

LEARNING MADE EASY



2nd Edition

GarageBand[®]

for
dummies[®]
A Wiley Brand



Use built-in instruments
to create songs

Attach your guitar or mic
to record live sounds

Mix, master, and export
your masterpiece

Bob “Dr. Mac” LeVitus

Technology columnist for
the *Houston Chronicle*



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Houston Chronicle "Dr. Mac" columnist

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GarageBand® For Dummies®, 2nd Edition

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Introduction

If you want to make music with GarageBand, you've made the right choice twice — once by choosing GarageBand, which is the easiest way to create your own music on a Mac or iDevice — and again by choosing this book to help you along. Before you know it, you'll be topping the charts and basking in fame, glory, and fortune.

Well, it's possible. By the time you finish this book, you'll possess the knowledge to do so, although I'm afraid it's up to you to provide the talent.

Don't worry. Just sit back, relax, and get ready to have a rockin' good time. That's right. This may be a computer book, but we're going to have a good time together. What a concept!

Whether you're new to music making or a grizzled studio veteran, I guarantee that learning to make music with *GarageBand For Dummies* is going to be fun and easy. Hey, it wouldn't say "Learning Made Easy" on the cover if it weren't true.

About This Book

Of course, *GarageBand For Dummies*, 2nd Edition is going to show you everything you need to get the most out of Apple's amazing GarageBand, which is a complete recording studio and much more.

But I hope to give you much more than that. Here's a quick look at just some of what you can do:

- » Discover how to use GarageBand's numerous (and very cool) features on the Mac and iDevices.
- » Get the lowdown on the equipment you will definitely need, the gear you don't need but may want, and the gear that you don't need — plus all the details on setting up and connecting everything.

- » Find details about creating great-sounding songs all by your lonesome and then distributing them to your friends (or enemies) and (gasp) perhaps even selling them.
- » Be gently introduced to many professional audio recording and engineering techniques that will impress your friends with slick, professional-sounding recordings.

GarageBand For Dummies, 2nd Edition is chock-full of useful information, plus tips and techniques for making good multitrack recordings. If you follow my simple instructions, you'll gain the skills you need to produce great-sounding recordings that are sure to impress your family and friends, not to mention musicians, singers, songwriters, and producers.

Not-So-Foolish Assumptions

Although I know what happens when you make assumptions, I've made a few anyway. The biggest is that you, gentle reader, know nothing about making multitrack recordings or using GarageBand.







I also assume that you know what a Mac, an iPad, and an iPhone are, you know how to turn them on and use them, and you know they have a copy of GarageBand installed. I assume also that you want to understand GarageBand without digesting an incomprehensible technical manual (which, by the way, doesn't exist anyway) and, finally, that you made the right choice by selecting this particular book.

One more thing: I assume you can read. If you can't, please ignore this paragraph.

Conventions Used in This Book

To get the most out of this book, you need to know how I do things and why. Following are a few conventions I use in this book to make your life easier:

- » When I want you to open an item in a menu, I write something like "Choose File ⇨ Open," which means, "Click the File menu and choose the Open command."
- » Stuff that you're supposed to type appears in bold type, **like this**.

- » **Sometimes an entire sentence is in bold**, as you'll see when I present a numbered list of steps. **In those cases**, I unbold **what you're supposed to type**, like this.
- » When I refer to the Mac's  menu, I'm referring to the menu in the upper-left corner of the macOS menu bar that looks like an apple (called the *Apple menu*).
- » For Mac keyboard shortcuts, I write something like "press +A," which means to hold down the  key (the one with the little pretzel or  symbol or both on it) and then press the letter A on your keyboard. If you see something like "press +Shift+A," that means to hold down the  and Shift keys while pressing the A key.

Icons Used in This Book

You'll see little round pictures (icons) off to the left side of the text throughout this book. Consider these icons as miniature road signs, telling you a little something extra about the topic at hand. Here's what the different icons look like and what they all mean.



TIP

Look for Tip icons to find the juiciest morsels: shortcuts, tips, and undocumented secrets about GarageBand. Try them all; impress your friends!



REMEMBER

When you see this icon, it means this particular morsel is something I think you should memorize (or at least write on your shirt cuff).



TECHNICAL
STUFF

This icon signifies something that's not required reading. It could be about pro audio, programming, or progressive rock, but whatever it is, it's not required for you to master GarageBand. (On the other hand, it must be interesting or informative, or I wouldn't have wasted your time with it.)



WARNING

Read these notes very, very carefully. Did I say *ver-y*? Warning icons flag important information. The author and publisher won't be responsible if your Mac explodes or spews flaming parts because you ignored a Warning icon. Just kidding. Macs don't explode or spew (with the exception of a few choice PowerBook 5300s, which can't run GarageBand anyway). But I got your attention, didn't I? It's a good idea to read the Warning icons carefully.

Beyond the Book

In addition to what you're reading right now, this book also comes with a free access-anywhere Cheat Sheet that provides a handy list of useful keyboard shortcuts as well as instructions for silencing mistakes. To get this Cheat Sheet, simply go to www.dummies.com and type **GarageBand For Dummies Cheat Sheet** in the search box.

I've also created a downloadable GarageBand tutorial with a completed GarageBand project, the finished master track, and a PDF explaining how and why I did what I did in the project, which you can download at www.workingsmarterformacusers.com/blog/garageband.

Where to Go from Here

Go to a comfortable spot (preferably not far from a Mac or iDevice) and read the book.



TIP

I didn't write this book for myself. I wrote it for you and would love to hear how it worked for you. So please drop me a line or register your comments through the Online Registration Form, which you can find by clicking the Customer Care link (under Contact Us) at www.dummies.com.

Did this book work for you? What did you like? What didn't you like? What questions were unanswered? Did you want to know more about something? Did you want to find out less about something? Tell me!

You can send email to me at GarageBandForDummies@boblevitus.com. I appreciate your feedback, and I try to respond to all reasonably polite email within a few days.

So, what are you waiting for? Go enjoy the book!

1

Starting on a Good Note

IN THIS PART . . .

Become familiar with the software and get a high-level overview of digital multitrack recording (which is what GarageBand does).

Determine your recording studio needs and wants (and budget), and then get down to the nuts and bolts of speakers, cables, audio interfaces, and other devices that you can use to achieve better sound.

Explore the process of multitrack recording and the way multitrack recordings are created in GarageBand.

IN THIS CHAPTER

- » Finding out what GarageBand is
- » Checking out what you can do with GarageBand
- » Discovering what you can't do with GarageBand
- » Exploring the differences between the Mac version and iOS and iPadOS versions
- » Checking requirements
- » Taking a sneak peek at the recording sequence

Chapter 1

Introducing GarageBand for Macs and iDevices

When GarageBand was introduced at Macworld Expo in January 2004, Apple CEO Steve Jobs informed the audience that one out of two adults play a musical instrument but that almost none of them have recorded themselves playing.

Why not?

Because before GarageBand came along, recording live music decently was just too complicated. It required expensive and hard-to-use software and even more expensive and equally hard-to-use hardware, as well as a basic understanding of audio engineering.

GarageBand changed everything. If you want to record yourself singing or playing an instrument — any instrument — GarageBand lets you do it without

spending a lot of time or money. Better still: GarageBand will give you professional-sounding results even if you don't know the first thing about audio recording or engineering.

In this chapter, you begin your acquaintance with GarageBand. First, you learn a bit about what it is and what you can do with it, along with what it is not and what it can't do. You explore the differences between the Mac version and the iPad and iPhone version and review the system requirements for both platforms. Finally, you finish with a quick look at the process of transforming the song in your head into a recording suitable for sharing.

What Is GarageBand?

GarageBand for the Mac is a complete recording studio that includes hundreds of realistic-sounding instruments, effects, and presets configured by experienced recording engineers.

GarageBand for the iPad and iPhone is also a complete recording studio, but the iOS and iPadOS versions are designed for the touchscreen and include realistic-sounding touch instruments you “play” onscreen.

In a nutshell, GarageBand — on either platform — combines everything you need to record, mix, master, and share music with others.



TIP

GarageBand's default settings and templates are a big part of the reason why GarageBand is so great, especially for beginners. The instruments and audio effects sound great right out of the box, and they rarely require much (if any) tweaking. It's kind of like having a crew of professional recording engineers inside your Mac or iDevice.

There has never been a program quite like GarageBand; it's the *perfect* introduction to multitrack audio recording on Apple devices. I mean that. GarageBand is easy, friendly, forgiving, and fun on all platforms and you can't beat the price.



TECHNICAL
STUFF

Multitrack recording means recording instruments or vocals with each instrumental or vocal performance recorded on its own track. The sound contained on each track can be adjusted independently of other tracks. Ultimately, the tracks are combined (that is, mixed) in a pleasing manner to create the final product.

I've used 'em all; if you're new to this audio thing, nothing else even comes close to GarageBand. You're gonna love it.

What Can You Do with GarageBand?

GarageBand does things that used to require hours in an expensive recording studio. The following is a fairly comprehensive list of what you can do with GarageBand:

- » Record vocals.
- » Record acoustic instruments.
- » Record software instruments via MIDI (Musical Instrument Digital Interface; more on that in Chapter 2).
- » Record electric guitars and basses with GarageBand's virtual amplifier models, so that you can get just the sound you want.
- » “Punch in” to a section of an otherwise excellent track to re-record over your mistakes.
- » Adjust the sonic (sound) characteristics — volume, equalization, echo, reverb, and so on — for each track individually (all these elements are part of mixing a song, which I cover in Chapter 10) and for the song as a whole (in other words, mastering, which I delve into in Chapter 11).
- » Make music using prerecorded loops.
- » Combine (mix) multiple tracks of music or loops or both into a two-track (stereo) song file.
- » Record a track while listening to (monitoring) one or more other tracks.

This list doesn't cover *everything* you can do with GarageBand, but it at least gives you the gist of the cool stuff you can do.

What Can't You Do with GarageBand?

Well, there's not much GarageBand can't do. When I wrote the first edition of this book, GarageBand's biggest shortcoming (versus more sophisticated recording-studio-type software or an analog recording studio) was that it allowed you to record only one track at a time.

That shortcoming is long gone. Today's GarageBand supports recording on as many tracks at once as your hardware interface (see Chapter 2) and Mac support. Today, its fewer remaining shortcomings are less troubling.

Although you can change the time signature anywhere in a song without missing a beat (pun intended), it's not easy. So, if you tend to write songs with multiple time changes, GarageBand may not be the best tool for you.

Moving right along, some other things you can't do with GarageBand include typesetting a book, removing red-eye from a digital photograph, and sending your mom an email message. But you knew that already (I hope).

Finally, it's possible to create a song that has too many instruments, effects, or tracks for your Mac or iDevice to handle. The older your device (and the less RAM it has), the more likely you'll encounter this issue sooner rather than later. Although this problem can happen when you use higher-end audio software, it happens sooner and with fewer tracks, effects, or instruments in GarageBand.

The next section covers GarageBand's system requirements, so I'll hold the gory details until then. Suffice it to say that newer Macs and iDevices run GarageBand more efficiently than older ones.

Checking Your System Requirements

GarageBand does a lot of intense processing behind the scenes, so it requires more horsepower than some other applications. So, before you go any further with GarageBand, make sure your Mac or iDevice is up to snuff.

The official requirements for Macs

The system requirements for Macs are

- » A Macintosh running macOS 10.13.6 or later
- » At least 8GB of RAM
- » At least 4GB free space on your startup disk for the default install or at least 21GB free space on your startup disk for the full install

Now, please allow me to add *my* two-cents worth regarding what I think is required: GarageBand may run on a 7- or 8-year-old (or older) Mac that meets the preceding requirements, but it probably won't run very well. And 8GB of RAM may not be enough for some advanced productions.



TIP

As a bonus, the more RAM you have in your Mac, the more tracks your songs can have before GarageBand chokes. If you want to know how much of your memory and processor GarageBand is using, open up Activity Monitor (in the Utilities folder inside your Applications folder).

You'll see that even when GarageBand is open but minimized on the dock, as shown in Figure 1-1, it uses more RAM and more processing power than any other program that's running.

But wait! It gets worse. If GarageBand is merely running in the background, as shown in Figure 1-2, it uses three times more processor power than when it was minimized.

FIGURE 1-1: GarageBand just minimized on the dock uses nearly 10 percent of the processor and over 250MB of RAM.

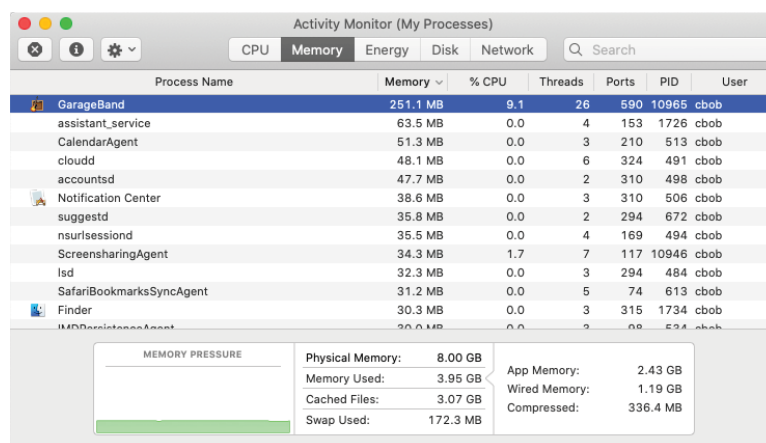
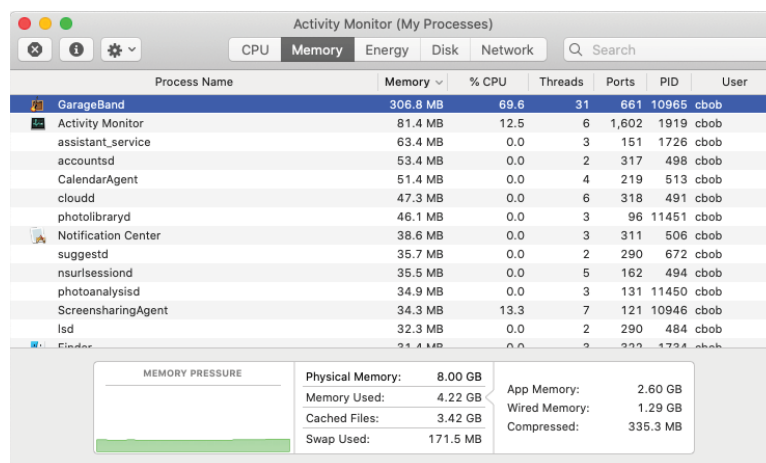


FIGURE 1-2: When GarageBand is playing in the background (with Activity Monitor in the foreground), it uses 69 percent of my Mac's processing power.





Any program or utility that uses that many CPU cycles even when it's minimized or in the background slows down everything else. I recommend that you quit all other apps when you use GarageBand and quit GarageBand (GarageBand⇨Quit GarageBand) immediately when you're finished using it each and every time.

The official requirements for iDevices

Following are the system requirements for iDevices:

» An iPhone, iPad, or iPod touch running iOS 13.0 or later

Here's my one-cent worth: GarageBand may run on an iPhone 6S, iPhone 6S Plus, iPhone SE, 5th generation iPad, or 3rd generation iPad Air (the oldest iDevices that support iOS 13), but it probably won't run very well. For GarageBand to run smoothly, I recommend the most recent iOS device you can use it on.

What Else Do You Need to Run GarageBand?

Even if you don't acquire a single hardware or software item recommended in Chapter 2, you can have a lot of fun using nothing but GarageBand.

If your Mac has a built-in microphone, as most Macs (and all iDevices) do, you can use that microphone to record vocals and musical instruments. The quality will not be as good as connecting just about any external microphone — even a cheap one. But in a pinch, you can use a built-in microphone to capture instruments and vocals.

On the Mac, you can use GarageBand's onscreen keyboard or musical typing keyboard to play the built-in software instruments, as shown in Figure 1-3. However, it's hard to play music with any precision by clicking a mouse or pressing a key, and you can't really play chords with either.

GarageBand for iDevices offers an array of Smart instruments, as shown in Figure 1-4, which are designed for the touchscreen and are easier to use than either of the Mac version's onscreen keyboards.

Pause for a brief interlude about tape — the old kind (cassette, ½-inch, 1-inch, and 2-inch) and the new kind (hard or solid-state drive) in the sidebar, "Recording with tape versus hard drive or SSD."