Dapper Manual

iTunes to Digital Audio Player Sync Tool



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Introduction

Thank you for downloading the Dapper manual. Reading this document will help you immensely in terms of setting up your Digital Audio Player as well as troubleshooting any issues you may have. I know its boring and long, but please take the time to read it to get the most from your DAP and Dapper.

Digital audio players have been designed to play music primarily, and the ability to connect and copy music have typically been secondary goals of the designers, so you will no doubt have picked Dapper as a result. This also means that some DAPs do not always behave well, especially when copying the huge amounts of data we find Audiophiles want to copy. Dapper attempts to mitigate these issues, but reading this manual thoroughly will explain the quirks and solutions to some issues we find with players.

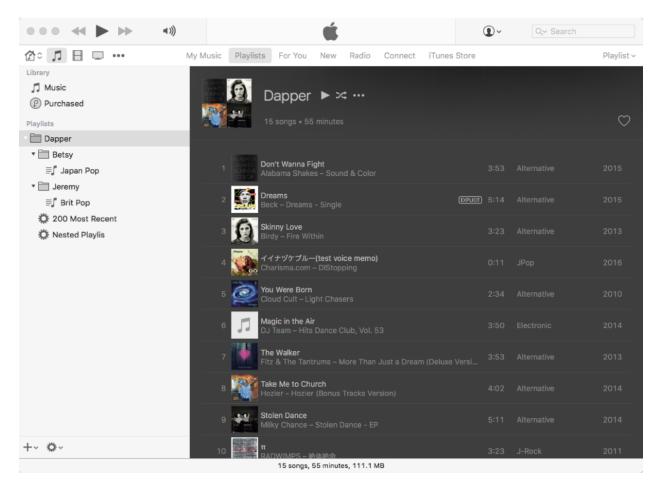
Dapper is an app that copies your iTunes music and playlists to your Digital Audio Player. It supports just about any player that supports it's storage to be seen by your Mac as a drive, either directly or via an app such as SyncMate. You can see a list of DAPs we have tested on the Tested DAPs page on www.map-pin.com, but Dapper can be used by many other models too, so long as they show up on your Mac as Disk Drives.

Dapper requires OSX 10.8.5 or above and is available on the Mac App store. We also have demo versions available to download on our site, and typically those versions are "ahead" of the App Store versions because Apple takes a few weeks to approve and post new versions to the App Store.

If you buy Dapper on the App Store, and run it at least once, then the most recent version on our site will recognize the fact that you have purchased a license and unlock automagically for you.

What Dapper Does - An Overview

Dapper copies your music from your iTunes over to your Digital Audio Player. It also reads, reformats and then copies your playlists to your Digital Audio Player so they will work correctly. In order to tell Dapper what music you want to copy, you will use iTunes playlists. Dapper will look for a folder in your iTunes called Dapper and copy all the playlists in that folder, and the music associated with those playlists to your Digital Audio Player:



Dapper supports nested folders in order to allow you to further organize your playlists on your Digital Audio Player. In the example above, the Betsy and Jeremy folders and the Japan Pop as well as Brit Pop playlists will be copied over to the DAP.

Security and the OS X Sandbox

App Sandbox is an access control technology provided in OS X. It is there to stop any app from accessing any data it should not have access to. So when you first run Dapper, it has no access to your iTunes or disks, including your DAP.

From Apple: "A sandboxed app automatically obtains access to files in arbitrary locations when those files are *explicitly opened by the user* or are dragged and dropped onto the application by the user."

So, in order for Dapper to work, you are going to have to select your iTunes library folder as well as all the DAP drives that show up on your Mac. Dapper has a setup wizard that runs you through this process as well as other options.

Quick Start

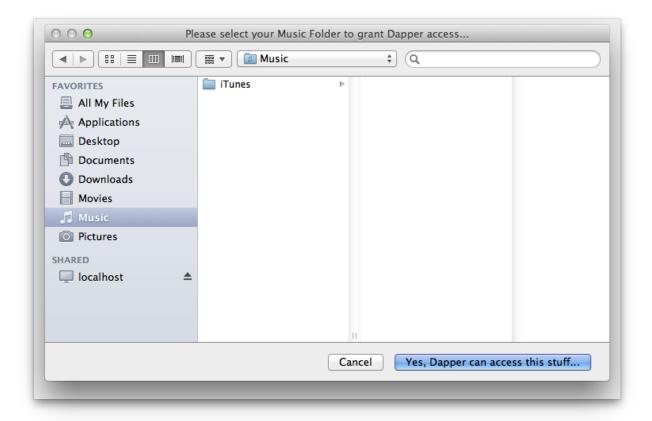
When Dapper starts up for the first time, it takes you through an initial setup explaining what it does:





The main things you are going to do are to select your Music folder to give Dapper access to your iTunes libraries, select each of your DAP drives in order to tell Dapper where to save your music to, and lastly select how you want to distribute your music between the storage areas on your DAP.

Step one - select your Music folder:

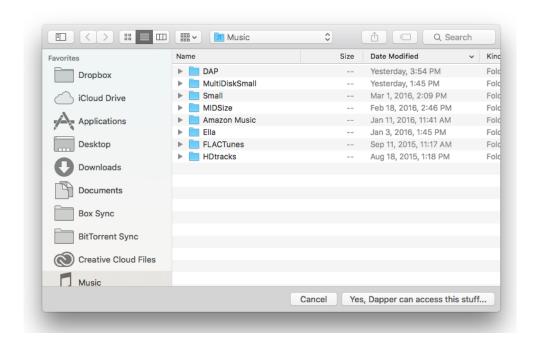


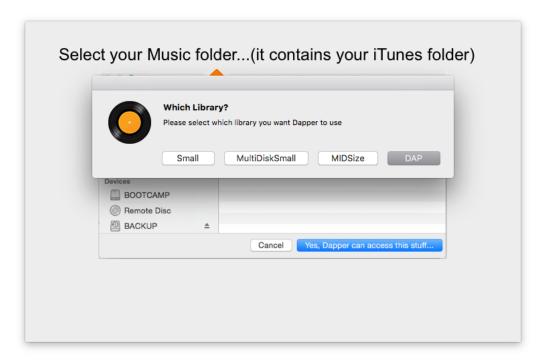
Selecting your Music folder tells Dapper where your iTunes library is, and tells OS X to allow Dapper to read those files. If your iTunes library is somewhere else, select the folder that contains the iTunes library itself.

Notice above that we did not click on the iTunes libraries themselves, but simply made sure i was in the folder. If you select your library only, this will usually work, but the best option is to select your Music folder.

If you are an Audiophile you may even have multiple libraries - once again, don't select the library itself, select the folder that contains the library.

If you do have multiples, as shown below, Dapper will ask which one you want to use:





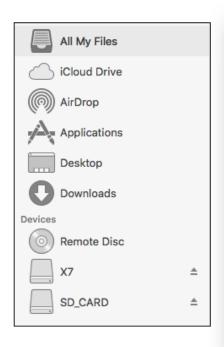
Step Two - select your DAP Drives:

Dapper needs to know where to save your Music and Playlists. In order to do this, it will ask you to select your DAP drives.

When you connect your DAP to your Mac, it should appear in your Mac as either one or two external devices, which will show up on the left hand side of any Finder window. You can open a new finder window by clicking it's icon on the left hand side of your dock:



You will notice on the screen shot below that when the user connected their FiiO X7, it showed up in the finder on the left as two devices - **X7** and **SD CARD**.

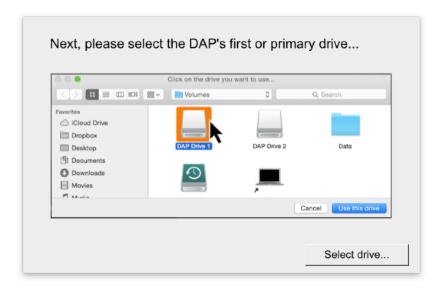


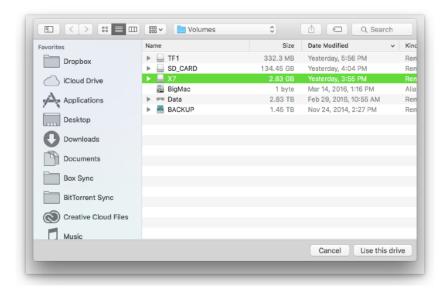


If you are unable to see your DAP on OSX, then Dapper will not be able to see it either, and will not be able to sync to it.

After selecting your Music, Dapper will ask you to select the first or primary drive. If your DAP only shows up one drive, you should select it now. If your dap has two drives, you will want to select the one that is the first, primary or internal drive.

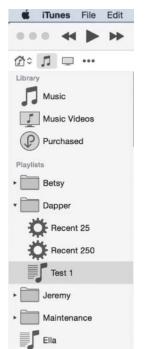
You will be asked for the first drive, and then a second drive. If your DAP does not have a second drive, you can simply skip the step of selecting the second drive.





Step 3 - Add your Playlists

Next, Dapper will walk you through some information. You will need to create some playlists in iTunes that contain the music you want to sync. These playlists should be put into a Playlist Folder named "Dapper" Here is a picture of the playlists portion of iTunes, set up and ready to go.





You will notice on the left that there is a playlist folder named Dapper and inside it are two smart playlists, named Recent 25 and Recent 250, as well as a list named Test 1. Notice how the Dapper summary page above shows that 3 playlists are to be synced.

So, make a folder named Dapper and drag in the playlists you want to sync.

Step 4 - Drag the slider to allocate music across the storage on your DAP

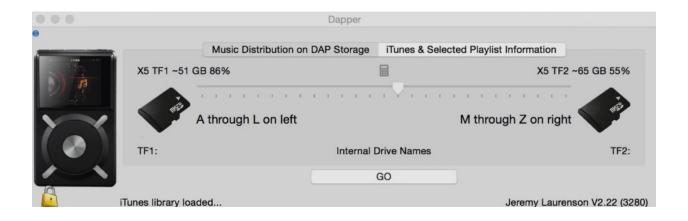
You can now use the slider to choose what music is saved on the first and second storage drives you selected:



You can also click the calculator button in the center of the slider to automatically have Dapper balance the music proportionally across three two.

Step 5 - You're done - Click "Go"

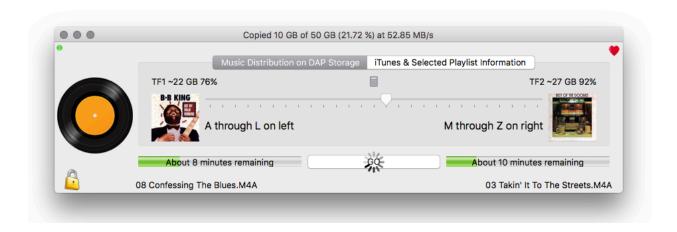
Once you are done, click the lock button to lock your configuration and then click the go button to sync. Bear in mind that the "Go" button only appears if the drives you selected are connected to your Mac.



Getting more speed from your Sync

Dapper is capable of syncing at speeds of well over 300MB/s... so why are you getting slow speeds?

The reality is, with fast SDCards, connected in fast card readers you can get transfer rates of 50MB/s to 70MB/s to your storage cards:



The bottleneck is often caused by the connection between your Mac and your actual storage card... either the cable, the DAP itself, or the card reader you may be using.

The DAP itself is made for Music, not transfer speed, and is a bottleneck.

The MicroSD Card may not be best.

You may not be connecting a great card to a great card reader.

So how can you sync the fastest to get your music on your DAP?

1... Use a MicroSD card reader (especially on your first big sync)

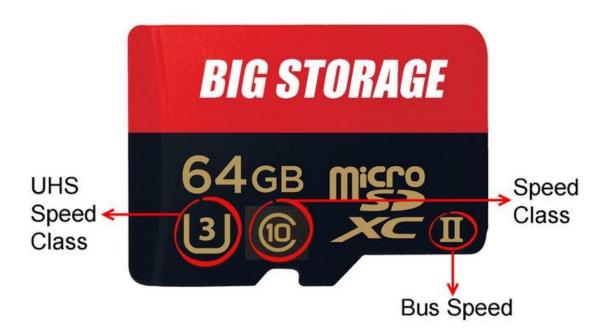
Connecting using your DAP is extremely slow. Most DAPs are made to play music, not to get a fast transfer speed and we regularly see speeds of 1MB/s to 3MB/s... or even lower. The example above is more than ten times faster when we connect the MicroSD card directly to a reader in a Mac!

2... Choose a good card for writing speed (or be patient with your current card)

There are three different standards for speed, and you may see more than one on a card. The original speed marking was a number inside the letter C (middle in the image below). The number denoted the minimum sustained write speed, so a 'Class 6' card would be capable of writing at 6MB/s – that's six megabytes per second. That's a sequential write speed, so it only applies when writing large amounts of data (such as when copying large music files) in sequential memory cells.

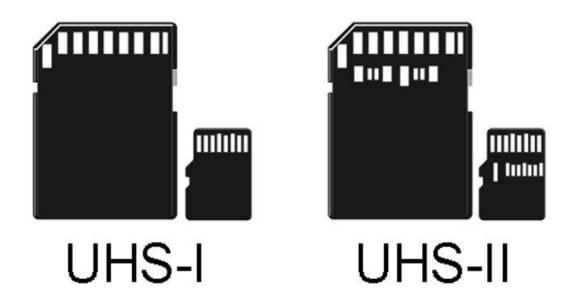
Most Class 10 microSD cards are capable of much more than the minimum of 10MB/s write speed. The SanDisk 200GB cards can do a theoretical 30MB per second on long sequential files. On shorter ones like album art youre going to see lower speeds.

Now, for even better speed on newer cards, this is where the UHS system comes in. It stands for Ultra High Speed, and uses a number in the letter U to denote the class. A UHS class 1 card writes at a minimum of 10MB/s and a UHS class 3 card writes at a minimum of 30MB/s. So basically the U number is a factor of 10 better than the C number, which also maxes out at C10.



You may also see UHS-I or UHS-II on the card. This tells you which technology the card uses. The UHS-I 'bus' can operate at up to 104MB/s, while the UHS-II bus can transfer data at up to 312MB/s. This doesn't mean the card will read and write at those speeds, only the maximums.

At the moment I don't know of any DAPs that actually take advantage of the UHS-II connections on these cards... but thats fine, we're worried about writing to them from your Mac, not your DAP. So UHSII makes a difference. You DAP can read slowly - thats fine:



3... Choose a good card reader (writer) and use that instead of your DAP for big syncs:

Just like the cards themselves, the readers make a difference. Your DAP by itself is not a superspeed card writer. Don't expect much over 2.5Megabytes per second using your DAP, and in some cases if it's also doing other things (like emulating/masquerading as a disk using software) you may see a lot less. So a 90MB/s card in your FiiO X5 is basically trying to squeeze all that data through the X5 emulation software which can do 3MB/s if the planets are aligned or a horrific .1MB/s if its busy.

So, take out the middleman and plug the memory card into a good, fast reader thats connected to your Mac using good, fast USB 3.0! If your Mac is older and only has USB 2.0 ports, theyre going to max out at 60MB/s vs USB 3.0 at 640MB/s. Make sure to plug the reader into a USB 3.0 port directly on your Mac - no hubs, please.

Recommended Cards and Reader

SDCard Reader:

I recommend the Lexar Professional Workflow UR2 Three-slot microSDHC/microSDXC UHS-II USB 3.0 Reader - LRWUR2TBNA which is on Amazon for around \$40



SDCard:

I recommend the Samsung 256GB 95MB/s EVO Select Micro SDXC Memory Card (MB-ME256DA/AM) card available on Amazon for \$199

All these things together help make things faster. You'll never get the theoretical maximum (See the "Up to" text) since Dapper is reading, and writing files over the USB connection to the card you are using, but if you get the best reader, best card and USB 3.0 your transfers will be able to use the added speed in order to help all the operations and improve you speed dramatically - our demo video below uses the best of the best on freshly formatted cards.



My speeds vary, but with the recommended cards and a reader I get speeds around 55-60MB/s. With a 200GB SanDisk card I get only 3-5MB/s.

Connecting Dapper directly to an SDCard instead of via the DAP

When your Mac is connected to your DAP it can see the storage available in the DAP itself and also any external cards you have plugged into the DAP. As I described in the previous section, this is great, but can be very slow.

In order to do an initial sync or a subsequent sync much faster, I recommend plugging the storage card(s) into a card reader connected to your Mac instead of via your DAP after you have done a normal setup:

- 1. Make sure you have run through the normal Dapper setup with any storage cards in your DAP itself.
- 2. Eject the storage cards/DAP from our Mac by using the finder. (Safely remove the device)
- 3. Turn off your DAP.
- 4. Remove any external storage cards from the DAP and connect them to your Mac directly using a USB card reader. (A good one)
- 5. Turn your DAP back on and reconnect it.
- 6. Dapper will now see any internal storage in your DAP as well as the "external storage" which is now directly connected, you can click Go to sync.
- 7. If your Dapper does not show the Go button, you can unlock the config and click each of the icons in the dapper window that represent the internal/external storage and re-select the internal card or the external card.

For a demo video, visit: http://bit.ly/2g7sqsz

Changing Settings in Dapper

Dapper has tons of settings to allow you to change what and how your music is synced. In order to access settings, you unlock Dapper by clicking the lock button and then click the settings gear:



This will open the settings drawer underneath the Dapper window:

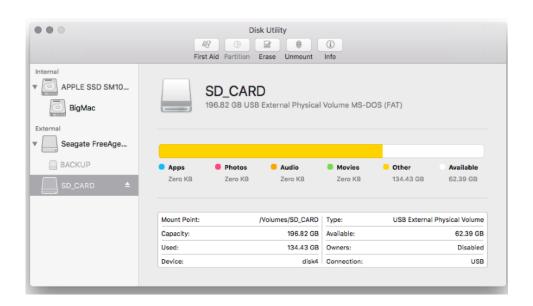


From here you can access all sorts of settings by clicking on the appropriate tab in the settings drawer. When you are done, you can click the gear icon again to close the drawer. We will cover each tab in the "Dapper Settings in Detail" section.

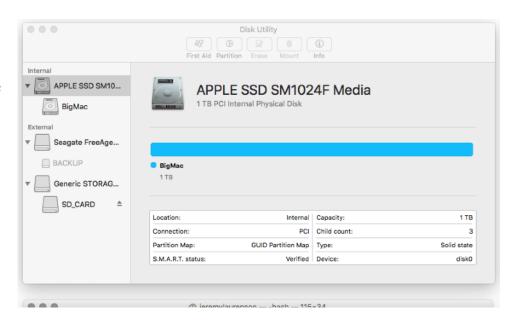
Formatting of SD Cards

For your DAP to read your cards best, they are best formatted in the DAP itself. OS X does not necessarily format SDCards in the way that the players like, and the difference is subtle.

Here is a view of Disk Utility for a card that FiiO X7 likes - notice the format:



Here is a card the X7 does NOT like - a Generic Storage Disk:



Both these disks are formatted as ExFAT and both look like they are named SD_CARD, but one works and the other doesn't.

Dapper Settings in Detail

Let's dive right into the settings available for you to change the behavior of Dapper. In order to access settings, you unlock Dapper by clicking the lock button and then click the settings gear:



This will open the settings drawer underneath the Dapper window:



Automation Settings

Automation settings allow you to set up how Dapper runs and what it does automatically. The goal is that after you have your Dapper settings dialed in you can automate the whole procedure of syncing and ejecting the DAP disks from the Mac so you can simply plug it in, wait for syncing to finish and then disconnect it.



Automatically start Dapper when you log in to your Mac will cause Dapper to always be up and running when you are at your computer. This will make sure Dapper is always running, waiting for you to connect your DAP.

Start Dapper in minimized mode is the setting which will make Dapper start and not have it's window open. It will appear only as a little Dapper icon in your top menu bar. Click it in order to show or hide the Dapper window. This setting helps keep Dapper out of the way when you're not using it, even if it launches on startup.

Automatically sync when the DAP connects will set Dapper so that when your DAP is detected, Dapper will automatically start syncing - as if you clicked the "Go" button. You'll need to set some other settings in the options tab to make this 100% automated, as Dapper usually warns you what its going to change before just proceeding.

In order for this feature to work, you must make sure Dapper's configuration is locked (the lock icon on the main window is locked):



When locked, Dapper checks every few seconds and if a DAP has been connected while the configuration is locked, it will sync.

Show Dapper when syncing and then hide when syncing is complete will allow you to watch the progress if you have enabled minimized mode above. If this isn't turned on the sync will happen entirely hidden, with just the Dapper icon on the menu bar changing color to green as it syncs.

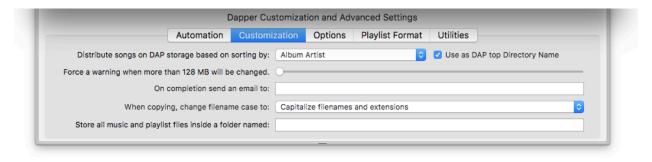
Automatically remove OS X hide files from DAP is a setting which will cause Dapper to clean some of the OS X files that OS X places on your DAP. You may notice as you browse

folders from your DAP itself that you see strange files named <code>ds_store</code>, .trashes etc. This setting will cause Dapper to try remove those before finishing syncing.

Automatically disconnect DAP when done will cause Dapper to eject the DAP disks from your Mac when it finishes syncing so you don't have to do this manually. It solves the issue of the "Disk not ejected properly" notice you may get if you forget.

Customization Settings

Customization settings allow you to customize some of the organization of files on your DAP as well as when Dapper will force you to acknowledge big changes to your DAP. Lets take a look:



This space intentionally blank

Distribution of Music between DAP Storage Areas

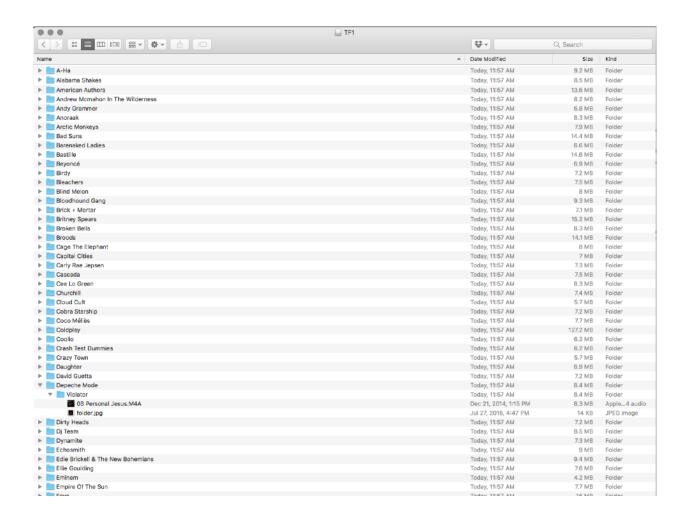
The **Distribute songs on DAP Storage based on sorting by...** dropdown list allows you to determine how you want your music to be allocated between the storage areas in your DAP.



Dapper will look at whatever property you select here, and then use this to alphabetically decide what music goes onto which card. The main window slider allows you to choose where the cutoff is alphabetically between each card.

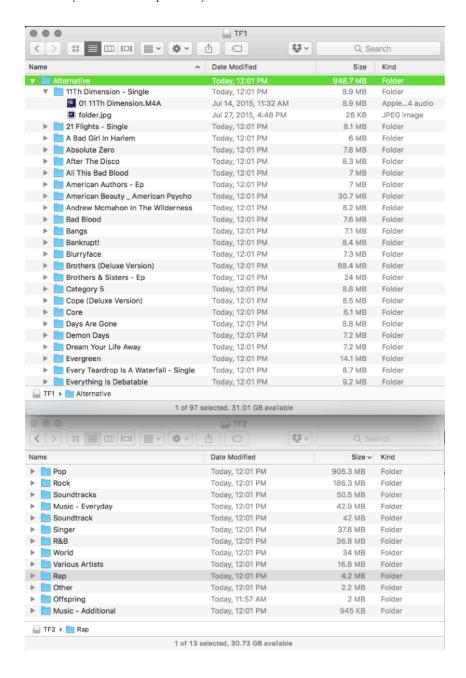
What exactly is being used to sort is what you are selecting in the **Distribute songs on DAP Storage based on sorting by** dropdown list. By default it is Album Artist, but as you can see you have plenty of options to select from.

For example, in the DAP disk shown below, the sorting was based on Album Artist and the cutoff for the first Disk was A though L on left and M through Z on right.

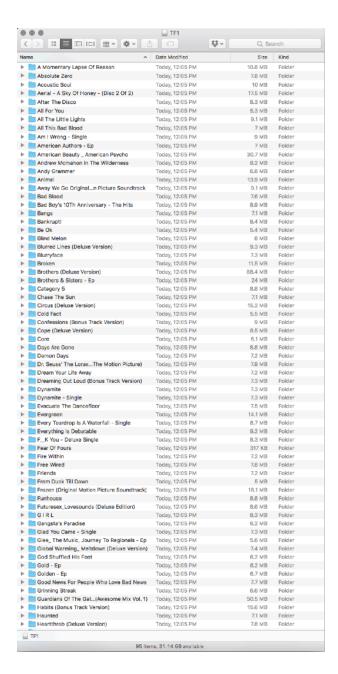


Notice how the directory structure includes a folder for each **Artist**, followed by a folder for each **Album**. Inside the album folder is all of the music as well as a **folder.jpg** file with the album art Dapper has extracted for you.

If you check the checkbox next to the **Distribute songs on DAP Storage based on sorting by** dropdown list, the **Artist** folder is instead replaced by whatever you selected from the list. For example you can sort by Genre and put all your Albums in Genre folders:

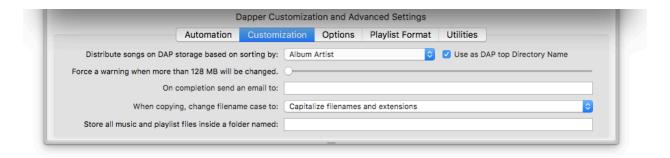


As another example, if you sort by Album *and check the checkbox* to change how the folders are actually organized on the DAP, then Dapper will create a directory structure that just has albums and not artists:



By using the **Distribute songs on DAP Storage based on sorting by** dropdown list and it's associated checkbox for making that also the way the actual files are saved not he DAP you have a huge range of capabilities.

As mentioned before, play around with just a few smaller playlists first and then you can test different settings to see if they are to your liking before applying to a much larger number of files - as this takes time to sync.



The **Force a warning when more than 128MB will be changed** is used in conjunction with automatic syncing. If you turn on automatic syncing, Dapper will automatically run through a sync process whenever you connect your DAP. This is great, unless because of some configuration change you're going to do a lot of changes.

This slider is there as your emergency circuit breaker. You can choose to have Dapper auto sync unless this amount of date or more is about to be changed, in which case it ill prompt you first.

The slider values can be set from 128 Megabytes all the way to 1024 Gigabytes.

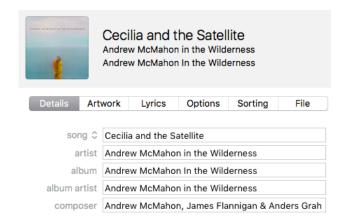
On completion send an email to field allows you to specify an email address to use when sending notices. If this is filled in, Dapper will email this address when a sync is complete. So, for example, you can enter an address to SMS your phone so what you get a notification automatically after a long sync.

On completion send an email to: Install Dapper helper scripts from www.map-pin.com/ds to enable.

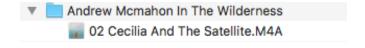
In order to enable this field you need to install the Dapper helper scripts from our WebSite at.

When copying, change filename case to allows you to have Dapper automatically "normalize" the capitalization of files a variety of ways.

For example, if the name of your particular track is mixed as with this example:

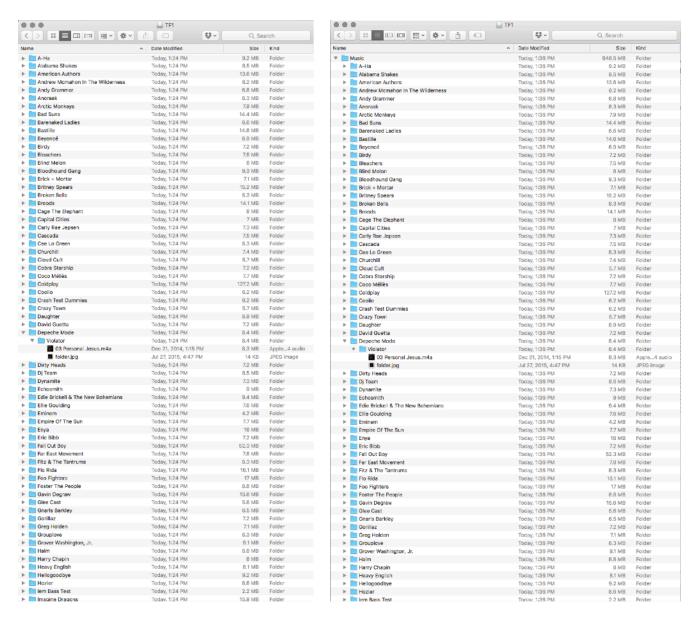


Capitalize Filenames and Extensions causes the files and folders to be capitalized like this:



Store all Music inside a folder named allows you to make sure your music is stored in a folder and not just the root of the DSP drive. This is especially useful when you are running an Android DAP. *Note: if you select this, Dapper will totally ignore whats outside of this folder.*

Here you can see the difference:



This will save your Music inside the folder - there is a separate setting for a playlists folder in the playlist customization screen.

Options Settings

The Options settings in Dapper allow you to turn on or off several different functions in Dapper. Let's ever each in turn:



Show summary, confirm before making changes checkbox causes Dapper to read out to you before each sync what will change:



If you want to automatically sync, you can uncheck this box. You will still be notified despite this if the amount of data that will change is more than the amount you selected on the **Force a** warning when more than xxxx will be changed in the **Customization** area of Dapper's configuration.

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When this message comes up, you can click on the "Show Me" button to see exactly what will change. Deletions are listed in red, new data is listed in green and moves/changes will be shown in blue.

Deletions will be very fast, Moves will be fast, and new files to be copied will be the slowest operation to do.





Changes to be made on Nov 2, 2016, 1:37:42 PM

	Files to be moved or renamed on X1
	ways/02 The Feast And The Famine.M4A ic Highways/02 The Feast And The Famine.M4A (07 MB)
0002 /Music/Flee/Sonic High > /Music/Foo Fighters/Son	ways/folder.jpg ic Highways/folder.jpg (28 KB)
0003 /Music/Flee/Sonic High > /Music/Foo Fighters/Son	ways/06 In The Clear.M4A ic Highways/06 In The Clear.M4A (08 MB)
	Files to be moved or renamed on
None	
	Files to be removed from X1
0001 /Volumes/X1/Music/Fal	Out Boy/10.Touched by Tango_Five Tango Sensations - Anxiety.dff
0002 /Volumes/X1/Music/Edi	e Brickell The New Bohemians/01-Habits (Stay High).m4a
0003 /Volumes/X1/Music/Edi	e Brickell The New Bohemians/30sSilence192-24.m4a
	Files to be removed from
None	
	Files to be copied to X1
0001 /Volumes/X1/Music/Pla	ying For Change/Songs Around The World AudioVideo Version/1-06 Talkin Bout A Revolution.M4A (07 MI
0002 /Volumes/X1/Music/Pla	ying For Change/Songs Around The World AudioVideo Version/folder.jpg (25 KB)
0003 /Volumes/X1/Music/Bas	stille/All This Bad Blood/2-10 The Draw.M4A (06 MB)
0004 /Volumes/X1/Music/Bas	stille/All This Bad Blood/folder.jpg (23 KB)
0005 /Volumes/X1/Music/Bas	stille/Bad Blood/01 Pompeii.M4A (07 MB)
0006 /Volumes/X1/Music/Bas	stille/Bad Blood/folder.jpg (19 KB)
0007 /Volumes/X1/Music/Var	rious Artists/Guardians Of The Galaxy Awesome Mix Vol. 1/01 Hooked On A Feeling.Mp3 (06 MB)
0008 /Volumes/X1/Music/Var	rious Artists/Guardians Of The Galaxy Awesome Mix Vol. 1/folder.jpg (30 KB)
0009 /Volumes/X1/Music/Brit	tney Spears/Circus Deluxe Version/01 Womanizer.M4A (07 MB)
0010 /Volumes/X1/Music/Brit	tney Spears/Circus Deluxe Version/folder.jpg (25 KB)
0011 /Volumes/X1/Music/Brit	ney Spears/Circus Deluxe Version/02 Circus.M4A (06 MB)
0012 Molumas/X1/Music/Sir	Sly/You Haunt Me/01 Where Im Going.M4A (07 MB)
OU 12 / VOIGITIES/X I/WUSIC/OII	
	Sly/You Haunt Me/folder.jpg (07 KB)
0013 /Volumes/X1/Music/Sir	Sly/You Haunt Me/folder.jpg (07 KB) agine Dragons/Smoke Mirrors/05 I Bet My Life.M4A (06 MB)

Use a single thread when scanning and copying causes Dapper to only copy to one card at a time instead of doing both together.

Do not remove empty folders from DAP turns off the function where Dapper will remove empty folders, for example in the case that you have delated an album, Dapper will remove the empty album folder. This setting turns that functionality off.

Scan DAP drive on every sync. This setting forces Dapper to scan the DAP drives for changes every single time you sync. Dapper normally does not re-scan unless the amount of disk cree space reported on the DAP has changed - making syncing happen much faster. DAPs that change files or add data such as index will unfortunately be scanned every time too.

Do not detect new DAPs being connected tells Dapper not to try prompt you that it has detected a new DAP and to allow you to accept the settings for it.

DAP only shares one drive at a time is a setting for some DAPs like Sony DAPS which can only share one of their disk drives at a time for the Mac. This setting enables Dapper to sync essentially just one disk at a time. Dapper will prompt you to eject and connect as needed while it syncs.

Multi DAP Mode and **Key using USB Serial#** allow you to turn on a feature where you may sync several different DAPs to a single iTunes library. Please see the Multiple Dap Mode section.

Trial Run This setting makes Dapper run through the entire sync process without actually copying/deleting or writing any data.

Wait for all threads before ejecting disks is there to only have Dapper eject a completed disk when all syncs have completed. Some DAPs will disconnect both drives when you eject any single drive, and so this setting is there to avoid that issue.

Never delete files on the DAP is useful when you want to manage your library to a large degree. Dapper will only copy new files to the DAP and will not remove anything you may

already have on the DAP. For example, maybe you manually copied FLAC files over and don't want Dapper removing them.

Find "Dapper" anywhere in playlist name will force Dapper to sync all playlists that have the word Dapper anywhere in them. By default Dapper syncs playlists inside a Dapper folder, or with Dapper at the start of the name.

Arrange music in alphabetic folders will cause Dapper to create folders on your DAP labeled A, B, C, D etc. Now all the artists beginning with A will be saved under the A folder. Artists beginning with B will be put into he B folder and so on.

Move files whenever possible is the setting that has Dapper check the files on the dap to see if they should be moved or renamed. So, for example, if you turned on the Alphabetic folders above, Dapper would delete all the existing Artist/Album/Songs and replace them with fresh copies in the new hierarchy. With this move option turned on, Dapper will instead actually just move the file on the DAP, or rename it on the DAP.

The **Compilations dropdown** allows you to select how you want compilation albums saved to the DAP. By default, they will simply be saved like any other Album, listed by Album Artist, or whatever else you may have overridden to. You can have Dapper create a special Compilations folder for compilations and either put all compilations inside, or only put compilations inside when an Album Artist tag is not present in the file.

✓ Move files whenever possible instead of deleting/recopying

✓ No special treatment for compilations

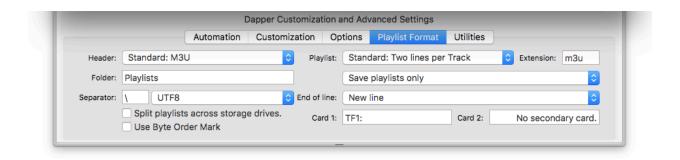
All compilations should be placed in a Compilation folder

Only compilations without Album Artist should be in a Compilation folder

Playlist Format Settings

When you connect a new DAP to Dapper it automatically looks for the settings that best fit your DAP. This includes details on how to write the actual playlist files to the DAP so that each line refers correctly to the songs on your DAP and also so that the playlist itself is named correctly and has the right format.

If your DAP is not automatically detected, or if you want to override the settings, you can do so on the Playlist Format Settings page:



Header: The first item allows you to have Dapper place a standard M3U header as the first line of the playlist file, or just not have any header there. If the header is selected, Dapper will write a single line at the start of the file: #EXTM3U

Folder: If you enter a name here, Dapper will create this folder for you on the DAP and save your playlists inside. It will save them in folders hierarchically if you have them set up this way in iTunes. If you have no name in this field Dapper will simply save all the playlists to the root of the DAP card storage, and not make any hierarchical folders.

Separator: The separator character is the character that Dapper will use in the playlist file to separate the folders from each other and from the filename. So, as an example, if the character is set to "\" as seen in the screenshot above, the playlist will look like this:

#EXTM3U

\Music\Parade Of Lights\Golden - Ep\01 Golden.M4A
\Music\Cloud Cult\Light Chasers\05 You Were Born.M4A
\Music\Marlo Thomas\Thanks And Giving All Year Long\11 The Little Stuff.M4A
\Music\The All-American Rejects\When The World Comes Down Deluxe Edition\04 Gives You Hell.M4A

Whereas if you se it to "/" the playlists will have separators that look like this:

#EXTM3U

/Music/Parade Of Lights/Golden - Ep/01 Golden.M4A /Music/Cloud Cult/Light Chasers/05 You Were Born.M4A /Music/Marlo Thomas/Thanks And Giving All Year Long/11 The Little Stuff.M4A /Music/The All-American Rejects/When The World Comes Down Deluxe Edition/04 Gives You Hell.M4A

Next to the separator is a dropdown menu for the **encoding to use for the text file**. In order for the file to include special characters, the encoding needs to be correct. See the section on Special Characters for more detail. You can select a few different types of encoding from the dropdown menu.

Byte order mark When writing a file using a specific encoding, the text for each character is actually made up of two bytes or characters which, together, define the letter. However, there is not a clear set of rules among operating systems on DAPs as to which of the two bytes used to make up a single character would be written first. By checking the byte order mark checkbox, you are instructing Dapper to write a special character at the very start of the playlist file that can/may/may not be read by your DAP in order to automatically determine what formatting to use. If you are unsure of Unicode and Byte order Marks, you're likely not going to use this setting.

The **Split Playlists across storage drives** setting is in Dapper for Sony DAPs which only allow a playlist to reference songs on the same card as the playlist is on. In the case it is checked each playlist will be written twice - once to each card - but only include the songs that are on the respective card in the playlist thats written. So if you had a "Rock and Roll" playlist with ACDC and ZZ Top on it, the playlist would appear on both cards, but on one it would include AC/DC and the other, on the second card would include ZZ Top.

Playlist format: This field allows you to select whether each song in a playlist should simply be written as a single line, referencing the file - or as two lines where the first line includes data about the actual song name and duration, with a second line including the actual file information:

Standard: Two lines per Track Standard: One line per Track

The two line files look like this:

#EXTM3U

#EXTINF:259, Velvet - a-ha

\A-Ha\25 (Deluxe Version)\29 Velvet.M4A

#EXTINF:226, Talkin' Bout a Revolution - Afro Fiesta

\Playing For Change\Songs Around The World (Audio Video Version)\1-06 Talkin' Bout A Revolution.M4A

#EXTINF:232, Don't Wanna Fight - Alabama Shakes

\Alabama Shakes\Sound & Color\02 Don't Wanna Fight.M4A

#EXTINF:258, Breathe - Alexi Murdoch

\Compilations\Away We Go Original Motion Picture Soundtrack\08 Breathe.M4A

#EXTINF:213, Gives You Hell - The All-American Rejects

\The All-American Rejects\When The World Comes Down (Deluxe Edition)\04 Gives You Hell.M4A

And single lines like this:

#EXTM3U

\A-Ha\25 (Deluxe Version)\29 Velvet.M4A

\Playing For Change\Songs Around The World (Audio_Video Version)\1-06 Talkin' Bout A Revolution.M4A

\Alabama Shakes\Sound & Color\02 Don't Wanna Fight.M4A

\Compilations\Away We Go Original Motion Picture Soundtrack\08 Breathe.M4A

\The All-American Rejects\When The World Comes Down (Deluxe Edition)\04 Gives You Hell.M4A

Extension determines the file name extension of the playlist. Usually its M3U or M3U8.

The playlist saving dropdown allows you to choose whether the playlists are simply copied to the DAP or whether to clean out the playlist folder and copy a fresh set of playlists each time. You would usually leave this at **Save playlists only** in which case any external playlists you made and put into the same folder would not be deleted. If you select **Save playlists and remove old playlists** Dapper will clean out the playlist folder each time and replace just fresh copies from iTunes. If you select **Ignore this folder and save in Root** then playlists will be written instead to the root of the DAP drive and the folder you have listed as the playlist folder will be ignored.

End of line: This allows you to determine whether a carriage return, line feed or both are used at the end of each line of the playlist text files.

Card1 and **Card2** are text fields where you can fill in the internal DAP representation of each storage card. As an example, the FiiO X5 DAP has two storage card slots. Lets say we have our playlist in the device:

```
#EXTINF:259,Velvet - a-ha
\A-Ha\25 (Deluxe Version)\29 Velvet.M4A
#EXTINF:226,Talkin' Bout a Revolution - Afro Fiesta
\Playing For Change\Songs Around The World (Audio_Video Version)\1-06 Talkin' Bout A Revolution.M4A
#EXTINF:232,Don't Wanna Fight - Alabama Shakes
\Alabama Shakes\Sound & Color\02 Don't Wanna Fight.M4A
#EXTINF:258,Breathe - Alexi Murdoch
\Compilations\Away We Go Original Motion Picture Soundtrack\08 Breathe.M4A
#EXTINF:213,Gives You Hell - The All-American Rejects
\The All-American Rejects\When The World Comes Down (Deluxe Edition)\04 Gives You Hell.M4A
```

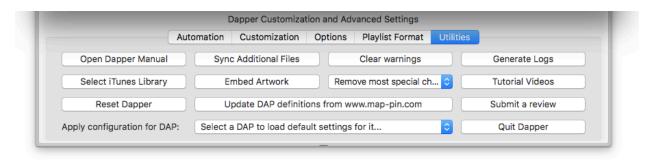
You will notice that the *Playing for Change* artist is in the same list as the *A-Ha* artist, however *A-Ha* songs will be stored on card 1 and *Playing for Change* songs will be saved on card 2.

Internally to the FiiO is knows these cards at TF1: and TF2: and so in order for the playlists to reference the file in the correct location, you would use TF1: and TF2: in the card fields, resulting in this playlist:

```
#EXTM3U
#EXTINF:259,Velvet - a-ha
TF1:\A-Ha\25 (Deluxe Version)\29 Velvet.M4A
#EXTINF:226,Talkin' Bout a Revolution - Afro Fiesta
TF2:\Playing For Change\Songs Around The World (Audio_Video Version)\1-06 Talkin' Bout A Revolution.M4A
#EXTINF:232,Don't Wanna Fight - Alabama Shakes
TF1:\Alabama Shakes\Sound & Color\02 Don't Wanna Fight.M4A
#EXTINF:258,Breathe - Alexi Murdoch
TF1:\Compilations\Away We Go Original Motion Picture Soundtrack\08 Breathe.M4A
#EXTINF:213,Gives You Hell - The All-American Rejects
TF2:\The All-American Rejects\When The World Comes Down (Deluxe Edition)\04 Gives You Hell.M4A
```

Utilities Settings

Utilities settings.



Open Dapper Manual allows you to open the latest version of this document online.

Select iTunes Library allows youth select your Music folder and choose a different iTunes library.

Reset Dapper will reset all Dapper settings and Quit. The next time you launch Dapper it will go through setup again from the start.

Sync additional files allows you to add files outside of iTunes to your DAP - for example a collection of FLAC files. The process is described on the next major section in the manual, titled: "Sync Additional Files: Adding music that is not in iTunes"

Embed Artwork is a utility function that allows you to use the Kid3 ID3 tag editor available here: https://sourceforge.net/projects/kid3/ to take the album art from iTunes and embed it directly into he actual music files. For this option to work, you must have Kid3 installed and also have the Dapper Scripts installed from https://www.map-pin.com/ds

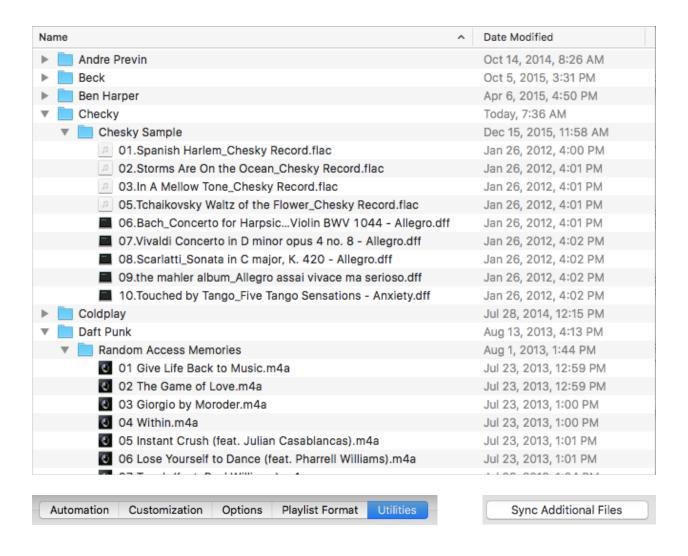
This option will cycle through very single file in your DAP and run Kid3 against it. As a result this can take a lot of time, so when you click the button you will get a popup asking for you to enter a filter - essentially forcing you to put in some text to filter on:



You would, for example, type in "Aerosmith" in order to ember artwork in any Aerosmith file. Or if you type in an album name, it would run through that album. Dapper doesnt let you try every single file all at once simply because it takes an enormous amount of time and power to tag your entire library all in one go.

Sync Additional Files: Adding music that is not in iTunes

Dapper also can copy files that you have on your Mac that are not in iTunes such as DSD, FLAC and other types of files that iTunes does not handle directly. In order to do this, you simply need to make sure your music that you want to sync is organized in folders by Artist and then Album as shown below:

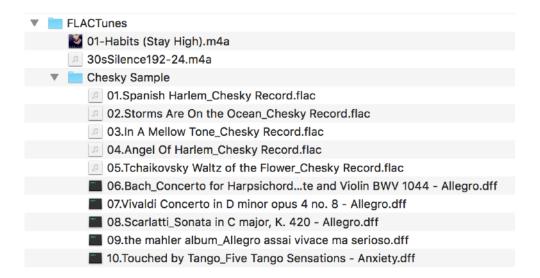


To select the files, open the Dapper settings, click on the "Utilities" tab and click the "Sync Additional Files" button to select the folder containing all the artist folders.

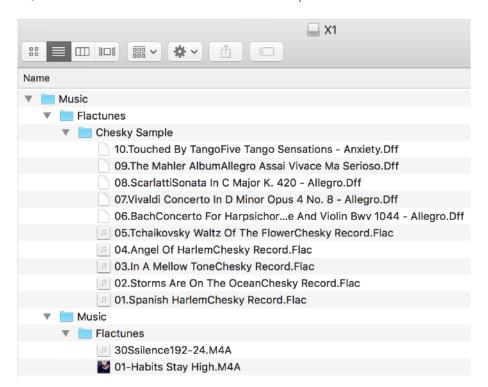
To deselect and stop syncing, click the same button and cancel the selection.

Dapper will read each file, and then use the name of the folder it is in as the Album name, and the folder above that as the artist name. So, be careful of your layout. As an example if some selected files and how they land on the DAP:

Selected Folder: FlacTunes



Notice that the two songs - Habits and 30sSilence both are not in an Album and Artist folder, and the Chesky Sample album is correct, but with no artist. So Dapper will still look at the enclosing directory and categorize the Chesky Sample album as done by artist *Flactunes* because thats it's enclosing folder, and the other two are considered to be by artist *Music* and album *Flactunes*:



Remove Special Characters

In certain songs, albums or artists names you may well have special characters. These range from the / in AC/DC through the ö in Björk all the way to full non-western songs like

イイナヅケブルー by charisma.com.

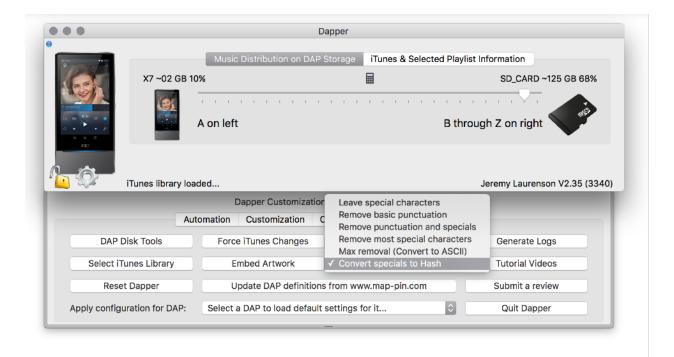
The issue with these special characters is that they can confuse the DAP in several ways.

- 1... The DAP may not be able to read filenames with special characters in them.
- 2... The DAP may not be able to display those filenames properly.
- 3... The DAP may not be able to read the filenames properly inside a playlist.

So what's an Audiophile to do with the album Distopping by Charisma.com?



Dapper has special character stripping capability to help your DAP cope:



By default, Dapper will leave all special characters as-is, but if you are having issues with your DAP being able to play a particular song in a playlist, or on the drive, then you can select a more aggressive setting.

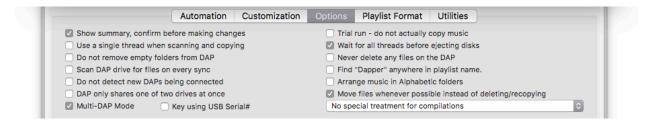
If most of your music just has accents on western characters (such as in Björk) then you can push this setting to the "Remove most special characters" to get good results. If your collection has a lot of non-western characters such as with Distopping, then you may want to try the last option - where Dapper will remove all special characters and also insert a unique code for each song so there are no duplicates.

Update DAP definitions from www.map-pin.com will cause Dapper to connect to your server and get the latest copy of our DAP settings for all the DAPs we have created custom settings for. Underneath this is a dropdown **DAP Selector** that allows you to choose your DAP from a list to apply the settings. Normally Dapper will automatically detect your DAP, but if you want to manually select a set of settings you can use the dropdown to do so.

Multiple Digital Audio Player Mode

By default, Dapper syncs a single Digital Audio Player to a single iTunes library, but we have a lot of folks who have several Digital Audio Players and want to sync them each to their iTunes library.

In order to do this, Dapper has an option in settings called "Mutli DAP Mode" which you can turn on (see bottom left of the settings area below).



In this mode, Dapper will remember the specific settings for each Dap you connect and instead of syncing all the contents in the "Dapper" playlist folder, each DAP will have it's own specific playlist folder in iTunes.

When you turn on Multi Dap Mode, and you connect a DAP, Dapper will display this message including details of the specific playlist folder name to use:



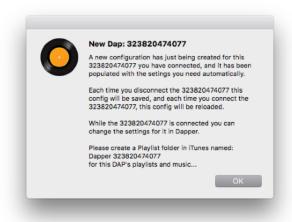
In this case, a FiiO X3 has been connected and the playlist folder Dapper will be looking for is "FiiO X3", and so the iTunes playlist folder looks like this:



In come cases, you may have two of the same kind of DAP you want to sync, in which case you will not be able to simply use the DAP make and model to differentiate your playlist folders. This is what the "Key using USB Serial#" is for.

If you check this checkbox, then Dapper will not use the DAP Make and Type, but will instead use the USB Serial number of the device.

As an example, when you connect a DAP with this checked you get this notice:



Now that you have a playlist folder for your Digital Audio Players, you can configure it however you like, and Dapper will "remember" its configuration whenever you connect it. Make sure to make changes to the settings for your Digital Audio Player in Dapper only when the DAP is connected, as this is how it will know which player the settings apply to.

For a tutorial, see: https://www.map-pin.com/_db/dapper/tutorial.php?url=MULTIDAP

Dapper and Android Devices

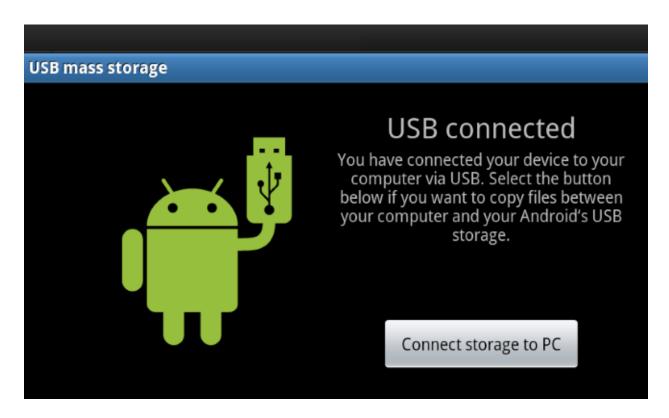
Dapper supports various DAP definitions for Android devices, however depending on the device it may be more cumbersome to use than other Digital Audio Players. This chapter is a must read if you have a DAP that is Android based in order to understand your options.

Android devices support a few different ways of connecting to a computer. They are "USB Mass Storage Mode", "Media Transfer Protocol or MTP" as well as "Picture Transfer Protocol or PTP"

Connecting your device to your Mac allows you to figure out what it supports. Just plug it in and depending on what pops up, you'll be able to tell:

USB Mass Storage Mode

You can tell if your Android device uses this if you see the USB Mass Storage screen pop up on your DAP when you connect to your Mac:



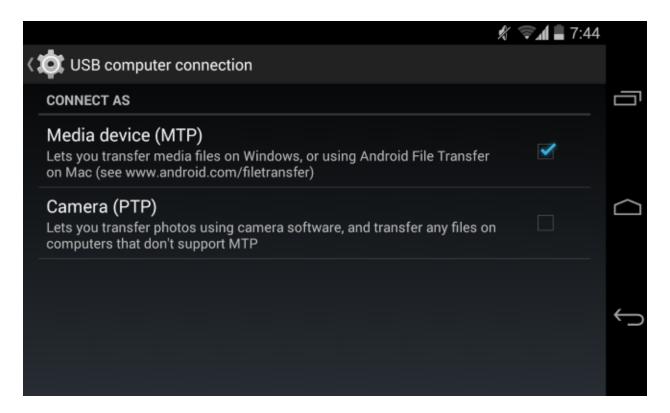
If your device supports this, all you need to do is to click the button to turn on USB Mass storage mode and your device will show up on your Mac as one or more Disk Drives. In fact this is the same as plugging in a USB card reader into your Mac in terms of what you can write and save to it. (Although its probably a lot slower then a direct connection because your device needs to emulate a UDB stick) At any rate, if your DAP drives pop up on your Mac - fantastic, you're done!

You should do all that you can to use USB Mass Storage Mode, including emailing the DAP support folks and telling them you want this enabled, because it makes Dapper use seamless and just works.

Examples of Digital Audio Players that support USB Mass Storage are FiiO X5III, X7 as well as Sony NW-ZX2 and NW-WM1A.

MTP and PTP Modes:

If your Android Device instead shows this screen, you are on a device that does not support USB Mass Storage, and instead supports only MTP or PTP.



MTP stands for "Media Transfer Protocol." When Android uses this protocol, it appears to the computer as a "media device." The media transfer protocol was widely promoted as a standardized protocol for transferring audio files to digital music players using Windows Media Player and similar applications. It was designed to allow other media player companies to compete with Apple's iPod and iTunes.

And theres the rub - its a competitor to Apple, so Apple OS X doesn't directly support these kinds of devices, so we need a workaround to make them show up as disk drives for Dapper to see...

MTP is also a very flakey protocol. You will have noticed this if you tried to use Google's "Android File Transfer" or Onkyo's "XDAP Link" software to copy over any significant number of files. Its prone to just stopping, and needing you to disconnect, reconnect etc. Google "MTP Sucks" for some good reads if you're not convinced.

Unfortunately this flakiness causes flakiness that affects Dapper.

Hidden MTP modes (Astell and Kern devices):

If you have an Astell and Kern device, or some other DAPs with highly custom Android then MTP may actually be enabled for you under the hood and you may not see this screen.... but you have the same hurdle to get your device to show up on your Mac as a Disk.

Now, you are not forced to us MTP mode if your device uses MicroSD cards. You can just plug those cards directly into your Mac and Dapper can sync that way - with phenomenal results in terms of speed... but you have to move the cards around and it also doesn't help you get to the internal storage of your DAP.

Again, email the support people for your DAP telling them you want to enable USB Mass Storage Mode since your on a Mac, and it just works.

If you're forced to use MTP then read on in the SyncMate section about using the 3rd party software, SyncMate, to get access to your DAP:

Using SyncMate to get access to your MTP Based Android device

SyncMate is a third party piece of software, its not affiliated with Map-Pin or Dapper directly, but it allows you to have your device storage show up as a virtual disk on your Mac.

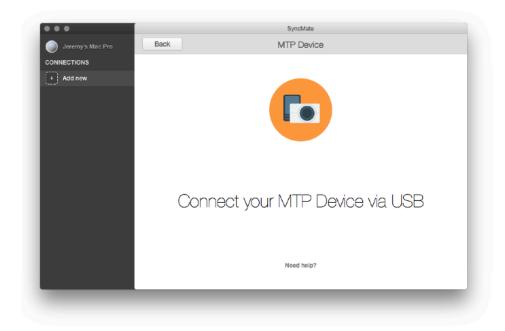
You need the Expert Edition of SyncMate to enable Disk mounting; and that costs \$39.95.

Download SyncMate Free edition, install it on your Mac and launch. "Mount disk" option is available in Expert edition so you will need to upgrade your Free version. You can upgrade at http://www.sync-mac.com (we recommend you to test SyncMate Free Edition prior to upgrading to Expert).



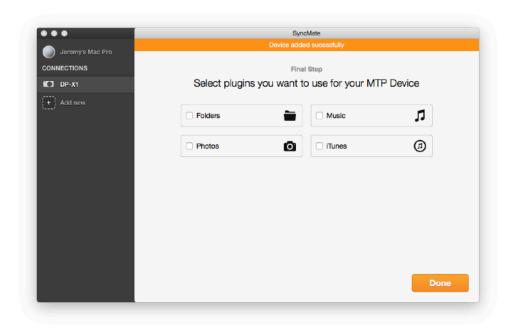
Click 'Add New' link in the left panel.

Choose "MTP Device" from the list

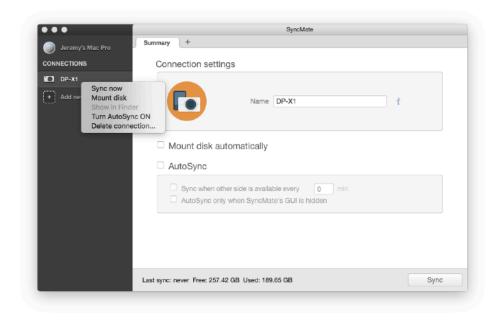


Connect your Android DAP to your Mac. You'll be asked to select plugins, you can ignore theses and click

Done:



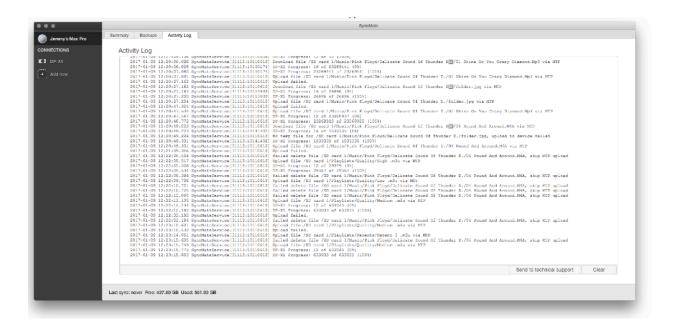
Once the DAP is connected, you can find "Mount disk" option in "Summary" tab and also check the "Mount disk automatically" checkbox:



Enable it and your device will be mounted to your Mac as additional Mac disk.

Monitor Syncing with Dapper on SyncMate

Now that your device is showing up on your Mac as a disk, you can launch Dapper and get syncing. You should watch the SyncMate log window too - you find it by clicking the name if your computer in the SyncMate window and clicking the **Activity Log** tab:



Keep an eye on that tab and you'll see SyncMate trying very hard to apply changes which may or may not be successful all the time. You have to wait for Dapper AND SyncMate to be done before ejecting your DAP.

Again, you should do all that you can to use USB Mass Storage Mode, including emailing the DAP support folks and telling them you want this enabled, because it makes Dapper use seamless and just works.

Hidden Settings

There are some hidden settings that you can tweak. In order to do this, you need top open the **Terminal** application that is inside the **Utilities** folder inside your **Applications** folder of your Mac:



Quit Dapper and in the new terminal window you can type the following commands and press enter:

defaults write com.map-pin.Dapper detailedTimeDisplay -bool yes

Displays time left in more accurate terms eg 1:56:56 instead of "About two hours"

defaults write com.map-pin.Dapper collectAlbumArt 0

Turns off saving folder.jpg files to your DAP

Limiting File Name Length or Path Length

If your DAP only recognizes or supports a certain length of a file name, or path there are two hidden settings that can help.

For example:

/Music/30 Clasica - Locatelli, Pietro Antonio/2016 L'Arte del Violino (Locatelli Violin Concertos) (DSD128 2.0 Bin) - Lisa Jacobs, The String Soloists\03 3. Andante (Locatelli Violin Concerto No. 2 in C Minor, Op. 3, No. 2).dsf

Is 228 characters long. This is too long for some players to handle.

Dapper can shorten this, if you tell it what your limitations are:

defaults write com.map-pin.Dapper longestFileName 200

This tells Dapper to truncate the entire file path and name of the destination file to this number of characters. So, for example if the

defaults write com.map-pin.Dapper longestComponent 200

This tells Dapper to truncate the each item in the file path and name of the destination file to this number of characters.

Getting help or new features

If you have any issues at all with Dapper, please visit us at <u>support.map-pin.com</u> - we are always very happy to help, or add a new feature you may want.

You can find helpful articles, how-to videos and more at www.map-pin.com!

Tested Digital Audio Players

































