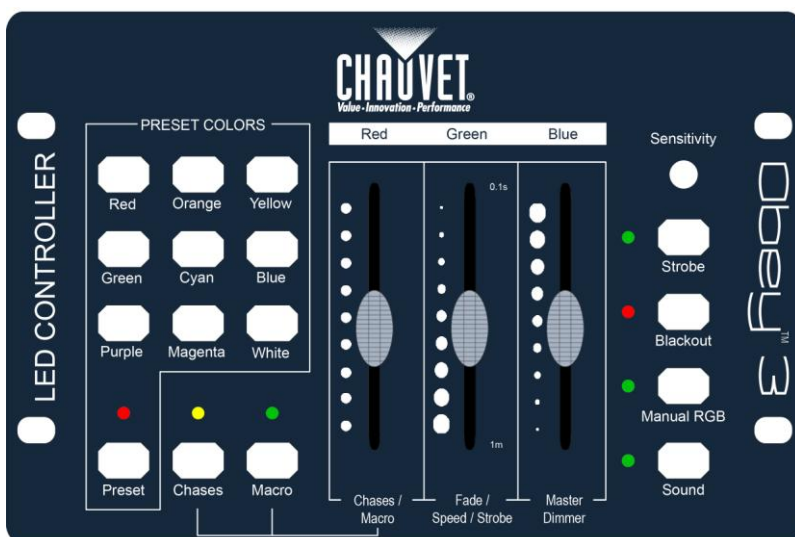
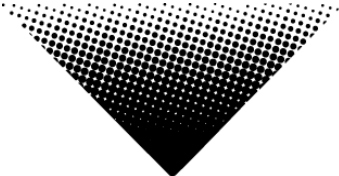


# Obeey™ 3

## Snapshot

Use on Dimmer	<input type="checkbox"/>
Outdoor Use	<input type="checkbox"/>
Sound Activated	<input checked="" type="checkbox"/>
DMX	<input checked="" type="checkbox"/>
Master/Slave	<input type="checkbox"/>
Autoswitching Power Supply	<input type="checkbox"/>
Replaceable Fuse	<input type="checkbox"/>
User Serviceable	<input type="checkbox"/>
Duty Cycle	<input type="checkbox"/>

## User Manual



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# 1. BEFORE YOU BEGIN

## What is included

- 1 x Obey™ 3
- 1 x Power supply
- 1 x Warranty Card
- 1 x User Manual

## Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.




## Manual Conventions

CHAUVET manuals use the following conventions to differentiate certain types of information from the regular text.

CONVENTION	MEANING
[10]	A DIP switch to be configured
<Menu>	A key to be pressed on the fixture's control panel
1~512	A range of values
50/60	A set of values of which only one can be chosen
<b>Settings</b>	A menu option not to be modified (for example, showing the operating mode/current status)
<b>MENU &gt; Settings</b>	A sequence of menu options to be followed
<b>ON</b>	A value to be entered or selected

## Icons

This manual uses the following icons to indicate information that requires special attention on the part of the user.

ICONS	MEANING
	This paragraph contains critical installation, configuration or operation information. Failure to comply with this information may render the fixture partially or completely inoperative, cause damage to the fixture or cause harm to the user.
	This paragraph contains important installation or configuration information. Failure to comply with this information may prevent the fixture from functioning correctly.
	This paragraph reminds you of useful, although not critical, information.

## Safety Instructions



Please read these instructions carefully. It includes important information about the installation, usage and maintenance of this product.

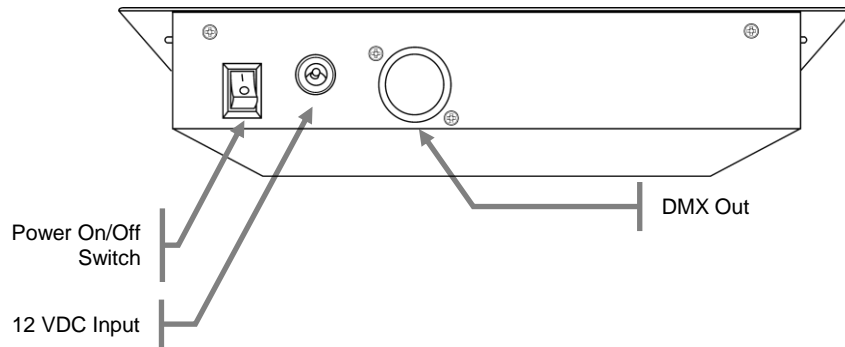
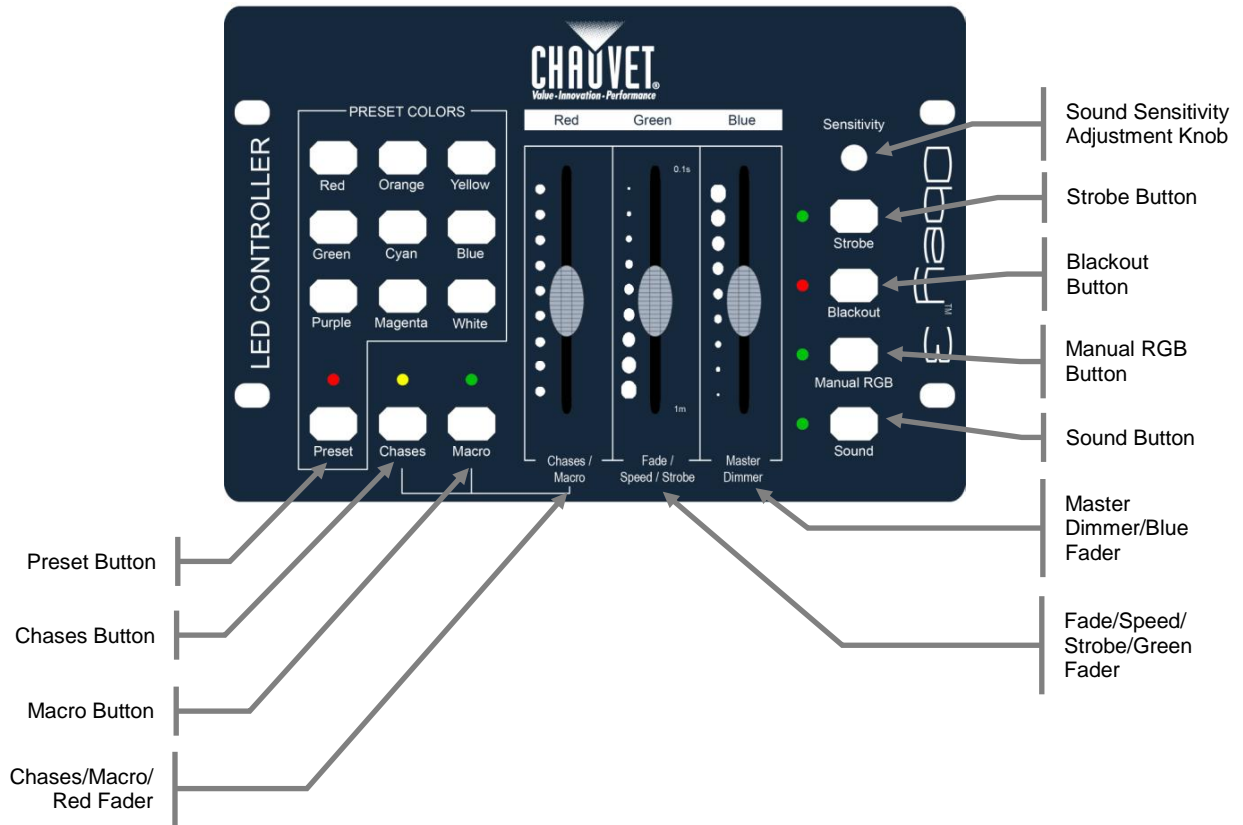
- Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only! To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Maximum ambient temperature (Ta) is 104° F (40° C). Do not operate fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.
- Never connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.

# 2. INTRODUCTION

## Features

- Universal DMX-512 compact controller for 3-channel LED fixtures
- Works with all 3-channel LED fixtures
  - Channel 1: red
  - Channel 2: green
  - Channel 3: blue
- Playback options include automated, sound-activated or manual RGB
- Playback modes:
  - Preset: 9 built-in colors
  - Chase: triggers automated programs
  - Macro: scrolls through the color spectrum
- Variable fade times for all playback modes
- Variable strobing on the fly
- Fader for master dimmer
- Adjustable blackout allows fixtures to fade out
- Adjustable audio sensitivity

# Product Overview



# 3. SETUP

## AC Power

This fixture runs on 12 VDC, 500 mA. Before powering on the unit, make sure the power supply voltage to which you are connecting it is correct.



**Always connect the fixture to a switched circuit. Never connect the fixture to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used only as a 0 to 100% switch.**

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating indicates its average current draw under normal conditions.

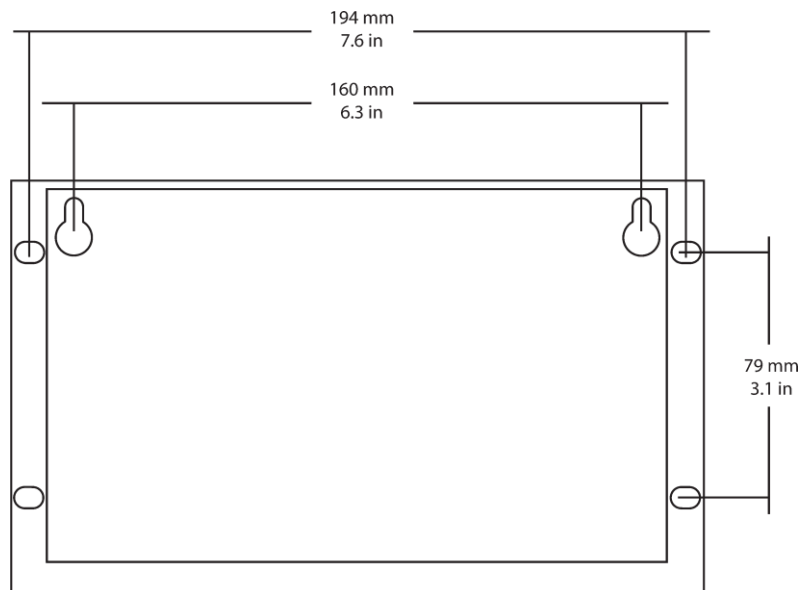
## Mounting

### Orientation

The Obey™ 3 may be mounted in any safe position, provided there is adequate room for ventilation.

### Installation

Please see the drawing below, which shows the back of the controller. It details the dimensions for mounting. This will aid in placing the holes for installation.



# 4. OPERATING INSTRUCTIONS

## Operating Modes

### Preset Operation

This controller has preset color macros. There are nine color macros to choose from, which may be accessed using the nine preset buttons. Please see the instructions below for this operation.

1. Press **<PRESET>** until the appropriate LED indicator lights.
2. Adjust the Fade/Speed/Strobe/Green Fader to the desired level to set the Fade Time.
3. Adjust the Master Dimmer/Blue Fader to the desired level.
4. Select one of the nine preset color macros.
5. The Fade time and dimming may now be readjusted.



Please be sure that the Strobe, Blackout, and Manual RGB functions are not overriding the controls.



Sound will not function in Preset Mode.

### Chases Operation

This controller has preset color chases, which will change between one color and another. There are several color combinations to choose from. Please see the instructions below for this operation.

1. Press **<CHASES>** until the appropriate LED indicator lights.
2. Adjust the Fade/Speed/Strobe/Green Fader to the desired level to set the Fade Time.
3. Adjust the Master Dimmer/Blue Fader to the desired level.
4. Using the Chases/Macro/Red Fader, select one of the color combinations.
5. The Fade time and dimming may now be readjusted.



There are several preset color combinations that may be discovered by moving the Chases/Macro/Red Fader through the full range of movement.



Please be sure that the Strobe, Blackout, and Manual RGB functions are not overriding the controls.



Sound will function in Preset Mode.

### Macro Operation

This controller has preset color macros. This is a static color selection, meaning that no chasing, movement, or color flows of any kind will occur. There are several color macros to choose from, which may be accessed using the Chases/Macros Fader. Please see the instructions below for this operation.

1. Press **<MACRO>** until the appropriate LED indicator lights.
2. Adjust the Fade/Speed/Strobe/Green Fader to the desired level.
3. Adjust the Master Dimmer/Blue Fader to the desired level.
4. Using the Chases/Macro/Red Fader, select one of the color macros.
5. The Fade time and dimming may now be readjusted.



Please be sure that the Strobe, Blackout, and Manual RGB functions are not overriding the controls.



Sound will not function in Preset Mode.



# Operating Functions

## Strobe

This controller has multiple functions for the 3 faders. One of the functions for the middle fader (Fade/Speed/Strobe/Green) is the strobe function. Please see the instructions below for this operation.

1. Press **<STROBE>** until the appropriate LED indicator lights.
2. Adjust the fader to the desired level.
3. In order to return to the desired mode, press **<STROBE>** until the appropriate LED indicator is off.



This function may be activated while operating in any other mode (preset, chases, macro).



In order to deactivate this function, the mode must be entered, and the fader must be set to 0.1M (fully down). Then, deactivate **<STROBE>**.

## Blackout

This controller has a dedicated blackout button. This button works in conjunction with the Fade/Speed/Strobe/Green fader. Please see the instructions below for this operation.

1. Adjust the Fade/Speed/Strobe/Green fader to the desired value to determine how quickly the lights will fade out.
2. Press **<BLACKOUT>** until the appropriate LED indicator lights.



The blackout function will also work with the Fade/Speed/Strobe/Green fader when disabling the blackout.



The blackout function will not work when the controller is in manual RGB mode.

## Manual RGB

This controller has the ability to manually choose a custom color combination by simply using the Red, Green, and Blue faders. However, **<Manual RGB>** must first be pressed. Please see the instructions below for this operation.

1. Press **<Manual RGB>** until the appropriate LED indicator lights.
2. Adjust the Red, Green, and Blue Faders to the desired levels.



You may press **<Manual RGB>** until the appropriate LED indicator is off to disable this mode.



Blackout will not work in Manual RGB function.



Fade/Speed will not work in Manual RGB function.

## Sound

This controller has preset chases. These chases are normally triggered using the Speed fader. However, they can be triggered using the built-in microphone, as well. Please see the instructions below for this operation.

1. Follow the instructions for working with chases in the appropriate section of this manual.
2. Press **<SOUND>** until the appropriate LED indicator lights.
3. Adjust the Sensitivity Fader to the desired level (turn clockwise to increase sensitivity).



You may press **<SOUND>** until the appropriate LED indicator is off to disable this mode.



You may adjust the master dimmer and the fade time in this mode with the appropriate faders.

# 5. APPENDIX

## DMX Primer

There are 512 channels in a DMX connection. Channels may be assigned in any manner. A fixture capable of receiving DMX will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+).

## General Maintenance

To maintain optimum performance and minimize wear, fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

- Unplug fixture from power.
- Use a vacuum or air compressor and a soft brush to remove dust collected on external vents.
- Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue.
- Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens.
- Gently polish optical surfaces until they are free of haze and lint.

The cleaning of external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates. Damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Clean the external optics at least every 20 days. Clean the fixture at least every 30/60 days.



***Always dry the parts carefully after cleaning them.***



***Never spin a fan using compressed air.***

# Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.



**Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard, no more than 32 fixtures should be connected on one data link. Connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.**

*Maximum recommended serial data link distance: 500 m (1640 ft)*

*Maximum recommended number of fixtures on a serial data link: 32*

## Data Cabling

To link fixtures together you must obtain data cables. You can purchase CHAUVET certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

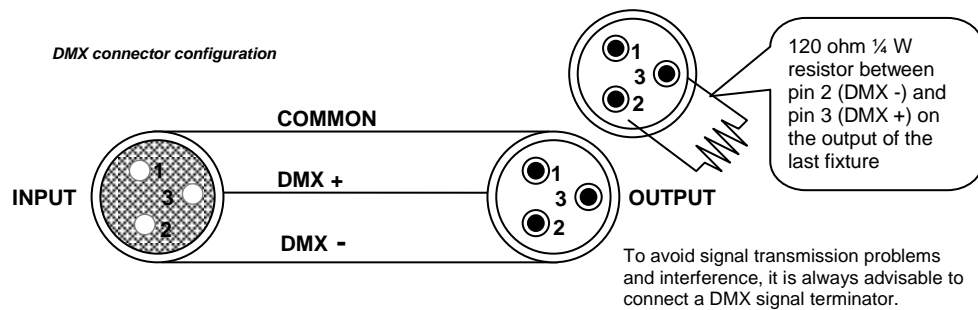
## DMX Data Cable

Use a Belden© 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable must have the following characteristics:

Type:	shielded, 2-conductor twisted pair
Maximum capacitance between conductors:	30 pF/ft
Maximum capacitance between conductor and shield:	55 pF/ft
Maximum resistance:	20 ohms/1000 ft
Nominal impedance:	100 ~ 140 ohms

## Cable Connectors

Cabling must have a male XLR connector on one end and a female XLR connector on the other end.



**Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.**

## 3-Pin to 5-Pin Conversion Chart

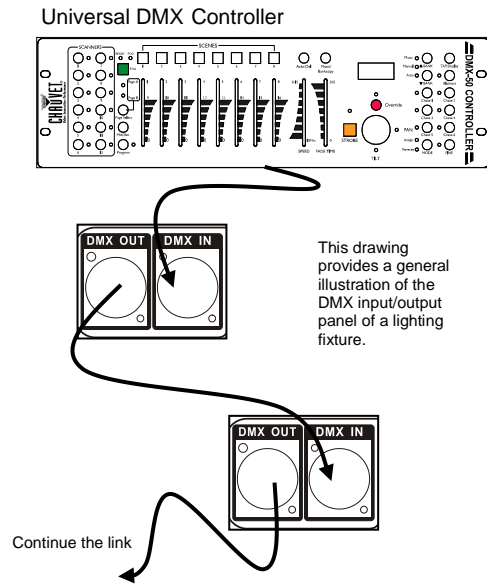


If you use a controller with a 5-pin DMX output connector, you will need to use a 5-pin to 3-pin adapter. The chart below details a proper cable conversion:

3-PIN TO 5-PIN CONVERSION CHART		
Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data ( - ) signal	Pin 2	Pin 2
Data ( + ) signal	Pin 3	Pin 3
Not used		Pin 4
Not used		Pin 5

## Setting up a DMX Serial Data Link

1. Connect the (male) 3-pin connector side of the DMX cable to the output (female) 3-pin connector of the controller.
2. Connect the end of the cable coming from the controller which will have a (female) 3-pin connector to the input connector of the next fixture consisting of a (male) 3-pin connector.
3. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.



## Setting the Starting Address

This DMX mode enables the use of a universal DMX controller device. Each fixture requires a start address from 1–512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that uses six DMX channels and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, and 105. Choose start addresses so that the channels used do not overlap, and note the start address selected for future reference.

If this is your first time addressing a fixture using the DMX control protocol, we suggest jumping to the "Appendix" section and reading the heading "DMX Primer". It contains very useful information that will help you understand its use.

## General Troubleshooting

SYMPTOM	POSSIBLE CAUSE(S)	POSSIBLE ACTION(S)
Breaker/Fuse keeps blowing	<ul style="list-style-type: none"> <li>Excessive circuit load</li> <li>Short circuit along the power wires</li> </ul>	<ul style="list-style-type: none"> <li>Check total load placed on the electrical circuit.</li> <li>Check for a short in the electrical wiring (internal and/or external).</li> </ul>
Device does not power up	<ul style="list-style-type: none"> <li>No power</li> <li>Loose power cord</li> </ul>	<ul style="list-style-type: none"> <li>Check for power on Mains.</li> <li>Check power cord</li> </ul>
Fixture is not responding to DMX	<ul style="list-style-type: none"> <li>Wrong DMX addressing</li> <li>Damaged DMX cables</li> <li>Wrong polarity settings on the controller</li> <li>Loose DMX cables</li> <li>Faulty DMX interface</li> <li>Faulty Main PCB</li> </ul>	<ul style="list-style-type: none"> <li>Check Control Panel and unit addressing</li> <li>Check DMX cables</li> <li>Check polarity switch settings on the controller</li> <li>Check cable connections</li> <li>Replace DMX input</li> <li>Replace Main PCB</li> </ul>
Loss of signal	<ul style="list-style-type: none"> <li>Non DMX cables</li> <li>Bouncing signals</li> <li>Long cable / Low level signal</li> <li>Too many fixtures</li> <li>Interference from AC wires</li> </ul>	<ul style="list-style-type: none"> <li>Use only DMX compatible cables</li> <li>Install terminator as suggested.</li> <li>Install amplifier right after fixture with strong signal.</li> <li>Install an optically coupled DMX splitter after unit #32.</li> <li>Keep DMX cables separated from power cables or black lights.</li> </ul>



*If you still have a problem after trying the above solutions, please contact CHAUVET Technical Support.*

## Contact Us

### World Wide

#### General Information

CHAUVET  
3000 North 29<sup>th</sup> Court  
Hollywood, FL 33020  
voice: 954.929.1115  
fax: 954.929.5560  
toll free: 800.762.1084

#### Technical Support

CHAUVET  
3000 North 29<sup>th</sup> Court  
Hollywood, FL 33020  
voice: 954.929.1115 **(Press 4)**  
fax: 954.929.5560 **(Attention: Service)**

#### World Wide Web

[www.chauvetlighting.com](http://www.chauvetlighting.com)

## Returns Procedure

Returned merchandise must be sent prepaid and in the original packing; call tags will not be issued. Package must be clearly labeled with a Return Merchandize Authorization Number (RMA #). Products returned without the RMA # will be refused. Call CHAUVET and request an RMA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to pack fixture properly; any shipping damage resulting from inadequate packaging is the customer's responsibility. As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

CHAUVET reserves the right to use its own discretion to repair or replace product(s).



***If you are given an RMA #, please include the following information on a piece of paper inside the box:***

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) The RMA #
- 5) A brief description of the symptoms

## Claims

Damage incurred in shipping is the responsibility of the shipper; therefore, the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

## Technical Specifications

### WEIGHT & DIMENSIONS

Length..... 5.5 in (140 mm)  
Width..... 8.3 in (210 mm)  
Height ..... 2.1 in (52 mm)  
Weight..... 2 lbs (0.9 kg)

### POWER

Operating Range..... DC 12 V, 500 mA max  
Adapter (external power supply: 100~240 VAC, 50/60 Hz)..... Provided

### THERMAL

Maximum ambient temperature ..... 113° F (45° C)

### CONTROL & PROGRAMMING

Data output ..... locking 3-pin XLR female socket  
Data pin configuration ..... pin 1 shield, pin 2 (-), pin 3 (+)  
Protocols..... DMX-512 USITT

### ORDERING INFORMATION

Obey™ 3 Controller ..... OBEY3

### WARRANTY INFORMATION

Warranty ..... 2-year limited warranty