# Chapter 1: Putting Your <br> Music on CD and Vinyl 

In This Chapter<br>$\checkmark$ Understanding CD burning<br>$\checkmark$ Finding the right CD-Rs<br>$\checkmark$ Burning your first CD<br>- Preparing your CDs for duplication<br>$\checkmark$ Finding a CD duplicator<br>$\checkmark$ Pressing a vinyl record

0ne of the coolest things about audio recording nowadays is that you can create music in your home and put it on the same medium that the biggest record companies use. When I started as a recording engineer, the best you could do was put your music on cassette for other people to listen to. Pressing vinyl was expensive. But now anyone with a computer, a CD burner, and a few inexpensive CD-Rs can put his or her music on the same format as all the best albums in the record store. You gotta love it!

In this chapter, you explore how to make CDs of your music. You discover the best CD-Rs to buy, and you get a chance to burn a CD. You also find out how to submit your mastered CD to a company that can mass-produce your music and make it ready to sell.

And because life tends to turn in a circle, you get a chance to explore vinyl records as a medium for your music. All that's left are some ideas for promoting your packaged product, which you can find in this chapter as well.

## Getting into CD Burning

Because you're recording in your computer with Pro Tools, chances are you have a computer with a CD-R or CR-RW drive. If so, you also have software that you can use to burn your CDs. Most CD-burning software works fine for putting your mastered music onto CDs. If you don't already have a burner and want to add one to your existing computer, check the system requirements for the burner that interests you to make sure that your system can use it. For audio CDs, you can use just about any CD burner on the market (as long as it's compatible with your system, of course).

## 660 purchasing CD-Rs

## Recognizing Red Book CDs

Regardless of the CD burner you get, make sure that it can create a Red Book CD. I know that this sounds mysterious, but all Red Book means is that the CD is an audio CD, not a CD-ROM. Red Book is a standard for the data
used to create an audio CD; a Red Bookcapable burner follows that standard. This ensures that your CD can play on all audio CD players. Your CD burner clearly states whether it can burn audio, or Red Book, CDs.

## Purchasing CD-Rs

A staggering variety of CD-R types are available. Available are green, blue, gold, and even black CDs; as well as data and music CDs. So which ones are best? Well, that depends.

Unless you have a consumer CD recorder from several years ago, you can record your CD onto any data CD-R. You can find these discs just about anywhere, and they can cost as little as five to ten cents apiece if you buy in quantity. If you have an older consumer CD recorder, you have to use music CD-Rs. These CD-Rs have a code in them that allows older consumer recorders to actually record. These CD-Rs cost a lot more not because they capture music any better, but because a royalty - about one dollar, which goes to the recording industry - is figured into the price of the CD. (Don't get me started.)

So, if you have a late-model CD-R recorder connected to your computer, or if you have a professional-grade CD burner (such as the Alesis Masterlink), you can get by just fine by using run-of-the-mill data CD-Rs.

As far as which of the countless CD-R brands to use, well, they're all pretty much the same as long as you go with a major manufacturer. Personally, I always go with Taiyo Yuden if I can find them. (Do a search on the Internet for some places that sell this brand.) Keep in mind, though, that some CD-Rs work better on some recorders, and the only way to find out is to try them and see. When you find a brand that works, try to stick with it.

Look for CD-Rs with a tough top surface. It's the scratches or pits in the top of the disc that cause it not to play over time, not the scratches or pits on the bottom.

## Recording Your Music to CD-R

Burning a CD is easy. All you generally have to do is open your CD-burning software and follow the prompts. A few things, however, can be helpful to know to get the best sound and to create a CD that you can duplicate. Rundown coming right up.

## Dealing with diversity: Using different CD recorders

If you're using a $C D$ burner in your computer, burning a CD is as simple as opening your software and following the program's directions for making a CD. If you use a standalone CD recorder (burner), you have to connect it to your Avid interface (via a digital connection) and record to your CD recorder. These options are presented in the following subsections.

## Computer-based systems

If you have a CD burner program (such as Toast, Jam, or CD Creator), burning your CD is easy. One advantage of using one of these programs to burn a CD is that you have quite a bit of flexibility to organize your songs and place space between them.

In general, all you have to do is click the Add Track button on the main screen and select the track you want to add. You're also prompted to choose any silence that you want to place before the track, as well as PQ subcode information. (A PQ subcode is "housekeeping" information added to the CD data; it includes instructions for start and stop times for each track.)

When you have all your tracks assembled, you can go ahead and burn your CD. Pretty simple, huh?

## Standalone CD burners

A variety of standalone CD burners are available, and they all work differently. Some record the CD the same way a cassette player records tapes: You connect the digital input of the CD recorder to the digital output of your Avid interface and then press Record on the CD recorder while clicking Play in Pro Tools. The CD is then recorded in real time. Other standalone CD burners, such as an Alesis Masterlink (the CD-burning standard for many pro studios), work more like computer software programs than cassette recorders.

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With the Masterlink, you first record the music from Pro Tools to the Masterlink hard drive (using the same procedures just listed). From there, you can edit, sequence, and even dynamically process each song before you burn all the songs to a CD-R. When you're happy with the order of the songs and the spacing between them, you can then burn your CD.


If you want to do any dynamic processing to your music in the Masterlink, be sure to send your files to the machine undithered and at 24 bit. You can dither in the Masterlink after you make your changes. This improves the sound of your final CD. If all you're doing is sequencing your songs, you can send the files dithered if you want. (For more on dithering, see Book VII, Chapter 2.)

## Burning for mass production

If you intend to send your CD-R to a duplication or replication company to have it mass-produced, you have a few ducks to get in a row first. Here are a few things to keep in mind:

- Check for physical defects to the CD-R before you try to burn to it. Scratches, fingerprints, smudges, and other imperfections on the mirror side (bottom) of the CD-R can cause errors in the data when burning the CD-R. Be sure to use a clean and unblemished CD-R for burning your master. After all, CD-Rs are cheap.
- Always write your master CD by using Disc at Once mode. This allows the CD to be read as a Red Book audio CD. Your other option when recording a CD is Track at Once, which burns one song (track) at a time. Unfortunately, Track at Once produces more errors than Disc at Once, which burns the entire CD at one time. Because of the errors present on CDs burned when using Track at Once, a mass producer's equipment can't read - and therefore summarily rejects - CDs that people produce via this method. (In fact, many older CD players for homes and cars can't read these CDs, either.) So be sure that you use Disc at Once whenever you make a CD of your mastered music.
- If you can, use an error-detection software program to check for errors in your recorded CD or verify your disc when you burn it. (This is an option you can generally choose within your CD-burning software; check your burner's manual for details.) If you don't have access to an error-detection program, put your CD into an audio CD player and listen all the way through, making sure it doesn't skip or stop. Also check the back of the CD for any blemishes (just as you did before recording onto it).
- Listen carefully to your entire CD after it's recorded. Compare it with your original file and make sure that the CD is perfect. Also, spend time re-evaluating the order of the songs. Make sure that they flow well together (Book VII, Chapter 2 has more on sequencing your songs).
- Label the CD master. With a felt-tip marker approved for use on CD-Rs, write the name of your album and all your contact info. Your contact information should include your name (or your band's name), your phone number, and the date when the master was made.
If the marker isn't specifically labeled as such, the ink might leak through the top surface of the disc over time, disrupting the data.
And don't use a ballpoint pen or an adhesive label (paper or plastic) to identify your master. A ballpoint pen can damage the surface of the CD. Adhesive labels can slow the rotation speed of the CD (causing errors in the duplication or replication process), and they've been known to come off inside a duplication machine, clogging up the works.
Write only on the top surface of the disc.
- Make three CD-Rs of your mastered music. Keep one copy safe in your studio and send the other two to the duplication or replication company. Call it good insurance: If one of the two CDs that you send off for mass production has an error, you don't waste any time sending the company a replacement.
- Prepare a PQ subcode log. PQ subcodes include additional information, written on the CD, that provides time-code information, such as track numbers and the start and stop times of the tracks. If your CD burner software doesn't support PQ subcodes, make a list of the start and stop time of each track (referenced from the start of the CD) on a separate piece of paper as well as the track number and length of each track; then send that info along with your CD masters. If your software program can generate a PQ subcode log, print it - and remember to send it with your CD master.


If you're burning a CD for a major record label, first of all, congratulations! Secondly, make sure you supply ISRC (International Standard Recording Code) codes with your CD. These codes contain information about the CD, such as the owner of the song, the country of origin, year of release, and serial number. (You can find more information and an application for obtaining ISRC codes for your music at https://usisrc.org/.)

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at www. copyright.gov/forms, or you can call the Copyright Office at 202-707-9100 to have it mailed to you. Choose (or ask for) Form SR with Instructions. The current cost for filing the form is $\$ 65$, but double-check this fee before you send it in because it's been known to go up. (Hey, it's the government.) You can fill out one form for each CD, so the cost per song isn't very high. After you have your copyright, it's yours for life.

The form is pretty easy to fill out, but if you run into difficulty, you can call an information specialist to help you out. The number is 202-707-3000. Be prepared to wait on hold for a little while. (Hey, it's the government.)

Send your completed form, the fee, and a copy of your CD to the address listed on the form. You'll receive a certificate in the mail, but you can consider your music copyrighted as soon as you mail it in (as long as you sent it to the correct address). If you're especially protective of your music (paranoid? or is that paranoid enough?), you can wait until your check clears your bank. At this point, you can be almost certain that your form is being processed. If you can't sleep at night unless your music is copyrighted, you're best off waiting until your certificate arrives in the mail before you start selling or distributing your CD. (This is a good reason to file for your copyright early.)

## Making Multiple Copies

When you have a CD that you want to copy, you can either make the copies yourself or hire someone to copy them for you. If you copy them yourself, you have to burn CDs one at a time, just like the first one. This can cost very little money but take a lot of time (as you undoubtedly found out when you burned your first CD).

## Making copies yourself

Well, you've done everything else yourself, so why not add the copying process to the list? If you have more time than money and only need a few CDs, making them yourself might be a good option.

To make saleable CDs yourself, you need not only the CD burner, but also a graphics-design software program and a printer to print CD labels and cover material (CD sleeve and tray card). Even with this equipment, your package won't look as professional as the package that a CD duplication or replication company can create, but what you create is probably good enough for you to sell a few copies to friends, acquaintances, and maybe open-mic-night audiences.

## A work of art

Cover artwork is an important part of your CD. Take the time to create a visually appealing CD cover and tray card. This is especially true if you intend to sell your CD through record stores or other retailers. Your package needs to look professional because it's going to be competing with the big boys (and girls) who have huge art budgets for their CDs.

If you can't create a professional package yourself (no shame there - not everybody can), hire someone to do it. Most CD replicators I discuss in this chapter provide design services. Sometimes these services are even included in the CD package price. I recommend that you take advantage of these services; sometimes you get best results by letting the pros do what they do.

## Having someone else making copies

Depending on how many copies you want, you can either have them duplicated or replicated. Either process can provide you with a professional-quality product that you can sell alongside major releases. Your choice between duplication and replication depends on how many copies you plan to have made.

## Duplication

Duplication involves making copies of your master CD-R the same way you made the CD-R in the first place. The only difference is that duplication companies use CD burners that enable them to make more than one copy at a time. Duplication is great if you want to make a small number of copies anywhere from 50 to 300 . Most CD-duplication companies include the actual discs (with printing on them), jewel cases with color-printed inserts, bar codes (see the "UPC bar codes" sidebar in this chapter), and shrink-wrap. You can expect to pay around $\$ 3$ to $\$ 5$ for each CD, depending on the quantity you order. You can also find other types of packaging, such as vinyl sleeves and one-color printing, for less per disc if $\$ 3$ to $\$ 5$ is too steep for you.

An advantage to having your CDs duplicated is that your CDs usually can be done quickly. Many duplication companies can provide you with a finished product in as little as a few days (although an average of seven days seems more common). The disadvantage is that you usually pay considerably more for each CD than you would if you did it yourself or went the replication route.

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To have your CDs duplicated, you need to provide a CD-R master - that is, a CD-R recorded as a Red Book-compliant audio CD. If you want the duplication company to create retail-ready packages, you also have to provide artwork laid out to the company's specifications. (Hint: Get 'em beforehand.)

If you're interested in going the duplication route, here are a few resources to get you started. You can also do a search on the Internet for more places by using the search term CD duplication.

- CD Works, 93 Park Street, Beverly, MA 01915; phone: 800-CDWORKS; website: www. cdworks.com.
- DiscMakers, Main office: 7905 N. Route 130, Pennsauken, NJ 08110; phone: 866-707-0012; website: www.discmakers.com/music.
- Oasis CD Duplication, 12625 Lee Hwy, P.O. Box 214, Sperryville, VA 22740; phone: 888-296-2747; website: www. oasiscd.com.

Most of the companies that I list in the following section also provide duplication services for smaller quantities.

## Replication

Replication is the process used for making commercial CDs - lots and lots of them. Instead of making copies directly from your master CD-R, this process involves burning a glass master - the master disc from which all your CD copies will be made - from your master disc. The glass master is then used to transfer the data onto CD media. Replication is designed for larger runs: namely, 500 or more copies. Quantities of fewer than 300 aren't cost-effective because the glass master often costs between $\$ 100$ and $\$ 200$ to make, and the film needed for the printing of the CD and sleeve and tray card can cost several hundred more.

## UPC bar codes

If you make a CD that you intend to sell through major retailers, such as record stores or Internet retailers, you need a UPC bar code. A UPC bar code is a string of numbers that identify your product. Every CD has its own unique bar code. You can go about a getting a bar code in one of two ways: You can register and pay $\$ 750$ with the Universal Code Council (UCC), or you can pay anywhere from nothing to $\$ 50$ to get one from a CD replicator or distributor.
Unless you intend to release more than 35 CDs, your best bet is to buy a bar code from a
replicator or distributor, who can provide bar codes for a small (or no) fee with your CD order. Here are additional places where you can get a UPC bar code:
$\checkmark$ Disc Makers: www . discmakers . com/ music
$\checkmark$ Oasis Disc Manufacturing: www. oasiscd.com
$\checkmark$ CD Baby: www. cdbaby .com

CD replication usually comes with printing on the CD in one to four colors, and a tray card and sleeve often printed in four colors. Most CD-replication companies have retail-ready CD package deals that cover everything from layout of your artwork (some do, some don't, so be sure to ask first), printed CDs, jewel boxes, bar codes (see the "UPC bar codes" sidebar in this chapter), and shrink wrap. You can expect to pay between $\$ 1,000$ and $\$ 1,500$ for 5001,000 retail-ready copies from most manufacturers.

If you're interested in going the replication route, you need to provide the replication company with a master audio CD, artwork set to its specifications, and a completed order form. Oh, and you'll probably have to pay half the money for the job up front before they start work on your project (bummer).

After people at the manufacturing company receive your order form, the CD, and the artwork, they make a reference $C D$ (which shows you what the finished product will sound like) and proofs of your finished printed material. Be sure to look over the art proofs carefully: Listen to every second of the reference CD. Any mistakes you don't catch are your problem, so take your time and compare the reference CD very closely with the master recording. (You did make a copy of your master CD before you sent it out, right?) The master and the reference should be exactly the same.


Having your CD replicated is a stressful thing. You're spending a ton of money and getting quite a few copies; you'll need to be proud enough of them to go out in the world and sell them. Choosing a CD-replication company to work with is an important task. Quite a few companies are out there, so you should choose the place that makes you feel the most comfortable and makes a high-quality product.

Here is a list of the larger CD-replication companies. For more possibilities, do a search on your favorite search engine for CD replication or CD duplication.

- Disc Masters, 2460 5N279 Wooley Road, Maple Park, IL 60151; phone: 888-430-DISC; website: www. discmasters.com.
$\uparrow$ Oasis CD Duplication, 12625 Lee Hwy, P.O. Box 214, Sperryville, VA 22740; phone: 888-296-2747; website: www. oasiscd.com.
- Groove House, 5029 Serrania Ave., Woodland Hills, CA 91364; phone: 888-476-6838; website: www . groovehouse . com.
- DiscMakers, main office: 7905 N. Route 130, Pennsauken, NJ 08110; phone: 866-468-9353; website: www. discmakers.com/music.

Many CD-replication companies can provide you with great resources, information, and even opportunities for promoting your work. Take advantage

Book VIII Chapter 1 of these opportunities if you can, but don't choose a company based on its promotional promises. Choose a company because of its customer service, price, and the quality of its product.


Be sure to ask for referrals (or at least a list of satisfied clients) before you go with a duplication or replication company. As always, your best bet when you're entrusting someone with your precious music to is to ask friends for recommendations. Also, take timing estimates with a grain of salt. I've had a couple of occasions when a company promised to finish my CDs by a certain date, and the discs didn't show up. So leave plenty of time between when you print your CDs and when you need them.

## Pressing Vinyl

There is a trend for musicians to create compelling packaging to try to entice listeners into buying a physical product rather than just taking a free download. (Whether you offer a free download or not, chances are your music will be available for free somewhere through P2P sharing.) One of the ways artists are distinguishing themselves is to offer vinyl records.

This retro format is a viable option for breaking through the noise and getting your music heard (I cover more ways to "premiumize" your music to help with promotion in the next chapter). If you're interested in putting your music out on an old-fashioned record, here's what you need to know:

- It takes a lot longer to make a vinyl record than a CD. Expect to wait close to 8 weeks for your finished record.
- Not everyone has a record player. In fact, as attractive as it may be to put your music out on vinyl, the vast majority of your fans will not have the proper equipment to play it. So, when you print, keep this limited market in mind. The average independent artist only prints a few hundred records at a time.
- A vinyl record doesn't hold a lot of music. You may need to cut songs from your CD to fit the constraints of the vinyl. A 12 -inch $331 / 3 \mathrm{rpm}$ record only holds about 18 minutes per side and a 7 -inch 45 rpm record holds about $41 / 2$ minutes per side.
- You may lose some fidelity. If you're mixing your music with the modern style of having pretty heavy bass, you may need to dial that back to accommodate the limitations of the vinyl medium. You may also find that the high frequencies also drop as you move to vinyl. You can deal with this and make an excellent-sounding record if you have the special know-how. Here is an article on how to prepare your music for vinyl: www. customrecords.com/prepare_music_for_vinyl_ record.html.
- Most vinyl record pressing companies will include a download card in your record's packaging so your listeners can download your music to a portable device. This allows you to offer the best of both worlds.

If a vinyl record interests you, check out these resources for the many options and prices:

- Groove House, 5029 Serrania Ave., Woodland Hills, CA 91364; phone: 888-476-6838; website: www. groovehouse . com.
- Untied Record Pressing, 453 Chestnut Street, Nashville, TN 37203; phone: 866-407-3165; website: www . urpressing. com.
- Recordpressing.com, 475 Haight Street, San Francisco, CA 94117; phone: 415-462-1992; website: www.recordpressing.com/.
- Rainbo Records, 8960 Eton Ave., Canoga Park, CA 91304; phone: 818-280-1100; website: www.rainborecords.com/.

Most CD duplicators and replicators also have recommendations for vinyl pressing companies that they work with regularly. So if you have a CD manufacturer that you like and you want a vinyl record, ask the manufacturer for a referral.

## Promoting Your Music

Congratulations, you have a CD to sell. The hard - oops, I'm sorry, actually the easy - part is behind you. I'm sure you don't want to be stuck with boxes of expensive coasters, so now you have to work on getting people interested in buying your music. You've just gone from being a musician-composer-engineer-producer to being all those plus a record company-owner-business-person. (Exactly how hyphenated can a person get, anyway?)

Your friends and some acquaintances will probably buy a few copies, but after you've sold a CD to all of them, you need to get your music to the broader world. This can be tricky. After all, you're now competing with the big boys, and face it: You don't have nearly the resources that they do. Traditional channels of distribution and marketing are pretty much out of the question for you (and for most of us). So, to succeed in selling your music, you need to try some alternative approaches.

I'm no marketing guru, but I have managed to create a nice niche for myself and my music. So, trust me: You can do the same. All it takes is a little imagination and a lot of hard work. In the following list, I present a few ideas that have worked for me and other enterprising, independent artists:

- Take yourself seriously. No, don't go buy a limo. At least not yet. What

Book VIII Chapter 1 I mean here is to take the job of promoting and selling your music seriously: Treat it as a business. Getting people to notice and buy your music is a lot of work, but it doesn't have to be a drag. (If it is, you're better off getting someone else to do it for you.)
$\downarrow$ Get organized. Get your new business off on the right foot by developing a habit of keeping track of your sales and developing a contact list. One of the best investments that you can make is to get a contact-management database (ACT! is a good one) to keep track of promotion contacts (newspapers, radio stations, clubs), CD sales, and fans. Also, do yourself a big favor and keep meticulous records of your income and expenses; you'll be grateful you did that when tax time comes.

- Create a mailing list. This is one of the most cost-effective and powerful ways that you can start to develop a following. Make a sign-up sheet for your mailing list available at every public appearance. (Ask people to include both postal mail address and e-mail address.) Then enter those names into your database system. You can then either send out snailmailings or e-mail notices whenever you play or do anything worth mentioning.
- Get out and be seen. This one is pretty straightforward. Get out in the world and let people know about your music. This can mean not only playing gigs but also talking about your music. I have a good friend who releases an album each year. He prints 1,000 copies, which he sells at his gigs, and every year he sells out. (Hey, that's an extra \$10,000 a year after expenses. Not bad!) He also uses the CDs as his calling card in order to get more gigs.
- Look beyond the music store. Competing with the major labels in the music store is nearly impossible. Unless you live in a small town or know of a music shop that has a section devoted to local bands, ready and willing to sell your CDs, you need to think of other places to put your music. For example, another friend of mine has placed his CD at quite a few of the local businesses in his neighborhood around the holidays. Every place - from the local pack-and-ship to the video store - has a counter-top display with his CD. He creates a small poster that fits on the counter, describing him and his music. He sells quite a few CDs and gets a handful more gigs each year this way.
- Capitalize on your style. Some non-record-store venues just happen to fit what your music is saying. For example, another one of my friends composes folksy, new-age music, and he managed to get his CDs into a handful of new-age, gift-type shops. He often puts them in the stores on consignment and checks each store once weekly to refill the counter-top display and collect any money that the store took in (minus the store's cut, of course). Going into the stores every week helps him to develop a connection with the store owners, many of whom have arranged for him to do performances in their stores, which increases his exposure and sales.
- Try something different. Years ago, I teamed up with a local author and played at her book signings. (This is before I wrote any books myself.) She read a passage from her book, and then I played for a few minutes. I always ended up selling a few dozen CDs at these events.
- Don't be stingy. Give away your CD (within reason, of course). I usually count on giving away anywhere from 10-15 percent of the CDs I print. These can be for reviews, as a way to get gigs, or for any way to spread the word about the music. Giving out your CD as a promotional tool is an inexpensive way to let people know what you're doing.

Some of the bigger CD replication companies, such as Oasis and Disc Makers, offer independent artists (this would be you) promotional opportunities that can get you more distribution and exposure. I recommend looking at these distribution and promotion options when you consider a company to manufacture your CD. These opportunities can save you a lot of time and money, and they're often included in the replication price.

If you're interested in the possibilities for using the Internet to promote and sell your music, I discuss these in Chapter 2 of this mini-book.

I'm sure there are dozens more ways to promote and sell your music. Think outside the box and use your imagination. Remember: Don't be shy. Do whatever you can to get your music out into the world.

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