

# CHORDPRISM



Version 2.0



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## Setup

Chord Prism is a VST Instrument. It can be used as a MIDI output to another Instrument track, or it can host an additional VST Instrument within itself. It does not produce sound on its own. An AU MIDI Effect version is also included for Logic users. Multiple instances of Chord Prism can be used within a project. All instances will share the same Key, Scale and Chord selection values, so changing Key on one instance will change Key on all instances.

**Routing** – To send MIDI from Chord Prism to a destination VST Instrument, you will need to set up separate instrument tracks for Chord Prism and the destination VST Instrument. You will then need to set Chord Prism as the MIDI input to the destination Instrument before recording. Maschine and Reason do not allow for this type of routing.

**Recording** – Chord Prism Tracks contained within a DAW’s Sequencer will record the keys that you select from your MIDI controller. This does not record the actual tone/chord selections that are being played, but allows you to adjust all Chord Prism parameters after recording. If you want to record the actual tones being played by Chord Prism, you can Export (drag and drop) midi from Chord Prism to the destination VST Instrument.

**Hosting VST Instruments within Chord Prism** – Chord Prism also provides internal VST Instrument hosting to accommodate Maschine and Reason. You can scan your plugin folders to add instrument plugins to your Chord Prism library. Most plugins work fine with Chord Prism, but a very small number of plugins can cause problems during the scanning process and will not upload to your library. To avoid crashes during the scan process, please click and drag desired instrument plugins from their respective file on your computer browser to the Chord Prism Library window.

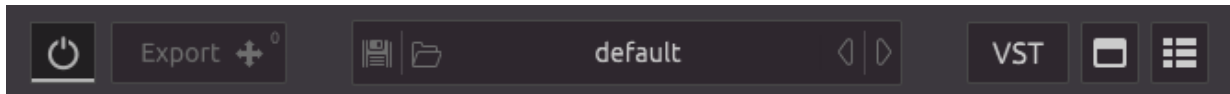
**AU Format** – The AU MIDI Effect version of Chord Prism works in the same manner as other AU MIDI Effects, where it is inserted prior to the AU Instrument in the Logic Track signal flow.

**MIDI CC** – When Chord Prism is loaded to your DAW, the DAW will declare Chord Prism’s parameters as the target for MIDI CC control. Parameters of plugins hosted within Chord Prism can also be assigned MIDI CC once loaded.



## Preferences

Preferences can be accessed by clicking on the Chord Prism logo. Here you can access an online link to the Users Guide, hide/show Tooltips, hide/show the bottom keyboard display, manage your license or change the colors of Chord Prism. You can also adjust how the black keys function within the Chord Generator, determining whether it acts as shifters for the Key and Scale parameters or for the Chord Groups parameter.



## Export

Drag and drop the actual MIDI being played by Chord Prism to a track in your DAW. The exported MIDI contains all completed bars from the beginning of the most recent playback (32 bar max). If playback includes more than 32 bars, the most recent 32 bars will be included. Export prints only completed bars, and will temporarily disable while recognizing the first bar of playback.

To best use the Export function, it is recommended that you stop playback within your DAW once you have completed what you intend to export. Then restart playback from the beginning of what you intend to export. Stop playback again once you have fully played through all bars that you wish to export. Then drag and drop content to your DAW track.

**Enable/Disable Button** – Disables all MIDI FX that are applied by Chord Prism, and sends unaltered MIDI through the device.

## Presets

**Save Preset** – Save the current Chord Prism configuration for later use.

**Open Preset** – Choose from multiple genre, artist, vibe or user configurations.

**Navigate Presets** – Scroll through different presets in a chosen file.

## VST Hosting

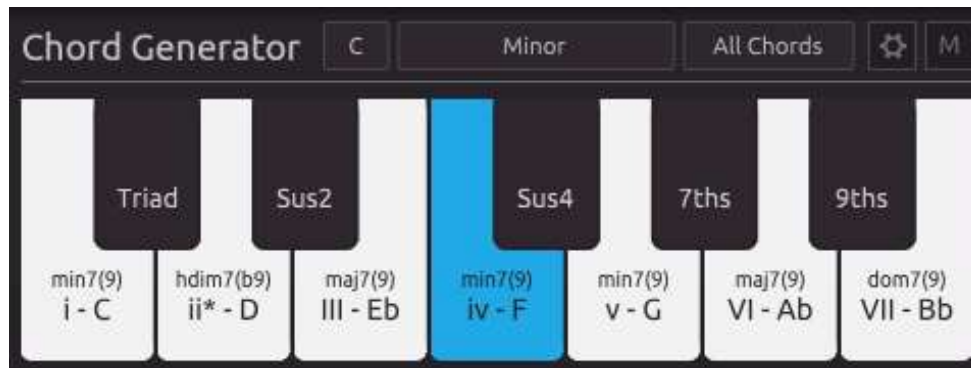
**VST** – Select a VST Instrument to be hosted within Chord Prism. The selected VST will output sound from the MIDI that Chord Prism generates.

**VST Pop Up Button** – Selection will provide access to the loaded VST Window.

**VST Library** – Scan and upload VST Instruments to be used within Chord Prism.

## Chord Generator

The Chord Generator allows users to play full chords with the selection of a single key. Once a key, scale and mapping are defined, chords are mapped accordingly on the left side octaves of your keyboard. The Chord Generator also dictates behavior of the Smart Scale/Multi Arp in the “Chord Tones” and “Dynamic Scale” mappings.



**Key** - Selecting a Key defines the lowest tone in your composition. The key serves as an anchor point for your song, and will have a major impact on the overall pitch and mood of your song.

**Scale** - Selecting a Scale defines which seven of the twelve chromatic tones will be used in your composition. These seven tones will serve as the foundation from which Chords and Melodies are built. Each scale places different chord types into the seven different chord positions, while also having a profound impact on the way that Melodies, Basslines and Arpeggios come together.

**Chord Progression** – Aligns defined chords into a chord progression order on the white keys of the Chord Generator.

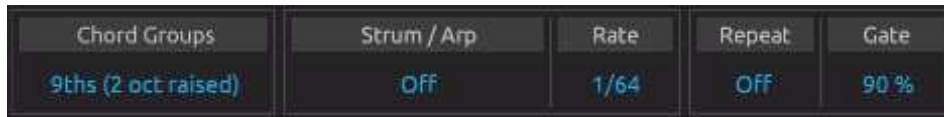
**Gear Icon** – Switches Chord Effects view to Chord Editor view.

**Mute** – Mutes Chord Generator Output. Mute is helpful when you want to play different Chord Prism instruments simultaneously, with each performing different tasks (CG or SS/MA).

**Chord Layout** - Displayed on each white key in the keyboard display is the title for the chord associated with that key and a Roman numeral. Major chords use Roman numerals with capital letters, minor chords use lower case, diminished chords have an asterisk and augmented chords use a plus sign. When you select a key, it outputs the midi associated with that chord and becomes illuminated. The most recently selected chord has a colored stripe at the top edge of its corresponding piano key. Right click on a Roman numeral, and a drop down menu will appear with each Roman numeral available as a selection. Right click on a chord title, and a drop down menu will appear with multiple chord types that can be applied to the chord root. Selecting a new chord type will alter the step on/off buttons in the Chord Editor.

**Chord Groups Shifters** – Selecting black Chord Generator keys shifts the Chord Groups parameter. Right click on a shifter key, and a drop down menu will appear with all Chord Groups values available. Chord Groups Shifters can function in a Toggle manner where they hold after being deselected, or in a Standard manner where they do not hold after being deselected. The Standard/Toggle option can be selected within Preferences.

**Key Shifters** – Black Chord Generator keys can also act as Key and Scale Shifters. Right click on a shifter key, and a drop down menu will appear with all key or scale values available. Shifter keys can be switched from Chord Groups to Key Shifters within Preferences.



**Chord Groups** – Defines what type of chords will be output from the selected Chord Generator Output. Once set users can alter each chord in a more detailed manner within the Chord Editor, or by selecting a new chord from the Active Chord Display drop down parameter. Changing the Chord Groups parameter resets all adjustments that you have made within the Chord Editor or Active Chord Display drop down parameter.

**Strum / Arp** – Provides playback of chords with each tone starting at a different time. The playback of tones within Strum values will sustain through the duration of the chord, while the playback of tones within arp values will occur individually within a pattern. Four strum directions are available; Upward, Downward, Alternating and Random. Twelve arp patterns are available; Linear Down, Converge Down, Diverge Down, Stutter Down, Zigzag Down, Boomerang Down, Boomerang Up, Zigzag Up, Stutter Up, Diverge Up, Converge Up and Linear Up.

**Strum Rate** – Multiple rates are provided for the time in between each tone of the strum.

**Repeat** – Provides playback of chords in a repetitive manner while holding down a key. Select a rate to activate function.

**Repeat Gate** - Left Click and Drag to determine how long each chord repetition will last (0-100%).

**Arp Range** – Defines how many octaves the most recently selected arpeggio will span (1-3). Added octaves will reach into higher pitches.

**Arp Gate** – Left Click and Drag to determine how long each tone from the most recently selected arpeggio pattern will last (0-100%).



**Octave** – Each Output can be set to any octave, providing the ability to spread different instruments out into different frequency areas of the mix.

**Stack** – Duplicates selected chords in different octaves. This can be done in the octave directly above selected tones, two octaves above selected tones or both octaves above selected tones.

**Velocity Algorithm** – Assigns a predefined velocity curve over the course of a bar. When you play a tone at a specific location within a bar, a specific velocity will override the actual velocity (Sequencer must be engaged).

*Afrobeat* – rhythmic velocity pattern that mimics an afrobeat drum style.

*Breakbeat (hip hop / trap)* – rhythmic velocity pattern that mimics a breakbeat drum style.

*Dancehall* – rhythmic velocity pattern that mimics a Dancehall drum beat style.

*House (EDM)* – rhythmic velocity pattern that mimics a House drum beat style.

*Moombahton* – rhythmic velocity pattern that mimics a Moombahton drum beat style.

*Up* – creates a linear velocity rise from the beginning of a bar to the end of a bar.

*Down* – creates a linear velocity drop from the beginning of a bar to the end of a bar.

*Up ½* - creates a linear velocity rise from the beginning to end of each half within a bar.

*Down ½* - creates a linear velocity drop from the beginning to end of each half within a bar.

*Up ¼* - creates a linear velocity rise from the beginning to end of each quarter within a bar.

*Down ¼* - creates a linear velocity drop from the beginning to end of each quarter within a bar.

*Up/Down* – creates a linear velocity rise for the first half of a bar, and a linear velocity drop for the second half of a bar.

*Down/Up* – creates a linear velocity drop for the first half of a bar, and a linear velocity rise for the second half of a bar.

**Velocity Peak** – Left click and drag to define the highest velocity that will occur within a Velocity Algorithm.

**Velocity Range** – Defines the range in between each value of the Velocity Algorithm from high to low.

**Hold** – Sustains selections after they are deselected. Selections are ended by a different selection, the end of a bar or stopping playback within your DAW. When DAW playback is stopped, reselections end the active selection.



**Step Sequencer On/Off** – Initiates playback of Chord Generator selections in a rhythmic manner that follows along with your DAW's Sequencer.

**Step Sequencer Pattern Select** – Four memory slots are available for storing different patterns.

**Step Sequencer Swing** – Pushes even steps backwards for a more natural groove.

**Step Sequencer Gate** – Determines how long each step sustains for. Full value equals a 1/16<sup>th</sup> note unless the Sustain Button is selected, in which case the parameter will apply to the 1/16<sup>th</sup> note before the next active step.

**Step Sequencer Sustain** – When selected, each active step will sustain until the next active step.

## Chord Editor

The Chord Editor feature allows users to edit each chord on a step by step basis, allowing for a totally open ended approach to chord design. Create any extended chord by adjusting the step on/off buttons, take chords out of scale with the step accidental parameters, and create any type of inversion or voicing imaginable with the step octave parameters. *The Chord Groups parameter alters the step and octave parameters to define inversions, voicings and chord types.*

Step	1	2	3	4	5	6	7	9	11	13
Accidental	-	-	-	-	-	#	-	-	-	#
Octave	0	0	0	0	+1	0	0	0	0	0

**Step Parameters** - Within each chord users can edit which scale tones are included, whether there are any accidentals applied and what octaves they will reside upon. The step parameters are designed to facilitate the creativity of those with a higher level of music theory.

On/Off buttons - Displays active scale tones within each chord. If a button is illuminated, the corresponding tone is active within the chord. Selecting the button will turn it on or off. This is helpful for building custom extended chords (9ths, 11ths, 13ths).

Accidental Parameter - For each individual chord, accidentals can be applied to any of the seven tone positions to design any altered (out of scale) chord. Scales automatically apply accidentals to certain steps, so that specific extended chords can be easily achieved. These only affect the Smart Scale when the selected tone is active.

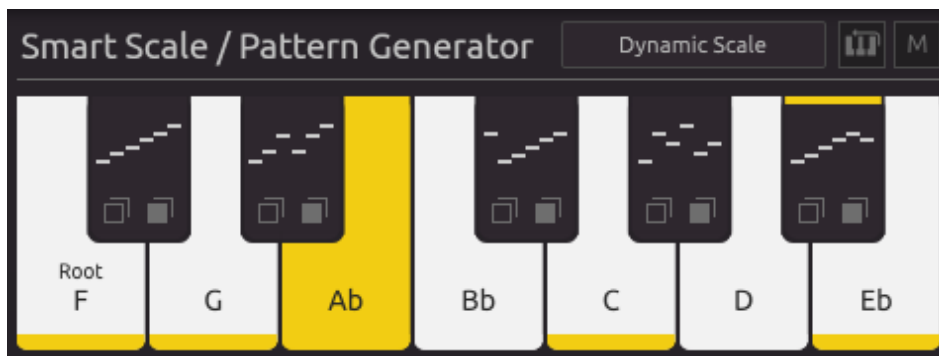
Octave Parameter - For each individual chord, tone octave positions can be adjusted and stacked, allowing for the design of any voicing or inversion.



## Smart Scale / Pattern Generator

The Smart Scale arranges the seven scale tones in different configurations based upon the selected Mapping. In guided Mappings for beginners (Chord Tones, Dynamic Scale), users are able to keep their fingers in the same position while chord tones transpose to those locations. Mappings for more advanced users (Relative Scale, Absolute Scale and Chromatic Scale) keep tones in static and more natural positions.

Look Ahead Scale Transposing is applied after a loop is set and Chord Generator content is recorded within your DAW. This greatly reduces the chances that you play the Smart Scale slightly before it shifts to a new chord.



**Mapping** - The Mapping parameter defines how the Chord Generator and Smart Scale/Multi Arp are organized. The selection of a Mapping will most likely be related to your experience level playing the piano and with music theory in general. There are five different settings provided:

- **Chord Tones (beginners)** – Rounds scale tones to white keys. Transposes selected “Key” to first white key (natural C) and applies chords to white keys of left side octaves. Transposes “Root” of selected Chord to first white key (natural C) of right side octaves (1-3-5-7-2-4-6 alignment). Applies Key/Chord Shifters to black keys on left side octaves. Applies Arpeggios to black keys of right side octaves.
- **Dynamic Scale (low intermediate)** – Rounds scale tones to white keys. Transposes selected “Key” to first white key (natural C) and applies chords to white keys of left side octaves. Transposes “Root” of selected Chord to first white key (natural C) of right side octaves (1-2-3-4-5-6-7 alignment). Applies Key/Chord Shifters to black keys on left side octaves. Applies Arpeggios to black keys of right side octaves.
- **Relative Scale (high intermediate)** – Rounds scale tones to white keys. Transposes selected “Key” to first white key (natural C) of all octaves. Applies Chords to white keys on left side octaves. Applies Key/Chord Shifters to black keys on left side octaves. Applies Arpeggios to black keys of right side octaves.
- **Absolute Scale (advanced)** – Rounds scale tones to white keys. Applies Chords to white keys on left side octaves. Applies Key/Chord Shifters to black keys on left side octaves. Applies Arpeggios to black keys of right side octaves.
- **Chromatic Scale (advanced)** – Rounds scale tones and applies Chords to white keys on left side octaves. Applies Key/Chord Shifters to black keys on left side octaves.

**Inversions Button** - Keeps all of the scale tones within an octave when using Chord Tones and Dynamic Scale Mappings. When selected this will sometimes place lower tones to the right of other higher pitched tones. This is a result of organizing tones based upon chord tone positioning and not by pitch.

**Mute** – Mutes Smart Scale / Multi Arp Output. Mute is helpful when you want to play different Chord Prism instruments simultaneously, with each performing different tasks (CG or SS/MA).

**Scale Tone Layout** – Scale Tones are displayed on top of each white Smart Scale piano key. The letter on the key is indicative of the tone that will be applied with the corresponding key selection of your MIDI controller or qwerty. Piano keys with a colored bottom edge identify Chord Tones. When you select a key from a right side octave of your MIDI controller, the corresponding key within Chord Prism will become illuminated. Right clicking a white key engages Note Repeat within the Arp parameters.

**Pattern Generators** – Patterns are displayed on top of each black right side octave piano key. Selecting a black key will begin playback of the selected arpeggio or melody pattern. Each black key has its own separate set of pattern parameters, so users can program different patterns of each chord to play in real time. Right clicking a black pattern key will make it the actively displayed pattern in the effects chain. The actively displayed pattern key has a colored stripe across the top.

Pattern	Notes	Rhythm	Swing	Gate
Melody - Linear Up 1	8	Abstract 10	0 %	89 %

**Pattern** – Defines the direction of the most recently selected pattern. Note Repeat can also be applied to all scale tones after right clicking any white Smart Scale key, which will place a colored stripe across the top of the left most Smart Scale key.

**Arp Rate** – Determines the rate at which the most recently selected arpeggio pattern is played (1/2, 1/4, 3/16, 1/8, 1/8T, 1/16, 1/16T, 1/32 & 1/32T). Also applied to Smart Scale tones when Note Repeat is turned on.

**Arp Range** – Defines how many octaves the most recently selected arpeggio will span (1-3). Added octaves will reach into higher pitches.

**Arp Chord** – Defines how many tones are utilized in the most recently selected arpeggio pattern (5<sup>ths</sup>, Triads, 7<sup>ths</sup>, 9<sup>ths</sup>, 11<sup>ths</sup> and 13<sup>ths</sup>).

**Arp Gate** – Left Click and Drag to determine how long each tone from the most recently selected arpeggio pattern will last (0-100%). Also applied to Smart Scale tones when Note Repeat is turned on.

**Melody Notes** – Defines the number of tones that will occur within a bar for the selected melody.

**Melody Rhythm** – Defines the rhythm of how melody tones will be played over the course of a bar.

**Melody Swing** – Pushes melody steps that occur on even steps backwards for a more natural groove.

**Melody Gate** – Left Click and Drag to determine how long each tone from the most recently selected melody pattern will last (0-100%).



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