

Contents

1	Production - General Tips	2
1.1	Royalty Free Samples	2
2	Production - Drums	2
3	Production - Bass & Guitars	3
4	Production - Vocals	3
5	Tracking - General Tips	3
6	Tracking - Drums	3
7	Tracking - Bass & Guitars	5
7.1	Recording Tips	5
7.2	Playing Techniques	5
8	Tracking - Vocals	7

1 Production - General Tips

- A good track starts with a good arrangement. Are all your instruments masking each other in the same frequency range? Are you lacking in the mid-range, or only using bass heavy instruments?
- This can vary in each section. Try keeping the verse narrow and more sparse, then fill up the frequency spectrum and stereo width for a huge chorus.
- Check by using an EQ on your demo. Want more high-end but the EQ only gives you cymbal harshness and ground noise? Try adding something else to your arrangement, transposing something up an octave or a fifth, or changing your amp settings.
- Set the microphone gain by playing through the loudest and quietest sections. Make sure the recording isn't clipping/peaking at the loudest part, and make sure it's not full of noise and interference at the quietest parts (turn the monitor volume up or compress hard to check this after recording)
- Want to sound like your favourite band? Note the gear they use. If you're using MIDI drums or amp simulations, try to find one that matches. If you're sending your MIDI or DI tracks off for mixing, make a note of the drums, cymbals, and amps that you want. Try live/studio videos, a websearch, or sites like <https://equipboard.com/>.

1.1 Royalty Free Samples

Always check the license!

- <https://mixkit.co/license/#sfxFree>
- <https://99sounds.org/license/>
- <https://www.pacdv.com/sounds/index.html>
- <https://pixabay.com/service/license-summary/>
- <https://help.videvo.net/article/29-royalty-free-license>

2 Production - Drums

- When programming drums, check that the drum pattern is playable! Your MIDI drums might sound great, but would you need 5 arms to play it?
- Tune your drums (real or sampled) to the key of your song
- When using kick samples, pay attention to whether the subs of the kick are more prominent in the attack or decay of the sample. Having the subs upfront in the attack adds a driving force to a track, whereas more subs in the tail-end of the sample will give the arrangement a slower, lagging feel.

3 Production - Bass & Guitars

- Experiment with different voicings. Does it sound better to slide all the way up the neck to the next note, or to play it on the next string?

4 Production - Vocals

- More vocal layers! Double track your lead vocal. Double or triple track each backing vocal
- Try different types of backing vocals: Harmonies, whispers, low growls, shouts, humming. It might seem silly, but can sound great when blended in subtly.
- Record backing vocals at different positions in the room while the microphone stays in the same spot

5 Tracking - General Tips

- Keep phones and other electronics away from your computer, interface, pickups, cables, etc. This reduces unwanted noise. If you're not sure if you can hear background noise, turn the input gain up and experiment with different positions for your equipment.
- Don't leave cables curled up near your audio interface, lay them out across the room.
- Link tracks in your DAW when multi-micing or DI tracking to arm them simultaneously and ensure they all record together.
- Tune instruments between every take.
- Check for headphone bleed! Use headphones when recording, and keep the volume low enough that the backing track or metronome isn't picked up by your microphone. This is often a problem with vocal recordings in particular. If your over-ear headphones have a lot of bleed, try using in-ear buds instead.
- Not enough mic stands? Connect two mic holders with a thread adaptor, clip onto another mic stand.
- Recording alone or in a small room? Struggling to hear the tone of a snare or bass amp through your monitors or headphones over the source sound? Use a clean delay on the master channel, 100% wet, no feedback, set the delay time to approximately 1 second, or whatever you like. Make sure it's a clean delay and not a coloured or tape delay. You can now adjust your microphone position without all the stopping and starting!

6 Tracking - Drums

- Tune your drums. Experiment with different tunings. Try matching the key of the song
- Don't use clip-on mics/clamps that mount directly on the drums. This can result in mechanical noise. Also be careful of mic cables touching the drums, particularly inside the



kick!

- Experiment with putting cotton balls/rags/t-shirts inside toms instead of using duct tape/-moon gel for damping.

7 Tracking - Bass & Guitars

7.1 Recording Tips

- Face pickups away from your computer and interface.
- Track a DI too if possible, even if you're 100% set on the amp tone. This makes editing easier in the future, particularly for guitars with lots of gain.
- Use Hi-Z/instrument input on your interface, if you have one and don't have a DI box.
- If recording a DI track to be used with a high-gain amp simulation, try recording with a high gain amp simulator on the track. It doesn't have to be good, or even close to the final tone. There are plenty of high-gain amp sim plugins that will do the job. The aim is to hear if you are playing cleanly. Lots of distortion or overdrive on the track will bring any mistakes out. This way, you can fix problems at the source rather than hoping it will be fixed in the edit. Be sure not to accidentally print the amp simulation instead of the DI track though!
- Many guitars and basses have grounding problems that cause noise in your recordings. Check this by plugging your instrument into an amp. If there's a humming noise that stops when you touch the metal part of the jack connector, you might have a grounding issue. This can be solved with a soldering iron or by just grounding to something metal.
- Minimise noise by experimenting between using high guitar/bass volume with low gain on your pre-amp (audio interface), and low instrument volume with higher input gain.
- Use less gain than you think! This is another good reason to track a DI too, it will give more options for re-amping down the road.

7.2 Playing Techniques

- Prevent ringing of unplayed strings by muting with a fretwrap or piece of fabric wrapped around the neck. Keep it as close to the middle of the neck as you can (e.g. if the lowest fret you're playing is fret 5, mute the strings at fret 4 to stop ringing). This won't work if you're playing open strings!



- If some strings won't be played at all, try muting them with a piece of masking tape or cloth.



- Or, try tuning the unused strings to match the key of the song, or try an open tuning. This way, playing unwanted strings isn't dissonant.
- Remember you're not playing live! You can record each section at a time, using the above techniques in different ways for each section. There's no limit to the number of takes or tracks you can record.
- Choose chord voicings/positions so they're closer together. This makes transitions easier and prevents that string squeak. Again, you can record as many takes as you like, so if a particular transition is too difficult to track cleanly, just do a different take. Be careful about overlap though!
- Another technique to reduce squeaking is to soak your fingertips in warm water for a minute before tracking. Some people find dipping your fingertips in cornflour works too.

- Find a balance between putting lots of energy into a take and making sure the intonation is still good. Check with a tuner while you play.
- Get your instrument set-up properly. If the action of the strings is too high above the fretboard, it will be difficult to get a good take.
- Lift your fingers fully off the strings and place down on the next note perpendicularly. It takes some practice if you're not used to it, but can reduce noise.

8 Tracking - Vocals

- Be aware of proximity effect, and experiment to find the best position to record
- Always use a pop filter!!!
- Hold a pencil vertically in front of the capsule to reduce sibilance.
- To reduce mouth noises and clicking, drink plenty of water and do multiple takes if necessary.
- Experiment with positioning pop filter closer to microphone or closer to your face.
- Turn the microphone capsule slightly off-centre to reduce plosives and sibilance.



- Place microphone slightly higher than you think, so the vocalist has to tilt their head back to sing into it.
- Plosive and sibilance control starts with the vocalist! Try different ways of pronouncing each sound and play it back.

- Look into breath control techniques. Try to leave some silence before and after taking breaths between each phrase.
- Keep the same distance from the microphone. If you want to pull back from the microphone to avoid clipping during particularly loud sections, try turning your head off to the side of the microphone instead. This might take some practice, but maintains the tone of the recorded voice.
- Recording yourself for the first time but don't want to spend lots of money on pre-amps and microphones? Skip the USB microphone and get a second-hand interface with one or two inputs (Focusrite, Steinberg, Presonus, etc.) and a second-hand SM58. Much better than a USB mic. I have a 10 year old Steinberg UR22 I still use on occasion, it's built like an absolute tank and goes for about £30 used. A Focusrite Scarlett 2i2 is around the same price. A Shure SM57/SM58 is around £100 new, or about half that secondhand. They are also pretty indestructable.
- Don't cup the microphone! Ideally, don't touch the microphone or the stand at all, but if using a handheld dynamic mic, don't cup the capsule! Hold the microphone further down (usually near the XLR port).
- Check your posture!
- Experiment with the vocal level in the monitor mix. Vocalists will naturally be louder when the vocals are quiet in the mix, or quiet if the mix is louder. Be careful about bleed though!
- Play back your recording with extreme compression. This will make it easier to hear any noise or strange artifacts that you might want to re-track.
- Prevent harsh sibilance from whistling around the teeth by blocking gaps in your front teeth with dental wax.
- Learn about different vocal techniques. I'll defer to the experts on this one, here's various vocal techniques you might find useful or interesting: <https://www.youtube.com/playlist?list=PLBJ0ZhqqgzUrgj3BY-IAYkqFjr63Axs4a>