



MobileSheets






The Sheet Music Reader














User Guide
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INTRODUCTION

Welcome to MobileSheets, a sheet music reader designed for musicians on Android, iOS and Windows. This user guide will help you get the most out of MobileSheets by providing detailed explanations of every screen and feature. While it's recommended that every user read this documentation in full, the most basic information needed to get started with MobileSheets is covered in the next section. As you will soon find, MobileSheets has a vast number of features and options, so you will most likely find yourself coming back to this document once you have some experience with the application. The table of contents at the top will help you skip right to the section you need.

GETTING STARTED

This section is going to briefly cover the essential features you need to know about to start viewing songs in your library. Later sections will cover the various parts of the application in detail.

THE LIBRARY SCREEN

If this is your first time loading up MobileSheets, your library will be empty and a help window will be displayed linking to this manual. Once that window is closed, a prompt will be displayed asking if you want MobileSheets to manage your imported files. This is an important setting, as it determines whether MobileSheets will copy imported files into a storage location it manages, or if it will use files from the locations you specify. It is normally recommended to select "Yes" to let MobileSheets manage your files, but if you have directories already set up with your files organized as you like, select "No". This setting can always be changed later under Settings->Storage. For more information on this, see the section on [storage](#).

Once the prompts are gone, you will see the main library screen. The image below shows this screen with numbered boxes corresponding to the areas of the screen you will interact with when creating and loading songs.

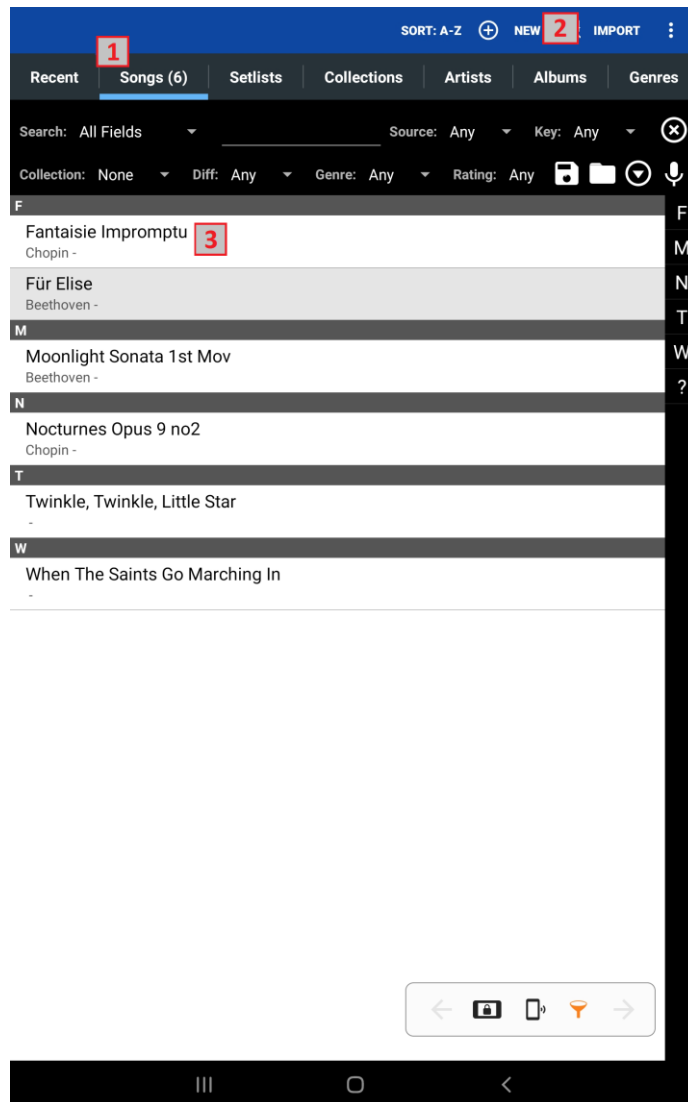


Figure 1 - The library screen

1. **Library tabs** – These tabs let you switch between the various lists of data in your library. For this introduction, the only tab that will be used is the songs tab. For more information on the various tabs and their ordering, see the [library management](#) section or the section on [configuring tabs](#).
2. **Import** – Provides a list of different options for importing files. For now, we will focus on the “Local File” option. Importing files using any of the options listed is the fastest way to create songs, but you will not be able to enter detailed information or setup audio and MIDI. See the sections on [importing](#) and [batch importing](#) for more details.
3. **Active List** - Displays all items that correspond to the selected tab that match the current filters. If the list is currently displaying songs, tapping on an entry in the list will load that song.

Now that you are familiar with the basic layout of the library screen, the next step is to create a song by importing a file.

IMPORTING A FILE

For this example, an iPad will be used with a Macbook. When the iPad is plugged in to the Macbook using a USB cable, you can use a Finder window to connect to the tablet, and switch over to the Files section. You can then drag a folder containing your PDFs over to MobileSheets and the contents will be copied to the iPad.

Now switch to your iPad. Tap the “Import” button at the top right and then tap “Local File”. This will take you to Apple’s file picker. On the left side, you can tap “On My iPad” to view files you copied into the MobileSheets folder. Tap the MobileSheets folder, and then tap the folder containing the PDFs. Select the PDFs you want to import and then tap Open. You will now see an “Import Settings” dialog. Uncheck the “Automatically crop pages” checkbox if you don’t want MobileSheets to crop your documents (you can always change the cropping later as the original file is not modified) and then tap “OK” to finish. Your new songs will be visible in the songs list. You can also import files from iCloud Drive in a similar manner, which is often more convenient than copying the files to the iPad.

LOADING YOUR SONG

Tap on the new song in the list to load it. The library screen will slide over and the PDF will be shown. To turn pages, tap the left or right sides of the screen. To access the overlay, tap the center of the screen. A quick overview of important features will be described below.



Figure 2 - The song overlay

1. **Page slider** – This slider will let you preview and jump to any page in the song. You can also tap the numbers on the right side to enter a specific page.
2. **Display mode button** – Tapping this button will display a dialog with options for configuring the display mode and other related display settings. The default display mode to use for all songs for the current tablet orientation will be displayed at the top. You can change the mode for the current able tablet orientation by selecting a new value from the dropdown. The following display modes are supported:
 - a. **Single Page** – Shows one page at a time, and scrolls pages horizontally.
 - b. **Two Pages** – Displays two pages side-by-side. When selected, an additional icon with a “1” will be shown at the bottom left of the overlay. This lets you control how many pages are advanced at a time. This mode is only available in landscape orientation.
 - c. **Half Page** – Pages advance half a page at a time. This provides a way to preview the top of the next page while playing through the bottom of the current page.
 - d. **Vertical Scrolling** – Pages are scrolled up and down, and tapping on the sides scrolls the next section into view.

3. **Page Scaling Button** – Displays a dialog with options that determine how the current page is stretched to fill the screen. By default, the “Fit Screen” option will ensure pages are made as large as possible without changing the aspect ratio (the image will not be distorted). If you choose one of the other options, the page will be stretched to fit the screen as specified.

You now know the basics for song creation and how to view a song. This barely scratches the surface of what MobileSheets has to offer though, so continue reading to learn about the other great features that are available.

LIBRARY MANAGEMENT

In order to get the most out of your library, it is important to understand what songs are, how they are organized and grouped, and the fastest ways to find the songs you want. This section will focus on the library screen and the various supported tabs that help you organize your library.

To start, a song is composed of one or more files (images, PDF, text, or chord pro), metadata (title, artists, albums, etc.), audio tracks, and MIDI commands. Other than having a title and a file, everything else is optional. Songs can be grouped by attributes such as artists, composers, albums, genres, etc, as well as setlists (ordered lists) and collections (used for quick filtering). The same song can show up in many different groups – there is no limit. The more details you add to songs, the more options there are for filtering and quickly locating them. By default, the library has the following tabs at the top:

[Recent] [Songs] [Setlists] [Collections] [Artists] [Albums] [Genres]

These are the most commonly used tabs, but there are other supported tabs as well, such as composers, keys, and bookmarks. To learn about selecting which tabs to display and their order, consult the section on [configuring tabs](#). The different types of tabs will be explained below, as well as the data they hold.

- **Recent** – Displays a list of all songs and setlists that been recently created and/or loaded. This lets you easily keep track of what songs and setlists you have recently accessed, and also provides a mechanism to let you quickly load any of those items if you wish to play them again. Tapping on any entry in this list immediately loads that song or setlist.
- **Songs** – Displays all songs in the library. By default, songs are sorted alphabetically and split up by the letter they start with (sorting and filtering will be discussed [later](#)). Filtering can be used to quickly find songs in this list, as well as the [alphabet list](#).
- **Setlists** – Displays all setlists in the library. A setlist is an ordered list of songs. When a setlist is loaded, all songs are loaded at once, which lets you easily page between those songs without interruption. This is perfect for performances where you know the order of the songs you will be playing and want them all accessible at once.
- **Collections** – Displays all collections in the library. A collection is a list of songs that is primarily used for filtering purposes, but like other group types, can also be used just to organize lists of songs. Collections can be used to divide the library based on the types of songs you want visible. For example, if you play in multiple bands, collections can be used to create mini-libraries only containing songs that pertain to each band. This lets you switch what songs are listed with a couple taps. Filtering by collections will be covered in the section on [filtering](#).

- **Artists/Albums/Genres/Composers/Source Types/Keys/Signatures/Years** – All of these tabs are used to group songs based on a particular field. Songs can be associated with one or more of each of these types. For example, a song can be associated with multiple artists if needed or no artists if that field isn't populated in the song. Tapping on an entry in one of these lists will view the list of songs associated with that entry. Tapping on "Load All" will load all songs for viewing at once, whereas tapping an individual entry will load just that song.
- **Custom Group** – This is a unique tab as it can be named whatever you want. For example, if you want to group songs by instrument, you can change the [custom group name](#) to "Instruments" in the settings and this tab will then read "Instruments". Besides the custom name, this tab behaves exactly like all other song groups listed above.
- **Bookmarks** – This tab shows all bookmarks that have been created and made visible on the library screen. Tapping on a bookmark will load the song that owns that bookmark, and will jump to the bookmarked page. More details about bookmarks can be found in the [bookmarks](#) section.

MobileSheets lets you enter as much or as little information as you desire for each song. This flexibility lets each user determine what information is critical for organizing their library. What is really important is the ability to quickly locate any song when needed. The next section will cover the various supported methods of filtering and locating songs.

FILTERING

At the top of the library screen, the following row of controls can be seen:

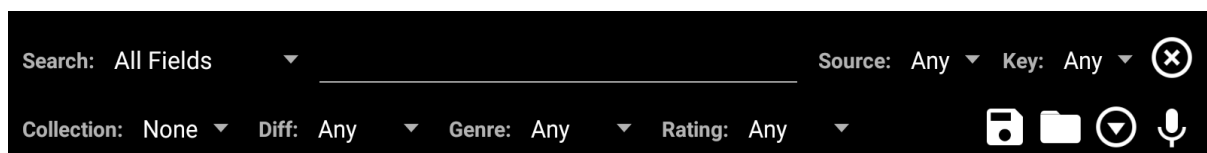







Figure 3 - The various filters

This collection of controls provides a number of different ways to filter the current list of entries on the library screen. The various filter fields are explained below:

- **Search:** The search field can be used to filter the list so that only entries that match the search phrase will be shown. The default search type is "All Fields", which means that the search phrase is compared against every field of every song. This means that if you type "abc", a song whose title contains "abc" will be shown as well as another song whose artist is "abc". If you select a specific field to search against, such as "Album", then only that field will be considered when matches are found. When viewing group types, the search text is compared against both the group and all of its

songs to ensure that it either has a matching title or contains at least one song that matches.

- **Source:** Filters on one or more matching source types.
- **Key:** Filters on one or more matching keys
- **Collection:** Applies a filter based on collection.
- **Diff:** Filters on difficulty. Only songs with a matching difficulty will be shown.
- **Genre:** Filters on one or more matching genres.
- **Rating:** Filters on rating. Only songs with a matching rating will be shown.
-  : Displays a menu to save or manage the current filters. If “Save” is selected and filters were not previously saved or loaded, a prompt is displayed to name the new filters. Otherwise, the previously saved or loaded filters will be updated. If “Save as” is selected, a prompt is displayed for a name. If the name matches an existing filter, it will be updated, otherwise a new entry is created. If “Manage Filters” is tapped, a dialog will be displayed where saved filters can be deleted by tapping on the “X” next to their name.
-  : Displays a list of saved filters. Tapping on an entry will load those filters.
-  : Provides a list of additional filters, including keywords, custom, custom2, metronome and audio filters. The first three are text fields, much like the search text described earlier, and the text entered must match the values in the songs for them to be shown. The other listed fields are group types such as composers which behave like the others listed above. Metronome is a filter that can be used to check if songs have had their metronome settings configured or not. Audio files is a filter that can be used to check if songs have associated audio. The “Clear additional filters” button will clear any selections made on this dialog. While any additional filters are present, the circle icon will be colored green.
-  : Initiates a voice search. Any entries that match the spoken words will be shown in a popup window. Tap on one of the entries to accept that selection (equivalent to tapping on that entry in the list). Tap outside the window to cancel the voice search.
-  : Clears any filters.

For all group filter fields, four different filter modes are supported – Include, Exclude, Unassigned and Assigned. These types are explained below:

- **Include** - Every song must be included in one of the selected groups to be shown.
- **Exclude** – Songs are only shown if they have not been added to any of the selected groups.
- **Unassigned** – Only songs that have not been added to a group of the given type are shown.

- **Assigned** – Only songs that have been added to a group of the given type are shown.


ALPHABET LIST

In addition to the filters described above, another import tool is the alphabet list. At the right side of every list on the library screen is a list of letters. This list is referred to as the “alphabet list” and is composed of letters that entries in the list start with. Tapping on any of these letters will scroll items starting with that letter into view. Tapping on the ‘?’ in the alphabet list will select a random item from those in the list. If a filter is applied to the list, reducing the number of items, the characters in the alphabet list will change to reflect the items in the filtered list.

One useful feature of the alphabet list is the ability to match on multiple characters at the start of song titles. To do this, long press a letter in the alphabet list and a second list of letters will be displayed. This second list is composed of all of the second letters of words that started with the first letter. You can tap any of those letters to be taken to the first word that starts with those two letters, or you can long press one of those to be shown the third letter of every word that started with those two letters. In this way, you can drill down to find a specific group of words very quickly by long pressing. For example, if a song title started with the word “Lucky”, you could long press “L” followed by “U” and then tap “C” to be taken straight to that section. In most cases, the second letter is all that is required to find the desired song.

Now that you have the necessary tools to filter entries, the actions that can be taken on those entries will be covered.

THE ACTION BAR

At the top of the library screen, you will see a row of icons and text with a blue background. This section is known as the action bar. The action bar reflects what actions are available for the current tab and, if items are selected in that tab’s list, what actions can be performed on those items. If you long press an item in any list on the library screen, it will start the multi-selection mode, which puts checkboxes next to the items to show which ones are selected. When this occurs, the action bar will display different actions that can be performed on these items. For the songs tab, this would include actions like “Copy Song” or “Edit Song”. To exit multi-selection mode without performing any actions, hit the tablet back button or tap the checkmark at the left side of the action bar. If an action cannot fit at the top of the screen or is not a frequently used action, it will show up in the overflow menu, which is accessible through the  icon at the top right of the screen. Tap this icon to see additional commands in a dropdown menu.

While there are a large number of actions spread across the tabs, most of the actions are the same for tabs of the same type (i.e. groups like artists and albums). Common actions for songs, groups and setlists will be covered below, as well as actions that are specific to certain tabs.

COMMON ACTIONS (NO SELECTION)

- **New** – Creates a new instance of whatever type is specified by the selected tab. If the Songs or Recent tab is selected, tapping this action will display the [song editor screen](#), which is used to create a new song. If you are on another tab such as Setlists, Artists or Albums, tapping this action will create a new group of the selected type and take you to the [group editor](#).
- **Import** – Provides a number of different ways to quickly create songs from files. While this is the fastest way to create songs, most of the options will create songs without metadata, audio files or MIDI commands. These fields would need to be added by editing the songs in the song editor. The import action supports importing from the local tablet SD card, Dropbox, Google Drive, OneDrive and external applications. There is also a batch import feature that can import all files from a selected directory and sub-directories, and a batch audio import feature for creating blank songs from audio files. Lastly, a CSV and PDF bookmark import feature is available to split up large PDFs into a list of songs with relative ease. All of these options are covered in more detail in the [import section](#). If the import action is used on a group tab such as setlists or collections with an active group (meaning you are viewing the list of songs under that group), any new songs will be added to the active group. This can be used to import new songs directly into an existing group.
- **Add Placeholder** – Creates a new song with a single blank page in it. This can be used to create and prepare a song that will later contain a real file instead of blank pages.
- **Connect Tablets** – Allows multiple devices to be connected using wifi or bluetooth. The leader device can load songs and setlists, and turn pages on the follower devices. See the section on [connecting devices](#) for more information.
- **Connect to Companion** – Initiates a connection to the [MobileSheets Companion App](#). The companion app can be used to manage the tablet library on a Windows PC. A MacOS version is not currently available but is planned for the future.
- **Sync Library** – Synchronizes the current device to another device, a cloud folder or a backup file. See the section on [synchronizing device libraries](#) for more information.
- **Manual** – Downloads the latest version of the manual (if necessary) and opens it inside MobileSheets.
- **Settings** – Enters the [settings screen](#) for MobileSheets. These settings can help you get the most out of MobileSheets by changing the behavior of the application.

GROUP ACTIONS (NO SELECTION)

- **Edit** – If no group has been tapped (meaning the list of groups is displayed), tapping this action will enter the [group editor](#) for the currently selected tab. If a group has been tapped (meaning the group’s songs are displayed), tapping this action will edit the selected group.
- **Sort** – When viewing the list of groups on a given tab, you can sort the list by “A-Z”, “Date Created” and “Date Modified”. When a group is tapped to view its songs, you can also sort the list of songs inside the group. The song sorting options include “Manual”, “A-Z”, “Shuffle”, “Date Created” and “Date Modified”. Manual sorting means that the order of the songs is user specified, A-Z sorting means that songs are ordered alphabetically and shuffle randomly orders songs. The sorting selection is saved per group. When MobileSheets is exited, the order of a shuffled group will change the next time the application is loaded.
 - a. Reshuffle – If the sort mode is currently “Shuffle”, this will reshuffle the list.

TAB SPECIFIC ACTIONS (NO SELECTION)

- **Recent Tab**
 - a. Clear List – Clears all of the recent entries from the list.
- **Songs Tab**
 - a. Sort – Changes the way songs are sorted in the tab. The selections include “A-Z”, “Date Created” and “Date Modified”, or the option to sort on one of the song fields such as Custom. You can also toggle whether the sort is ascending or descending (i.e. A-Z versus Z-A)

ACTIONS FOR SELECTED SONGS

Common (One song selected):

- **Edit Song** – Displays the [song editor](#) to begin editing the selected song.
- **Copy Song** – Creates a copy of the selected song in the [song editor](#) that can be modified before adding it to the library. If copying a song that uses a text or chord pro file, a dialog is displayed to let you choose whether to use the same file or copy the contents into a new file.
- **Swap File** – Swaps out one of the song’s files for another. The process for swapping a file is covered in more detail in the section on [file swapping](#).
- **View/Edit Notes** – Displays a dialog containing notes entered for the given song. These notes can also be viewed through a button on the [song display screen](#).

- **Load Start of Song** – Loads the given song and starts at the first page. This is normally the default behavior, but if the [“Always Load Last Viewed Page”](#) setting is enabled, this is a quick way to load the first page of the song.
- **Load Last Viewed Page** - Loads the given song and displays the last page that was viewed.

Common (One or more songs selected):

- **Edit** - Opens the [batch edit dialog](#) to change the metadata for multiple songs at once.
- **Delete Song** – Deletes the selected songs from the library and optionally deletes the files associated with them. The songs will be removed from any groups that were referencing them. More details can be found in the section on [deleting songs](#).
- **Share** – Tapping this action will display a list of supported ways to share or export the selected songs. This list will include any external apps that support sharing as well as options like Bluetooth or “Copy to Clipboard”. More details can be found in the sections on [sharing songs](#), [.msf files](#) and [exporting songs and setlists](#).
- **Add to Setlist** – Provides a list of setlists to choose from and adds all selected songs to the selected setlist.
- **Remove from Setlist** – Provides a list of setlists to choose from and removes all selected songs from the selected setlist.
- **Add to Collection** – Provides a list of collections to choose from and adds all selected songs to the selected collection.
- **Remove from Collection** – Provides a list of collections to choose from and removes all selected songs from the selected collection.
- **Create Setlist From Songs** – Creates a new setlist and adds the selected songs to it. You must enter the name for the new setlist.
- **Create Collection From Songs** – Creates a new collection and adds the selected songs to it. You must enter the name for the new collection.
- **Print** – Uses one of the installed print services on the device to print the selected songs. See the section on [printing](#) for more information.

It should be noted that if you are viewing a group’s list of songs, and you select one or more songs, you will see a “Remove” option at the top instead of “Delete Song”. This will remove all selected songs from the currently viewed list. A “Delete Song from Library” action is available at the end of the overlay menu instead if you wish to delete the song. Additionally, all of the options from “Add to Setlist” and below are also available when viewing a group’s list of songs without any selections. In this case, all of the group’s songs are used for the action.

ACTIONS FOR SELECTED GROUPS

Common (One group selected):

- **Edit** – Loads the [Group Editor](#) for the selected group.
- **Copy** – Prompts for a new name, and copies all of the songs of the selected group into a new group with the provided name.
- **Rename** – Renames the selected group.

Common (One or more groups selected):

- **Delete** – Deletes all selected groups. This does not delete the songs they contain – it just updates those songs by removing their references to the groups.
- **Share (Setlist only)** – Displays options for sharing or exporting a selected setlist into a .mss or .msf file. If one of the share options is selected, the resulting file can be shared using the application you select. See the section on [sharing songs and setlists](#) for more details. If one of the export options is selected, it will write the selected setlist into a .mss or .msf file stored on the tablet's SD card. See the section on [exporting songs and setlists](#) for more details.
- **Add Songs to Setlist** – Adds all of the selected group's songs to a given setlist.
- **Add Songs to Collection** – Adds all of the selected group's songs to a given collection.
- **Remove Songs from Setlist** – Removes all of the selected group's songs from a given setlist.
- **Remove Songs from Collection** – Removes all of the selected group's songs from a given collection.
- **Create Setlist from Songs** – Creates a new setlist from the songs of the selected groups.
- **Create Collection from Songs** – Creates a new collection from the songs of the selected groups.
- **Print** – Uses one of the installed print services on the device to print the selected songs. See the section on [printing](#) for more information.

Setlist Tab:

- **Generate Song List** – Sends the setlist's list of songs (as text) to the program you select. Unlike the main sharing feature that generates files to be shared, this feature just generates a list of song titles that can be placed into an email or written to a document. The format of the title that is used for each song can be controlled through the [Generate Song List Format dialog](#).
- **Load Start of Setlist** – Loads the selected setlist at the first page of the first song.

- **Load Last Viewed Page** – Loads the selected setlist at the page that was last viewed when the setlist was loaded.

FLOATING TOOLBAR

At the bottom right corner of the library screen, a floating toolbar with icons can be seen. The toolbar can be seen in figure 4 below:



Figure 4 - The Floating Toolbar

These icons are explained below in order from left to right:

- **View Previous Button** – If a group was selected in the list, and songs are being displayed, tapping this button will go back to viewing the list of groups.
- **Performance Mode** – Tapping on the performance mode button will enable performance mode and turn the button orange. In performance mode, most features are disabled except for page turning and the quick action box. See the section on the [song display](#) and [performance mode](#) for more details.
- **Connect Tablets** – Displays the dialog that is used to connect multiple devices together so that one leader can control the followers. See the section on [connecting devices](#) for more information.
- **Enable/Disable Filters** – Tapping this button will show or hide the filters at the top of the library screen.
- **View Last Song** – If a song was loaded, tapping this button will go from the library screen back to the song display to continue viewing that song.

It should be noted that the toolbar can be hidden if desired by unchecking Settings->Library Settings-> Show Floating Toolbar.

CONFIGURING TABS

Both the number of tabs shown and their order can be configured in MobileSheets on the settings screen. To access the tab order dialog, load the Settings through the action bar overflow menu then tap on the “Tab Selection and Order” item under “Library Settings”. The following dialog will be displayed:

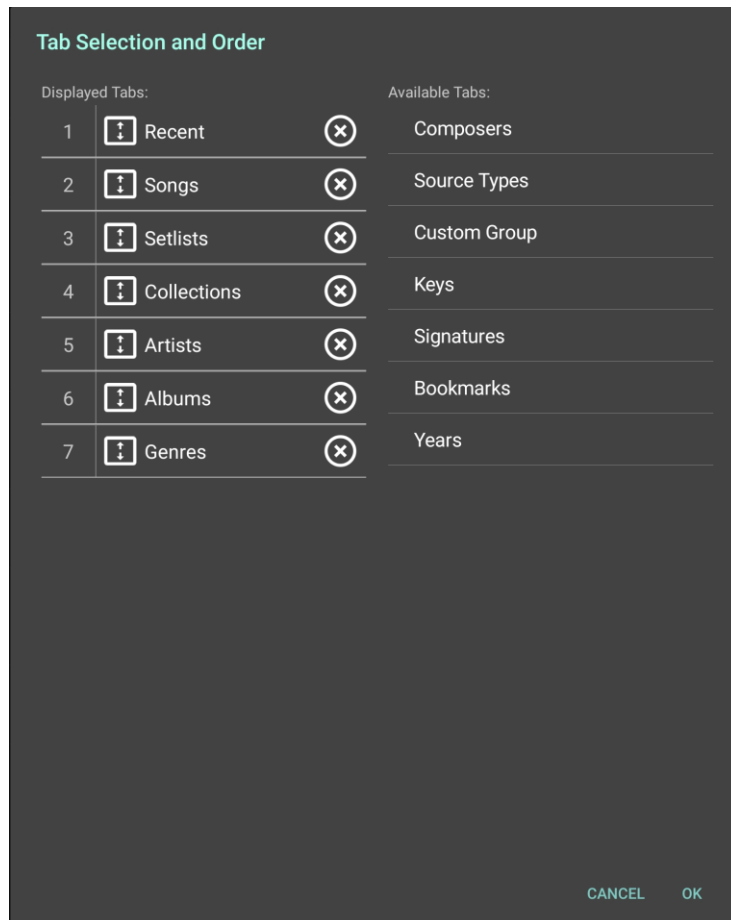


Figure 5 - The Tab Selection and Order Dialog

The left list shows tabs that are currently visible on the library screen. The right list shows all tabs that are currently not being shown. A tab can be added to the list by either tapping the entry in the right list, or by dragging the tab name from the right list to the left list. Tabs can be reordered by dragging the up/down arrow boxes in the left list up and down. Tabs that are currently visible can be removed by tapping the “X” next to their name in the left list. To accept changes to the tab ordering, tap the OK button at the bottom of the dialog.

SETTING UP MULTIPLE LIBRARIES

In certain situations, it may be easier to have multiple independent libraries instead of using a single library with filtering. To create a new library, go to Settings->Library Settings->Switch Library. The following screen will be displayed.

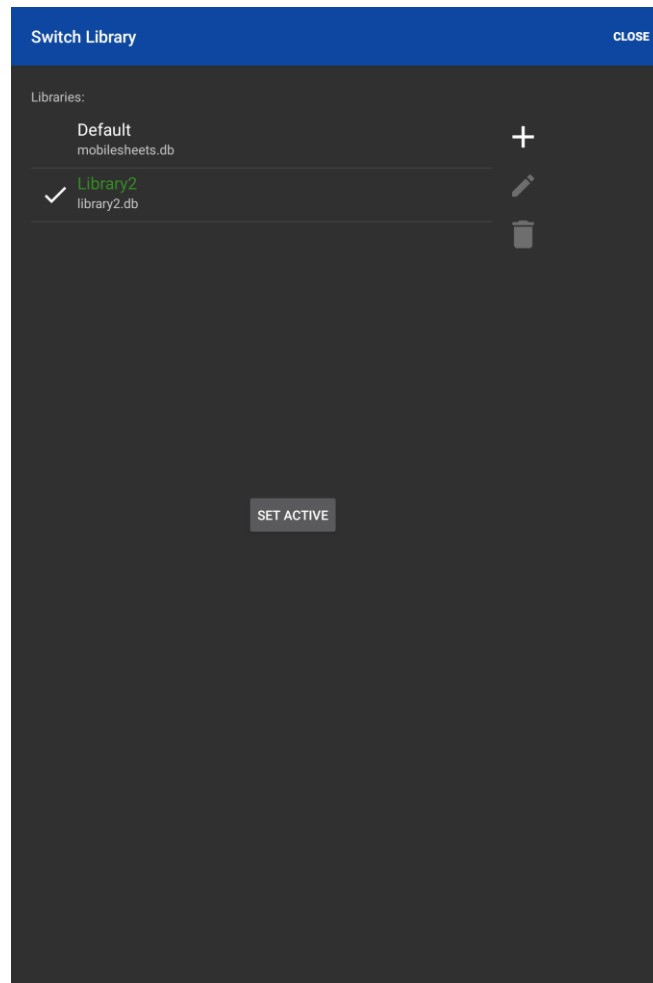


Figure 6 - The switch library screen

To create a new library, tap the **+** icon and then enter the name for the library. A database file will be created for the library with the same name. The active library is shown with a checkmark next to it. To switch libraries, tap the entry in the list and tap the “Set Active” button. To rename a library, tap the **✎** icon, and to delete a library, tap the **🗑** icon.

Currently, all libraries use the same storage location for their files. This means that if you use the same file in multiple libraries, you may encounter file conflicts. This may be desired by some users as it eliminates redundant files that take up extra space for no gain. Others may want to keep their files isolated. A future update will be added to allow each library to have its own independent storage location.

SONG TITLE FORMATTING

When songs are displayed on the library screen, they normally show data from a couple of fields, namely the title on the top row and “artists – albums” on the row below it (referred

to as the caption). This formatting can be configured to include any fields you want in any format you want. You can also hide the caption if you only want one row of text per song. To change the song title formatting, go the Settings->Library Settings, and tap the “Song Title Formatting” option. The following dialog will be displayed:

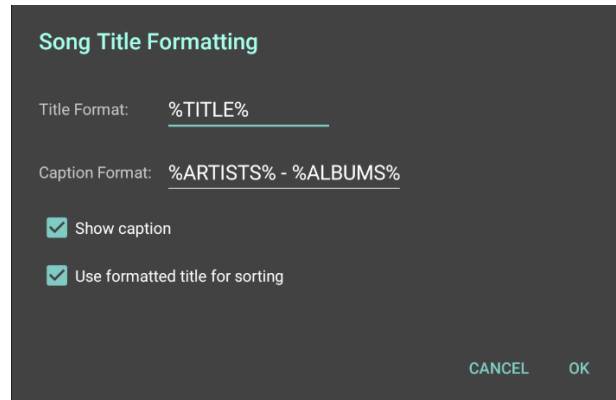


Figure 7 - Song Title Format Dialog

The title format text is set up so that any fields you want included have to be inside “%” characters. Any text outside of those characters is shown normally. So, for example, you could create a format such as %TITLE% - [%KEYS%] if you wanted to the title to show up as something like, “New Song [Gb]”. If you don’t want the caption displayed below the title, uncheck the “Show Caption” checkbox. The “Use formatted title for sorting” checkbox determines whether a song’s original title is used for sorting or the formatted title chosen on the dialog. This is very important if a field other than title is used at the beginning of the title format. If either the “Title Format” or “Caption Format” fields are tapped, the following dialog is displayed:

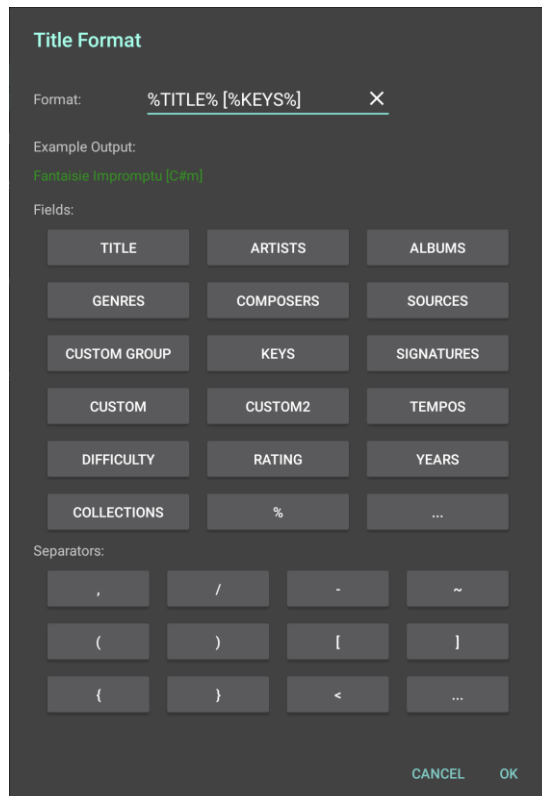


Figure 8 - Title Format Dialog

This dialog provides an easier way to build a format string. You can tap the fields you want displayed and the separators you want between them by tapping the appropriate buttons. Tap the “...” button for a list of additional supported fields. An example output is shown to give you an idea of what your format will look like on the library screen. Tap OK to accept your changes to the format, and you will see the title format on the first dialog update to reflect the changes.

ADVANCED SONG TITLE FORMATTING

If you want to have a song title format that can dynamically account for missing fields and display different content depending upon conditions, you will want to take advantage of the more advanced syntax that can be used. The basic pattern for the advanced syntax is shown below:

`%FIELD: text if field is not empty | text if field is empty%`

FIELD can be any of the values shown in Figure 8, such as ARTISTS, ALBUMS, GENRES, COMPOSERS or KEYS. The “text if field is not empty” section can be composed of any words or symbols, other fields or a special `$(VALUE)` keyword that is used to insert the value of the field listed by FIELD. For example, if the section was defined as “`_${VALUE}_`” and the field value was “Bach”, then it would show up as “`_Bach_`”. Each field can contain multiple values

though, and by default, these are separated by commas. If the field instead contained both Bach and Chopin, it would be “_Bach, Chopin_”. The separator between multiple values can be specified as part of the VALUE keyword by placing the separator after the word VALUE but inside the braces. If instead of commas a slash should be used to separate values, the following could be used: `${VALUE/}`. It should be noted that you can use other fields (or even complex conditional statements) inside of either the “text if field is not empty” or “text if field is empty” sections. This would be done by specifying the field inside `${}` as seen with VALUE. If you wanted to show Key when ARTIST is defined, but Genre when it is not, you could do the following:

```
%ARTISTS:${KEYS}|${GENRES}%
```

Furthermore, if you wanted to show keys when artist is defined, and if keys is not defined, show signatures, you could do:

```
%ARTISTS:${KEYS:${VALUE}}|${SIGNATURES}}|${GENRES}%
```

This demonstrates that you can nest complex statements if needed for very dynamic behavior. It should be noted that the text if not empty statement is optional – if you only want behavior when a field is not empty, you can use just the first section, i.e. `$(FIELD:[text if not empty])`

A common scenario for using an advanced statement would be to hide a separator if the first value is empty. For example, using the default `%ARTISTS% - %ALBUMS%`, if ARTISTS is empty, a “ - “ will be shown before the albums, and if albums is also empty, only the dash will be shown. This could be avoided with the following format string:

```
%ARTISTS:${VALUE} - %%ALBUMS%
```

With this format, a dash will still be present after artists even if albums is empty. This makes it easy to tell which field is missing. If you would rather only ever show the separator when both values are present, the following would be necessary:

```
%ARTISTS:${VALUE}${ALBUMS: - ${VALUE}}|${ALBUMS}%
```

While most users will not need to take advantage of the advanced syntax format, it provides a powerful set of options for those that want complete control over the song formatting on the library screen.

GENERATE SONG LIST FORMATTING

When a setlist is used to generate a song list, the way in which songs are printed in this list can be controlled. Much like the song title format dialog, there is a dialog for the generate song list formatting that determines what fields are included and in what format. The dialog

can be accessed by going to the Settings->Library Settings->Generate Song List Format. The dialog is shown below:

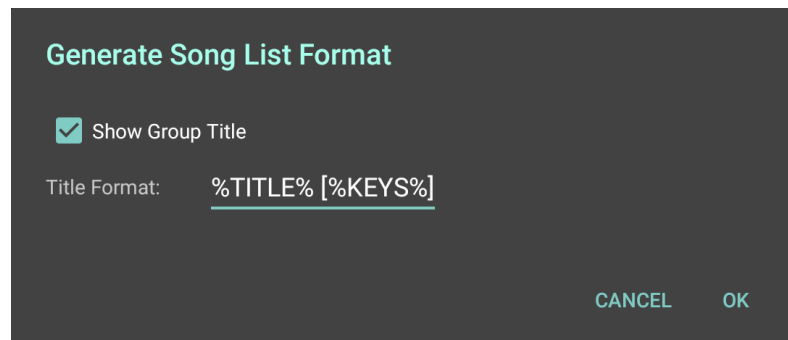


Figure 9 - The Generate Song List Format Dialog

If you want the setlist title included with the list, check the “Show Group Title” checkbox. If you want to modify the song title format, tap the text field next to “Title Format”. A Title Format Dialog will be displayed (the same as used with the song title formatting). Tap OK to accept the changes and return to the library screen.

LIBRARY DISPLAY SETTINGS

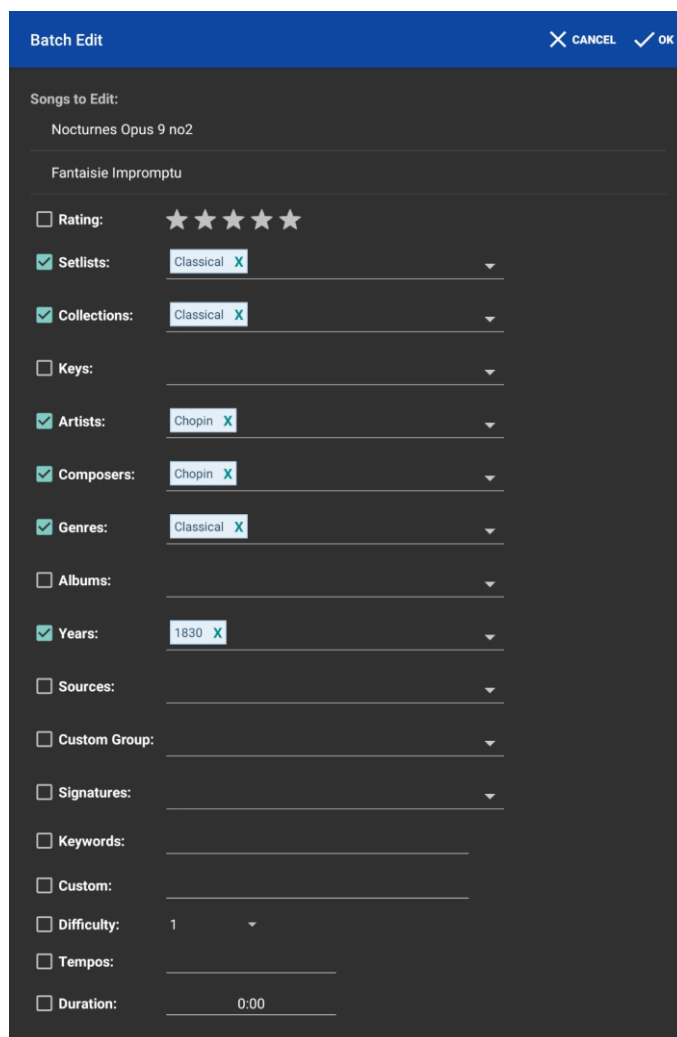
A number of settings are available that can change the appearance and behavior of the library screen. These include:

- Alphabet letter size
- Song title formatting
- Custom Group Name
- Use Dark Theme
- Alternate Row Color
- Library Text Size
- Tab Selection and Order
- Ignoring Articles While Sorting (and the articles to ignore)
- Initial Library Tab
- Text Alignment
- Show Floating Toolbar
- Normalize Characters
- Show Number of Songs
- Show Setlist Duration
- Skip Viewing Groups with One Song

There is a comprehensive list of all of the settings with explanations in the [library display settings](#). It is highly recommended that users learn about the various settings that are available.

BATCH EDITING

If multiple songs are selected on the library screen and “Edit” is tapped, the batch edit dialog will be displayed, as shown below. This dialog allows the metadata of multiple songs to be modified at the same time. Fields that are different between the selected songs are highlighted in red.



The screenshot shows a 'Batch Edit' dialog with a dark background and a blue header. The header contains 'Batch Edit' on the left and 'CANCEL' and 'OK' on the right. Below the header, the text 'Songs to Edit:' is followed by two song titles: 'Nocturnes Opus 9 no2' and 'Fantaisie Impromptu'. The dialog lists various metadata fields, each with a checkbox and a value field. The values for 'Setlists', 'Collections', 'Artists', 'Composers', 'Genres', and 'Years' are highlighted in red, indicating they differ between the selected songs. The values are: 'Classical', 'Classical', 'Chopin', 'Chopin', 'Classical', and '1830' respectively. Other fields like 'Rating', 'Keys', 'Albums', 'Sources', 'Custom Group', 'Signatures', 'Keywords', 'Custom', 'Difficulty', 'Tempos', and 'Duration' are not highlighted.

Field	Value
Rating	★★★★★
Setlists	Classical
Collections	Classical
Keys	
Artists	Chopin
Composers	Chopin
Genres	Classical
Albums	
Years	1830
Sources	
Custom Group	
Signatures	
Keywords	
Custom	
Difficulty	1
Tempos	
Duration	0:00

Figure 10 - Batch editing multiple songs

PRINTING

If a song is selected and the print option is selected from the action bar overflow menu, a new print screen will be displayed.

FILE MANAGEMENT

File storage and access is a very important, but somewhat complex, topic in MobileSheets. This section aims to cover the following in detail:

- File storage settings and their impact on importing files
- Supported file types
- The different methods of importing files and creating songs
- Sharing songs
- Deleting songs and their files
- Backing up and restoring your library

FILE STORAGE

Due to the very restrictive model used for file storage on iOS, MobileSheets must copy all imported files into its own application folder. Files cannot be used from their original location. Another important thing to mention about file storage is that there is the potential for conflicts with file paths. If the “Create Subdirectories For Songs” setting is enabled, file conflicts can be eliminated by ensuring that all songs have unique titles. Otherwise, all imported files must have unique names. This is because all imported files will be copied to the same location, and files would overwrite each other if their names are not unique.

IMPORTING FILES

MobileSheets supports a number of different ways to import files. Before exploring all of the different options, it’s important to discuss what kinds of files are supported.

SUPPORTED FILE TYPES

There are four basic types of files supported:

- **Images** – Includes .jpg, .gif, .png, .bmp and .webp
- **PDF** - .pdf files
- **Text** - .txt files
- **Chord Pro** - .cho, .crd, .chordpro, .chopro, and .pro

Freehand files (.fh) are also supported, but they will be converted into .png files during the import process. It is important to note that text and chord pro files have a number of significant differences from image and PDF files:

- The appearance of text and chord pro files in MobileSheets can be configured through the [text file display settings](#) dialog. This can have a large impact on how the files appear on the screen. Image and PDF files cannot be configured in this way.
- Text and chord pro files do not have a fixed size or number of pages in MobileSheets. If you change the font size or other properties, the number of pages may change, and content may appear in different areas. Image and PDF files have a fixed number of pages and do not support changing properties such as font sizes.
- Text and chord pro files support both transposing and capos to change the keys of the songs. Image and PDF files do not support transposing or capos.
- Text and chord pro files cannot be rotated, and there is no option to change the page ordering (as the number of pages can change). These features are supported for both images and PDFs.

When importing multiple image files, whether through quick import or batch importing, file names are very important for determining if the images will be joined into one song, or placed in separate songs. In order for multiple image files to be joined into one song, their file names must be nearly identical with a different number at the end (i.e. MySong1.png and MySong2.png).



Mobilesheets introduces a new custom file format called .msf (MobileSheets Song File). A .msf file contains either a list of songs or setlists. For each song, all files the song uses are bundled in the .msf file as well as any information stored in the database. It's basically a direct copy of the song in your library with all settings intact. For setlists, all songs the setlists use are packaged in their entirety. This makes .msf a very useful format for exporting or sharing songs with band members. Just remember that while .msf files can easily be imported through the [quick import](#) mechanism, there is no way to extract the PDFs or other files embedded in them outside of MobileSheets.

MobileSheets also introduces a file format called .mss (MobileSheets Setlist Songs) which is XML based and can be viewed/edited in a text editor if needed. This file format contains just a list of songs in the setlist along with information about the file each song uses. When this file is imported on another device, it will try to create the same setlist with matching songs found in its library. If no matching song is found, it will be skipped and not added to the setlist.

THE FILE BROWSER

Many different features in MobileSheets allow the user to select a file or folder that is stored in the cloud. In order to handle this, MobileSheets comes with a custom file browser.

The top of the browser is composed of a back button, a search field and an overflow menu with icons. A few of these icons are explained below:

	Switches the file browser back to the first folder it was viewing when it was loaded. It's important to note that the file browser will save the last folder you were in after selecting files. This is always the first folder shown.
	Reloads the list of files from the current folder.

The overflow menu also exposes these actions:

- New folder – Creates a new folder inside the currently viewed folder.
- Select None – Deselects all items in the current list
- Select All – Selects all items in the current list

To select one or more files or folders, just tap on the items in the list. You will see a checkbox next to their name indicating that they are selected. When you are ready to accept your selections, tap the OK button at the bottom of the screen.

IMPORT ACTION ITEM

The import dropdown menu is by far the fastest way to import new files if you don't need to enter detailed information up front for each song and only need to import files from a single directory. The import menu on the library screen supports eight different actions:

- Local File
- Dropbox
- Google Drive
- OneDrive
- Batch Import
- Batch Audio Import
- CSV or PDF Bookmarks

Each option will be discussed in full below.

LOCAL FILE

Selecting the local file option will display the standard iOS file picker. The file picker lets you select files either through another application, iCloud or any of the files under "On My iPad". After a selection has been made, the following dialog will be shown:

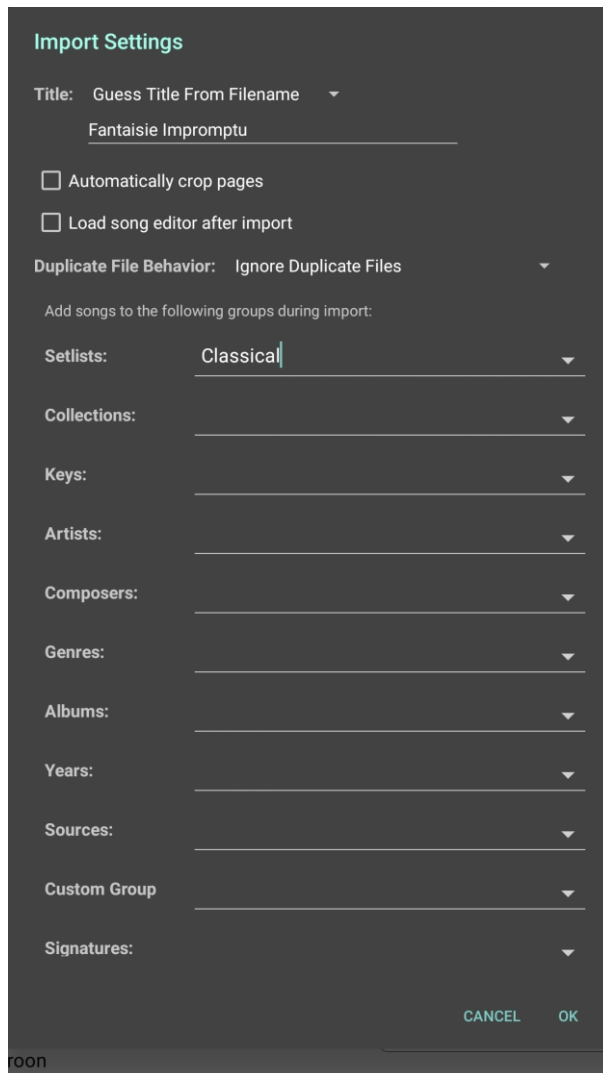


Figure 11 - Import Settings Dialog

The first dropdown is used to determine how the songs created during import will be named. There are two choices:

- **Guess Title From Filename** – File names will be converted to a more user-friendly title. Underscores will be replaced by spaces, and words that are joined together such as “MyNewSong” will become “My New Song”.
- **Use Filename as Title** – The title of all songs will match their files without the extension (i.e. “my_song.pdf” would become a song titled “my_song”)

If a single file has been imported, the title of the song that will be created will be shown. This title can be edited if needed. If a chord pro file is imported, this field will not be shown if the chord pro file contains a title and MobileSheets is configured to populate song fields from the chord pro metadata.

The “Automatically crop pages” checkbox determines if all imported files will be cropped to eliminate margins. Cropping in MobileSheets does not change the original file – it just draws the file on screen without the margins. Additional information about cropping can be found in the section on [cropping](#). The setting below that, “Load song editor after import”, is only shown when a single file is being imported (or a series of images that are joined into a single song). If enabled, this setting will cause MobileSheets to display the song editor after the song is created so that additional data can be entered or files can be added.

The “Duplicate File Behavior” dropdown specifies what action should be taken if a file is imported that exactly matches an existing file in name, size, and content. There are two possible choices:

- **Create New Song From Existing File** – If this is selected, a new song will still be created from the imported file, but it will reuse the existing file that is already there instead of overwriting it with the duplicate.
- **Ignore Duplicate Files** – Any file that is a duplicate will be ignored during the import process.

The bottom section of the dialog lets you assign the new songs to any groups in the library. If you need to create a new group of any type, you can do so by just entering in the name of the group into the appropriate category and hitting the accept or enter key.

After tapping OK, the import will proceed, and a dialog will show the results at the end. If a file conflict is detected, a dialog will be shown with different options depending the type of conflict. If there is another file already in the storage location that is tied to an existing song, then the following dialog will be shown:

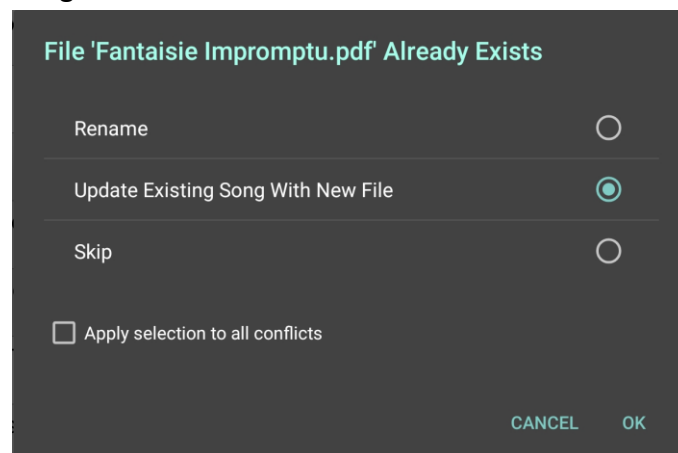


Figure 12 - File conflict dialog when matching song is found

Selecting “Rename” will present a dialog so that a unique file name can be assigned. If another conflict occurs, you will be prompted to rename the file, overwrite the existing file

or cancel. "Update Existing Song With New File" will replace the file used by the existing song and update metadata if required. "Skip" will move to the next file being imported.

If the file being imported matches a file already in the storage location but no song is tied to it (an orphan file), then the options shown will instead be "Use Original File", "Rename", "Overwrite" and "Skip". "Use Original File" will not import the new file and will instead use the existing file for the song that will be created. "Overwrite" will replace the existing file with the new one. The other two options function the same as described above.

DROPBOX/GOOGLE DRIVE/ONEDRIVE

The process for importing from Dropbox , Google Drive and OneDrive is almost identical to the local file option. If this is your first time accessing Dropbox, Google Drive or OneDrive, you may need to select the account to use. After selecting the files you want to import, MobileSheets will download these to a temporary storage location. After accepting selections on the import settings dialog, the files will be copied to the MobileSheets storage location like normal.

BATCH IMPORT

When the batch import option is selected, the following screen will be displayed:

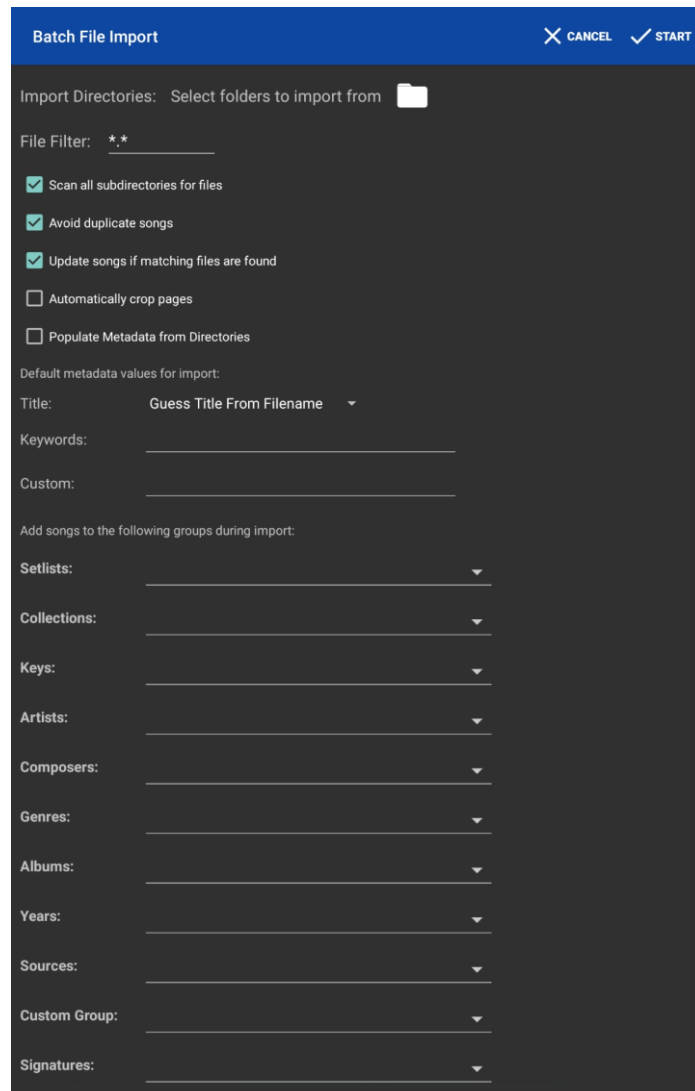


Figure 13 - The Batch Import Screen

This dialog comes with a number of settings, and each will be explained below.

- **Import Directories** – The directories that files will be imported from. Tap the folder icon to select the folders in the file browser.
- **File Filter** – A search filter that can determine what files will be imported. For example, if you wanted to only import PDFs, you could enter *.PDF.
- **Scan all subdirectories for files** – If checked, all child directories inside the import directories will also be scanned for files.
- **Avoid duplicate songs** – If checked, new songs will not be created from duplicate files that already exist in the library. Other settings can affect MobileSheet’s ability to identify duplicate songs, such as changing the “Create Subdirectory For Songs”

settings, as a new song would store its file in a different directory if this setting was changed.

- **Update songs if matching files are found** – If a file is not a duplicate, but would overwrite an existing file, this setting determines if MobileSheets should update the song using the file after it is replaced (to handle differences between the files). This setting can reduce the number of user actions that need to be taken during the import (to handle file conflicts) if you know you are replacing existing files.
- **Automatically crop pages** - Determines if all imported files will be cropped to eliminate margins. Additional information about cropping can be found in the section on [cropping](#).
- **Populate Metadata from Directories** – Determines if metadata for the songs will be populated using the names of the directories containing the files. The song fields that are populated depend upon the metadata format string which is explained in the next section.
- **Title:** See the import settings dialog description [here](#).
- **Keywords:** A list of words that will be placed into the keywords field of every new song.
- **Custom:** The value to put in the custom field of every new song.
- **All groups at the bottom:** All new songs will be placed into any groups that you select from the dropdowns. New groups can be added by entering the name of the new group into the appropriate category and hitting the enter or accept key.

After tapping start at the top right, a progress dialog will be shown indicating what file is currently being imported. Depending upon the number and size of the files being imported, this can take a while. Note that if you turn on “Automatically crop pages”, the import process will take much longer as each file has to be opened and page boundaries have to be calculated. Once the import is complete, a dialog will be shown displaying the results of the import.

Populating Metadata from Directories

The batch import supports the ability to populate song metadata fields from the names of directories containing files. Each part of the metadata string represents the field that should be populated for the sub-directory at that depth. For example, if the format is %ARTIST%/ %ALBUM%/ %GENRE%, the first sub-directory is used for the artist field for all files in that folder. All folders in that folder would be used for album, and any folders under those folders would be used for genre. Any further sub-directories would not be used for metadata. It is important to note that you do not have to have the same number of sub-directories as you do metadata format sections. Given the previous example, if only one level of sub-directories is used, then only artist will be populated.

If the metadata format field is tapped, the following dialog is displayed to allow editing of the format field:

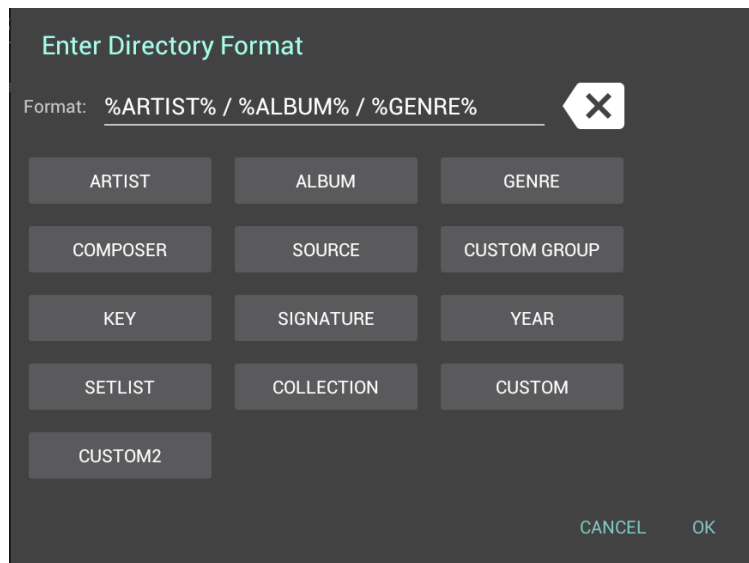


Figure 14 - Metadata Format Dialog

Current entries can be removed by tapping the delete button at the top right. Additional fields can be added by tapping on them. Tap OK to accept all changes to the format string.

BATCH AUDIO IMPORT

The batch audio import screen is identical to the normal batch import screen, and all settings operate the same way. The only difference is that a batch audio import only targets audio files such as .mp3 or .wav files. For each audio file that is found, a song will be created with a blank page and the audio file will be added to that song. This allows MobileSheets to be used just for audio playback while still utilizing all of the library organization features.

CSV OR PDF BOOKMARK IMPORT

The CSV and PDF bookmark features are extremely powerful tools for splitting up PDFs that contain a large list of songs. After the "CSV or PDF Bookmarks" option is tapped, the file browser will be shown so that a .csv or .pdf file can be selected. If importing a .csv file, You must ensure that the PDF and .csv are in the same directory so that MobileSheets will be able to locate the PDF. After a valid file is selected, the following dialog will be displayed:

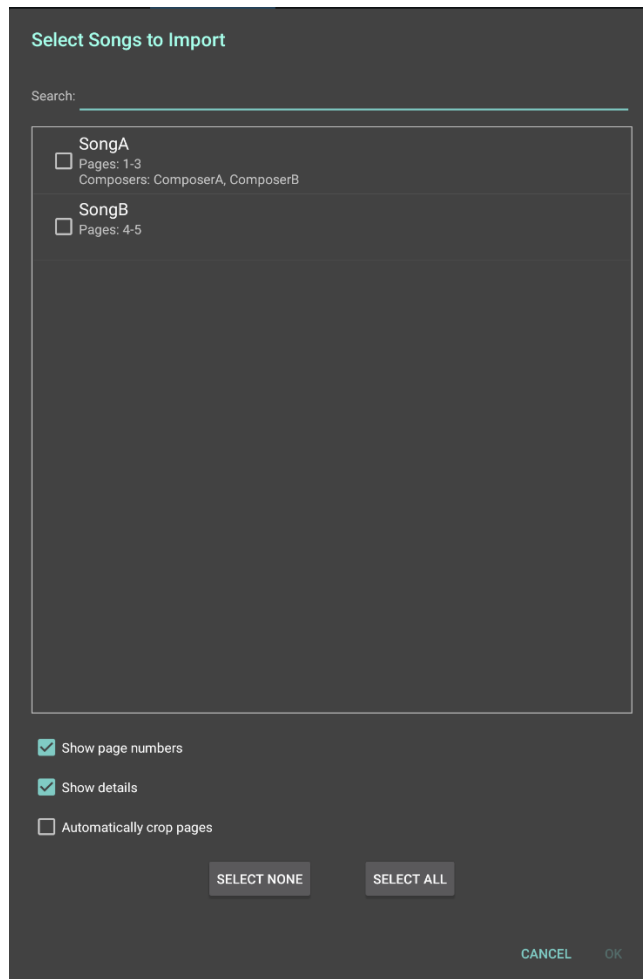


Figure 15 - CSV or PDF Bookmark Import Dialog

This dialog allows one or more songs to be selected that will be created with the supplied information. Checkboxes at the bottom left allow for more or less detail to be displayed, and pages can optionally be cropped upon import. When a PDF file is selected, the bookmarks in the file will be used to create sections, where each section is the number of pages between the bookmarks. If bookmarks have been created for every song, this is a convenient and fast way to only select the songs that are needed from the file. Further refinement of pages can be made in the song editor if required.

CSV files provide much more functionality than PDF bookmarks. A .csv file is nothing more than a text file with values that are delimited by a certain character such as a comma or semi-colon. The first line of the file specifies the order of the song fields that will be populated, while each line after that specifies the details for a song. The example shown in the figure above was generated from the following CSV file:

```
title;pages;composers;difficulty
SongA;1-3;ComposerA|ComposerB;8
SongB;4-5;;
```

In this example, the first line specifies that song title comes first, then the range of pages used from the source PDF, then the list of composers and finally the difficulty. When a list of values is supplied, it must be delimited by a | character, as is used above to separate ComposerA and ComposerB. Fields can be skipped for a song by providing no value other than a semi-colon, as seen for SongB which doesn't specify any composers or a difficulty. The last thing that should be mentioned is that two columns are always required: title and pages. These must be put somewhere on the first line, and every song must provide these values. The full list of supported field names is shown below:


CSV Field Name	Description
title	The title for the song
artists	The list of artists
albums	The list of albums
genres	The list of genres
composers	The list of composers
sourcetypes	The list of source types
customgroups	The list of custom groups
keys	The list of keys
signatures	The list of signatures
custom	The value for the custom field
custom2	The value for the custom2 field
tempos	The list of tempos (numeric)
difficulty	The difficulty value
duration	The duration in hh:mm:ss or total seconds.
rating	The rating
years	The list of years
sorttitle	The custom sort title
audiofiles	The list of audio file paths. Each path provided must be a valid path to an audio file on the tablet.
pages	The page range to use from the source PDF. To use multiple sections, separate them by commas, i.e. 1-3,4-6
keywords	The value for the keywords field
setlists	The list of setlists to add the song to
collections	The list of collections to add the song to

The field names must be entered in English as shown above.

IMPORTING FILES FROM OTHER APPLICATIONS

If you happen to be viewing files in an external application, such as the standard Files application on iOS, you can import files directly into MobileSheets from that application. To do this, select the Share option and select MobileSheets as the application to share with. MobileSheets will then import the file and display the import settings dialog.

IMPORTING FILES USING THE SONG EDITOR

If the  icon is tapped in the action bar on the library screen, the song editor will be loaded with the files tab selected. On this tab, you can add a file or blank page, take a photo with the device's camera, or generate a new chordpro file.. These files will not be copied into the storage location until the "OK" button is tapped at the top right, and the new song is created. See the [song editor](#) section for more details on creating songs using this approach. While this approach is the most time consuming, it also provides the most control over the configuration of the new song.

PLACEHOLDER SONGS

Placeholder songs are songs that have been created with metadata, but contain only a single empty blank page. There is no actual file associated with these songs. The idea behind placeholder songs is that they can be created in anticipation of having a file at a later date in time, and once that file is obtained, it can be swapped in place of the blank pages. This allows the song to be created, metadata put in place and annotations made before being in possession of the actual file. Placeholder songs can be created through the action bar on the library screen. Swapping files is covered in the next section.

SWAPPING FILES

If a song contains a file that needs to be swapped out for a newer version, or if a song has blank pages that you want to swap for a file, you will want to take advantage of the "Swap File" option on the library screen. To begin the file swap process, long press the song whose file you want to swap, access the overflow menu in the library action bar, and select "Swap File". If the song contains multiple files, you will be prompted to select the file you want to replace. The file browser will then be shown so that you can pick the file you want to swap. After selecting the file, you will be presented with options for the swap as shown below:

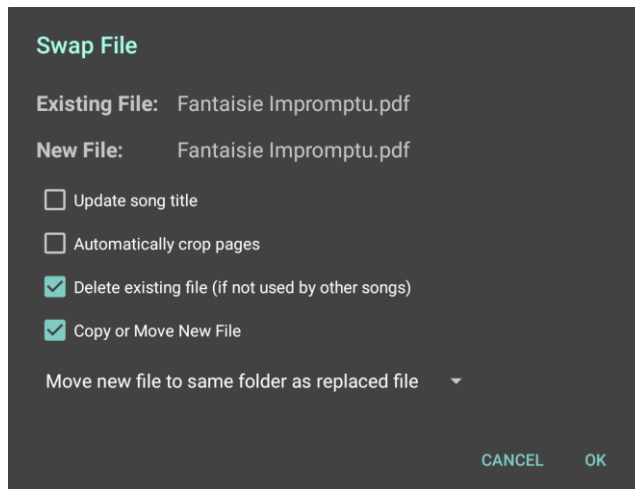


Figure 16 - The File Swap Dialog

The top of the dialog shows the name of the file to be replaced followed by the new file to use in its place. The “Update song title” option determines if the song’s title is updated based upon the name of the new file. The “Automatically crop pages” option determines if the pages of the new file will be cropped to reduce margins. The “Delete existing file” option controls whether or not the existing file used by the song is deleted after being replaced by the new file. Note that the file won’t be deleted if it is used by other songs. The “Copy or Move New File” checkbox determines how the storage of the new file will be handled. If you check the “Copy or Move New File” checkbox, the dropdown below it will be enabled so that you can select the exact action you want. If you uncheck that setting, the current location of the new file will be used, meaning it will not be copied into the MobileSheets storage location, which is usually not recommended unless you manage your own folders and files. The dropdown contains the following options:

- **Copy new file to same folder as replaced file** – The new file will be copied into the same folder that contained the existing file. The original file will remain where it is. This behaves in the same way as the “Copy new file to MobileSheets storage” option.
- **Move new file to same folder as replaced file** – The new file will be moved into the same folder that contained the existing file. This behaves in the same way as the “Move new file to MobileSheets storage” option.
- **Copy new file to MobileSheets storage** – The new file will be copied into the MobileSheets storage location, and the original file will remain where it is.
- **Move new file to MobileSheets storage** – The new file will be moved into the MobileSheets storage location.

After tapping OK to accept the selections, the swap will occur and moments later you will be back at the library screen.

SHARING AND EXPORTING SONGS

MobileSheets supports multiple different options for sharing and exporting songs and setlists. The difference between sharing and exporting is that sharing will use a separate application (such as a mail client) to send files whereas exporting will generate files on the device storage. Both individual songs and setlists can be selected to share their data. The fastest way to share a setlist with another user who has the same songs in their library is to create a .mss file. The process for this is simple:

1. Long press the setlist on the library screen to start the selection mode
2. Tap the “Share” action on the action bar, then “Share song list” and then select the method you wish to use to share (Bluetooth, Email, Google Drive, etc).
3. MobileSheets will ask you to name the file you are sharing, so provide a name. The .mss at the end is optional, and will be automatically added if you leave it out.
4. MobileSheets will proceed to create the .mss file, and then will load whichever application you selected to use for sharing. Refer to the specific application’s instructions for information on how to send files.

The destination device, when it imports the file, will either create a new setlist or update an existing one (if a matching setlist name is found), and then populate that setlist with the list of songs in the .mss file. For each song, if a matching song is not found in the library, it will be skipped.

One important feature of MobileSheets is the ability to both archive and share songs and setlists using a .msf file. The process for this is quite simple:

5. To share a list of songs, or a list of setlists (you can’t combine the two), long press an item on the library screen to start the multi-selection mode and then tap each item to be shared.
6. Tap the “Share” action on the action bar, then “Share as .msf” (if sharing songs) or “Share songs and files” (if sharing setlists) and then select the method you wish to use to share (Bluetooth, Email, Google Drive, etc).
7. MobileSheets will ask you to name the file you are sharing, so provide a name. The .msf at the end is optional, and will be automatically added if you leave it out.
8. MobileSheets will proceed to create the .msf file, and then will load whichever application you selected to use for sharing. Refer to the specific application’s instructions for information on how to send files.

If you only want to share the files used in a song or setlist, select the songs as described above and then tap on “Share files”. You must choose an application to use for sharing, and then you will be shown a dialog with the following options:

- Use song titles as file names – When exporting songs with a single file, this option will be available which names each exported file the same as the song title.
- Use song page ordering for shared files – Select this if you want the shared files to use the same page ordering as the song. If only using a few pages from a large PDF for example, this setting should be checked.
- Share with cropping – Determines if the shared files should crop each page to match the song’s cropping.
- Share with rotation – Determines if the shared files should rotate their pages to match the song’s page rotation.
- Share with annotations – Determines if the shared files should contain all of the annotations from the song.
- Export iOS compatible annotations – When annotations are exported, they are added to the PDF as PDF annotation objects that can be modified in PDF editors outside MobileSheets. These annotations are not supported well by the default iOS PDF reader though, so this setting writes out the annotations as images embedded into the PDF pages, making them permanent.
- Draw highlights behind content – The PDF specification does not support a mechanism to embed highlight annotations behind existing content. The only way to accomplish this is to rebuild the entire PDF with the images generated from MobileSheets. While this setting produces highlights that are more visually pleasing, it may drastically increase the file size and result in a slower loading file.
- Join into one PDF – Will join all files from all songs into a single PDF.

It should be noted that if a single file is being shared or exported, the name of the file will be shown on the dialog. This can be modified if a different name is desired for the new file. If sharing a text or chord pro file and annotations are both present in the song and “Share with annotations” is enabled, a new PDF will be generated for sharing purposes, as text and chord pro files don’t support annotations in them. The process for exporting songs or setlists is very similar:

1. Select the songs or setlists as described in #1 above.
2. Tap the “Share->Export as .msf” (for songs), “Share->Export Songs and Files” (for setlists) or “Share->Export files” action.
3. A file browser window will be displayed to choose the directory to contain the exported files. If exporting to .msf, a text entry field will be shown at the bottom to provide a name for the file. Tap OK once a directory is selected and name is entered if necessary.
4. A dialog will be displayed containing export settings. This is identical to the share file settings except for the addition of an option for exporting audio files.

To import a .msf or .mss file, use the Import->Local File option on the action bar, and select the file inside the file browser.

DELETING SONGS

To delete a song from your library, long press the song on the library screen, and then select “Delete Song” from the action bar at the top. You will be presented with the following dialog when you do that:

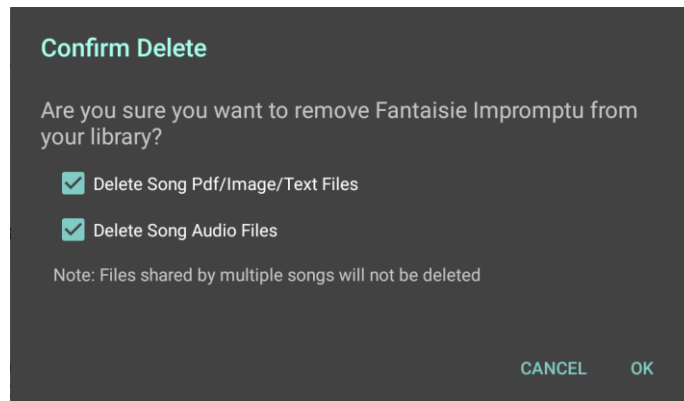


Figure 17 - The Confirm Delete Dialog

Two checkboxes are present to control whether or not files are deleted. It is important to note that if multiple songs share the same file, it will not be deleted even if you leave this checkbox checked. For this reason, you almost always want to leave this box checked if MobileSheets is managing your files.

BACKUP AND RESTORE

One of the most important features in MobileSheets is the ability to back up your entire library, including all files and annotations, to one single backup file that can be safely archived. These backup files can be restored at any time through a simple process. This also means that if you replace your tablet with a newer one, you can easily transfer your library over. The backup and restore features will be discussed further below.

BACKING UP YOUR LIBRARY

To back up your library, you must first access the settings screen. This can be accomplished by tapping the action bar overflow menu at the top right of the library screen, and then tapping the “Settings” option from the dropdown. On the settings screen, tap the “Backup and Restore” option on the left side of the screen. Lastly, tap the “Backup Library” option in the list on the right side of the screen. After selecting this option, a dialog will be displayed as shown below:

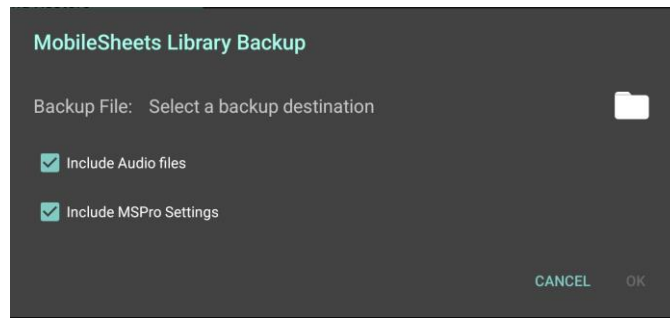


Figure 18 - The Library Backup Dialog

This dialog only has three selections: the directory you want to create the backup file in, the option of whether or not to backup audio files, and the option of whether or not to include MobileSheets settings in the backup file. The directory can be selected by tapping on the folder icon, which displays options for where to save the file.

A progress dialog will be displayed to show how many songs have been written to the backup file. You can press the back button to cancel the backup if needed. Once the backup completes, a dialog will be presented indicating success.

RESTORING YOUR LIBRARY

To restore your library, you must have previously created a backup file using the library backup utility discussed in the previous section. The first is to access the settings screen as described previously, but select “Restore Library from Backup” instead of “Backup Library”. You will be shown the following dialog:

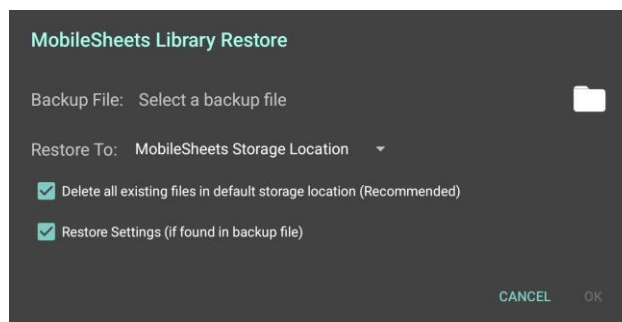


Figure 19 - The Library Restore Dialog

The first selection on this dialog is the backup file to restore. To browse for a backup file, tap the folder icon. This will display options for where to import the file from. Navigate to the folder containing your .msb file, and then tap on the file to be returned to the library restore dialog. You will see the name of your backup file to the right of the “Backup File” label.

The next selection that must be made is whether or not the storage location will be cleared of all files before the library is restored. This is usually recommended in order to ensure unused files aren't left on the device. The last selection is whether or not to extract the settings in the backup file (if it contains settings). Checking this option will replace all MobileSheets settings, so use it with caution if restoring a backup from a different user with settings different from your own.

THE SONG EDITOR

The song editor is, as the name would suggest, the screen in MobileSheets that lets you manage song data and settings. It provides a central location to both create and edit songs, and select the metadata, files, audio and MIDI that will be associated with those songs. The song editor is composed of four separate sections: fields, files, audio and MIDI.

THE FIELDS TAB

The fields tab is the main screen where song metadata is managed. The fields tab can be accessed by long clicking on a song and pressing "Edit Song" in the action bar. This screen can be seen below:

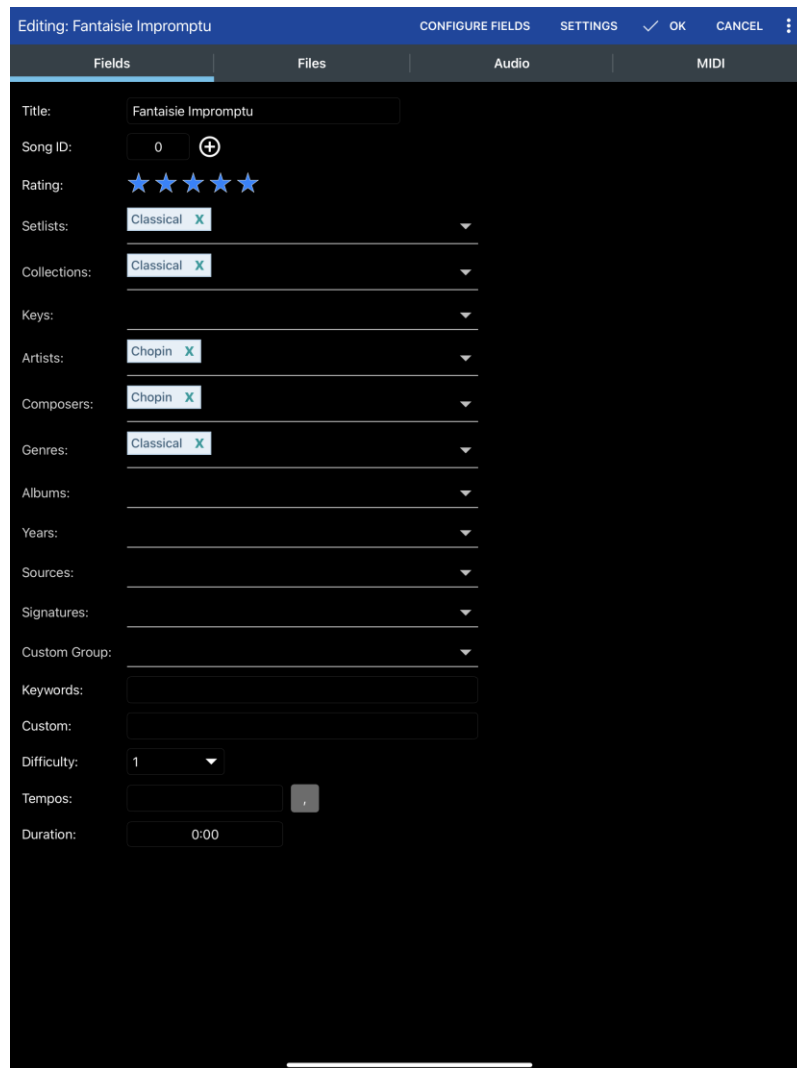



Figure 20 - The Song Editor Fields Tab

While there are nearly twenty supported fields, the only required field is Title. Data entry in most of the fields is pretty straight forward. The song ID can be manually entered or the  icon can be tapped to find the next smallest unique song ID. To change the rating, tap the star that matches the rating you want to provide. For each of the group fields, you can type enter as many values as needed. For each value, enter the name and hit the accept key on the virtual keyboard. The value will be placed in a light blue rectangle. You can then repeat the steps for each additional value. You can also tap on the dropdown, and then tap the items you want to select on the selection dialog. This dialog also provides filtering controls when the list is longer than a few values. You can type a search term at the top or tap the letters on the right side to find the items you want to select. Note that tapping the “X” to remove a group does not delete it, it will just no longer be associated with the song.

If you decide you don't need some of the fields and would like to hide them, tap the "Configure Fields" option at the top right of the screen. You will be presented with a list of every field (except Title). Uncheck the fields you no longer wish to see, and tap OK to continue.

THE FILES TAB

The files tab provides four main features:

1. Multiple methods of adding files (Tablet storage, Google's file picker, camera, Dropbox, OneDrive, Google Drive and blank pages)
2. The ability to control page ordering
3. Rotation of pages
4. Cropping

The layout of the tab is shown below:

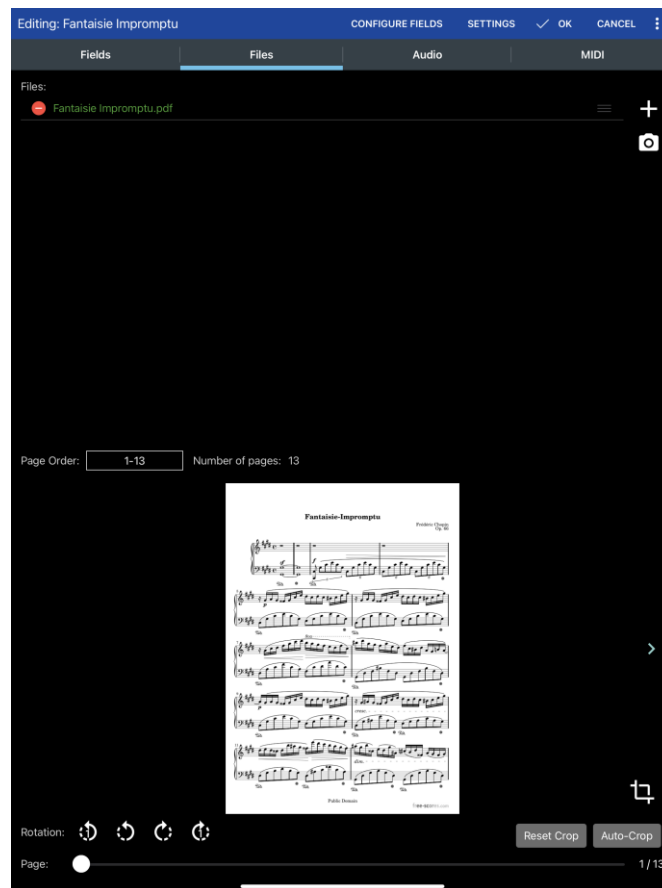









Figure 21 - The Song Editor Files Tab

If you are editing an existing song, you will see the song's files listed at the top of the screen. These files can be reordered by pressing on the box with up and down arrows and dragging this box up or down. The full path of any file can be viewed by long pressing on the file. To

remove a file from the list, tap the “X” on the right side of the screen for that file (note that the file will not be deleted if you do this). If you are creating a new song, this list will be empty and you will be instructed to add a new file. There are eight ways to add a new file, and they will be discussed below:

+	Displays a dropdown with several choices for how a file will be added:	
		Opens the local file browser and allows one or more files to be selected. While multiple PDFs and images are allowed, only one text file is allowed, and you cannot mix text/chord pro files with PDFs or images.
		Opens the file browser and allows for the selection of files located in a Dropbox account.
		Opens the file browser and allows for the selection of files located in a Google Drive account.
		Opens the file browser and allows for the selection of files located in a OneDrive account
		Adds any number of blank pages to the song. No file is actually added – white pages will be shown that match the size of the screen. These pages can still be used with annotations.
	Uses the camera to take a picture, and then imports this file into the song editor.	
	This option is displayed when the song contains no files, and allows a new text or chord pro file to be created. A prompt will be presented for a new filename and then the text editor will be shown.	

After at least one file has been added to the song, a number of features become accessible. The most noticeable is the file preview at the bottom of the screen. The page that is previewed can be changed by either tapping on the white arrows on the side of the preview area or by moving the page slider at the bottom of the screen. You can also select a specific page by tapping the page number at the bottom right of the screen. In addition to previewing the file, you can also change the page ordering, rotate pages or crop the file. The only exception to this is if a text or chord pro file has been added. Those features are not supported with text or chord pro files as described in the [supported file types section](#).

If the song being edited contains a text or chord pro file, an additional icon will be displayed at the bottom right of the preview area instead of the cropping icon. The **A** icon will bring up the [text display settings dialog](#), which can be used to configure various display settings for the current file.

If a file is added with the same name and output path as an existing file, a conflict dialog will be displayed, as shown below:

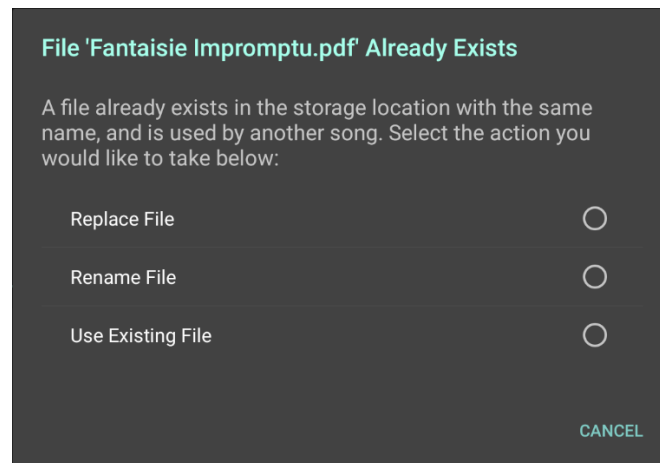




Figure 22 - File Conflict Dialog

You can either replace the existing file, rename the file before it is copied, or use the existing file instead of the one being imported. If you want to update an existing song with a new file, you should use the [swap file](#) feature.

PAGE ORDERING


If you have a PDF with more than one page, you can change the order of the pages. This feature is actually quite powerful because you can create a custom page order that repeats pages multiple times, and each instance of a page can have different cropping, annotations, link points, etc. This can be used to eliminate the need to jump to previous pages for repeats. For example, if you have a four-page song that jumps from page three to page one, you could set up the ordering as follows: 1-3, 1, 3, 4. To change the page order, tap on the page order field, and then enter the desired order on the dialog that is displayed.

ROTATING PAGES

To rotate just the currently displayed page, tap the rotate left  and rotate right  buttons at the bottom left corner of the screen. To rotate every page in the file, tap the rotation buttons beside those. Long press these buttons to rotate every page in every file in

the song. The rotate left button rotates the page 90 degrees to the left, and the rotate right button rotates the page 90 degrees to the right.

CROPPING FILES

There are a number of different ways to crop files in the song editor. By default, all new imported files are automatically cropped. The algorithm used for cropping and which pages of the file are cropped can be controlled in the [additional settings](#). If you want to get rid of the cropping, you can tap the “Reset Crop” button at the bottom right to reset the document back to being uncropped. If you want to manually crop the document, tap the  icon at the right side of the page preview area. This will bring up the cropping screen, which will be discussed in the next section.

THE CROPPING SCREEN

The cropping screen is composed of the current page in the center with eight white circles that define the boundaries of the region you want displayed. This cropping screen can be seen below:

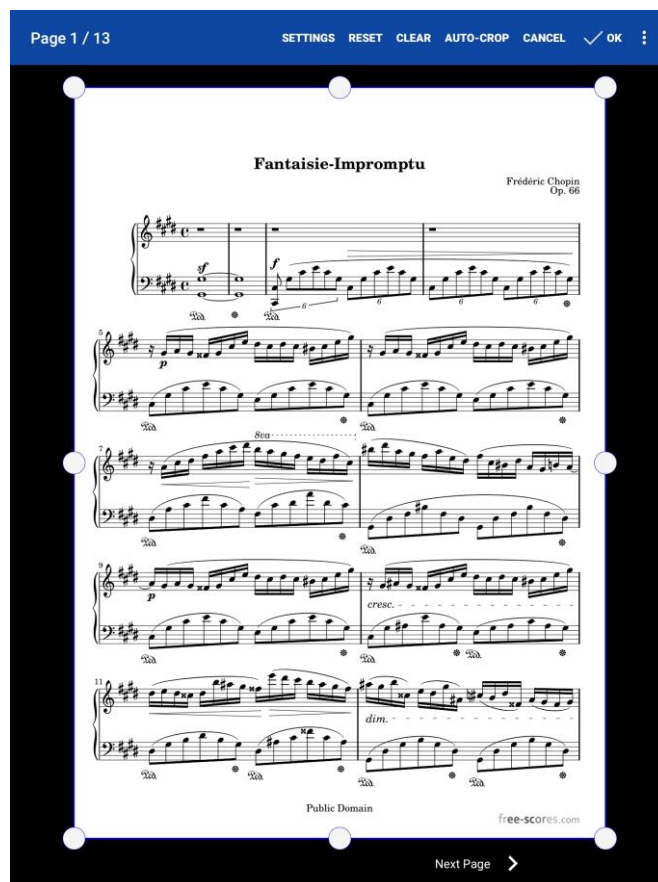


Figure 23 - The Cropping Screen

Changing the cropping area is as simple as pressing on one of the white circles and dragging it to a new location. Anything outside of the blue rectangle is cropped out of the document, meaning it won't be displayed on the main song display. It is important to note that cropping does not affect the original file in any way – it just instructs MobileSheets on what section of the page you want to see, so you do not have to worry about modifying the underlying file unintentionally. You can change the page that is currently viewed by tapping the arrows at the bottom of the screen. Several actions are supported on the action bar at the top of the screen:

- **Settings:**
 - **Crop** - Changes the pages that will be cropped based on the current cropping region. The default behavior is to only crop the current page. You can also select “All pages in selected file” to crop every page identically in the currently displayed file, and “All pages in all files” if you want every page in every file of the song cropped exactly the same way. If the song is part of a loaded setlist, another option will be available to apply the cropping to all songs in the setlists. This can be used not only to apply cropping to a large list of songs at once, it can also be used to clear the cropping if needed.
 - **Aggressively Crop** – Enables/Disables aggressive cropping. This cropping algorithm is discussed in detail in the additional settings section.
- **Reset** – Resets the cropping region to what it was when the cropping screen was first loaded.
- **Clear** – Clears cropping completely, meaning the cropping region matches the full page.
- **Auto-Crop** – Automatically crops the current page, and depending upon the “Apply To” setting, other pages as well. After the automatic cropping completes, you can view the new crop regions on all of the cropped pages.
- **Auto-Crop All Pages** – Automatically crops every page in the song, across all files. This is just a shortcut to crop all pages without having to change the “Apply To” setting.
- **Go To** – Provides a mechanism to select the page you want to view. This is slower than using the arrows at the bottom of the screen, but if the document has many pages, this provides a convenient way to access a specific page.

Once you are satisfied with the cropping regions, tap OK to apply them. Tap Cancel if you wish to exit without applying any modifications.

ADDITIONAL SETTINGS

If you tap the “Settings” action at the top of the song editor screen, you will see the following dialog displayed:

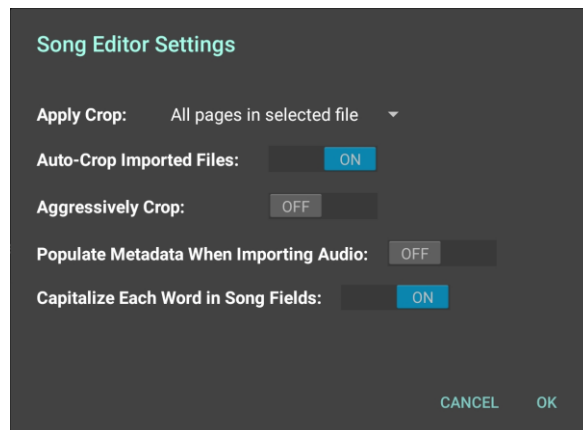


Figure 24 - The Song Editor Settings

The settings for “Apply Crop” are as follows:

- **Current page only** – Applies the crop to the currently displayed page only.
- **All pages in selected file** – Applies the crop to all pages in whatever file is currently being displayed.
- **All pages in all files** – Applies the crop to all pages in all files used by the song.

The “Auto-Crop Imported Files” setting determines if files that are added to the song are immediately cropped. The “Aggressively Crop” setting determines whether the automatic cropping uses a “safe” algorithm for cropping or an “aggressive” one. The main difference is that the safe cropping is guaranteed to not cut any content out of the document at all. This means that as soon as a single non-white pixel is encountered anywhere on the document, the cropping on that side will not go past that pixel. The aggressive setting will try to avoid any black content around the very edges of the document (like you can often get from a scanner). The safe algorithm is the best choice if the margins of your documents are white or near-white.

The “Populate Metadata When Importing Audio” determines if the song’s metadata will be updated when new audio files are added. For example, if the song’s artist, year and duration fields are blank, these values can be extracted from an imported audio field and entered automatically. Note that existing values will not be changed in any way – they must be blank for this setting to take effect.

The "Capitalize Each Word in Song Fields" setting determines if each word will be capitalizing when typing values into metadata fields on the Fields tab.

THE AUDIO TAB

The audio tab is composed of a list of audio files at the top and an audio player at the bottom that can be used to play those tracks and set different properties of those tracks. This can be seen in the picture below:

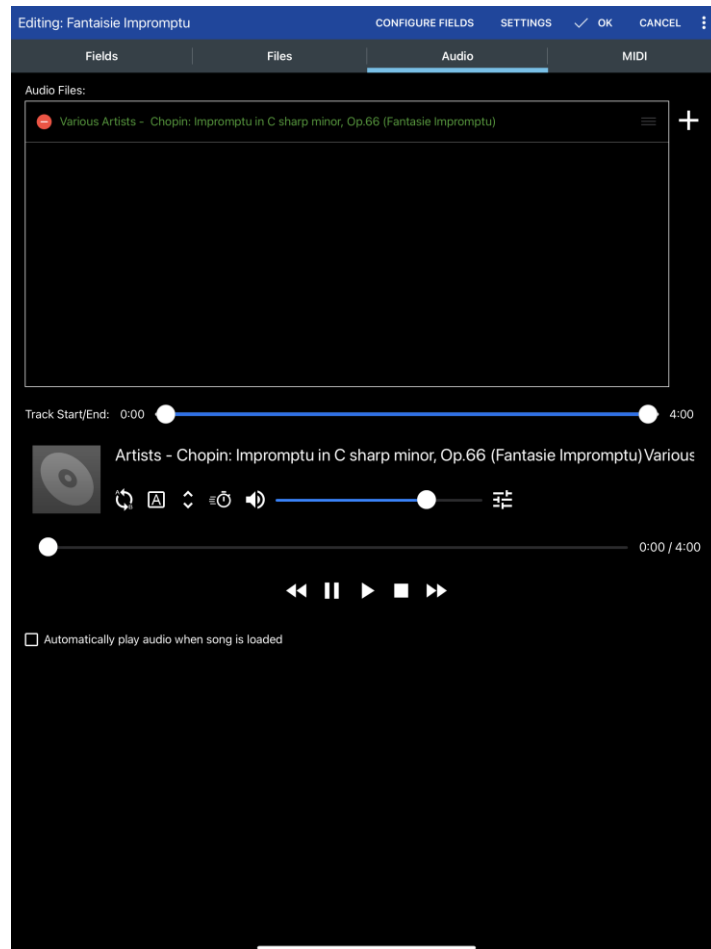






Figure 25 - The Song Editor Audio Tab

Much like the files tab, there are two ways to add files: use an external program on the tablet or browse for a file on the tablet's storage. Tap the  icon to select an audio file you want to add on the tablet, and add it to the current song. You will see the audio file show up in the list at the top and the audio player will display the audio track's title. You can reorder audio tracks in the top list by dragging the box with the arrows in it up and down. You can remove audio tracks by tapping on that track's "X" at the right side of the list.

Once there is at least one audio file present, you will be able to play that file in the audio player at the bottom of the dialog. The audio player on the audio tab has five playback buttons: previous track, pause, play, stop and next track. One very useful feature is the ability to specify an a-b loop in the song. To do this, you must first tap the  icon to enable a-b looping. The icon will turn orange after it has been selected to indicate that looping is active. Next, change the track's position to the start of the loop by dragging the slider. Then, tap the  icon to set the start of the loop. An orange vertical bar will be drawn showing the start of the loop. Move the slider to where you want the loop to end and press the  icon. You can now press play to test out the loop.

If you wish to change the duration of the current track, you can slide the ends of the "Track Start/End" slider to change where the track will start and end. This can be useful if you only need a certain section of an audio track.

The audio player on the audio tab does not contain all of the features present on the song display's audio player. To learn about the other available features, see the song display's [audio player](#) section.

THE MIDI TAB

In MobileSheets, you can set up songs so that they either transmit MIDI commands when they are loaded, or are loaded when specific MIDI commands are received. The MIDI tab provides the tools to create and edit MIDI commands. The MIDI tab screen can be seen below:

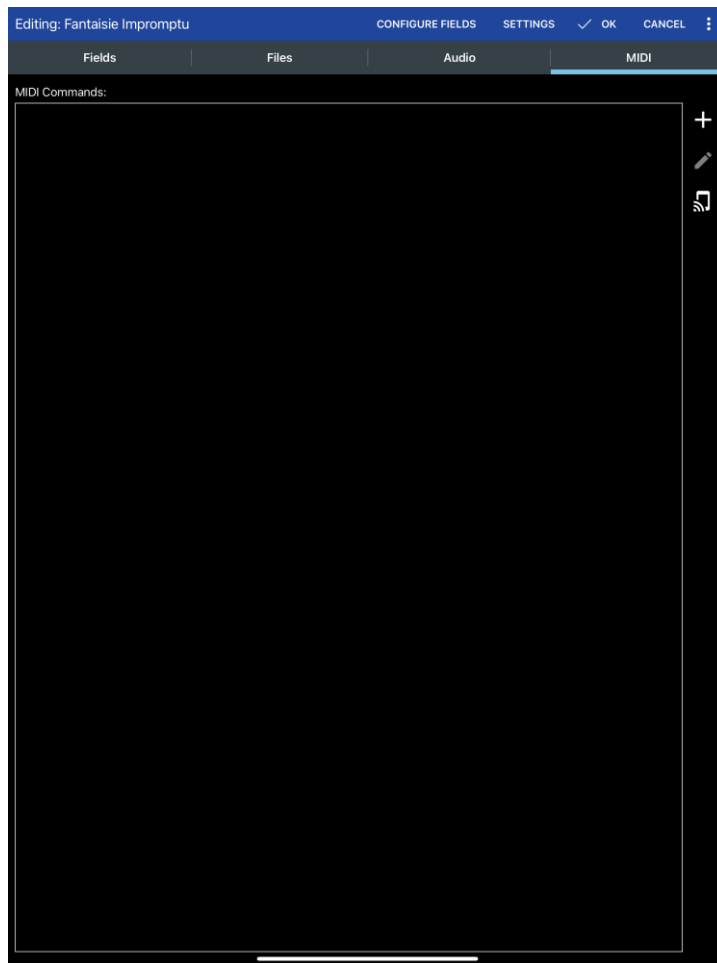


Figure 26 - The Song Editor MIDI Tab

While a full explanation of MIDI won't be provided in this manual, an overview of the supported MIDI commands will be. Consult the manual for your MIDI device to determine what MIDI commands are supported. The following MIDI commands are recognized in MobileSheets:

- Patch Select – Contains two control change messages and a program change message, and is typically used to change the selected instrument on a keyboard.
- Control Change – Contains a controller number and value.
- Program Change – Contains a single value.
- System Exclusive – Contains a series of bytes. This is the most advanced command, and is normally only needed for setting more complex configuration settings on a connected device.
- Number (KORG only) – This requires just one number as input that should be either three or four digits. This is converted to four control change commands.
- Note Off – Contains the value of the note released.
- Note On – Contains the value of the note pressed down.

- Batch Command – Command used to group together commands to be sent or received. The primary use is to trigger a song to be loaded or an action to be triggered in response to all of the matching commands being received in a row.
- Pause – Pauses the sending of messages for the specified time.
- Song Select – Contains a single value representing the song to select.
- MIDI Start – Starts MIDI playback on the connected device.
- MIDI Continue – Pauses MIDI playback on the connected device.
- MIDI Stop – Stops MIDI playback on the connected device.
- Toggle Timing Clock – Turns on or off the sending of timing clock messages to the device which determines the tempo it uses for playback. The tempo is based upon the metronome settings for the currently loaded song.

To add a new MIDI command, tap the **+** icon at the top right of screen. This will display a separate dialog allowing the command to be configured. The dialog can be seen below:

Figure 27 - Dialog for creating and editing MIDI commands

The label field at the top can be used to display a different description for the MIDI command in the list on the MIDI tab. This can make it easier to remember what a given command is configured to do. Next, you will see a “Patch Select” command in the command type dropdown (or “Number” if the MIDI Device is set to KORG in the settings). Selecting a different command from the dropdown will change the data that is required. For example, a control change message requires two values while a program change message only requires

one. The patch command is unique in that you can turn off which pieces of it are sent (or required on receipt).

The input and output port fields are only visible if Google's MIDI library is being used. This can be used to provide an extra layer of filtering to send messages out on a specific port or only trigger the song to load when receiving on a specific port. To switch to Google's MIDI library, see the section on [configuring MIDI connections](#).

At the bottom of the dialog, two toggles related to sending and receiving are visible. If you want the MIDI command to be sent from MobileSheets to your device when the song is loaded, switch the "Send on Song Load" to "ON". If you want MobileSheets to load the song when the current MIDI command is received, switch the "Load Song on Receive" to ON. If you have both of these switches active, a song can be loaded when a command is received and that same command will then be sent back to the device. If you are using a KORG keyboard and need additional information concerning the "Number" MIDI command, you can consult the KORG documentation [here](#). In order to use the KORG number command, you must set the MIDI device in the [MIDI settings](#) to "KORG".

By default, MobileSheets will listen to MIDI commands on MIDI channel 1. This can be changed in the MIDI settings if you need to send commands to different channels than the one used for receiving. MobileSheets supports sending commands on multiple channels if needed. To do this, enable the "Allow Multiple MIDI Channels" in the MIDI settings, and you will see a channel dropdown on the Add MIDI Command dialog. This dropdown controls which channel that command will be sent to.

If multiple songs are configured to be loaded when the same MIDI command is received, the song that was first configured to use that command will be loaded first. If the MIDI command is received again, the next song listening for that MIDI command will be loaded. This provides a means to cycle through all songs set up for the same MIDI command. Note that if any other MIDI commands are received before that command is received again, it will reset back to the first configured song.

BATCH MIDI COMMANDS

In some scenarios, it is useful to be able to trigger songs to load when multiple commands are received from a device. This cannot be accomplished by adding multiple different commands on the MIDI tab, as the song would be loaded if any of those commands were received. This is where the batch command comes in. A batch command can contain any number of MIDI commands and can be configured for sending to a device when a song is loaded, or more commonly, to load a song when all child commands are received in order.

To create a batch command, bring up the Add MIDI Command dialog and change the command type dropdown to Batch Command and tap the edit icon that appears. This will display the Edit MIDI Command dialog as shown below:



Figure 28 - Dialog for adding commands to a batch command

This dialog is pretty straightforward – tap the add button to be presented with the familiar dialog for creating a new MIDI command, and tap the edit button to edit the currently selected command. Like other MIDI commands, the batch MIDI command can be assigned a label and input/output ports, and can be set up to be sent when the song is loaded or load the song when it is received.

MIDI LISTEN DIALOG

One easy way to create a batch command designed for listening is to use the MIDI listen dialog. To display this dialog, tap the  icon on the MIDI tab. The following dialog will be displayed:

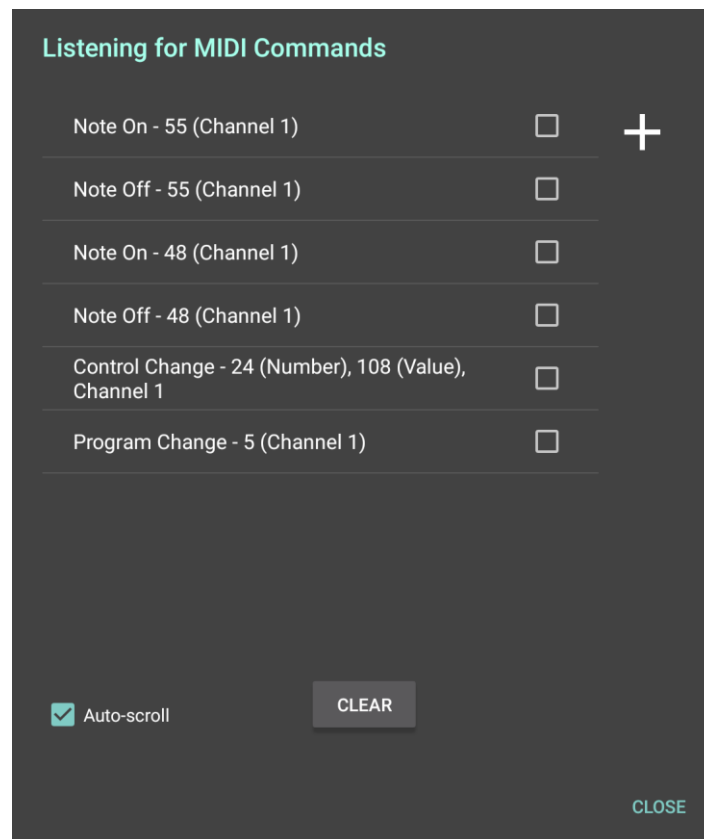



Figure 29 - The MIDI Listen Dialog

This dialog will display messages received from the MIDI device that can be used in a batch command. Select each command you want to use to trigger the song to load, then tap the add button at the top right. If multiple commands are selected, this will generate a new batch command on the MIDI screen configured for “Load Song on Receive”, otherwise the command itself will be added to the MIDI screen. In addition to being useful for generating batch commands, this MIDI listen dialog can also be used to monitor any MIDI traffic from the device, which can be helpful when analyzing problems.

LINKING SONGS TO GENOS REGISTRATIONS

One powerful feature is the ability to link songs in MobileSheets to Genos registrations. This will ensure that if a song is loaded in MobileSheets, the registration is loaded on the Genos, and vice versa. To set this up, first go to Settings->MIDI Settings and change the MIDI Device

to “Genos”. If you are connected to your MIDI device, the link icon  will appear on the MIDI tab. Tapping this will link the song to the registration that is currently loaded on the Genos. If the registration changes or you wish to use a different registration, you can tap the link icon again to update the song.

GROUP MANAGEMENT

In MobileSheets, songs can be placed into three different types of groups:

- Setlists
- Collections
- Metadata Groups

A setlist is an ordered list of songs that can be used to create a continuous playlist. This means you can page through all of the songs sequentially, which is perfect for performances. You can also adjust the ordering of a setlist to be manual, alphabetic, shuffled, the date the songs were created or last modified.

A collection, like other metadata groups, is a list of songs that is used primarily for filtering that has the same sorting options as a setlist. The important difference between collections and other metadata groups is that there is additional filtering that can be used with collections. See the section on [filtering](#) for more information.

Metadata groups, such as artists, albums, genres, and composers are used for grouping songs to aid in filtering. All of the songs in a given group can be loaded into a temporary setlist by tapping the “Load All” option when viewing that group’s songs, but their primary purpose is to provide additional filtering on the library screen so that songs can be located by a number of different attributes.

THE GROUP EDITOR

While the [Song Editor](#) can be used to place new and existing songs into any of the different group types, the fastest way to manage groups is through the Group Editor. The group editor can be accessed in two ways. If a tab is selected, such as Setlists, and you hit the Edit button in the action bar, you will see the following screen:

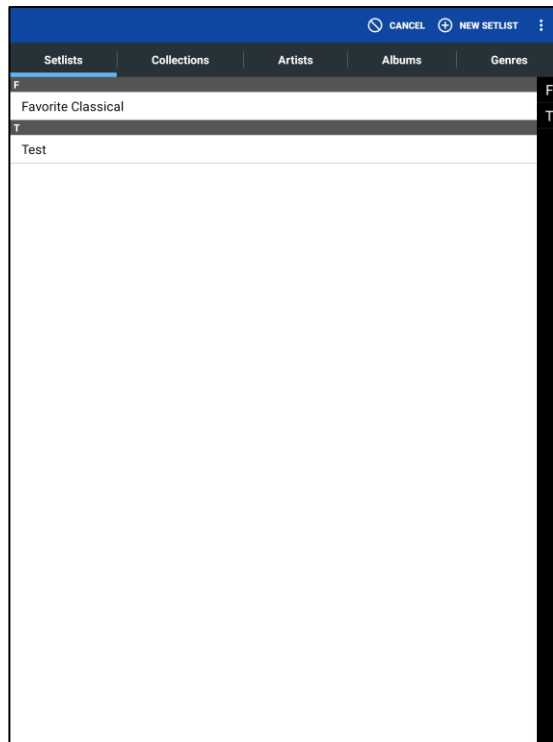


Figure 30 - The Top-Level Group Editor Screen

This screen serves two main purposes:

1. To create new group types by using the button at the top right. First tap on the tab you want to create a new instance of and then tap on the button.
2. To edit existing groups by clicking on the tabs at the top to change groups, and then tapping on an entry to edit it.

Like other library screens, you can tap on the letters on the right side of the list to jump to entries beginning with that letter. If you long press a group type, you will see the following list of actions: Rename, Copy and Delete. If you are long pressing a setlist, you will also see Share, Load Start of Setlist, Load Last Viewed Page, and Print All of these actions are described in the library section on [selected group actions](#).

The second way the group editor can be accessed from the library screen is by tapping on a group tab, tapping on a group to view its song, and then tapping on the Edit action at the top of the screen. This will switch straight to editing that specific group type instead of first going to the screen above. Once a group has been selected for editing in the group editor, the following screen will be displayed:

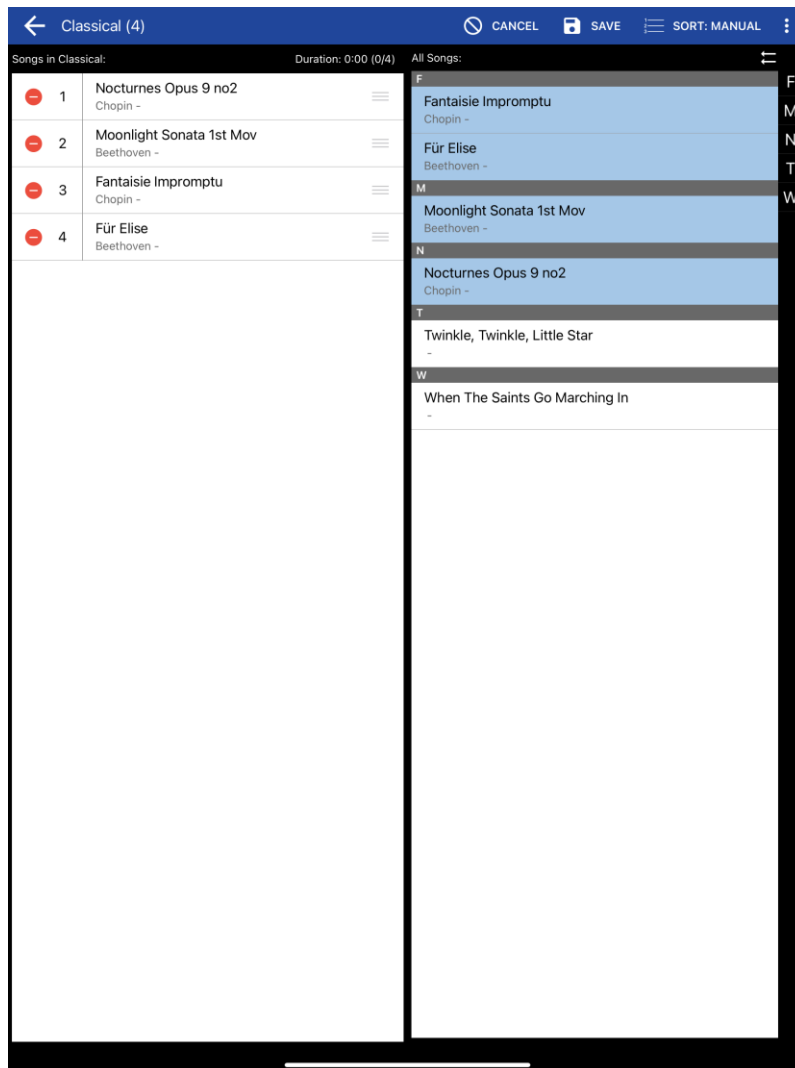


Figure 31 – The Group Editor

In the example above, a Setlist has been edited titled “Classical” which can be seen at the top left of the screen. The number of the songs in the setlist is shown in the title. At the top right, the following actions are available:


- **Cancel** – Exits the editor without saving any changes to the current group.
- **Save** – Commits all changes made to the group and exits the editor.
- **Sort** – Changes the sorting of the group (sorting groups is described in further detail [here](#)).
- **Clear All** – Removes from the currently displayed group.
- **Show/Hide Filters** – Shows or hides all of the filters shown above the list. For more details, see the section on filtering. When filters are hidden but active, the filters icon will be blue.
- **Automatically Save on back** – If enabled, pressing the back button will save the changes to the current group and exit the editor. Otherwise, a prompt will be displayed asking whether or not to save the changes to the setlist.

- **Rename** – Renames the group being edited
- **Add Placeholder** – Adds an empty placeholder song to the group. A placeholder is a song with a single blank page that can be edited later.

When another group type is shown other than a setlist, a “Create Setlist” action is available. This action will place all of the songs of the current group into a new setlist for which you provide the name.

The group editor is mainly composed of the two lists in the center. The left list is the songs currently in the edited group while the right list is all of the songs in the library. When a song is added to the current group, it will be highlighted in blue in the right list to show that it’s been added. You can filter the right list by using the filters at the top of the screen to more quickly find the songs you want to add. Songs can be removed from the current group by tapping the “X” to the right of the entry in the left list.

If the group is manually sorted, songs can be reordered by dragging the three line icon to the far right side of each song. Additionally, drag & drop is enabled, providing a mechanism to drag a song from the list on the right to the position you desire in the left list. If the group is using A-Z sorting, songs can be added by tapping on them. It should also be noted that you can add the same song to a setlist multiple times, whereas with other group types, a song is either part of a group or not, so tapping on a song that is already in the list will remove it, and vice versa.

If you wish to add all songs, tap on the  icon above the right list. You will be prompted to confirm that you want to add all of the songs. If you have filtered the list of songs on the right, only the filtered songs will be added, so this can be used to quickly add all songs that match the current filter.

THE SONG DISPLAY

When a song or setlist is loaded on the library screen, the library screen will shift over and you will be shown what is referred to as the song display. The song display contains both the rendered pages of the songs as well as various windows and controls that are useful while performing, such as the metronome and audio player. The song display is driven by a powerful display engine that is responsible for loading content from all the various file formats, displaying the pages of those files on the screen, and drawing annotations on top of the files. The way in which the engine displays the pages of the songs is determined by the selected display and page scaling modes. The display modes determine how pages are drawn in relation to each other and how page turns are handled, while page scaling determines how pages are stretched to fit the screen. These settings and other features of the song display are controlled through something called the song overlay. In order to access the song overlay, it's important to first understand how touch events are handled on the song display. The following image shows the various touch zones that can be accessed:

The image displays a page of musical notation for 'Fantaisie-Impromptu' by Frédéric Chopin, Op. 66. The score is overlaid with a grid of colored touch zones. The zones are: a green zone at the top left; an orange zone at the top center; a green zone at the top right containing the composer's name 'Frédéric Chopin Op. 66'; a large red zone covering the first two columns of the score; a large blue zone covering the next two columns; and a yellow zone at the bottom right. The score includes various musical notations such as treble and bass clefs, time signatures, dynamics (p, f, cresc., dim.), and fingerings. At the bottom of the score, it says 'Public Domain' and 'free-scores.com'.

Figure 32 - The Song Display Touch Zones

The corners (colored green and yellow) and the top and bottom (colored orange) are areas of the screen that can be configured to perform various actions, such as starting/stopping audio, toggling night mode and cycling through bookmarks. More information on this can be found in the section on [configuring touch actions](#). The sides (colored red) turn the pages of the score when tapped. Tapping the left side turns to the previous page while tapping on the right turns to the next page. The bottom right corner (colored yellow) brings up what is known as the quick action box, which provides convenient access to start/stop the audio player, metronome and scrolling. The quick action box is available even when performance mode is enabled, making it a useful tool in all scenarios. See the section on the [quick action box](#) for more information. The quick action box can be moved to any of the other corners if desired or hidden if it is not needed. Lastly, the center of the screen can be tapped to bring up the song overlay, which provides access to all of the various features of the song display.






THE SONG OVERLAY

When the song overlay is accessed by tapping the center of the screen, a title bar will slide down from the top of the screen, the page slider and other buttons will slide up from the bottom, and the audio player (depending upon its settings and whether an audio track is present in the current song) will be displayed. This can be seen in the image below:



Figure 33 - The Song Overlay


The title bar at the top left of the overlay will be covered first. The following buttons can be found in the title bar:

	Returns to the library screen. Functionally equivalent to hitting the hardware back button.
	Configures the active song's or setlist's notes in a dialog. This can be used to configure whether or not the notes are automatically displayed. See the section on displaying notes for more information.
	Loads the annotation editor for the current page.
	Edits the current song in the song editor .
	Transposes the current text or chord pro file (only shown for those file types). See the section on the Transpose dialog for more information.
A	Displays a dropdown menu with two choices: Text Display Settings and Edit File. The first option edits the text display settings for the current text file, and the second edits the current file in the text editor . These options are not displayed if the current file is not a text or chord pro file.

It should also be noted that if you tap the page number at the top right, a dialog will allow you to enter the page you want displayed.

The title bar normally is only displayed when you tap the center of the screen to bring up the overlay. If you prefer to always see the title bar, there is an "Always Show the Title Bar" option on the [display settings](#) screen. When this setting is used, the score will account for the space used by the title bar when rendered. Normally, the score is reduced in size when the overlay is visible so that parts of the score are not obscured. This reduction in size uses a faster, lower quality scaling of the page compared to normal, as the overlay is not meant to be hidden while playing through the song. If the title bar is always shown, the page will be reduced in size using a higher precision scaling so that there is no reduction in image quality.



At the bottom of the screen there is a row of buttons. The buttons on the left are used to change settings and activate various features while the buttons on the right are used to bring up windows and other tools like the audio player and metronome. The buttons on the left will be described first.

 - Displays a popup menu with the following options:

- **Print** – [Prints](#) the currently displayed song.
- **Create Snippet** – Loads the snippet tool which can be used to create a new song from the pages of the current song. More information about the tool can be found [here](#).
- **Find and Load Song** - Displays a search window to quickly locate another song to load. This will exit the current song or setlist, so this is mainly used to quickly load a song without having to return to the library screen.
- **Start Scrolling** – Starts automatic scrolling for the current song.
- **Scroll Settings** – Brings up the automatic scrolling settings for the current song. See the section on [automatic scrolling](#) for more details.



- Displays the following list of actions in a popup menu:

- **Crop** – Loads the [cropping screen](#) for the current page so that the cropping region can be adjusted.
- **Clock Settings** – Displays a dialog that allows a clock to be shown on top of the score in a designated area. The font size, style and color can be modified if desired.
- **Rotate** – Displays a dialog that allows the current song’s pages to be rotated. To rotate the currently displayed page, tap the rotate left  and rotate right  buttons at the bottom left corner of the screen. To rotate every page in the file, tap the rotation buttons beside those. Long press these buttons to rotate every page in every file in the song. The rotate left button rotates the page 90 degrees to the left, and the rotate right button rotates the page 90 degrees to the right. Tap the arrows on the sides to change pages.
- **Sharpen Image** – Brings up a dialog with an “Enable Sharpen” checkbox and a Sharpen level slider. “Sharpening” is a feature in MobileSheets that cleans up images with a lot of “noise”. For example, if you have a scanned page of a book with a lot of smudges, gray areas and/or other undesirable markings, sharpening can help remove these and make the background whiter and the content darker. The higher the value used for “Sharpen Level”, the more aggressive the sharpening algorithm will be, but this can sometimes cause visual artifacts, and the image can become more jagged in areas, so it’s important to select a value that removes undesirable content without negatively affecting the score.
- **Orientation** – Locks or unlocks the current orientation. If the orientation of the tablet is locked, rotating the tablet will no longer have any effect.
- **Show Annotations** – Shows or hides annotations.
- **Night Mode** – Enables night mode which inverts the color of the sheet music.
- **Zoom/Pan Settings** – Displays the “Apply Zoom/Pan Settings” dialog, which is shown below:

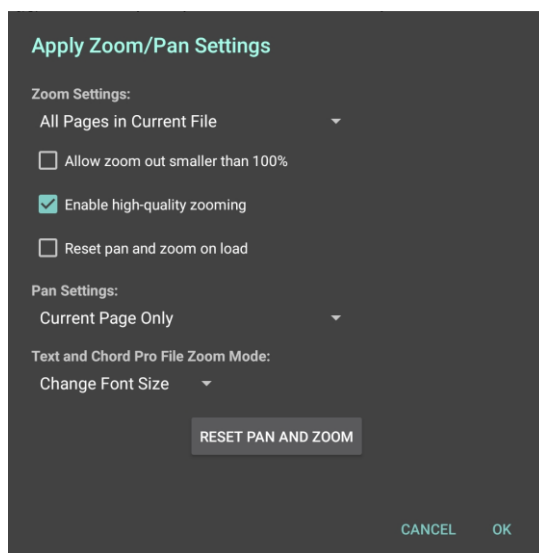


Figure 34 - The Zoom/Pan Settings Dialog

This dialog determines what pages are affected when either pinch zooming or panning occurs. By default, all pages are zoomed by the same amount. If you find yourself using zooming to remove margins, the [cropping feature](#) is much better for this. You can change which pages are zoomed using the first dropdown, which supports Current Page Only, All Pages in Current File, All Pages in All Files (Current Song), and All Pages in Setlist. The pan settings dropdown also supports these same options. The Text and Chord Pro File Zoom Mode provides a method to control how zooming works with text and chord pro files. The default zoom mode is to “Change Font Size” which will increase or decrease the font sizes used to render the text or chord pro file. The “Change Page Size” option will just zoom in on a particular part of the page, which is the same way zooming works with images and chord pro files. The “Disabled” option will disable zooming with chord pro and text files entirely. When the “Enable high-quality zooming” setting is enabled, every pinch zoom will result in a new high-quality rendering in the background. With some documents, this can be quite slow. If you like to zoom in and out frequently, disabling this setting can result in a much better experience at the cost of a little bit of image quality.

If “Reset pan and zoom on load” is checked, zoom and panning changes will not be saved so that each time a song is loaded, no zooming will be applied. Additionally, pages cannot be turned while zoomed in – you must zoom out before turning pages. While zoomed in with this setting enabled, you can perform a single finger pan of the page. For users that like to zoom in and out a lot, turning off high-quality zooming and enabling the “Reset pan and zoom on load” setting will make it very fast to zoom in, pan the page, and then zoom back out.

If you do not like the current pan or zoom settings, tapping “Reset Pan and Zoom” will remove any zooming or panning that has been applied. Lastly, the “Allow zoom

out smaller than 100%" option determines whether the page will be allowed to be smaller than the screen in both dimensions. By default, this is not allowed as it's normally desirable to use as much as the screen as possible without stretching the score.



- Enables panning, which provides a means to move the page around on the screen. This feature only works if the page is larger than the screen, as otherwise there would be no need to move the sheet music around. This tool is only displayed when using the single page display mode, as this is the only mode that supports saving the amount that each page has been zoomed and panned. When using that display mode with the default settings, pages will be displayed in the same manner as they were last seen. That means if you would like to start a page with it partially scrolled, you can set it up so that it's always loaded that way. As described in the previous section, you can change this behavior if desired. The majority of users will not need zooming and panning, and instead should rely on cropping to eliminate sections of the page that aren't needed.



- Tapping this icon will display a dialog used to change the current display mode for songs as well as various display settings for the display modes. The display mode determines how pages are positioned, and the way in which pages are turned. The icon will change depending upon which mode is currently selected. The display mode is saved per orientation, so you can assign a different display mode to portrait versus landscape orientation. By default, the same display mode is applied to all songs. You can override the display mode per song if required. The dialog used for selecting the display mode is shown below:

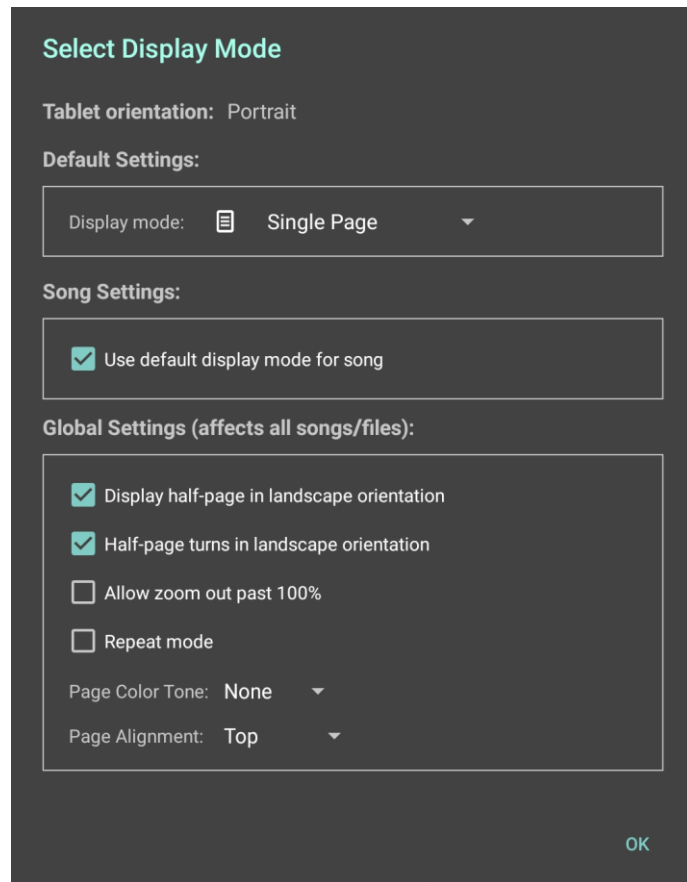















Figure 35 - The Display Mode Dialog

The device orientation will automatically be detected and the label at the top of the dialog will change depending on how the device is oriented. A different display mode can be set per orientation of the device. The default display mode for the current orientation can be set by tapping the Display mode dropdown. If a different display mode is desired for the current song, uncheck the “Use default display for song” checkbox and select the desired display mode. At the bottom, different settings are shown depending upon what display mode is currently active. This provides quick access to change settings instead of having to go to the main settings screen. The following display modes are supported:

 Single Page	<p>The single page display mode shows one full page in portrait and horizontally scrolls pages during page turns. In landscape mode, you can split each page up into two parts (see the “Display Half Page in Landscape” setting) to make full use of the available screen width. In landscape, you can also turn half pages at a time if you enable the “Half-Page Turns in Landscape Mode” setting. This mode supports zooming and panning.</p>
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 <p>Two Pages</p>	<p>The twopage display mode is only available in landscape orientation. This will show two pages at a time, which works really well on larger tablets. When this mode is selected, an additional icon is added to bottom left of the overlay to control the page turn behavior. The following page turns are supported:</p> <table border="1" data-bbox="639 461 1401 835"> <tr> <td data-bbox="639 461 770 595">  </td> <td data-bbox="770 461 1401 595"> <p>Turns one page at a time, meaning pages 1 & 2 would be displayed, then 2 & 3, then 3 & 4, and so on.</p> </td> </tr> <tr> <td data-bbox="639 595 770 712">  </td> <td data-bbox="770 595 1401 712"> <p>Turns two pages at a time, meaning pages 1 & 2 would be displayed, then 3 & 4, then 5 & 6, and so on.</p> </td> </tr> <tr> <td data-bbox="639 712 770 835">  </td> <td data-bbox="770 712 1401 835"> <p>Alternates page turns, meaning pages 1 & 2 would be displayed, then 3 & 2, then 3 & 4, then 5 & 4, and so on.</p> </td> </tr> </table>		<p>Turns one page at a time, meaning pages 1 & 2 would be displayed, then 2 & 3, then 3 & 4, and so on.</p>		<p>Turns two pages at a time, meaning pages 1 & 2 would be displayed, then 3 & 4, then 5 & 6, and so on.</p>		<p>Alternates page turns, meaning pages 1 & 2 would be displayed, then 3 & 2, then 3 & 4, then 5 & 4, and so on.</p>
	<p>Turns one page at a time, meaning pages 1 & 2 would be displayed, then 2 & 3, then 3 & 4, and so on.</p>						
	<p>Turns two pages at a time, meaning pages 1 & 2 would be displayed, then 3 & 4, then 5 & 6, and so on.</p>						
	<p>Alternates page turns, meaning pages 1 & 2 would be displayed, then 3 & 2, then 3 & 4, then 5 & 4, and so on.</p>						
 <p>Half Pages</p>	<p>The half page display mode shows one full page, but only advances one half-page at a time. This means that if all of page one is showing and a page turn occurs, the top half of page two will be displayed. Another tap will display all of page two. This makes it easy to prepare for page turns as the pages can be turned ahead of time whenever it is convenient.</p>						
 <p>Vertical Scrolling</p>	<p>The vertical scrolling display mode shows all pages stacked vertically. This is the most common display mode for PDF readers. You can drag your finger up and down to scroll through the pages or tap the sides to slide the screen to the next page. This display mode is the best mode to use if you plan to take advantage of the automatic scrolling feature, as it supports a slow constant scroll that doesn't work as well in other modes.</p>						



- Similar to the display mode icon, the page scaling icon displays a dialog that is used to change the current page scaling mode which determines how pages are stretched to fill the screen. The icon will change depending upon the currently active page scaling mode. Like the display mode, the page scaling is also saved independently for portrait vs landscape orientation. A default page scaling mode can be set and individual songs can override the default settings if required. See the page scaling dialog below:

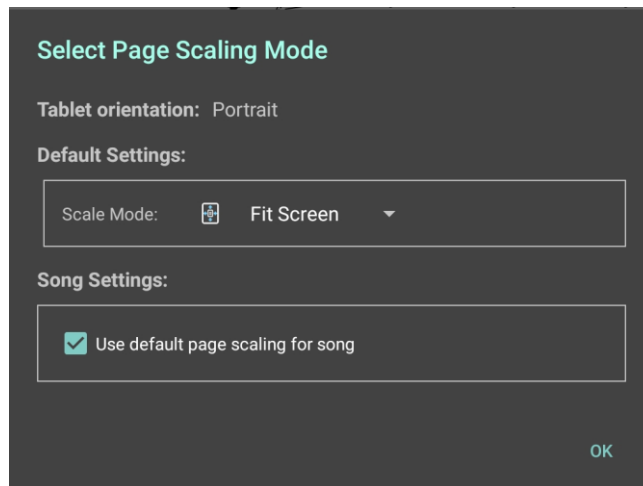







Figure 36 - The Page Scaling Mode Dialog

A different page scaling mode can be set per orientation of the device, and the orientation is displayed at the top of the dialog. The page scaling options are described below:

 Fit Screen	<p>The Fit Screen scaling mode will stretch the score as large as possible to fill the screen without changing the aspect ratio. Either the width of the score will match the width of the screen, or the height of the score will match the height of the screen, depending upon which one doesn't cut off any content. That means that you won't experience any distortion or tearing as the sheet music grows or shrinks. This is the default mode and is recommended for most users.</p>
 Fit Width	<p>The Fit Width scaling mode will stretch the score so that the width of the page matches the width of the screen. This may cause parts of the top or bottom of the score to be off the screen.</p>
 Fit Height	<p>The Fit Height scaling mode will stretch the score so that the height of the page matches the height of the screen. This may cause parts of the sides of the score to be off the screen.</p>
 Full	<p>The Full scaling mode will stretch the score so that it completely fills the screen. This will not respect the aspect ratio of the original file though, so you will see some distortion of the original image. If your files have an aspect ratio that closely matches the tablet, this mode may not cause much distortion, and may be favorable to other modes. Otherwise, it will almost certainly make your scores a little harder to read.</p>

One other icon can show up at the bottom left that has not been discussed yet. This is the

half-page turn position icon, which looks like this: . This icon is only shown when using the single page display in landscape orientation with half-page turns enabled. Tapping this

icon allows you to position the two halves independently so that no content is cut off during the half-page turns. It's as simple as tapping this icon, scrolling the first half to where you like it and releasing your finger to accept, and scrolling the second half to where you like it and releasing your finger to accept. This must be performed per page of the song.

The buttons at the bottom right of the overlay are more involved and will be explained in the next sections.

THE SETLIST WINDOW

The setlist window provides a convenient way to view all songs in the current setlist, and skip to any of those songs with a single tap. It also supports reordering songs, and a series of buttons at the bottom of the window. Different buttons are available depending upon whether a single song was loaded, or an actual setlist. The window (both variations) can be seen below:

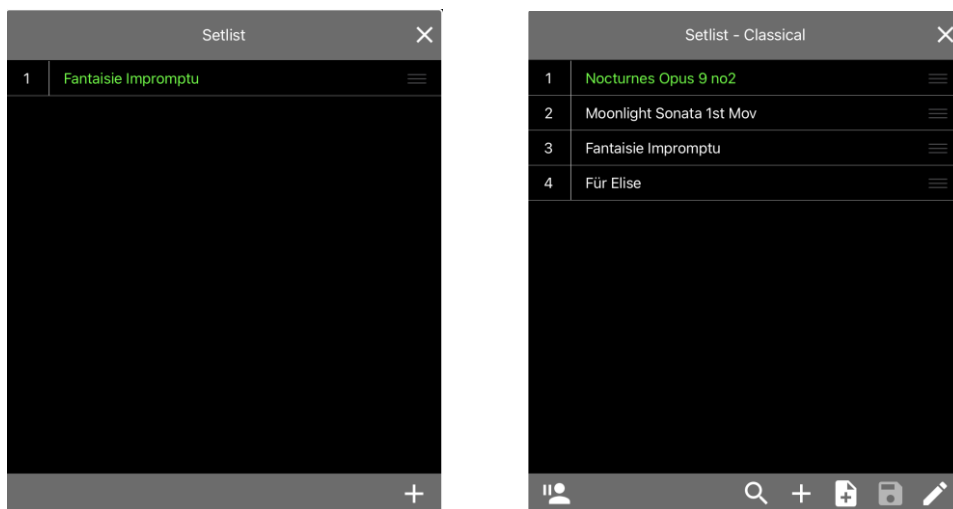








Figure 37 – The Setlist Window with a Song on left and Setlist on right

If any of the song entries are long pressed, a menu will be shown with options to either edit the song or remove it from the setlist. The buttons at the bottom of the window are described below:

	<p>Pauses the current setlist and loads another song. This action is only available when a setlist has been loaded. When this action is tapped, a dialog will be shown from which you can pick a song in your library. This dialog supports basic filtering (search words, collections, an alphabet list, etc) so that a song can be quickly located. When you select the song from the list, the song display will load that song. If you hit the tablet hardware back button or the back button at the top left corner of the overlay, it will go back to the last viewed page in the setlist. If an audience member requests a song, this makes it easy to handle one-off requests that are not</p>
	<p>Finds a song in the current setlist. You can search for a song by typing the title in the search bar or using the alphabet list. When you select a song from the list, the song display will load that song.</p>
	<p>If a setlist is loaded, this brings up a search window to quickly locate a song to add to the current setlist. Note that the change to the setlist will not be saved unless you explicitly hit the save button.</p> <p>If a single song is loaded, this brings up a list of all setlists in your library and lets you add the current song to one of your choosing. Just tap on a setlist in the list to add the song to it.</p>
	<p>Creates a new placeholder song and adds it to the current setlist. The slider at the top of the dialog provides a way to select the position in the setlist for the new song. This option is only available if a setlist was loaded.</p>
	<p>Saves any modifications to the current setlist, making them permanent. This option is only available if a setlist was loaded.</p>
	<p>Loads the current setlist in the group editor. This option is only available if a setlist was loaded.</p>



THE BOOKMARKS WINDOW

Bookmarks are used in MobileSheets to mark pages in a song for quick future access. They can also be configured to show up on the bookmarks tab on the library screen, which provides a mechanism to jump to specific parts of songs by searching for the bookmark name. Bookmarks are very useful when dealing with large scores or PDFs containing multiple songs in them, as you can individually mark the songs with bookmarks, and load these from the bookmarks tab.

The Bookmarks window is used to create and view all bookmarks for the current song or setlist. It can be seen below:

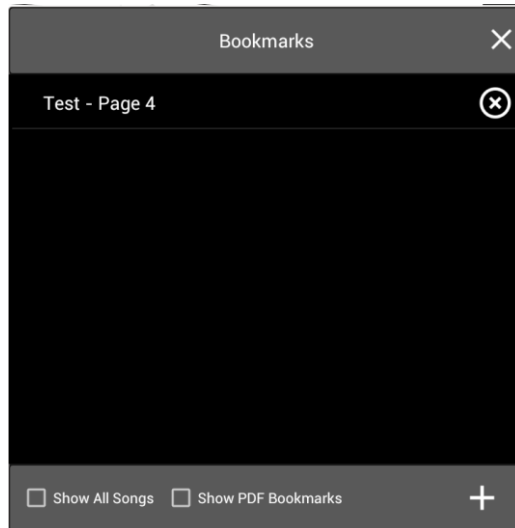


Figure 38 - The Bookmarks Window

The window is fairly simple – the bookmarks are shown in a list, and each entry can be removed by tapping on its “X” on the right side of the window. New bookmarks can be created by tapping the **+** button at the bottom right. If a bookmark entry is tapped in the list, the song display will skip to the page of the bookmark. If the “Show All Songs” checkbox is checked then bookmarks from all songs in the current setlist will be shown, otherwise only bookmarks from the active song will be shown in the list. If “Show PDF Bookmarks” is checked, then any PDF bookmarks found will also be displayed in the list. If a non-PDF bookmark is long pressed, a popup menu will be displayed with an option to go to the bookmark, edit the bookmark or delete the bookmark.

When the **+** button is tapped to create a new bookmark, the following dialog is shown:

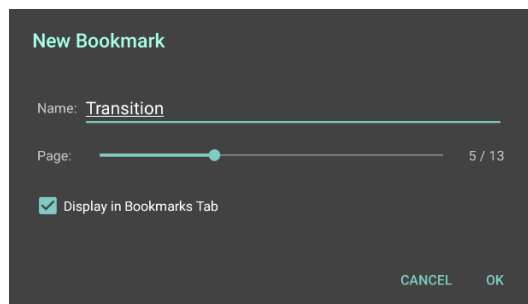


Figure 39 - Creating a New Bookmark

The name of the bookmark can be assigned in the text field at the top, and the page can be set using the slider in the middle. The currently displayed page is used as the default, so in most cases, a name is all that is needed. If you want the bookmark to show up in the bookmarks tab on the library screen, check the “Display in Bookmarks Tab” option.



LINK POINTS

Link points are used in MobileSheets to create a connection between two pages. The link point will show up as a partially transparent circle on the score. When it is tapped, it will jump from one page to the other, and briefly highlight the link point so that you know where you should be looking. This makes link points great for handling things like repeats (D.S/D.C.). The only other way to effectively handle repeats is to create a custom page ordering that repeats pages so that you are always advancing forward. The list of link points can be seen in the Links window, shown below:

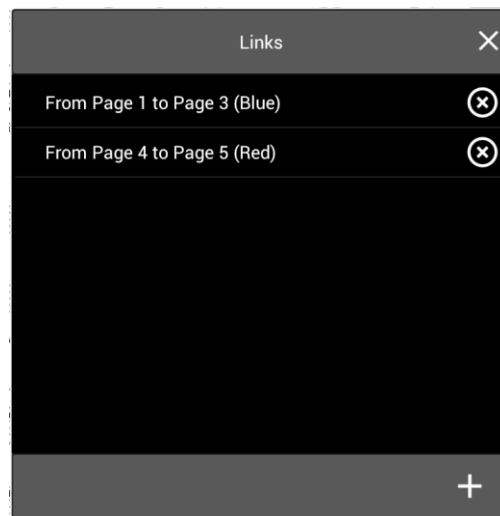


Figure 40 - The Links Window

Each start and end link point will be assigned the same color, and all pairs will have different colors to make them easier to distinguish. Up to 10 pairs of link points are allowed. To remove a pair of link points, tap the “X” at the right side of the list. Be aware that this may adjust the colors of existing link points. Tap on entries in the list to view the start and end pages for the link points (tap the same entry multiple times to cycle between the start and end). The image below demonstrates what a link point looks like on a page:

The image shows a page of musical notation for piano. The score is divided into five systems of staves. The first system (measures 41-43) is marked 'Largo' and 'pesante'. The second system (measures 44-46) is marked 'Moderato cantabile' and 'poco dim.'. The third system (measures 47-49) is marked 'sotto voce'. The fourth system (measures 50-52) is marked 'a tempo' and 'riten.'. The fifth system (measures 53) is marked 'tr'. A blue circle highlights a link point in measure 45. The website 'free-scores.com' is visible at the bottom right.

Figure 41 - A page with a blue link point

To create a link point, tap on the **+** button. Most of the overlay will be hidden except for the page slider and the display at the top, which indicates what to do. You can cancel the creation at any time by tapping the “Cancel” button at the top left. Tap the location that you want to link from first, then swipe to turn pages (or use the page slider) to locate the page to link to. Tap the position on the screen for the end link point and you will see both a partially transparent circle on the score as well as a new entry in the Links window.

To edit an existing link point, long press the entry in the Links window. You will see the following dialog displayed:

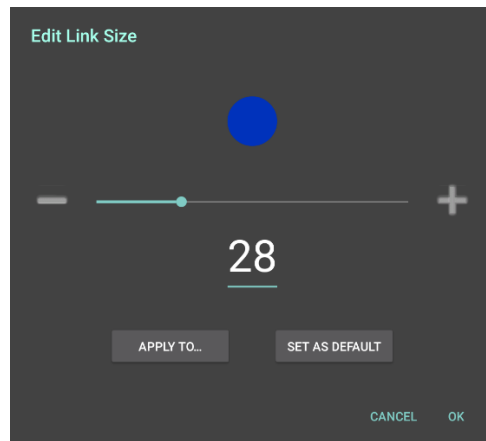


Figure 42 - Editing a link point

This dialog lets you adjust the size of any link point. The default size for all link points is 28. To adjust the size of the current link point, drag the slider or press the minus and plus buttons on the side. You will see the size of the link point change in real time as you do this. Once you have found an acceptable size, you can either tap OK to accept the change for that one link point, or tap the “Apply To” button to apply the change to other link points. Tapping this button gives you the following options:

- **Current Link Only** – Only modifies the current link point. Equivalent to just tapping OK.
- **All Link Points in Current Song** – Sets the size of every link point in the current song to match the new size.
- **All Link Points in Setlist** – All link points in every song in the setlist will be modified to match the selected size.
- **All Link Points in All Songs** – This will modify all link points in every song in the library to match the selected size. If you are trying to set a new default, and want to update all of the existing link points to match, this is the way to accomplish that.

If you would like all future link points to have a different default size, you can tap the “Set as Default” button to set the selected link point size as the new default.

Link points cannot currently be rearranged in the window. If you need to remove a link point, press and hold on the particular item to be removed, and select the delete option from the menu. This will update the colors of the existing link points, as their position in the list changes.



SMART BUTTONS

Smart buttons are a powerful feature in MobileSheets that let users place buttons on top of their scores that can trigger various actions when tapped. One of the most common uses for smart buttons is to send a series of MIDI commands to a connected device. This is useful as it allows devices to be configured at the appropriate time instead of when the song is loaded. It also provides a mechanism to change device settings partway through a song. To place a smart button, first bring up the smart buttons window, then tap the **+** button to begin creating a new button. The following dialog will be displayed:

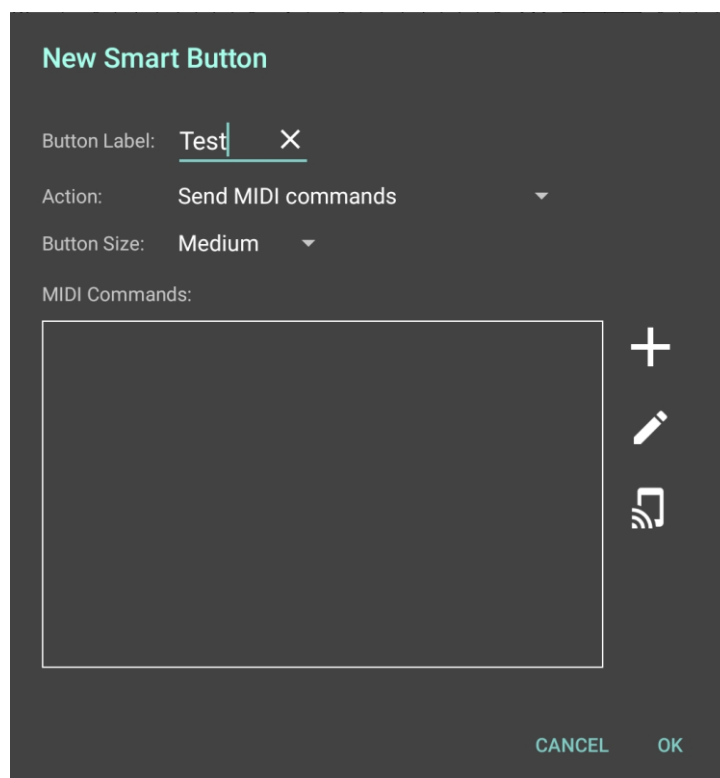


Figure 43 - The new smart button dialog

The first setting on the dialog is the button label which is the text that will be shown on the button. While this field is optional, it can help provide context for what the button is programmed to do. The next setting is the action, which determines what will happen when the button is tapped. The following actions are supported:

- **Send MIDI commands** – Sends one or more MIDI commands when the button is tapped. When this command is selected, you will see the list of MIDI commands as shown above. Tap the **+** button to see the [new MIDI command dialog](#), or tap an existing command tap the **✎** to edit that command. Tap the **📡** button to listen for MIDI commands.

- **Start or Stop Audio Track** – Starts or stops audio playback.
- **Start or Stop Metronome** – Starts or stops the metronome
- **Go to Start of Song** – Goes to the first page of the current song
- **Go to End of Song** – Goes to the last page of the current song
- **Go to Previous Song** – Goes to the previous song
- **Go to Next Song** – Goes to the next song
- **Load or Go to Song** – Loads a different song in the library or current setlist and skips to the provided page. Unlike link points, which can only be used to skip between pages of the same song, this provides a mechanism to quickly jump between pages of different songs in the library. If this option is selected, the dialog will reveal a song dropdown for picking the song and a field for entering the page number.
- **Reset Next Link Point** – When using a pedal to advance through link points, this will prompt the user to indicate which link point should be triggered next.
- **Open File in External Application** – Loads the file that was linked to the smart button in an external application. If no default application is assigned for the selected file type, you will be prompted to select a supported application to load the file.
- **Show Notes** – Shows any notes assigned to the current song.
- **Pause or Resume Audio Track** – If the audio player is currently playing, the track will be paused, otherwise playback will resume from the current position.
- **Show or Hide Audio Player** – Displays the audio player if it's currently hidden, or hides the player if it is shown.
- **Load and Play Audio Track** – Links the button to one of the audio tracks in the current song. This provides a convenient mechanism to play back a specific track in the song and set the playback position (if desired).
- **Open URL** – Opens a URL. This can open a web browser for a URL that starts with `http://` or `https://`, or can load a file if it starts with `file://`.

The size of the button that is created can be changed by selecting a different value from the “Button Size” dropdown. After selections are made and the OK button is tapped, the window will be hidden so that the smart button can be placed on the score. To place the button, just press down on the score and drag to where you would like the button positioned. After that, the smart button window will be shown again with the new button in the list. To edit an existing button, long press on it in the smart buttons window. See the screenshot below for an example of what a medium size smart button looks like on the score:

Fantaisie-Improptu



Figure 44 - A smart button placed on the score

To reposition an existing smart button, long press it on the score and then drag the button to the new location. While it is possible to drag buttons between two pages that are both visible at the same time (when using a display mode such as the two-page display mode), if the button needs to be moved more than a couple of pages away, it's usually faster to delete and recreate the button.



THE AUDIO PLAYER

MobileSheets comes equipped with an audio player that can be used to play backing tracks for scores. This is incredibly useful if you want to practice with a recording of other instruments, are performing live and need to fill in missing parts with an audio track, or need to hear how something is supposed to be played while learning a new song. The audio player can be seen in the image below:

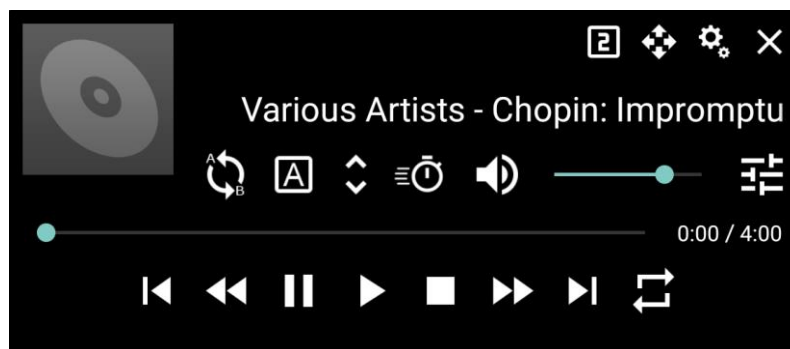



Figure 45 - The Audio Player

To see how the audio player looks in the overlay, see the [beginning of this section](#). The audio player comes with a lot of functionality but the interface is quite simple. Before all of the various buttons are addressed, it should be noted that there are three different sizes for the audio player – small, normal, and large. These can be cycled through by tapping the  icon. Every time the icon is tapped, a different number will be shown in the icon, and the size of the audio player will change. The small size can be seen below:

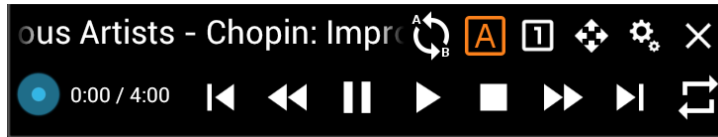


Figure 46 - Audio Player (small)

This has the same functionality as the top window except for the missing volume control. The other layout is the large size:

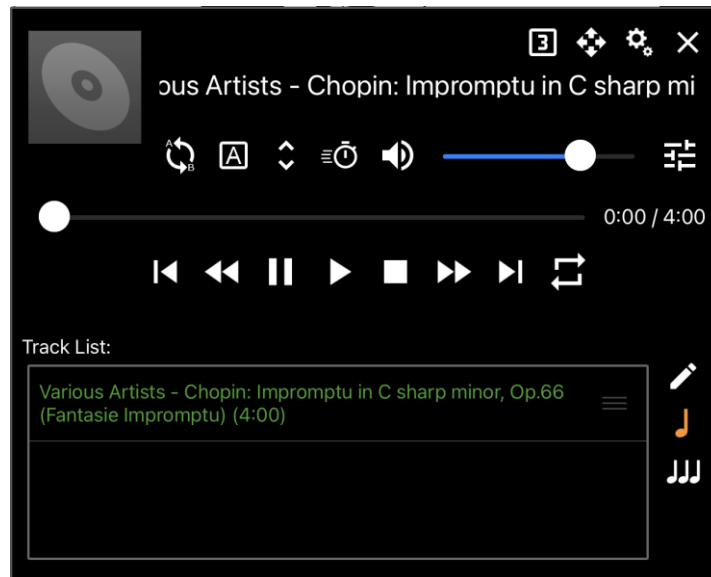






Figure 47 - Audio Player (large)

The large size comes with additional features not present in the normal size. A track playlist is shown below the player with the ability to skip between tracks by tapping them, as well as support for reordering them (tap and drag the box to the left of the track). To edit the current playlist, tap the  icon to be taken to the [song editor audio tab](#). To change the playlist so that it only contains tracks from the current song, tap the  icon. This is the default. To change the playlist so that it contains tracks from every song in the current setlist, tap the  icon.

The next thing that should be explained is the audio player settings dialog. To view the settings, tap the  icon. This dialog is shown below:

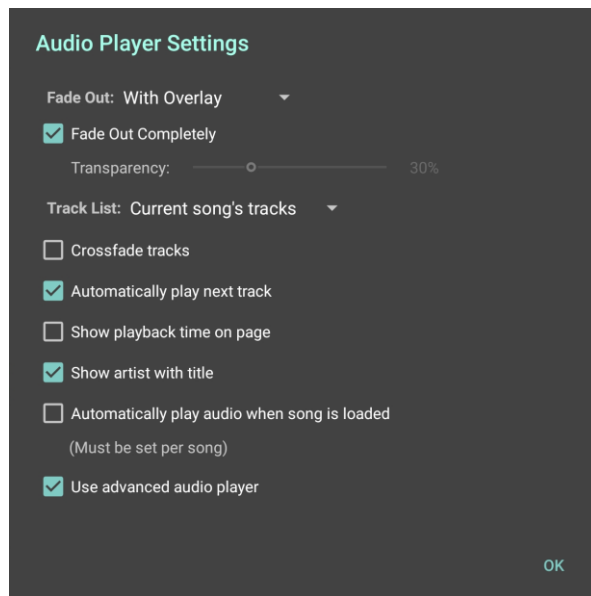







Figure 48 - The Audio Player Settings Dialog













The audio player settings are the same for all songs with the exception of the setting: “Automatically play audio when song is loaded”. If you want audio playback to start immediately after a song is loaded, you need to view this dialog with that song loaded and check the checkbox. The other settings are explained in the list below:


- **Fade Out:** Determines if the audio player will fade out when the overlay is closed. The following values are supported:
 - **Never** – The audio player will stay visible even if the overlay is closed. The audio player can still be hidden by tapping the “X” at the top right. If you do this, you must tap the ▶ button in the overlay to show the audio player again.
 - **With Overlay** – The audio player is shown when the overlay is shown, and hidden when the overlay is hidden. This is the default behavior.
 - **After 5 Seconds** – The audio player is hidden after five seconds of inactivity, meaning you have not touched any of the audio player controls within five seconds.
- **Fade Out Completely** – Determines if the audio player is hidden completely when it fades out, or if it will stay partially visible. If this option is not checked, the transparency slider can be used to determine how transparent the player is.
- **Track List** – Determines if the tracks loaded in the audio player are for the current song only or all songs in the current setlist. If the selection is set to “All tracks in setlist”, the “Switch track when song changes” setting is shown.

- **Crossfade tracks** – If enabled, allows crossfading between tracks which allows the current track’s volume to be faded out as the next track’s volume is faded in. When this setting is enabled, a slider is shown providing a selection for the length of the crossfade between 1 to 11 seconds.
- **Automatically play next track** – Determines if the audio player will continuously play through all tracks in the playlist. If this option is unchecked, the audio player will stop playback after finishing the current track.
- **Switch track when song changes** – Determines if the audio player will change the current track when the song changes. If this option is enabled, and you change from one song to another in a setlist, the audio player will stop playback and switch to the first track associated with that song. This setting is only valid when “Track List” is set to “All tracks in Setlist”.
- **Show playback time on page** – If enabled, displays the current playback time at the top right corner of the screen.
- **Show artist with title** – Determines if the artist is shown with the song title. In order for this to work, the audio track must contain artist information.
- **Automatically play audio when song is loaded** – If enabled, the audio player will automatically play the associated audio file when a song is loaded. This setting must be set for each song.
- **Use advanced audio player** – Switches the audio player engine to the Superpowered Audio library instead of Microsoft’s audio library. This enables use of pitch shifting and tempo adjustment and provides better performance. If a file can’t be loaded with the Superpowered Library (which only supports wave and mp3 files), the Microsoft Library will be used instead. If experiencing buzzing, crackling or popping noises when using the audio player, it can often help to disable this feature.

All of the buttons on the audio player will now be explained:

	Allows the audio player to be moved by pressing and dragging this button across the screen. The new position of the audio player will be saved and automatically restored the next time MobileSheets is loaded.
	Enables a-b looping. If an a-b loop has previously been set, orange vertical bars will be drawn to show where the start and end points are for the loop.
	Sets the start and end points for an a-b loop. First, change the track’s position to the desired start of the loop by dragging the slider. Then tap the  icon to set the start of the loop. An orange vertical bar will be drawn showing the start of the loop. Move the slider to where you want the loop to end and press the  icon. If you have not enabled a-b looping, the start/end will not be shown, so you must do this first if you want to test the loop.

	Adjusts the pitch of the track without affecting its playback speed. Adjustments can be made in steps from -12 to 12.
	Adjusts the playback speed of the track without affecting its pitch. Values can be selected between 0.01 and 3 (meaning 1/100 th of the speed to 3 times the normal speed)
	Mutes or unmutes the volume. You can adjust the volume by using the slider to the right of this icon. If volume is muted the icon will look like  .
	Goes to the previous track. If the current playlist only has one song, this will have no effect.
	Rewinds within track. If pressed it will rewind in 5 second intervals. If held down it will continuously rewind.
	Pauses playback for the current track. If the track is currently paused, tapping this again resumes playback.
	Plays the current track. If the current track is already playing, tapping this again will restart at the beginning of the track.
	Stops playback for the current track.
	Fast forwards within track. If pressed it will fast forward in 5 second intervals. If held down it will continuously fast forward.
	Skips to the next track. If the current playlist only has one song, this will have no effect.
	Sets the repeat mode. Tap this once to repeat the current playlist. Tap it again to repeat the current track. Tap it again to turn repeating off.

The last icon that should be mentioned is the  icon which can be used to control the panning of the speakers. When the icon is tapped, the following popup is shown:

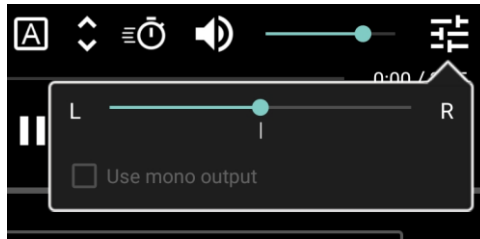


Figure 49 - The speaker panning control

If the audio is panned completely to one side, the “Use mono output” checkbox will be enabled. This allows a single channel of audio to be output to both speaker channels at once.



THE METRONOME WINDOW

MobileSheets comes with a fully featured metronome that can be accessed through the overlay. The metronome contains multiple display modes, sound effects, and options for controlling the tempo and beats. The metronome window is shown below:

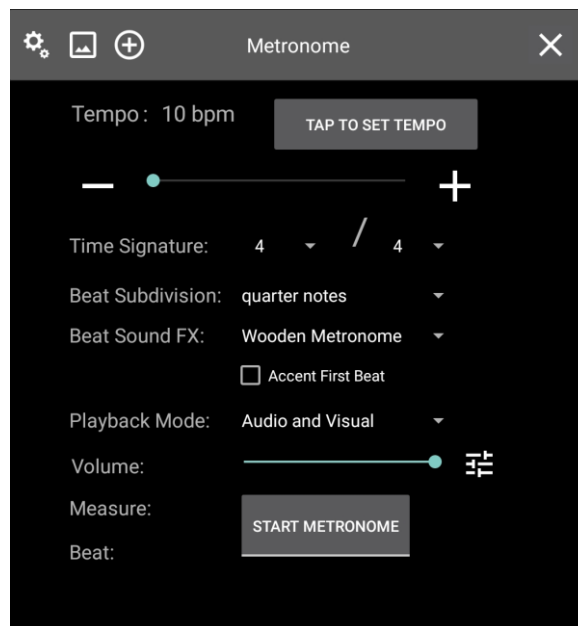



Figure 50 - The Metronome Window

The metronome window has controls for adjusting tempo, time signature, beat subdivisions, sound effects, the first beat accent, volume, and panning of the audio between the left and right speaker channels. You can also change the playback mode if you only need visual or audio playback. At the top there is a tap-to-set tempo button to help you dial in the tempo you require. The tempo slider allows you to make quick adjustments, while the plus and minus buttons on the side adjust the tempo by 1 bpm at a time. The sound pack that is selected determines what sound effect is used for the various beats. The following sound packs are included:

- Wooden Metronome
- Ping
- Digital Metronome
- Hi-Hat
- Kick and Hi-Hat
- Bongo
- Cowbell
- Metal Metronome
- Woodblock

If the Accent First Beat checkbox is selected, a different sound effect will be used on the first beat of every measure to make it easy to identify.

At the top left of the window, there are multiple icons. The first icon is  which displays the metronome playback settings dialog when tapped. This can be seen below:

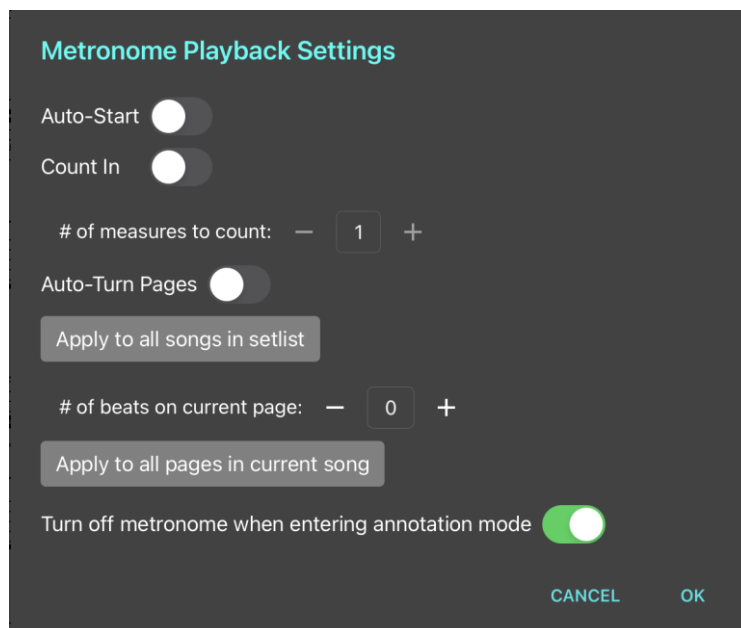



Figure 51 - Metronome Playback Settings

The metronome playback settings must be set individually for each song. This gives you the ability to control the metronome behavior based on what song or setlist you are loading. Each of the settings is explained below:

- **Auto-Start** – Determines if the metronome will immediately start playing when the song is loaded. If the song is part of a setlist, the metronome will start playing as soon as the song is visible.
- **Count In** – Determines if the metronome will play a certain number of beats for a count-in, and then stop. If the metronome is stopped in the middle of a count-in, it

will instead skip the count in. This provides an easy mechanism to override a count-in if needed so that the metronome will continue to play without stopping.

- **# of measures to count:** If count-in is enabled, this is the number of measures that will be played before the metronome stops.
- **Auto-Turn Pages** – Determines if the metronome will automatically turn pages when it reaches the number of beats set for a given page.
- **Apply to all songs in setlist** – Applies the auto-start, count-in, # of beats to count, and auto-turn pages settings to all songs in the current setlist.
- **# of beats on current page** – Determines how many beats there are on the current page, which is used with the Auto-Turn Pages setting. The metronome will count this number of beats, and then turn the page. This setting must be set for each page in the song.
- **Apply to all pages in current song** – Uses the current “# of beats on current page” value for all pages.
- **Turn off metronome when entering annotation mode** – Stops the metronome when entering annotation mode.

The next icon at the top left of the metronome window is the  icon. This is used to change the display settings for the metronome. The display settings dialog can be seen below:

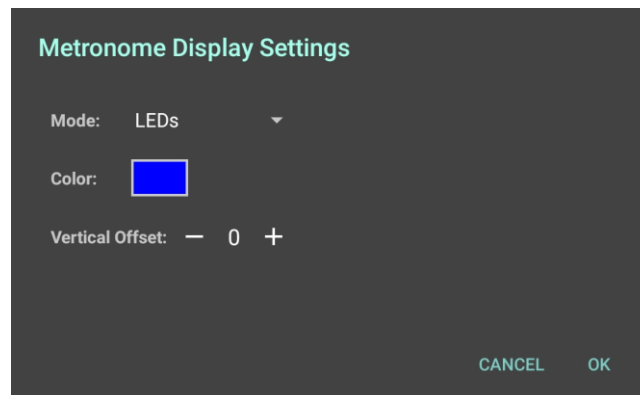
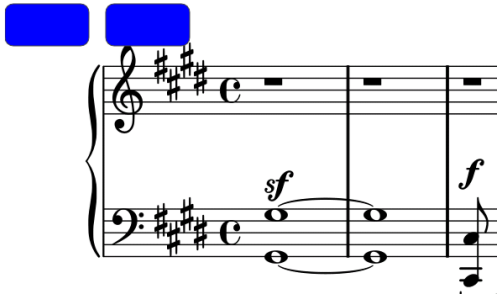


Figure 52 - Metronome Display Settings

The first dropdown changes between the four different display modes. The choices are: LEDs, Glow, Metronome and Circle. For every mode but “Metronome”, you can change the color used in the second dropdown. You can also tap the square next to the dropdown if you wish to select a custom color. In order to understand the four display modes, pictures are provided below with an explanation for each mode.

LEDs:



The LEDs display mode will draw a series of colored squares at the top of the screen. The number of squares matches the number of beats in the current time signature.

Glow:



The glow display mode will draw a colored box around the whole screen that pulsates with the beats. The box will be colored orange for the first beat if the option to accent the first beat has been enabled.

Metronome:





The metronome display mode places a little metronome image at the top left corner of the screen. The metronome arm will toggle between left and right on each beat.


Circle:



The circle display mode will draw a blinking circle at the top left corner of the screen. It will be drawn when a beat occurs, and then quickly fade out. Like glow display mode, if the first beat is accented, the circle will be orange on the first beat.

The vertical offset setting moves the position of the metronome visual indicators up or down on the screen.

At the top of the metronome window, you can also see the  icon. If this icon is tapped, a new tempo will be added for the current song. This lets you switch tempos for the current song, which can be useful if the song contains multiple tempo changes. A dropdown will be displayed to the right of the Tempo label so that you can select which tempo is active. You can also delete a tempo by tapping the  icon at the top of the window (this is only shown if more than one tempo is available). The tempo can be quickly changed by assigning a [touch or pedal action](#) to cycle through the tempos. The ability to switch tempos after a certain number of beats is going to be added soon as well.

The snippet tool is a very useful feature for quickly cutting out a section of a song with which to create a new song. It can be accessed by clicking on the popup menu  in the bottom left corner of the song overlay. If you happen to be using a PDF that contains numerous songs, the snippet tool can be used to break up that PDF into a series of songs which all share the same file. The snippet tool window is shown below:

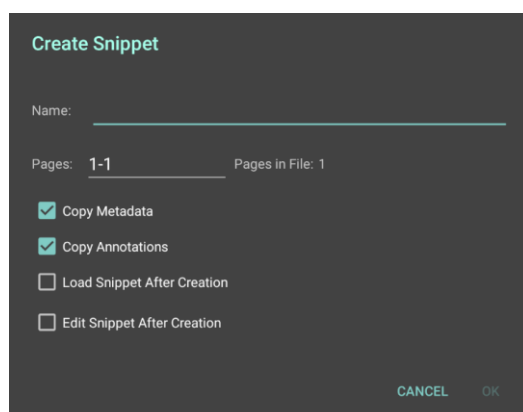


Figure 53 The Snippet Tool

This dialog lets you enter a name for the new song that will be created as well as a range of pages to use from the current song. The page range that is entered must be between 1 and the value shown next to “Pages in File”. The range does not need to be continuous – you can enter “1, 3, 5-7, 9” if you only wanted those specific pages. The “Copy Metadata” checkbox determines whether the new song will be created with the same metadata (artists, albums, genres, etc) as the current song. Likewise, “Copy Annotations” determines if the current song’s annotations are copied into the new song. If “Load Snippet After Creation” is checked, the new song will be immediately loaded into the song display after creation. If “Edit Snippet After Creation” is checked, the song editor will be displayed for the new song.

THE QUICK ACTION BOX

If the bottom right corner of the song display is tapped (see [this picture](#) for a visual of the tap zones), the quick action box will be displayed. The quick action box contains a collection of buttons that can be used to perform actions such as starting/stopping the audio player, metronome, automatic scrolling, and performance mode. There is also a button whose action can be changed if desired. The quick action box is shown below:

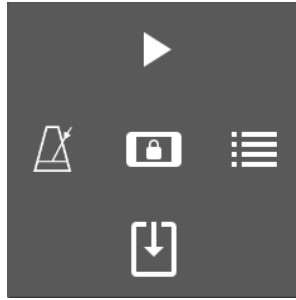








Figure 54 - The Quick Action Box

The quick action box will automatically fade out after five seconds of inactivity. The buttons have the following actions:



	<p>Turns the metronome on. Long pressing this icon will display the metronome window.</p>
	<p>Starts playing the track that is loaded in the audio player. Long pressing this icon will show the audio player.</p>
	<p>Shows the setlist window. Long pressing this icon will change the action of this icon to one of the following:</p> <ul style="list-style-type: none"> • Show setlist window – Displays the setlist window • Show bookmarks – Displays the bookmarks window • Add new song to setlist – If a setlist is loaded, this will display a dialog to find a song and add it to the current setlist. If a song is loaded, this will display a list of setlists to add the song to. • Pause setlist for request – Explained in detail here. • Find and load song – Displays a dialog to find a song and load it. • Edit song – Edits the currently displayed song in the song editor. • Settings Screen – Loads the settings screen. • Set Pedal Actions – Loads the screen used to configure the pedal actions • Toggle Night Mode – Toggles night mode which inverts the colors showing white on black instead of black on white. • Annotate Song – Loads the current page in the annotations editor. • Change Text File Settings – Loads the Text Display Settings Dialog. If a text file is loaded, the dialog will change the settings for that text file, otherwise the dialog will change the default text file settings. <p>If the icon action is changed to something other than “Show setlist window”, the icon will change to  to indicate that it is a custom user action.</p>



	Starts automatic scrolling. Long pressing this icon will show the automatic scrolling settings .
	Toggles the performance mode on and off. When performance mode is active, the overlay is disabled and pressing on the screen will only change pages.

Users may wish to enable performance mode for live performances, as it disables the overlay and zooming. When performance mode is enabled, the quick action box is very important as it provides access to features that would otherwise be inaccessible.

AUTOMATIC SCROLLING

One of the most useful features of MobileSheets is the ability to have hands-free playback through either the use of a pedal or automatic scrolling. Automatic scrolling is very configurable and can be set up to scroll and turn pages with appropriate pauses. Automatic scrolling is especially great when paired with the vertical scrolling display mode, as you can have it continuously scroll at a slow pace. The automatic scrolling can have different settings per song so that you can fine tune the behavior for specific behaviors. The scrolling will also automatically stop when the last page of a song is reached in a setlist, so there is no danger of it scrolling too far after a song is finished. Automatic scrolling can be initiated in multiple ways:

- By tapping the  icon in the overlay, and then tapping “Start Scrolling”.
- By tapping the bottom right corner to bring up the quick action box and then tapping the  icon.
- By assigning “Start or stop scrolling” to either a [touch or pedal action](#).

To change the automatic scrolling settings, either tap the  icon in the overlay and tap “Scroll Settings”, or long press the  icon in the quick action box. The following screen will be displayed:

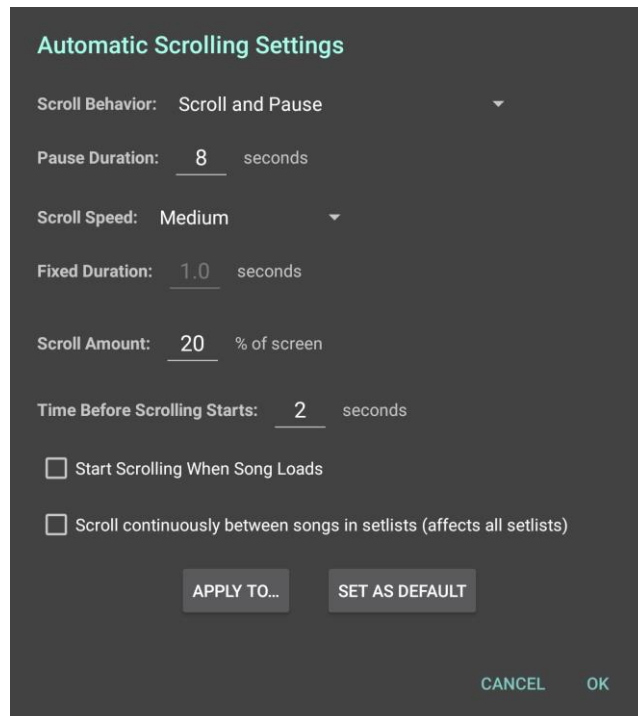


Figure 55 - Automatic Scrolling Settings

The settings are as follows:

- **Scroll Behavior** – Determines how each page will be scrolled. Four different modes are supported.
 - **Scroll and Pause** – Each page will be scrolled by the percentage specified for “Scroll Amount”, and then paused for the number of seconds specified in “Pause Duration”.
 - **Scroll and Pause After Page Turn** – Each page will be scrolled until the end, the page will be turned, and then the automatic scroller will pause for the number of seconds specified in “Pause Duration”.
 - **Scroll Continuously To End** – The automatic scroller will continuously scroll and turn pages until it passes the end of the song.
 - **Scroll Entire Song in Fixed Time** – Scrolls to the end of the song in a fixed amount of time. When selected, a new “Total Duration” field will be visible where you can enter the time value.
- **Pause Duration** – The number of seconds to pause between scrolls, depending upon the scroll behavior.
- **Scroll Speed** – The speed at which the screen is scrolled. This value is used in conjunction with the scroll amount to determine how much of the screen to scroll, and how fast. Each supported value will be explained below. The first time is the amount of time per scroll with a scroll mode of “Scroll and Pause” while the second time is the amount of time per page when using the other modes.
 - **Slowest** – 90 seconds per page.

- **Slower** – 75 seconds per page.
 - **Slow** – 60 seconds per page.
 - **Medium** – 45 seconds per page.
 - **Fast** – 30 seconds per page.
 - **Faster** – 15 seconds per page.
 - **Fastest** – 7.5 seconds per page.
 - **Immediate** – Scroll occurs immediately (no animation).
 - **Fixed Duration** – Scrolls for the duration specified in the Fixed Duration setting.
 - **Use Metronome** – The scroll speed is based upon the current metronome tempo. The basic rule is the # of beats/bps * 4 measures per line = the number of seconds per scroll.
- **Fixed Duration** – If the Scroll Speed is set to Fixed Duration, this is the amount of time to scroll per Scroll Amount or per page, depending upon the scroll behavior.
 - **Scroll Amount** – The percentage of the page to scroll at a time when using the “Scroll and Pause” scroll behavior.
 - **Time Before Scrolling Starts** – The number of seconds to wait before scrolling begins.
 - **Start Scrolling When Song Loads** – Immediately starts the automatic scrolling when the song is loaded.
 - **Scroll continuously between songs in setlists** – Normally, automatic scrolling is stopped when the last page of a song is reached. This ensures that MobileSheets does not transition between songs in a setlist. If you prefer to have all of your songs scrolled continuously, enable this setting.
 - **Apply To** – Applies the selected scroll settings to the current song, all songs in the current setlist, or all songs in the library.
 - **Set as Default** – Uses the current scroll settings as the default for all new songs.

THE PAGE SLIDER


At the bottom of the song overlay there is a slider for changing the current page called the page slider. When only one song is loaded, the page slider shows the current page and total number of pages for the song. When a setlist is loaded, the page slider shows the current page out of the combined total number of pages for all songs in the setlist, and the information about the position in the current song above the slider. When pressing on the slider to change the current page, a preview window is displayed above the slider to show you what page you are turning to before you release. The preview window is shown below:



Figure 56 - The Page Slider Preview

Normally, the page slider is only shown when the overlay is visible. If you like having access to the page slider at all times, you can change its behavior in the [display settings](#). Conversely, if you don't like the page slider, you can choose to hide it entirely.

TRANSPOSING

When a text file is currently displayed, the  icon is displayed at the top right of the song overlay. Tapping this icon will display the dialog used to transpose text files. The dialog can be seen below:

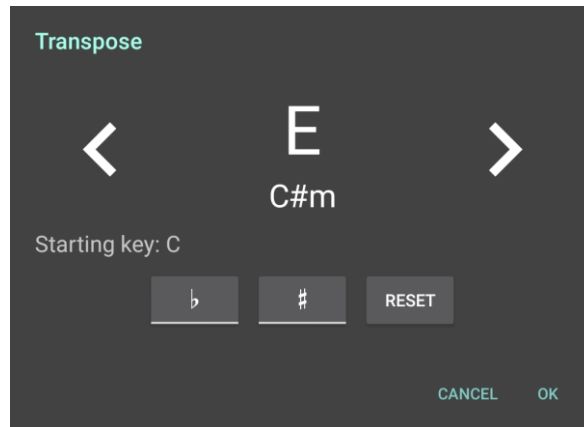





Figure 57 - The Transpose Dialog

The transpose dialog is fairly simple in nature – to transpose to a different key, just tap the right or left arrows to switch the key until you’ve reached the desired key. If you want to transpose to a sharp key, tap the  toggle button. If you instead want to transpose to a flat key, tap the  toggle button. The number of intervals used to adjust the chords in the current song is determined by the difference between the currently selected transposition key and the starting key. To reset the key back to the key that was first displayed, tap the reset button.

TEXT FILE SETTINGS

When a text file is currently being displayed, an  icon is displayed at the top right of the song overlay. Tapping this icon will display two choices: Text Display Settings and Edit File. The first option lets you change the text display settings for the current file. The text display settings dialog is shown below:

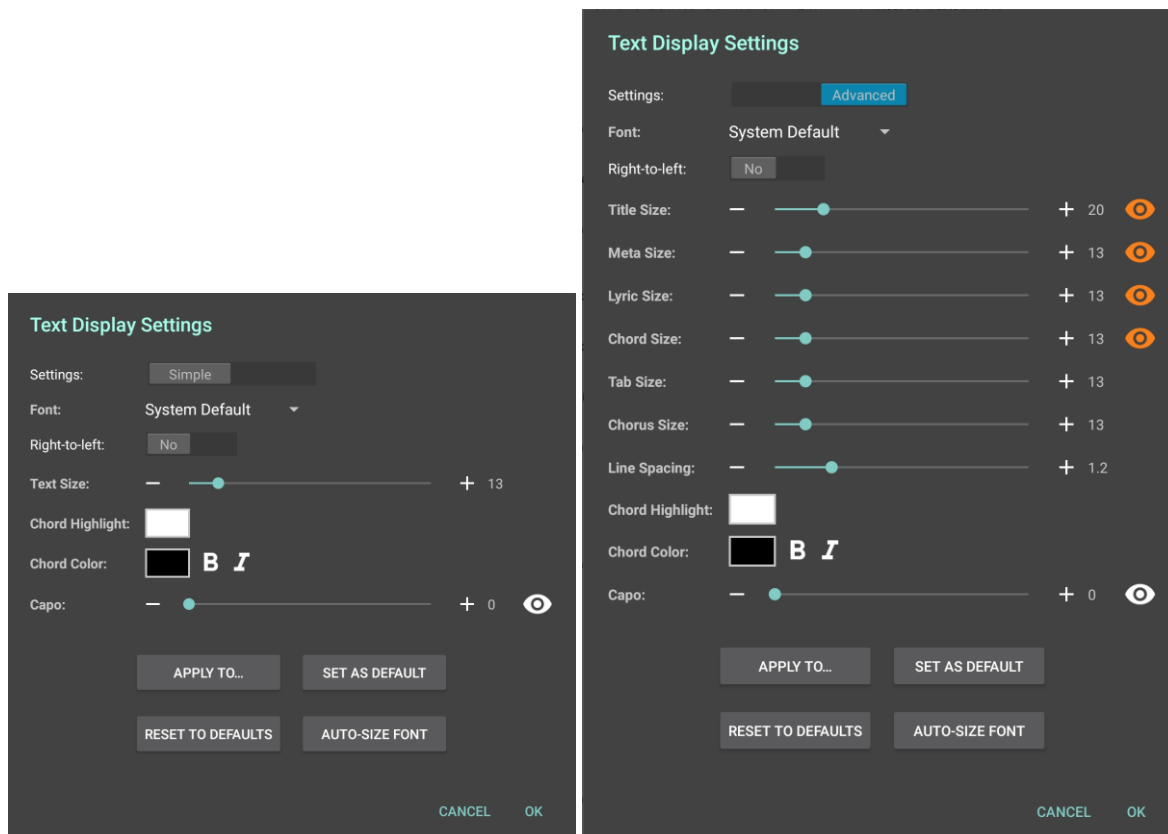


Figure 58 - Text Display Settings (Simple on left, Advanced on right)

As can be seen above, there are two modes for the dialog: simple and advanced. The switch at the top controls this, and the default is simple. The only difference between the two is that the simple mode hides a number of settings that are not commonly needed by most users. Values on the dialog can be changed to immediately see the effect on the file in the background. The changes are not applied until the OK button is clicked. The settings are as follows:

- **Encoding:** Changes the character encoding used to read the file such as UTF-8 or ASCII. If you find that your file doesn't display correctly and has diamonds with question marks in them, try changing the encoding. This setting is only shown if Settings->Text File Settings->Display File Encodings is enabled.
- **Font:** Changes the currently selected font for the text file. The list of supported fonts is provided below. Not every font is available on every device. Only the fonts that are supported on your device will be shown.
 - **System Default** – Uses the system font default which is used for all controls and labels.
 - **Monospace** – Uses a fixed width font. While it is not very aesthetically pleasing, it is very useful for displaying guitar tabs and other content where every character needs to have the same width so that everything lines up correctly.

- **Sans Serif** – On most tablets, this is the same as the system default.
 - **Serif** – A pleasing font that takes up a little more width than sans serif.
 - **Light** – A font that has a smaller thickness than standard sans serif.
 - **Condensed** – A font with less width between characters than sans serif.
 - **Condensed Light** – A font that has less width between characters and a smaller thickness than standard sans serif.
 - **Thin** – A font with a very small thickness.
 - **Medium** – A font with a larger thickness than sans serif, making it appear darker.
 - **Black** – A font with even more thickness than medium, making it appear darker.
- **Right-to-left:** When a file is imported, MobileSheets will check to see if the file contains a language with right-to-left characters such as Hebrew. If this is detected, MobileSheets will toggle the right-to-left setting to true and the file should switch the layout accordingly. This switch lets you override the right-to-left setting that was initially assigned.
 - **Title Size:** The font size used to display the document title, which will be the first line of the text file unless a specific title is specified in the chord pro syntax.
 - **Meta Size:** The font size used to display content such as sub-title or artist.
 - **Lyric Size:** The font size used to display lyrics.
 - **Chord Size:** The font size used to display chords.
 - **Tab Size:** The font size used to display tabs.
 - **Chorus Size:** The font size used to display the chorus.
 - **Line Spacing:** The amount of space to leave between lines of lyrics and chords. This is a multiplier.
 - **Chord Highlight:** The color to put behind chords. If any color other than white is chosen, a square block of color will be drawn behind chords to highlight them.
 - **Chord Color:** The color to use for chords. This can help make them stand out from the lyrics.
 - **Capo:** Changes the capo applied to the current song. The capo, much like transposing, changes the chords that are displayed. If the “Modulate Capo Down” setting is enabled in the text file settings, then the chords will be modulated down the number of steps entered for the capo. For example, if the chord is normally C, and the capo value is set to 3, the chord will be displayed as A. This is because, if you have a capo on the 3rd fret of a guitar and wanted to play a C chord, then you should play an A chord, as the two are equivalent. If “Modulate Capo Down” is unchecked, then an Eb chord will be displayed, as playing a C chord with a capo on the 3rd fret is equivalent to playing an Eb chord without a capo.
 - **Apply To:** Provides a popup with a selection to apply the settings to the current file, all files in the current song, all files in the setlist, or all files in the library.

- **Set as Default:** Replaces the default text file settings with the current settings.
- **Reset:** Resets the settings to what they were when the dialog was first shown.
- **Auto-Size Font:** Determines the largest font that can be used without any lines having to wrap around. In order to prevent ridiculously large font sizes from potentially being selected, the “Maximum Auto Font Size” is set to 30 by default in the settings. This means that if the calculated font size is larger than 30, 30 will be used instead.

In some situations, the text file display settings dialog is displayed not for a current text file, but to modify the default text settings. In this case, the capo field is not displayed.

CHORD PRO FILES

Chord pro files are text based files that contain directives for the program loading them. This allows the program to customize how the text is displayed such as making a title larger, or by placing chords above the lyrics instead of in line with them. This makes them much more powerful than standard text files. MobileSheets tries to support some of the same features with text files (such placing chords above lyrics), but many features are chord pro specific. That is why chord pro files are the preferred format in MobileSheets for combining lyrics with chords. The chord pro specification can be found at the following website:

<http://www.chordpro.org>

MobileSheets supports most of the standard directives, and a number of custom ones as well. The following table shows which commands are supported and what effect they have. Note that multiple values may be present in the first column – they all have the same effect. Use whichever you feel most comfortable with.


{title:text}, {t: text}	Sets the title of the document. This is typically rendered in larger font at the top (you can control the font size specifically)
{subtitle:text}, {st:text}, {su:text}	Sets the sub-title. This is shown underneath the title using the font size specified for the meta size.
{album:text}, {a:text}	Sets the album. This can be used to automatically populate the song’s album field when the file is first imported.
{artist:text}	Sets the artist. This is shown underneath the title and subtitle. It uses the meta font size. It can also be used to automatically populate the song’s artists field when the file is first imported (see the “Use Fields For Songs” setting)
{key:text}	Sets the key of the song. This is important for transposing the chords. This can also be used to automatically populate the song’s keys field when the file is first

	imported. (see the “Use Fields For Songs” setting)
{capo:number}	Sets the capo for the song.
{tempo:number}	Sets the tempo for the song. This can be used to automatically populate the song’s tempo field when the file is first imported (see the “Use Fields for Songs” setting)
{time:text}	Sets the time signature for the song. This can be used to automatically populate the song’s signature field when the file is first imported (see the “Use Fields for Songs” setting)
{duration:number}	Sets the duration for the song. This can be used to automatically populate the song’s duration field when the file is first imported (see the “Use Fields for Songs” setting)
{comment:text}, {c:text}, {guitar_comment:text}, {gc:text}	Displays a comment in the file, which will be shown with an italicized font.
{comment_box:text”}, {cb:text}	Displays a comment surrounded by a box.
{start_of_chorus}, {start_of_chorus:text}, {soc}	Marks the start of a chorus. A chorus will be indented and will display the text provided above it (or Chorus if no label was provided). This chorus can be repeated where needed by using the {chorus} command.
{end_of_chorus}, {eoc}	Marks the end of a chorus.
{start_of_tab}, {sot}	Marks the start of a tab. All of the text between this and the end of the tab will be shown using a monospace (fixed width) font. This is useful for displaying guitar tablature where every character needs to be the same width so that things line up properly.
{end_of_tab}, {eot}	Marks the end of a tab.
{tabsize:number}	Sets the font size to be used for tab sections. This is only processed when the file is first imported.
{copyright:text}	Displays a copyright at the bottom of every page which is bolded and capitalized.
{footer:text}	Displays the given text at the bottom of every page.
{book:text}	Has the same effect as {album}
{textsize:number}	Sets the font size to be used. This is only processed when the file is first imported.
{textfont:text}	Sets the font to be used. This is only processed when the file is first imported. The value must match one of the following: <ul style="list-style-type: none"> • Monospace • Sans Serif • Serif • Light • Condensed

	<ul style="list-style-type: none"> • Condensed Light • Thin • Medium • Black <p>Note that not every font is supported for every tablet. Some fonts were recently introduced with later OS versions.</p>
{chordsize:number}	The font size to use for chords.
{chordfont:text}	Sets the font to be used for chords. See {textfont} for a list of supported values.
{highlight:text}	Highlights the given text using a yellow background.
{chorus}	Repeats the chorus specified between {soc} and {eoc}. This can be a useful way to repeat choruses without having to copy the chorus several times in the file.
{chorussize:number}	Sets the font size to be used for chorus sections. This is only processed when the file is first imported.
{new_page}, {np}	Causes a page break so the content following this command will be placed on a new page
{tabsize}	The font size to use for the next tab section
{chorussize}	The font size to use for the next chorus section
{meta field: value}, {meta: field value}	<p>Sets the song metadata of the given field type using the supplied value. Supported fields include:</p> <ul style="list-style-type: none"> • sorttitle • collection • setlist • source • genre • difficulty • custom • custom2 • customgroup • keywords • rating
{column_break}, {cb}	Switches to a new column if multiple columns are enabled. If there isn't room for a new column, this acts as a page break.
{transpose: steps}	Transposes every chord after this keyword by the number of steps specified. The transpose can be cleared later by specifying either {transpose: 0} or {transpose} without any value. Note that total the number of steps transposed will be determined by combining this value, the MobileSheetsPro transpose setting for the song and the current capo setting.

{start_of_part:text}, {spp}	Marks the start of a part. The text provided will be bolded.
{end_of_part}, {eop}	Marks the end of a part.
{start_of_verse:text}, {sov}	Marks the start of a verse. The text provided will be bolded.
{end_of_verse}, {eov}	Marks the end of a verse.

THE TEXT FILE EDITOR

MobileSheets contains a text editor that can be used to generate new text or chord pro files, or edit existing files. To create a new file, a song must first be created by entering the Song Editor by tapping the “New” action in the action bar, and then tapping the  icon on the Files tab. A prompt will be shown requesting the name of the new file, and it will be placed inside an appropriate folder in the MobileSheets storage location. You can also create a new file if the current song being edited contains no other files. If a song is edited that is currently using a text or chord pro file, the same icon can be used to edit that existing file. Similarly, if a song is currently being viewed that uses a text or chord pro files, you can edit the text file using the **A** icon in the [song overlay](#).

The text editor displays the current file’s contents in the center section of the screen with a series of options at the top of the screen in the action bar as seen below:

```

twinkle_twinkle.cho
{title:Twinkle Twinkle}
{subtitle:Little Star}

[C]Twinkle, twinkle, [F]little [C]star,
[F]How I [C]wonder [G]what you [C]are!
[C]Up a[F]bove the [C]world so [G]high,
[C]Like a [F]diamond [C]in the [G]sky.
[C]Twinkle, twinkle, [F]little [C]star,
[F]How I [C]wonder [G]what you [C]are!

{start_of_chorus}
[C]little, [F]little, [C]little [G]star,
[C]Up a[F]bove the [C]clouds so [G]far,
[C]How I wonder [F]what you [C]are!
[F]little, [C]little, [G]little [C]star.
{end_of_chorus}

{start_of_tab}
|-----0--0-----|
|-----3--3-----3-----1--1--0--0-----|
|--0--0-----2--2--0---|

|--3--3--1--1--0--0-----|
|-----3-----|
|-----|

Play only on strings 1, 2, 3
{end_of_tab}
[C]Twinkle, twinkle, [F]little [C]star,
[F]How I [C]wonder [G]what you [C]are!
[C]Up a[F]bove the [C]world so [G]high,
[C]Like a [F]diamond [C]in the [G]sky.
[C]Twinkle, twinkle, [F]little [C]star,
[F]How I [C]wonder [G]what you [C]are!

{start_of_chorus}
[C]little, [F]little, [C]little [G]star,
[C]Up a[F]bove the [C]clouds so [G]far,
[C]How I wonder [F]what you [C]are!
[F]little, [C]little, [G]little [C]star.
{end_of_chorus}

{start_of_tab}
|-----0--0-----|
|-----3--3-----3-----1--1--0--0-----|
|--0--0-----2--2--0---|

|--3--3--1--1--0--0-----|
|-----3-----|
|-----|

Play only on strings 1, 2, 3
{end_of_tab}

```

Figure 59 - Text File Editor

The options at the top include:

- **Move** – Enables the chord move mode. This is only shown when editing a chord pro file. When this mode is enabled, tapping on a chord will select that whole chord (including the brackets) and display a toolbar with options to slide that chord left or right one character. This makes it easy to reposition chords in the file. Tapping the X in the toolbar will temporarily hide it until the next chord is tapped.
- **Transpose** – Allows the chords in the file to be transposed. This uses the same [transpose dialog](#) as the one in the song overlay – just tap the arrows to switch keys and switch between flat and sharp if needed.
- **Insert** – Allows chords and certain directives to be inserted into the current file to make editing faster. This is only shown when editing a chord pro file.
 - **Title** – Inserts a {title:} directive and places the cursor after the colon.

- **Chord** – Inserts the brackets for a chord and places the cursor between the brackets so the chord letters can be entered.
- **Comment** – Inserts a {comment:} directive and places the cursor after the colon.
- **Chorus Section** – Inserts a {start_of_chorus} and {end_of_chorus} directive and places the cursor on the line between them.
- **Tab Section** – Inserts a {start_of_tab} and {end_of_tab} directive and places the cursor on the line between them.
- **Repeat Chorus** – Inserts a {chorus} directive to repeat the chorus.
- **Save** – Saves all changes that have been made to the file and exits the editor.
- **Cancel** – Cancels any changes that have been made and exits the editor.
- **Preview** – Shows a preview of what the text or chord pro file will look like when rendered in the normal song display.
- **Chord Insertion Mode** – While this mode is active, tapping anywhere in the file will create chord brackets in that location and the cursor will be placed between the brackets. This mode is useful if you need to insert a lot of chords in succession.

THE NEXT SONG BAR

When using a setlist, it's often very useful to know when you've reached the last page of a song, and what is coming up next. In order to do this in a convenient, non-obtrusive way, the next song bar was created. The next song bar shows up at the top of the screen when you are on the last page of a song, and displays the title of the upcoming song. Depending upon the settings, the next song bar can be configured to fade out after a number of seconds. If you really like knowing what the next song is at all times, you can also configure the next song bar to be shown at all times. The picture below demonstrates the next song bar:



Figure 60 - The Next Song Bar

To configure the next song bar, tap the  icon at the far left side of the bar. This will display the following dialog:

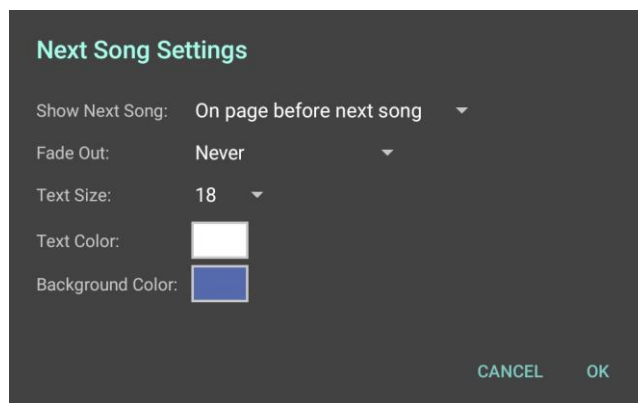


Figure 61 - The Next Song Settings Dialog

The “Show Next Song” setting determines when the next song bar will be shown. The options are:

- **Never** – The next song bar is never shown.

- **On page before next song** – The next song bar is only shown when the last page of the current song is shown.
- **Always** – The next song bar is always shown.


The “Fade Out” setting determines how long the next song bar waits before fading out. The following options are supported:

- **Never** – The bar will stay visible until you change pages.
- **After 2 Seconds** – The bar will fade out after two seconds.
- **After 3 Seconds** – The bar will fade out after three seconds.
- **After 4 Seconds** – The bar will fade out after four seconds.
- **After 5 Seconds** – The bar will fade out after five seconds.
- **After 10 Seconds** – The bar will fade out after ten seconds.

The “Text Size” setting determines how large the font in the next song bar is, and the “Text Color” determines what color it is. Lastly, the “Background Color” setting determines what color is used for the next song bar background.

If you have never seen the next song bar shown, it is likely disabled. You can change this by going to the Display Settings, and selecting the “Show Next Song Indicator” setting. You will see the same options described above for the “Show Next Song” setting.

DISPLAYING NOTES FOR SETLISTS AND SONGS

If the  icon is tapped in the top left corner of the song overlay, the following dialog will be displayed:

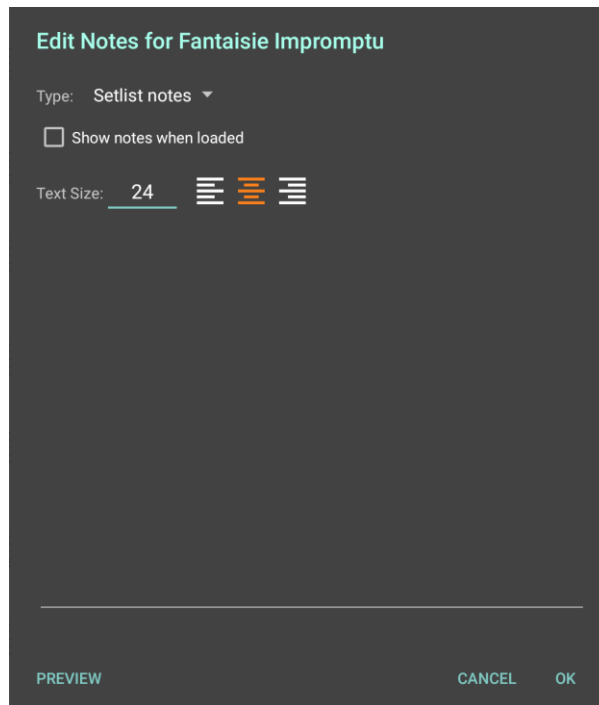


Figure 62 - The Notes Dialog

Notes can be saved both for individual songs and setlists. In each case, checking the “Show notes when loaded” checkbox will show a popup window containing the notes when the song or setlist is loaded. When that box is checked, a dropdown will be displayed with choices for how long the pop window should be shown. The window can be shown until a tap occurs or until a certain amount of time passes. If the notes dialog is opened when a setlist is loaded, the “Type” dropdown provides a mechanism to change whether the current setlist’s notes are modified or the current song’s. If an individual song is loaded, the dropdown at the top will not be visible and the current song’s notes will be edited. The text size and alignment can also be set for both the song and setlist notes. Tapping the text size field will show the following dialog where the text size value can be changed, settings can be applied to more than one song and the default settings can be configured:

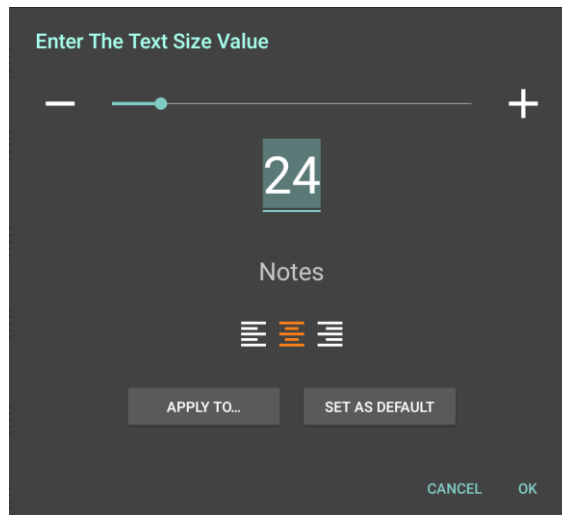





Figure 63- The Notes Text Size Dialog

PERFORMANCE MODE

When performing live, it can be nice to disable many elements of MobileSheets that are not needed, and could cause accidents. For this purpose, the performance mode feature was created. When performance mode is enabled, the overlay and zooming is disabled, and taps on the center of the screen will turn the page instead of bringing up the overlay. The touch actions in the corners, top and bottom still operate normally, and the quick action box is available to toggle features like the audio player and metronome. To toggle performance mode, use the quick action box by tapping in the bottom right and tapping the  icon, or return to the library screen, and tap the  icon in the floating toolbar. Note that when performance mode is enabled, the action bar on the library screen will be hidden, as it's assumed no changes will be made to the library during a performance.

ANNOTATIONS

One key feature in MobileSheets is the ability to markup music in a variety of ways. When a song is loaded, the annotations editing mode can be accessed by either hovering a smart stylus above the screen (if "Enter Annotation Mode With Stylus Input" is enabled in the settings), using a three-finger tap (which is configurable in the touch actions) or tapping the  icon in the song overlay. On some devices such as e-ink devices, tapping the screen with the stylus is required, as hovering is not supported with those devices. This will activate the annotations functionality as shown below:

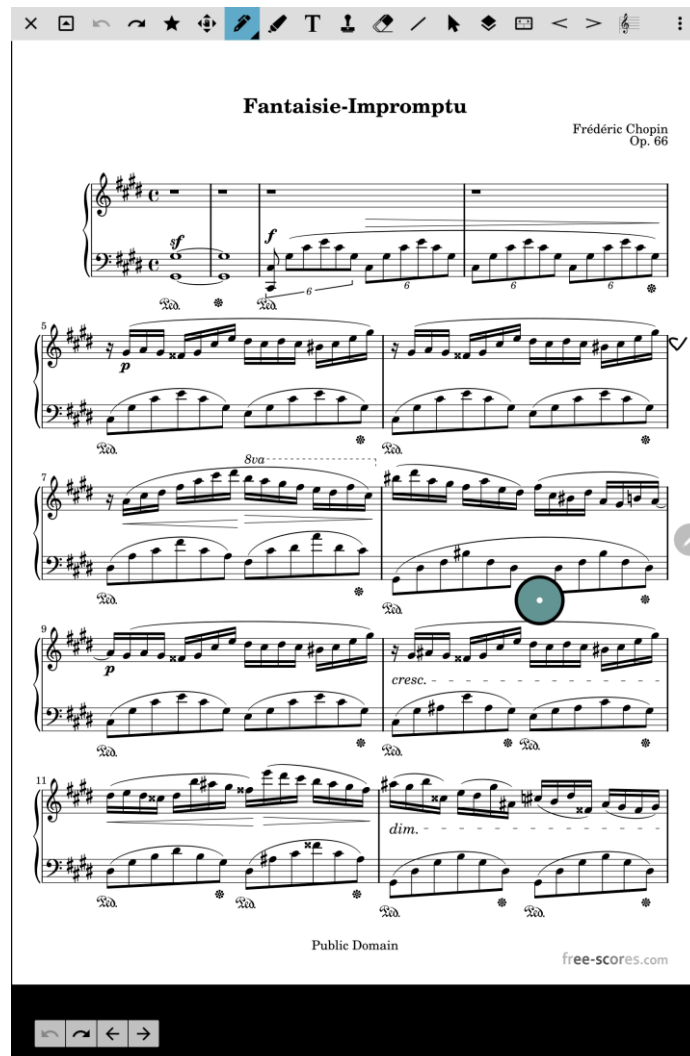


Figure 64 – Annotations editing mode

Upon switching into the annotations editing mode, you will see a toolbar at the top showing the various tools, a small toolbar at the bottom left for accessing undo/redo and buttons to switch pages, and a draggable green circle. This circle is a component known as a radial menu, and provides access to all of the tools and settings through a single concise interface.

Tap on the circle to expand the radial menu, and tap on the center of the circle to collapse it. The screenshot below shows the expanded radial menu:



Figure 65 - The radial menu

The radial menu is fairly simple to interact with. It can be moved by pressing and dragging. Tapping on any section will either select the tool in that section, toggle the setting in that section, or bring up the window for that particular feature. Tapping on the arrows on the border of a particular section will view additional settings related to that section, as shown in the screenshot below:


















Figure 66 - Accessing the pen settings









Long pressing the "Stamp" section will display a floating window to switch the active stamp, and long pressing on the "Favorites" section will display the floating window for the favorites. The settings for each tool will be covered in subsequent sections.

In addition to the radial menu, the tool settings can be accessed from the toolbar at the top of the screen. To switch to a particular tool, just tap the icon for that tool. If the icon is tapped again, a dropdown will be displayed with the settings for that tool.

TOOLBAR

The toolbar at the top of the screen provides a convenient way to quickly switch between tools and activate certain features like undo/redo, the layers window and favorites. Long pressing on any icon in the toolbar will display a tooltip for that icon. All of the icons in the toolbar will be explained below:

Icon	Name	Description
	Exit	Exits the annotation mode and resumes viewing the song normally.
	Collapse Toolbar	Collapses the toolbar , leaving only a much smaller bar in place with an option to exit or expand the toolbar.
	Undo	Reverts the last action.
	Redo	Reapplies the last action in the undo stack.
	Favorites	Displays a dropdown containing all of the favorite user tool settings. User can quickly add the current tool settings as a new entry by tapping the + icon.
	Panning	The panning tool lets the user move the score around with a single finger. If stylus mode is enabled, this mode isn't necessary as you can always pan with a single finger in stylus mode.
	Pen	The pen tool is used for freeform drawings.
	Highlighter	The highlighter tool can be used to draw freeform drawings, rectangles or lines. Highlights will blend into the background if the option is enabled to "Draw highlights behind content".
	Text	The text annotation can be used to insert text on the page. The text can optionally have a background and a border.
	Stamp	Brings up the stamp window to place stamps on the page.
	Eraser	The eraser tool which can be used to remove annotations with three different modes.
	Shapes	The shapes tool which supports a line, rectangle, ellipse and arrow.
	Selection	The selection tool, which can be used to select annotations by drawing a box or tapping.
	Layers	Displays the layers window which is used to control the visibility of layers and select which layer annotations will be created under.
	Command Bar	Displays the command bar which contains shortcuts for various features and a horizontal list of favorites.

<	Crescendo	Activates the crescendo tool .
>	Decrescendo	Activates the decrescendo tool .
	Piano Staff	Selects the piano staff tool .
	Snipping Tool	Selects the snipping tool , which can be used to copy or cut content from a PDF page.
	Grid	Displays a dialog with settings for the grid , which can be useful for aligning content.
	Audio Player	Displays the audio player, which is normally hidden when annotating. This provides a mechanism to continue playing audio while editing annotations.
	Metronome	Displays the metronome window, providing a way to start or stop the metronome while annotating.
	Embed Annotations	Writes the annotations to the file that is currently displayed. Once the annotations are written to the file, extra steps need to be taken to edit them in MobileSheets.
	Clear All	Deletes all of the current song's annotations.
	Settings	Displays the annotation settings .

 PEN

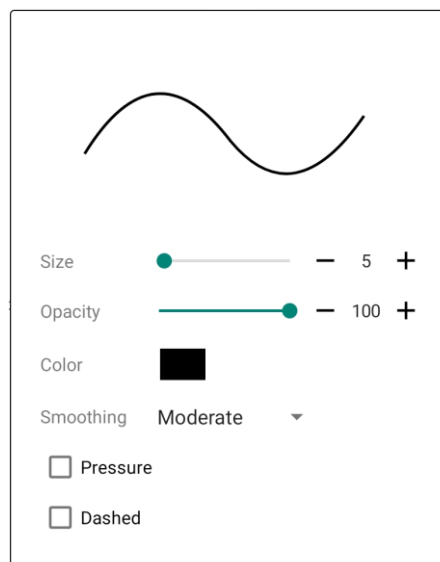



Figure 67 – The pen dropdown

While each tool supports a number of different settings, many of these, such as size, are self-explanatory. Only settings that need additional explanation shall be mentioned.

Opacity: The transparency of the freeform strokes as a percentage between 1 and 100.

Smoothing: Determines how aggressively the freeform strokes are smoothed out to improve their appearance. In addition to smoothing the strokes, if "Moderate" or "Aggressive" is selected, the number of points that are used to reproduce the curves of the strokes are dramatically reduced, improving performance and reducing the amount of data that needs to be stored in the database. A value of "Minor" removes points that are deemed redundant, and a value of "None" will not remove any points.

Pressure: If a smart/active stylus is used, this setting causes strokes to have a variable thickness based on the pressure of the stylus. While this can result in more realistic looking strokes, it also requires more data to be used for every stroke, so if a large number of strokes are going to be created on each page, it's better to turn this setting off for better performance.

 HIGHLIGHTER

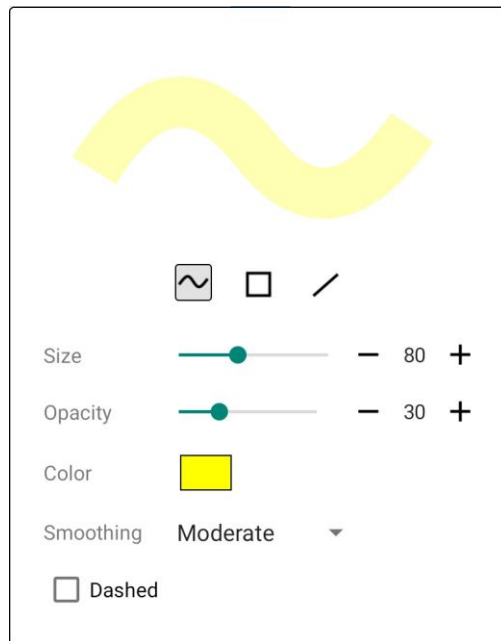





Figure 68 - The highlighter dropdown

At the top of the dropdown, three choices are available for how highlighter strokes will be handled:

Icon	Type	Description
	Freeform	Each highlighter stroke will be a freeform stroke, similar to using the pen tool.
	Rectangle	The highlighter will draw rectangles, which requires the user to drag to specify the top left and bottom right corners of the rectangle.

	Line	The highlighter will draw a line between the start and end touch points.
---	------	--

The other settings are identical to the [pen settings](#).

T TEXT

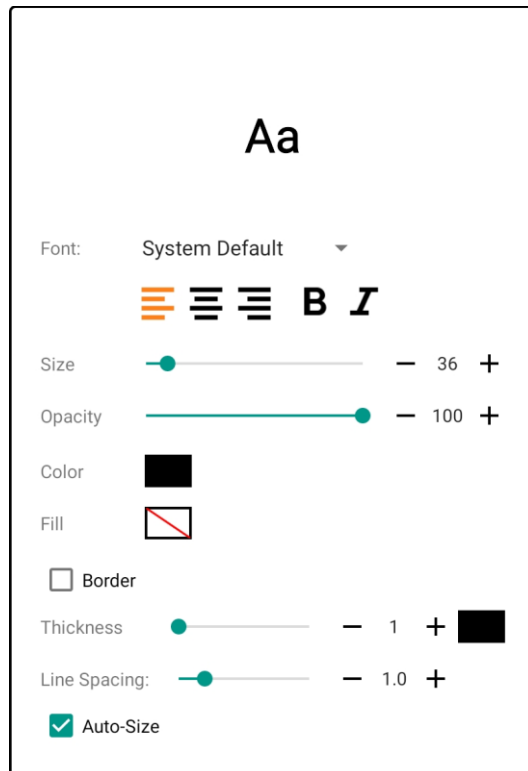


Figure 69 – The text tool dropdown

Font: The font family to use for the text annotation. Fonts are limited to those included with the Android operating system to ensure capability.

Auto-Size: If enabled, the height of each textbox is automatically calculated.

One important difference with the text dropdown is that any changes to the text tool settings will modify the current text annotation if one is being created or edited. By contrast, any modifications to the other tools will only impact the next annotation of that type that is created. This is different for text annotations as it is often necessary to update the text appearance while entering the text, and that would be much more difficult if the annotation had to be selected and then edited before any properties would be updated.

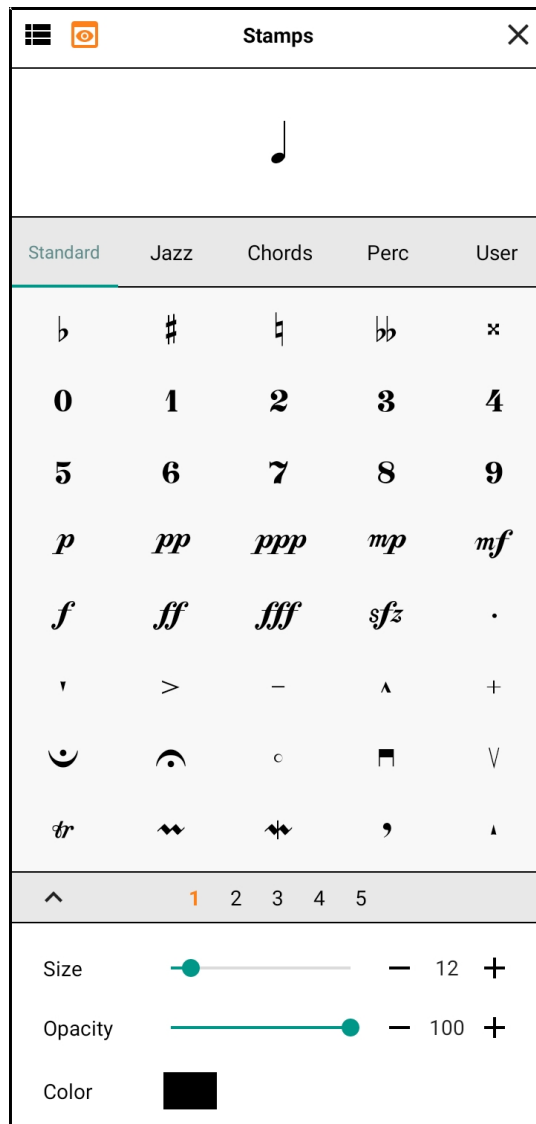


Figure 70 - The stamp tool dropdown


The stamp dropdown displays lists of stamps in multiple categories including Standard, Jazz, Chords, Percussion and a customizable list of user stamps. Tapping the header for the category will switch to viewing stamps under that category. Swiping the list right will view the next 40 stamps under the current category, while swiping left will view the previous 40 stamps. Tapping the numbers at the bottom will jump to that index in the pages of stamps.

The size setting increases or decreases the scaling of the stamp that will be created. The stamps in Standard, Jazz, Chords and Percussion categories will all scale to any size without a loss in quality. User provided stamps that are bitmaps will show a loss in quality as their size is increased, while user provided vector graphics files will maintain the same quality at any size. See the following section on user-provided stamps for more information.

REORDERING STAMPS

Stamps in all categories can be reordered so that the most frequently used stamps can be placed at the start. To reorder stamps, long press and hold on the stamp to start reordering, and then drag the stamp to the new location. Dragging to the edge of the list will skip to the next page of stamps.

USER PROVIDED STAMPS

The user category is a list of user-provided stamps and other stamps that have been added from other categories. This provides a way for users to use their own files in MobileSheets, as well as to build a list of the most commonly used stamps without having to rely solely on the favorites feature. To add a stamp file to MobileSheets, switch to the User category, and then tap the  icon. You can then choose to import from local storage or a cloud source, as shown below:

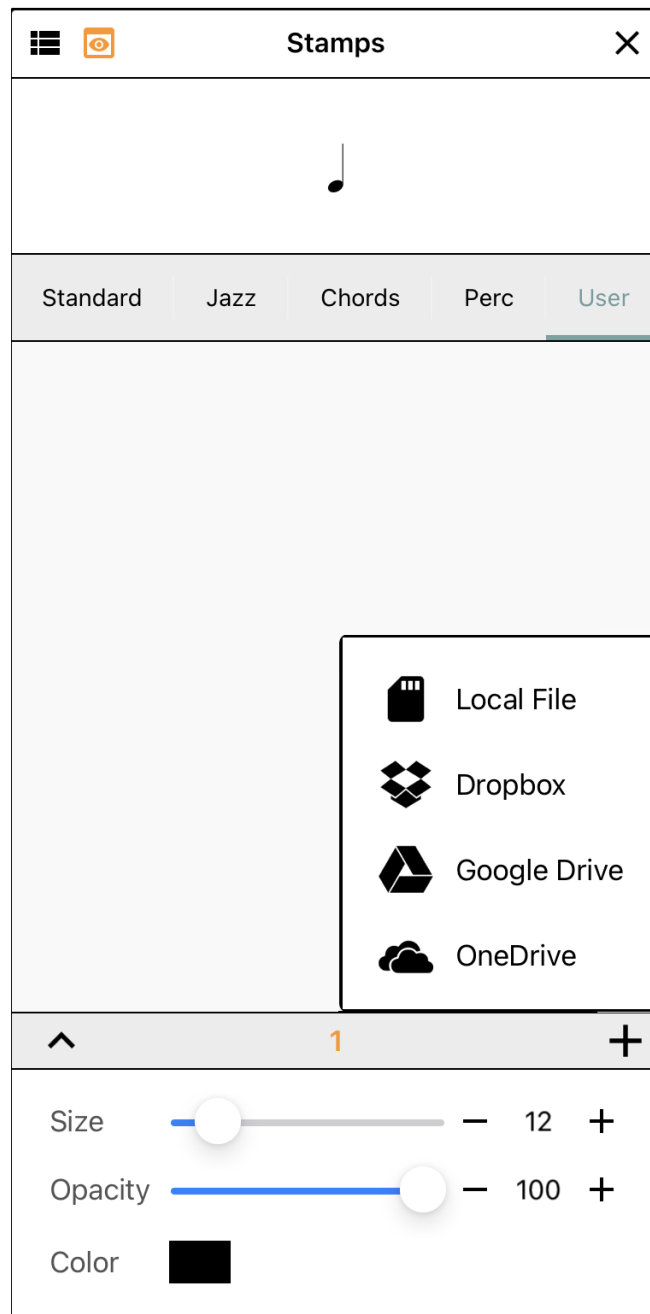


Figure 71 - Adding a custom stamp

After adding a stamp to the user category, you can access additional options by tapping a stamp to select it, and then tapping again, as shown below:

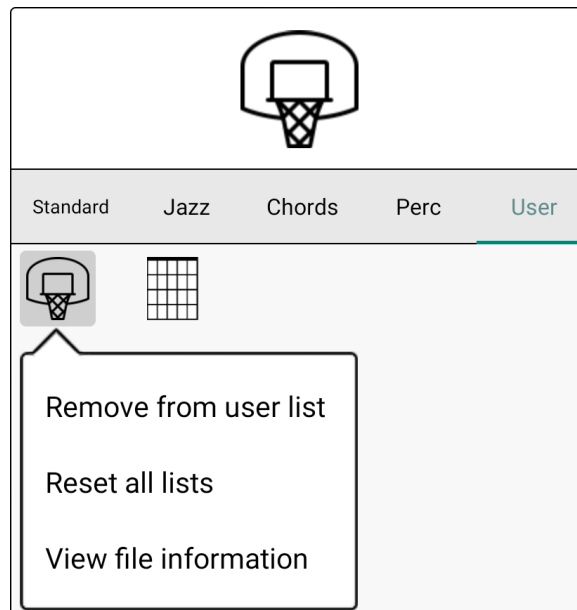


Figure 72 - Accessing additional stamp options

Tapping "Remove from user list" will remove the stamp from the user category. If the stamp was added from a file, MobileSheets will only delete the file from the storage location if no stamps in any songs are currently using that stamp. Tapping "Reset all lists" will display a prompt asking if the ordering of all lists should be reset to the defaults. An option is also presented to clear all user-provided stamps. Lastly, tapping "View file information" will display the path to the stamp file, its size, and its last modified timestamp.

Stamps in other categories can be added to the user category. To do this, tap the stamp to select it, then tap again to access the dropdown menu. Tap "Add to user list" to add the stamp to the user list as shown below:

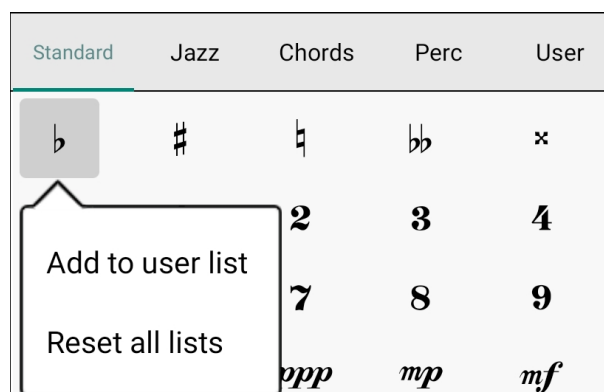



Figure 73 - Adding stamps to the user list

FLOATING STAMP WINDOW

When quick access to stamps is needed, it can be more efficient to display the floating stamp window instead of using the dropdown. To access the floating window, view the additional options for the "Stamps" section of the radial menu, and then tap on "Type". The following window will be shown:



Figure 74 - The stamp tool floating window

The floating window operates identically to the dropdown, although the size, opacity and color must be changed through the radial menu. Tapping the  symbol at the top left will hide the stamp preview section at the top of the stamps window. Tapping the dropdown arrow at the bottom left will open and collapse the bottom section of the stamps window with the size, opacity and color settings.




One difference with the floating window is that it can be collapsed to a vertical list by tapping the  icon or a horizontal list by tapping the  icon. This takes considerably less space, so it can be helpful on smaller screens. Tapping the  icon will revert the window back to its full size. The collapsed lists can be seen below:



Figure 75 - The collapsed stamps window

STAMP PREVIEW

If placing a stamp annotation with a finger, a preview will pop up that provides a way to see what is under the finger to aid with the placement of the stamp, as shown below:



Figure 76 - The stamp preview

This preview is not shown when placing stamps with a stylus, as it's not necessary or helpful when using a stylus.

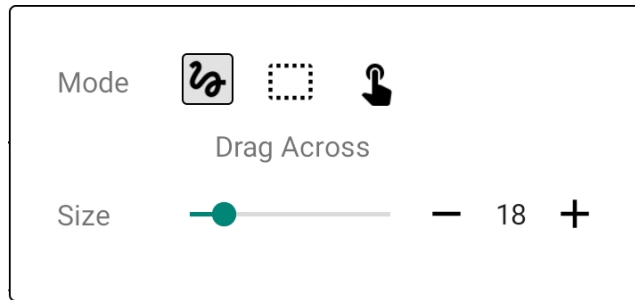


Figure 77 - The eraser dropdown

The eraser dropdown provides three different modes of erasing:



Drag across – The eraser will act much like the eraser on a pencil. As the eraser is moved around, a red stroke will be shown to indicate what will be erased upon release. This mode supports deleting only parts of annotations, such as shortening a freeform annotation.



Draw Box – A box must be drawn to indicate what to erase. Every annotation that is contained within the box will be deleted upon release.



Tap – Any annotation that is touched will be deleted. It is possible to drag over all of the annotations to delete in this mode. Each annotation that will be deleted will be highlighted with a gray background to show what will happen upon release.

The size selection determines the radius of the touch location when using the "Drag across" and "Tap" modes. A larger size makes it easier to delete more at once, where as a smaller size makes it easier to make more precise deletions. The size selection is not used with the "Draw Box" mode.

SHAPES

Multiple types of shapes are supported for annotations including lines, rectangles, ellipses and arrows. To switch between the different types, tap the corresponding icon for the desired shape type on either the shapes dropdown or the radial menu. The shapes dropdown can be seen below:

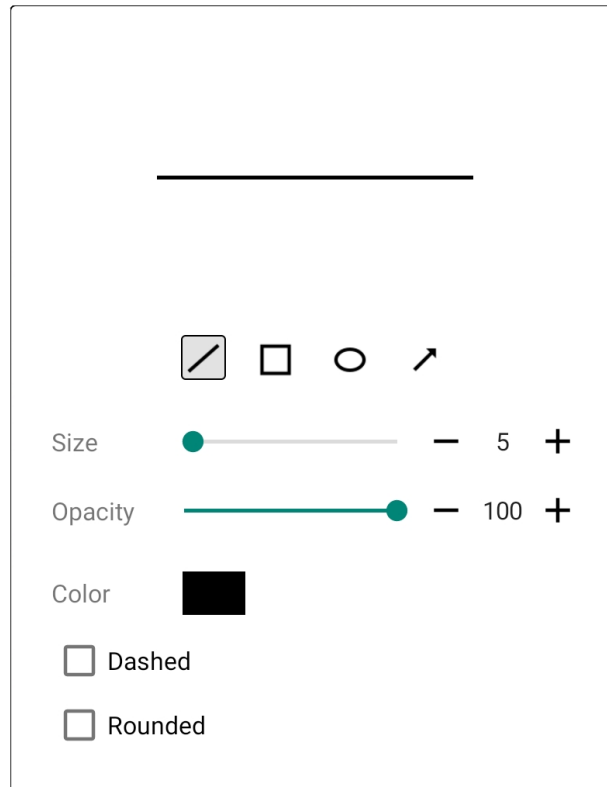


Figure 78 - Shapes dropdown with line selected

Different settings can be selected for each type of shape.

SELECTION

The selection tool can be used to select one or more annotations which can then be edited, moved or deleted as a group. To select annotations using the selection tool, either tap individually on a single annotation to select or draw a box around all of the annotations to select. You can also select annotations in the layers window, which will be discussed later. Upon selecting annotations, the following bar will pop up under the selection:



Figure 79 - Popup shown when annotations are selected

The icons perform the following actions:



- Edits the currently selected annotations. A dialog will be displayed containing settings that can be applied to all annotations. See the [following section](#) for more details.



- Brings up the [nudge tool window](#) so that the annotations can be repositioned with more accuracy.



- Copies the selected annotations so that they can be pasted and duplicated.



- Cuts the selected annotations, removing them but allowing them to be pasted in another location.



- Deletes the selected annotations.

EDITING ANNOTATIONS

When the edit icon is tapped while annotations are selected, a window will be displayed with settings that are applicable to all of the selected annotation types. For example, the window below is shown if a freeform annotation is edited:



Figure 80 - Edit window for a freeform annotation

By contrast, the following window is shown if a text annotation is edited:

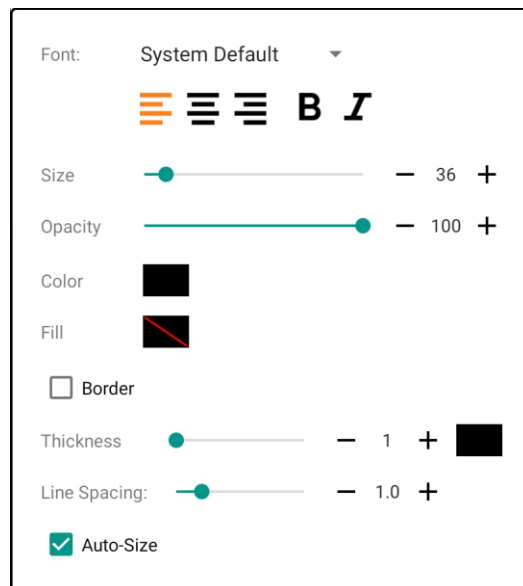



Figure 81 - Edit window for a text annotation

Changing any of the settings will immediately change the properties of all selected annotations.

COPYING, CUTTING AND PASTING ANNOTATIONS

Selecting annotations and then tapping the copy or cut icons will place a copy of those annotations in memory so that they can be pasted to another location. To paste annotations, activate the selection tool, then long press on a page where you would like to paste the annotations. A popup will be displayed with only one option – Paste. Tap that option to paste the annotations.

THE NUDGE TOOL

The nudge tool provides a way to reposition annotations with precision, as you can move them one pixel at a time in any direction. Just tap on an arrow to move the annotation in that direction, and press and hold on an arrow to have the annotation continually moved in that direction until the press is released. Tapping on the **1X** icon will display a dropdown that lets you select the speed at which annotations will be moved when arrows are pressed or held (1X = 1 pixel per tap, 5X = 5 pixels per tap). Tapping on the  icon will switch the nudge window into a floating window that you can drag around. The nudge window will be displayed as long as the selection tool is active, or a text annotation is being edited with the text tool Tap the X icon in the floating nudge window to close it, at which point it must be accessed through the edit bar again.

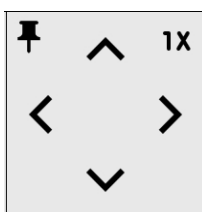


Figure 82 - The nudge tool

< CRESCENDO/DECRESCENDO

The crescendo tool can be used to create a crescendo symbol. Press down and then drag right to stretch out the crescendo, or drag left to shrink the crescendo. If the crescendo is dragged far enough in the opposite direction, you can flip the crescendo to a decrescendo (or vice versa). If a crescendo or decrescendo is selected, selection circles will be displayed as shown below:

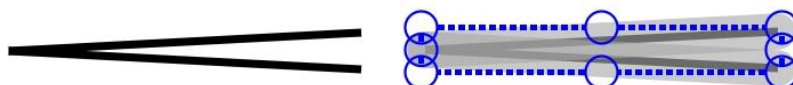


Figure 83 – A crescendo unselected and selected

If one of the top or bottom circles is dragged, it is possible to change the crescendo/decrescendo height. If one of the side circles is dragged, it is possible to change the width of the symbol. The dropdown with the full list of crescendo settings is shown below:



Figure 84 - The crescendo dropdown

The height setting controls the vertical distance between the two end points of the lines that make up the crescendo, while the thickness controls the thickness of those lines.

PIANO STAFF

The piano staff tool provides a quick way of inserting a piano staff on a song page. To create the piano staff, tap down to start the initial placement and then drag the piano staff to where it should be placed. With the finger still pressed down, wait for a second until the piano staff switches from being positioned to being sized. Then drag the piano staff to the right to specify the desired length. At any point during the size phase, you can stop moving your finger for a second to place a single end line for a segment. You can then either hold for another second to place a double line, or drag to the right to create another measure. If you immediately release your finger while sizing the piano staff, no end line will be placed.



Figure 85 - The three different end segments

The piano staff can also be scaled up or down in size. To do this, first place the piano staff and wait until it switches into the sizing mode, and then drag the finger up or down to change the size.

SNIPPING TOOL

The snipping tool provides a way to copy part of a PDF page and paste it elsewhere, either on the same page or a different one. This tool can only be used with PDFs, however, because the image that is pasted will be embedded in the file itself. The only way to edit these embedded images is to enable the "Allow editing of embedded PDF annotations" setting in the [settings window](#). Then you will be able to move or delete the annotations as needed.

It is also possible to cut part of a PDF page, which will place a white rectangle over the snipped area. The white rectangle is a normal MobileSheets annotation and can be interacted with like any other shape annotation.

To use the snipping tool, press down on the top left corner of the snipping region, and drag to specify the rectangle to clip. Release your finger, and then select either "Copy" or "Cut". You can then long press on the score to paste the snipped region in a new position, or the original position. See the image below:



Figure 86 - A region selected with the snipping tool



Figure 87 - Long press to paste the selected region

Once the snippet region has been pasted, you can then move the snippet with the nudge tool or delete it by tapping the trash can icon. You can also drag the snippet around like other annotations. Once the snippet is saved into the PDF, you will only be able to edit it if the "Allow editing of embedded PDF annotations" setting is enabled.



GRID

Tapping the grid item in the toolbar will display the following dialog:

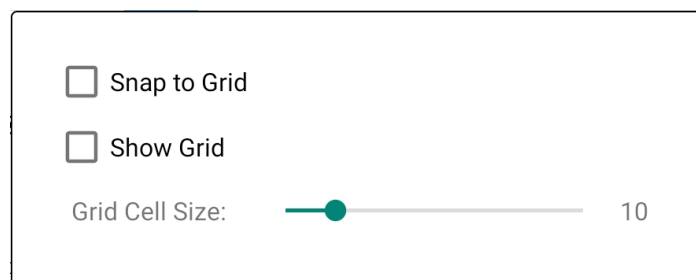


Figure 88 - The grid options dialog

Enabling the "Snap to Grid" option will ensure that all touch events are snapped to the nearest intersecting lines on the grid. This can be useful when using rectangles and lines to ensure proper alignment of annotations. You can also enable the option to "Show Grid" in order to see the grid lines on top of the page. The grid cell size can be modified to increase or decrease the amount of space between each point that will be snapped to.

AUDIO PLAYER

Tapping the audio player option will display the [audio player](#), which is normally hidden when annotating. This provides a mechanism to continue playing audio while editing annotations.

METRONOME

Tapping the metronome option will display the metronome window, which is normally hidden when annotating. This provides a mechanism to listen to the metronome while editing annotations.

EMBED ANNOTATIONS

When the option to embed annotations is selected, the annotations will be saved in the underlying file instead of being managed and displayed only in MobileSheets. If using an image file, the annotations will be embedded in the image file permanently and there will no longer be any way to edit those annotations. If using a text or chord pro file, the file will be converted to a PDF so that the annotations can be stored in it. The benefit of embedding annotations in a PDF is that the annotations can be seen and edited in external applications, and the annotations will also rotate with the page. The downside of embedding annotations is that they can only be edited in MobileSheets if you enable the "Allow editing of embedded PDF annotations" feature, which requires PDFs to be reloaded every time the user enters or exits the annotation editor, which can cause a delay.

CLEAR ALL

Tapping the clear all option will delete all of the annotations that are currently on the page.

FAVORITES

One of the most powerful features when annotating is the ability to create favorites of different combinations of tool settings. This provides a mechanism to quickly switch between different settings for all of the tools without having to manually adjust the settings for each tool. If the favorites are accessed from the toolbar, a dropdown will be shown, as can be seen in the figure below:

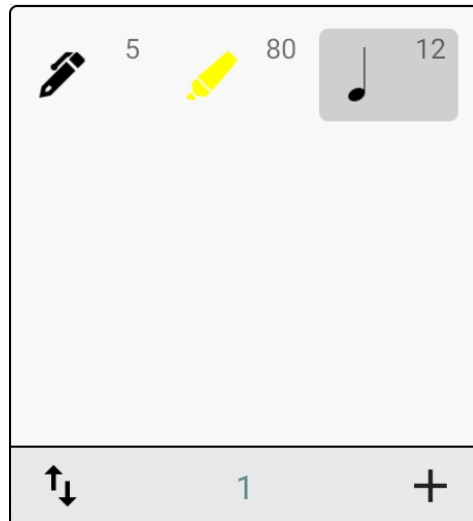


Figure 89 - The favorites dropdown

If the favorites feature is accessed from the radial menu, a movable window will be displayed instead, which can be useful if you need quick access to switch tools. A later update will add additional options for collapsing the favorites window down into a small vertical or horizontal list.

To add an entry to the favorites list, first switch to the tool you want to add to the list and change its settings to match what you want to save. Next, tap the **+** icon and an entry will be inserted into the favorites window. Tap that entry to switch to that tool with the saved settings.

The  icon enables reordering and deletion in the favorites menu, as seen below:

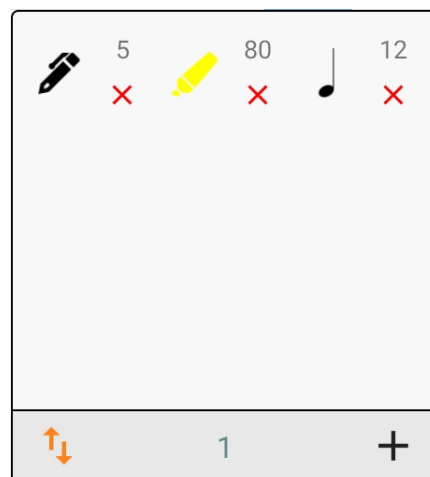


Figure 90 - Favorites window with reorder mode active

Dragging any of the tools in the list will move them to a new position. To delete an entry, tap twice on the red X.

To update the settings for a particular entry in the list, disable reorder mode if it's active, then long press on the entry and select "Update to current settings". The selected favorite will be updated to match the current settings for that tool. The same long press popup also provides another method to delete an entry.

COMMAND BAR

The command bar provides convenient access for a number of different features including:

- Previous page/next page buttons
- Window resizer
- An icon to bring up the layers window
- A horizontal list of favorites and an icon to add new favorites
- The selection tool
- The eraser tool
- Undo/redo

The command bar can be closed at any time by tapping the X at the top left corner of the control. The command bar can be seen below:

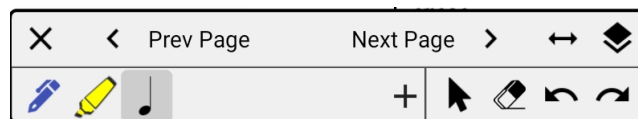


Figure 91 - The command bar

PANNING

The panning tool is used to allow the page to be moved in any direction by dragging with a finger. This tool is unnecessary if stylus mode is enabled, as in that mode, touch input with a single finger is automatically used for panning.

LAYERS

Layers provide a powerful mechanism to separate and organize annotations while also providing an easy way to hide or show groups of annotations as needed. Each layer can have any number of annotations in it, and the layer visibility can be quickly toggled on or off through the layers window. The layers window can be seen below:

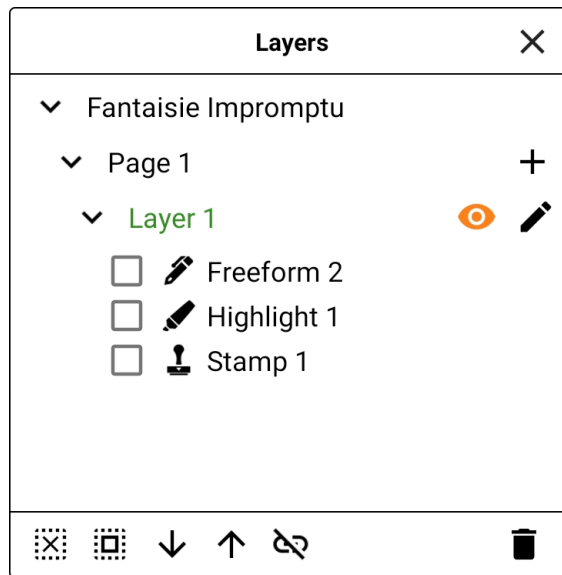


Figure 92 - The layers window

When using a display mode that only displays one page at a time, only the visible page will show up on the layers window. If multiple pages can be displayed at once, then the layers window will show every page that is currently loaded.

Each page must always have one layer in it, so a default layer called "Layer 1" can be found under each page. To add a new layer, tap the **+** icon to the right of the page under which the layer will be created. A dialog will be displayed asking for a name for the layer, as seen below:

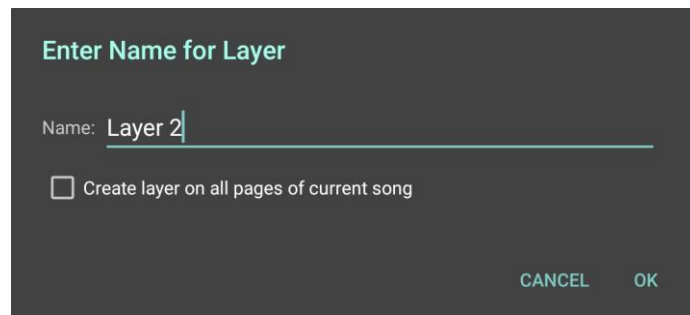





Figure 93 - New layer dialog

The option to "Create layer on all pages of current song" will create a layer of the same name for every page. This option is very useful if you want to switch between layers on all pages at once, which can be accomplished either by using the pedal action to switch annotation layers or by tapping the  icon to enable linking of layer visibilities. If layer linking is enabled, tapping the visibility icon  for any layer will switch the visibility for all other layers with the same name in the same song. Once multiple layers have been added

under a page, a delete icon  will be displayed next to each layer name. Tap this icon to delete the layer.

To select one or more annotations, tap the checkbox next to the annotation name in the list. The layers window will always reflect the current selection status of all annotations.

To switch the layer into which new annotations will be added for a given page, tap the name of the layer in the window. The layer whose name is green is the active layer for that page. If layer linking is enabled, switching the active layer for a given page will switch the active layer of all pages in the same song (assuming each page has a layer with the same name).

The other icons in the layers window are described below:



- Renames the layer. Each layer for a page should have a unique name in order to use the layer linking feature.



- Deselects all annotations.



- Selects all annotations under the active layer on the current page. Long press this icon to select all annotations in all layers for the current page.



- Moves all selected annotations down in their layer. This can be used to control which annotations are on top of other annotations. Annotations on the bottom of the list will be drawn on top of annotations higher in the list.




- Moves all selected annotations up in their layer.



- Deletes all selected annotations.

SETTINGS

The settings window contains a list of options that change how the annotations mode behaves. Each setting will be explained at the end of this section, but it's also possible to view information for any setting in the window by tapping the  icon for that setting. The settings window can be seen below:

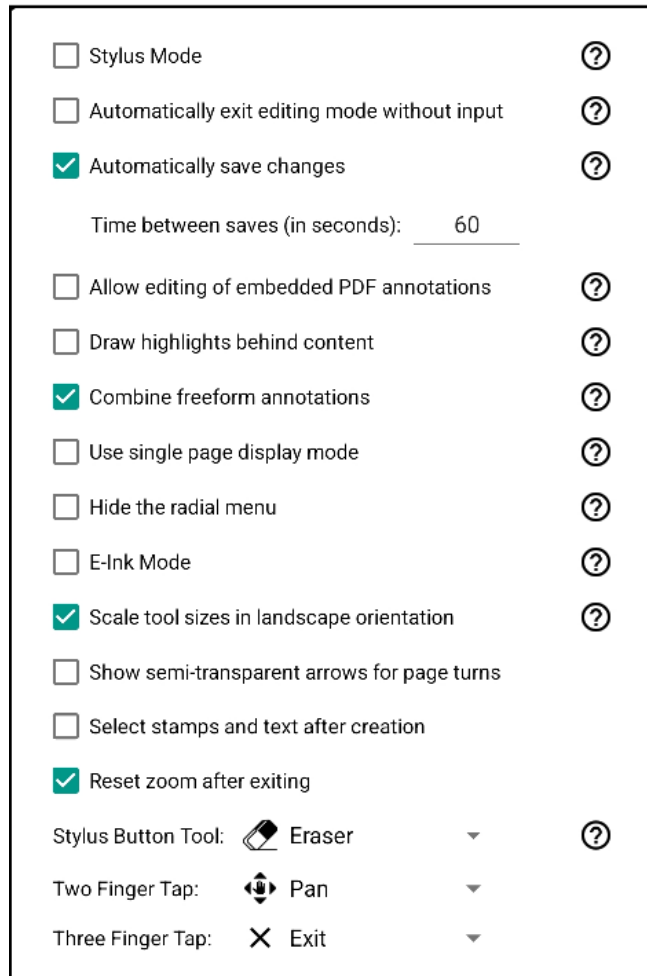


Figure 94 – The settings window

- **Stylus Mode** – Stylus mode prevents touch input from being used to create annotations. Dragging with a single finger will instead pan pages, and pinch-zooming is still enabled. Stylus mode only works with smart or active styluses, which are not supported on all devices. If your stylus supports hovering, then it should work with stylus mode.
- **Automatically exit editing mode without input** – If enabled, the annotations mode will be exited if no input is received without the allowed timeout. This can be useful when coupled with the option to automatically edit annotations when a stylus input is received. This allows users to start editing annotations by hovering their stylus above the screen, and then resume viewing scores within seconds of finishing the edits.
- **Automatically save changes** – Determines if MobileSheets will automatically save annotation changes after the configured timeout. This ensures that all modifications will be saved even if something causes the app to close unexpectedly, such as the device running out of power.

- **Allow editing of embedded PDF annotations** – Allows annotations stored in PDFs to be edited in MobileSheets. Some MobileSheets annotation properties are not supported for PDF annotations, and unsupported PDF annotation types will not be editable. In order to make some PDF annotations editable, they may be converted or modified to match what MobileSheets requires.
- **Draw highlights behind content** – Changes the way highlight annotations are rendered so that they are placed behind content on the page. Standard PDFs do not support this type of feature, so this option is disabled when annotations are stored in PDFs instead of in MobileSheets.
- **Combine freeform annotations** – Groups together drawings with the pen and highlighter tools into single annotations to improve performance and simplify changing the properties of the annotations. A new grouping can be started by changing tools or changing the active tool settings. If this setting is disabled, each drawing with the stylus will be made into a separate annotation.
- **Use single page display mode** – Switches to using the single page display mode when annotating.
- **Hide the radial menu** – Hides the radial menu, which is the circular control that provides quick access to settings and tools. If the radial menu is hidden, all settings and tools must be accessed through the toolbar at the top of the screen instead.
- **E-Ink Mode** – Slows down the rate at which the screen is refreshed, improving performance on e-ink devices while annotating. In general, the e-ink version of MobileSheets (available through the ZuberSoft FastSpring store) should be used on e-ink devices instead of relying on this setting.
- **Scale tool sizes in landscape orientation** – Increases or decreases tool sizes as needed to ensure that when the device is rotated, annotations created in landscape orientation appear the same size as annotations created in portrait orientation.
- **Show semi-transparent arrows for page turns** – Disables arrows on the sides of the screen while annotating that provides a quick way to turn pages. These icons are larger than the icons at the bottom left or in the command bar, so they are easier to trigger.
- **Select stamps and text after creation** – Automatically selects the annotation after creation to allow for editing of the annotation.
- **Reset Zoom After Exiting** – Resets the zoom to the default setting after exiting annotation mode.
- **Stylus Button Tool** – Determines which tool is selected when the primary stylus button is pressed. The previous tool will be reselected when the button is released. With some styluses, you must first press the button down and then touch the stylus to the screen in order for it to work.
- **Two Finger Tap** – Determines what action is triggered when a two-finger tap is performed.

- **Three Finger Tap** – Determines what action is triggered when a three-finger tap is performed.

TOUCH AND PEDAL ACTIONS

In MobileSheets, the area used to display songs has nine tap zones, six of which can be configured for triggering actions. The division of these tap zones can be seen [here](#). The screen to determine what action is triggered for a particular zone can be found by going to the [settings](#) screen, then Touch & Pedal Settings, and finally “Touch Actions”. This will bring up the following screen:

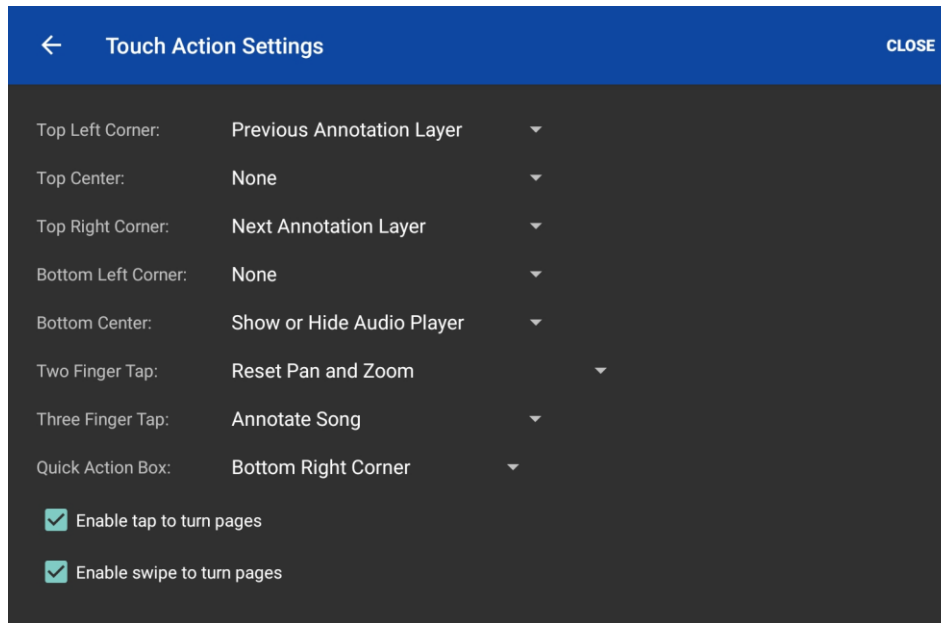


Figure 95 - Touch Action Settings

For each of the five programmable zones, two finger taps and three finger taps, the following options are available:

- **None** – No action will be taken.
- **Previous Annotation Layer** – The previous [annotation layer](#) will be selected.
- **Next Annotation Layer** – The next annotation layer will be selected.
- **Start or Stop Audio Track** – The audio player will be started if it is stopped, or stopped if it is playing, resetting the playback position to the start.
- **Show or Hide Audio Player** – The audio player will be hidden if it is shown and shown if it is hidden.
- **Skip to Previous Audio Track** – Starts playing the previous track in the audio player. If the playlist only contains one audio track, this will have no effect.
- **Skip to Next Audio Track** – Starts playing the next track in the audio player. If the playlist only contains one audio track, this will have no effect.
- **Start or Stop Metronome** – Starts the metronome if it is stopped, or stops the metronome if it is currently started.

- **Go to Previous Song** – Skips back to the previous song in the active setlist. This will have no effect if a single song is loaded.
- **Go to Next Song** – Skips to the next song in the active setlist. This will have no effect if a single song is loaded.
- **Toggle Night Mode** – Toggles night mode, which inverts the colors for low light situations.
- **Go to Start of Song** – Skips back to the start of the current song.
- **Go to End of Song** – Skips to the last page of the current song.
- **Go to Next Metronome Tempo** – Switches the current [metronome tempo](#) to the next one in the list.
- **Annotate Song** – Enters [annotation mode](#).
- **Go to Previous Bookmark** – Changes the page to the page matching the closest bookmark before the current page.
- **Go to Next Bookmark** – Changes the page to the page matching the closest bookmark after the current page.
- **Start or Stop Scrolling** – Starts automatic scrolling if it is stopped, or stops it if the pages are currently scrolling.
- **Reset Pan and Zoom** – Resets the pan and zoom for the current song or setlist.
- **Create Snippet** – Loads the [snippet dialog](#) for creating a snippet from the current song.
- **Return to Library** – Switches back to the library screen
- **Show Notes** – Displays any notes that have been entered for the song
- **Reset Next Link Point** – When using a pedal to advance through link points, this will prompt the user to select the link point that should be triggered next.
- **Turn One Page Backward** – Advances one page backward.
- **Turn One Page Forward** – Advances one page forward.
- **Turn Two Pages Backward** – Advances up to two pages backward.
- **Turn Two Pages Forward** – Advances up to two pages forward.
- **Pause or Resume Audio Track** – If the audio player is currently playing, the track will be paused, otherwise playback will resume from the current position.
- **Show bookmarks** – Displays the bookmarks window.
- **Scroll Down or Turn Page if at bottom** – Scrolls down to the bottom of the song and turns the page once it reaches the bottom.
- **Scroll Up or Turn Page if at Top** – Scrolls up to the top of the song and turns the page once it reaches the top.

After making selections, tap the close button or tablet back button to exit the touch action settings page.

The pedal actions can be configured by going to the settings screen, then Touch & Pedal Settings, and finally “Pedal Actions”. This will display the configuration screen for the pedal actions, which can be seen below:

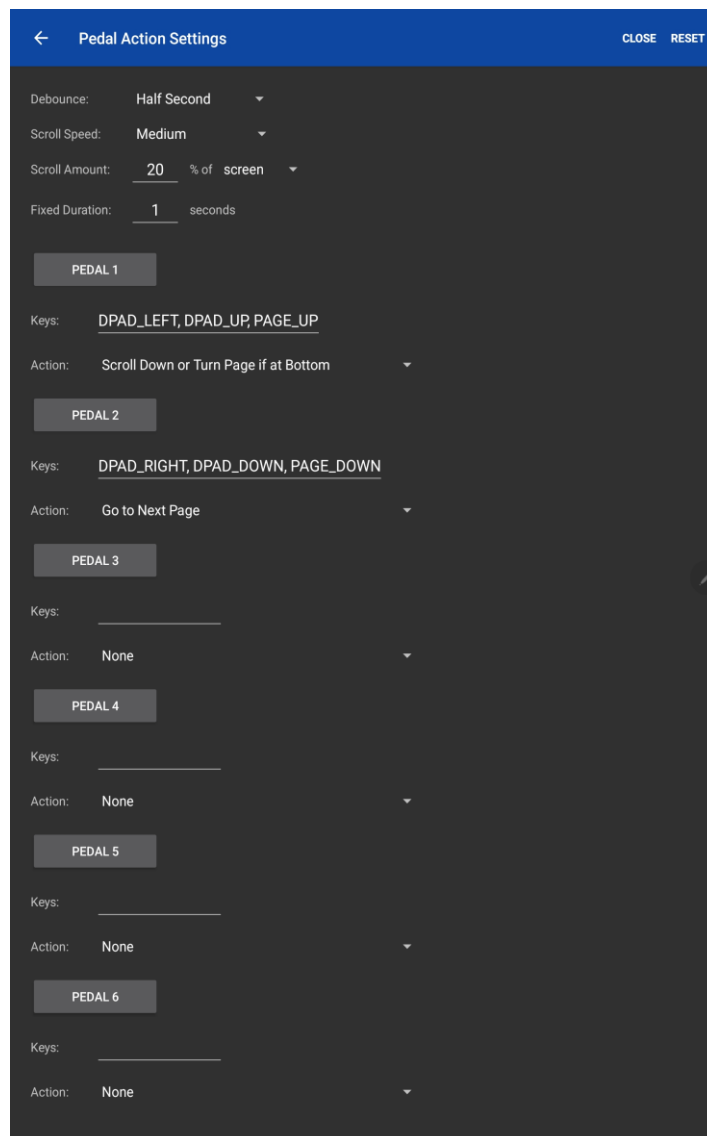


Figure 96 - Pedal Action Settings

The first setting, “Debounce”, determines the amount of time that must be measured between pedal presses for them to be accepted. The options are: Disabled, Quarter Second, Half Second, One Second, and Two Seconds. Having something other than “Disabled” for the debounce setting is normally recommended to prevent multiple page turns at once.

The next setting, “Scroll Speed”, determines how fast the screen is scrolled after a pedal action has initiated a scroll. This value is used together with “Scroll Amount” which specifies the percentage of the page to scroll every time the pedal is pressed. For example, Medium speed is one second, so if the scroll amount is 20%, 20% of the page will be scrolled in one second after the pedal is pressed. The following values are supported:

- **Slowest** – 5 seconds
- **Slower** – 3 seconds
- **Slow** – 2 seconds
- **Medium** – 1 second
- **Fast** – 0.75 seconds
- **Faster** – 0.5 seconds
- **Fastest** – 0.2 seconds
- **Immediate** – The page is scrolled immediately (no animation).
- **Fixed Duration** – The value specified in the “Fixed Duration” setting determines the number of seconds to use for the scroll time.
- **Use Metronome** – The current metronome tempo is used to determine how quickly the screen is scrolled.

The fixed duration field, as explained above, determines the amount of time to use for scrolling when the scroll speed is set to “Fixed Duration”.

In the middle of the screen, six sections are present – one per pedal. While MobileSheets supports up to six pedals, you can use any number of pedals you want. It doesn’t even have to be a pedal – any device that can send Bluetooth or USB keyboard commands will be recognized. It should be noted that the labeling of pedal 1 through 6 is purely for organizational purposes – you can tie whatever pedal or device to whatever pedal number you want, as each one is just a mapping of one or more keyboard commands to a MobileSheets action. To set up the action for a particular pedal, you can either tap one of the “Pedal #” buttons or tap the “Keys” dropdown first to set up the keys to listen to, then the action dropdown to specify the action (the Pedal # just sets up one after the other).

When you tap the Keys dropdown, the following dialog will be displayed:

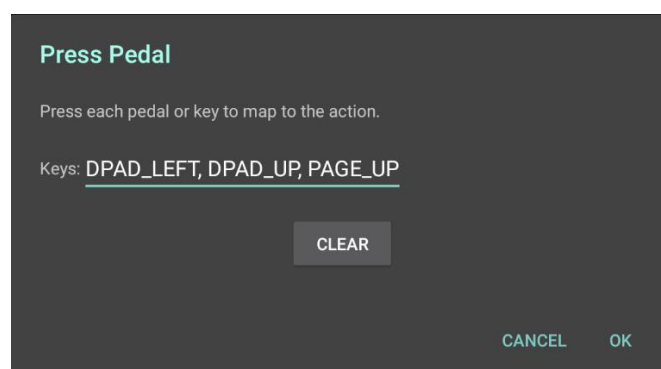


Figure 97 - The Key Mapping Dialog

While this dialog is displayed, MobileSheets will be waiting to receive commands from any devices. If you have a pedal connected, press the pedal to see the value appear in the “Keys” field. You can first tap “Clear” if you want to remove all values then press the pedal

to have just its value added. Tap OK to accept the current list of keys to map to the action. If you don't see anything added after pressing your pedal or other device, first ensure that you have a valid connection over Bluetooth or USB and try again.

Once the keys are set, you can assign the pedal action. The following pedal actions can be selected by tapping the action dropdown:

- **None** – No action will be taken.
- **Go to Previous Page** – Advances backward one page.
- **Go to Next Page** – Advances forward one page.
- **Scroll to Top of Page** – Scrolls continuously to the top of the current page.
- **Scroll to Bottom of Page** – Scrolls continuously to the bottom of the current page.
- **Activate Link Point or Turn Page** – Activates a link point if one exists on the page, otherwise turns to the next page.
- **Scroll Down or Turn Page if at Bottom** – Scrolls down to the bottom of the current page, or turns to the next page if already at the bottom.
- **Scroll Up or Turn Page if at Top** – Scrolls to the top of the current page, or turns to the previous page if already at the top.
- **Predictive Scroll Down and Turn** – Attempts to scroll the next measure into view by looking at the content of the page, or turns to the next page if at the bottom of the current page.
- **Predictive Scroll Up and Turn** – Attempts to scroll the previous measure into view by looking at the content of the page, or turns to the previous page if at the top of the current page.
- **Activate Previous Link** – Triggers the previous link which skips to the end link page. If the first link has not been activated yet, this has no effect.
- **Activate Next Link** – Triggers the next link which skips to the end link page. If all links have been triggered, this has no effect.
- **Activate Previous Link or Go to Previous Page** – Triggers the previous link if it is on the current page, otherwise it turns to the previous page. Additional details are provided at the end of this section.
- **Activate Next Link or Go to Next Page** – Triggers the next link if it is on the current page, otherwise it turns to the next page. Additional details are provided at the end of this section.
- **Previous Annotation Layer** – Switches to the previous annotation layer.
- **Next Annotation Layer** – Switches to the next annotation layer.
- **Show or Hide the Audio Player** – Shows or hides the audio player.
- **Previous Audio Track** – Skips to the previous audio track.
- **Next Audio Track** – Skips to the next audio track.

- **Start or Stop Audio Track** – Starts the audio player if it is stopped, and stops it if it is playing.
- **Start or Stop Metronome** – Starts the metronome if it is stopped, otherwise it is started.
- **Go to Previous Song** – Skips to the previous song in a setlist. This has no effect if a single song is loaded.
- **Go to Next Song** – Skips to the next song in a setlist. This has no effect if a single song is loaded.
- **Go to Start of Song** – Turns to the first page of the current song.
- **Go to End of Song** – Turns to the last page of the current song.
- **Go to Previous Bookmark** – Turns to the page of the closest bookmark before the current page.
- **Go to Next Bookmark** – Turns to the page of the closest bookmark after the current page.
- **Start or Stop automatic scrolling** – Starts automatic scrolling if it is stopped, otherwise it is started.
- **Go to Previous Page or Loop to End of Song** – Turns one page backward if not at the start of the song, otherwise it advances to the last page of the song. This looping mechanism works per song and doesn't rely on the global repeat mode setting.
- **Go to Next Page or Loop to Start of Song** – Turns one page forward if not at the end of the song, otherwise it returns to the start of the song.
- **Annotate Song** – Opens the annotations editor for the current song.
- **Return to Library** – Switches back to the library screen
- **Show or Hide the Setlist Window** – Displays or hides the song overlay setlist window
- **Show Notes** – Displays any notes that have been entered for the song
- **Turn Two Pages Backward** – Advances up to two pages backward.
- **Turn Two Pages Forward** – Advances up to two pages forward.
- **Reset Next Link Point** – When using a pedal to advance through link points, this will prompt the user to select the link point that should be triggered next.
- **Activate Next Smart Button** – Advances forward through the song's list of smart buttons triggering each one in order regardless of what page they are on.
- **Activate Previous Smart Button** – Advances backward through the song's list of smart buttons triggering each one in order regardless of what page they are on.
- **Audio Player Volume Up 5%** - Raises the volume of the audio player by 5%
- **Audio Player Volume Down 5%** - Lowers the volume of the audio player by 5%
- **Pause or Resume Audio Track** - If the audio player is currently playing, the track will be paused, otherwise playback will resume from the current position.
- **Trigger Back Button** – Simulates pressing the tablet back button which will return to the library screen while viewing a song.

- Several of the pedal modes reference activating the previous or next link, or the previous or next smart button. When a first song is loaded, a counter is kept determining what link point and smart button were last triggered. If a song has four link points, and you've triggered the first link point, the next link point is the second link point in the song. With the "Activate Previous Link or Go to Previous Page" and "Activate Next Link or Go to Next Page" settings, it should be noted you must trigger the link points in order. If you skip past a link point without triggering it, you will not be able to activate later link points with the pedal until the song is reloaded (or you go back to the page containing the link point and trigger it). Those modes are designed so that you can design a sequence of pages, such as, 1,2, 3, 1, 2, 5, 6, and advance through them using the pedal. This would be done by having a link point from 3 to 1, then from 2 to 5. You could then use the "Activate Next Link or Go to Next Page" mode to just step through each page in order. The only other way to achieve this is with a [custom page order](#).

CONFIGURING MIDI CONNECTIONS

MobileSheets supports multiple methods for connecting to MIDI devices including USB, Bluetooth and WiFi. To connect a device, go to Settings->MIDI Settings->Configure MIDI Connections. The following dialog will be displayed:

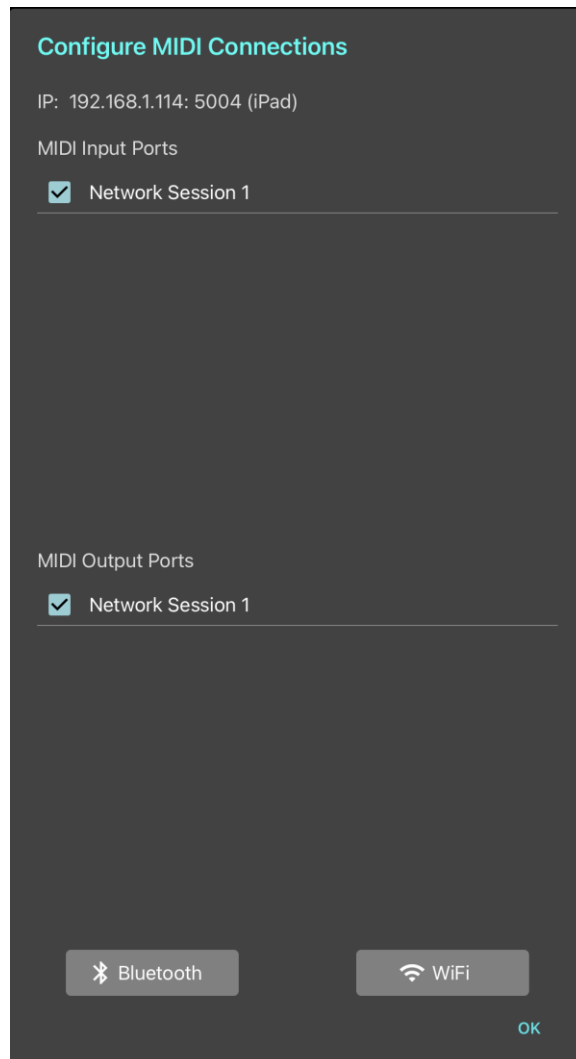


Figure 98 - The MIDI Connection Dialog

To connect to a device, tap the checkbox next to the name of the input and output ports for that device. To connect over WiFi, the other device can either connect to the IP address and port shown at the top, or the bonjour name which is shown in parenthesis. Alternatively, tap the WiFi icon and enter the IP address and port of the MIDI device. To connect over Bluetooth, tap the Bluetooth button and then select the MIDI device that is shown in the list of detected Bluetooth devices.

MIDI ACTIONS

Similar to pedal actions, MobileSheets can be configured to trigger various actions when one or more MIDI commands is received. To configure these actions, go to the [settings](#) screen, then MIDI Settings, and finally “MIDI Actions”. This will bring up the following screen:

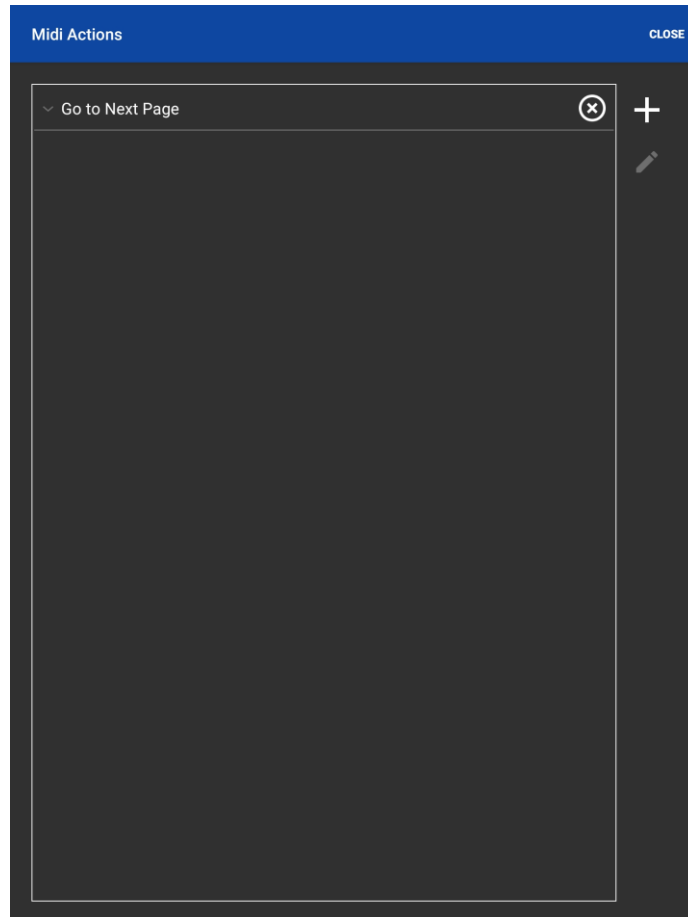



Figure 99 - The MIDI Actions Screen

To add a new MIDI action, tap the **+** icon and the New MIDI Action dialog will be displayed. The dialog lets you choose what action will be triggered in the dropdown at the top. The same actions are supported for MIDI actions as are supported for pedal actions, so consult the previous section for more information on the actions. Tapping the **+** icon on this dialog will display the Add MIDI Command dialog. This dialog lets you select the type of MIDI command to listen for. See the [MIDI tab](#) section for additional details. Add all of the MIDI commands that must be received in order to trigger the selected action. If you tap the  icon, you can listen for commands from your MIDI device, and setup the MIDI action to use those commands.

CONNECTING DEVICES

One feature in MobileSheets that is quite powerful is the ability to have one leader device control other connected follower devices. The leader tablet can be configured to load songs and setlists on the other tablets, turn pages and send pedal actions. To begin connecting devices, tap the “Connect Tablets” option in the overflow menu on the library screen, and you will see the following dialog displayed:

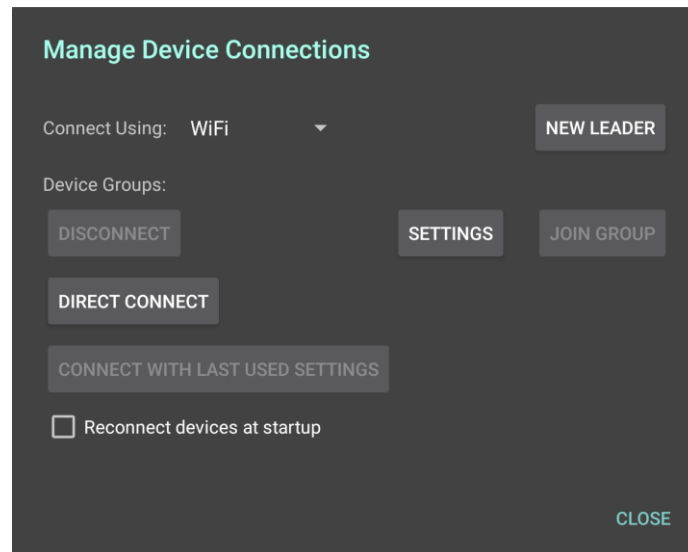


Figure 100 - The connect devices dialog

There are two ways to connect devices: WiFi and Bluetooth. You can switch between these modes by tapping the “Connect Using” dropdown. If WiFi is selected and the IP address of the leader tablet is known, the “Direct Connect” button can be tapped to bring up a dialog that accepts an IP address. After tapping OK, the tablet will connect directly to the leader device, skipping the normal discovery mechanism. This can be useful if the leader device doesn’t show up in the list due to network or device restrictions, but a direct connection is still possible. Similarly, “Connect with Last Used Settings” can be tapped to connect the leader using the same exact settings as the last session. The button will be disabled if a connection hasn’t been successfully made to another device. The “Reconnect devices at startup” option will cause MobileSheets to set up the same connection as the last successful connection when it is first loaded. This means creating a new group on the leader tablet and connecting to that group from a follower tablet.

Both the Wifi and Bluetooth connection types will be covered in the following sections as well as the various settings dialogs.

CONNECT DEVICES USING WIFI

In order to connect devices using WiFi, a common access point that all devices can connect to must be available. That access point must also allow messages to be sent between devices (public access points may restrict this). If no access points are available, most phones now support creating a hotspot access point that other devices can connect to, and this can be used with MobileSheets.

To begin connecting devices, the “New Leader” button must be tapped on the device that will be designated as the leader. The following dialog will be displayed:

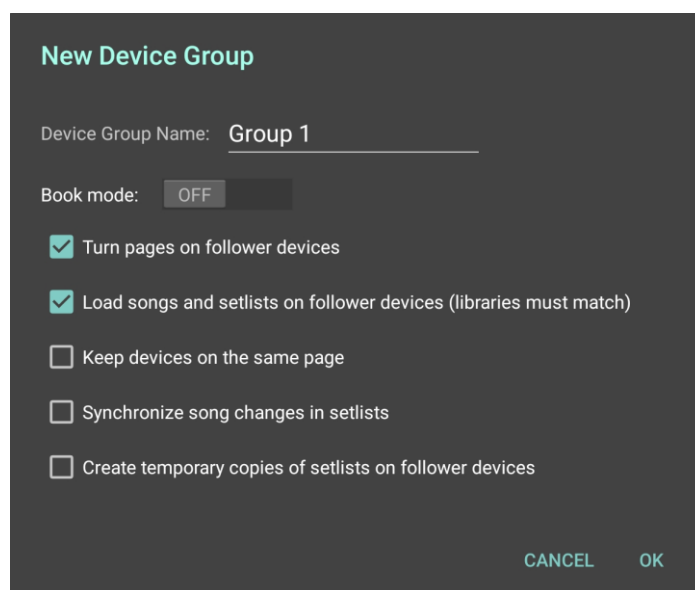


Figure 101 - The dialog used to setup a new group

A name can be provided for the group which the follower devices will use when joining the group. It's useful to provide a unique name if several different groups may be created on the same access point. The “Book mode” setting is used to treat the leader and follower devices as a single pair that will be used to view scores by a single user. This setting emulates the two-page display mode across two separate devices. You can read more about book mode at [the end of this section](#).

The next setting shown is whether or not the leader will turn pages and/or load songs and setlists on the follower devices. In order for songs to be loaded, the follower devices must have songs and setlists with matching titles. The “Keep devices on the same page” setting will ensure that the same page of each song is displayed on the leader and all connected followers. Unlike the “synchronize song changes in setlists” option, this option will handle scenarios where a song might have more pages on one tablet than the other. In order for this setting to function properly, it's important that the setlists on each device have the songs in the same order. The “Synchronize song changes in setlists” option will ensure that

if the leader tablet changes songs (either by changing pages, using a bookmark or jumping to a song) that the follower devices will change to the same song on their device. Lastly, the “Create temporary copies of setlists on follower devices” will cause the leader tablet to send its setlist (and list of songs) over to the follower devices when the setlist is loaded. The follower devices will create a temporary copy of the setlist, and for each song in the list, they will either add a matching song from their library or a blank placeholder if a matching song can’t be found

When “OK” is tapped on this dialog, the leader device will begin broadcasting the group information to the follower devices. When this occurs, the group will show up in the dialog, as can be seen below:

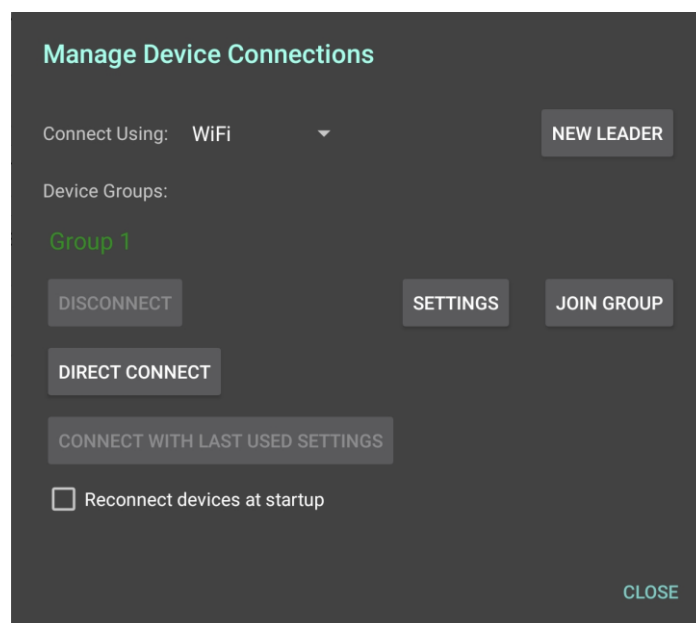


Figure 102 - The leader group is detected and can be joined

In this example, “Group 1” can be tapped, at which point it will be selected, the text will turn green and the “Join Group” button will be enabled as can be seen in the figure above. If “Join Group” is tapped, the follower device will attempt to join the selected group. When this join succeeds, the label in the list will change to “Group 1 (Connected)”, and the leader device will display the connected follower device in its list. At this point, the leader can now load a song or setlist, and the follower device will load the same song or setlist (assuming it can find a match). If enabled, the leader device can also turn pages and the follower devices will turn their pages in sync. It should be noted that pedal commands, such as scrolling will also be sent from the leader device to the connected follower devices, but only if page turns are enabled.

CONNECTING DEVICES USING BLUETOOTH

In order to connect devices using Bluetooth, the devices must be in range of each other and have Bluetooth enabled. If Bluetooth is chosen from the dropdown but Bluetooth is not enabled, MobileSheets will prompt you to enable it. Once Bluetooth is selected and enabled, the dialog will display a new switch labeled “Search” as can be seen in the figure below:

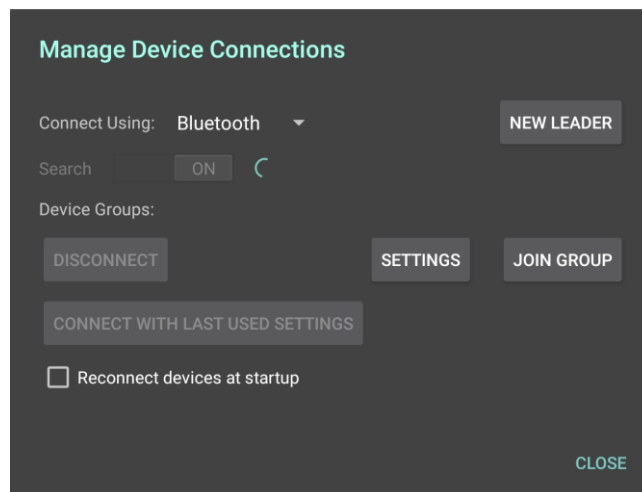


Figure 103 - Bluetooth is selected and discovery is active

While switched on, the tablet will search for Bluetooth devices nearby that can be connected to. Note that due to limitations in the operating system, only iOS devices can connect to each other over Bluetooth in the iOS version of MobileSheets. It is not possible to connect to an Android or Windows device over Bluetooth.

To create a new group, the leader device must tap the “New Leader” button, and provide a name, as described in the previous section.

FOLLOWER CONNECTION SETTINGS

If the “Settings” button is tapped on the main connect devices dialog, a separate dialog will be shown that is used to configure settings on the follower devices. The dialog can be seen below:

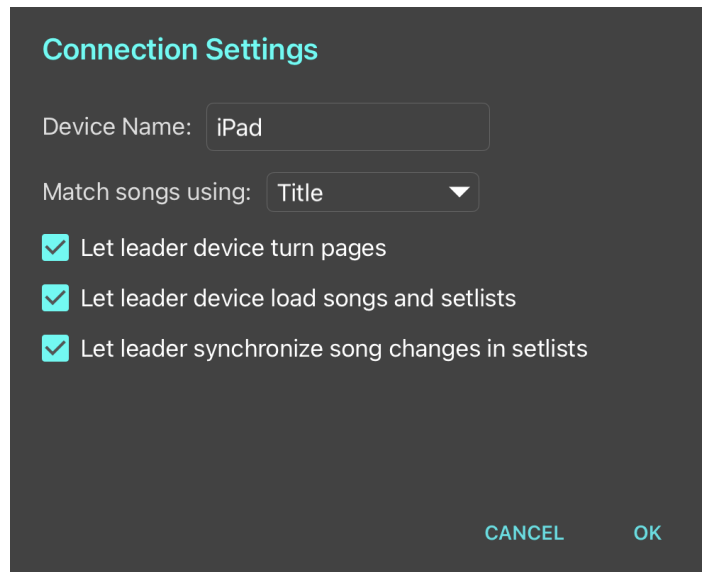


Figure 104 - Follower device connection settings

This device name value allows the follower device to be uniquely named which makes it easier to distinguish in the leader devices list. The setting below that, “Match songs using” is incredibly important. This determines how songs sent from the leader tablet will be matched to songs on the follower tablet. By default, songs are matched based upon their title. If each device has different songs (such as when each musician has a different version of a song for their instrument), then it may be better to match on a different field such as the song ID or custom field. Supported values for this setting are “Title”, “Custom Sort Title”, “Song ID”, “Custom” and “Custom 2”.

The last few settings let follower devices choose whether they want to allow the leader device to load songs and setlists or turn pages for them. This allows the leader to have default settings that apply to all follower devices, but certain users can override these settings if needed.

SYNCHRONIZE TWO TABLETS FOR ONE MUSICIAN (BOOK MODE)

Due to the scarcity of devices with screens large enough for a two-page display, it is often more convenient to connect two devices as use them as if they were one. The book mode feature makes this possible. When the leader device (the left-hand page) is connected to the follower (the right-hand page) and a song is loaded, the follower device will always display the page directly after the page shown on the leader device. Pages can be turned by tapping on either device’s screen. When book mode is enabled on the “New Device Group” dialog, the dialog will change to show additional options as shown below:

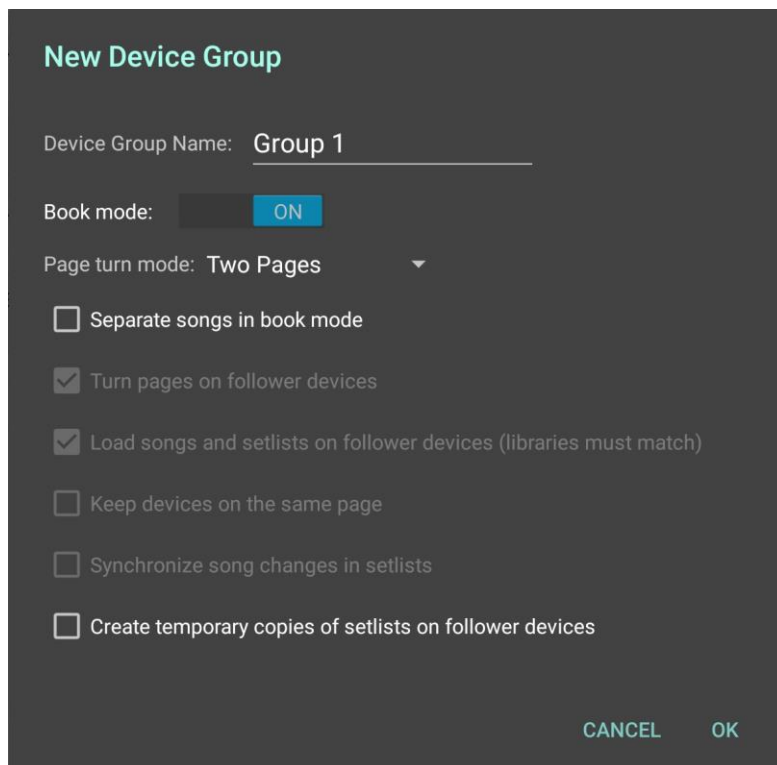


Figure 105 - New Device Group dialog when book mode is selected

The “Page turn mode” setting is used to determine how pages will be advanced while going through the song. See the section on the [two-page display mode](#) to see supported page turn modes. The “Separate songs in book mode” will ensure that pages from two different songs are not shown at the same time on both devices. In the case of a song with an odd number of pages, the follower device may display a blank page when the last page of the song is displayed on the leader.

In order for book mode to work properly, it is essential that each device has the same library. This can be accomplished either by using the [backup](#) and [restore](#) features or the [library synchronization](#) feature. It is important to note that book mode will not be activated until a device has been successfully connected to the leader tablet. This ensures that if the follower device is disconnected for any reason, the leader device can still be used normally until the follower is reconnected.

SYNCHRONIZING DEVICE LIBRARIES

When playing as part of a group, it's often necessary to keep the libraries of each group member synchronized, especially when utilizing features such as the leader/follower connection feature. While a library backup file can be used to accomplish this, it is an all-or-nothing approach to solving the problem, as restoring a backup file will replace the entire library on the device. A much better solution is to use the library synchronization features in MobileSheets that will merge libraries together. To access this feature, tap the overflow button on the library screen and select "Sync Library". When selected, the following types of synchronization are displayed:

- Synchronize to a device
- Synchronize to a cloud folder
- Synchronize to backup file

Each type of synchronization will be covered in detail in the following sections.

SYNCHRONIZE TO A DEVICE

This type of synchronization allows two devices to merge their libraries together over WiFi or Bluetooth. When this option is selected, the following screen is displayed:

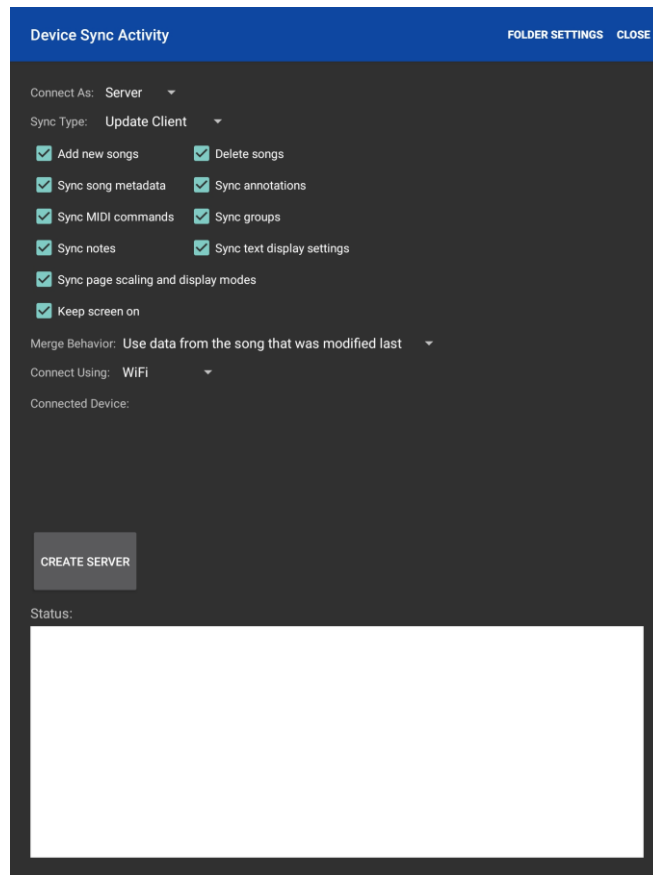


Figure 106 - Device Sync Screen

Each of the settings will be described below:

- **Connect As** – This setting is used to designate one device as the server and the other device as the client. The server device is the one that designates all of the settings for the merge.
- **Sync Type** – Determines which device will be updated during the merge. If only one device needs to be updated, select “Update Server” or “Update Client”, otherwise “Two-way Sync” should be selected to update both devices as needed.
- **Add new songs** – Determines whether new songs should be allowed to be created. If disabled, no new songs will be added to either library.
- **Delete songs** – Determines if songs will be deleted if needed during the merge. This setting is only available when performing a one-way merge. If the sync target has a song that doesn’t exist on the other device and this setting is enabled, that song will be deleted.
- **Sync song metadata** – Synchronizes song metadata, including most data in a song not associated with groups. Examples include link points, bookmarks, the custom/custom2/difficulty/rating fields, scroll settings and metronome settings.
- **Sync annotations** – Synchronizes all annotations.

- **Sync MIDI Commands** – Synchronizes song MIDI commands. This will only process MIDI commands added to songs – MIDI actions in the global settings will not be merged.
- **Sync groups** – Synchronizes group data including setlists, collections, genres, artists, etc.
- **Sync notes** – Synchronizes song notes.
- **Sync text display settings** – Synchronizes text display settings used for text and chord pro files.
- **Sync page scaling and display modes** - Synchronizes song display settings, which are song overrides of the display and page scaling modes for both portrait and landscape orientations.
- **Keep screen on** – Determines if the screen will be forced to stay on while the libraries are merged.
- **Merge Behavior** – Determines how song differences are processed. The following options are supported:
 - **Use data from the song that was modified last** – When songs are compared, data from the song that was modified last will be used. Note that this last modified timestamp is updated when any change is made to the song. When song files are compared, the file that was modified last will be used.
 - **Prompt user for decision** – A dialog will be displayed for every difference between songs. This provides complete control over how the merge proceeds.
 - **Only merge new songs and groups** – Ignores songs that exist on both tablets.
 - **Only merge new and prompt user** – Ignores songs that exist on both tablets, and prompts the user to decide which songs should be added.
 - **Always use data from server** – Similar to a one-way sync, the server’s songs will always be used whenever a difference is determined and a merge is needed. Unlike a one-way sync, new songs can still be created during a two-way sync if this setting is used.
 - **Always use data from client** – Same as the previous option, but the client’s songs are always used.
- **Connect Using** – Determines if the devices will connect to each other using WiFi or Bluetooth. WiFi is typically more reliable and much faster and should be chosen if a router is available.

At the top right, the “Folder Settings” option is available in the action bar. Tapping this will present a dialog where you can create name/path mappings for folders on the device. If each device assigns different paths to the same names, they can control where files will be placed on each device while merging. This is typically only necessary if you manage your own files and are not relying on the MobileSheets storage location.

After the settings have been selected, the server device can click “Create Server” to begin the merge. The client should automatically detect the server device if using WiFi, but you can also tap “Direct Connect” on the client side to enter the server’s IP address if necessary. If automatically detected, the server will show up in the list. Tap the server name to select it, then tap the “Connect” button to initiate the connection. The server device should then show the connected client device. Consult the previous section on connecting devices if using Bluetooth to connect. Once the devices connect to each other, the merge will automatically begin. Status messages will be printed to the bottom of the screen and depending upon the merge behavior, prompts will be displayed if needed. When the merge completes, you can tap Exit to end the merge. If there are multiple devices that need to be synchronized, you can tap continue to reset the state of the merge and allow for a new connection.

SYNCHRONIZE TO A CLOUD FOLDER

This type of synchronization allows one device to upload its library to a cloud folder, and then other devices can synchronize to that same folder to receive updates. Most of the settings from the previous section are also supported with this type of synchronization (just substitute the words “Folder” for “Client” and “Device” for “Server”). The following settings are different:


- **Check for updated files in cloud folders** – If enabled, each file in the cloud folder is checked to see if it has been updated. While this is slow, it ensures that if new copies of files have been copied to the cloud folder, they will be processed. If you know you haven’t copied any files to the folder, and have always relied upon MobileSheets to update the folder, you can disable this setting which makes the synchronization much faster/
- **Search for new files and create songs in both libraries (slow)** – If enabled, MobileSheets will scan the cloud folder for files that aren’t currently used by the library. If found, they will be imported, and then the library in the cloud folder will be updated as well.

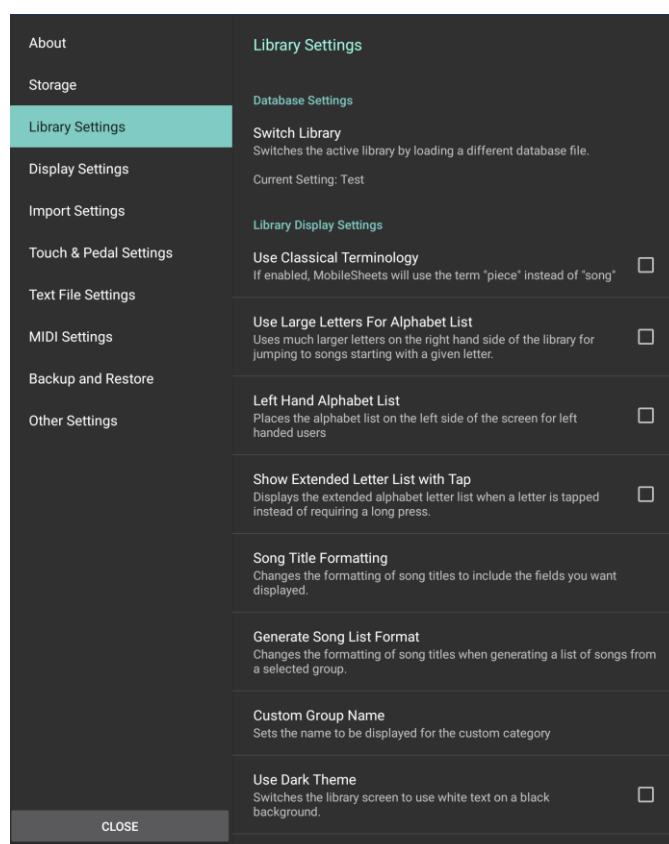
To start the sync, tap on the folder icon, browse for a cloud folder, and then tap the “Start” button. The first time a device is synchronized to a cloud folder, a copy of that device’s library must be uploaded to the cloud folder (you can’t just use an existing cloud folder as no database will be present to store the library information). After this initial upload which can take a while if the library is large, all subsequent synchronizations will be fast, especially if MobileSheets does not have to check for updated files. While you can add new files to the cloud folder manually and search for new files, it’s often much more efficient to import these files on one device and then sync to the cloud folder.

SYNCHRONIZE TO BACKUP FILE

If it is necessary to synchronize the libraries of a lot of devices without internet connectivity, the option to synchronize to a backup file can be quite useful. Merging to a backup file is a one-way sync where only the device is updated. The version of the database in the backup file must match the version of the database on the device, otherwise the sync will not be allowed. To start the merge, tap the folder icon and select the .msb file you wish to use. The file must be present on the tablet itself or through connected storage (such as an SD Card) – cloud storage cannot be used. Once a file has been selected, you can tap “Start” to begin the merge. It will then proceed identically to the other types of synchronization covered in the previous sections.

SETTINGS AND OPTIONS

While the default settings for MobileSheets will be fine for most users, everyone likes to operate a little differently. That’s why MobileSheets provides the ability to change various settings that impact how the application operates. To access the settings screen, tap the overflow menu at the top right of the library screen and select settings, or tap the  icon at the bottom right corner of the overlay. The settings screen is shown below:



107 – The Settings Screen

When the settings screen is accessed from the library screen, the “Library Settings” section is first shown. When the settings screen is accessed from the song overlay, the “Display Settings” section is first shown.

While most settings are self-explanatory, some may not be completely clear upon reading the description. For this reason, all of the settings will be described in detail below:

ABOUT

- **Version** – Displays the current version of MobileSheets
- **Email Zubernsoft Support** – Starts using the email client in iOS to send an email to the Zubernsoft support email address.
- **Release Notes** – Displays a dialog showing all of the release notes for recent releases.
- **Credits** – Lists the amazing translators and supporters of the app and open-source software that is used.
- **Privacy Policy** – Views the MobileSheets privacy policy.

STORAGE

- **Create Subdirectories For Songs**
 - Creates an individual folder in the storage location for every song. This can help reduce the potential for file name conflicts. This setting only applies if “Manage My Files” is enabled.
- **Switch Dropbox Account**
 - Provides a mechanism to change the current Dropbox account.
- **Switch Google Drive Account**
 - Provides a mechanism to change the current Google Drive account.
- **Switch OneDrive Account**
 - Provides a mechanism to change the current OneDrive account.
- **Enable Dropbox Integration**
 - Determines whether Dropbox will show up as an import/export option under the cloud sources
- **Enable Google Drive Integration**
 - Determines whether Google Drive will show up as an import/export option under the cloud sources
- **Enable OneDrive Integration**
 - Determines whether OneDrive will show up as an import/export option under the cloud sources

LIBRARY SETTINGS

- **Switch Library**
 - Provides a mechanism to load a different database file and switch the active library.
- **Use Classical Terminology**
 - If enabled, MobileSheets will use the term “piece” instead of “song”
- **Use Large Letters For Alphabet List**
 - Sets a larger font size for the alphabet list on the right side of the library screen. All letters may not be visible if this option is selected, in which case you will need to scroll the list to access them.
- **Left Hand Alphabet List**
 - Places alphabet lists, used to quickly scroll lists to entries starting with a given letter, on the left side of the screen instead of the right.
- **Show Extended Letter List with Tap** – This setting changes the behavior of the alphabet list on the library screen so that a single tap brings up the extended letter list, which is normally shown after a long press. A long press will then trigger the normal single tap behavior, which scrolls to the given letter. See the section on the [alphabet list](#) for more information.
- **Song Title Formatting**
 - Loads the song title formatting dialog so that the way in which songs are displayed in the library lists can be configured. See the section on [song title formatting](#) for more information.
- **Generate Song List Format**
 - Determines how songs are printed when generating a song list from a setlist. See the section on [generate song list formatting](#) for more information.
- **Custom Group Name**
 - Determines what name is displayed for the custom group category.
- **Use Dark Theme**
 - Inverts the list colors so that it shows white text on a black background.
- **Alternate Row Color**
 - Provides alternating row colors for the library screen lists. Options include: none, light gray, gray or dark gray.
- **Library Text Size**
 - Determines what font size is used for displaying entries on the library screen.
- **Text Alignment**
 - Determines if entries in the library lists are left, center, or right aligned.
- **Tab Selection and Order**
 - Loads the [tab selection and order dialog](#) to select what tabs are shown and in what order
- **Show Number of Songs**

- Determines if, for group types, the number of songs they contain is displayed to the far right of the entry in the list (or far left if Left Hand Alphabet List is enabled).
- **Show Setlist Duration**
 - Shows the total setlist duration beside the setlist title on the library screen.
- **Calculate Setlist Duration Using Audio Files**
 - Calculates setlist duration using the combined duration of all audio files used by songs in the setlist instead of using the song duration field.
- **Clear Filters After Load**
 - Automatically clears any filters than have been applied when a song or setlist is loaded.
- **Reset Filters After Exiting Group Editor**
 - Automatically resets filters to their previous state when exiting the group editor.
- **Show Floating Toolbar**
 - Determines if the floating toolbar is shown at the bottom right corner of the library screen.
- **Ignore Articles While Sorting**
 - This determines if articles specified by the “Articles to Ignore” are ignored during sorting. This is typically used to ignore articles such as “A”, “An”, and “The”, so that a song titled “The Best Song” would show up under “B” instead of “T”.
- **Articles to Ignore**
 - This determines what articles are ignored at the beginning of songs when the “Ignore Articles While Sorting” feature is enabled. The list of articles must be comma separated.
- **Normalize Characters**
 - Determines if diacritical marks are removed from characters while sorting and certain other characters are replaced, i.e. Ć becomes C, Å becomes A, Ö becomes O
- **Use Language Sorting Rules**
 - Compares values by using the sorting rules of the currently selected language. If disabled, a simple comparison will be performed.
- **Automatically Load Next Song**
 - This setting can be used to page through songs in any library list. For example, if an individual song is loaded using the songs tab, this setting would let you page through all of the songs on the songs tab, starting with the first one you loaded. The songs aren’t loaded as a setlist – instead, MobileSheets will just load the next one in the list when you advance past the last page of the current song.

- **Always Load Last Viewed Page**
 - When this setting is enabled, MobileSheets will automatically load the last page that was viewed for any song or setlist. This ensures that you can pick up from wherever you left off at when working through pieces.
- **Initial Library Tab**
 - This setting determines what tab is shown first when MobileSheets is loaded.
- **Always Load Whole Setlist**
 - This setting determines if, when an individual song is tapped inside of a setlist on the library screen, whether the whole list is loaded (starting at the page of that song) or just that song is loaded.
- **Skip Viewing Groups with One Song**
 - If a group with only one song is tapped, the song will be loaded instead of viewing the group. Empty groups will be shown with a gray title. If group song counts are enabled, no number is shown for groups with a single song.
- **Automatically Load Last Used Filters at Startup** – If enabled, MobileSheets will save all filters when the application is closed. The next time the application is loaded, those same filters will be applied.

DISPLAY SETTINGS

- **Language**
 - Provides a way to easily change the language used in MobileSheets.
- **Allow Zoom Out Past 100%**
 - When pinch zooming in MobileSheets, you are normally not allowed to zoom the score smaller than the screen dimensions. This is done so that as much of the screen space is used as possible. If you want to be able to make the sheet music smaller than the screen, enable this setting.
- **Disable Page Turn Animation**
 - Normally when using the single page, two page, or vertical scrolling display mode, the pages will scroll when you tap to advance to a new page. This setting removes the scrolling animation so that pages instantly change when you tap.
- **Repeat Mode**
 - If this setting is enabled and you advance past the last page of a song or setlist, MobileSheets will jump back to the first page of that song or setlist.
- **Display Half Page in Landscape Orientation**
 - Displays half a page in landscape orientation while using the single page display mode. Pages can be scrolled up and down.
- **Half-Page Turns in Landscape Orientation**

- Advances half a page at a time while the single page display mode is active in landscape orientation. Vertical scrolling is disabled while this mode is active.
- **Separate Songs in Two Page Mode**
 - If this setting is enabled, two different songs will never be shown at the same time when using the two page display mode. This means if a three page song is shown, followed by a two page song, page three of the first song will not be shown at the same time as page one of the second song. This means that sometimes a single page will be displayed if necessary.
- **Link Point Default Size**
 - Provides control over the default size of link points. This increases both their size on the screen, and the hit detection area.
- **Page Color Tone**
 - Tints pages using a selected color tone to reduce glare and eye strain. Supported tints include sepia, gray and cool (a blueish tint).
- **Background Fill Color**
 - Determines what color is used to fill the margins surrounding scores displayed in MobileSheets. Choices include black and white (black is the default). This also acts as the background color for transparent images. If you are using transparent images, setting the background to white will allow you to see your sheet music normally.
- **Night Mode**
 - Inverts black and white to help in dark environments (decreases the amount of light coming from the device reflecting on your face.)
- **Page Alignment**
 - Normally, pages are aligned with the top of the tablet in MobileSheets. This makes it easier for your eyes to know where the next page will align. If you prefer to have your pages centered or aligned to the bottom of the screen, switch this setting.
- **Show Formatted Song Titles**
 - Determines if the song titles shown in the overlay, setlist window and next up song bar will use the same formatting as the library screen. If not, the standard song title will be used.
- **Show Next Song Indicator**
 - Displays the options for determining when the next song indicator will be shown. The options are never, on page before next song, and always. More information can be found in the [next song bar](#) section.
- **Always Show the Title Bar**
 - Determines if the top section of the overlay, known as the title bar, is always visible at the top of the screen while viewing a song. Enabling this setting will

ensure that the sheet music is pushed below the title bar so that nothing is obscured.

- **Show Preview During Page Seek**
 - Enables/disables the mini-preview window that appears while using the page slider to change pages.
- **Use Page Slider Only for Previewing Pages**
 - Allows the page slider to be used to view the preview thumbnail for pages, but when released, the current page is not changed.
- **Page Slider Visibility**
 - This setting determines when the page slider is shown. The options are: hidden, shown with overlay, and always visible.
- **Device Orientation Lock**
 - Locks the orientation of the device to the selected. This overrides song orientation locks and applies to every screen in the application.
- **Fullscreen Mode**
 - Determines if MobileSheets hides the notification bar at the top of the screen. If you don't need notifications on your tablet, this will free up additional space for displaying your library and scores.

IMPORT SETTINGS

- **Convert PDF Bookmarks**
 - Enables automatic conversion of PDF bookmarks to MobileSheets bookmarks when PDFs are imported. The PDF itself will not be modified.
- **Automatically Add Matching Audio**
 - Determines if matching audio files will be automatically added to songs when files are imported. The file names (ignoring the extensions) must match and the audio files must be in the same folder as the files being imported. That means if a file called "newfile.pdf" is imported, a search for "newfile.*" will be performed, and any match with a valid audio file extension will be used (such as newfile.mp3 or newfile.wav).
- **Aggressively Crop**
 - Enables a more aggressive algorithm for removing margins which tries to ignore noise in the margins of pages.
- **Populate Metadata When Importing Audio**
 - Determines if song fields are populated using the metadata from imported audio files.
- **Join Imported Images with Similar Names** – Adds imported image files to the same song when their filenames are identical except for a number near the end. If you

have many individual image files that were scanned, this can provide an easy way to import them all at once and have them joined in one song.

- **Capitalize Each Word in Song Fields** – Normally, MobileSheets will capitalize each separate word when entering values for song fields. This isn't desirable in some languages though, so this behavior can be disabled.

TOUCH & PEDAL SETTINGS

- **Pedal Actions**
 - This loads a separate dialog that lets you assign actions to pedal presses. See the section on [configuring pedal actions](#) for more information.
- **AirTurn Direct Mode** – Connects to AirTurn pedals that support direct mode such as the AirTurn PED, Digit III and BT500S models. Direct mode uses less battery power, eliminates the need to pair the pedal through the OS and allows the virtual keyboard to stay accessible.
- **Prevent Pedal From Changing Songs**
 - If you like to change pages with a pedal but do not want the pedal to switch between songs, enable this option. Songs will only be changed by tapping the screen.
- **Touch Actions**
 - This loads a separate dialog that lets you assign touch actions to parts of the screen. See the section on [configuring touch actions](#) for more information.
- **Overlay Toggle Mode**
 - Determines what action displays the image overlay. Choices include: single tap, long press or swipe diagonally. (A single tap will always close it.)
- **Enter Annotation Mode with Stylus Input**
 - Determines if MobileSheets will immediately start annotating when stylus input is detected. This includes when the stylus is hovering above the screen.
- **Enable USB Mouse Processing**
 - This determines if USB mouse clicks will be used to turn pages
- **Swap Mouse Click Actions**
 - Switches the mouse click actions so that a left mouse click turns back one page while a right mouse click turns forward one page.
- **Treat Mouse Click as Pedal Press**
 - If this setting is enabled, mouse clicks can be used like a pedal to invoke a left or right pedal action. You must assign the actions you want to pedal #1 and pedal #2 on the pedal action screen.

TEXT FILE SETTINGS

- **Default Display Settings**

- Loads the [text file settings](#) dialog to configure the default settings for text files.
- **Wrap Text**
 - Determines if text will be wrapped when displaying text files. If this setting is unchecked, lines may extend beyond the screen.
- **Page Margins**
 - Displays a dialog that can be used to adjust the page margins for text/chord pro files as well as the space between columns.
- **Use Multiple Columns**
 - Determines if text files will attempt to use multiple columns per page if there is enough width available.
- **Place Chords Above Text**
 - Determines if chords are extracted and placed above text when possible, or if they are left on the same line
- **Hide Chord Brackets**
 - Determines if chords are shown when they are on the same line as lyrics. This setting is disabled if “Place Chords Above Text” is enabled.
- **Use Text Fields During Song Creation**
 - Determines if metadata will be extracted from chord pro files and used to populate song fields during creation. See the section on [chord pro files](#) for more information.
- **Modulate Capo Down**
 - Determines if chords will be modulated down by the number of steps specified by the capo field in songs. For example, if the chord is normally C, and the capo value is set to 3, the chord will be displayed as A. This is because, if you have a capo on the 3rd fret of a guitar and wanted to play a C chord, then you should play an A chord, as the two are equivalent. If “Modulate Capo Down” is unchecked, then an Eb chord will be displayed, as playing a C chord with a capo on the 3rd fret is equivalent to playing an Eb chord without a capo.
- **Capo Display Settings**
 - Configures the appearance and visibility of the capo on the score and next up song bar. The capo number is displayed in a rounded rectangle.
- **Process Output Directives**
 - Determines if output directives such as the lyrics font name and size, chords font name and size and tab font size are processed.
- **Detect Key By**
 - Determines how the key of a given text or chord pro file is determined. The options are as follows:
 - **First Chord** – The first chord in the song will be used as the key

- **Last Chord** – The last chord in the song will be used as the key
 - **Chord Progression** – MobileSheets will look at the chord progression in the song, count the number of chords of each type, and try to determine the key from this information.
- **Display File Encodings**
 - Determines if the file encoding setting is shown on the text display settings dialog. Normally users do not need to change the file encoding for text files as they are determined automatically. If you see <?> characters in your text or chord pro files, enable this setting, and try changing the encoding for that file in the text settings dialog.
- **Chord Localization**
 - Determines how chords are handled based upon the rules of the selection region. Two selections can be made: one for the source localization (how chords read from the file are interpreted) and one for the display localization (how the chords are displayed to the user after being transposed if needed). The supported localizations are as follows:
 - **Default** - Displays chords as capital letters from A through G with flat or sharp symbols as needed. Minor chords are denoted by a lowercase "m" to the right of the chord.
 - **Czech** - Displays chords in a convention familiar with the Czech language. This displays "B" as "H" and "Bb" as "B". In addition, minor chords are denoted by lowercase "mi".
 - **German** - Displays chords in a convention familiar with German-speaking people. This displays "B" as "H" and "Bb" as "B".
 - **Scandinavian** - Displays chords in a convention familiar with Scandinavian-speaking people. This displays "B" as "H" and "Bb" as "Bb".
- **Auto-Size Font**
 - If enabled, the font size will be automatically calculated for imported text and chord pro files based on the longest line in the file. The font size will be the largest value possible that doesn't cause line wrapping and is less than or equal to the maximum auto font size.
- **Maximum Auto Font Size**
 - The largest font size allowed when auto-size font is used to calculate the font for a file. This ensures that extremely large font sizes aren't used for files with short lines of text.

MIDI SETTINGS

- **MIDI Channel**
 - The MIDI channel that MobileSheets will send and receive MIDI messages on.
- **MIDI Echo**
 - Determines if MobileSheets will send all received MIDI messages back out to every connected device.
- **Allow Multiple MIDI Channels**
 - Determines if MobileSheets will allow MIDI commands to be configured to be sent out on multiple channels.
- **MIDI Device**
 - Determines what kind of MIDI device is connected. If KORG is selected, an additional “Number” MIDI command will be available. Consult the KORG documentation [here](#) for more information. If Genos is selected, the option to link Genos registrations to songs will be available in the song editor.
- **Configure MIDI Connections**
 - Displays the [MIDI connection screen](#).
- **MIDI Actions**
 - Configures actions that MobileSheets will trigger when MIDI messages are received. See the section on [MIDI actions](#) for more details.
- **Prevent Looping Between Songs**
 - Prevents MobileSheets from loading songs in an endless loop when the songs are configured with the same MIDI messages.

BACKUP AND RESTORE

- **Backup Library**
 - Displays a dialog that will let you initiate a backup of your entire library. See the section on [backing up your library](#) for more information.
- **Restore Library from Backup**
 - Displays a dialog that will let you initiate a restore of your entire library. See the section on [restoring your library](#) for more information.
- **Restore Automatic Database Backup**
 - Allows one of the automatic database backups to be restored in the case that data has been lost. Restoring a database backup is irreversible, so be cautious when using this feature.

OTHER SETTINGS

- **Keep Screen On**

- Determines when the screen is forced to stay on. The choices are: Never, While Viewing Scores and Always. Note that if no activity is detected for an entire hour, the screen will be allowed to turn off to prevent the tablet battery from being completely drained.
- **Find Missing Files**
 - Shows a dialog that can be used to find songs that are missing files in the library. Songs in this list can be tapped to swap in valid files, edited to fix the problem or deleted if they are no longer needed.
- **Fix Broken File Paths**
 - This advanced utility can be used to repair file paths in the library if files have been relocated to a location that no longer matches what MobileSheets originally stored. The simplest way to use the utility is to tap the Automatic radio button and then let MobileSheets search for the files and fix the paths stored in the database. Note that MobileSheets can only search under the MobileSheets application storage directory, so you have to move files under that directory first.
- **Stop Audio on Back**
 - Determines if audio playback is stopped when the back button is used to return to the library screen.
- **Allow Audio from Other Applications**
 - Determines if MobileSheets will silence audio from applications running in the background when audio is played in MobileSheets.
- **Disable Audio Player**
 - Determines when the audio player is disabled. The following values are supported:
 - **Never** – The audio player is always enabled and available for use.
 - **In Performance Mode** – The audio player will be disabled in performance mode, preventing accidental use
 - **Always** – The audio player is always disabled and cannot be accessed.
- **Play Audio in Background**
 - Controls whether audio playback will be stopped when switching between applications.
- **Play Metronome in Background**
 - Controls whether metronome playback will be stopped when switching between applications.
- **Disable Mouse Cursor in Performance Mode**
 - If a mouse is connected to the tablet while using MobileSheets, a cursor will be shown on the tablet screen. This option ensures that the cursor is hidden while viewing scores with performance mode.
- **Reset Page Order if File Changes**

- If a file is detected as having changed outside MobileSheets, this setting ensures the page order will be reset to use the full range of available pages.
- **Prompt before exit**
 - If the back button is tapped to exit MobileSheets when triggered by a pedal action, a confirmation is required before the app will be exited.
- **Show number keyboard first**
 - Defaults to showing the number section of the keyboard first. Some tablets show numbers and letters together by default, so this setting may have no effect.
- **Clear Library**
 - Completely clears the library, optionally removing all song files.
- **Reset Settings to Default**
 - Resets all settings across the application to their defaults.

MOBILESHEETS COMPANION

The MobileSheets Companion is a standalone application that allows you to manage your library from the comfort of your PC. It is distributed through the Zubernsoft website at www.zubernsoft.com/mobilesheets/companion.php. Using the companion app, you can add, edit, and remove songs, create and edit setlists and collections, and even do things like select tracks from your tablet's music library or transfer music tracks from your PC to the tablet. To start using the companion app, the first thing you need to do is connect your tablet to the MobileSheets Companion.

CONNECTING TO YOUR TABLET

In order to connect your tablet to the PC Companion, both your tablet and PC must be hooked up to the same network (i.e. the same router). The first step is to start the sync mode on the tablet. On the library screen, tap the action bar overflow menu at the top right, and then tap on the "Connect to Companion" option. You will be presented with the following screen:

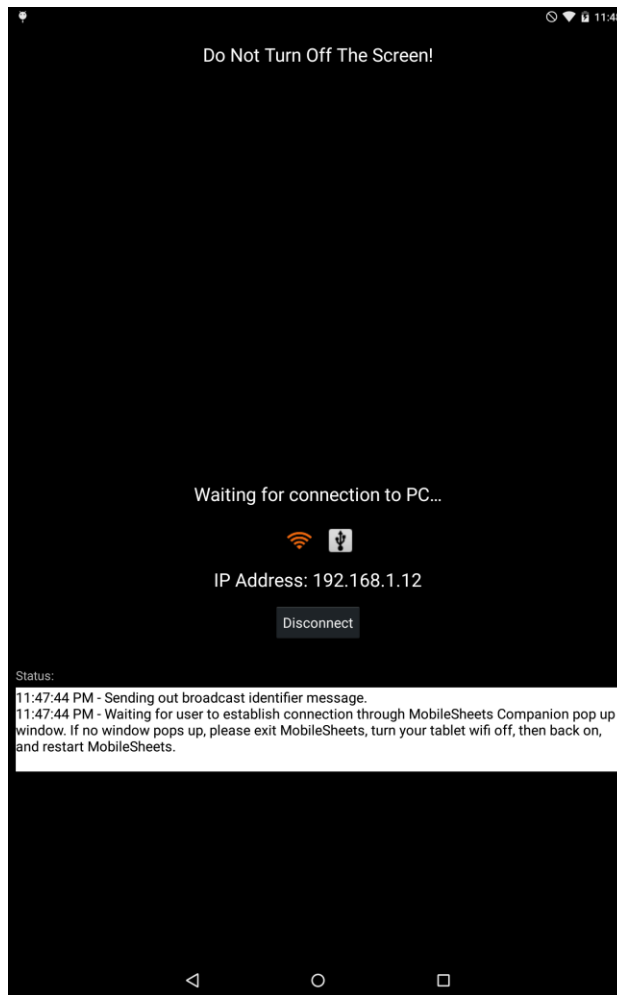
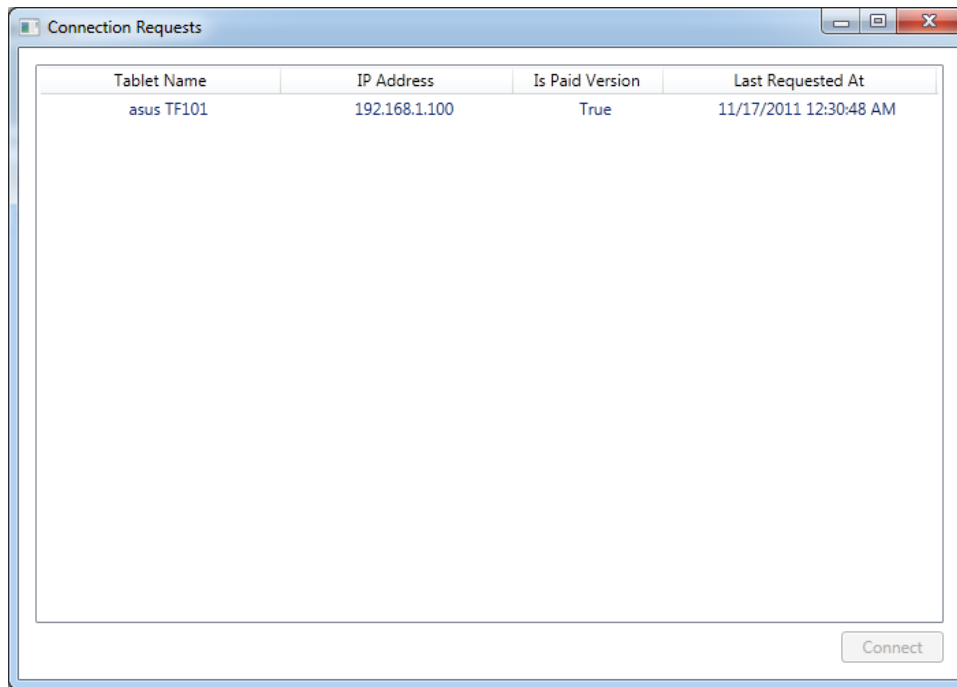


Figure 108 - The Sync Screen

By default, this screen is configured to connect over Wi-Fi. It is highly recommended that you stick with a Wi-Fi connection, as the USB connection is very difficult to configure. That means that the Wi-Fi connection symbol should be orange in the center of the screen. If not, tap it to select it.

Next, load up the MobileSheets companion. The tablet will be sending out an identification message to your PC. The Companion App should then pop up a window that looks like the following:



109 - The Companion App Connection Screen

Double-click on the entry to start connecting to the tablet. The companion application will show that it is connected by no longer being disabled and by stating, "Ready". If you perform these steps, and the connection screen is not displayed, you may need to toggle the Wi-Fi off and then on again with your tablet. This resets locked resources. If you do see the connection screen, but can't get a successful connection, you may have a firewall that is blocking necessary ports. Make sure you allow ports 16568, 16569, and 8888. You can also connect to your tablet using the manual Wi-Fi connect. Enter the tablet IP address that is shown on the tablet screen and click connect.

THE MAIN WINDOW

After a connection is established, the main window will look like the following:

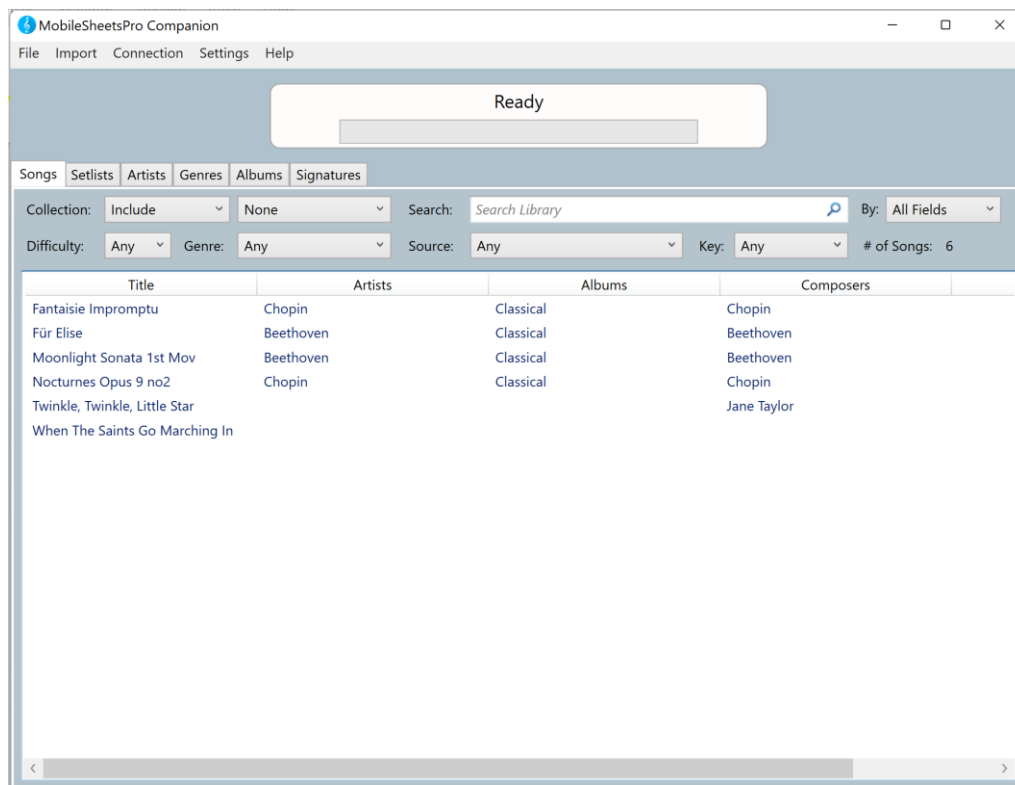


Figure 110 - The Main MobileSheets Companion Window

All of the songs in your library will be displayed in the center. You can filter these songs just like you can on the tablet. See the section on [filtering](#) for more information on this. The next step is to create or edit a song.

CREATING AND EDITING SONGS

At this point, you can now drag files from your hard drive to the application to start creating a song or edit an existing song by double-clicking on it. You can also right-click on the list and select "Add Song" to bring up the song editor to start creating a new song. The song editor is shown below:

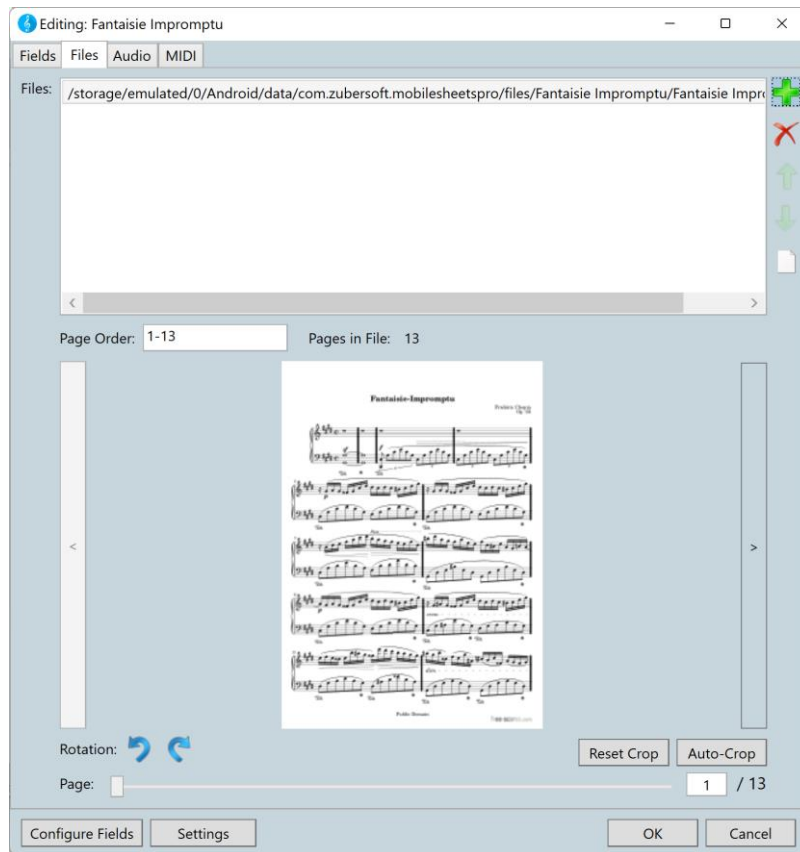


Figure 111 - The Song Editor

The MobileSheets Companion song editor was modeled after the tablet [song editor](#), so you will see a lot of similarities. Consult the main tablet song editor section for additional information. The main differences are with adding audio tracks and MIDI commands.

If multiple files are dragged in to the main window, an import of all files will be performed at once instead of loading the song editor. The following dialog will be displayed:

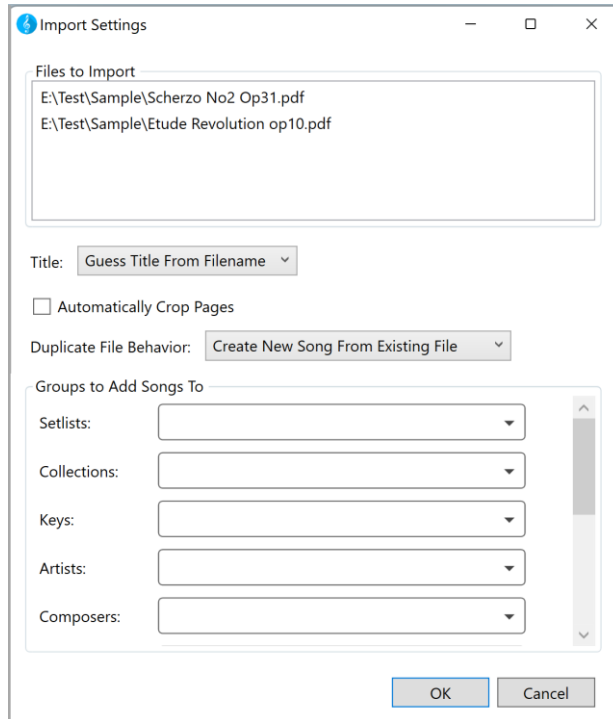
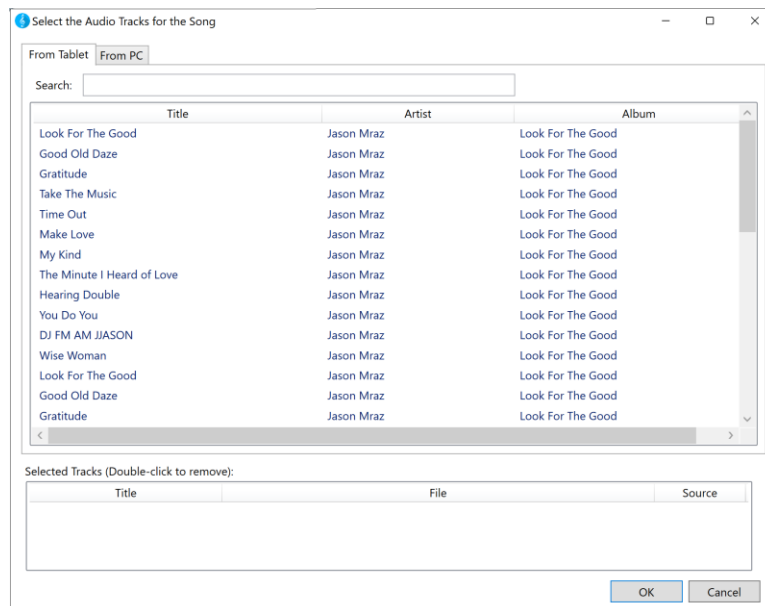


Figure 112 - The Import Settings Dialog

This dialog is identical in nature to the one shown on the tablet when the Import->Local File action is used. See that [section](#) for more details on this dialog.

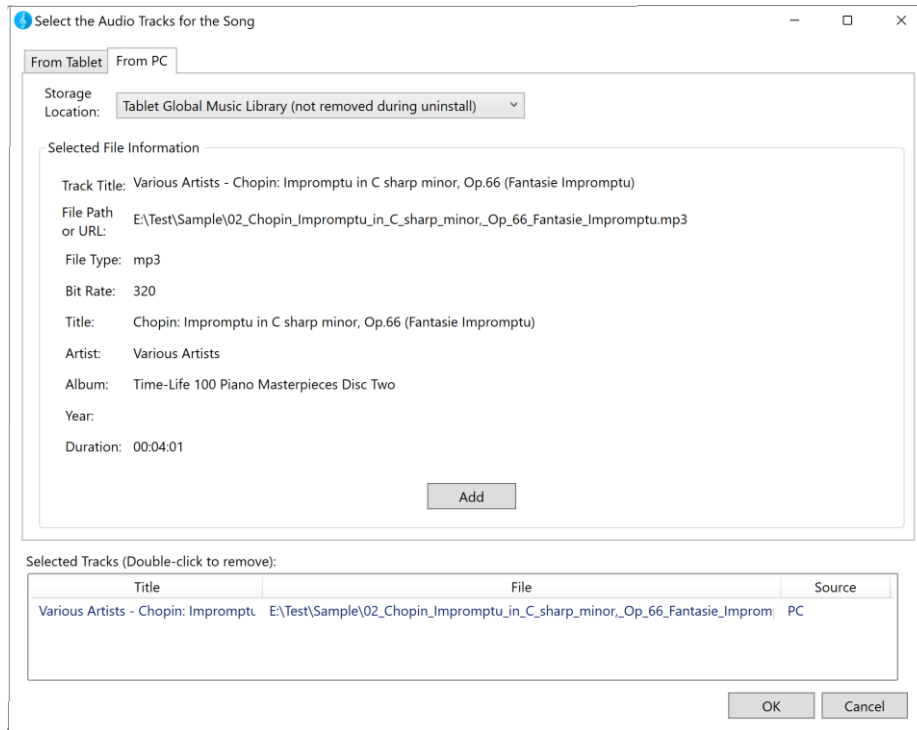
SELECTING AND TRANSFERRING AUDIO TRACKS

If you select the audio tab in the song editor, and then click the Add button or double click an entry, the following window will be displayed:



113- The track selection dialog

The first tab, as shown here, displays every track that was found in your tablet’s music library. This feature doesn’t work with iOS devices, so the list will be empty. If the track you want isn’t currently on your tablet, and is on your PC, click the second tab to view the screen shown below:



114 - Selecting a track from your PC

The first thing you will notice is that the fields are not filled in. You must add a file by either dragging and dropping a file into the window or browsing for a file by clicking the “Add” button at the bottom of the top section. Once you add a file, the various fields will be populated with information, and the file will be added to the song’s list of audio tracks. By default, the song will be transferred and added to the tablet’s global music directory. The benefit of putting songs in this directory is that the tablet will automatically detect that a new track has been added, and you will see the track in any other application/browser that looks at the music directory (for example, music players). Another added benefit is that the audio track won’t be deleted if you uninstall MobileSheets. If you want to keep the audio file in the same location as the other song files, change the storage location at the top to “Default Application Storage”

MIDI COMMANDS

While adding and editing MIDI commands in the companion app is very similar to the tablet, the main difference is that in the companion app, a separate window is used to create and edit commands. This window is shown below:

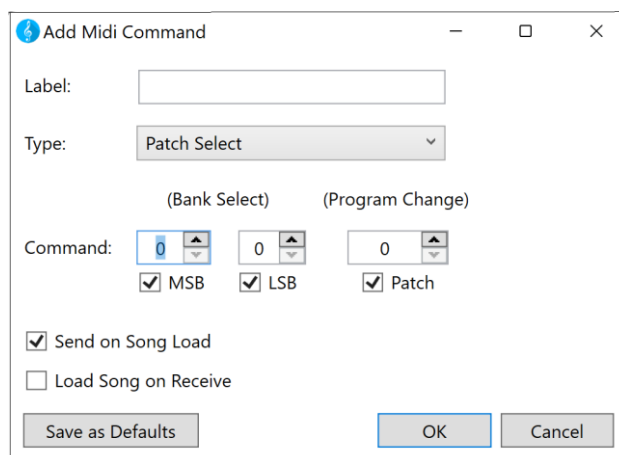


Figure 115 - The MIDI Command Dialog

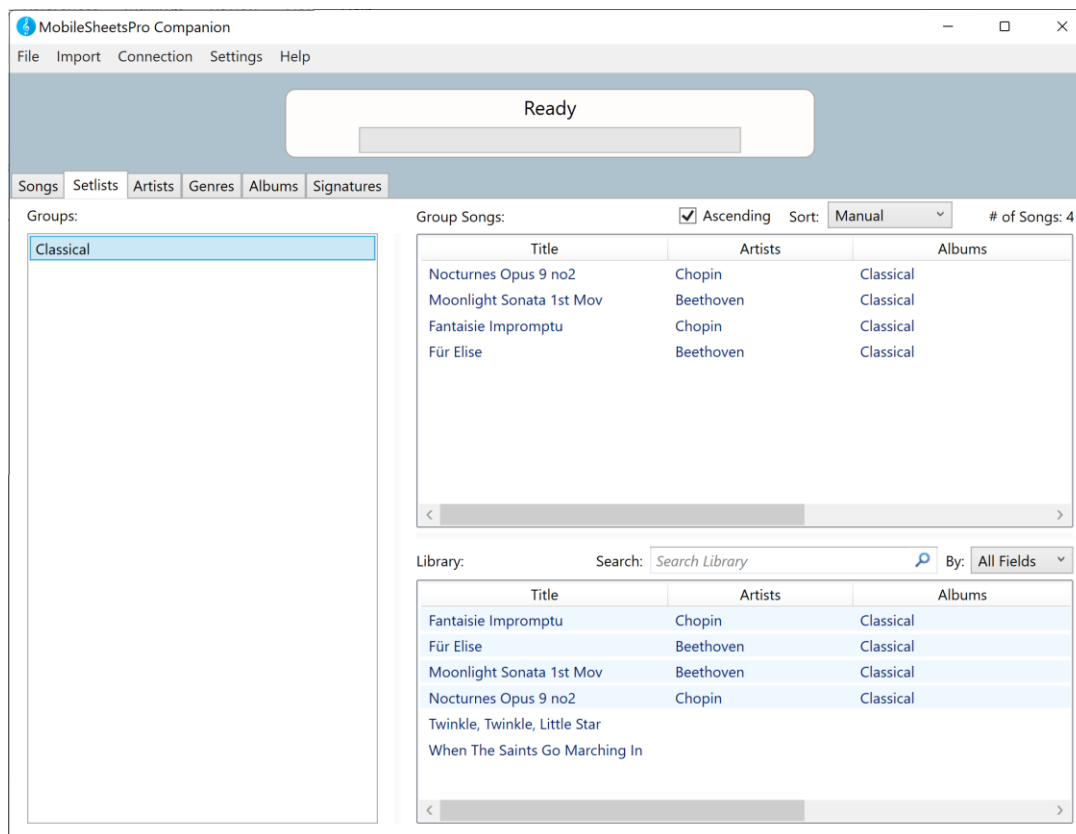
The contents of this dialog will change depending upon what MIDI command type is selected at the top. Otherwise, the data entry is identical to the tablet.

BATCH IMPORTING IN THE COMPANION APP

Batch importing on the companion app is almost identical to the tablet. The only difference is that every file will be first processed on the PC, and then once the processing is complete, all of the files will be transferred to the tablet. For more information on the various options, see the [tablet section on batch importing](#).

CREATING AND EDITING SETLISTS

The MobileSheets Companion gives you the ability to create, edit, and delete setlists. To access the setlist page, click the setlist tab at the top of the main dialog screen. The setlist sections looks like the following:



116 - Editing Setlists in the Companion App

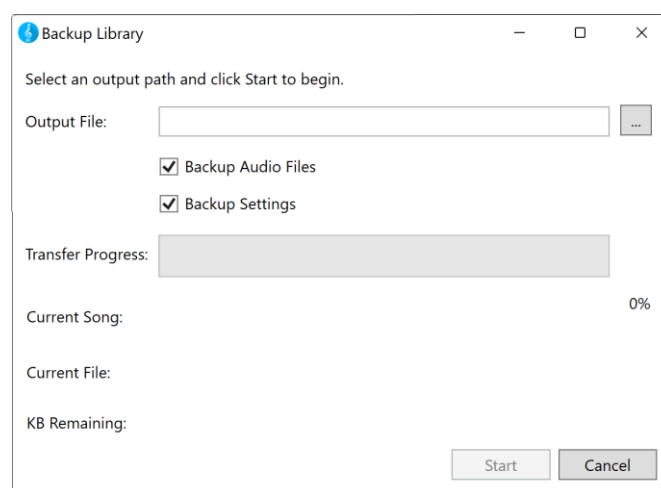
On the left side, you can see a list of all the setlists that currently exist on your tablet. On the top right, you can see the list of songs for the currently selected setlist. On the bottom right, you can see the list of all songs in your library. To create a new setlist, or to edit the name of an existing setlist, right-click in the list on the left side of the screen to access the context menu, and then select “New” or “Rename” accordingly. After entering the name, you can start adding songs to the setlist. There are several ways to do this. The easiest way is to select one or more songs in the bottom right window, and to drag them up to the top right window and release. This will add all selected songs to the list. You can also select songs on the main song selection screen (the first tab), right-click and select Add Song to Setlist. This will bring up a list of all setlists, and you can just click whichever setlist you want to add to. If you have a lot of songs in your library, it can helpful to type in the search textbox to filter the display. You can also select the column to search on; otherwise the default is to search in all columns. To remove songs from the active setlist or setlists themselves, you can either right-click and access the menu option for delete, or just hit the delete key on your keyboard. To rearrange songs in the active setlist, just drag and drop each song to its correct location.

CREATING AND EDITING COLLECTIONS

The MobileSheets Companion also provides the ability to create, edit, and delete your collections. The directions for managing a collection (and any other group type) in the companion app are identical to that of a setlist, so just follow the directions of the previous section.

LIBRARY BACKUP

At some point, you may want to back up your entire library in case you need to uninstall, or you may just want the peace of mind of knowing your work will not be lost. The companion app allows you to invoke the backup feature on your tablet, and automatically transfer the backup file to your PC for storage. To access this feature, select File->Backup Library, which will display the window shown below:



117 - The Library Backup Dialog

First, select the destination for the backup file, and ensure that the hard drive has plenty of space available. Once you are ready, click the "Start" button to begin. You will see the progress bar start to slowly fill as songs are transferred from your tablet over Wi-Fi. This process can take a considerable amount of time if you have a large library. Once the transfer completes, you will see a popup message indicating success. You can also perform a [backup from the tablet](#).

LIBRARY RESTORE

If you want to restore a library backup on the tablet that you have stored on the PC, you can use the Library Restore feature in the companion app to accomplish this. Go to File->Restore Library to see the following window:

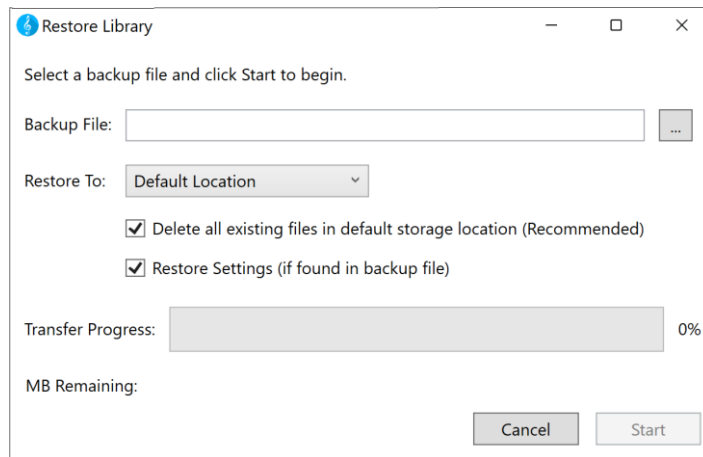
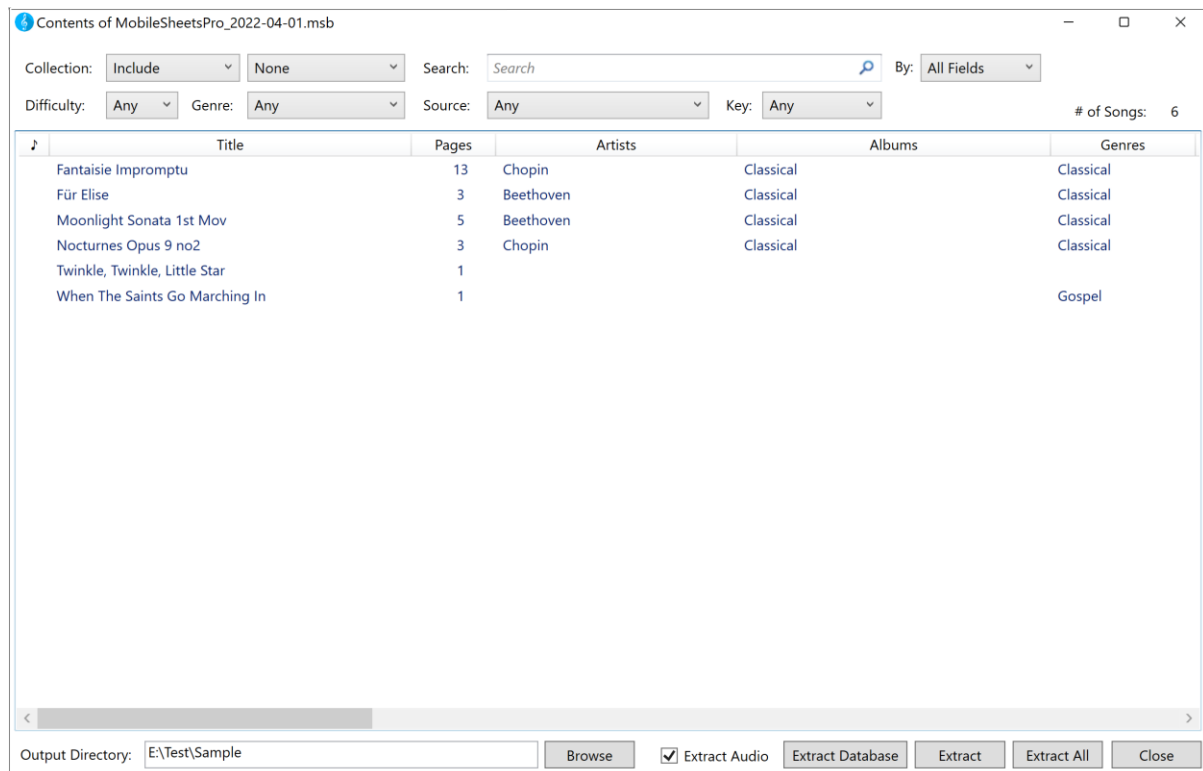


Figure 118 - Companion App Library Restore

Select the backup file on your PC using the browse (...) button, and then click Start to begin transferring the backup over WiFi. If the backup is large, this can take a fair amount of time. For information on the restore to options, see the tablet [library restore](#) section.

BACKUP VERIFICATION OR EXTRACTION

After a backup file is transferred to your PC, you may want to verify the contents of the backup, or possibly pull some of the files out of the backup. This can be accomplished by going to File->View/Extract Backup. This will load up the dialog you see below:



119 - Song Extraction Dialog

This dialog can be brought up even when the tablet is not connected. Select the backup file to load, and after the loading finishes, all of the songs in your library and their respective metadata should be displayed. Take note of the output directory shown in the bottom left. This is the same directory as the backup file by default, but can be changed if desired. Double-clicking on an individual song will automatically extract that song to the selected output directory. You can also select Extract All to extract every file in the entire library. You can also select multiple entries, and extract them by clicking the Extract button.

FAQ

Question	Answer
What kind of pedal would you recommend?	The most reliable and well-built Bluetooth pedal available is the Airturn Duo . You can get two or four pedal models. All sales using the above link helps support future MobileSheets development.
Will MobileSheets work on my iPhone?	An iPhone version of MobileSheets is not available at the moment, but will be created in the near future.

TROUBLESHOOTING

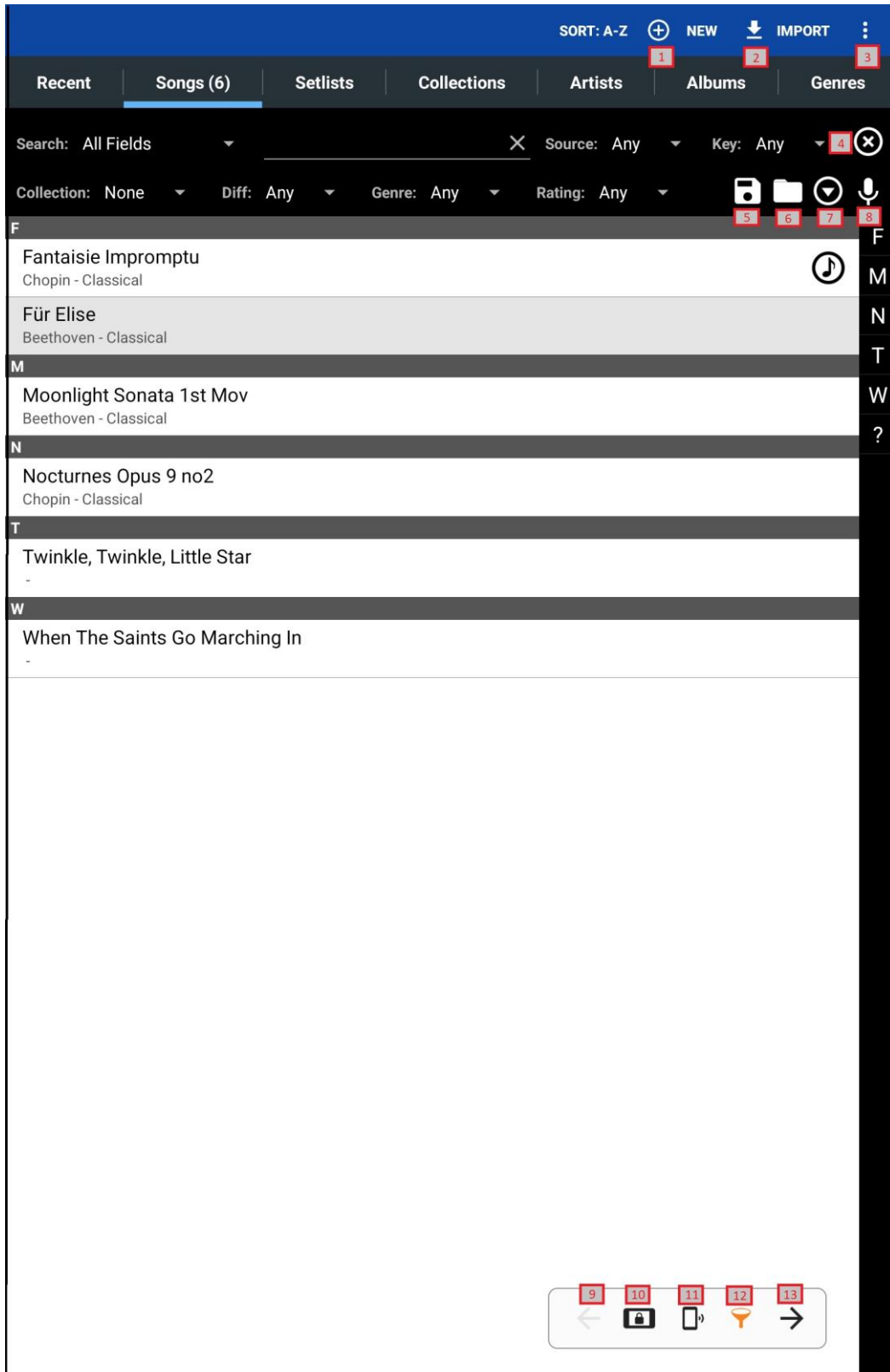
Problem	Resolution
I am unable to connect my tablet to my PC.	<p>The first step is to check to see if any anti-virus scanner programs are running, as these often have firewalls. You must either disable the anti-virus firewall or allow ports 8888, 16568 and 16569.</p> <p>The second step is to ensure that MobileSheetsCompanion is not blocked by Windows Firewall. Go to Start->Control Panel->Windows Firewall, and click the "Allow a program or feature through Windows Firewall" option at the top left. Scroll down to MobileSheetsCompanion, and ensure that the "Home/Work (Private)" and "Public" boxes are both checked.</p> <p>Lastly, try rebooting your router. This often fixes connection problems for many users.</p>
I am unable to use the voice-based searching feature	<p>This feature requires an active internet connection and voice input capabilities on your tablet. If you know your tablet has voice input capabilities, please connect to a wireless network and try again.</p>














<p>I can no longer seem to bring up the song overlay. When I tap on the center of the screen, the pages turn instead of showing the overlay.</p>	<p>You have performance mode enabled. To disable performance mode, tap the quick action box at the bottom right of the song display, and tap the lock icon in the center.</p>
<p>How can I connect to other cloud sources such as Box?</p>	<p>Currently, there is only integrated support for Dropbox, Google Drive and OneDrive, but other cloud storage options will be provided soon. For now, you must install the app for the particular service and import from it using Apple's file picker.</p>

If you have a question that hasn't been answered yet or you have a feature request, please visit the forums at <http://www.zubersoft.com/mobilesheets/forum/> or send a message directly to my email at <http://www.zubersoft.com/mobilesheets/support.html>. You can also send emails to support@zubersoft.com.

ICON GLOSSARY

LIBRARY SCREEN



1.  : Creates a new instance of whatever type is specified by the selected tab.
2.  : [Imports](#) a file stored on the device or in the cloud.
3.  : Opens the overflow menu.
4.  : Clears any filters.
5.  : Displays a menu to save or manage the current filters.
6.  : Displays a list of saved filters.
7.  : Provides a list of additional filters.
8.  : Initiates a voice search.
9.  : If a group was selected in the list, and songs are being displayed, tapping this button will go back to viewing the list of groups.
10.  : Enables/Disables [performance mode](#).
11.  : [Connects multiple devices](#) together so that one leader can control the followers.
12.  : Shows or hides the filters at the top of the library screen.
13.  : If a song was loaded, tapping this button will go from the library screen back to the song display to continue viewing that song.

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Fantaisie-Impromptu

Frédéric Chopin
Op. 66

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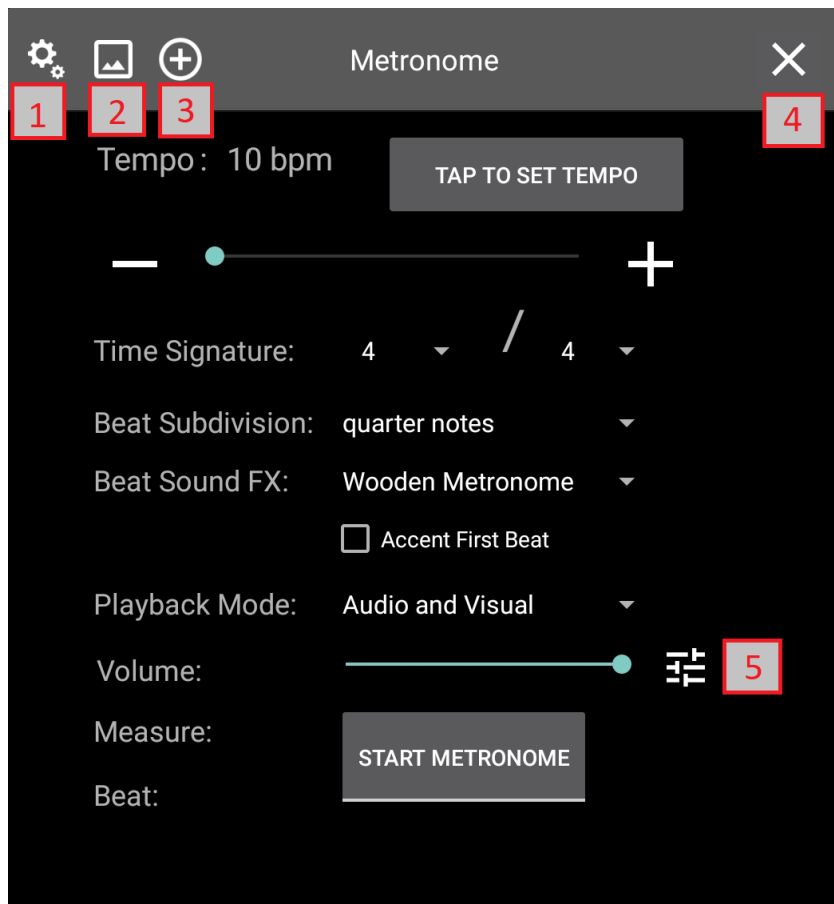
11






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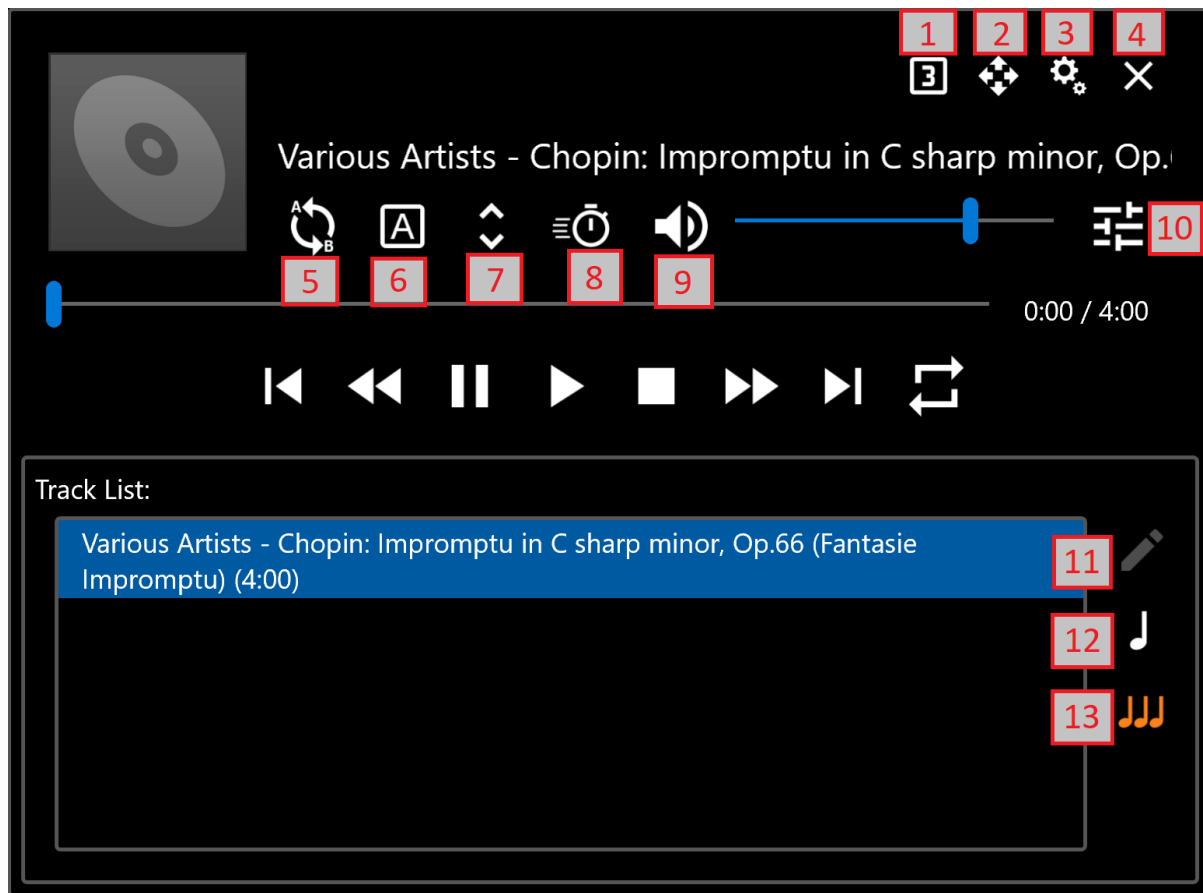
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





1.  : Returns to the library screen.
2.  : Configures the active song's or setlist's notes in a dialogue.
3.  : Loads the [annotation editor](#) for the current page.
4.  : Edits the current song in the [song editor](#).
5.  : Opens a popup menu with the options to print, create snippet, find and load song, start scrolling and scroll settings.
6.  : Opens a popup menu with display settings such as crop, clock settings, rotate, sharpen image, orientation, show annotations, night mode, and zoom/pan settings.
7.  : Enables panning, which provides a means to move the page around on the screen.
8.  : Changes the current display mode for songs as well as various display settings for the display modes.
9.  : Changes the current page scaling mode which determines how pages are stretched to fill the screen.
10.  : Views all songs in the current [setlist](#) and allows you to reorder songs.
11.  : Create and view all [bookmarks](#) for the current song or setlist.
12.  : [Link points](#) create a connection between two pages.
13.  : [Smart buttons](#) can be placed on scores that can trigger various actions when tapped.
14.  : Opens the [audio player](#).
15.  : Opens the [metronome](#) window.
16.  : Opens the settings for MobileSheets.




METRONOME



1.  : Opens the metronome playback settings.
2.  : Changes the display settings for the metronome.
3.  : Adds a new tempo for the current song.
4.  : Closes the metronome window.
5.  : Controls the panning of the speakers.



























1.  : Changes the size of the audio player from small, to normal to large
2.  : (While being pressed) allows the Audio Player window to be moved around the screen.
3.  : Opens the audio player settings.
4.  : Closes the audio player.
5.  : Enables a-b looping.
6.  : Sets the start and end points for an a-b loop.
7.  : Adjusts the pitch of the track.
8.  : Adjusts the playback speed of the track.
9.  : Mutes or unmutes the volume.
10.  : Controls the panning of the speakers.
11.  : Edit track
12.  : Music note
13.  : Music notes

11.  : Opens the song editor audio tab.
12.  : Changes the playlist to only contain tracks from the current song.
13.  : Changes the playlist to contain tracks from every song in the current setlist.

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1.  : Closes the annotation editor.
2.  : Collapses the toolbar.
3.  : Reverts the last action.
4.  : Reapplies the last action in the undo stack.
5.  : Favorite user tool settings.
6.  : Moves the score around with a single finger.
7.  : Pen tool used for freeform drawings.
8.  : Highlighter tool used to draw freeform drawings, rectangles or lines.
9.  : Text annotation used to insert text on the page.
10.  : Opens the stamp window to place stamps on the page.
11.  : Eraser tool used to remove annotations.
12.  : Shapes tool which supports a line, rectangle, ellipse, and arrow.
13.  : Selection tool used to select annotations.
14.  : Opens the layers window.
15.  : Command bar contains shortcuts for features and list of favorites.
16.  : Activates the crescendo tool.
17.  : Activates the decrescendo tool.
18.  : Selects the piano staff tool
19.  : Opens the overflow menu.
20.  : Tapping in the circle will open the radial menu.
21.  : Reverts the last action.
22.  : Reapplies the last action in the undo stack.
23.  : Go to previous page.
24.  : Go to next page.