# Obey™ 10 DMX Controller

## Snapshot

<table>
<thead>
<tr>
<th>Feature</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ok on Dimmer</td>
<td>☑️</td>
</tr>
<tr>
<td>Outdoor OK</td>
<td>☑️</td>
</tr>
<tr>
<td>Sound Activated</td>
<td>☑️</td>
</tr>
<tr>
<td>DMX512</td>
<td>☑️</td>
</tr>
<tr>
<td>Master/Slave</td>
<td>☑️</td>
</tr>
<tr>
<td>115V/230V Switch</td>
<td>☑️</td>
</tr>
<tr>
<td>Replaceable Fuse</td>
<td>☑️</td>
</tr>
<tr>
<td>User Serviceable</td>
<td>☑️</td>
</tr>
<tr>
<td>Duty Cycle</td>
<td>☑️</td>
</tr>
</tbody>
</table>
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1. **BEFORE YOU BEGIN**

**What is Included**
- 1 x Obey™ 10 controller
- 1 x DC 12V 500mA, 110V Power Adapter or 230V Power Adapter
- 1 x Manual with warranty card

**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 of this product.

- 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 50cm 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.
- Do not 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°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.
2. **INTRODUCTION**

The Obey™ 10 is a universal intelligent lighting controller. It allows the control of 8 fixtures composed of 16 channels each and up to 6 programmable chases. Six chase banks can contain up to 999 steps. Programs can be triggered by music, 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 buttons, and an LED display indicator for easier navigation of controls and menu functions.

**Features**

- Universal DMX-512 controller
- Controls up to 8 intelligent lights of up to 16 channels each
- 128 DMX channels of control
- 6 sets of chases containing 999 scenes each
- Reversible sliders
- Re-assignable channels
- Sequential linking of chases
- Grab any fixture on the fly
- Beat activation and auto run
- DMX polarity selector
- 2-space (2U) rack mount

**Product Overview (front)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Button or Fader</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fixture select buttons</td>
<td>Fixture selection</td>
</tr>
<tr>
<td>2</td>
<td>Fixture indicator LED's</td>
<td>Indicates the fixtures currently selected</td>
</tr>
<tr>
<td>3</td>
<td>Channel faders</td>
<td>For adjusting DMX values, Ch 1<del>8 can be adjusted immediately after pressing the respective scanner select button, Ch 9</del>16 after pressing the Page select button</td>
</tr>
<tr>
<td>4</td>
<td>Page A Indicator LED</td>
<td>Represents Ch 1~8 range selected</td>
</tr>
<tr>
<td>5</td>
<td>Page B Indicator LED</td>
<td>Represents Ch 9~16 range selected</td>
</tr>
<tr>
<td>6</td>
<td>Page select button</td>
<td>Press to toggle between pages of control</td>
</tr>
<tr>
<td>7</td>
<td>Program button</td>
<td>Used to enter programming mode</td>
</tr>
<tr>
<td>8</td>
<td>Music/Add Copy button</td>
<td>Used to activate Music mode and as the confirm command during programming</td>
</tr>
<tr>
<td>9</td>
<td>LED display window</td>
<td>Status window displays pertinent operational data</td>
</tr>
<tr>
<td>10</td>
<td>Step Up button</td>
<td>Function button to scroll through steps in a scene during programming and playback</td>
</tr>
<tr>
<td>11</td>
<td>Step Down button</td>
<td>Function button to scroll through steps in a scene during programming and playback</td>
</tr>
<tr>
<td>12</td>
<td>Blackout button</td>
<td>Reduces all DMX values to zero.</td>
</tr>
<tr>
<td>13</td>
<td>Auto/Dis button</td>
<td>Used to activate Auto mode and as the delete function key during programming</td>
</tr>
<tr>
<td>14</td>
<td>Chase buttons</td>
<td>Chase memory 1 ~ 6</td>
</tr>
<tr>
<td>15</td>
<td>Speed fader</td>
<td>This will adjust the hold time of a scene or a step within a chase</td>
</tr>
<tr>
<td>16</td>
<td>Fade Time fader</td>
<td>Also considered a cross-fade, sets the interval time between two scenes in a chase</td>
</tr>
<tr>
<td>17</td>
<td>Step/Dis button</td>
<td>This is used to change steps and modify the display from 0-255 or 0-100%</td>
</tr>
</tbody>
</table>
Product Overview (rear panel)

<table>
<thead>
<tr>
<th>Item</th>
<th>Button or Fader</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Power On/Off switch</td>
<td>Used to turn the power on/Off while it is plugged into the power adapter</td>
</tr>
<tr>
<td>19</td>
<td>DMX polarity switch</td>
<td>May be used to change signal polarity</td>
</tr>
<tr>
<td>20</td>
<td>DMX output connector</td>
<td>DMX control signal</td>
</tr>
<tr>
<td>21</td>
<td>DC input jack</td>
<td>Main power feed</td>
</tr>
</tbody>
</table>

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** 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.
- **Standalone** 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.
3. **Operating Instructions**

**Setup**

**Setting up the System**

1) Place the Obey™ 10 on a level surface.

*Note! The Obey™ 10 can also be rack mounted, occupying two rack spaces (2U).*

2) Plug the AC to DC 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" section.

4) Reset the system using the instructions on page 9.

**Fixture Addressing**

The Obey™ 10 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.*

<table>
<thead>
<tr>
<th>FIXTURE OR SCANNER #</th>
<th>DEFAULT DMX STARTING ADDRESS</th>
<th>BINARY DIPSWITCH SETTINGS SWITCH TO THE &quot;ON POSITION&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>1.5</td>
</tr>
<tr>
<td>3</td>
<td>33</td>
<td>1.6</td>
</tr>
<tr>
<td>4</td>
<td>49</td>
<td>1.5,6</td>
</tr>
<tr>
<td>5</td>
<td>65</td>
<td>1.7</td>
</tr>
<tr>
<td>6</td>
<td>81</td>
<td>1.5,7</td>
</tr>
<tr>
<td>7</td>
<td>97</td>
<td>1.6,7</td>
</tr>
<tr>
<td>8</td>
<td>113</td>
<td>1.5,6,7</td>
</tr>
</tbody>
</table>

**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 & STEP/DIS 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 that you wish to move to.

5) Press the MUSIC/ADD button to confirm setting. All FIXTURES LED indicators will flash to confirm successful copy.

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

**Notes**

*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.*
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 MUSIC/ADD button.
10) Release SCANNER button #1 first before releasing SCANNER button #2.
11) Release MUSIC/ADD button.
12) All FIXTURES LED indicators will flash to confirm successful copy.
13) Press and hold PROGRAM & STEP/DIS buttons (2) times to exit mode.

Reverse Channel Output (OPTIONAL SETUP)

Action

1) Press and hold PROGRAM & STEP/DIS buttons together (2) times to access the channel assignment mode then press the FIXTURE button.
2) Select FIXTURE.
3) Move the SPEED fader until you arrive at the controller channel you wish to alter.
4) 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 5-11. 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

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

Reset to Factory Default

Action

1) Press the STEP UP and AUTO/DEL buttons simultaneously.
2) All LEDs will flash, indicating a successful reset of the controller.

Notes

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

Notes

This will erase all saved Chases!

This will work in any mode: Program or Playback.
Blackout

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

Fade Assignment (OPTIONAL SETUP)

Use this feature to turn the fade slider on or off for a certain channel. This is most useful when you want the fade time to affect the pan/tilt of a fixture for smoother movements, but do not wish to use this function on things such as shutter or color or gobo, as these should switch very fast most times.

Action

3) Press and hold BLACKOUT & STEP/DIS buttons together (2) times to access the channel assignment mode. then press the FIXTURE button.
4) Select FIXTURE.
5) Move the SPEED fader until you arrive at the controller channel you wish to alter.
6) Move the FADE TIME fader all the way up until N changes to Y.
7) Press the MUSIC/ADD button.
8) Release MUSIC/ADD button.
9) All FIXTURES LED indicators will flash to confirm successful setting.
10) Press and hold BLACKOUT & STEP/DIS buttons (1) times to exit mode.

Notes

This will permanently turn on/off the fade time for a channel, until the user turns it back on/off.

Programming

A program (bank) is a sequence of different scenes (or steps) that will be called up one after another. In the Obey™ 10, 6 programs can be created with up to 999 steps each.

Entering program mode

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

Action

1) Press and hold the PROGRAM button for 3 seconds.
2) Select a FIXTURE to program.
3) Select a Chase to store the program to (1~6).
4) Compose a look by moving the FADERS. (Changes in fixture attribute such as colors and gobos.) Press PAGE SELECT to access Channels 9~16 on the faders.
5) To program another FIXTURE press the FIXTURE button you have just finished programming then select another FIXTURE button to program.
6) Repeat steps 2 ~ 4 until you have your look.
7) Tap MUSIC/ADD button to store.
8) All FIXTURES LEDs will flash, indicating a successful save of the step to the memory.
9) The display will automatically go on to the next step. Use the Step Up and Step Down buttons to navigate through the existing steps in the Chase.
10) Repeat steps 2 ~ 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.

Notes

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 FIXTURE button again will hold the parameters changed for that fixture in the program scene.

There are 999 scenes available for every chase.
Delete a Step

**Action**

12) Press the **PROGRAM** button for 3 seconds.
13) Press the Chase button (1–6) for the corresponding chase you wish to edit.
14) Locate the step in the program by using the **Step Up** and **Step Down** buttons.
15) Press the **Auto/Del** button to delete the current step.
16) All **FIXTURES** LEDs will flash, indicating a successful delete of the step from the memory.
17) When you have finished deleting the steps, press & hold the Program button for 3 seconds to exit the Program mode.

**Notes**

- Deselect **Blackout** if LED is lit.
- The currently selected scene will be outputted to the light fixtures connected to the DMX output.

Delete Chase

**Action**

1) Press the **PROGRAM** button for 3 seconds.
2) Press and hold the **AUTO/DEL** button while pressing the Chase you want to delete.
3) All LED’s will flash, indicating that the Chase was successfully erased.

**Notes**

- ! This will erase all Steps in the Chase!!!

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) Use the **Step Up/Step Down** buttons to scroll through the chase and arrive at the step number for which you would like to add a step to.
4) Select a **FIXTURE** button.
5) Adjust the **Faders** to the desired look on stage.
6) Press **Music/Add** button and one step number will be added after the previously displayed step number. All **FIXTURES** LED indicators will flash to confirm successful copy.
7) Repeat steps 3–6 until all scenes have been added to the chase.
8) Press and hold the **PROGRAM** button for 3 seconds to exit programming mode.

**Notes**

- The step will be added after the scene displayed on the digital readout.

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. All **FIXTURES** LED indicators will flash to confirm successful copy.

**Notes**

- Steps will remain programmed on the controller.
- Only the chase is affected.
Playback

Manual Run Chase

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 CHASE button that stores the scene you want to run manually by using the STEP UP/DOWN.

Notes

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

Running in Sound-Mode

Action

1) Press the MUSIC/ADD button until the MUSIC TRIGGER LED turns on.
2) Select the CHASE you wish to operate.
3) Press the MUSIC/BANK-COPY to exit.

Notes

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

Running in Auto-Mode

Action

1) Press and hold the AUTO/DEL button until the AUTO TRIGGER LED turns on.
2) Select the CHASE you wish to operate.
3) You can set the time between steps by moving the SPEED fader and the fade time of the step by moving the FADE TIME fader.
4) You can change Banks while in operation by using the STEP UP/DOWN buttons.

Notes

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.

Running Sequential chases

Action

1) Press either AUTO/DEL or MUSIC/ADD 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

Chases must already be programmed.

The chases will run in the order they are pressed

Obey™ 10 User Manual 10 Rev.3
4. APPENDIX

Returns

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 (RMA #). Products returned without an 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 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). FedEx packing or double-boxing are recommended.

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.

Technical Specifications

WEIGHT & DIMENSIONS

- Length: 19 in (482 mm)
- Width: 3.5 in (89 mm)
- Height: 3.5 in (89 mm)
- Weight: 3.9 lbs (1.78 kg)

POWER

- Operating Range: DC 12V 500mA max
- Adapter: 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™ 10 Controller: OBEY10

WARRANTY INFORMATION

- Warranty: 2-year limited warranty