

MidiBro User Manual

Version 1.0.0

The Ultimate MIDI File Browser for Music Producers

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Quick Start Guide

Get up and running in 4 minutes:

- 1) Install → Run the .dmg file (MacOS) or the .exe file (Windows) and run the installer
- 2) Allow some time for installation
- 3) Add MIDI Files → Click "+Add Folder" and select your MIDI folder
- 4) Start Browsing → Find files in MidiBro and drag them to the plugin!
- 5) Optional: In your DAW, add "MidiBro Connector Plugin" to a MIDI track

 **Success Check:** You should see "Connected" in both the app and plugin, and hear your MIDI files when you click play.

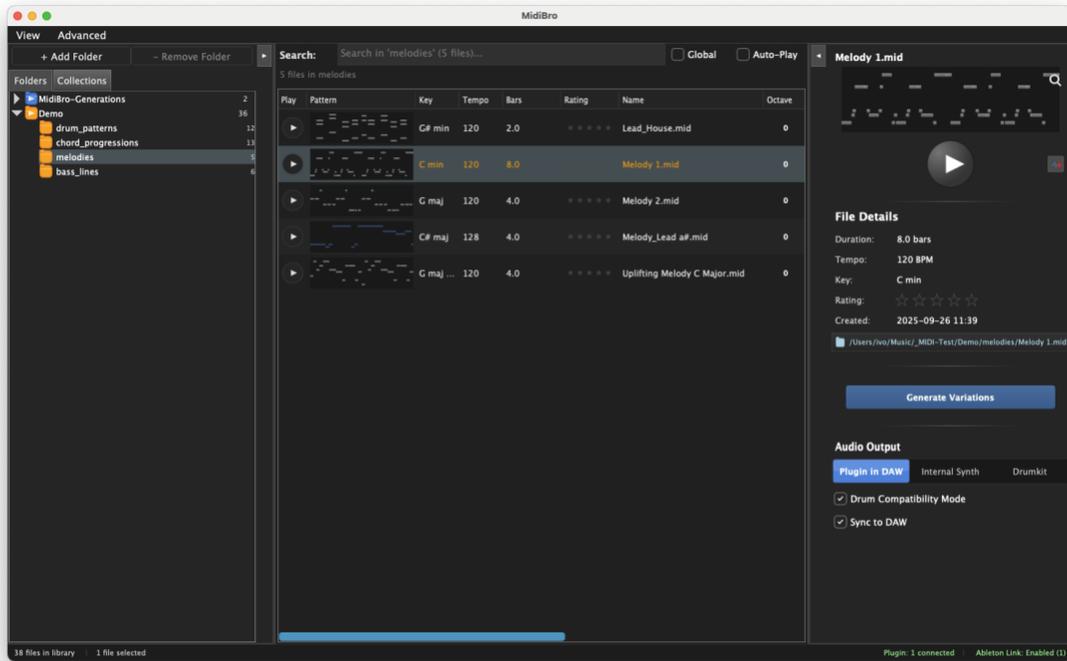
What is MidiBro?

MidiBro transforms how you work with MIDI files by giving you lightning-fast search and seamless DAW integration. No more digging through folders or losing track of great MIDI patterns.

Two Powerful Components

🖥️ MidiBro App (Standalone)

- Browse and organize thousands of MIDI files instantly
- Preview files with internal synthesizer, Drumkit or with plugin connected to DAW
- Generate variations of your MIDI files
- Browse by smart collections by key, tempo, or instrument/style tags
- Rate your favorites
- Drag and drop into your DAW



🔌 MidiBro Connector Plugin (VST3 or AU)

- Lightweight plugin for your DAW
- Streams MIDI directly to your tracks
- Stays in sync with your DAW's playback



Installation

System Requirements

- macOS 14 or newer
- Windows 10/11
- 250 MB free disk space
- 250 MB of RAM
- Optional: VST3-compatible DAW (tested with Bitwig Studio, Ableton Live) or AU (Logic)

Installation Steps

- 1) Run the installer and follow the steps.
- 2) Enter your password if prompted (needed to install plugins).
- 3) Installation will take some minutes (due to many files for AI functionality).
- 4) Wait for "Installation Complete" message.
- 5) Launch MidiBro:
Find MidiBro in your Applications folder.
If MacOS asks for permissions, click "Allow" for:
 - Local network access (for plugin communication)
 - File access (to scan MIDI files)
- 6) Verify Installation:
App should open without errors
Check that plugins are installed by searching them in your DAW
- 7) Registration: In the Menu, choose Register MidiBro, then enter your serial. Unregistered MidiBro is fully functional but will remind you at startup and in intervals minutes to register.

Your First Session

Let's get you browsing MIDI files in under 3 minutes:

Step 1: Add Your MIDI Files

- 1) Click the "+Add Folder" button in the left panel
- 2) Navigate to a folder containing MIDI files (.mid or .midi)
- 3) Click "Choose" and wait for the scan to complete
- 4) You'll see your files appear in the center panel

Step 2: Start Playing

- 1) Select any MIDI file from the list
- 2) Click the ► play button in MidiBro
- 3) You should hear the MIDI file through the internal synthesizer.



Success! You're now ready to explore your MIDI library like never before.

Step 3: Connect Your DAW with plugin

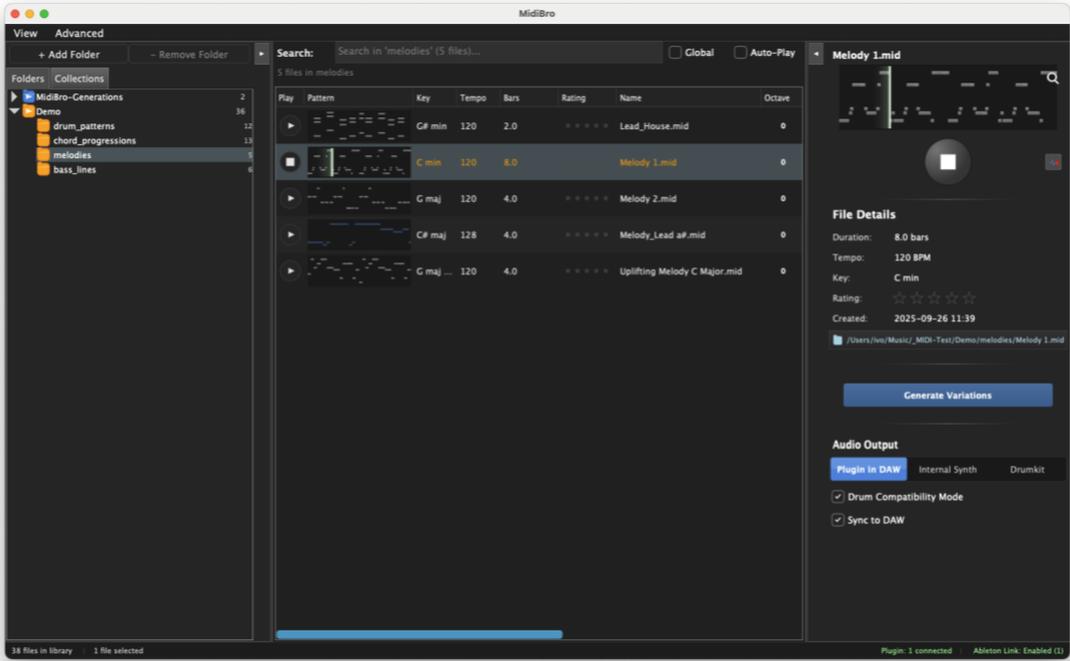
- 1) Open your DAW (Bitwig, Ableton, etc.)
- 2) Add an instrument to the track
- 3) Insert/connect "MidiBro Connector Plugin" with your instrument track

- 4) Look for "Connected" status in both app and plugin
 - 5) In right panel, switch to "Plugin with DAW"
 - 6) Click the ► play button in MidiBro
 - 7) You should hear the MIDI file through the DAW.
-  Another milestone! Browse your MIDI files and preview with your favorite synth in DAW.

Using the MidiBro App

Interface Overview

MidiBro uses a clean three-panel layout designed for speed and efficiency:

FOLDER & COLLECTIONS	MIDI FILE LIST TABLE	FILE DETAILS & PREVIEW VARIATIONS PLUGIN / SYNTH / DRUMS
		
<i>Browse folder & collections here</i>	<i>Scroll through your files, play, sort or change octave</i>	<i>Seek through thumbnail, play, reveal file, generate variations, switch plugin/synth/drumkit, synth presets</i>

Left Panel: Folders & Collections

Folders

- Browse your file system just like Finder (macOS) or Explorer (Windows)
- Root folders (ones you added) have a special folder icon (play symbol)
- Folders from external Volumes, e.g., USB-drives or NAS have darker icon
- Double-click on folder to reload its contents
- File counts show how many MIDI files are in each folder
- Adding folders with many files may take some time until everything is scanned
- Select any folder to see its MIDI files in the center panel
- Expanded folder state is saved
- Drag n drop folder to move up or down
- MidiBro-Generations contain subfolders with generated variations

Managing Folders:

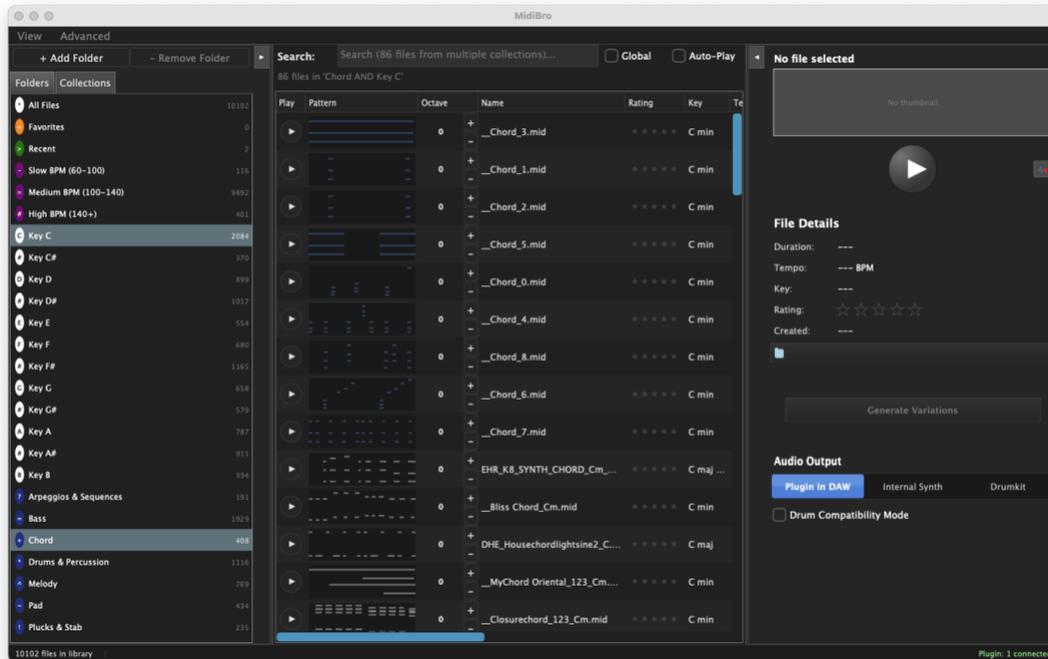
- Add: Click "+Add Folder" to watch new locations
- Remove: Select a root folder and click "-Remove Folder"
- Rescan: Menu → Misc → Full Scan (use when you've added/removed files; deep scan takes time)

Collections

Collections are smart and automatically organize your files by distinct key words in file name, file path or MIDI file meta data:

GUI	Collection Name	What it shows
	All files	Every MIDI file in your library
	Favorites	Files you gave stars (★)
	Recent	Files you've played recently
	Slow BPM (60-100)	Files grouped by tempo/BPM
	Medium BPM (100-140)	
	High BPM (140+)	
	Key C	Files organized by musical key (C, C#, D, etc.)
	Key C#	
	Key D	
	Key D#	
	Key E	
	Key F	
	Key F#	
Key G		
Key G#		
Key A		
Key A#		
Key B		
Arpeggios & Sequences	Arpeggios & Sequences	Arps, Bass, Drums, Melody, Pads, etc. (The categories and search terms are configured in file 'config.json', which can be opened from menu "Misc".)
Bass	Bass	
Chord	Chord	
Drums & Percussion	Drum & Percussion	
Melody	Guitar	
Pad	Melody	
Plucks & Stab	Pad	
	Pluck & Stab	

To multi-select collections, hold command key (macOS) or CTRL key (Windows) and click items. Only files matching **all** selected collections are listed (AND logic). When selection a collection by clicking and holding command key, multiple selections can be combined. Only files in selected collections, are listed:



Center Panel: File Browser

This is your main workspace - a powerful table showing all your MIDI files with instant search.

Title	Function
▶ Play	Click to preview the file (<i>keyboard shortcut: space bar</i>)
Name	Filename (click to sort alphabetically)
Pattern	Visual thumbnail (note pattern) of MIDI file
★ Rating	Your star rating (0-5 stars) (<i>keyboard shortcut: 0, 1, 2, 3, 4, 5</i>)
Key	Musical key detected from the MIDI file (in brackets if key in file name differs)
🎵 Octave	- +/- buttons to transpose playback (<i>shortcut: cmd + ↑ or cmd + ↓</i>)
Tempo	BPM extracted from file
Time Sig	Time signature*
Bars	Length of the MIDI file
Created	File creation date
Last Played	Date when file was last played in MidiBro
File path	Storage location of file

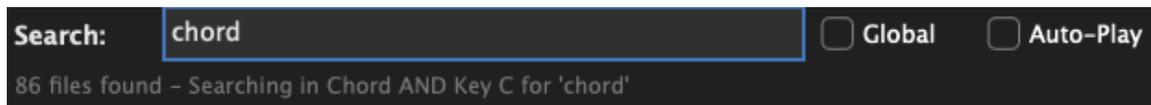
- Sort by any column - Click headers to sort
- Resize columns - Drag column borders
- Drag and Drop - Drag files to your DAW or desktop
- Hold CMD key and click to select *multiple files* for:
 - Drag n drop
 - Rating with stars with 0, 1, 2, 3, 4, 5

Search

The search box is your secret weapon for finding files instantly. The search is looking in filename, file path and MIDI file meta data.

Local Search (Default):

- Searches only the currently selected folder or collection
- Perfect for exploring specific categories



Global Search:

- Enable Global to search your entire library. Perfect when you remember a file but not its location
- Searches your entire MIDI library
- Find files no matter where they're stored

Search Tips:

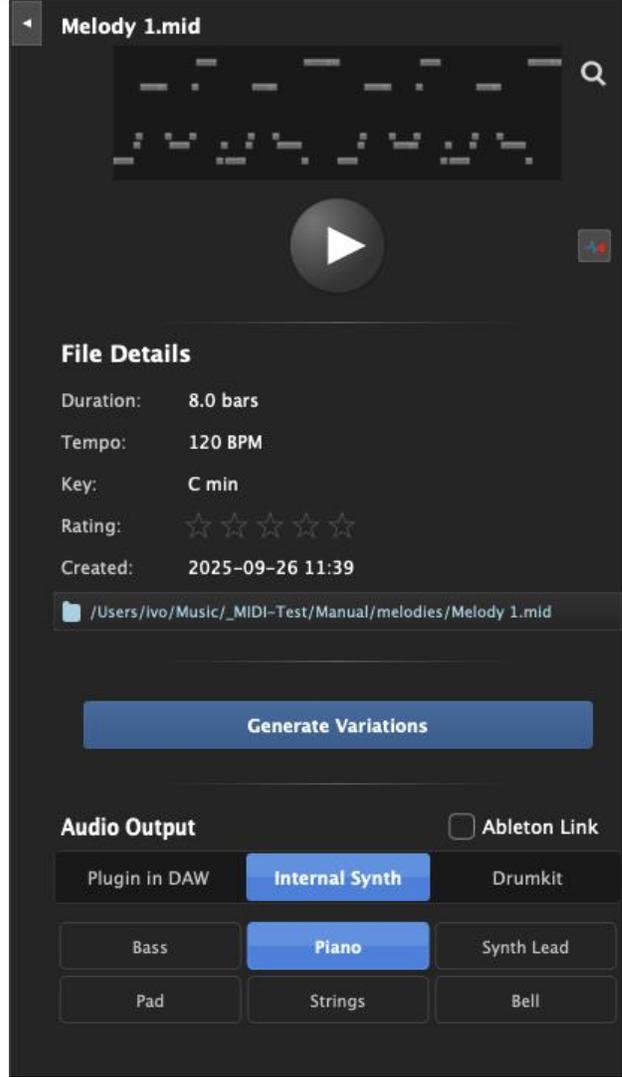
- Search by filename ("bass", "pad")
- Search by musical key ("C major", "Am")

Auto-Play:

- Enable the "Auto-Play" checkbox
- Play a file from central list
- Choose a new file (by click or arrow keys ↑↓)
- New files play automatically

Right Panel: File Details & Preview

When you select a file, the right panel shows file details and has some action buttons:

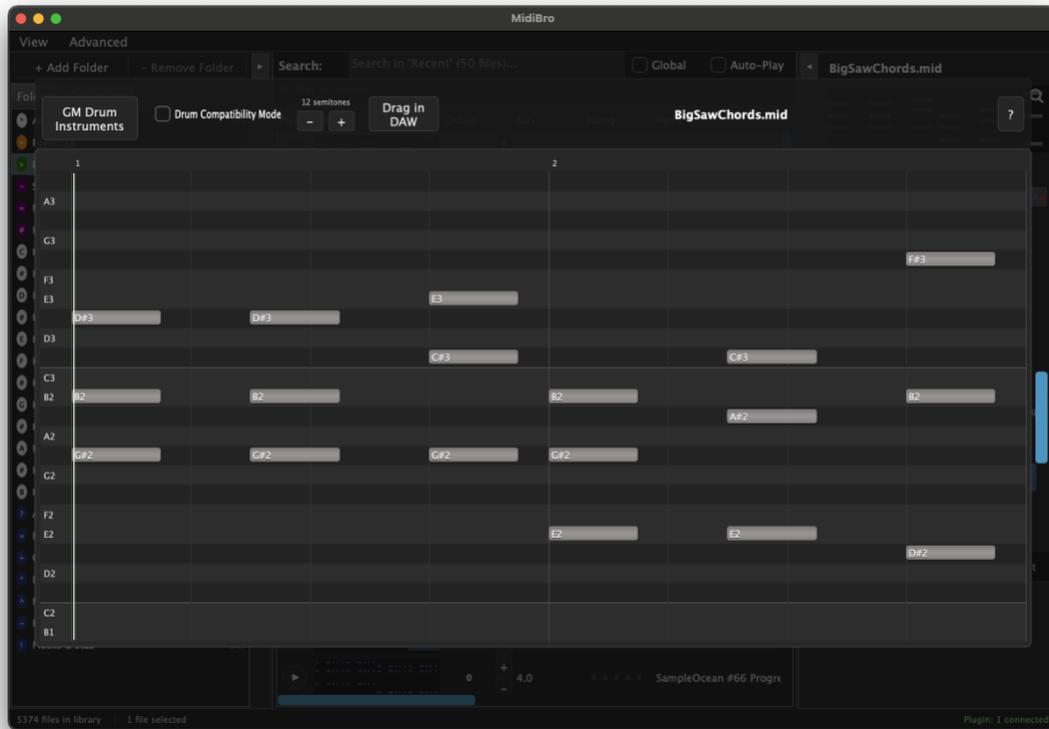
 <p>Melody 1.mid</p> <p>Duration: 8.0 bars Tempo: 120 BPM Key: C min Rating: ☆☆☆☆☆ Created: 2025-09-26 11:39</p> <p>/Users/ivo/Music/_MIDI-Test/Manual/melodies/Melody 1.mid</p> <p>Generate Variations</p> <p>Audio Output <input type="checkbox"/> Ableton Link</p> <p>Plugin in DAW Internal Synth Drumkit</p> <p>Bass Piano Synth Lead</p> <p>Pad Strings Bell</p>	<p>File name</p> <p>Thumbnail / note pattern</p> <p>Zoom icon shows detail piano roll</p> <p> Play/Stop button</p> <p> MIDI Panic button</p> <p>File details</p> <p>Some details...</p> <p>★ Rating – Click to rate 1-5 stars</p> <p>Click reveals file location</p> <p>Click opens MIDI generation window</p> <p>Audio Output Output route: Plugin in DAW, Internal Synth, Drumkit Internal Synth: Presets (Bass, Piano etc.)</p> <p>Toggle “Ableton Link” Toggle “Drum Compatibility Mode”</p>
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Notes:

- Thumbnail / note pattern: during playback click anywhere to jump to a position (seek function)
- Seek function works also in detail piano roll
- Toggle “Ableton Link”: Enables this protocol. Status shows connected plugins and Ableton Link devices
- Toggle “Drum Compatibility Mode”: Intelligent mapping of missing drum sounds to available samples, available in audio output modes “Plugin in DAW” and “Drumkit”

Detail Piano Roll

When clicking on zoom icon in a note pattern (e.g. right panel), a detail piano roll window opens. It displays note values in more detail and offers some more functions:



This window allows following actions:

Button "GM Drum Instruments"	Displays General MIDI Drum Instrument names in the left gutter.
Toggle "Drum Compatibility Mode"	Maps missing drum sounds to available samples (standard drum range C1-A2) and auto-shift drums in too high or too low octaves. Suitable for audio output via "Drumkit". Same function like in main window, right panel.
Buttons [-] and [+]	Transpose all notes 12 semitones down or up (= 1 octave). Recommendation: Don't use this in "Drum Compatibility Mode".
Button "Drag in DAW"	Drag from this button to your DAW to get the original or modified file
Button [?]	Help window opens with further explanations.
Dragging of note layers	Note layers can be dragged with mouse to another note, e.g. to move all notes from C2 to C1. Dragging works <u>not</u> for single notes. Only vertical moving of notes is allowed. Recommendation: Don't use this in "Drum Compatibility Mode".

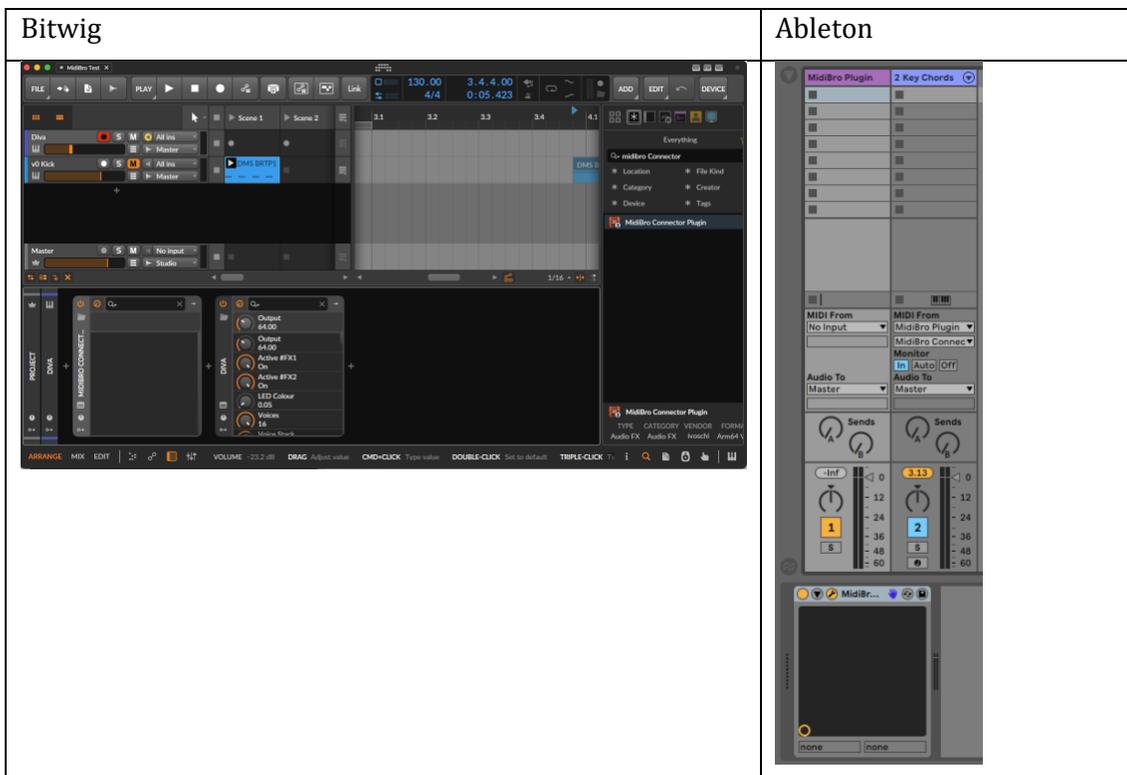
In case you changed something and leave the window (e.g. ESC key or click outside), you are asked if you want to store the modified file.

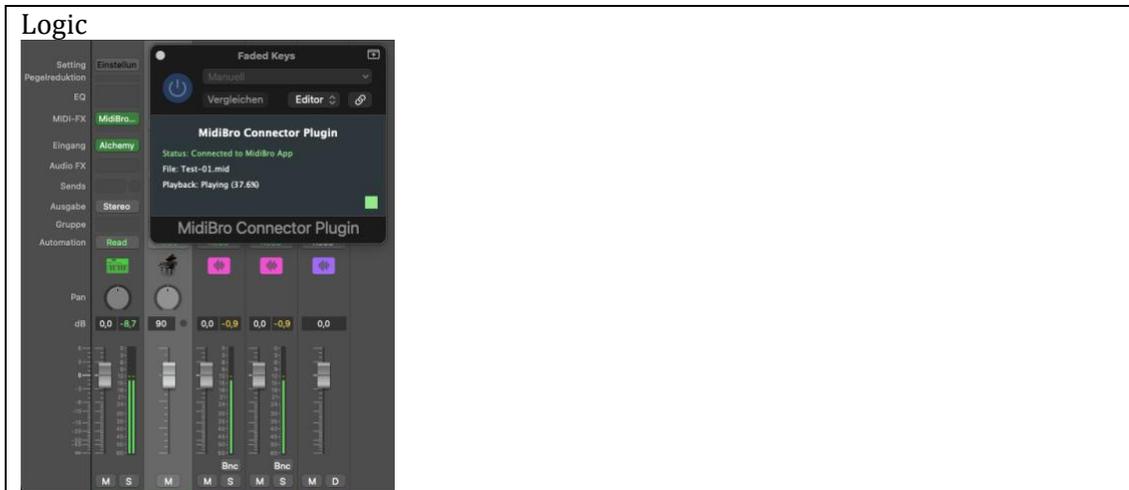


DAW Integration

Setting Up the Plugin

1. Create a MIDI track
2. Add your instrument (e.g., Operator, Wavetable)
3. Add "MidiBro Connector Plugin" before the instrument (Bitwig) or let instrument track receive MIDI notes from plugin MIDI track (Ableton, Logic -> MIDI FX).
4. Ensure the signal chain: MidiBro Connector Plugin → Instrument → Audio Out
5. The plugin will route MIDI to your instrument





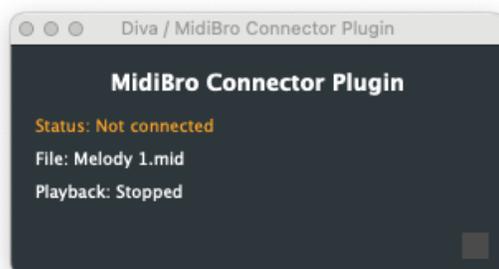
Using the Plugin

Connection Status:

- Green "Connected" = App and plugin are communicating



- "Not connected" (or "Checking...") = Check that MidiBro app is running

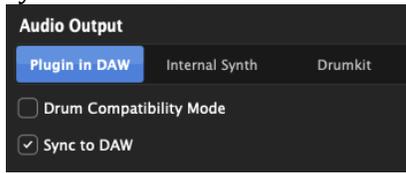


Playing Files:

- Select any file in MidiBro app
- Click play in either the app or center panel
- MIDI streams directly to your DAW track (with tempo from DAW)
- Use your DAW's transport controls normally

Synchronization with DAW:

In MidiBro app, right panel, enable toggle “Sync to DAW”: The start of playback is synchronized with DAW:

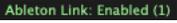


In Audio Settings Window (from menu) the quantization type can be configured: bar or beat

Internal Synth with Ableton Link Synchronization

MidiBro can connect to your DAW if it supports the synchronization protocol “Ableton Link”, e.g. Ableton Live, Logic Pro, Avid Pro Tools, Reason and Bitwig Studio. This is especially helpful if you cannot use the MidiBro Connector plugin.

When Link is enabled, MidiBro’s Internal Synth tempo follows your DAW. If a file is already playing, allow a few seconds for the progress bar to re-align.

The status of a connection and the amount of connected devices is displayed in the status bar: 

In the right panel, the value at “Tempo” is written in green with suffix “(Link)”:



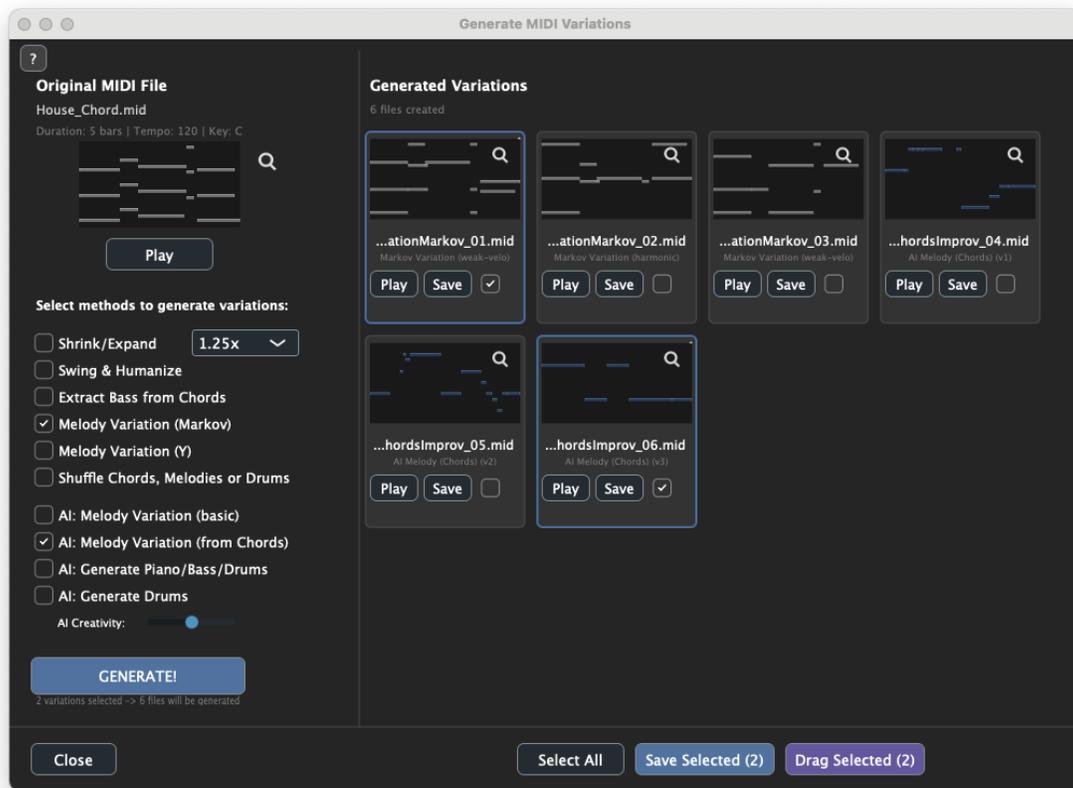
If you change the tempo in your DAW, the tempo in MidiBro is updated. In case a file is currently playing, allow some seconds that progress bar catches up (it was a pain to implement this ;).

In case of connection issues restart MidiBro, your DAW or disable any firewall that might block network traffic.

If MidiBro is connected via plugin to DAW, Ableton Link synchronization is not needed (therefore no toggle available).

Generate Variations

MidiBro has a powerful set of algorithms to generate note variations from your MIDI file.



Overview and Usage

Top left corner: Button “?” opens a window that explains the algorithms.

On the top left you see the original file (file details, note pattern etc.)

Below you find algorithms to be applied.

Click on button “GENERATE!” to generate variations.

In the right panel you find note cards with variations.

- Zoom icon: open detail piano roll
- Play: play note variation
- Save: store note variation in folder “MidiBro-Generations”
- Checkbox: select note variation for bulk save in folder “MidiBro-Generations” or for “Drag Selected”

At the bottom:

- Close: closes this window (or use ESC key)
- Select All: Selects all generated note cards
- Save Selected: Saves all selected note cards as MIDI files in folder “MidiBro-Generations”
- Drag Selected: Click and drag selected note variations as MIDI files into your DAW or another storage location (Explorer or Finder)

The Algorithms

Name	Explanation
Shrink/Expand	Contract or Stretch notes by given factor from drop down Suitable for: All types of MIDI files
Swing & Humanize	Adds groove and natural timing variations Suitable for: All types of MIDI files, especially rhythmic content
Extract Bass from Chords	Generates bass lines from chord progressions Best for: MIDI files with chord progressions (minimum 2-note chords) Not suitable for: Single-note melodies, drum tracks
Melody Variation (Markov)	Creates intelligent melodic/harmonic variations Best for: Melodic MIDI files, chord progressions, mixed content Not recommended for: Drum patterns
Melody Variation (Y)	Statistical pattern-based variations Best for: Monophonic melodies, bass lines, arpeggiated patterns Good for: Simple sequential chords Not recommended for: Complex polyphony, dense simultaneous chords
Shuffle Chords, Melodies or Drums	Intelligently detects and rearranges musical content Best for: Chord progressions, drum patterns, structured melodies Automatically detects track type and applies appropriate shuffling strategy
AI: Melody Variation (basic)	Uses AI to continue melodic patterns Best for: Simple melodies, monophonic lines Uses Magenta's basic_rnn model
AI: Melody Variation (from Chords)	Generates melodies based on chord progressions Best for: Files with chord progressions Uses Magenta's chord_pitches_improv model
AI: Generate Piano/Bass/Drums	Creates a trio arrangement piano, bass, and drum (=3 tracks in one MIDI file) based on provided notes Uses Magenta's trio_4bar model

“AI Creativity” Slider	Apply “temperature” for AI creativity. Low values provide subtle variations - high values generate maximum creativity and chaos.
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Notes:

All algorithms and AI-based models run locally on your computer. While non-AI algorithms (e.g. Markov) are quickly generated, the AI-models (neural networks) need more time for calculation, depending how powerful/fast your computer is.

Generated variations deliver not always good results:

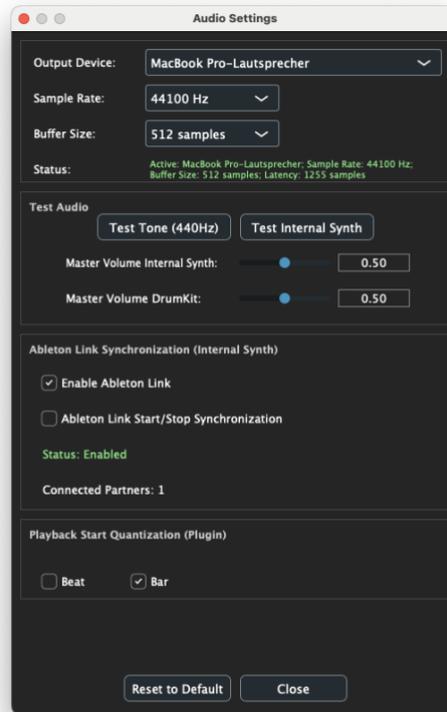
- All models have limits – don’t expect any miracles (🧠>🤖)
- Use variations as source of inspiration
- If variations are not useful: quickly generate new ones or use other MIDI input file

Menu “Advanced”

Entry name	Function and Purpose
Full Scan	Re-scans all folders, generates a list of corrupt MIDI files. Generates a list of corrupt MIDI files and stores them in download folder.
Clear Collection ‘Recent’	Clears the history of played MIDI files.
Clear and Rebuild Thumbnail Cache	Trouble with display of note patterns (thumbnails): execute this entry.
Shrink database	Execute when you have orphaned folders/files, database file gets too big. It also re-indexes data – may speed up performance with large data sets.
Open log file app	Opens log file of MidiBro application with standard application associated with .txt files.
Open log file plugin	Opens log file of MidiBro plugin with standard application associated with .txt files.
Open configuration file	Opens configuration file (config.json) with standard application associated with .json. This file contains some settings and also the configuration of the synth presets and the collections.
Reveal folder w/ logfiles, db ...	Opens the folder with configuration, cache and database files
Enable/disable debug logging	In case of issues or reproducing them, enable debug logging which generates more information for troubleshooting.
Generate diagnostic log file	Creates a zip file in Downloads folder with logfiles, database files and a brief system description.
Register MidiBro	Registration window to enter your serial.

Audio Settings

Control & check settings for Audio, for Ableton Link and playback start of Plugin in DAW.



Common Workflows

Workflow 1: Finding the Perfect Chord

- 1) Click "Chord" in Collections (left panel)
- 2) Use search to narrow down and choose a collection with a key, e.g., "Key A" by holding command key plus mouse click
- 3) Preview files using the play button
- 4) Rate favorites with stars
- 5) Drag the chord to your plugin

Workflow 2: Building a Track by Key

- 1) Start with "Key C" collection (or your preferred key)
- 2) Search for "chord" to find chord progressions or hold cmd key plus mouse click on collection "Chord".
- 3) Rate and organize your choices
- 4) Search for "bass" in the same key
- 5) Continue building your arrangement

Workflow 3: Tempo-Based Discovery

- 1) Click "Medium BPM (100-140)" for house/techno
- 2) Or "High BPM (140+)" for drum & bass/dubstep
- 3) Preview files quickly to find the right groove
- 4) Use octave +/- to test different pitch ranges

Workflow 4: Organizing New Files

- 1) Add new folders with "+Add Folder"
- 2) Let MidiBro scan and analyze the files
- 3) Rate interesting files immediately
- 4) Use "Recent" collection to review what you've played

Troubleshooting

Connection Issues

Problem: Plugin shows "Disconnected"

Try:

- Ensure MidiBro app is running
- Restart both app and DAW
- Check that plugin is properly loaded in DAW

Problem: No sound when playing files

Try:

- Verify plugin is connected to an instrument
- Check DAW's MIDI routing
- Ensure instrument track is not muted
- Test with a simple instrument first

Performance Issues

Problem: App feels slow with large libraries

Try:

- Consider organizing files into smaller subfolders

Problem: Files not appearing after adding folder

Try:

- Run "Full Scan" from Misc menu
- Check that files have .mid or .midi extensions
- Verify folder permissions

File Management

Problem: Files moved/deleted but still appear in MidiBro

Try: Menu → Misc → "Full Scan" to refresh the database

Problem: Can't find a file you know exists

Try:

- Use Global search instead of local
- Check if you're in the right folder/collection
- Verify the file wasn't accidentally moved

Tips & Best Practices

Organization Strategies

- Use descriptive filenames - Include key, tempo, and instrument type
- Rate everything - Star system helps you find gems later
- Organize by project - Create folder structures that match your workflow

Search Mastery

- Start broad, then narrow - Use collections first, then search within them
- Combine criteria - Search "Am bass" to find specific elements
- Use Global search - When you remember a file but not its location
- Clear search often - use collection "All Files" to see full collections

Workflow Optimization

- Preview before dragging - Save time by listening first
- Use octave controls - Test melodies in different ranges to match instrument range
- Keep app open - MidiBro is designed to stay running during sessions

Technical Reference

File Support

- Formats: .mid, .midi (case insensitive)
- Metadata Extraction: Key, tempo, time signature, duration, track count
- Analysis: filename and path, note pattern visualization

Performance Specs

- Search Speed: <100ms response time (depending on library size and hardware)
- File Capacity: Tested with 10,000+ files
- Memory Usage: <300MB with large libraries
- UI Performance: 60 FPS scrolling and interactions

Data Storage Paths

What	MacOS	Windows
	~/Library/MidiBro/...	%APPDATA%\MidiBro
Database	db/MidiBro_Library.db	db/MidiBro_Library.db
Thumbnails	thumbnails/	thumbnails/
Logs	logs/	logs/
Configuration	config.json	config.json
Generated variations	~/Music/MidiBro-Generations/	%USERPROFILE%\Music\MidiBro-Generations\

Plugin Compatibility

- Tested DAWs: Bitwig Studio, Ableton Live
- Format Support: VST3, AU
- Communication: File-based IPC with automatic reconnection
- Latency: Real-time MIDI streaming

Supported DAWs

✅ Fully tested (VST3): Bitwig Studio, Ableton Live

✅ Fully tested (AU): Logic

✅ Should Work:

- Other DAWs supporting VST3

- Limitation: Ableton does not accept pure MIDI AU plugins. Plugin wrappers for VST3 will probably not work since communication between app and plugin is not forwarded.

Security & Privacy

All analysis and AI models run locally; no cloud uploads.

Keyboard Shortcuts

MidiBro offers a comprehensive set of keyboard shortcuts designed for fast, mouse-free navigation and editing. Most shortcuts work globally, while others are specific to certain panels or modals.

Global Shortcuts (Work Everywhere)

Shortcut	Action
⌘,	Open Audio Settings
F10	MIDI Panic – instantly stops all playback
⌘F	Focus the search bar
Esc	Clear search / cancel current action
⌘G	Find next result
⌘1	Focus the left panel (folders)
⌘2	Focus the left panel (collections)
⌘3	Focus the center panel (search/results)
Space	Play / stop current file
R	Activate quick rating mode
A	Switch to Plugin (DAW) audio output
S	Switch to Internal Synth audio output
D	Switch to Drumkit audio output
→ / ←	Jump forward / backward 10% during playback

Tip: All shortcuts use ⌘ on macOS and Ctrl on Windows.

Search Results Table (in the middle)

Where	Shortcut	Action
Left Panel: Folders	↑ / ↓	Navigate folders
	→ / ←	Expand / collapse folder
	Return	Select current folder
Left Panel: Collections	↑ / ↓	Navigate collections
	Return	Select current collection
Center Panel:	Space	Play / stop selected file
Search Results Table	0 – 5	Set star rating (0 removes rating)
	⌘↑ / ⌘↓	Increase / decrease octave (±4 limit)

Center Panel:	Return	Execute search
Search Bar	Esc	Clear search text
Zoomed	Esc	Close piano roll
Piano Roll	Space	Toggle playback
	→ / ←	Jump forward / backward 10%
	↑ / ↓	Load previous / next file
	A / S / D	Switch audio output mode
MIDI Generation	Esc	Close modal
Window	Space	Play / stop original file
	→ / ←	Jump forward / backward 10%
	A / S / D	Switch audio output mode

Need Help?

Can't find what you're looking for?

- Check the Collections panel for smart organization
- Try Global search with broader terms
- Use Menu → Misc → "Full Scan" to refresh your library (grab a coffee and let it run)

Still having issues?

- Check system requirements
- Verify DAW compatibility
- Review plugin routing in your DAW
- Use local MIDI folders instead of (slow) external volumes
- Contact me: midibro@ivoschi.de

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Built with JUCE Framework

Integration of Ableton Link

Integration of Google Magenta