



# VIBRIO

## User Manual

# Welcome

## Why Vibrio?

Vibrio is a lighting control software for the iPad. One intuitive solution to handle lighting for your venue or show. It connects to the lights wirelessly using an ethernet-to-DMX converter and the Art-Net protocol. We believe Vibrio bridges the gap between lighting programmers and designers by having a simple interface that even beginners can learn quickly. When designing Vibrio, we took the best features of high-end lighting consoles and brought them to the iPad.

## Requirements

The following is needed for fixtures can be controlled by Vibrio:

iPad running iOS 9.0 or above  
Router (preferably the Apple Airport Express)  
Ethernet-to-DMX adapter

There are many brands and distributors of the Ethernet-to-DMX converter. We recommend the [Enttec ODE](#) or [DMXKing eDMX1](#). The converter will need to support the Art-Net protocol to be compatible with Vibrio.

## How it works



### iPad

Your device sends a Wifi signal to your router.

### Router

Your router then sends that signal over to your DMX adapter.

### DMX

Your adapter directly controls your fixture,

### Fixture

Making the touch of a screen turn this bad boy on.

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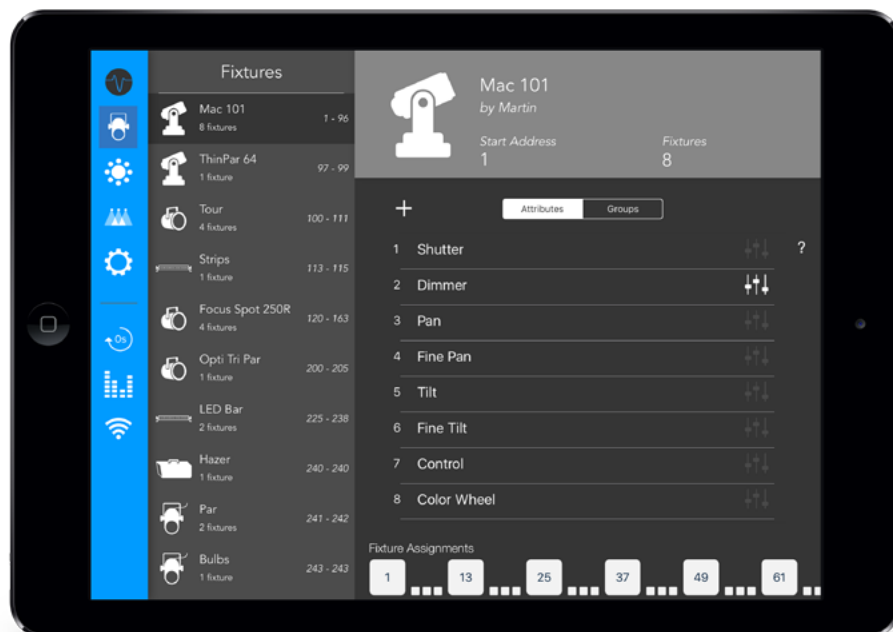
# Fixtures

The Fixtures screen shows all fixture assignments for the active show. The first step in creating your show is to set up fixtures by assigning them to addresses. Vibrio needs to know the address of each fixture to send it the correct data.

## Adding Fixtures

To assign a new address, press the **+** button under DMX Addresses. Next, choose a fixture by either selecting a manufacturer then fixture or by searching the library. For fixtures previously used, choose the Recent section under manufacturers. If your fixture does not exist in the library, choose Create New or a generic option similar to your fixture. The Add Patch Addresses dialog will appear with options for the Starting Address and Number of Fixtures. By increasing the Number of Fixtures, multiple fixtures will be assigned back-to-back from the chosen starting address. Note that there cannot be blank address gaps between the fixtures for this to be configured. Press the Done button to confirm the assignment.

Tip: When addressing your fixtures, we suggest condensing the assignments instead of spreading them out over the 512 universe.




## Editing Fixtures

The top section includes options for the selected fixture address. The name and manufacturer can be modified by tapping on them. The icon can be changed by tapping through the different options, with its only function being to provide a visual representation of the fixture.

The bottom section contains attributes and groups that can be modified by selecting the appropriate switch option. To delete an attribute or group, swipe left and choose Delete. The name of an attribute or group can be changed by simply tapping on it. When adding a fixture assignment, it will automatically be added to a group with its fixture name so keep this in mind when changing group names. The + button above the list will add a new attribute or group. When adding attributes, a popup will provide common fixture attributes to choose from.

## Dimmer Values

Attributes display the  icon if they are a dimmer value. This means that when the fixture in a scene is faded in or out, this attribute will be fade instead of snap to the new value. For example, the color wheel should not cycle through colors as it fades in, it instead should immediately load the correct color. In this case the dimmer value should be off. Alternatively, the red value on a 3-channel LED should allow dimming as it fades in or out. When debugging a fixture with an undesired behavior, make sure to review the dimmer values for each attribute.

## Fixture Assignments

With a selected DMX Address, the bottom of the Fixtures screen displays the fixture assignments. This list shows the starting address for each fixture in the selection and is to help when addressing lights.

# Shows

The Shows screen is a list of your shows, with options to add, duplicate, delete, rename, color, and export. Tap a show once to edit details and tap again to enter the show. A second way to enter the selected show is by pressing the ▶ button.

## Import / Export

The Export button allows the user to backup or transfer a show to another iPad via e-mail. To use this feature, select the desired show and press Export. An email dialog will appear, in which you can send the show to someone. To import a show, simply open the email attachment in the Mail app and choose to open with Vibrio. All fixtures and effects used in the show will be transferred as well.

## Show View

Entering a show will present the Show View, which is an overview of all scenes and sequences within the show. Press the + button to add a new scene or sequence. At the bottom are folders for Playing, Most Used, Favorites, and Archived. The Playing folder contains all scenes and sequences that are actively running in order of most recent first. Most Used contains the top 5 scenes and sequences according to their play count. Favorites and Archived are changed depending on the user placing scenes in those categories. A tile that is archived will no longer appear in the main list.

## Master Settings

The sidebar contains a master timing setting for the current show. Timing controls the fade time when a scene or sequence is played, and when an effect is applied. Tap ↺<sup>0s</sup> to increase by 1 second, with a range of 0s - 5s.





# Scenes

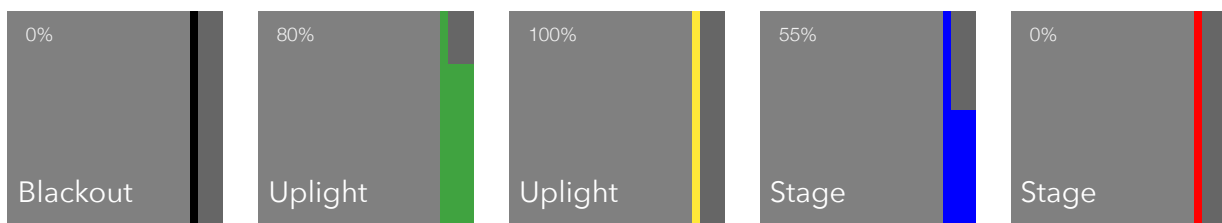
A scene is a fixed set of attribute values for the fixtures in a show. Not all fixtures or attributes may be included in a scene. When multiple scenes are running simultaneously, the last scene played takes precedence (also known as LTP).

Selecting a scene tile provides options to Rename, Edit, Duplicate, Delete, Favorite, Archive, Color, Play, and control the Dimmer. The top section of the Shows View displays each of these options.

## Tile Gestures

The following gestures can be used on scene and sequence tiles:

			
Single tap	Double tap	One finger hold	Two finger hold
Select the tile	Play or stop the scene/sequence	Reorder tiles	Temporarily bring the scene dimmer to 100%; also called a “bump”



# Scene Edit

The Scene Edit View allows the user to make changes to groups and fixtures in a scene, apply Effects to groups, and view scene details. This view is accessed by selecting a Scene tile and pressing [Edit](#).

## Groups

By default, groups are not included in a new scene. Include means that when multiple scenes are running, this scene will override attributes for fixtures in that group. Tap the Include button on a group to view fixtures and begin editing the group. After selecting a group, attributes for the group can be edited in the Attributes section. These changes will apply to all fixtures in the group.



Note: Groups are managed from the Fixtures tab in the sidebar.

## Fixtures

Once a group is selected, all fixtures in the group will appear in the Fixtures section. Tap a fixture tile to select it, and again to deselect. For faster editing, multiple fixtures can be selected at once. When a fixture is selected, its attributes can be edited in the Attributes section.

## Attributes

The Attributes section shows common attributes in the selected group or fixture(s). Slide an attribute fader to change the DMX value, or tap on the value label for the Fine Tuning dialog. In the Fine Tuning dialog, values can be entered manually, incremented / decremented, copied, and pasted. To copy/paste all attributes, scroll right and choose the appropriate option.

A second way to edit attributes is through the custom Color and Position pickers. Red, Green, and Blue values can be easily edited by pressing the Color Wheel button  (if available). Pan and Tilt values can be edited similarly with the Position button .

## Effects

In the Scene Edit view, effects can be applied to a group. Select the desired group and a list of available effects will appear under Add Effects. Tap an effect to apply it, and the effect will fade in using the show's Master Timer rate. Effects currently running for the selected group can be viewed under the Running Effects section. Simply tap the effect again to remove it.

Note: Effects are managed from the Effects tab in the sidebar.

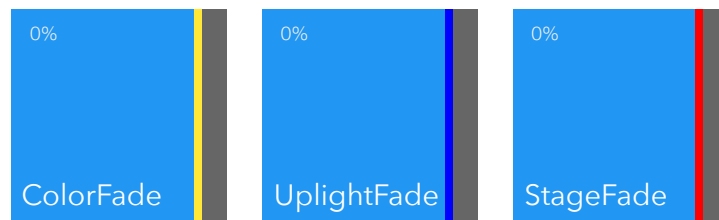


# Sequences

A sequence is a selection of scenes that continuously run in a set order. A fade and hold time is customized for each scene in the sequence. A sequence is played just like a scene, and its tile is distinguished using a blue background color.

## Tap Tempo


When a Sequence is selected in the Show View, the Tap for Tempo button will appear in the top section. This button allows an override to the timing for a sequence based on the tap tempo. To set the BPM (beats per minute), tap the button 3 times or more. Once the BPM is set, press the Use BPM button to activate the override.







# Sequence Edit

The Sequence Edit view allows the user to make changes to scenes in a sequence, control playback, and edit fade/hold times. This view is accessed by selecting a Sequence tile and pressing [Edit](#).

## Scenes

A list of all scenes is shown in the left panel. Tap a scene to add it to the sequence, and it will appear in the main view. To remove a scene, swipe left and press Delete. To reorder scenes, press the Edit button and drag using the  symbol.

## Playback Controls

In the top section are playback controls. By pressing the  or  buttons the Sequence will play / pause the transition between scenes. Note that the Sequence continues to be actively running in the show. The  and  buttons manually progress to the previous or next scene in the sequence.

## Fade & Hold Time

A fade and hold time can be adjusted for each individual scene by tapping on the label in the scene. When the dialog appears, use the sliders to find the desired time. Select the Apply to All option to apply changes to every scene in this sequence. The fade time is the time it takes for the scene to fade in. Hold time is the amount of time the scene remains playing after fading in.

# Effects

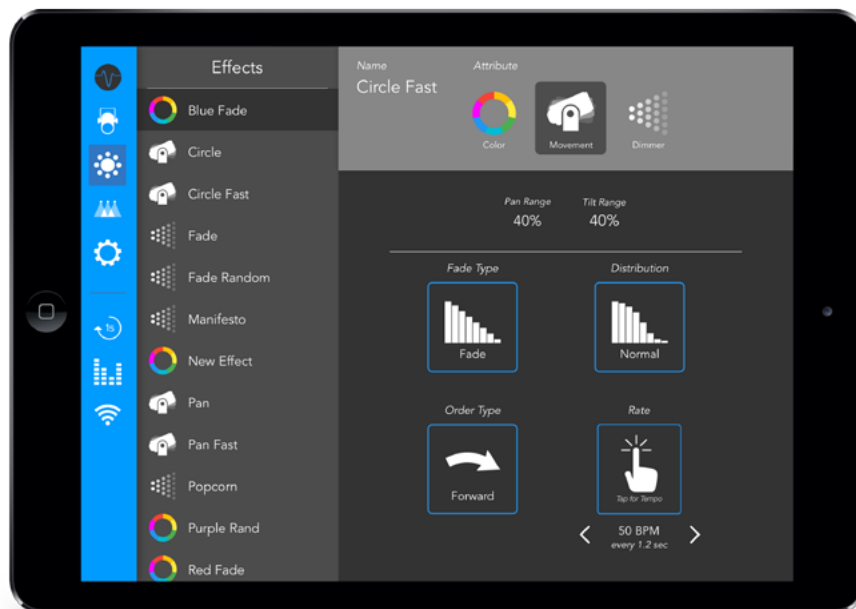
Effects are live adjustments to the color, position, or dimmer attributes. An Effect is applied to a fixture group in a scene. View the preloaded effects that come with Vibrio to see how different features function. This section describes editing an effect, for more information on running effects, see [“Effects” on page 8](#).

## Attribute

The attribute of an effect can either be Color, Position, or Dimmer. A Color effect will apply to fixtures that have Red, Green, and Blue attributes. Position applies to any fixtures with Pan and Tilt. Dimmer effects will apply to any attribute labeled with the Dimmer Value on. For more information about the Dimmer Value, see [“Dimmer Values” on page 5](#).

## Order Type

An effect will move through the fixtures in a group in a particular order. The order can be set to run Forward, Backward, or Random.



## Distribution

Effects are naturally generated using a sin curve, so a row of lights would appear to have one light with higher intensity than the others. By inverting the distribution, the sin curve is turned upside down, making that light be lower intensity than the others. For all lights to behave exactly the same without a wave effect, use the None selection.

## Fade Type

The fade type for an effect can either be Fade or Snap. Fade will transition the effect change smoothly, and snap will change without fading.


## Rate

The rate of an effect controls the timing in which each phase will occur. As an effect moves through fixtures in a group, each fixture will be given this amount of time. The Tap for Tempo button can be pressed 3 or more times to determine a BPM (beats per minute) rate. Use the arrows to fine tune the BPM rate or tap the rate label to change manually.

## Movement

The Pan and Tilt Movement values are only available for Position effects. These values represent a percentage of DMX range to apply the pan or tilt. For example, a 20% Pan Range will move the pan position a value of 25 left and 25 right of the original position.


## Color

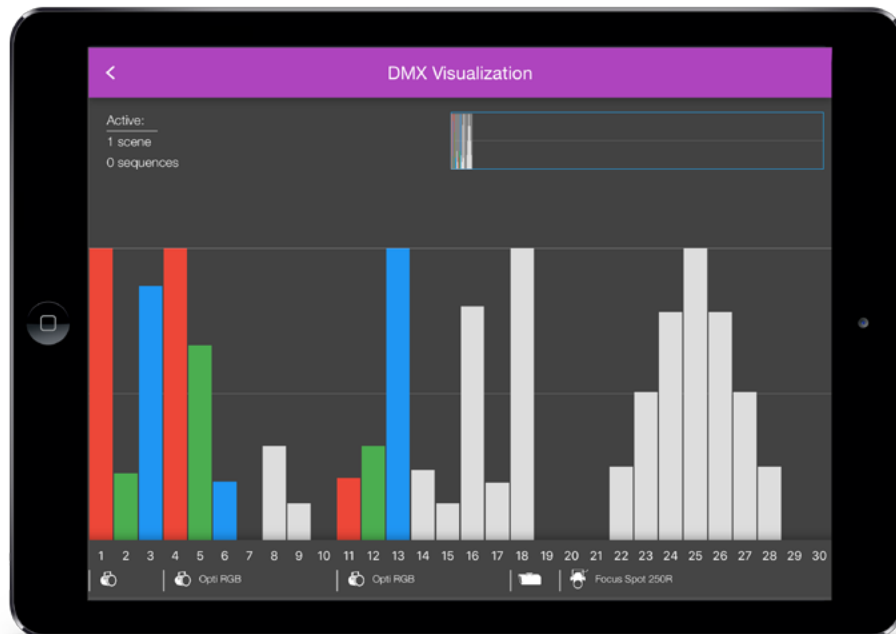
The Color value is only available for Color effects. Tap the color wheel  to choose a color for the effect to run. The effect will change a fixture group from its original color to the chosen color.

## Dimmer Range


The Dimmer Range value is only available for Dimmer effects. This percentage determines how large the change will be. A smaller percentage will increase the minimum value in the scene. Note that the high value is determined by the scene's dimmer.

# Visualizer

Access the DMX Visualizer by pressing the  in the sidebar. The Visualizer shows the DMX output value for the current show. It is designed to aid in viewing and debugging output from the scenes to ensure correct values are sending. A count of active scenes and sequences can be found at the top left. Located at the bottom is the fixtures and addresses in the show. A minimap at the top shows the entire 512 addresses. Touch on the minimap to view that section quickly.



# Settings

Access the Settings screen by pressing the  in the sidebar. The settings are applied globally and will retain changes after the app is closed and restarted.

## Safe Mode

Safe Mode allows Vibrio to be run with restricted access to fixture assignments, scene/sequence editing, and effect settings. This mode is beneficial when running live shows or when controlled by volunteers. The environment will not allow modifications to scenes, except for the adding and removing of effects.

## Scene Layering

Scene Layering is on by default, and allows multiple scenes and sequences to play simultaneously. By turning Scene Layering off, any currently active scenes will fade out once a new scene is played.

## Unicast

Vibrio can send Art-Net DMX packets to either all nodes on the network, or just one. By default, Vibrio sends via Broadcast (all nodes). For better network performance, use Unicast by specifying the IP address of your Ethernet-to-DMX converter. Once enabling Unicast, tap the IP Address and Vibrio will display other Art-Net devices found on the network with their corresponding IP Address.

# Support

For additional support, please contact [support@toastmobile.com](mailto:support@toastmobile.com). Note that we will not assist with any network setup issues, as you need to consult with an IT professional. Please contact us about any software bugs, feature requests, fixture profile requests, or other comments.

