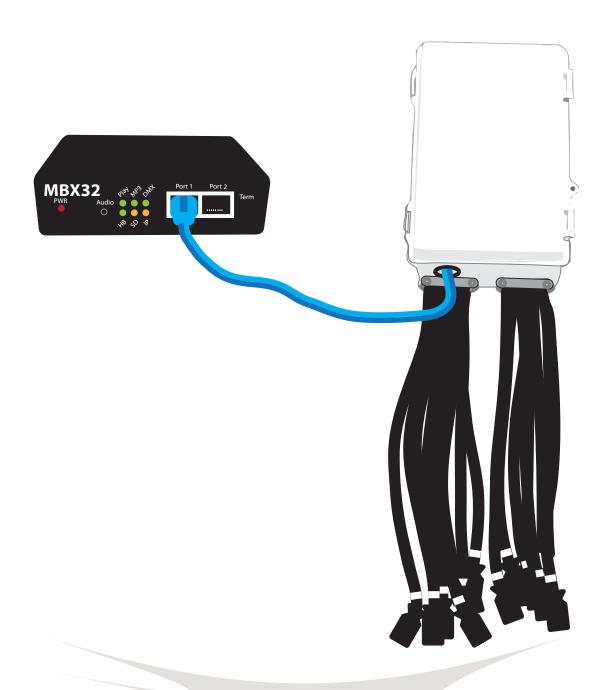


# Channels and Controller Addresses



Updated: March 18, 2014

**Reference Manual** 

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## **UNDERSTANDING THIS GUIDE**

Animated Lighting offers pre-programmed lighting shows. Because every lighting enthusiast has a vastly different collection of light strings and various decorative items, our standard light shows have been programmed to a somewhat 'generic' layout. That is, because we can't know for certain what each customer owns (lighting-wise) and where each item is positioned in their display, we have programmed our standard light shows based on a few assumptions.

A **lighting channel** is anything that needs to be controlled on an individual basis; for example, a single string of Christmas lights, a single bush wrapped in a few red light strings, the light inside a blowmold reindeer, the entire left side of your house wrapped in white light or anything else that needs to be controlled as a unique item. Our LC-16 light controller has 16 channels and can therefore control up to 16 uniquely controlled lighting items.

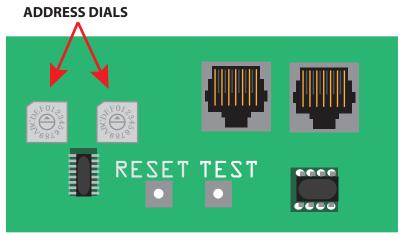
A **section** is a part of a whole. For example, sections 1 thru 4 might be, say, 4 trees in a row or 4 windows in a row lit with a single color or lit as a single item, maybe like a single elf in a group of elves, for example.

Our pre-programmed 16 channel light shows use mostly **colors** and **sections**. At the time of programming our 16 channel shows, we assume that we are programming for 4 Sections that are triple-lit with 3 colors, but really it could be 16 completely unrelated lighting items. Our standard show channel layouts are simply a recommendation; one option of many.

If you want your entire roof to light up as one solid piece, run the cables and the light strings so that you plug a single cord into power and all the light strings covering the entire roof come on together. At that point, the roof is a single *lighting channel*. But, if you want your roof to "animate" in, say, 3 different pieces, you would divide the roof up into 3 *sections* and run a wire from each section back to their own channel on the light controller. 3 sections means that you will use 3 channels on the light controller.

According to the table on the next page, Section 1, Color 1 plugs into Channel 0. Find channel 0 (zero) on one of your LC-16 light controllers and connect it to the lights of Section 1, Color 1. It's that simple. Do the same for Section 1, Color 2 and all of the others.

Finally, because the table for the 16 channel show tells us that the controller address is [0 0], we must set both address dials inside the LC-16 to "0". As a second example, if it had said the controller address should be set to [0 1], then we would set the left address dial to "0" and the right address dial to "1".



Inside the LC-16 enclosure

#### 16 Channel Christmas Shows

#### Controller Address - [0 0]

Ch	Description	Ch	Description
0	Group 1 - Section 1	8	Group 3 - Section 1
1	Group 1 - Section 2	9	Group 3 - Section 2
2	Group 1 - Section 3	10	Group 3 - Section 3
3	Group 1 - Section 4	11	Group 3 - Section 4
4	Group 2 - Section 1	12	Misc - Item 1
5	Group 2 - Section 2	13	Misc - Item 2
6	Group 2 - Section 3	14	Misc - Item 3
7	Group 2 - Section 4	15	Misc - Item 4

These are really just recommendations. Rules, in the case of our STANDARD shows, can be broken. At any time, you can decide to plug in any light that you want to into any channel on the light controller that you want to. Have a great time connecting and re-connecting your lights until you find a style that looks great on your home!

For an example, please turn the page



## Example -16 Channel Christmas Show



### Your house

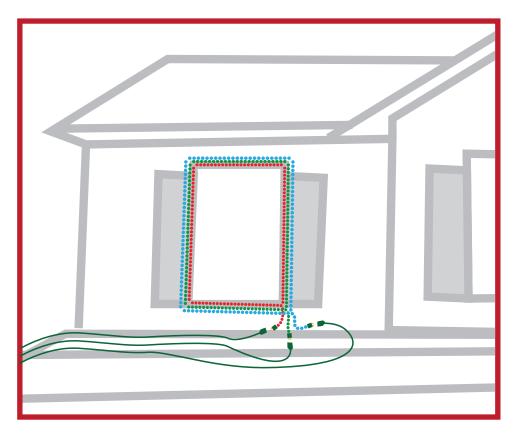
Imagine this cartoon house is your house and you want to put up one of our 16 channel standard Christmas shows. This example will help you get started.



4 sections

Our 16 channel standard Christmas shows are divided into 4 sections, so try to divide your house or display into 4 sections or find 4 items that you want to decorate to act as your 4 sections. We chose to decorate the 4 windows on the 2nd floor.

## Example -16 Channel Christmas Show - (Cont.)



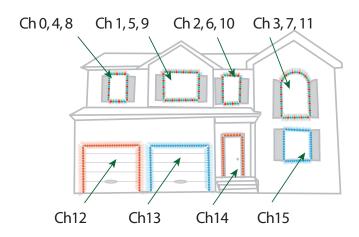
### 3 colors

Each section needs 3 colors. We chose Red, Green and Blue. Each color in each section is connected to an extension cable that runs back to the LC-16 light controller. Because this was our first section, we plugged Section 1 Red into channel 0, Section 1 Green into channel 4, and Section 1 Blue into channel 8. Refer to the table on page 2 for more channel connection information.

### Example -16 Channel Christmas Show - (Cont.)



Now choose 4 miscellaneous items. They could be trees, bushes, reindeer, snowmen or anything! We chose to finish the 4 main features of your house, the 2 garage doors, the front door and the 1st story window.



### **Finished**

Remember, this is simply one example to help you understand how to setup a simple show, you do not need 4 windows or 4 of anything to have a really cool show. In fact, you could just start plugging things into the light controller willy nilly and quickly come up with your own custom layout! There is no wrong way! Have fun!

### 32 Channel Christmas Shows

### Controller Address - [0 0]

Ch	Description	Ch	Description
О	Group 1 - Section 1	8	Group 3 - Section 1
1	Group 1 - Section 2	9	Group 3 - Section 2
2	Group 1 - Section 3	10	Group 3 - Section 3
3	Group 1 - Section 4	11	Group 3 - Section 4
4	Group 2 - Section 1	12	Misc - Item 1
5	Group 2 - Section 2	13	Misc - Item 2
6	Group 2 - Section 3	14	Misc - Item 3
7	Group 2 - Section 4	15	<b>Misc</b> - Item 4

### Controller Address - [0 7]

Ch	Description	Ch	Description
0	Group 1 - Section 5	8	Group 3 - Section 5
1	Group 1 - Section 6	9	Group 3 - Section 6
2	Group 1 - Section 7	10	Group 3 - Section 7
3	Group 1 - Section 8	11	Group 3 - Section 8
4	Group 2 - Section 5	12	Misc - Item 5
5	Group 2 - Section 6	13	Misc - Item 6
6	Group 2 - Section 7	14	<b>Misc</b> - Item 7
7	Group 2 - Section 8	15	Misc - Item 8

### 48 Channel Christmas Shows

### Controller Address - [0 0]

Ch	Description	Ch	Description
0	Group 1 - Section 1	8	Group 3 - Section 1
1	Group 1 - Section 2	9	Group 3 - Section 2
2	Group 1 - Section 3	10	Group 3 - Section 3
3	Group 1 - Section 4	11	Group 3 - Section 4
4	Group 2 - Section 1	12	Group 4 - Section 1
5	Group 2 - Section 2	13	Group 4 - Section 2
6	Group 2 - Section 3	14	Group 4 - Section 3
7	Group 2 - Section 4	15	Group 4 - Section 4

### Controller Address - [0 7]

Ch	Description	Ch	Description
0	Group 1 - Section 5	8	Group 3 - Section 5
1	Group 1 - Section 6	9	Group 3 - Section 6
2	Group 1 - Section 7	10	Group 3 - Section 7
3	Group 1 - Section 8	11	Group 3 - Section 8
4	Group 2 - Section 5	12	Group 4 - Section 5
5	Group 2 - Section 6	13	Group 4 - Section 6
6	Group 2 - Section 7	14	Group 4 - Section 7
7	Group 2 - Section 8	15	Group 4 - Section 8

## 48 Channel Christmas Shows (cont.)

#### Controller Address - [0 D]

Ch	Description	Ch	Description
0	Group 5 - Section A	8	Group 6 - Section A
1	Group 5 - Section B	9	Group 6 - Section B
2	Group 5 - Section C	10	Group 6 - Section C
3	Group 5 - Section D	11	Group 6 - Section D
4	Group 5 - Section E	12	Group 6 - Section E
5	Group 5 - Section F	13	Group 6 - Section F
6	Group 5 - Section G	14	Group 6 - Section G
7	Group 5 - Section H	15	Group 6 - Section H

The sections in groups 5 and 6 have been labeled as A thru H rather than 1 thru 8 to acknowlege that the groups/sections do not correspond together. Groups 5 and 6 are totally unique from groups 1 thru 4. Therefore, section 1 and section A should not be considered the same section. This also applies to the 64 channel shows.

### 64 Channel Christmas Shows

### Controller Address - [0 0]

Ch	Description	Ch	Description
О	Group 1 - Section 1	8	Group 3 - Section 1
1	Group 1 - Section 2	9	Group 3 - Section 2
2	Group 1 - Section 3	10	Group 3 - Section 3
3	Group 1 - Section 4	11	Group 3 - Section 4
4	Group 2 - Section 1	12	Group 4 - Section 1
5	Group 2 - Section 2	13	Group 4 - Section 2
6	Group 2 - Section 3	14	Group 4 - Section 3
7	Group 2 - Section 4	15	Group 4 - Section 4

### Controller Address - [0 7]

Ch	Description	Ch	Description
0	Group 1 - Section 5	8	Group 3 - Section 5
1	Group 1 - Section 6	9	Group 3 - Section 6
2	Group 1 - Section 7	10	Group 3 - Section 7
3	Group 1 - Section 8	11	Group 3 - Section 8
4	Group 2 - Section 5	12	Group 4 - Section 5
5	Group 2 - Section 6	13	Group 4 - Section 6
6	Group 2 - Section 7	14	Group 4 - Section 7
7	Group 2 - Section 8	15	Group 4 - Section 8

## 64 Channel Christmas Shows (cont.)

### Controller Address - [0 D]

Ch	Description	Ch	Description
0	GroupA - Section A	8	GroupB - Section A
1	GroupA - Section B	9	GroupB - Section B
2	GroupA - Section C	10	GroupB - Section C
3	GroupA - Section D	11	GroupB - Section D
4	GroupA - Section E	12	GroupB - Section E
5	GroupA - Section F	13	GroupB - Section F
6	GroupA - Section G	14	GroupB - Section G
7	GroupA - Section H	15	GroupB - Section H

#### Controller Address - [1 0]

Ch	Description	Ch	Description
0	GroupC - Section A	8	GroupD - Section A
1	GroupC - Section B	9	GroupD - Section B
2	GroupC - Section C	10	GroupD - Section C
3	GroupC - Section D	11	GroupD - Section D
4	GroupC - Section E	12	GroupD - Section E
5	GroupC - Section F	13	GroupD - Section F
6	GroupC - Section G	14	GroupD - Section G
7	GroupC - Section H	15	GroupD - Section H

See note on page 5.

## **ANIMATED HOLIDAY TREE - CHRISTMAS**

### **Animated Holiday Tree**

#### Controller Address - [0 0]

Ch	Description	Ch	Description
0	Color 1 - Section 1	8	Color 3 - Section 1
1	Color 1 - Section 2	9	Color 3 - Section 2
2	Color 1 - Section 3	10	Color 3 - Section 3
3	Color 1 - Section 4	11	Color 3 - Section 4
4	Color 2 - Section 1	12	Tree Topper
5	Color 2 - Section 2	13	Misc - Item 1
6	Color 2 - Section 3	14	Misc - Item 2
7	Color 2 - Section 4	15	<b>Misc</b> - Item 3

The "Misc" (Miscellaneous) channels in the programming for the Animated Holiday Tree are extra channels that are not used by the tree. Instead, they are channels for a few extra items in your display. These Misc items could be anything. Light string reindeer and gift boxes are very popular Misc channel items. Whatever items you choose, place them close by around the bottom of the Animated Holiday Tree and these channels will compliment your tree.

## **MINITREES - CHRISTMAS**

## (4) 4 color Mini Trees

### Controller Address - [0 0]

Ch	Description	Ch	Description
0	Tree 1 - Color 1	8	Tree 1 - Color 3
1	Tree 2 - Color 1	9	Tree 2 - Color 3
2	Tree 3 - Color 1	10	Tree 3 - Color 3
3	Tree 4 - Color 1	11	Tree 4 - Color 3
4	Tree 1 - Color 2	12	Tree 1 - Color 4
5	Tree 2 - Color 2	13	Tree 2 - Color 4
6	Tree 3 - Color 2	14	Tree 3 - Color 4
7	Tree 4 - Color 2	15	Tree 4 - Color 4

If you have 3 color mini trees, use the channels for the first 3 colors. The last 4 channels can then be used for miscellaneous items in your display.

## **ARCH SHOW - CHRISTMAS**

### **Four Arches**

### Controller Address - [1 4]

Ch	Description	Ch	Description
О	Arch 1 - Segment 1	8	Arch 2 - Segment 1
1	Arch 1 - Segment 2	9	Arch 2 - Segment 2
2	Arch 1 - Segment 3	10	Arch 2 - Segment 3
3	Arch 1 - Segment 4	11	Arch 2 - Segment 4
4	Arch 1 - Segment 5	12	Arch 2 - Segment 5
5	Arch 1 - Segment 6	13	Arch 2 - Segment 6
6	Arch 1 - Segment 7	14	Arch 2 - Segment 7
7	Arch 1 - Segment 8	15	Arch 2 - Segment 8

### Controller Address - [1 5]

Ch	Description	Ch	Description
О	Arch 3 - Segment 1	8	Arch 4 - Segment 1
1	Arch 3 - Segment 2	9	Arch 4 - Segment 2
2	Arch 3 - Segment 3	10	Arch 4 - Segment 3
3	Arch 3 - Segment 4	11	Arch 4 - Segment 4
4	Arch 3 - Segment 5	12	Arch 4 - Segment 5
5	Arch 3 - Segment 6	13	Arch 4 - Segment 6
6	Arch 3 - Segment 7	14	Arch 4 - Segment 7
7	Arch 3 - Segment 8	15	Arch 4 - Segment 8

## **GREATEST STORY EVER TOLD - CHRISTMAS**

## **Greatest Story - Nativity**

### Controller Address - [0 C]

Ch	Description	Ch	Description
0	Shepard	8	Mary and Joseph Traveling
1	Lamb	9	Angel Gabriel
2	Manger	10	Glory of God (Floods or Strobes)
3	Joseph	11	Star
4	Mary	12	Camel
5	Baby Jesus	13	Heavenly Hosts (multiple angels)
6	Magi	14	Palm Tree
7	Ox	15	Gifts

## STROBES - CHRISTMAS

## Strobes

### Controller Address - [0 B]

Ch	Description	Ch	Description
О	STROBE 1	2	STROBE 1
1	STROBE 1	3	STROBE 1

## SINGING REINDEER FACES

## 4 Singing Reindeer Faces

### Controller Address - [1 6]

Ch	Description	Ch	Description
0	FACE 1 - Outline	8	FACE 2 - Outline
1	FACE 1 - EYE 1	9	FACE 2 - EYE 1
2	FACE 1 - EYE2	10	FACE 2 - EYE2
3	FACE 1 - Top Mouth	11	FACE 2 - Top Mouth
4	FACE 1 - Mid Mouth	12	FACE 2 - Mid Mouth
5	FACE 1 - Low Mouth	13	FACE 2 - Low Mouth
6	FACE 1 - Open Mouth	14	FACE 2 - Open Mouth
7	FACE 1 - Circle Mouth	15	FACE 2 - Circle Mouth

#### Controller Address - [17]

Ch	Description	Ch	Description
0	FACE 3 - Outline	8	FACE 4 - Outline
1	FACE 3 - EYE 1	9	FACE 4 - EYE 1
2	FACE 3 - EYE2	10	FACE 4 - EYE2
3	FACE 3 - Top Mouth	11	FACE 4 - Top Mouth
4	FACE 3 - Mid Mouth	12	FACE 4 - Mid Mouth
5	FACE 3 - Low Mouth	13	FACE 4 - Low Mouth
6	FACE 3 - Open Mouth	14	FACE 4 - Open Mouth
7	FACE 3 - Circle Mouth	15	FACE 4 - Circle Mouth

## STANDARD HALLOWEEN SHOW

#### 16 Channel Halloween Show

#### Controller Address - [0 0]

Ch	Description	Ch	Description
0	STROBE 1	8	Group 2 - Section 1
1	Flood Light 1	9	Group 2 - Section 2
2	Flood Light 2	10	Group 2 - Section 3
3	Black Light	11	Group 2 - Section 4
4	Group 1 - Section 1	12	Group 3 - Section 1
5	Group 1 - Section 2	13	Group 3 - Section 2
6	Group 1 - Section 3	14	STROBE 2
7	Group 1 - Section 4	15	STROBE 3

Note: The STROBE channels are ON and OFF only channels, meaning they don't fade smoothly. They are simply ON or OFF like a standard light switch. Most Strobe lights will not accept dimming and, if fact, the dimming will noticeably shorten the life of the strobe. Any light can be plugged into the Strobe channels (0, 14 and 15), but a strobe light shouldn't be plugged into any channel other than these dedicated channels.

## **PUMPKIN FACES - HALLOWEEN**

### 4 PUMPKIN FACES

#### Controller Address - [1 4]

Ch	Description	Ch	Description
0	FACE 1 - EYE 1	8	FACE 2 - EYE 1
1	FACE 1 - EYE2	9	FACE 2 - EYE2
2	FACE 1 - Top Mouth	10	FACE 2 - Top Mouth
3	FACE 1 - Mid Mouth	11	FACE 2 - Mid Mouth
4	FACE 1 - Low Mouth	12	FACE 2 - Low Mouth
5	FACE 1 - Open Mouth	13	FACE 2 - Open Mouth
6	FACE 1 - Circle Mouth	14	FACE 2 - Circle Mouth
7	FACE 1 - Outline	15	FACE 2 - Outline

#### Controller Address - [1 5]

Ch	Description	Ch	Description
О	FACE 3 - EYE 1	8	FACE 4 - EYE 1
1	FACE 3 - EYE2	9	FACE 4 - EYE2
2	FACE 3 - Top Mouth	10	FACE 4 - Top Mouth
3	FACE 3 - Mid Mouth	11	FACE 4 - Mid Mouth
4	FACE 3 - Low Mouth	12	FACE 4 - Low Mouth
5	FACE 3 - Open Mouth	13	FACE 4 - Open Mouth
6	FACE 3 - Circle Mouth	14	FACE 4 - Circle Mouth
7	FACE 3 - Outline	15	FACE 4 - Outline

## **PUMPKIN FACES - HALLOWEEN**

### 1 PUMPKIN FACE

### Controller Address - [1 4]

Ch	Description	Ch	Description
0	FACE 1 - EYE 1	8	Group 1 - Section 1
1	FACE 1 - EYE2	9	Group 1 - Section 2
2	FACE 1 - Top Mouth	10	Group 1 - Section 3
3	FACE 1 - Mid Mouth	11	Group 1 - Section 4
4	FACE 1 - Low Mouth	12	Group 2 - Section 1
5	FACE 1 - Open Mouth	13	Group 2 - Section 2
6	FACE 1 - Circle Mouth	14	Group 2 - Section 3
7	FACE 1 - Outline	15	Group 2 - Section 4