ACOUSTIC GUITAR TRACK

CHORDS · PATTERN · TONE

USER GUIDE



Standalone app · **VST3 plugin** · **70 patterns** · **Stereo double-tracking** · **Import audio**

Chords in · guitar out

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1

Welcome

Acoustic Guitar Track turns a list of chords into a realistic guitar part. You choose the chords, a strumming or picking pattern and the feel. The program plays it the way a guitarist would: real chord shapes, down- and up-strokes that sweep across the strings, and small human variations in timing and touch.

It comes in two forms that share the same editor:

- **The standalone app** for Windows: write songs, listen to them, and save them as MIDI or WAV files.
- **The VST3 plugin**: runs inside your DAW (Reaper, Cubase, Studio One, Ableton Live, Bitwig...), follows the DAW's tempo and position, sends MIDI, and can play its own guitar sound.

What it can do

Chords → guitar

Type chord names; the app picks real fingerings (open or barre) and shows them.

70 patterns in 13 genres

Pop, rock, folk, country, blues, reggae, funk, Latin, ballads, 3/4 and 6/8, fingerstyle.

Human feel

Strum speed, timing and velocity variation, and dynamics on hardware-style knobs.

Random progressions

Roll the die for a new progression in any key and scale, at three complexity levels.

Guitar sounds

Ten built-in modelled guitars plus your own SoundFont (.sf2) libraries.

Stereo double-tracking

Two to four guitarists, each with their own take, spread across the stereo field.

Export

MIDI files, drag-and-drop MIDI clips, and dry WAV audio up to 96 kHz / 32-bit.

In your DAW

Sample-accurate playback that follows the DAW's tempo, loops and position.

Import audio

Load a WAV or MP3 guitar recording: get its tempo, key, chords and strumming or picking pattern.

Jam and practice

Loop a progression at any tempo and play along, or export it as a backing track.

How it works

Everything starts from your song. The generator turns it into guitar notes; the notes can leave as MIDI or be played by a guitar sound, optionally doubled across the stereo field:

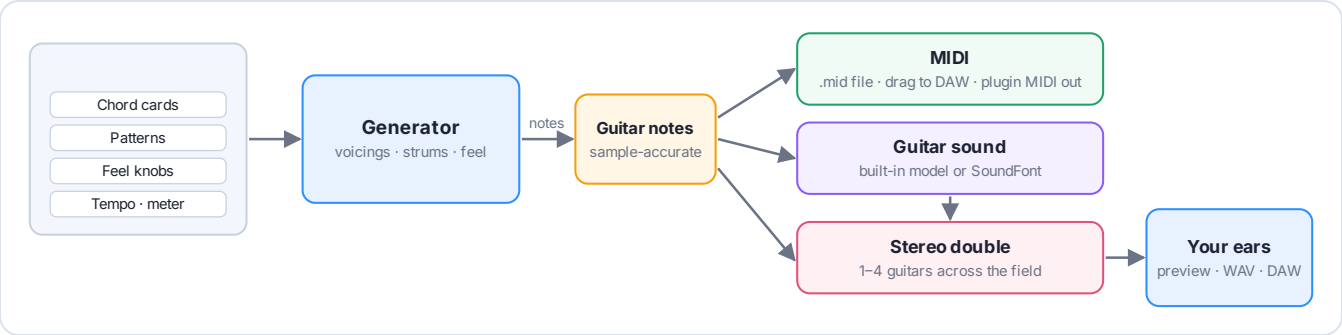


Figure 1. From your song to what you hear.

About this guide

> **NOTE** Screens in this guide come from the design preview of the interface. Your build may differ in small details such as spacing or exact wording.

Keyboard keys look like `Shift`, things you type look like `C G Am F`, and **bold** names refer to buttons and controls on screen.

2

A tour of the main screen

The editor looks like a piece of studio hardware: brushed panels, glowing displays and knobs. The same editor appears in the app and in the plugin. The numbers match the list below.



Figure 2. The main screen (standalone app).

1. File buttons: New, Open..., Save, Save as... (app only)
2. Preview and Stop: play the song through the chosen guitar sound
3. Tempo with TAP (app); in the plugin the tempo follows your DAW
4. Read-outs: beats per bar (editable), bars, length, notes
5. Open chords and Loop switches (plugin also shows Start bar and Sound)
6. Feel knobs: Strum, Timing, Velocity, Dynamics
7. STEREO: Double switch, Width knob, Guitars, Shapes

8. Random progression die and the last generated (or imported) key and progression
9. Import audio: tempo, chords and pattern from a WAV or MP3 recording (chapter 9)
10. Guitar sound menu, Remove (×) and Import SoundFont
11. Quick fill: type a whole progression
12. Pattern for quick fill, Fill bars, Apply pattern to all
13. A chord card (see Figure 3)
14. Glowing edge: the card that is playing now
15. Red frame: chord not recognised
16. Add bar, Clear all
17. Custom patterns editor (click to open)
18. Status line: warnings and messages
19. Export .mid..., Export .wav..., Drag MIDI to DAW

3

Quick start

Make your first guitar part in five steps.

1. **Type the chords.** In the **CHORDS** box type `G D Em C`.

2. **Pick a pattern.** In the menu next to it choose **Pop · Island strum**, then click **Fill bars**. Four chord cards appear.

3. **Set the tempo.** Type `96` in the Tempo display, or click **TAP** in time with a song you like.

4. **Listen.** Click **▶ Preview**. The card that is playing lights up at the bottom. Turn on **Loop** to keep it going while you adjust the knobs.

5. **Take it with you.** Click **Export .wav...** for audio, **Export .mid...** for MIDI, or drag **Drag MIDI to DAW** onto a track.

TIP Stuck for ideas? Click the spinning die for a ready-made progression (chapter 8).

4

Chords and chord cards

A song is a row of **chord cards**. Each card holds one chord (or several) and the pattern used to play it. Cards are played from left to right, top to bottom.

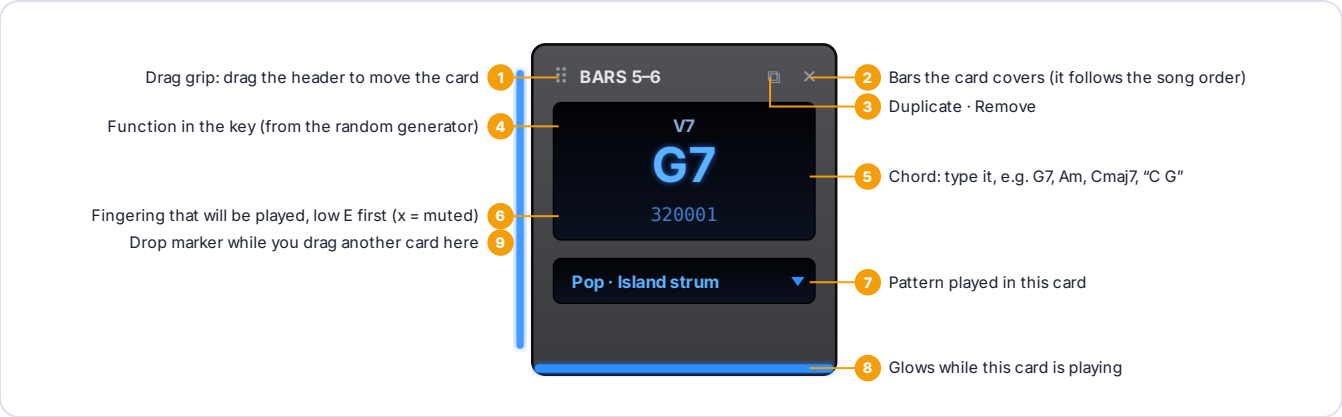


Figure 3. Parts of a chord card.

Writing chord names

Type a root note (**A** to **G**, with **#** or **b**) followed by a chord type:

Type	Write	Example	Sound
Major	(nothing), maj	C, F#, Bb	bright, stable
Minor	m, min, -	Am, C#m	darker
Dominant 7th	7	G7, E7	wants to resolve
Major 7th	maj7, M7	Cmaj7, Fmaj7	soft, jazzy
Minor 7th	m7, min7, -7	Am7, Dm7	mellow
Suspended 2nd / 4th	sus2 · sus4 (or sus)	Dsus2, Asus4	open, unresolved
Added 9th	add9	Cadd9, Gadd9	shimmering
Diminished	dim, °	Bdim	tense
Augmented	aug, +	Caug	dreamy, unsettled

For silence type `N.C.` (no chord) or leave the card empty. A chord the app does not understand gets a **red frame** and a warning in the status line; that card stays silent until it is fixed.

Fingerings: open and barre shapes

Under each chord you see the fingering that will be played, written from the low E string to the high E string: a number is the fret, **0** an open string, **x** a string that is not played.

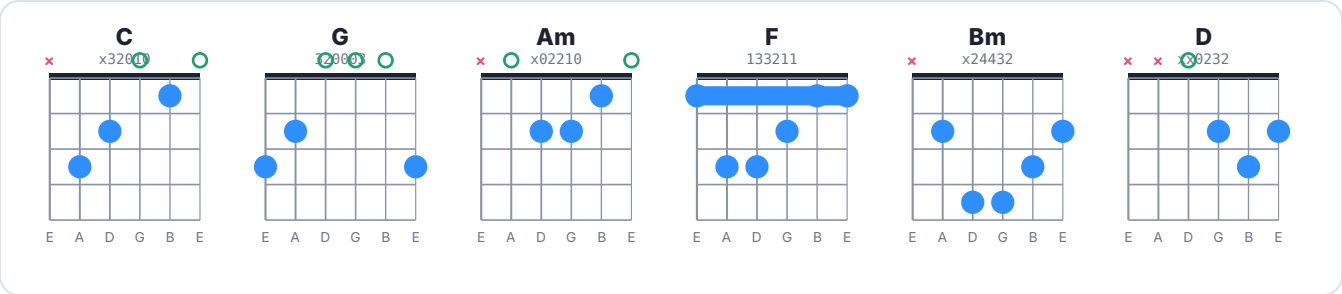


Figure 4. How the fingering text reads on the fretboard. Blue dots are fingers; a bar is a barre.

With **Open** switched on, open-position shapes are used whenever one exists (C, G, D, Em, Am…). Other chords, and all chords when Open is off, use an *E-shape* or *A-shape* barre chord, whichever sits lower on the neck. Barre shapes sound tighter and are typical for rock.

Several chords in one card

Separate chords with a space to share a card: `C G` in a one-bar card plays two beats of C and two of G. With the quick-fill box you can also make a card last several bars (next section); chords in a card always share its whole length equally.

Quick fill

Type a whole progression in the **CHORDS** box, choose a pattern and click **Fill bars**. This replaces all cards.

You type	You get
`C G Am F`	four cards, one bar each
`C:2 G:2 Am F`	C and G two bars each, then Am and F one bar each
`C | G | Am Em | F`	with | each part is one card, so a card can hold two chords (Am and Em share bar 3)
`C:2 | G | Am Em:2`	combine both: the Am–Em card lasts two bars

Apply pattern to all keeps your chords and only changes every card's pattern.

Arranging cards

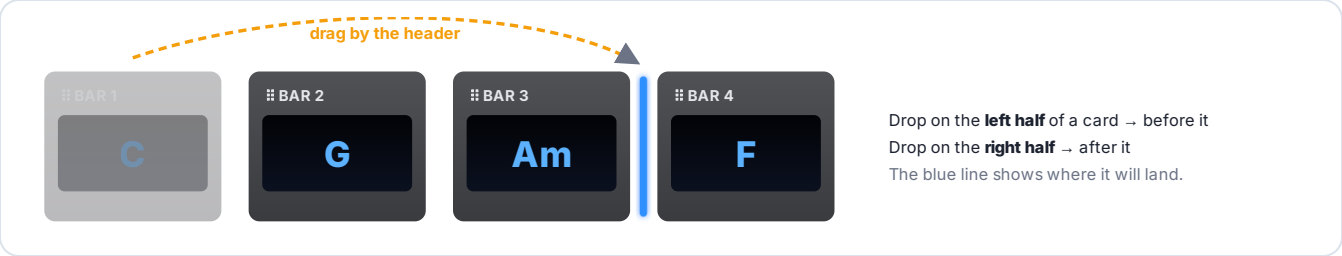


Figure 5. Moving a card: drag it by its header and drop it before or after another card.

Use ⧉ on a card to **duplicate** it and ✕ to **remove** it. **+ Add bar** adds a copy of the last card at the end; **Clear all** removes every card.

5
Patterns

A pattern describes *how* the chord is played: which strokes or strings, and when. Patterns repeat every bar and work with every chord.

Reading a strum pattern

A pattern is written on a grid under the count. **Steps per beat** sets the grid: 2 = eighth notes (1 & 2 & …), 4 = sixteenth notes (1 e & a …), 3 = triplets for shuffle, swing and 6/8.

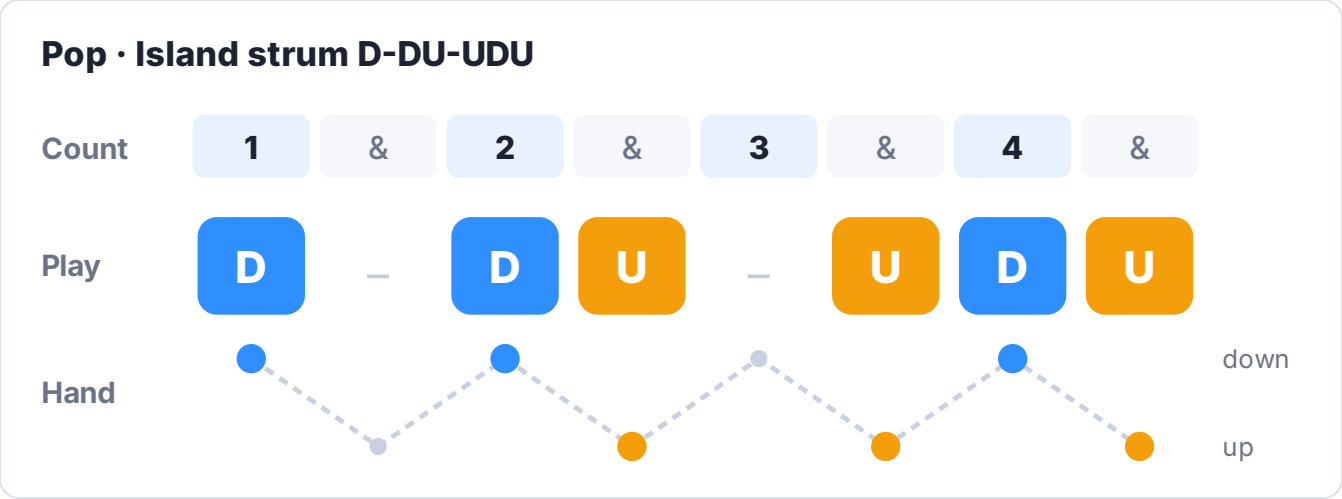


Figure 6. The most-used strum. The hand keeps moving like a pendulum (dashed line): down on the beats, up on the "&"s, touching the strings only where a stroke is written.

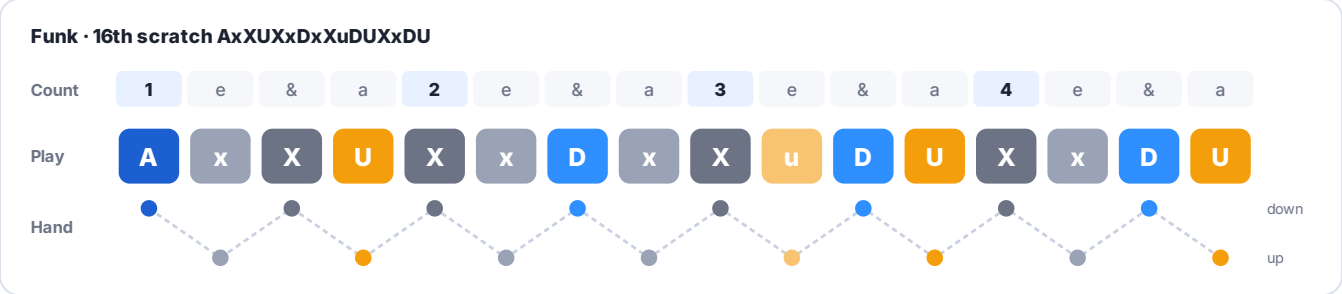


Figure 7. A sixteenth-note pattern mixing accents (A), muted scratches (X, x) and chord hits.

Symbol	Stroke	Sound
D · U	down / up strum	down: all chord strings, low to high · up: top 3–4 strings, high to low

Symbol	Stroke	Sound
A	accented down	harder and louder
d · u	soft down / up	ghost strokes that keep the groove moving
X · x	muted chuck (down) / muted scratch (up)	percussive; also stops everything that is ringing
P · p	palm mute, loud / soft	low 3 strings, short and chunky
S · s	staccato chop, down / up	chord choked straight away (reggae, ska, funk)
B · b	bass note / alternate bass	only the chord's bass string (boom-chick)
–	rest	nothing new; ringing strings keep ringing

Fingerstyle patterns

Fingerstyle patterns list the strings plucked on each step, separated by spaces; strings played together are joined with **+**. For example Travis picking is `B+1 3 A 2 B+1 3 A 2`.

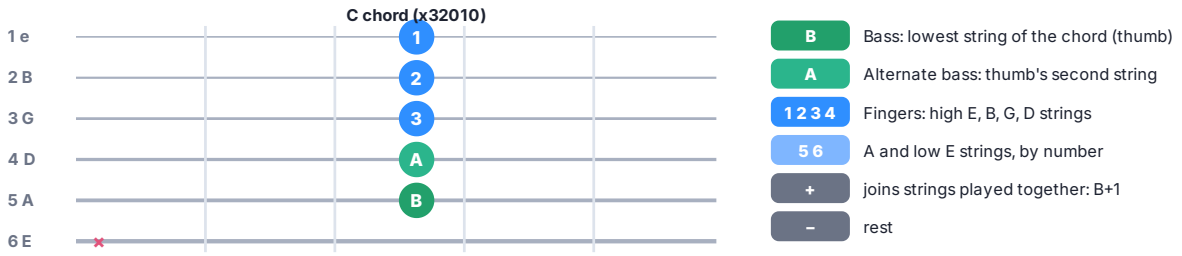


Figure 8. String roles. B and A move with the chord shape, so one pattern fits every chord.

Pattern families

Genre	Patterns	Character	Try with
Basic	5	Building blocks. Use them for intros, endings, breakdowns, or as a starting point for your own patterns.	C G Am F
Pop	6	Bright acoustic-pop strums that sit on top of a drum groove.	C G Am F · G D Em C · Am F C G
Rock	7	Straight, driving rhythm parts. Downstrokes dominate, and palm mutes build tension.	E D A E · A G D A · Em C G D
Punk & Metal	5	Fast downstrokes and tight palm-muted chugs.	E G A C · Em C D B7 · E F E G

Genre	Patterns	Character	Try with
Folk	4	Warm acoustic strums with a clear low end.	G C D G · D G A D · Em C G D
Country	4	Boom-chick bass-strum patterns, train beats and shuffles.	G C D G · A D E A · C F G C
Blues & Jazz	5	Swung triplet feels for the blues and short, crisp comping for jazz.	A7 D7 E7 · G7 C7 D7 · Cmaj7 Am7 Dm7 G7
Reggae & Ska	4	Offbeat chops. What the guitar leaves out matters as much as what it plays.	Am D · C G Am F · Em A
Funk & Soul	5	16th-note grooves built from muted scratches and short chord stabs.	E7 · Am7 D7 · Dm7 G7 · E9
Latin	4	Rumba, reggaeton, bossa and cumbia rhythms.	Am G F E · Dm7 G7 Cmaj7 · Am Dm E7 Am
Ballad	3	Slow, open strums for emotional songs.	C Am F G · G Em C D · D A Bm G
3/4 & 6/8	4	Patterns in three. Set Beats per bar to match (3 for 3/4, 2 for 6/8).	G C D G · C Am F G · D G A D
Fingerstyle	15	Picking patterns. B and A are the thumb, 1–4 are the fingers on the top strings.	C G Am F · Cmaj7 Am7 Dm7 G7 · Em C G D

Appendix A lists every pattern with its grid and typical tempo. Patterns written for 3/4 or 6/8 say so in their name: set **Beats / bar** to 3 for 3/4 and to 2 for 6/8 (the tempo is then the dotted-quarter pulse).

Making your own patterns

Open **CUSTOM PATTERNS** under the cards:

1. Give the pattern a **Name** and choose the **Type** (Strum or Fingerstyle).
2. Choose **Steps/beat**: 2 for eighths, 4 for sixteenths, 3 for triplets.
3. Type the **Pattern** using the symbols above, e.g. `D-DU-UXU` or `B 3 2 1 A 3 2 1`.
4. Click **Add / update**. The pattern appears at the top of every pattern menu and is saved with the song.

> **TIP** Write one bar: for 4/4 with 2 steps per beat that is 8 steps. Keep downstrokes on the beats and upstrokes between them; that's how a real hand moves.

6

Feel: knobs and switches

The knobs shape how the part is played. They work like hardware knobs:

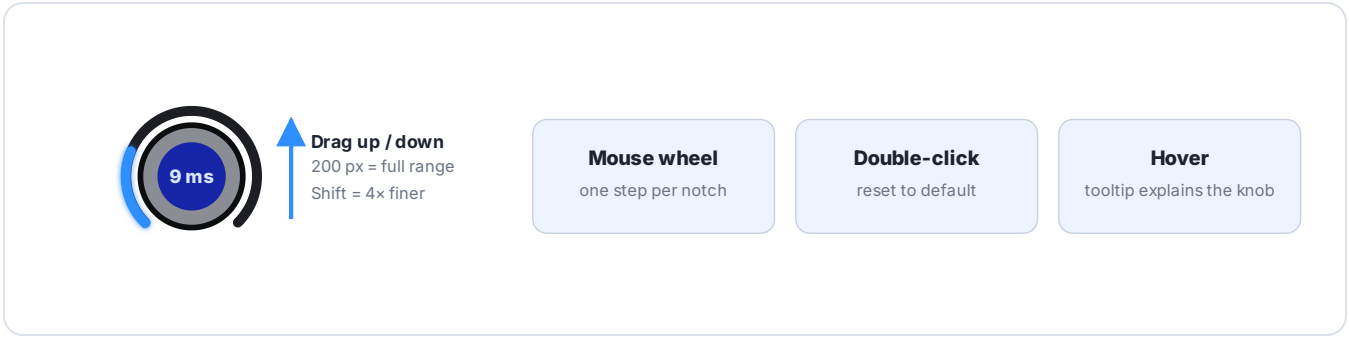


Figure 9. Using the knobs.

Strum

The time between strings in a strum, from 2 ms (tight, snappy) to 30 ms (slow, lazy). Default 9 ms. Upstrokes are a little faster and only hit the top strings.



Figure 10. What the Strum knob changes.

Timing and Velocity

Timing (0–25 ms, default ±6) lets each stroke land slightly early or late. **Velocity** (0–25, default ±8) varies how hard each note is played. Together they stop the part sounding machine-made. On top of this, strokes on the beat are a little louder and beat 1 is loudest.

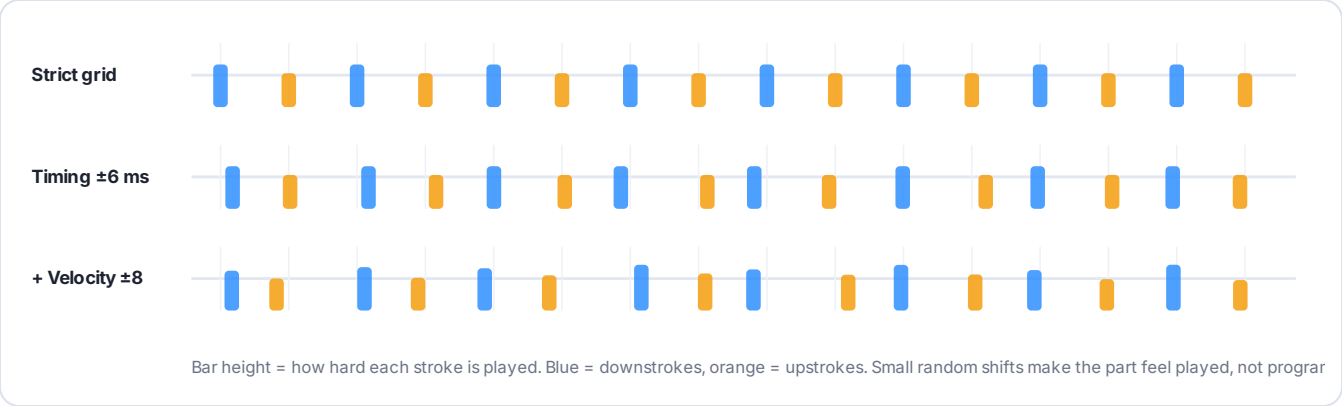


Figure 11. The effect of Timing and Velocity.

Dynamics

Overall playing strength, from 0.40× (gentle) to 1.35× (hard). Default 1.00×.

Switches

Switch	What it does
Open	Prefer open-position chord shapes; off = barre shapes everywhere.
Loop	Repeat the song in the preview (and in the plugin, around its start bar).
Sound (plugin)	The plugin plays its guitar sound as audio. Off = MIDI only.

NOTE Every new random progression also gets a fresh human feel, so two generated songs never play exactly alike.

7

Tempo, meter and the displays

Tempo and TAP

Type the tempo in beats per minute in the first display, or click **TAP** in time with the music:

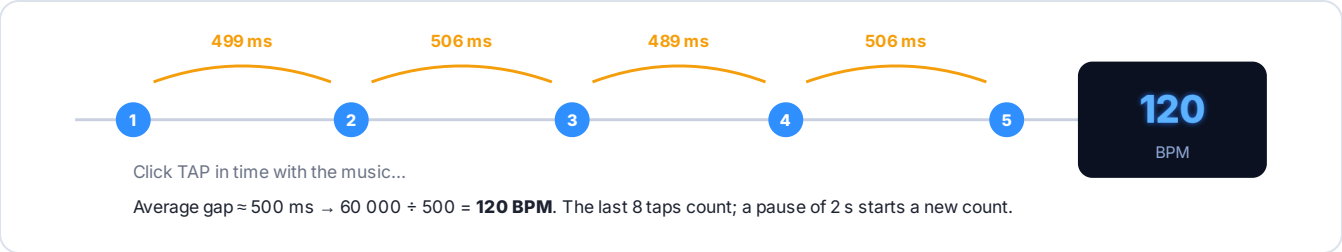


Figure 12. Tap tempo: the average gap between your clicks becomes the tempo.

Beats per bar

Choose 2–7 beats per bar in the second display. Use 4 for most music, 3 for waltzes, and 2 for 6/8 patterns (felt in two).

Read-outs

Bars shows the length of the song in bars, **Length** its duration in minutes and seconds at the current tempo, and **Notes** how many guitar notes will be played.

8

Random chord progressions

Click the spinning **die**. It rolls, then opens the **Random progression** window. Choose what matters to you and leave the rest on **Random**.

Option	Choices
Key	Random, or C to B. Random prefers guitar-friendly keys: G, C, D, A, E, F; Am, Em, Dm, Bm, Gm.
Scale	Random, Major, Minor, Dorian, Mixolydian, Harmonic minor
Chords	Basic, Intermediate or Advanced (see below)
Bars	4, 8, 12 or 16
Play	Strumming or Fingerpicking
Pattern	Random (one that suits the style) or any pattern, including your own
Tempo	a number, or **Random** within the pattern's typical range (app only; in the plugin the DAW sets the tempo)

Click **Generate**: the die rolls once more and the new progression replaces the cards on the main screen. The tempo, beats per bar and pattern are set to match, and the key and progression are shown next to the die.

Complexity levels

Level	What you get	Example in C
Basic	major and minor chords from the key; easy open shapes	C – G – Am – F
Intermediate	adds V7, m7, sus and add9 colours, borrowed ♭VII, sus4 → resolution	C – G7 – Am7 – Fsus2
Advanced	maj7 / m7 chords, secondary dominants, borrowed iv, passing diminished, two chords per bar	Cmaj7 Am7 – Dm7 – G7 – Cmaj7 E7

How progressions are built

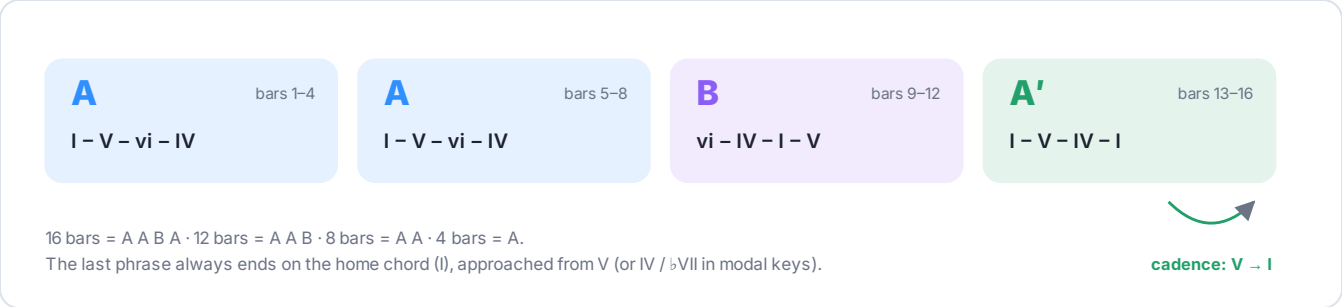


Figure 13. Progressions are built from 4-bar phrases and always end at home.

Reading the chord functions

Generated cards show each chord's **function** in the key as a Roman numeral: **I** is the home chord, **IV** and **V** the strongest neighbours, lower case means minor (**ii**, **iii**, **vi**). A 7 or maj7 is added when the chord has one; **V7/vi** means “the V7 chord that leads to vi”. The label disappears when you change the chord by hand.

> **TIP** Like the chords but not the pattern? Choose another pattern and click **Apply pattern to all**. The chords stay.

9

Import audio

Have a recording of a song you want to play? **Import audio** listens to a WAV or MP3 file and sets up the main screen for you: the tempo, the beats per bar, the key, a chord card for every bar and the strumming or picking pattern. Then you can listen, correct anything it got wrong, and play along, export or change it like any other song.

> **NOTE** Import audio works out *what* is played and *how*, then plays it with the app's own guitar sounds. It doesn't copy the recording: the tone, the room and the player's every nuance stay in the original. Think of it as a fast way to learn a song's chords and feel, and to get a backing track for it.

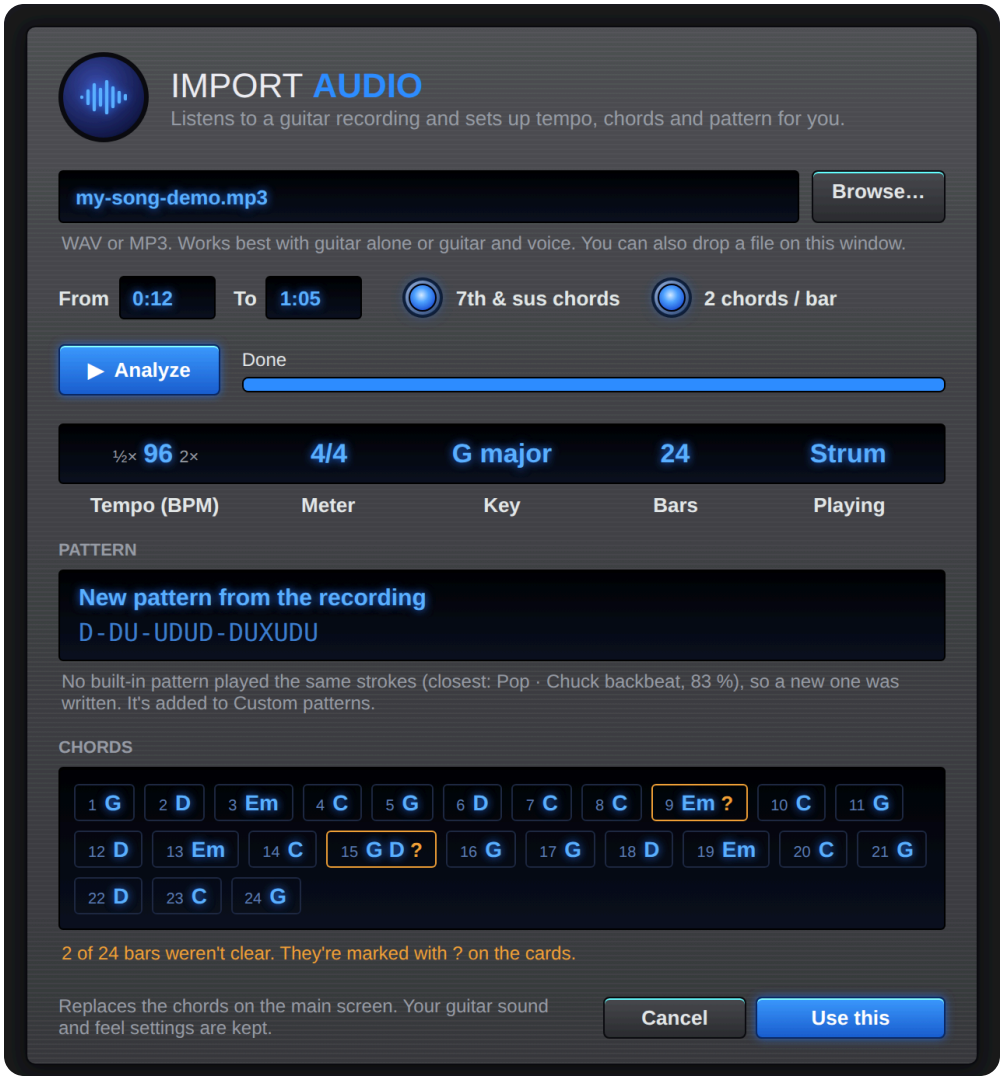


Figure 14. The Import audio window after analyzing a recording. Two bars were unclear and are marked ?.

Step by step

1. Click the **Audio** button next to the die on the main screen.
2. Click **Browse...** and choose a WAV or MP3 file, or drop the file on the window. Analysis starts straight away and takes a few seconds.
3. Optional: to analyze only part of a song, type **From** and **To** as seconds (`45`) or minutes:seconds (`0:45`), then click **Analyze** again.
4. Look at what was found: tempo, meter, key, number of bars, strumming or picking, the pattern and the chords.
5. If the tempo is twice or half what you expected, click **½×** or **2×**. The recording is read again at that tempo.
6. Click **Use this**. The chord cards on the main screen are replaced. Your guitar sound, feel knobs, stereo and export settings stay as they are.

What it finds

	What you get
Tempo	Beats per minute. A clean whole number when the recording is steady (e.g. 96).
Meter	4/4, 3/4 or 6/8, and where bar 1 starts. Silence and count-ins at the start are skipped.
Key	The home key, e.g. G major or E minor. Chords are written with sharps or flats to match it.
Chords	One chord per bar, or two (“C G”, two beats each) when the harmony changes half-way. Major and minor, and with **7th & sus chords** on also 7, maj7, m7, sus2, sus4 and dim when they're clearly played. Each card also shows its Roman numeral in the key.
Playing	Strumming or fingerpicking, straight or with a triplet (swing) feel.
Pattern	The built-in pattern that plays exactly the same strokes, or a new pattern written from the recording (see below). Songs whose sections strum differently get one pattern per section.
Unclear bars	Chords that weren't clear are marked with ? on the card.

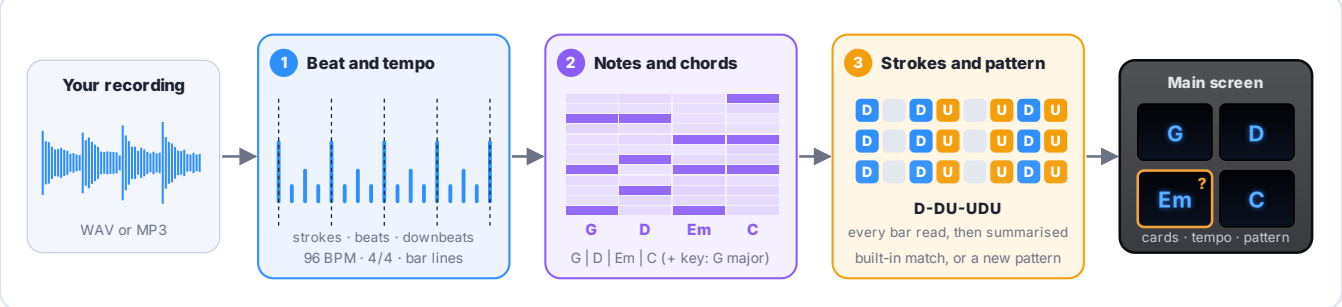


Figure 15. How a recording becomes chord cards: the beat first, then the notes, then the strokes.

First the program finds every stroke and works out the beat from how they repeat. Then it reads which notes sound during each beat and finds the chord that explains them best, keeping the bass note and the key in mind, and decides where the bars start (chords usually change on the first beat of a bar). Last, it looks at every stroke on a 16th-note (or triplet) grid.

Built-in pattern or a new one

For each stroke the program notes where it falls in the bar, how loud it is, and what kind of stroke it is:

It hears…	So it writes	Because
the bass strings ring out with the others	**D** (down)	downstrokes start on the low strings
only the treble strings	**U** (up)	upstrokes catch the top 3–4 strings
a stroke much softer / louder than the beats	**d u** / **A**	ghost strokes and accents
a dead, noisy click with no ringing note	**X x**	muted chuck or scratch
only the low strings, cut short	**P p**	palm mute
a full chord cut short	**S s**	staccato chop
a single bass note	**B b**	bass note (alternate bass)
single notes or pinches (fingerpicking)	**B A 1 2 3**…	which string of the chord shape was plucked

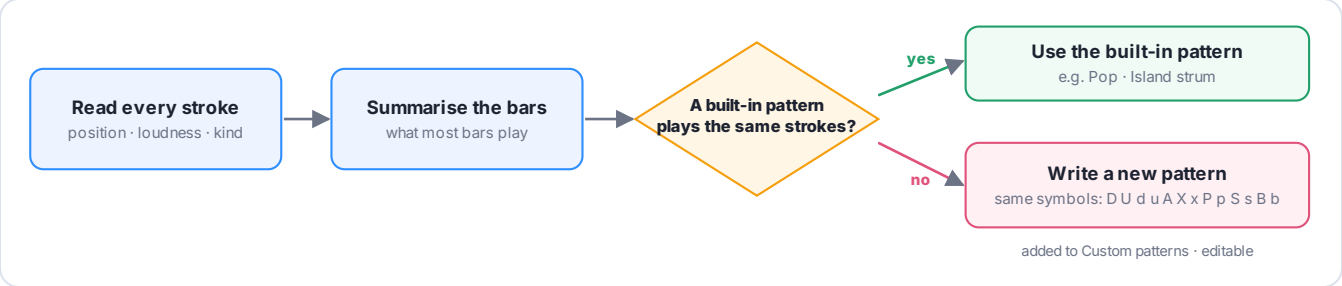


Figure 16. A built-in pattern is used only when it plays the same strokes as the recording.

A built-in pattern is used only when it plays a stroke wherever the recording does, rests wherever the recording rests, and uses the same kind of stroke. Otherwise the program writes a **new pattern** with exactly what it heard, using the same symbols as the pattern library (chapter 5). It's named after the file (e.g. *From audio · my song*), added under **Custom patterns**, and you can edit it there like any pattern you made yourself. The window also tells you which built-in pattern came closest.

A bar that clearly plays something else, such as a final strum left to ring, gets the built-in pattern that fits it.

Checking the result

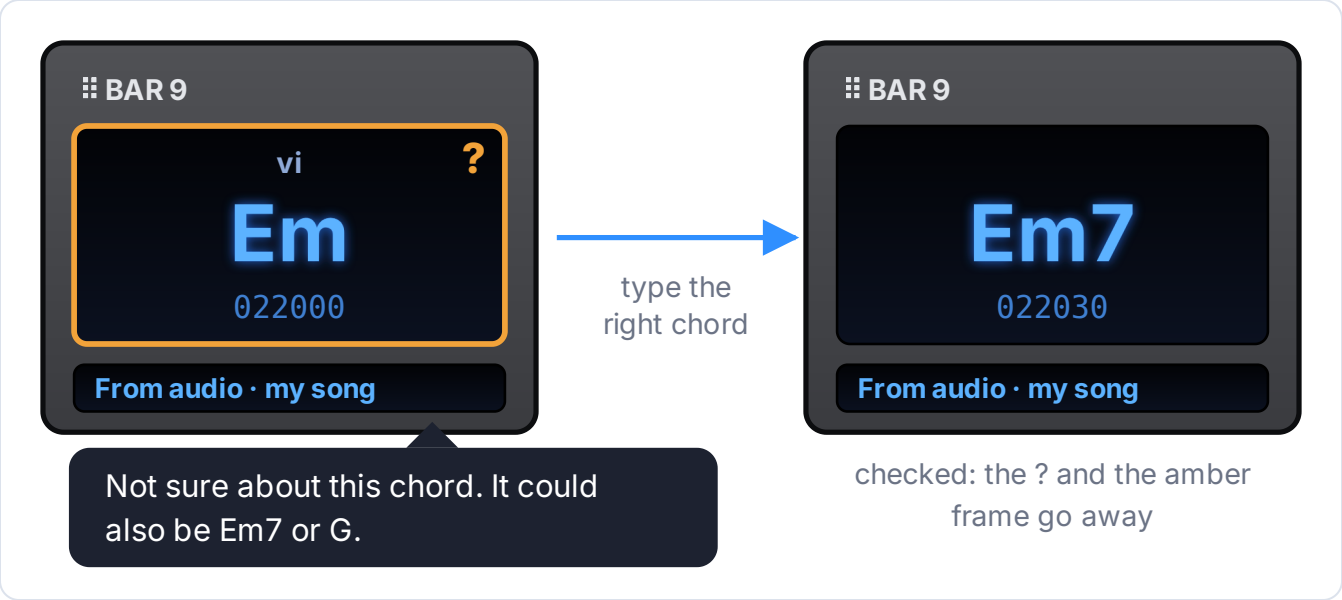


Figure 17. A chord the program wasn't sure about. Point at the ? to see the alternatives; type the right chord and the mark goes away.

Cards with an amber frame and a **?** are chords the program wasn't sure about. Point at the card to see what else it might be, play the bar and listen, and type the right chord if needed. As soon as you change the chord, the mark goes away.

The same music can be written at two tempos: a slow song in 16th notes is the same as a twice-as-fast song in 8th notes. If the tempo or the number of bars looks doubled or halved, use **½×** or **2×** before you click **Use this**.

Getting the best results

Tip	Why
Use a recording of guitar alone, or guitar and voice	drums, bass and keyboards add notes and clicks that aren't the guitar
Pick one section with **From** and **To**	e.g. the first verse; quicker, and you get the pattern of that part
Steady tempo works best	the tempo is one number for the whole song; free-time playing and big tempo changes can't be followed
Keep **7th & sus chords** on for jazzier songs, off for simple songs	off means only major and minor chords are named
Turn **2 chords / bar** off if you see split cards you don't want	every card then holds one chord
Capo songs are named as they sound	a G shape with a capo on fret 2 is written A; use the app's chords, or move the shapes yourself

If the recording isn't tuned to A = 440 Hz (an older record, or a guitar tuned slightly flat), the program notices and names the chords as if it were in tune. In the plugin, the tempo comes from your DAW: set the project to the tempo shown in the window.

From the command line: `gpgen --analyze song.mp3 --save song.gpsong`. See chapter 14.

10

Guitar sounds

The **Guitar sound** menu chooses the guitar that plays in the preview, in WAV export and in the plugin. It lists ten built-in guitars first, then any SoundFonts you have imported.

Built-in guitars

Guitar sound	Character
Dreadnought · Rosewood · Vintage	Big, booming bass, scooped mids and sparkling highs. The classic bluegrass and singer-songwriter dreadnought.
Dreadnought · Rosewood · Deluxe	Rich and complex, with long sustain and a shimmering top end. A high-end rosewood dreadnought.
Jumbo · Rosewood · Modern	Bright, even and articulate across all strings. Modern bracing gives a clean, balanced voice.
Round-shoulder · Mahogany	Warm, dry and punchy, with a strong midrange and a quick decay. A classic 'workhorse' songwriter sound.
Dreadnought · Rosewood · Arched back	Loud and powerful, with strong low mids and projection. An arched-back rosewood dreadnought.
Classical · Spruce top	Clear, focused concert classical guitar with a defined attack and good projection.
Classical · Cedar top	Warm, soft and round, and responsive to a light touch. The intimate classical sound.
Flamenco · Cypress	Bright, percussive and quick to decay, with a snappy attack for rasgueado strums.
Archtop · Jazz	Round, woody and mellow, with the highs rolled off. For jazz comping.
Electric · Clean	Clean single-coil electric guitar with a long sustain and a glassy top end. No amp or effects.

The built-in guitars need no sample files. Each string is physically modelled and the body of the guitar is simulated:

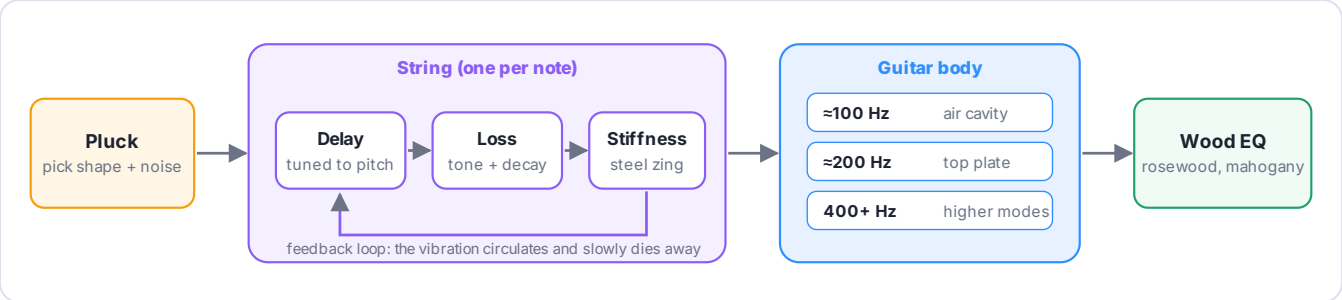


Figure 18. Inside a built-in guitar sound.

> **NOTE** The built-in sounds are synthesized profiles of guitar *types*, not recordings of particular instruments. For the sound of real recorded guitars, use a SoundFont.

Adding your own guitars (SoundFonts)

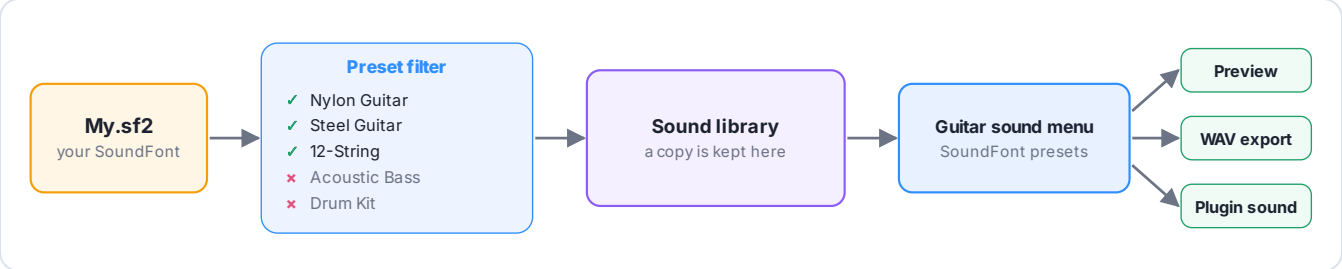


Figure 19. Importing a SoundFont.

1. Click **+ SoundFont...** next to the Guitar sound menu and choose one or more **.sf2** files.
2. From a small SoundFont (a typical guitar library) every sound is added. From a large General MIDI bank only the guitars are added; basses and drums are skipped.
3. The new sounds appear in the menu as **SoundFont · preset · file**, and the first one is selected.

Each file is **copied into your sound library** (`%AppData%\AcousticGuitarTrack\SoundFonts`), so songs and DAW projects keep working if you move or delete the original. The app and the plugin share the library.

To remove a SoundFont sound, select it and click ×. The file is deleted from the library when its last sound is removed. A song that used it falls back to the nearest built-in guitar; import the same file again to get it back.

> **TIP** Good free starting points are the guitar sounds in the **GeneralUser GS** and **FluidR3_GM** SoundFonts. Dedicated acoustic or nylon-guitar libraries sound best. Only .sf2 files are supported (not .sf3 or SFZ).

11

Stereo double-tracking

Studio producers often record an acoustic part two or more times and pan the takes left and right. The **STEREO** section does the same: it makes the part sound like two, three or four guitarists playing together.

Control	What it does
Double	Switches double-tracking on or off.
Width	0% = every guitar in the centre (a thicker mono sound) · 100% = hard left and right. 70–90% is the classic wide acoustic sound.
Guitars	2 (left and right), 3 (left, right, and a slightly quieter centre) or 4 (two wide and two inside).
Shapes	Lets guitars 2 and 4 play the other kind of chord shape (open ↔ barre), like a real double part.



Figure 20. Where the guitars sit, seen from above.

Why it sounds like real players

This is not a chorus or delay copying one guitar. Every guitarist plays **their own take**:

	Guitar 1	Guitar 2	Guitar 3	Guitar 4
Human feel	original	new take	new take	new take
Strum speed	×1.00	×1.18	×0.86	×1.10
Extra timing looseness	–	+2 ms	+2.5 ms	+3 ms
Touch (dynamics)	×1.00	×0.97	×0.95	×0.93
Tuning	0	+5 cents	−5 cents	+8 cents
Chord shapes (Shapes on)	as set	swapped	as set	swapped

Built-in guitars also get a slightly different body for each player. The takes are then placed across the field with constant-power panning, so the overall loudness stays even as you turn Width.

> **NOTE** Doubling is heard in the preview, in WAV export and in the plugin's sound. The MIDI output stays a single part. While previewing, Width changes are heard at once; switching Double or changing the number of guitars restarts the preview from the top.

12

Listening and exporting

Preview

▶ **Preview** (app) plays the song through the chosen guitar sound on your default audio output; ■ **Stop** stops it. The card that is playing gets a glowing bottom edge. Changes to chords and patterns are heard from the next loop.

MIDI files and drag-and-drop

Export .mid... saves a standard MIDI file (one track, channel 1, with tempo, time signature and the General MIDI guitar that matches your Guitar sound). **Drag MIDI to DAW** writes the same file and lets you drop it straight onto a DAW track as a clip.

WAV audio

Export .wav... renders the part with the current Guitar sound and stereo settings. The file is dry: no reverb or effects are added.

Option	Choices
Sound	shown for information; change it with the Guitar sound menu
Format	44.1, 48 or 96 kHz · 16-bit, 24-bit or 32-bit float
Ring-out	seconds added after the last bar so the final chord can fade (default 2 s)
Normalize	scales the file so its loudest peak is at −1 dBFS

Saving songs

In the app, **Save** and **Open...** use **.gpsong** files. They store everything: chords, patterns, custom patterns, feel, stereo, Guitar sound and export settings. In the plugin all of this is saved inside your DAW project.

13

Using the plugin in your DAW

Connecting it in your DAW

Put the plugin on an instrument track. With its **Sound** switch on, it plays its own guitar sound and you are done. To use another guitar instrument instead, send the plugin's MIDI to that instrument:

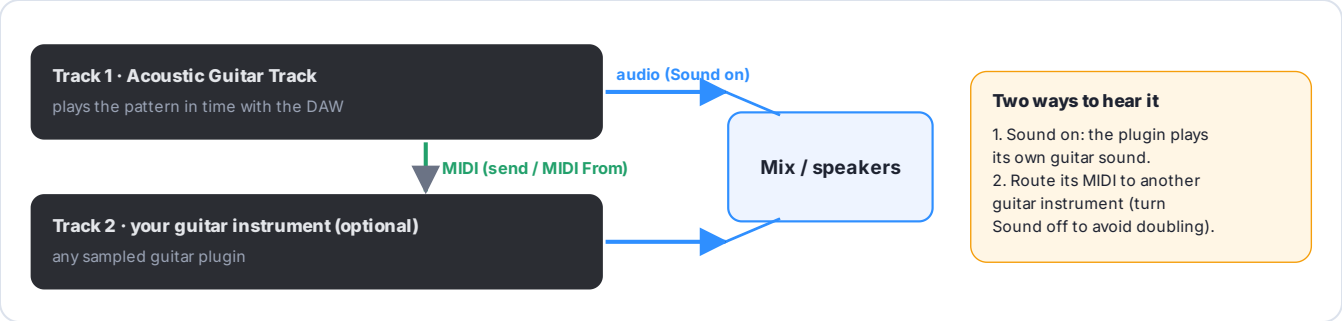


Figure 21. Two ways to hear the plugin in a DAW.

DAW	How to route the plugin's MIDI to another instrument
Reaper	Track 1: plugin. Track 2: guitar instrument. On track 1 open **Routing**, add a send to track 2 with Audio *None* and MIDI *All*.
Ableton Live	Plugin on one MIDI track. On the guitar track set **MIDI From** to that track / Acoustic Guitar Track, then arm or monitor it.
Cubase · Studio One · Bitwig	Create an instrument track with the plugin, then set the guitar track's MIDI input to the plugin's MIDI output.
Any DAW	Drag **Drag MIDI to DAW** onto a track to drop the part as a normal MIDI clip (see chapter 12).

App and plugin compared

	Standalone app	Plugin
Tempo	Tempo display + TAP	follows the DAW (shown in the display)
Start position	bar 1	**Start bar**: the DAW bar where your bar 1 begins
Listening	Preview / Stop	the DAW's transport; loops and jumps follow the DAW
Sound	always the Guitar sound	**Sound** switch: guitar sound on or off (MIDI is always sent)
MIDI	Export .mid / Drag MIDI	sent live to the DAW, plus Export .mid / Drag MIDI
Saving	.gpsong files	inside the DAW project

Timing is sample-accurate: notes land on the exact sample, also across DAW loops and when you jump around the timeline. Notes that are still sounding are released when the transport stops or jumps.

WATCH OUT Hearing the guitar twice? The plugin's Sound is on *and* its MIDI goes to another instrument. Turn one of them off.

14

Command-line tool

The solution also builds **gpgen**, a command-line tool for quick renders and batch work. Run it with `dotnet run --project src/GuitarPattern.Cli --` followed by options.

Option	Meaning
`--chords "C G Am F"`	chords, same syntax as quick fill (:N lengths and | work)
`--pattern "Pop · Island strum"`	pattern name
`--tempo 96 --beats 4 --seed 7`	tempo, beats per bar, feel seed
`--song file.gpsong`	use a saved song instead of --chords
`--out song.mid`	MIDI file to write (default guitar.mid)
`--wav song.wav --rate 48000 --bits 24`	also render audio
`--guitar dread-rosewood-deluxe`	built-in guitar id, or a SoundFont id like `"sf2:My.sf2|0|25"`
`--double 2 --width 0.9 --same-shapes`	stereo double-tracking
`--random Advanced --style Fingerpicking --bars 12 --count 5`	print random progressions
`--patterns · --check-patterns · --pattern-book FILE`	list, check or document the patterns
`--voicing "F#m Bb7"`	show fingerings
`--sf2-presets file.sf2 · --import-sf2 file.sf2`	inspect or import a SoundFont
`--analyze song.mp3 --from 0:30 --to 1:15`	Import audio: print tempo, key, chords and pattern of a recording
`--analyze song.wav --save s.gpsong --out s.mid --wav back.wav`	... and save it as a song, MIDI file or backing track
`--tempo 96 --beats 3 --triads-only --one-chord-per-bar`	with --analyze: force tempo or meter, simpler chords
`--analysis-test`	check the analyzer on built-in test songs

15

Troubleshooting and FAQ

The plugin doesn't show up in my DAW.

Use a 64-bit DAW that loads VST3 plugins, make sure the complete plugin folder is in your VST3 folder, and rescan plugins.

The plugin is silent.

Check that the DAW transport is playing past the plugin's **Start bar**, that **Sound** is on, and that the track is monitored. A large SoundFont takes a moment to load after you select it.

I hear the guitar twice.

The plugin plays its own sound and also sends MIDI to another instrument. Turn off **Sound**, or remove the MIDI route.

My DAW can't route the plugin's MIDI.

Use **Drag MIDI to DAW** or **Export .mid...** and put the clip on any instrument track.

A chord card has a red frame.

The chord name wasn't recognised. See the table in chapter 4. Use N.C. for silence.

A 3/4 or 6/8 pattern sounds wrong.

Set **Beats / bar** to 3 for 3/4 patterns and 2 for 6/8 patterns.

The preview makes no sound.

Check your Windows default playback device and that no other program holds it in exclusive mode.

A SoundFont won't import.

Only .sf2 files are supported (not .sf3 or SFZ), and the file must not be damaged. The message names the file and the problem.

A song from another computer plays a different guitar.

It used a SoundFont that isn't in this computer's library. Import the same .sf2 file and the sound comes back.

Why isn't the doubling in my MIDI file?

Double-tracking is an audio feature. Export .wav... to get the doubled sound as audio.

The exported WAV is too loud or too quiet.

Turn on **Normalize** for a consistent level with its loudest peak at −1 dBFS.

Import audio found twice (or half) the tempo.

Both readings play the same rhythm. Click **½×** or **2×** in the Import audio window to read it again at the tempo you expect.

Import audio got some chords wrong.

Check the cards marked **?** first. Choose a section where the guitar plays alone with **From** and **To**, and try with **7th & sus chords** off. Recordings with drums and bass are harder.

The imported pattern isn't quite right.

Edit it under **Custom patterns** (it's named after your file), or pick a built-in pattern and click **Apply pattern to all**.

Import audio says the file can't be read.

Use a WAV (PCM or float) or MP3 file. Other formats (M4A, FLAC, OGG) can be converted to WAV in most audio players or editors.

A

Pattern library

All built-in patterns. Menus show them as *Genre · Name*. Grid: 2 = eighths, 3 = triplets, 4 = sixteenths.

Basic

Pattern	Notation	Type · grid · meter	BPM
Whole note	`D-------`	Strum · 2 · 4/4	any
Half notes	`D---D---`	Strum · 2 · 4/4	any
Quarters	`D-D-D-D-`	Strum · 2 · 4/4	any
Eighths	`DUDUDUDU`	Strum · 2 · 4/4	any
Rest (silent)	`----`	Strum · 1 · 4/4	any

Pop

Pattern	Notation	Type · grid · meter	BPM
Island strum	`D-DU-UDU`	Strum · 2 · 4/4	80–130
Chuck backbeat	`D-XU-UXU`	Strum · 2 · 4/4	85–120
Accent backbeat	`DuAuDuAu`	Strum · 2 · 4/4	95–130
Modern syncopated	`D--UD-D-D--UD-DU`	Strum · 4 · 4/4	90–115
Anticipation	`D-DU-UD-`	Strum · 2 · 4/4	80–120
Sparse verse	`D---d-DU`	Strum · 2 · 4/4	70–110

Rock

Pattern	Notation	Type · grid · meter	BPM
Straight 8ths	`DdDdDdDd`	Strum · 2 · 4/4	100–160
Palm-mute chug	`PPPPPPPP`	Strum · 2 · 4/4	100–170
Chug and crash	`A-PPPPPP`	Strum · 2 · 4/4	100–160
Power push	`A-PPA-PP`	Strum · 2 · 4/4	110–160
Anthem	`D-DUD-DU`	Strum · 2 · 4/4	100–140
Grunge loud-quiet	`A--UD-DU`	Strum · 2 · 4/4	90–130
Stop time	`S-----S-`	Strum · 2 · 4/4	100–150

Punk & Metal

Pattern	Notation	Type · grid · meter	BPM
Fast downstrokes	`DDDDDDDD`	Strum · 2 · 4/4	160–220
Verse to open	`PPPPPPD-`	Strum · 2 · 4/4	150–210
Gallop (Metal)	`P-PPP-PPP-PPP-PP`	Strum · 4 · 4/4	120–180
16th chug (Metal)	`PPPPPPPPPPPPPPPP`	Strum · 4 · 4/4	90–140
Chug and stab (Metal)	`A---PPPPA---PPPP`	Strum · 4 · 4/4	100–150

Folk

Pattern	Notation	Type · grid · meter	BPM
Campfire	`D-D-DUDU`	Strum · 2 · 4/4	90–130
Bass and strum	`B-DUD-DU`	Strum · 2 · 4/4	90–130
Driving 16ths	`D-dUD-dUD-dUD-dU`	Strum · 4 · 4/4	80–110
Slow ballad	`D---D-DU`	Strum · 2 · 4/4	60–90

Country

Pattern	Notation	Type · grid · meter	BPM
Two-step	`B-D-b-D-`	Strum · 2 · 4/4	100–140
Carter strum	`B-DUb-DU`	Strum · 2 · 4/4	100–150
Train beat	`X-DUX-DUX-DUX-DU`	Strum · 4 · 4/4	140–180
Shuffle chug	`P-PP-PP-PP-P`	Strum · 3 · 4/4	110–150

Blues & Jazz

Pattern	Notation	Type · grid · meter	BPM
Shuffle strum	`D-uD-uD-uD-u`	Strum · 3 · 4/4	80–130
Slow 12/8	`DudDudDudDud`	Strum · 3 · 4/4	50–75
Boogie chug	`P-pP-pP-pP-p`	Strum · 3 · 4/4	100–150
Four to the bar (Jazz)	`S-S-S-S-`	Strum · 2 · 4/4	120–220
Charleston (Jazz)	`S--s----`	Strum · 2 · 4/4	120–200

Reggae & Ska

Pattern	Notation	Type · grid · meter	BPM
One drop chop	`--S---S-`	Strum · 2 · 4/4	65–85
Double chop	`----Ss------Ss--`	Strum · 4 · 4/4	65–85
Offbeat ups (Ska)	`-s-s-s-s`	Strum · 2 · 4/4	140–200
Offbeat downs (Rocksteady)	`-S-S-S-S`	Strum · 2 · 4/4	90–120

Funk & Soul

Pattern	Notation	Type · grid · meter	BPM
16th scratch	`AxXUXxDxXuDUXxDU`	Strum · 4 · 4/4	90–115
Chicken scratch	`XxXxDxXxXxXxDxXx`	Strum · 4 · 4/4	95–120
Stabs	`S--s--S---S--s--`	Strum · 4 · 4/4	95–115
Wah 16ths	`DuDuDuDuDuDuDuDu`	Strum · 4 · 4/4	90–110
Backbeat stabs (Soul)	`----S--u----S-du`	Strum · 4 · 4/4	70–100

Latin

Pattern	Notation	Type · grid · meter	BPM
Rumba	`D-XUD-XUD-XUD-XU`	Strum · 4 · 4/4	90–130
Dembow	`S--s--S-S--s--S-`	Strum · 4 · 4/4	85–100
Bossa strum	`B--S--S-b-S--S--`	Strum · 4 · 4/4	110–140
Cumbia	`Bs-sbs-s`	Strum · 2 · 4/4	90–110

Ballad

Pattern	Notation	Type · grid · meter	BPM
Soft 16ths	`D--UD-D-D-DU-UDU`	Strum · 4 · 4/4	60–85
Half-time	`D---D-du`	Strum · 2 · 4/4	60–80
Power chorus	`A-DU-UDU`	Strum · 2 · 4/4	65–90

3/4 & 6/8

Pattern	Notation	Type · grid · meter	BPM
Strum (3/4) (Waltz)	`D-dudu`	Strum · 2 · 3/4	90–160
Oom-pah-pah (3/4) (Waltz)	`B-D-D-`	Strum · 2 · 3/4	100–170
Ballad strum (6/8)	`D-uDud`	Strum · 3 · 6/8	45–70
Irish jig (6/8)	`DudDud`	Strum · 3 · 6/8	100–130

Fingerstyle

Pattern	Notation	Type · grid · meter	BPM
Arpeggio	`B 3 2 3 1 3 2 3`	Finger · 2 · 4/4	60–110
Travis picking	`B+1 3 A 2 B+1 3 A 2`	Finger · 2 · 4/4	80–130
Travis syncopated	`B+1 2 A 3+1 B 2 A+1 3`	Finger · 2 · 4/4	80–120
Ballad	`B 3 2 3 A 3 2 3`	Finger · 2 · 4/4	60–90
Rolling arpeggio	`B 3 2 1 2 3 2 1`	Finger · 2 · 4/4	70–110
Bass + pinch	`B - 3+2+1 - A - 3+2+1 -`	Finger · 2 · 4/4	70–120
Pinch halves	`B+3+2+1 - - - A+3+2+1 - - -`	Finger · 2 · 4/4	60–100
16th roll	`B 3 2 1 A 3 2 1 B 3 2 1 A 3 2 1`	Finger · 4 · 4/4	60–90
Classical p-i-m-a	`B 3 2 1 2 3 A 3 2 1 2 3`	Finger · 3 · 4/4	60–90
Blues shuffle	`B - 3+2 A - 3+2 B - 3+2 A - 3+2`	Finger · 3 · 4/4	80–120
Hybrid country	`B 2+1 A 2+1 B 2+1 A 2+1`	Finger · 2 · 4/4	100–150
Bossa nova	`B+3+2+1 - - 3+2+1 - - 3+2+1 - A - 3+2+1 - - 3+2+1 - -`	Finger · 4 · 4/4	110–140
Neo-soul	`B - 3 2 1 - 2 - A - 3 2 1 - 2 -`	Finger · 4 · 4/4	65–90
Waltz (3/4)	`B - 3+2+1 - 3+2+1 -`	Finger · 2 · 3/4	90–150
6/8 arpeggio	`B 3 2 1 2 3`	Finger · 3 · 6/8	45–70

B

Glossary

Bar
A group of beats, usually 4. Each chord card normally lasts one bar.

Barre chord
A chord where one finger presses several strings across one fret; movable up and down the neck.

BPM
Beats per minute: the tempo.

Cadence
The chord movement that ends a phrase, e.g. V → I.

DAW
Digital audio workstation: Reaper, Cubase, Ableton Live and so on.

Double-tracking
Recording or playing the same part more than once and panning the takes apart.

General MIDI
A standard list of 128 instrument sounds; programs 25–32 are guitars.

Key
The home note and scale a song is built on, e.g. G major. Its chords are the ones that sound most at home.

MIDI
Note data (which note, when, how hard) without sound.

Onset
The moment a note or strum starts. Import audio finds the beat from the onsets.

Open chord
A chord near the nut that uses open strings (C, G, D, Em...).

Palm mute
Resting the picking hand on the strings near the bridge for a short, chunky sound.

Roman numeral
A chord's place in the key: I is the home chord, IV and V its neighbours; lower case = minor (ii, iii, vi).

SoundFont (.sf2)
A file of recorded instrument samples that any SoundFont player can play.

Voicing
The exact notes and strings used to play a chord.

VST3

A plugin standard that lets instruments and effects run inside a DAW.

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