



Attribute settings allow you to configure how your encoder wheels behave, for each attribute. The attribute settings can be opened by pressing and holding the Setup key, and pressing the button of the attribute you would like to configure. On FLX, you could therefore press and hold Setup and tap Colour, or on FLX S, you could press and hold Setup, and tap the Colour tab, at the top of the internal touchscreen which opens when a fixture with colour parameters is selected.

The attribute settings can also be opened via Setup, by tapping Setup -> Settings, and choosing the attribute under "Attributes".

The options in each Attribute's window are the same (apart from colour, which has one extra option), but the setting for each option can be changed per attribute independently.

Wheel Mode

"Wheel mode" allows you to change how the encoder wheel will affect the selected fixtures. The options are explained below. A secondary "shifted" option can be chosen whilst holding down the **[Shift]** key on the console, which allows you to select how the encoder will work when you rotate it whilst holding **[Shift]**.

- "Absolute" will change all the selected fixtures to be exactly the same value for that wheel's parameter. For example, if all the moving lights have different gobos, changing the gobo wheel in absolute mode will switch them all to the same gobo, and then alter them all together. This is the default for Colour, Beam and Shape. The DMX value displayed on the encoder is sent to all fixtures.
- "Relative" will change all the selected fixtures relative to the values they currently have. For example, if lots of moving lights are all pointing centre stage, they are all at different angles. Moving them "relative" will move all their Pans and Tilts together rather than snapping them all to the same angle (which is what "absolute" would do). Relative is therefore the default wheel mode for Position. The DMX value displayed on the encoder is that of the first selected fixture.
- "Fan first" fans the change you make across all the selected fixtures, so the first fixture's parameter doesn't change, the last fixture's parameter changes as expected, and all the fixtures in-between will scale between these two values. This is the default shifted option for all attributes.
- "Fan Middle" will fan from the middle fixture, so the middle fixture's parameter doesn't change, the first half of the fixtures will change in one direction (again, scaling as you move away from the middle fixture), and the second half of the fixtures will change in the other direction.
- "Fan Last" fans the change you make across all the selected fixtures, so the last fixture's parameter doesn't change, the first fixture's parameter changes as expected, and all the fixtures in-between will scale between these two values.

- “Fan V” is similar to “Fan Middle”, but the second half of the fixtures change in the same direction as the first half, rather than the opposite direction. Also known as "Fan Symmetrical".

Wheel Behaviour

“Wheel Behaviour” changes how responsive rotating the encoder is.

- “Proportional” uses an exponential algorithm to control attributes based on the speed of the encoder wheel movement. This is the default, and provides the best overall control.
- “Course” uses a linear algorithm to control attributes, with a low sensitivity to make large changes quickly.
- “Fine” using a linear algorithm to control attributes, with a high sensitivity to make very accurate changes easily. Every “click” of the encoder wheel will change the parameter by one DMX value.

Keep Parameters Separate

When SmartTag is disabled in the Record Options window, rather than the console deciding which parameters to record into palettes and cues, you decide. With SmartTag disabled, you choose which parameters get stored by "tagging" them. When moving an encoder wheel, you will notice the parameter goes from having a dark blue background in the encoder display, meaning untagged, to a light blue encoder display, meaning tagged. Therefore whenever you adjust an encoder, you know that value will be stored when you record a cue.

However using the "Keep Parameters Separate" option, you can decide if moving one parameter within an attribute should automatically tag all the other parameters within that attribute too.

By default, parameters are not separated for Colour and Position, as all the values within those attributes come together to create a single colour and single position. In most cases, you therefore need all of those parameters to be recorded at a time. Whereas the default is “Yes” for Beam and Shape, as often the parameters within Beam and Shape are completely independent from each other.

[Click here to find out more about SmartTag](#)

Wheel Sensitivity

“Wheel Sensitivity” allows you to change the sensitivity of the four encoder wheels. The setting is a value between 0% and 100%, with 100% being the most sensitive. Recommended use is between 50% and 60%. Increasing the sensitivity reduces the amount of wheel rotations required, and reducing the sensitivity increases the amount of wheel rotations required. Note Wheel Sensitivity is a global option, which can be accessed from each attribute's settings.

Colour Edit Mode

This option is found in the Colour Settings only, and allows you to switch between controlling fixtures using RGB (Red, Green, Blue) or CMY (Cyan, Magenta, Yellow). ZerOS will convert all fixtures to this colour mixing mode.