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Alphabet Soup

Making sense of the stew of digital formats

By Garrett Haines

INTRO

How do I obtain digital distribution? How do I get my songs titles to show up on computers when people play my CD? What do BDS, ISRC, AMG, CDDB, CD TEXT, ASCAP, BMI, EPK, and RIAA mean? How can I get my CD listed on iTunes? How do I get royalties when my songs are played on the radio? As a studio owner, I am constantly asked about these and other issues. Historically, record labels handled these technical items. But with the emergence of the Internet as a major conduit between musicians and fans we are starting to see more artists outside of the traditional big-label model.

So, if you're thinking about releasing your own material, or even starting your own micro label, the following provides some information about the various terms, codes, and organizations involved in contemporary music distribution. Additional resources and links are provided for those wishing to take a hands-on approach. For the purposes of this article, we will assume that you are the writers of both the music and the lyrics and have complete ownership over the material. Recording covers, sampling, and remixing involve legal discussions beyond the scope of this article. Finally, it's important to mention that this piece is for informational purposes, and does not constitute legal advice. Readers are encouraged to consult a legal professional with specific questions regarding individual circumstances.

BACKGROUND

Since many of the things you'll need to do can be completed while your CD is being made, a quick review of the recording process is in order. During preproduction, the group rehearses the songs that are scheduled to be on the album. Once in the studio, the band records music, vocals, and overdubs during the tracking process. These tracks are blended during the mixing phase. With the artists' and producer's approvals, the mixes are sent to a mastering engineer who optimizes the levels, sequences the program, and makes the final duplication CD. This CD (which is technically the pre-master CD) is sent to a manufacturing plant where it is used to make the physical masters for CD

replication. After the CDs are created, printed, and packaged, they are sent for distribution.

Graphic: The Audio Production Life Cycle

PROTECTING YOUR WORK

Stephen Foster was America's first professional composer. Songs like "Oh! Susanna," "Camptown Races," and "Beautiful Dreamer," continue to be used in movies, television shows, and theater, over one hundred fifty years after his death. Yet Foster died penniless. Secondary publishers were printing his music, foreign vendors selling his work, and his songs were being performed widely – all without paying Foster any royalties. Why? Because in the middle of 19th century copyright law was vague and provided limited protection. And there were no Performing Rights Societies for Foster to turn to.

Over the years, the laws have been amended to protect creative works. Today, Copyright is a form of protection provided by the laws of the United States (title 17, U.S. Code) to the authors of "original works of authorship," including literary, dramatic, musical, artistic, and certain other intellectual works.

According to the Library of Congress Copyright Office website, your work is protected as soon as it is "created and fixed in a tangible form that it is perceptible either directly or with the aid of a machine or device." But you wouldn't want to try to win a lawsuit by trying to use your demo tapes! Formally registering protects you in a couple of ways. First, registered works may be eligible for statutory damages and attorney's fees in successful litigation. Second, if registration occurs within 5 years of publication, it is considered prima facie evidence in a court of law (meaning the person who registered the work would be automatically considered the true copyright owner unless someone can provide substantial contradictory evidence). The best thing to do is follow the formal process established for registering your songs with the Copyright Office. Traditionally, submitting audio for copyright required sending in a physical sample of the material along with your application and fees (no, it's not free to copyright something). But the Library of Congress has continued to expand its online filing capabilities, which are faster, and as of this writing, cost less than the traditional filing method.

Suppose your songs are being played on the radio in five cities, and a television show wants to use one of your tracks for an episode. How will they get royalty payments to you? This is where being a member of a performing rights society comes in handy. As a member of one of the big three (represented in the United State by ASCAP, BMI, and SEASAC), you can log your songs in their catalog of member assets. Then, whenever your audio is played, sold, or used, the society will obtain payment in the form of royalties, and make sure you get paid. (Actually, it's a little more complicated than that, as you can establish limits on the use of your songs. Check with the individual groups for specifics).
In addition to collecting royalties for their members' work, performing rights societies also offer benefits (including gear and health insurance), discounts, and often have a wealth of career, touring, and other guidance for their members. All three groups are wonderful organizations. Which one to join is a personal decision. Check out their websites for more information: (www.ascap.com, www.bmi.com, www.sesac.com).

NAMING YOUR WORK

The question I always get is, "how do I get my song titles to show up when people put my CD into their computer?" The most common misconception attributes CD Text as the solution, but that's not the case. Today, computer applications that display song titles and other information get it from Internet metadata databases. In fact, if your computer is not connected to the Internet when you insert a new CD, your software will be unable to provide you with the title information. Presently, there are three main repositories for CD track and title information: The CDDB, Muze, and FreeDB. How do you get your CD metadata (information about the album name, song titles, etc) into these databases? The answer is it depends. For CDDB, you can upload information from Gracenote-enabled applications such as iTunes (from the Advanced menu, choose Submit CD Track Names). For Muze, you must contact them directly. And FreeDB integrates with a long list of CD authoring and MP3 encoding software titles. For a full list, check out their site. One note of caution: these database work by assigning each CD a unique ID. This ID is calculated based upon the number of tracks on a CD, the length of the tracks, the space between tracks, and some other factors. Consequently, you never want to add your titles until you have your final master in your hands, or you have your CDs back from your manufacturer. Otherwise, you could end up with duplicate versions of your CD in the database, which is unfair to these organizations and confusing to your fan base.

Database		Information Via	
Gracenote (CDDB)	iTunes	Gracenote enabled applications such as iTunes	www.gracenote.com
Muze	Microsoft Media Player	Contact them at music@muze.com	www.muze.com
FreeDb	Open source	FreeDB enabled applications such as Plextools, MP3 Maker	www.freedb.org

Table: The major Internet-based audio metadata databases

But if iTunes and other applications get their information from the Internet, then what is CD Text? In short, it is an enhanced CD that has both text data and audio data written on it. When the premaster CD is made, the mastering engineer encodes information in addition to the audio. The most common CD Text elements are song titles, band name, and album name, but other data may be included as well. This information is stored in such a way that it doesn't interfere with the normal operation of most CD players or CD-ROM drives. However, CD Text is only implemented in some machines, mostly car players, and some component systems, so only a certain number of players can take advantage of it. Furthermore, there is some evidence that CD Text can render a disc unreadable in a small number of players. Why? CD Text is really a CD created in the "Blue Book" standard. (The technical specifications for creating CDs were named by the color of their report's cover, and the nicknames stuck. For example, the original specifications for audio CDs were published with a red cover. This resulted in people calling it the "Red Book" standard). For a short time, some CD players included anti-piracy circuits that prohibited playback of anything but mass produced "Red Book" CDs. Fortunately, these anti-piracy machines were not on the market long. With the advent of MP3 CDs and with CD burners becoming standard in home computers, manufacturers received complaints of non-playing CDs from consumers. Consequently, the chances of a CD Text enhanced CD being rejected by your player is very small.

Type	Contents	Standard
Audio CD	PCM digital audio files stored at 16-bit 44.1 sample rate	Red book
Enhanced CD	A CD with two sections: part 1 includes Red Book audio that can be played by car and CD players. Part 2 contains computer data (such as video, CD TEXT, photos, etc) that can be read by the CD-ROM drives in computers	Blue Book
Data CD	Computer data to be read by CD-ROM drives.	Yellow Book
Video CD	Rarely used in the U.S., video CDs include MPEG-1 Video (352×240 pixels).	White Book
Interactive CD	Initial track holds software for CD-i players for interactive, choice driven applications.	Green Book
Photo CD	Format developed by Kodak for storing photos	Beige Book

Table: Some Common Compact Disc Formats

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TRACKING YOUR SALES

Getting your CDs on store shelves across the nation usually requires a major label or distribution deal. However, many independent labels manage to penetrate national chains on a regional level. For example, your label may be able to sell CDs to big box book retailers in a your three state area. So, you need to be prepared. If you will be selling your CDs at brick and mortar stores, you will need a bar code on your packaging. Today, many manufacturing plants can sell you a one-off bar code for your CD, or include the barcode with their services. Some vendors who offer these services include DiscMakers (www.discmakers.com), Oasis Manufacturing (www.oasiscd.com), and CD Forge (www.cdforge.com). Of course, if you are a record label with hundreds of releases, you might want to apply with the government to get your own universal product code (http://barcodes.gs1us.org). However, this is expensive and not necessary for most artists.

Now that your CD has a bar code, you'll want to notify the people who track sales and radio play. To do this, you'll want to register with two Nielsen companies: SoundScan and Broadcast Data Systems. SoundScan tracks US and Canadian sales of music and music video products. When an item is scanned at the check out register, Nielson is notified which titles are sold (from the UPC bar code information). Data from point-of-sale cash registers is collected weekly from over 14,000 retail, mass merchant and non-traditional (on-line stores, venues, etc.) outlets. Additionally, Nielsen SoundScan is the sales source for the Billboard music charts.

If you're pushing for radio play, don't forget the sister Nielsen organization, Broadcast Data Systems (BDS). Presently, Nielson BDS is the world's leading provider of airplay tracking. Nielsen claims that BDS captures more than 100 million song plays annually on more than 1,600 radio stations, satellite radio and cable music channels in over 140 markets in the U.S. and Canadian markets. It's no surprise that Nielson BDS information is utilized by Billboard in determining their radio airplay music charts.

While the Nielson systems have been major players in the US, they are still geared towards the traditional big label artist. Independent artists, especially those exploring foreign markets, must use another method of tracking their work. The ISRC (International Standard Recording Code) is such a method. It is the international standard for identifying sound recordings and music video recordings. Each ISRC provides a unique identifier for a specific recording, which can be permanently encoded into a product as its digital fingerprint. Encoded ISRC provide the means to automatically identify recordings for royalty payments. In the United States, the Record Industry Association of America (RIAA) administers the assignment of registrant codes. Any record label is

allowed to apply for these codes. This includes the smallest one-artist micro label. So, if you are self-publishing your CD, you can apply. There is no cost to obtain a code. Simply fax the application to the RIAA and they will respond within five business days. You'll receive an email with your unique code and a manual that covers the use and guidelines for allocating codes.

Each code is a 3-character value, and can be used for up to 10,000 titles during a calendar year. Labels that release more titles can apply for additional codes. For example, Roar Shack Records, an independent label applied for its own ISRC. The RIAA replied with a code of R6T. When the time came to release a CD, Roar Shack Records allocated codes for each song, with the first track being ISRC US-R6T-08-00001, and the second track being ISRC US-R6T-08-00002, etc. Each element of the code represents particular elements of national origin, registrant, year, and designation. A breakdown of these examples can be seen in the grid below:

US	**-R6T**	**-08**	**-00001**
Country Code:	**Registrant Code:**	**Year Of Reference Code:**	**Designation Code:**
The registrant's (sound recording copyright owner) country (2 characters).	The code of the registrant that allocated the ISRC (3 characters), in this case, Roar Shack Records.	The year in which the ISRC is allocated to the recording (2 characters), in this case, 2008.	The code assigned to the sound recording by the registrant. This code may not be repeated within the same calendar year (5 characters).

Table: What the elements within each ISRC represent.

The record label needs to assign unique codes for each song on your release. Then, you need to provide these codes to your mastering engineer before the final master CD is created. In the worst case, if the master is already finished, there are still ways to add the ISRC to the tracks. More on this in the next section.

DIGITAL DISTRIBUTION

Everyone wants to be on iTunes. And it's no wonder; the Apple website has sold over 5 billion songs as of June 2008. If you were one of the lucky ones who signed up with Apple early, you probably already have access to an iTunes publishing account. If so, you're already good to go. However, if you have never been for sale on their site, things are a little complicated. You have two choices: you can apply through an Apple's content provider application or you can pay an agency to get you listed. Applying with Apple is free, and according to their website, takes a few weeks to complete. However, my unscientific research has been unable to verify that speed. In fact, most people I've talked to lament that the process of registering with Apple can take longer. (All the

more reason to start this process early; once you have a label or artist account, you don't have to go through the sign up process again). Conversely, companies like Tune Core (www.tunecore.com) will register you with iTunes, as well as other digital distribution sites such as Amazon, Napster, and Rhapsody, for a fee. The time it takes for you music to become available to the public varies depending on the destination site, but it can be faster than by applying with each of these services individually.

Regardless of which path you choose, your songs will need to have ISRC assignments. Presently, TuneCore accepts your ISRC assignments, or can apply for codes on your behalf. Apple can also assign codes for you, but its always better to provide them with the codes when you submit the audio. After all, this is your work, and you want to be the one responsible for managing your intellectual property.

PROMOTING YOUR WORK

Since bands have been touring, there have been press kits. Typically, these were time consuming to create and expensive to print. The folks at Sonicbids came up with a popular solution to save money on CD duplication, postage, and other fees associated with physical press kits -- the Electronic Press Kit (EPK for short). An EPK is an easy-to-use, web-based Electronic Press Kit that can be updated and distributed at any time and as much as you like.
For more information, check out www.sonicbids.com

Another important way to promote your music is to have it listed with AMG. Originally known as All Music Guide, AMG was founded in 1991 to help consumers discover recordings in their favorite genres. Today, Allmusic (www.allmusic.com) is not only one of the world's largest databases of recorded music, it's also the main way the Grammy Foundation certifies voter membership. Recording engineers and producers with a certain number of credits in the Allmusic system can apply for Voting Member status. Allmusic also publishes band biographies and reviews of recordings. Increasingly, if you're not in Allmusic, you're not in the industry. So, if your recordings are available commercially (meaning not only on consignment) you can submit your CD for inclusion. Details and submission guidelines are available on their site.

What	Who	When	Where
Copyright Songs	The writers	As soon as you have rough mixes.	www.copyright.gov
Join a Performing Rights Society	The writers	While you are writing songs	www.ascap.org www.bmi.org www.seasac.org
Obtain ISRC Codes	The record label	Before mastering is finished	www.riaa.com
Assign ISRC codes	The record label	The ISRC should be encoded in digital sound carriers in the pre-mastering or authoring process	The mastering house. Worst case, some manufacturers might add them for a fee.
Obtain BDS code	The Record Label	Before CDs are shipped to radio stations	www.bdsonline.com
Obtain SoundScan code	The Record Label	Before CDs are shipped to stores	www.soundscan.com
Obtain barcode	The Record Label. Note: sometimes provided by Manufacturing Plant	In time to be included in CD printing and packaging	Manufacturing plant for one offs. To obtain a corporate barcode, check: http://barcodes.gs1us.org
Create an Electronic Press Kit	The band or manager	Before you start to book shows or the CD release party	www.sonicbids.com
Submit your CD to Allmusic for listing	The Record Label	As soon as the CD is back from the manufacturing plant.	www.allmusic.com
Submit Tracks to iTunes and/or other online music vendors.	The Record Label	As soon as the final master is approved.	Directly at: www.apple.com Or via third party such as www.tunecore.com
Submit Track Names to the CDDB, Muze, and/or FreeDB	The artists, mastering engineer, or record label	As soon as the final master is approved.	Via enabled software application such as iTunes for CDDB.

CONCLUSION

Never before have musicians been able to reach so many fans so quickly. With the power of the Internet becoming a pervasive force in global society, the opportunity to get your music heard by the masses has never been so great. But this power comes with obligation. For years, record companies handled all of the documentation, activities, and logistics related to a record release. This was often transparent to the artist. But if you're considering an independent route, you have to assume these responsibilities. If this is first time you register for these codes and services it may be overwhelming. But once you do it it's done, and from then on out, you don't have to duplicate your efforts. It's a small

price to pay for maintaining your artistic freedom and being in charge of your intellectual property.

Garrett Haines is a mastering engineer at Treelady Studios in Pittsburgh, PA. His articles have appeared in Tape Op Magazine, EQ Magazine, The Indie Bible, Rockrgrl, Harmony Central, and many others. Visit him online at www.treelady.com