A-List Acoustic Guitarist 2.0

Introduction

Acoustic Guitarist is the first Rack Extension instrument in the A-List series for Propellerhead Reason and Reason Essentials. Think of Acoustic Guitarist as a professional session guitarist playing rhythm guitar on a top-notch acoustic steel string guitar, and performing exactly as you wish, while leaving you full control over sound character, musical performance and mix. Whether you want to add realistic rhythm guitar tracks to your productions, use it as an inspiration for writing songs on a train or plane, or as source material for creative sound design - it will get you from idea to result as fast as possible.

At the core of Acoustic Guitarist - and all future instrument of the Propellerhead A-List series - is the idea that you can create professional sounding instrument tracks exactly the way you would get them from an A-List player in the studio. There, you'd give them a lead sheet, adjust sound character and mix, and tell your session guitarist what kind of musical style and performance you're expecting, and a great player would deliver exactly that.

Acoustic Guitarist does exactly that for you: the lead sheet becomes MIDI notes in your Reason tracks (or played live on a MIDI controller), there are controls for sound and mix, you load styles and select phrases in real-time, and there are performance controls to vary the performance.

Whatever Acoustic Guitarist does, it does extremely well, fast, and asking absolute minimal effort of you.

Try it now - it's easy and fun!

Acoustic Guitarist is designed for creating stunning dynamic performances using very simple MIDI commands. The perfectly played phrases and styles all come built in. All you need to do is provide chords, pick phrases and optionally make (real-time) adjustments. You can even dynamically control palm muting of the strings for dynamic expression and creation of your own phrasings.

Here's how it basically works - and we encourage you to try it now.

1. **Create an Acoustic Guitarist device in the rack.**
   It will load a default style that's all you need for now.

2. **Start playing on your connected MIDI keyboard or the built-in Interactive Keyboard.**

➜ **Hit a key or chord from the note C4 and upwards and Acoustic Guitarist will start playing.**

→ **Activate the Latch switch so it keeps playing.**

→ **Hit the note B3 when you want to stop in Latch Mode.**

→ **Move the Mod Wheel or apply Aftertouch on your MIDI keyboard to apply palm muting.**
You can live-control palm muting using the Mod Wheel or Aftertouch. Turning up the Mod Wheel gradually increases the pressure of the palm, Aftertouch switches between no and full pressure.

→ **Vary the phrasing.**
Pressing keys (or generally: sending MIDI notes) between C1 and Bb3 selects phrases. The lower two octaves select a set of standard phrases, the C3-Bb3 octave selects phrases of the currently loaded style.

→ **Change the sound character.**
Use the Mic/Pickup switch and the Character control to vary the overall tone of the guitar. Turn the Shimmer control clockwise and notice how the sound gets more "shiny", or "glitzy".

→ **Add a second guitar player.**
Activate the Doubling button in the performance section to activate a second player (similar to overdubbing in the studio), with the players panned left and right in the stereo image.

Background

It is important to know that Acoustic Guitarist does not emulate a guitar. It does not let you edit individual notes, but it also does not require you to play individual notes, or to think about how to emulate realistic strumming or typical guitar voicings. It has all that built in, simply because it is based on actual rhythm guitar recordings, not samples of individual notes.

What Acoustic Guitarist emulates is therefore a studio guitarist who already knows how to play. Because when you have an idea in your head and want to get it to "tape" the last thing you want to do is having to struggle with MIDI editing and trying to make a MIDI performance sound realistic. What you need is a professional player recording your idea the way you want it. That's exactly what Acoustic Guitarist does.

The foundation of Acoustic Guitarist is real performances on a top-notch acoustic guitar, played by a professional player and recorded both with a studio microphone and a pickup mounted on the guitar.

During the sessions for Acoustic Guitarist, about 1100 phrases were played and recorded, totaling more than 15 hours of guitar performances. Those were then meticulously selected, adjusted and prepared in a sophisticated and unique way, allowing us to create a Rack Extension that can virtually play any guitar phrase at any tempo and always sound like an original performance.

Panel overview

The Acoustic Guitarist front panel contains the following sections:

Acoustic Guitarist front panel sections

- **1. Source section (for adjusting the basic sound character of the guitar).**
- **2. Performance section (for telling the "virtual player" which Style to play and for tweaking a few performance parameters).**
- **3. Mix section (for adjusting the Attack, Shimmer and Volume of the audio output).**
- **4. Patch selector (for browsing, loading and saving patches).**
- **5. Interactive keyboard (for telling the "virtual player" which Phrases and Chords to play).**

Loading and saving patches
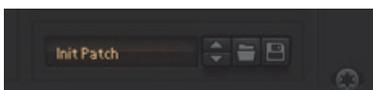
Loading and saving patches is done in the same way as with any other internal Reason/Reason Essentials device - see the "Sounds and Patches" chapter in the Reason/Reason Essentials Operation Manual pdf for details.

! **On instantiating Acoustic Guitarist, or when loading Combinator Patches featuring Acoustic Guitarist, it can take a few seconds until all content is loaded into RAM.**

Panel controls

Source section

In this section you set the basic sound character of the Guitar.

Mic or Pickup

Acoustic Guitarist lets you choose between two signals:

- **Mic**
  A vintage large-membrane studio condenser microphone positioned about 1 ft. from the neck/bridge intersection. The Mic signal has strong bass and treble and generally a more "rounded" sound character.

- **Pickup**
  A pickup mounted on the guitar. The pickup sounds drier, more compact and direct.

- **!** **Switching between Mic and Pickup replaces the entire guitar content. This means it will take a couple of seconds before the new guitar is loaded.**

- ► **Some engineers like to combine a guitar recorded via pickup with one recorded via microphone. Combine two instances of Acoustic Guitarist to accomplish this.**

Fret Noise

When changing from one chord to another, the fingers sliding on the fretboard create characteristic noises that add to the authentic character of an acoustic guitar. Acoustic Guitarist has an algorithm that produces these noises dynamically, exactly where they would occur on a real guitar. You can switch them on by activating this button.

Low Tune

Activating this button emulates a guitar where the strings of the entire guitar are tuned down by two semitones, but the player still plays the same chords. This generally leads to a darker sound character and also extends the low range down from E to D. Basically this means:

- **You can play chords down to the low D.**

- **The guitar will generally sound fuller/lower as lower versions/inversions of the wanted chord are now available.**

Character

The Character knob adjusts the recorded signal before it enters any further sound processing inside Acoustic Guitarist. It offers five distinct settings:

Knob position	Character	Use…
Warm	Bassy tone with softened high end.	… to beef up an arrangement in the low/mid range. Works best with slow, not too animated material.
Full	Pronounced mid range, low and high end attenuated.	… for adding harmonic content to a mix without adding too much high end (strumming)
Original	Untreated signal, straight from the microphone/pickup.	… for a straight acoustic guitar character, or if you plan to do all sonic treatment in the mixer or using studio processors.
Bright	Pronounced high mids and treble, low end rolled off.	… for a guitar track that blends well with other harmonic/chord tracks, without interfering with the lower mids. Allows you to bring down the level and still keep the strumming "recognizable".
Crisp	High frequencies of the strum noise almost isolated, no bass or mids.	… add high end animation to any mix, without interfering with other chord sounds. Works particularly well with doubling activated.

Position

The Position knob emulates moving the strumming hand between bridge and neck.

- **The center position represents the recording position - the hand strumming over the sound hole - and is therefore neutral.**

→ **Turn the knob to the left (moving the virtual hand towards the bridge) for a thinner sound with more attack.**

→ **Turn the knob to the right (moving the virtual hand towards the neck) for a more full-bodied, hollow sound.**

Performance section

This section is a mixture of selectors, knobs and displays for selecting and adjusting the musical performance.

Styles and Phrases

Acoustic Guitarist is designed to produce rhythm guitar tracks. As the term indicates, a rhythm guitarist doesn't play melodies, but phrases. A phrase in this context is a rhythmic sequence of strummed chords.

A Style in Acoustic Guitarist is a collection of phrases of a certain musical context. Styles are given descriptive names. Phrases, although, are not named but numbered.

- **As you play from left to right on the keyboard's phrase ranges (C#1 - Bb3), phrases become more intense - i.e. denser and more animated.**
  You can add to the dynamic expression of a song by selecting phrases accordingly: As you move from intro to verse to chorus, move right on the phrase selection keys and vice versa.

! The Phrase playback is always triggered by the MIDI Note On; it's not synced to the sequencer's bar position.

The reason for this is you might not always want the phrase locked to the bar position. This way you can be more creative with re-triggering the phrases and get more "live feel". If you want it locked to the bar position in the sequencer this can still be achieved by positioning the trigger notes and/or switching from the silent phrase at the right moment. If you change MIDI notes in a legato fashion (tied), the new notes will continue the "phrase-sync" from the previous note.

Style

In this menu, you can select one of the 57 included musical styles, each available in a normal and half-speed version. Each style features 11 individual phrases (see "Style Phrases").

Swing

This knob gradually applies a shuffle feel to the guitar performance by delaying the off-beats.

Depending on the selected style, 8th or 16th note off-beats will be affected. At maximum position, the off-beat will have the same timing as the last note of a triplet.

Not all phrases contain 8th or 16th note off-beats so in these cases the Swing control has no effect.

Feel

With this control you can tell the virtual player to push or play laid back, i.e. it affects the overall timing of the guitar performance. Right from center, off-beats will be slightly advanced (Push), left from center they will be delayed (Pull).

Latch

Use this toggle button to determine if Acoustic Guitarist should always keep playing or only when keys are held.

If on, Acoustic Guitarist will keep playing after a chord is pressed, until either Latch is switched off or the Stop button in the Reason/Reason Essentials sequencer is pressed.

A sustain pedal can be used as a temporary latch (but does not affect the appearance of the Latch switch). Lifting the sustain pedal unlatches any notes that are no longer held, even if the Latch switch is still on, see "Sustain Pedal".

Doubling

Use this function to create the impression of two independent players playing at the same time.

When on, Acoustic Guitarist will add a second guitar player to the currently selected signal and places them at opposite stereo positions.

Mix section

The controls in this section allow you to adjust the high-end, transients and volume of the output signal.

Shimmer

This control adds silvery high-end to the signal, making the guitar shimmer or sparkle even more. This is particularly useful when you use Acoustic Guitarist as support for hi-hat and other high-frequency rhythmic instruments, as is often the case in pop/rock productions.

Attack

When turned left, this control softens the attack transient (strum) of the guitar signal and accentuates the sustained portion. When turned right, it makes the attack more pronounced.

Volume

Adjusts the audio output volume of Acoustic Guitarist for maintaining an optimal input level into the mixer or subsequent audio processors.

Interactive keyboard

The interactive keyboard is both a display of received MIDI notes and a working on-screen keyboard. The left side of the keyboard (Standard Phrases and Style Phrases) doesn't make any sound by itself. Here, you control the performance of the guitarist by switching between 34 different phrases. 11 of these phrases are set by the style, the rest are always available. The right side of the keyboard (Chords) determines which chord Acoustic Guitarist plays based on the note(s) you send.

! **The interactive keyboard does not get recorded. Use a MIDI keyboard or the Reason/Reason Essentials On-screen Piano Keys for this purpose.**

Standard Phrases

The lower left of the MIDI keyboard (C#1 - B2) is reserved for a collection of so-called "Standard Phrases". These phrases are "hard-wired" and won't change with the Style selection.

Standard Phrases complement the Style Phrases by phrasings that are more generic and applicable to multiple contexts. Combine them with the Style Phrases for maximum variety.

! **Phrases are what you make of them. Acoustic Guitarist lets you switch phrases in real-time without interrupting the performance. That's a great way to create dynamic and interesting phrasings of your own.**

Style Phrases

Keys in this area select phrases of the currently selected Style (see "Style").

Phrases in the Style range start with the lowest density/intensity on C3 and get more complex as you move towards Bb3.

You could generally work your way through a song going from left (intro, verse) to right (chorus), but of course this greatly depends on the style and your song. Just know you always have 11 different rhythms plus the Standard Phrases at your immediate disposal.

The highest key of the Style Range - B3 - is the Stop key. In Latch mode, pressing this key will stop playback whereas the Silent key (C1) will keep playback going, just with an empty phrase.

Chords

Keys in the Chords range function almost like a regular musical keyboard: You start and stop the guitarist's performance and you determine the chords played. It's like playing keyboard, except that instead of playing notes you select the chord the guitarist will perform as a phrase. Acoustic Guitarist recognizes and plays 13 chord types. More on chords and how to make best use of them in "Chord Sets and Fingerings".

Key

This control sets a key for the song, forcing all chord input to the most useful chords in the selected key.

• **In the "Off" position, all chords in all keys are available:**

Played Note:	C	C#	D	Eb	E	F	F#	G	Ab	A	Bb	B
Played back Chord:	Cmaj	C#maj	Dmaj	Ebmaj	Emaj	Fmaj	F#maj	Gmaj	Abmaj	Amaj	Bbmaj	Bmaj

• **In any other position (C, C#, D, Eb etc.), only the chords matching the set scale are available (see below).**

Using the Key parameter has two potential benefits:

• **It's a handy helper if your keyboard or musical skills are basic, or if you want to simplify chord input in general, as it will "quantize" all chord input to chords that aren't entirely wrong for the given key.**

• **It saves memory, because it unloads all chords that aren't in the currently selected key.**

When a key is set, these are the chords Acoustic Guitarist will play depending on the actual input - shown in C:

Played Note:	C	C#	D	Eb	E	F	F#	G	Ab	A	Bb	B
Played back Chord:	Cmaj	Csus4	Dmin	Ebmaj	Emin	Fmaj	Fsus4	Gmaj	Gsus4	Amin	Bbmaj	G7

The currently played back chord is always displayed in the interactive keyboard display.

Building Custom Phrases

The CV/Gate input on the rear panel of Acoustic Guitarist interprets notes differently than the MIDI Input. Notes from C#1 to C#5 don't select phrases and chords, but individual slices of which are laid out across the note range.

You can use this feature to create your own phrases by triggering "slices" (which are individual strums extracted from the original performance). Try it with a Matrix pattern sequencer!

❗ **Note that this just replaces the phrase selection - you will still need to send chord notes via MIDI Input to get the guitarist strumming away!**

| MIDI Note	Function
C1	Stop currently playing slice.
C#1 to C#5	Trigger individual slices.

See "CV Input".

Chord Sets and Fingerings

Chord Sets

Chords take up memory in RAM, therefore Acoustic Guitarist loads only five chord types by default, although it supports 13 different chords.

→ **To load the full chord set, press Tab to get to the rear panel view of Acoustic Guitarist, and activate the toggle switch labeled "Enable full chord set".**
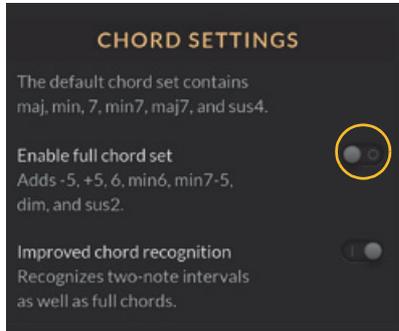

The following selection of chords for the two chord sets is also printed on the rear panel of Acoustic Guitarist:

Default Chord Set:	maj, min, 7, min7, maj7, sus4	
Full Chord Set:	maj, min, 7, min7, maj7, sus4	-5, +5, 6, min6, min7-5, dim, sus2

Chord Fingerings

Acoustic Guitarist has a built-in chord detection that interprets incoming MIDI notes. Here are the fingering schemes for each chord (reference key: C):
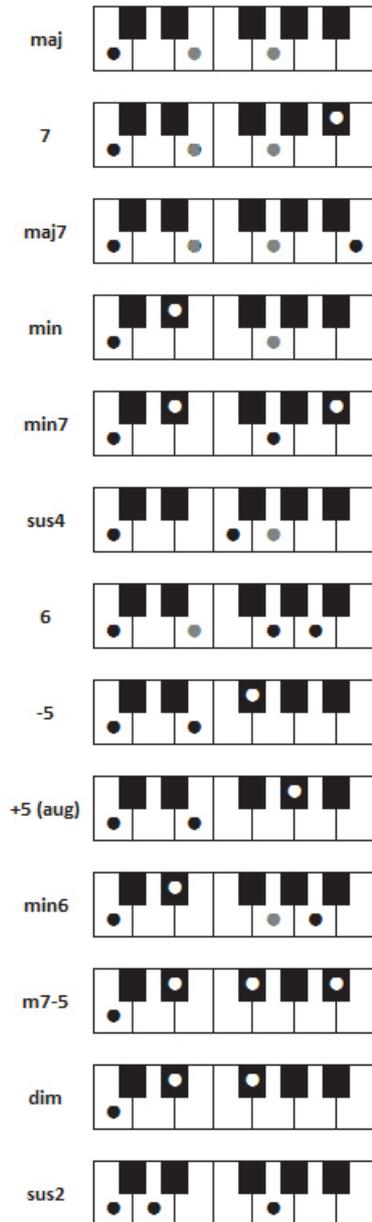

Chord Fingerings (grey dots are optional keys).

Improved Chord Recognition

Optionally, Acoustic Guitarist also lets you play intervals and interprets matching chords. For example, when you play C and D at the same time, Acoustic Guitarist will interpret this as a sus2 chord.

➜ **To enable the recognition of two-note intervals, press Tab to get to the rear panel view of Acoustic Guitarist, and activate "Improved chord recognition" using the toggle switch.**
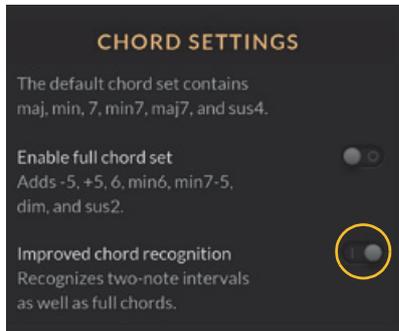
MIDI Controllers

Pitch Bend

The Pitch Bend wheel can be used for creating bending or vibrato. The pitch range is fixed at ±2 semitones.

Mod Wheel

Palm Muting is a powerful method for live-controlling the phrasing of Acoustic Guitarist.

• **The Mod Wheel controls the Palm Muting that your guitarist applies to the performance.**
In the Mod Wheel's default position, no Palm Muting is applied. The further you turn it up, the shorter the notes will become. The maximum position of the Mod Wheel produces entirely "tone-less" muted strums.

► **You can add Palm Muting after the fact by adding a lane to your Acoustic Guitarist track and recording a Mod Wheel performance on top of your notes. Experiment with multiple tracks with different Mod Wheel performances for greatly enhanced live feel and two-player impressions.**

Aftertouch

Like the Mod Wheel, Aftertouch lets you control Palm Muting, but works like a switch between "no muting" and "full muting".

Expression

The Expression Controller is applied individually to each strum in a phrase, so the volume of the previous step that is still playing is not affected. This can be useful for fine-tuning performances.

! **Note that velocity is not used to control volume, as it is difficult to play all notes of a chord with consistent velocity.**

Sustain Pedal

The Sustain Pedal replicates the "Latch" button, so you can use it as an additional way of varying phrases in real-time. Pressing the Sustain Pedal activates latching of chord notes. Releasing the Sustain Pedal releases any latched chord notes even if the Latch button is on.

Connections
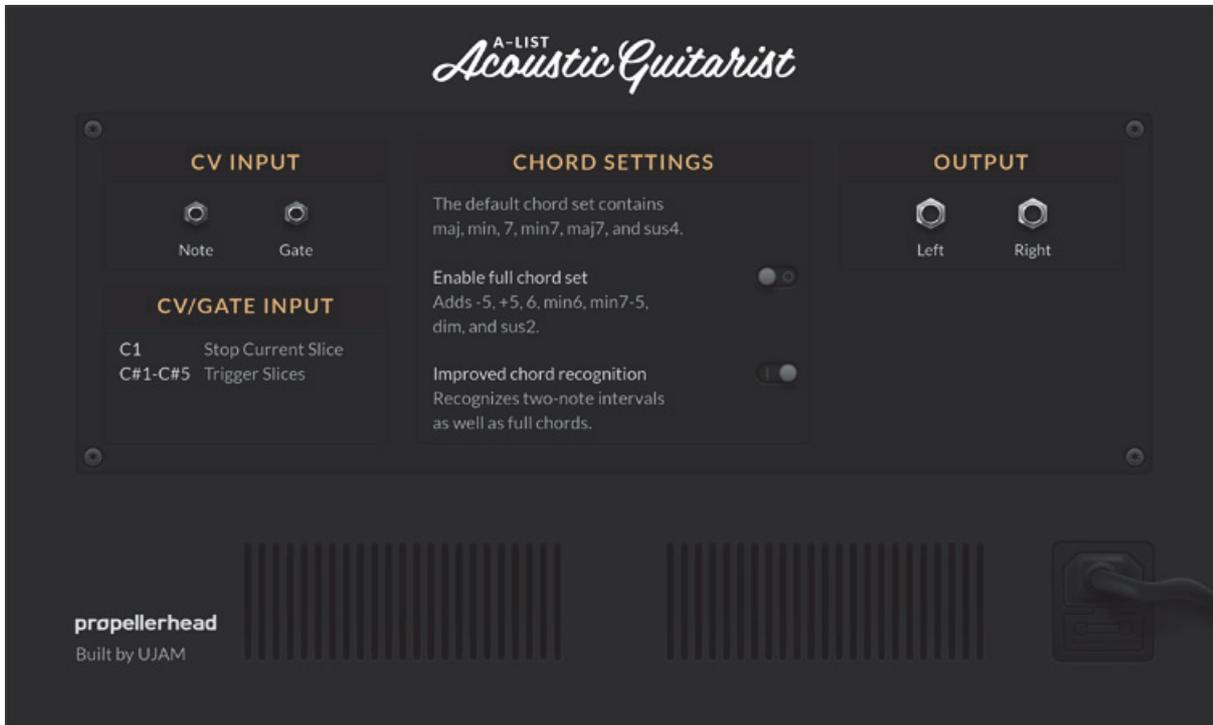
! **Remember that CV connections are NOT stored in the Acoustic Guitarist patches! If you want to store CV connections between devices, put them in a Combinator device and save the Combi patch.**

CV Input

The Note and Gate CV inputs can be used for adding extra phrase creation options by using the CV output from another CV/Gate device (typically a Matrix or an RPG-8). Note that the Gate input also responds to keyboard velocity. Please refer to "Building Custom Phrases" above.

Output

On the right are the main audio outputs. When you create a new Acoustic Guitarist device, these outputs are auto-routed to the first available channel in the Reason/Reason Essentials main mixer.

Advanced tips

Optimizing chord recognition

Acoustic Guitarist tries to be as tolerant to sloppy chord input as technically possible, but particularly when live-recording to a MIDI track, you may end up with it not playing the chords you had in mind. It's really easy to fix this situation if you keep a few things in mind:

→ **Always quantize your MIDI notes in the sequencer.**
Notes with different starting positions can lead to multiple chords getting recognized one after another, or cut-off chords.

→ **Clean up note lengths to make sure there are no note gaps or overlaps.**
In the Legato Adjustments section of Reason's Tool Window you can force legato and remove overlaps.

Minimizing memory consumption

How much memory Acoustic Guitarist requires entirely depends on the settings of the chord set and the Key parameter loaded:

- **The default chord set requires about 220 MB of RAM.**
- **The full chord set increases this figure to around 470 MB.**
- **When setting a key, the allowed chords are all in the default chord set, so if you have the full set selected, you can save memory by switching back to the default set on the rear panel of Acoustic Guitarist.**
- **If you use several Acoustic Guitarist devices in your song, the sample memory is shared among the devices whenever possible.**