

# TVEC 4 *PATTERNMAKER* *MICROTUNER*

TVEC 4 adds to TVEC 3 a powerful rhythm and tonal PatternMaker and micro tuning table. (This tutorial applies to any library that includes

TVEC 4. Therefore, while the images in this tutorial show strings, TVEC4 works in exactly the same way for all other TVEC4 instruments.)

See "What is **PatternMaker**?" and "Using **PatternMaker**" below.

See "What is **MicroTuner**?" and "Using **MicroTuner**" below.

PatternMaker and MicroTuner come with their own built-in tutorials. Hover the mouse over any feature, and Kontakt's info pane will provide information.

## TVEC 4 **PatternMaker** Features

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33



1. Repetition Number Knob. You can choose from 1 to 24 repetitions. Please note that a repetition is counted AFTER you play a note.
2. Random Duration Knob. Even though you can designate note length (duration), this knob will slightly randomize your settings for more realism.
3. Random Start Knob. You can randomize the start time of each repetition with this knob.
4. Key Signature Knob. This is the same knob that controls the key signature for trills (where applicable). All major, natural minor, and harmonic minor keys are available. You can also

20. Scale Button. All repetitions will be played in the key you choose (See "4" above).
21. Arpeggio Button. All repetitions will be played according to the key's dominant triad. Example: If you choose C Major, and play any note, all repetitions will play the nearest "C Major Triad" note to the designated note you set in the Tone Pattern (See "4" and "10" above).
22. You can split the keyboard, and have a pattern play on one side of the keyboard as you play an accompanying melody on the other side. Clicking this button does not do anything. It is just an indicator that you have chosen to split the keyboard.

simply turn off Key Signatures. Example: Suppose you choose C major. In the displayed diagram, if you play and hold a middle C, you will hear the C you played, followed by a repeated C, and then a full C arpeggio up 2 octaves, each note playing twice. Then the the arpeggio will descend but will be an F major arpeggio. However, if you should start with a different note, all of the following notes will remain in the C major scale. This way, you can use polyphony and not worry that a note will sound out of key. Please see "20" and "21" below for more information.

**5. Set Velocities.** Each repetition can have its own velocity setting from 1 to 127. If you set a velocity at 0, then the repetition will be silent.

Please note that the 1st repetition happens AFTER the first note you play.

**6. Set Tones.** Here, you can set a note above or below the note you play-and-hold that triggers the pattern. Please note that the 1st repetition happens AFTER the first note you play.

**7. Set Duration.** Here you can set each repetition's duration. Please note that the 1st repetition happens AFTER the first note you play.

**8. Velocity Pattern Preset Menu.** After you create a velocity pattern, you can save it to a preset. There are 10 available presets to which you can save your patterns.

**9. Velocity Pattern Preset buttons for automation.** With these buttons, you can automate any of the 10 Velocity Pattern presets to start cycling whenever you want.

**10. Tone Pattern Preset Menu.** After you create a tone pattern, you can save it to a preset. There are 10 available presets to which you can save your patterns.

**11. Tone Pattern Preset buttons for automation.** With these buttons, you can automate any of the 10 Tone Pattern presets to start cycling whenever you want.

**12. Duration Pattern Preset Menu.** After you create a duration pattern, you can save it to a preset. There are 4 available presets to which you can save your patterns.

**13. Duration Pattern Preset buttons for automation.** With these buttons, you can automate any of the 4 Tone Pattern presets to start cycling whenever you want.

**14.** The repetitions will be played as quarter notes.

**15.** The repetitions will be played as quarter note triplets.

**16.** The repetitions will be played as eighth notes.

**17.** The repetitions will be played as eighth note triplets.

**18.** The repetitions will be played as 16th notes.

**19.** The repetitions will be played as 16th note triplets.

(See "23", "24" and "25" below).

**23. Split Note Selection Slider.** With this slider, choose the note where you want the split. (See "24" and "25" below.)

**24. Melody Above Split Button.** Clicking this button will activate "Split Mode". Anything you play that is above or includes the split note will not be repeated. Therefore, you can play above the split to create an accompanying melody. Please note that the split will not cut off a tone pattern's range. Repetitions actually may play above the split at the same time that you're playing your accompanying melody.

**25. Melody Below Split Button.** Clicking this button will activate "Split Mode". Anything you play that is below or includes the split note will not be repeated. Therefore, you can play below the split to create an accompanying melody. Please note that the split will not cut off a tone pattern's range. Repetitions actually may play below the split at the same time that you're playing your accompanying melody.

**26. Cycle All Presets.** You can tell TVEC 4 to cycle all of your Velocity, Tone and Duration Pattern presets. See 27 through 31 below for more about cycling presets.

**27. Cycle Presets Randomly.** This will tell TVEC 4 to cycle presets in a random fashion. If you choose to cycle any presets, and you do not choose "Cycle Random", then the cycle order will be sequential ascending.

**28.** This button will link the Tone Pattern Preset numbers to the Velocity Pattern Preset numbers. So even if you cycle randomly, the Velocity and Tone Pattern preset numbers will match.

**29. Cycle Velocity Pattern Presets.** If you do not choose "Cycle All Presets", and choose "Cycle Velocity" here, then only the Velocity Pattern presets will cycle. You can choose whether to cycle ascending or to cycle random. (See "27" above).

**30. Cycle Tone Pattern Presets.** If you do not choose "Cycle All Presets", and choose "Cycle Tones" here, then only the Tone Pattern presets will cycle. You can choose whether to cycle ascending or to cycle random. (See "27" above).

**31. Cycle Duration Pattern Presets.** If you do not choose "Cycle All Presets", and choose "Cycle Duration" here, then only the Duration Pattern presets will cycle. You can choose whether to cycle ascending or to cycle random. (See "27" above).

**32. 1st Note Length.** This editor will choose how long the first note (the note you actually play) will last until it fades out. High values here may even cause the 1st note to overlap into your pattern.

**33. Active Repetition Display.** Displays the currently-playing repetition.

### What is PatternMaker?

TVEC 4's PatternMaker is a very sophisticated feature that enables you to create dynamic rapid patterns, whether rhythmical, tonal or both. This is especially useful should you want a "double-tongue" or "triple-tongue" phrase for brass, or super fast "scrubbing" or tempo-based tremolos for strings. The possibilities are truly endless.

Additionally, it does more than just make playing fast stuff easy. This is because even if you were to sequence a really fast phrase, especially when using the same note in rapid succession, you would have a very hard time getting a realistic feel. This is because in order to do so, you would need to have

The TVEC 4 PatternMaker gives you total control over rapid tonal and rhythmical phrases. This is because you can control the actual velocity, tone and duration of each repetition's note. And since PatternMaker plays repetitions without caring about a midi note-off event, you are free to be as creative as you want where overlapping the same note is concerned. Create slurs up or down to a note. Create fun ostinatos. The choices are endless.

Of course, all of PatternMaker's features are fully automatable. This includes:

-Turning PatternMaker on or off

the notes overlap a bit. But overlapping the same note in succession is typically impossible in a midi sequence. That's because the sequencer would need a midi note-off event before the next same note could be played. It used to be that a "cure" for this was to simply add more release to the notes. While this would be alright sometimes, the result could end up sounding a bit "flabby" and never "tight", with the perception of being too ambient.

Additionally, you don't have to load a different and special instrument for PatternMaker. PatternMaker is integrated right into the TVEC engine, so you get all of the same features you had in TVEC 3 at the same time. So imagine getting all of the great benefits of TVEC 3 with added instant access to PatternMaker all in the SAME INSTRUMENT!

- Choosing user-defined presets
- Cycling any or all Velocity, Tone or Duration presets
- Choosing whether you want to play an independent melody on top of or below your pattern
- Choosing from 1/4 notes to 16th note triplets
- Choosing any of the 37 key signatures or none at all
- Choosing to play in the key's scale or to create arpeggios
- Choosing random start times
- Choosing random duration times,
- And even choosing how many repetitions after each note you play.

And PatternMaker is polyphonic! (SmartLegato is turned off when PatternMaker is on.)

### **Using PatternMaker (Also see "Using Presets")**

PatternMaker replaces TVEC 3's Duplets and Triplets. Instead, you will see "Pattern On" and "Pattern Off". Both of these buttons are automatable and keyswitchable.

PatternMaker is only available for certain articulations:

#### Strings:

- AccentPP (whether "normal arco", tremolo, or trills)
- AccentMF (whether "normal arco", tremolo, or trills)
- AccentFF (whether "normal arco", tremolo, or trills)
- Short
- Pizzicato
- Bartok Pizzicato (where included)

#### Brass:

- AccentPP
- AccentMF
- AccentFF

This is because it is assumed that slower phrases would not require the PatternMaker feature, and using the "Smooth" or "Adagio" articulation would not sound good performed rapidly.

PatternMaker engages when the "Pattern On" button is on, and a valid articulation is selected, and while you hold down at least one note. And since PatternMaker only cycles while you hold down notes, you will be able to easily disengage the repetitions if you want by simply playing very short notes. This will add a lot of flexibility to your musical expression.

Since certain articulations are exempt from PatternMaker, this makes it very flexible for changing musical phrases instantly. For example, you could turn on the "Pattern On" button, and play the "Smooth" articulation as you always have without PatternMaker engaging. This is because "Smooth" is not a valid PatternMaker articulation. Then, the instant you choose a valid articulation (such as AccentFF) and hold down a note, PatternMaker will start cycling. Going back and forth and experimenting will prove to be quite interesting and provide a significant amount of creative flexibility.

To customize and create presets for PatternMaker, and to access its 33 features, choose "PatternMaker" from the "Settings" drop-down menu.

### **TVEC 4 *MicroTuner* Features**

1 2 3 4 5



#### 1. Key Signature

If you have turned on Key Signatures, then when you change key signatures, the microtuning values you set (see 2 below) will move accordingly.

#### 2. Microtuning Table On/Off

You can quickly disengage/engage MicroTuner with this switch.

#### 3. Microtuning Table

You can tune each note 100 cents sharp or flat. 100 cents sharp is the same as tuning up 1 half step. Alternately, 100 cents flat is the same as tuning down 1 half step. Note that these tunings do not trigger a different MIDI note. The tuning here changes the actual pitch of the sample(s) being played.

#### 4. Note and Tuning Display.

In these labels, you will see the note name, and by how much you have detuned.

#### 5. You can save as many as 10 microtuning table presets.

### What is MicroTuner?

TVEC 4's MicroTuner is a very sophisticated feature that enables you to micro tune each note of the 12-tone scale. You can go up to 100 cents sharp or 100 cents flat. This way, you can do atonal and all kinds of untraditional music that requires tuning with other than the conventional "Western" method. .

Additionally, you don't have to load a different and special instrument for MicroTuner. It's all integrated right into the TVEC engine, so you get all of the same features you had in TVEC 3 at the same time. So imagine getting all of the great benefits of TVEC 3 with added instant access to MicroTuner all in the SAME INSTRUMENT!

### Using MicroTuner

From the "Settings" drop down menu on the TVEC 4 Basic Settings page, choose "•Set MicroTuner.

There, you will see a 12-step table which represents each note of the 12-tone scale starting with C-Natural. This table has a horizontal center line through the middle of it. This line represents a tuning value of 0. This means the pitch receives no micro tuning. If you click and drag above the line, you will see that the corresponding label for that note alerts you as to the change in tuning you are making.

If you want to hear the micro tuning, make sure that you have turned on MicroTuner. You will see a small switch just above the table that says "MicroTuner Off" or "MicroTuner On" depending on the state in which the instrument was lastly saved. If you have Key Signatures turned on, then MicroTuner will move your microtuning to the appropriate new corresponding tone should you change key.

## Using Presets

This guide will show you how to use PatternMaker's presets.

There are 2 methods of saving presets:

### 1 - Saving individual tables (Velocity table, Tones table, Note Duration table)

#### 2 - Saving Globally

### 1 - Saving Individual Tables (Velocity table, Tones table, Note Duration table)

In this example, you will need to resave the instrument to preserve the changes when you are done.

A - Go to the PatternMaker page from Settings > •Set PatternMaker

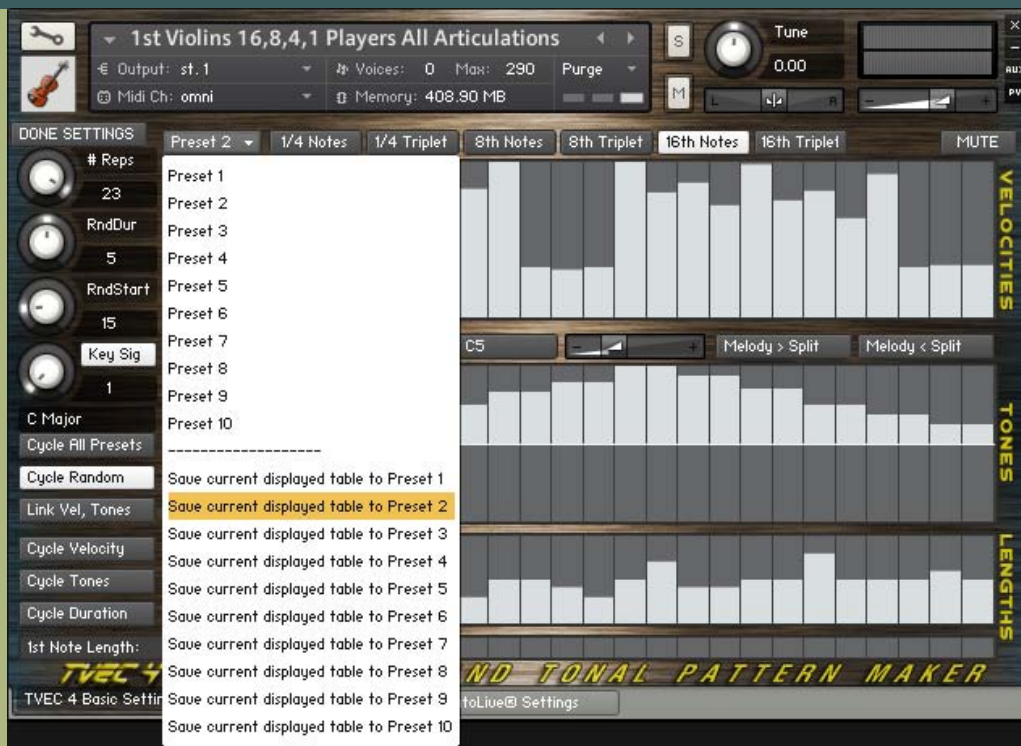
B - We will choose the Velocity Table's preset 2 and create a custom table there. So first, go to preset 2.



C - Now, we redraw the table.



C - Now, we save this new table to preset 2.

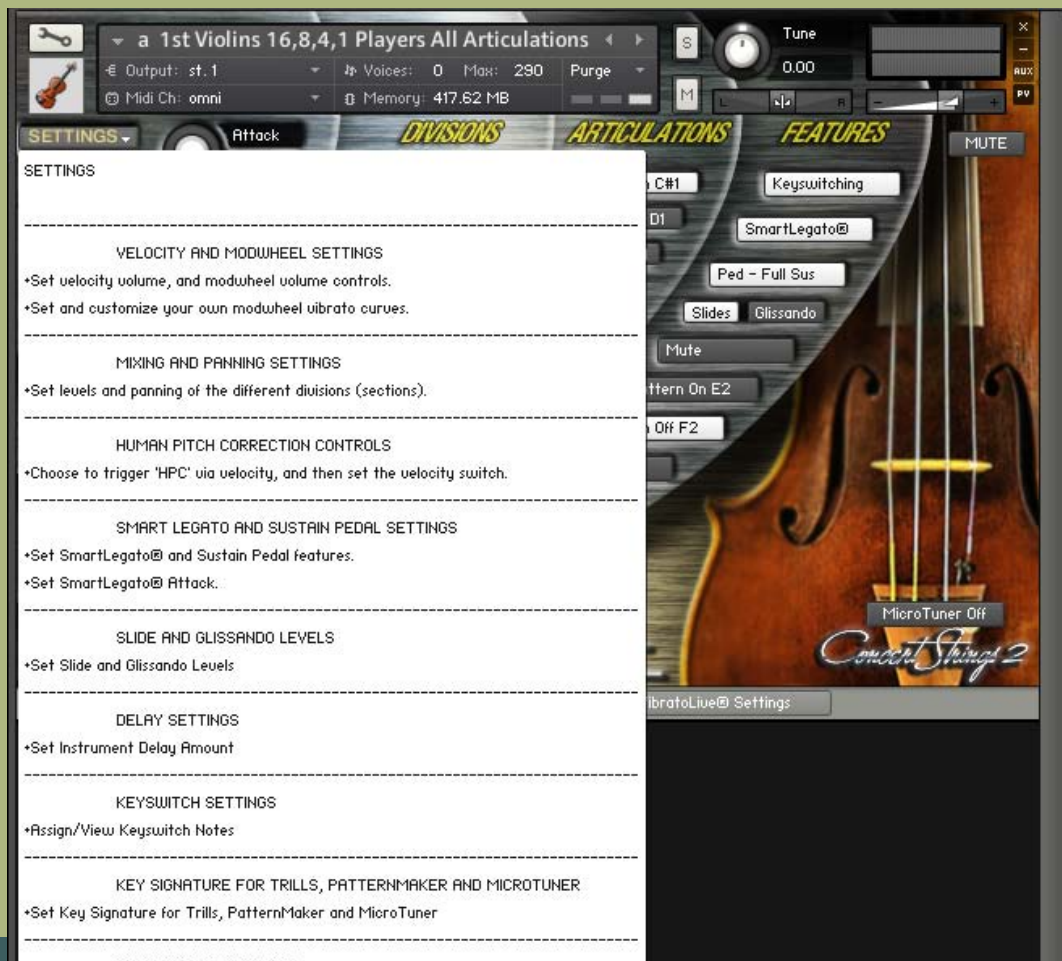


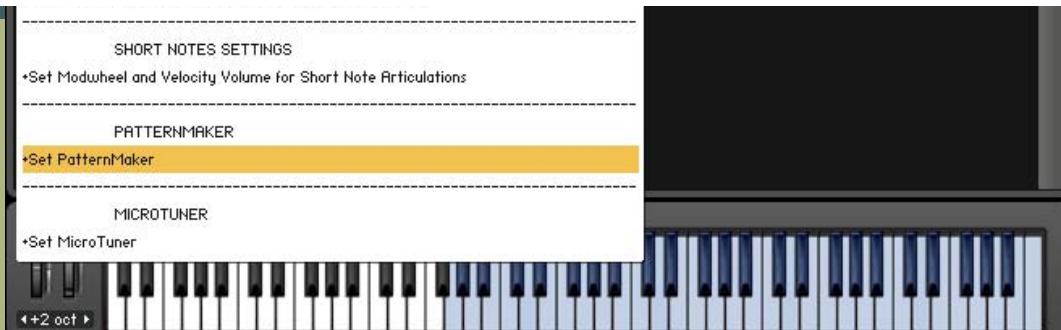
D - Now, this new preset is available to you as long as you have the instrument open. However, if you close the instrument and do not resave it, the "stock" preset #2 over which you drew will come back again the next time you open the instrument, and you will have lost your settings. Therefore, you MUST resave the instrument to preserve your changes.

## 2 - Saving Globally

This method allows you to create and save settings across any tvec 4 instrument whether violins, trombones or anything.

A - Go to the PatternMaker page from Settings > •Set PatternMaker





B - Draw your own patterns in any of the Velocity, Tones, or Note Duration tables.

C - After you have finished your settings, send them to the "Current Presets" page. (A page you can go to by clicking the "Current Presets" tab at the bottom of the interface.)

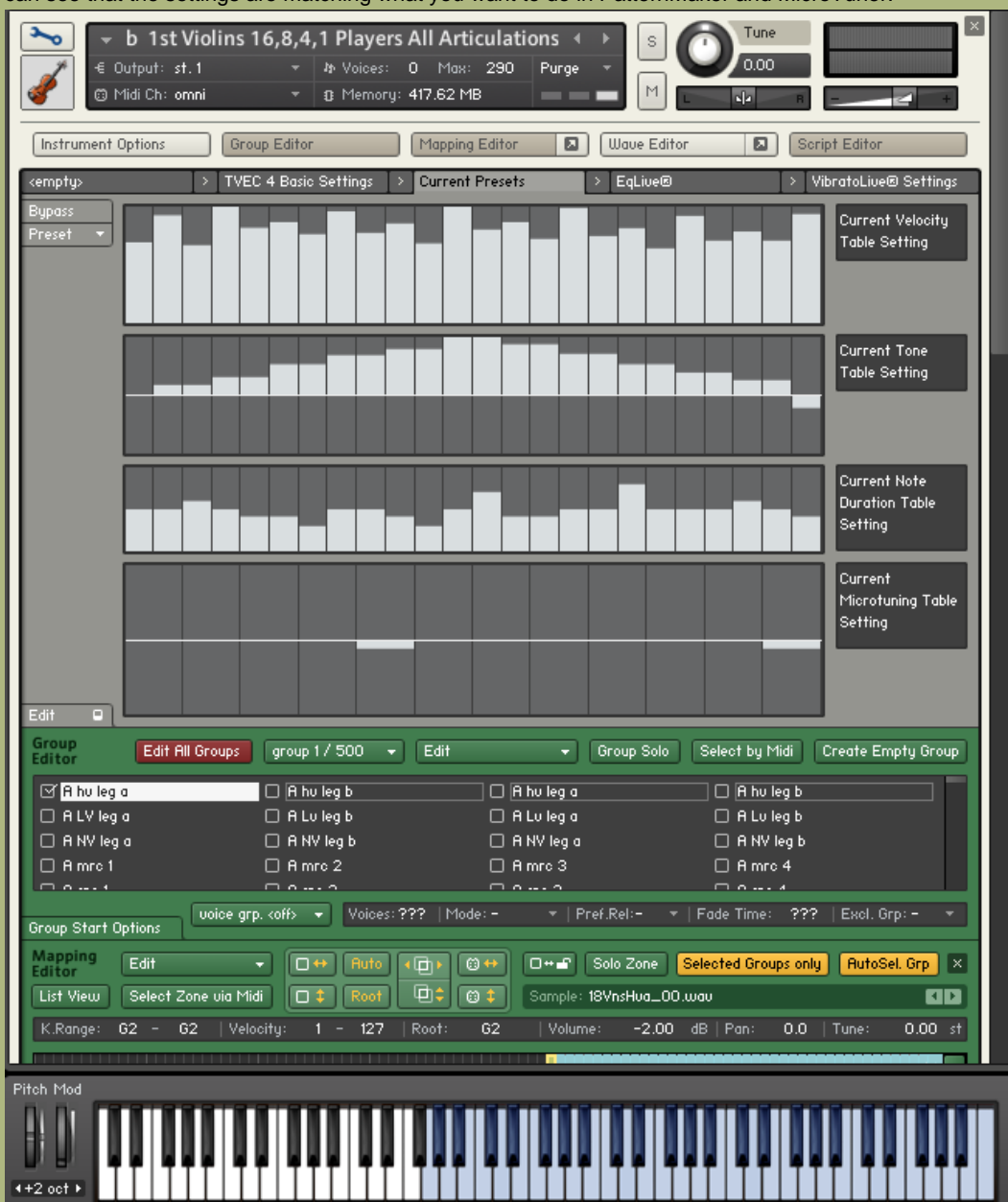


D - Now, click the "wrench" icon to open the instrument, and choose the "Current Presets" tab near the top of the interface. BE CAREFUL.





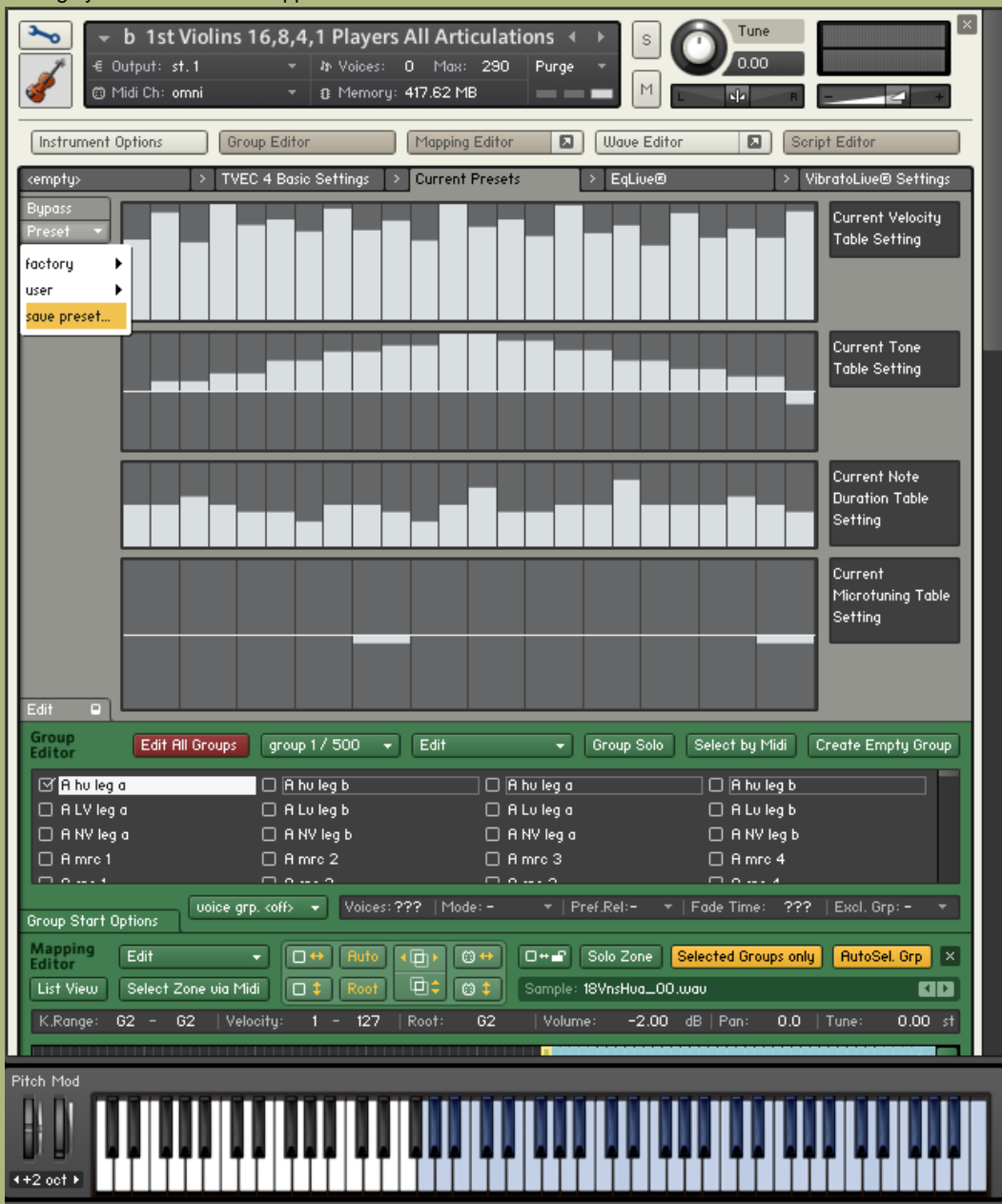
E - You will now see the values you set in the PatternMaker page assigned here in the "Current Presets" page. Please note that changing values here on this page have NO EFFECT, and should be avoided. The display here is merely for reference so that you can see that the settings are matching what you want to do in PatternMaker and MicroTuner.



F - Now, you can save the preset with any name you wish. Make sure you save it in Kontakt's presets/Scripts folder which should

happen automatically. You do not need to resave the instrument at this point.

G- To retrieve a saved preset, just go to the "Current Presets" page here, and choose "user" and then the preset you saved. The settings you saved will now appear here.



Then, go back to the PatternMaker, and choose "EVERYTHING" from the "GLOBAL" drop down menu. All of the settings will be loaded into the tables here and will now be active in PatternMaker



You can do the same saving of presets using the same method in the MicroTuner as well.