Multitracker 2.1

playing Multitrack and Midi Songs at your live-gigs has never been easier.

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1. Preface

MULTITRACKER

The uncomplicated multi-track audio / MIDI player for your live performances.

Multitracker is a live player that allows you to play both multi-track audio files and midi files comfortably and flexibly with the help of playlists.

If a USB audio interface is connected to the iPad, the audio tracks (stems) of a song can be routed to any of the outputs of the interface. At the same time, the headphone output can also be used as an additional routing destination, so that you have two additional channels available.

To play midi songs, Multitracker provides a midi player that allows each MIDI track to be assigned to any existing Midi device (whether via USB or iPad instrument such as Sound Canvas).

Of course a midi song can be played in sync with audio tracks.

If necessary, a metronome with 9 different click sounds and freely selectable time signature can be added to your song or be played alone.

It has never been easier to play multitrack and midi songs on stage!

2. System Requirements:

- iPad with iOS 9 or later

Optional:
- USB-Audio Interface (Class Compliant)
- Lightning to USB-Cable or Camera Connection Kit (if you want to provide your iPad with power when connected to USB Interface)

3. Short description and features

- supports any class compliant audio interface
- Headphone output selectable as additional routing destination (2 additional channels)

Audio Player:

- unlimited number of audio tracks (stems) depending on the performance of your iPad
- Supports wav, mp3, flac, aac, ac3 (also mixed in one song)
- Each audio track (Stem) can be routed to any output
- Audio tracks can also be routed to outputs that are not currently connected
- Volume fader per track
- Solo and mute buttons per track
- Copy / Paste function for routing and volume for faster configuration
- List of all audio routings
- Output channel busses with faders and listing of all assigned stems

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Midi Player:

- Supports MIDI Format 0 and 1
- Each MIDI track can be assigned any MIDI locations (external / internal) - at the same time
- Transpose for each track separately or for the entire song
- Midi Clock Send in sync with the Midi Song (without Song Position Pointer)
- Switchable automatic metronome
- changeable Tempo
- Program change commands adjustable for each channel and midi device
- Prgogram Changes can be sent when the song is started or loaded
- You can also save songs that contain only Program Change messages but no Midi Song

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Metronome:

- can be played with or without Midi Song
- Choice of 9 different click sounds
- Time signature can be set arbitrarily
- Adjustable Click Duration
- Midi Clock synchronous to the metronome

Playlist:

- Playlist is easy to create with pre-configured songs
- Pause between songs on / off switchable
- Quicksave-option
- Display of faders configurable
- Size of faders configurable
- Playlists can be saved
- Playlists can be adjusted while playing
- FastForward / Rewind
- Pause
- Start / Stop / Pause / Skip / VolumeFader controllable via Midi (Midi Learn)

Live View:

- extra large song title (as well as next titles)
- extra large transport buttons
- Playlist View can be faded in
- Pause / Start Next Buttons can be faded in
- Fast Forward / Rewind

general:

- works in background
- import / export all song settings and playlists for backups and migration
- 3 free demo songs to download
- Multitracker is permanently extended and improved!

Multitracker concept

Multitracker is designed to first create and save multitracker songs from your own audio / midi files imported to iPad.

These pre-configured songs are then ready for immediate playback and can be arranged in a playlist that can be played in either Playlist View or Live View.

Multitracker contains two independent, independent players. One is in the Song Configuration View. The others share the playlist and the live view.
Thus, you can reconfigure songs in the Song Configuration View at short notice, while the player continues working in the playlist or live view.

A multitracker song can consist of the following elements:

- any number (depending on iPad model) of audio tracks (wav, mp3, flac, acc, ac3)
- Midi File
- Audio Tracks + Midi File (synchronous)
- Generic Click
- Midi File + Generic Click
- Audio Tracks + Generic Click
- Audio Tracks + Midi Files + Generic Click
- just Midi Program Changes without Midi File

It is possible to make volume / mute corrections in the Playlist View and save the song with these settings on the fly (Quick Save Button)

4. Quickstart

First, you need to import your audio files into multitrackers (or demo songs).
To prepare and play your songs, follow the steps below:

The rough sequence is: Import Audio Files - Configure Song - Save - Arrange in playlist - Play

IMPORT FILES:

see 5.1. import files, or
download Demo Songs:
1. tap Settings View
2. tap Demo Songs (on the left side)
3. tap „Download Demo Songs" and wait until all songs are loaded

CREATE SONGS:

1. Tap Song Configuration View
2. Tap audiofiles on the left, belonging to a song
3. set outputs by tapping „Out" button on each track
4. When using a Mifi File: Set Midi output for all tracks (Outputs for all tracks), otherwise no midi will be output
5. Listen / Adjust volumes
6. save song

Repeat these steps for each song

PLAYLIST ERSTELLEN:

1. Tap Playlist View
2. Tap Songs on the left side
3. Songs appear in playlist on the right side
4. Play!

IN LIVE USE:

The playlists can be played both in the Playlist View and in the Live View.

5. Detailed Description:

5.1 Import Files

To be able to create multitracker songs, you must first import your audio and / or midi files into multitrackers. You can do this using iTunes on your Mac / Pc, using a cloud service with the File Manager in Multitracker, or using file sharing from another app.

5.1.1 IMPORT FILES USING ITUNS ON MAC/PC

Connect your iPad to your Mac / PC and wait for iTunes to start or start it yourself. Then please follow these steps:
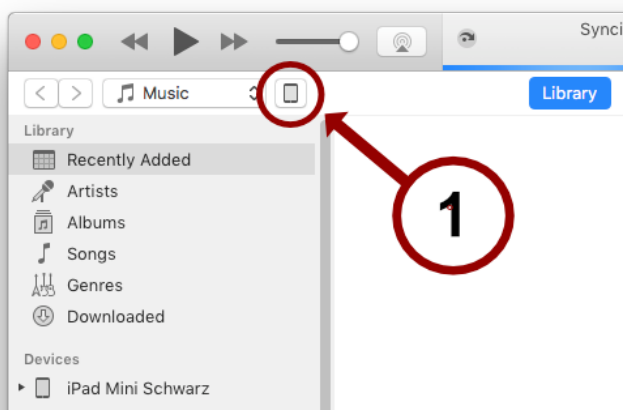
1. Click the iPad symboll
2. Click „File Sharing"
3. Scroll down until Multitracker is visible
4. Click Multitracker Symbol
5. Drag your files / directories to the Documents window or Click „Add" at the bottom of the Documents window

After successful transfer, the added files and folders are visible in the Configuration View.
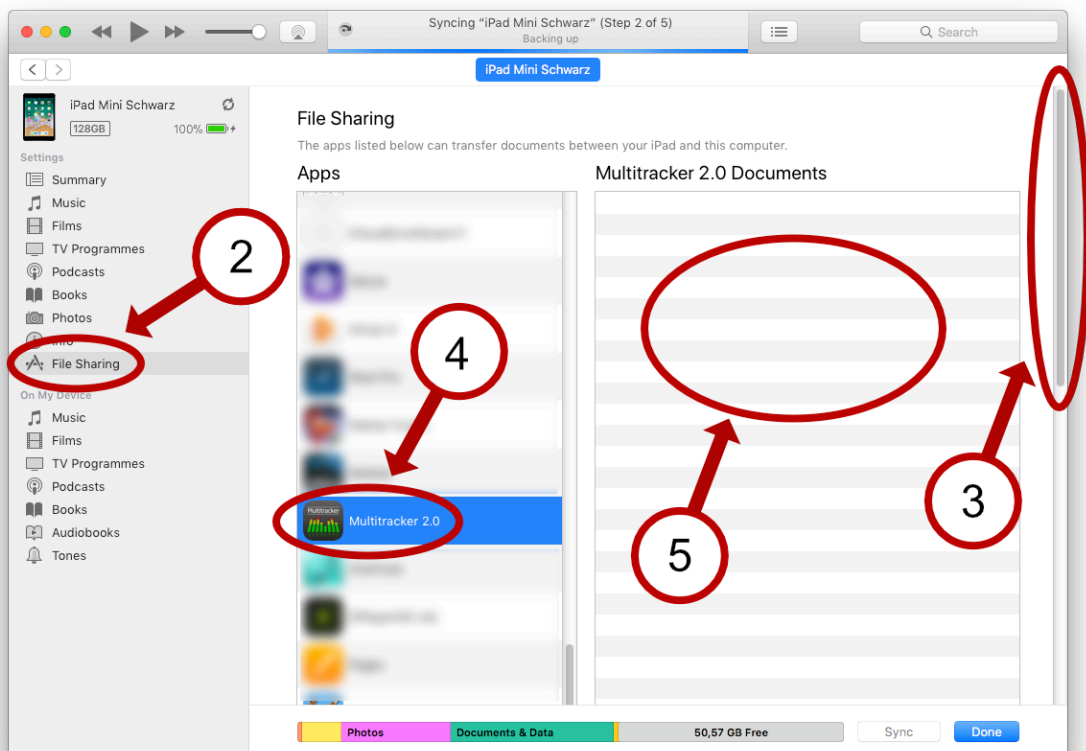
5.1.2 IMPORT FILES FROM CLOUD SERVICES

Multitracker can copy files from various cloud services or apps that support file sharing directly into its own file structure.

- In Multitracker tap on „Settings" on the lower menubar, then tap on „File Manager" on the left side
- two Windows open on the right side containing the file structure of Multitracker
- Choose a folder in the left or right window, where you want your files to be imported
- Tap on „import" above the window
- A window will open with the storage locations available to you.
- tap on the storage location of your choice and select the files to import

After successful import, you can move the files to any other folder within Multitracker (see File Manager)

5.1.3 COPY FILES USING FILE SHARING

Some iOS apps allow direct copying of files to other apps (file sharing). Tap the File Sharing icon in the app and select Multitracker as the destination.
The selected files end up in Multitracker in the folder "Imported Files".

Here is an example of a screenshot from Cubasis:
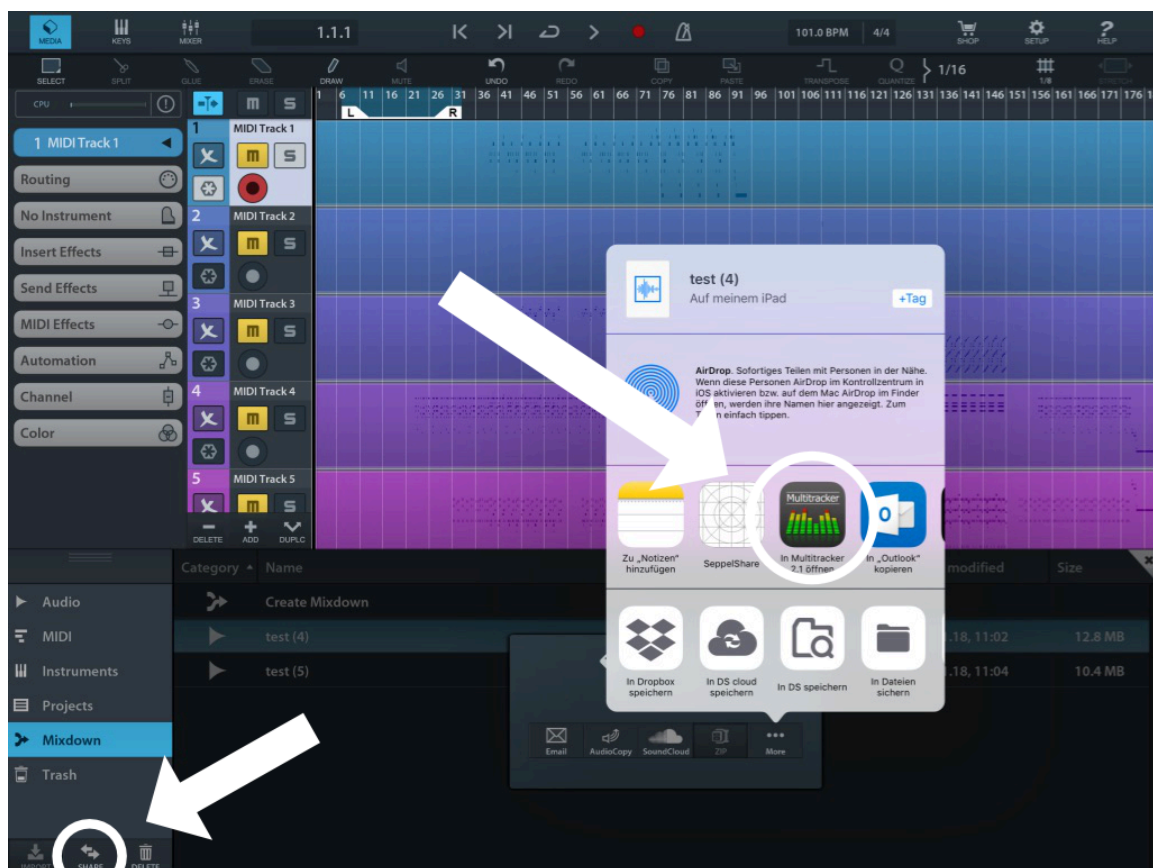
5.2 Song Configuration View:

When opening the Song Configuration View only the hardware output busses of the connected USB interface are visible (or the headphone outputs if no interface is connected)

Before a song can be included in a playlist, it must first be prepared in the Song Configuration View.

The Song Configuration view is divided into three main areas:
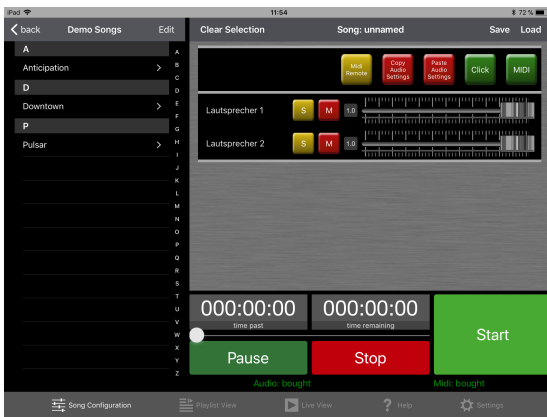
- Start	Starts the song - if the song is playing, it starts again. if the song is currently in pause mode, it continues playing at the last position.
- Stop	Stops the song and rewind it to the beginning
- Pause	Pauses the song or resumes the song when in pause mode.
- time past	The time that has passed since the start
- time remaining	The time that lasts until the song ends
- Position slider	moves the song position. If the song is in pause or stop mode, the song will continue to play at that position.

1. Files- / Details area
2. Transport Buttons
3. main area with Audio Stems / Midi tracks / Generic Click / Busses

FILES AREA

This view shows all audio and MIDI files that you have imported into Multitracker (see Import Files)
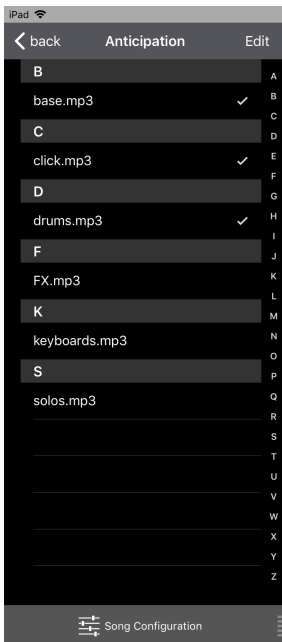
You can navigate in the directory structure by tapping a directory or by tapping „< back" in the upper left corner to change to the parent directory.

When you tap on an audio file / midi file, it is automatically added as a track in the main section and displayed as a stereo or mono track or midi tracks and checked in the file view.

Tapping a file with a check mark removes the corresponding track(s) from the main area..
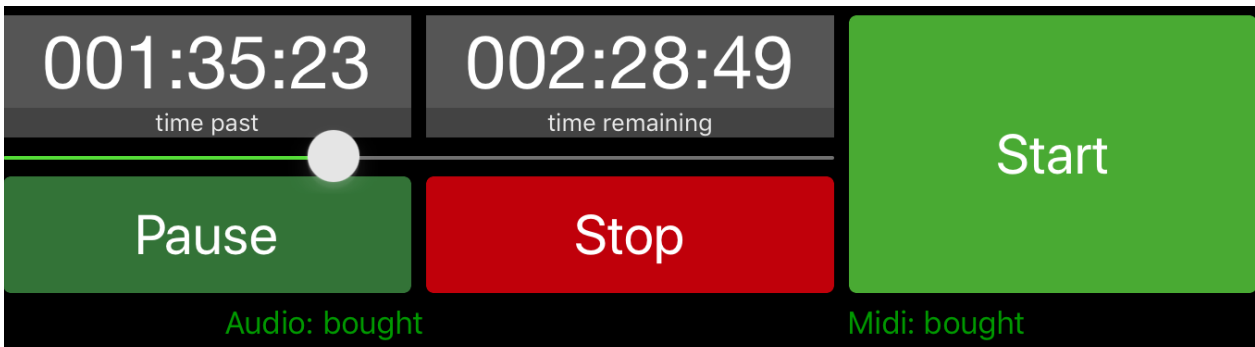
DETAIL VIEWS

The detail view changes depending on the selected track in the main view. You can always return to the File View by swiping right in the detail view or by tapping the folder icon in the top left corner. The individual views will be explained in detail in the next sections.
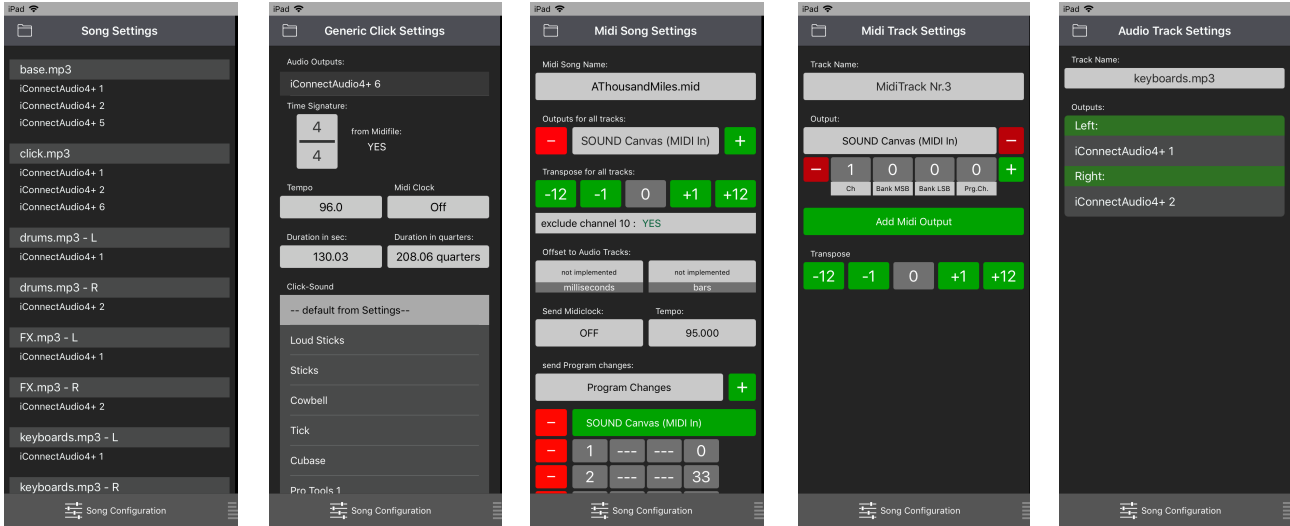
TRANSPORT AREA

The transport view is pretty self-explanatory:

All transport ads and buttons apply only to the song in the Song Configuration View and not to the song in the Playlist View. The two players are independent of each other and only refer to the song in the respective view!

Below the transport view, the InApp purchase status is permanently displayed.

MAIN AREA

In the upper menu field, you can use "Clear Selection" to remove all tracks from the song (this will not erase songs that you have already saved but only the song you are editing). In the middle the song name is displayed - on the right you can save or load a song.

When saving, the respective last song name is displayed thinly in the input field, which can either be accepted by tapping „Save" or be named otherwise.

The following buttons are always visible in the top line:
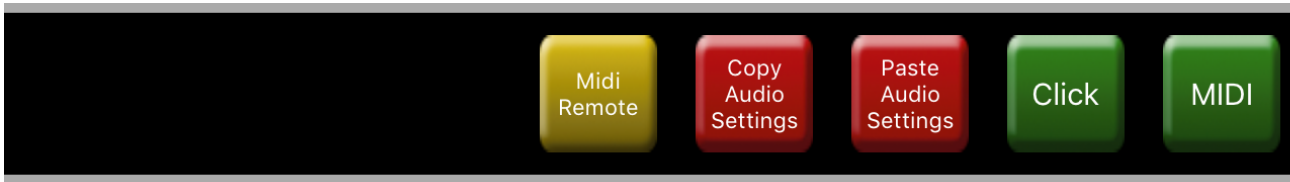
- **Midi**: activates / deactivates the display of the Midi-Song tracks in the main view. If the Midi display is deactivated, a possibly loaded Midi song will still be played.

- **Click**: enables / disables the click and display of the click in the main view. If the click indicator is deactivated, no click will be played or saved.

- **Copy / Paste Audio Settings** : These buttons allow you to copy audio settings from one song to the next. This includes the volume settings and channel routing of all audio tracks and the Generic Click track.

- **Midi Remote:** activates / deactivates the Midi-Learn mode by assigning commands to the respective control elements. This affects all transport buttons, as well as the volume controls for audio files and output buses.

Tapping the empty area opens a window in the detail view with an overview of all files of the song and its assigned channels.

GENERIC CLICK

The Generic Click is a Click Generator, with a choice of 9 click sounds, freely selectable tempo, time signature and outputs.
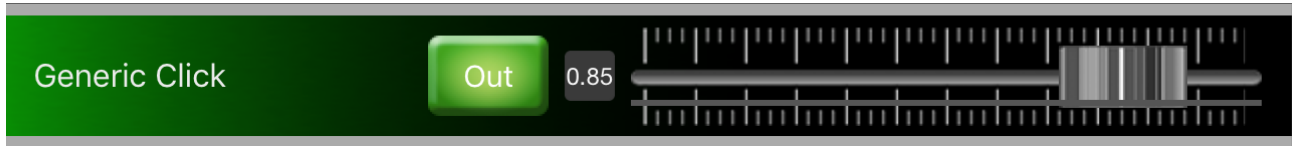
By tapping the button „Out", you can assign one or more outputs to the Click.

If you want to play a click without selecting a midi file or audio track, you must first set how long the click should run (Duration in sec button).

Selecting the Generic Click opens the Generic Click Settings in the detail view:
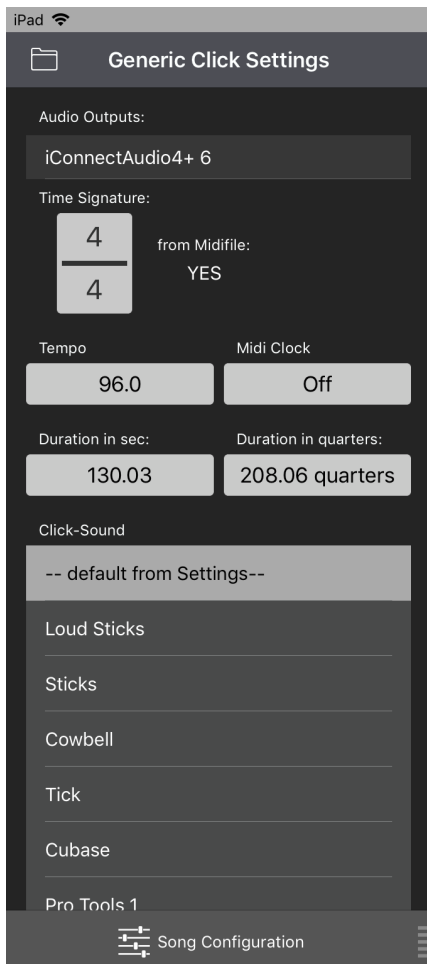
Audio Outputs: shows the current outputs for the Click Sounds

Time Signature: displays the time signature. When a midifile is loaded, the time signature depends on the tempo track. You can change it by tapping the time signature.

from Midifile: Tap to set whether the time signature, tempo and midi clock are controlled by the midi clock's tempo track, if a MIDI file is loaded.

Tempo: indicates the tempo of the click. Can be changed by tapping. With existing TempoTrack of a midi file, the tempo is changed relatively during tempo changes

Duration in sec: Duration of the click. Can be changed by tapping. In-existing Midi file or audio files each longer song length is taken. Changeable by tapping.

Duration in quarters: Converted to quarter-note duration of the song

Click-Sound: Here you can set a click sound individually for each song. "Default from Settings" means that for the song the click is taken, which is set in the Settings View. Thus, the click can be changed with a simple adjustment in the settings for all songs in which "default from settings" is set.

MIDI CONFIGURATION

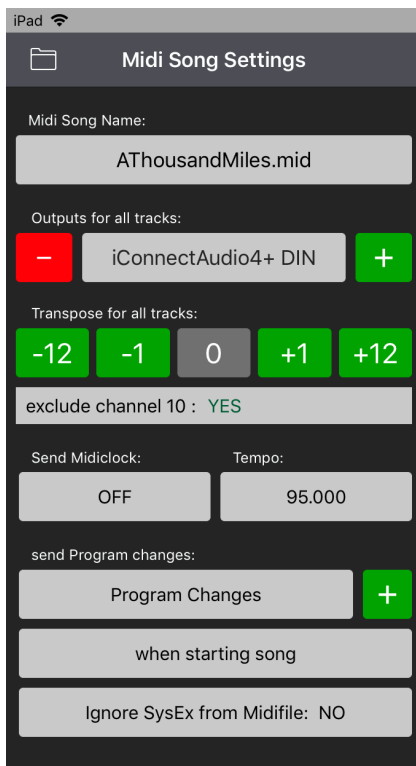The Midi Configuration is only visible if the "MIDI" button in the top line in the main view has been activated.

Midi Configuration   Midi-File: AThousandMiles.mid
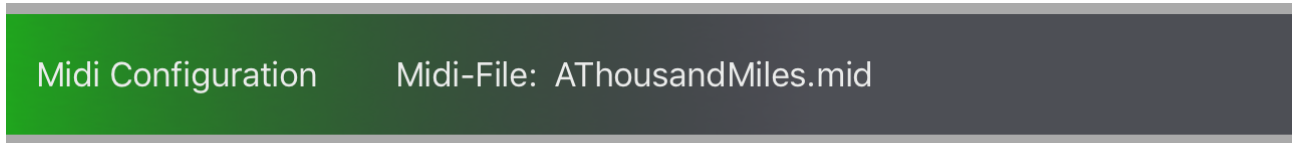
Tapping the Midi Configuration will open the "Midi Song Settings" window in Detail View. All settings made here affect ALL tracks of a possibly loaded midi song.

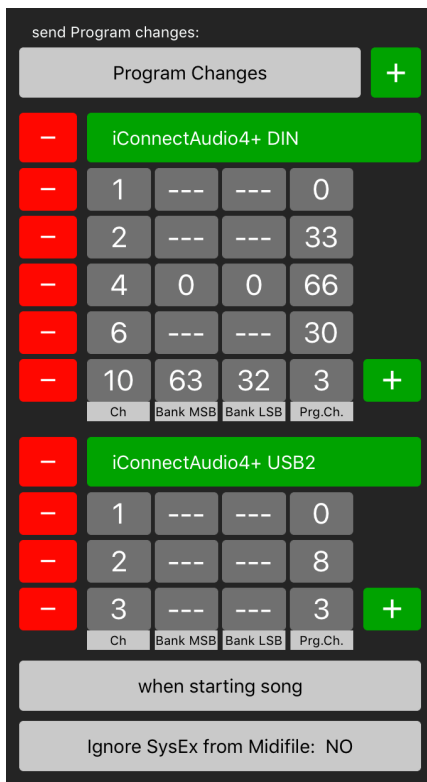**Midi Song Name**: The currently loaded Midi File

Outputs for all Tracks: By tapping the Midi Output a Midi target can be set / changed. The Minus button deletes the Midi output of all tracks on the selected Midi output. Plus allows you to add more Midi destinations to all tracks.
Possible midi destinations are both midi outputs of a connected USB interface and (at the same time) the midi ports of a running app on your iPad.

Transpose for all Tracks: Here you can transpose all tracks of your Midi song simultaneously.

exclude Channel 10: refers to the transpose setting and excludes channel 10 (mostly drum tracks) from transposition.

Send Midiclock: Toggles sending the MidiClock on / off (the button is the same as in the Generic Click View). The Midi Clock does not send song position pointers.

Tempo: (as in the Generic Click view) shows the tempo of a possibly loaded Midi-Files. If a TempoTrack exists, only the first tempo of the track is displayed and all tempo changes are changed relative to the set tempo.

| Program Changes | + |

| − | iConnectAudio4+ DIN | |

−	1	---	---	0
−	2	---	---	33
−	4	0	0	66
−	6	---	---	30
−	10	63	32	3	+
	Ch	Bank MSB	Bank LSB	Prg.Ch.

| − | iConnectAudio4+ USB2 | |

−	1	---	---	0
−	2	---	---	8
−	3	---	---	3	+
	Ch	Bank MSB	Bank LSB	Prg.Ch.

| when starting song |

| Ignore SysEx from Midifile: NO |

Program Changes: Tapping this button will open / close the program change settings of your Midi song, if any. Only the first program change command of each channel of the loaded midi song will be displayed. If several program change commands exist in a midi track, all others will not be displayed.

A Program Change command consists of the Midichannel (Ch), optionally BankMSB / LSB and the Program Nr. (Can be changed by tapping the respective numbers)

You can also add program change commands without midi-file or audio data loaded and save them as a stand-alone multitracker song!

+ : adds a new Program Change command. If the plus sign next to the "Program Changes" button is tapped, a Midi output can be selected, otherwise a program change command will be added within the selected midi output.

-: A minus directly next to the Midi output deletes all program changes of the respective output. Dropping the Program Changes will only clear the Program Change command of that channel.

when starting song / when song was loaded / don't send / original from file:
This button determines when to send the Program Change commands:

- **when starting song (default):** All first program changes of each MIDI track are sent when the song is started. All subsequent program changes are ignored.
- **when song was loaded:** All first program changes of each MIDI track are sent immediately after loading the song. All subsequent program changes are ignored.
- **don't send:** all program changes are ignored
- **original from Midi File:** the program changes are sent exactly as they were programmed in the Midifile.

Ignore SysEx from Midifile:
ignores all SysEx commands of a midifile

MIDI TRACKS

Each track of a Midi file in format 1, or each channel used in Midi format 0 is assigned a Midi track. Ch. Indicates the Midi channel or indicates minus if no Midi channel has been assigned and plus if several channels and / or outputs have been assigned.
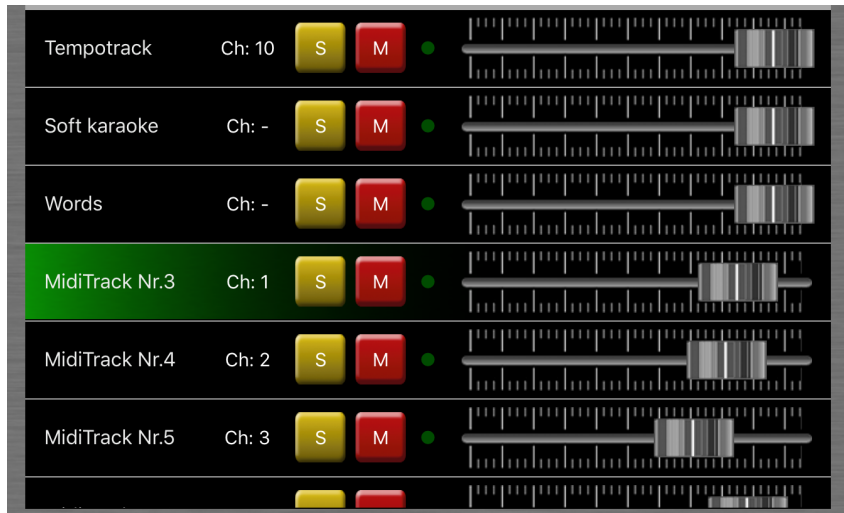

Tapping S or M solos or mutes the corresponding track.

The track name can be changed by tapping „track name" in the detail view on the left side.

The volume knob shows the highest volume of each midi track. Changing the slider adjusts all the volume levels of the track relative to the highest volume of that track.
Volume controls with the same channels and the same midi outputs are paired.

These settings are saved with the each multitracker song.

Tapping a Midi track will open "Midi Track Settings" in the detail view on the left:
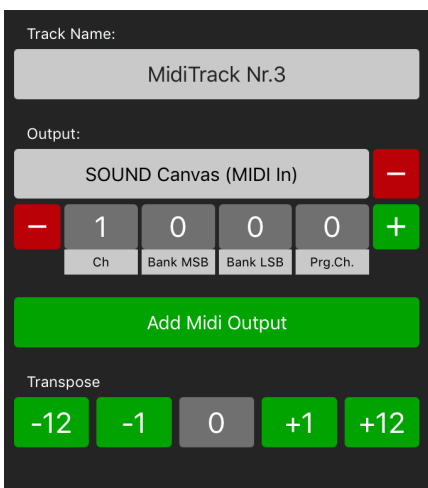
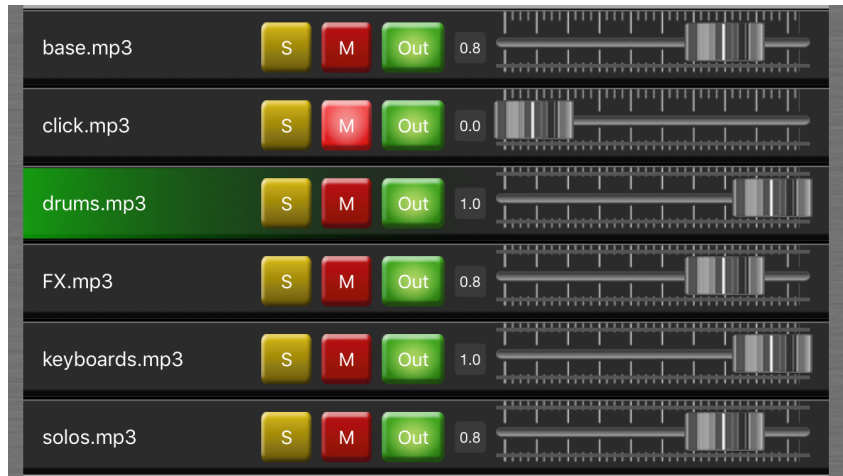**Track Name:** is the track name of the respective midi track. Can be renamed by tapping.

Output: indicates the midi output of the midi track. You can change this by tapping. The minus next to the midi output clears the output and all assigned channels of the midi track. Underneath you can delete / add Program Change commands.

Add Midi Output: Here you can add more Midi outputs to the Midi track. So the Midi track is sent on several Midi outputs simultaneously.

Transpose: Transpose setting for the selected midi track

AUDIO TRACKS (STEMS)

If a multitracker song contains audio files, a track is displayed in the main view for each audio file. Stereo files are grouped into one track or optionally displayed as two separate faders. (see Settings -> General -> "Handle Stereo Files as Two Separate Mono Channels")

The track name is the name of the audio file and is not editable.
Each track has a solo and mute button.
The Out button lets you assign one or more outputs to each track. For tracks that are not assigned an output, you can not move the volume knob.

When assigning an output, the track will first be assigned a default volume. This can be set to any value in the Settings View (Settings -> General -> initial Volume for audio tracks). By double tapping on a volume control this is reset to the default value.

Tapping „Out" displays all the outputs that can be used. Suppose, for example, a USB interface with 8 outputs and also has the headphone output connected, a total of 10 outputs are displayed. There you can assign outputs by selecting them.

If you do not want to connect your audio hardware each time you configure new songs, you can yet display more outputs than are available by adjusting how many outputs are to be displayed at least in the settings view. (Settings -> General -> Minimum number of Outputs in Song Configuration). The non-existent outputs get dummy names (Channel ...)

Tapping on an audio track will open Audio Track Setting in Detail view:
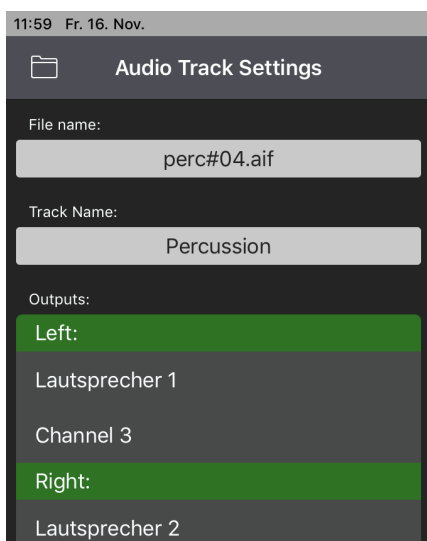
„File Name" shows the corresponding audio file.
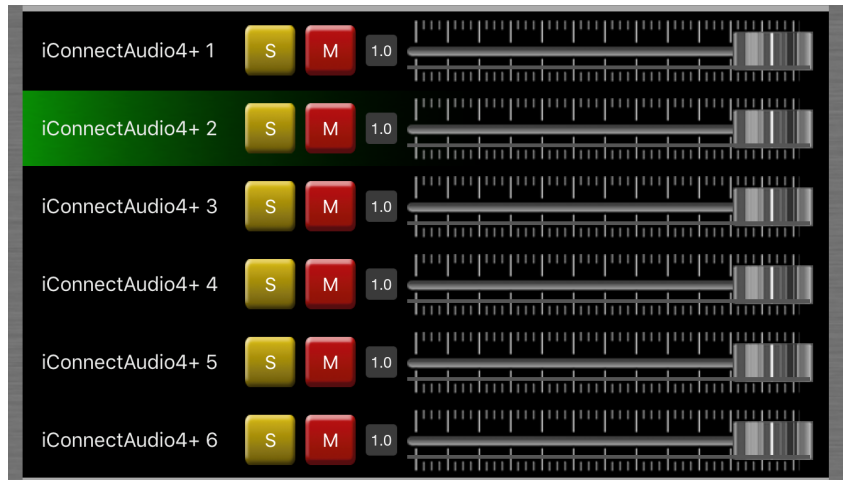
Tapping on "Track name" renames the track name.

The assigned audio outputs are also displayed.

OUTPUT BUSES

The output buses represent all existing audio outputs. If nothing is connected to the iPad, you can see here only the two speakers L / R outputs.
When the USB interface is connected, the number of outputs changes accordingly.

Each bus has a solo and mute button and a volume control.

When you tap an output bus, the detail view will show the name of the bus and all the audio tracks assigned to it.

5.3 Playlist View

In Playlist View you can create or change playlists quickly and easily. Here you can prepare and play your shows and make changes on the playlist or on the song on the fly.
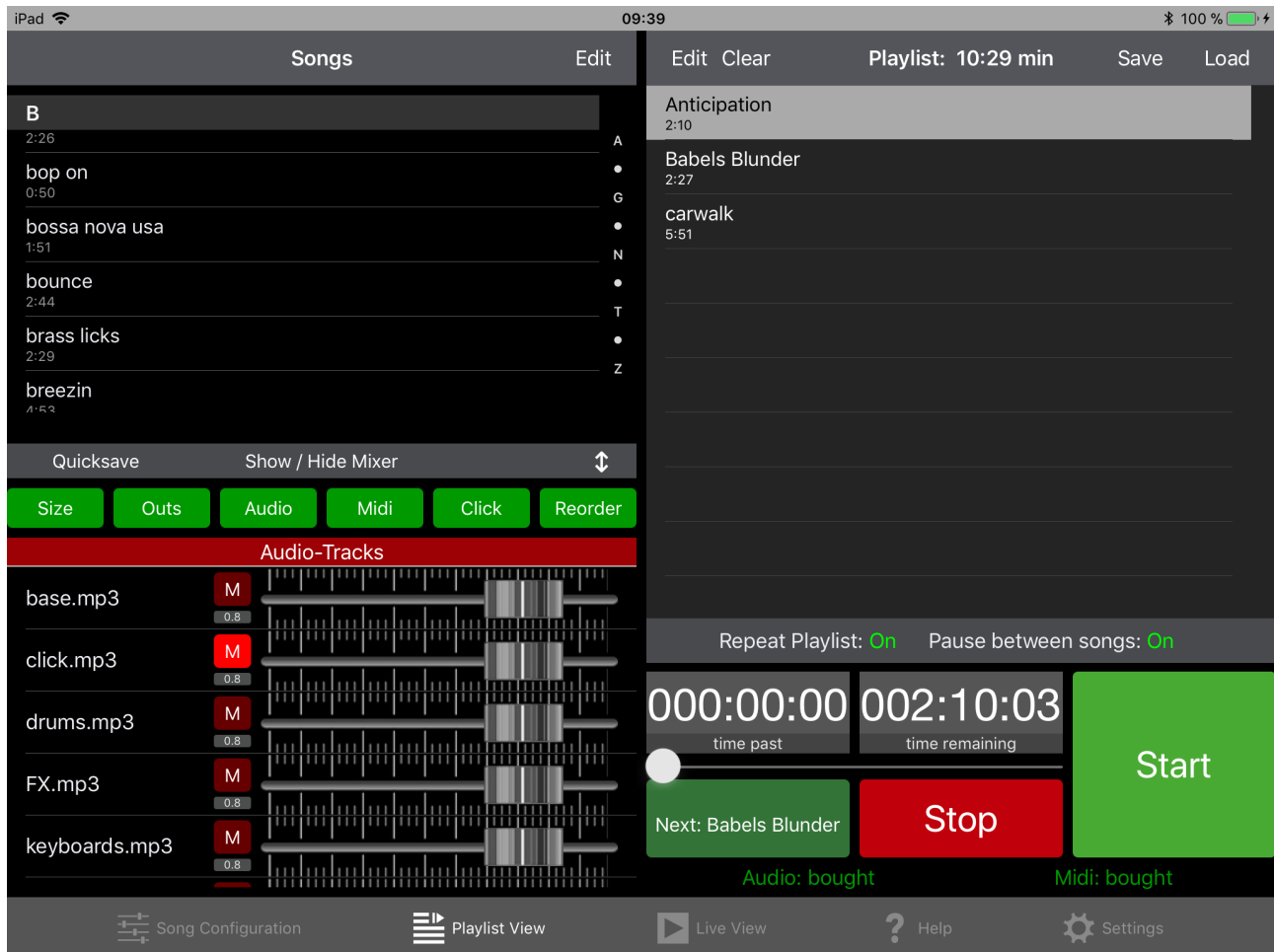
The playlist view is divided into 4 areas:

- The **song list** contains all the multitracker songs you previously prepared in the Song Configuration View.
- The **mixer section** shows all tracks of the currently selected / played song
- The **playlist** displays your selected songs in the playlist
- The **transport area** - see Song Configuration View

The size of the song list and the mixer can be arbitrarily divided by dragging the gray divider bar between the two areas up or down. Alternatively, tap Show / Hide Mixer to show or hide the mixer.

Playlist concept:

A prepared multitracker song can be copied to the playlist simply by tapping it in the song area. So you can gradually create a playlist. With the help of "Edit" in the playlist area you can change the order of the songs (also during playback).
Multitracker plays all the songs one at a time and waits for a start command at the end of each song (optional - if "Pause between Songs" is on), so you do not have to worry about a song starting when you're not ready yet.

If you're in the middle of a song in your show and want to skip the next song at short notice, just tap any song from the playlist - it'll load after the current song finishes.

You can also copy songs from the song list into the playlist at any time during your show without disturbing playback of the current song.

SONGS AREA

In the Song section all preconfigured Multitracker songs are displayed.
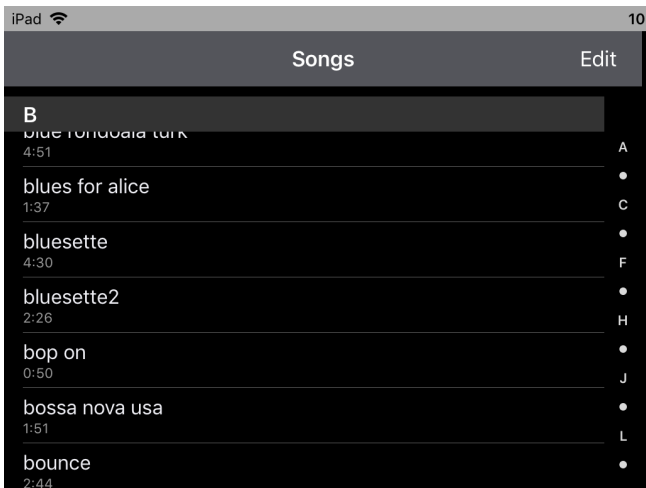
Tapping a song will take it to the playlist.

If you want to delete a multitracker song, swipe it to the left or tap Edit in the upper right corner of the menu. This just deletes your song configuration and not the associated audio / midi files on the iPad. These are still available for other songs.

On the right side of the song area is an alphabet with which you can quickly jump to more distant songs by tapping a letter.

MIXER AREA

The Mixer section shows all Audio / Midi tracks, as well as the Generic Click and the Output Buses.
Here you can quickly make volume and mute adjustments and save the selected song by tapping on "quicksave" with these settings (even during playback). With the help of "show / hide" the mixer can hidden or shown or it can be moved up or down by dragging the gray menu up or down.
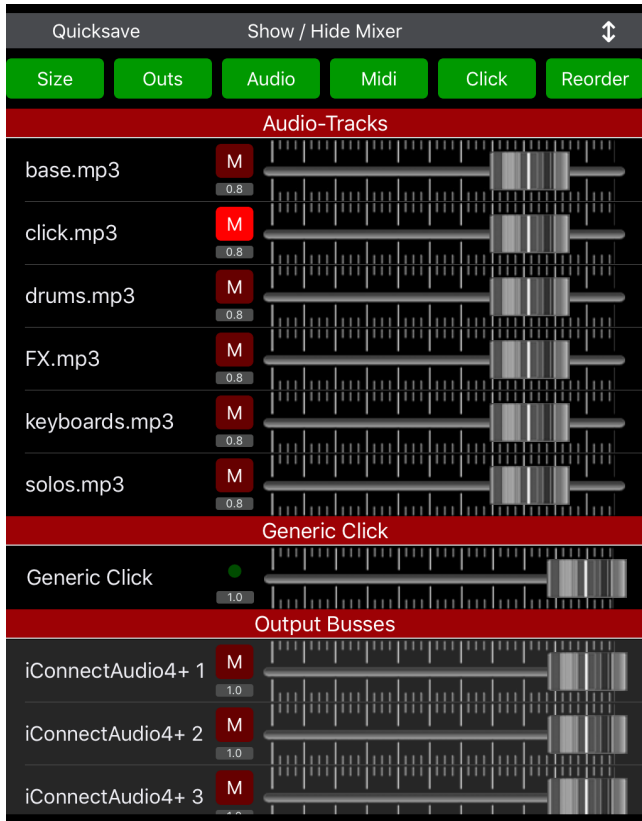
By tapping the green buttons Outs, Audio, Midi, Click you can show or hide the corresponding areas. This only affects the display and not the playback of the tracks.

Tapping "Size" adjusts the height of the tracks so that more tracks fit in the area.

You can use Reorder to specify the order in which the individual areas should be displayed.

The arrangement and size of the areas is NOT stored separately for each song.

Double-tap on the audio volume knob to adjust the volume to the default value.
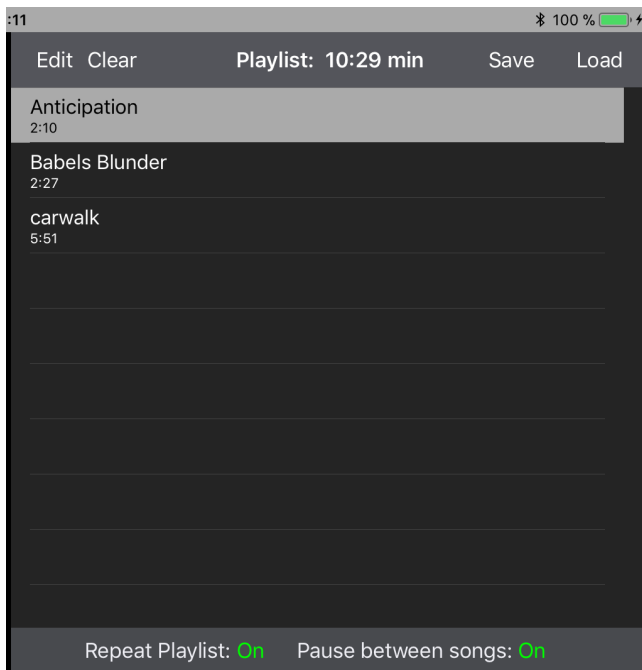
For reasons of space, the solo buttons were omitted.
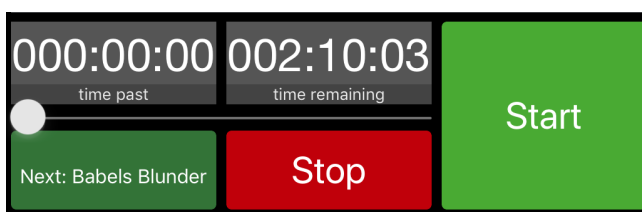
The **transport area** is the same as in the Song Configuration View except for the „Next" button, which interrupts the current song and immediately plays the next one.

PLAYLIST AREA

Here, all selected songs are displayed as a playlist in the order in which they are played.

All songs are played one after the other. If "Pause between Songs" is enabled at the bottom, Multitracker pauses after each song, moves to the next song in the playlist, and waits for a start command.

If Repeat Playlist is activated, the playlist jumps to the first song after the last song.

If you touch a song in the playlist during playback, it will be selected next after the current song ends.

Using the "Edit" button above the playlist, you can change the order or remove songs from the playlist. Also while playing.
You can also remove songs from the playlist by swiping the song to the left.

Tapping "Clear" deletes the current playlist display. Saved playlists will not be deleted.

Above the playlist the length of the playlist is displayed in minutes.

With "save" and "load" playlists can be saved or loaded.

5.4 Live View

The Live View is an alternative view of the Playlist View. Live View and Playlist View share the same player and playlist. If you change the playlist in one view, it also changes in the other.


The extra large buttons are hard to miss and offer even more safety in live operation. The Stop button can also be optionally operated by double tap (see General Settings).

The playlist can be rearranged next to each song using the handles on the right side.

As in the Playlist View, you can also tap the song you want to play next during a performance.

In the area above the transport buttons you can
- show / hide the playlist by swiping left / right
- move a song forward or backward in the playlist by swiping up / down
- show / hide „Pause" and „Start next" buttons by double tapping
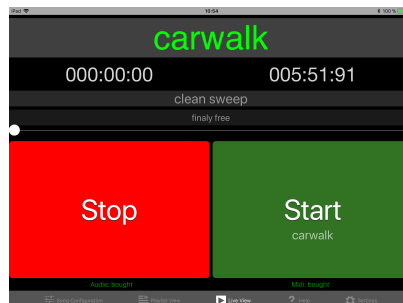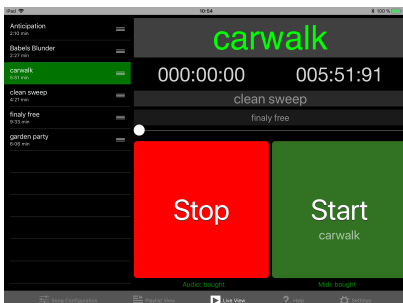
5.5 Settings

GENERAL

- **Handle Stereo Files as two seperate Mono Channels**: Stereo files are treated in the mixers either as a stereo volume fader or as two separate mono faders.

- **Show warning at Startup**: A warning window is displayed each time Multitracker is started, warning of alarms or incoming calls that Multitracker can not suppress, and which could lead to interruptions.

- **Enable Background Mode:** Basically, Multitracker also plays in the background, if a song has already been started and then Multitracker has been switched to the Background (Home Button). However, if no song is running and Multitracker still should be able to be controlled via Midi, this switch should be activated.

- **Advance to next song after completing a song**: Here you can set whether at the end of a song the next one should be loaded.

- **"Next" Button starts next song:** sets whether the "Next" button only selects or also starts the next song.

- **Size of Stop button in Live View:** determines the size of the Stop button in Live View.

- **Number of taps for Stop Button in Live View:** determines the number of taps that activate the Stop button.

- **Minimum number of outputs in Song Configuration:** determines the number of hardware outputs displayed in the Track Configuration in the Song Configuration View. So you don't necessarily have to connect a USB interface, and can assign outputs that are not present at the moment.

- **Output Latency**: By decreasing this value, the delay between pressing Start and hearing audio (latency) can be minimized. On older iPads, however, this can lead to suddenly suspended audio tracks and slowed down display. Please adjust with care or leave at 30ms (maximum value).

- I**nitial Volume for Audiotracks**: Represents the initial volume of an audio track to which new outputs will be assigned.

- **Default Click Sound**: This is the click sound that is played by songs that have the "Click from Settings" selected in the Generic Click.

IN APP PURCHASES

In Multitracker, Audio Functions and Midi Functions can be unlocked together or separately.

If no In App Purchase has been made, you can take full advantage of all the features that Multitracker has to offer with Audio-Songs. however, **every 5 songs an announcement** will be played on all output channels.

In addition, in Song Configuration mode, you can fully test everything related to Midi (including the Generic Click). Without buying you can only save **5 songs with Midi functions** that you can use as much as you like in Playlist mode.

Use the buy buttons to make purchases, **shut down the announcements**, and **unlock an infinite number of midi saves**. If you reinstall Multitracker on another iPad with the same account, you can restore your purchases using the restore purchases button. The same is true if you uninstall and reinstall Multitracker..

Please make sure your iPad is **online** when buying or restoring your purchases.

DEMO SONGS

With the Download Demo Songs button you can download 3 free demo songs which you can use to try Multitracker. These are loaded in the background - you can immediately switch to the Song Configuration View.

DATABASE OPERATIONS

- **Export Database**: exports all Multitracker song settings and playlists to an export file (extension .MTBackup) on your iPad. The audio files and midifiles themselves are not exported. Thus, you can make a complete backup of your Multitracker by copying the exported database along with all audio and Midifiles using iTunes on your Mac / PC. (ie the entire contents of the multitracker file sharing in iTunes)

- **Import Database**: imports a multitracker backup file that has been copied to Multitracker via iTunes or has previously been exported with "Export Database". Audio files and Midi files must be copied to the iPad independently, if they were not already there. (iTunes - Multitracker - File Sharing). You can choose whether the old database should be completely replaced by the new one, or whether the old one should be supplemented with the new one, whereby you can choose to overwrite the same song names or append them with a new song name. **Please make sure that the .MTBackup file is in the root directory of Multitracker. Otherwise it will not be displayed.**

- **Check Database for missing files**: Here you can check if all audio files exist for each song.

FILE MANAGER

Here you can rename, move and delete files and folders, create new folders and import or export files from iCloud, Dropbox and others.
The File Manager consists of two views of the files and folders in Multitracker.
Both views have the same functions. You only need the second window to move files from one directory to another.

- **Import:** imports files from the cloud or from other apps of the iPad into the directory that can be seen in the currently visible directory.
- **Export:** exports the files previously selected with "Select". (On iOS <11.0 only 1 file can be exported at a time)
- **New Folder Icon:** Generates a new folder in the currently visible directory
- **Select / Cancel:** Switches the window to selection mode, in which you can mark files for moving, deleting or exporting.
- **long pressing File / Folder:** Intelligent renaming of the file / folder. **Multitracker checks if stored songs contain the file to be renamed and adapts them.**
- **Trashcan Icon:** Intelligent deletion of a file or folder. **Multitracker checks whether stored songs contain the files to be deleted and warns you against deletion.**
- **Move Selection:** Intelligent moving of the selected files and folders to the directory in the opposite window. **Multitracker checks if stored songs contain the files to be moved and changes the linking if necessary.**

INFO

Contact information and rate link - I am grateful for any feedback and suggestions and try to implement useful suggestions in new multitracker versions!