Table of Contents

Welcome to the Tonalite v1.0.0 Documentation!

This book will show you how to get started using Tonalite to create great lighting quickly and easily.

Who is Tonalite for?

Tonalite is for schools and smaller venues who need a solid multi-purpose lighting control application on a budget. It is designed to work with industry standard hardware, and it is meant to be as easy to use as possible.

What is Tonalite meant to do?

Tonalite is supposed to be used with theater systems that have very little or no moving lights. This makes it great for facilities with outdated lighting rigs. Tonalite outputs up to 48 chanels of E1.31 (sACN) DMX data which should be sufficient for many use cases. This number can always be increased if needed.

Supported Hardware

Tonalite supports any E1.31 (sACN) to DMX 512 network interface. Below is a table with some supported interfaces listed. In theory, any E1.31 (sACN) interface should work with Tonalite but thse are the most common and easily found.

Interface	Manufacturer
eDMX1 PRO	DMXKing
eDMX2 PRO	DMXKing
eDMX4 PRO DIN	DMXKing
ultraDMX2 PRO	DMXKing

Supported Software

It is possible to visualize your lighting using external software. Below is a list of some visualizers that work with Tonalite.

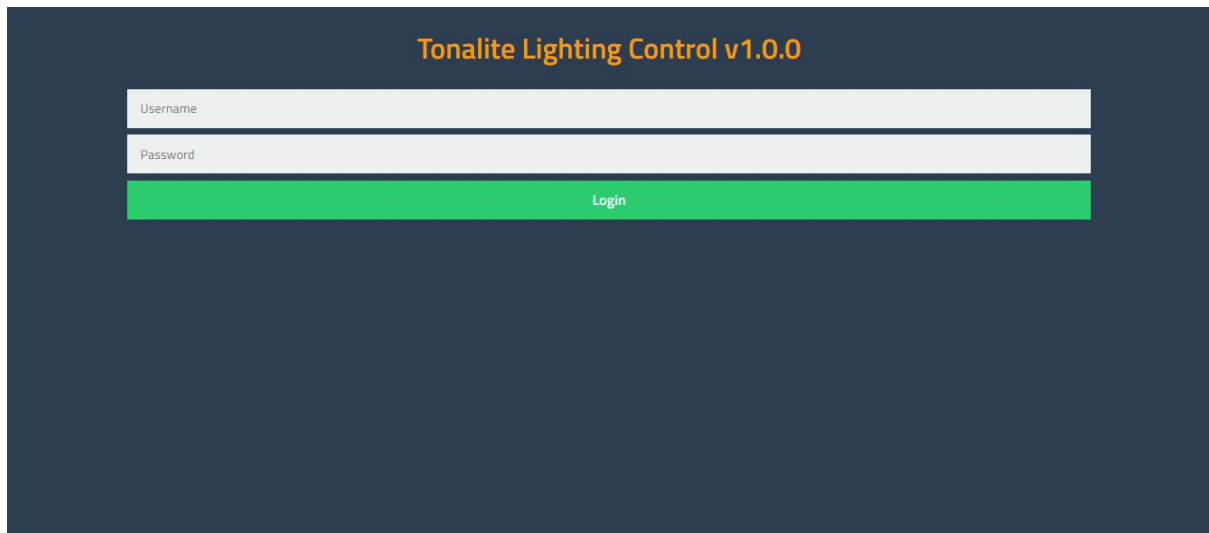| Software	Manufacturer
Capture	Capture Visualisation AB
ShowDesigner	Martin
Realizzer	Realizzer
Vision	Vectorworks, Inc.
MagicVis	Chamsys Limited

Installing Tonalite

To install Tonalite, download `tonalite-*version*-*OperatingSystem*x64.zip` and unpack it to somewhere on your computer. This location can be anywhere that has permissions to run application files. It is often easiest to put it in either the *Documents* or *Desktop* folder.

Starting the Application

To start Tonalite, run `tonalite-*version*-*OperatingSystem*x64/Tonalite.exe`. Once you have done this, a web browser window will open with the Tonalite login screen.

Logging Into Tonalite

The Tonalite login page is the first thing any user will encounter when trying to access the control interface. This protects your system from unwanted operators who may mess up the lighting.

Default Login

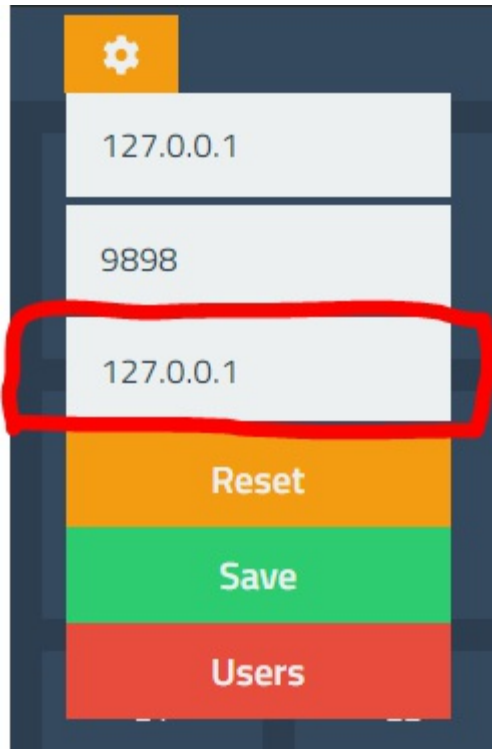By default, Tonalite has one user. The default username and password are:

Username: `admin`

Password: `password`

These can be changed after you login the first time, or you can leave them as-is if security is not an issue for your system.

Configure Your E1.31 (sACN) Interface

You can configure your E1.31 (sACN) DMX interface from the settings box on the Tonalite header. The E1.31 output IP setting is the third input from the top. *Note that the server must be restarted each time you make a change to this value.*
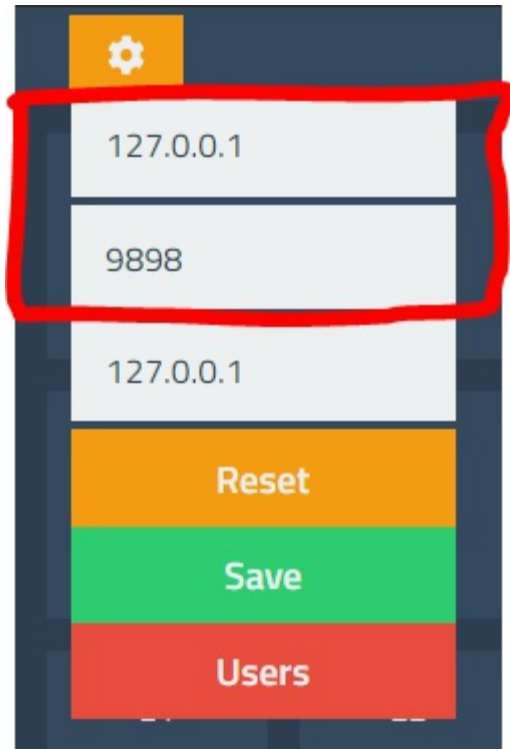

By default, this is set to the local IP of your computer, `127.0.0.1`, but you will have to update this for your interface. Each IP is specific to the interface that you own. If you can not figure out the correct IP to use, contact the interface manufacturer.

Reset

If you set a custom value for the *E1.31 (sACN) IP* and can't remember what the default value was, just press the yellow *Reset* button and the default value will be entered. Then, simply press the green *Save* button to use that value.

Configure the Tonalite Server

You can configure the Tonalite serve from the settings box on the Tonalite header. The server output IP and port settings are the first and second inputs from the top, respectively. *Note that the server must be restarted each time you make a change to these values.*

Server IP

This is the output IP address that the Tonalite server will stream the client to. By default, this is set to the local IP of your computer, `127.0.0.1` , but if you would like to use the Tonalite interface from another device, this will have to match the IP address of your internet connection. You may also need to change this if it clashes with another service on your computer that needs to use that IP address.

Server Port

This is the IP port on which the Tonalite server will stream the client to. By default, this is set to `9898` so as not to clash with any other processes that may be using the same IP address, but you may have to change this if you experience problems.

Fallback

If you have set custom values for the *Server IP* and *Port* and the Tonalite server has trouble connecting, it will fallback to the default values and try again.

Reset

If you have set custom values for the *Server IP* and *Port* and can't remember what the default values where, just press the yellow *Reset* button and the default values will be entered. Then, simply press the green *Save* button to use those values.
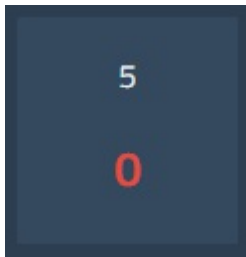
Using Channels

Channels form the building-blocks of Tonalite. Their values are what get outputted over the network to control the lights. You can view the current channel values by going to the *Channels* tab in the interface.


For each channel there is a box, also known as a tombstone, that displays the *Channel Number* and the *Channel Value*. The *Channel Number* is the smaller number on top, while the *Channel Value* is the larger, colored number on the bottom. Each channel can have a value from `0` to `100`. This value is a percentage of the output of the light which is actually `0` to `255`.
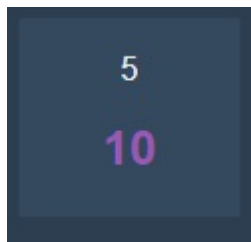
The *Channel Value* is **red** if the value was not updated in the last action (setting a channel value, going from cue to cue, or moving a submaster, etc.).

The color of the *Channel Value* is **green** if the value increased after the last action.
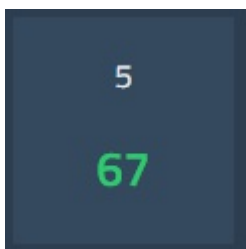
The color of the *Channel Value* is **purple** if the value decreased after the last action.

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Setting Channel Values

To set the values of different channels, use the *Keyboard* tab in the control interface. Channel values entered from the *Keyboard* tab overwrite all other channel values from *Cues* and *Submasters*.
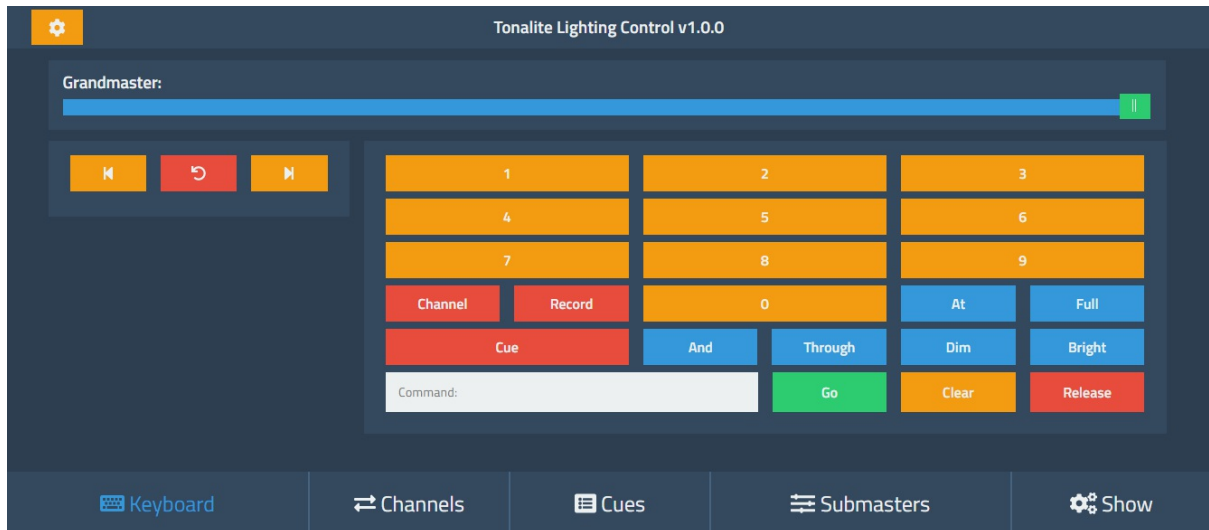
Set a single value

To set a single channel's value, press the *Chanel* button then the channel number you would like to control, then the *At* button and then the value of the channel. Finally, press the *Go* button.

To set Channel 1 at 50%, you would press:

`Channel` + `1` + `At` + `50` + `Go`

Set multiple values

To set multiple channel's values, do the same as above, except this time use the *And* and *Through* buttons.

And

The *And* button allows you to set the values of multiple channels out of order.

To set Channel 1, 3, and 5 at 75%, you would press:

`Channel` + `1` + `And` + `3` + `And` + `5` + `At` + `75` + `Go`

Through

The *Through* button allows you to set the values of many channels in a row.

If you want to set Channels 1 through 25 at 25%, instead of using the *And* button and entering each channel one-by-one, just press:

`Channel` + `1` + `Through` + `25` + `At` + `25` + `Go`

Special Channel Buttons

On the keyboard, you will see some other, more specific buttons that affect channel values.

Full

This button provides an easier way to enter full strength for the selected channel values. Instead of entering the number `100` (for 100%) manually, just press the *Full* button and `100` will be entetred for you.

Dim

The *Dim* button takes the selected channel values and lowers them by 10%.

If Channel 5 is currently at 80% and you would like to bring it down slightly to 70%, press:

`Channel` + `5` + `At` + `Dim`

Bright

The *Bright* button takes the selected channel values and increases them by 10%.

If Channel 5 is currently at 70% and you would like to increase it slightly to 80%, press:

`Channel` + `5` + `At` + `Bright`

Release

When you set channel values in the *Keyboard* tab, the values overwrite all other channel values set by *Cues* and *Submasters*. The *Release* button removes all the inputted values and allows the other functions to edit the channel values. *Note that only specific values entered in the Keyboard tab will overwite the Cues and Submasters.* For example, if you set the values of Channels 1 through 5 in *Keyboard*, the values of Channels 6 through 48 will still be controlled by *Cues* and *Submasters*.

Using Cues

Cues allow you to save combinations of channel values and play them back at a certain time. You can view and edit cues by going to the *Cues* tab in the interface. Tonalite supports an unlimited number of cues.
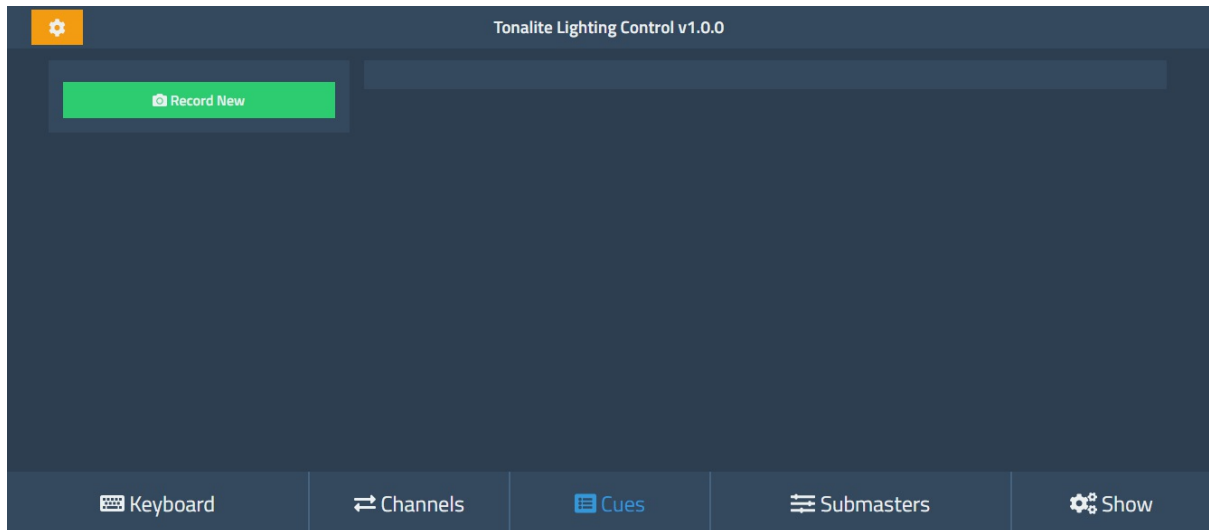
Recording Cues

There are two ways to record a new cue, from the *Cues* interface tab of from the *Keyboard*.

First, set some channel values as shown in the previous section using the *Keyboard* tab.

The *Cues* tab

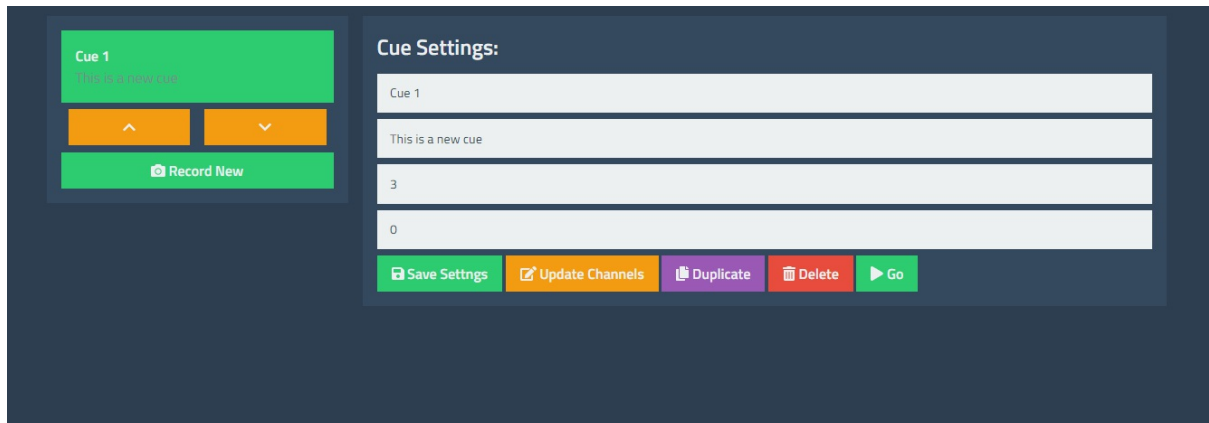On the left of the control panel, press the *Record New* button.

The *Keyboard*

In the *Keyboard* tab, press `Record` + `Cue`.

Editing Cues

Once you have recorded one or more cues, you will see that each as an entry on the lefty side of the *Cues* tab above the *Record New* button. You will also see that two other buttons have appeared: ∧ and ∨. To edit a cue, click on it's name in the list, it will turn green, and you will see the text boxes to the right of the cues list fill with values.

Name

This is the name of the selected cue. It can be any length, but it will be truncated to `20` characters when displayed in the control interface.

Description

This is a description of the selected cue. It can be any length, but it will be truncated to `70` characters when displayed in the control interface.

Time

This is the amount of time (in seconds) that it will take to transition into the selected cue. This number can be in whole seconds (eg. `3`) or it can also be a decimal (eg. `3.5`).

Follow

If this is greater than `0` , The selected cue will transition to the next one in line after this amount of time. This number can be in whole seconds (eg. `3`) or it can also be a decimal (eg. `3.5`).

Save Settings

The *Save Settings* button saves all the changes you have made to the selected cue's *Name*, *Description*, *Time*, and *Follow*.

Update Channels

The *Update Channels* button replaces the selected cue's channel vales with those that are currently set from the *Keyboard* tab.

Duplicate

The *Duplicate* button duplicates the selected cue and places the copy at the end of the cue list.

Delete

The *Delete* button deletes the selected cue from the show.

Go

If you press the *Go* button, Tonalite will use the selected cue as the active show cue and transition accordingly.

Moving Cues

At the cottom of the cues list in the *Cues* tab, there are two buttons ^ *(Up)* and ∨ *(Down)*.


^ (Up)

If a cue is selected, this button will move it up in the list.

∨ (Down)

If a cue is selected, this button will move it down in the list.

Using Submasters

Submasters are sliders that you can configure to control different combinations of channels for easy access. The submaster controls can be found in the *Submaster* tab in the interface. Tonalite supports an unlimited number of submasters.
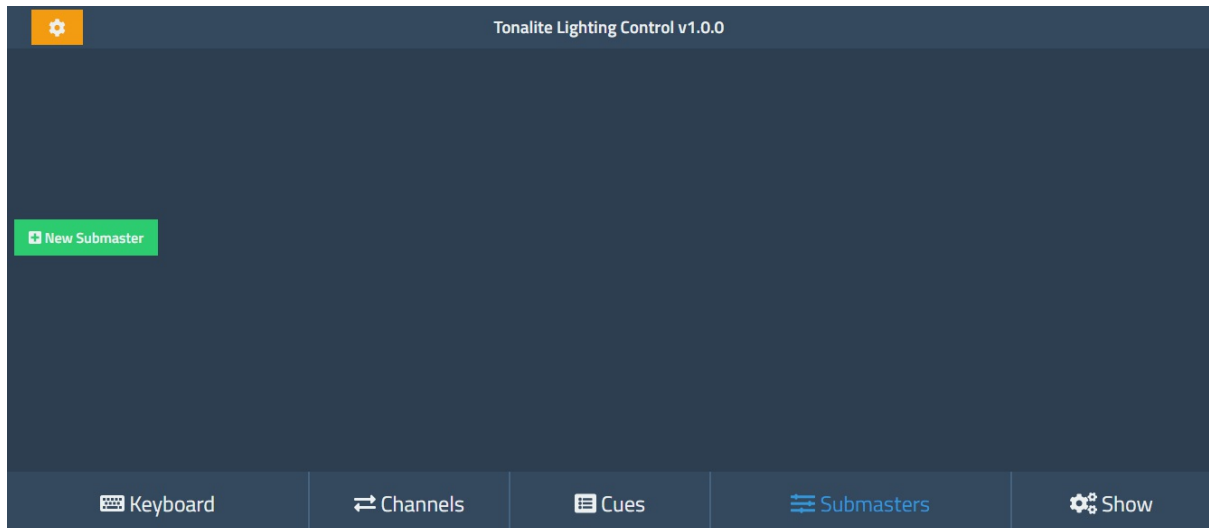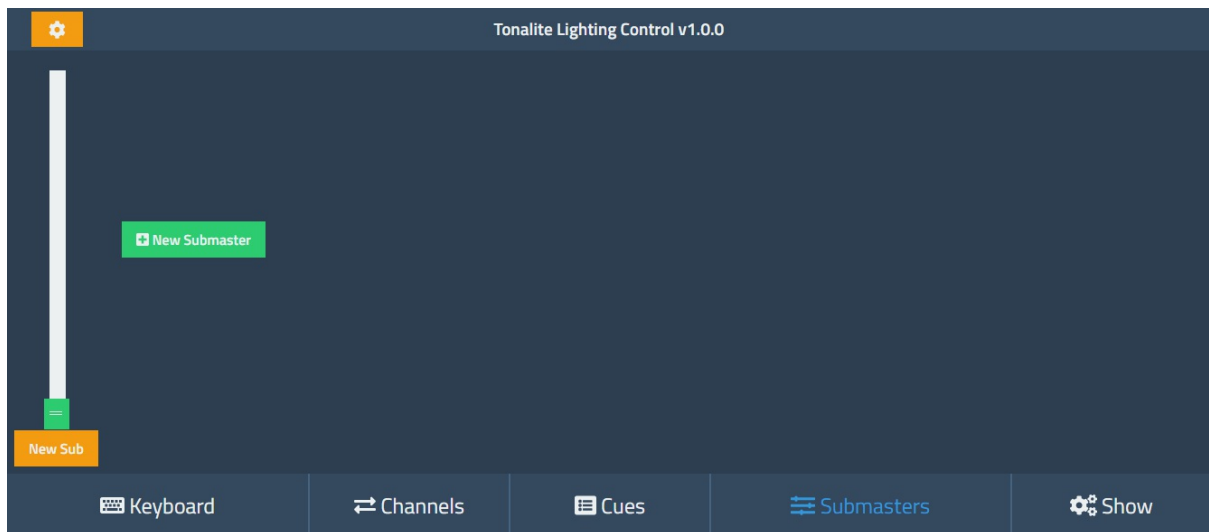
Creating Submasters

To create a new submaster, press the *New Submaster* button.
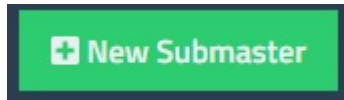
A new submaster will be created and displayed before the *New Submaster* button. If there are other submasters, the new one will be displayed after all others (to the right).

If the *Keyboard* was used to set channel values, all values set will automatically be added to the newly created submaster.

Editing Submasters

To edit a submaster, click on its name benith the slider.
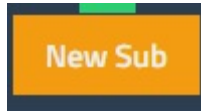
A window will pop up that holds the settings for the selected submaster.

Name

The *Submaster Name* can be be as long as you would like, but it will be truncated to `12` characters when displayed in the interface.

Value

This is the value (in percents) of the submaster slider. All channels controlled by the current submaster will have their output set at this percent of their value.
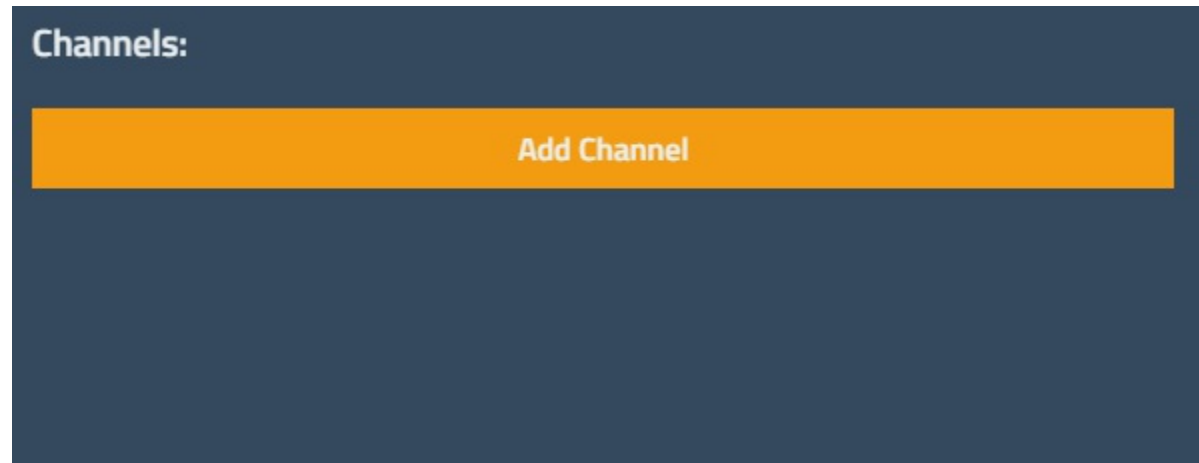
Save Settings

Save and update the *Name* and *Value* for the current submaster.

Delete

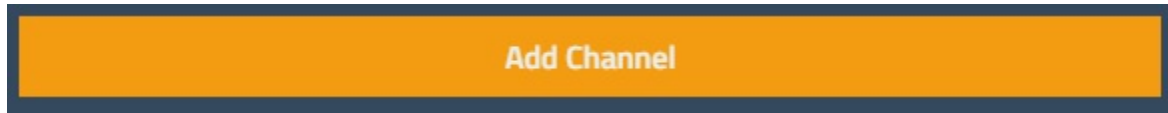Delete the current submaster from the show.

Submaster Channels

Submasters allow you to control the values for multiple channels. The settings for submaster channels can be found on the right of the current submaster settings popup.

Adding Submaster Channels

To add a channel to the current submaster, click the *Add Channel* button.

Add Channel

A new channel entry will be added to the list.

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Editing Submaster Channels

Each submaster channel has its own entry in the channels list.

Channel

This is the channel to be controlled. It may have a value from `1` to `48` .

Value

This is the maximum value for the channel (in percents). By default, it is `100` .

If the value for a submaster channel is `26` and the submaster's value is `100` , then the output value of that channel will be `26` . If the submaster value is `50` then the output value of this channel will be `13` .

Save

Save the *Channel* and *Value* of this submaster channel. Make sure to press the save button after editing before doing anything else! If you go and attemt to edit another channel, the first's settings will not be saved.

Delete

Delete this channel from the submaster.