



**W**hat's included?

**C**onnection Diagram

**O**utput Channels

**S**how Card

**A**udio and Sound

**P**ower Up

**T**rouble Shooting

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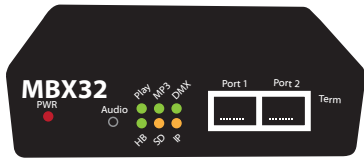
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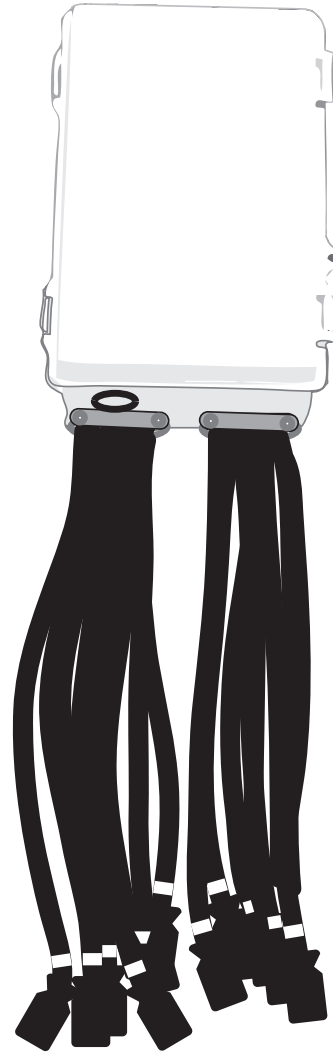
# What's included?

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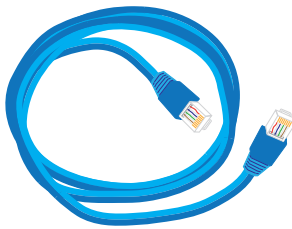
(1) MBX32



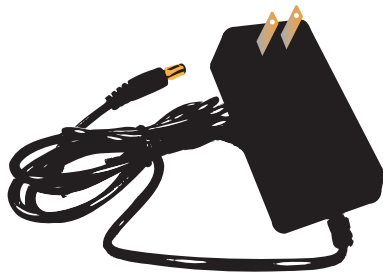
(1) LC-16 Light Controller



(1) CAT5 Cable

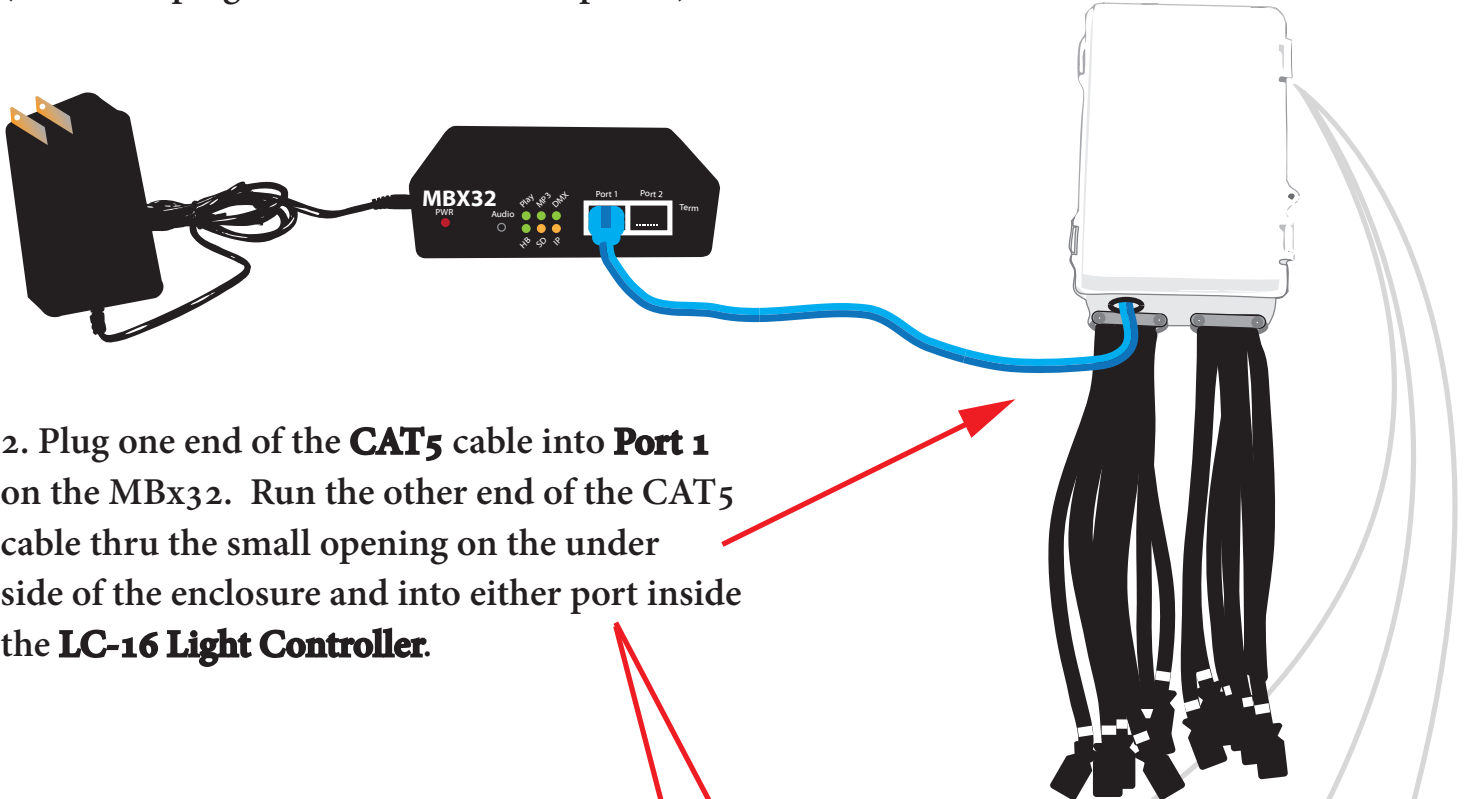


(1) DC Transformer



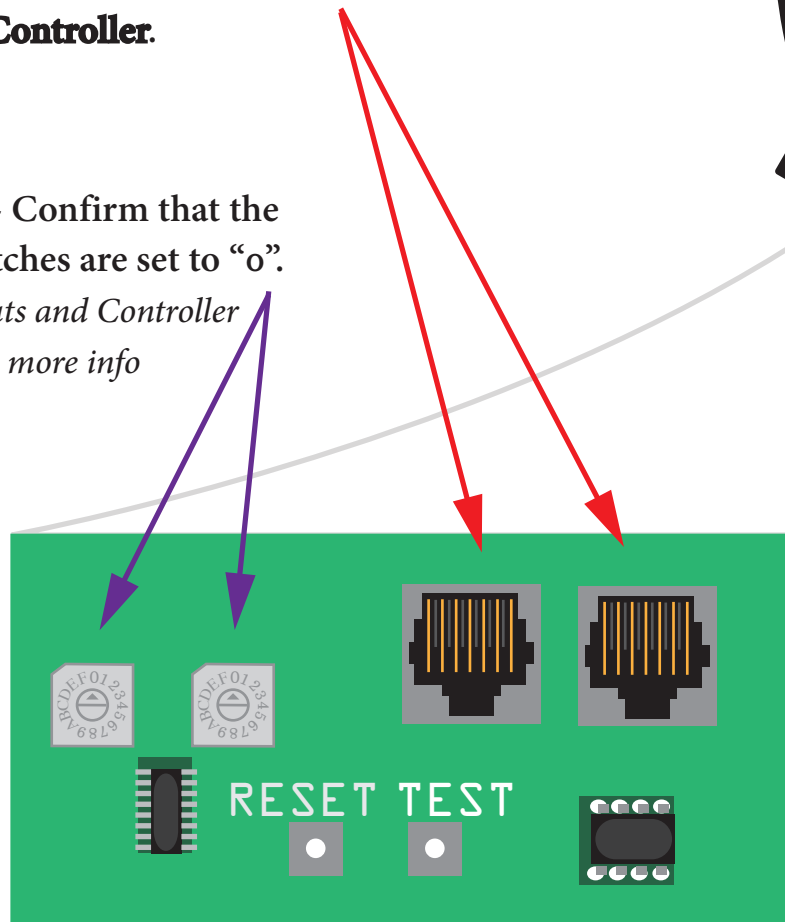
# Connection Diagram

1. Plug the **DC transformer** into the **MBx32**  
(**DO NOT** plug the transformer into power)



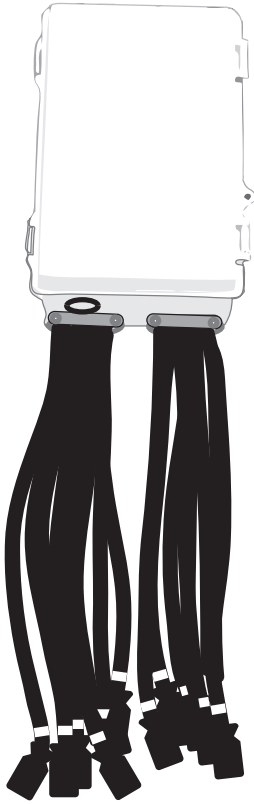
2. Plug one end of the **CAT5** cable into **Port 1** on the MBx32. Run the other end of the CAT5 cable thru the small opening on the under side of the enclosure and into either port inside the **LC-16 Light Controller**.

3. Address Dials - Confirm that the dials on both switches are set to "0".  
-See *Channel Layouts and Controller Settings Manual* for more info



Inside the LC-16 enclosure

# Output Channels



4. Place your controller into position, then connect your light strings to the 16 channel outputs.

Note: Be sure to not overload the controller. It can handle up to 8 Amps per channel, but only up to 15 Amps over all 16 channels total. (A 30Amp version is also available)

Many customers have many different kinds, amounts and styles of lights. There is no right or wrong way of connecting lights to our LC-16 Light Controllers. Typically, we program the lights in Colors and Zones. Take a look at the chart below for a helpful reference that will guide you in laying out your channels.

Our 16 channel Christmas light shows are programmed in this manner:

Ch	Description	Ch	Description
0	Color 1 - Zone 1	8	Color 3 - Zone 1
1	Color 1 - Zone 2	9	Color 3 - Zone 2
2	Color 1 - Zone 3	10	Color 3 - Zone 3
3	Color 1 - Zone 4	11	Color 3 - Zone 4
4	Color 2 - Zone 1	12	Misc A - Tree Topper
5	Color 2 - Zone 2	13	Misc B - Section 1
6	Color 2 - Zone 3	14	Misc B - Section 2
7	Color 2 - Zone 4	15	Misc B - Section 3

For information on channel layouts for our other shows, please reference our *Channels and Controller Addresses Manual*

# S how Card

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5. Insert your show card (SD card), if not already installed. The end of the card should be flush with the enclosure when fully inserted properly. You should no longer be able to see the face of the card.

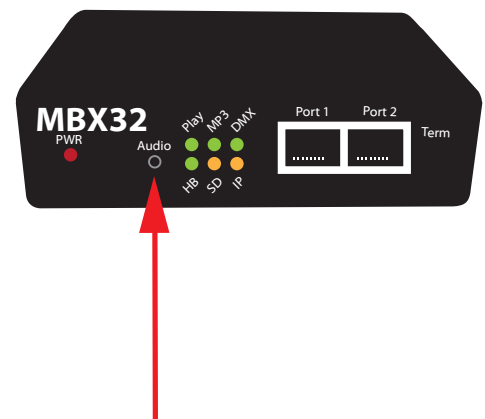


# A udio and Sound

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**WARNING:** Do not connect the MBx32 directly to a powered amplifier like the ones used in large applications. This audio output was designed for use with small speakers or FM Transmitters. A DI box must be used if power amplification is required (contact us for more information).

Note: There is only one output level on the MBx32 unit. It can't be turned up or down. All volume control must be done by the connected speakers or FM Transmitter.



6. Plug your speakers or FM Transmitter into the **AUDIO** connector on the front of the MBx32.

FM Transmitter *and* speakers can be used together in most situations.

# **P**ower Up

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7. Once all connections have been made and it is safe to do so, plug your **LC-16 Light Controller** into power.

8. Plug the **DC Transformer** for the **MBx32** into Power. This must ALWAYS be the very last step.

Your show will begin in moments. If you have a show that has been set to operate only within certain time frames, your show will not begin until the designated time.

If you have any issues, please continue on to the *Troubleshooting* section.

# Trouble Shooting

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## MBx32 -

- No Power and No Indicator Lights - check to make sure that the DC Transformer is plugged into the MBx32 and that the DC Transformer is plugged into a power outlet. If plugged into a surge protector or power strip, make sure the strip is on.

- No Show is playing - Check to make sure that the HB indicator light on the MBx32 is blinking. If HB is not blinking, please contact Animated Lighting. Check to make sure that the PLAY indicator light is on. If it is on and you don't see a show, please troubleshoot your LC-16 controller on the following page. If don't see the PLAY indicator light on, then your SD is not currently playing a show. Your show may be a 'timed' show with scheduled start and stop times. If so, wait until the time of the show, then start the show again. If the PLAY light is off and you have not purchased a timed show, please contact Animated Lighting.

- All 6 indicator lights are flashing together steady - Eject then reinsert the SD card

- All 6 indicator lights are snaking around in a circle then lighting one single light - this is a show card error. Please contact Animated Lighting for a card replacement.

- Slow blinking HB light, all other indicators off - Check to make sure that the SD card isn't locked. Remove the card from the unit by pressing the card further into the slot. Once it clicks, the card will pop out. Remove the card from the slot and check the small slider switch on the side of the card. Confirm that it is in the "unlocked" position.

- No Audio - Make sure that your speakers are connected to the Audio jack on the front of the MBx32. Check to make sure that the MP3 indicator light on the unit is on. If the indicator is on and you do not have audio output, make sure that your speakers are turned on and that all cable connections have been made. If you do not see the MP3 indicator light on, then the SD card believes that no music should be playing at this time. If this is incorrect, please contact Animated Lighting for SD card update.

- Why don't we use Port 2? - Port 2 is the network connection for the Pixel Driver device. The Pixel Driver controls RGB Pixel-based LEDs. If you are interested in learning more, contact Animated Lighting or email [sales@AnimatedLighting.com](mailto:sales@AnimatedLighting.com)

Power reset is required for all settings changes to take affect. To reset the power, remove the power cable, wait 2 seconds, then reinsert the power cable and allow the unit a few seconds to power up.

# Trouble Shooting (cont.)

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## LC16 Light Controller - (Remove POWER before opening enclosure)

- No Power and No Indicator Lights - check to make sure that the unit is plugged into a power outlet. If plugged into a surge protector or power strip, make sure the strip is on. Check the 1A fuse for continuity.

- Power is on, but no lights - Check to make sure that the HB indicator light on the light controller is blinking. If HB is not blinking, please contact Animated Lighting. Check to make sure that the 16 channel indicator lights on the circuit board are flashing to the music. If they are, check the 15A fuse(s) for continuity. If they are not, check the C indicator light (next to the HB indicator on the circuit board). It should be flashing with the music. If it is, please contact Animated Lighting. If it is not, check your CAT5 cable. Also, make sure that your MBx32's PLAY indicator light is on. If it is not, troubleshoot your MBx32 using the previous page. If you still don't see the C indicator flashing, you may need to replace the 485 communications chip. Please contact Animated Lighting for details.

Power reset is required for all settings changes to take affect. To reset the power, remove the power cable, wait 2 seconds, then reinsert the power cable and allow the unit a few seconds to power up.

## Tips -

A few things to think about when installing your system. This is a sensitive computer network that is being installed in less than perfect conditions. Follow these helpful guidelines to ensure years of trouble free use.

- All outlets used with this equipment must deliver 'clean' power. They must have a ground and the hot/neutral must be wired correctly. That goes for all extension cables, too.

- Motors, like the ones inside fans on inflatable displays and moving head light fixtures, can cause noise in the power circuit. Circuit sharing with these types of items should be avoided.

- The CAT5 cable carries a low voltage data signal and should always be ran 12" or more away from extension cords and light strings. The interference from the higher voltage will cause noise in the CAT5 cable and cause your show to look "sporadic".