

CYMATICS

30 DAY

**Serum Sound
Design Guide**



Week 1: Getting to Know Serum: Read the Manual

I think we can all agree that Serum is both very technical and powerful.

And in my opinion, it's easily the best synth out there. But it can be a bit overwhelming to producers who haven't been using it for a long time.

Which is why it blows my mind that 99% of producers who download Serum don't even read 1 page of the manual.

Reading the manual is one of the best ways to quickly become familiar with the program. Almost all of your questions can be answered by just doing this, whether you're confused about complex features or even some of the basics.

The funny thing is, I still revisit the manual on a regular basis and every time I do, I learn something new.

So, the first week will be entirely focused on reading a good majority of the manual.

[CLICK HERE TO DOWNLOAD THE XFER SERUM MANUAL](#)

But don't worry, it's not going to be just all work and no play.

You should have Serum open as you read through the manual. That's because actually playing with the features that you read about will help you get the most out of it.

So, as you learn something new, spend a few minutes exploring different possibilities within the feature you learned about.

You may already be somewhat acquainted with Serum, but it's important to take your time as you get to know it better.

For the first week, read these chapters of the manual:

Day 1: Read Chapter 4. Wavetable Oscillators

Day 2: Read Chapter 5. Noise Oscillators & 6. Filter Module

Day 3: Read Chapter 7. Effects

Day 4: Read Chapter 8. Modulation Routing & 9. Envelopes & 10. LFOs

Day 5: Read Chapter 11. Voicing & Portamento & 12. Global Page Settings

Day 6: Read Chapter 13. Wavetable Editor

Day 7: Read Chapter 14. Importing Audio

Week 2 : Reverse Engineer Basic Presets (Leads, Pads & Plucks)

****WARNING: DO NOT MOVE ON TO WEEK 2 WITHOUT COMPLETING THE MATERIAL IN WEEK 1. THIS WILL RESULT IN A LOT OF CONFUSION DURING WEEKS 2-4****

Now that you have a good understanding of most of Serums features, you can begin to reverse engineer a few presets.

Reverse engineering a preset is one of the fastest and most effective ways to learn how to make different types of sounds.

For those of you who don't know what I'm talking about:

Reverse engineering presets is simply taking full made patches and breaking them down section by section to see exactly what's making that patch sound the way it does. I'll be going into more detail about this process below.

But don't worry about recreating any presets just yet. Instead, begin by reverse engineering simple presets like Leads, Pads and Plucks.

Before you begin:

It's very important that you start off with some quality presets to reverse engineer. The higher quality the preset, the more you will learn.

That's why I went ahead and included our Ultimate Free Serum Library for free in this regime, so you don't have to spend hours looking for a good set of presets yourself.

We made sure these 300+ presets are really high-quality and are from every genre. They include basses, leads, plucks, rises and a bunch other style presets. That way you'll definitely have way more than a week's-worth of presets to reverse engineer.

So before you begin, download the Ultimate Free Serum Library here:

cym.fm/UltimateSerumLibraryDownload

How to Reverse Engineer Presets:

Now that you have high-quality presets, you'll be able to go ahead and start studying the presets by reverse engineering them.

So to "reverse engineer" a preset, we have to start at the last layer, which is the FX section and work back to the oscillators.

In the preset you selected, go to the FX tab and disable all the effects. This is necessary because the effects can drastically change a sound.



After all the effects are turned off, you'll notice the sound change. It's vital that you closely listen as you turn off each FX. The whole point of doing this is to see how each FX affects the sound itself.

Just noticing this change is enough for now. We'll come back to this section at the last step.

Next, disable the filter in the Osc tab:



Now the preset is stripped back to its core; the oscillators. This is a great place to start studying how the preset works. The sound comes from the oscillators and the movement of the sound comes from the modulation section (LFO's and Envelopes).

How to Study the Oscillators and Modulators:

Study how the oscillators are set up and what modulators are controlling its parameters. Take your time with this step, because you'll learn lots of neat tricks to implement into your own sound design in the future.

You can see what parameters are being affected by a modulator if you click on the modulator tab ("LFO 1", "ENV 2"). The blue line around the knob indicates that it's being modulated.



After studying all the oscillators (Osc A & B, Noise Osc, & Sub Osc), you can begin to enable the other layers of processing.

(If you're having trouble understanding any of this at this point, refer back to the manual. It's going to be your best friend throughout this journey.)

Study the Filter

While studying how the filters are affecting the sound, you need to ask yourself a few important questions.

- What type of filter is it?
- What oscillators are being filtered through it?
- Are any parameters in the filter being modulated?



Re-Enable the FX:

The last layer of processing is the FX section. Continue to the FX tab and begin to re-enable the effects individually. Study each effect carefully and analyze how it changes the sound.

You'll notice that some of the FX will barely even influence how the preset sounds, while other FX will have a dramatic impact on the preset.

As you study how each FX affects the presets, you'll be learning exactly how to implement these FX to your own sound to get the desired result you want.



You should do this multiple times with one preset until you have a good understanding of how the preset is put together.

Studying Macros:

Another vital thing to understand is how the preset is controlled by the macros. To do so, first start off by opening up the macro section.

To see where a macro is mapped to, right-click on it to open the options menu. In that menu, the first option will say “Bypass: (Name of parameter.)”

You can then easily navigate to that parameter to see how the macro knob controls it.



For your 2nd week, follow this schedule:

Day 8: Reverse Engineer 3 Lead Presets

Day 9: Reverse Engineer 3 Pluck Presets

Day 10: Reverse Engineer 3 Pad Presets

Day 11: Reverse Engineer 2 Lead & 1 Pluck Preset

Day 12: Reverse Engineer 2 Pads and 1 Pluck Preset

Day 13: Make 2 of your own Lead presets & 1 Pad preset

Day 14: Make 1 of your own Pad presets & 2 Pluck presets

Week 3: Reverse Engineering & Re-creating Presets

This week you'll get into re-creating presets. With the combination of reverse engineering and recreating presets, you'll be able to get really good, really fast.

Recreating presets may get tedious after awhile, but it's incredibly important to build up your own catalog of Serum tricks to implement into your own sound design in the future.

Simply put, the more presets you re-create, the more tricks you learn.

To re-create presets, follow the same steps you would take to reverse engineer a preset except instead of turning off different filters and FX you should begin to copy all of the settings (starting from the oscillator) to a blank "Init" instance of Serum.

The easiest way to do this is to have 2 instances of Serum opened up at the same time. One should have a blank "init" of Serum and the other should have the preset you want to re-create.

Work your way through from the Oscillators to the filter, modulation, effects, and macros. Keep referencing the preset to make sure you don't miss any steps.

Even though you have the exact preset you want to recreate, it will still get a bit tricky because even a knob being slightly different on the 2 patches can have a dramatic effect on the sound. Remake a bunch of different sounds and eventually try to remake it exactly without having to reference the original preset.

Once you can do this, you should have a good understanding of how to make that sound.

During this week you'll still be doing some reverse engineer, but we're going to be diving into more complex presets such as Bases, Sequence patches, and Growls.

For this week, re-create these presets accordingly:

Day 15: Reverse Engineer 3 Growl Presets

Day 16: Re-Create 2 of the Growls from scratch

Day 17: Reverse Engineer 3 Bass Presets

Day 18: Re-Create 3 Bases from scratch

Day 19: Reverse Engineer 3 Sequence Presets

Day 20: Re-Create 1 Sequence, 1 Growl, 1 Lead

Day 21: Re-Create 1 Bass, 1 Pad, 1 Pluck

Week 4: Experimentation

Another key to mastering Serum is to learn how to make a particular sound with different methods and techniques.

For instance, you may have learned how to make a growl by using FM. But this time, try using a different technique to make a growl.

Another thing you can experiment with is layering two different types of sounds to make a hybrid preset. Serum is an incredibly versatile synth, so it's capable of doing many things at once.

You import a supersaw chord into the noise oscillator and then use Oscillator A and B to make a growl. Now you'll have a hybrid chord growl bass.

During this week you'll also discover a bunch of new techniques purely from experimentation that will help you discover your own unique sound.

For the last week, experiment with these features in serum:

Day 22: Experiment with different Wavetables

Day 23: Experiment with FM and all the other warp modes

Day 24: Experiment with all the filters

Day 25: Experiment with different LFO mappings

Day 26: Experiment with the FX units

Day 27: Experiment with a combination of Serum's features

Day 28: Make a complex preset using the tricks you've learned over the past month

Secret Tip: The best way to solidify the information you learned is by teaching it to someone else. Tell some other producers you know about the things you've learned and swap ideas with one another.

In fact, every time I discovered a cool feature on Serum or made a crazy sound I didn't know was possible, I would instantly call one of my other producer friends and tell them all about it.

It seriously helped me grasp the concept 10X more. And the minute they had questions, I started realizing which concepts I actually understood and which ones I needed to study a lot more.

So, this may as well be another step in this regime, because it helped transform my knowledge in Serum from a lesson I just learned to a permanent part of my memory.

Additional Tips and Info:

Ignore your DAW: While you're studying Serum, you may make a cool sound and might be tempted to want to implement it into a track/start writing something new with the sound you just made.

But you should ignore your DAW altogether during this 30-day regime as it could distract you from your studying.

You may feel as though this is just helping you in your production. But to be honest, if you try to work on too many different production concepts at once, you won't be able to master any of them.

Remember "If you chase two rabbits, you will not catch either one." So, yes, if you want to be average at sound design and songwriting, then I would suggest doing both at the same time.

But if you want to become an absolute BEAST at sound design, then focus on JUST sound design.

This discipline might be hard to achieve, but just make sure to keep the goal in mind. When I was starting to learn sound design, I first made the mistake of trying to learn piano, songwriting, mixing and mastering all at once.

It wasn't until I narrowed my focus that I was actually able to get GOOD at sound design. And looking back, there's no way in hell I would be at the skill level I am today had I not dedicated 3 full years to JUST designing sounds.

(There's a book about how people are way more productive when they focus on less. It's called "The One Thing" by Gary Keller, and I highly suggest checking it out.)

Learn from others: A great way of learning is by absorbing information from other people. You can do this by watching live streams of producers like Virtual Riot or Xilent work on their productions. You'll pick up on several sound design tricks.

Conclusion:

Learning sound design may not be the easiest process in the beginning. You will certainly have to do a lot of reading, studying, and recreating presets, but that's why so few producers have actually mastered the art of sound design.

But now that you have the exact formula on what to study and how to implement these lessons in your production...

You'll hopefully have a clear vision on how these tasks can all come together and put you ahead of the millions of producers who aren't willing to do the same thing.

So, with that being said, good luck in your sound design journey and if you get discouraged, just cut yourself some slack and remind yourself this is no easy feat.

Because honestly, if there's one thing I've learned from sound design, it's that **consistency is the only thing that separates the top-level producers from the average.**

The book "Mastery" even talks about how a person can "master" any skill once they've dedicated 10,000 hours to the subject. That's about one year, so hang in there and make sure to stay focused.

If you have any more questions about sound design that you would like to ask me, leave a comment on [THIS PAGE](#). I'll personally be going through every single comment and answering them as fast as I can.

I want to give you some time to absorb these skills first, so I won't be taking any questions about the new techniques I've implemented in the presets in our next pack. But I'll be letting you in on some of these methods very soon. So just stay tuned and I'll make sure you're kept in the loop.

Happy sound designing :)

-Drew (Cymatics Co-founder & Lead Sound Designer)