

The FLX range of lighting consoles feature award winning colour control tools.

All colour parameters of your fixtures can be controlled using the colour encoder wheels, accessed by selecting the fixture and tapping **Colour** . If your fixtures have more parameters than available encoders, tap the **Colour** button again to page through. You are likely to find the following parameters in the colour attribute, depending on the currently selected fixtures:

- Additive colour parameters such as Red, Green, Blue
- Subtractive colour parameters such as Cyan, Magenta & Yellow
- Colour Wheels
- Colour Macros
- Colour Presets
- Colour Temperature

## Colour Mixing

If your fixtures have colour mixing capabilities, the FLX range of consoles provide multiple colour mixing tools that can be used to control the colour of your fixtures. As well as using the colour encoders to colour mix, you will be able to use Automatic Palettes, Colour Picker, Image Picker, Colour Faders and Colour Filters. These colour mixing tools can be accessed on the internal touchscreen by tapping **Colour** but can also be found in the Colour window on the external monitor. The colour window is found top left of the "Palettes" desktop, and in the bottom half of the "Grp, FX, Colour" desktops.

[Click here to find out more about the External Desktops](#)

There are three types of fixtures with colour mixing capabilities that can use the ZerOS colour mixing tools: Additive, Subtractive and HSI/HSV.

Fixtures with additive colour mixing will often use Red, Green, Blue and White LED emitters. However, they may also include many other additive emitters. ZerOS supports over 20 different additive LED emitter colours, that if present in your fixture, will be used by the ZerOS colour mixing tools. Supported parameters include:

- Deep Red
- Red
- Red Orange
- Orange
- Amber
- Yellow
- Light Green
- Lime
- Green
- Mint Green

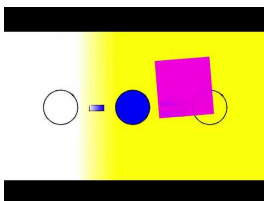
- Green Cyan
- Cyan
- Royal Blue
- Blue
- Indigo
- Deep Blue
- Congo Blue
- Purple
- Magenta
- Violet
- Pink
- UV

If using fixtures with subtractive Cyan, Magenta, Yellow mixing, the encoder wheels will display a "-" after the parameter name, to indicate these are subtractive parameters, not additive emitters.

### Find out more about the colour controls...

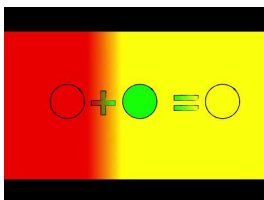
- [Colour Palettes](#)
- [Colour Picker](#)
- [Colour Faders](#)
- [Colour Filters](#)

Fixtures that can colour mix, can use two methods - subtractive colour mixing, or additive colour mixing. Take a look at the videos below for more information...



Subtractive Colour Mixing.

<https://youtu.be/xppPHtNlnEk>



Additive Colour Mixing.

<https://youtu.be/-h1LXYe8rfE>

# Palettes



When fixtures with colour mixing or colour wheels are patched, colour palettes can be automatically created.

ZerOS will create the following 15 "global" automatic colour palettes, if fixtures with colour mixing capabilities are patched:

1. White
2. Warm White
3. Cool White
4. Red
5. Orange
6. Yellow
7. Chartreuse
8. Green
9. Spring Green
10. Cyan
11. Azure
12. Blue
13. Violet
14. Magenta
15. Rose

These colour palettes will be available for all patched fixtures with colour mixing capabilities, and fixtures with colour wheels with a suitable slot (this is because the console compares the RGB values specified for each colour slot of colour wheels, with the RGB values of the automatic colour palettes. If the colour of a colour wheel slot is within a certain tolerance of the standard colour, the console will automatically add the relevant colour wheel slot to the relevant automatic colour palette).

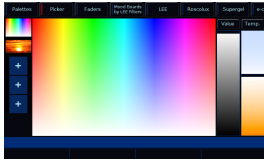
This means you can select all fixtures, tap [Red], and even if you have a mix of fixtures with colour wheels and colour mixing, they'll all go red.

In addition to the "global" automatic colour palettes, the console generates an auto palette for each colour slot in each colour wheel of your patched fixtures. These palettes are labelled with the stock colour names as supplied by the fixture manufacturer, and are ordered by fixture number & colour slot position.

As well as the automatic colour palettes, you are able to program your own colour palettes, to quickly save and recall your custom colours, made by adjusting the encoders, or colour mixing features. When colour palettes are stored, they will display a colour splash preview of the saved colour on the palette tile.

[For information on programming palettes, see the Palettes chapter.](#)

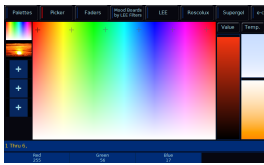
# Picker



The “Colour Picker” tab, allows you to choose a colour when fixtures with colour mixing capabilities are selected. Just touch the picker using the touch screen, and the colour of the selected fixture will be set to the colour pressed.

The cross (“+”) symbol on the picker indicates the current colour values for the selected fixture. If multiple fixtures are selected, multiple “+” will be displayed.

## Fanning



You can select multiple fixtures and “fan” them across the picker by using two fingers and multi-touch. The first selected fixture (defined by the order of selection) will be at your first finger, the last selected fixture will be at your second finger, and all the fixtures in-between will spread between these two points.

## Fanning across Multicell Fixtures

On multicell fixtures, colour can be fanned in two ways. Firstly, colour can be fanned across a multicell fixture, just like a standard fixture. This means that every light output of the multicell fixture is the same, resulting in a single cross (+) per fixture on the colour picker. Alternatively, colours can be fanned across the individual cells of a multicell fixture, resulting in a cross (+) per cell on the colour picker.

The way your fixtures will be fanned across the colour picker, will be dependent on whether they were selected as whole fixtures, or individual cells. When using the channel faders, fixtures will be selected as whole fixtures, unless your fixture is a linear multicell fixture, such as an LED batten, in which case the fixture will be selected as cells.

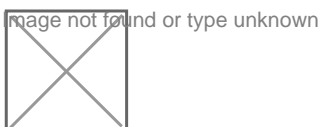
[Click here for information on selecting fixtures using syntax commands for more information.](#)

[Click here for information on selecting fixtures using the channel faders for more information.](#)



For more information on controlling multicell fixtures on FLX S consoles, click here.

<https://youtu.be/7Onn1GSW-FY?si=z4jOru88SsjHhiw1>



<https://youtu.be/5s0hB-i3Ekw?si=kbAcsqs-mojrGWG8>

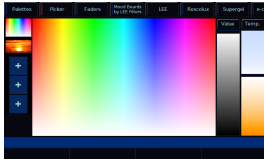
For more information on controlling multicell fixtures on FLX consoles, click here.

## Value Fader



To the right of the colour picker is a "value" fader, which can be used to dim your colour, without lowering the fixture's intensity. You will find that if the value fader is at the bottom, your fixtures are still considered to be on, however in black. A preview of the colour you have created is shown at the top of the value fader.

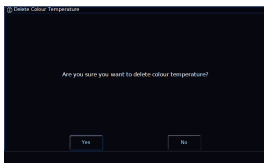
## Temperature Fader



After picking a shade of white, the Colour Temperature fader can then be used to "warm up" or "cool down" the colour of your fixtures.

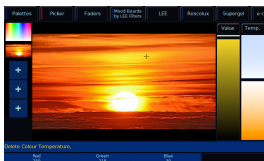
If your fixtures have a dedicated "Colour Temperature" parameter with a single, defined temperature range, the Temp. fader will control this. If your fixtures do not have a Colour Temperature parameter, the Temp. fader will adjust any white emitters your fixture may have, such as Cool White or Warm White. If your fixture does not have multiple white emitters, the Temp. fader will adjust the levels of your fixture's colour mixing parameters.

Tapping the **Temp.** button resets the fader to a default temperature of "50%". The default value of the **Temp.** button can be configured. To configure the **Temp.** button, set the Temp. fader to the required position, and then tap **Record** or **Update** , and then click on the **Temp.** button.

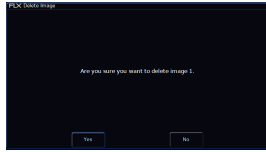


To remove a custom colour temperature and revert back to the default temperature of "50%", tap the Delete key, and then tap the Temp. button. You will then be asked to confirm the operation.

## Image Picker

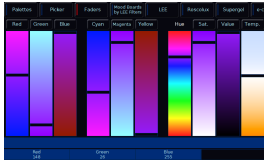


Images can be loaded into the colour picker, to allow you to choose colours from the loaded image. This is useful when wanting to use the colours of a companies' logo, or wanting to recreate the colours from a particular image you've photographed. Press one of the "+" symbols along the left hand side of the picker to open the "Load file" window which will display all the images on the connected external USB drive. Choose the image file you need, and load it in. The Image Picker also supports multi-touch for fanning across your fixtures.



To remove an image from the Picker, just press the Delete button and then press the image from the left hand side. This creates space for a new image to be loaded.

# Faders



On-screen colour faders are available on FLX consoles, and allow you to mix in RGB, CMY or HSV, irrespective of whether your fixtures use additive, subtractive, or HSV/HSI mixing.

Moving one fader automatically updates the others, meaning it doesn't matter how your physical fixture works - as long as it has colour mixing you can use any of these methods to control its colour. Like the other ZerOS colour mixing tools, these faders will adjust all additive emitters that your fixture may have, providing a simple set of controls that will then be converted and applied to all emitters.

On FLX, the background colour of the faders automatically updates to show you the colour you'll end up at by moving that fader.

Each fader (apart from Hue), has a button above it. The buttons take each fader to full, apart from the *Temp.* button, which takes the temperature fader to default.

[Click here to find out more about the Temperature fader](#)

# Filters

## Mood Boards by LEE Filters



Clicking the “Mood boards by LEE Filters” tab displays a window which collates colours together in “moods”. Selecting a mood will give a selection of several colours that work well together for that mood.



Some moods have more than one selection of colours, such as “Moonlight” which has “Realistic” & “Romantic” selections. After clicking on a mood, click the "Mood boards by LEE Filters" tab again to go back to the list of mood boards.

[For more moods and colour ideas, click here to go to the LEE filters website.](#)

## Filter Libraries



As well as Mood boards by LEE Filters, on FLX you can also access seven different filter libraries. To access these, you can horizontally scroll the tabs along the top of the Colour window.

The available filter libraries are:

- LEE
- Roscolux
- Supergel
- e-colour+
- Cinegel
- GamColor
- Apollo

## Filter References





Upon choosing a colour filter, all colour mixing parameters of the selected fixtures will be taken to the values required to recreate this filter colour.

On the encoder wheels, the filter number and name will be displayed, followed by the DMX value in brackets. Upon recording filters into cues, the reference is kept, meaning that if you go into a cue, and then select the fixtures, you will be able to view the filter that is in use on the encoder wheels.

The filter reference will also be shown in the parameter details table at the bottom of the Output window, when the fixture is selected or manually adjusted.

When you apply a filter, that instruction is written in the command line. This means you can backspace to undo.