Table of Contents

Welcome to the Tonalite v2.0.0 Beta 7 Documentation!

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

Who Is Tonalite For?

Tonalite is for smaller theater venues that need an easy to use lighting control system that is still powerful enough to control modern lights. It is designed to work with industry-standard hardware and is meant to be as intuitive as possible.

What Is Tonalite Meant to Do?

Tonalite is meant to control lighting rigs using a web interface, accessible from any device on the network, such as a phone, tablet, or laptop. This allows the operator to control the lighting while moving throughout the theater. You can also use it with a wired connection to prevent connection issues in a production environment.

Supported Hardware

Tonalite supports any E1.31 (sACN), ArtNet, and official uDMX interfaces (using uDMXArtNet). Currently, Tonalite only outputs 2 universes of DMX (1024 channels).

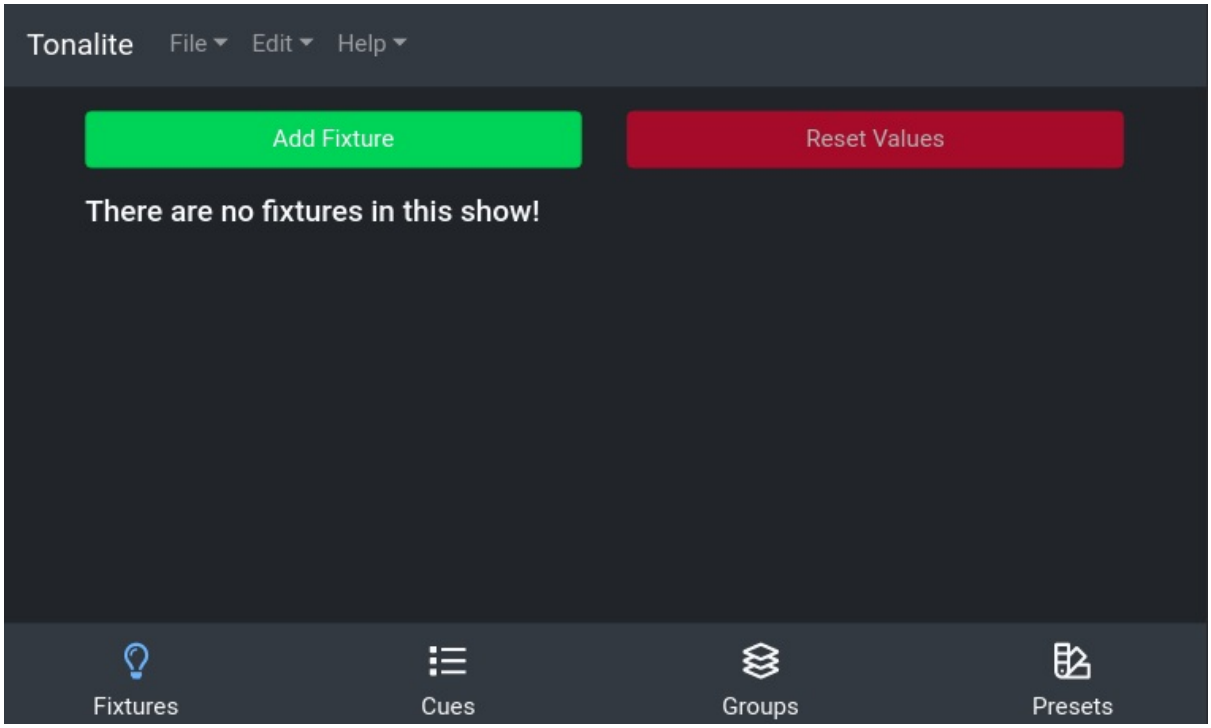
Supported Software

It is possible to visualize your lighting using external software that supports the E1.31 (sACN) or ArtNet protocols. Below is a list of some visualizers that work with Tonalite.

Software	Manufacturer
Capture	Capture Visualisation AB
Realizzer	Realizzer
Vision	Vectorworks, Inc.

Using Fixtures

Any production uses a number of different lighting fixtures. Tonalite allows you to control each one individually and set the values of each of its parameters separately. You can access the fixtures in the `Fixtures` tab of the interface.



Display

A fixture item displays as a blue box with the fixture's name inside.

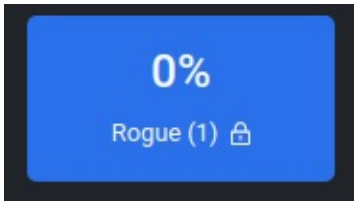
Special Displays

Intensity

If a fixture has an intensity parameter, the value of that parameter will be displayed along with the fixture's name.

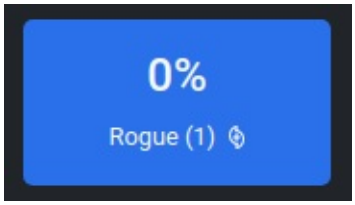
Locked Channels

If a fixture has any locked channels, an icon will appear next to its name to indicate this.



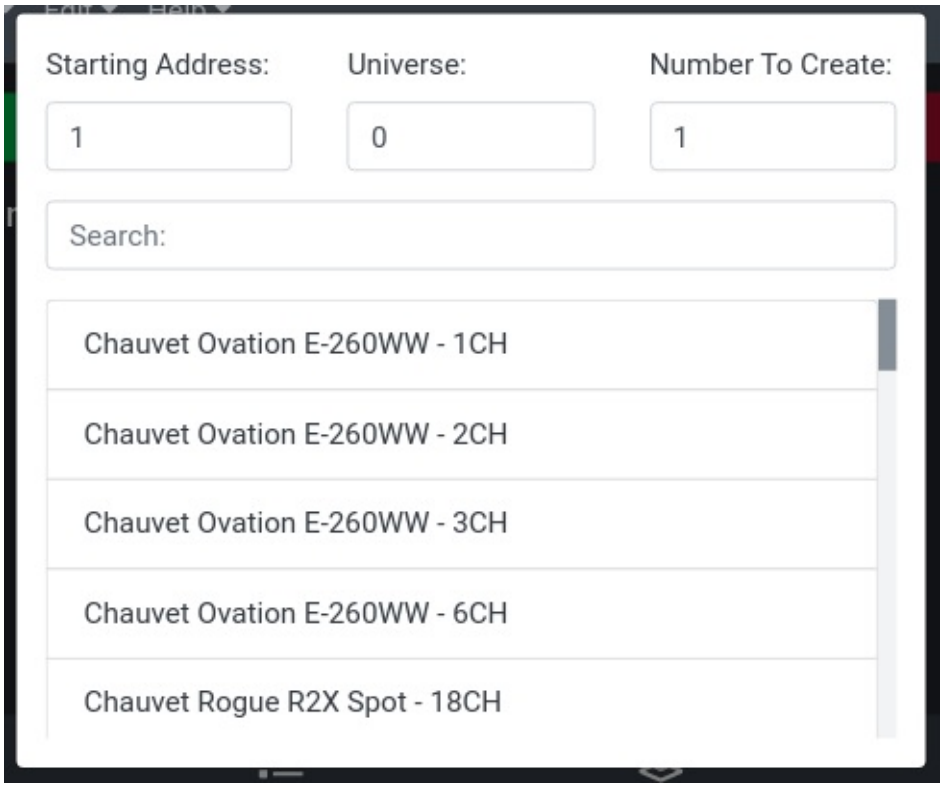
Active Effects

If a fixture has any active effects, an icon will appear next to its name to indicate this.

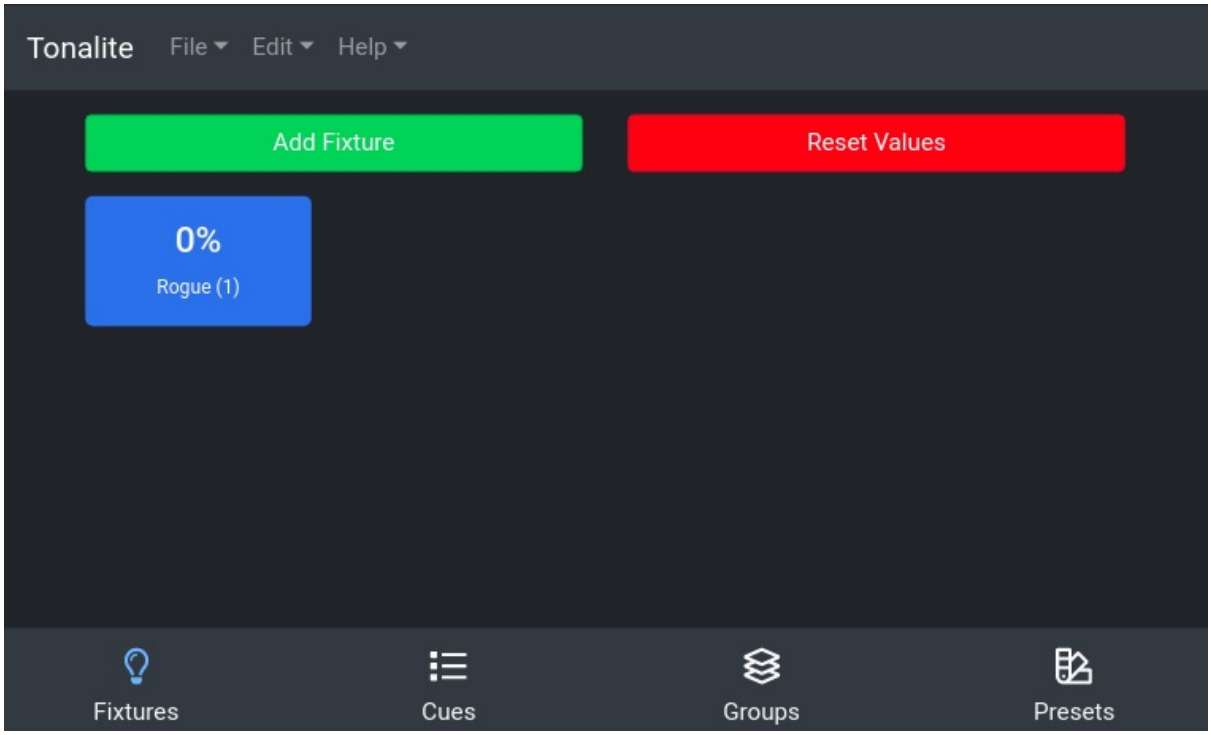


Adding Fixtures

Add a fixture using the green `Add Fixture` button on the top of the `Fixtures` tab. This will open a modal that shows the available fixture profiles and allows you to set a starting DMX address for the soon to be created fixture. Each of a fixtures's parameters' DMX addresses is based on the `Starting Address` and `Universe` fields. If the fixture has three parameters and the starting DMX address is 1, the parameters will be mapped to addresses 1, 2, and 3. Use the `Number To Create` field to specify how many of this type of fixture you would like to create.



To select a fixture profile, click on it in the list, and a new fixture will be created based on this profile. If you can't find what you are looking for, try using the `Search` box. If there isn't a profile in the library for the fixture you want to use, you can create one yourself or send a support message asking for one to be created for you.

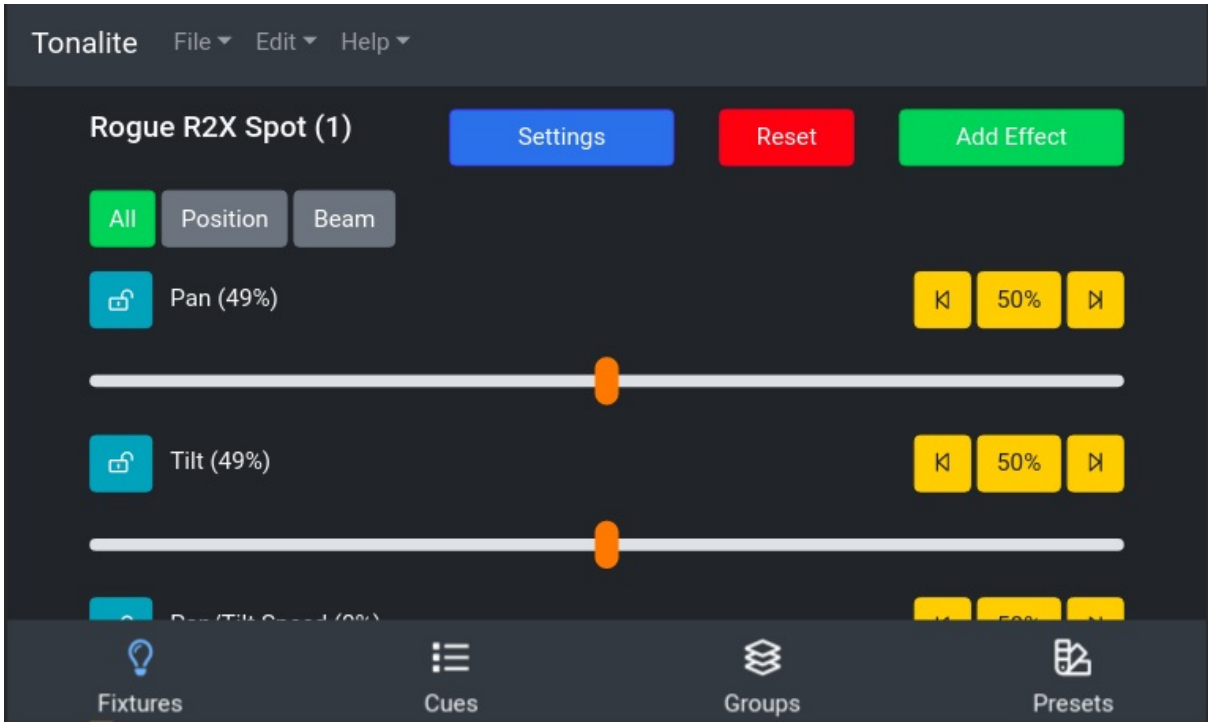

Tonalite
File
Edit
Help
Add Fixture
Reset Values
0%
Rogue (1)
Fixtures
Cues
Groups
Presets

Resetting Fixture Parameter Values

You can reset the values of every fixture's parameters using one button. To do so, click the red `Reset Values` button on the top of the `Fixtures` tab. You will be asked to make sure you want to do this because this will cause a blackout in most cases.

Updating Fixture Parameters

Each of a fixture's parameters can be controlled individually. To access the fixture parameters page, click on the appropriate fixture in the `Fixtures` tab.



Top Bar

Settings

Go to this fixture's settings.

Reset

Reset the parameter values for this fixture. You will be asked to make sure you want to do this because this will cause a blackout in most cases.

Add Effect

Add an effect that will run on this fixture.

Category Buttons

All

Display all available parameters on this fixture.

Position

Display only the position parameters on this fixture.

Color

Display only the color parameters on this fixture.

Beam

Display only the beam parameters on this fixture.

Parameter Buttons

Lock

Besides each parameter, there is a lock icon. It switches from unlocked to locked when you click on it. When a parameter is locked, the value you set manually on the slider will override values for the parameter that are saved in cues.

Left

Set this parameter to 0%.

50%

Set this parameter to 50%;

Right

Set this parameter to 100%;

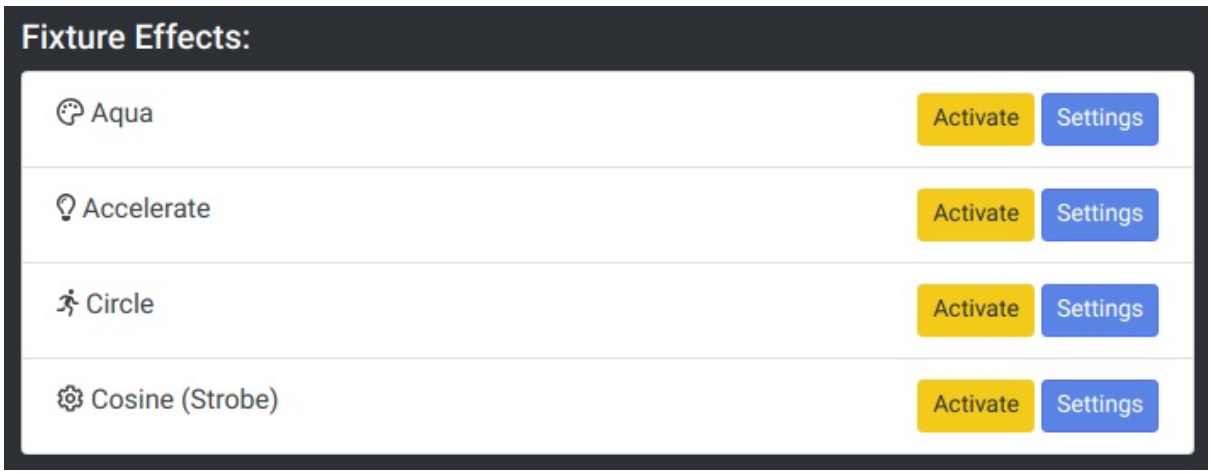
Fixture Effects

Tonalite supports several fixture effects. Each of these fixture effects falls into a specific category based on what parameter(s) of a fixture they control. These categories are:

- Color
- Intensity
- Shape
- Parameter

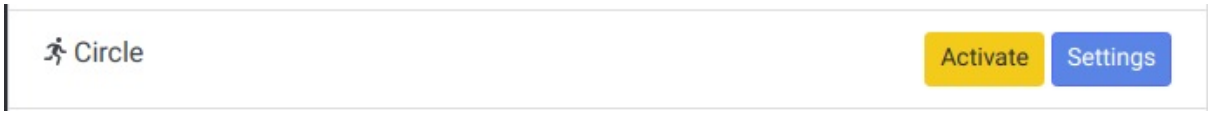
Effect Display

When a fixture has effects added to it, they are displayed at the bottom of the fixture's parameters page.



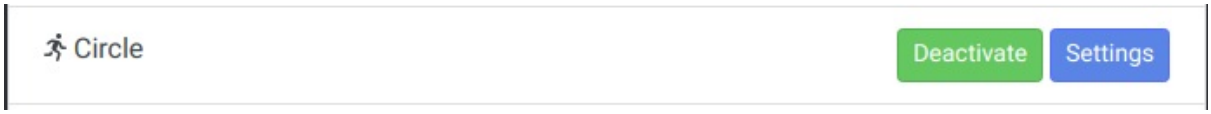
Buttons

Activate



Activate the selected effect. When pressed, this button turns into a `Deactivate` button. The activation state of all cues on a fixture is saved to cues.

Deactivate



Deactivate the selected effect. When pressed, this button turns into an `Activate` button. The activation state of all cues on a fixture is saved to cues.

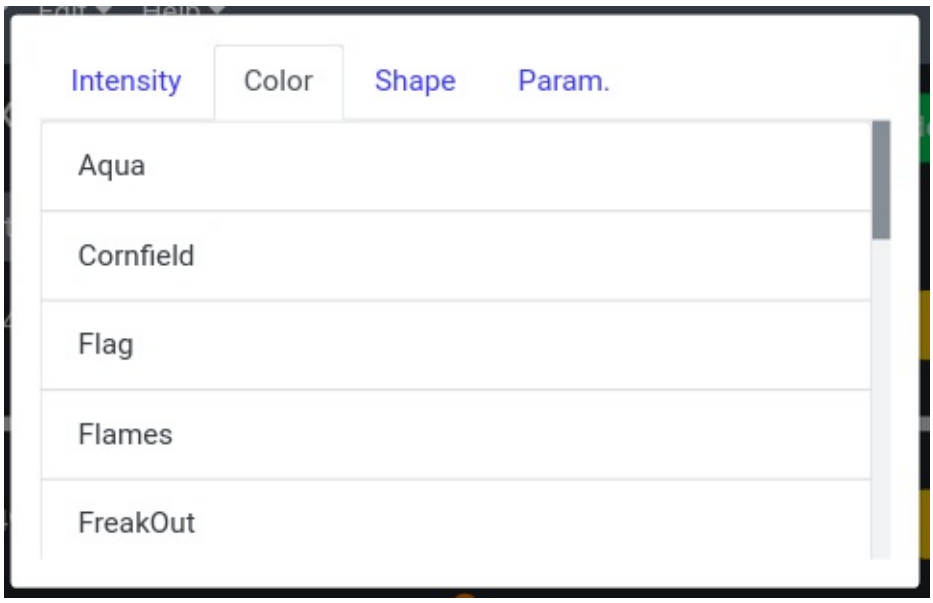
Settings

Go to this effect's settings.

Adding Effects

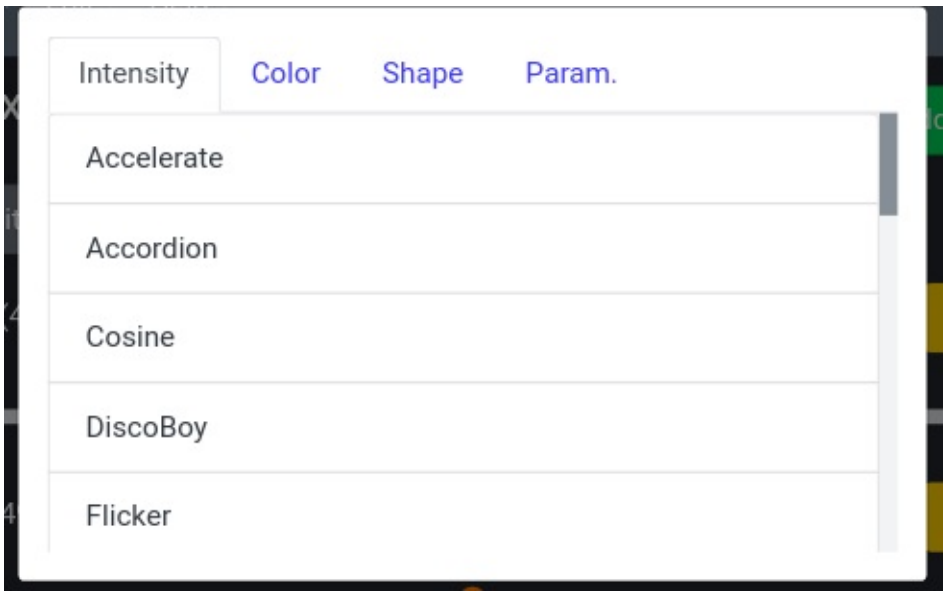
Add an effect to the current fixture by using the green `Add Effect` button on the top of the fixture's parameters view. This will open a modal that shows the available effect categories. You can select a category and it will display all the effects available for that category.

Color



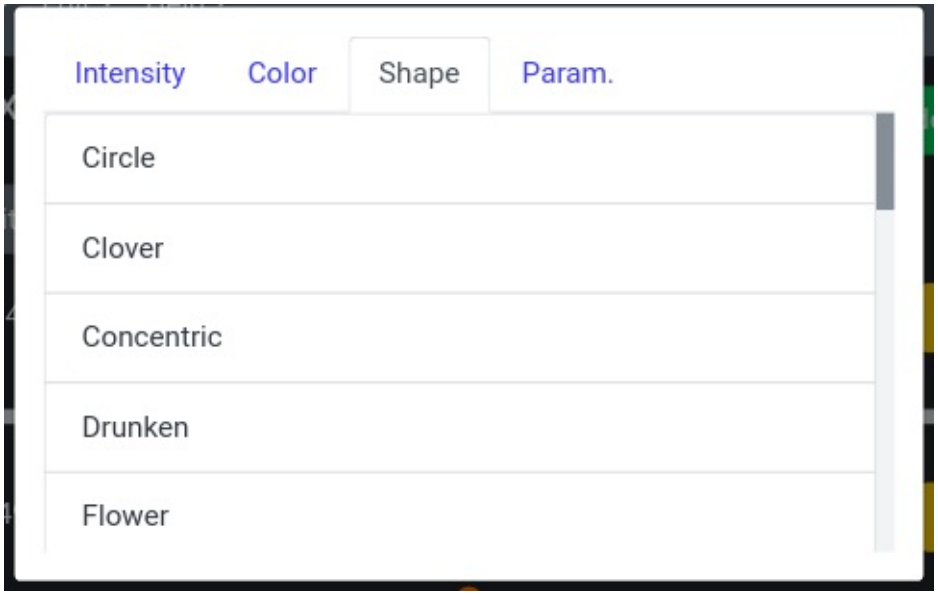
Color effects control the RGB values of a fixture. If more parameter colors than just RGB exist, they will not be affected. If only the R, G, or B parameters exist on the fixture, they will still be affected by themselves.

Intensity



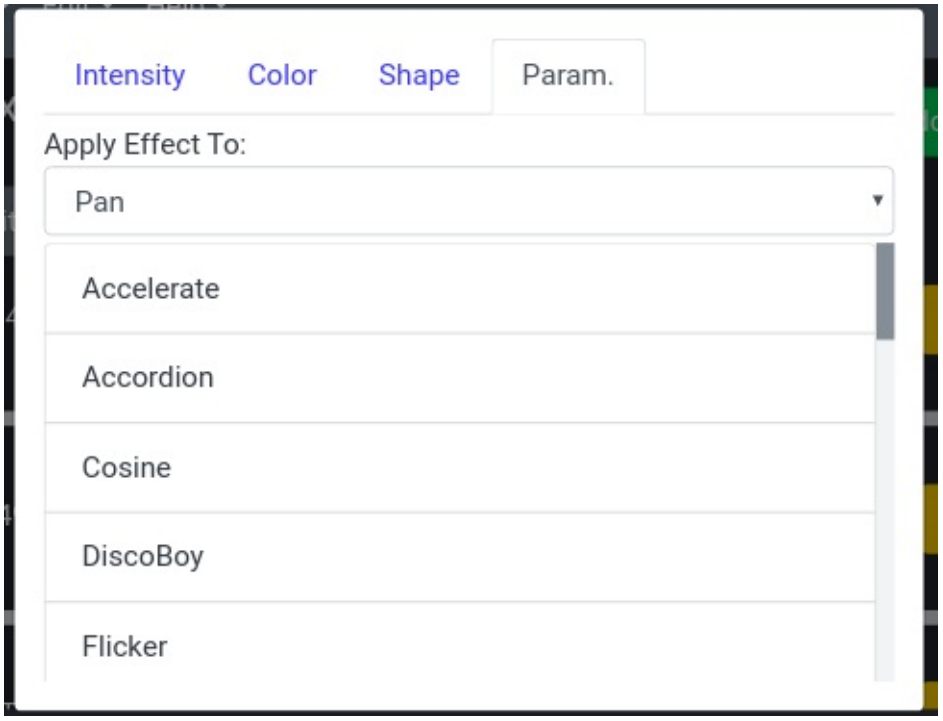
Intensity effects control the intensity values of a fixture. If an intensity parameter does not exist on the fixture, the effect will have no effect.

Shape



Shape effects control the pan and tilt values of a fixture (X and Y). If only the pan or tilt parameter exists on the fixture, it will still be affected by itself.

Param.



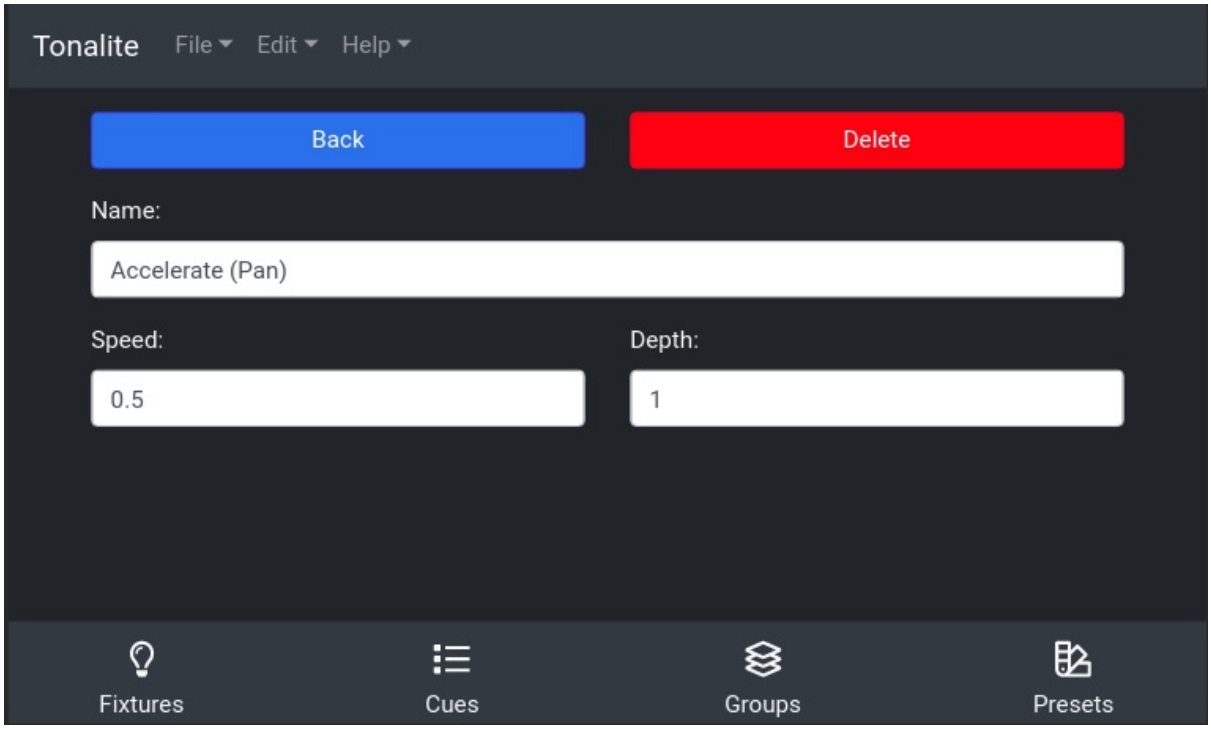
Parameter effects control any other value of a fixture. They can however also control color, intensity, and shape parameters as well.

Apply Effect To

Use the dropdown to select which of these fixture's parameters to apply the parameter effect to.

Changing Effect Settings

You can change various settings of an effect. You can access an effect's setting page by clicking the `Settings` button on the effects's display row on a fixture's parameters page.



Buttons

Back

Go back to the fixture's parameters.

Delete

Remove the effect from the show. You will be prompted to make sure you want to do this.

Inputs

Name

The full name of the effect. This can be any length needed to be descriptive.

Speed

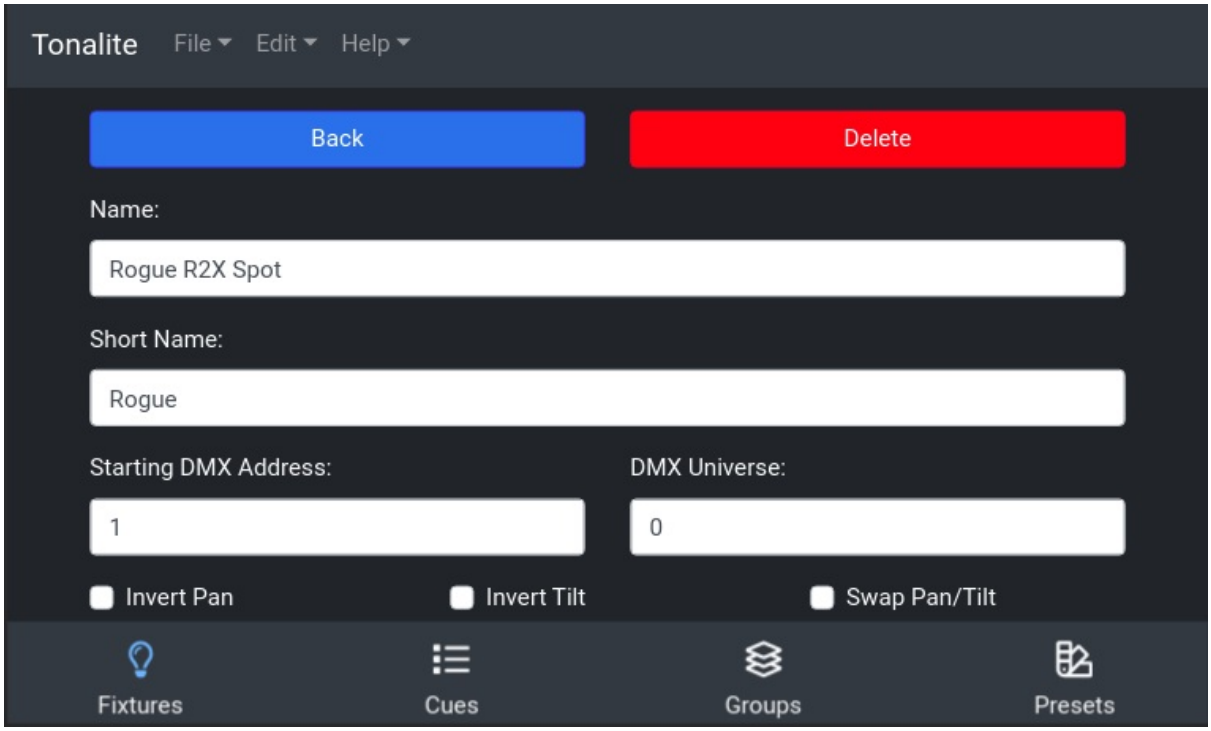
A multiplier for the speed of the effect.

Depth

How much this effect affects the fixture that it is applied to. Depth is in a range of `0.0` to `1.0` where `0.0` is the least effect, and `1.0` means that this effect completely overrides the values from the fixture. If depth is between `0.0` and `1.0`, the values of the effect and the values of the fixture are mixed. This is useful when used on shape effects to scale the shape produced to fit your stage.

Changing Fixture Settings

You can change various settings of a fixture. You can access a fixture's setting page by clicking the `Settings` button on the fixture's parameters page.



Buttons

Back

Go back to the fixture's parameters.

Delete

Remove the fixture from the show. You will be prompted to make sure you really want to do this.

Inputs

Name

The full name of the fixture. This can be any length needed to be descriptive.

Short Name

A shorter version of the fixture's name for display in the interface.

Starting DMX Address

The base DMX address that the parameters for the fixture are based on. See description in `Adding a Fixture` .

DMX Universe

The DMX universe that the fixture lives in. Tonalite allows for 2 universes of DMX to be output. See description in `Adding a Fixture`.

Invert Pan

If enabled, the values for the pan parameter (if the fixture has one) will be outputted backward in their range. This is to allow for fixtures that have been mounted in a reverse manner.

Invert Tilt

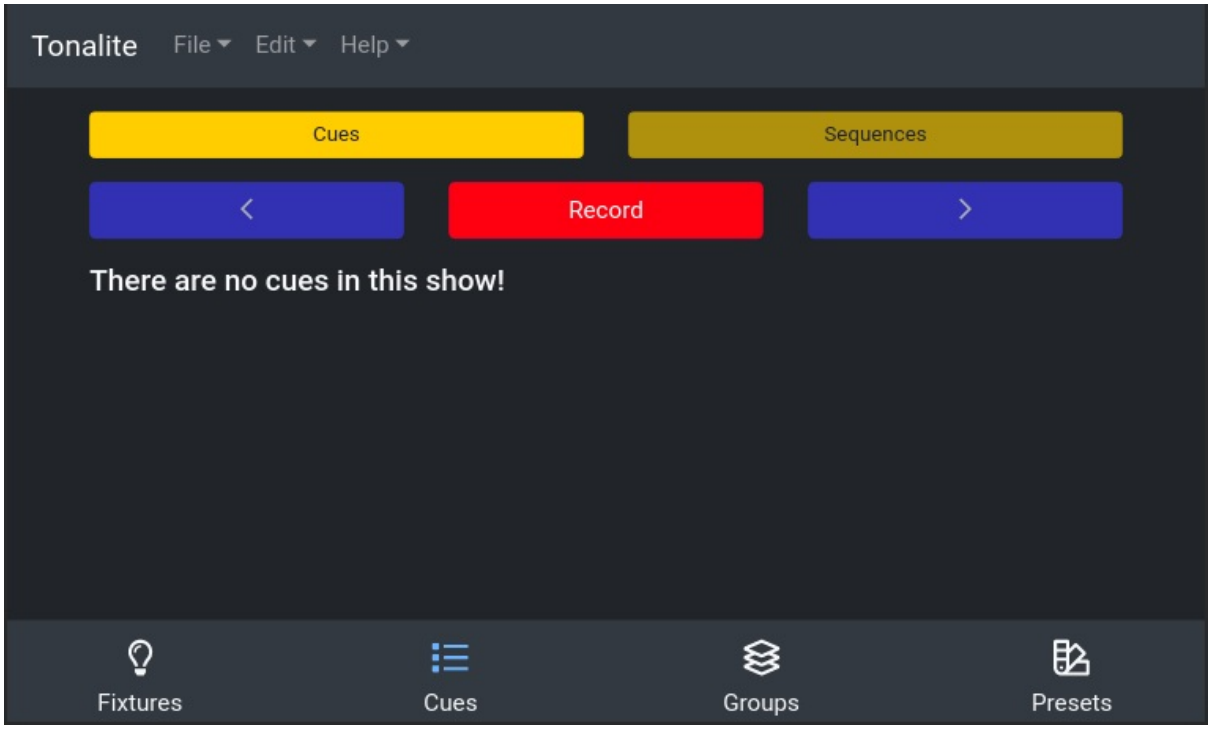
If enabled, the values for the tilt parameter (if the fixture has one) will be outputted backward in their range. This is to allow for fixtures that have been mounted in a reverse manner.

Swap Pan/Tilt

The controls for pan and tilt will output to each's opposite channel.

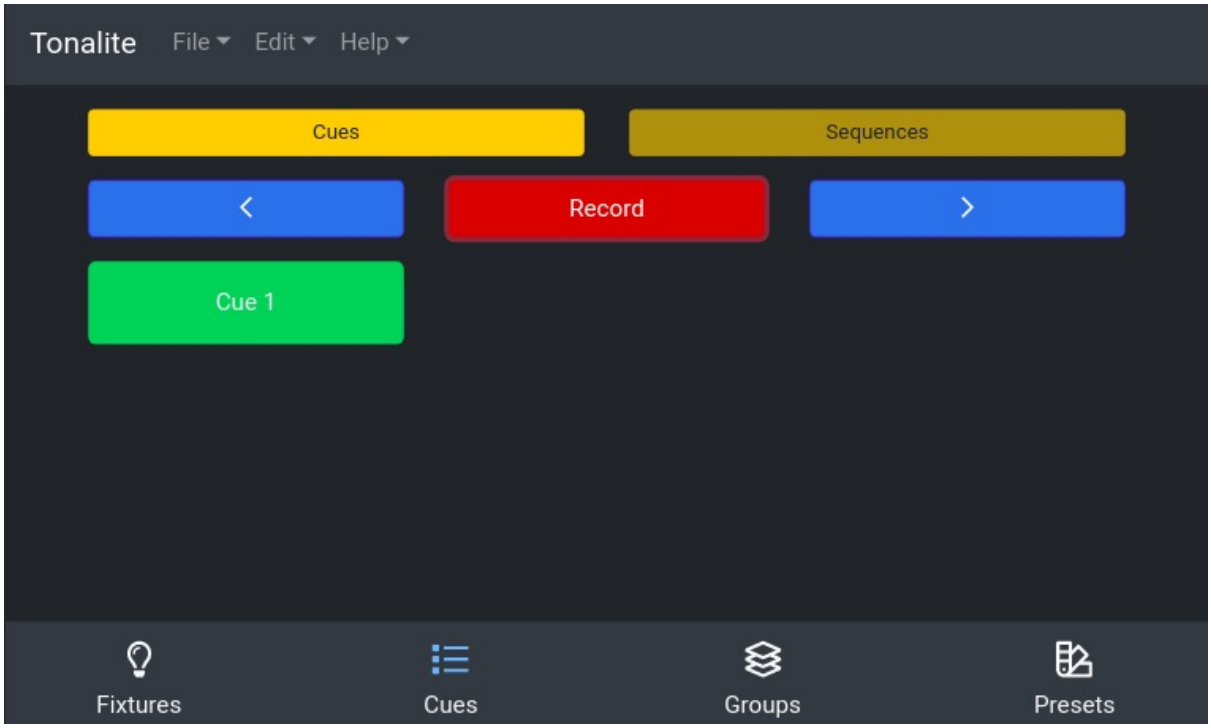
Using Cues

During a production, you will have a different lighting setup for almost every scene. You can create cues and transition between them to serve this purpose. You can find the options for cues in the `Cues > Cues` tab.



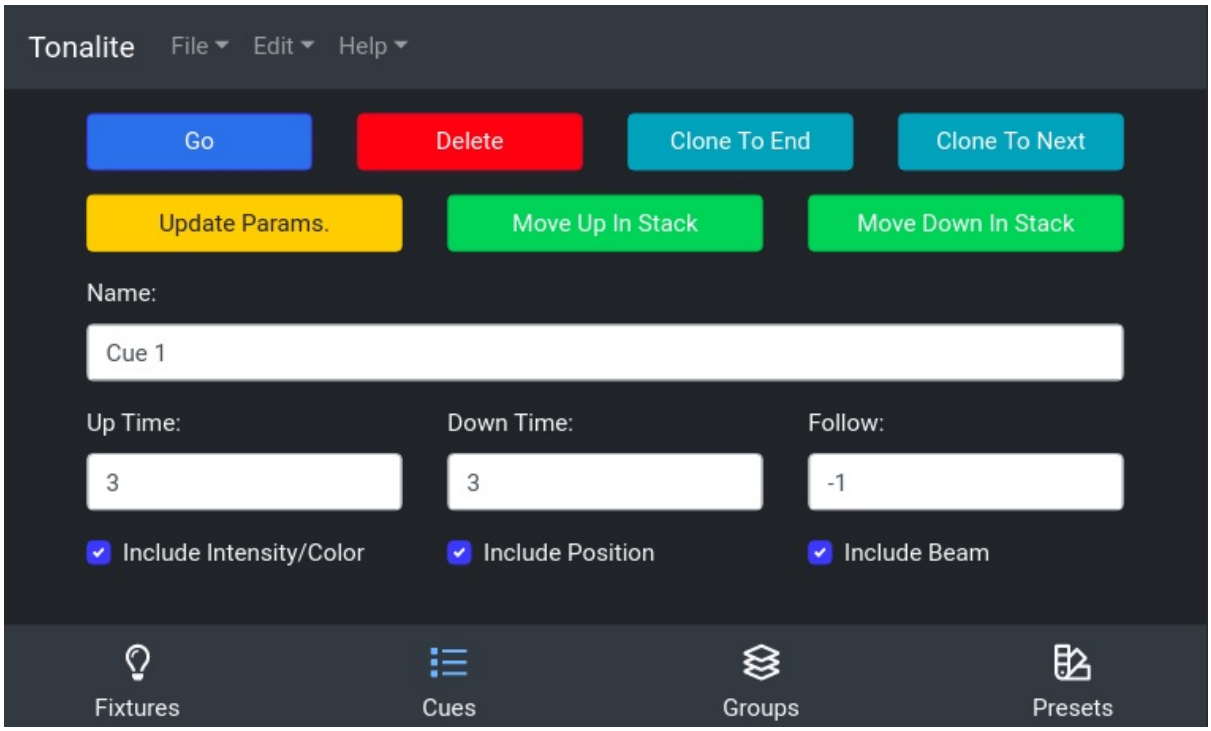
Recording Cues

You can add a new cue by pressing the `Record` button at the top of the `Cues > Cues` tab. A new cue item will be added to the list on that page. The new cue stores the values for all fixture parameters in the show at the time of its creation.



Cue Settings

You can access the settings for a cue by clicking on it in the list on the `Cues > Cues` tab.



Buttons

Go

Transition to this cue specific cue in the time stated in the cue's `Length` setting.

Delete

Remove this cue from the show. You will be prompted to make sure that you want to do this.

Clone To End

Duplicate this cue and place it at the end of the cue list. The new cloned cue will have the same settings and fixture values as the cue that is being cloned.

Clone To Next

Make a duplicate of this cue and place it after this cue in the cue list. The new cloned cue will have the same settings and fixture values as the cue that is being cloned.

Update Parameters

Update this cue to use the current values of the show's fixture's parameters.

Move Up In Stack

Move this cue forward in the cue list.

Move Down In Stack

Move this cue backward in the cue list.

Inputs

Name

The name of the cue. You can use this to describe when the cue should be run.

Up Time

The time it takes for fixture values to change between cues if they are increasing.

Down Time

The time it takes for fixture values to change between cues if they are decreasing.

Follow

If this is set to a value greater than `-1`, once the cue has been run, the cue following it will be run after the time specified here (in seconds).

Include Intensitity/Color

Allow this cue to control the intensity and color parameters of fixtures.

Include Position

Allow this cue to control the position parameters of fixtures.

Include Beam

Allow this cue to control the beam parameters of fixtures.

Moving Between Cues

You can transition between cues using the buttons at the top of the `Cues > Cues` tab.

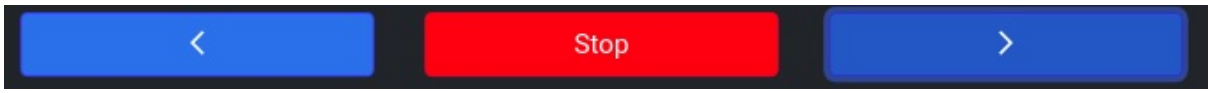
Left

Transition to the cue directly before the current or last-played cue. If no cue has been played or the last cue played was the first in the list, the last cue in the list will be played.

Right

Transition to the cue directly after the current or last-played cue. If no cue has been played or the last cue played was the last in the list, the first cue in the list will be played.

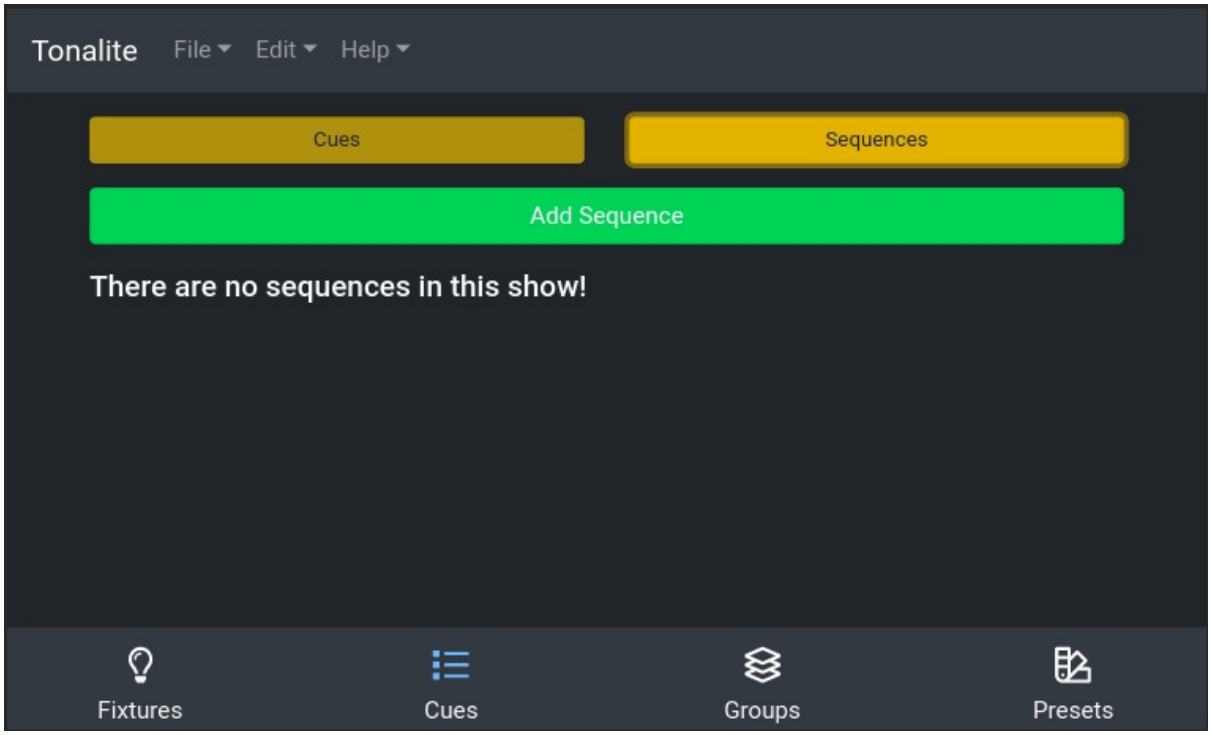
Stop



When a cue is running, the `Record` button will switch to a `Stop` button. Press this to stop the currently running cue.

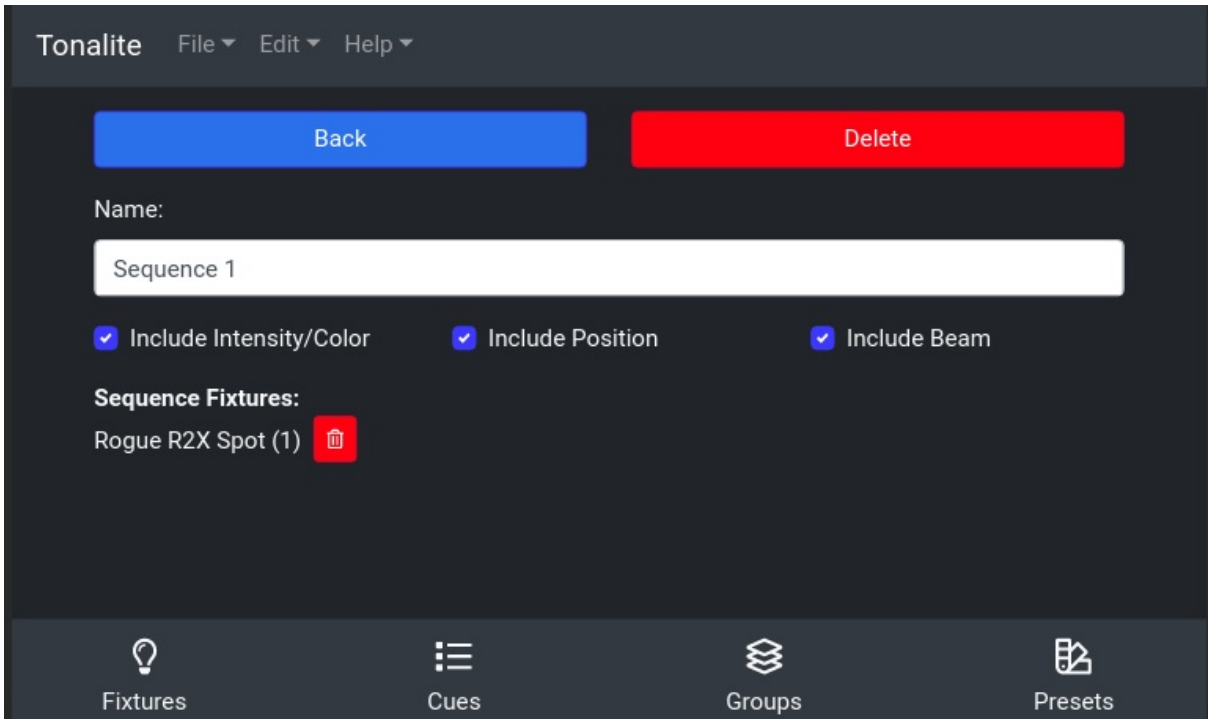
Using Sequences

During a production, you will have a different lighting setup for almost every scene. You can create sequences and transition between them to serve this purpose. You can find the options for sequences in the `Cues > Sequences` tab.



Sequence Settings

You can access the settings for a sequence by clicking on it in the list on the `Cues > Sequences` tab.



Buttons

Back

Go back to the sequence's `Steps` view.

Delete

Remove this sequence from the show. You will be prompted to make sure that you really want to do this.

Inputs

Name

The name of the sequence. You can use this to describe when the sequence should be run.

Include Intensitity/Color

Allow this sequence to control the intensity and color parameters of fixtures.

Include Position

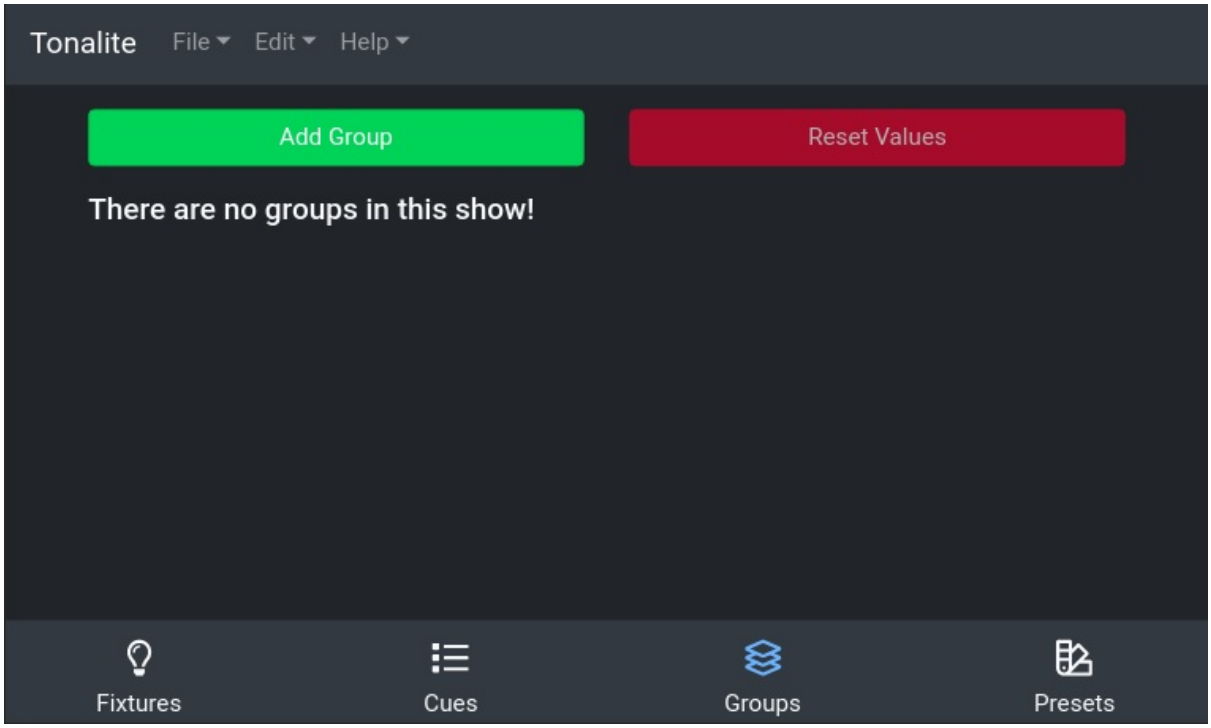
Allow this sequence to control the position parameters of fixtures.

Include Beam

Allow this sequence to control the beam parameters of fixtures

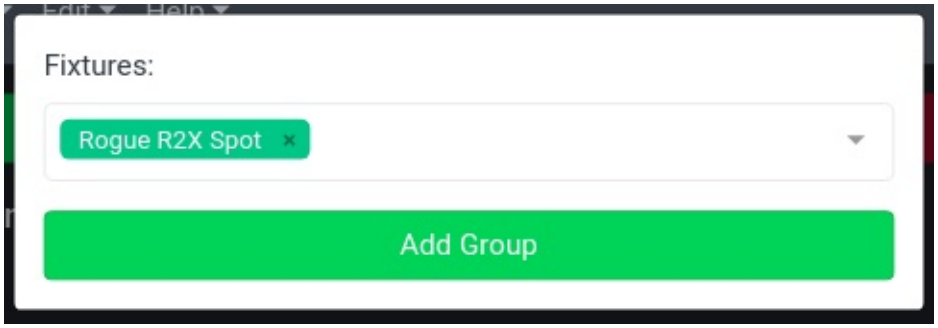
Using Groups

You can control the parameters of multiple fixtures at the same time by using groups. Groups can be accessed in the `Groups` tab of the interface.

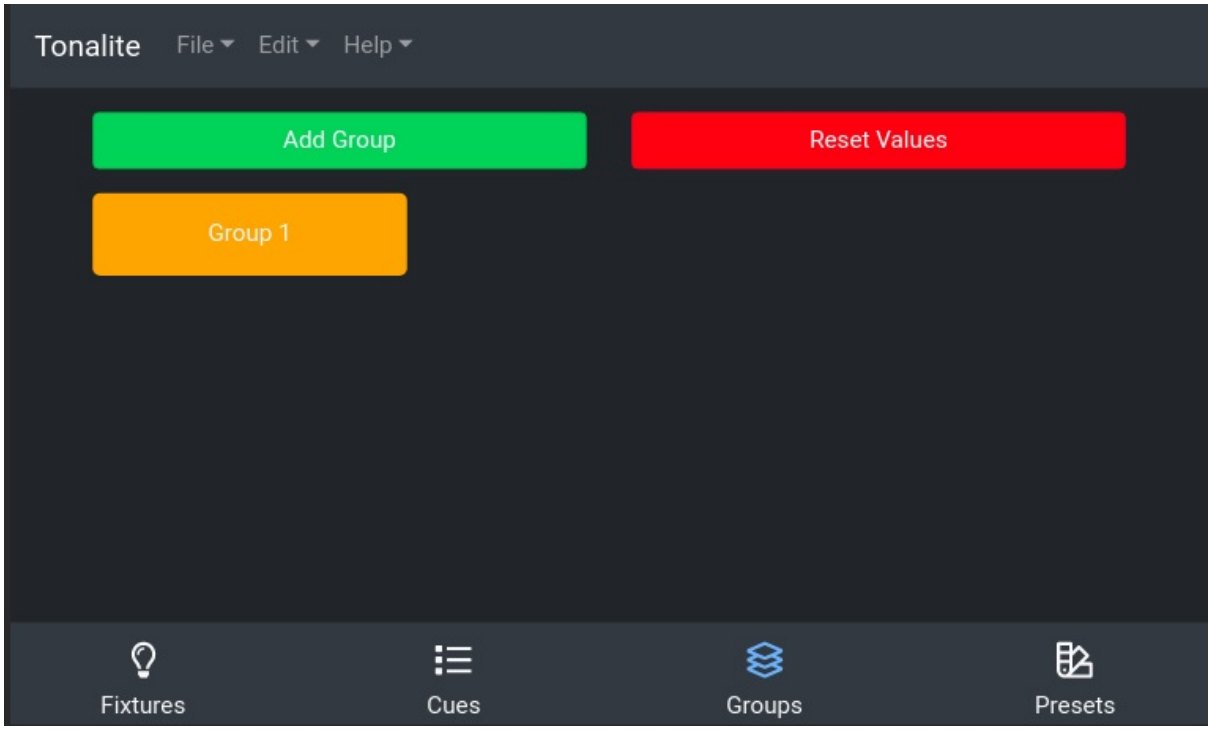


Adding Groups

Add a group using the green `Add Group` button on the top of the `Groups` tab. This will open a modal that shows the available fixtures in the show and allows you to select which ones you would like to control with this group.



To select a fixture, click on it in the list, and the new group will control this fixture along with any others you select. You can select multiple on this list.

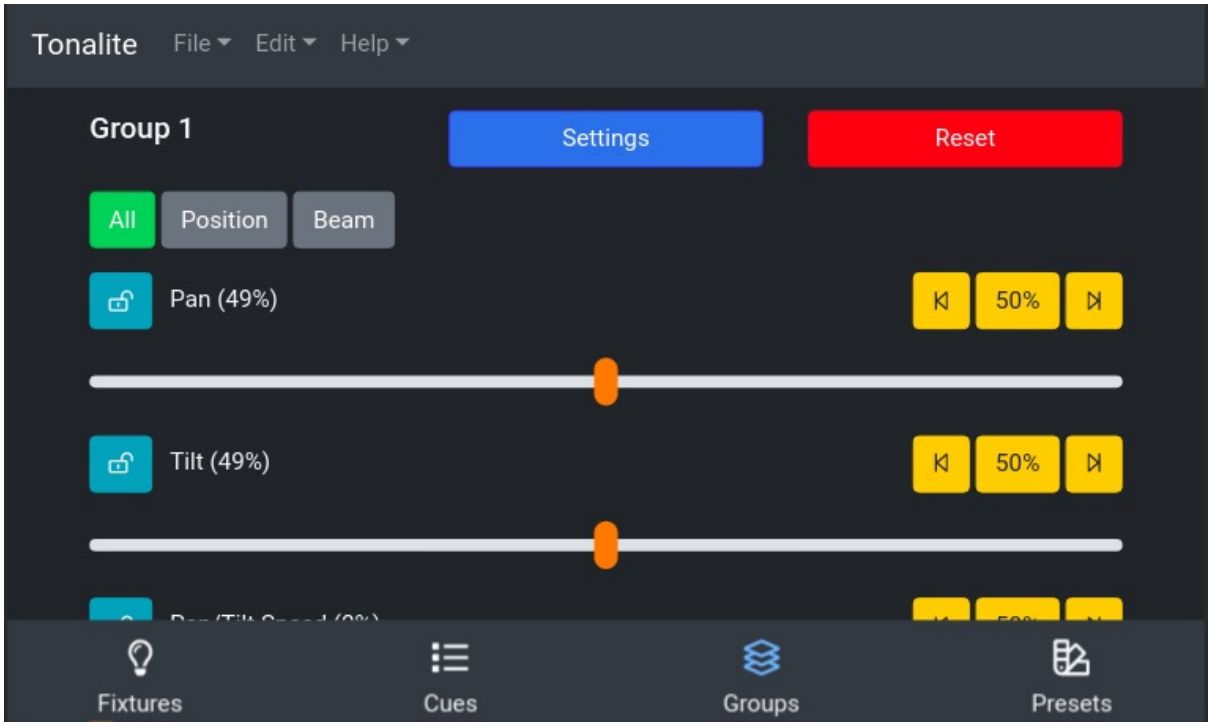


Resetting Group Parameter Values

You can reset the values of every group's parameters using one button. To do so, click the red Reset Values button on the top of the `Groups` tab. You will be asked to make sure you want to reset all values because this will cause a blackout in most cases.

Updating Group Parameters

Each of the groups's parameters can be controlled individually. To access the group parameters page, click on the appropriate group in the `Groups` tab.



Buttons

Settings

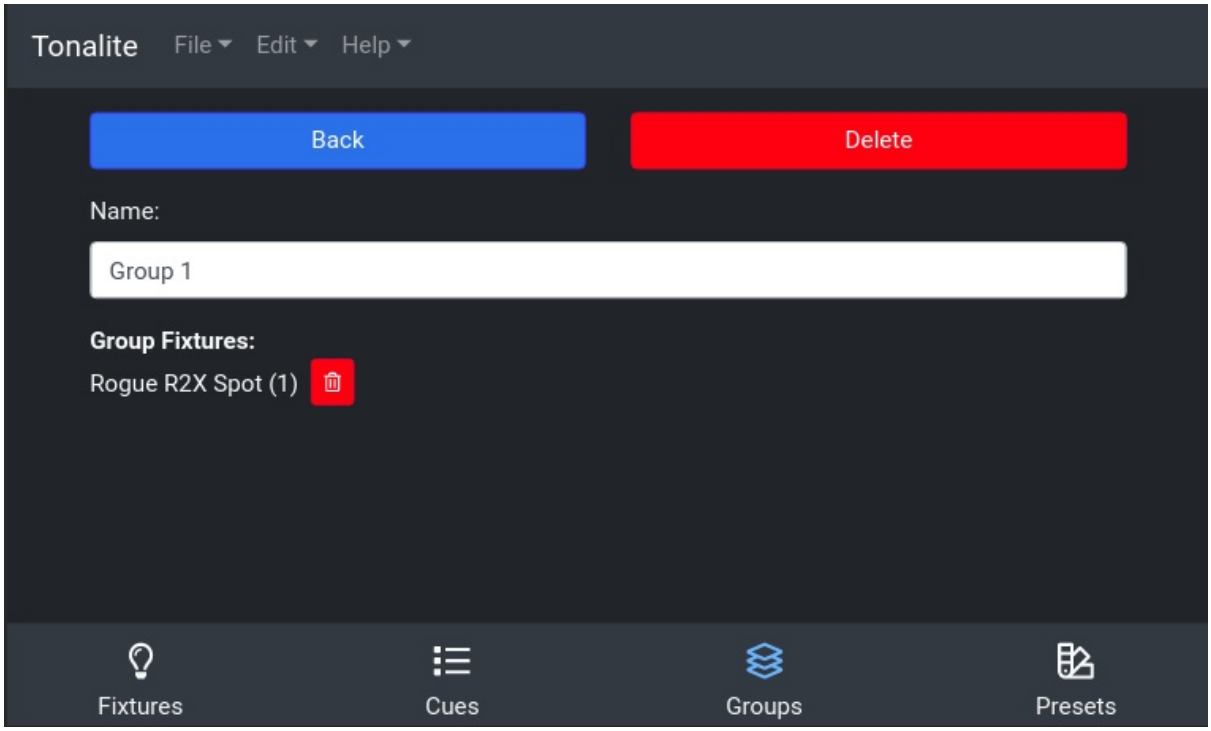
Go to this group's settings.

Reset

Reset the parameter values for just this group.

Changing Group Settings

You can change the various settings of a group. You can access a group's setting page by clicking the `Settings` button on the group's parameters page.



Buttons

Back

Go back to the group's parameters.

Delete

Remove the group from the show. You will be prompted to make sure you want to do this.

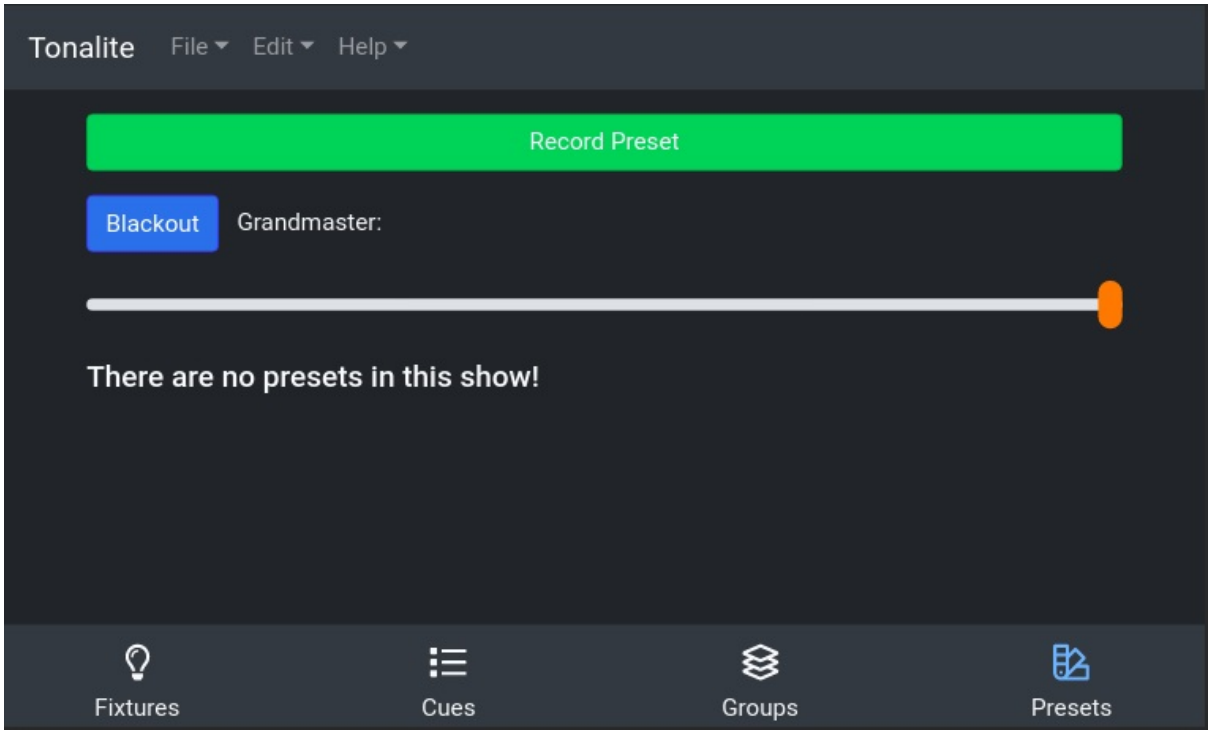
Inputs

Name

The full name of the group. This can be any length needed to be descriptive though you should keep it short enough to fit into the interface easily.

Using Presets

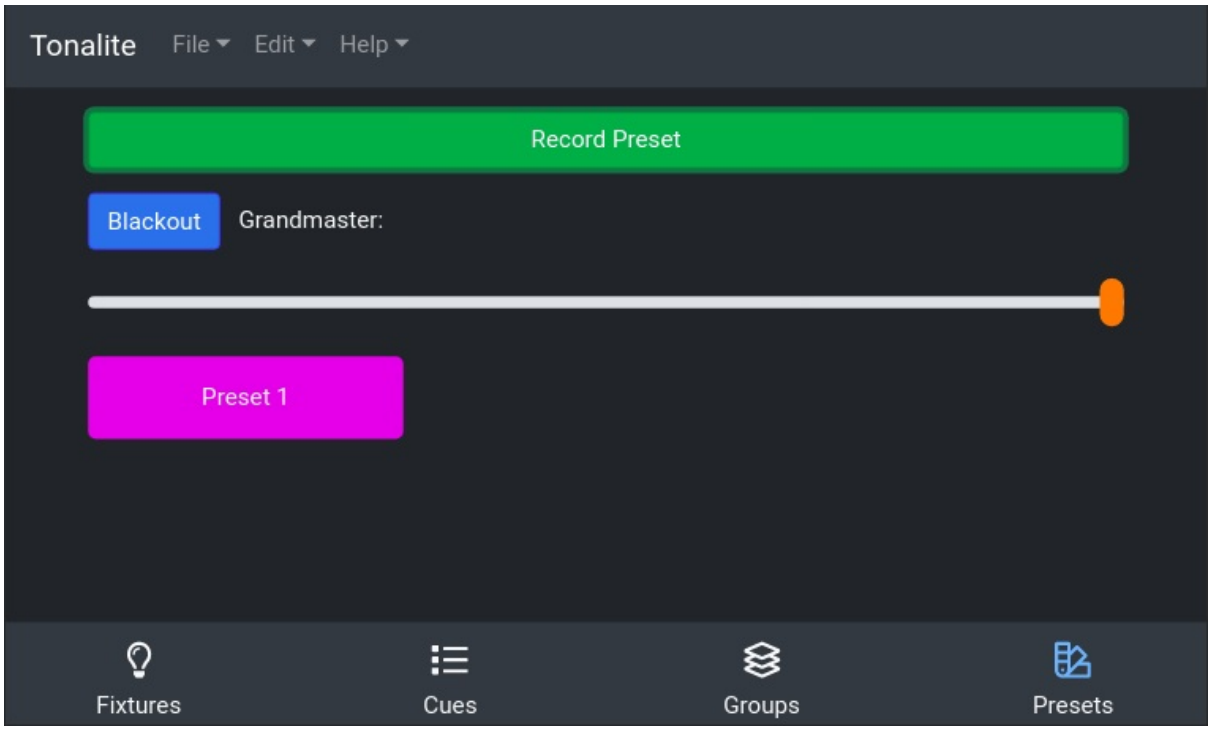
When used for a permanent installation, there needs to be a way for users who don't have experience with the program to turn on lights. Tonalite allows you to set up presets which are one-click overrides that allow easy control of chosen lights.



On the presets page, tab a preset to turn it on (it will turn red) and tap again to turn it off (it will go back to purple).

Record Presets

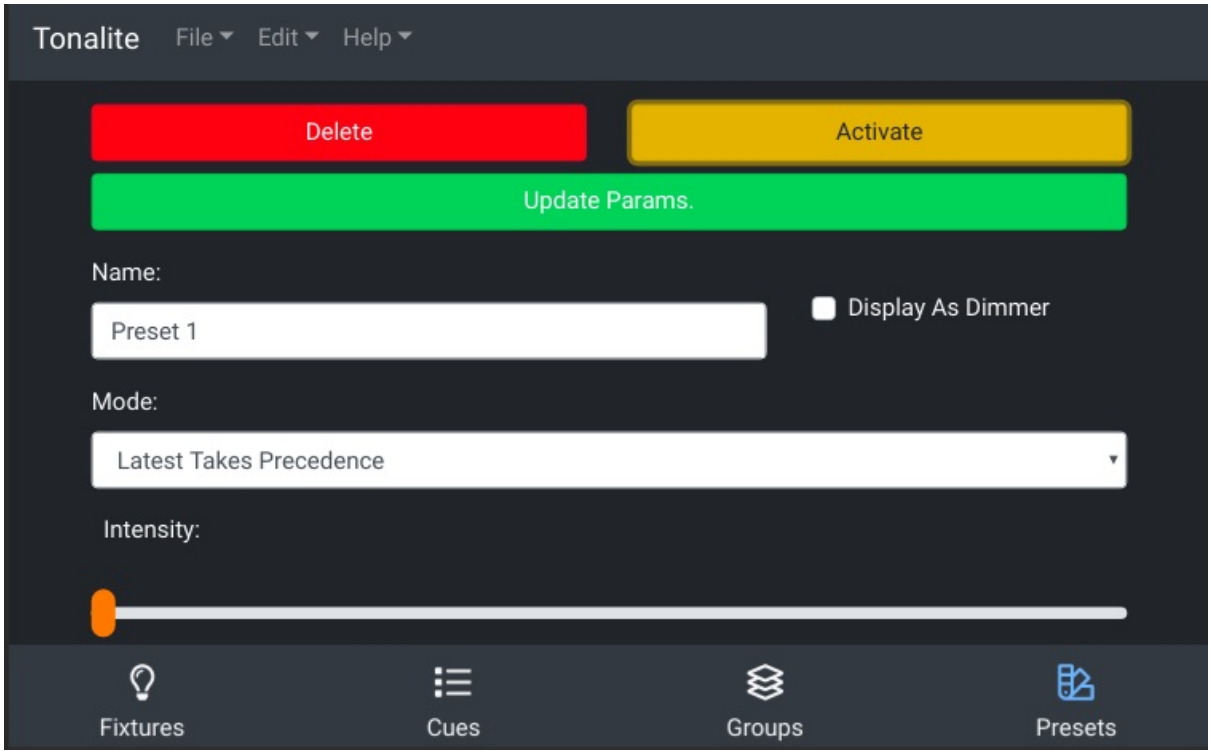
Record a preset using the green `Record Preset` button on the top of the `Presets` tab. Note that a preset stores the current output DMX values, and not output fixtures. This is so that presets will still work even if you don't have some or all fixtures needed for the preset in the current show. A preset will only override DMX output parameters when the channel saved in the preset has a higher value than the current channel.



To edit a preset's settings, tap on it in this list.

Changing Preset Settings

You can change the various settings of a preset. You can access a preset's setting page by clicking on a preset item on the `Presets` page.



Buttons

Delete

Remove the preset from the show. You will be prompted to make sure you want to do this.

Activate

Active the current preset. When activated, this button will switch to `Deactivate` which does the opposite.

Update Params

Update the values that are stored in thie preset.

Inputs

Name

The full name of the preset. This can be any length needed to be descriptive though you should keep it short enough to fit into the interface easily.

Display As Dimmer

Display the preset as a dimmable value rather than as an on/off button in the interface.

Mode

The overide mode that the preset is in.

Options:

- `Latest Takes Precedence` - This preset will overide everything
- `Highest Takes Precedence` - This preset will ovveride everything when its values are higher

Default: `Latest Takes Precedence`

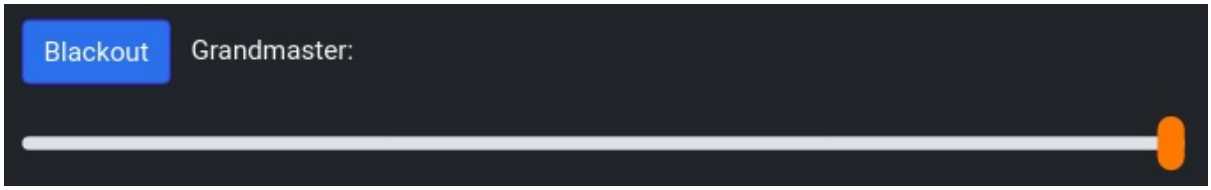
The default can be updated in settings.

Intensity

Control the overall intensity of this preset.

Grandmaster and Blackout

The grandmaster and the blackout button are the master overrides for the entire lighting system. The only things they can not control are the presets.



Grandmaster

The grandmaster controls the final output percentage of the lights. It is in a range of 0-100, and any light values will be output at this percentage of their actual value.

Blackout

As long as Blackout is active, all DMX output values will be `0`.

Keyboard Shortcuts

There are several keyboard shortcuts built into Tonalite to make it easier to do certain actions while programming and/or running shows.

Key	Action
R	Record Cue
End	Stop Cue
Page Up	Next Cue
Page Down	Last Cue
Home	First Cue
SHIFT+A	Add Fixture
CTRL+N	New Show
CTRL+S	Save Show

Configuration

You can find the system configuration in the `settings.json` file.

device

The platform that the user is running on.

Options:

- `linux` - Linux 64bit
- `win` - Windows 64bit
- `macos` - macOS 64bit
- `rpi` - Raspberry Pi

Default: `linux`

Reboot required after change.

url

The IP address of the webserver that runs the control page. This is also used as the ArtNet and sACN output IPs.

Default: `localhost`

Reboot required after change.

port

The IP port of the webserver that runs the control page.

Default: `3000`

Reboot required after change.

defaultUpTime

The default up time used for new cues and sequence steps.

Default: `3000`

defaultDownTime

The default down time used for new cues and sequence steps.

Default: `3000`

defaultPresetMode

The default mode used for new presets.

Options:

- `ltp` - Latest Takes Precedence
- `htp` - Highest Takes Precedence

Default: `ltp`

desktop

The platform Tonalite is running on.

Options:

- `true` - Tonalite is running in desktop mode
- `false` - Tonalite is running in embedded mode (used for the touchscreen model)

Default: `true`

Reboot required after change.

udmx

Whether or not to output to uDMX.

Options:

- `true` - Enables uDMX-Artnet
- `false` - disables uDMX-Artnet

Default: `false`

Reboot required after change.

automark

Whether or not to use automark while transitioning cues.

Options:

- `true` - Enables automark
- `false` - Disables automark

Default: `true`

displayEffectsRealtime

Display effect values in the UI as they run while active. This can slow down the interface.

Default: `true`

interfaceMode

Allows you to choose to see all controls or only those needed for an all-dimmer rig.

Options:

- `normal` - Displays all available controls in the UI
- `dimmer` - Only displays controls needed for dimmers

Default: `normal`

artnetIP

The IP on which to output ArtNet data.

Default: `null`

When the value is `null`, ArtNet will choose where to output automatically.

Reboot required after change.

artnetHost

The host IP mask on which to output ArtNet data.

Default: `255.255.255.255`

Reboot required after change.

sacnIP

The IP on which to output sACN data.

Default: `null`

When the value is `null`, sACN will choose where to output automatically.

Reboot required after change.