

Column by Renzo van Riemsdijk (Masterenzo): Colouration

The term colouration might not ring a musical bell. However, it is indeed possible to add a nice sheen of colour during recording, mixing and mastering.

But what exactly is colouration? There's no easy answer to this but I'll give it a try. Let's start at the beginning. Imagine a band consisting of five members: a drummer, a pianist, a vocalist, a guitarist and a bass player. They decide to make a recording and book a studio.

In the studio microphones are placed in front of the instruments. The mics are then connected to mic-pre's. These preamplifiers are necessary to raise input levels coming from the mics before going into the DAW. And there you have it: the first *colouring station*.

In a mic-pre the signal is fed through a transformer or tube stage. Both transformers and tubes colour the sound. The music tends to sound a bit rounder or deeper. Sometimes the sound gets richer or more 3D or the highs and lows are slightly boosted or attenuated.

So actually music is often recorded with more colour than the original performance. There are however many types of preamps. Mic-pre's without tubes or transformers sound cleaner to accommodate classical or jazz recordings that could probably do with less colouration.

In a DAW all channels are mixed together using plug-ins or outboard equipment to again colour the sound. And again the sound gets richer and more spacious. After mixing the mastering studio comes into view.

During mastering the (stereo) mix is fed through another set of outboard gear or plug-ins. It takes no scientist to conclude that mastering is yet another colouring stage. Actually many mastering studios use their extensive analogue chains as their secret weapon. In many cases those machines don't even apply much processing. Just feeding the music through them is enough to add a nice sheen to it.

I hear you thinking: with that much colouring, what will remain of the original recording? The amount of colour strongly depends on genre. Classical music and jazz could probably do with less colour than rock or hip hop. Your ears decide if and how much colour the music needs.

And besides, colouring music is a subtle process. You can check this easily in the box by putting a series of plug-ins on the master bus. Choose plug-ins that emulate analogue gear and don't let them apply any processing. Spot the differences when you hit the bypass button. Try using headphones if you can't hear the difference on your speakers.

You'll probably notice that the differences are quite small. But even small changes in the timbre or colour of a sound can have a huge impact, especially when you listen at a higher volume. Colouration is a beautiful way to add character, depth and vibe to recordings. Have a listen to an average album from the seventies. Chances are that the recordings were done using a big analogue console, the ultimate colouring tool.

The effect of colouration is cumulative: the colour of all those channels adds up to the nice sheen and sonic imprint those Neve, API and SSL consoles are famous for...

Renzo

Renzo (Masterenzo) is a Rotterdam based Dutch mastering engineer. As the owner of premium mastering studio Masterenzo Mastering he has worked for many independent artists like Ocobar, Black Nazareth and Hédi Carlee (Charlie Dée).

More info about Masterenzo Mastering can be found on masterenzo.nl.