Recording 2 Guitars

These files accompany the Session Notes article in the January 2016 issue of SOS

Session Notes: Audio Examples

The audio files available on this page accompany my Session Notes article in SOS January 2016 about recording an acoustic–guitar duo. The filenames are fairly self–explanatory, but here are some additional notes to describe exactly what you’re hearing in each case.

* GtrReflections01\_Dead

I mention in the main article that I usually prefer to record acoustic guitars in a reflective environment, because I find the reflections help enhance the instrument’s overall tone. Although I made no direct comparison files relating to this issues from this particular guitar–duo session, here’s an example of another acoustic–guitar recording I did a while ago which does provide a good illustration. This file was recorded with a crossed–pair stereo mic array about eighteen inches in front of an acoustic guitar, with the player surrounded by a variety of acoustic absorbers to soak up room reflections. Compare this with the GtrReflections02\_Live file to hear how reinstating some early reflections changed the timbre.

* GtrReflections02\_Live

In this example I used exactly the same guitar and microphone setup, but surrounded the player with acoustic reflectors instead of acoustic absorbers. Notice how the harmonics are picked up much more richly here than in the GtrReflections01\_Dead example file.

* OmniAngle01\_Down

When I first set up the omni mic pair, I oriented the microphones so that they pointed directly downwards, the thinking being that this would render both instruments equally off–axis to the microphones and maintain a balanced timbre. However, in practice this made the overal tone of the ensemble feel a bit muted, as you can hear in this audio example.

* OmniAngle02\_ToGtrs

Angling the left-hand omni microphone towards the left–side guitar and the right-hand omni microphone towards the right–side guitar gave the mix much more detail and presence. Compare this audio example with the OmniAngle01\_Down file to hear the extent of the difference — the instrument and microphone placement is otherwide identical between the two files. Incidentally, there’s no mix processing on these files (all I’ve done is panning) so you can judge the effects of the microphone positioning more clearly.

* GtrPerfSwitch01\_Before

Once the basic microphone positioning had been decided upon, the performers’ positions were adjusted for each different piece of music to achieve the best balance — and in some cases one of the guitars was also swapped out too. This audio example shows one situation which called for a change of instrument. (Again, no mix processing is being used here, so you’re hearing exactly what we heard on the recording session.) Notice how the right–hand guitar is rather overbearing, especially where the octave–doubled melody arrives at 0:07.

* GtrPerfSwitch02\_After

Switching the left–hand guitar to a different instrument immediately improved the balance, in terms of both level and timbre, within the ensemble, especially for the octave–doubled melody section. For the best comparison, import this and the GtrPerfSwitch01\_Before file into separate tracks in your DAW so you can switch between them instantaneously.

* Mix01\_RawTracksPanned

The following set of examples demonstrates how little work was needed to create a final mix of our raw recordings. To start with, here are the raw mic signals — all I’ve done so far is pan them to opposite sides of the stereo field.

* Mix02\_Processing

For this example I’ve switched in the minimal channel processing I used. This comprises a 50Hz high–pass filter from IK Multimedia’s Linear Phase EQ to remove unwanted traffic rumble, and a gentle –1dB low-shelving cut on the left–hand mic to slightly rebalance the lower frequencies in the stereo picture. The differences are pretty subtle, so you may need to line these examples up side–by–side in your DAW and switch between them instantaneously to properly appreciate them.

* Mix03\_ReverbSolo

Because we’d recorded the instruments in a small basement practice room, I deliberately recorded fairly dry, with a view to adding a more appealing emulated acoustic at the mix. This audio example demonstrates the reverb setting I used. (I’ve solo’d the reverb return so you can hear it more clearly, but you can hear it in context in the following audio example, Mix04\_ReverbMix). The plug–in I used was Lexicon’s LXP Native Hall, and I chose the ‘Recital Hall 2’ preset, tweaking the Reverb Time and Rolloff settings to achieve the desired length and richness in this instance. I also widened the reverb a little using 2dB of Sides–channel gain from Voxengo’s freeware MSED plug–in, so that it better surrounded the dry guitars.

* Mix04\_ReverbMix

In this example you can hear the reverb I isolated in the Mix03\_ReverbSolo audio file within the context of the full mix.

* Mix05\_Automation

This audio example shows the completed mix, where I’ve used a little level automation to do a little music–related refinement of the balance from moment to moment — mostly just tweaking the left–channel mic level and/or master mix level whenever a melody note felt over/under–played. If you compare this completed mix to the raw mic signals in the Mix01\_RawTracksPanned audio file, you’ll hear how little the sound has fundamentally changed.