

CD-TEXT and iTunes

Has this happened to you? When you had your CD mastered you were sure that the mastering engineer encoded the CD artist, title and track information onto the master you sent to the replication house. But when you put one of your brand new manufactured CDs into your computer & started up iTunes, the CD information was not there (or worse it showed information for a totally different CD!) What happened and what can you do to fix it? Well the first step is to better understand the differences between CD-TEXT and online CD databases.

CD-TEXT and CD databases

There is quite a bit of confusion regarding the source of CD track information in iTunes, Windows Media Player as well as various other hardware and software media players. For the most part there are two primary sources of CD track information utilized by media players: CD-text and online media databases.

CD-TEXT is an extension of the Red Book Compact Disc specifications standard for audio CDs that was created to allow storage of information such as artist name, album title, track names and so on in the subcode of an audio CD. Since its release in 1996, CD-TEXT has been adopted slowly and support by many CD players and especially CD-ROM drives has been inconsistent. Most car CD players and many multidisc players now support CD-TEXT (such as your DVD player at home). Many computer-based media players, such as later versions of WinAmp, Realplayer, EAC, Nero and others support CD-TEXT as long as the CD-ROM drive in the computer also supports CD-TEXT. But many popular computer applications do not utilize CD-TEXT information, most notably iTunes and Windows Media Player. They use a different method to get CD information - online databases.

Online databases are used to store CD information as well as other metadata including album art, lyrics and to provide this data to any device that has access to the database. In fact the original online database, CDDB (created by Ti Kan and Steve Scherf), predated the release of the CD-Text spec. The original CDDB contained CD profiles that could be stored on your computer or accessed via the internet. Each CD profile was created by a fingerprinting process involving calculations on track start times, track duration and total length information stored in the table of contents of the CD. If a record for the CD was not found, a new profile could be created and submitted to the database. Now CDDB is known as Gracenote (used by iTunes) and there are many other databases available as well, most notable AMG (Macrovision), Muze, freedb and MusicBrainz. Although the CD identification process used by these databases may differ from the original CDDB process, the concept is the same and duplicate, erroneous and multiple entries do occur with some systems (especially in systems that report user-submitted data such as Gracenote & freedb.)

The information supplied by online databases can easily be confused with similar data stored within MP3 or AAC (iTunes format) files. These files actually do contain metadata in the header of the file (called ID3 tags for MP3's). This information is often supplemented using data from online databases within many applications.

What to do with your new CD's

Now that you have a bit of background what do you do to make sure your listeners can get your CD track information without digging into the liner notes? Assuming that you were careful to notify your mastering engineer of any title changes or typos so that your production CDs contain accurate CD-TEXT information, the next step is to tackle the online databases. Unfortunately every database has a different submission procedure but below is a list based on the player in question:

iTunes - insert your CD, click on the first track and select 'file', then 'get info' and enter the track information (You can also click in the edit fields or, on a PC, hit [ctrl]+[I].) When you have entered all the track information go to 'advanced', 'submit CD track names', fill in the requested information and hit [OK].

Windows Media Player - You must send a copy of your CD to AMG. Use the link below to get address information.

There are many players that reference the freedb database. Visit the website to see a list of supported players you can use to submit CD information (see link below) . Popular applications are Exact Audio Copy and Nero.

- Kevin

Links:

[AMG \(now Macrovision\)](#)

[Gracenote](#)

[Muse](#)

[freedb](#)