

MIXING

Mixing is the art of blending all instruments and sounds into a **sound field**. It has two goals:

- **combine** all elements into a cohesive whole
- keep elements sufficiently **defined** so listeners can distinguish between them

The mix is the blend of all the sounds.

In a final mix everything has its right place. A good mix is like an ideal society: made of autonomous and unique individuals, but a well integrated larger endeavor overall.

Mixing adjusts four interrelated parameters of a track to define its place in the sound field:

Level (the metaphorical *height* of a track) is loudness, controlled by a fader or track automation. It may be further controlled by dynamic **compressors**, typically at the end of the mixing process for a particular track.

EQ (metaphorical *color*) is short for equalization. EQ boosts and cut levels in specific frequency ranges, shaping the tracks in a mix so they fit together without competing. For example, to get a kick drum to cut through better, the low frequencies of the bass guitar are often reduced. EQ also gives specific sonic characters to individual tracks.

Panning (*width*) determines the left-right placement in the stereo field. It is what creates the stereophonic environment (**stereo**- from Greek, “solid”). It can be very helpful when different instruments occupy the same frequency range. Panning one to the left and the other to the right can separate the two and keep them from masking each other.

Time-based effects create a sense of *depth* (front to back). Reverb and delay can make an instrument seem further away, and richer and “bigger” than a dry instrument signal.

TIPS

- Begin with a rough balancing of the levels on each track.
- Use automation. Mixing is a **dynamic** process: in an interesting mix, different tracks get louder or softer over the course of a song.
- Get the basic balance of levels before you add too many effects. Think about **headroom** early. If you need to bring a track up in the mix, consider lowering the levels of the other tracks instead, unless (a) you are sure it's the very front element, like the lead vocal, or (b) **all** of your tracks lie around -15 dB or lower.
- Always keep the end goal in mind. What is the sound you're going for? Take into account the genre of the music. There is no one right way to mix.
- Be organized. In Logic, use track stacks and colors!
- Know your Logic shortcuts so you can work quickly:
 - command – 1** = track window
 - command – 2** = mixer window
 - X** = mixer panel within the main window
 - defining **Screensets** can be even more convenient (see tutorial)

Izotope Mixing Guide. An excellent primer, great place to start.

downloads.izotope.com/guides/iZotope-Mixing-Guide-Principles-Tips-Techniques.pdf