

Drums

Track 01 ▶ KICK

I made the kick sound tight and compact with a compressor and EQ. Let's look at my plug-in settings.

-
- ❖ Listen to the kick drum by itself. Set KICK to solo mode and the loop marker to bars 1-9.
-



-
- ❖ **INSERT 1: Renaissance Compressor**
Open the Waves Renaissance Compressor on insert 1 of the KICK track.
-

To emphasize the kick's attack without boosting bass frequencies too much, I set **Thresh** = -6.8 dB. The **Attack** and **Release** parameters determine the timing of this effect on the kick. Setting **Attack** = 6.62 ms does not alter the attack phase and triggers the compressor just after it. I set **Gain** = 6.3 dB as the output level of the Renaissance Compressor.

-
- ❖ Deactivate Renaissance Compressor and listen to the unmodified kick drum. Activate the compressor to hear the improved dynamics.
-



❖ INSERT 2: Q10

Open the Waves Q10 Equalizer plug-in on insert 2 of the KICK track.

After successfully altering the dynamics, I used four EQ filters on the Q10 to complete the kick processing:

- Band 5 (Freq = 54 Hz, Gain = 4.7 dB, Q = 7) is a peak filter that adds power to the lowest bass frequencies.
- Band 2 (Freq = 82 Hz, Gain = -6 dB, Q = 7) is a peak filter that removes boominess.
- Band 6 (Freq = 853 Hz, Gain = -3.2 dB, Q = 7) is a peak filter that gives the kick a warmer, more analog character.
- Band 8 (Freq = 3.4 kHz, Gain = 4.6 dB, Q = 100) is a high-shelf filter adds presence and blends the kick better with the hi-hat and synth sounds.

❖ Deactivate the Waves Q10 Equalizer and listen to the kick without equalizers. Activate the EQs to hear the improved sound.

Track 02 > CLAPS

As in the original mix, my clap sound has a lot of reverb that is cut by a noise gate after 433 ms. Additional reverb from the ROOMREVERB effects channel spices it up. I used an equalizer to further shape the sound.

❖ INSERT 1: Q1

Open the Waves Q1 Equalizer plug-in on insert 1 of the CLAPS track.



As you can see in the figure above I boosted the clap 8 dB around 2 kHz to attain a snappier, more biting sound.

Alternatives:

Percussion effects for the clap can be achieved by copying the audio regions of the existing clap sound to a new track. Adding a groove delay (e.g., Waves SuperTap 2) to the insert of the second audio track creates a tap groove. To give the feedbacks more sustain, set the corresponding feedback value in the range 50-60. The next step is to displace the second track rhythmically by $1/8$ or $1/4$ delay (e.g., using track delay). If your sequencer only permits values in *ms*, use the formula introduced in the kick drum tutorial to calculate the corresponding settings. There are also utilities to help calculate those values from the *bpm* setting.

Track 03 > CRASH CYMBAL

The crash cymbal was too powerful in the lower spectrum so I used the Q1 to balance the sound.

✦ INSERT 1: Q1

Open the Waves Q1 Equalizer plug-in on insert 1 of the CRASH CYMBAL track.



A high-pass EQ filters everything up to 658 Hz, creating a less dark crash cymbal sound. Of course it is merely a matter of taste. If you think the filter leaves the cymbal sounding too thin, lower the **Freq** value.

Track 04 > REVERSE EFFECTS

I use three different reverse effects in the remix to provide more flow to the fill-ins. One is a backward synth crash cymbal from the Roland TR808, another is a reversed piano sound with lots of reverb, and the last is an LFO noise sound from my personal effects library. Remember, keep the arrangement flexible and do not use too much compression. These seemingly insignificant sounds are very important for the overall character of the remix.

Track 05 > SNARES

Snare fill-ins are not part of the groove, but function to create tension during different parts of the song. Compressors and other dynamic effects are unnecessary because the snare gain stays within an acceptable range. The snare doubles the kick during fills and makes them sound tighter and more lucid.

Track 06+07 > CLOSEHIHAT + OPENHIHAT

As with the original mix, I used classic open and closed hi-hat patterns for the drum backing. These sounds come from a Roland TR909 and are processed later through the DRUMS group track.

Track 08 > PERCS

To prevent the groove from being dull, I added a high-pitched 16th-note conga line. Those familiar with the Trance scene may recognize this small tribute to Nalin & Kane's hit *Beachball*.

Grooves

Track 09 > GROOVE1

Logic 7's Guitar Amp Pro is again used to give GROOVE1 its dirty sound. It may seem paradoxical that after making such a valiant effort to achieve a clean mix, we intentionally create distorted sounds. Just think how boring electric guitar would be without occasional distortion and you can readily appreciate the utility of this practice for other instruments. The secret lies in the context. Our dirty groove is a great contrast for the other sounds and adds the right zest to our remix.