VIRTUAL GUITARIST®

IRON

User Guide

by Peter Gorges

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Welcome to Virtual Guitarist IRON

We hope you will enjoy this powerful addition to your musical palette, and we thank you for becoming a part of the UJAM community of music creators!

About the Virtual Guitarist series

The original Virtual Guitarist series was a best-selling virtual instrument developed by Wizoo and distributed by Steinberg. The last version, Virtual Guitarist 2, was discontinued in 2007.

Since then, people have been asking for a Virtual Guitarist 3.

In 2013, the core team behind the original Virtual Guitarist gathered again, and finally it's here. The new Virtual Guitarist is not just an evolution of the original. It is a whole new generation of Virtual Guitarists, *IRON* being the first of them. With an all-new concept and technology Virtual Guitarist instruments now offer vastly expanded realism, musical and sonic capabilities with the same ease and speed of use the legacy instruments were so famous for.

You and us

Virtual Guitarist IRON was built *by* musicians *for* musicians. We at UJAM are a pretty diverse bunch – from DJ to guitarist to weekend producer to Oscar-

awarded Hollywood composer. We build every product for ourselves, and, like you, we're all users of *Virtual Guitarist IRON* too.

That means that before we even start developing, a lot of thought and discussion goes into finding out what you, the user, will expect from the product, what problem it solves, which controls we can remove to make the product more inviting and simpler, which hurdles we can move out of the way between you and a perfect track.

Virtual Guitarist IRON is optimized for one clear, powerful purpose: To produce great-sounding guitar tracks without distracting you from the complex endeavor that producing a song is.

We hope that *Virtual Guitarist IRON* transpires that philosophy in everything you do with it.

Naturally, we're always open to new ideas and critique, and you are always encouraged and welcome to talk to us:

- Send us an email: support@virtualguitarist.com
- Visit our Facebook page: https://www.facebook.com/vrtlguitarist
- Catch us on Twitter: https://twitter.com/vrtlguitarist/

Looking for quick help?

If you're just looking to figure out something quick, there are three ways to get there:

- The *Interactive Overview* is a screenshot of the user interface. Clicking on a control there takes you straight to its explanation.
- The *Quick Reference* has super-short explanations for every control
- The *Walkthrough* is a guided tour where you'll try every control on the *Virtual Guitarist IRON* screen once – the quickest hands-on experience possible.

If you're looking for in-depth explanations of all functions and controls, head straight for the Reference Guide further down.

Interactive Overview

Clicking on any control on the image below will take you to the reference explanation of this particular feature.

Quick Reference

Area	Parameter	Explanation
Menu Bar	Preset	Click name to open menu for browsing and loading a new *Virtual Guitarist IRON* preset
	Save	When editing a user preset, click to save your preset, replacing the previous version.
	Save as	Click to save your preset under a different name and - optionally - assign a category. Edits to factory presets can only be saved as user presets (factory presets cannot be overwritten).
	Bell icon	Will illuminate for notifications such as product updates.
	Speech bubble	About-Page – information about licensing status, portal to other services such as website, this manual or product support.
Style Bar	STYLE	Loads a Style (collection of 11 phrases, accessible via the Style Phrases section of the keyboard) .
	KEY	Allows you to set a fixed key, limiting the selection of possible chords to that scale.
	CHORD	Displays the chord currently selected by MIDI notes or clicking a key in the Chords Range.
Interactive Keyboard	Common Phrases	Keys in this area select generically useful phrases that don't change with the Style and can be combined with Style Phrases.
	Style Phrases	Keys in this area select phrases of the currently selected Style.
	Chords	Playing in this area
Performance Section	Latch	When active, *Virtual Guitarist IRON* will keep playing independently of keys held, until you deactivate Latch or press the Stop Key.
	Speed	Lets you switch the playback tempo to half, normal or double time.
	Swing	Controls syncopation (often also called Shuffle). Slide to the right to syncopate off-beats.
	Feel	Controls timing. Set to left of center for a "pushing" feel, to the right for a laid-back (dragging) feel.

Area	Parameter	Explanation
GUITAR/AMP	THRUST	A unique effect that adds sweeping harmonics to the guitar signal as you turn the knob. Assigned to Aftertouch by default.
	GUITAR	Selects a guitar pickup setup, changing the guitar tone (before amp).
	AMP	Selects one of 5 amp/speaker combinations. Amp settings are sorted from clean to heavily distorted.
	DRIVE	Increases the overdrive level (amount of distortion) of the guitar amp.
GUITAR MOD	Drop D	Tunes the strings of the entire guitar down by two semitones, which makes the guitar sound fatter at the same pitch. The low range is extended down from E to D.
	Doubling	Creates a drastically fuller and wider sound by adding a second guitarist with a separate amp setup, and panning both signals hard left and right.
Effect Section	Delay Mix	Dials the delay effect in.
	Delay Type	Selects one of 6 guitar-typical delay types, ordered by note resolution (delay repetition length).
	Chorus	Adds a guitar-optimized Chorus effect. Turn clockwise to increase rate and depth.
	Reverb	Dials in a guitar-amp typical spring reverb.
	Volume	Controls the master output volume.
Wheels	Pitchbend Wheel	Bends the overall pitch by ±2 semitones.
	Modulation Wheel	Turn up to gradually add palm-muting. The maximum position will produce dead notes.

What is Virtual Guitarist IRON?

Virtual Guitarist IRON is a software instrument doubling as a professional guitarist in a music studio, with you being in the producer chair.

Virtual Guitarist vs. A Real Guitarist

If we denied the huge differences between a software and guitarist, you shouldn't trust us.

If you have all the money, time and patience in the world plus a recording studio and a professional guitarist available, we would always recommend: Go for it!

But for most people, most of the time, that's not the case:

- Maybe you have no access to a (professional) guitarist.
- Maybe you want to just work out ideas totally by yourself.
- Maybe you're a guitarist but want to quickly lay down a track without the hassle of setting up.
- Maybe you want to use MIDI-controlled guitar tracks as source material for electronic manipulation.

In these and many others scenarios, *Virtual Guitarist IRON* is a great alternative to the real thing.

What is "*IRON*" about?

Virtual Guitarist IRON focuses on Power Chords, the key ingredient of Metal, but generically used for powerful sounding distorted rhythm tracks in almost every genre of modern music.

Why so few controls?

We are all musicians and we know that the time for learning a user interface is better spent making music.

Therefore, the user interface of *Virtual Guitarist IRON* is designed for maximum ease of use and minimum distraction.

It is also fail-proof in that no matter how you set up the controls of *Virtual Guitarist IRON*, the result will never be musically or technically wrong – without sacrificing any creative freedom.

You can trust in the fact that tracks produced with *Virtual Guitarist IRON* are realistic, professionally produced guitar tracks.

Trial and Authorization

We have designed the entire process of downloading, activating and authorizing *Virtual Guitarist IRON* with a strong focus on simplicity. It's important to us to make it as easy as possible for you to get your hands on *Virtual Guitarist IRON* - and make it your own if you like it.

Trying, Buying, Authorizing

We only want you to spend money if you're absolutely happy with *Virtual Guitarist IRON*. Therefore, we grant you a 30-day trial period, during which the plugin will run without any limitation.

When opening *Virtual Guitarist IRON* during the trial period (or when clicking the *Authorize* button in the menu bar), you will see this overlay which

- displays information about your trial status,
- provides a link to the Virtual Guitarist website where you can purchase a permanent *Virtual Guitarist IRON* license after or during the trial period,
- allows you to enter your credentials and authorize *Virtual Guitarist IRON* once you've purchased it.
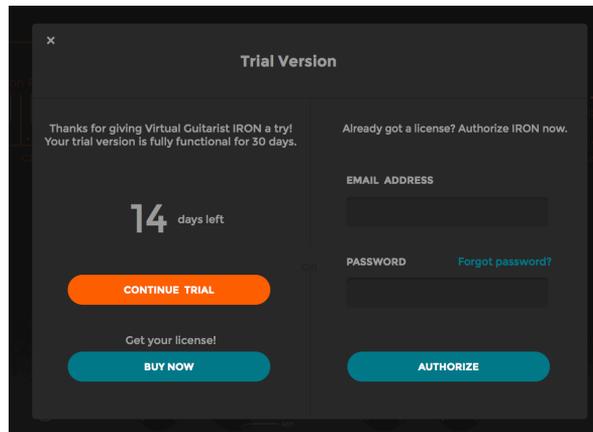
Trial Screen

Where to put the Content

The actual guitar goodness of *Virtual Guitarist IRON* – the audio content - is packed into a so-called blob file named VG_IRON.blob which is about 3 GB big. You can keep the blob file anywhere you like (e.g. on a separate content drive). During standard installation, it will be put into the following locations on your main system drive:

OSX	/Library/Application Support/UJAM/IRON
Windows	/ProgramData/UJAM/IRON/

Installing to a different drive

If you wish to install the blob file onto a separate drive, you can set a different content installation folder in the installer. Just click the "Change Install Location" button in the "Installation Type" page of the *Virtual Guitarist IRON* installer and point to your desired location. You can always change the location afterwards (see below)

Changing the content location after installation

You can always move the *VG_IRON*.blob file after you have installed *Virtual Guitarist IRON*:

• Move your file to the desired location (different folder or different drive)

• Launch your DAW and open *Virtual Guitarist IRON*. It will present you with a dialog asking for the file location. Simply point to the new location of the IRON.blob file – done.

Controller hardware for Virtual Guitarist IRON

Virtual Guitarist IRON requires MIDI note input for playing and recording musical performances, and optionally Pitchbend, Modulation and Sustain Pedal data for added realtime variation.

If you have a MIDI controller (keyboard), this will be the easiest and most straightforward MIDI input method and it's most fun as this way you control your guitarist in realtime.

Of course you can also control *Virtual Guitarist IRON* by using MIDI step sequencers or by entering MIDI notes manually into MIDI tracks.

For getting to know Virtual Guitarist IRON *and for testing purposes, you can also use the* Interactive Keyboard *in the top half of the* Virtual Guitarist IRON *window. This works best with the* Latch *function enabled.*

Native Instruments KONTROL integration

Virtual Guitarist IRON is fully NKS-compatible for superior integration with Native Instruments KONTROL technology.

This means that when using MASCHINE or any of the KONTROL-S keyboards, *Virtual Guitarist IRON* will offer added functionality:

- Native Map: You can edit *Virtual Guitarist IRON*s parameters using the controller knobs
- Light Guide: On KONTROL-S keyboards, LEDs with color codes matching the *Virtual Guitarist IRON* user interface guide you to the Common and Style ranges as well as the Chord range.
- You can browse *Virtual Guitarist IRON* presets in the Native Browser, including categories.
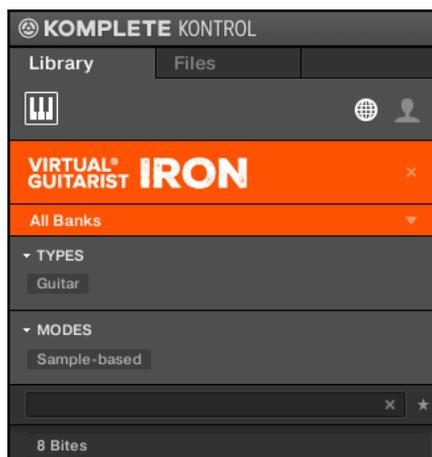
Virtual Guitarist IRON *in the KONTROL Browser*

These features are available in the KONTROL Software as well as in all popular DAWs that feature KONTROL integration, such as Ableton Live, Steinberg Cubase/Nuendo and Apple Logic.

Start Playing!

Before we look at things in more depth, let's first explore how to play *Virtual Guitarist IRON*, as that may be all you need for now.

The top half of the *Virtual Guitarist IRON* window is dedicated to the guitarist's performance – in other words: How he plays. Here, you'll find two musical core aspects you can control: Phrasing and Notes. The Interactive Keyboard is split between a Phrase Range (left) and a Chord Range (right).

The basic principle is simple:

- When you press keys from C4* upwards, *Virtual Guitarist IRON* will start playing a phrase with the chord determined by the notes you play. When you release the key(s), playback will stop.
- MIDI notes below C4 don't represent musical keys but switches varying the phrasing of your player in realtime. This is a powerful way of making your performance more interesting and dynamic.
- By turning up the Modulation wheel, you can morph from normal to shorter to dead notes – another powerful way of varying phrases.

If you know these things and can switch presets, you know all you need to start producing with *Virtual Guitarist IRON*.

*C4 is one octave above middle C. The MIDI note number is 72. Some DAWs refer to it as C5.

Walkthrough

Note: Keywords printed italic *refer to parameter or section names you will also find elsewhere in this manual.*

If you're pressed for time or if you already know the basic concepts behind Virtual Guitarists, then this Walkthrough may be all you need for now, and you can come back later to look up deeper explanations as you need them.

We will take a quick tour across all controls of *Virtual Guitarist IRON*. After this you will have a good basic understanding of *Virtual Guitarist IRON*.

We assume you have Virtual Guitarist IRON *opened in your DAW. Ideally you have a MIDI controller connected, otherwise use the* Interactive Keyboard*.*

Make a sound and learn about chords and key

- Play C4 or a higher note. Your guitarist will start playing. It will display the current chord in the *CHORD* display which is part of the *Style Bar* above the *Interactive Keyboard* in the upper half of the *Virtual Guitarist IRON* window.

The Interactive Keyboard *also doubles as a display for the MIDI notes* Virtual Guitarist IRON *is receiving. The keyboard is divided and properly labeled with the functions of the corresponding note ranges.*

- By playing more than one note, you can play different intervals and even create melodic riffs.

- Set the *Key* value in the *Style Bar* to D to force *Virtual Guitarist IRON* to play only chords in the D scale. Set different keys playing the same notes. This will change the chords played – watch the *CHORD* display too.

Try the presets

- At the top of the *Virtual Guitarist IRON* window you can load presets. A preset is always a complete setting of *Virtual Guitarist IRON*, i.e. it will change the performance as well as the guitar and amp sound. At this point, just go through different presets and try different *Style Phrases* to get an impression of the musical and sonic palette of *Virtual Guitarist IRON*.

Tell your player what to play

- Activate the *Latch* button right next to the *Style Bar*. Now *Virtual Guitarist IRON* will keep playing even if you don't hold a note. Let it keep playing.
- Now play a note in the correspondingly labeled *Style Phrases* range of the keyboard, C3-B3. Go from C3 upwards and see how the phrasing gets more intense. These are the phrases you can exchange by loading different *Styles*. Let's do just that now:
- Load different Styles using the *STYLE* menu to the left-hand side of the *Style Bar*. You will notice that your guitarist masters a vast range of playing techniques and musical genres.
- Now try keys in the C#1-B2 range, labeled *Common Phrases*. These phrases will always be there no matter which *Style* you've loaded, and can be freely combined with the *Style phrases*.
- Interrupt your player temporarily by holding the *Silence key* (C1). It will continue when you play another note. Now stop your player by pressing or clicking the *Stop* key (B2).

You can use the Silence key in Latch Off *mode too to mute your phrase but keep it running. This is different from lifting the key and playing it again as that will restart the phrase.*

More performance tweaking fun

- Keep *Virtual Guitarist IRON* playing and slowly turn up the *Swing* control right next to the *Interactive Keyboard*. As you will notice, this will delay the off-beats until the phrasing resembles a ternary feel that is common in Swing music (hence the name), often also called Shuffle or Groove depending on your DAW.
- The Speed switch lets you set *Virtual Guitarist IRON* to half- or double time.

- Now experiment with the *Feel* slider right next to the Swing control. It makes subtle changes to the timing, creating a rushed or relaxed feel. Play a drum loop along for better comparison.

Find your guitar sound

Now that you know your performer, let's look at the bottom half of the *Virtual Guitarist IRON* window. Here you set up your guitar, amp and effects.

- Set your player to *Latch* and keep playing while you tweak controls
- First, play with the *GUITAR* rotary switch. Notice how it changes the character of the guitar sound and compare your impression with the knob labels.

Technically, the GUITAR *control switches between different guitar pickups. The pickup is an important element of the guitar sound.*

- Now experiment with the @AMP rotary switch. In the real world, this would require an engineer to frantically set up different guitar amps and speaker cabinets per your request. Here, you just turn a knob.
- Notice how the amps sound heavier from Clean to Metal.
- Set the *AMP* rotary to *Cream*. Now turn the *DRIVE* control clockwise, starting from the leftmost position. Notice how the sound gets more distorted.
- Play with different combinations of the *GUITAR*, *AMP* and *DRIVE* controls. This way you get a good impression of the sonic range of *Virtual Guitarist IRON*.

Virtual Guitarist IRON *features a built-in amp simulation replicating various vintage tube amplifiers speaker cabinets. Advantage: The amp sound is not baked into the guitar sound - you have full control over the amp sound, and the complex interactions between guitar and amp are happening in real time as you play.*

More sound tweaking fun

- Hold D4 (any preset is fine) and activate *Drop D* at the bottom left of the *Virtual Guitarist IRON* window. Notice how the phrase drops by an octave – this is the so-called *drop tuning* that expands the note range by tuning the strings of the guitar two semitones lower – on real guitars, it's often the E string only. This setting also fattens up the sound and works best with high overdrive levels in the Crunch and Metal *AMP* settings.
- Keep playing a phrase and push the *Doubling* button. This adds a second guitar player with a separate guitar and amp setup, and places both at the outer positions of the stereo image, for a dramatically more vivid and powerful sound.

Playing with the built-in effects

We strongly encourage you to use your go-to effects when perfecting your guitar tracks. However, in order to save you time and create a more interesting range of instantly accessible presets, we have included the three most important effects right on board: Delay, Chorus and Reverb.

* Turn up the left *Delay* knob to dial in an Echo effect. To match the delay to your song, use the right knob to selects the note resolution that works best for your song's timing and feel.

* Turn up the *Chorus* knob to add sweet modulation to the sound. It's all a matter of taste, but *Chorus* works best with lower *DRIVE* settings in the Clean and Crisp *AMP* settings.

* The *Reverb* adds ambience to the guitar sound. The built-in effect is a spring-type reverb that's optimal for guitar. If you're not using external plug-ins, you should always dial in a tiny little reverb, otherwise the guitar sound might be too dry and artificial.

Save the best for last

Maybe you've noticed that we have somehow ignored the *THRUST* knob so far. This knob is a unique feature of *Virtual Guitarist IRON*. It adds harmonics to the clean *GUITAR* sound that let you drastically alter the sound character.

* You can actually play with *THRUST* like with a pedal. Set the *THRUST* knob to center position, and play with Aftertouch on your MIDI keyboard (or MIDI-learn any other controller). Sounds great right? Thrust will be more obvious towards the Metal *AMP* setting and at higher *DRIVE* values.

Reference Guide

In the following part of this user guide, every feature of *Virtual Guitarist IRON* will be explained in depth.
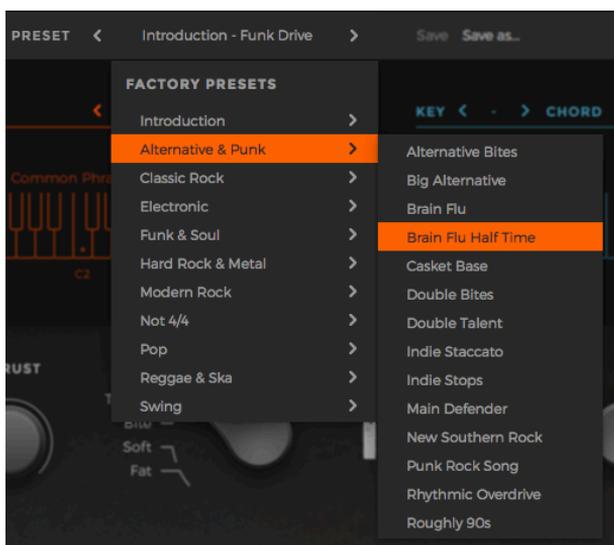
Menu Bar

The top bar of the *Virtual Guitarist IRON* interface lets you load and save presets. It also contains important management functions from checking your trial status to contacting support.

Menu Bar

Loading Presets

Preset Browser

A preset in *Virtual Guitarist IRON* is a complete setting of the entire plug including style selection and all control values. Here's how you can switch presets:

- Advance to the next preset by clicking one of the arrows left and right of the *PRESET* name
- Click on the name of the current preset in the *PRESET* menu to open the *Preset Browser* (see image above).

As you can see, the Preset Browser is a clean, organized list of presets, categorized by simple musical terms.

Virtual Guitarist IRON ships with over 150 Factory Presets. Take your time exploring them, as this is the quickest way of getting an overview of what *Virtual Guitarist IRON* can do!

If you have freshly installed Virtual Guitarist IRON*, there will be only Factory Presets. User Presets will appear once you have saved your first own preset.*

Save / Save as …

You can of course save your own *Virtual Guitarist IRON* presets. You can name them and assign a category too.
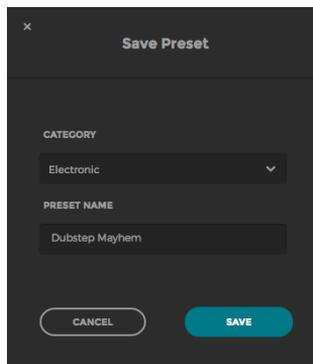
"Save as …" Dialog

The difference between the *Save* and *Save as …* buttons:

- *Save* overwrites the preset with the changes you just made.
- *Save as …* lets you assign a name and a category, so does not replace the current preset.

Factory Presets can only be saved using Save As …*, they cannot be overwritten.*

Moving, renaming and deleting presets

You can rename, move or delete presets directly in your operating system. You will find *Virtual Guitarist IRON* presets in these folders:

OSX	Factory Presets	/Library/Application Support/UJAM/IRON/Presets
	User Presets	/Users/USERNAME/Library/Application Support/UJAM/IRON/Presets
Windows	Factory Presets	C:\ProgramData\UJAM\IRON\Presets
	User Presets	C:\Users\USERNAME\AppData\Roaming\UJAM\IRON\Presets

Bell icon – Notifications

When you launch *Virtual Guitarist IRON*, it will automatically check for updates. If an update is available, the bell icon will be illuminated.
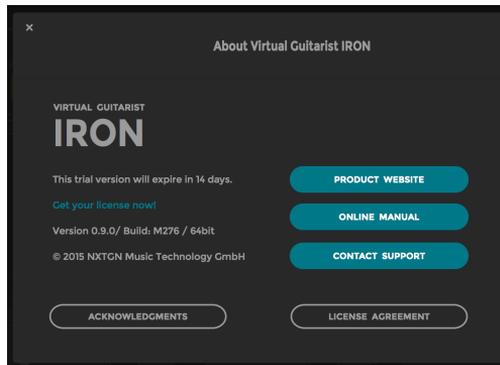
Clicking it will open a dialog that lets you choose whether you want to download the update now or later.
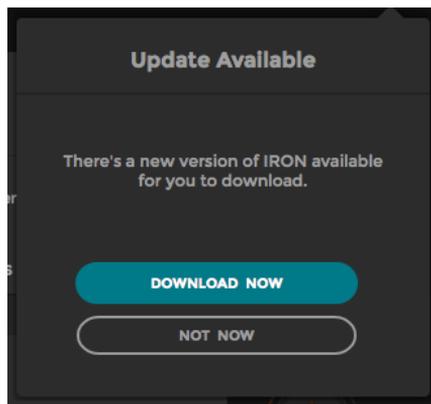
Update Dialog

We built this mechanism to save you the pain of manually checking for updates in order to stay current and stay current on the latest improvements of Virtual Guitarist IRON.

Speech Bubble Icon – About Page

About Page

The **About Page** is the place for information about your version and licensing status of *Virtual Guitarist IRON*. It is also a portal to other services:

- **Visit Product Site** takes you to virtualguitarist.com with regularly updated news, videos, tutorials and other helpful stuff.
- **Contact Support** lets you report problems and ask questions.
- **Read User Manual** opens this document.
- **Acknowledgments** – the people behind *Virtual Guitarist IRON*.
- **License Agreement** – legalese stuff for gourmets.

Style Bar

In the Style Bar, you choose a *STYLE* (selection of phrases) and a *KEY*. It also contains the *CHORD* display.

Style Bar

STYLE

A *STYLE* in *Virtual Guitarist IRON* is the counterpart to a particular phrasing style that you ask your guitarist to play. Styles are the "rhythmic vocabulary" of *Virtual Guitarist IRON*, which is why we have included 100 of them.

You can select styles by either clicking the small arrows to skip to the previous/next style, or by clicking the name of the current Style to bring up the full list.
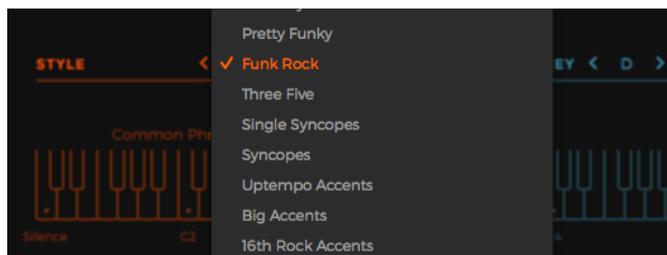
Style List

Every style is a set of eleven phrases that you can access via the Style Phrases area of the Interactive or MIDI keyboard.

In most Styles, Phrases are ordered by intensity/density from left to right.

KEY

This parameter lets you define a Key (scale). With a pre-selected Key, *Virtual Guitarist IRON* offers a reduced chord selection consisting only of chords that work well in this key.

Key played		C#		Eb			F#		G#		Bb	
	C		D		E	F		G		A		B
Chord	**C**	**Csus4**	**D**	**Eb**	**E**	**F**	**Gsus4**	**G**	**Gsus4**	**A**	**Bb**	**B**

Exemplary chord mapping for the key of C

Setting a key is useful if you want a simplified method of playing chords or if you're controlling *Virtual Guitarist IRON* from a non-keyboard controller and have only so and so many pads or buttons assignable.

CHORD
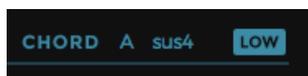
CHORD is not a parameter but a display. It shows the chord corresponding to the keys you play (see also **Fingering Scheme**).

Low/High

For the note range between D4 and G5, the Chord display may show a Low or High indicator. This happens when there a chord is available in two octaves (Low and High). This is also affected by the *Drop D* status.

Chords available in only one octave will show no indicator.

Interactive Keyboard

The interactive keyboard is both a display of received MIDI notes and an actually functional on-screen keyboard. The left side of the keyboard 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.

Interactive Keyboard
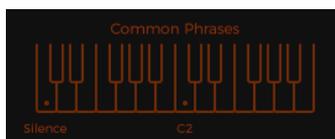
Common Phrases

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

Common Phrases complement the *Style Phrases* by phrasings that are more generic and applicable to multiple contexts.

Phrases are what you make of them. Virtual Guitarist IRON *lets you switch phrases in realtime without interrupting the performance. That's a great way to create dynamic and interesting phrasings of your own. For example, insert Common Phrase #14 every now and then for a beat to add accents, or lead from a bridge to a chorus with a build-up.*

Reference of Common Phrases

| #	Group	MIDI note	Description	Bars
		C1	Silence (phrase keeps playing silently)	
1		C#1	Single Note Vibrato	4
2	Single Notes	D1	Single Note Quarter	2
3		Eb1	Single Note Rhythm	2
4	Long Chords	E1	Long Chord	4
5		F1	Long Chord With Fill	1
6		F#1	Chord Rhythm 1	1
7	Chord Rhythms	G1	Chord Rhythm 2	1
8		G#1	Chord Rhythm 3	1
9		A1	Chord Rhythm 16th	1
10		Bb	Muted 8th Accent	2
11		B1	Muted 8th Acc 16th	2
12	Muted Rhythms	C2	Muted 8th Open	2
13		C#2	Muted 16th Riding	2
14		D2	Muted 16th	2
15	Off-Beats	Eb2	Off-Beats Reggae 2 & 4	1
16		E2	Off-Beats 8th	1
17	Fills	F2	Fill 16th	1
18		F#2	Fill 16th Slide	1
19	Build-ups	G2	Build-Up Open 8th	1
20		G#2	Build-Up Muted-Open	1
21	Dead Notes	A2	Dead Notes 4th	2
22		Bb2	Dead Notes 16th	1
23	Slide	B2	Slide Down	1

Style Phrases

Keys in this area select phrases of the currently selected *Style*.

Phrases in the Style Range start with the lowest density/intensity on C3 and get more agitated 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 common 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.*

Chord Range
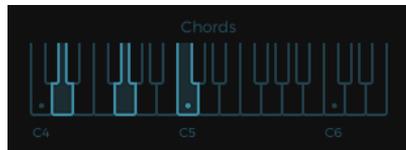
Keys in the Chord range function like a regular musical keyboard: You start and stop the guitarist's performance and you determine the notes played. It's like playing keyboard, except that instead of notes you play rhythms.

Virtual Guitarist IRON creates a special kind of chords: Power Chords. These sound like full chords, but don't consist of three or more notes as usual. Power Chords are two-note intervals that sound like chords because harmonics get added by the distortion produced in the tube amp, creating the impression of full chords.

Unlike other instruments, *Virtual Guitarist IRON* will almost* always play a two-note interval, no matter whether you play one or four notes. This is because three or more notes - when sent through distortion – would sound mushy and often unpleasant.

*almost … because there are single notes in selected styles.

You can hear the original intervals clearly when you set the Amp to Clean and the Drive control to minimum position.

Fingering scheme

The schematic on the next page shows you which intervals you can play with *Virtual Guitarist IRON*.

Here's how to read it:

- A black dot on the stylized keyboard means "required", a grey dot means "optional" (for example, if you use the MIDI file of a synth pad to control *Virtual Guitarist IRON*)
- Chord displayed: The resulting musical chord as displayed by *Virtual Guitarist IRON*

Performance Controls

Performance controls let you adjust the musical performance of *Virtual Guitarist IRON* to your song's feel and tempo.


Performance Controls

Latch

When *Latch* is activated, once you press a key in the Chord range, *Virtual Guitarist IRON* will keep playing until you press the Stop key.

When *Latch* is off, *Virtual Guitarist IRON* only plays as long as you hold at least one key in the Chord range. *Latch* is convenient when testing or setting up sounds, and is more practical if you build a track by manually entering notes into your MIDI track.

You can use an optional Sustain Pedal as a temporary Latch*. Lifting the sustain pedal unlatches any notes that are no longer held, even if the* Latch *switch is still on.*

Fingering Scheme   **Chord as displayed**
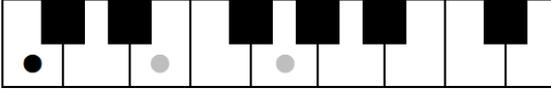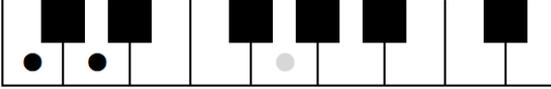
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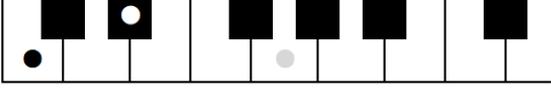
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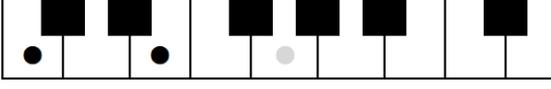
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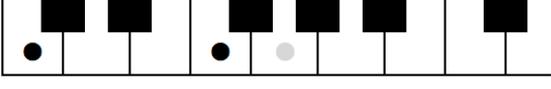
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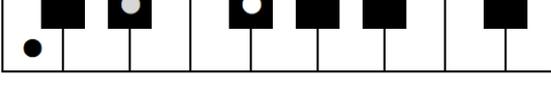
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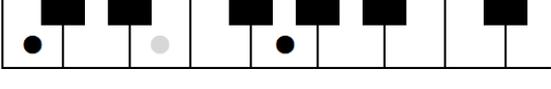
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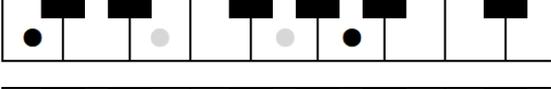
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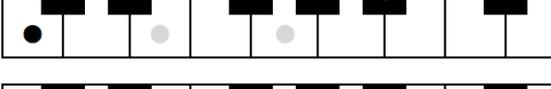
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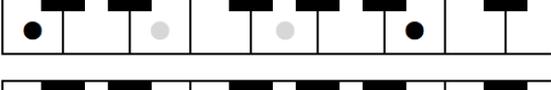
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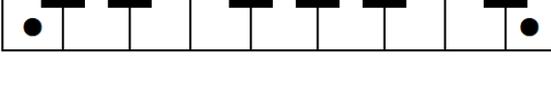
9

Speed

The *Speed* switch lets you halve (0.5x) or double (2x) *Virtual Guitarist IRON*s tempo relative to the song tempo.

This way you can extend the style range to 4th- or 32nd-note-based, or have *Virtual Guitarist IRON* styles play at normal grooves even if you use extremely low or high song tempi.

Swing

This function, often also called "Shuffle", delays the off-beats. *Virtual Guitarist IRON* will automatically switch the Swing resolution to 8th or 16th note depending on the selected *Style*.

At maximum position, the off beat will have the same timing as the last note of a triplet.

Use this control to match the timing of *Virtual Guitarist IRON* to a shuffled or triplet-based song.

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

Feel

You can tweak the feel of your guitarist's performance either towards relaxed or rushed using this control:

- As you move the slider to the left, the player will play off-beats slightly earlier, leading to a rushed or driving feel.
- In the opposite direction, off-beats will be slightly delayed, creating a laid-back or relaxed feel.

Feel has a stronger effect when listened to against other tracks. If you're not sure what it does, try playing a drum loop along with Virtual Guitarist IRON *and tweak the control. You will notice that the off-beats will play earlier or later than the off-beat drums (usually Hi-Hats or snares) as you turn the control.*

To create advanced doubling, create two instances of Virtual Guitarist IRON*, pan both extremely left and right, set different* GUITAR *and* AMP *settings and set the* FEEL *slightly differently.*
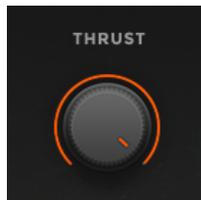
GUITAR / AMP Section

GUITAR / AMP Section

This area is where you tweak the sound of guitar and amp. *Virtual Guitarist IRON* offers a large range of sounds from twangy and clean to massively distorted metal.

THRUST

The *THRUST* knob is a very unique feature of *Virtual Guitarist IRON* that lets you change the sound in realtime. It adds a sense of boosted velocity and energy to the sound – hence the name.

THRUST adds harmonics that increase in pitch as you turn the knob. In the real world, these harmonics are created by a special playing technique and are physical sub-vibrations of the guitar strings. While a real guitar would "skip" to these harmonics, Thrust adds them.

The *THRUST* effect depends greatly on the settings of the GUITAR, AMP and DRIVE controls – from a flanger-like effect in clean settings to very pronounced harmonics at heavily distorted settings.

THRUST becomes even more interesting when you move the control during playback. Thrust is assigned to the Aftertouch MIDI controller. Increasing pressure to your keyboard "turn" the *THRUST* knob from it's set position to maximum.

Advanced tip: Press and hold the Stop key, then play chords while using the Stop key for finer Aftertouch control.

Be aware that using THRUST *in combination with odd intervals can lead to clashing pitches. True to the nature of string harmonics, the harmonics added by*

THRUST *resemble third, fifth and octave intervals of the base note. If you set* THRUST *to a fifth interval but play an augmented fifth, the result will sound "interesting", but not necessarily correct.*

GUITAR

Electric guitars have one or more pickups – the electromagnetic parts that pick up the vibrations of the strings and convert them into electric signals.

By choosing and combining pickups, guitarists have a lot of influence over the characteristics of the guitar sound. *Virtual Guitarist IRON*s *GUITAR* parameter offers you the four most suitable pickup combinations for power chord guitars:

Name	Pickup choice (technical)	What this really means
Twang	Single-coil pickup guitar with less mid range, similar to a Telecaster or a Stratocaster with two out-of-phase pickups.	"Glassy" character with well-defined treble. Use for clean or only subtly crunched sounds
Bite	Bridge-pickup Stratocaster character with a lot of bite and sharp upper mids.	Works best with distorted amp settings. For tracks you want to cut through a mix.
Soft	Warm neck pickup sound, very round.	For soft, non-aggressive sounds with a fuller bass. Sounds better with low-mid distortion.
Fat	Rock guitar with bridge Humbucker - lots of power, lots of mids.	For fat rock sounds or clean sounds with powerful mids - probably the most universal setting.

Those descriptions provide just guidelines and technical info. We encourage you to always try out all pickup positions for any given track.

AMP

Virtual Guitarist IRON features a sophisticated guitar amp and speaker simulation. In other words: The amp sound is not baked into the guitar performance. Instead, as you play, the clean guitar signal is sent to an amp and speaker where the final sound is produced. Not only does this give you full control and flexibility over the sound, it also means that the complex interactions between guitar and amp are produced in realtime for a dynamic and realistic result.

The *AMP* knob lets you choose between five amplifier presets for a large range of musical styles. Each preset is a pre-configuration of an amp and a speaker cabinet, including pre-set internal parameters that provide the right character and range of sonic possibilities for each preset:

Amp Setting	Character	Use...
Clean	California sound, crystal-clear treble, 12" speaker character - the sound those tweed-covered amps are legendary for.	For clean to subtly overdriven sounds, very dynamic.
Crisp	The amp for that bluesy character. Class-A circuit, very smooth transition from clean to overdriven. 4 x 12" cabinet.	When Clean is too clean and Brit is too distorted - this amp is perfect for hybrid clean/overdriven sounds that are so popular in Blues styles.
Cream	The 60s/70s sound, providing a large spectrum from warm, mid-rich clean sounds to the proverbial creamy distortion. 2x12" cabinet.	For mid-heavy power sounds that are warm, yet not too scratchy in the high range.
Crunch	THE classic gold/black British rock stack you still see on stages all over the world. Very "British" distortion, raw, powerful character. 4x12" cabinet.	For everything Rock from the 70s until today.
Metal	Big rock stack pre-loaded by a distortion pedal for a fat distortion sound	For everything harder, including Metal. Use "Drop D" for extra evil (e.g. Nu

	with massive bass and less mids. 4x12" cabinet.	Metal

DRIVE

The *DRIVE* knob adjusts the overdrive level of the tube amp.

Simply put: The lower the DRIVE setting, the cleaner, and the higher the DRIVE setting, the more distorted the sound of *Virtual Guitarist IRON*.

The effect is very different depending on the *AMP* you've chosen. Naturally, cleaner *AMP* settings such as Clean or Crisp will work better with lower Drive settings, whereas Crunch or Metal benefit from a higher dose of clean signal.

Guitar Modes

The two knows underneath the *THRUST* control allow you to retune and duplicate the guitar.

Drop D

Activating this button tunes the strings of the entire guitar down by two semitones. This has two effects:

• You can play chords down to the low D.

• The guitar sound becomes fatter and less sharp as in the normal settings. In combination with Metal and high Drive settings this helps creating typical fat and evil sounds.

Doubling

Activate this button has the same effect as if two guitarist played your track at the same time, with minimal variations.

Technically, *Doubling* adds a second guitarist with a separate amp setup and places both at the outer positions of the stereo spectrum.

We recommend to use Doubling *with care – it's great to give more weight to tracks that are a key foundation of your song. On the other hand, a mix gets mushy pretty quick if you have 2 or 3 doubled guitar tracks playing at the same time.*

Two handy tips:

- To create the impression of two guitarists playing even differently, instead of using Doubling set up two instances of *Virtual Guitarist IRON* with different settings amp settings and pan positions, and pick different phrases for both.
- Add a single guitarist with a sharper sound and less distortion to a doubled "wall of doom", place it in the middle, EQ it slightly to attenuate high and low frequencies but pronounce the mids around 2-3 kHz, and you have a very effective way of controlling the presence of that guitar track in the mix by adjusting the single track against the doubled one.

Effect Section

Effect Section

Virtual Guitarist IRON features three guitar-typical on-board effects. They provide for a greater sonic palette and allow you to create presets that sound perfect "out

of the box" – because often you need that little reverb or delay for a particular sound.

The onboard effects are not meant to replace dedicated plug-in or outboard effect processors, and we encourage you to route Virtual Guitarist IRON *into external plugins or outboard gear if you need more advanced tweaking options.*

Delay

Delay Section

The Delay effect in *Virtual Guitarist IRON* offers five different, guitar-optimized stereo delay presets from 32th to 4th note resolution, as well as a mix control (left knob).

From Slapback echoes (32th setting) to rhythmic duplication using the longer resolutions – subtle delay adds width and ambience to Virtual Guitarist IRON *without adding too much wash to the mix.*

Chorus

Adds a guitar-optimized Chorus effect. As you turn the knob, the chorus will go from a subtle slow flanging to a fast, deep, almost ensemble-style effect.

Try the Chorus particularly for adding depth to cleaner or crunchy rhythms. Be careful not to overdo it – there's just a fine line between a nicely animated guitar rhythm and a sticky mush of 80s kitsch.

Reverb

Virtual Guitarist IRON onboard reverb is – deliberately - not a high-end cathedral simulation. It is a so-called spring reverb (because in actual guitar amps metallic springs create the reverberation) and has a nicely percussive and open character to it that's just perfect for guitar sounds. Turn up the knob for more reverb level.

Master Volume

The Volume knob adjusts the master output volume of *Virtual Guitarist IRON*. Levels inside *Virtual Guitarist IRON* are usually auto-adjusted, so you will never have to level-compensate for Doubling or switching amps, but you may want to use this control to adjust the gain of *Virtual Guitarist IRON* before sending it into subsequent audio processors or effect devices.

MIDI Learn

Using MIDI Learn, you can assign *Virtual Guitarist IRON* controls to controls on your hardware keyboard that send MIDI controller data. To assign a control, you usually right-click or ctrl-click a control in *Virtual Guitarist IRON* to open the MIDI Learn context menu of your DAW.
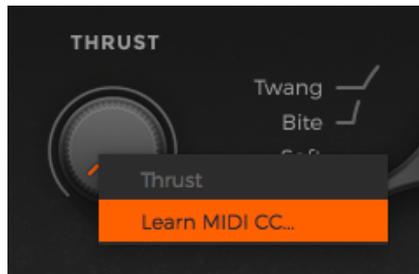
MIDI Learn Menu in Logic

Automation

All controls in *Virtual Guitarist IRON* can be automated. In combination with the phrase select keys this is actually a very powerful way of creating more dynamic performances. For example, automate Thrust and Drive with faders to create dynamic transitions, or switch-automate Amp or Doubling to drastically change the sound between song parts.

For instructions on how to activate Virtual Guitarist IRON *parameters for automation, please refer to your DAWs user guide.*

MIDI Controllers

Unless you add more using MIDI Learn, *Virtual Guitarist IRON* supports the following MIDI controllers:

Pitchbend

The *Pitchbend* controller (usually a wheel) lets you vary the pitch of Virtual Guitarist IRON by ±2 semitones.

Modulation

Palm Muting is a powerful method for live-controlling the phrasing of Electric Guitarist - Power Chords.

The Modulation controller (usually a wheel) controls the Palm Muting that your guitarist applies to the performance.

In the Modulation 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 so-called "dead notes".

You can add Palm Muting after the fact by recording a separate Mod Wheel performance on top of your notes.

Aftertouch

Aftertouch lets you realtime-control *Thrust*. Pressing the key harder has the same effect as turning up the *Thrust* knob.

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* control, 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.

FAQ

Q: **How does Virtual Guitarist IRON actually work?**

A: Virtual Guitarists are based on realtime performances on a real guitar by a real musician, specially prepared using proprietary UJAM technology for realtime playing and adjustment to tempo and other aspects.

Q: **Can I play melodies with Virtual Guitarist IRON?**

A: *Virtual Guitarist IRON* is a 100% dedicated rhythm guitarist. You can play melodic themes in very limited ways by playing with intervals, and there are styles with single notes. But it's not a lead guitarist really.

Q   **What are Power Chords?**

A: A chord, in music theory, is almost always a combination of three or four notes. A Cmaj chord, for example, consists of the notes C, E and G. Power Chords are – musically speaking – intervals that sound like chords because the amp distortion adds "the missing" harmonics. Full chords played on a guitar usually don't sound good when distorted.

Q: **I have more questions! Where can I send them?**

A: Please send your questions to support@virtualguitarist.com! We will add them here eventually!