

Vocal Elimination.txt

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>I'd like to know if it's possible to filter out the voice-part of a
>CD-track.
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I've done this several times with various equipment. It's true that the quality of the result depends upon how well localized the original vocal is, but it's easy enough to try for yourself and see...

Like someone said, the trick is to combine the channels out of phase. If you have a mixer with balanced (XLR) inputs, you wire up a couple of cables with RCA on one end, XLR male on the other. On one cable your RCA ground goes to pin 1 and 3 of the XLR, and the hot to pin 2. That's the normal cable. You make another cable with ground to 1 and 2 and 3 hot. That's the reversed cable- MARK IT CLEARLY SO YOU DON'T GET BITTEN ON SOME OTHER SHOW. Another option would be to get/make two normal cables and build yourself an XLR phase reverse adapter, ie an adapter that reverses pins 2 and 3. Plug your CD or tape into your mixer with these cables.

If you don't have a mixer with balanced inputs, get a balanced-to-unbalanced adapter (ie transformer). The transformer output will generally be a 1/4" plug, which goes into one channel of your mixer (any mixer will do). You then connect your RCA cord hot to pin 3 of the transformer XLR input, and the shield to pins 1 and 2. (I have been known to shove the bare wires into the holes on the XLR in a pinch- it works fine for the 10 minutes you'll need it).

Ok, now you set all tone controls/EQ dead center, and match up all the levels. Set the pans to center. Now, mixing the two channels together, if you are lucky you'll find an adjustment which minimizes the vocal, sometimes eliminates it altogether. You may get some residual reverb- there isn't much you can do about it. You might also lose some other parts of the music, usually the bass (which is almost always mixed dead center). To fix this, if you have a good EQ on your board, try bringing the low bass up slightly on one channel only, and down a little on the other channel. You can try the same with the treble but you might get some leakage. It's always a compromise... If you don't have EQ, or only have a two band EQ, you can put a graphic EQ between your CD player and the mixer. But you'll have to match the channels closely to get the best results.

If you don't even have a mixer, you can still do this using just a graphic EQ, a couple of Y adapters, and a transformer. As long as you invert one channel (it must be balanced to do this, hence the transformer), and as long as you can separately control the level of the channels into a mono mix, you can try this. The equalization isn't necessary but it really helps.

Of course, you'll want to record the result on another tape, once you get the settings exactly right. DON'T expect you'll be able to eliminate the vocal during a live performance...

-Ben Mehlman