



Synthesizers

Nice to meet you! My name is Oscar and I am here to share some great tips with you!

If you just got involved in the electronic music production scene, you might be aware of how important sound design is for you as a music producer.

People often say that you have to develop your own signature sound so that you can stand out from the rest. That's true. The music industry does not want another Martin Garrix or Calvin Harris in the scene, they want something new which is promotable or marketable to attract the listeners.

Before you even start learning sound design, you have to know what generates those sounds that we hear in songs that we listen to everyday. They are known as the synthesizers. A synthesizer is an electronic musical instrument that generates electric signals that are converted to sound through instrument amplifiers and loudspeakers or headphones.

There are tons of quality software synthesizers out there in the market.

- Wavetable Synthesizer

Wavetable synthesis is a sound synthesis technique that employs arbitrary periodic waveforms in the production of musical tones or notes. Famous wavetable synthesizers include Sylenth1 by Lennar Digital, Serum by xFer Records and Spire by Reveal Sounds.

- FM (Frequency Modulation) Synthesizer

Frequency modulation synthesis (or FM synthesis) is a form of audio synthesis where the timbre of a simple waveform (such as a square, triangle, or sawtooth) is changed by modulating its frequency with a modulator frequency that is also in the audio range, resulting in a more complex waveform. Some of the famous synthesizers for FM Synthesis are FM8 by Native Instruments and Sytrus by Image Line.

- Sampler

A sampler is an electronic or digital musical instrument similar in some respects to a synthesizer, but instead of generating new sounds with filters and oscillators, it uses sound recordings of real instrument sounds (e.g., a piano, violin or trumpet). Battery 4, Nexus 2 and Kontakt by Native Instrument are great examples of this kind of synthesizer.

Have to idea on how to create sounds using your favourite synthesizers?

One of the best way to learn is to reverse engineer sound patches (aka presets) crafted by professional sound designer.



Fortunately, we at W.A. Production have been releasing free sound banks for various synthesizers for years. Why don't you take advantage of these free sound banks and improve your sound design techniques?

Click [HERE](#) to download free sounds now.

Speaking of "reverse-engineering", we applied this technique on some sounds and thanks to that, we found out how some of the very famous signature sounds are made. Here are some examples for you:

- [How to create Mike Williams' lead](#)
- [How to create Virtual Riot bass](#)
- [How to create JAUZ wobble bass](#)
- [How to create Snails' filthy bass](#)

If you are interested in even more KNOWLEDGE, go and check out our sound-design tutorial series [HERE](#).



Song-writing

What does song-writing mean to you personally?

Is it trying to tell a story through your composition? .. Or ... Is it a way for you to express your emotions (like Skrillex is doing for example)?

We all have our own ways or methods to write music. As one may start with the drop (climax) section, others may start with the breakdown. One may start with programming the drums but some producers like me tend to start a song by writing the melody.

When it comes to writing melody or music in general, there are a few things which you need to keep in mind:

- **Chords**

A chord, in music, is any harmonic set of pitches consisting of two or more (usually three) notes (also called "pitches") that are heard as if sounding simultaneously.

- **Lead** (Top Melody)

A linear succession of musical tones that the listener perceives as a single entity.

- **Grooves**

In music, the groove is the sense of propulsive rhythmic "feel" or sense of "swing".

- **Rhythm**

The pattern of regular or irregular pulses caused in music by the occurrence of strong and weak melodic and harmonic beats.

- **Scale**

There are 2 common types of scales – Major scale (usually known as the happy scale) & Minor scale (the sad scale)

Have no idea on how to compose your own melody?

Do not worry. We at W. A. Production have it figured out for you. We have a lot of free MIDI packs which you can look up to learn how to create powerful or emotional melodies to influence your listeners.

Click [HERE](#) to download a really cool free MIDI collection now!

You can find even more free packs [HERE](#).

We have various types of free MIDI pack influenced by the world top artists so that you'll learn from the bests.



Learning melody composition can be difficult at first but once you get the hang of it, it's not that complicated anymore!

In case you want us to share more resources with you, here are some interesting articles from our blog:

- [5 ways to make song-writing process more efficient](#)

- [#1 way to stay in key when writing melody](#)

Have fun being creative!



Mixing

Once you have all your melodies written and sounds ready, it's time to blend them perfectly together. The process of blending sounding together so that they sound good with each other is known as the mixing process.

In sound recording and reproduction, audio mixing is the process of combining multitrack recordings into a single track and these tracks that are blended together are done so by using various processes such as EQ, Compression and Reverb. The track may be mixed in mono, stereo, or surround sound.

Let me explain you on various techniques of audio processing for mixing purposes.

- Equalization (EQ)

Equalization is the process of adjusting the balance between frequency components within an electronic signal. Equalizers are used in music production to adjust the timbre of individual instruments and voices by adjusting their frequency content and to fit individual instruments within the overall frequency spectrum of the mix.

- Compression

Compression is often used in music production to make performances more consistent in dynamic range so that they "sit" in the mix of other instruments better and maintain consistent attention from the listener. Vocal performances in rock music or pop music are usually compressed to make them stand out from the surrounding instruments and add clarity.

- Reverb

Reverb (short for reverberation) is the acoustic environment that surrounds a sound. Reverb is composed of a series of tightly-spaced echoes. The number of echoes and the way that they decay play a major role in shaping the sound that you hear.

- Delay

Delay is an audio effect and an effects unit which records an input signal to an audio storage medium, and then plays it back after a period of time. The delayed signal may either be played back multiple times, or played back into the recording again, to create the sound of a repeating, decaying echo.

- Distortion

Distortion and overdrive are forms of audio signal processing used to alter the sound of amplified electric musical instruments, usually by increasing their gain. Distortion is most commonly used with the electric guitar, but may also be used with other electric instruments. Most of the time, distortion is used to add harmonic to the sound which we are distorting.



Now that you briefly know what audio processing is. It's time to get practical. I've taught some mixing tutorials on [W.A. Production Tutorials & Templates section](#).

That's not it!

In case you are using **FL Studio**, you can check these FL Studio dedicated videos [HERE](#).

In case you are using **Ableton**, this video is right for you: [Ableton Mixing Tutorial](#)

... and finally here are some handy articles from our blog:

- [Top 5 tips to mix kick and bass](#)
- [Top 5 free mixing plugins](#)
- [5 essentials tips for mixing drums](#)
- [Top 5 big secrets / tips for vocal mixing](#)



Mastering

After you achieve a solid mixdown, it's time to prepare it to be played in various sound systems around the world. The process of polishing and getting the track ready is known as the mastering process.

Mastering, a form of audio post production, is the process of preparing and transferring recorded audio from a source containing the final mix to a data storage device (the master). There are several considerations in this process: unifying the sound of a record, maintaining consistency across an album, and preparing for distribution.

I am going to show a simple guideline on how to master your song.

1. Cutting EQ

I always start my mastering process by cutting unwanted or resonating frequencies. I will roll off any frequency below 30Hz and anything above 18000Hz as our ears can't hear anything in that particular range of frequency.

2. Compression

I like to use compression to glue everything in the mix nicely and tightly. This is to maintain the consistency of the song's volume and to take care of the dynamic range of the mix.

3. Harmonic Distortion

Subtle distortion is used to add harmonics into the mix so that it sounds rich and powerful. Tube and tape distortion are both of my commonly used distortions in the mastering process.

4. Stereo Imaging

Stereo imaging refers to the aspect of sound recording and reproduction concerning the perceived spatial locations of the sound source(s), both laterally and in depth. It's best to keep your low end (anything below 200Hz) to be in mono. You can add width to the high end but do not overdo it as it can mess up your mix.

5. Final EQ (Optional)

This step is optional as it depends on the final result which you desire from the original mix. You also can do final corrections at this stage.

6. Limiting

When you're mastering your tracks, you want them to be as loud as the songs from the professional producers. It is here where you get your mixes up to commercial loudness to compete with the other masters out there.



This is basic mastering guideline that you can follow when you're mastering your track. We even have free mastering tutorials in our [Tutorials Section](#).

(HOT TIP) - [Quick mastering tip / using OTT compressor](#)