

Circuit - Synth Editor 101 (rev0.01)

This document has been set up for anyone looking for a reference, visual reference and 'quick start' guide to using the **Synth Editor**.

First off, a bit of legal:

*****DISCLAIMER*****

Everything contained within this document are for information and advisory purposes *ONLY*. Whatever you do to your own gear is up to you, and I will hold no responsibility for any breakages, bricked devices, mashed up OSs, hard drive failures, fires, beer spilt on your keyboard by your cat, your kid nagging you to take them to go and play Pokethemon or ANY OTHER negative effects that happen to you or your gear from reading this document. That's your responsibility. Don't go suing me when I'm just trying to help!

By reading past this page you agree never to create any legal case against the publisher, blah blah blah.

Thank you!

*****DISCLAIMER*****

..Now that's out of the way, lets have a look at how this thing all comes together!





Lets dive straight in!

Start off by downloading and installing the software found here:

<http://isotonikstudios.com/novation-x-isotonik/novation-circuit-editor/>

----- Look for this near the bottom of the page -----

NOVATION CIRCUIT EDITOR – £ FREE

	MAXFORL (MAC OS & WINDOW:		WINDOW: 64BIT STANDAL:	<input type="checkbox"/> Download Includes
				<input type="checkbox"/> User Guide
				<input type="checkbox"/> Minimum System Requirements
	MAC OS STANDAL:		CHECKOU	<input type="checkbox"/> Installation

----- Choose the flavour of your system on which you wish to install. -----

Now you are ready to begin!

Open up the freshly downloaded software.

It should look like this:



We're going to start by having a look at how to change **Direct** routing of a **Macro**.

Adapting Macros

In circuit (or many other synths and other devices) a macro is something that controls something much larger than just one thing (or parameter).

Circuit has eight (8).

Each one of these **8 Macros** has four (**4**) **Macro sub pages**.

This makes it **VERY POWERFUL!**

Lets have a look at changing some, shall we?

Open up the **Synth Editor**, and lets get going!

Step 1

Step 1. Make sure the **Synth Editor** is clearly visible:



In its default state, the editor may look *really small!*

We can change this by selecting a different zoom size in the **View Control** section.

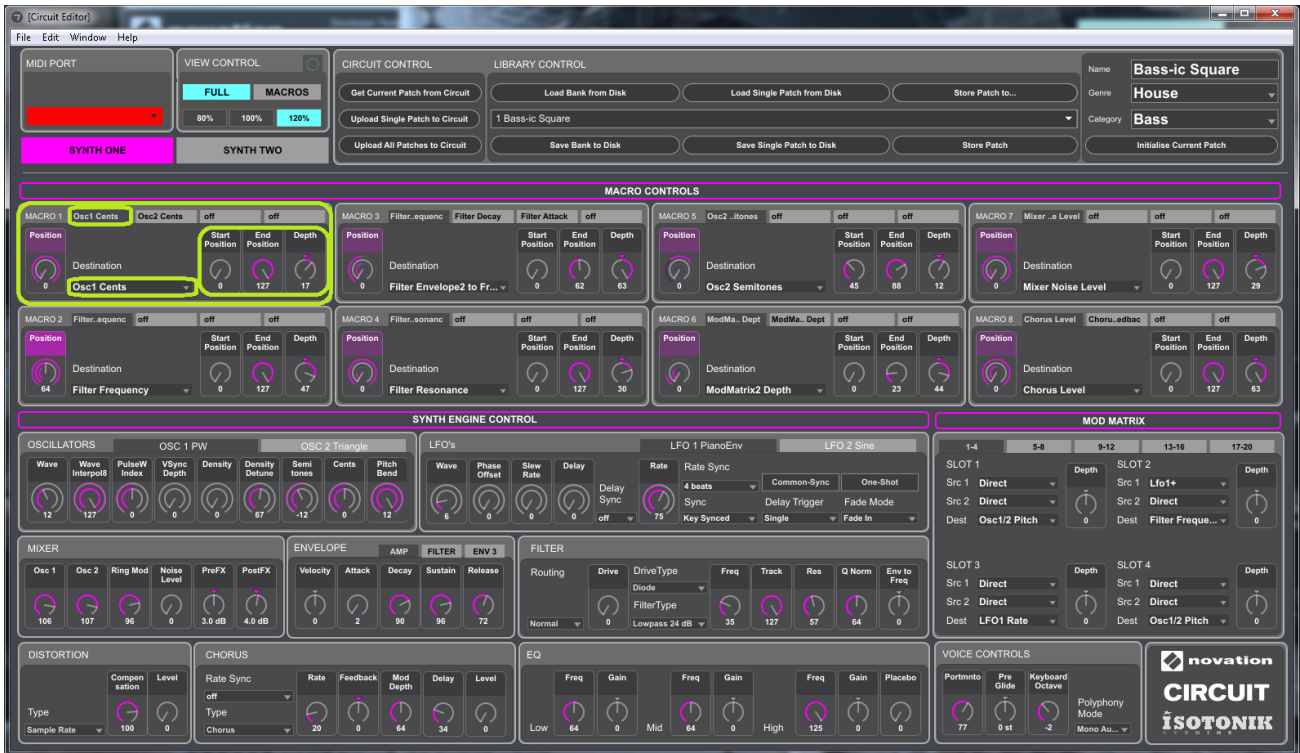
Select the **Zoom Size** that best works for you.

That's better.

Now we can see what we are doing properly!

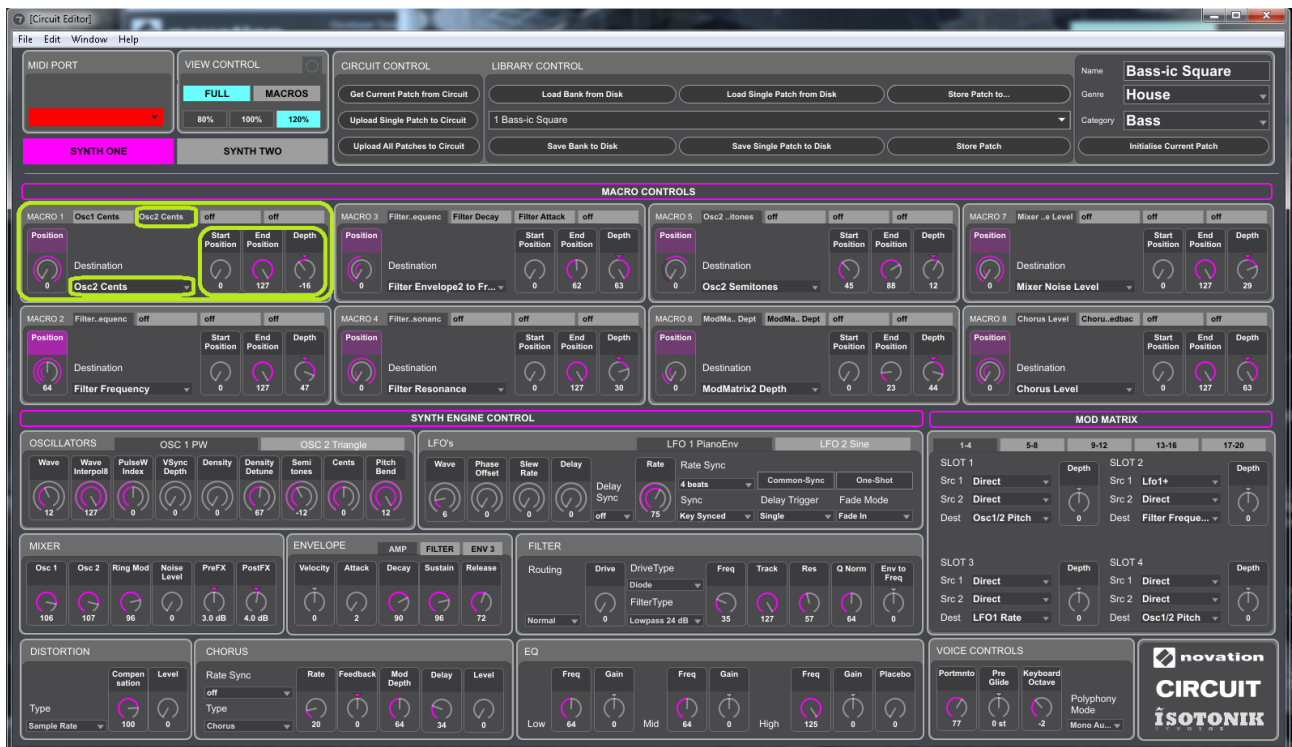
Step 2

Take a look at the **Macro** we wish to change:



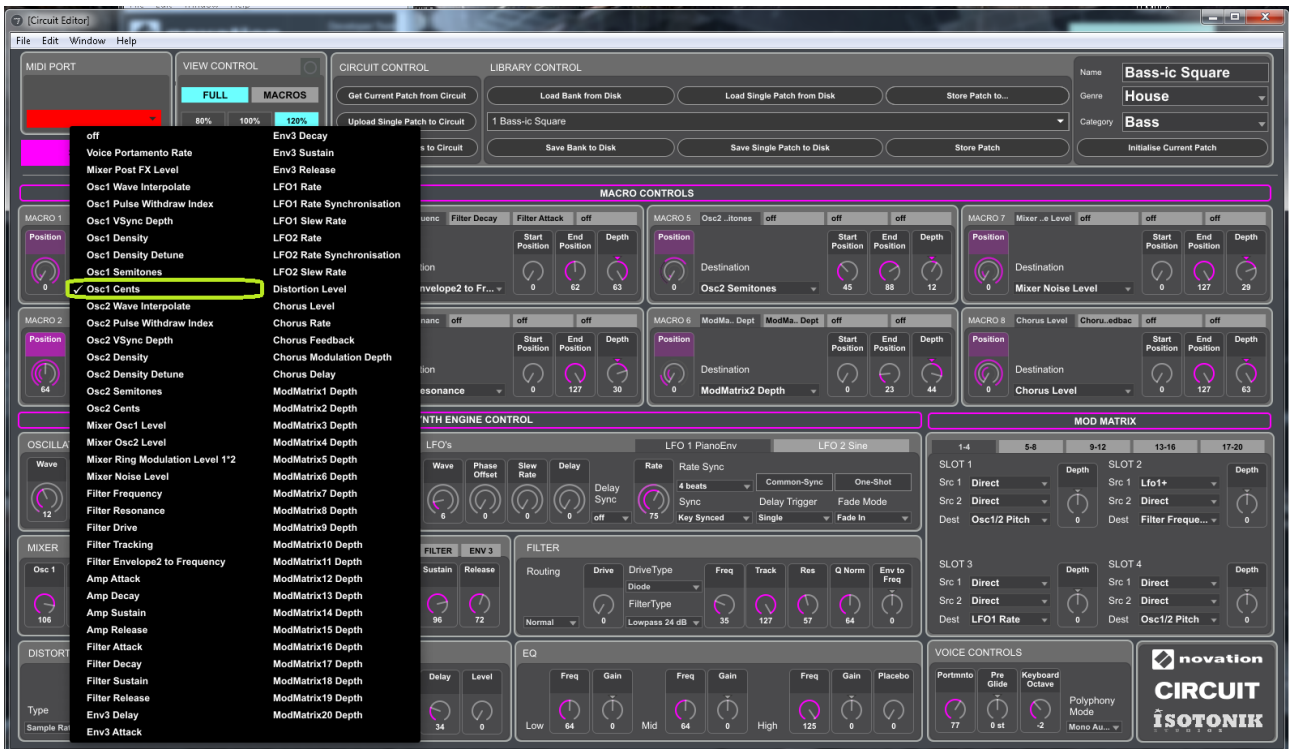
You can see that slot 1 of 4 for Macro 1 has control of Osc1 Cents in Direct mode.

Slot 2 of 4 has Direct control over Osc2 Cents:

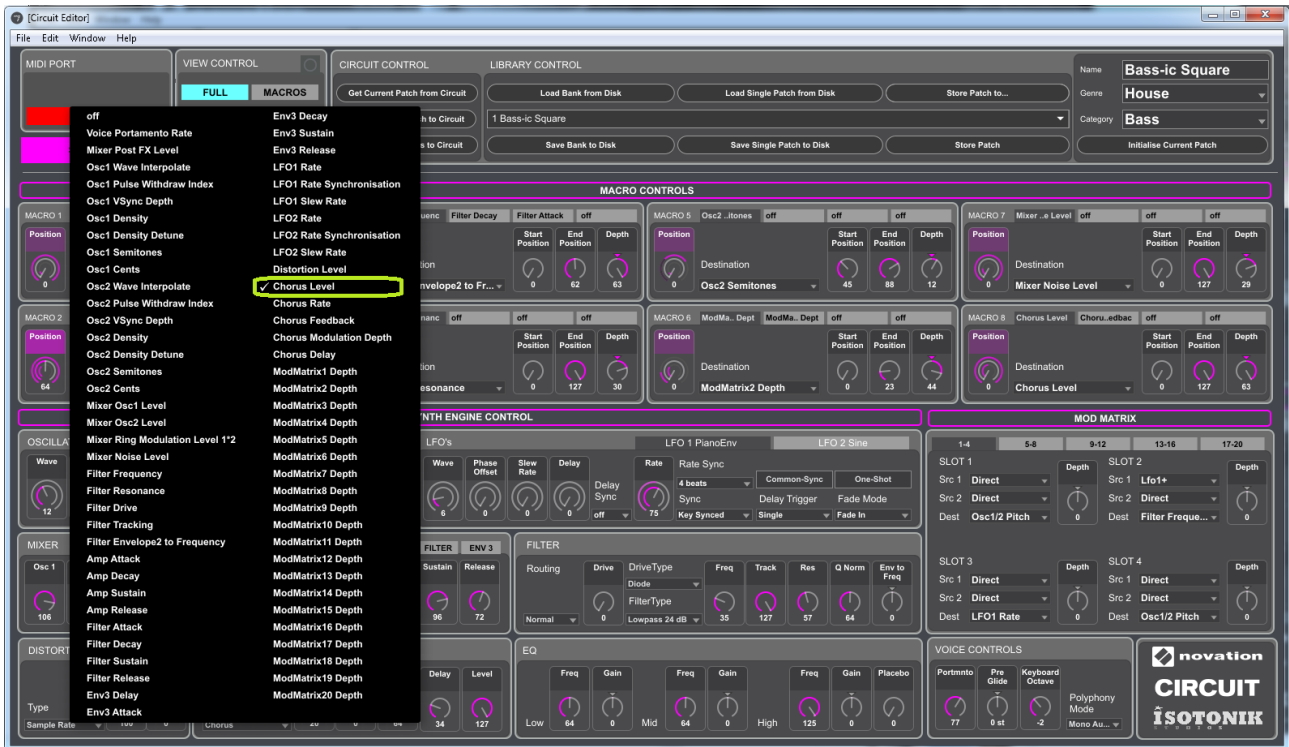


Step 3

Select where it names the **Parameter** in the **Macro slot** you wish to use:

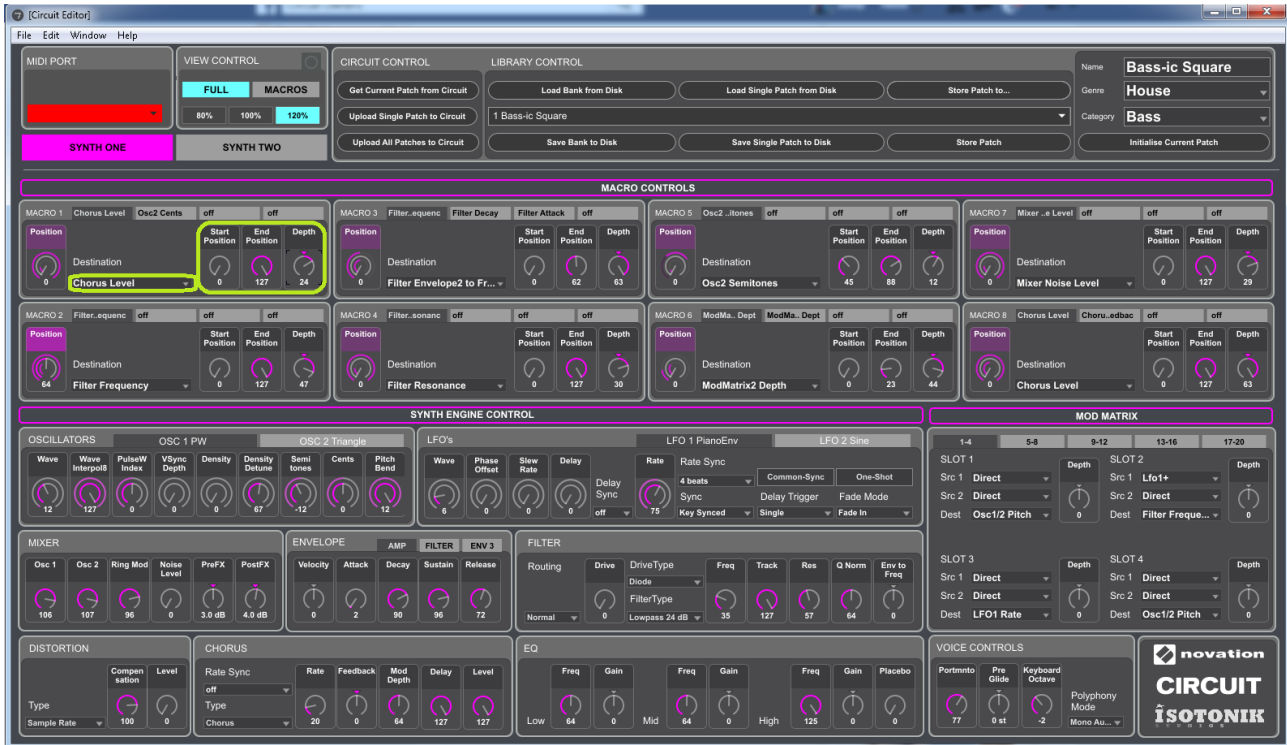


Choose the **Parameter** that you wish **Macro 1** to be **Sent**:



Step 4

Change the values of **Start**, **End** and **Depth** positions to desired values:



Well done!

You have just successfully set up your first **Macro Parameter Assignment!**

Next up...

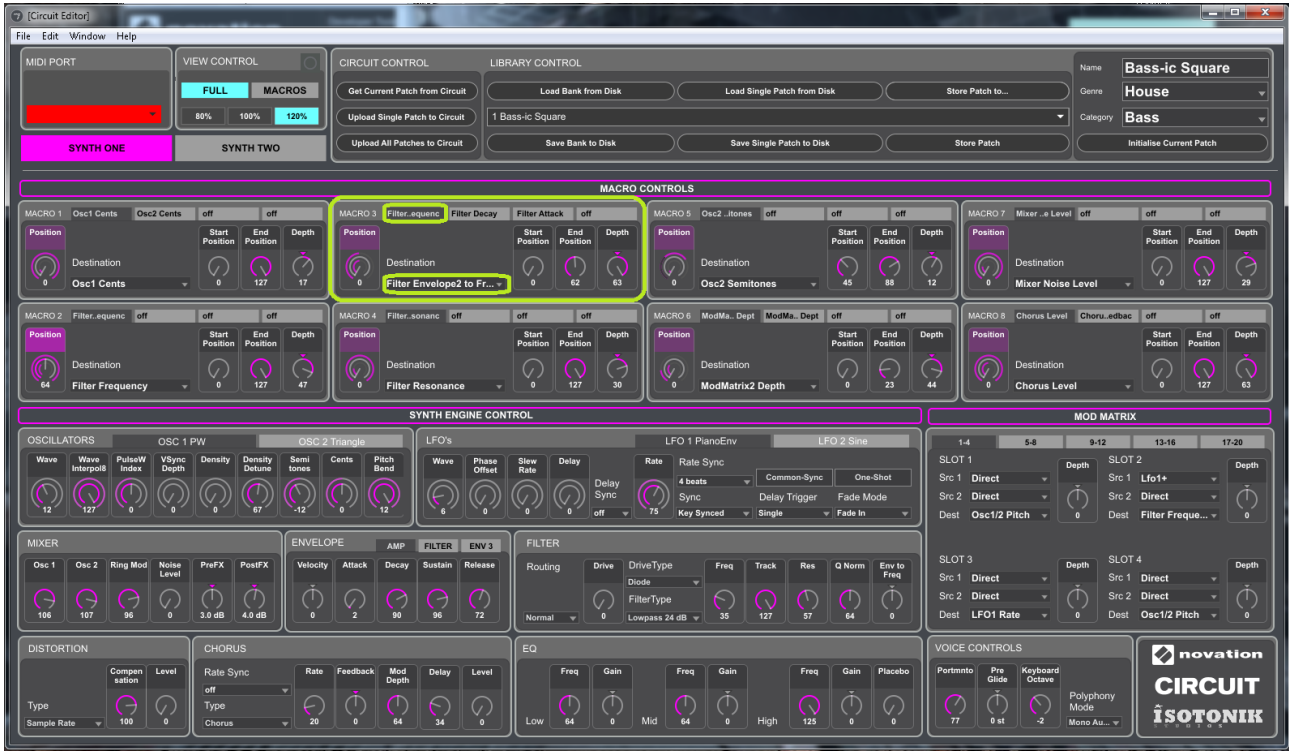
Mod Matrix Routing

How about we go a little deeper now, and really unlock some of the power that **Circuit** has to offer!

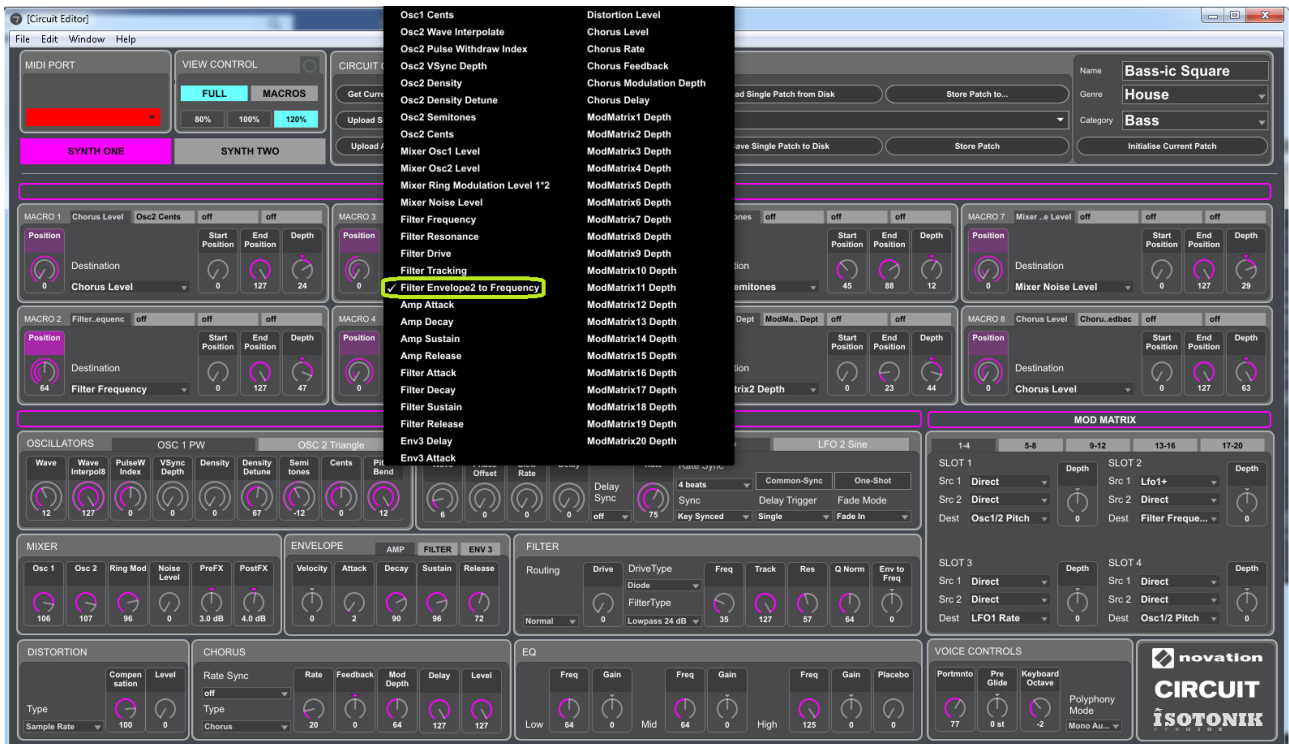
This can seem a little bit confusing to start with. Follow the next few steps with the **Editor** in front of you, and lets see how this is done..

Step 1

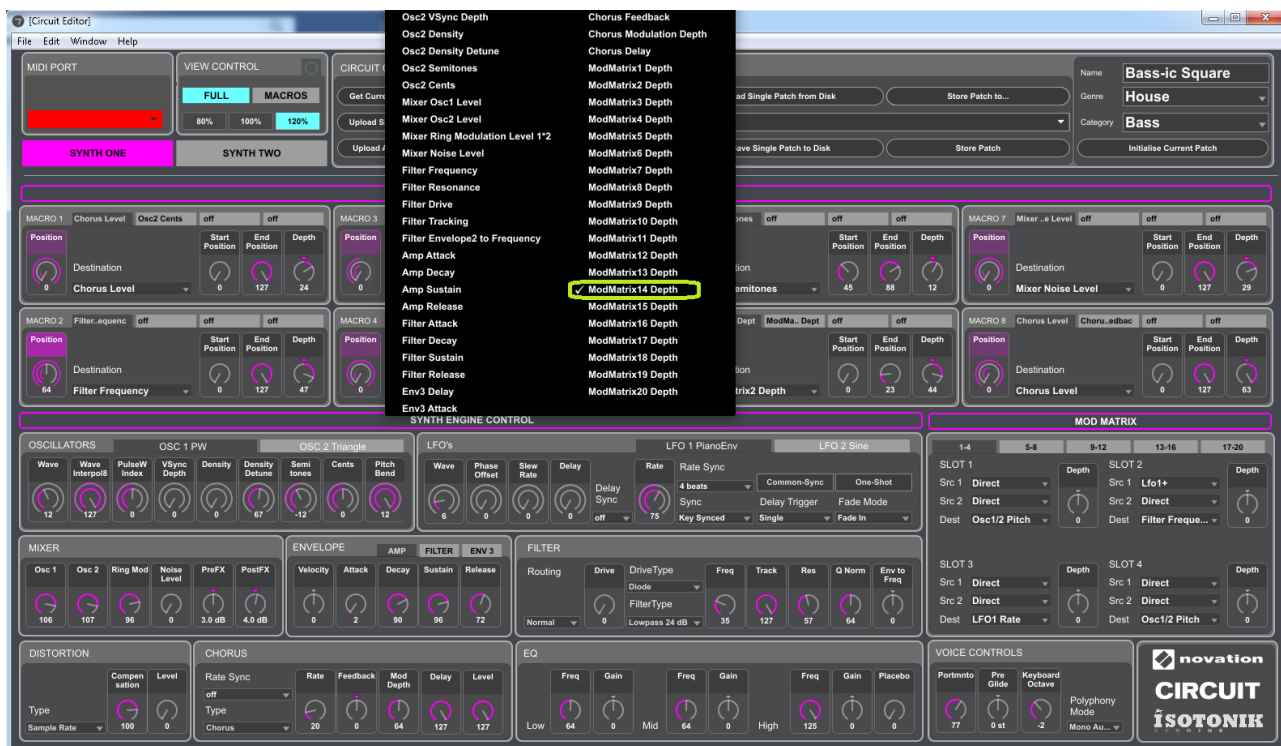
Select the Macro and slot you wish to use.
Here, I have selected Macro 3 slot 1 of 4:



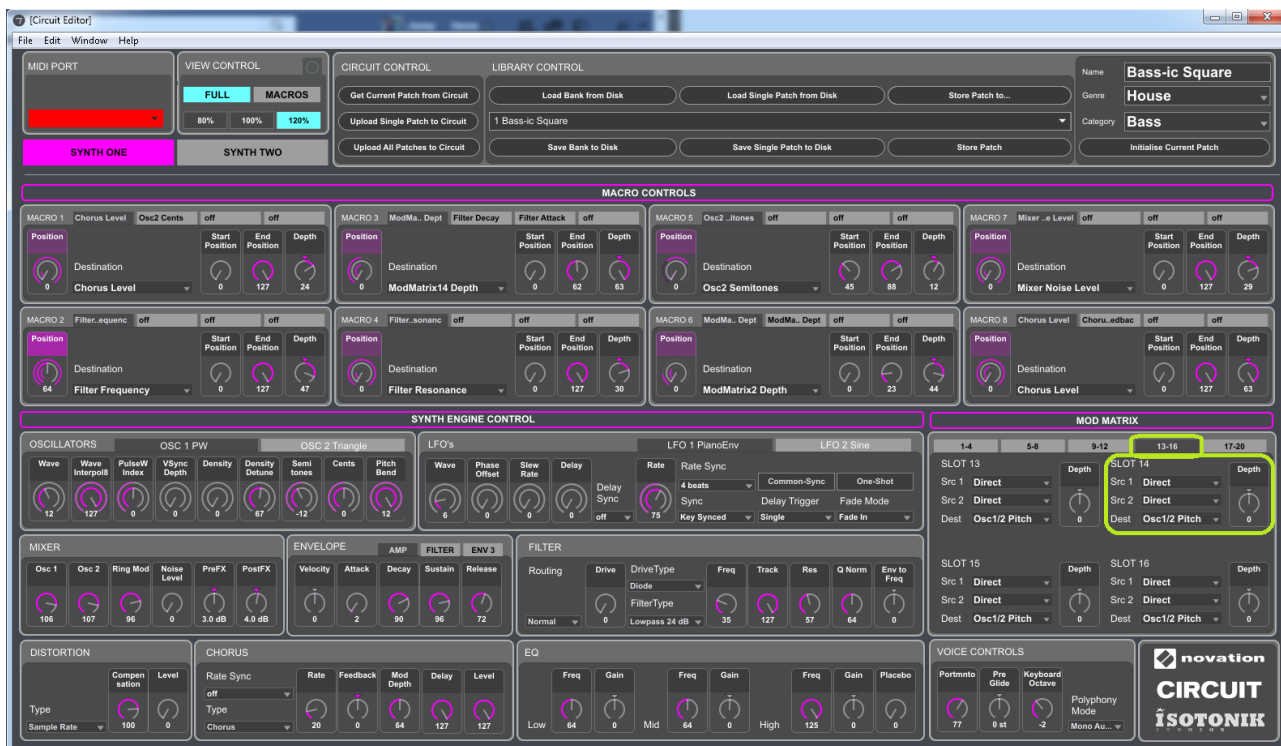
At the moment it is selected on Filter Envelope2 to frequency:



I wish to send this to the Mod Matrix slot 14:

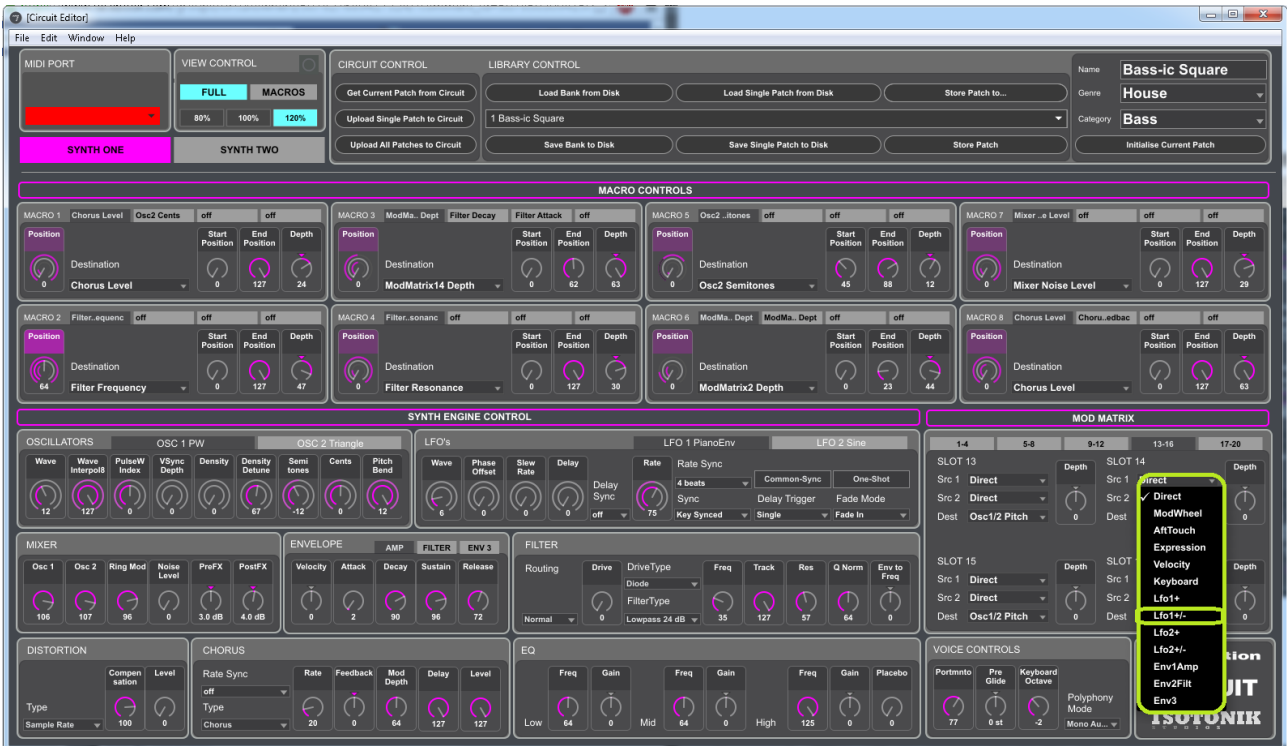


I will now select mod Matrix Slot 14 which is contained in Mod Matrix page 13 to 16:



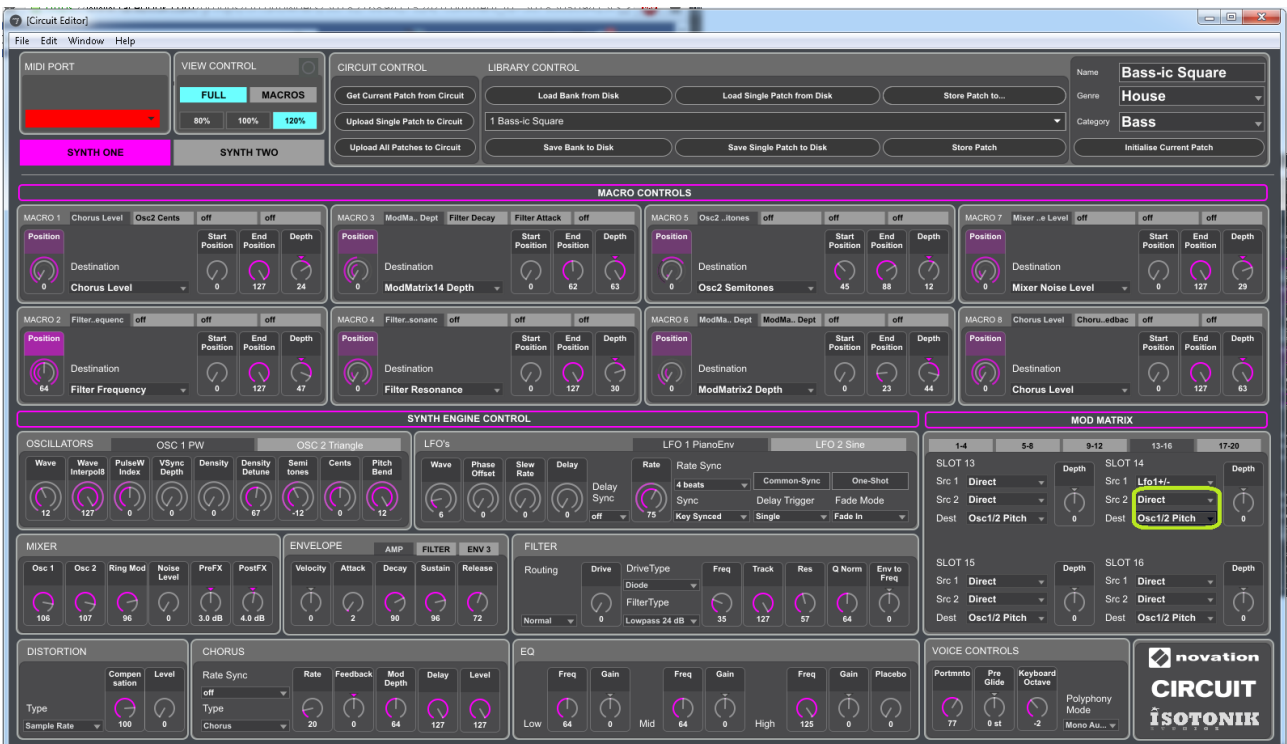
Step 2

Now select what you wish to **Source** from:



In this example I am selecting **Lfo1 +/-** in Mod Matrix slot 14, source 1. This will feed the Lfo output to Source slot 1.

I wish to keep **Source 2** to be fed directly from **Macro 2**, but change where this is being sent.



It is currently routed to control the pitch of **Osc 1 & 2**.

I wish this to be now sent to the **Filter Drive** value:

The screenshot displays the Novation Circuit software interface, which is a digital synthesizer. The interface is organized into several sections:

- Top Bar:** Includes a MIDI PORT section, VIEW CONTROL (FULL/MACROS), CIRCUIT CONTROL (Get Current Patch from Circuit, Load Bank from Disk, Load Single Patch from Disk, Store Patch to...), LIBRARY CONTROL (1 Bass-ic Square), and Name/Genre/Category (Bass-ic Square, House, Bass).
- MACRO CONTROLS:** A grid of 8 macro control panels (MACRO 1-8) with various parameters like Chorus Level, Osc2 Cents, Filter Decay, Filter Attack, Osc2 LFOs, Mixer Noise Level, Filter Frequency, Filter Resonance, ModMatrix14 Depth, and Chorus Level.
- SYNTH ENGINE CONTROL:** Includes OSCILLATORS (OSC 1 PW, OSC 2 Triangle), LFO's (LFO 1 PianoEnv, LFO 2 Sine), MIXER (Osc 1, Osc 2, Ring Mod, Noise Level, PreFX, PostFX), ENVELOPE (Velocity, Attack, Decay, Sustain, Release), FILTER (Routing, Drive, DriveType, Freq, Track, Res, Q Norm, Env to Freq), MOD MATRIX (SLOT 13, 15, 16), DISTORTION (Type, Compensation, Level), CHORUS (Rate Sync, Rate, Feedback, Mod Depth, Delay, Level), EQ (Low, Mid, High), and VOICE CONTROLS (Portamento, Pre Glide, Keyboard Octave, Polyphony Mode).

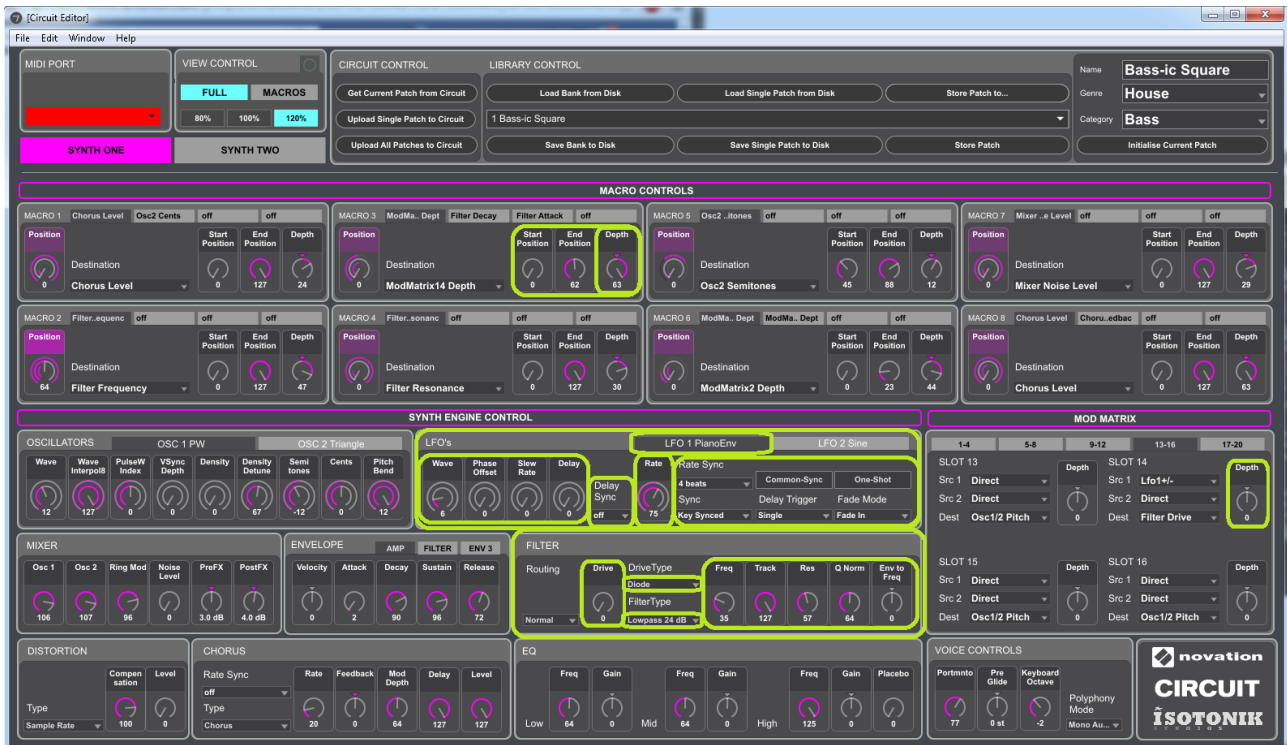
A yellow box highlights a list of parameters on the right side of the interface:

- Osc1/2 Pitch
- Osc1 Pitch
- Osc2 Pitch
- Osc1 VSync
- Osc2 VSync
- Osc1 PWid
- Osc2 PWid
- Osc1 Level
- Osc2 Level
- Noise Level
- Ring Modulation 1/2 Level
- Filter Drive
- Filter Frequency
- Filter Resonance
- LFO1 Rate
- LFO2 Rate
- AmpEnv Decay
- ModEnv Decay

Step 3

We can now set **Macro 3 Slot 1, Start, End and Depth.**

Then the **Depth on Mod Matrix Slot 14.** I can then set up **Lfo 1** and the **Filter** with my desired settings:



If you've got this far, well done!
(That wasn't so hard now, was it?).

What next?

Ok. So, we've got this far. So what *is* next?!

Well, if you haven't hooked up your **Circuit** console already, **now** is the time to do so..

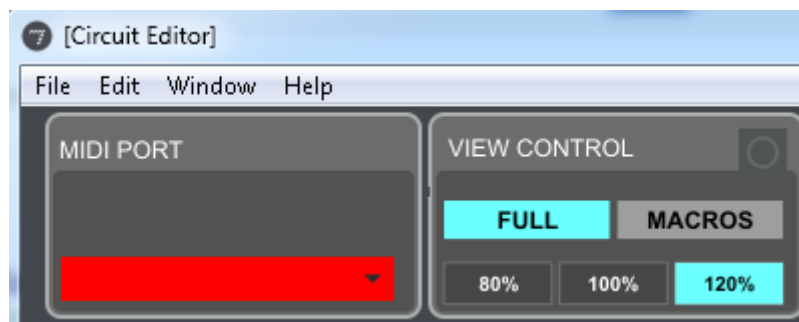
Sometimes I get problems with my drivers, and things don't work straight away.
Unfortunately, this seems to be a bug!

On one of my systems Circuit picks up straight away.
One of my others, I have to reinstall the drivers every time I wish to do this..

Other things that could get in the way, are things like your OSX version, or an update of something else may be required. Have a chat on the Circuit Owners facebook page or Novation if you are struggling!

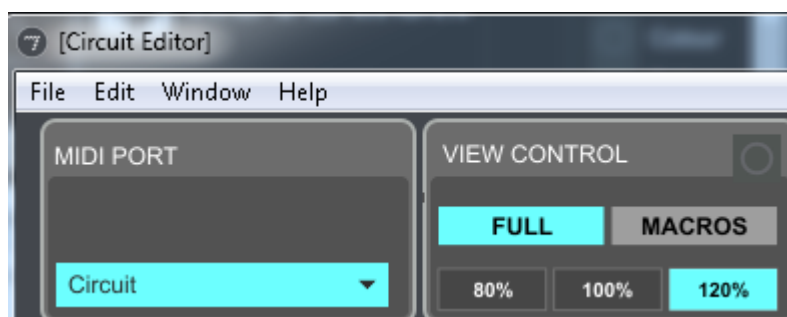
(Unfortunately I don't have time to go in to all this right now, but if you see me online, say 'Hi!' and I will try to help! By the way, I'm a digital artist, but I don't work for Novation or Isotonik).

Now you are hooked in to your computer and your drivers are all working etc, check to see that you are connected in the **Synth Editor**:



If the MIDI Port looks like the image above. You **are not** connected!
(Make sure you are in the standard mode and **not** the bootloader)

It should look like this:



Now that we are connected, you have two main ways to upload this patch to your **Synth**.

You should be able to tweak the Macros to experiment with this new patch we have just built be playing around on **Circuit**. It works in real time!

Result 1

*“I wish to install just this patch, **but, I don’t** want to save it for all other sessions.”*

Once you are happy with your new patch, hit **‘Save’** on **circuit**.

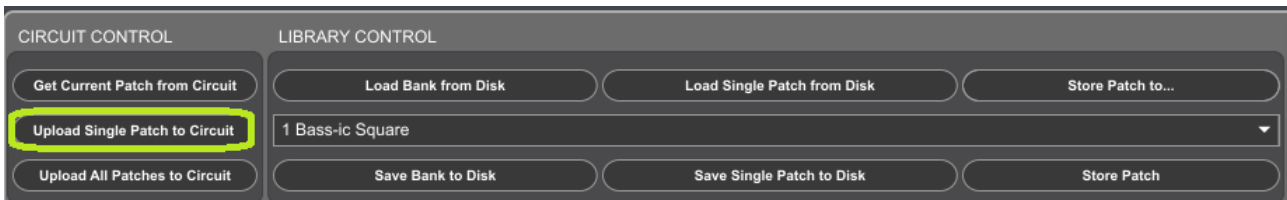
This will save this patch to the current session, and the current session **only**.

Result 2

*“I wish to install this patch so that **I can** access it from **all** sessions.”*

Click **‘Upload Single Patch to Circuit’**.

Now you can access the patch from any session you wish!



That’s it for now!

I hope you have found this useful.

If there are any other tutorials you wish to see, get hold of me in the Circuit Owners group, and I will see what I can do.

Thanks for reading.

Enjoy!

All the best.

Jonny Miller 2016