Play Digital Music on Your Home Stereo

What You'll Need

- **Hardware: Home stereo, 3.5 mm stereo cable or 3.5 mm-to-dual-RCA male adapter and dual RCA cable or optical cable, wireless network and network digital audio bridge (optional)**

- **Software: Digital music player**

- **Cost: $5 to $80 U.S.**

With so much music available online—everything from Abba to Z-Trip, not to mention Internet radio and podcasts–wouldn't it be nice if you could play it all on your home stereo? After all, even the cheesiest home stereo has a better amplifier and speakers than the most expensive laptop. Fortunately, connecting your laptop to your home stereo requires only a few inexpensive cables; we'll show you how to do this first.

Of course, if you want to get fancy—and we think you do—you can connect your laptop to your home stereo wirelessly using a network digital audio receiver. It's a bit more complicated and will cost a few bucks more, but you'll be able to control your stereo remotely from anywhere in your home, and do it all without running a single wire. We'll show you how to do it in the second part of this chapter.

The Wired Way

Step 1: Check Out Your Connections

The type of stereo you have, and the kinds of connections it can accommodate, will determine which cables you'll need to use. Most home stereos have at least one pair of RCA inputs (see Figure 3-1) for connecting auxiliary components; if yours doesn't, see *Hook Up Another Way*. You'll need a cable that has a male 3.5 mm stereo jack at one end

and a pair of male RCA connectors at the other (see Figure 3-2), which you should be able to pick up at a Radio Shack or a local hardware or electronics store.

Figure 3-1

RCA inputs.

Figure 3-2

This cable is the key.

Hook Up Another Way

If you've got a cheap home stereo, or even just a boom box, and you can't find any RCA inputs, don't sweat it. If the stereo has a line-in jack, you can still get hooked up.

All you'll need is one 3.5 mm stereo cable. Just plug one end of the cable into your laptop's headphone jack and the other end into the stereo's line-in jack.

Step 2: Get Connected

Your stereo may have more than one set of RCA inputs for connecting to various other components such as a CD or DVD player or tape deck. Many stereo receivers also have auxiliary inputs, which are often labeled Aux (see Figure 3-3).
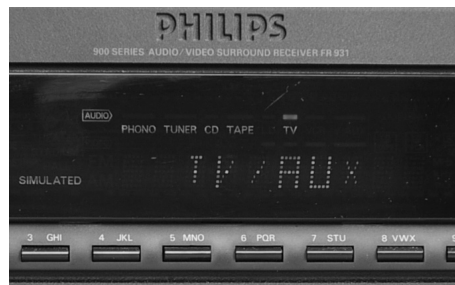
Figure 3-3

Auxiliary inputs.

If your stereo doesn't have auxiliary inputs, you can also connect to any other pair of inputs; if you use the tape inputs, however, connect to the "play" jacks, not the "record" jacks. Once you're hooked up, set your stereo to play from whichever input you plugged into; most home stereo receivers have a dial or switch that toggles the input source (see Figure 3-4).

Figure 3-4

Select the right source.

tip *Be sure to plug the white RCA cable (left channel) into the white jack and the red RCA cable (right channel) into the red RCA jack.*

Finally, plug the 3.5 mm end of the cable into your laptop's headphone jack.

note *Some higher-end laptops can connect to home audio components using lasers! If your laptop has an optical jack (see Figure 3-5), it can transmit a digital audio signal over a special fiber optic cable, which will deliver superbly clear, rich audio without any static or interference. Optical jacks are sometimes labeled Toslink or S/PDIF, which stands for Sony/Philips Digital Interface Format. Optical cables are expensive, but the sound quality is worth it.*

Figure 3-5

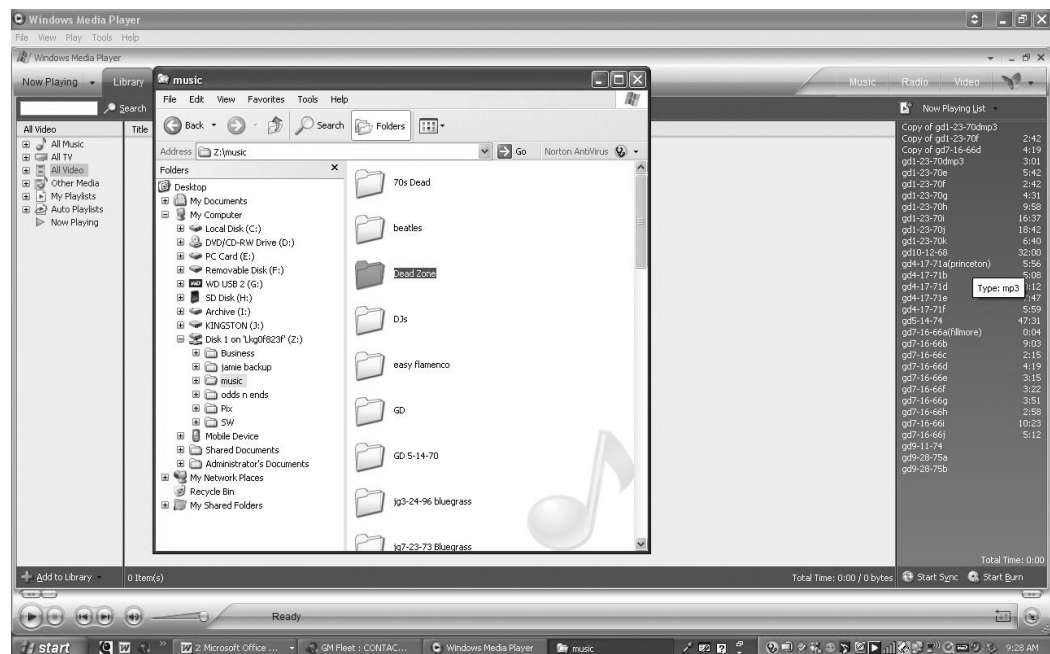An S/PDIF (aka Toslink) jack.

Step 3: Load Up Some Tunes

Now that everything's connected, we're almost there. Because it comes preloaded on most laptops, we're going to use Microsoft Windows Media Player, but there are plenty of other free digital music player applications available; for up-to-date reviews and recommendations, check out www.download.com. Start by dragging the music you want into Media Player's interface (see Figure 3-6). Click the play button and you should hear the music coming out of your home stereo's speakers. Voilà!

Figure 3-6

Drag files into the music player.

The Wireless Way

You might not be crazy about the idea of tethering your laptop to your home stereo—after all, you got your laptop because it's portable. A network digital audio bridge can connect your laptop to your home stereo over a wireless network, so that your laptop can play music on the stereo from anywhere in (or around) your home. There are a number of great products on the market; we'll use the Linksys WMB54G Wireless-G Music Bridge to demonstrate.

Step 1: Install the Bridge

Start by loading the bridge's software onto your laptop from the included CD. After everything's installed and you've plugged the audio bridge into your laptop using the included LAN cable, the laptop should be able to automatically find the device and configure it. If you're unsure of what to do, consult the audio bridge manual.

tip *Don't worry if the laptop and audio bridge don't connect on the first try. Check the cables, but make sure the bridge is turned on and that the power and Ethernet lights are lit. It may take a few tries, but they should eventually find each other.*
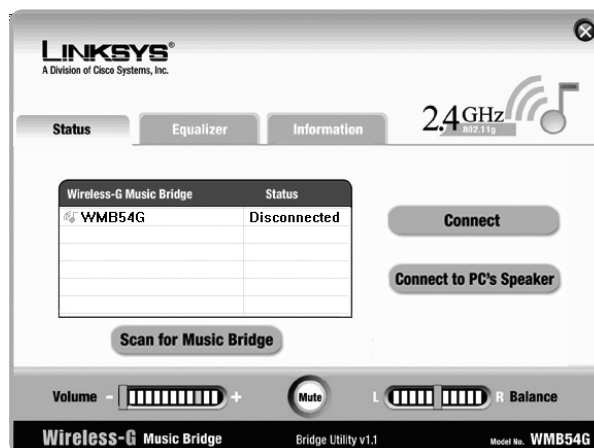
Step 2: Configure the Bridge

Every vendor's audio bridge is a little different, but they all transmit your tunes over the wireless network to your stereo. Before the bridge can do that, however, you need to supply it with a few important details about your laptop and your network. You're going to need to supply the bridge with your wireless network's name and password (if you use one), and point it to where the music is stored on your laptop. Once you've shown the bridge how to access your network, you can disconnect the LAN cable. Again, specific directions on how to do this should be found in the audio bridge manual.

Step 3: Connect the Bridge to the Stereo

Next, launch the audio bridge's connection interface (see Figure 3-7).

Figure 3-7
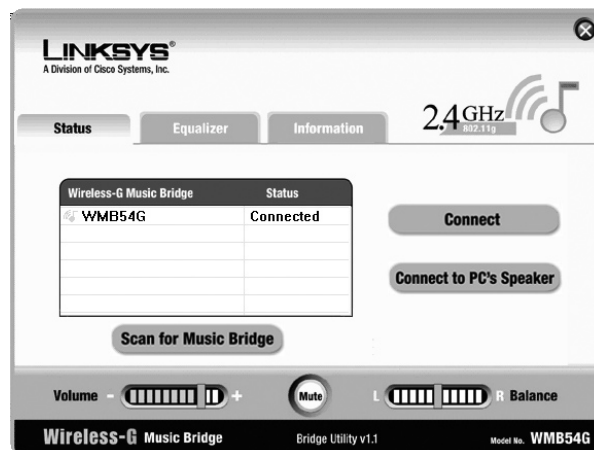
Launch the bridge's software.

Now plug one end of the RCA cables into the bridge, and the other end into the stereo's *Aux* input. Congratulations! Your bridge has been built. Now it's time to send some music across it.

Step 4: Find That Confounded Bridge

Every audio bridge is a little different, but you'll need to have your laptop find the active music bridge and connect to it wirelessly. Once your laptop finds your bridge (see Figure 3-8), you're all set.

Figure 3-8

Ready to play.

Step 5: Load Up Some Tunes

Now that everything's connected, we're almost there. Because it comes preloaded on most laptops, we're going to use Microsoft Windows Media Player, but there are plenty of other free digital music player applications available; for up-to-date reviews and recommendations, check out www.download.com. Start by dragging the music you want into Media Player's interface. Click the play button and you should hear the music coming out of your home stereo's speakers. With most audio bridges, you can stray up to 100 feet away, and the music will still come through loud and clear. Good times.

tip *Your network digital audio bridge may have a built-in graphic equalizer that can tweak the sound to suit the type of music and the size and shape of the room. In addition to settings for rock, classical, and a slew of other styles, you can modify it to boost the high end or flatten the bass.*

When using a network digital audio receiver, keep in mind that there are range limits, and if your laptop strays too far from the wireless network, the rocking will come to a stop. If you need to roam further than your bridge will allow, try a powered antenna or signal booster for some additional range.