## Obey ${ }^{\text {TM }} 40$ <br> DMX Controller

Snapshot

| Ok on Dimmer | $\mathbf{Q}$ |
| :---: | :---: |
| Outdoor OK | $\mathbf{Q}$ |
| Sound Activated | $\Omega$ |
| DMX512 | $\Omega$ |
| Master/Slave | $\mathbf{Q}$ |
| 115V/230V Switch | $\mathbf{Q}$ |
| Replaceable Fuse | $\mathbf{O}$ |
| User Serviceable | $\mathbf{Q}$ |
| Duty Cycle | $\mathbf{Q}$ |



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## Before You Begin

## What is included

## > $1 \times$ Obey $^{\text {TM }} 40$ controller <br> $>1 \times$ DC $9-12 \mathrm{~V} 500 \mathrm{~mA}, 110 \mathrm{~V}$ Power Adapter or 230 V Power Adapter <br> $1 \times$ Manual with warranty card <br> 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.

## Safety Instructions



Please read these instructions carefully, which includes important information about the installation, usage and maintenance?

- Please keep this User Guide 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 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 50 cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing lamp or fuse and be sure to replace with same lamp source.
- In the event of 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. Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.
- Do not operate this device in more than $113^{\circ} \mathrm{F}$ ambient temperature conditions.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET at: 954-929-1115.

## INTRODUCTION

The Obey ${ }^{\text {TM }} 40$ is a universal intelligent lighting controller. It allows the control of 12 fixtures composed of 16 channels each and up to 240 programmable scenes. Six chase banks can contain up to 240 steps composed of the saved scenes and in any order. Programs can be triggered by music, midi, automatically or manually. Channel assignments can be reprogrammed for ease of controlling different fixtures. On the surface you will find various programming tools such as 8 universal channel sliders, quick access scanner and scene buttons, and an LED display indicator for easier navigation of controls and menu functions.

## Features

- Universal DMX-512 controller
- Controls up to 12 intelligent lights of up to 16 channels each
- 30 banks of 8 scenes, 240 scenes max
- 192 DMX channels of control
- 6 sets of chases containing 240 scenes
- Reversible sliders
- Re-assignable channels
- Sequential linking of chases
- Fog \& strobe control buttons
- Grab any fixture on the fly
- Beat activation, tap-sync and auto run
- Polarity selector
- 3 space 19" rack mount
- MIDI compatible


## Product Overview (front)



## Product Overview (rear panel)



## Common Terms

## The following are common terms used in intelligent light programming.

- Blackout is a state where all lighting fixtures' light output are set to 0 or off, usually on a temporary basis.
- DMX-512 is an industry standard digital communication protocol used in entertainment lighting equipment. For more information read Sections "DMX Primer" and "DMX Control Mode" in the Appendix.
- Fixture refers to your lighting instrument or other device such as a fogger or dimmer which you can control.
- Programs are a bunch of scenes stacked one after another. It can be programmed as either a single scene or multiple scenes in sequence.
- Scenes are static lighting states.
- Sliders are also known as faders.
- Chases can also be called programs. A chase consists of a bunch of scenes stacked one after another.
- Scanner refers to a lighting instrument with a pan and tilt mirror; however DMX controllers can use this term to control any DMX-512 compatible device as a generic fixture.
- MIDI (Musical Instrument Digital Interface) is a standard for representing musical information in a digital format. A MIDI input would provide external triggering of scenes using midi device such as a midi keyboard.
- Stand Alone refers to a fixture's ability to function independently of an external controller and usually in sync to music, due to a built in microphone.
- Fade slider is used to adjust the time between scenes within a chase.
- Speed slider affects the amount of time a scene will hold its state. It is also considered a wait time.
- Shutter is a mechanical device in the lighting fixture that allows you to block the lights path. It is often used to lessen the intensity of the light output and to strobe.
- Patching refers to the process of assigning faders to a DMX channel within a fixture.
- Playbacks can be either scenes or chases that are directly called to execution by the user. A playback can also be considered program memory that can be recalled during a show.


## Operating Instructions <br> Setup

## SETTING UP THE SYSTEM

1) Place the Obey ${ }^{\top T M} 40$ on a level surface.

Note! The Obey ${ }^{\text {TM }} 40$ can also be rack mounted, occupying three rack spaces (3U).
2) Plug the $A C$ to $D C$ power supply into the system back panel and into the mains outlet.
3) Plug in your DMX cable(s) to your intelligent lighting as described in the respective fixture's manual. For a quick overview of DMX see the "DMX Primer" on page 18.
4) Reset the system using the instructions below.

## RESETTING THE SYSTEM

Warning: this will reset the controller to its factory defaults. This will erase all programs and settings.

1) Turn off the unit.
2) Press and hold BANK UP and AUTOIDEL.
3) Turn on power to the unit (while still holding BANK UP and AUTOIDEL).

## FIXTURE ADDRESSING

The Obey ${ }^{\top \mathrm{M}} 40$ is programmed to control 16 channels of DMX per fixture. Therefore, the fixtures you wish to control with the corresponding "FIXTURE" buttons on the unit must be spaced 16 channels apart (check the respective fixture's manual for how to enter the information into the fixture).

Note: failure to use these DMX assignments may cause a lack of control of the fixtures.

| Fixture or <br> Scanner \# | Default DMX Starting <br> Addres | Binary Dipswitch Settings <br> Switch to the "On position" |
| :--- | :--- | :--- |
| $\mathbf{1}$ | 1 | 1 |
| $\mathbf{2}$ | 17 | 1,5 |
| $\mathbf{3}$ | 33 | 1,6 |
| $\mathbf{4}$ | 49 | $1,5,6$ |
| $\mathbf{5}$ | 65 | 1,7 |
| $\mathbf{6}$ | 81 | $1,5,7$ |
| $\mathbf{7}$ | 97 | $1,6,7$ |
| $\mathbf{8}$ | 113 | $1,5,6,7$ |
| $\mathbf{9}$ | 129 | 1,8 |
| $\mathbf{1 0}$ | 145 | $1,5,8$ |
| $\mathbf{1 1}$ | 161 | $1,6,8$ |
| $\mathbf{1 2}$ | 177 | $1,5,6,8$ |

## PHYSICAL FADER ASSIGNMENT (OPTIONAL SETUP)

Use this feature to combine or unify fixture control attributes for different fixtures. For example; if you were controlling 4 moving mirrors and 4 moving yokes, the color, gobo and dimmer channels may not line up ideally on the physical faders. Use this function to re-assign the dimmer, color and gobo channels to faders 1, 2 and 3 . From now on you will be able to control the same attributes on all fixtures using the same fader location.

## Action

1) Press and hold PROGRAM \& TAPSYNC buttons together (1) time to access the channel assignment mode.
2) Press a FIXTURE button that represents the fixture whose faders you would like to re-assign.
3) Move the SPEED fader until you arrive at controller channel (number).
4) Move the FADE TIME fader to select the DMX channel.
5) Make all changes, and the press the MIDI/ADD button to confirm setting.
6) Repeat steps 3 ~ 5 as often as necessary.

If you wish to copy a scanner's physical assignments to another scanner, continue by following steps 7-13. If you do not wish to do this, press and hold PROGRAM \& TAPSYNC buttons (2) times to exit mode.

## Example: Copying Scanner 1 into Scanner 2

7) Press and hold FIXTURE button \# 1.
8) While holding button \# 1 press FIXTURE button \# 2.
9) While holding FIXTURE buttons \# 1 and \# 2, press and hold MIDI/ADD button.
10) Release FIXTURE button \# 1 first before releasing FIXTURE button \# 2.
11) Release MIDIIADD button.
12) All FIXTURE LED indicators will flash to confirm successful copy.
13) Press and hold PROGRAM \& TAPSYNC buttons (2) times to exit mode.

Notes $\square$
All physical faders can be re-assigned to output on a different DMX channel. Faders are given a channel number and are labeled on the surface of the controller as such.

## REVERSE CHANNEL OUTPUT (OPTIONAL SETUP)

## Action

1) Press and hold PROGRAM \& TAPSYNC buttons together (2) times to access the channel assignment mode then select the FIXTURE button.
2) Move the SPEED fader until you arrive at the controller channel you wish to alter.
3) Move the FADE TIME fader all the way up until N changes to Y .

If you wish to copy a scanner's reverse channel assignments to another scanner, continue by following steps $4-10$. If you do not wish to do this, press and hold PROGRAM \& TAPSYNC buttons (1) times to exit mode.

## Example: Copying Scanner 1 into Scanner 2

4) Press and hold FIXTURE button \# 1.
5) While holding button \# 1 press FIXTURE button \# 2.
6) While holding FIXTURE buttons \# 1 and \# 2, press and hold MIDI/ADD button.
7) Release FIXTURE button \# 1 first before releasing FIXTURE button \# 2 .
8) Release MIDIIADD button.
9) All FIXTURE LED indicators will flash to confirm successful copy.
10) Press and hold PROGRAM \& TAPSYNC buttons (1) times to exit mode.

You can permanently reverse the output of any given channel on the controller.

## FADE TIME ASSIGN (OPTIONAL SETUP)

You can choose whether the board's fade time during scene execution is implemented broadly to all output channels or only to the Pan and Tilt movement channels. This is relevant because often you will want gobos and colors to change quickly while not affecting the movement of the light.

## Action

1) Turn OFF the controller.
2) Hold the BLACKOUT and TAPSYNC buttons simultaneously.
3) Turn ON the controller.
4) Press the TAPSYNC button to toggle between the two modes. Either all channels (A) or select channel Pan \& Tilt only (P)
5) Press BLACKOUT and TAPSYNC to save settings. All LED's will blink to confirm.

## Programming

A program (bank) is a sequence of different scenes (or steps) that will be called up one after another. In the Obey ${ }^{\text {™ }} 4030$ programs can be created of 8 scenes in each.

## ENTERING PROGRAM MODE

Press the PROGRAM button for 3 seconds until an LED dot next to the label PROG blinks. This indicates that the user is in programming mode.

## CREATE A SCENE

A scene is a static lighting state. Scenes are stored in banks. There are 30 bank memories on the controller and each bank can hold 8 scene memories. The Obey ${ }^{\text {TM }} 40$ can save 240 scenes total.

## Action

1) Press and hold the PROGRAM button for 3 seconds.
2) Select a FIXTURE (fixture) to program.
3) Compose a look by moving the FADERS. (Changes in fixture attribute such as colors and gobos.) Press PAGE SELECT to access Channels $9 \sim 16$ on the faders.
4) To program another FIXTURE press the FIXTURE button you have just finished programming then select another FIXTURE button to program.
5) Repeat steps $2 \sim 4$ until you have your look.
6) Move the SPEED and FADE sliders to adjust the speed and fade time of the scene.
7) Tap MIDI/ADD button to prepare to store.
8) Choose a BANK (01~30). Use the Up and Down arrow Bank buttons to change if necessary.
9) Select a SCENES button to store. All LED's will blink 3 times. The display will now display the bank and scene number that is stored.
10) Repeat steps $2 \sim 8$ to record more scenes. ( Read Important notes on the right ->)
11) To exit program mode, hold the PROGRAM button for 3 seconds. The controller will default to a BLACKOUT when exiting the programmer.

## EDIT A SCENE

## Action

1) Press the PROGRAM button for 3 seconds.
2) Locate the scene in the program BANK. Use BANK UPIDOWN to navigate program banks.
3) Select the SCENE in the program BANK to edit.
4) Adjust FADERS to change the look.
5) Press the MIDI/ADD button then the SCENE button again previously selected for editing.

Notes $\square$
Deselect Blackout if LED is lit.
A FIXTURE button represents one lighting fixture.
You can access channels 9~16 by pressing the Page Select button. This is necessary for fixtures that use more than 8 channels of control. When switching pages it will be necessary to move previously moved faders up then down to activate.

Pressing the same Scanner button again will hold the parameters changed for that fixture in the program scene.

## There are 8 scenes available in every bank.

## Notes $\square$

Deselect Blackout if LED is lit.
! Remember the scene number on the controller that you will edit, otherwise, you could overwrite the contents of another scene.

## SCENE COPY

## Action

1) Press the PROGRAM button for 3 seconds.
2) Locate the scene in the program BANK. Use BANK UPIDOWN to navigate program banks.
3) Select the SCENE in the program BANK to copy.
4) Locate the destination scene in the program BANK. Use BANK UPIDOWN to navigate program banks.
5) Press the MIDI/ADD button then the new SCENE button to copy to.

## DELETE SCENE

## Action

1) Locate the scene in the program BANK. Use BANK UPIDOWN to navigate program banks.
2) Press and hold the AUTOIDEL button while pressing the SCENE you want to delete.

## DELETE ALL SCENES

## Action

1) Press and hold the PROGRAM button and the BANK ( $\boldsymbol{\nabla}$ ) while you turn the controller On.

## BANK COPY

## Action

1) Press the PROGRAM button for 3 seconds.
2) Locate the program BANK. Use BANK UP/DOWN to navigate program banks.
3) Press and release the MIDIIADD button.
4) Locate the destination program BANK. Use BANK UPIDOWN to navigate program banks.
5) Press the MUSIC/BANK-COPY button to compete copy.

## BANK DELETE

## Action

1) Press and hold the PROGRAM button for 3 seconds.
2) Locate the BANK to delete. Press the AUTOIDEL and MUSIC/BANK-COPY at the same time to delete the Bank.

Notes $\square$

Notes $\square$
The action of deleting a scene is actually a value reset to 0 on all DMX channels available to the scene memory. The physical location of the scene memory remains.

## Notes $\square$

All scenes should be erased when the controller is turned back on.

Notes $\square$

The LCD display will blink to indicate a successful copy.

The LED display will blink to indicate a successful delete.

## Chase Programming

A chase is created by using previously created scenes. Scenes become steps in a chase and can be arranged in any order you choose. It is highly recommended that prior to programming chases for the first time; you delete all chases from memory. See "Delete All Chases" for instructions.

## CREATE A CHASE

A Chase can contain 240 scenes as steps. The term steps and scenes are used interchangeably.

## Action

1) Press and hold the PROGRAM button for 3 seconds.
2) Press the CHASE (1~6) button you wish to program.
3) Change BANK if necessary to locate a scene.
4) Select the SCENE to insert.
5) Tap the MIDIIADD button to store. All LED's will flash 3 times.
6) Repeat steps $3 \sim 5$ to add additional steps in the chase. Up to 240 steps can be recorded.
7) Press and hold the PROGRAM button for 3 seconds to save the chase.

## COPY BANK INTO CHASE

## Action

1) Press and hold the PROGRAM button for 3 seconds to enter programming mode
2) Select the BANK to be copied using the BANK UPIDOWN buttons.
3) Press MUSIC/BANK COPY and Midi/Add buttons at the same time to copy.
4) Press and hold the PROGRAM button for 3 seconds to exit programming mode.

## ADDING A STEP TO A CHASE

## Action

1) Press and hold the PROGRAM button for 3 seconds to enter programming mode.
2) Press the desired CHASE (1~6) button.
3) Press the TAPSYNCIDisplay and the display will display the scene and bank number. This displays the scene you will be adding (STEP LED must be on),
4) Use the BANK UP/DOWN buttons to scroll through the chase and arrive at the step number for which you would like to add or append a scene/step to.
5) Press MIDI/ADD button and one step number will be added to the previously displayed step number.
6) Press the SCENE button that corresponds to the scene to be copied.
7) Press MIDIIADD button again to add the new step.
8) Press and hold the PROGRAM button for 3 seconds to exit programming mode.

## DELETE A SCENEISTEP IN A CHASE

## Action

1) Press and hold the PROGRAM button for 3 seconds to enter programming mode.
2) Press the desired CHASE (1~6) button that contains the scene to be deleted.
3) Press the TAPSYNCIDISPLAY button to switch the LED display to steps.
4) Select the scene/step to be deleted using the BANK UPIDOWN buttons.
5) Press AUTOIDEL button to delete the step/scene.
6) Press and hold PROGRAM button for 3 seconds to exit.

## DELETE A CHASE

## Action

1) Press and hold the PROGRAM button for 3 seconds to enter programming mode.
2) Press the CHASE button (1~6) to be deleted.
3) Press and hold the AUTO DEL button and the respective CHASE button then release to delete the chase. All LED's will blink 3 times.

Notes $\square$

Notes $\square$
Remember that we use scene and steps interchangeably.

Notes $\square$
Scenes will remain programmed on the controller. Only the chase is affected.

## DELETE ALL CHASE PROGRAMS

CAUTION! This procedure will result in irrevocable loss of chase step memory. The individual scenes and program banks will be preserved.

Action
Notes $\square$

1) Press and hold the BANK DOWN button and the AUTO DEL button while turning OFF the controller.

## Playback (Scenes)

## MANUAL RUN SCENE

When power is first turned ON, the controller will be in manual scene mode.

## Action

1) Make sure neither MUSIC TRIGGER nor AUTO TRIGGER LED's on the LED display are on.
2) Select the program BANK that stores the scene you want to run manually by using the BANK UPIDOWN.
3) Press the SCENE button to run.

## Notes $\square$

If you are in programming mode you can also press and hold the PROGRAM button until the Program LED goes off.

Notes $\square$
In the Sound mode, programs will be triggered by the sound using its built-in microphone. All scenes in a Bank will chase.

## Notes $\square$

In the Auto mode, programs will be triggered by controllers fade and speed time as set on the faders. All scenes in a Bank will chase.

CAUTION! The fade setting should never be slower than the speed setting or the scene will never complete execution.

## BLACKOUT

The Blackout button brings all lighting output to 0 or off (also called the home position of the unit).

## Playback (Chases)

## MANUAL RUN CHASES

This function allows the user to manually step through each individual step in a chase.

## Action

1) Press and hold PROGRAM button for 3 seconds to enter programming mode.
2) Start a chase by pressing any one of the CHASE buttons.
3) Press the TAPSYNCIDISPLAY button to manually step through the chase.
4) Use the BANK buttons to scroll through the chases.
5) Press and hold the PROGRAM button for 3 seconds to exit programming mode.

## AUTO RUN CHASES

## Action

1) Press any one of the CHASE buttons.
2) Press and release the Auto / Del button. The corresponding LED will blink.
3) Adjust the SPEED and FADE faders to your liking
4) You can override the speed and fade time by tapping the TAPSYNCIDISPLAY button (three) times. The chase will now run on the interval time of the taps.

## MUSIC RUN CHASES

## Action

1) Press any one of the CHASE buttons.
2) Press and release the MUSIC/BANK COPY buttons. The corresponding LED will blink in the display.
3) Your chase will now run to sound

## RUNNING SEQUENTIAL CHASES

## Action

1) Press either AUTO DEL or MUSIC BANK COPY buttons to select the trigger mode.
2) Press the CHASE button for each chase you wish to playback.
3) Adjust the Chase speed by changing the SPEED fader.

Notes $\square$
CAUTION! The fade setting should never be slower than the speed setting or the scene will never complete execution.

Notes $\square$

Notes $\square$
Chases must already be programmed.

The chases will run in the order they are pressed

## Midi Operation

The controller will only respond to MIDI commands on the MIDI channel when it is set to full stop. All MIDI control is performed using Note on commands. All other MIDI instructions are ignored. To stop a chase, send the blackout on note.

## Action

1) Press and hold the MIDI/ADD button until the third and fourth digits on the LED display blink.
2) Select the MIDI control channel (1~16) via the BANK UP/DOWN buttons to set.
3) Press and hold the MIDI/ADD button to store midi setup settings.

Notes $\square$

This is the Channel that the controller will receive MIDI note commands.

## APPENDIX <br> DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 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+). CHAUVET carries 3-pin DMX compliant cables, DMX-10 (33'), DMX-4.5 (15') and DMX-1.5 (5')

## FIXTURE LINKING



Note! If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. Chauvet Model No: DMX5M. The chart below details a proper cable conversion:

3 Pin to 5 Pin Conversion Chart

| Conductor | 3 Pin Female (output) | 5 Pin Male (Input) |
| :--- | :--- | :--- |
| GROUNDISHIELD | Pin 1 | Pin 1 |
| DATA ( - )SIGNAL | Pin 2 | Pin 2 |
| DATA ( + ) SIGNAL | Pin 3 | Pin 3 |
| DO NOT USE |  | Do not use |
| DO NOT USE |  | Do not use |

## 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 Authorization Number (RA \#). Products returned without an RA \# will be refused. Call CHAUVET and request an RA \# 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 properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

## Note: 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) 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.

## Troubleshooting

Please refer to the troubleshooting chart on page 21. If you still have a problem after trying those solutions, please contact CHAUVET Technical Support at (954) 929-1115.

## DMX Dipswitch Quick Reference Chart

| DMX Address Quick Reference Chart |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dip Switch Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DMX DIP SWITCHSET$0=$ OFF$1=$ ONX=OFF or ON |  |  |  |  | \#9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |  |  |  |  | \#8 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
|  |  |  |  |  | \#7 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
|  |  |  |  |  | \#6 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| \#1 | \#2 | \#3 | \#4 | \#5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 0 | 0 | 0 | 0 |  |  | 32 | 64 | 96 | 128 | 160 | 192 | 224 | 256 | 288 | 320 | 352 | 384 | 416 | 448 | 480 |
| 1 | 0 | 0 | 0 | 0 |  | 1 | 33 | 65 | 97 | 129 | 161 | 193 | 225 | 257 | 289 | 321 | 353 | 385 | 417 | 449 | 481 |
| 0 | 1 | 0 | 0 | 0 |  | 2 | 34 | 66 | 98 | 130 | 162 | 194 | 226 | 258 | 290 | 322 | 354 | 386 | 418 | 450 | 482 |
| 1 | 1 | 0 | 0 | 0 |  | 3 | 35 | 67 | 99 | 131 | 163 | 195 | 227 | 259 | 291 | 323 | 355 | 387 | 419 | 451 | 483 |
| 0 | 0 | 1 | 0 | 0 |  | 4 | 36 | 68 | 100 | 132 | 164 | 196 | 228 | 260 | 292 | 324 | 356 | 388 | 420 | 452 | 484 |
| 1 | 0 | 1 | 0 | 0 |  | 5 | 37 | 69 | 101 | 133 | 165 | 197 | 229 | 261 | 293 | 325 | 357 | 389 | 421 | 453 | 485 |
| 0 | 1 | 1 | 0 | 0 |  | 6 | 38 | 70 | 102 | 134 | 166 | 198 | 230 | 262 | 294 | 326 | 358 | 390 | 422 | 454 | 486 |
| 1 | 1 | 1 | 0 | 0 |  | 7 | 39 | 71 | 103 | 135 | 167 | 199 | 231 | 263 | 295 | 327 | 359 | 391 | 423 | 455 | 487 |
| 0 | 0 | 0 | 1 | 0 |  | 8 | 40 | 72 | 104 | 136 | 168 | 200 | 232 | 264 | 296 | 328 | 360 | 392 | 424 | 456 | 488 |
| 1 | 0 | 0 | 1 | 0 |  | 9 | 41 | 73 | 105 | 137 | 169 | 201 | 233 | 265 | 297 | 329 | 361 | 393 | 425 | 457 | 489 |
| 0 | 1 | 0 | 1 | 0 |  | 10 | 42 | 74 | 106 | 138 | 170 | 202 | 234 | 266 | 298 | 330 | 362 | 394 | 426 | 458 | 490 |
| 1 | 1 | 0 | 1 | 0 |  | 11 | 43 | 75 | 107 | 139 | 171 | 203 | 235 | 267 | 299 | 331 | 363 | 395 | 427 | 459 | 491 |
| 0 | 0 | 1 | 1 | 0 |  | 12 | 44 | 76 | 108 | 140 | 172 | 204 | 236 | 268 | 300 | 332 | 364 | 396 | 428 | 460 | 492 |
| 1 | 0 | 1 | 1 | 0 |  | 13 | 45 | 77 | 109 | 141 | 173 | 205 | 237 | 269 | 301 | 333 | 365 | 397 | 429 | 461 | 493 |
| 0 | 1 | 1 | 1 | 0 |  | 14 | 46 | 78 | 110 | 142 | 174 | 206 | 238 | 270 | 302 | 334 | 366 | 398 | 430 | 462 | 494 |
| 1 | 1 | 1 | 1 | 0 |  | 15 | 47 | 79 | 111 | 143 | 175 | 207 | 239 | 271 | 303 | 335 | 367 | 399 | 431 | 463 | 495 |
| 0 | 0 | 0 | 0 | 1 |  | 16 | 48 | 80 | 112 | 144 | 176 | 208 | 240 | 272 | 304 | 336 | 368 | 400 | 432 | 464 | 496 |
| 1 | 0 | 0 | 0 | 1 |  | 17 | 49 | 81 | 113 | 145 | 177 | 209 | 241 | 273 | 305 | 337 | 369 | 401 | 433 | 465 | 497 |
| 0 | 1 | 0 | 0 | 1 |  | 18 | 50 | 82 | 114 | 146 | 178 | 210 | 242 | 274 | 306 | 338 | 370 | 402 | 434 | 466 | 498 |
| 1 | 1 | 0 | 0 | 1 |  | 19 | 51 | 83 | 115 | 147 | 179 | 211 | 243 | 275 | 307 | 339 | 371 | 403 | 435 | 467 | 499 |
| 0 | 0 | 1 | 0 | 1 |  | 20 | 52 | 84 | 116 | 148 | 180 | 212 | 244 | 276 | 308 | 340 | 372 | 404 | 436 | 468 | 500 |
| 1 | 0 | 1 | 0 | 1 |  | 21 | 53 | 85 | 117 | 149 | 181 | 213 | 245 | 277 | 309 | 341 | 373 | 405 | 437 | 469 | 501 |
| 0 | 1 | 1 | 0 | 1 |  | 22 | 54 | 86 | 118 | 150 | 182 | 214 | 246 | 278 | 310 | 342 | 374 | 406 | 438 | 470 | 502 |
| 1 | 1 | 1 | 0 | 1 |  | 23 | 55 | 87 | 119 | 151 | 183 | 215 | 247 | 279 | 311 | 343 | 375 | 407 | 439 | 471 | 503 |
| 0 | 0 | 0 | 1 | 1 |  | 24 | 56 | 88 | 120 | 152 | 184 | 216 | 248 | 280 | 312 | 344 | 376 | 408 | 440 | 472 | 504 |
| 1 | 0 | 0 | 1 | 1 |  | 25 | 57 | 89 | 121 | 153 | 185 | 217 | 249 | 281 | 313 | 345 | 377 | 409 | 441 | 473 | 505 |
| 0 | 1 | 0 | 1 | 1 |  | 26 | 58 | 90 | 122 | 154 | 186 | 218 | 250 | 282 | 314 | 346 | 378 | 410 | 442 | 474 | 506 |
| 1 | 1 | 0 | 1 | 1 |  | 27 | 59 | 91 | 123 | 155 | 187 | 219 | 251 | 283 | 315 | 347 | 379 | 411 | 443 | 475 | 507 |
| 0 | 0 | 1 | 1 | 1 |  | 28 | 60 | 92 | 124 | 156 | 188 | 220 | 252 | 284 | 316 | 348 | 380 | 412 | 444 | 476 | 508 |
| 1 | 0 | 1 | 1 | 1 |  | 29 | 61 | 93 | 125 | 157 | 189 | 221 | 253 | 285 | 317 | 349 | 381 | 413 | 445 | 477 | 509 |
| 0 | 1 | 1 | 1 | 1 |  | 30 | 62 | 94 | 126 | 158 | 190 | 222 | 254 | 286 | 318 | 350 | 382 | 414 | 446 | 478 | 510 |
| 1 | 1 | 1 | 1 | 1 |  | 31 | 63 | 95 | 127 | 159 | 191 | 223 | 255 | 287 | 319 | 351 | 383 | 415 | 447 | 479 | 511 |

## Dip Switch Position

DMX Address

General Troubleshooting

| Symptom | Solution(s) | Applies to |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lights | $\underset{\substack{\text { Foggers } \\ \text { \& Snow }}}{\text { a }}$ | Contollers | ${ }_{\substack{\text { Dimmerse } \\ \text { Chaser }}}^{\text {a }}$ |
| Auto shut off | Check fan thermal switch reset | $\checkmark$ |  |  |  |
| Beam is very dim or not bright | Clean optical system or replace lamp Check 220/110v switch for proper setting | $\checkmark$ |  |  |  |
| Breaker/Fuse keeps blowing | Check total load placed on device |  |  |  | $\checkmark$ |
| Chase is too slow | Check users manual for speed adjustment | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |
| Device has no power | Check for power on Mains. Check device's fuse. (internal and/or external) | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |
| Fixture is not responding | Check DMX Dip switch settings for correct addressing <br> Check DMX cables <br> Check polarity switch settings | $\checkmark$ |  |  |  |
| Fixture is on but there is no movement to the audio | Make sure you have the correct audio mode on the control switches. If audio provided via $1 / 4^{\prime \prime}$ jack, make sure a live audio signal exists Adjust sound sensitivity knob | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |
| Lamps cuts off sporadically | Possible bad lamp or fixture is overheating. Lamp may be at end of its life. | $\checkmark$ |  |  |  |
| Light will not come on after power failure | Some discharge lamps require a cooling off period before the electronics in the fixture can kick start it again, wait 5 to 10 minutes before powering up | $\checkmark$ |  |  |  |
| Loss of signal | Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights. | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Moves slow | Check 220/110v switch for proper setting | $\checkmark$ |  |  |  |
| No flash | Re-install bulb, may have shifted in shipping | $\checkmark$ |  |  |  |
| No laser output | Bounce mirror motor may have shifted during shipping, readjust | $\checkmark$ |  |  |  |
| No light output | Check slip ring \& brushes for contact Install bulb Call service technician | $\checkmark$ |  |  |  |
| Relay will not work | Check reset switch Check cable connections |  |  |  | $\checkmark$ |
| Remote does not work | Make sure connector is firmly connected to device | $\checkmark$ | $\checkmark$ |  |  |
| Stand alone mode | All Chauvet lighting fixtures featuring standalone functions do not require additional settings, simply power the fixture and it will automatically enter into this mode | $\checkmark$ |  |  |  |

## Technical Specifications

| WEIGHT \& DIMENSIONS |  |
| :---: | :---: |
| Length. | 20.25 in ( 514 mm ) |
| Width | 3.5 in (89 mm) |
| Height | 6.75 in (171 mm) |
| Weight | $6 \mathrm{lbs}(2.7 \mathrm{~kg})$ |

POWER
Operating Range ..... DC 9V-12V 500mA max
Adapter Provided
THERMAL
Maximum ambient temperature ..... $.113^{\circ} \mathrm{F}\left(45^{\circ} \mathrm{C}\right)$
CONTROL \& PROGRAMMING

| Data output............................................................................ locking 3-pin XLR female socket |  |
| :---: | :---: |
| Data pin configuration |  |
| Protocols. | ................... DMX-512 USITT |
| ORDERING INFORMATION |  |
| Obey ${ }^{\text {TM }} 40$ Controlle | ...OBEY40 |

EC DECLARATION OF CONFORMITY
We declare that our products (lighting equipments) comply with the following specification and bearsCE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive89/336/EEC.


## EC DECLARATION OF CONFORMITY

We declare that our products (remote controller) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 89/336/EEC.
...................................................................................................................................EN55015: 1993
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EN61000-3-2: 1995

