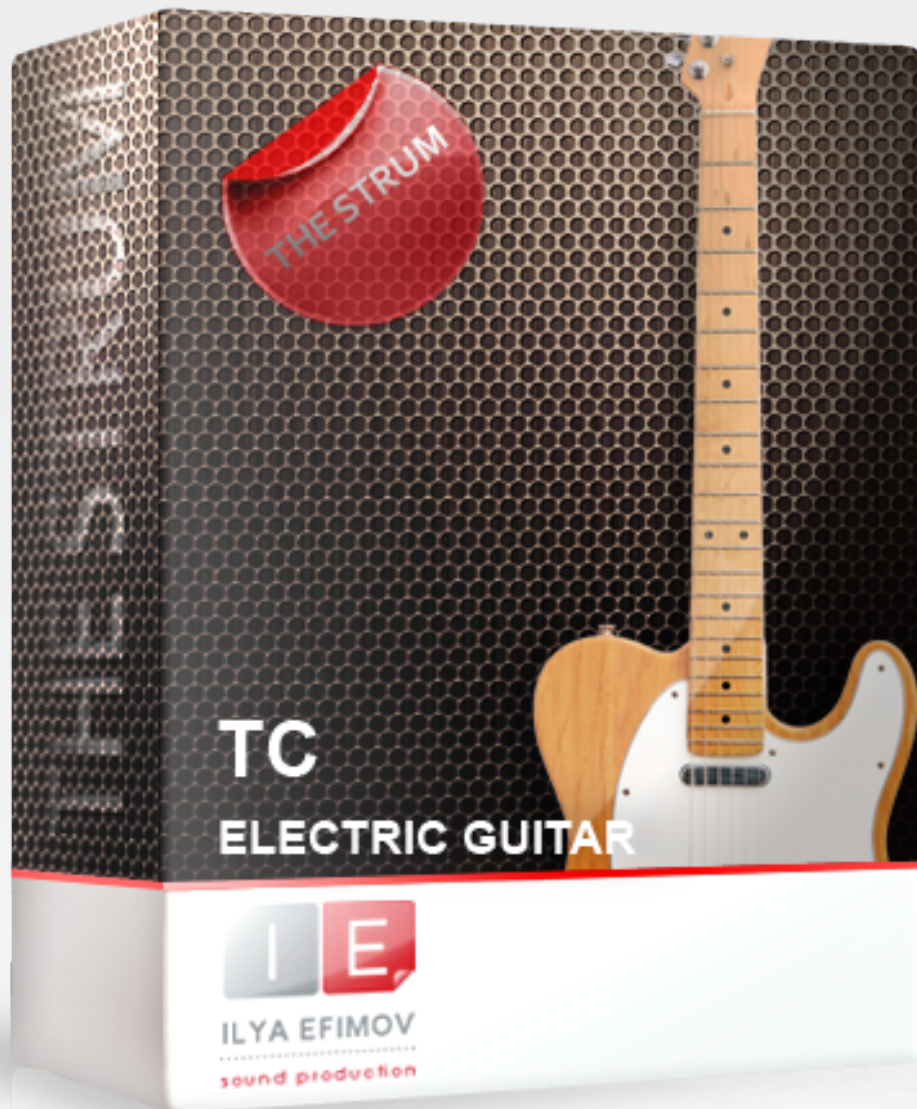




ILYA EFIMOV

sound production



TC
electric guitar

THE STRUM!

User`s manual

Welcome to Ilya Efimov TC strum !

Strum is a sample-based fully functional totally new formation module designed by Ilya Efimov Productions to imitate guitar musical accompaniment. Using our library could save you a lot of time and money as you will not need to hire a professional guitar player to record parts that would have previously been impossible to do on a virtual instrument.

Strum will not impose any limitations on your creative work, it is easy and convenient to use.

To add guitar accompaniment you will just need to choose the style and press keys on your MIDI-keyboard. You can play anything from simple to extremely complicated chords in any arrangement, Strum will do everything by itself.

The library isn't just restricted to root chords, it's familiar with a great variety of inversions and chord extensions. Each of the 33 chord variations that can be recognized by our instrument have 4 playing positions. Out-of-the-box our library comes with 1584 TABs. You can edit any of the TABs or create your own. Any chord, no matter how complicated, can be created and saved for use inside the library or on your HDD.

Our unique system – “Round Robin for Chords” is used in this library. It is a complex system that helps to prevent playing an exact replica of a strummed chord. The attack style, Pick noise variation, velocity of each string and Strum time (the time between attacks of each string during playing the chord) are also changed in a random way to avoid the machine-gun effect.

Strum has many styles. Altogether you have 320 cells available for storing patterns, 240 of which we have made ready for your fast and easy access. You can easily edit any style or create your own. The whole editing process is graphical and easy to understand even from the first time you use the library. Styles, patterns and chords can be saved inside the instrument or separately on your HDD.

For fast and easy switching between styles during use, you can choose patterns for your arrangement and compile them into songs.

As well as the features listed above, our library also provides a variety of interesting options such as Reverb effects, Delay, EQ, Compressor and 20 presets to save your personal settings for those effects.

There are also Stereo Double track options that will give you the opportunity to imitate 2 guitars playing simultaneously, and other settings to adjust the sound and style according to your taste.

- 🎵 2,71 Gb \ 3318 samples \ 44,1 Hz - 24 bit, stereo
- 🎵 10 velocity layers for each notes \ 23 frets on the each string with a round-robin algorithm.
- 🎵 Volume control and tone control for each of pickups
- 🎵 Chord recognition from a MIDI keyboard or sequencer
- 🎵 More than 30 techniques for chord strumming
- 🎵 NEW Strumming algorithm
- 🎵 Manual strumming
- 🎵 250 factory and 70 custom patterns for auto strumming
- 🎵 Pattern editing
- 🎵 Pattern and Chord Export \ Import options
- 🎵 No limitations for chord tablature Editing
- 🎵 Double track options
- 🎵 Different FX and Noises
- 🎵 Sound effects: Reverb, Delay, Chorus, Flanger, Phaser, EQ, Compressor, Cabinet, Stereo Width

If you use a typical size of the buffer preloading in Kontakt, this library will use 350 MB of RAM.

The library is protected by the watermark !!!
Each user receives a unique copy !

1. Please go to the download links you received after purchase and download all of the files.
2. Make sure you put all downloaded files into a single folder.
3. Unpack the downloaded files to any folder. Please note that the sample files you downloaded are a multi-part archive, so you do not need to extract every file; you only need to extract the first file that contains 'part1' in its name. To extract your files we recommend using Winrar for PC users, or UnrarX or Rar-Expander for the Mac. They're all free and you can find them here:

<http://www.rarlab.com/> (for PC users)

<http://www.unrarx.com/> (for MAC users)

http://download.cnet.com/unRAR/3000-2072_4-26159.html (for PC users)

<http://rar-expander.en.softonic.com/mac> (for MAC users)

3.1. Unpack the downloaded IETCS.rar file into the same folder. It is your unique copy.

4. You need to have the full retail version of Kontakt 4.2.4 or later to use this library. The free Kontakt Player does NOT support this library.

5. Open the Kontakt 4 browser (look on the left-hand side of the Kontakt user interface) and click the "Files" tab. Find the library folder, which you extracted earlier, and double click on the Ilya_Efimov_TC_Strum.nki file which should be in that folder. You can use the Quick-Build Database option to allow Kontakt to find and store the location for faster browsing and loading.

You cannot use the "Libraries" tab to "Add Library" for this product.

That feature is only available for encoded & locked "Powered-By-Kontakt" libraries.

Graphic User Interface

Strum interface has 3 tabs: Strum, Pattern, and FX tabs. You can find these tabs at the bottom of the GUI.



ILYA EFIMOV TC STRUM



The Strum tab

On this tab, chord positions and Manual Strumming settings are displayed. Strum also gives access to the list of general settings of our library.



The Pattern Tab

This page is designed for the use of Auto Strumming. On this page you can load, edit or create new patterns.



The FX Tab

This page is provided to set sound effects such as Reverb, Compressor, EQ, Delay and Stereo Width.

Les Paul guitars usually have two pickups, our library provides volume control and tone control for pickups. With the switch located on the visible body of the guitar, you can quickly switch between the pickups.

Right position - Bridge pickup

Left position - Neck pickup

Middle position - Both pickups.

You can control the position of the switch using the MIDI controller CC 78.

pickup	controller`s value
BRIDGE	0 - 19
BOTH	20 - 106
NECK	107 - 127



pickup	controller`s number
VOLUME	CC 83
TONE	CC 84

Chord recognition

Strum has a chord recognition system that chooses the correct chord based on the MIDI input from a sequencer or MIDI keyboard in real time. If you play a complete chord Strum will automatically recognize it.

Strum recognizes 33 chord types

major triad	minor triad
major triad -5	minor triad -5
major triad +5	minor 7
major 7	minor +7
major -5/7 (major +11)	minor -5/7
major +5/7	minor -5/+7
major +7	minor 7/9
major +5/+7	minor +7/9
major 7/-9	minor 6
major +5/7/-9	minor 6/9
major 7/+9	minor add9
major +5/7/+9	
major 7/9	dim 7
major +7/9	sus triad
major 6	sus 7
major 6/9	
major +7/13 (major 7/6)	
major 13 (major +7/6)	
major add 9 (without 7)	

In most cases, it doesn't matter what inversion of a chord you play. However, there are some exceptions where the bass note has to be the root or tonic note:

major +5. The bottom note is always the root chord note.

minor -5. The bottom note is always the root chord note.

major 6. The bottom note is always the root chord note. Other inversions are parallel minor with 7th.

minor 6. The bottom note is always the root chord note. Other inversions are Minor 5/7, where the root is 6th of minor chord with 6th.

dim7. The bottom note is always the root chord note.

major +7. The bottom note is always the root chord note. Other inversions are parallel Minor 9.

minor 6. The bottom note is always the root chord note. Other inversions are minor 5/7, where the root note is 6th of Minor with 6th.

Let's have a look at the exceptions using these examples:

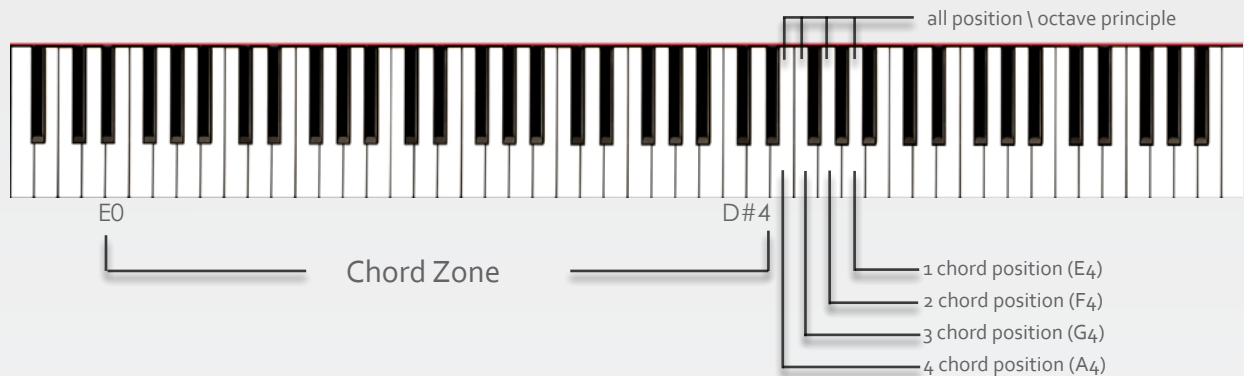
Am7 with the bottom note C = C6.

Am -5/7 with the bottom note C = Cm6

Am9 with the bottom note C = C+7/13

Chord Zone

The Chord Zone is the name given to the range of keys from **E0** to **D#4**.
The Chord names of a played chord are displayed on the left part of the strum tab a little below the fretboard.



Selecting Chord position

There are two ways to change chord position:



1. Octave principle.

Positions will change depending on which octave of the chord recognition zone you play in.

“All” button enables that mode

1,2,3,4 buttons disable the use of different positions in this mode.

If you play the chord using both hands and the notes in the chord duplicate each other, the lowest position will be used.

2. Change using Key Switches (KS).

Four KS are created to select positions.

1 position – **E4**

2 position – **F4**

3 position – **G4**

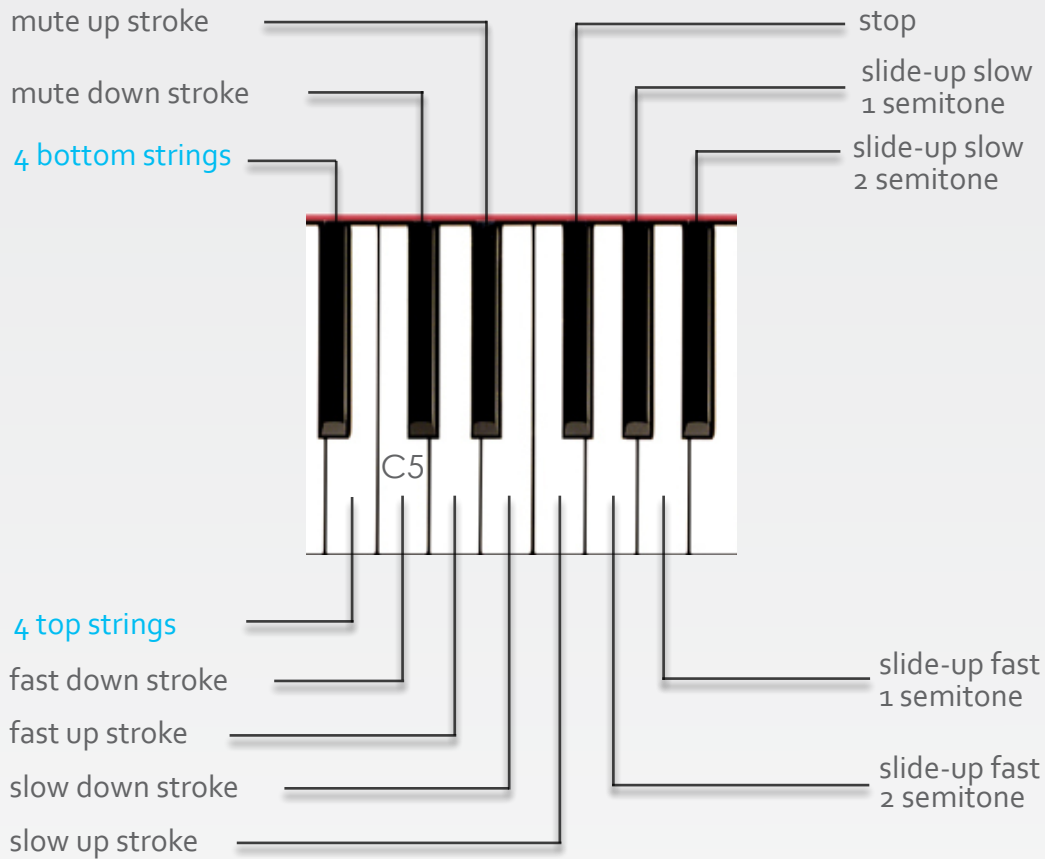
4 position – **A4**

Pressing all four KS at the same time will enable the octave principle.

The button [#\b] select between sharps or flats for the chord names.

Chord Articulations

10 basic chord articulations are available.



You can choose between performing the chord using all the strings, only on the bottom 4 strings or on the 4 top strings. Thus, 30 techniques of performing each chord are at your disposal.

A#4 and **H4** keys withes are used in combination with other chord articulation keys and will play either the top 4 strings or the bottom 4 strings of a chord.

A#4	4 bottom strings
H4	4 top string
C5	fast down stroke
C#5	mute down stroke
D5	slow down stroke
D#5	mute up stroke
E5	slow down stroke
F5	slow up stroke
F#5	stop
G5	slide-up fast \ 1 semitone
G#5	slide-up slow \ 1 semitone
A5	slide-up fast \ 2 semitone
A#5	slide-up slow \ 2 semitone

You can imitate guitar accompaniment in two ways: using the manual and automatic modes.

In the automatic mode [**Pattern mode**] simply select a pattern to hear the required accompaniment while pressing chords. In this mode only the chords are recorded into the sequencer.

In the manual mode [**Strum mode**] you can play and record the guitar accompaniment manually into your sequencer, changing chords and using chord articulations.

Round-Robin Chord System is used in our library, which guarantees that the sound of each chord will be different from the previous one, helping to avoid mechanical repetition.

Strum mode. Manual strumming

Go to Strum tab. The image of the guitar fret board occupies the main part of the interface. While playing the chord each of them is shown on the fret board with color markers. On the left-hand side of the Strum Tab the chord name and stroke types are displayed.



On the right-hand side of the GUI you will see 4 tablatures. Those 4 pictures display 4 possible positions of the chosen chord. The mode used is displayed on the highlighted picture.

Using the Pattern Mode\ Strum Mode button you can switch into a Manual Strumming Mode.

When Strum Mode is activated you can play chords in the chord zone and different variants of chord articulations in the articulation zone on the MIDI-keyboard.

You can toggle between up/down strokes within the chord zone when you play the chord notes in a legato strumming fashion.

Example:

Play a C and E to trigger a C chord. Now hold the E key and retrigger the C key to play an up stroke. Now hold the C key and retrigger the E key to play a down stroke. As long as you play legato you can toggle between up and down strokes.

If a chord is played for the first time it will be a down stroke. If the chord is repeated it will be played as up stroke.

String Keys

You can play arpeggios or fingered chords using String Keys on the MIDI-keyboard. Each note will correspond to respective guitar strings or a bass note of the chord.



C6	C#6	Bass 1 (Root note)
D6	D#6	Bass 2 (Alternative bass, usually the 5th degree of the chord)
E6	F#	D string
F6	G#	G string
G6	A#	H string
A6	H6	E string

Quick panel



The **Quick panel** at the bottom of the Strum tab allows you to quickly enable or disable options and noises.

Chord/Bass

With this option On, the bottom note of the chord is not included in the chord recognition algorithm. It will be evaluated as a bass note of the chord. Thus, you can use any derivative of the chord and complicated polychords.

For example,
 If the option Chord\Bass is enabled :
 E,G,C – C major chord with sixth
 G,A,C,F – F/G (F major chord over G bass)
 If the option Chord\Bass is disabled :
 E,G,C – C major triad,
 G,A,C,F – F major 9

You can operate turning on\ off this option using keyswitches:

Enable Chord/Bass – **Gb4**

Disable Chord/Bass – **Ab4**

Picking mode

When this mode is active, the chord performed in the Chord Zone will not sound. To play the chord use Chord Articulation Keys or String Keys.

Bass & Chord

In this mode choosing a chord in the Chord Zone will result in a bass note of the chord sounding. To play the chord use Chord Articulation Keys or String Keys.

Alt. Bass

Automatically alternates between Bass 1 and Bass 2 when the same chord is active in the Chord Zone.

Bass & Chord and Alt.

Bass modes are very convenient for playing real time accompaniments where you want to play the bass and chord separately. Use the left hand to press the chord in the Chord Zone to play the bass note of the chord and with the right hand play the chord using Chords Articulations.

Hold

This option sustains the chord when the hand is taken away from the keyboard. This feature acts as a substitute to the Sustain Pedal in Manual strum mode. Any chord change will not result in the notes overlapping.

Velo/Time

Activates the speed dependency of the strum on velocity

Pick Noise

Enables\Disables the pick noise during strumming the chord

Strum mode

Switches into a Manual Strum Mode

Double

Enables the guitar to play using the double-tracking recording technique mode.

Option page

Opens the page in the detailed settings of certain options.

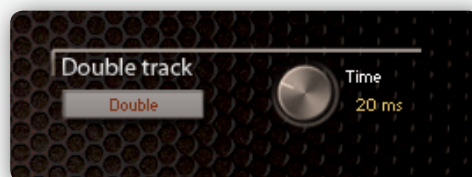
Edit chord

Edit a chord and its bass note.

Options page

Double track section

Enables the guitar to perform with the double-tracking recording technique.



Time knob

There is a knob to control the delay of the left channel.

Strum time section

You can adjust and control the Strum performance by changing the time delay between the strings.



Fast knob

Sets the time delay between the strings for Fast Strum Articulation.

Slow knob

Sets the time delay between the strings for Slow Strum Articulation.

Velo\Time button

Activates the speed dependency of the strum on velocity. Higher velocity values result in slower Strum times.



Fast min knob

Sets the minimal time delay between the strings for Fast Strum Articulation.

Fast max knob

Sets the maximum time delay between the strings for Fast Strum Articulation.

Slow min knob

Sets the minimal time delay between the strings for Slow Strum Articulation.

Slow max knob

Sets the maximum time delay between the strings for Slow Strum Articulation.

Pick Noise and Mute Chord

Enables/Disables the pick noise whilst strumming the chord.



Pick noise button enables this option.

You can select one of two variations of the sound and set the volume.

Mute/Mute FX knob sets the volume for the Mute chord articulation (C#5 and D#5 keys).

Fret Noise

This is the noise caused by the scratching of the guitarist's fingers along the strings. This FX is triggered when the chord is changed. You can also control the volume of this noise and the frequency it's used with the help of controlling knobs.



Vol. knob

Scratching sound volume

Freq knob

Frequency of random noises appearances

Real Guitar compatibility

The patch will react to RG patterns. If you are the owner of the Music Lab Real Guitar you can use any picking or strumming pattern from RG.



Time knob

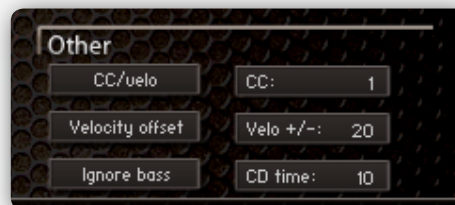
Affects the release time of chords in RG mode.

CC \ Velo

You can use the mod-wheel (or any other CC) to lower the velocity in real time.

Velocity offset

This value regulates general value of velocity



Ignore bass

This option turns off Chord bass notes (root and alt bass notes) and allows the use of a chord in a normal position.

For example:

G major triad in the 1st position:

Ignore bass OFF - Bass note - G and D

Ignore bass ON - Bass note - G (Elow string) and B (A string)

CD time/ Chord Definition time

You can adjust the chord detection time (range 1 – 30 ms). YOU HAVE TO USE THE NEGATIVE TRACK OFFSET AND HAVE TO SET THE VALUE TO AT LEAST THE SAME VALUE AS THE CHORD DETECTION TIME (or higher)

Pattern mode. Auto strumming

In this section we will examine fast use functions for prepared patterns. A separate section of this manual is devoted separately to editing patterns.

To start using Strum in the Pattern Mode you need to:

1. Turn on the Pattern mode
2. Select a pattern
3. Press any chord on MIDI key board



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Please note that you should play the chord 10-20 ms. early for it to play at the correct time. If you want to make use of Quantization in your sequencer, you need to use the negative track offset and set the value to at least the same value as the Chord Detection time (Option page)

Pattern Mode \ Strum Mode

This button turns on the Pattern Mode.

If Pattern Mode is enabled, Strum will start as soon as you play a note or start the sequencer. Any tempo changes in the sequencer will match to the tempo change of the Strum accompaniment. Strum will halt when you stop the sequencer.

You can **STOP playing** the pattern with MIDI-keyboard keyswitch **H -1**.

You can also switch between Pattern Mode and Strum Mode using the key **C0**.

If velocity > 64 will turn the **pattern** mode ON

If velocity =< 64 will turn the **strum** mode ON

Choosing the style and pattern

Strum consists of 320 slots to store patterns: 16 patterns in each of the 20 styles. You can load each of the 240 patterns that we created for you (16 patterns of 15 styles).

Go to the Pattern tab. Click any of the two buttons (style\pattern) to select the pattern.

On the left-hand side of the table you will see a list of styles and on the right-hand side you will see a list of patterns that you can select from. Each style consists of 16 patterns.

Auto button.

If this option is enabled the selected pattern will be loaded automatically. If this option is disabled to load the pattern you need to first close the window (using the button [X] that you can find in the upper left corner of the table) and then click the LOAD button in the pattern section.

Style	Pattern
1 Basic Pop 8th 1	1 Easiest 1 / F
2 Second 8th	2 Easiest 2 / F
3 Shuffle Pop	3 Easiest 3 / 5
4 Bass - Chord 1	4 Easy / 5
5 Bass - Chord 2	5 Easy 2 / 5
6 Pop 16th	6 Easy 3 / 5
7 Pop 16th - 2	7 Bawdy
8 Basic 3/4	8 Bawdy 2
9 Shuffle 3/4	9 Bawdy 3
10 Arpeggio 1	10 Bawdy 4
11 Arpeggio 2 - 6/8	11 Bawdy 5
12 Bossanova	12 Bawdy 6
13 Ska 2	13 Easy 4 / F
14 Pop Rock	14 Easy 5 / F
15 Pop Rock - 2	15 Bass_Chord 1
16	16 Bass_Chord 2
17	
18	
19	
20	

Pattern Select

There is an option for fast consecutive scrolling of the patterns using KeySwitches.

D#0. Scrolling pattern up. Loads next pattern from the list.

C#0. Scrolling pattern down. Loads a previous pattern from the list.

D0. Select pattern from velocity. The velocity of this KS is used like this:

a) Song mode off

Velocity 1 – 16 selects one of the 16 patterns of the current style

b) Song mode on

Velocity 1 – 20 selects one of 20 steps of the current song

During KS scrolling patterns are loading automatically.

In the active Song Mode (Song Mode detail in the following chapters) the scrolling keys work to navigate in the step list (up or down).

Latch

If this option is active the pattern will continue playing the last chord even if you release all chord keys.

Half tempo

You can set Strum to play at half-speed, regardless of the tempo of the current song, by clicking on the drop down menu in the Measure section:



[N] Normal tempo, is the same as the tempo of the current song.

[H] Strum's tempo is halved in proportion to the tempo of the current song.

Rnd Velocity

This option randomly changes event velocity. The **ON** button enables this option. You can also set the range of velocity thresholds by clicking and dragging the mouse along the values that are displayed in green and red colors.



Pattern MUTE mode

When a pattern is running, any strum key (including the stop note and single notes) will mute the current pattern as long as one of these keys is held. This allows you to play Chord articulations and single notes while the pattern is still running or just mute the pattern (with the stop note key). If you play a section in cycle mode the pattern mute mode will be cancelled at the beginning of the cycle.

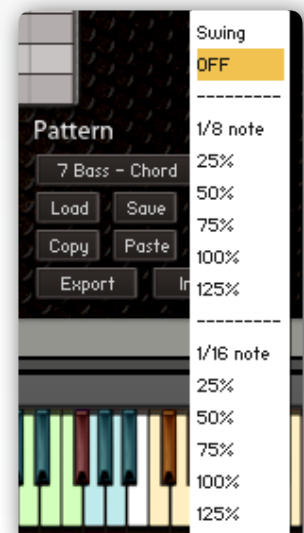
Bar offset option

If you start playing a 4 bar pattern in the 3rd bar of your sequencer project, the pattern will start at the 3rd bar of the pattern too. To fix this problem we provide the Bar Offset. This allows you to start patterns at any point in your sequence and ensure they are triggering the correct part of the pattern.



Swing

The swing option allows you to add swing factor to the pattern. You can change the rhythm between straight and shuffle. The swing menu is situated in the Pattern Section. Click the **OFF** button to open the drop down menu. Strum! will not recognize if a pattern has already been shuffle programmed, i.e. the pattern is in 3 Basic triplets. You should consider the duration of the pattern that you want to swing. The swing drop-down menu sets how far the off-beats are placed behind the eighth or sixteenth note positions. You can get Strum! to play exact triplets by setting shuffle to 50%.



Song Mode

There is space for 20 songs. Each song can have up to 20 steps. Each of these steps can be any pattern from any style. Empty steps in a song list are ignored. Song mode is activated in 2 ways:

a) Click the ON/OFF button

This will activate the currently loaded song list.

b) Click on the song list button and select a song from the drop down list.

If song mode is activated it will be reset to step 1 (or the first non empty step of this song).

You can use the small arrow buttons to navigate in the step list or the 2 keys on the keyboard to step up or down.

✎	Song	Clear song	Step	Clear step	Style	Pattern	✕
			1		1 Basic Pop 8th 1		
			2				
			3				
			4				
			5				
			6				
			7				
			8				
			9				
			10				
			11				
			12				
			13				
			14				
			15				
			16				
			17				
			18				
			19				
			20				

D#0.

Scrolls one step up.

C#0.

Scrolls one step down

To modify a song list:

Click on the song list button and select a song (by name). Click on the step # you

want to change or click directly on the style or pattern name (or an empty step) you want to change. Select a style and pattern from the drop down list. Close the drop down list and continue with the next step you want to change.

As mentioned above, you can leave steps empty, these will be ignored.

Songs can be renamed in the song list.

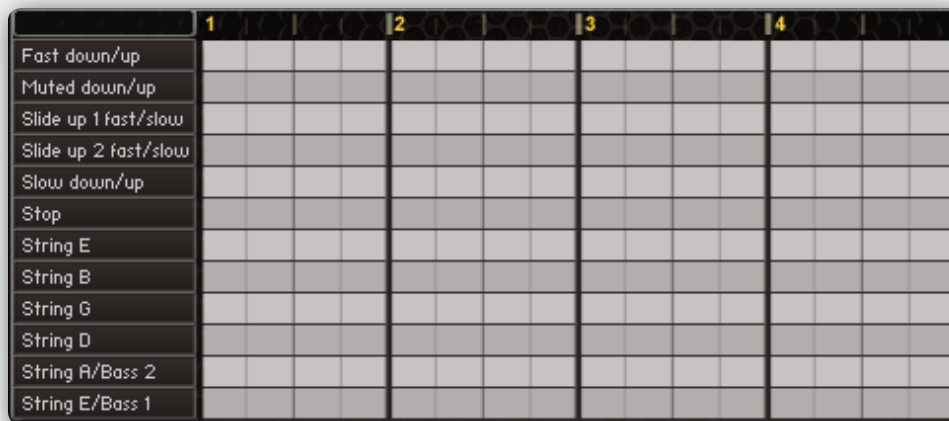
To add the song name, press the button containing a pencil icon. The button is situated in the upper left corner. Using the virtual keyboard you can write the name of the song in the dialog box and save the changes by pressing the Save button.

Please notice, that the dialog box, which may appear on this page, as well as on other pages of our program work solely with the virtual keyboard in our program. In this cases the computer keyboard will not work in the dialog boxes! If you are in song mode and click on either the normal style or pattern button the song mode will be turned off.

Pattern editing

Strum allows you to use available patterns, edit them and create your own patterns. You can arrange patterns, export and import them.

To create patterns you can use the graphic table which is similar to a standard sequencer key editor. This table occupies the major part of the interface.



Bars and time signature

A pattern can consist of 1 to 4 bars and can have its own time signatures. The time signature can not be changed inside a single pattern. Set the time signature of your pattern using the Measure menu in the drop down menu.

Choose the number of bars in your pattern, setting a number from 1 to 4 in the drop down menu.

The displayed table represents one bar of a pattern. Choose the exact bar you are going to edit, clicking one of the buttons 1-2-3-4 at the top of the editor.

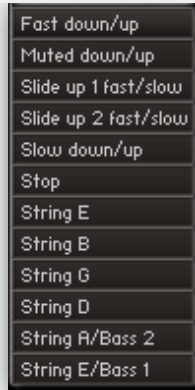


While playing the pattern, the bar which is playing at the moment is shown on the pattern tab.

Bar lock

On the right side of the 4 bar labels there is a button with a lock symbol. If it is active the currently selected bar will stay in view when the pattern is running. This allows you to work on a bar while the pattern is running.

Events Creation



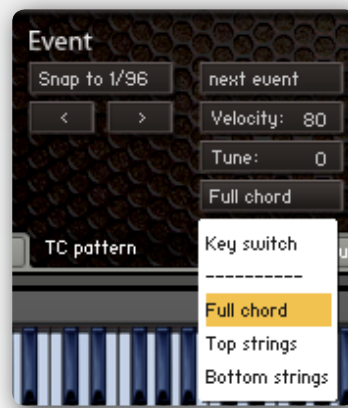
On the left-hand side of the Pattern Editor you can see a list of events: Chord Articulations and Single Strings. You can add the top/bottom strum assignment to a chord articulation.

For Single Strings you can use any of 8 articulations for a chosen note; selecting a necessary articulation from the list.

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Notice:

Before Pattern creation Click the button naming the style or pattern. Make sure that the button AUTO is off !!! Make sure that you turn this button off BEFORE you select a new location for a pattern!!! Otherwise you will lose the patterns you are planning to save



To add an event (articulation or string note) click somewhere in the grid.

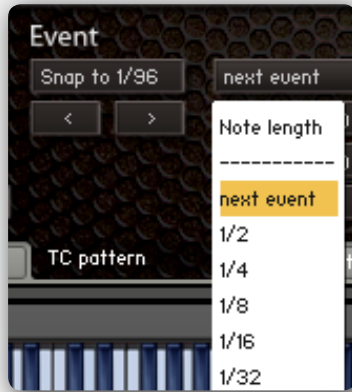
By default a newly created event is

1. a down stroke for stroke
2. a fast for slide-up

To create an up stroke and slow slide-up hold the ALT key.

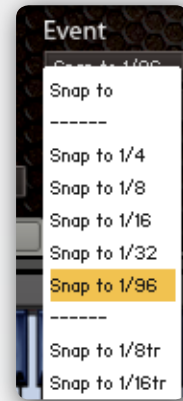
You can toggle between up and down stroke (fast and slow slide-up) by holding the ALT -key and click on an event.

Events are created on 16th's note borders, but you can move an event with the "<" and ">" buttons below the "Snap to" menu in the Event section.



With the "Snap to" menu you can select a quantization for the event move. The grid has a resolution of 1/96 notes.

By default an event will be played until the next event will happen.



You can control the length of an event in 3 ways.

1. Select the length from the menu
2. Add a stop event
3. Add an event at the same line with a very low velocity.

Deleting and Copying



A strumming event will replace all other events on the same note position.

1. Deleting a single event.

If you set the value to 0 the event will be removed.

2. Deleting a bar inside a pattern.

To delete a chosen bar inside a pattern press the **Clear** button in the Bar Section.

3. Deleting full pattern.

To delete a full pattern press the **Clear** button in the Pattern Section. To make sure that you really want to delete a pattern, there is a **Clear** Confirmation button. If you want to cancel the action, press **Cancel** button.

You can copy bars or entire patterns using **Copy** and **Paste** buttons. These buttons are situated in the Bar Section and Pattern section respectively.

Pattern Saving

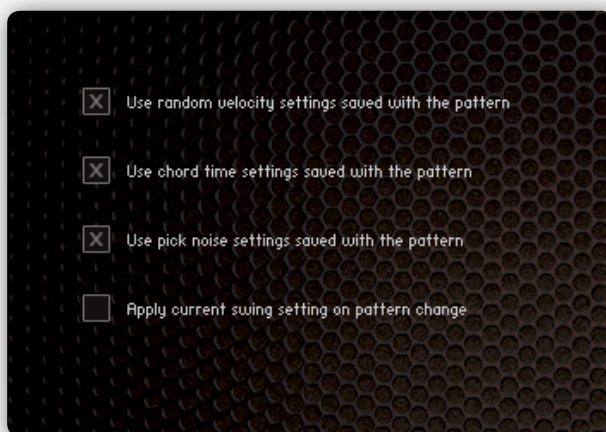
Click the button naming the style or pattern. Make sure that the button **AUTO** is **OFF** !!! Make sure that you turn off this button BEFORE you select a new location for a pattern! Otherwise you will lose the patterns you are planning to save!

Choose an empty preset where you want to store your new pattern in the Style Column and an empty preset in a Pattern Column. Close the Pattern table. Click the **Save** button. If you are sure press the **Save** button again or press the button **Cancel** if you don't want to save the pattern.

Notice

You can save your pattern into any slot. None of the patterns are protected from re-saving. To return to the default style you should import our styles that are available in the Data folder.

The settings of the RND VELOCITY, STRUM SPEED and CHORD_FX setting are saved with each pattern. On the option page you can select whether these saved settings are used (overwrite the current setting) or not.

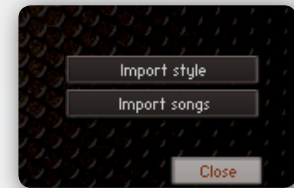


If a pattern should be used in a song list with a different tempo or swing setting then the default it should be copied to an empty pattern and this copy should be used in the song list.

Import - Export Styles

You can export and import a style, containing all the patterns and pattern names to and from the HDD on your computer. Only the currently selected Style will be exported. There is currently no option to export/import a single pattern.

Each style is its own data file and can only be exported/imported as complete. You can't import a style file into a different location i.e. if you export style #1 you can only import it into #1 regardless of which name you used to save the file.



Pattern name.

To add the name of your new style (pattern) or re-name the existing one press the button containing a pencil icon. That button is situated on the right side of the style or pattern name. In the dialog window that will appear in front of you, you can input the name using virtual keyboard and click the button Save. Saving of the name does not correspond to saving style/pattern. You can name the style/pattern any time.



Please, again, keep in mind that the saving dialog box on this and other pages only work with the virtual keyboard and your computer keyboard will not work with those dialog boxes !

Chord editing

You can change any chord to anything at all; there is no restriction. We intended this feature to enable you to build a “project” patch where you can assign complex chords to a single key.

To edit a voicing click on the EDIT MODE button.

You can select the voicing you want to change in 2 ways:

1. Play the chord on the keyboard
 Make sure that the correct variation label is highlighted; if not click on it.
2. Select the ROOT, CHORD and VARIATION from the menus.

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To turn a note on or off click on the fret board position.

If you hold the SHIFT key it will toggle between the note and a muted note.

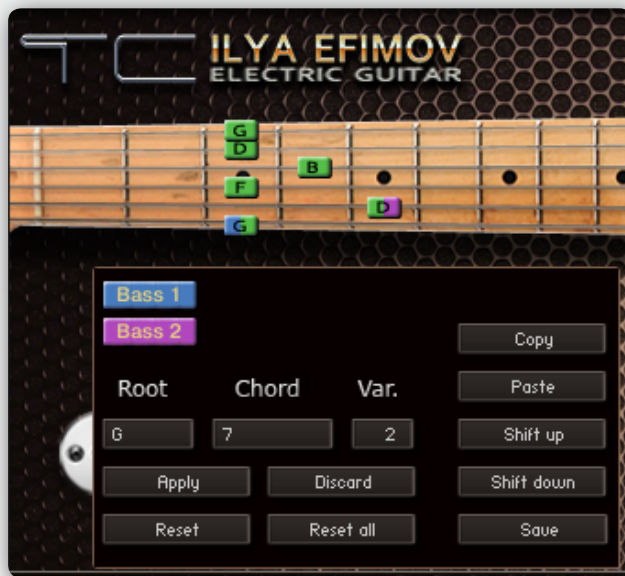
Muted notes are shown as “X” on fret 0.

An empty string in a voicing will not be played. A string with a muted note will be played with the mute sound. These muted notes are intended to be used for “inside” notes which shouldn't be played.

Strings marked with a muted note are ignored on slow strums.

For the BASS & CHORD feature it is necessary to assign 2 bass notes in each chord. Bass 1 is the main bass note, bass 2 the alternating bass note but it is also possible to assign both bass notes to the same note.

A bass note can be part of the voicing but also not a part of the voicing. Example: Take a look at the Dmajor chord. The D is part of the chord and bass 1 note. The A is not part of the chord but assigned to bass 2.



Apply button

Once you have made your changes you need to click on the apply button to save these changes.

If you select another voicing without clicking the apply button your changes will be lost.

Discard button

This button Discard the changes and returns to the previous voicing. This is not necessarily the default voicing; it could also be a previously made custom voicing.

Reset button

This will reset the voicing to the default value from the chord library.

Reset all button

This will reset the voicing to the default value from the chord library.

Copy/Paste buttons

Allows you to copy/paste a voicing and can be used with the SHIFT UP / DOWN buttons to quickly create the same voicing for different keys.

Save button

Saving your chord library. Please notice that this doesn't just save one chord, it will save the entire library of chords.

Effects

You can further produce the sound from this Library using integrated effects - Reverb, Delay, Chorus, Flanger, Phaser, Equalizer, Compressor and Cabinet FX.

You can control effects on the **FX tab**

You can change all the accessible parameters of each the effects.

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Reverb

To simulate realistic ambiences we use Convolution Reverb with our own Impulses Responses.



Drop-down menu situated to the right from the reverb button allows to choose

Send. Controls the level of the signal being sent to be processed to the reverb.

Return. the level of the signal being returned from the reverb.

Pre Delay. Introduces a small delay between the direct signal and reverbed signal.

IR Size (Early). Artificially squeezes or widens the impulse sample in time for early reverberations.

IR Size (Late). Artificially squeezes or widens the impulse sample in time for late reverberations.

High Pass (Early). Determines cutoff frequency below which the value of signal frequency will be diminished for early reverberations.

High Pass (Late). Determines cutoff frequency below which the value of signal frequency will be diminished for late reverberations.

Low Pass (Early). Determines cutoff frequency above which the value of signal frequency will be diminished for early reverberations.

Low Pass (Late). Determines cutoff frequency above which the value of signal frequency will be diminished for early reverberations.

Delay



Time. Delay time in milliseconds

Damp. Damps high frequencies of the delayed signal

Pan. If more than 0 there is a pan effect, which ping-pongs repetition signal between left and right channels.

Feedback. Sends a portion of the output back into the input of the delay line, which created repeating echoes

Send. Controls the level of the signal being sent to be processed to the delay.

Return. Controls the level of the signal being returned from the delay.

Chorus



Depth. Adjusts the range of modulated detuning. Higher values give a more pronounced chorusing effect.

Speed. Adjusts the LFO speed.

Phase. Imparts an LFO phase difference between the left and the right stereo channel. This can considerably increase the width of the output signal's stereo base.

Send. Controls the level of the signal being sent to be processed to the chorus.

Return. Controls the level of the signal being returned from the chorus.

Flanger



Depth. The amount of LFO modulation.

Speed. The LFO speed.

Phase. Imparts an LFO phase difference between the left and the right stereo channel. This can considerably increase the width of the output signal's stereo base.

Colour. Adjusts the delay line's range of operation and, consequently, the color of the flanging effect. Small values result in short modulated delay times, making the Flanger sound more like a phaser.

Feedback. Feeds a certain amount of the delayed signal back into the module's input, thereby creating a more pronounced effect.

Send. Controls the level of the signal being sent to be processed to the flanger.

Return. Controls the level of the signal being returned from the flanger.

Phaser



Depth. The amount of LFO modulation. Higher values cause the phaser effect to sweep over a wider frequency range.

Speed. The LFO modulation speed.

Phase. Imparts an LFO phase difference between the left and the right stereo channel. This can considerably increase the width of the output signal's stereo base.

Feedback. This control adjusts the emphasis of the peaks and notches that the comb filter effect imparts on the signal.

Equalizer

Using a 3-band equalizer you can change the frequency range of the guitar sound within 18 dB.

Three control parameters are available for each frequency band



Band 1, Band2, Band3. This are the 3 bands available for being changed.

Frequency. Chooses the frequency to be changed.

Bandwidth. Sets the bandwidth to be boosted or cutoff.

Gain. Controls the amount of boost or cutoff.

Compressor



Threshold. Level at wich the compression start.

Ratio. Intensity of the compression

Attack. Starttime of the compression.

Release. Time of the release after compression.

Output. Volume of the compressed signal.

Cabinet

This module simulates the sound of a guitar cabinet recorded through a microphone.



Type (dropdown menu). Allows you to choose the simulated cabinet mode.

Size. Adjusts the size of the simulated cabinet. Larger cabinets tend to have a more pronounced bass response, while smaller cabinets can sound thin and tinny.

Air. Controls the level of early reflections in the room response, adding a sense of space to the sound.

Treble. Boosts or cuts the level of the higher frequencies.

Bass. Boosts or cuts the level of the lower frequencies.

Output. Adjusts the module's output level.

Stereo

We have been striving to create the widest sound without any correlations. Nevertheless we offer you the opportunity to manage the sound width.

Spread. By default Stereo FX is turned off.

If you turn the knob to the far left position your audio channels will summed to mono. If you start turning the knob to the



Pan. This control allows you to place your signal within the stereo field. It works exactly like the Pan control of the Amplifier module.

Output. Adjusts the module's output level.

Global presets

The drop-down menu is visible on the FX tab.

To load the presets choose some Preset on the drop-down menu and press the **LOAD** button.

To save presets choose some preset on the drop-down menu and press the **SAVE** button.

Also you can import and export your settings to presets on HDD.

Sync issue

The new sync procedure comprises 2 different versions

1. The first version is based on the song position and is used when the instrument is used in a host and the sequencer is running.

This song position (MIDI protocol) returns a counter representing the time since the song was started. This protocol returns just the time and not which bar we are in. Based on this time information the script tries to calculate the bar # assuming the same time signature and the same pattern length are used throughout the song. There is no way to calculate the correct bar # if there was a time signature change or if you mix patterns with different bar length

2. The second version is used when the sequencer is not running or in standalone mode and is based on a beat timer which is derived from the current song tempo. This timer is just like a clock but returns no information about where we are in the song.

To avoid problems when the sequencer is running you should:

- Start a song at the first bar in the project
- Do not use time signature changes
- Only use pattern with the same length

There is another case which might lead to bad synchronization. Issues will occur if you:

- a) Use patterns with more than 1 Bar AND the song does not start at the first bar in the project.
- b) Use patterns with different bar length

EXAMPLE:

If you start playing a 4 bar pattern in the 3rd bar of your sequencer project, the pattern will start at the 3rd bar of the pattern too.

But to fix this problem we provide the Bar Offset. This allows you to start patterns at any point in your sequence and ensure they are triggering the correct part of the pattern.

SONGS BAR	0	1	2	3	4	5	6	7	8
1-Bar pattern	1	1	1	1	1	1	1	1	1
2-Bar pattern	1	2	1	2	1	2	1	2	1
3-Bar pattern	1	2	3	1	2	3	1	2	3
4-Bar pattern	1	2	3	4	1	2	3	4	1

Credits

Producer by Ilya Efimov
Script by Günter Hirscher
GUI design by Günter Hirscher and Ilya Efimov
Guitar by Alex Smirnov
Patterns by Max Rybakov, Ilya Efimov
Manual design by Ilya Efimov

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