

Chapter 1

Living in a Keyboard World

In This Chapter

- ▶ Grasping the basic attributes of a keyboard
 - ▶ Understanding the benefits of reading music
 - ▶ Perusing beginner and advanced keyboard effects
 - ▶ Looking at practice options
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You've probably seen images and scenes of people wielding the power and majesty of playing a keyboard:

- ✔ Young genius Mozart driving his peer Salieri mad with his effortless brilliance (no, I wasn't there; I saw the movie *Amadeus*)
- ✔ Early rockers like Jerry Lee Lewis and Little Richard banging away like men possessed
- ✔ The ever-so-detached cool of the jazz pianist, playing with head close to the keys, cigarette dangling from his lips, lost in concentration
- ✔ Prog-rocker Keith Emerson stabbing knives into his Hammond organ and riding it across stages, and then, for a break, strapping onto a spinning grand piano *and playing*, in the ultimate feat of showmanship
- ✔ Countless music videos in the '80's featuring bands behind stacks of synthesizers or dancing around wearing strap-on keyboards (and sporting interesting haircuts to boot.)
- ✔ Singer-songwriters like Billy Joel, Elton John, Alicia Keys, John Legend, and Carole King spinning their tales of life and love from behind massive grand pianos

All these images (and more) have caused many a young boy and girl to embark down the road of playing keyboard. And many baby boomers and successful businesspeople have returned to this love after carving out their careers and want to pick up where they left off.

Beyond the familiar black and white keys, though, keyboards can be wildly different instruments, and looking at the front panels may not give you much of a clue as to what's inside. This chapter gives you an overview of what keyboards are and just what you can do with them. **Remember:** I provide online audio tracks throughout the book to help demonstrate the topics at hand, including the discussions introduced in this chapter.



If what you're interested in is the acoustic piano, I recommend *Piano For Dummies* by Blake Neely (Wiley). It's a wonderful guide to all things piano.

Distinguishing Basic Keyboard Characteristics

The first thing to realize is that all keyboards aren't the same. They may make different types of sounds by different methods of sound production and are meant to do different things for the needs of different players. The following sections help you navigate this potentially confusing terrain.

Examining keyboard designs throughout the years

I divide keyboards up into the following types based on how they produce their sound to make the differences among keyboards easy to understand; you can read more in Chapter 2:

- ✓ **Acoustic instruments:** These instruments require no power to make their sound, so I don't cover them here. But they include the acoustic piano, the harpsichord, and old pump pipe organs and such. Each produces its sound in different ways and sounds distinctly different from the others. And their sounds are certainly included in your electronic keyboard.
- ✓ **Electro-mechanical instruments:** These options produce their sounds mechanically or acoustically and then have amplifiers and electronics to make the sound louder. The classic Rhodes and Wurlitzer electric pianos fall into this group, as well as the funky Clavinet (clav) and the mighty Hammond organ. These sounds are important to know because they're included in almost every keyboard you try out today.

✔ **Electronic instruments:** Keyboards in this group produce their sounds by electronic means, either analog or digital, and are what this book covers most in-depth. Electronic keyboards use a variety of technologies to produce their sounds. Brochures and websites throw around terms like *sampling*, *analog synthesis*, *DSP*, and *modeling*, along with hundreds of seemingly meaningless acronyms. In Chapters 2 and 14, I describe and compare all these methods of sound production.

Touching on key weight

Those black and whites may look the same at first glance, but keys (or the key mechanism) can vary greatly from instrument to instrument. The first main distinction is whether the keys are weighted. *Weighted* keys give the feel of playing an acoustic piano. These keys may seem harder to play, but they offer you much more control over your *dynamics*, or ability to play more softly and loudly.

Non-weighted keys are often called *synth-action*; they're lighter to the touch and can be faster to play. The next step up is *semi-weighted* keys, which are firmer, more solid light-touch keys.

I discuss key weighting in greater detail in Chapter 2. The quality can vary from model to model and brand to brand, so it's an important aspect to consider when buying a keyboard; be sure to check out Chapter 3 as well.

Join the family: Grouping keyboards

Electronic keyboards fall into well-established families or categories of instruments. Each has a relatively standard set of features and is meant to be used for specific musical needs and playing situations. Within each family, you encounter entry-level models that are more basic and then step-up models that add to the quality and number of sounds, the number of features, the size and quality of the keyboard feel, and so on. The main keyboard “food groups” are as follows:

- ✔ **Digital pianos:** Acoustic piano wannabes or replacements.
- ✔ **Stage pianos:** Digital pianos intended for the performing musician, with additional sounds and pro features.
- ✔ **Portable keyboards:** Fun, lightweight, and full of features to help you sound better.

- ✔ **Arrangers:** Keyboards with sophisticated backing features to produce the sound of a full band from your simple chord input.
- ✔ **Organs:** Instruments dedicated to reproducing the sound, features, and feel of the legendary Hammond B3. They may include some additional sounds such as pipe organ, combo organs, and even other keyboard and synth sounds.
- ✔ **Synthesizers:** Keyboards that allow you to make your own sounds and adjust the sounds provided. They can sound the most electronic and imaginative but now often include imitative and natural sounds as well.
- ✔ **Workstations:** Basically, synthesizers with onboard recording systems to allow you to create complete works of original music. Very advanced and feature-rich.
- ✔ **Controllers:** Keyboards that don't make sound themselves but are used to trigger sounds from your computer and other keyboards. These options use the MIDI standard to communicate with the sound-producing devices. (Head to Chapter 17 for details on MIDI.)

Chapters 2 and 3 are your keys (pun intended) to getting more info on all these families of instruments. Deciding which one is right for your needs can be confusing, but I help you organize and prioritize your needs, thinking through what you want to do, where you want to do it, and what you can afford, in Chapters 3 and 18.

Speaking the Musical Language

Perhaps you can pick up simple melodies by ear and hunt and peck with a few fingers to play the notes, but eventually you're going to want to develop your skills more. Learning to read musical notation opens up a way to communicate so much about playing any type of keyboard. It allows you to read the examples in this book and others; to buy sheet music and songbooks of your favorite piano pieces, artists, and songs; and to tackle instructional courses. Chapter 5 is your friendly and easy-to-follow introduction to the language of music. Developing your finger facility and strength takes you from fumble to finesse. Chapter 6 gets things rolling and will have you playing with good posture and fingering technique in no time.

Some forms of print music use what are called *chord symbols* to indicate notes that can be played beneath a melody. They're usually intended for guitar players to strum along, but the keyboardist can also use them to

enhance his playing. A form of print music called a *fake book* provides only a melody and chord symbols, so you need to know your chords to follow along. And you need to understand chords to use certain backing features of some keyboards. Read up on chords in Chapter 7.

Making the Most of Your Keyboard's Basic Features

You can just turn on your keyboard and start playing, and you'll have a great time. But these are electronic keyboards, and they do so much more than that. Your keyboard is brimming with features and cool capabilities, like any self-respecting tech product these days is. I don't know of any that offer video games or let you video chat with your friends, but you never know what may come to pass!

Working with sounds

Some keyboards offer a small grouping of sounds; simple digital pianos may have 16 or so. But most offer at least 100 and sometimes thousands. Finding them, selecting them, and understanding whether they're simple single sounds or complex combinations of instruments stacked on top of each other or split between your hands takes some study. Chapter 8 breaks that all down and provides step-by-step instructions.

Exploring effects

What you hear coming out of a keyboard is actually more than just a sound; it almost always has some extra sonic treatment called *effects* added to it. Effects are audio treatments such as reverb, chorus, EQ, and delay, and they add to the spaciousness, color, and tonality of each sound. Even in simple keyboards, you have the choice whether to use them, and many keyboards allow you to vary the settings of their effects to produce different results, sometimes completely changing what effect a sound uses. Chapter 9 has the details.

Getting into automatic playing features

Many of today's keyboards have some functions that can do some playing on their own (with your guidance, of course). You can sit back and let the keyboard do some of the work. The most common features are

- ✓ **Drum rhythms:** All portables and arrangers and many high-end digital pianos offer an on-demand drummer to add some groove to your performance. You can select the choices from the front panel, add fancy transitions called *fills*, and sometimes select progressively busier variations. Some stage pianos, synths, and workstations also offer these grooves, although they may be lurking within the arpeggiator feature (which I discuss in a moment). Visit Chapter 10 to find out more about getting your groove on.
- ✓ **Auto-accompaniment:** How about having a full backing band ready to play whatever style of music, song, or chords you think of? Portables, arrangers, and some high-end digital pianos can do that and more. If you haven't been around keyboards and music for some time, you may not realize just how good the backing bands on today's keyboards have become. In a word: amazing! But like anything in life, you get back what you put into it, so read Chapter 11 to bone up on all the ways you can lead your band to even greater heights and realism.
- ✓ **Arpeggiation:** With *arpeggiation*, you hold a few notes or a chord, and the keyboard repeats them over and over in a dizzying array of possible patterns — from simple up and down repetitions to pulsing grooves to complex rhythmic patterns. An arpeggiator is often what produces the fancy riffs you hear in pop and dance music. Many of the more advanced options can also produce realistic guitar strumming, harp flourishes, and even drum grooves. Chapter 12 has an introduction to this cool tool.

Delving into More-Advanced Digital Features

If you think of yourself as tech-savvy, you're probably looking for even more from this book, and I'm ready for you. Many of the keyboards have pretty advanced features — some that you would've thought you needed a computer to do. The following sections dive deeper into these digital waters.

Stepping into the virtual recording studio

Keyboards now commonly include some form of recording so that you can play and then listen back to yourself. Two forms of recording are available today:

- ✓ **Audio recording:** This method is the recording of the actual sound you produced. It's what you listen to from a CD, an MP3 player, or your favorite online music streaming service.
- ✓ **MIDI recording:** *MIDI* is the *Musical Instrument Digital Interface* standard, a fancy name for a digital way that musical products can talk to each other. It's not the sound you hear but rather a way of communicating the gestures, moves, and settings of your electronic device as you played it.

Each format has its own terms, capabilities, and benefits, and musicians at every level use each of them. Chapter 13 breaks them both down and helps you see what you and your keyboard can do in terms of creating and sharing your music with others. If you want to know even more about MIDI, check out Chapter 17 as well.

Shaping the sounds you play

So many of today's keyboards offer control over the sounds that are included, whether that's adjusting them a little bit or completely changing them, warping them, or building them from the ground up. For many musicians, creating the sound is as important as the music they play with it. The art of making sounds is usually called *programming* a keyboard, or *sound design*. If you've heard the terms *waveform*, *oscillator*, *filter*, *envelope generator*, or *LFO*, you know that they're the building blocks of this creative art. And Chapter 14 is your entry into this highly rewarding aspect of using an electronic keyboard.

Checking out the computer connection

Thanks to the development of MIDI, keyboards can connect to computers and tablets for a broad array of activities and enjoyment. In Chapter 17, I introduce you to all these categories of software, from recording and sound editing to playing additional sounds that are running on your computer to working with virtual teachers. This exciting world is the cutting edge of music making and study.

Practicing with and without Help

Whether you prefer to study keyboard playing with an electronic teacher or just want to hack out songs you love on your own, I have you covered.

Lurking inside many portable keyboards and digital pianos are patient music teachers, waiting to help you learn a few tunes and build your musical skills. They never yell, won't slap your wrists with a ruler, and are willing to go over things as slowly and as many times as you need. In Chapter 15, I explain and demonstrate both the Casio and Yamaha ways of giving you virtual keyboard lessons and provide practical advice on how to get the most out of them.

But sometimes you hear a song and you just want to sit down and play it right away at your keyboard. Why wait until you can buy the music or go to your next piano lesson? Learning to play by ear and to figure out songs from recordings is a great skill to develop. Some can do it naturally, but for most people, it takes some work. I have worked very hard at developing that skill, and I'm happy to share my best tips with you in Chapter 16.