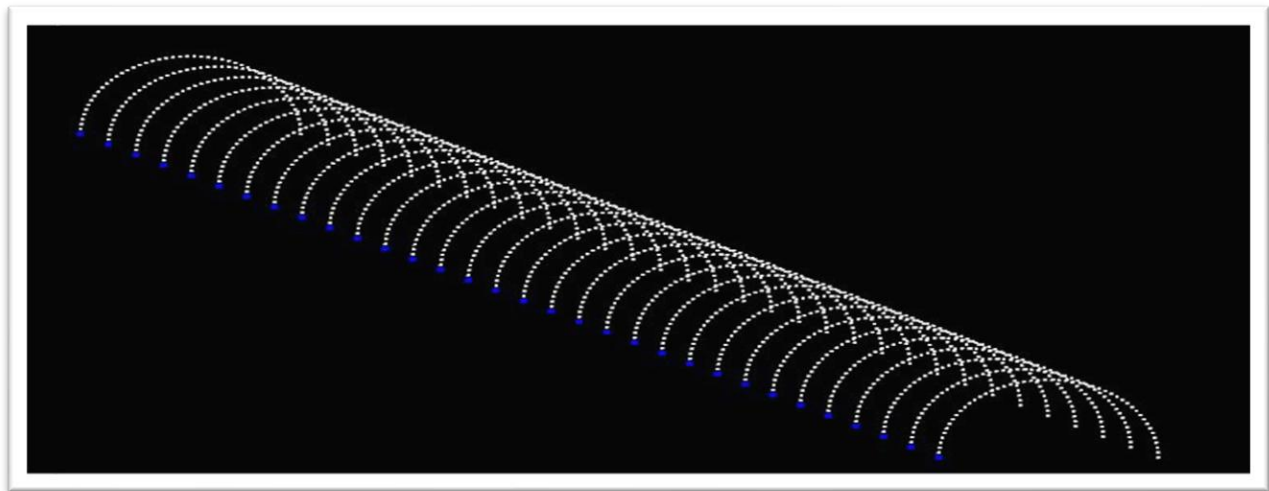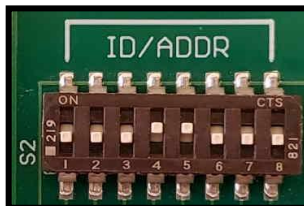

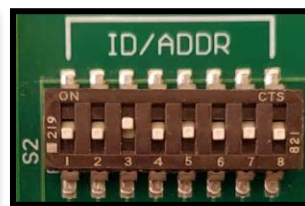
Pixie DIP Switch Settings (Four Pixie8s):

On the Pixie8 boards, set the DIP switches in the following on/off patterns. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 of the last controller in the chain (see page 18).
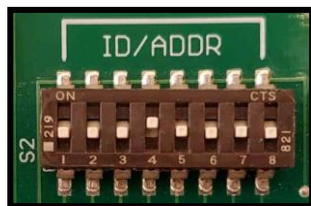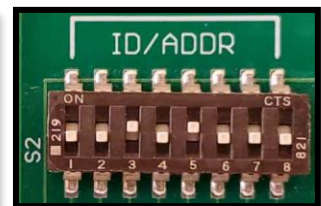

| Pixie8 - A | Pixie8 - B | Pixie8 - C | Pixie8 - D |

Pixie DIP Switch Settings (Eight Pixie4s):

On the Pixie4 boards, set the DIP switches in the following on/off patterns. Do not use the Light-O-Rama Hardware Utility on the computer to set your Unit IDs. A jumper should be placed on JP4 of the last controller in the chain (see page 18).
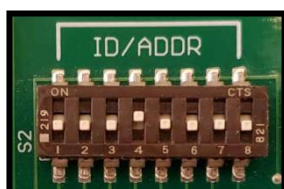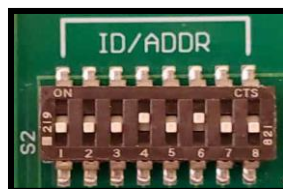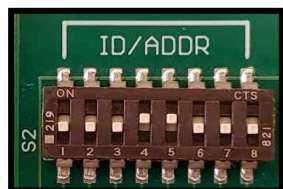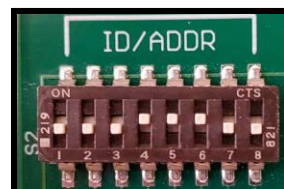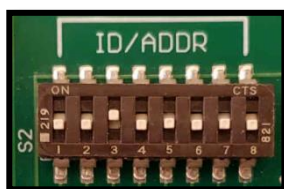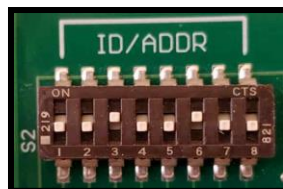

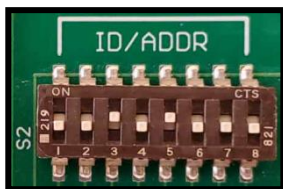**Pixie4 - A**   **Pixie4 - B**   **Pixie4 - C**   **Pixie4 - D**
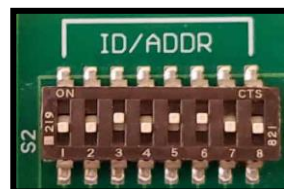

Pixie4 - E   **Pixie4 - F**   **Pixie4 - G**   **Pixie4 - H**

Director Settings:

Plug a standard Cat5 line from one of the network ports on the first Pixie controller to either port on **Network 1** on the N4-G4-MP3 Director. Connect the next Pixie controller to the first controller using a Cat5 line and follow that daisy-chain pattern until all controllers are connected. The shortest necessary Cat5 line length should be used (1000' maximum).

Tunnel Lengths:

Four Pixie Eight Controller (8 Arches Each): For best results and reduced likeliness of voltage drop, the recommend maximum distance (factoring in pixel extensions) between Arch 1 and Arch 32 using Pixie8 controllers and 12V pixels is **_200 feet_**. Each pixie should be located between the 4th & 5th connected arches of the controller. Each controller should connect to 8 arches.

Eight Pixie Four Controllers (4 Arches Each): For best results and reduced likeliness of voltage drop, the recommend maximum distance (factoring in pixel extensions) between Arch 1 and Arch 32 using Pixie4 controllers and 12V pixels is **_400 feet_**. Each pixie should be located between the 2nd & 3rd connected arches of the controller. Each controller should connect to 4 arches.
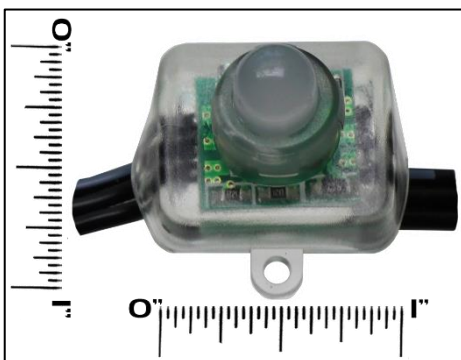
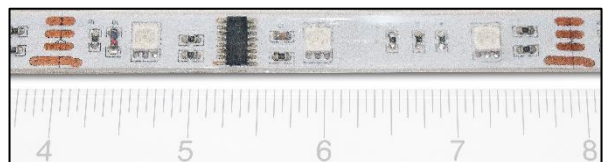## Bullet Nodes

Bulbs

Square Nodes

Ribbons (only usable with props requiring non-folded strands of 50 pixels.)

PIXEL EXTENSION LIMITS

Pixel extensions should only be used when necessary. The longer the extension from a strand of pixels to the Pixie controller, the more likely there will be voltage drop (the last pixels in the strand won't be as bright as the first). We recommend going no more than half of the maximum extension distances to ensure voltage drop avoidance.

Please ensure that you are using the 5V or 12V versions the Pixie controller, smart pixels, and pixel extensions. DO NOT mix and match between 5V and 12V.

Smart Pixel Device	Maximum extension distance to first pixel (5 VDC devices)	Maximum extension distance to first pixel (12 VDC devices)
Pixie 4/8/16 V2 and higher) (With DIP Switches)	20' (Max*)	50' (Max*)

PIXIE BOARD JUMPER ON JP4

Each Pixie controller comes with a baggy containing extra fuses and a jumper. The jumper should be placed on JP4 of the LAST Pixie controller in the chain. If there is only one Pixie controller used for your prop, the jumper should go on that controller.
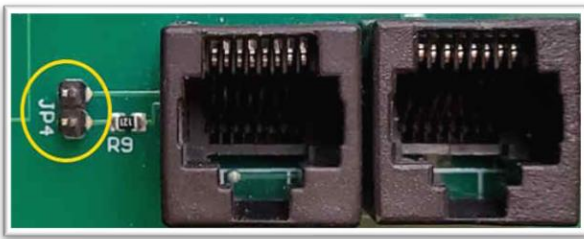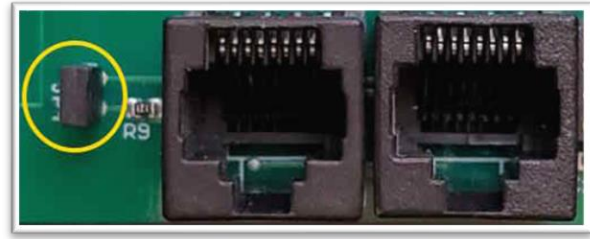
{No Jumper}   {Jumper Installed}

A NOTE ON UNIT IDS

Each strand of Light-O-Rama smart pixels is assigned a "Unit ID," which corresponds to one port in a Pixie controller. A Pixie4 has 4 ports / possible Unit IDs, a Pixie8 has 8 ports / possible Unit IDs, and a Pixie16 has 16 ports / possible Unit IDs. Each of the red, green, and blue settings within each bulb is called a "channel" (which is different from standard PRO Series 1602 controllers). You should not concern yourself with channel assignments when using this package; you only need to be aware of DIP Switch settings, which correspond to Unit ID assignments.

Light-O-Rama uses hexadecimal numbering, meaning that there are six additional Unit IDs between 09 and 10, 19 and 20, etc. This would mean that when starting with Unit ID 10, the following 16 numbers would be 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F (the 17th number would be 20).