# Hi there and welcome to the Chaser manual!

I know, 9 pages may seem like a lot to read. But don't worry. Things are actually really simple and straightforward once you've seen and used it once or twice. There's also pictures between all them word thingies, so it's really not all that bad.

Chaser makes it easy for you to build chasers and screen bumps based on your input mapping in Resolume. I made it because I got tired of having to go back and render basically the same content doing the same thing but with a slightly different position and timing for each show.

Chaser consists of two parts: an app and a plugin. This document describes how they work.

Build your input mapping in Arena.

Using Resolume Arena's advanced output, you build your input mapping. Basically you recreate your stage here. So each LED screen or projection surface should roughly occupy the same place in your comp as it has on the physical stage.
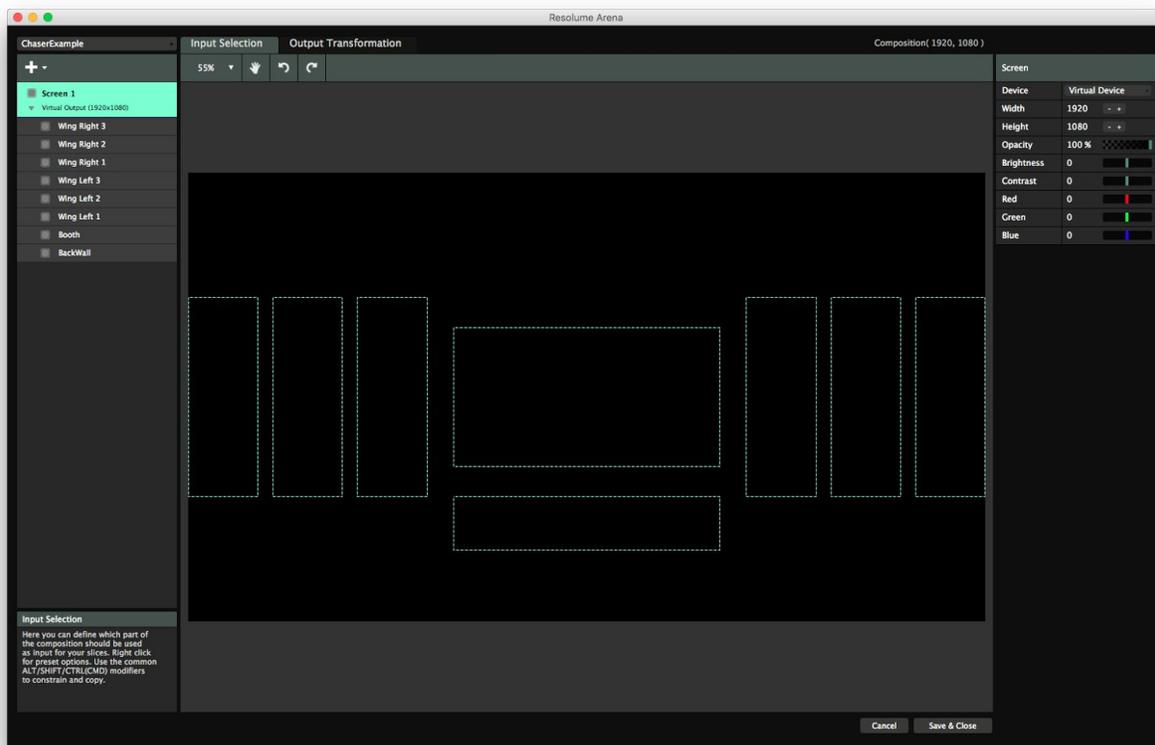
Chaser works entirely on the input side, in your composition. So you need to make sure each screen or surface has it's own little spot in your comp. Otherwise you won't be able to chase them individually.

Create your slices on the Input Selection tab!

Let me say this again, because I don't think you heard me. Chaser works entirely on the input side, in your composition. So really, create your slices and mapping on the Input Selection part of the Advanced Output!

So not only on the Output Transformation part!

I know a lot of you use slices and layer to slice routing to correctly scale and position multiple copies of your Resolume comp or layers. Your slice takes the full input of the comp or layer, and you use the Output Transformation to place it where you need it. It's a very powerful technique and kudos to you for figuring it out.

It's also a very limiting technique. You need a slice for each copy, and if you're using layer to slice routing, you then need several slices for each layer. A simple mapping job with only five surfaces turns into a nightmare output setup with 40+ slices, each of which needs to be adjusted in the output. Plus you lose all composition effects, layer blend modes and the preview of what your comp actually looks like. All in all, it makes the whole mapping process more complicated and more work than it needs to be.

The whole reason I created Chaser, is to let you do all this positioning and scaling *in the composition*, *before it goes to the advanced output*. Chaser scales and places your content to fit right inside your input slices. The only thing you use the Output Transformation for, is to align your slices to the object when projection mapping or to the pixel map when using a LED processor. Much less work and much, much simpler!
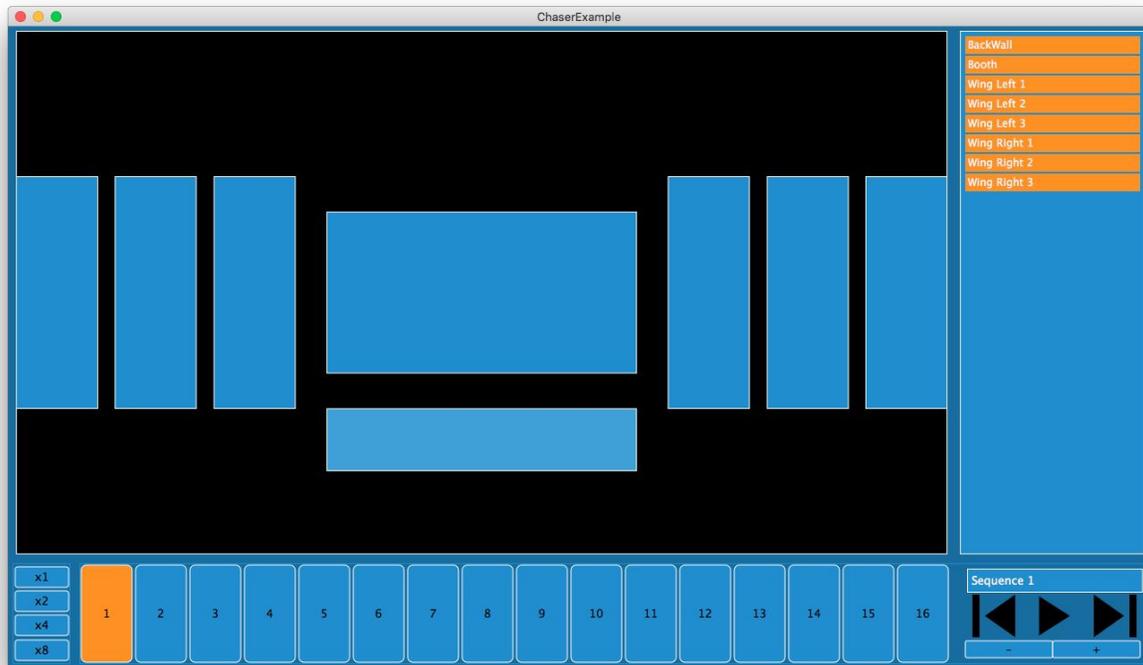
Using the app
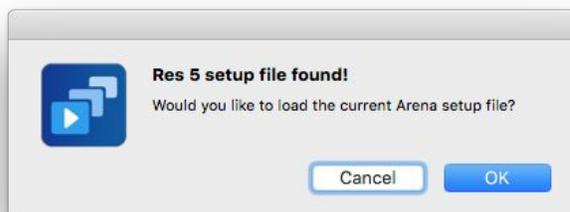
Next up, you start the Chaser app. Nothing is more scary than a blank canvas, so Chaser will ask you if you want to load the current setup file. Let's hit OK!

If for some reason the correct file is not loaded, you can load the Arena setup file you just created via File > Load Arena setup.

The app will then load your input slices and should look something like this.


Build a chaser

At the bottom you will see 16 buttons. These are the steps of your chaser. In the preview you will see the input slices that you created in Arena. Every slice is a button that you can toggle on and off. This is how you build chasers. Select step 1 and toggle the slices you want to see in step 1. Next, select step 2 and toggle the slices you want to see in step 2. Rinse and repeat.

See, I told you this would be easy!
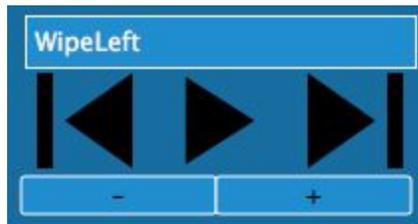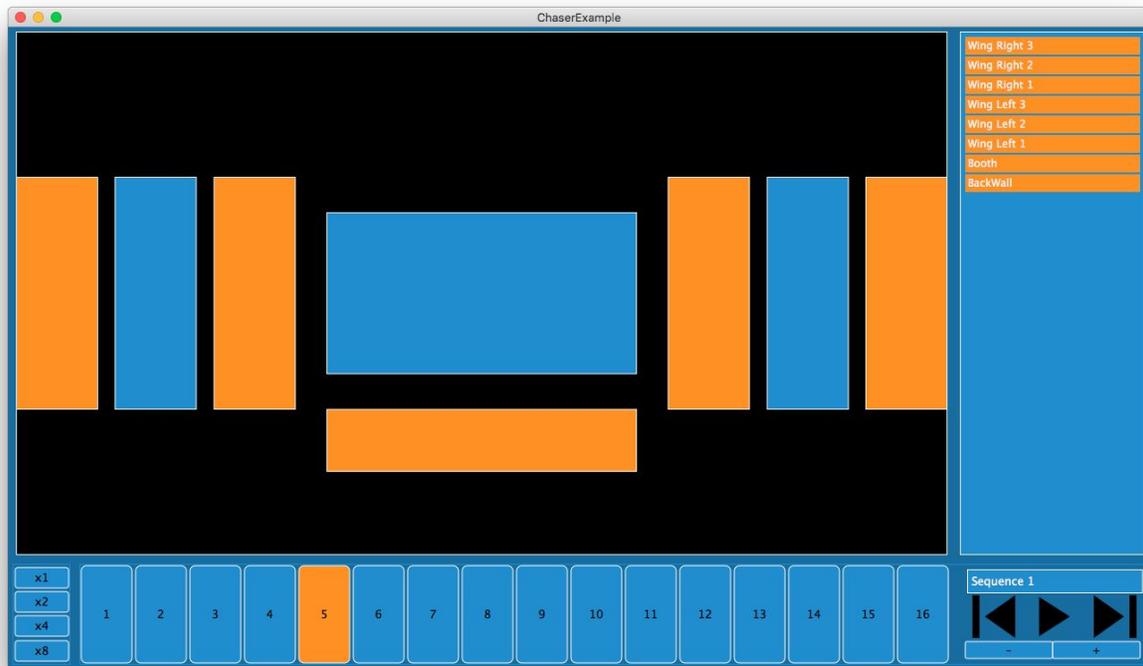
There's room for 16 chasers with 16 steps each. In the bottom right, you can hit play to play a chaser. This is purely to get a quick preview of what the chaser looks like when playing. You'll control the actual playback in Resolume via the plugin later on. The back and forward buttons let you switch between the 16 chasers. You can give each chaser a name and increase or decrease the number of steps.
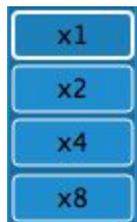

The x1, x2, x4 and x8 buttons can be used to quickly copy a step. Pressing one of these buttons will copy the current step to other steps. When you press x1, the current step is copied to all other steps. When you press x2, the current step is copied to every second step, when you press x4 to every fourth step and when you press x8 to every eighth step.

So when you are in step 3, pressing x4 will make steps 7, 11 and 15 the same as step 3. This 'wraps', so when you are in step 14, pressing x8 will make step 6 the same as step 14.

Tip! I find it's better to repeat a simple 2 step pattern over all 16 steps, as opposed to making the sequence only 2 steps in length. This way, you don't get big jumps in playback speed when switching sequences in Resolume.
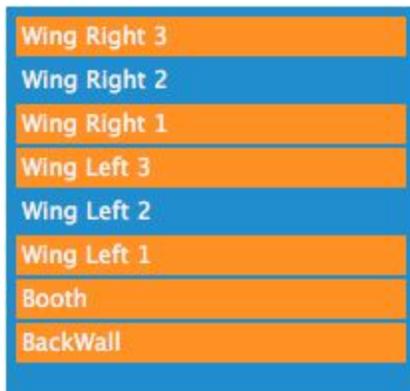
If a certain slice is getting in the way, you can turn it off in the slice list on the right hand side.

This doesn't change anything to the mapping Resolume or even to any chase sequences using this slice.

Having multiple slices in the same spot doesn't really do any harm, but it can be confusing while you're creating a chase or playing it back.

Saving

Every change you make is stored immediately. When you're done building chasers, there's no need to press save. You can just close the app and start Resolume.

If you want, you can save the chaser file under a different name, load a different one or start completely fresh with a new one via the File menu.

You can also reload your Resolume output preset here. Be careful though, if you added, removed or changed the order of the slices in Resolume, your chaser will probably not look the same.

Take care! The chaser file data is stored in a subfolder called 'Chaser' inside My Documents / Documents. It's important you don't delete this folder or mess with the files inside it.

Applying the effect in Resolume.

In Resolume, you apply the plugin as an effect on the clip, layer or composition. The plugin has the following options:
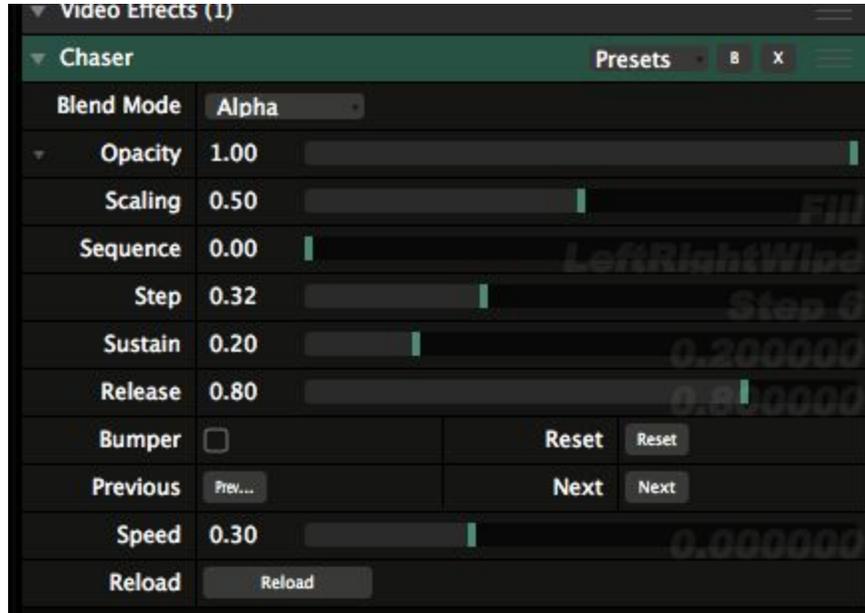

The **Sequence** slider lets you choose the sequence you'd like to play. The name you've given the sequence in the app shows up here.

The **Step** slider can be animated. This is how you actually play the sequence. In my mind, Timeline and BPM Sync make the most sense, but there's no reason why you can't use FFT or any of the other animation options here.
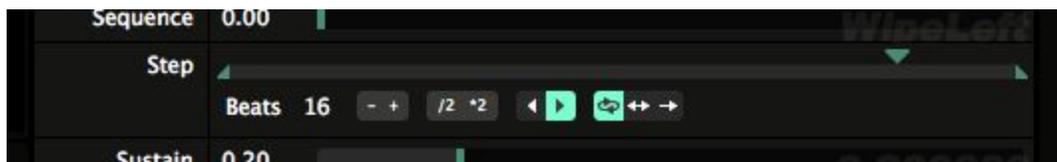
Sustain and **Release** control how the slice fades in and out during the step. With Sustain on 0 and Release on 1, every slice will fade out over the entire duration of the step. With Sustain on 0.2 and Release on 0.8, the slice will be completely visible for 20% of the duration of the step, it will fade out linearly over 60% of the duration of the step, and subsequently not be visible at all for the remaining 20% of the duration. If you don't want a fade at all, just put both Sustain and Release on 1.

This sustain/release thing may sound kind of illogical right now, it works really intuitively once you get your head around it. Just think of the Sustain value as the first keyframe of the animation, and the Release value as the second keyframe.
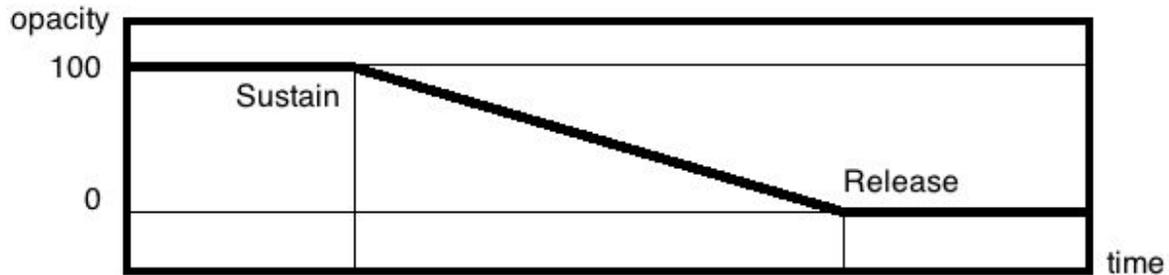
If a slice is on for 2 steps in a row, it won't be faded. So if a slice is on in step 1, 2, 3 and 6, it won't fade between 1 and 2 and between 2 and 3. This way you can have slice be on longer than others or for the entire sequence.

Btw, I'm calling it slices, but the plugin doesn't actually do anything to the slices in the advanced output. They stay on and active. The plugin only scales and positions your content in the composition, based on the coordinates of your input slices. This means you can play different chasers on different layers or clips and all of them will be visible in the output!

Bumping

By toggling on **Bumper**, you can make Chaser do one button bumps as well. This is a lot of fun! If Bumper is toggled on, you can no longer control Chaser with the Step timeline. Instead, you can use the **Next** and **Previous** buttons to play just the next or previous step. The Step slider will still show you what step you are on.

The **Speed** slider controls how fast each step plays. By hitting **Reset,** you reset the chase to the first step so you can play it from the beginning.

Note that Next, Previous and Reset only have any effect when Bumper is toggled on!

Scaling

Depending on how you setup step 1 in sequence 1, your Resolume composition output will look something like this:
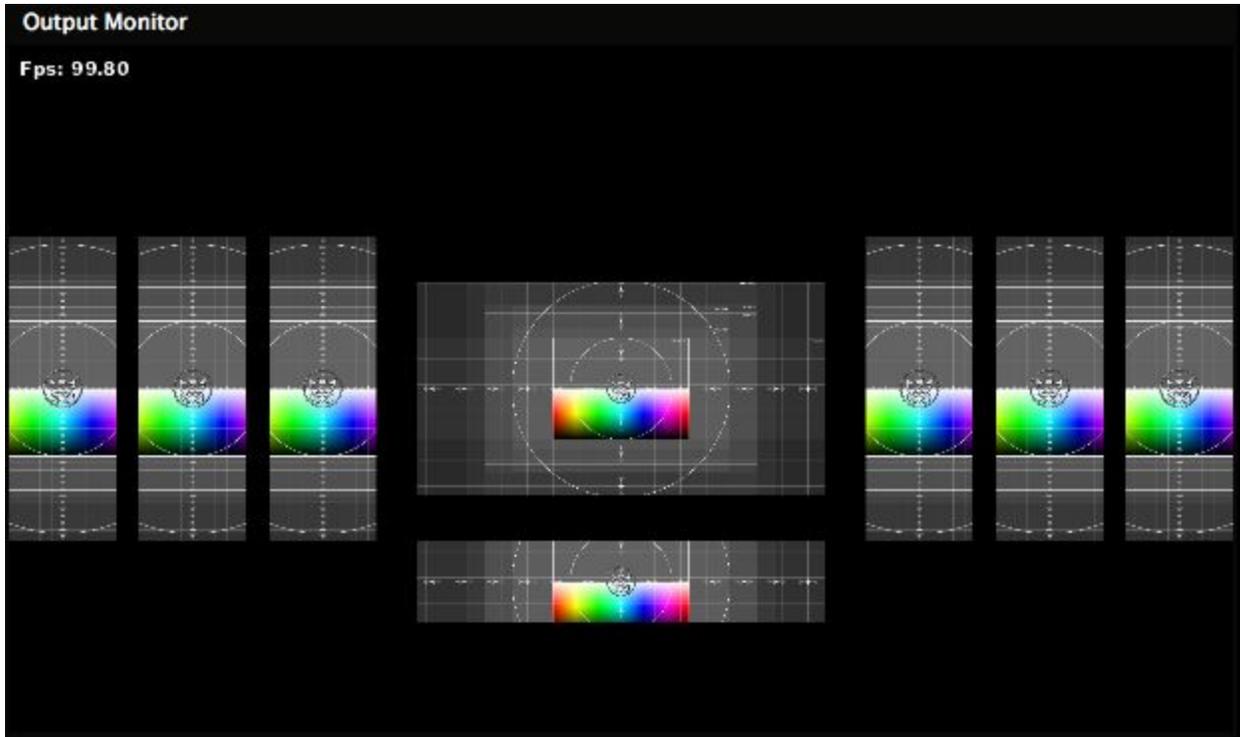
Fill

The **Scaling** slider controls how your content is placed within your slices. When it's set to Fill, your content will be scaled and copied into every slice, keeping the aspect ratio in tact. When set to Stretch, the content is copied and squeezed into the slice. When set to Fullscreen, the content is not copied or scaled at all. The chaser then 'punches' holes in the content.
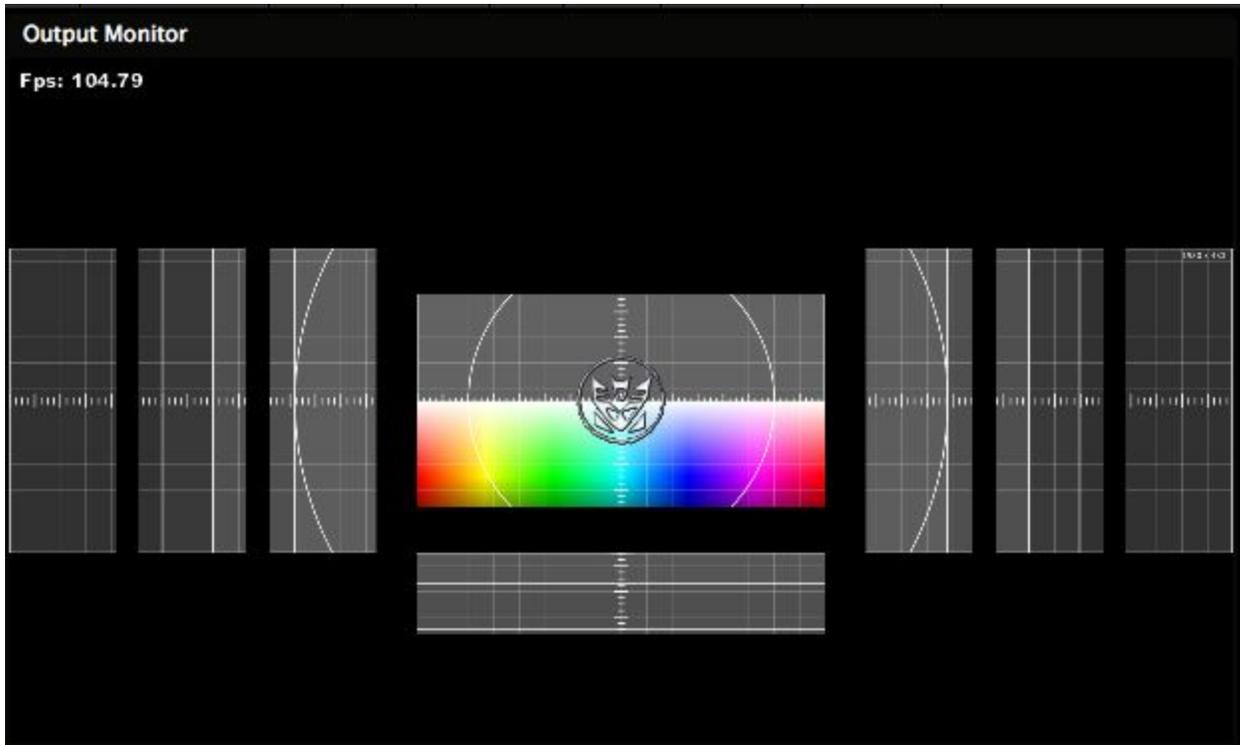
Fullscreen

Tip!: You can use Chaser as a quick way to position content. Just set it to Fill and set it fixed on a certain step. This way you can select a 'look', where your content is only visible on certain screens.

Reload forces the plugin to load the chaser data again. When you realise you've made a mistake or want to change things for any reason, you can open the Chaser app again. It remembers which file you were working on and you can make the desired changes immediately. After this you can press Reload on the plugin and Resolume will apply the changes immediately. If you want, you can even keep the Chaser app open and preview any changes in Resolume directly or add sequences during show.

That's it. Now go on and chase the dragon!