Chapter 17

Ten Ways to Take Your Recordings to the Next Level

In This Chapter

- Discussing microphones yet again
- Tuning your room so recordings sound better
- Making your songs sound better by throwing cash at them

Okay, now that you understand how to work with GarageBand, here are some ways that you can make your songs even better. Alas, most of the suggestions in this chapter cost money, but each one will contribute to making your GarageBand compositions sound even better than before.

Get a Better Microphone(s)

If you record acoustic instruments or vocals, an easy way to make your recordings sound better is to use a better microphone. You can find details about getting a microphone to suit your needs in Chapter 2. Audio magazines and Web sites are another good source of more detailed information about mics: These sources review recording equipment all the time, and they may be your best bet for learning more about specific mics and models.

That said, here are a few general tips about microphones:

- You don't have to spend a lot of money to get a decent mic. Don't spend more than $200 on a mic unless you are extremely serious about recording. Many excellent microphones are available for $200 or less.
- AKG, Audio-Technica, Sennheiser, and Shure are four companies that have been in the microphone business for as long as I've been recording; they all have products at many price points.

- Wind and pop screens can make a big difference in vocals. If you don't own one of these screens (described in detail in Chapter 2), consider buying one or both of them.
- Good recordings require proper microphone placement and that's hard to do without good mic stands. Boom-style stands are more flexible than the pole-type units, but the boom types are inherently less stable — particularly the cheap ones. So, if you use boom mic stands, be careful not to knock them over. It's easy to damage the microphone, the stand, or both.

Make Sure Your Speakers/Reference Monitors Reproduce Sound Well

Nothing compares to hearing music that's reproduced accurately. Unfortunately, the speakers that are built into computers are junk — they don't come close to producing accurate sound. Most computer speakers with a subwoofer are okay in a pinch, but if you're serious about hearing every little nuance, you should buy a set of speakers that reproduce sound as accurately as possible. Such speaker systems are called *reference monitors;* they can cost from a couple hundred dollars a set to thousands of dollars per speaker.

Among the least expensive are those M-Audio Studiophile LX4 speakers that I mention in Chapter 2 (visit `www.m-audio.com`). These speakers cost less than $300 per pair and sound unbelievably crisp and clear. I recommended them if you can spare the dough.

Also excellent and not much more expensive at around $400 are Tapco's S-5 Active Studio Monitors, also mentioned in Chapter 2. If you can spend the extra $100 and don't care about the LX4's ability to be expanded easily for surround sound, these are the reference monitors you want.

Get Better Headphones

As I mention in Chapter 2, you should use sealed headphones — ones that leak as little sound as possible — when you record. If you're using cheap headphones with porous foam ear cups, when you sing, some of the music that you're listening to is probably bleeding onto your track. Good sealed headphones not only prevent such noises from leaking onto your track, but they can also reproduce sound more accurately than cheaper models.

Don't underestimate the importance of good cans. You'll almost certainly mix and master faster and with fewer repetitions of the "play it, adjust it, remix it, and remaster it" cycle.

Fine-Tune Mic Placement

The location of your microphone makes all the difference when you're recording. I've heard many recording engineers tell me that setting up the mics correctly can take longer than the actual recording session.

So don't be afraid to experiment. If the acoustic guitar isn't sounding quite right to your ear, move the mic to the left or the right a little, point it up or down slightly, or move it farther from the sound hole. Each small move changes the sound that ends up on your track. If you take the time to discover the mic placement that sounds best to you, the resulting tracks will sound that much better.

Improve Room Acoustics

Another thing to consider is the room that you're recording in. It's well known that hard surfaces and parallel walls in your studio can resonate, reflect, and reverberate sounds; these issues are undesirable when you're recording. The more hard surfaces (and parallel walls) in the room, the more yuck you hear in the track. So, whenever you're not getting the sound that you want from a mic, try throwing some blankets or pillows over hard surfaces or moving the mic to a part of the room with fewer hard or parallel surfaces.

I've been known to make a tent out of old quilts and record hand-held percussion instruments by holding the instrument (usually a tambourine or maracas) and the mic under the quilt tent. It may not be pretty, but it's cheap and it works.

Use Quality Cables

Most computer peripherals and audio devices include a cable or two. Isn't that nice? The problem is, many manufacturers throw in the cheapest cable that they can buy. As a result, the quality may be lacking, and the cable may become nonfunctional sooner than you expect.

I'm not suggesting that you replace your existing cables with high-end cables such as Monster Cable, but when you shop for cables, avoid the cheapest ones. They won't last as long, and because they use the cheapest available components, they can also introduce unwanted noise and interference that you don't get with a better-quality cable.

If you're a guitarist, you should have at least one mono ¼-inch (phono) to stereo ⅛-inch (miniphono) cable to connect your electric guitar directly to your computer's audio input port. I use the Monster Instrument Adapter. You can probably find a similar cable at Radio Shack for less money. That said, I'm perfectly happy with the Monster adapter, which costs only $20 at the Apple Store.

Add a Mixing Board to Your Studio

Even though GarageBand is capable of recording only a single track at a time, there may be times when you want to record using more than one microphone, even though all the sound will end up on a single track.

Here's an example: A standard drum set needs as many as seven microphones to be recorded well. In big-time audio recording, this would be a no-brainer: Set up the microphones and then record each one on a different track. But in GarageBand, this is a problem, because you can record only one track at a time.

Another example: You're recording a large vocal group, and the group is too large to all sing into a single microphone.

In these cases, the answer is to use a small mixing board. A mixing board has inputs and outputs so that you can, for example, connect four microphones to four different input channels; adjust their level, equalization, tone, pan, effects, and so on; and then send that mixed signal to a single output (which would be fed to GarageBand).

You know the big sound board that you find out in the middle of the floor at a rock concert? That's nothing more than a big, expensive mixing board that obtains input from the microphones on the stage and sends output to the giant speakers on either side of the stage.

Guitar Center sells a wide variety of mixing boards. I bought a small Behringer mixer with eight in ports and two out ports for under $100, and a couple of even smaller ones were available for a bit less money.

Chapter 7 includes information written by my drummer buddy Dave Hamilton that concludes that a mixer is almost a "must-have" for GarageBand drummers.

Switch to More Powerful Software

If the previous section sounded good to you — and you're interested in recording multiple instruments or vocals on multiple tracks, all at the same time — you need more powerful software than GarageBand. Examples include pro audio recording applications such as Apple's Logic Express ($299) or Logic Pro ($999), or DigiDesign's Pro Tools.

The software expense will be the least of your worries if you decide to assemble a semipro or pro-quality home studio. For starters, you'll need a multichannel audio interface or two. Then, you'll want at least one microphone for each channel. You may want to dedicate a very fast Mac with very fast hard drives, and use it for recording only.

But I digress.

Logic Express or Logic Pro

In addition to GarageBand, Apple makes two excellent professional-quality music creation programs that go by the name Logic. Logic Express is the entry-level version; it sells for the reasonable price of $299. Logic Pro is just what the name implies — a professional-quality application with an equally professional price of $999.

The Express version packs a lot of bang for the buck but it intentionally lacks some of the high-end features found in Logic Pro. For example, you can only record 12 channels at a time using Logic Express while Logic Pro can record as many as your Mac can handle. Logic Pro records at resolutions up to 192k while Express maxes out at a respectable 96k. And, as you'd expect, Logic Pro includes more plug-ins (53 versus 28 at last count) and instruments, and supports 5.1 and 7.1 surround sound formats.

The truth is that either program will produce radio-quality music. Still, unless you absolutely know you'll need one of the Pro features, start out with Express. It uses the same file format and offers the same user interface as the Pro version, so everything you do and learn will apply if you decide you need to upgrade to Logic Pro. But in the meantime, you're $700 richer.

There's no reason songs you create with GarageBand can't be radio-worthy, though you'd probably want to have them mastered by a pro before pressing CDs.

Pro Tools

Pro Tools is worth consideration because DigiDesign offers multiple versions of it at a wide variety of prices, and all versions are compatible with each other. This means that you can start out with the least expensive version and continue to work with the same song files on any of the more expensive versions of Pro Tools. The least expensive version, which is included with the Mbox hardware audio interface, is Pro Tools LE. The hardware/software combination sells for around $450 and is a screaming deal if you plan to use Pro Tools. And, of course, the audio interface works with GarageBand as well. For additional details about Mbox, see Chapter 2.