

Getting Started Guide - Effects

In this chapter we are going to look at the effects engine in the MA dot2.

Let's start from fresh. Turn everything off and reset all special masters.

Dimmer effects and effect theory

Let's begin with some of the more basic effects. Select fixture 1 thru 10.

Select **Dimmer** in the Preset Type Bar and press the **Effect** key.

This opens the Dimmer Effect view. Here you have a selection of possible effects for the dimmer attribute. The left side of the screen shows you the possible effects and the right side is different tools like "Shuffle selection" and all the Aligns.

Tap the effect called **Soft Dimmer** and look at the Fixture view. This has given us a moving sinus curve effect on our ten fixtures. It goes from 0% to 100% percent. There's also a magenta colored marker in the fixtures views, next to the fixture ID, to show you that the value is under influence from an Effect.

Effects are the transition from one value to another. It always moves between two values - and only two. We can control how it should get from one value to the other, we can control the speed and whether they should all to this at the same point in time or if they should be spread out.

Let's examine some of these settings. Let's begin with the two values. In the purple effect title bar you'll find two buttons called **Low Value** and **High Value**. These are used to access and change those values.



Figure 1: Dimmer Effects title bar.

Press where it says **Low Value**. This gives you the standard look for the dimmer value. Tap the button called **25%**. Notice how this changes the lowest value in the Fixture view. Notice also that the Dimmer title bar is now also purple and there are two extra buttons in this view:



Figure 2: Dimmer title bar - Effect running.

The left most button is a small sine curve. This doesn't change because we change the effect type. The **Normal Value** button will take you back to controlling the normal value. We will examine what this means later.

Tap where it says **High Value** and then change the value to **75%**. Now we have limited the effect to only run from 25% to 75%. That's the High and Low values. Now tap the Sinus Icon in the title bar. This takes us back to the effect view.

We could also have set the Low and High Values using the left encoder.

Try to turn encoder number 2. This changes the speed of the effect.



The third encoder controls something called Phase. This is the name we use for spreading out the fixtures over the time of the effect loop. Try to tap the encoder and set the value to 0. Now all ten fixtures are doing the same output. They are in other words at the same time in the effect loop phase. Even if you now turn the encoder, then nothing really seems to happen. This is because all the fixtures are still at the same point in the loop, we are just moving where they all are in the loop. If we want to remake the effect to what it was before, then we need to spread the fixture throughout the loop. This loop is also often described as a circle. That's why the phase is a degree. There are 360 degrees in a circle so if we want to spread all the fixtures evenly through the loop then they need to have a phase from 0 to 360 degrees. Because of mathematics (a bit too complex to begin to explain here) it needs to be 0 to -360 to look like it moves from left to right. Press the encoder and select the dark red button called **0..-360**. And we are back to the sine effect.

Before moving on, please tap the **Hard Dimmer**. This gives us a chaser style dimmer effect. The right most encoder have control over something called Width and Softness. Try to turn it. A small width gives you less fixtures on at the same time. The higher the number the more fixtures are on. With a width of something like 20%, try to press and hold the **MA** key while you turn the encoder. This makes the values fade in and out or snap. Depending on the percent number. Try to give softness 100% and width 50%. Recognize the effect?

Try the two ramp effects and play around with width.

Ok, let's try to use this. Choose the **Hard Dimmer** effect and set the width at 50%. Now press **Shuffle Selection**. Press **Store** and then one of the keys associated with executor number 1 on page 1. Clear your programmer and try to run the cue. If you have set a default cue time then the effect uses this to fade in the effect.

Let's make a cue number two where the effect fades to a stop. Select the 10 fixtures again and press the **Effect** key. Now it might seem logic that you should press **Off** in the Effect view, but that takes the effect out of our programmer and right now it's in the cue. The cue list is a tracking cue list, so we need to tell the fixtures to stop the effect - we need to program a stop. This is called "Stomp" in MA. So press where it says **Stomp**. Now this stops the effect. Let's store this as a cue 2 with a fade time of 5 seconds - you know how to do this.

Color effects

Let's try to make some color effects.

Select the X4's, turn them to full and tap **Color** in the Preset Type Bar and then the Sinus Icon in the title bar.

Tap the **2 Color Hard**. Now that looks a lot like the chaser we did in the previous chapter!

Now the Low and High Value controls the two colors your effect changes between. Try to change them. Also play around with width and softness.

Let's make an effect that moves from the outside and into the middle. Clear your programmer. Select all the X4 using the group and run the **2 Color Hard** effect. Use the Low and High values to select the some colors you are happy with. Tap the Phase encoder and set the phase to 0 for all fixtures. Now tap the **Align <>** button and turn the Phase encoder counter clockwise until the effects moves from the outside to the middle. If you turn it enough then it starts to move the other way. Set the value at something you are happy with. Store the result as cue 1 on executor number 2 on page 1.



There's one special color effect. The RGB Rainbow effect. Select all the X4's and try it. Store this as cue 2 with a fade time, and try the transition from cue 1 to 2.

The "Colorwheel 2 Color" effect is used for color effects on color wheels. It's an effect between two colors on a color wheel.

There really isn't a lot more to say about color effects. Let's do some motion.

Position effects

Remember I promised to explain the "Normal Value"? Many position effects are only fun if the fixtures already have beginning position. This means we can have a cue where the fixtures are pointed at a singer in a band. Next cue the fixture begin to do a circle effect around the singer. Next cue the fixtures move to the guitar player while still making the circle. Next cue the fixtures moves to the singer while the effect stops. This scenario is why there's also a Normal Value and why the effects (values) are put on top of the normal values.

Let's try to make this. First make two position presets with the Alpha Profiles. They should be called "Singer" and "Guitar". Turn on the fixtures and put them on the singer. Store this as cue 1 on executor 3 (Page 1).

Now we need a circle effect. Tap **Position** in the Preset Type Bar and then the Sinus icon in the title bar. Here we very convenient find a circle effect - select it. Let's make it a bit more random looking. Use the **Odd** macro to select half of the fixtures and go back into the Effect view and tap the **Direction <>** button. Finish this by pressing the **Set** key (reselect all the fixtures). Now half the fixtures turn the opposite way. Let's make the size just a little bit smaller. The leftmost encoder controls the size. Turning this allows you to make the circle smaller or larger. It shows you two different numbers in percent. This is because there are two different sizes. One for tilt and one for pan. Turning the encoder change these two values together. Make it a size you like - I like 3.6%..10%. This is our circle effect. Store this as cue 2 with a fade time of 3 seconds.

Next cue we need to move the fixtures to the guitar player. Select the fixture and select the Guitar position preset. Store this as cue 3.

With the fixtures selected open the position effects again and tap **Stomp** and then the **Singer** position preset. Store this as cue 4.

I think you should add a fade time of 3 seconds to all the cues. Clear Your programmer and test it.

You can see the circle movement in the Fixture Symbol view and you can see the position presets in the Fixture Sheet view. When a fixture have a running effects then there's a small magenta marker next to the fixture ID - in all your Fixture Views.

Position effect uses Size and Center instead of Low and High value. This is because we have a base position and we make a size effect around the base. You can use the Center value to offset the effect from the base position.



This was the basic introduction to effects. Before moving on, try the other position effects. And play a little around in the effects.

You can of course make effects on most preset types. This just a demo of some of the common ones.

We are getting real close to the end of this guide. Before it's all over we should have a look at connecting external equipment.