



## Album

---

An album is a collection of SSEYO Koan pieces or MIDI files and these can be played only by SSEYO Koan Plus. The pieces could be your favourites or a collection you have bought from another artist, already conveniently supplied as an album. When you buy a pre-configured album it comes with its own notes which you can read in the SSEYO Koan Plus Viewer module. You can also add your own notes to your own albums, allowing you to jot down things you feel when you listen to its pieces.

The album file has the .SKA extension. Albums can include SSEYO Koan pieces with the .SKD, SKT or .SKP format. They can also include MIDI files.

## Piece

---

'Piece', 'track', 'song' and 'soundscape' are all terms used to describe the music created by the SKME when it 'plays' the .SKD file (the SSEYO Koan Pro Design file) that you create. We use piece in the manual and online help to refer this .SKD file (or even .SKT file), in which you can see and edit all parameters and envelopes through the SSEYO Koan Pro interface. In other words, the piece is the collection of all parameter values used to create the SSEYO Koan music. When we refer to piece level parameters, these are parameters that affect the entire piece. Likewise when we refer to voice level parameters these apply to individual voices within a piece.

Each piece contains one or more voices, and each voice plays a patch/ instrument (both have the same meaning in our terminology). The sound and output of each voice is controlled by the parameters, some of which can be given envelope values so that they vary in controllable and pre-determined ways over the duration of the piece. The notes that each Voice plays are governed by various rules.. The piece file can either have the extension .SKP (encrypted SSEYO Koan Play file), .SKD (SSEYO Koan Pro Design file) or .SKT (SSEYO Koan Template file).

## **.SKD, .SKT and .SKP files**

---

### ***.SKD files***

SSEYO Koan Pro generates .SKD files, these being SSEYO Koan Design files. These files store all the information on each parameter, together with envelopes and patterns. .SKD files cannot be read by any SSEYO product other than Koan Pro, although they can be played by them. Only .SKD (and .SKT) files can be opened by SSEYO Koan Pro - although SSEYO Koan Pro can create .SKP (SSEYO Koan Play) files, it cannot read them or play them.

### ***.SKT files***

SSEYO Koan Template files. The same file format as .SKD files, but with a different extension.

### ***.SKP files***

SSEYO Koan Pro can create .SKP files (File Menu, Save Play File option), these being SSEYO Koan Play files which contain the same information as .SKD files but in a different format, non-loadable by SSEYO Koan Pro. These are encrypted. We recommend you distribute your Koan pieces in this format as other people with SSEYO Koan Pro will not be able to see how you have constructed your piece.

## Piece Details

---

Pressing the [Piece Details](#) button calls up the Piece notes window where add or edit any notes you want to provide about your piece

### Recording Rights/ Copyright

When you author a piece you have 2 options. One is to choose whether or not you will allow the output of your piece to be recorded to a MIDI file, and the other is to decide whether or not you are prepared to relinquish all present and future rights in and title to MIDI file or other recordings of their piece. To make these selections check the checkboxes provided in this dialog. Please refer to [copyright](#) for further clarification.

**Note:** The copyright on the Piece notes should also belong to the Copyright holder detailed in the Piece.

---

### See also

[Piece Details](#)

## Encryption

---

Pieces written in SSEYO Koan Pro can be encrypted so that others can not read them, offering a higher level of protection to those who spend time creating polished works. Encrypted files have the file extension .SKP. These can be played by SSEYO Koan Plus (or Koan Web/Koan Plugin for Netscape) as well as the non-encrypted files with extension .SKD.

You are perfectly welcome to ship files as .SKD files so that you can let others see what you have done, just remember it means people can more easily copy your techniques and ideas.

To encrypt a file, from the menu choose File Save Play File.

## Parameters

---

Parameters are the various types of controls SSEYO Koan Pro uses to generate its output, and everything that can have a value is a parameter. For instance, Mute can have a value of Tick (not muted) or m (muted); Voicetype can take the value of Rhythmic, Ambient, Follows, RepeatBar or FixedPattern; MIDI Channel can be 0 or 1 to 16; Pitch can have a value anywhere from 1 to 127; 'Volume' can take an envelope value meaning the value can vary continuously throughout the playing of a piece. All parameters are changeable in real time, subject to the Composer setting in the Options Setup dialog, which determines how far in advance SSEYO Koan composes and therefore when the changes will be heard.

## Envelopes

---

Envelopes are a graphical way of displaying the way a parameter changes over time; they are analogous to a 'bar chart' in that the height of the bar is in direct proportion to the value of the parameter: the higher the bar the greater the value. Edit them using the envelope tools. Some parameters with envelopes are:

- Volume
- Pan (Stereo position)
- Velocity
- Velocity Range
- Velocity Change
- Velocity Change Range
- Tempo
- Scale Rule availability



## **Instrument/ Patch**

---

This can be any of the General MIDI patch numbers (including Capital tones, SoundFonts and Gravis patches i.e. 125.6) and these are identified by their patch number i.e. 098 FX2. In addition any Drum Set can be used in a piece; drumsounds are identified as the patch number preceded by a D, i.e. D60. The drum sound patches/instruments are at the end of the General MIDI patch list. You can assign any number of instruments to a voice by using the list functionality built into Koan.

---

### **See also**

**[Patch parameter](#)**

**[AWE32 SoundFont Banks](#)**

**[Gravis Melodic Patch Bank](#)**

## Voice

---

A voice in SSEYO Koan Pro terminology is a 'player' of a patch /instrument, and each player is assigned a patch/instrument. You can define up to 50 voices but the number that can play at any given time is governed by your sound card or synthesizers capability and the MIDI Mapper (which allows up to 16 simultaneous channels to play for Windows 3.1). You can name each voice identifying them with any name you want; in the demos the names mostly describe the instrument. This is useful when you want to use different samples on an external synth/sampler.

**Note:** There are a number of different Voice Types available which also affect how your Voices play.

## **Piece marker**

---

When you play a piece you will see a moving red bar on the left and near the top of the Power View. This indicates the percentage time for which a piece has been playing, where the beginning represents 0% and the end 100% of the piece length. Click your mouse on it to immediately forward or rewind to that point. Also use the ALT + 0 to 9 keys to move to a percentage of the way through the piece (e.g. ALT + 2 would be 20%). This is great fun and is useful for scratch mixing a piece when you are creating an audio recording.

---

### **See also**

**[Scratch mixing](#)**

## General MIDI

---

General MIDI is a standard adopted by many manufacturers where there are 128 patches which have pre-defined numbers. This allows MIDI files to sound roughly the same when they are played back, no matter what General MIDI soundcard/ synth is used to play them on. For instance, patch no 19 will always be a Rock Organ sound (or nearest equivalent) no matter what the card. However, not all soundcards are equal and in general a piece can sound quite different on another soundcard, due to the very wide range in quality and similarities available.

**Note:** Some cards do not actually provide the full complement of 128 sounds, in which case the manufacturer will generally provide a MIDI Mapper patch map which diverts those patch numbers to their nearest equivalent.

## Rules - Introduction

---



**Scale rule,**



**Harmony rule,**



**Next Note rule,**



**Rhythm rule**

The Scale, Harmony, Next Note and Rhythm rules are some of the key controls that govern SSEYO Koan Pro's musical output.

Each rule is a group of probabilities of various events occurring. For instance, if the probability of a note occurring in a Scale rule is zero, there is no chance of it occurring at all. Whereas if you said you want a minor second (m2, two semitones) harmony to occur 5% of the time it will give you a little flavor of something else. The benefit of giving each event a probability means that you can get many subtleties of note combinations occurring.

SSEYO Koan Pro calculates which note pitches to play from the Harmony and Scale rules and the note durations from the Rhythm rules. If you set up and use a scale rule to mimic a major scale (where only certain notes are possible) you can be assured only notes in that major scale will play (according to the probabilities you have assigned to the various intervals). If, however, you create a new scale rule where any of the 12 possible semitones can play with equal likelihood (an atonal scale), but you then restrict the harmonies available with the harmony rule, you will get a tonally 'floating' piece.

The rules are always displayed in bar form, and in general they start at the Root note (0ve) and progress away from it the further you go to the right (towards the octave (8ve)). Also, the taller the bar the greater the chance that particular note has of occurring. Each bar can be dragged up or down with the left hand mouse button.

Harmony, Scale and Next Note rules can be applied at the Piece or Voice, and the Rhythm rule only at the Voice level. This means, for instance, the Piece could use one Harmony rule but each Voice could use a different scale rule. Whenever you see or use a ? as the rule value you are letting the SKME choose the rule at random from a list.

When a rule window is displayed and a note is played that corresponds to one of the rule values, the appropriate bar will flash green. This is to aid you in seeing what you are hearing. For instance, you could have a Piano playing a Major scale rule. Each time the piano plays a note the Scale rule bar will flash according to what the interval was. I.E. if a 5th is played then the 5th bar in the Scale rule will flash. As to be expected, when a voice is muted no notes will show as being played.

Note that for Harmony, Next Note and Rhythm rules, bars will only flash when the SKME is itself composing the notes from calculations it is making. If you are playing a FixedPattern, RepeatBar (or Follows voice in some instance) these are already pre-composed and so do not count; however, voices the SKME is **composing** against these will.

Changes you make to the rules are applied immediately and you can hear any changes as soon as the SKME can get to them. It can be a great source of fun hearing the impact that changes to these rules have on the output. However, whilst any number of rules can be assigned to each piece, it is generally best to start with simplicity!

**Note 1:** The values for the rules used in each template will generally differ from template to template.

**Note 2:** Rules can be defined at the piece level. If you then set a rule value at the voice level to be ? it will be chosen as the piece level default from any list of rules defined in the Piece view.

**Note 3:** Rules work relative to the current octave of a note.

**Note 4:** Each piece can have a list of rules defined so that every time it plays it can randomly select a rule from a pre-defined list of values; the lists can be set up at both the voice and piece level.

## Rules - Scale rule

---



The scale rule(s) determine which 'actual' notes **can** be played, like in a scale. As such, you can be as restrictive as you want over the notes you want to play. For instance, you may want to have a Voice with a Timpani as the Patch, and want it to play only certain notes, e.g. the 5th in a Scale, so you would set up the rules to only allow 5ths.

The probability of each note playing is determined by the height of the bar. This allows you to have the flexibility of a fixed scale with 'occasional' foreign notes (pitches). If you definitely do not want certain notes to play then give them a zero bar height.

To edit the Scale rule bars click on them with the left mouse button and drag the bar to where you want it. The taller the bar the greater the chance of that particular note occurring.

The layout of the rule is that the tonic or root (first note) of the scale is on the left, with the note a semitone above to the right of it, and so on. You have 1 full octave (12 semitones including the root note) to play with (where 'm' represents minor and 'M' major in standard music terminology):

**Ove m2 M2 m3 M3 4th b5th 5th m6 M6 m7 M7**

**Note:** Each Voice can use its own Scale rule - just remember the Harmony rule will determine the harmonies though.

**Note:** Each piece can have a list of rules defined so that every time it plays it can randomly selected one from the list.

---

**See also**

**Rules - Introduction**

## Rules - Rhythm rule

---



The Rhythm rule(s) determine the durations of any notes played; each Voice can use a different Rhythm rule. The likelihood of the various note durations is given by the height of the bar. This allows you to have the flexibility of fixed note durations with 'occasional' foreign note durations. If you definitely do not want certain note durations then give them a zero bar height. The layout of the rule is that the whole note is on the left, followed by other durations (given below) to the right. You have 9 durations to play with e.g. ('dotted' notes mean notes whose duration is increased by half):

**1    1/2.    1/2    1/4.    1/4    1/8.    1/8    Tr    1/16**

**1        Whole Note**  
**1/2.    Dotted half note/Dotted Minim**  
**1/2      Half note/Minim**  
**1/4.    Dotted quarter note/Dotted Crotchet**  
**1/4      Quarter note/Crotchet**  
**1/8.    Dotted eighth note/Dotted Quaver**  
**1/8      Eighth note/Quaver**  
**Tr       Triplet**  
**1/16    Sixteenth note/Semi Quaver**

To edit the Rhythm rule bars click on them with the left mouse button and drag the bar to where you want it. The taller the bar the greater the chance that particular note has of occurring.

**Note:** The probabilities reflected in the bar height (this can be anything from 0 to maximum) are adjusted at composition time to compensate for such factors as the current bar type e.g. 4:4 or 6:8 (triplets are encouraged in the latter) and by the amount of time remaining in a bar. SSEYO Koan Pro tries to ensure that any note chosen will not prevent the bars starting/ending cleanly.

**Note:** Each piece can have a list of rules defined so that every time it plays it can randomly selected one from the list.

---

**See also**  
**Rules - Introduction**



## Rule - Harmony Rule

---



The Harmony rule dictates what notes are allowed to be played, from a harmony perspective. SSEYO Koan Pro combines the Harmony rule probabilities with those from the [Scale rule](#) to come up with the best note fit.

The rule gives the relative probability of choosing notes a given number of semitones different from each and every other currently playing note. The first 'bar' of the rule is the relative probability of playing a note which is 0 semitones (i.e. the 'root') different from another currently playing note (i.e. the 'tonic'), the second bar is the relative probability of playing a note which is 1 semitones different from another currently playing note etc. You have 1 full octave (12 semitones including the root note) to play with (where 'm' represents minor and 'M' major in standard music terminology):

**0ve m2 M2 m3 M3 4th b5th 5th m6 M6 m7 M7**

The way that this rule is applied in practice, is to take the relative probabilities created by the Scale rule, and then for every OTHER currently playing note, run through all possible notes relative to the CURRENT note and choose the most appropriate one. When there are 3 voices playing there can be 2 harmonies active, e.g. if the notes are B D are playing and an F is chosen to play then both B-F and D-F must be valid harmonies. Harmonies are always worked out in a direction away from the root note determined by the Piece Root parameter. So, if your Piece Root is A and an E is playing and the SKME is considering playing a C, then it works out the harmony from the E up and through the octave (i.e. E F G A B C).

To edit the Harmony rule bars, click on them with the left mouse button and drag the bar to where you want it. The taller the bar the greater the chance that particular note has of occurring.

**Note:** Each [piece](#) can have a [list of rules](#) defined so that every time it plays it can randomly selected one from the list.

---

**See also**

**[Rules - Introduction](#)**

## Rules - Next Note rule

---



The Next Note rule determines for each Voice how far away (in semitones) from the last note the next note to played should be. The first 'bar' is the relative probability of shifting 0 semitones, the second bar is the relative probability of shifting plus or minus 1 semitones etc. I.E. if all the highest probabilities are towards the right (thus further away from the Root (0ve)), then the notes will tend to jump around more.

The layout of the rule is that the tonic or root is on the left, with the note a semitone above (or below) to the right of it, and so on. You have 1 full octave (12 semitones including the root note) to play with (where 'm' represents minor and 'M' major in standard music terminology):

**0ve m2 M2 m3 M3 4th b5th 5th m6 M6 m7 M7**

To edit the Next Note rule bars click on them with the left mouse button and drag the bar to where you want it. The taller the bar the greater the chance that particular note has of occurring.

**Note:** Each piece can have a list of rules defined so that every time it plays it can randomly selected one from the list.

**See also**

**[Rules - Introduction](#)**

## **MASTER.SKT**

---

The MASTER.SKT file is a special file that resides in the same directory as the Koan Pro installation. It is only ever used if you happen to delete all your templates and it works just like a template; it is like a reserve tank so to speak. Should you wish, you can load this file, change it as you would any other SKD or SKT file and then save it again. Change this with care!

## **Envelope display**

---

The right hand side of the power View window is what you will look at for parameters with envelopes. Parameters with envelopes are: Volume, Stereo, Velocity, Velocity Range, Velocity Change and Velocity Change Range.

Envelopes are under real time control (changes made are immediately actioned) and they are easy to change. Simply point at the line with the left mouse button and pull it to where you want it to go. Clicking on it with the right mouse button will call up a shortcut menu for the envelope tools.

When you have made your changes don't forget to save them!

## Adding/ modifying a Voice

---

### Adding a Voice

Double-click with the left mouse in the row in to which you want to add a voice or click with the right mouse button and select Add from the shortcut menu. Alternatively, select Edit Add from the menu bar.

### Copying a Voice

Click with the right mouse button anywhere in the row of the voice row you want to copy and select Copy from the shortcut menu. Alternatively, select Edit Copy from the menu bar or Control C.

### Copying a parameter or envelope

Click with the right mouse button anywhere in the row of the voice row you want to copy and select Copy Parameter from the shortcut menu. Alternatively, select Edit Copy Parameter from the menu bar or Control+SHIFT+C (you can only paste this value back into the same parameter of another voice).

### Pasting a Voice

Click with the right mouse button anywhere in a blank row and select Paste (you must already have copied a voice) from the shortcut menu. Alternatively, select Edit Paste from the menu bar or Control V.

### Cutting a Voice

Click with the right mouse button anywhere in the row of the voice row you want to cut and select Cut from the shortcut menu. Alternatively, select Edit Cut from the menu bar or Control X.

### Editing voices - see [navigation](#)

**Note:** Each Voice uses one MIDI channel (unless [MIDI Channel Sharing](#) is defined otherwise), so check with your soundcard/ synthesizer as to how many simultaneous channels it can play (multi-timbrality).

## **Adding/ modifying an instrument/ patch/ parameter/ envelope/ rule**

---

### **Modifying a patch/instrument (see also [navigation](#))**

Select the [patch](#) with your left mouse button (or arrow to it and press enter) and you will be presented with a list of [General MIDI](#) instruments, including drums (which are prefixed with D). You can choose a new instrument and it will be effected immediately. To add an instrument that supports the GS Capital tones or AWE32 SoundFont Banks, type in the patch and bank you want with the syntax `[patch].[bank]`, eg 6.4.

### **Modifying an envelope**

Click on the envelope with the left mouse button and use the envelope tools to make your [changes to the envelopes](#).

### **Modifying a rule**

Select the display to be in one of the Rule views by clicking on the [rules button](#). Then click on an drag the bars up or down with your left mouse for real time changes to the values.

### **Adding/ deleting a rule**

Select the display to be in one of the Rule views by clicking on the [rules button](#). Click on the Rule name and select Edit Add or Edit Delete from the menu or use your right mouse button to bring up the shortcut menu.

### **Modifying Piece level parameters**

Select the Piece View toolbar button. Change any of the parameters available (see [navigation](#)).

## Lists - Adding entries and modifying

---

Lists are a fundamental and important feature of SSEYO Koan Pro. A list in SSEYO Koan Pro terms is a list of different values that a parameter can take, already defined by you, and these are stored in the piece. Each and every parameter in SSEYO Koan Pro can have a list of values associated with it. When a piece plays it will randomly select a value for the parameter from this list, and this parameter value (it could be a patch for instance) will be used for the duration of the piece (see exceptions, below). This allows a tremendous degree of freedom for a piece of SSEYO Koan music, as a piece need never use the same parameter values or patches.

For example, a list of patches could be defined for a voice. When the piece plays, the voice will select one patch to play from a list of many. The SKME chooses which patch to play for each voice every time the piece is played. If there is only one patch in the list the choice is easy! If there a number of patches in the list, it chooses one at random.

### *Exceptions:*

The **Patch Change Bars** parameter allows you to set up a voice so that it can automatically change its patch at various times during the piece.

The **Patterns parameter** can accept a list of patterns and each time it reaches the end of a particular pattern (from within a pattern group) it will choose another from within the pattern group.

### **Creating a list**

To create or edit a list either click on the item with your right mouse button, select Edit Lists from the menu or press CTRL+L.

### **Adding to a list**

Press the Add button to add a new item which can then be edited in the normal way. Use the copy and paste buttons to quickly duplicate a number of values.

**Note:** To instantly change the parameter value used by a playing piece, highlight the appropriate value in the list and press Apply.

**Tip:** You may want SSEYO Koan Pro to choose say one particular value 9 times out of 10. Do this by having 9 occurrences of this value and one occurrence of another.

## SSEYO Koan Pro Power View

---

See also [shortcuts](#), [Quick Steps](#), [Voice X View](#) and [Piece View](#).

A view is a way of presenting information in SSEYO Koan Pro, namely the values of the parameters used by your piece. The Power View is the main way of seeing and editing your SSEYO Koan piece (it is the main window), and it is supplemented with the [Voice X View](#). In SSEYO Koan Pro there are five parameters that are common to most views; these are [Voice Name](#), [Patch](#), [MIDI Channel](#), [Voice Type](#) and [Mute](#).

There are a number of buttons in the Power View window, each displaying a different set parameters (the parameter views). The first five buttons show the parameters closely related to the five Voice Types, the next four display parameters like controllers and voice level rules, the middle four are soundcard specific and the six on the left select the envelope views. Just below these buttons you will see some text on the left (next to an up arrow) showing you which view you are in and text on the right (next to a down arrow) showing the full name of the parameter for the currently selected cell. Beneath this are the column headers which display the parameter names, full or abbreviated, dependent on how wide you set the column (See Customization below).

### Moving around

Use your keyboard arrow keys to quickly navigate around the screen and use the special Control keys (CTRL+ No. or CTRL+SHIFT+No.) to change between parameter views. To call up Voice X view click on the numbered button in the first column of the voice whose parameters you want to exclusively view and edit.

### Keyboard control - numerical values

Move to the cell with your arrow keys and press the Enter button to select it. Use the + or - keys to increment/decrement values by 1 or the [ ] keys to increment/ decrement by 10. Using the CTRL+[ or CTRL+] keystrokes will increment/decrement values by 100.

### Keyboard control - patch/list/combo box cells

Once you have pressed the Enter key to select the cell, you can use the up or down keys to move up or down in the list (e.g. for changing patches).

### Keyboard control - Voice Type cell

Press the Enter key to toggle through the Voice Type, or press a key with the first letter, e.g. A for ambient.

### Mouse control options

- Position the mouse over a slider in a number cell (a double headed arrow will show) and click with the left hand mouse to select it. Then drag it to the new value.
- Single click on the left hand or right hand side of the cell (not on the text or numerical value) to increment/decrement by 1 (and use the SHIFT key to make this +/-10 or the CTRL+SHIFT key to make it +/-100).
- Click with the left mouse and hold down anywhere in the cell and drag the mouse to the left or the right. This will call up a floating speed control which will increment/decrement the value. The further away you drag the mouse from its original position the faster the value will change.

### Parameter value entry/editing by keyboard

Simply type in the Voice Name cell to change a Voice Name; type in a number to change a number cell or type in a new Patch number or name (it will search for a patch based on the letters you type) to change the Patch.

### Editing Patterns and WAV file names by keyboard/mouse

Using CTRL+ENTER (or CTRL+SHIFT with the mouse) on the Pattern or WAV cells will allow you to



enter/edit the text manually. Normally you will use the Pattern Editor or WAV dialog.

### **Shortcut menus**

Click anywhere in the parameter grid to bring up a shortcut menu, for copying, pasting, cutting and lists.

### **Customization of row/column sizing**

Double clicking on a column header (top most cell in a column) will alternate between minimising the column width to the smallest abbreviation of a parameter and doing a best fit on the column. In this case the full parameter name in the column header and parameter values (whichever is the larger width-wise) are both visible.

You can increase the parameter column widths by moving the mouse over the column header and dragging to the left or right the double headed arrow that appears.

In the User Preference dialog that follows you can set the default height of every row in all the views. You can manually set each row height by moving the mouse over the first column (which contains the Voice X buttons) and dragging up or down the double headed arrow that appears. You can resize every row back to the default height by pressing the at the top of the first column.

## **SSEYO Koan Pro Voice X View**

---

The Voice X View is where you can edit and review the parameters of one voice at a time. Each Voice can have its own window. The format displays wider columns so you can see the parameters and modify their values more easily. The Voice X window duplicates the Parameter and Envelope view icons so that you can easily swap views.

To call up Voice X View from the Power view click on the numbered button, e.g. 1, in the first column for the voice whose parameters you want to focus on.

You can edit the parameters in the normal way and use the [keyboard shortcuts](#) to move between the [parameter views](#).

---

**See also**

**[Power View](#)**

**[Piece View](#)**

## Row Height reset tool

---



Use the button at the top of the first column (where there are all the buttons to select the Voice X Views) to reset all your Voice row heights to the default value given in the User Preferences dialog.

**See also**

**User Preferences**

**Power View**

## Navigation and Shortcuts - keyboard and mouse

---

### Keyboard

#### Navigation

Changing between parameter and envelope views

Changing numbers and text

Copy, cut, paste, add, lists

Saving and opening pieces

Playing, stopping, muting, recording and solo controls

### Mouse

#### General operation

Changing values - clicking

Changing values - dragging

Changing envelopes

## Keyboard shortcuts - navigation

---

<b>To move</b>	<b>Press</b>
One cell to the left	LEFT ARROW
Once cell to the right	RIGHT ARROW
One cell up	UP ARROW
One cell down	DOWN ARROW
End of voice row	END
Beginning of voice row	HOME
To a position in the piece (0% to 90%)	ALT+0 through 9

## Keyboard shortcuts - parameter and envelope views

---

<b>To change to</b>	<b>Press</b>
From parameter to envelope window (toggle)	F6
Views 1 through 9	CTRL+1 through 9
View 10 through 13	CTRL+SHIFT+0 through 3
Next view	CTRL+PAGEUP
Previous view	CTRL+PGEDOWN
Volume envelope	CTRL+1 (env window)
Velocity envelope	CTRL+2 (env window)
Velocity Range env.	CTRL+3 (env window)
Velocity Change env	CTRL+4 (env window)
Velocity Change Range env.	CTRL+5 (env window)
Pan envelope	CTRL+6 (env window)
Select help on selected parameter	CTRL+F1

## Keyboard shortcuts - numbers and text

---

<u>To</u>	<u>Press</u>
Select a cell for editing/ apply value after editing	ENTER
Increase value by 1	+
Decrease value by 1	-
Increase value by 10	]
Decrease value by 10	[
Increase value by 100	CTRL+]
Decrease value by 100	CTRL+[
Change patch number	Type patch number and press ENTER
Change patch name	Type patch name and press ENTER
Cycle through a list	ENTER repeatedly
Toggle a value (e.g. Mute)	ENTER
Edit number directly	Type new number and press ENTER
Edit WAV or Patterns values by hand	CTRL+ENTER when in the WAV or Patterns cell

## Keyboard shortcuts - copy/cut/paste/add/lists

---

To	Press
Copy a voice	CTRL+C
Copy a parameter or envelope	CTRL+SHIFT+C
Add a voice	ALT+E+A
Paste a voice	CTRL+V
Cut a voice	CTRL+X
Delete a voice	CTRL+DEL
Create/ Edit a list	CTRL+L



## Keyboard shortcuts - saving and opening pieces

---

To	Press
Create a new piece	CTRL+N
Open a piece	CTRL+O
Save a piece	CTRL+S

## Keyboard shortcuts - playing/stopping/muting/recording/solo

---

To	Press
Play a piece	SPACEBAR
Stop a piece	SPACEBAR
Fast forward a piece	CTRL+F
Fast rewind a piece	CTRL+B
Quick MIDI recording	F5
Mute (toggle)	ENTER key in mute cell
Solo a voice	/
Unsolo	\
Force note to play	CTRL+SPACEBAR
Force note to stop	ALT+SPACEBAR

## Mouse - General operation

---

<u>To</u>	<u>Click</u>
Select/toggle a cell	Left mouse button
Select combo box or edit parameter value	Double click on cell with left mouse button
Bring up shortcut menu	Right mouse button
Select help on a parameter	Bring up shortcut menu with right mouse button on any cell and choose Help On This Parameter
Toggle column width between minimum and maximum value	Double click on column header
Increase / decrease column width	Drag column header handle with left mouse button
Move to a position in the piece	Click on the piece marker

## Mouse - Changing values by clicking

---

**Note:** The number/text area is a dead zone when using the mouse

<u>To</u>	<u>Click and Click/Hold</u>
Increase value by 1	Left mouse button on RHS of cell
Decrease value by 1	Left mouse button on LHS of cell
Increase value by 10	CTRL+left mouse button on RHS of cell
Decrease value by 10	CTRL+left mouse button on LHS of cell
Increase value by 100	CTRL+SHIFT+left mouse button on RHS of cell
Decrease value by 100	CTRL+SHIFT+left mouse button on LHS of cell
Solo a voice (toggle)	CTRL+left mouse button in mute cell
Edit WAV or Patterns values by hand	CTRL+left mouse in WAV or Patterns cell

## Mouse - Changing values - dragging

---

### To

Increase value with  
variable speed control

Decrease value with  
variable speed control

Increase/ decrease  
parameter value

### Click and Click/drag

Anywhere in the cell  
and drag to RHS

Anywhere in the cell  
and drag to LHS

Left mouse button on  
the value and drag  
double headed slider  
arrow

## Mouse - envelopes

---

### To

Select entire envelope

Apply envelope tool to marked envelope area

Quickly apply envelope tool to envelope selection

### Click

Double click on env. with left mouse button

Mark area with left mouse button and then depress desired tool

Choose envelope tool first, then CTRL+left mouse button and mark the desired area



## Quick Start - Playing the Demo pieces

---

With SSEYO Koan Pro it is easy to create simple ambient pieces in a relatively short time by using the templates supplied and adjusting a few basic parameter and envelope settings. Creating more advanced pieces will require some further experimentation with the wealth of parameters available. This section is meant to be a very brief introduction on how to create a piece; for further in-depth instructions please refer to the Tutorial section. In addition, refer also to the online Quick Steps information and keyboard and mouse shortcuts.

- SSEYO Koan Pro uses left and right mouse buttons. If you cannot get SSEYO Koan Pro to do something you want, try the other mouse button.

First off, there are a number of terms which we use frequently and it is a good idea to know what these are:

[Piece](#)

[Voice](#)

[Parameter](#)

[Envelope](#)

- We are assuming you have correctly installed your soundcard and have had no problems installing Koan Pro.

### Opening, playing and closing the Demo pieces



#### Open a piece

Press the File open button or select File Open from the menu. Try opening one of the demo pieces and playing it. These will be in the SKD subdirectory under the main directory where you installed Koan Pro (default is *drive:\KOANPRO*).



#### Play a piece

Either press the Play button to play the piece, select Control Play from the menu or press the spacebar.



#### Fast forward the playing piece

Press the Fast Forward button to scroll through the piece or select Control Fast Forward from the menu. You can also use the left mouse button to move the piece marker by clicking on the position to which you want to fast forward the piece or use the ALT+0 to 9 key combination to move to that percentage position (9 = 90%) through the piece. The way the SKME works means you will hear no jumping or discontinuities in the piece (unless the volumes of the section are different or you have a slow machine - see Setting up SSEYO Koan Pro in Chapter 1) and composition will continue smoothly.



#### Rewind the playing piece

Press the Rewind button to scroll back through the piece or select Control Rewind from the menu. You can also use the left mouse button to move the piece marker by clicking on the position to which you want to rewind the piece (see also comment for Fast Forward).



#### Pause a piece

Press the Pause button or select Control Pause to temporarily stop the SKME composing



#### Record a piece to a MIDI file

Either press the Record button, select Control Record from the menu or press F5 to record a MIDI file.





### **Stop a piece**

Either press the Stop button, select Control Stop from the menu or press the spacebar.

### **Viewing the Pieces Details:**

Each piece can be given its own comments, describing it. To view or edit these, select the Piece Details button on the top toolbar. To edit the piece details simply edit/add text to the appropriate fields.

**Note:** The piece details are editable only for .SKD format files and then only in SSEYO Koan Pro. Once a encrypted Play file (.SKP) has been created the comments are permanently encrypted within that file and are Read Only. This file can then only be played and viewed by SSEYO Koan Plus. SSEYO Koan Pro cannot load or display a Play file. To save a Play file from your piece select File Save Play File from the menu. See Piece Details for more information.

## Creating a piece - Quick Introduction

---

It is easy to create pieces in SSEYO Koan Pro. This section is meant to be a very brief introduction on how to create a piece; for further in depth instructions please refer to the [Tutorial](#) section and read the descriptions of the parameters. In addition, please refer to the [Quick steps](#) information and [keyboard and mouse shortcuts](#).

Each piece contains a number of voices (shown in rows) with a number of voice level parameters (shown in columns) whose values will vary the way in which the voice will produce its music (there are 13 views of these parameters; icons for which are in the lower toolbar). You can change the width of each column by double-clicking on the column header with the mouse (each column header can display the abbreviation of the parameter or its full name) or by dragging the column edges; the first 6 grayed columns (from voice number to Mute) are common to each view. In addition there are a number of piece level parameters that effect the way the whole piece sounds, and these are shown in the piece views.

The most important factors determining which notes each voice will play are determined by the [Voice Types](#) and the [Rules](#). In general, each Voice Type has its own color-coded view which shows closely related parameters. Some parameters take effect only when the Voice Type is set to a specific value, e.g. Follow Named Voice only takes effect when the Voice Type is Follows. The Rules (Scale Rule, Harmony Rule, Next Note Rule and Rhythm Rule) determine which notes are played and they allow all the voices to interact with each other.

A number of parameters in SSEYO Koan Pro have a minimum value and a range associated with them. The range is always added to the minimum to determine how far the parameter can deviate from the minimum value, i.e. if the Pitch is 60 and the Pitch Range is 24 then any note played can be between pitch 60 and pitch 60+24 (84). The actual values used are chosen at random from within this band, dependent of course on the rules used by the voice.

[Lists](#) are fundamental to SSEYO Koan Pro and are accessed via the Edit Lists menu, by pressing CTRL+L or clicking on a cell with the right mouse button and selecting Lists from the shortcut menu. Every parameter allows you to define a list of values from which it can choose a value when the piece plays. Parameters values with lists attached are shown with a gray cross-hatch.

Finally, every parameter is changeable in real time. How soon the change can be heard depends on how far in advance you have asked the SKME to [compose](#).

### Create a new piece

- Either press the File New button



, select File New from the menu or select CTRL+N

- Select a Template from the selection presented, upon which to base your piece, e.g.

NORMAL.SKT

- You can stop or start the piece at any time by pressing the space bar, using the play and stop buttons on the toolbar or by selecting Control Play or Control Stop from the menu

### Changing some voice level parameters

- Type in the name you want to call the voice in the Voice Name column, e.g. First Pad, and press the Enter key. Notice that the **parameter name** of the current cell is always shown at the top right of the Power view and which **view** you are in is shown on the top left hand side of the Power view.

- Change the Patch by typing in either the patch name (e.g. Pad 2) or the patch number (e.g. 92) and press the Enter key

- Set the MIDI channel by typing in a number from 1 to 16 and pressing the Enter key or use the + and - number keys to increment/decrement the value

- Set the Voice Type to e.g. Rhythmic by selecting the Voice Type cell and press the Enter key to toggle between the 5 types Voice Types (or press R)

- ▣ If you want to mute the voice select the mute cell and press the Enter key to toggle it on or off. Alternatively Solo the voice by pressing the / key and unsolo it with the \ key
- ▣ Change the minimum pitch of the voice by increasing or decreasing the Pitch cell value (middle C is 60). Try using the mouse speed control for this. Click on the cell and drag the mouse to the left or right
- ▣ Change the range of pitches above this value by increasing or decreasing the Pitch Range cell value (1 octave is represented by a range of 12)
- ▣ Change the minimum length of the Phrase played by adjusting the Phrase Length parameter and set its range with the Phrase Length Range parameter
- ▣ Set the likelihood of a Phrase note being a rest with the Phrase Rest % parameter
- ▣ Set the gaps between phrases with the Phrase Gaps and Phrase Gaps Range parameter

### Changing envelope values

- ▣ Select the Volume envelope (if not already selected) from the toolbar or press the F6 key to move between the parameter and envelope views and then press CTRL+1
- ▣ Select the Envelope Toolbar button from the top toolbar to display the toolbox and select the Freehand tool (a pencil) or select Edit Envelope Freehand from the menu. Draw on the envelope with the left mouse button. This effects how the volume of the voice will behave over the time the piece plays

### Moving between views and selecting the Rules used by a voice

- ▣ To change parameter views select one of the 13 view icons or press CTRL+1 to 0 (for views 1 to 10) or CTRL+SHIFT+1 to 3 (for views 11 to 13). For this example you will need to select View 6 from the toolbar or press CTRL+6
- ▣ Set the Scale Rule used by the voice by selecting the Scale Rule cell for the voice and then press the Enter key
- ▣ Use the up/down arrow keys to select a rule from the pre-defined list and press Enter to select the rule you require (in the Scale Rules window, selectable off the top toolbar, you can make you own Scale rules or edit those provided as defaults)
- ▣ Set the Rhythm rule in a similar way; this determines with what duration notes will be played
- ▣ Set the Harmony rule to determine what harmonies are allowed when this voice interacts with other voices (this can also be set at the piece level in the Piece View)
- ▣ Set the Next Note rule to determine how far away from the last note will be the next note the voice plays (this can also be set at the piece level in the Piece View)

### Changing Piece level parameters

- ▣ To select the Piece view choose Group Piece from the menu bar or press the Piece icon on the top toolbar
- ▣ Set the Tempo parameter to change the tempo of the piece
- ▣ Set the Meter parameter to the metro you want for your piece

### Adding/copying/pasting and deleting Voices

- ▣ Select a cell in any blank row and choose Edit Add from the menu, or click with the right mouse button and select Add. A new voice will be added
- ▣ To copy a voice select any cell in the voice you want to copy and choose Edit Copy from the menu, CTRL+C or click with the right mouse button and select Copy Voice
- ▣ To paste a copied voice select any blank cell and choose Edit Paste from the menu, CTRL+V or click with the right mouse button and select Paste
- ▣ To cut a voice select any cell and choose Edit Cut from the menu, CTRL+X or click with the right mouse button and select Cut
- ▣ To delete a voice select any cell and choose Edit Delete from the menu, CTRL+DEL or click with the right mouse button and select Delete

### Adding a pattern to a voice

- ▣ Change the Voice Type to FixedPattern
- ▣ Initially set the Patterns Use % parameter to 100% (so the pattern will play all the time)
- ▣ Select the Pattern Editor from the top toolbar, or press the Enter button when in the Patterns cell in Parameter View 5

- Use your left and mouse button and SHIFT + left mouse button to add notes to the grid and then press Start to hear your pattern. Press Apply to save it to the piece. Refer to the Pattern Editor for more information

**Adding AWE32 SoundFont compatible banks or Gravis patches to your piece (only audible if you have the appropriate soundcard)**

- Select the Piece 3 view (press the Piece view button on the top toolbar or select Groups Piece from the menu)
- Select the AWE32 SoundFont Bank cell or the Gravis Melodic/Drum Patch Bank cell and type in the bank and name of the SoundFont or patch bank you want (refer to Chapter 9 for more information)
- Choose Options Setup from the menu and type in the path of your SoundFont or patch bank if it is not in the same directory as your piece
- Select one of the parameter views and select the Patch cell of the voice you want
- Set the patch and bank number by typing the value in and pressing enter, e.g. 12.1 and press play

---

**See also**

**[Quick Tutorial](#)**

## Quick Tutorial - Creating and Editing pieces

---

Note: To see how to get started and check out the demos supplied, please refer to the Quick Start [Playing the demo pieces](#) or [Creating a piece - Quick Introduction](#) sections.

It is easy to create your own pieces in a few steps. These step-by-step tutorials will take you through the creation of four of the pieces supplied with the program - on a purely practical level. We recommend you work through all examples, and they should not take you long at all to complete.

The Quick Tutorials are not a substitute for reading the introduction and associated help text provided (we suggest the order they are laid out on the Help Contents page)!! We do recommend you read these sections to gain an insight to the various terms we use and a more in depth overview to the product.

Note: We are assuming you have setup your soundcard correctly and installed Koan Pro successfully

### Quick Tutorial 1 - Creating the piece DRIFTR1 (this should take you approximately 15 minutes)

#### New items covered in this tutorial:

- ▣ Creating a new piece from a template
- ▣ Selecting a view
- ▣ Naming your piece and adding your personal information
- ▣ Saving your piece
- ▣ Changing a parameter
- ▣ Naming/Renaming and Copying a voice
- ▣ Modifying an envelope with the Envelope tools

*Note 1* DRIFTR1 comes as a demo file: save your version to DRIFTR1A

---

#### 1 Creating a new piece

- 1.1 Select File New from the menu or press the File New Button. You will be presented with the Use Template dialog from which you choose a template, in this case the NORMAL template.

#### 2 Selecting a parameter view

- 2.1 Select View 1 by clicking on the first of the 13 parameter view buttons or press CTRL+1 when in this side of the screen. The Rhythmic view (View 1) can be the most often used view.

#### 3 Giving your piece a name and some details

- 3.1 Click on the Piece Details button on the toolbar.
- 3.2 Type in Drifter 1A in the Piece field, and add your name to the Author field and then add the copyright notice, e.g. Copyright (c) 1995 Your Company. All rights reserved, to the copyright field.
- 3.3 Check the appropriate Author choices for the 2 selections presented. More information on the Piece Details parameter is provided in Chapter 8.
- 3.4 In the Piece Notes box just add a few lines of text to describe what you are hoping to do; you can always come back to this later. Remember to depress at the same time both the Control and Enter keys when finishing a line.

#### 4 Saving your piece as DRIFTR1A

- 4.1 Select File Save from the menu or click on the File Save button.
- 4.2 You will be asked for a name for your piece, type in DRIFTR1A.SKD
- 4.3 Tip: Remember to regularly save changes you have made to any piece you are creating/editing.

#### 5 Naming/Renaming and Copying a voice

- 5.1 Select the Voice Name cell which should be Voice 1.

- 5.2 Type in the Name Drifter 1 and press Enter.
- 5.3 To copy this voice select CTRL+C or Edit Copy Voice and then paste it back to the piece with CTRL+V or Edit Paste.
- 5.4 You should now have 2 voices named Drifter 1 and New Voice 1 (you would get New Voice 2, New Voice 3 etc. if you continued pasting the voice). To rename New Voice 1 as Drifter 2 just follow steps 5.1 and 5.2 again.

## **6 Changing a parameter (e.g. Portamento - you will only hear the change if your soundcard supports the particular controller)**

- 6.1 Select the View 7 (the Controllers view) button on the toolbar.
- 6.2 Select one of the Portamento (or Reverb if your card does not support portamento) parameter cells and adjust the value of each one to be 64 if it is not already.
- 6.4 Tip: When you play a SSEYO Koan Piece any changes you make will be effected as soon as the SKME can accommodate them (see Chapter 1 - Introducing SSEYO Koan Pro and the *Setup Options* section for discussion).

## **7 Modifying an envelope with the Envelope tools**

- 7.1 Select the Volume envelope icon from the toolbar.
- 7.2 Open the Envelope toolbox (by pressing the Envelope button on the top toolbar) and select the tool you want to apply to the envelope, say the Linear Ramp Up tool (you can do this from the Edit Envelopes menu or using the mouse).
- 7.3 Select an area of the volume envelope with the left mouse button, by the standard click and drag process. Then press the tool you want to apply which will apply the envelope tool to the area you have selected. Modify both volume envelopes to be similar to those in the original DRIFTR1 demo piece.

## **8 Selecting the Scale rule each voice will use**

- 8.1 Each Voice can use a particular Scale rule (allowing greater musical flexibility) or it can use its own rule. Select View 6 (the Rules parameter view) by pressing the View 6 button.
- 8.2 Select one of the Scale Rule parameter cells and, for each voice, Drifter 1 and Drifter 2, select the Major scale from the combo box if not already selected.

## **9 Playing your piece DRIFTR1A**

- 9.1 Simply press the Play button, the spacebar or select Control Play from the menu and you are away playing your first SSEYO Koan ambient piece! It is as easy as that. Dont forget to save it if you want to keep it!

## **Quick Tutorial 2 - Creating the piece PASSENGER** **(this should take you no more than 20 minutes)**

### **New items covered in this tutorial:**

- ▣ Changing Patches/instruments
- ▣ Using Fixed Pattern and Ambient Voice Types
- ▣ Creating and using lists
- ▣ Using the Patch Bars Change parameter
- ▣ Using the Mutation parameter
- ▣ Changing the rules used by a voice
- ▣ Adding Sustain (Damper/Hold) (for cards that support Sustain)
- ▣ For those with AWE32 soundcards, adding a SoundFont Bank

*Note:* PASSENGER is supplied as already completed demo file, PASSENGR.SKD

*Note:* Remember to regularly save your piece, save it as PASSENG1.SKD and compare with PASSENGR.SKD

**Passenger is a piece that makes use of the mutation of patterns and it allows the SKME to take a**

## **free-wheeling approach to composition.**

### **1 Opening a FixedPattern template and changing Voice Types**

*First, we want to create a number of voices with blank patterns, all 1 bar long, and a couple of Ambient voices to provide a mellow drifting feel*

- 1.1 Select File New and open the Fixed Pattern Template.
- 1.2 Create 3 new voices by copying Voice 1 and pasting it.
- 1.3 Rename the voices to be Eguitar/Bass, Various, Pads and Drone.
- 1.4 Set the Pitches to be 40, 50 and 40 for the first three and 30 for the last, and set the Pitch Ranges to be 40, 30 and 40 for the first three and 25 for the last.
- 1.5 Change the Voice Type of the Pads and Drones voices to Ambient by selecting the Voice Type cell and toggling through those available by pressing the Enter key.

### **2 Changing patches and changing the MIDI Channel**

*Next we need to select the patches and set up the MIDI channels*

- 2.1 Select the Patch cell for the first voice and double click on the cell (or arrow to it and press Enter).
- 2.2 From the drop down combo list select 025-Acoustic Guitar.
- 2.3 Change the patches for the other voices to be Various - 005-Rhodes Piano; Pads - 093-Pad 5 (bowed); Drone - 076-Pan Flute.
- 2.4 Select the MIDI Channel cell for the first voice and set it to 1. Then set the others to 2,3 and 4. If you have them all set to 0 the SKME will allocate them a MIDI channel automatically, but you will never know what it is.

### **3 Applying a Mutation factor to a fixed pattern**

*We need to add mutation to the blank pattern to allow it to mutate and seed itself, and we need to say how often it will mutate.*

- 3.1 Select View 5, the Fixed Pattern View.
- 3.2 Select the Mutation Factor cell (it has the abbreviation MF - when you have a cell highlighted you can see the full name of parameter in the window above the Power View).
- 3.3 For all 4 voices change the Mutation factor to be 150 (meaning that each note will have a 15% chance of mutating), and set the Mutate No. Bars to 2 for all 4 voices (meaning that the 1 bar phrase will only mutate every 2 bars).

### **4 Changing the Phrase Length and Phrase Gaps**

*If we were to play the piece now, we would find no nice long phrases and it would be a bit discordant (see 7.2), so we need to define how long these will be*

- 4.1 Select View 1, the Rhythmic View.
- 4.2 Change the Phrase Length, Phrase Length Range, Phrase Gaps and Phrase Gap Rests to be 8,4,1 and 5 respectively for the first three voices. If you play the piece now you will hear it is slowly starting to take shape, but is a bit discordant.

### **5 Adding some controller effects: Damper/Hold to prolong some notes, Reverb and Chorus**

*For ambient pieces, effects are generally very important*

- 5.1 Select View 7, the Controllers View.
- 5.2 Select the Damper/Hold parameter and change this to 65 for the first 2 voices.
- 5.3 Select the Reverb parameter and set these to 84, 124, 124 and 65.
- 5.4 Select the Chorus parameter and set these to 64 for the first 3 voices.

### **6 Setting up the Ambient voices**

*We need to choose how the Ambient voices will play*

- 6.1 Select View 2, the Ambient view.
- 6.2 For the Pads voice, set the Ambient Duration and Ambient Duration Range to 4 seconds (note this is 4 seconds and not 4 milliseconds - you can change the Ambient Units to be Full seconds, Milliseconds or 60ths of a Beat).
- 6.3 For the Drone voice, set the Ambient Duration, Ambient Duration Range, Ambient Gap and Ambient Gap Range to 18, 0 4 and 12 seconds respectively.

## 7 Setting up the harmonization and rhythm rules

*When a voice mutates, it uses the rules to decide which notes to play*

- 7.1 Select View 6, the Rules view.
- 7.2 Set the Harmonize? value to Yes for all voices, allowing the voices to harmonize with each other.
- 7.3 To set the Rhythm rule used by each voice double click on the Rhythm rule cell and from the drop down combo change the first two voices to use the Semiquavers Only rule.

## 8 Changing the Piece tempo

*There are a number of piece level parameters that affect the whole piece*

- 8.1 Select and press the Piece icon on the top toolbar.
- 8.2 In Piece view 1, change the Tempo parameter to 89.
- 8.3 Select the Scale rule to be Dorian.
- 8.4 Select the Piece Length to be 900 seconds (15 minutes).

## 9 Using the Patch Bars Change parameter and setting up

### Lists

*Patch changing is very important and provides a great source of sound palette variety*

- 9.1 Select View 2, the Ambient view.
- 9.2 For the first 3 voices, change the Patch Change Bars and Patch Change Bars Range values to be 8 and 4 respectively.
- 9.3 Select the patch cell for the Eguitar/Bass voice and press CTRL+L to open the list dialog. Add 2 more voices (making a total of 3) and change these so that they are 25,26 and 27.
- 9.4 Select the Various voice and create a list containing 5,25 and 93 and for the Pads voice create a list containing 90,93 and 93.
- 9.5 You could now play this piece and it will have a reasonable closeness to Passenger. However, if you have an AWE32 soundcard, see the next section to add a few more touches.

## 10 Adding AWE32 touches, including SoundFont banks

*The use of real samples is one of the most striking things about SSEYO Koan music.*

- 10.1 Select View 12, the AWE32 controllers view.
- 10.2 Select the Pitch Filter cutoff and set this to 117 for the Various voice and to 99 for the pads voice.
- 10.3 Select the Piece View from the toolbar icon and choose View 3.
- 10.4 Select the AWE32 SoundFont Bank Name parameter and type in **1 PASSENGR.SBK**
- 10.5 Make sure the SKME will look in the right directory by selecting Options Setup from the menu, and in the Koan Supplementary File Path add the directory to the SBK, probably C:\KOANPRO\SKD
- 10.6 Select the patch for the Drone voice and make this 76.1  
If you now play the piece the SKME will load the SBK and the patch assigned to 76.1.

## Quick Tutorial 3 - Creating the piece DYNAMO

**(this should take you no more than 30 minutes)**

### New items covered in this tutorial:

- ▣ Using a Rhythm template
- ▣ Importing MIDI phrases and using patterns
- ▣ Using the RepeatBar Voice Type
- ▣ Using a drum loop
- ▣ Changing the rules used by a voice
- ▣ Changing envelopes

*Note:* DYNAMO is supplied as already completed demo file, DYNAMO2.SKD

*Note:* Remember to regularly save your piece, save it as DYNAMO1.SKD and compare with DYNAMO2.SKD



**Dynamo is a fairly complex piece that makes extensive use SoundFonts and a drum loop. It is a great piece for scratch mixing and uses the Follows and RepeatBar voices to come up with interesting melodic developments. This tutorial will take you through some of the steps to create a rough version. You can use the Dynamo SoundFont bank that comes with SSEYO Koan Pro. Before you start the piece it would be good to look at it for a few minutes in Creative Labs Vienna, to familiarise yourself with the samples it contains.**

## **1 Using a Rhythm template and setting up the general layout of the piece and adding the SoundFont Bank sound palette**

*First, we want to open a rhythm template and add a selection of voices.*

- 1.1 Select File New and open the Rock 6 - 4/4 template. Add another 9 voices by selecting Edit Add from the menu.
- 1.2 Make 5 of these voices Fixed Pattern, 2 RepeatBar and 2 Ambient by toggling the Voice Type cell.
- 1.3 Name the 5 new Fixed Pattern voices, Flute, Moog, Harsh, Drumloop and Talk; name the two RepeatBar voices Flumpy Bass and Flumpy Bass1; name the two Ambient voices Blips and Aaaah.
- 1.4 Add the SoundFont bank in the Piece view, view 3, as in Tutorial 2. Set up the AWE32 SoundFont Bank Name to be **2 DYNAM2.SBK** This means the SBK will load up into bank 2.
- 1.5 Set up some patches for the voices; we are going to use the following:  
Flute - 77.2, Moog - 39.2, Harsh - 95.2, Drumloop - D127.2, Talk - 54.2, Flumpy bass - 88.2, Flumpy bass1 - 88.2, Blips - 95.2, Aaah - 53.2.
- 1.6 Set up the MIDI Channel for all the drum voices (including Drumloop) to be 10, and then give every other voice its own MIDI channel, other than 10.
- 1.7 It is now important to set up some Pitch and Pitch Ranges for the voices: Flute - 50 and 11; Moog - 20 and 11; Harsh - 30 and 11; Drumloop - 30 and 11; Talk - 50 and 11; Flumpy bass - 50 and 11; Flumpy bass 1 - 70 and 32; Blips - 40 and 24; Aaah - 60 and 24

## **2 Setting up the Ambient voices**

*We want to allow the Ambient voices to have a restricted Phrase length so they dont play too many notes in a phrase.*

- 2.1 Select View 2, the Ambient view
- 2.2 Set the Phrase parameters as follows: Blips: Phrase Length 1, Phrase Length Range 3, Phrase Gaps 1, Phrase Gaps Range 6; Aaah: Phrase Length 1, Phrase Length Range 0, Phrase Gaps 1, Phrase Gaps Range 5
- 2.3 Set the Ambient parameters as follows: Blips: Ambient Duration 1 sec, Ambient Duration Range 0 secs, Ambient Gap 0 secs, Ambient Gap Range 3 secs; Aaah: Ambient Duration 1 sec, Ambient Duration Range 1 sec, Ambient Gap 4 secs, Ambient Gap Range 8 secs.

## **3 Setting up the RepeatBar voices**

*The RepeatBar voices will generate some melodic interest by bringing earlier phrases back to the piece and also to occasionally bring in some new material of their own.*

- 3.1 Select View 4, the RepeatBar view
- 3.2 Set the Bars Repeat % for both Flumpy bass and Flumpy bass 1 to 95%. By not defining which voice they will repeat (in Repeat Specific Voice) it is entirely up to chance as to which voice they will latch on to when the piece starts.

## **4 Adding some patterns to the FixedPattern voices and mutating them**

*Dynamo works as a piece because it takes some base patterns around which everything else revolves. Some of these patterns are allowed to mutate. You could try using you own patterns to see what happens!!*

- 4.1 Select View 5, the Patterns view
- 4.2 We want to get the drum loop going first, so we need to put in a trigger for this. Open up the Pattern Editor by clicking the button in the Pattern cell. You want to select a 2 bar pattern and put in 2 long notes. of 1 bar each. To add these long notes depress the Shift key and click your mouse in the first square of the first bar for the D127 drum (displayed on the left) and then drag it to the right until you have a white square followed by some blue squares that last one whole bar. Do the same for

- the second bar. Press the Apply button to save your pattern in the piece and then press OK to close the dialog. Play the piece to hear the drum loop playing (the Piece tempo should be set to 115 if it is not already).
- 4.3 We now wish to add the Moog phrase, and we are going to import it from a MIDI file. Open the Pattern Editor from the Moog voice and set the Root to be E - this is the root we want for the piece.
  - 4.4 Select the Scale Rule to be Phrygian and then press the Import button. Look for the file MOOG.MID in the SKD directory, select it and press enter.
  - 4.5 In the Import MIDI file dialog we need to decide how we want the intervals mapped for the melody, and we are going to choose Phrygian for the Scale rule.
  - 4.6 Press the Extract Pattern button and the pattern string will be shown in the box at the bottom. Now press the Apply button and the pattern will be written to the Pattern Editor. Once there, press the Apply button and close the dialog.
  - 4.7 We need to do the same process for the Harsh and Flute patterns. For the Harsh voice, import the HARSH1.MID file and use the Phrygian scale for the import and set the Use Root parameter to be C3. Once you have done this, select the combo box next to the 1 of 1 text and choose the number 2, to add another pattern to the pattern group (a group of patterns from which the voice can select). Import the HARSH2.MID file with the same values. You will now have 2 patterns for this voice. For the Flute voice do exactly the same and import the FLUTE.MID file. The best way to use the Pattern Editor is to drag your mouse at speed over the grid to come up with your own interesting patterns.
  - 4.8 Now we need to allow the patterns to mutate, so set up the Mutation Factor, Mutate No Bars and Mutate No Bars Range parameters as follows:  
 Flute: 25, 4, 2  
 Moog: 12, 8, 4  
 Talk: 200, 1, 0
  - 4.9 We also need to choose the Rhythm and other rules. Rhythm rule: Flumpy bass - Middle; Flumpy bass 1 - Fast Plain; Blips - Middle. You will notice that the original Dynamo uses special Scale rules for different voices. It is easy for you to change the rules, they can be whatever you want.

## 5 Changing the velocity envelopes

*For a piece that uses a lot of pattern information you will not want to have too much variation in the velocities used by the voices (and hence apparent volume). The default values are too high for this piece*

- 5.1 Select the Velocity view, above the envelopes
- 5.2 Use the nudge down envelope to bring down the values for every voice. Do this for the Velocity Range, Velocity Change and Velocity Change Range envelopes as well.

## 6 What to do next....

*Koan pieces are works of art, so just like a work of art it is impossible to detail every last nuance, even if you wanted to! So now you are on your own. Look at the original and play around with your piece. Have fun!*

- 6.1 Some further areas to look at are:  
 Add lists of patches for some of the voices  
 Set up the Patch Change parameters for these voices  
 Thin out the volume envelopes so that difference voices play at different times. This is entirely down to your judgement, but it is often what is left out that creates the most stunning material.



## Quick Steps

---

See also keyboard and mouse [shortcuts](#), [Hot Tips](#) and [Common Questions](#).

### View

- [Change to another parameter view, Change to envelope view, Changing between envelope and parameter view](#)

### Piece

- [Open a piece, Save a piece, Create a new piece, Play or stop a piece](#)

### Voice

- [Add a new voice, Copy a voice, Delete a voice, Paste a voice](#)

## Piece - Quick Steps

---

### Open a piece

- Either select File Open from the menu, press CTRL+O or click the File Open icon.

### Save a piece

- Either select File Save from the menu, press CTRL+S or click the File Save icon.

### Create a new piece

- Either select File New from the menu, press CTRL+N or click the File New icon.

### Play a Piece

- Either select Control Play from the menu, press the spacebar or click the Play icon

### Fast Forward

- Either select Control Next from the menu or click the Play icon

### Rewind a Piece

- Either select Control Previous from the menu or click the Play icon

### Pause a Piece

- Either select Control Pause from the menu or click the Pause icon

### Stop a piece

- Either select Control Stop from the menu, press the spacebar or click the Stop icon

## Changing Views - Quick Steps

---

### **Change to another parameter view**

- Either click one of the view icons or select CTRL+Number of the view, i.e CTRL+3 to change to View 3 - Follows voicetype.
- Alternatively, select Groups View and the view number from the menu

### **Change to envelope view**

- Either click one of the envelope icons or select CTRL+E+Number, i.e.CTRL+E+1 to change to the Volume envelope

### **Change between envelopes and parameter views**

- Press the F6 key to toggle between them

## Voice - Quick steps

---

### **Add a new voice (a default voice)**

- ▣ Select any cell in a blank row and select Edit Add from the menu, or;
- ▣ Click in any cell in a blank row with the right mouse button and select Add from the shortcut menu

### **Copy a complete voice**

- ▣ Either select any cell in row and select Edit Copy from the menu or press CTRL+C, or;
- ▣ Click in any cell in a blank row with the right mouse button and select Copy from the shortcut menu

### **Copy only a parameter or envelope for a voice**

- ▣ First select the cell or envelope you want to copy and then either select Edit Copy Parameter from the menu or press CTRL+SHIFT+C, or;
- ▣ Click in the desired cell or envelope with the right mouse button and select Copy Parameter from the shortcut menu

### **Paste a voice (first copy one)**

- ▣ Either select any cell in row and select Edit Paste from the menu or press CTRL+V, or;
- ▣ Click in any cell in a row with the right mouse button and select Paste from the shortcut menu

### **Delete a voice**

- ▣ Either select any cell in row and select Edit Cut from the menu or press CTRL+X, or;
- ▣ Click in any cell in a row with the right mouse button and select Cut from the shortcut menu





## Authoring Guidelines

---

Creating a good SSEYO Koan piece is actually quite easy; creating a masterpiece requires more skill and perseverance. When you start with a piece, try and bear the following in mind:

- ▣ **Palettes.** Your sound palette (instrument patches or samples) will greatly affect how a piece sounds. Your creativity will be limited by the sound quality or capabilities of your soundcard or synthesizer. Ambient music is quite contextual, meaning that it often uses sounds from your audio environment, so use as many samples as you can.
- ▣ **Ambience.** The SKME is primarily geared for creating ambient, free-flowing pieces although you can produce very techno-like material using fixed patterns. Producing good rhythmic pieces is harder to do but can be very rewarding. Start with ambient pieces.
- ▣ **Experiment.** A lot of the fun to be had with SSEYO Koan Pro is found through experimentation. SSEYO Koan Pro is a very deep product, meaning there is often a number of ways to skin the proverbial cat - so don't give up if at first you don't succeed!. Play around with the parameters to see what happens, and make sure to save various stages of your pieces.
- ▣ **Look at other pieces.** One of the best ways of learning how to use it is to look at what others have done - do take time to try out the tutorials. You may find tricks in them that you did not know you could do or parameters that you may not have used before. Also, experiment with the templates.
- ▣ **Let go.** Try to let go and allow SSEYO Koan to do a lot of the compositional work. It may seem strange at first to let go of some of the musical control which you might be used to, but it brings its own rewards in terms of the variety and richness of the output. To do this well requires its own type of discipline! It is quite easy to set up pieces that only use the fixed patterns and a roll the dice approach, and although this is creative you may not get something really original with **real** elements of surprise.
- ▣ **Lists.** Make use of lists and the Patch Change Bars parameter. Lists will allow you to create pieces that are different every time and they are a key strength of the SKME.
- ▣ **Arrangement.** Try to get all your voices and patches fully set up before you go for any major volume/velocity envelope arrangements. It is best to get the general structure there before you go in for the real details!

## Hot Tips

---

There are many things you can do with SSEYO Koan Pro and often many ways you can do it. Here are just a few of the Hot Tips we think you might find useful. They all assume you are reasonably familiar with SSEYO Koan Pro. See also [Authoring Guidelines](#) and [Common Questions](#)

### **I want to include WAV files in my pieces, and I want to have them trigger randomly and independently**

Say you have 3 voices you want to play WAV files. The easiest thing to do is to set up each voice as an Ambient voice. Make the Ambient Duration parameter for each voice longer than the WAV file - the limitation here is 32 seconds if you are using Milliseconds for you ambient units, or a lot longer if set to Full seconds!. If you trigger a sample longer than 32 seconds long (when using milliseconds) the voice could trigger the sample again before it finishes playing (if the Ambient Gap parameter is 0). You can play longer samples (up to 64 seconds) if you give the Ambient Gap parameter its maximum value of 32 seconds. Don't forget that you need to leave enough space between each triggering to let it breathe. Set the Phrase Length to 1 and Phrase Length Range to 0 - this means that only 1 note will play per phrase (and before another starts), otherwise it can trigger more notes - according to the Rhythm rule selected (Ambient voices still follow the Rhythm rules if you give them phrase lengths longer than 1). Do the same for each voice playing a WAV file. When it finishes playing one file it will play another one according to when the next Ambient voice comes up to play again (it could even be the same one).

### **I want to have 3 or 4 instruments play in a piece for one voice, changing at random during the piece.**

For the voice create a list of patches. Then set the Patch Change Bars parameter to say 5 bars and the Patch Change Bars Range to say 5 as well. This means that every 5 to 10 bars the voice will change its patch to another in the list you have defined.

### **I want to create subtle changes of expression and swells of velocity for a voice.**

This is achieved through the Velocity group of envelopes. Set up the whole Velocity envelope to say 50% using the Mid value envelope tool. Then use the Shift Up tool to raise the envelope value to say around 80%. Select the whole Velocity Range envelope in a similar manner and apply the Randomize tool. Now, move the entire envelope value down with the Shift Down tool so that you cut off some of the envelope at a value of 0. Now set the Velocity Change envelope to say 5% and the Velocity Change Range to be 15% (increase the row height to do this, if you want). This has the effect of having gradual swells in the velocities sent to the instrument over the course of the piece.

### **I would like to set up a pattern so that it defines when the notes are going to play, but not what the notes will be.**

In the Pattern Editor, press the Rhythm/Both button so that it displays Rhythm. In this case any notes you enter will be saved in your SSEYO Koan piece as Rhythm only values. This means when the SKME plays the piece it will know when to compose a note but it will choose the actual pitch of the note according to the Scale and Harmony rules you have defined. This comes in very useful if you want to tie the composition to a drum track. Duplicate a drum voice whose feel you want to follow and for the new voice select Rhythm as above. When the piece plays your notes will be in synch with the drum track (provided, of course, you do not mutate the rhythms of either of the patterns).

### **I want to create a piece where some voices do not play every time**

Set up a list for the Mute cell (every parameter can have a list) for each voice. In the list put in both Mute and Non-Mute values. When your piece plays some voices will be muted, some wont, all determined at random. The Alternative to this is to use the Volume or Velocity envelopes and carry out the same type of procedure (completely zero value envelopes and normal envelopes).

### **How can I get a real live feel to a recording of a piece or do so scratch mixing?**

You can jump around where you are in a piece using the ALT+0 to 9 keys. This has the same effect as clicking the mouse in the moving piece marker. This just tell the SKME where you are in the piece, e.g.

ALT+7 would be 70% the way through the piece. When you are recording (or playing live) this can be really useful, if you set up sections of the piece in advance.

Another way to get this live feel is to use the Force Voice capability of the Control menu (also CTRL+SPACEBAR to start, ALT+SPACEBAR to stop). This will force the selected voice to play right then. This could be a WAV file or breakbeat for instance, or maybe a long slow Ambient voice.

A further suggestion is to plug in a music keyboard (through your soundcard MIDI in). When you play the SKME will compose its music to fit around what you are playing (refer to Chapter 1 - Fixed Volume Input device).

### **How do I scratch mix WAV files?**

SSEYO Koan Pro does not yet support DirectAudio, so in Win 3.1 or Windows 95 only one WAV file can play back at a time. However, you can scratch mix (i.e. manually trigger) WAV files. What you need to do is create a voice that never plays but that you can trigger when you want, using the Force Voice capability (see previous tip). The best way to do is to set up a voice to be Voice Type FixedPattern, and give it a blank pattern with no mutation. It will never play, but you can force it to play a note/WAV file.

### **How do I use the Piece level parameters to change the voices Rules values?**

You will want to do this if, for instance, you want to let the SKME make choices as to which scale the piece should use for all voices. SSEYO Koan Pro allows you to let each voice have its own rules (View 6), if you want it to be so, and the voice can choose which rules it uses each time the piece is played from its own lists (refer to lists). If a number of voices in your piece are using lists of rules (Scale, Harmony etc.) it is possible that sometimes the rules will not work well together (e.g. one voice chooses a Major Scale rule while another chooses a Minor Scale rule). The alternative is to set the rules values for each voice to ? which means that the rules used will be chosen from those defined for the piece, and not the voice. So, if you have set the piece Scale rule to be pentatonic and the Scale rule for every voice (in View 6) to be ? the voices will all use the pentatonic scale. Now it gets interesting! You can set up a list of e.g. Scale rules at the piece level, just like you can have lists everywhere else. If all the voices Scale rules are set to ?, as above, each time the piece plays the SKME will choose its piece level scale rule from this list, thus determining the Scale rule for every voice. When the piece plays, the piece level parameters are selected from any lists present and these values will be then be used by the piece for its entire duration (except Piece Root Change).

**Note:** To change Scales during a piece see Scale Rule Availability envelope in Chapter 8

### **Thinning out the piece**

You may often want to have less happening in a piece but want to keep its general structure. Two parameters are useful for thinning it out. Check out the Phrase Note Rest % (for use with any voice that is composing, e.g. a mutating pattern counts here) and Follow Use % parameter (for use with Follows Voice Types).

### **Creating voices with a lot of flammings**

Flamming is a word used by some people to mean imprecision and an event that has multiple starts (a little like Chorus). Create some more voices as Follows Voice Types and set up some delays between the master voice and the following voices. Also try using the Micro Note Delay range of controllers. If you have an AWE32 you can try using the EMU8000 envelope controllers - specifically the Envelope Delay parameters. These controllers are also very useful for thickening up sounds. Try creating a number of following voices and adjusting the LFOs to produce and number of slightly changing voices. When they all combine together you can get a lovely rich, full sound. Use this in conjunction with the following voices, mentioned earlier.

### **Drums and harmonisation**

It is best when using drums in a piece to set the Harmonize? parameter to No, to cut down the work the SKME has to do. This is also the case when using SBKs and you have a drum sample in the melodic bank (see Creative Labs Vienna documentation) - this will avoid the sample trying to harmonize with other

voices.

### **I want to create the smallest versions possible of my pieces for WWW use**

Try the following tips for saving the smallest files from Koan Pro :

1. Add/use no more voices / rules / scales etc. than you need.
2. Rename all voices / rules etc. to be as short as possible - use a different character for each one.
3. Base the file on the MINIMUM template (called MINIMUM.SKT) and change only the parameters you need.
4. Leave out unnecessary piece note information.
5. Use the DEFAULT voices / rules / parameter values etc. To find out what a default value is, just add a new voice (do not copy one). Check the values in your piece against these values. Any value that is different will mean extra size is added to the file.
6. Try to keep envelopes flat (i.e. to a single value); using many changes of levels in an envelope will greatly add to the size of a piece.

### **Can I add ADSR to instruments where my soundcard does not support it?**

The SSEYO Koan Music Engine allows \*any\* voice to use ADSR (Attack/Decay/Sustain/Release) envelopes, which are modeled by real-time manipulation of the volume controllers for each affected instrument. This effect will work in exactly the same way, on all soundcards that support continuous volume controller changes (i.e. **not** OPL2/OPL3 based cards).

The Koan ADSR envelopes work seamlessly in conjunction with the existing high-level voice volume envelopes and volume microcontrollers.

The Koan ADSR controllers may be used in combination with any ADSR envelope controllers that are present on your soundcard or external synthesizer. Any soundcard-specific ADSR controller values (if any) are superimposed on the Koan envelopes.

**Note:** the Koan ADSR effects are not designed for use by voices which share MIDI channels - especially drums (all share MIDI channel 10). This is because all voices on the same MIDI channel must share the same controller information. See the Koan ADSR Parameters in Chapter 8. See [Setup Options](#).

## Common Questions

---

### See also [Hot Tips](#)

Below are some common questions asked about SSEYO Koan Pro. Please scan these before you call technical support as you may find your question answered here. To see the answer to the question, click [ANSWER](#).

1. Why do I get no sounds at all coming out of my soundcard? [ANSWER](#)
2. Why do I get different quality sounds on different cards? [ANSWER](#)
3. Why can some pieces sound jumpy? [ANSWER](#)
4. Why do pieces sometimes take time to stop? [ANSWER](#)
5. Why can I not record a MIDI file? [ANSWER](#)
6. Why do some of my Creative Labs SoundFont compatible banks or Gravis Ultrasound patches not seem to play? [ANSWER](#)
7. Why do I get the wrong patch/instrument playing for a voice, or the voice plays at the wrong time, or a voice wont play it at all? [ANSWER](#)
8. Why cant I get a voice to play a pattern or why does the pattern change? [ANSWER](#)
9. How do I change the volumes of individual drum instruments? [ANSWER](#)
10. How do I change the default settings when I create a new piece? [ANSWER](#)
11. How do I change the settings of the voice that is added when I select Edit Add? [ANSWER](#)
12. Why do I suddenly get a low or high note occasionally? [ANSWER](#)
13. I am using an external synth module and SSEYO Koan Pro keeps crashing [ANSWER](#)
14. Reverb and chorus do not seem to work correctly [ANSWER](#)
15. How do I create chords? [ANSWER](#)
16. How do I use SoundFonts from multiple SoundFont compatible banks? [ANSWER](#)

**Q: Why do I get no sound (or only a few sounds) coming out of my soundcard**

**A:** Firstly check that the Mixer application (if any) used by your soundcard has its sliders for MIDI and Volume turned up and the channels are not muted. Make sure your MIDI Mapper is set up correctly. Look in the on-line help or refer to your soundcard instruction manual. Some soundcards come with default configurations that only use the first 10 MIDI channels (e.g. AWE32), and Koan pieces often use more. **Win 3.1:** You should make sure that all 16 channels are 'active'.

Another common problem can be you are using the wrong MIDI output:

**Win 3.1:** If you have the 'Port Name' in the MIDI Mapper 'Setups' to be an 'out', i.e. SB16 Out. This has the effect of sending the MIDI information to the MIDI output port, rather than to the synthesizer chip on the soundcard, which is used to generate the sound. Access this through the Control Panel, MIDI Mapper, Setups and select Edit. Click on the Port name combo box and select the appropriate driver (e.g. Voyetra Super Sapi FM driver). Refer to your soundcard documentation for more information.

**Win 95:** Make sure the MIDI output for you your Multimedia Properties for MIDI does not point to MIDI for external MIDI port

**Koan:** Make sure in Setup options your MIDI Output Device is not a MIDI Out (where the MIDI information never gets sent to your soundcard synthesiser but gets sent to the MIDI output port instead), e.g. SB16 MIDI Out.

**Q: Why do I get different quality sounds on different cards?**

**A:** Although General MIDI is positioned as being a savior for the music industry, as it defines a standard mapping for 128 different sounds, each soundcard has different qualities of sound for each 'patch' (various pre-defined sounds your soundcard plays). This means that the instruments that the pieces use will sound better/worse depending on the soundcard on which you play the piece, or on which card the piece was originally authored (no author can check that their piece sounds good on every soundcard - which is where General MIDI provides only *some* help, in practice). If you really do not like the particular patch on your card that corresponds to one used in a piece you can either use the MIDI mapper to reassign say patch 39 to play as patch 40 (for .SKP pieces) or change the patch in the piece.

Also, some soundcards support reverb or chorus which is very useful for ambient pieces. SSEYO Koan pieces can also be written to take advantage of other useful controls, such as portamento or modulation for instance, but not all cards support these parameters. The volume of each patch will also vary from soundcard to soundcard.

**Q: Why can some pieces sound jumpy?**

**A:** Some SSEYO Koan Pro pieces can be very complex, and to compose and play these in real time requires considerable processing power. We have developed a system whereby the SKME will compose in advance, as far ahead as you want it to, to provide a buffer of music that will continue to play should other applications require your processors attention. If a piece sounds jumpy, the reason is probably that your processor just has not got the resources to carry out all the calculations it needs to create the flowing music. The first thing to try is to increase the Compose Reaction Time (in Options Setup off the menu) to adjust how far in advance it actually composes.

If this does not provide a solution you may need to set your Resolution and Cycle values (Options Setup) to higher values, maybe 50, 100, 200 or even higher. Higher values can even sometimes help to give it that extra smoothness at the expense of rhythmic accuracy, (which for highly rhythmic piece could make is sound sloppy, rather than jumpy) even with more powerful machines. If the software is making too many demands on your processor you can select Low priority mode.



**Q: Why do pieces sometimes take time to stop?**

**A:** The time it takes for a piece to stop is directly governed by your soundcard windows driver, and some are faster than others. If you are using the SB16 MIDI Out device to get SSEYO Koan Pro to drive an external synth you will find the piece can take a few seconds to stop. This delay is to do with the driver and is not the fault of SSEYO Koan Pro.

**Q: Why can I not record a MIDI file?**

**A:** Make sure you have checked the Author allows MIDI file recording of this piece checkbox in the piece details dialog (accessed from the Piece Details button on the top toolbar).

**Q: Why do some of my Creative Labs SoundFont Banks or Gravis Ultrasound patches not seem to play?**

**A: Both cards**

Make sure you have the correct path information included in the Options Setup Dialog and the Koan File Supplementary Search Path box. This determines where the Koan Music Engine will look for special patches, banks or WAV files.

You will need to first save a new piece before it can load your SBKs or patches.

**Creative Labs SoundFont compatible banks on an AWE32**

If you have tried to load too large an SBK for the memory available on your AWE32, then the SBK will not load at all. Try setting up the AWE32 Control Panel to use the GM SoundFont Bank, which will free up maximum memory.

It is also possible you have set up the patch to refer to the wrong patch in the SBK. For instance, your piece is playing patch 12.1 (instrument 12 in bank 1) and your patch is defined as 12 in the SBK. SSEYO Koan Pro pieces work from 1 to 128 whereas SBKs go from 0 to 127, so you will need to set the patch in SSEYO Koan Pro to 11.1.

Check that the Creative Labs Mixer settings for MIDI and Volume are both up and not muted.

You may have created an instrument within an SBK where you have set the volume of the sample to zero or a very low value.

You may have created an SBK for which one of the patches only plays on a small range of notes (perhaps even, say, middle C = 60). You must make sure the rules use by your piece allow this note/ these notes to play.

**Gravis patches**

Make sure you set up your MIDI Mapper to use the 'Ultrasound' setup (for patch caching apps) and not any of the other setups like Ultra 1024, Ultra 512 or Ultra 256 which are for non-patch caching applications. If you don't do this then some patches will be loaded incorrectly.

You may have tried to load too many patches into the onboard SRAM and so some of the patches have been unloaded. Gravis cards operate on a FIFO (First In First Out) principle.

Check that the Ultrasound Mixer settings for MIDI and Volume are both up and not muted.

**Q: Why do I get the wrong patch/instrument playing for a voice, or the voice plays at the wrong time, or a voice wont play it at all?**

**A: Wrong patch/instrument or the voice is playing at the wrong time**

If you seem to get notes in the piece from a patch/instrument that should not be playing, check the Options Setup dialog. Make sure that *Line Number* and *Set Instrument* are both set to <none> for the Fixed Volume Input Line section. If the Line Number is set to say 3 and the instrument is set to Piano, these values will override those in the piece for MIDI line 3. The volume for this patch will automatically be set to maximum by the SKME and it will not follow the Volume envelope - so you might be surprised to see the voice playing when it is supposed to have no volume.

Check that your voice does not share the same MIDI Channel as another otherwise voices might not play as expected. The reason being that you cannot have 2 different patches playing on the same MIDI channel at the same time (unless drums on channel 10).

If using SoundFont compatible banks, check that you have not got 2 verisons of the same SBK on your system. Often you may have made changes to one of the SBKs (e.g. changed the patch numbers) and the piece may be picking up the other one. The reason for this is the one you dont want may be in a directory in your path or defined in the Koan File Supplementary Path (see Options Setup menu).

You may have defined a list of patches for your voice. The currently used patch will be shown under the Patch parameter and it will update as the patch changes (if using Patch Bars Change parameter, for instance).

**Voice not playing at all**

Check that you have not muted the voice and that the Pitch is within a range that will be audible.

Check that your Volume, Velocity, Velocity Range, Velocity Change and Velocity Change Range envelopes all have non-zero values and that the Expression controller (View 6) is not set to 0.

Check your **MIDI Channel** allocations if you have more than 16 voices; if you let the SKME choose your pieces MIDI channels (MIDI Channel Sharing Reallocation parameter) remember that when a voice has zero volume its MIDI line can be reallocated to another voice which needs to play. If you try to follow or a repeat a voice that has been deselected, then you will hear nothing, as the voice is no longer available to be followed or repeated.

Check that the rules used by your voice allow notes to be played (for all cases below, too). Have a look at the flashing rule bars to verify this.

If a Rhythmic voice, check that the Phrase Note Rest % parameter is not 100%.

If an Ambient voice, make sure the values for your Ambient Gap parameters are not too large, or it will never seem to play.

If a Follows voice, make sure it is following a voice that is playing (i.e. the other voice has non-zero volume/velocity), that the Follow % parameter is not 0% and that the Follow Named Voice parameter is not set to ?

If a RepeatBar voice, make sure it is repeating a voice that is playing (i.e. the other voice has non-zero volume/velocity) and that the Repeat Bars % parameter is not 0%.

If a FixedPattern voice, make sure you have a pattern defined for the voice and that the Pattern Use % parameter is not 0%.



**Q: Why cant I get a voice to play a pattern or why does the pattern change?**

**A:** Make sure your voice is a FixedPattern type.

Make sure the Pattern Bars Percent parameter is set to 100% if you want your pattern to play all the time, otherwise sometimes it will compose rather than play the pattern.

Also, if your pattern is changing check the value of the **Mutation Factor** parameter. If it has a non-zero value the pattern can change.

**Q: How do I change the volumes of individual drum instruments?**

**A:** You will find if you change the volume envelope for a number of voices using drumsounds that it does not have the effect of changing the volume of the drums correctly. This is because the volume envelope applies to everything on Channel 10 *OVERALL* - it is like a master envelope. What you need to do is adjust the Velocity envelope for each drum voice.

**Q: How do I change the default settings when I create a new piece?**

**A:** When you select File New, SSEYO Koan Pro loads one of the templates. Customize these to your own settings if you wish, or create your own.



**Q: How do I change the settings of the voice that is added when I select Edit Add?**

**A:** Edit Add will create a voice based on the fixed defaults supplied with SSEYO Koan Pro - it is not possible to change these. You can, however, save a piece as a Template (.SKT) with lots of your favorite voices (see above) and their settings and use this as a template. You can then use copy and paste to do just that!

**Q: Why do I suddenly get a low or high note occasionally**

**A:** SSEYO Koan Pro has a built in factor that will occasionally take you out of the octave of notes you are in to move you to another octave (if you have set the Patch Range to be large enough). If this was not the case, the SKME might compose all its notes within the same octave.

**Q: I am using an external synth module and SSEYO Koan Pro keeps crashing**

**A:** Make sure you are not using your external synth setup up to use its own internal MIDI clock. It should be set up to use an external MIDI clock.

**Q: Reverb and chorus do not seem to work correctly**

**A:** Try setting the Master Control values to 0, as these values add to those you have chosen in View 7 (Controllers view).

**Q: How do I create chords?**

**A:** You can create chords by using the Follows Voice Type. See [Follow Named Voice](#) and [Follow Strategy](#).

**Q: How do I use SoundFonts from multiple SoundFont compatible banks**

**A:** This is easy to do by specifying different SoundFonts from a number of SoundFont compatible banks in the AWE32 SoundFont Bank & SBK Filename parameter in the Piece view.



## Voice Types



Voice Type		
MC	Voice Type	MU
0	Rhythmic	✓
0	Ambient	✓
0	Follows	✓
0	RepeatBar	✓
0	FixedPattern	✓

The Voice Type is one of the parameters available for you to select. The voice can have only one Voice Type defined at a time, but you can still edit any of the piece parameters for the other Voice Types, even though they will have no effect until you change the Voice Type to the appropriate one (please refer to the Voice Type table for a quick lookup of which parameter is effective for which Voice Type). The Voice Types are all changeable in real time and are as follows:

### Rhythmic

A Rhythmic Voice Type means that the notes played by the voice will be governed by the current Rhythm Rule (look at some of the demo files for examples). The voice will also compose according to the Scale, Harmony and Next Note rules and is primarily governed by the Phrase Length and Phrase Gap parameters.

### Ambient

The Ambient Voice Type allows you to have notes/events that play for a long time (or a very short time), and can thus be used to create 'drone' like sounds (long notes) or burbling sounds (short notes). The notes played will still follow the Scale, Harmony and Next Note rules (not the Rhythm rule), allowing a very free floating effect in the music. This voice type is unique to SSEYO Koan products as it allows notes to play which are not restricted to traditional music bar boundaries, as the note durations are defined by time. It is also useful for putting in special effects which will only play infrequently. See Ambient Duration, Ambient Duration Range, Ambient Gap and Ambient Gap Range.

### Follows

This is a very powerful voice type enabling one voice to follow another - that is, to play notes based on or harmonized with a lead voice. The way the voice follows the lead voice (selected in the Follow Voice parameter) is determined by the various Follow parameters. 3 types of following are supported; Chordal Harmony (where any interval up to that specified can be chosen), Interval within Scale Rule (allowing fixed intervals) and Semitone Shift (allowing fixed tonal following). In addition, you may determine how likely a voice is to follow the lead voice and to apply a delay factor in seconds, milliseconds or 60th of a beat. For instance, you could simulate fugue phrasing by following a lead voice by say 4 beats. Alternatively, you could mimic a long delay by setting the delay time value to say 5 seconds. Again, you could follow a lead voice with say 6 other voices (with Chordal Harmony selected), each with a range of delays, creating fairly natural sounding chords. It is important to note that one Follows voice cannot follow another Follows voice (i.e. if Voice C were to follow Voice B which in turn follows Voice A. See Follow Named Voice and Follow Strategy.

### RepeatBar

A Voice of this type will 'look back' at previously played notes over a specified number of bars and either repeat them in their entirety or repeat a certain amount of their information. It can even repeat notes from other voices. See Repeat Bar History and Repeat Bars %.

### FixedPattern

With the FixedPattern Voice Type you can force a voice to play musical phrases; it is a bit like using a 'seed' pattern. You can create patterns with the Pattern Editor and your mouse or you can use it to



import phrases from existing MIDI files. The FixedPattern Voice Type is very powerful and is often used to create drum patterns or other types of pieces where you want to use a pre-defined melodic theme. Patterns are based on the current Scale Rule intervals so you can change the melodies simply by changing the Scale rule used by the voice. Patterns can be modified with the Mutation parameter allowing the pattern to mutate over time, allowing beautiful freewheeling pieces. You can specify the following information in the pattern:

Either:

The note pitch (in intervals), or;

The note duration, or;

Both the note pitch and the note duration

Further information on this is supplied under the Parameters Voice Type. See [Pattern Bars %](#) and [Patterns](#).

---

**See also**

[Forcing a voice to play](#)

[Scratch mixing](#)

## Micro controllers overview

---

SSEYO Koan Pro provides the facility of micro control to deliver really subtle changes of a number of parameters, mimicking the effect that nothing is ever really fixed - especially when it comes to sound. Through these controls continuous micro-level changes of an voices pitch, volume and modulation can be achieved, and also changes to when notes play (not every musician can play exactly on the beat to the nearest millisecond).

### The Microcontroller values - Change, Range, Offset, Update

The way these micro controllers work is to allow a random change of certain selected parameter values over time, mentioned above. The amount that these micro controllers allow the parameters to change is governed by the **Change** parameter associated with the micro controller. This controller acts like a random walk, in that the amount the parameter can vary each time it changes is somewhere between 0 and the Change value - and the value to use is selected at randomly from within this range. The maximum deviation allowed from the original parameter value is governed by the associated **Range** controllers. These act like a wall beyond which the parameter will not vary. A number of the micro controllers have **Offsets**. This value determines how far from the original parameter value the micro controllers will consider the base line value about which it will work, e.g., the Micro Note Delay offset will determine how much shift is applied to notes played, just like playing in advance of or behind the beat. The final setting available for some of them is the **Update** value. This determines how often the micro controller will cause the parameter value to change (or be updated).

Koan Pro provides the facility of micro control to deliver really subtle changes of a number of parameters, mimicking the effect that nothing is ever really fixed - especially when it comes to sound. Through these controls continuous micro-level changes of an voices pitch, volume and modulation can be achieved, and also changes to when notes play (not every musician can play exactly on the beat to the nearest millisecond).

### Change, Range, Offset, Update

The way these micro controllers work is to allow a random change of certain selected parameter values over time, mentioned above. The amount these micro controllers allow the parameters to change is governed by the **Change** parameter associated with the micro controller. This controller acts like a random walk, in that the amount the parameter can vary each time it changes is somewhere between 0 and the Change value - and this is selected at random. The maximum deviation allowed from the original parameter value is governed by the associated **Range** controllers. These act like a wall beyond which the parameter will not vary. A number of the micro controllers have **Offsets**. This value determines how far from the original parameter value the micro controllers will consider the base line value about which it will work. The final setting available for some of them is the **Update** value. This determines how often the micro controller will cause the parameter value to change (or be updated).

---

### See also

[Micro controllers View 8](#)

[Micro controllers View 9](#)

## Common Parameters

---

Each piece displays a number of common parameters. The column headers for these parameters are grey to indicate that they are common to most views:

Voice Name

Patch

MIDI Channel

Voice Type

Mute

## Envelope View

---

The envelope buttons on the lower toolbar select which envelope you want to view. You can edit the envelope using the envelope tools on the top envelope toolbar:



Volume



Velocity



Velocity Range



Velocity Change



Velocity Change Range



**Pan (10)**

## View 1 - Rhythmic Voice and general parameters

---



This parameter group view displays those parameters you are most likely to use when creating a voice of the Rhythmic type:

Phrase Gaps Range

Phrase Gaps

Phrase Length Range

Phrase Length

Pitch Range

Pitch

Volume Step Change

Phrase Note Rest %

**See also**

**[Parameter List](#)**

## View 2 - Ambient Voice, patch changing and WAV parameters

---



This parameter group view displays those parameters you are most likely to use when creating a voice of the Ambient type. Also included are parameters for specifying WAV files and for changing the patches a voice uses whilst it plays:

Ambient Duration Range  
Ambient Duration  
Ambient Gap Range  
Ambient Gap  
Ambient Units  
Patch Change Bars Range  
Patch Change Bars  
Wave file

**See also**

**[Parameter List](#)**

## View 3 - Follow voice parameters

---



This parameter group view displays those parameters you are most likely to use when creating a voice of the Follows type:

[Follow Delay Range](#)

[Follow Delay Unit](#)

[Follow Delay](#)

[Follow Named Voice](#)

[Follow Percent](#)

[Follow Shift/Interval Range](#)

[Follow Shift/Interval](#)

[Follow Strategy](#)

---

**See also**

**[Parameter List](#)**

## View 4 - Repeat Bar parameters

---



This parameter group view displays those parameters you are most likely to use when creating a voice of the Repeat Bar type::

[Repeat Bar History Range](#)

[Repeat Bar History](#)

[Repeat Bars %](#)

[Repeat For Bars Range](#)

[Repeat For Bars](#)

[Repeat Specific Voice](#)

---

**See also**

[Parameter List](#)



## View 5 - Pattern and Mutation parameters

---



This parameter group view displays those parameters you are most likely to use when creating a voice of the [FixedPattern](#) type:

[Meter](#)

[Mutate No. Bars Range](#)

[Mutate No. Bars](#)

[Mutation Factor](#)

[Mutation of Rhythm](#)

[Pattern Bars %](#)

[Patterns](#)

---

**See also**

[Parameter List](#)

## View 6 - Voice Rules and other general parameters

---



This parameter group view displays the rules used by a voice and other general parameters:

[Harmonize?](#)

[Harmony Duration](#)

[Harmony Rules](#)

[MIDI Channel Reallocation](#)

[MIDI Channel Sharing](#)

[Next Note Rules](#)

[Rhythms Rules](#)

[Scale Rules](#)

---

**See also**

**[Parameter List](#)**

## View 7 - Controllers

---



This parameter group view displays the standard controllers used to alter the sound of instruments/patches:

[Chorus \(93\)](#)

[Damper Release](#)

[Damper/Hold \(64\)](#)

[Expression \(11\)](#)

[Modulation \(1\)](#)

[Portamento \(65\)](#)

[Reverb \(91\)](#)

[Soft \(67\)](#)

[Sostenuto \(66\)](#)

[Koan ADSR Attack Time](#)

[Koan ADSR Hold Time](#)

[Koan ADSR Decay Time](#)

[Koan ADSR Sustain Level](#)

[Koan ADSR Release Time](#)

---

**See also**

[\*\*Parameter List\*\*](#)

## View 8 - Micro Note and Micro Pitch parameters

---



This parameter group view displays the first group of Micro control parameters. These allow you to vary various aspects of the patches sound at a micro level, i.e. very subtle real time changes:

[Micro Note Delay Change](#)

[Micro Note Delay Offset](#)

[Micro Note Delay Range](#)

[Micro Pitch Change](#)

[Micro Pitch Range](#)

[Micro Pitch Update](#)

[Micro Pitch Update Range](#)

[Pitch Bend Offset](#)

[Pitch Bend Sensitivity](#)

**See also**

[Micro controls overview](#)

[Parameter List](#)

## View 9 - Micro Modulation and Micro Volume parameters

---



This parameter group view displays the second group of Micro control parameters. These allow you to vary various aspects of the patches sound at a micro level, i.e. very subtle real time changes:

[Micro Modulation Pulse](#)

[Micro Modulation Pulse Range](#)

[Micro Modulation Range](#)

[Micro Modulation Update](#)

[Micro Modulation Update Range](#)

[Micro Volume Change](#)

[Micro Volume Range](#)

[Micro Volume Update](#)

[Micro Volume Update Range](#)

---

**See also**

[Micro controls overview](#)

[Parameter List](#)

## View 10 - AWE32 Controllers - LFO1 and LFO2

---



This parameter group view displays the first set of AWE32 EMU800 controllers:

AWE32 LFO 1 Filter Cutoff

AWE32 LFO 1 Frequency

AWE32 LFO 1 Pitch Shift

AWE32 LFO 1 Start Delay

AWE32 LFO 1 Volume Shift

AWE32 LFO 2 Frequency

AWE32 LFO 2 Pitch Shift

AWE32 LFO 2 Start Delay

---

**See also**

**[Parameter List](#)**

## View 11 - AWE32 Controllers (Envelope 1)

---



This parameter group view displays the second set of [AWE32 EMU800 controllers](#):

[AWE32 Envelope 1 Attack](#)

[AWE32 Envelope 1 Decay](#)

[AWE32 Envelope 1 Delay](#)

[AWE32 Envelope 1 Filter Cutoff](#)

[AWE32 Envelope 1 Hold](#)

[AWE32 Envelope 1 Pitch Shift](#)

[AWE32 Envelope 1 Release](#)

[AWE32 Envelope 1 Sustain](#)

---

**See also**

[Parameter List](#)

## View 12 - AWE32 Controllers (Envelope 2 and sundry Pitch parameters)

---



This parameter group view displays the third set of [AWE32 EMU800 controllers](#):

[AWE32 Envelope 2 Attack](#)

[AWE32 Envelope 2 Decay](#)

[AWE32 Envelope 2 Delay](#)

[AWE32 Envelope 2 Hold](#)

[AWE32 Envelope 2 Release](#)

[AWE32 Envelope 2 Sustain](#)

[AWE32 Pitch Filter Cutoff](#)

[AWE32 Pitch Initial](#)

[AWE32 Pitch Resonance](#)

**See also**

**[Parameter List](#)**



## View 13 - SCC1 Controllers

---



This parameter group view displays SCC1 specific controllers:

[SCC1 Attack](#)

[SCC1 Decay](#)

[SCC1 Release](#)

**See also**

[\*\*Parameter List\*\*](#)

## Piece View

---



The piece parameters affect the whole piece and so have their own window. You can toggle between each of the 3 views by pressing the buttons at the top of the window.

### View 1

This parameter group view displays those parameters you are most likely to use which affect the entire piece:

[Drum Set](#)  
[Harmonization Type](#)  
[Harmony Rules](#)  
[Meter](#)  
[Next Note Rules](#)  
[Piece Gap Range](#)  
[Piece Gap](#)  
[Piece Length Range](#)  
[Piece Length](#)  
[Tempo Change?](#)  
[Tempo Envelope Range](#)  
[Tempo Envelope](#)  
[Tempo Range](#)  
[Tempo](#)

### View 2

This parameter group view displays those more complex or advanced parameters you have at your disposal to affect the entire piece:

[Piece Demo Time](#)  
[Piece Random Scale](#)  
[Piece Root Bars Range](#)  
[Piece Root Bars](#)  
[Piece Root Change](#)  
[Piece Root Envelope](#)  
[Piece Roots](#)  
[Piece Semitone Shift Range](#)  
[Piece Semitone Shift](#)  
[Voice](#)

### View 3

This parameter group view displays advanced parameters you have at your disposal for loading patches or SoundFonts, should you have the appropriate soundcard (you may still set these even if you do not have the soundcard but you will not hear any effect):

[AWE32 Chorus Variation](#)  
[AWE32 Effect Type](#)  
[AWE32 Reverb Variation](#)  
[AWE32 SoundFont Bank & SBK Name](#)  
[Gravis Drum Patch Bank](#)  
[Gravis Melodic Patch Bank](#)

---

**See also**

**[Parameter List](#)**





**"SSEYO - the world leader in computer assisted ambient musics (CAAM)"**

SSEYO (pronounced SAY-OH) was established to respond to the ever increasing demand for quality of life and personal fulfillment. If you want to know more about the company or its products, have any ideas as to what you would like us to develop next or suggestions as to how we may improve our products, please do contact us at the address below:

**SSEYO Ltd  
Pyramid House  
Easthampstead Road  
Bracknell  
Berks RG12 1YW  
UK**

**Sales and general information:**

**Internet:** [koaninfo@sseyo.com](mailto:koaninfo@sseyo.com)  
**WWW:** <http://www.sseyo.com>

**CompuServe:** GO SSEYO

**Tel:** +44 (0) 1344 712017  
(9:00am to 4:00pm GMT Monday to Friday, excluding holidays)

**Fax:** +44 (0) 1344 712005

**Technical support:**

Please note: No support is provided on this demo version.

**Trademarks**

SSEYO, Koan and the SSEYO logo are registered trademarks of SSEYO Limited in the UK and are trademarks of SSEYO Limited in other countries. Other products mentioned may be trademarks or registered trademarks of their respective companies and are the sole property of their respective manufacturers.

---

**See also**

**[SSEYO Koan CD ROM albums](#)**

## World Wide Web

---

An inter-connected series of electronic pathways, allowing you to access information on computers all over the world, mostly via the POTS system (Plain Old Telephone System). You need a modem and an Email account with one of the network service providers. SSEYO Koan pieces can be downloaded over the WWW and played by SSEYO Koan Web, configured as a Helper Application, or directly with the SSEYO Koan Netscape Plugin (both freely available from the SSEYO website) - **while you are online**.

With a 28800 modem you can typically download a 7Kb Koan piece (an average file size) in 3 seconds - SSEYO Koan Web/Koan Plugin will then start playing it immediately. One of the main advantages of SSEYO Koan technology for net use is that the piece you download would only be a few Kb in size yet it could play beautiful music for many hours. Koan file sizes typically range from less than 1Kb to 20Kb.

Dont forget that any files you place on your website are covered by copyright (the right to copy - see Copyright discussion) and likewise any files you download, too!! If you want to put someone elses Koan files on your website you need their permission (as you will have copied them). However, we have produced a number of files (the Koan Giftbox) that we will allow you to put on your own website for FREE, meaning you can have music on the net for FREE.

Check out our web site for the latest demos, files and links (also see the Connect to the SSEYO Web Page menu option):

**WWW:**        <http://www.sseyo.com>

## CompuServe® forum

---

Purchasing SSEYO Koan Albums or SSEYO Koan Pro will enable you to get a FREE Membership to CompuServe, some details are given below:

### Get valuable SSEYO support around the clock on CompuServe

CompuServe gives you a direct connection to our technical support team and easy access to the most current updates. To access the SSEYO Section of the Multimedia A Vendor Forum, click on the **GO** button of the CompuServe Information Manager software (see Membership below) and enter **SSEYO**. There you'll gain valuable information on all our products, as well as late-breaking news on soon-to-be and newly released products.

▪ **Stay in touch 24hrs a day.**

Post your messages for us and share your views and knowledge with others. Catch the latest Press Releases and information on our products

▪ **Get product demos and download files.**

We will always have the latest versions of demos of our products here in the Library. You will also find many demo pieces and we encourage you to make your own submissions - who knows, you might even get famous in our Forum section!

▪ **Talk to support experts.**

There's no better place to get support on our products!

▪ **Provide product feedback.**

Tell us what you want to see in our products. What do you like most about them? What could be better? What other services could we offer you? We always want to know!

### So what exactly is CompuServe?

CompuServe is the information service world-renowned for its computer support and electronic camaraderie. Join CompuServe and join millions of other members who have around-the-clock access to over 2000 products and services, including over 850 hardware and software companies.

Now you can ask questions, share ideas and get important information about SSEYO products via CompuServe, the world's premier online information service.

Interested in upgrades? Don't miss out on important news about product enhancements, as well as details on ordering upgrades.

### CompuServe puts the world at your fingertips.

Of course there's always more to choose from on the information service you won't outgrow. And CompuServe is always ready. Around the clock and around the world. CompuServe offers more local access connections than any other service, including 14.4 BPS connections in most major cities.

More than information, CompuServe is your connection to a network of personal computer users in over 150 countries. You'll find CompuServe members with interests just like yours exchanging information and ideas around the clock and around the world.

Interconnect to the Internet and electronic mail systems, fax machines and postal mailing addresses everywhere. Shop a mall that never closes. Search exhaustive reference libraries in minutes. Find the best fares and book your trips with the same systems used by travel agents worldwide.

### Get a FREE Membership to CompuServe...

As a valued SSEYO customer, you would be entitled to a **FREE** CompuServe Membership, including:

- ▣ One free month of Membership (a \$9.95 value)
- ▣ An additional 5 hours free in your first month
- ▣ CompuServe Information Manager (CIM) software (for Windows or Mac)
- ▣ A complementary subscription to CompuServe's monthly magazine
- ▣ A personal User ID number and private electronic mailbox
- ▣ Access to popular internet services.

**GO SSEYO. We look forward to meeting you.**



## Introducing SSEYO Koan Pro

---

### Welcome to SSEYO® Koan™ Pro

Thank you for evaluating this demo version of SSEYO Koan Pro. We have spent a long time perfecting it for you and we hope you enjoy it! .

### The complete Zentertainment™ and Music Creativity system

SSEYO Koan Pro is a unique, powerful and easy-to-use Windows music software product that will stimulate your creativity and provide endless hours of fun. SSEYO Koan Pro enables you to create ever-changing music, comprising swirling ambient sounds or more techno, rhythmic material, and it's visual, easy to navigate and does not require a musical keyboard. Through manipulation of on-screen controls you can create your own SSEYO Koan pieces, some free-wheeling, others based around subtly changing 'seed-phrases'. The soothing music these SSEYO Koan pieces can generate can be used as Zentertainment™ or as the basis for the musical content of any number of music or multimedia projects.

### SSEYO Koan Music Engine(SKME)

All pieces created with SSEYO Koan Pro are interpreted and composed in real time by the SSEYO Koan Music Engine (or SKME, pronounced 'SCHEME' or 'SKEEM'), which then sends out MIDI information to your soundcard or sound module. Whenever a piece is played it can be slightly different - like a musical kaleidoscope. SSEYO Koan music can also sound very natural and expressive and each piece tends to have its own character. The SKME has been designed to be flexible and so does not limit itself to pre-defined, style-based music, making it ideal for ambient music of all genres. Also, because a piece's musical output can be different every time, it provides a higher level of originality and interest than MIDI files, whose output is always the same. A similar situation will one day apply to CD Audio tracks, too, when soundcards that support uploading of samples will proliferate...

### 'Zentertainment' ... great. What is it?

The music you create with SSEYO Koan Pro is ideally matched to the new forms of software - or 'Zen Ware', - now appearing on the market. We like to use the term Zentertainment for the music created by SSEYO Koan Pro, because as well as creating relaxing and reflective musical material it can also be used to produce exciting techno music. Because the music is always different it requires an intuitive response from you, helping you to 'surf' with more freedom and instant appreciation.

Since you can also play along with SSEYO Koan Pro too (you will need a MIDI music keyboard or similar device for this), you can create your own atmospheres and have real fun doing it. You just play -- and the SKME will harmonize with what you are playing, subtly of course. You can even record the resulting 'mix' to a MIDI file for later manipulation or enhancement in a sequencer.

'Koan' itself is a Japanese Zen word which means a puzzle or mystery with no logical solution. There is a famous Koan: if you clap two hands together you get the sound of two hands clapping. What is the sound of one hand clapping? Our music is well suited to this description, as it never repeats itself (unless specifically requested to do so) and so it is never wholly quantifiable: it is like an endless stream.

### Where you might hear it....

SSEYO Koan Pro's ambient output (or MIDI file recordings of it) can be heard in any number of situations and in all manner of places, e.g. on your own computer, on the [web](#), performing your own pieces, multimedia projects, aurally-enhanced screensavers, film and video tracks, adding spice to presentations or simply used as a relaxing non-intrusive background. But why stop there? You can produce music for malls, elevators, chill-out rooms, raves, hospitals, alternative health centers, greenhouses, your own house party - it fits in anywhere (all subject to our licence).

We also have an Application Programming Interface (API) available for the SKME for developers who

wish to include it in their own applications. You might therefore hear it included in software games or multimedia titles.

Remember, SSEYO Koan music is not muzak, which is a rendition of a song people already know and love: SSEYO Koan music is always fresh and different. Perhaps the closest analogy to the SSEYO Koan products is that of an Aeolian harp, where the wind `plucks` its strings in an uncertain and changing manner, thus producing quite `ethereal` music. Or think of it the aural equivalent of a glowing, burning log fire. SSEYO Koan music can be ethereal or more down to earth, depending on what you want from it. But you are always in control of the output.

## How do I create this amazing music?

Creating a SSEYO Koan piece is straightforward and involves editing and reviewing a number of on-screen parameters. All of them are real-time changeable, meaning your input will take effect as soon as the SKME can accommodate it (and exactly how far it composes ahead is set by you). You can fix some of these parameters for the duration of the piece and others, using `envelopes`, can provide varying settings throughout the length of your piece - vital to the freshness and subtlety of the music.

## Nearly 150 parameters to shape your musical pieces:

- ▣ Up to 50 separate voices (soundcard dependent)
- ▣ Rhythm templates and demo pieces provided
- ▣ Separate windows for Power, Voice X, Rules and Piece level parameter views
- ▣ 5 different voicetypes: Ambient, Rhythmic, FixedPattern, Follows or RepeatBar. Use Follows voices to `follow` another, allowing easy counterpoint; use RepeatBar voices to repeat material from earlier bars; use Ambient voices to create notes with durations in milliseconds, seconds or fractions of a beat
- ▣ 4 music rule types: Scale, Harmony, Next Note and Rhythm
- ▣ Envelopes to control Volumes, Pans, Velocities, and Tempo
- ▣ Controllers for Reverb/ Chorus/ Portamento/Sostenuto/Expression/ Damper/ Softness
- ▣ Support for GS/GM patches
- ▣ Creative Labs AWE32: Define in your piece and auto-load multiple Creative Labs AWE32 SoundFont™ compatible banks from any directory location (could be a CD ROM on your D: drive for instance). Controllers for all 25 EMU8000 LFOs, Oscillators and Envelopes on the AWE32.
- ▣ Gravis Ultrasound/ Ultrasound MAX: Define in your piece and auto-load Gravis Technology patch banks from any single directory location (could be a CD ROM on your D: drive for instance).
- ▣ Roland SCC1: Controllers for Attack/Decay/Release
- ▣ Import MIDI files & record your SSEYO Koan piece output to a type 0 MIDI file
- ▣ Random patch changing as a voice is playing
- ▣ Mutation of phrases
- ▣ Micro-level controls for real time, subtle random changing of a voice's volume, pitch, start time and modulation
- ▣ Support for WAV files, stored externally or even used from a CD ROM
- ▣ Lists of values for every parameter
- ▣ Create encrypted .SKP demo pieces that will stop playing after a pre-determined time (allowing you to create and send out encrypted demos of your work, to be played with SSEYO Koan Web/Koan Plugin for Netscape); add pieces notes for others to see when they load your pieces
- ▣ Extensive mouse and keyboard support
- ▣ Comprehensive online help system

## Music as we know it is changing

Good music has traditionally been thought of as being pre-composed and completely pre-defined. Not so with SSEYO Koan music, which is realized for you as you create it or listen to it, and because of its novel design it can ebb and flow in many beautiful ways.

### **How `computer` music was made in the past**

The most commonly-used method to create `generated` or auto-composition music was developed by Mozart. He created a system of automatic composition which used a fairly large set of generally short musical phrases of a fixed length. He would roll dice to determine in which order he should string them together. The result was generally quite reasonable, but fairly limited in expression.

### **What SSEYO has developed for you**

SSEYO Koan Pro can use nearly 150 specially-designed variable controls to influence and produce its music *as it composes*. The values you input to these controls, some of which are time dependent, are written into a SSEYO Koan `piece` (SSEYO Koan Design file - .SKD). They determine the notes and melodies generated when you play the piece through the SKME. It is these very controls that influence the creation of music that is smooth, non-intrusive, and natural-sounding. But, the SKME's real power is that it composes and harmonizes everything in real time according to your selections. And because you can still use the `roll the dice` technique (i.e. for selecting music patterns), you can create pieces which span the complete range - from simple old-style `roll the dice` constructions to completely free-wheeling, ever-changing atmospheric productions.

Because of the way the SKME has been written, pieces of considerable length can be created in SSEYO Koan Pro (currently up to 9 hours). For instance, you could create three pieces that could each play for eight hours, providing you with round the clock music with appropriate changes to accommodate the time of day.

### **SSEYO Koan Pro and General MIDI and GS**

---

As SSEYO Koan Pro supports General MIDI and GS your piece will have access to many special effects and ways of manipulating sounds if your sound card supports General MIDI or GS, too.

## Copyright, licensing and ownership discussion

---

**Important:** *SSEYO provides no warranties whatsoever as to the accuracy or legality of the statements provided below. We recommend you should consult your lawyer should you have any doubt about your ownership of Copyright on recordings you may make. See also the software licence.*

### Copyright

We are keen to bring to the multimedia market a way of creating good quality music that is copyright free, but copyright law is a very complex area. Computer generated music is currently a hot topic in Copyright circles and there are no real precedents set either way. The wording of the UK Copyright, Designs and Patents Act 1988 states that the owner of a copyright in a musical work is the person that created it, whereas this contrasts with computer generated musical works where the owner of the copyright in the work is the person by whom the arrangements necessary for the creation of the work are undertaken. In our efforts to bring about copyright free music we have designed SSEYO Koan Pro so that we allow the author of a SSEYO Koan file/ piece - i.e. the .SKD, .SKT, .SKP or any other file it might be possible for it to generate in the future - to state explicitly what rights they are prepared to relinquish.

The originator of a SSEYO Koan file/piece is the owner of the copyright on that piece. Just as a Record Company can sell you a record or CD on which their artist's song is recorded, the originator of a SSEYO Koan file can provide a floppy disk containing their own file/piece(s). Although you DO own the record or floppy disk once you have purchased it, you DO NOT own the actual song or file itself; nor (for an audio recording) do you own the recording of that song: in effect YOU are purchasing a licence to use or listen to that particular song or SSEYO Koan's interpretation of the file YOURSELF. The SSEYO Koan file is a literary work and so enjoys the full protection of International Copyright law. Licensing software for use is the normal situation for software, and the originator of the software is the copyright holder under International Copyright law.

**Note:** The reason a person has to pay the Performing Rights Society a fee when playing pre-recorded music in public is that a large number of people are listening to it, and not just you.

### MIDI file recordings of SSEYO Koan output

So, purchasing a floppy disk containing a SSEYO Koan file does not mean that you then own the copyright to it and, because you don't own it, you are not allowed to make copies of that file and resell these copies (but as with a CD you are allowed to make a 'backup' copy for your own personal use). However, because the SSEYO Koan output can be different each time a file is played (dependent on how the author has set up the piece), you can make a 'master' audio or MIDI file recording of it each time it plays which no one else will probably ever be able to make (subject to the limits of our random number generator and subject to the authors consent), so you can 'own' the copyright on that recording.

**Note:** The situation may be unclear on who would own the copyright on recordings of a piece that contained recognizable musical fragments of another artist's work. This could occur if the author of a SSEYO Koan piece included musical 'seed' phrases (patterns) that were the copyright of another artist. There are also further complications of MIDI file recordings of computer generated music on which we are seeking legal advice.

### What is the benefit of this to you?

We believe it means you can use 'ROYALTY FREE' (because you own the copyright) any MIDI file or audio recording you have made of any Koan piece (subject to the original author giving consent by relinquishing any present or future rights to or title they may have to all MIDI file or other recordings of their pieces, and this is an option to which they agree or not) for any use or application you may desire. **The only requirement is that you note somewhere prominently in your application, accompanying documentation or materials that the music was created by SSEYO Koan software and you give the original authors name, i.e. Original music A. Gnu Piece was written by A. Gnu Artist and created and played by SSEYO Koan software.**

If you are the originator of a SSEYO Koan file then, as stated, you **may** not have any claim to copyright on the `output`, but you may record one or many instances of that output and you own the copyright to that (those) specific recording(s).

## Live output from the SKME

Where the SKME is composing music in real time, we call this `live` use (see below). Our standard licence (the one that comes with this package) allows you to use the product for personal use where the Software is `in use` on a computer when it is loaded into the temporary memory or installed in the permanent memory of that computer.. However, we specifically preclude use of this software in an unattended mode of operation for any purpose whatsoever, other than for personal use (by attended use we mean you as an individual are controlling it, interacting with it or playing it). We also preclude use for public broadcast (please see the licence).

This means you can use SSEYO Koan products for all your daily personal requirements whatever they may be. But, if you want to use any SSEYO Koan product in an unattended form (i.e. no-one is regularly attending it) for non-personal use (i.e. company or business) you will need a special licence from us.

**Note:** Play back of MIDI files created earlier by the SKME are simply recordings of the SKME and are not composed in real time, so for live use you can use them as you please, subject to the discussion earlier.

Examples:

Use covered by standard licence

### **Live attended use**

#### **Personal**

SSEYO Koan personal background music on your work/ home computer  
Creating your own SSEYO Koan pieces

Yes  
Yes

#### **Non-personal (i.e. used by or for business)**

Presentations with SSEYO Koan background (loaded with presentation)  
Live use at gigs, DJ work, performances

Yes  
Yes

### **Live unattended use**

#### **Personal**

Wake up to it in the morning  
General music around the house

Yes  
Yes

#### **Non-personal (i.e. used by or for business)**

Sending out Product Demo disks with SSEYO Koan music  
SSEYO Koan music for telephone hold systems  
SSEYO Koan music for hotel foyers, reception rooms, lobbies, rest areas  
SSEYO Koan music for environmental control systems (buildings etc.)  
SSEYO Koan music for broadcast (radio stations/ in flight rest music etc.)

No  
No  
No  
No  
No

*SSEYO would be pleased to discuss our licensing terms with you for Unattended, non-personal use, as outlined above.*

## SSEYO Koan Pro V1.2 Demo

---

SSEYO Koan Pro Demo is a slightly cut down version of SSEYO Koan Pro. It is only to be used for demonstrating and evaluating what SSEYO Koan Pro can do. Please check out our [website](#) for other demo pieces which we will post from time to time.

SSEYO Koan Pro Demo has the following limitations over the full version:

- ▣ No saving of pieces or templates
- ▣ No MIDI file save
- ▣ No exporting of patterns to MIDI file
- ▣ Plays for 5 minutes when it will then stop playing. You can restart it by pressing play.
- ▣ Only a few sample pieces and templates.

See the SSEYO Koan Pro Demo software [licence](#)

## SSEYO Koan Albums/ Koan Plus V1.2

---



SSEYO will be releasing a number of Koan Albums. The albums will come with the SSEYO Koan Plus Album Player software. SSEYO Koan Plus is similar to Koan Web in that it is a player, but it has a number of extended capabilities (in addition to those of Koan Web):

- ▣ Creation of albums of Koan pieces (SKP/SKD/SKT) and MIDI files
- ▣ Playback of Albums of these pieces and MIDI files
- ▣ Muting of the playing piece
- ▣ Random/Ordered playlist selection
- ▣ Can be used as an upgrade to Koan Web and will play pieces over the Web

SSEYO will also be releasing a Koan product - **Generative Music 1** - by the Ambient Music pioneer and producer of U2/David Bowie - **Brian Eno**.

**Note:** The Brian Eno Koan product is released specifically for the AWE32 because of the amazing things he does with the EMU8000 controllers in the card

**At the time of writing this help file the first SSEYO Koan album - Calm.1 - should come with the following:**

Pieces specially written for each of the following soundcards:

- |  |           |
|--|-----------|
| ▣ Creative Labs AWE32                  | 10 pieces |
| ▣ Creative Labs SoundBlaster 16        | 10 pieces |
| ▣ Yamaha DB50XG                        | 10 pieces |
| ▣ Gravis Ultrasound and Ultrasound MAX | 10 pieces |
| ▣ Roland SCC1                          | 10 pieces |
| ▣ Orchid NuSound PnP                   | 10 pieces |

---

### See also

[SSEYO Koan CD ROM albums](#)

[Piece Length - Max Demo Time](#)

## **SSEYO Koan based CD ROM albums**

---

SSEYO has adopted a policy to develop the market for SSEYO Koan based CD ROM `albums`. We want to help you produce your own CD ROM albums, albums that could contain a wealth of your WAV files, samples in SoundFont compatible Bank format, Gravis patches and SSEYO Koan pieces that make use of them. The reason for doing this is to create a new market for hyper-music - music that is able to be different every time it plays. This music can always be exciting, and if it makes use of your own samples and WAV files the music it creates will truly be incredible. The concept of putting the operating system software (in this case the SSEYO Koan album player, SSEYO Koan Plus), which includes the SKME, on each CD-ROM is new and unique - your customers would be buying all they need to play your albums on the CD-ROM itself! All the customer would need to do is load the version of SSEYO Koan Plus supplied on the CD ROM and it will call up your album. When new versions of SSEYO Koan Plus (and thus the SKME) become available, you will simply ship your new CD-ROM album with the new SSEYO Koan Plus on the CD ROM - so your users always get the latest capability.

SSEYO will be happy to license to you a serialized copy of SSEYO Koan Plus for you to put on the CD ROM album you wish to release. Each different album you release would require a new serialized version of SSEYO Koan Plus, to match the version of the SKME your copy of SSEYO Koan Pro would utilize. The licence fee is charged on a per copy basis and is on a quantity sliding scale; please contact SSEYO for further details. Even if you do not want to bring out your own CD ROM albums we may be interested in publishing them for you, so please get in touch!



## Technical Support

---

Sorry, but no support is provided on the SSEYO Koan Pro Demo version, but check out our CompuServe forum section or our website.

See also

[SSEYO](#)

## Licence Agreement for SSEYO Koan Pro Demo

---

### **ATTENTION: THIS IS A LICENCE, NOT A SALE**

IMPORTANT NOTICE: CAREFULLY READ THIS LICENCE BEFORE USING THE SOFTWARE AND ACCOMPANYING DOCUMENTATION. BY USING THE SOFTWARE YOU ARE AGREEING TO ALL THE TERMS AND CONDITIONS OF THIS LICENCE AGREEMENT. IF YOU DO NOT ACCEPT THESE TERMS WE ARE UNWILLING TO LICENSE THE SOFTWARE TO YOU AND YOU SHOULD NOT USE THE SOFTWARE

### **SOFTWARE LICENCE AGREEMENT**

**A.** SSEYO Limited ("SSEYO") continues to own this copy of the Software and all other copies that you are authorised by this Agreement to make. THIS SOFTWARE CONTAINS CODE THAT RESULTS IN THE SOFTWARE TIMING OUT AFTER 5 MINUTES. This licence gives you the non-exclusive, non-sublicensable, non-transferable right to use the Software on the following terms:

### **B. YOU MAY**

1. Use the Software, subject to the provisions below. The Software is "in use" on a computer when it is loaded into the temporary memory or installed in the permanent memory of that computer.
2. May make one (1) backup copy of the Software, provided that you reproduce all copyright and other proprietary notices on the copy and the copy is kept in your possession with the original.
3. Distribute the Software on a public bulletin board, ftp site, world wide web site, or distribute it by other means \*provided\* we give you written authorisation, which we may withhold for any reason.

### **C. YOU MAY NOT**

1. Rent, lend, lease, sell, transfer or grant any rights in the Software.
2. Remove any copyright or other proprietary notices on the Software.
3. Modify, alter, translate or create derivative works based on the Software (except as the law may permit you to do so, notwithstanding such restrictions).
4. Reverse engineer, decompile, disassemble or otherwise attempt to derive the source code, except as the law may permit you to do so, notwithstanding such restrictions, and you acknowledge that the Software in source code form remains a confidential trade secret of SSEYO and/or its suppliers.
5. Use this Software in a mode of operation where the Software is unattended by an operator for any purpose whatsoever, other than for personal use.
6. Use this Software for any form of public broadcast or public performance.
7. Notwithstanding that the Software does not facilitate the making of MIDI file recordings, you may not make MIDI file recordings of a SSEYO Koan piece where the original piece author has NOT authorised MIDI file recordings of their piece, or claim rights to MIDI file recordings or other recordings of a SSEYO Koan piece where the author has not relinquished such rights.

### **D. CONTENT**

All content accessed by or through the Software is the property of the applicable content owner and may be protected by applicable copyright law. This Licence gives you no rights to such content.

### **E. LIMITED WARRANTY**

SSEYO MAKES NO REPRESENTATIONS ABOUT THE SUITABILITY OF THIS SOFTWARE OR ABOUT ANY CONTENT OR INFORMATION MADE ACCESSIBLE BY THE SOFTWARE, FOR ANY PURPOSE. THE SOFTWARE IS PROVIDED 'AS IS' WITHOUT EXPRESS OR IMPLIED WARRANTIES, INCLUDING WARRANTIES OF SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT.

THIS SOFTWARE IS PROVIDED GRATUITOUSLY AND, ACCORDINGLY, SSEYO SHALL NOT BE LIABLE UNDER ANY THEORY OR ANY DAMAGES SUFFERED BY YOU OR ANY USER OF THE SOFTWARE. SSEYO WILL NOT SUPPORT THIS SOFTWARE.

DEPENDING ON LOCAL LAW, CERTAIN LIMITATIONS CONTAINED IN THIS WARRANTY MAY NOT APPLY TO YOU OR YOU MAY HAVE OTHER RIGHTS, SO BE SURE TO CHECK. THIS WARRANTY IS GIVEN IN LIEU OF ALL WARRANTIES, CONDITIONS, TERMS, UNDERTAKINGS AND OBLIGATIONS IMPLIED BY STATUTE, COMMON LAW, CUSTOM, TRADE USAGE, COURSE OF DEALING OR OTHERWISE, ALL OF WHICH ARE HEREBY EXCLUDED TO THE FULLEST EXTENT PERMITTED BY LAW.

#### **F. LIMITATION OF LIABILITY**

NEITHER WE NOR OUR SOFTWARE SUPPLIERS, DEALERS, DISTRIBUTORS, AGENTS OR EMPLOYEES, WILL BE LIABLE FOR (a) ANY INDIRECT, CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGES OR ANY SORT, SUCH AS DAMAGES FOR LOST PROFITS, BUSINESS INTERRUPTION OR LOSS OF DATA ARISING OUT OF THE USE OF THE SOFTWARE, WHETHER OR NOT WE HAVE BEEN NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES, OR (b) FOR ANY CLAIM BY ANY OTHER PARTY. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. FURTHERMORE, SOME COUNTRIES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS LIMITATION AND EXCLUSION MAY NOT APPLY TO YOU.

#### **G. GENERAL TERMS**

All rights not expressly granted to you hereunder are reserved by us. This licence is effective until terminated. Failure to comply with any provisions of this licence, will result in automatic termination of this licence and may result in legal action. SSEYO may terminate this Licence at any time by delivering notice to you and you may terminate this Licence at any time by destroying or erasing your copy of the Software. Upon termination, you agree to destroy all copies of the Software in your possession. In the event of termination, the following sections of this Licence will survive: C7,D,E and F. This Licence is personal to you and you agree not to assign your rights herein.

Title, ownership rights, and intellectual property rights in and to the Software shall remain in SSEYO and/or its suppliers. You agree to abide by international copyright law.

- The enclosed Software and documentation are provided with restricted rights. Any use, duplication or disclosure by the U.S. Government or any agency thereof is subject to restriction as set forth in subdivision (c)(1)(ii) of The Rights in Technical Data and Computer Software clause at 48 CFR 252-227-7013 and in subdivision (b)(3)(ii) of The Rights in Technical Data and Computer Software clause at FAR 52.227-7013. Similarly, any use, duplication or disclosure by any other government is subject to similar restrictions under local law.

- In the event of any conflict between any provision of this Agreement and any applicable law, the provision or provisions of this Agreement affected shall be modified to remove such conflict and permit compliance with such law, and as so modified this Agreement shall continue in full force and effect.

- This Agreement shall be governed by the English law and shall be subject to the exclusive jurisdiction of the English courts without reference to conflicts of laws principles. This Agreement constitutes the entire agreement between the parties with respect to the Software and supersedes any communications, advertising or representations concerning the Software and may not be modified other than by an instrument in writing signed by both parties.

NOTHING IN THIS AGREEMENT SHALL AFFECT THE STATUTORY RIGHTS OF A PERSON DEALING WITH SSEYO AS A CONSUMER AS DEFINED IN THE UNFAIR CONTRACT TERMS ACT 1977.

SSEYO, Koan and the SSEYO logo are registered trademarks of SSEYO Limited in the UK and trademarks of SSEYO Limited in other countries.

IF YOU HAVE ANY QUESTIONS ABOUT THIS LICENCE OR THIS LIMITED WARRANTY, PLEASE WRITE TO OUR CUSTOMER SERVICE DEPARTMENT AT SSEYO LIMITED, PYRAMID HOUSE, EASTHAMPSTEAD ROAD, BRACKNELL, BERKS RG12 1YW, UK



## SSEYO Koan Pro requirements

---

### Requirements:

- ▣ 486 DX 33MHz PC (or greater)
- ▣ 8Mb RAM (minimum)
- ▣ DOS 5.0 or higher
- ▣ Windows 3.1 or Windows 95
- ▣ Mouse
- ▣ 3.5" 1.44Mb floppy drive for installation
- ▣ 5Mb free hard disk space
- ▣ PC soundcard/ MIDI interface with MIDI Mapper support and with a high quality sound synthesiser - Wavetable or LA (Creative Labs SoundFont or Gravis patch compatible preferred)

There are no special display requirements. You may use any sound card or MIDI interface and external synth that can connect to the [Windows MIDI mapper](#) (refer to your Windows manual for details on the MIDI Mapper). This noted, SSEYO Koan Pro will sound the best if you are using a high end sound card or external synth/sampler; this is because the quality of the music produced is generally only limited by the sound quality of your sound card/ synthesizer.

**Note:** Windows 3.1: We recommend you use the MIDI Mapper, but the SKME will pick up any other Windows MIDI driver if the MIDI Mapper is not installed.

**Note:** SSEYO Koan Pro supports the [General MIDI standard](#), and all instructions assume your sound card or synth does, too.

## Installing SSEYO Koan Pro Demo

---

If you have the disk version simply run the SETUP.EXE program from the disk.

If you have the .ZIP version do the following:

- 1) Create a directory KPRODEMO
- 2) Copy the .ZIP file to the KPRODEMO directory (the ZIP file will be called KPRD1216.ZIP or KPRD1232.ZIP)
- 3) From a DOS command line prompt type (you will need PKUNZIP.EXE for this, alternatively use a Windows utility like WinZip):  
PKUNZIP -d KPRD1216.ZIP (for 16 bit version - note the spaces)  
PKUNZIP -d KPRD1232.ZIP (for 32 bit version - note the spaces)
- 4) Now read the software licence. By using SSEYO Koan Pro V1.2 Demo you agree to be bound by the terms of its software licence agreement (LICEKPRD.TXT) installed with the software (also found in the KPRODEMO.HLP file - search for Licence).
- 5) The first time you run Koan Pro you will be asked whether your soundcard supports continuous volume controllers (OPL2/OPL3 based cards do not). Make your selection (which can be later changed via Options Setup).

**Note** **Windows 3.1:** If you have not already set up the Windows MIDI Mapper for your sound card, follow the instructions given in the manual that came with it or refer to the MIDI Mapper help topic.

## Setting up the MIDI Mapper

---

**Note:** We recommend you use the Windows 3.1 or 3.11 MIDI Mapper, but we will pick up any other Windows MIDI driver if the MIDI Mapper is not installed. This section is not appropriate for the Windows 95 MIDI Mapper, for which we refer you to your Windows 95 documentation.

### General reference

The MIDI Mapper is a very useful Windows utility and it makes it easier for software to communicate with your sound card or MIDI interface card. It acts as an intermediary through which Koan Pro talks to your sound card. It basically one big patch map (or post office) which allows you to match up your sound card with any software generating a MIDI output. Koan Pro supports the General MIDI standard, so, if not already set-up in this mode, you will need to set up the MIDI Mapper to match this standard.

Incidentally, Windows 3.1 supports a number of sound cards/devices, and these are currently the Creative Labs Sound Blaster v1.0/ v1.5, Roland MPU401, Roland LAPC1, Ad Lib, Media Vision Thunder Board etc. If your card/interface is not apparently supported by Windows then the card/interface manufacturer should produce a `driver` that allows it to talk to the MIDI Mapper. To see the list of drivers supported (and to make sure your sound card is configured properly) select the Drivers icon in the Program Manager Control Panel. If your card is not already set up, refer to the card/interface maker's instructions.

The MIDI Mapper comes with 4 patch maps as standard; MT32, MT32 perc, Prot/1 and Prot/1 perc. The MT32 perc is actually set up as the General MIDI patch map (quite obvious really), but for the example below we are going to assume that you have a Roland SCC1 card fitted, and you need to create a patch map for this card.

We have chosen this card to represent the case of those cards which do not have a preset setup in the MIDI Mapper. Although you may be able to follow the example, we do recommend that you have a quick read through the section on the MIDI Mapper in the Windows manual before proceeding.

*Note: You should also follow the instructions provided by the supplier of your sound card/interface, because you may need a special set-up for some cards. SoundBlaster, MediaVision and similar cards do not always support the 128 General MIDI sounds.*

Double click on the Control Panel icon in the Program Manager, and then double click on the MIDI Mapper (if there is no MIDI Mapper, then you have not properly set-up your sound card, or there is no sound card installed - refer to the Windows manual).

Select Show Patch Maps and open the Name drop box. You will see there is no General MIDI set-up up so we are going to create one.

Select New and in the Name and Description boxes type General MIDI, then press OK.

You are presented with a table with the headings Src Patch, Src Patch Name, Dest Patch, Volume %, and Key Map name. We want to set up a General MIDI patch map, and this entails matching the Src Patch to the Dest Patch.. Kindly, this is the default. Press the button at the top (which toggles between `1 based patches` and `0 base patches`) so that the first Src patch is 1, which corresponds to acoustic grand piano. Make sure the Key Map name is `none` and press OK.

Next, select Show Setup and open the Name drop box. You will see there is no General MIDI set-up (however, Extended MIDI really is General MIDI, without the Patch Map set up properly!) so we are going to create one.

Select New and in the Name and Description boxes type General MIDI, then press OK.

You are presented with a table with the headings Src Chan, Dest Chan, Port Name, Patch Map Name and Active. The Src and Dest Channel matchings are beyond the scope of this manual, but we are going to pair 1 with 1 , and 2 with 2 etc. The Port Name is the driver you have set up to talk to your sound card.

Go through each of the 16 Src Channels and set Port Name to the driver your card is using (e.g. MIDI 401 for the SCC1), and Patch Map name to the General MIDI patch map we have just made. Make sure all of the Active boxes is ticked.

**Note:** Koan Pro requires that channel 10 is reserved for drums/percussion

Your sound card should now be ready to work with Koan Pro.





## File Menu commands

---

The File menu offers the following commands:

<u>New</u>	Creates a new piece.
<u>Open</u>	Opens an existing piece.
<u>Close</u>	Closes an opened piece.
<u>Save</u>	Saves an opened piece using the same file name (disabled).
<u>Save As</u>	Saves an opened piece to a specified file name (disabled).
<u>Save Play File</u>	Saves an opened document as an encrypted file (disabled).
<u>File Create Template List</u>	Creates a list of templates for File New.
<u>Connect to the SSEYO Web Page</u>	Starts your Web browser to connect to the SSEYO Website.
<u>File 1, 2, ...</u>	Opens specified file.
<u>Exit</u>	Exits SSEYO Koan Pro.

## **Edit Menu commands**

---

The Edit menu offers the following commands:

<u>Add</u>	Adds a new voice.
<u>Cut</u>	Deletes a voice and all its associated parameter values and moves it to the clipboard.
<u>Copy</u>	Copies a voice and all its associated parameter values from the piece to the clipboard.
<u>Copy Parameter</u>	Copies a single parameter value or envelope from a voice to the clipboard.
<u>Paste</u>	Pastes a voice and all its associated parameter values from the clipboard into the piece.
<u>Delete</u>	Deletes a voice
<u>List</u>	Edits a list

## Control Menu commands

---

The Control menu offers the following commands:

<u>Previous</u>	Rewinds through the currently playing piece in 10% increments.
<u>Play</u>	Plays the piece that is in the active window.
<u>Stop</u>	Stops the currently playing piece.
<u>Next</u>	Fast forwards through the currently playing piece in 10% increments.
<u>Pause</u>	Pauses the currently playing piece.
<u>Record MIDI</u>	Records MIDI information to a file (disabled).
<u>File</u>	
<u>Play Now</u>	Forces a note to play.
<u>Stop Now</u>	Stops a currently playing note.

## Options Menu commands

---

The Options menu offers the following commands:

<u>Setup</u>	Defines the time over which you allow SSEYO Koan Pro to compose and, as well, lists options like your search path.
<u>Master Controls</u>	Volume, stereo position, reverb and chorus master controls.
<u>Preferences</u>	User preferences for row height, voice and rule flashing and startup screens.

## Window Menu commands

---

The Window menu offers the following commands, which enable you to arrange multiple views of multiple documents in the application window:

<u>Cascade</u>	Arranges windows in an overlapped fashion.
<u>Tile</u>	Arranges windows in non-overlapped tiles.
<u>Arrange Icons</u>	Arranges icons of closed windows.
<u>Toolbar</u>	Shows or hides the toolbar.
<u>Status Bar</u>	Shows or hides the status.
<u>Tools display</u>	Shows or hides the envelope tools.
<u>Window 1, 2, ...</u>	Goes to specified window.

## Help Menu commands

---

The Help menu offers the following commands, which provide you assistance with this application:

<u>Index</u>	Offers you an index to topics on which you can get help.
<u>Search</u>	Calls up the Help Search facility to look for keywords.
<u>Using</u>	Provides general instructions on using help.
<u>Help</u>	
<u>About</u>	Displays the version number of this application.


## **New command (File menu)**

---

Use this command to create a new piece in SSEYO Koan Pro.

You can open an existing piece with the Open command.

### **Shortcuts**

Toolbar:   
Keys: CTRL+N




## Open command (File menu)

---

Use this command to open an existing piece (SKD or SKT) in a new window. You can open multiple pieces at once. Use the Window menu to switch among the multiple open pieces. See [Window 1, 2, ... command](#).

You can create new pieces with the [New command](#).

### Shortcuts

Toolbar:   
Keys: CTRL+O

## **File Open dialog box**

---

The following options allow you to specify which piece to open:

### **File Name**

Type or select the piece name you want to open

### **List Files of Type**

SSEYO Koan Pro will only read/open files with the extension SKD or SKT (SSEYO Koan Pro pieces).

### **Drives**

Select the drive in which SSEYO Koan Pro stores the file that you want to open.

### **Directories**

Select the directory in which SSEYO Koan Pro stores the file that you want to open.

### **Network...**

Choose this button to connect to a network location, assigning it a new drive letter.

## Close command (File menu)

---

Use this command to close all windows containing the active piece. SSEYO Koan Pro suggests that you save changes to your piece before you close it. If you close a piece without saving, you lose all changes made since the last time you saved it. Before closing an untitled piece, SSEYO Koan Pro displays the Save As dialog box and suggests that you name and save it.

You can also close a piece by using the Close icon on the pieces window, as shown below:




## Save command (File menu)

---

### Disabled in this demo version

Use this command to save the active piece to its current name and directory. When you save a piece for the first time, SSEYO Koan Pro displays the Save As dialog box so you can name your piece. If you want to change the name and directory of an existing piece before you save it, choose the Save As command.

### Shortcuts

Toolbar:   
Keys: CTRL+S

## Save Play File command (File menu)

---

### Disabled in this demo version

Use this command to save the active document as an encrypted file, with the same name as the active document but with the extension .SKP. This encrypted file cannot be opened (and displayed like a .SKD file) at a later date by any other SSEYO product, although it can be played by them. A Play file cannot be played by SSEYO Koan Pro.

## Save As command (File menu)

---

### Disabled in this demo version

Use this command to save and name the active piece. SSEYO Koan Pro displays the Save As dialog box so you can name your piece.

To save a piece with its existing name and directory, use the Save command.

## **File Save As dialog box**

---

### **Disabled in this demo version**

The following options allow you to specify the name and location of the piece you're about to save:

#### **File Name**

Type a new filename to save a document with a different name. A filename can contain up to eight characters and an extension of three characters. SSEYO Koan Pro adds the extension you specify in the Save File As Type box, but you should only save your piece as a SKD or SKT file (unless you are saving as a play file).

#### **Drives**

Select the drive in which you want to store the piece.

#### **Directories**

Select the directory in which you want to store the piece.

#### **Network...**

Choose this button to connect to a network location, assigning it a new drive letter.

## Connect to the SSEYO Web page (File menu)

---

Selecting this menu item will load the Web Browser you have defined in the View Setup dialog. It tries to run this program and then gets it to load up our URL (Uniform Resource Locator), or any other URL that is available off the menu and that you have selected. If your browser is set up to autodial then you can connect direct to our page this way (provided you are not connected when you select this menu option). Otherwise, you need to be connected to your services provider (with your browser closed\*) before you launch the browser from our menu.

\* If you have the Koan Web/Plugin 32 bit version and a 32 bit browser, you should be able to call up the new page without closing your browser (another instance of the browser will be loaded).

**Note:**

You must already have a Web browser setup and functioning correctly (see your Web browser information, e.g. Netscape Navigator, Microsoft Internet Explorer, Mosaic etc.), for which you will need at least a Dialup account to the Internet with an Internet service provider. There are many sources of information on the Internet including magazines, friends and books. If you are new to the Internet or the WWW now is the time to learn about it and get connected!



## **1, 2, 3, 4 command (File menu)**

---

Use the numbers and filenames listed at the bottom of the File menu to open the last four pieces you closed. Choose the number that corresponds with the piece you want to open.

## **Exit command (File menu)**

---

Use this command to end your SSEYO Koan Pro session. You can also use the Close command on the application Control menu. SSEYO Koan Pro prompts you to save documents with unsaved changes.

### **Shortcuts**

Mouse: Double-click the application's Control menu button.



Keys: ALT+F4

## **Add command (Edit menu)**

---

Use this command to add a default voice to the piece.


## Cut command (Edit menu)

---

Use this command to remove the currently selected voice (and all its associated parameter values) from the piece and put it on the clipboard. This command is unavailable if there is no data currently selected.

Cutting data to the clipboard replaces the contents previously stored there.

### Shortcuts

Main control panel:   
Keys: CTRL+X


## **Copy command (Edit menu)**

---

Use this command to copy the currently selected voice (and all its associated parameter values) onto the clipboard. This command is unavailable if there is no data currently selected.

Copying data to the clipboard replaces the contents previously stored there.

### **Shortcuts**

Main control panel:   
Keys: CTRL+C

## **Copy Parameter command (Edit menu)**

---

Use this command to copy a single parameter value or envelope onto the clipboard. This value can then be pasted into the same parameter in another voice. This command is unavailable if there is no data currently selected.

Copying data to the clipboard replaces the contents previously stored there.

### **Shortcuts**


Keys:      CTRL+SHIFT+C

## Paste command (Edit menu)

---

Use this command to insert a copy of the clipboard contents (an entire voice and its associated parameter values) at the insertion point. This command is unavailable if the clipboard is empty.

### Shortcuts

Main control panel:   
Keys: CTRL+V


## Delete command (Edit menu)

---

Place holder

Use this command to insert a copy of the clipboard contents (an entire voice and its associated parameter values) at the insertion point. This command is unavailable if the clipboard is empty.

### Shortcuts

Main control panel:   
Keys: CTRL+DEL



## List command (Edit menu)

---

Use this command to edit or add a list to a parameter. All parameters in SSEYO Koan Pro support lists.

### Shortcuts

Keys: CTRL+L

---

### See also

[Lists](#)

## Envelope tools

---



Select the envelope tool you wish to use to edit or create your envelopes by clicking on the tool button in the floating toolbar panel with your left mouse button. Once you have selected the right tool, select the area on the grid where you want to apply the tool, as described below.

### Applying an envelope to a selected area with the Control key

- 1 Select the appropriate envelope tool.
- 2 Press the keyboard Control button and, while holding the key down, click the left button of mouse on one corner of the area.
- 3 Continuing to depress the Control key and the mouse button, drag it to encompass the area of the grid you wish to select
- 4 Release the mouse button and the envelope will be applied
- 5 The area will remain selected until you select another area, meaning you can press another envelope tool to apply to this area.

### Applying an envelope to a selected area without the Control key

- 1 Click the left button of mouse on one corner of the area.
- 2 Continuing to depress the mouse button, drag it to encompass the area of the grid you wish to select
- 3 Release the mouse button to select the area.
- 4 Select the appropriate envelope tool.
- 5 The envelope will be applied.
- 6 The area will remain selected until you select another area, meaning you can press another envelope tool to apply to this area.

### Selecting an entire envelope

- 1 Double click on the envelope with the left hand mouse button.


### Selecting an entire envelope and applying an envelope tool to the whole envelope

- 1 Select the tool you want to be applied
- 2 Press the keyboard Control button and, while holding the key down, double click the left mouse button on the envelope.

### Envelope tools



Freehand

- ▣ Normal curve (+)
  - ▣ Normal curve (-)
  - ▣ Minimum line
  - ▣ Maximum line
  - ▣ Middle line
  - ▣ Linear ramp up
  - ▣ Linear ramp down
  - ▣ Curve ramp up
  - ▣ Curve ramp down
  - ▣ Nudge up
  - ▣ Nudge down
-  Random envelope generator


**Note:** The nudge up and nudge down tools work by moving the envelopes up or down by a pixel at a time. This means that if you expand the row height you can have finer control over the amount of nudging.

## **Play command (Control menu)**

---

Use this command to play the piece in the active window.

### **Shortcuts**


Toolbar:   
Keys: SPACEBAR

## Stop command (Control menu)

---

Use this command to stop the piece currently playing.

### Shortcuts

Toolbar: 


Keys: SPACEBAR

## Pause command (Control menu)

---

Use this command to pause the piece currently playing.

### Shortcuts


Toolbar: 

## Next command (Control menu)

---

Use this command to move quickly forward through the playing piece. Alternatively, you can also use the left mouse button to move the piece marker by dragging it to your new position or clicking on the position to which you want to rewind the piece.

### Shortcuts


Toolbar:   
Keys: CTRL+F

## Previous command (Control menu)

---

Use this command to move quickly backwards through the playing piece. . Alternatively, you can also use the left mouse button to move the piece marker by dragging it to your new position or clicking on the position to which you want to rewind the piece.

### Shortcuts

Toolbar:   
Keys: CTRL+B



## **Play Note Now command (Control menu)**

---

Use this command to force a voice to play a note.

### **Shortcuts**

Keys:      CTRL+SPACEBAR

---

### **See also**

[\*\*Forcing a voice to play\*\*](#)

## **Stop Note Now command (Control menu)**

---

Use this command to stop any note a voice is currently playing.

### **Shortcuts**

Keys: ALT+SPACEBAR

### **See also**

[\*\*Forcing a voice to stop\*\*](#)

## **Toolbar command (Windows menu)**

---

Use this command to display and hide the Toolbar, which includes buttons for some of the most common commands in SSEYO Koan Pro, such as File Open. A check mark appears next to the menu item when the Toolbar is displayed.

See [Toolbar](#) for help on using the toolbar.

## Top level toolbar




The top level toolbar is displayed below the menu bar. The toolbar provides quick mouse access to many tools used in SSEYO Koan Pro.

To hide or display the Toolbar, choose Toolbar from the Windows menu (ALT, W, T).

### Click To

---

- Open a new piece.
- Open an existing piece.
- Save the current piece. If you have not named the piece SSEYO Koan Pro displays the Save As dialog box.
- Deletes an entire voice and its parameter values and moves it to the clipboard.
- Copies an entire voice and its parameter values and moves it to the clipboard.
- Copies an entire voice and its parameter values from the clipboard into the selected piece.
- Rewinds the piece currently playing.
- Plays the piece that is in the active window.
- Fast forwards the piece currently playing.
- Stops the currently playing piece.
-  Context sensitive help.

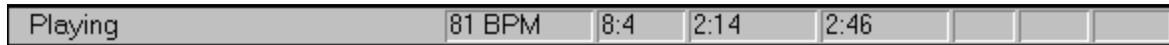
## **Status Bar command (Window menu)**

---

Use this command to display and hide the Status Bar. A check mark appears next to the menu item when the Status Bar is displayed.

See [Status Bar](#) for help on using the status bar.

## Status Bar



The status bar is displayed at the bottom of the SSEYO Koan Pro window. To display or hide the status bar, use the Status Bar command in the Window menu.

The left area of the status bar describes actions of menu items as you use the arrow keys to navigate through menus and the full parameter text description as you move around the voice grid. This area similarly shows messages that describe the actions of toolbar buttons as you depress them, before releasing them. If after viewing the description of the toolbar button command you wish not to execute the command, then release the mouse button while the pointer is off the toolbar button.

The right areas of the status bar indicates various piece statistics:

<b>Indicator</b>	<b>Description</b>
1st box	Tempo of the piece in beats per minute.
2nd box	Time signature of the piece, i.e. 4/4.
3rd box	Time the piece has been playing in minutes:seconds.
4th box	Time the piece has left to play in minutes:seconds.

## **New Window command (Window menu)**

---

Use this command to open a new window with the same contents as the active window. You can open multiple document windows to display different parts or views of a document at the same time. If you change the contents in one window, all other windows containing the same document reflect those changes. When you open a new window, it becomes the active window and is displayed on top of all other open windows.

## **Cascade command (Window menu)**

---

Use this command to arrange multiple opened windows in an overlapped fashion.



## **Tile command (Window menu)**

---

Use this command to arrange multiple opened windows in a non-overlapped fashion.

## **Arrange Icons command (Window menu)**

---

Use this command to arrange the icons for minimized windows at the bottom of the main window. If there is an open document window at the bottom of the main window, then some or all of the icons may not be visible because they will be underneath this document window.

## Views icons and Toolbars

---

There are 2 toolbars with SSEYO Koan Pro. The top toolbar contains the main application tools like File Save and also the envelope tools.

The lower toolbar contains icons where you can specify the Views you have of the parameters and envelopes,. The parameters are put into groups that are most likely to be used, and that have a close relationship to each other. Generally, when setting up a piece you would work from left to right along the views.

The icons for Parameter Views and envelopes are as follows:



### Piece Details

- ▣ View 1 - most often used parameters and Rhythmic voicetype parameters
- ▣ View 2 - Ambient voicetype, Patch Change and WAV parameters
- ▣ View 3 - Follow voicetype parameters
- ▣ View 4 - RepeatBar voicetype parameters
- ▣ View 5 - Pattern voicetype and mutation parameters
- ▣ View 6 - The rules and other sundry parameters used by a voice
- ▣ View 7 - Standard controllers to use effects like reverb and chorus
- ▣ View 8 - The first group of Micro controllers to allow subtle continuous changes of note timings and pitch
- ▣ View 9 - The second group of Micro controllers to allow subtle continuous changes of modulation and volume
- ▣ View 10 - The first group of AWE32 specific controllers
- ▣ View 11 - The second group of AWE32 specific controllers
- ▣ View 12 - The third group of AWE32 specific controllers
- ▣ View 13 - SCC1 specific controllers
- ▣ Scale rules view - The button that calls up the Scale rules window(s) where you can edit/ add/ delete rules
- ▣ Harmony rules view - The button that calls up the Harmony rules window(s) where you can edit/ add/ delete rules
- ▣ Next Note rules view - The button that calls up the Next Note rules window(s) where you can edit/ add/ delete rules
- ▣ Rhythm rules view - The button that calls up the Rhythm rules window(s) where you can edit/ add/ delete rules
- ▣ Piece view - The parameters that effect the whole piece
- ▣ Volume envelope
- ▣ Velocity envelope
- ▣ Velocity Range envelope
- ▣ Velocity Change envelope
- ▣ Velocity Change Range envelope
- ▣ Pan(10) envelope

## **1, 2, ... command (Window menu)**

---

SSEYO Koan Pro displays a list of currently open document windows at the bottom of the Window menu. A check mark appears in front of the document name of the active window. Choose a document from this list to make its window active.

## **Index command (Help menu)**

---

Use this command to display the opening screen of Help. From the opening screen, you can jump to step-by-step instructions for using **SSEYO Koan Pro** and various types of reference information.

Once you open Help, you can click the Contents button whenever you want to return to the opening screen.

## **Search command (Help menu)**

---

Use this command to search for topics on which you require help.

## **Using Help command (Help menu)**

---

Use this command for instructions about using Help.

## About command (Help menu)

---

Displays the copyright notice and version number of your SSEYO Koan Music Engine and **SSEYO Koan Pro**.




## Context Help command

---

Use the Context Help command to obtain help on some portion of SSEYO Koan Pro. When you choose the Toolbar's Context Help button, the mouse pointer will change to an arrow and question mark. Then click somewhere in the SSEYO Koan Pro window, such as another Toolbar button. The Help topic will be shown for the item you clicked.

Additionally, you can click with the right mouse button on the column header to bring up immediate help on that parameter.

### Shortcut

Main control panel:   
Keys: Shift+F1

## **Scroll bars**

---

Displayed at the right edge of the document window. The scroll boxes inside the scroll bars indicate your vertical location in the grid. You can use the mouse to scroll to other parts of the grid that is not currently displayed.

## Size command (System menu)

---

Use this command to display a four-headed arrow so you can size the active window with the arrow keys.



After the pointer changes to the four-headed arrow:

1. Press one of the DIRECTION keys (left, right, up, or down arrow key) to move the pointer to the border you want to move.
2. Press a DIRECTION key to move the border.
3. Press ENTER when the window is the size you want.

Note: This command is unavailable if you maximize the window.

### Shortcut

Mouse: Drag the size bars at the corners or edges of the window.

## Move command (Control menu)

---

Use this command to display a four-headed arrow so you can move the active window or dialog box with the arrow keys.



Note: This command is unavailable if you maximize the window.

### Shortcut


Keys: CTRL+F7

## **Minimize command (Application Control menu)**

---

Use this command to reduce the **SSEYO Koan Pro** window to an icon.

### **Shortcut**

Mouse: Click the minimize icon  on the title bar.

Keys: ALT+F9

## **Maximize command (System menu)**

---

Use this command to enlarge the active window to fill the available space.

### **Shortcut**

Mouse: Click the maximize icon  on the title bar; or double-click the title bar.

Keys: CTRL+F10 enlarges a document window.

## **Next Window command (document Control menu)**

---

Use this command to switch to the next open document window. **SSEYO Koan Pro** determines which window is next according to the order in which you opened the windows.

### **Shortcut**

Keys:      CTRL+F6

## **Previous Window command (document Control menu)**

---

Use this command to switch to the previous open document window. **SSEYO Koan Pro** determines which window is previous according to the order in which you opened the windows.

### **Shortcut**

Keys:       SHIFT+CTRL+F6



## Close command (Control menus)

---

Use this command to close the active window or dialog box.

Double-clicking a Control-menu box is the same as choosing the Close command.

Note: If you have multiple windows open for a single document, the Close command on the document Control menu closes only one window at a time. You can close all windows at once with the Close command on the File menu.

### Shortcuts

Keys:      CTRL+F4 closes a document window  
              ALT+F4 closes the piece window or dialog box

## **Restore command (Control menu)**

---

Use this command to return the active window to its size and position before you chose the Maximize or Minimize command.

## **Switch to command (Application Control menu)**

---

Use this command to display a list of all open applications. Use this "Task List" to switch to or close an application on the list.

### **Shortcut**

Keys:        CTRL+ESC

### **Dialog Box Options**

When you choose the Switch To command, you will be presented with a dialog box with the following options:

#### **Task List**

Select the application you want to switch to or close.

#### **Switch To**

Makes the selected application active.

#### **End Task**

Closes the selected application.

#### **Cancel**

Closes the Task List box.

#### **Cascade**

Arranges open applications so they overlap and you can see each title bar. This option does not affect applications reduced to icons.

#### **Tile**

Arranges open applications into windows that do not overlap. This option does not affect applications reduced to icons.

#### **Arrange Icons**

Arranges the icons of all minimized applications across the bottom of the screen.

## Title Bar

---



The title bar is located along the top of a window. It contains the name of the application (SSEYO Koan Pro) and currently selected piece.

To move the window, drag the title bar. Note: You can also move dialog boxes by dragging their title bars.

A title bar may contain the following elements:

- ▣ Application Control-menu button
- ▣ Document Control-menu button
- ▣ Maximize button
- ▣ Minimize button
- ▣ Name of the application
- ▣ Name of the document
- ▣ Restore button



## MIDI File Recording

---

No MIDI file saving is available in this demo version.

**See also**

**[Piece Notes](#)**



# SSEYO Koan Pro V1.2 Demo Help Contents

---

## **Important notes on SSEYO Koan Pro V1.2 Demo:**

IMPORTANT NOTICE: CAREFULLY READ THE [LICENSE](#) BEFORE USING THE SOFTWARE AND ACCOMPANYING DOCUMENTATION. BY USING THE SOFTWARE YOU ARE AGREEING TO ALL THE TERMS AND CONDITIONS OF THE LICENSE AGREEMENT.

[SSEYO Koan Pro Demo](#) will play for 5 minutes before displaying a message saying you have another 5 minutes before the product will stop playing. To restart simply press the play button or select Play from the Control menu. The Demo pieces are a selection of those in SSEYO Koan Pro. All forms of saving and exporting are disabled.

The SSEYO Koan Pro Demo online help is virtually the same as SSEYO Koan Pro help, allowing you to see the functionality you would get if you purchase the full version.



## **Overview, Quick Start and Quick Steps**

Introducing SSEYO Koan Pro, the Interface, and how to Get Started quickly



## **Using SSEYO Koan Pro**

In depth information on parameters, rules, lists, Voice Types, MIDI operations, shortcuts, and the Pattern Editor



## **Tutorials and Examples**

Tutorials to help you use SSEYO Koan Pro



## **Reference and Setup**

Answers to common questions; tips; keyboard shortcuts; setting up SSEYO Koan Pro and the MIDI Mapper; menu commands; your PC configuration



## **Support and Copyright**

How to get technical support; information on Copyright; the World Wide Web; plus the SSEYO Koan Pro License

## **SSEYO Koan Plus**

Copyright © 1994 - 96 SSEYO Ltd. All rights reserved.

### **Credits:**

This SSEYO Koan software was developed by: Tim Cole, Peter Cole and John Wilkinson with special thanks to Tim Didymus, Jon Pettigrew and Joel Cutrara. Thanks also to our customers for their continuous enthusiasm and encouragement.





## **Overview, Quick Start and Quick Steps**

### **General background on SSEYO Koan Pro**

[Introducing SSEYO Koan Pro](#)

### **Views**

[Power View](#)

[Voice X View](#)

[Piece View](#)

[View icons and Toolbars](#)

### **Quick Start**

[Playing the Demo pieces](#)

[SSEYO Koan Pro templates and demo pieces](#)

[Creating a piece - Quick Introduction](#)

### **Quick Steps**

[Quick Steps](#)

## ▪ SSEYO Using Koan Pro

### **Major components**

[Voice Types](#)

[Rules](#)

[Lists](#)

[Parameters](#)

[Micro controllers](#)

### **Pattern Editor**

[Pattern Editor](#)

### **MIDI operations**

[MIDI file Import/Export](#)

[MIDI file recording](#)

### **Special soundcard bank and patch support**

[SoundFont™ compatible bank support for Creative Labs AWE32 soundcards](#)

[Gravis Ultrasound Melodic Patchbank support](#)

[Gravis Ultrasound Drum Patchbank support](#)



## Tutorials and Examples

[Quick Tutorials](#)



## **Reference and Setup**

### **Setup of SSEYO Koan Pro and your system**

[Setup Options](#)

[PC Configuration/ Requirements](#)

[Setting up your MIDI MAPPER](#)

[Connecting to the SSEYO Web Page](#)

### **General Reference information**

[Keyboard and mouse shortcuts](#)

[Parameters](#)

[Real time harmonization with MIDI input](#)

[Glossary](#)

### **Common Questions and Tips**

[Common Questions](#)

[Hot Tips](#)

### **Menus and commands**

[File menu](#)

[Edit menu](#)

[Control menu](#)

[Window menu](#)

[Options menu](#)

[Help menu](#)



## **Support and Copyright**

### **Support**

[Technical Support](#)

[CompuServe Forum](#)

### **Intellectual property**

[Copyright issues](#)

[Software License](#)

### **SSEYO**

[World Wide Web site](#)

[SSEYO](#)

## Setup Options command (Options menu)

---

**Note:** For each and every voice the SKME (SSEYO Koan Music Engine) will compose ahead by the value set in the Reaction time below. However, if a voice is playing a fixed pattern (i.e. not mutating) or is following or repeating another voice it will compose this voice one bar in advance. This is inbuilt to allow smooth scratch mixing, and is especially important for drum tracks.

You may not need to change any of the settings shown below (available under the Options Setup menu) but you should be aware they are available.

### Fixed Volume Input Line

The SKME allows you to play along with Koan pieces and use the patches available on your soundcard (or in SoundFont banks if defined). You will need a MIDI music keyboard, MIDI guitar pickup or similar device if you want to use this facility; simply plug your device into the MIDI in port (see MIDI Input Device below) and away you go.

The SKME will pick up on MIDI input on any and every MIDI line, the input being chords or single notes, so you may wonder why you need to define an input line at all. The reason is simple. Koan pieces are all governed by volume envelopes, meaning sometimes a voice can have no, or very low volume. Naturally, if you are going to play along you want to be able to play when you want, so we override the volume envelope for your input on a specific channel.

Your input will be interpreted just as if the SKME had generated it, and everything else the SKME generates will be harmonized against it according to the Scale and Harmony rules currently active. You can record your session to a MIDI file, which captures both yours and Koans playing.

### Line Number

You select the MIDI line into which you want to play along with the SKME (it will listen to all MIDI lines, as above, but only this one is set to maximum volume). The default is 16, as few pieces will generally use this number of MIDI lines.

**Note:** If you are not using this feature set both the Line Number and Set Instrument values to none, otherwise this patch will override any you have set in the piece, and at full volume too!

### Set Instrument

Choose the instrument patch you want to use.

### Conductor Timer

Roughly speaking, the Conductor determines what how demanding the SKME is for your PC system resources. The bigger the value of Resolution and Cycle, the smoother the truly Ambient pieces sound as there is less precision required in the composition, however, it is generally best to use smaller values, which are required for the more rhythmic pieces. The default setting is High Priority.

### Low Priority

Means the SKME is less likely to take system resources; so some pieces will sound smoother as there is less rigorous control of timings. However, this can have a detrimental effect on highly rhythmic pieces.

### High Priority

If on **High Priority** at high **Resolution** (i.e. low actual millisecond (ms) value) the SKME will take as much system resources as it needs - highly rhythmic pieces require this. This can cause other applications to run more slowly.

### Resolution

In conjunction with the **Cycle** parameter below, determines how accurately the SKME conducts its pieces/sends out its MIDI information. **Resolution** is the tolerance on the Cycle value. This means Koan will send out MIDI information every **Cycle** +/- the **Resolution**. The default setting is 10ms.

### **Cycle**

This is the period in milliseconds between timer events, i.e. how often the SKME composes/sends out the MIDI information. Small values for **Cycle** (10 ms or less) mean the pieces will be very accurate time wise (important for rhythmic pieces), however this can sometimes be at the expense of some smoothness, especially on slower machines. Very small values of **Cycle** and **Resolution** can cause your PC to slow down its processing of other applications. The default setting is 10ms.

### **Composer**

The Composer sets the time for which the SKME looks ahead, and the elapsed period over which it will carry harmony and other relationships.

### **Reaction Time**

The amount of time in milliseconds (ms) the Composer has over which to compose. The larger the value the more the SKME can compose ahead, which is very useful for slower machines, and if you want to do a lot of processor-intensive work, i.e. displaying a screenshow. If you choose a small value for Reaction Time and totally remove the focus away from the program, i.e. hold down the mouse, the output can stop. It will resume when the focus passes back to SSEYO Koan Pro.

Normally set to 5,000 ms ( i.e. 5 seconds).

**Note:** If you want the SKME to compose along with your playing (see Fixed Volume Line Input below) you will want to make this value as small as possible, to get the fastest reaction. e.g. 200 ms (0.2 seconds).

### **History Time**

The period over which harmony relationships will hold good for long notes. Normally set to 20,000 ms (i.e. 20 seconds).

### **Multithread**

The 32 bit version of Koan Plus (designed for use with Windows 95 or later) supports a multi-threaded composer, which can be enabled through the Setup Dialog. This option enables Koan to keep on composing, even when the graphical user interface is fully engaged by the user. Previously, if the user interface were stopped while waiting for user input, the music could stop being played after the Composer Reaction time (View Setup) had elapsed. If you enable the multi-threading option, and later experience problems with multi-threaded operation, you may of course disable (and later re-enable) this option.

The most likely problem with multi-threading is that you might experience some lack of smoothness in the played music when you have a small amount of physical memory available (e.g. less than 16 Megabytes of base physical memory, and / or many applications loaded). If this is the case, simply disable the multi-threading option

### **Use Koan ADSR**

If your MIDI Output device solely uses the OPL3 chipset (e.g. SB16 and SB16 equivalents) or is one that **doesn't support** continuous volume controller changes then you should clear the Use Koan ADSR checkbox. If you have a Wavetable soundcard or one that **does support** continuous volume controller changes (e.g. AWE32, SCC1, DB50XG, Gravis, NuSound) then you should check the box. The first time you run Koan Web a dialog will display asking you to choose which of the above you have - this will update the Setup Options automatically.

### **MIDI Output Device**

Select where you want the SKME to send its MIDI output. Normally this will need to be set to the MIDI Mapper if you are using Windows with a soundcard, or alternatively, you can write directly to your soundcards driver. However, if you wish to drive an external synth then set this up to your MIDI Output device, e.g. SB16 MIDI out.

### **MIDI Input Device**

Select the device through which you want to input MIDI information. If this is not set correctly the SKME will not detect any incoming MIDI signals with which to harmonize.

### **Koan File Supplementary Search Path**

Enter the path(s) here where you want SSEYO Koan Pro to look for any supplementary files used in your pieces. These could be for example SoundFonts from a CD ROM drive, Gravis patches off a network drive or WAV files from another directory to that used by your piece. The format is that of your normal DOS PATH command. Separate your paths with semicolons and leave no spaces between entries. Adding a \ after your directory is optional and not required.

*Example:*

C:\WAV;D:\SBK;E:\KOAN\PIECES;C:\KOANPRO\TEMPLATE

### **Define Web Browser (button)**

If you have an Internet account with a Internet Service Provider and have a web browser setup on your system (e.g. Netscape or Mosaic) then you can automatically dial our [website](#) for the latest news, files and links. Press this button to call up the Select your browser application dialog, which is like a normal file open dialog. Find your browser and press OK to have it selected. Once you have done this you can select File, [Connect to the SSEYO Web Page](#) from the menu to automatically connect to our website. This will load up your browser (it should not be loaded already - if it is just put in our website URL <http://www.sseyo.com>) with our URL.

**Note 1:** Changes to the Composer or Conductor values are implemented by the SKME as soon as it can accommodate them. You do not need to restart the piece for these changes to take effect.

**Note 2:** The values set here will be used by the SKME to play any piece you might load, so in some circumstances it may be necessary to alter them. You will be able to identify this if the piece sounds jumpy or seems to give you bursts of notes. In this case try to increase the reaction time first and then raise or lower the values for cycle/resolution. However, once set to your satisfaction they should not require frequent adjustment.



## Master Controls Dialog (Options menu)

---

These controls override, but do not alter any *piece* level settings that may be provided within the piece. They are additive in that they add a uniform amount to the value of this parameter for each instrument in the piece.

<b>Volume</b>	Sets the master volume
<b>Pan</b>	Sets the master stereo position of the output
<b>Reverb</b>	Sets master reverb level.
<b>Chorus</b>	Sets master chorus level

**Note 1:** The Volume control has no effect if your MIDI Output device solely uses the OPL3 chipset (e.g. SB16 and SB16 equivalents) or is one that **doesn't support** continuous volume controller changes - in which case use the soundcards own Mixer application or the Windows 95 Mixer application. If you have a Wavetable soundcard or one that **does support** continuous volume controller changes (e.g. AWE32, SCC1, DB50XG, Gravis, NuSound) then this works fine. See [Setup Options](#).

**Note 2:** Reverb and chorus settings will only have any effect on soundcards/ synths that support them.

**Note 3:** If you notice delays in response they could be caused by a large [Composer time value](#).

## User Preferences command (Options menu)

---

The User Preferences dialog is accessible from the menu, under Options Preferences. Here you can define what is displayed on start-up, whether voices and rules flash when a note is played and the row height for your voices, amongst other things.

### **Display Welcome dialog**

Selecting this will mean the Template Dialog will display when you first start SSEYO Koan Pro

### **Open Most Recently Saved File**

Selecting this will cause the last piece you had open to display on first starting SSEYO Koan Pro

### **Flash voice when it is played**

When checked, a voices Voice Name will flash the colour of its Voice Type when it plays a note. This is useful for when you want to see what is happening in a piece. It is also pleasant to watch. The reason for allowing you to switch this off is that it has a small system resource requirement.

### **Flash rule when it is used**

When checked, any rule will flash when a value/or column in that rule is used to determine a note. For instance, if a voices scale rule allows 5ths to play a 5th plays, the appropriate bar in the rule will flash to show that this has occurred. The reason for allowing you to switch this off is that it has a small system resource requirement.

### **Set default row height to ---- units**

Use this setting to determine what your row height will be. The default is 18. When you press the Row Height reset tool button all the rows will be set to the height you have set here.

## Envelope Options (Options menu)

---

This dialog allows you to set the minimum and maximum values for the envelope tools. When you have chosen a value it will be saved and the appropriate tool will use this value from then on. Pressing the Use Defaults button will cause all the envelope settings to be overridden with the defaults, which are generally 0 (min) and 127(max).

---

### See also

[Envelope command](#)

## MIDI file Import

---

### Exporting of patterns is disabled in this demo version

SSEYO Koan Pro allows you to import/export sections of MIDI files to/from the Patterns parameter. Any MIDI fragments or phrases that are imported are saved in SSEYO Koan Pros own file format; you can then further modify these patterns with the Pattern Editor, if required. SSEYO Koan Pros export feature allows you to export these patterns (or any you have created or modified in the Pattern Editor) to a MIDI file for further manipulation.

**Note:** It is not currently possible to import chords. Koan will choose a note at random from any chord it finds present in the selection you wish to import.

To access the import/export functionality you need to do the following:

- 1) Open the Pattern Editor by pressing the Pattern Editor button on the top toolbar or pressing the Enter key when on the Patterns cell in View 5
- 2) Press either the Import or Export button
- 3) Select your options, described below, and press the Enter key

### MIDI File importing

#### Name File button

Press this button to call up a File Open dialog, where you choose the MIDI file from which you wish to import.

#### Track Number

If the MIDI file is type 1 you can select the track number for the section you want to import; however, if the MIDI file is type 0 there will be only 1 track displayed and you will choose your MIDI sequence from the Line Number.

#### Line Number

For Type 1 MIDI files this will display the instruments playing on that track; for type 0 MIDI files it will show you every track.

#### From bar

Choose the bar from when you want to start the import (e.g. bar 10). This will default to the bar in the MIDI file when the instrument first starts playing.

#### Number of bars

Select how many bars you want to import.

#### Use Root

<NUMERICAL NOTE VALUE><NOTE><OCTAVE SCALE>

E.G. 54 F#2

SSEYO Koan Pro makes a best guess of the root of the MIDI file segment by looking at the lowest note in the section you are importing and presents you with this guess. If you are importing a section which is in F# Minor and the root is displayed as 48 C2 (instead of 54 F#2 say) you should amend this value to suit to key of the phrase or segment you are importing. The Octave scale simply shows you in which octave band the root note occurs (middle C on the piano occurs in octave 4).

#### Scale Rule

When importing a MIDI file fragment it is important for you to say what scale rule Koan will use whilst performing the import. Koan will look at the import selection note by note and try to match it to your scale rule. If it does not find the note in the scale rule it will round it down to the nearest available note according to your defined scale rule. For example, if you import a phrase in a major key but use a minor

scale rule any major 3rd will be rounded down to minor 3rds (there are no major 3rds in a minor scale). This can lead to anomalies when your desired phrase follows scales that are different depending on melodic direction or if it uses a number of passing notes.

The ALL scale rule is used as the default, which means every note is acceptable and your phrase will sound exactly as you would expect. However, if you use this rule and you wish to mutate the pattern over time, when the mutations occur they will be in the scale rule you have chosen, in this case ALL. You could therefore expect any note to occur in the mutation which might not fit in with your desired harmony structure!! Please refer to [Scale Rules](#) or the [Patterns](#) parameter for further information.

### **Import Pattern style**

FREQUENCY and RHYTHM OR RHYTHM ONLY. Patterns are stored in strings of characters, and there are 2 types of strings; one contains the frequency and rhythm information, the other only contains information on rhythm (i.e. when to play a note, not what the note will be). Please refer to the [Patterns](#) parameter for further information.

### **Quantize/ Round patterns**

USE ACTUAL RHYTHMS or QUANTIZE SEMIQUAVERS/TRIPLETS. The SKME will compose in intervals from 1/16th notes (semi-quavers) to Whole notes (semi-breve). This range has been selected to minimize the (already) heavy processing overhead required when carrying out real-time composition. When you import a MIDI fragment it will often have a finer resolution than this e.g. 1/32nd or 1/64th notes, or even non-quantized values but you can still keep these rhythmic values if you select USE ACTUAL RHYTHMS. However, it can sometimes sound odd to have a mismatch in terms of resolution, as the phrase you import may have more feel than that which is composed because of the SKMEs limitation described above. We therefore also provide the capability for you to quantize any notes imported to a multiple of a 1/16th (semi-quaver) note or a triplet by selecting QUANTIZE SEMIQUAVERS/TRIPLETS.

### **Extract button**

Once you have made your choices press this button to extract the MIDI file pattern/ fragment. You will see it displayed in the character string format used by Koan.

### **Apply Button**

Press this button to copy the pattern to the Pattern Editor where you can hear it (by pressing the Play button). From here you can save it to the Patterns parameter for your Voice.

### **Cancel button**

Press this button if you do not want to import the pattern.

---

### **See also**

[Patterns](#)

[Scale Rules](#)

[Pattern Editor](#)

## Pattern Editor

---



The Pattern Editor is a kind of musical palette for creating/importing/editing SSEYO Koan patterns - seed phrases used by SSEYO Koan pieces around which the SKME will compose. You can enter patterns via the mouse or import MIDI files, or sections of them, to the Pattern Editor where you can further modify them. You can play back patterns in the Pattern Editor (they will loop automatically) and edit them before you save them. You can also have many patterns within a pattern group. Whenever it is due to play a pattern, the SKME will choose to play one of these patterns at random. Patterns have a minimum resolution of a 1/16 note and notes can be added of duration up to nearly 4000 whole notes (Semibreve).

**Note:** The Rhythm rule (which is used by the SKME for composition) only allows notes with a maximum length one whole note).

**Note:** Before using the Pattern Editor, we recommend you refer to the `parameter` for more information.

### Loading the Pattern Editor

To load up the Pattern Editor either press the Pattern Editor button on the top toolbar, click the button in the Patterns parameter cell in View 5 or select the call and press the Enter key. You are provided with a number of controls and combo boxes, allowing you to select a voice, change the patch and pitch etc., described below. Each of these controls changes the associated voice/piece parameter. The display on the left will indicate the availability of either notes or drum sounds (depending on the MIDI channel - channel 10 being reserved for Drums) and this is affected by the Scale rule and Root.

### Adding/editing patterns by mouse

**1/16th notes** Click on any square in the grid with the LHS mouse to enter a note, which will display as a white square. For meters of X/4 (e.g. 4/4 or 5/4) this will be a 1/16th note and for meters of X/8 (e.g. 6/8 or 9/8) this will be one note of a triplet.

**Longer notes** Click on any square in the grid with the SHIFT Key + LHS mouse button, hold it down and drag across the number of square you want the note to display. The beginning of the note will display as a white square, extended to the right by a number of blue squares indicating it is a long note.

**Rest** These are not displayed, but where there is no note defined it will be a rest by default.

**Clearing notes** Either click on a white note with the LHS mouse button to clear it, or press the Clear button to clear the whole display.

**Note:** The actual pitch of note shown at the bottom left of the grid is that of the Root note (e.g. A, as defined by the Root control), which is also governed by the Pitch parameter (see below). It is good practice to start all patterns near the root, otherwise the pitch can get very high before you know it.

**Note:** Pressing Apply will not save the piece, and you will need to save your piece regularly.

### Applying patterns/changes

Your new/edited patterns or changes to any of the parameters available in the Pattern Editor will not be made to the piece until you press the Apply button, when they will be written back to the piece. This means that changes to parameters like the Patch or Scale Rule will be made to the appropriate voice on pressing Apply. Pressing the OK button before you press the Apply button will effectively cancel any changes you have made since your last Apply.

## Playing patterns

Provided your SSEYO Koan piece is not already playing you can play patterns in the Pattern Editor by pressing the Start button. This will toggle between Start and Stop. If your SSEYO Koan piece is playing, you can still edit the pattern(s) used by a voice by opening the Pattern Editor. You can make changes to the pattern and have it change in real time in the piece (by first Applying it - see Apply below).

## Controls

### Voice (see [Voice definition](#))

Select the voice for which you want to add/edit a pattern. Once you have done this you will see the left hand side of the display showing all the pitches available for you to use. If you select a voice which uses MIDI channel 10, the display instead will show the drum patches available. You can only edit the active voices pattern (the active voice is the one in the combo box).

### Patch (see [Patch parameter](#))

Select the instrument/patch for the active voice. When you select a new instrument the change will be made immediately.

### MIDI (see [MIDI Channel](#))

Changes the MIDI channel on which the pattern will play.

### Pitch (see [Pitch parameter](#))

Defines the minimum pitch a note can have, and so will affect the octave of the Root that is played (for example, increasing the Pitch can shift the pattern between an octave 4 C root (C4) to an Octave 5 C root (C5)). This is saved back to the voice. The frequency 60 corresponds to C4, which is middle C on a piano. The available pitches display on the LHS (see [Scale Rule](#) below).

### Root (see [Piece Roots parameter](#))

Defines the Piece Root for the piece; changing the root will immediately change the root note the pattern uses. You can have a list of roots defined at the piece level but you can only save one here. If you want to create a list of roots, you must do it with the Piece Root parameter.

### Meter (see [Meter parameter](#))

You can change the Meter of the piece here, and changes will be reflected in the grid display. Changes are only saved when Apply is pressed.

### Bars

Sets the length of the pattern to be used and helps keep the display informative. If you want a pattern to have a few notes at the beginning followed by many bars rest, just use this to create a pattern of many bars length. Any square not containing a note is a rest.

### Tempo (see [Tempo parameter](#))

Affects the tempo at which the Pattern Editor will play the pattern. This will be saved to the piece when Apply is pressed and so affect the piece tempo.

### Scale Rule (see [Scale Rule parameter](#))

Select the Scale rule that you want to use for the pattern. Often you can have a number of Scale rules defined in a piece, and the pattern will sound different with each Scale rule, due to the flexible way Scale rules work (they are based on intervals and only allow specific notes to play). You will notice that the pitches along the left hand side of the Pattern Editor grid change if you select a different Scale rule - to reflect those notes now available. The Pattern Editor will apply the Scale rule at the voice level.

### Pattern (see [Patterns parameter](#))

This is where you define or select lists of **Patterns** from within a **Pattern group** (refer to the Patterns parameter and see Pattern List below). When a voice plays a pattern it will choose from one of these defined within the pattern group. The pattern group used by a piece is fixed for the duration of the piece.

## **Import/Export - see below**

### **Pattern List (see Patterns parameter)**

The Edit Patterns List dialog is presented when you press the top button in the area marked Patterns. It has a number on it like (1)... indicating that this is the first **Pattern Group** in the **Pattern Group list** (if you have created one). Each pattern is part of a pattern group, even if there is only one pattern in the group. If a pattern group list is defined, a voice can choose **one** of the pattern groups from which to select patterns every time a piece is started.

### **1 of 1**

Lets you know which pattern you are looking at and out of how many.

To add a new pattern, select the combo button next to the item above and select the next number available. If you have one pattern defined it will give you a choice of 1 or 2, so you choose 2. Next time you do this you will have a choice of 1, 2 or 3. The new pattern will default to the notes in the Pattern previously displayed, allowing you to make small changes to it without having to re-key it in.

### **Prob (Probability - see Patterns parameter)**

Determines how likely the pattern is to play every time the SKME is ready to choose a new one. A value of 100% means it will always repeat, whereas 0% would mean the SKME would never use the pattern and just compose as normal. This does not affect playback direct from the Pattern Editor.

### **Both/Rhythm (see Patterns parameter)**

Changes patterns from Rhythmic patterns to Both patterns and vice versa. Converting from a Both pattern to a Rhythmic pattern will result in the loss of pitch information attributed to any note in the pattern.

### **Delete**

Deletes the pattern currently selected.

### **Clear**

Clears the pattern display.

### **Apply**

Pressing Apply will immediately write your pattern and other parameter values defined in the Pattern Editor to the piece, allowing you to use this tool for real time composition. As the SKME can compose in advance it may take a bar or two for the change to work though, depending on what you have selected for your Options Setup Options Composer Reaction values. However, before any changes you have made to patterns are saved to disk you must still save your SSEYO Koan piece.

### **Start/Stop**

Will start or stop the pattern playing. You cannot start a pattern playing if the SSEYO Koan piece is already playing (although you can edit a pattern and press Apply to have the SKME use the new pattern).

### **OK**

Closes the Pattern Editor. Unless Apply has been pressed beforehand, any changes you have made to the pattern will be lost.

## **Importing MIDI files and Exporting patterns**

### **Import (see MIDI File Import/ Export)**

Allows you to import MIDI files or sections of MIDI files. When you perform an import the new information will overwrite any pattern already present in the currently selected pattern. E.g., you may have 3 patterns defined in your pattern group and are looking at pattern 2 of 3. When you import, the



information will overwrite pattern 2.

**Export (see [MIDI File Import/ Export](#))**

Allows you to export your patterns to MIDI files. Disabled in this demo version

---

**See also**

**Patterns**

**[Scale Rules](#)**

**[MIDI File Import/Export](#)**

---



## Demo Pieces/ templates

---

We have provided a few of demo pieces in .SKD format so you can have some idea of what you might be able to create with SSEYO Koan Pro. You can look at them to see how they have been put together and pick up a few tips for your own masterpieces. Simply open one of these files and then add you instruments to it as required. Some of them use the ability of the SKME to support multiple patterns in a pattern group. A couple of these pieces are used in the Quick Tutorial, where you are shown how to create them from scratch. To see what each piece shows or demonstrates, look at the Piece Details.

---

**See also**  
[Templates](#)

## Templates

---

A few template files are provided in the demo version so that you can quickly construct pieces, either by using them as the basis for a new piece or copying voices from them to a new piece. Some of the SSEYO Koan Template files (.SKT) are Rhythmic templates containing complete drum patterns, others are basic starting points perfect for creating pieces with certain moods. You can create and save (not in the demo version of SSEYO Koan Pro though) your own template files and you can select which templates you want to see using the Select Templates dialog, found under the File, Create Template List menu item. All standard templates can be found in the TEMPLATE directory but you can save yours anywhere.

Rhythmic templates are generally identified in the file name as R\_XXXXXX.SKT, where XXXXXX can be any text, but you can give any name you want for the template description, which is what you will see when wish to use a template.

To use a Template simply select File New and choose one from the list presented (or you can modify this list for next time). To save a modified template or even a new one just select File Save As (disabled in this demo version of SSEYO Koan Pro), and choose the .SKT file type and give the file the name XXXXXXXX.SKT. Template files (SKT) are just like normal pieces (SKD), so there are no restrictions on what you can do with them.

To create your own custom list of templates which display when you select File New, select the Create Template List from the File menu. You will be presented with a dialog where you can add or remove templates from this list. Removing templates will not remove the templates from your computer, only from the template list. The active template list is stored in your KOANPRO.INI file.

---

### See also

[Demos](#)

## Scratch mixing

---

Use the ALT+0 to 9 key combination to move to that percentage position (9 = 90%) through the piece. The way the SKME works means you will hear no jumping or discontinuities in the piece (unless the volumes of the section are different or you have a slow machine - see Setting up SSEYO Koan Pro) and composition will continue smoothly. This feature is really great for when you want to mix a piece as you are recording it, or even just for the fun of doing it.

### See also

[Forcing a voice to play](#)

[Piece marker](#)

## Forcing voices to play or stop playing

---

Use this when you want to hear a voice play a note at your command. The note chosen to be played by the SKME will follow the rules used by the voice (Harmony, Scale, Next Note and Rhythm) so it will harmonize with all the other voices and fit as if the voice were playing normally. This feature is very useful when setting up pieces and hearing what a patch will sound like within the context of the piece. It can also be used for scratch mixing a piece (in conjunction with the ALT+0 through 9 keystrokes to move the piece marker to various % positions in the piece). One example of this would be where you have created a number of ambient voices and you want to trigger them one at a time. Even though you may have forced a note to play, the voice will continue to compose as normal, so when another note is due to be played it will take over and stop the note you have forced. To force a note to play press CTRL+SPACEBAR. To stop it playing press ALT+SPACEBAR.

### **See also**

[\*\*Scratch mixing\*\*](#)



## Parameter List

---

All the parameters available to Koan Pro are displayed in a number of parameter groupings or views, to make it easier to find the parameter you wish to change. Due to space requirements in the demo version we are unable to show the alphabetical hyper-linked list here.

All parameters support lists of values from which to choose each time the piece is played.



## Ambient Duration

---

### Location

View 2 

### Description

Minimum time an ambient voice will play for when it is triggered.

### Range of Values

0 to 32,000

Units can be 1/60th of a bar, milliseconds or full seconds, set with Ambient Units parameter. **Note:** 1000 milliseconds (ms) = 1 second

### Typical value

5000 ms (5 seconds)

### Note :

The Ambient parameters determine the durations of the notes and rests played by the Ambient Voice Type, but they still utilize the voices Phrase Length, Phrase Length Range, Phrase Gap and Phrase Gap Range parameters to determine how the notes or rests are strung together. If you have the Voice Type set as Rhythmic it will follow the voices Rhythm rule to generate the notes and rests. However, when a Voice Type is set to Ambient it will use the Ambient parameter values to substitute for the voices Rhythm rule.

Say you have parameter values as follows:

Voice Type	Ambient
Phrase Length	4
Phrase Length Range	0
Phrase Gap	3
Phrase Gap Range	0
Ambient Duration	2 secs
Ambient Duration Range	0 secs
Ambient Gap	3 secs
Ambient Gap Range	0 secs

What would be played would be 4 notes (Phrase Length + Phrase Length Range) of duration 2 seconds (Ambient Duration + Ambient Duration Range) followed by 3 rests (Phrase Gap + Phrase Gap Range) of duration 3 secs (Ambient Gap + Ambient Gap Range). Changing the Range parameters to be non-zero will add a random element to when the voice will play the note.

If you want only 1 note to last as a long drone (followed by a long rest and not other ambient notes as in a phrase) set the Phrase Length to 1, Phrase Length Range to 0, Phrase Gap to 1 and Phrase Gap Range to 0. This gives you the following: Note, Gap, Note, Gap, Note, Gap etc.

---

### See also

[Ambient Units](#)

## Ambient Duration Range

---

### Location

View 2 

### Description

Maximum time an ambient voice will play for above and beyond minimum value set with the Ambient Duration parameter.

### Range of Values

0 to 32,000

Units can be 1/60th or a bar, milliseconds or full seconds, set with Ambient Units parameter. **Note:** 1000 milliseconds (ms) = 1 second

### Typical value

10000 ms (10 seconds)

---

### See also

[Ambient Units](#)

[Ambient Duration](#)

## Ambient Gap

---

### Location

View 2 

### Description

The minimum time before an ambient voice will play another note, i.e. after the last note has stopped playing it will wait at least this long until it plays another.

### Range of Values

0 to 32,000

Units can be 1/60th of a bar, milliseconds or full seconds, set with Ambient Units parameter. **Note:** 1000 milliseconds (ms) = 1 second

### Typical value

3000 ms (3 seconds)

### Note 1:

Ambient voices will generally start in a piece some time at random after the beginning, and this can be any time from when the piece starts up to the Ambient Gap plus Ambient Gap Range values.

### Note 2:

The Ambient parameters determine the durations of the notes and rests played by the Ambient Voice Type, but they still utilize the voices Phrase Length, Phrase Length Range, Phrase Gap and Phrase Gap Range parameters to determine how the notes or rests are strung together. If you have the Voice Type set as Rhythmic it will follow the voices Rhythm rule to generate the notes and rests. However, when a Voice Type is set to Ambient it will use the Ambient parameter values to substitute for the voices Rhythm rule.

Say you have parameter values as follows:

Voice Type	Ambient
Phrase Length	4
Phrase Length Range	0
Phrase Gap	3
Phrase Gap Range	0
Ambient Duration	2 secs
Ambient Duration Range	0 secs
Ambient Gap	3 secs
Ambient Gap Range	0 secs

What would be played would be 4 notes (Phrase Length + Phrase Length Range) of duration 2 seconds (Ambient Duration + Ambient Duration Range) followed by 3 rests (Phrase Gap + Phrase Gap Range) of duration 3 secs (Ambient Gap + Ambient Gap Range). Changing the Range parameters to be non-zero will add a random element to when the voice will play the note.

If you want only 1 note to last as a long drone (followed by a long rest and not other ambient notes as in a phrase) set the Phrase Length to 1, Phrase Length Range to 0, Phrase Gap to 1 and Phrase Gap Range to 0. This gives you the following: Note, Gap, Note, Gap, Note, Gap etc.

---

### See also

[Ambient Units](#)

## Ambient Gap Range

---

### Location

View 2 

### Description

The maximum amount of time before ambient voice will play another note above and beyond the minimum time as set with the Ambient Gap parameter.

### Range of Values

0 to 32,000

Units can be 1/60th of a bar, milliseconds or full seconds, set with Ambient Time Units parameter. **Note:**  
1000 milliseconds = 1 second

### Typical value

10000

---

### See also

[Ambient Units](#)  
[Ambient Gap](#)

## Ambient Units

---

### Location

View 2 

### Description

This parameter determines which of 3 types of units the other Ambient parameters will use - 60ths of a beat, Milliseconds or Full seconds.

### Range of Values

1/60th bar, milliseconds or full seconds

**Note:** 1000 milliseconds = 1 second  
60 1/60ths of a beat = 1 beat  
240 1/60ths of a beat = 1 bar of 4:4  
960 1/60ths of a beat = 4 bars of 4:4

### Typical value

Milliseconds

## AWE32 Chorus Variation

---

**NOTE: Only relevant for Creative Labs AWE32 soundcard owners**

### Location

Piece view 3 

### Description

This parameter will allow you to select one of the chorus effect types available in the AWE32 Control Panel (refer to your AWE32 Control Panel manual for further information on these). You will need to select the **AWE32 Effect Type** parameter to be **0 - Reverb and Chorus** (if this is set as **-1 -Default settings** it will leave your AWE32 chorus settings as they were). Any changes you make to the chorus setting will be applied immediately. The settings you choose in the Chorus(93) parameter (i.e. 0 to 127) will be applied to the chorus effect type you have chosen, and both settings are stored in the piece.

### Range of Values

0 - Chorus 1, 1 - Chorus 2,..... 7 - Short Delay FB

### Typical value

1 - Chorus 2

## AWE32 Effect Type

---

**NOTE: Only relevant for Creative Labs AWE32 soundcard owners**

### Location

Piece view 3 

### Description

This parameter lets you select which Effect Type you want your AWE32 to use (refer to your AWE32 Control Panel manual for further information on Effect Types). Selecting **-1 -Default settings** will leave your AWE32 chorus settings as they were; **0 - Reverb and Chorus** allows you to select the settings for your card through the **AWE32 Chorus Variation** and **AWE32 Reverb Variation** parameters; and **1- Q Sound** will select this effect. The value of this parameter (and the other AWE32 parameters) is stored in the piece.

### Range of Values

-1 - Default Settings; 0 - Reverb and Chorus; 1 - Q Sound

### Typical value


0 - Reverb and Chorus

## AWE32 EMU8000 Controllers

---

**NOTE: Only relevant for Creative Labs AWE32 soundcard owners**

### Location

Views 10, 11 and 12 

### Description

There are 25 parameters in all, each one starting with AWE32 and they allow real time control of the EMU8000 LFOs, envelopes and filters. They are operated just any other controller in SSEYO Koan Pro. Further information on what each of these do is available in the Creative Labs AWE32 FAQ, which is available from the Creative Labs BBS. We strongly recommend you read this as it gives you further details of the controllers and of the values they take.

### Range of Values

Refer to AWE32 FAQ

### Typical value

As appropriate to the controller

AWE32 Envelope 1 Delay  
AWE32 Envelope 1 Attack  
AWE32 Envelope 1 Hold  
AWE32 Envelope 1 Decay  
AWE32 Envelope 1 Sustain  
AWE32 Envelope 1 Release  
AWE32 Envelope 1 Filter Cutoff  
AWE32 Envelope 1 Pitch Shift  
AWE32 Envelope 2 Delay  
AWE32 Envelope 2 Attack  
AWE32 Envelope 2 Hold  
AWE32 Envelope 2 Decay  
AWE32 Envelope 2 Sustain  
AWE32 Envelope 2 Release  
AWE32 LFO 1 Filter Cutoff  
AWE32 LFO 1 Frequency  
AWE32 LFO 1 Pitch Shift  
AWE32 LFO 1 Start Delay  
AWE32 LFO 1 Volume Shift  
AWE32 LFO 2 Frequency  
AWE32 LFO 2 Pitch Shift  
AWE32 LFO 2 Start Delay  
AWE32 Pitch Filter Cutoff  
AWE32 Pitch Initial  
AWE32 Pitch Resonance

**The following information is provided courtesy of the Creative Labs FAQ and remains their copyright:**

The EMU8000 has its roots in E-mu's Proteus sample playback modules and their renowned Emulator sampler. The EMU8000 has 32 individual oscillators, each playing back at 44.1 kHz. By incorporating sophisticated sample interpolation algorithms and digital filtering, the EMU8000 is capable of producing high fidelity sample playback.

The EMU8000 has an extensive modulation capability using two sine-wave LFOs (Low Frequency



Oscillator) and two multi-stage envelope generators.

What exactly does modulation mean? Modulation means to dynamically change a parameter of an audio signal, whether it be the volume (amplitude modulation, or tremolo), pitch (frequency modulation, or vibrato) or filter cutoff frequency (filter modulation, or wah-wah). To modulate something we would require a modulation source, and a modulation destination. In the EMU8000, the modulation sources are the LFOs and the envelope generators, and the modulation destinations can be the pitch, the volume or the filter cutoff frequency.

The EMU8000's LFOs and envelope generators provide a complex modulation environment. Each sound producing element of the EMU8000 consists of a resonant low-pass filter, two LFOs, in which one modulates the pitch (LFO2), and the other modulates pitch, filter cutoff and volume (LFO1) simultaneously. There are two envelope generators; envelope 1 contours both pitch and filter cutoff simultaneously, and envelope 2 contours volume. The output stage consists of an effects engine that mixes the dry signals with the Reverb/chorus level signals to produce the final mix.

*What are the EMU8000 sound elements?*

Each of the sound elements in an EMU8000 consists of the following:

### **Oscillator**

An oscillator is the source of an audio signal.

### **Low Pass Filter**

The low pass filter is responsible for modifying the timbres of an instrument. The low pass filter's filter cutoff values can be varied from 100 Hz to 8000 Hz. By changing the values of the filter cutoff, a myriad of analogue sounding filter sweeps can be achieved. An example of a GM instrument that makes use of filter sweep is instrument number 87, Lead 7 (fifths).

### **Amplifier**

AWE32 Envelope 2 Sustain

### **LFO1**

An LFO, or Low Frequency Oscillator, is normally used to periodically modulate, that is, change a sound parameter, whether it be volume (amplitude modulation), pitch (frequency modulation) or filter cutoff (filter modulation). It operates at sub-audio frequency from 0.042 Hz to 10.71 Hz. The LFO1 in the EMU8000 modulates the pitch, volume and filter cutoff simultaneously.

### **LFO2**

The LFO2 is similar to the LFO1, except that it modulates the pitch of the audio signal only.

### **Resonance**

A filter alone would be like an equalizer, making a bright audio signal duller, but the addition of resonance greatly increases the creative potential of a filter. Increasing the resonance of a filter makes it emphasize signals at the cutoff frequency, giving the audio signal a subtle wah-wah, that is, imagine a siren sound going from bright to dull to bright again periodically.

### **LFO1 to Volume (Tremolo)**

The LFO1's output is routed to the amplifier, with the depth of oscillation determined by LFO1 to Volume. LFO1 to Volume produces tremolo, which is a periodic fluctuation of volume. Lets say you are listening to a piece of music on your home stereo system. When you rapidly increase and decrease the playback volume, you are creating tremolo effect, and the speed in which you increases and decreases the volume is the tremolo rate (which corresponds to the speed at which the LFO is oscillating). An example of a GM instrument that makes use of LFO1 to Volume is instrument number 45, Tremolo Strings.

### **LFO1 to Filter Cutoff (Wah-Wah)**

The LFO1's output is routed to the filter, with the depth of oscillation determined by LFO1 to Filter. LFO1 to Filter produces a periodic fluctuation in the filter cutoff frequency, producing an effect very similar to that of a wah-wah guitar (see resonance for a description of wah-wah) An example of a GM instrument that makes use of LFO1 to Filter Cutoff is instrument number 19, Rock Organ.

### **LFO1 to Pitch (Vibrato)**

The LFO1's output is routed to the oscillator, with the depth of oscillation determined by LFO1 to Pitch. LFO1 to Pitch produces a periodic fluctuation in the pitch of the oscillator, producing a vibrato effect. An example of a GM instrument that makes use of LFO1 to Pitch is instrument number 57, Trumpet.

### **LFO2 to Pitch (Vibrato)**

The LFO1 in the EMU8000 can simultaneously modulate pitch, volume and filter. LFO2, on the other hand, modulates only the pitch, with the depth of modulation determined by LFO2 to Pitch. LFO2 to Pitch produces a periodic fluctuation in the pitch of the oscillator, producing a vibrato effect. When this is coupled with LFO1 to Pitch, a complex vibrato effect can be achieved.

### **Volume Envelope**

The character of a musical instrument is largely determined by its volume envelope, the way in which the level of the sound changes with time. For example, percussive sounds usually start suddenly and then die away, whereas a bowed sound might take quite some time to start and then sustain at a more or less fixed level.

### **Envelope details**

A six-stage envelope makes up the volume envelope of the EMU8000. The six stages are delay, attack, hold, decay, sustain and release. The stages can be described as follows:

#### **Delay**

The time between when a key is played and when the attack phase begins

#### **Attack**

The time it takes to go from zero to the peak (full) level.

#### **Hold**

The time the envelope will stay at the peak level before starting the decay phase.

#### **Decay**

The time it takes the envelope to go from the peak level to the sustain level.

#### **Sustain**

The level at which the envelope remains as long as a key is held down.

#### **Release**

The time it takes the envelope to fall to the zero level after the key is released.

Using these six parameters can yield very realistic reproduction of the volume envelope characteristics of many musical instruments.

### **Pitch and Filter Envelope**

The pitch and filter envelope is similar to the volume envelope in that it has the same envelope stages. The difference between them is that whereas the volume envelope contours the volume of the instrument over time, the pitch and filter envelope contours the pitch and filter values of the instrument over time. The pitch envelope is particularly useful in putting the finishing touches in simulating a natural instrument. For example, some wind instruments tend to go slightly sharp when they are first blown, and this characteristic can be simulated by setting up a pitch envelope with a fairly fast attack and decay. The filter envelope, on the other hand, is useful in creating synthetic sci-fi sound textures. An example of a GM instrument that makes use of the filter envelope is instrument number 86, Pad 8 (Sweep).

**Pitch/Filter Envelope Modulation**


These two parameters determine the modulation depth of the pitch and filter envelope. In the wind instrument example above, a small amount of pitch envelope modulation is desirable to simulate its natural pitch characteristics.

## AWE32 Reverb Variation

---

**IMPORTANT NOTE: Only relevant for Creative Labs AWE32 soundcard owners**

### Location

Piece view 3 

### Description

This parameter will allow you to select one of the reverb effect types in the AWE32 Control Panel (refer to your AWE32 Control Panel manual for further information on these). You will need to select the **AWE32 Effect Type** parameter to be **0 - Reverb and Chorus** (if this is set as **-1 -Default settings** it will leave your AWE32 reverb settings as they were). Any changes you make to the reverb setting will be applied immediately. The settings you choose in the Reverb(91) parameter (i.e. 0 to 127) will be applied to the reverb effect type you have chosen, and both settings are stored in the piece.

### Range of Values

0 - Room 1, 1 - Room 2,..... 7 - Panning Delay

### Typical value


1 - Room 2

## AWE32 SoundFont™ Bank & SBK File Name

---

**IMPORTANT NOTE:** Only relevant for Creative Labs AWE32 soundcard owners

### Location

Piece view 3 

### Description

Allows your piece to use samples from one or more Creative Labs SoundFont compatible bank Files (SBKs). SBKs are files that contain a number of audio samples in a special format (SoundFont) that can be loaded in to the RAM present on the Creative Labs AWE32 sound card. These audio samples can then be played back in a SSEYO Koan piece, thus allowing you to include many special sounds not provided on the ROM of the AWE32. If stored in the Melodic section of the SoundFont bank, each sample can be triggered at a different pitch, as for any normal instrument; if stored in the percussive section samples will be played back like a normal drum bank. Please refer to Creative Labs for further information on SoundFont compatible banks. Examples of SoundFont compatible banks in SSEYO Koan pieces could include using speech, wild animal or instrument samples to give the pieces much greater life, depth and realism. You could ship to your friends/ customers your SSEYO Koan pieces (.SKP, .SKT or .SKD format) and the SBK files they use. We also allow you to ship a Demo version of SSEYO Koan Plus. The AWE32 soundcard currently ships with 0.5Mb of RAM which can be increased up to 28Mb by adding sufficient memory chips.

The SKME can load individual SoundFonts from a SoundFont Bank meaning that you conserve the AWE32 memory required for loading. For instance, say you have the standard 500Kb of onboard DRAM but your SoundFont bank is 2MB. Say there are only 3 SoundFonts in it you want to use, and these 3 have a combined size of 370Kb (SoundFonts are effectively just samples) the SKME can be told to only load these 3. See 2 below.

You may also use SoundFonts from more than 1 SBK in a piece, meaning you could use your favorite guitar sound from your GUITAR.SBK and favorite piano from PIANO.SBK. This facility means you do not have to create new SBKs specially for each piece. See 2 below.

Finally, SBKs can be loaded from a CD ROM or any other drive and directory once you set the path the SKME uses (See [Options Setup](#)).

### Range of Values

The [SoundFont](#) can be any number from 1 to 128. The [SoundFont compatible bank name](#) can be any 8 character name (supported by DOS) followed by the .SBK extension.

### 1) Piece using only 1 [SoundFont compatible bank](#)

#### The whole [SoundFont bank](#) is loaded

Call up the AWE32 SoundFont Banks dialog by pressing the button with the down arrow. Select the first cell in the [SoundFont Bank Name](#) column by either double clicking or pressing Enter in the column or selecting Add. You will see a button pop up showing \*.sbk or \*.sf2 (we support both SBK and SoundFont 2 format banks). Select the SBK you want to add/use. If you want to use the patch numbers in your SoundFont bank as they are pre-defined and you want to load the whole SoundFont bank, then press OK. Now refer to the [Patch parameter](#) to see how to use SoundFonts in a Koan piece.

**Note:** See Note 1 below on patch numbering.

**Note:** The SoundFont bank is loaded when the piece starts playing.

**Note:** If you want to specify individual SoundFonts to be loaded up to reduce the AWE32 onboard memory required, you need to carry out procedure 2 below.

## 2) Piece using [SoundFonts](#) from multiple [SoundFont Banks](#) (or selected [SoundFonts](#) only)

### Only specified [SoundFonts](#) are loaded

Follow the procedure above for each [SoundFont bank](#) from which you want your piece to select a [SoundFont](#). Each row corresponds to a SoundFont Bank (and you can have the same bank shown many times if you wish to select a number of SoundFonts from one bank).

If you want the piece to assign a SoundFont to another patch in the piece (e.g. you want SoundFont 37 in your SoundFont bank to correspond to patch 56 in the piece) or if you want to specify individual SoundFonts (so reducing the AWE32 onboard memory required for loading) then in the cell in the From column, select the SoundFont Bank GM patch number (0-127) and in the To column select the patch you want this to correspond to in your piece. Now refer to the [Patch parameter](#) to see how to use SoundFonts in a Koan piece.

**Note:** See Note 1 below on patch numbering.

### Notes:

- 1 The Creative Labs Vienna SBK tool uses instruments from 0 to 127 and Koan Pro reads them as 1 to 128. Make sure you allow for this.
- 2 Any SBKs used must be in the same directory as your Koan piece, unless you define the path in [Options Setup](#).
- 3 Loading SoundFont compatible banks onto the AWE32 takes time; the larger the SBK the longer it takes. However, loading is much faster in Windows 95. We recommend that you ship pieces with SBKs that can fit into the default supplied AWE32 (512k).
- 4 You should ensure that the GS Synth Bank is not loaded by your AWE32 Control Panel before loading a Koan piece containing SBK support. This is because the GS sample map uses ALL the available default memory (if you have the 512Kb supplied as standard). You should instead ensure that the AWE32 Control Panel Synth Bank is set to General MIDI.
- 5 The SKME fully supports loading of individual SoundFonts from multiple SBKs, and the Creative Labs drivers for Windows 95 cater for this functionality. However, if you are using Windows 3.1 and you notice that the whole of the SBK (and not just the SoundFont you require) is being loaded you will need to contact Creative Labs to obtain the latest drivers (which were currently in beta at time of going to press).
- 6 When sending out SoundFont compatible banks to your customers/ friends make sure you put them in the same directory as the SSEYO Koan piece which uses them, or advise them to set up their path (see note 2 above).

---

### See also

[AWE32 EMU8000 controllers](#)

## Chorus (93)

---

### Location

View 7 

### Description

Sets the chorus level for a voices patch/ instrument

### Range of Values

0 - 127 (Where 0 equates to no chorus and 127 to full chorus)

Some soundcards do not support this parameter

### Typical value

0

## Damper Release

---

### Location

View 7 

### Description

Determines whether the damper/hold is released at the end of every bar. If **Damper Release** is set to Yes the sustain will be reset at the end of every bar, otherwise it will continue throughout the piece, or until the note is stopped. If set to No and you are using say a pad sound, each note played by the instrument will continue throughout the piece or until the note is stopped, creating a very dense wall of sound (noise!).

### Range of Values

Yes or No

### Typical value

Yes



## Damper/Hold (64)

---

### Location

View 7 

### Description

Affects the damping/hold of notes on soundcards that support this controller (number 64). This is in some ways equivalent to sustain and is best used on percussive type instruments such as piano or guitar. If **Damper Release** is set to Yes the sustain will be reset at the end of every bar, otherwise it will continue throughout the piece. In this instance if you are using say a pad sound, where Damper Release is set to No, then each note played by the instrument will continue either throughout the piece or until the note is stopped, creating a very dense wall of sound (noise!).

### Range of Values

0 to 127 (Where 0 is no damping and 127 is max damping)

In effect 0-63 is off, and 64-127 is on.

### Typical value

35

## Drum Set

---

### Location

Piece view 1 

### Description

Determines the Drum set which your sound card will use in the piece. SSEYO Koan Pro supports Drum sets from 1 to 128 (1 is the standard Drum Set). Refer to the [discussion](#) on the Drum Set and see the Patch parameter for information on drums and SBKs.

### Range of Values

1-128

### Typical value

1

---

### See also

[Patch](#)

## Expression (11)

---

### Location

View 7 

### Description

Affects the Volume of notes played on soundcards that support this controller (number 64). It effectively shadows the overall Volume envelope parameter (but not as an envelope). This is handy when you want one of a number of voices sharing a MIDI channel to have a different volume from the rest.

### Range of Values

0 to 127 (where 0 is zero volume and 127 is maximum volume)

### Typical value

127

You might find it best to have this set to maximum and allow the volume envelope to take control, otherwise you may forget you have set it and wonder why there is no volume!

## Follow Delay

---

### Location

View 3 

### Description

Determines how much delay is applied to the notes played by a voice when following another voice (Voice type must be set as a **Follows** voice for this to take effect). Use this to create long delays (artificial echo), short delays (simulated reverb), fugues (use Follow Delay Unit to be 1/60 of a Beat), humanized chord strums (using Follow Percent) etc.

### Range of Values

0 to 32,000

### Typical value

10

## Follow Delay Range

---

### Location

View 3 

### Description

Determines the range of values a following voice can have for the **Follow Delay** parameter. The value set for the **Follow Delay Range** parameter is added to the **Follow Delay** parameter so that the actual delay that occurs is anywhere between the **Follow Delay** and the **Follow Delay** plus the **Follow Delay Range** value (i.e. if these were 2 seconds and 4 seconds respectively, the delay could be anywhere between 2 seconds and 6 seconds (2+4)).

### Range of Values

0 to 32,000


### Typical value

10

## Follow Delay Unit

---

### Location

View 3 

### Description

Determines the units used by the Follow range of parameters.

### Range of Values

Seconds, Thousandths of a second or 1/60th of a beat (quarter note/crotchet)

### Typical value

Seconds

## Follow Named Voice

---

### Location

View 3 

### Description

Selects the lead voice (by Voice Name) that a **Follows** voicetype will track. This can be any voice in the piece, provided it is not another **Follows** Voice Type. If you do select to follow another **Follows** Voice Type, the voice will not play anything.

**Note:** If you have this value set to ? then the voice will not play at all - you must explicitly define the voice you want it to follow. You can, of course, create a list of voices from which it can choose to follow one when the piece starts.

### Range of Values

? (meaning none), or any voice in the piece

### Typical value

Default Voice 1

## Follow Percent

---

### Location

View 3 

### Description

Defines how likely the voice is to play another note when the voice it is following (the lead voice) plays a note. If you set this to 100% then every time the lead voice plays a note this voice will also play a note. This parameter allows a subtle layering of chords. For example, say you set up a number of voices following a lead voice and you set this parameter to say 40% for each of the following voices you will find you can sometimes get thin chords (few notes) and sometimes fat chords (many notes).

### Range of Values

0 to 100 (percentage value)

### Typical value

40



## Follow Shift/Interval

---

### Location

View 3 

### Description

Determines how many musical tones away from the lead voice the notes played by the following voice (follower) will be, and is used in conjunction with the **Follow Strategy** and **Follow Shift/Interval range** parameters.. For example, if **Follow Strategy** is set to *Semitone Shift* and you have set **Follow Shift/Interval** to be 3, then every note the follower plays will be 3 semitones above that of the lead voice. It is likely you will most often use this set to 0 (or 12), where it will play the same note as (or an octave above) the lead voice. Alternatively, if **Follow Strategy** is set to INTERVAL WITHIN SCALE and **Follow Shift/Interval** is 2, then the notes played by the follower voice will depend on the notes available in the scale rule that used by the follower voice. This means you could have both voices using a major scale, say, and with an interval of 2 this represents a major third (M3) when the lead voice plays a root note (root note[0], M2[1], M3[2]). This is a real interval of 4 semitones (root[0], m2[1], M2[2], m3[3], M3[4]). However, if the lead voice now plays a major second (M2) the follower will play a fourth (M2, M3, 4) which is actually 3 semitones (M2[0], m3[1], M3[2], 4th[3]). This allows a natural sounding progression along the scale, which would not be possible if it was a fixed semitone interval.

### Range of Values

-60 to +60 (negative values represent notes lower than the lead voice, positive values notes higher than the lead voice)

### Typical value

0

## Follow Shift/Interval Range

---

### Location

View 3 

### Description

Determines the range of values a following voice can have for the **Follow Shift/Interval** parameter. The value set for **Follow Shift/Interval Range** is added to that selected for **Follow Shift/Interval** so that the frequency/interval shift that occurs is anywhere between the **Follow Shift/Interval** value and the **Follow Shift/Interval** plus the **Follow Shift/Interval Range** value (i.e. if these were 2 and 4 respectively, the interval shift could be anywhere between 2 and 6 (2+4)).

### Range of Values

-60 to +60 (negative values represent notes lower than the lead voice, positive values notes higher than the lead voice)

### Typical value

0

## Follow Strategy

---

### Location

View 3 

### Description

Determines the actual strategy a voice will adopt if it is set as a Follow Voice Type (follower). There are 3 possibilities: *Chordal Harmony*; *Interval Within Scale Rule* and *Frequency Shift*.

When the follower voice plays a note in response to the lead voice (set with Follow Named Voice), *Chordal harmony* allows the follower voice to harmonize the note it plays with that of the lead voice - according to the Scale, Harmony and Next Note rules used by the follower voice. Thus you could set up say 6 follower voices, all responding to one lead voice, and the notes played will likely be that of a chord (if the **Pitch** and **Pitch Range** values for each voice allow a sufficient spread of notes). *Interval within scale rule* allows the follower voice to choose the note it plays based upon a set note interval, the available notes being those of the Scale rule used by the follower voice; *Frequency Shift* just sets up a fixed melodic interval - e.g. 5 semitones - over the lead voice (see **Follow Shift/Interval** for further details).

Note that a **Follows** voicetype can only follow a non-**Follows** voicetype.

### Range of Values

*Chordal Harmony*; *Interval Within Scale Rule* and *Frequency Shift*

### Typical value

*Chordal Harmony*

## Gravis Drum Patch Bank

---

**NOTE: Only relevant for Advanced Gravis Ultrasound, Ultrasound Max or certified Ultrasound compatible soundcard owners.**

### Location

Piece view 3 

### Description

Allows you to automatically upload Gravis drum patch to your soundcard RAM for use by Koan pieces. This has the same operation as the [Gravis Melodic Patch Bank](#) parameter, and so all details are covered there.

### Range of Values

Up to 127 different patches can be defined.

### Selecting the patches

Call up the Gravis Drum Patch Banks dialog by pressing the button with the down arrow. To select the patch you want to add either double click or press Enter in the Gravis Patch Name column or select Add. Then, in the To patch column, select the GM patch number (1-127) you want this to correspond to in your piece.

### Notes:

- 1 Any patches used must be in the same directory as your SSEYO Koan piece, unless you define the path in [Options Setup](#). The special Gravis patches must **ALL** be in the same directory, otherwise they will not load.
- 2 When defining the patches for the voices in your piece you **DO NOT** need to add the patch bank (i.e. 74.99 where 99 is bank 99). You should instead treat it as a normal patch (i.e. 074 - Flute). This will load up the Gravis patch (you have defined above) in its place.
- 3 Gravis do not support capital tones (see [GS discussion](#)), meaning that Gravis cards can only use patches from only one bank in any piece (i.e. you cannot use patches from BOTH bank 99 and bank 100). The only exception to this rule is if a patch is not found in the bank defined it will revert to the standard bank 0 patch as a default. We recommend you use bank 99 to avoid possible conflict with other applications.
- 4 When sending out patches to your customers/ friends make sure you put them in the same directory as the Koan piece which uses them.

## Gravis Melodic Patch Bank

---

**NOTE: Only relevant for Advanced Gravis Ultrasound, Ultrasound Max or certified Ultrasound compatible soundcard owners.**

### Location

Piece view 3 

### Description

Allows you to automatically upload Gravis melodic patch banks (see also [Gravis Drum Patch Banks](#)) to your soundcard RAM for use by SSEYO Koan pieces. Make sure you try not to load more patches than your soundcard RAM can take, otherwise the patch loading operates on a First In First Out basis (i.e. the last patch to be loaded takes priority, so some patches could be unloaded). You simply define a patch bank into which you want to load your patches - it is best to choose one that you are not using for anything else and we use 99 as the default. .

When you play the SSEYO Koan piece it writes the bank information to the ULTRASND.INI file, which you can see if you look at the file whilst the Koan piece is playing (just remember that it can not write to this file if it is already open when the piece starts). When the piece stops this information is wiped from the .INI file, thus leaving the patch bank free for other purposes.

If you want your piece to be able to select from a large number of patches define them all in this parameter before you start the piece as you will only be able to select patches that are listed in the .INI file. The piece will only load up what it needs, when it needs it. This facility is useful if you want to experiment with the sound palette for your piece whilst you are writing it.

You could ship to your friends/ customers your SSEYO Koan pieces (.SKP, .SKT or .SKD format) and the patches they use. We also allow you to ship a Demo version of SSEYO Koan Plus.

### Range of Values

Up to 127 different patches can be defined.

### Selecting the patches

Call up the Gravis Melodic Patch Banks dialog by pressing the button with the down arrow. To select the patch you want to add either double click or press Enter in the Gravis Patch Name column or select Add. Then, in the To patch column, select the GM patch number (1-127) you want this to correspond to in your piece.

### Notes:

- 1 Any patches used must be in the same directory as your SSEYO Koan piece, unless you define the path in [Options Setup](#). The special Gravis patches must **ALL** be in the same directory, otherwise they will not load.
- 2 When defining the patches for the voices in your piece you **DO NOT** need to add the patch bank (i.e. 74.99 where 99 is bank 99). You should instead treat it as a normal patch (i.e. 074 - Flute). This will load up the Gravis patch (you have defined above) in its place.
- 3 Gravis do not support capital tones (see [GS discussion](#)), meaning that Gravis cards can only use patches from only one bank in any piece (i.e. you cannot use patches from BOTH bank 99 and bank 100). The only exception to this rule is if a patch is not found in the bank defined it will revert to the standard bank 0 patch as a default. We recommend you use bank 99 to avoid possible conflict with other applications.
- 4 When sending out patches to your customers/ friends make sure you put them in the same directory as the Koan piece which uses them.



## Harmonize?

---

### Location

View 6 

### Description

Determines whether a voice is to harmonize with other voices or not. Having this flexibility can be useful when you are using drums in a melodic bank and you do not want them to affect (i.e. harmonize with) other voices. Another situation would be where you are playing an SBK/ Gravis patch which you did not want to harmonize with other voices as it had only one pitch. However, normally you will want to set this to Yes otherwise you can get strange disharmonies.

### Range of Values

Yes or No (Yes is default)

### Typical value

Yes

This can be used to good effect if you want a lot of passing notes (refer to the Glossary) or one voice to be apparently unrelated to the rest of the piece.

## Harmonization Type

---

### Location

Piece view 1 

### Description

Determines at the piece level if a Harmony rule is to be applied at all. Each voice normally composes according to which Harmony and Scale rules are applied to it.

### Range of Values

A value of 1 means that the Harmony rule will be applied (at either the Voice or Piece level depending on what you have defined in the piece); a value of 0 means that any note may be chosen to play in the Scale rule used by any voice, and the harmony rule is ignored.

### Typical value

1

---

### See also

[Rules](#)

[Harmony Rule](#)

[Scale Rule](#)



## Harmony Duration

---

### Location

View 6 

### Description

How long a note will continue to be harmonized with other notes.

### Range of Values

0 to 32,000 Milliseconds

### Typical value

16,000 (16 seconds)

**Note:** This parameter enables voices to be set up such that their notes are significant for harmonization purposes \*only\* over this period. I.E. after a note has played for the length of time specified by the Harmony Duration parameter, that note ceases to be considered for harmonization with other notes.

If **Harmony Duration** is set to zero, then other voices will **never** consider this voice for the purposes of harmonization, though this voice's notes will still be harmonized against all other current voice notes when composed.

If **Harmony Duration** is non-zero, and **Harmonize?**= 'Yes', then the voice is harmonized against for the duration of that voice's note.

This parameter is particularly useful for ambient voices, especially drones, whenever you do not wish them to dominate the harmonization of a piece for their entire duration !

**Note:** When a Piece Root change occurs, the only voices whose notes may continue across the Root change bar boundary are those for which **Harmonize?** = No. All other voices stop their current notes at the end of the preceding bar, and may then start new notes in the new (key-changed) bar.

## Harmony Rule(s)

---

### Location

View 6 

### Description

The Harmony rule determines how a voice is composed. You can select which rule is used for a voice from the list of already pre-defined Harmony rules (which you can add to/modify in the Harmony rule window by selecting the Harmony rule button on the top toolbar or selecting Groups Harmony Rules from the menu). The SKME calls on the harmony relationships and probabilities defined in this rule when it comes to composing for this voice. If the value is set to ? it will use the Harmony rule defined at the piece level. Each voice can have its own distinct harmony rule.

### Range of Values

Can be set to any Harmony rules you may have created or a ?

### Typical value

Default Harmony Rule, or Major, or Minor etc.

---

### See also

[Rules](#)

[Harmony Rule](#)

[Harmony Rule Value](#)

## Harmony Rule(s)

---

### Location

Piece view 1 

### Description

The Harmony Rule (or list of rules) the piece uses. Note that if you want it left up to the piece to decide which Harmony rule to use, set the Harmony rule parameter in View 6 to be ?. Remember that you can set up a list of pre-defined Harmony rules from which a choice can be made every time the piece plays.

### Range of Values

Choose from the list of rules you have defined.

### Typical value

Default Harmony Rule

---

### See also

[Rules](#)

[Harmony Rule](#)

## Harmony Rule(s) Value

---

### Location

Rules view 

### Description

Displays the Harmony Rule window, where you can see the probability bars for each harmony rule defined/available.

### Range of Values

Each bar can be from zero to maximum height, where the higher it is the more likely the note is to play.

### Typical value

Mid range

---

### See also

[Rules](#)

[Harmony Rule](#)

## Koan ADSR Attack Time

---

### Location

View 7 

### Description

The time taken in milliseconds to rise to the full volume level of the note, from when the note is started. As changes to the Volume Envelope occur at low priority time (and the ADSR changes are in relation to this envelope value), the smoothest ADSR effects will be obtained on faster machines. In the light of this we suggest you use values of 100s or 1000s of milliseconds.

**Note:** This parameter has no effect for OPL2/OPL3 based soundcards (see [Koan ADSR in Options Setup](#)).

### Range of Values

0-32,000 (0 is off)

### Typical value

0

---

### See also

[Koan ADSR Hold Time](#)

[Koan ADSR Decay Time](#)

[Koan ADSR Sustain Level](#)

[Koan ADSR Release Time](#)

## Koan ADSR Hold Time

---

### Location

View 7 

### Description

The time in milliseconds at which the full volume level of the note is held, after the attack time (if any) has elapsed. As changes to the Volume Envelope occur at low priority time (and the ADSR changes are in relation to this envelope value), the smoothest ADSR effects will be obtained on faster machines. In the light of this we suggest you use values of 100s or 1000s of milliseconds.

**Note:** This parameter has no effect for OPL2/OPL3 based soundcards (see [Koan ADSR in Options Setup](#)).

### Range of Values

0-32,000 (0 is off)

### Typical value

0

---

### See also

[Koan ADSR Attack Time](#)

[Koan ADSR Decay Time](#)

[Koan ADSR Sustain Level](#)

[Koan ADSR Release Time](#)

## Koan ADSR Decay Time

---

### Location

View 7 

### Description

The time taken in milliseconds to fall to the sustain level of the note after the hold time (if any) has elapsed. As changes to the Volume Envelope occur at low priority time (and the ADSR changes are in relation to this envelope value), the smoothest ADSR effects will be obtained on faster machines. In the light of this we suggest you use values of 100s or 1000s of milliseconds.

**Note:** This parameter has no effect for OPL2/OPL3 based soundcards (see [Koan ADSR in Options Setup](#)).

### Range of Values

0-32,000 (0 is off)

### Typical value

0

---

### See also

[Koan ADSR Attack Time](#)

[Koan ADSR Hold Time](#)

[Koan ADSR Sustain Level](#)

[Koan ADSR Release Time](#)

## Koan ADSR Sustain Level

---

### Location

View 7 

### Description

The relative value in the range of 0 (minimum) to 127 (maximum), to which the ADSR volume envelope will decay, and will then be held subsequently until just before the note is about to stop. As changes to the Volume Envelope occur at low priority time (and the ADSR changes are in relation to this envelope value), the smoothest ADSR effects will be obtained on faster machines. In the light of this we suggest you use values of 100s or 1000s of milliseconds.

**Note:** This parameter has no effect for OPL2/OPL3 based soundcards (see [Koan ADSR in Options Setup](#)).

### Range of Values

0-32,000 (0 is off) It is suggested you set this to a high value, otherwise you may not hear the note before it decays.

### Typical value

0

---

### See also

[Koan ADSR Attack Time](#)

[Koan ADSR Hold Time](#)

[Koan ADSR Decay Time](#)

[Koan ADSR Release Time](#)



## Koan ADSR Release Time

---

### Location

View 7 

### Description

This comes into operation when the note is just about to stop. It defines the time taken in milliseconds to fully release the volume to the final value of 0, from the Sustain Level. As changes to the Volume Envelope occur at low priority time (and the ADSR changes are in relation to this envelope value), the smoothest ADSR effects will be obtained on faster machines. In the light of this we suggest you use values of 100s or 1000s of milliseconds.

**Note:** This parameter has no effect for OPL2/OPL3 based soundcards (see Koan ADSR in Options Setup).

### Range of Values

0-32,000 (0 is off)

### Typical value

0

---

### See also

[Koan ADSR Attack Time](#)

[Koan ADSR Hold Time](#)

[Koan ADSR Decay Time](#)

[Koan ADSR Sustain Level](#)

## Meter

---

### Location

View 5 

### Description

Allows you to set a meter or time signature at the voice level (as opposed to the piece level). Each voice can have a different meter if desired. This is particularly useful if you want to set up patterns, for a number of voices, that cycle against each other (using the Voice Type FixedPattern). For example, you could have one pattern set for Voice A with **Meter** 7:8 and another for Voice B with **Meter** 3:4. Another possibility is to set **Meter** to 1:4 (a special case), which means you can have a pattern of any number of beats (provided it totals to an integer number of quarter notes/crotchets), irrespective of the time signature. I.E. you could create a pattern of 61 notes for one voice and 93 for another, thus allowing complex patterns to cycle against each other (using the Voice Type FixedPattern).

### Range of Values

1:4, 2:4, 3:4, 4:4, 5:4, 6:4, 7:4, 8:4, 1:8, 2:8, 3:8, 4:8, 5:8, 6:8, 7:8, 8:8, 9:8, 10:8, 11:8, 12:8

Meters of x/8 are counted in triplets.

### Typical value

4:4

## Meter

---

### Location

Piece view 1 

### Description

The time signature to be used by the piece. You can choose this from the list presented

### Range of Values

1:4, 2:4, 3:4, 4:4, 5:4, 6:4, 7:4, 8:4, 1:8, 2:8, 3:8, 4:8, 5:8, 6:8, 7:8, 8:8, 9:8, 10:8, 11:8, 12:8  
Meters of  $x/8$  are counted in triplets.

### Typical value

4:4

## Micro Modulation Pulse

---

### Location

View 9 

### Description

Defines how long the micro modulation will last for when it is applied.

### Range of Values

0 - 10,000 ms

### Typical value

Default 100

---

### See also

[Micro controls overview](#)

## Micro Modulation Pulse Range

---

### Location

View 9 

### Description

The range of values available on top of that defined by the Micro Modulation Pulse parameter.

### Range of Values

0 - 10,000 ms

### Typical value

Default 0

---

### See also

[Micro controls overview](#)

## Micro Modulation Range

---

### Location

View 9 

### Description

Defines the maximum modulation value that will be used when the micro modulation effect comes in to play. This uses the standard soundcard modulation (if supported on your soundcard). The actual value of the modulation will be chosen at random every time it is applied (see Micro Modulation Update) and will be between 0 to the value you define here. This amount is added to any modulation you may already have defined with the Modulation parameter, which must be turned on (i.e. not -1).

### Range of Values

0 to +127

### Typical value

Default : 0 (off)

---

### See also

[Micro controls overview](#)

## Micro Modulation Update

---

### Location

View 9 

### Description

Defines how frequently the micro modulation effect will be applied. This is the minimum amount of time that will pass before the effect is applied.

### Range of Values

0 - 10,000 ms

### Typical value

Default 0 - continuous

---

### See also

[Micro controls overview](#)

## Micro Modulation Update Range

---

### Location

View 9 

### Description

The range of values available on top of that defined by the Micro Modulation Update parameter.

### Range of Values

0 - 10,000 ms

### Typical value

Default 0

---

### See also

[Micro controls overview](#)



## Micro Note Delay Change

---

### Location

View 8 

### Description

Defines how much the delay applied to a note can change the next time a note is played by that voice. It is best thought of as a walk. The delay cannot walk by more than this value each time a new note is played. The maximum limits on the delay are set by the Micro Note Delay Range parameter.

### Range of Values

0 to +1000 ms

### Typical value

Default : 0

---

### See also

[Micro controls overview](#)

## Micro Note Delay Offset

---

### Location

View 8 

### Description

Sets the amount each note played by a voice will be delayed or advanced. This can provide the effect of rhythmic feel. This is a fixed value throughout the piece but may be changed in real time.

### Range of Values

-1000 ms to +1000 ms

Notes : -1000 ms is 1 second early, +1000 ms is 1 second late.

### Typical value

Default : 0 (off)

---

### See also

[Micro controls overview](#)

## Micro Note Delay Range

---

### Location

View 8 

### Description

Defines the total range over which notes played by a voice can vary in terms of start time (i.e. when they are played by the SKME). This value is added to that set by the Micro Note Delay Offset parameter.

### Range of Values

0 to +1000 ms

Notes : This value is purely additive.

### Typical value

Default : 0

---

### See also

[Micro controls overview](#)

## Micro Pitch Change

---

### Location

View 8 

### Description

Defines by how much the Pitch can change the next time it is updated. It is best thought of as a Random walk. The Pitch cannot walk by more than this value each time it is changed by the Micro Pitch Change controller. The maximum limits of the change in Pitch are set by the Micro Pitch Range parameter. This actual amount by which the pitch changes is also governed by the Pitch Bend Sensitivity value. For instance, if this is 2 (2 semitones, and this is the default) then a value of 8191 would be 2 semitones. Similarly if the Pitch Bend Sensitivity is 24, then 8191 would represent 24 semitones.

### Range of Values

0 to 8191

### Typical value

Default : 0 (off)

---

### See also

[Micro Pitch Range](#)

[Micro controls overview](#)

## Micro Pitch Range

---

### Location

View 8 

### Description

Defines the range over which the pitch of a note played by a voice can change. The actual pitch value is also governed by the Pitch Bend Sensitivity value. For instance, if this is 2 (2 semitones, and this is the default) then a value of 8191 would be 2 semitones. Similarly if the Pitch Bend Sensitivity is 24, then 8191 would represent 24 semitones. Is used in conjunction with Micro Pitch Change, Micro Pitch Update and Micro Pitch Offset.x

### Range of Values

0 to 8191

0 is OFF

Notes : Superimposed on the Pitch Bend Offset

### Typical value

Default : 0

---

### See also

[Micro Pitch Change](#)

[Micro controls overview](#)

## Micro Pitch Update

---

### Location

View 8 

### Description

Determines how often changes will be made to the Pitch value. If it is set to 100 then every 100 ms the Pitch can change according to the other Micro Pitch controller settings.

### Range of Values

0 to +10000 ms

### Typical value

Default : 0 (continuous)

---

### See also

[Micro controls overview](#)

## Micro Pitch Update Range

---

### Location

View 8 

### Description

Used in conjunction with the Micro Pitch Update controller and provides the range of times over which the pitch changes can occur.

### Range of Values

0 to +10000 ms

### Typical value

Default : 0

---

### See also

[Micro controls overview](#)

## Micro Volume Change

---

### Location

View 9 

### Description

Defines how much a voices Volume can change the next time it is updated. It is best thought of as a Random walk, superimposed on top of the volume envelope. The Volume cannot walk by more than this value each time it is changed by the Micro Volume Change controller. The maximum limits of the change in Volume are set by the Micro Volume Range parameter.

### Range of Values

0 to 127 (standard volume controller values)

### Typical value

Default : 0 (off)

---

### See also

[Micro controls overview](#)



## Micro Volume Range

---

### Location

View 9 

### Description

Defines the maximum value by which the Volume can change. This is superimposed on the Micro Volume Change.

### Range of Values

0 to +127

### Typical value

Default : 0

---

### See also

[Micro controls overview](#)

## Micro Volume Update

---

### Location

View 9 

### Description

Defines how frequently Micro Volume changes will be applied. This is the minimum value of time that will pass before any changes are applied.

### Range of Values

0 to +10000 ms

### Typical value

Default : 0

---

### See also

[Micro controls overview](#)

## Micro Volume Update Range

---

### Location

View 9 

### Description

The range of values available on top of that defined by the Micro Volume Update parameter.

### Range of Values

0 to +10000 ms

### Typical value

Default : 0

---

### See also

[Micro controls overview](#)

## MIDI Channel

---

### Location

Each of the 13 views in the Power View and in Voice X view. See the [Common Parameters view](#).

### Description

Forces a voice to take a specific, defined MIDI Channel. If set to 0 the SKME will allocate a MIDI Channel automatically and it will manage which MIDI Channels a voice will use. This can be very useful if you are using more voices than MIDI Channels (i.e. 22 melodic voices where the MIDI Mapper can accept 16 MIDI Channels). In this instance it will swap MIDI Channels according to which voices are playing (see also MIDI Channel Reallocation), but only when a voice's volume goes to 0. Channel 10 is generally reserved for drum patches. Refer also to the Glossary.

### Range of Values

0, or 1 to 16

### Typical value

1

**Note:** You must make sure that voices that have different patches or even the same patches but different volume or pan envelopes **do not** share the same MIDI channel. The reason is that there can be only one master volume/pan envelope or patch per MIDI channel. In the event that there are two different volume/pan envelopes defined in the piece for a MIDI channel the SKME will choose at random which volume envelope to use. For the case where two voices using the same MIDI channel have different patches, the SKME will choose at random which patch will be used by BOTH voices, potentially leading to strange results.

**Note:** For voices that you definitely want to be present throughout the piece it is best to specify their MIDI channel (e.g. 6). This way, any voice that is dependent on it (e.g. a voice may follow this one) will not stop playing due to the master voice's MIDI channel being reallocated.

**Note:** If you set the instrument to be a Drum sound and you force the MIDI channel to be any channel other than 10 (the reserved drum channel) you can get some interesting effects as each different note that is played (i.e. different note frequency or program change) will trigger a different drum patch.

## MIDI Channel Reallocation

---

### Location

View 6 

### Description

If the MIDI channel is set to 0 for a voice and the voice's volume goes to zero, this parameter determines how the MIDI channel will be reallocated to another voice whose MIDI channel is zero.

### Range of Values

Yes or No

### Typical value

No

### Notes:

*General:* When there are too many voices declared to each have a MIDI Channel, the system drops the MIDI Channel for a voice when the volume of that voice reaches zero. This channel is then allocated to other voices which have not been allocated a MIDI Channel. This maximizes the possible use of limited resources, and enables you to put many fancy effects into your pieces. Implementing it in this way means, however, that you cannot be certain which MIDI channel will be taken by a Voice when the piece plays (unless you use the MIDI Channel parameter).

If the **MIDI Channel Reallocation** parameter is set to Yes, then only other voices which have ZERO volume when the channel is dropped may be reallocated that spare channel. To use this option, you can ensure that voices switch in smoothly : provided that you make sure that volume envelopes do not overlap in time - i.e. you must ensure that the volume of the second voice is zero when the volume of the first voice drops to zero - or the second voice will not be able to take over the channel of the first voice.

If **MIDI Channel Reallocation** is set to No, then any other voice which does not have a MIDI Channel may be allocated the free MIDI Channel - whatever the value of that voice's volume level. This may lead to voices suddenly jumping in with high volumes, without having had a chance to build up their volume gracefully. However, this means that you do not have to be totally accurate with your alignment of volume envelopes.

---

### See also

[MIDI Channel](#)

## MIDI Channel Sharing

---

### Location

View 6 

### Description

Generally, if more than one voice is created with the same patch/instrument, you may want them to share the same MIDI Channel to allow more MIDI Channels to be available for other voices with different patches/instruments. However, you will more than likely want to have different effects envelopes for each voice, even though they may be playing the same instrument, so you will not want the voices to share MIDI Channel (refer also to the Glossary).

### Range of Values

Yes or No

### Typical value

No

### Notes:

Consider the example where you have 2 voices playing piano, with varied attack and decay envelopes. If both pianos share the same MIDI channel, then both would share the same effects - and you may NOT want this !

In this case, ensure that you create each piano voice with the **MIDI Channel Sharing** parameter set to No.

Note that if you have voices with the same patches/instruments sharing a MIDI channel, and which happen to use different volume or pan(stereo) envelopes within a piece, then the system prevents MIDI Channel controller conflict and ensures that the volume and stereo envelopes of only ONE of these voices is used to dictate what happens on that MIDI Channel.

To use another example, what happens when you have more than one voice sharing a MIDI channel, and both voices play the same note ? You do NOT get two notes played. This is another example of where you might not wish voices to share the same MIDI Channel.

## Modulation (1)

---

### Location

View 7 

### Description

Sets the value of the modulation of a voice (for soundcards that support it). Set this to -1 if you want no modulation. The parameter will apply to the voice throughout the piece.

### Range of Values

-1, 0 to 127

-1 is off and means that micro modulation will not occur.

### Typical value

0

## Mutate No. Bars

---

### Location

View 5 

### Description

Determines how many bars the voice will go before mutating (for Fixed Pattern or Repeat Bar Voice types only). If this is set to zero the voice will never mutate. If set to 2 for example, it will apply the mutation every 2 bars (provided the Mutate No. Bars Range parameter has been set to 0, otherwise it will randomly vary according to the range used). When using this in conjunction with a FixedPattern Voice Type make sure the parameter is set to the same number of bars as the pattern.

### Range of Values

0 to 100

### Typical value

3

---

### See also

[Mutation Factor](#)


[Mutate No. Bars Range](#)



## Mutate No. Bars Range

---

### Location

View 5 

### Description

Defines the additional range of bars over which the Mutate No. Bars parameter will operate. I.E. if the Mutate No. Bars parameter is set to 5 and the Range parameter set to 3, then the voice will mutate every 5 to 8 bars (chosen at random, and when it comes to the end of the selection/bars repeated it will choose a value again).

### Range of Values

0 to 100

### Typical value

3

---

### See also

[Mutation Factor](#)

[Mutate No. Bars](#)

## Mutation Factor

---

### Location

View 5 

### Description

Determines the degree of mutation for a FixedPattern or RepeatBar Voice Type if the Mutate No. Bars parameter has been set. The parameter affects the likelihood any note will change over the space of a bar. The parameter takes values between 0 and 1000, where a value of 1 represents 1/10 %. Therefore, if you set the value to say 200, every note being played from a pattern by that voice will have a 20% chance of changing (assuming you have set the Mutate No. Bars parameter to 1 and the Mutate No. Bars Range to 0).

The new notes chosen to play will be selected from the range of possible notes available as governed by the Harmony, Scale, Rhythm and Next Note rules. The Mutation parameter will insert rests as often as it inserts notes.

### Range of Values

0 to 1000

### Typical value

150

**Note 1:** The mutation developed by a pattern is remembered by the SKME. If you have a FixedPattern voice which is playing a pattern group containing 2 patterns, the voice can swap between these two patterns as it plays. If the first pattern has developed a certain mutation and the SKME chooses to play the second (it will choose patterns at random from the pattern group, throughout the piece), it will store the mutation of the first pattern. When the first pattern comes to play again it will play the pattern as it left off - and NOT the original pattern stored in the piece. The reason for this is to allow piece to develop freely.

**Note 2:** If you have a pattern that is 10 notes long and the Mutation Factor is say 5 (=0.5% chance of mutation per note played, or 99.5% chance the note stays the same), then for every bar played there is a chance of 0.995 to the power of 10 ( $0.995 * 0.995 * 0.995 * 0.995 * 0.995 * 0.995 * 0.995 * 0.995 * 0.995 * 0.995 = 0.95$ ) i.e. 95% that no note will change. On a similar principle, after 10 bars there is a chance of only 60% that no note will have changed (or a 40% chance that it will have changed). (These figures assume you have set the Mutation No. Bars to be 1, i.e. changing every bar).

By the same principle you can arrive at some interesting figures below (all assume a pattern of 10 notes and Mutation set to occur every bar):

Mutation Factor	Bars	Chance of a note in the pattern changing over bars given
5	1	5%
50	1	40%
5	5	23%
50	5	93%
5	10	40%
50	10	99.4%%

---

### See also

[\*\*Mutate No. Bars\*\*](#)

**Mutate No. Bars RangePatterns**

## Mutation of Rhythm

---

### Location

View 5 

### Description

Lets you determine whether or not you want to allow rhythmic values of patterns (or phrases) to be mutated by the **Mutation Factor** parameter. If set to Yes, then when a phrase mutates (determined by **Mutation Factor**) the duration of notes can be changed as well as the note pitches, according to the rhythm rule in use by the voice. If set to No, then the rhythmic content of the notes in the phrase will never change, only the note pitches. You can imagine this by thinking of a number of containers in a line stuck in some sand. The container never moves, but you can put different notes in them. The only proviso is that for this parameter the SKME treats a rest like a note. - that is, where a rest is really a note with specified duration but no pitch. Therefore, a rest within a phrase can mutate into a note with a pitch (and vice-versa - a note could become a rest for a while), but the duration of this note will not change. If you want to avoid this happening, make sure your pattern contains no rests.

### Range of Values

Yes or No

### Typical value

Yes

---

### See also

[\*\*Mutation Factor\*\*](#)

## Mute

---

### Location

Each of the 13 views in the Power View and in Voice X view. See [Common parameters](#).

### Description

Mutes the currently playing voice. It works by setting the velocity to a minimum value (1), and it is possible you may still be able to hear it very faintly. Click your left hand mouse button in the cell in the Mute column corresponding to the voice you want to Mute: a tick means the voice is active; m means it is muted. Alternatively, move to the square with one of the keyboard arrow keys and press the Enter button to toggle the mute on and off.

*SOLO*: Closely related to the muting functionality is the Solo capability. To Solo a voice, depress the CTRL key and select the mute cell with the left hand mouse button. This will mute every other voice in the piece, effectively soloing the voice. To de-mute all the voices use the CTRL+ LHS mouse button combination again (alternatively use the / or \ keys in the mute cell).

### Range of Values

tick or m

### Typical value

tick

## Next Note Rule(s)

---

### Location

View 6 

### Description

The Next Note rule determines for a voice how close any new note is likely to be in terms of pitch to the last note played by that voice. It will guide selection based on the pitches of notes possible as determined by the voices Scale and Harmony rules. You can select which rule is used for a voice from the list of already pre-defined Next Note rules (which you can add to/modify in the Next Note rule Window by selecting the Next Note rule button on the top toolbar or selecting Groups Next Note Rules from the menu). The SKME calls on the probabilities defined in this rule when it comes to determining what the next note to be played by the voice will be. If the value is set to ? it will use the Next Note rule defined at the piece level. Each voice can have its own distinct Next Note rule.

### Range of Values

Can be set to any Next Note rules you may have created or a ?

### Range of Values

If no rule specified it will use the Default rule.

### Typical value

Default Next Note Rule

### See also

[RulesRhythm Rule](#)

## Next Note Rule(s)

---

### Location

Piece view 1 

### Description

The Next Note Rule (or list of rules) the piece uses. In View 6 set it to ? if you want it left up to the piece to decide. You can set up a list of pre-defined Next Note rules from which a choice can be made every time the piece plays.

### Range of Values

Any one of the Next Note rules you have available for the piece, as defined in a list.

### Typical value

Default Next Note Rule

---

### See also

[Rules](#)

[Next Note Rule](#)

## Next Note Rule(s) Value

---

### Location

Next Note Rule view 

### Description

Displays the Next Note Rule window, where you can see the probability bars for each Next Note rule defined/available. The probability bars determine the likelihood of the next note (i.e. the musical interval the next note played will be from the note just played).

### Range of Values

Each bar can range from zero to maximum height, where the higher it is the more likely a note is to play.

### Typical value

Mid range

---

### See also

[Rules](#)

[Next Note Rule](#)



## **Pan (10) \*\***

---

### **Location**

See the [Envelope View](#)

### **Description**

This envelope determines the Stereo (pan) position of a voice as the piece plays.

### **Range of Values**

0 to 127 (64 is the value for dead center, 0 is full left, 127 is full right)

### **Typical value**

64

---

### **See also**

[Envelopes](#)

[Envelope Tools](#)

## Patch

---

### Description

The patch (instrument) you want the voice to play. See [Common Parameter view](#).

### Range of Values

- 1 to 128 for instruments or D1 to D128 for drums (patches with standard GM names are listed)
- Capital tones can be added by adopting the syntax `[Patch].[Bank]`, e.g. 6.8 is patch 6 bank 8, (generally another Electronic Piano No.2 patch), or D73.1 (Drum sound 73 bank 1)
- SoundFont compatible Banks and Advanced Gravis patches are supported in the same syntax `[Patch].[Bank]`, e.g. 27.48 is patch 27 bank 48 (see also the AWE32 and Gravis parameters as SSEYO Koan Pro is 1 based and SBKs are 0 based) or D43.1 is Drum sound 43 bank 1.

**Note:** Drum sounds (i.e. Percussive section in Vienna) in SoundFont compatible banks are treated as instrument number 128 (in 0 - 127 patch nomenclature), so a SoundFont compatible bank can contain its own drum bank. If you set up patches to use these drum sounds (e.g. you put a Snare sample in the percussive section of your SBK at instrument 38, you would refer to it in your Koan piece as D38.1 if you were using bank 1) and none are defined within the SoundFont bank, the drums played will default back to those available within the drum bank defined in the [Drum Set](#) parameter.

**Note:** If you use SoundFont bank drums you must define all drums in the piece as appearing to be in the bank - even if they are not (e.g. all drums would be DXXX.1 say, where XXX is the patch number). Otherwise, they can automatically default back the standard drum banks if the last drum patch the SKME looks at is a non-bank patch.

### Typical value

015 -Tubular Bell

Some instruments sound better than others in ambient pieces, and although most soundcards support General MIDI (GM), the pieces will sound different on every soundcard depending on the quality of their patches.

SSEYO Koan Pro also supports Capital tones (part of the GS standard) where banks of sound other than the GM sounds can be triggered, if your soundcard has them. GS compatible soundcards generally have a bank containing extra sounds *related* to the main GM patch (which is always located in bank 0). For example, patch 6 in GM terminology is Electronic Piano No 2 (located in bank 0). GS soundcards also generally have another Electronic piano No 2 patch in bank 8, which is related to this sound.

To add an instrument that supports the Roland GS Capital tones, Creative Labs AWE32 SoundFont compatible Banks or Gravis Patches, simply select the instrument area with the left mouse and type in the patch and bank you want with the syntax `[patch].[bank]`, e.g. 6.4. When providing SBKs, it is always best to configure them so that someone without an AWE32 can play the piece and it still sounds good (the patches default to bank 0 if no AWE32 is present). This means assigning SoundFonts to the most appropriate patches in your SBK.

When constructing pieces for others to use, keep in mind there are many different soundcards available. The quality of patches varies enormously across soundcards/synths.

---

### See also

[Adding/ modifying an instrument](#)  
[Polyphony and the Drum Set](#)  
[AWE32 SoundFont Banks](#)



## Patch Change Bars

---

### Location

View 2 

### Description

Determines how often the Patch parameter for a voice will change during the playing of a piece. The way it works is that after the number of bars set for the parameter the SKME will make a random selection from the list of defined patches for that voice (if a list has been defined).

### Range of Values

0 to 100 (values in bars)

### Typical value

10

This parameter is only for use where you have defined a list of instruments from which to choose. A value of 0 will mean it never changes. The prime purpose of this parameter is to allow you to easily inject some variety into the piece by changing the instrument for a particular voice, as the piece plays.

This is most effective if for your voice you use instruments that are similar. I.E. if you have a list of Clean Guitar, Jazz Guitar, Acoustic Guitar and Mute Guitar the SKME will choose at random which out of these is chosen to play next. This parameter mean you do not have to define a voice for each and every instrument you want to hear throughout a piece.

It may be best not to change the patch too often so that the piece has a chance to settle in.

---

### See also

[Patch Change Bars Range](#)

## Patch Change Bars Range

---

### Location

View 2 

### Description

Determines the range (in terms of bars) over which the Patch will change if the Patch Change Bars parameter has been set.

### Range of Values

0 to 100

### Typical value

5

---

### See also

[Patch Change Bars](#)

## Pattern Use %

---

### Location

View 5 

### Description

Dictates how likely it is that the pattern group specified with the Patterns parameter will be played. Pattern Use Percent is the percentage average number of bars to play a fixed pattern (the rest are composed normally, or perhaps repeated). If this is set to 100 then one of the patterns in the selected pattern group will play every time. If any other value is set then there will be bars where the pattern does not play and the normal rules used by the voice will take over.

### Range of Values

A percentage from 0 to 100

### Typical value

50

### Note:

You can define a number of patterns within a pattern group, that the SKME will choose from every time it gets to the end of the pattern.

---

### See also

[Patterns](#)

[Mutation Factor](#)

[Mutate No. Bars](#)

## Patterns

---

### Location

View 5 

### Description

Allows musical seed phrases of any length to be used in a piece, around which the SKME can compose in real time. These patterns can be mutated, allowing you to start a piece with a seed phrase, and have it change over time as the piece plays.

This parameter also effectively allows the construction of entire pieces using the Mozart rolled dice principle where each pattern acts as a phrase that can be chosen at random. Most often you will employ a balance of the two.

To use a pattern your voice must be a FixedPattern voicetype. At play-time, the pattern is chosen from a subset (if present) of patterns contained within the **pattern group** (a collection of patterns).

Two types of patterns can be created, **Rhythm only (R)** or **Frequency and Rhythm (B)** (Both). A special data format is currently required for this parameter which defines frequency (pitch) and note length values in a text syntax. However, it is not necessary to know this format while using the [Pattern Editor](#).

### Range of Values

The actual string length (the number of text characters that can be used to describe a pattern group) supported by the Patterns parameter is up to around 32,000 characters; this can contain as many patterns as you wish, based on the syntax given below. Each pattern can be as long as you wish within the character limit. Patterns support notes outside an octave but the value of 1 always represents the Root note, as governed by the Pitch parameter, meaning that negative FREQUENCY values have no meaning. If you enter a pattern that does not constitute an integer number of bars (i.e. 3 1/2 bars) the SKME will continue the pattern with rests until it reaches the end of the pattern, and can start playing it again (unless you have set the Meter of the voice to be 1:4 - see Meter).

### Typical value and format of a pattern group:

< [% relative time it will play] [B or R] [pattern description] >< [% relative time it will play] [B or R] [pattern description] >.....

E.G.

Pattern 1

Pattern 2

<80 **B** 60 1 30 2 30 3 60 7 60 4> <60 **B** 30 1 30 1 30 3 30 3 60 70 60 4>.....

### Notes:

- Each pattern group can contain one or many patterns. Having many in a pattern group will allow you to set up different variations on a melody or on a drum beat; these variations each have a percentage chance of being played.
- The Pattern will contain pairs of values for a **Both** type (see below, example 1), or single values for a **Rhythmic** type (see below, example 2)- and you must put 1 space between each number if editing by hand.
- It is possible to declare lists of pattern groups from which voices can choose to play. In this case, each time the SSEYO Koan piece plays, the appropriate voice will choose to play one of these pattern groups, each pattern group having the capacity to contain many patterns as mentioned above (see below for further details). The pattern group used by the voice will only be changed on re-starting the piece.
- The patterns are read through in real time, so if you make a change to a pattern whilst a piece is playing you will hear it the next time that pattern is played (if it is a one bar pattern, then that will be the next bar).
- If your pattern does not include enough notes to reach the end of a bar the pattern will be filled

out with rests to give it enough notes to reach the end of the bar (although you can set the Meter at the voice level).

■ If you have set up your piece to use a list of meters (time signatures, i.e. 3/4 6/8 etc.) the pattern will be filled out with rests to give it enough notes to match up to the new meter.

## IN DEPTH BACKGROUND ON PATTERN STRINGS

The **Patterns** parameter is where the patterns are stored.

A pattern definition looks something like one of following, where the difference is the use of the **B** (both RHYTHM and FREQUENCY) and **R** (RHYTHM only) characters:

### Example 1 - Both RHYTHM and FREQUENCY (**B**)

<100 **B** 60 1 60 2 60 3 30 0 30 2 15 5 15 6 15 0 15 1>

This pattern group has only one pattern in it and it will play 100 percent of the time, where 100 is the percentage **relative** probability of this pattern (see below) being chosen when a number of patterns are included in this pattern group. The pattern contains information on both Rhythm and Frequency and the values are given in **pairs** (where the first of a pair is the duration value and the second is the frequency information). Note that a Frequency value of 0 is used to indicate a **rest**. The **Frequency** values correspond to available values in the Scale Rule applied to this voice. i.e., if your scale rule allows every note in the scale to be played, each interval in the pattern would represent a semitone. If, however, your Scale rule only allowed the Root note and a 5th, then a value of 1 would represent the Root Note, 2 would represent a 5th, 3 would represent the next available note - being an octave above the root - and so on. The syntax for the **Rhythm** values is outlined in the second example, below.

### Example 2 - RHYTHM only (**R**)

<100 **R** 60 60 60 -30 30 >

This pattern will play 100 percent of the time, where 100 is the percentage **relative** probability of this pattern (see below) being chosen when a number of patterns are included in this pattern group. The pattern is **Rhythm** and any note pitches may be played by the KME, provided they follow the indicated rhythm and obey the Rules used by the voice. The number 60 indicates a 1/4 note (crotchet), other numbers indicate the appropriate scaled multiple (e.g. 15 is one quarter of a 1/4 note (crotchet), i.e. a 1/16 note (semiquaver) - see below). Rests may be indicated by using a negative in front of the number. In the above example -30 represents a rest of a 1/8 note (quaver).

Note that the percent value in a pattern definition is a **relative** probability of being chosen when a pattern group contains more than 1 pattern.

Value	Duration (US)	Duration (UK)	Negative value
240	Whole note (1)	Semibreve	Rest
180	Dotted half note (1/2.)	Dotted minim	Rest
120	Half note (1/2)	Minim	Rest
90	Dotted quarter note (1/4.)	Dotted crotchet	Rest
60	Quarter note (1/4)	Crotchet	Rest
45	Dotted eighth note (1/8.)	Dotted quaver	Rest
30	Eighth note (1/8)	Quaver	Rest
15	Sixteenth note (1/16)	Semiquaver	Rest
20	Triplet quarter note (Tr)	Triplet crotchet	Rest

### Notes:

1 Although the Rhythm Rules do not support note values over 240 the Patterns parameter does. It also supports notes of any duration/values i.e. 23. You can manually enter patterns with rhythmic values being any number between 1 and 15,000, thus allowing for really fine tuning and special rhythmic effects. The Pattern Editor will only allow entry of notes with a resolution of 15. i.e. 45, 105, 15, 60 etc.

2 All pieces in time signature X/8 are measured in triplets, meaning that note values of 20 are used for note values below a quarter note (crotchet), i.e. 12/8 counts as 12 beats of a triplet, meaning that the total bar length is  $12 * 20 * 3 = 720$ . The total bar length for 5/4 on the other hand is simply  $5 * 60 =$



300.

### **IN DEPTH BACKGROUND ON Multiple Patterns**

SSEYO Koan Pro provides a powerful feature where you can have multiple patterns in your pattern group. One pattern will be chosen from this group of patterns, based on the relative likelihood of each pattern occurring, when the SKME next plays a pattern. This effect can mimic the roll the dice approach provided by other auto-accompaniment programs - however, with the SKME the velocity and volume envelopes mean that this can create very realistic sounding players and adds a new dimension to this approach.

#### **Example 3 - multiple patterns in a pattern group**

<80 B 60 1 30 2 30 3 60 7 60 4><60 B 30 1 30 1 30 3 30 3 60 70 60 4><40 B 240 0>

The pattern group above contains 3 patterns, the first with an 80% chance of occurring, the second with a 60% chance of occurring and the third with a 40% chance of occurring every time a bar is played. As the probabilities are all relative, the total value is added up (80+60+40) and each patterns likelihood of being played is measured against this total. You could have given them each a value of 100, all that would happen is that they would all have had a 33% chance of playing -  $100 / (100+100+100)$ .

**Note:** You will notice the 3rd pattern is effectively a bar long rest. This allows you to create more space in a piece.

---

#### **See also**

[Pattern Editor](#)

[Pattern Bars %](#)

[Mutation Factor](#)

[Mutate No. Bars](#)

[Scale Rule\(s\)](#)

## Phrase Gaps

---

### Location

View 1 

### Description

Minimum number of rest notes that separate the phrases composed by the SKME for Rhythmic and Ambient Voice Types (or mutated RepeatBar and Fixed Pattern Voice Types). The rests are generated according to the Rhythm rule used by the voice, in the same way as notes are generated. This means if your Rhythm rule only allows 1/16th notes, then each rest will be for a 1/16th note.

### Range of Values

Depends on what you are trying to achieve, the bigger the number the less busy the piece

### Typical value

3

---

### See also

[Phrase Gaps Range](#)

## Phrase Gaps Range

---

### Location

View 1 

### Description

Range of the number of rest notes to be expected between a phrase, over and above the minimum value

### Range of Values

Depends on what you are trying to achieve, the bigger the number the less busy the piece

### Typical value

8

---

### See also

[Phrase Gaps](#)

## Phrase Length

---

### Location

View 1 

### Description

The minimum number of notes that are strung together in a phrase. The Phrase Length parameter gets its note durations from the Rhythm rule used by the voice. For instance, say the Phrase Length parameter had a value of 5 and it was using a Rhythm rule that equally allowed only quarter notes (crotchets) and eighth notes (quavers). Every time a note was played (and 5 would be played together in a phrase, with no rests in between the notes) it would choose to play a note with either of those durations. After this, it would use the Phrase Gaps parameter to determine how long to wait before playing another phrase. The way to break up a phrase to allow rests in the middle is to use the Phrase Note Rest % parameter.

### Range of Values

0-32,000

### Typical value

2

## Phrase Length Range

---

### Location

View 1 

### Description

Range of number of notes to be expected in a phrase over and above the minimum value.

### Range of Values

1-32,000

### Typical value

6

---

### See also

[Phrase Length](#)

## Phrase Note Rest %

---

### Location

View 1 

### Description

Determines how many notes to leave out when a phrase is being generated. This parameter defines the probability that one of the notes generated in a phrase will be a rest instead. The rest value will have the same duration as would the note it is replacing. In addition to allowing a thinning out of notes it will also break up phrases (which are not otherwise broken up, as the SKME treats a phrase as a continuous stream of notes) so as to allow to sound more natural. This parameter works with all Voice Types and uses the Rhythm rule defined for the voice.

### Range of Values

0 - 100%

### Typical value

10%

## Piece Demo Time

---

### Location

Piece view 2 

### Description

Allows a piece to be foreshortened and stop playing before it reaches its natural end as defined in the Piece Length parameter.

### Range of Values

1 to 32,000 seconds (8 hours)

### Typical value

60 seconds (1 minute)

This is important for those occasions where you want to release a piece (normally in SKP format) and only want the person who gets it to be able to sample it in a try-before-buy approach. Once they have heard it and decide they like it, you can supply them the full piece that has no foreshortening. This parameter means you do not have to adjust the Piece Length, which would affect how the whole piece sounds as the envelopes would then apply over a shorter time period.

---

### See also

[Piece Length](#)

## Piece Details

---

### Location

Piece Details view

### Description

Enter Piece, Author and Copyright information relating to the piece together with your description of the piece (Piece Notes). The Piece Notes can be anything you like, from text describing the mood to the patches you used. Basically anything you think someone else is likely to read. Think of them as CD sleeve notes.

There are also 2 tick/check boxes you can select or leave deselected: checking a tick box means you agree with the statement next to it, leaving a tick box unchecked means you disagree with the statement next to it.

Author allows MIDI file recording of this piece  
If checked, this enables a user with SSEYO Koan Plus to make MIDI file recordings of the piece. Should you supply users your piece in a SKD file format, they could check or uncheck this box. If you have this box checked but leave the box below unchecked you are effectively saying you are allowing them to make recordings but you are reserving to yourself or company any rights or potential rights associated with recordings of the piece. You will always own the copyright on any SSEYO Koan file you produce (i.e. SKP, SKD or SKT files created by SSEYO Koan Pro as opposed to recordings of them as mentioned above) unless you specifically assign the copyright to another party.

Author relinquishes all present and future rights in and title to MIDI file and other recording of this piece.

If checked, you are giving away any rights to MIDI file and other recordings made of this piece - this is primarily aimed at people creating SKP/ SKD pieces for their customers where they want their customers to be able to create and own their own content, this being one of the main benefits of SSEYO Koan technology.

**Note:** The Piece Author can be different from the Copyright holder. For example, Band X records an album for Record company Y, Band X being the Author/ composer. In the contract with the artist Record company Y states that they own the copyright on any recordings or materials produced.

### Range of Values

The Piece, Author and Copyright text boxes will each accept up to 255 characters. If your details/notice do not all fit on the screen, simply click on the field with the left mouse button and drag it to the left.

The Piece Notes text box can accept text descriptions up to 32,000 characters, which equates to around 800 lines of text. Each line takes up 2 characters in addition to the text added, be it blank or not.

### Typical value

ECO2

SSEYO Ltd

(c) Copyright 1995 SSEYO Ltd. All rights reserved.

This piece is about etc.....



## Piece Gap

---

### Location

Piece view 1 

### Description

Minimum rest time between pieces, in seconds. This is where you set up how long you want the SKME to wait before it plays the next piece. This is particularly useful if you want to send someone a SSEYO Koan album that follows a certain sequence.

### Range of Values

0 to 10

### Typical value

0

Note: It is generally best to have this small, or zero, so that pieces load up and play quickly.

---

### See also

[Piece Gap Range](#)

## Piece Gap Range

---

### Location

Piece view 1 

### Description

Maximum rest time between pieces, in seconds relative to the minimum value.

### Range of Values

0 to 20

### Typical value

0

**Note:** It is generally best to have this small, or zero, so that pieces load up and play quickly.

### See also

[Piece Gap Range](#)

## Piece Length

---

### Location

Piece view 1 

### Description

Length of the piece in seconds. Most often you will create pieces that are around 5 to 10 minutes long, but we allow you to create pieces up to 8 hours long.

### Range of Values

1 to 32,000 seconds (around 8 hours)

### Typical value

300

### Notes:

Envelopes are around 300 pixels wide and contain 100 data points - these data points are spread across the length of the piece. The values of envelope parameters are interpolated between the various data points, to enable smooth sounding changes. For very long pieces the changes that take place may seem to be very slow, i.e. say you start an 8 hour piece at zero volume (data point 1) and ramp it to maximum at data point 2 (this would take 288 seconds to ramp up) . Therefore, for these situations where you do not want slow changes we have added the Volume Step Change parameter. This allows you to switch off the interpolation and jump between data points immediately. In the above case the volume would immediately change from 0 to maximum after 288 seconds.

## Piece Length Range

---

### Location

Piece view 1 

### Description

Range expected in piece length above the minimum set by the Piece Length parameter.

### Range of Values

1 to 32,000 seconds

### Typical value

100

---

### See also

[Piece Length](#)

## Piece Random Scale

---

### Location

Piece view 2 

### Description

If this parameter is set to Yes, it allows the piece to randomly select from and change to another scale from a list of scale rules (if present), according to the Piece Root Bars parameter (meaning it can change at the same time as the Piece Root). Note that in this case the Scale Rule must be defined at the Piece level (i.e. all Scale Rules at the voice level are defined as ?) AND there must be a list of Scale Rules defined. Combines with other Piece Root parameters.

### Range of Values

Yes or No

### Typical value

No

If you have say 3 scale rules defined at the piece level (Major/Minor/Pentatonic) then all voices with Scale rule set to ? could simultaneously choose one of the list of piece level Scale rules next time they are due to change, according to the Root Change Bars Between parameter.

### See also

[Piece Root Envelope](#)

[Scale Rule\(s\) Availability](#)

## Piece Root Bars

---

### Location

Piece view 2 

### Description

Number of bars before the Piece Root changes. The Piece Root is the pitch around which everything revolves. In musical terms it is called the root of a scale, e.g. in Do, Re, Me, Fa, So, La, Ti, Do the first Do is the root. There can be only one root for a piece, but every voice can have different Scale rules.

### Range of Values

0 to 32,000

### Typical value

10

If the Piece Root Bars parameter has a value of 10, the piece could start with a piece root of say A, and then after 10 bars it will change to another root, maybe G (depending on values for the other Piece Root parameters). Use of this parameter can make pieces more varied and interesting, as they dont stay in a single fixed key for the duration of the piece.

### See also

[Piece Root Change](#)

[Piece Root Bars Range](#)

## Piece Root Bars Range

---

### Location

Piece view 2 

### Description

Range expected in the number of bars above the minimum, as defined by the Piece Root Bars parameter value.

### Range of Values

0 to 32,000

### Typical value

5

---

### See also

[Piece Root Change](#)

[Piece Root Bars](#)

## Piece Root Change

---

### Location

Piece view 2 

### Description

Allows you to choose whether or not you want the Piece Root to change in a piece. If you select Yes, the Root can change during a piece, according to the values set in the Piece Semitone Shift parameter.

### Range of Values

Yes or No

### Typical value

Yes

---

### See also

[Piece Semitone Shift](#)

[Piece Random Scale](#)



## Piece Root Envelope \*\*

---

### Location

Piece view 2 

### Description

Enables a specified envelope of scale roots to be followed through a piece. As the piece plays it would move through various pre-defined roots, allowing some structure to be adopted for the piece.

### Range of Values

0 to 11 throughout the piece.

### Typical value

0

**Notes:** If the value is 0, then the scale root chosen can be any value provided by the normal algorithm in Piece Semitone Shift. Any other value is referenced to the Scale Root defined when the piece commences playing. For instance, if the Scale Root is A, then 1 represents A, 2 is Bb, 3 is B etc. This parameter can be cross matched with the Scale Rule Availability parameter to effectively allow you to define the scale and the key throughout the piece.

---

### See also

[Piece Root Change](#)

[Piece Semitone Shift](#)

[Piece Random Scale](#)

[Scale Rule\(s\) Availability](#)

## Piece Roots

---

### Location

Piece view 2 

### Description

The Scale Root around which the piece is played. Every time a piece plays it can choose one of the values in this string as the root from which to start playing the piece. If you always want to have the piece start with the same Root, simply choose the root you want, as it is not necessary to have a string of values. This parameter supports lists, just as other parameters.

### Range of Values

Ab, A, A#, Bb, B, C, C#, Db, D, D#, Eb, E, F, F#, Gb, G, G#

### Typical value

C

You can edit these values with the LHS mouse button. Just click in the parameter and enter the letters as normal text.

---

### See also

[Piece Root Change](#)

[Piece Semitone Shift](#)

[Piece Random Scale](#)

## Piece Semitone Shift

---

### Location

Piece view 2 

### Description

Indicates the number of semitones to shift the Piece Root when it is due to change, according to the Piece Root Bars parameter value.

### Range of Values

Only used if the Piece Root Change parameter is set to Yes.

Any value from -60 to 60.

### Typical value

7

**Note:** This is a fixed value, so each time the root changes it will go up or down by this value. If you set it to 7 for instance, you can have a cycle of fifths where each scale Root is a major fifth above the last. To have an random next scale root, see Piece Semitone Shift Range.

---

### See also

[Piece Semitone Shift Range](#)

[Piece Root Bars](#)

## Piece Semitone Shift Range

---

### Location

Piece view 2 

### Description

Range of semitones by which the Piece Root can change over and above the fixed, minimum value set with the Piece Semitone Shift parameter value. Use of this parameter depends on what you are trying to achieve, but allows for a random change of Piece Root to give more diversity to the piece.

### Range of Values

0 to 12

### Typical value

3

---

### See also

[Piece Semitone Shift](#)

## Pitch

---

### Location

View 1 

### Description

When any note is played this is the minimum pitch it will have (unless it is a drum sound, where the pitch corresponds to a drum type, e.g. bass drum or hi hat).

### Range of Values

Depends on range best suited to sound card (refer to manual), but always within the range 0 to 127

### Typical value

35 (60 is middle C)

## Pitch Bend Offset

---

### Location

View 8 

### Description

Purpose is to tune / de-tune an instrument before applying the micro pitch changes (which will be based around this as a base line).

### Range of Values

-8192 to +8191 (-1000 ths of a tone)

Notes : Uses the pitch wheel controller

### Typical value

Default : 0

---

### See also

[Micro controllers overview](#)

## Pitch Bend Sensitivity

---

### Location

View 8 

### Description

This determines the pitch bend to be achieved with full application of the pitch bend controller (the Micro Pitch Change/ Micro Pitch Range controllers) for this MIDI channel. The value of the parameter is the maximum number of semitones (i.e. from 0 to 24 semitones, default is 2 semitones) that the Micro Pitch Range parameters can bend the pitch.

### Range of Values

0 to 24

### Typical value

Default : 2 (0 is OFF)

---

### See also

[Micro Pitch Change](#)

[Micro Pitch Range](#)

[\*\*Micro controllers overview\*\*](#)

## Pitch Range

---

### Location

View 1 

### Description

Range of expected pitches available above the minimum value, set with the Pitch parameter. If you set this to a very high values you might find it difficult to hear the voice for some patches.

### Range of Values

11 - 127

### Typical value

24

The reason the minimum value is 11 is because each Scale or Harmony rule operates on the Root plus 11 notes, this representing 1 octave.

---

### See also

[Pitch](#)



## Portamento (65)

---

### Location

View 7 

### Description

Applies a fixed amount of portamento to your instrument, meaning the instrument will smoothly slide from some starting note value to the note it should actually play (should you soundcard support it).

### Range of Values

0 to 127

### Typical value


63 is the mid value which means there is no portamento applied. 127 means the note will slide up to reach the target note, 0 means it will slide down to reach the target note. The larger the value of portamento the further away from the target note is the starting note. This parameter should be used sparingly.

**Note:** There is no Portamento available on the AWE32, but there is on the SCC1

## Repeat Bar History

---

### Location

View 4 

### Description

Defines how many bars back in the history of a piece SSEYO Koan Pro can look to find bars of a voices music to repeat with Repeat Bars % and Repeat For Bars. If set to 0 and the Repeat Bar Percent and Repeat For Bars parameters have values such that SKME looks to repeat a bar(s), it can repeat any bar(s) out of the last 100.

### Range of Values

1 - 100

### Typical value

2

---

### See also

[Repeat Bars %](#)


[Mutation Factor](#)

[Mutate No. Bars](#)

## Repeat Bar History Range

---

### Location

View 4 

### Description

Defines the range of values that can be used by the SKME and the Repeat Bars Percent parameter for repeating previously bars of music played by a voice. This value is added to that of the Repeat Bar History parameter.

### Range of Values

0 - 100

### Typical value

2

---

### See also

[Repeat Bars %](#)

[Repeat Bar History](#)

[Mutation Factor](#)

[Mutate No. Bars](#)

## Repeat Bars Percent

---

### Location

View 4 

### Description

Determines to what extent the bars selected in Repeat Specific Voice will be repeated. If set to 0 they will never repeat; if set to 50% then they will repeat half the time; if set to 100% they will always repeat. This only applies to RepeatBar Voice Types.

### Range of Values

A percentage from 0 to 100

### Typical value

80

### Notes:

With the RepeatBar Voice Type and Repeat Bars Percent you can create a voice that will repeat music it has played in the past. This is useful if, for example, you wish to have a repeating theme within a piece. The theme that is repeated, consists of entire bar(s) from the past music played by that voice, from within the current piece.

The two controlling voice-level parameters are :

**Repeat Bar History** Selection of numbers in range 0 to 100

**Repeat Bars Percent** Selection of numbers in range 0 to 100

**Repeat Bar History** is the maximum number of bars in the past that a piece will look, for a bar to repeat for a repeating voice. If this value is set to 0, then when a piece decides to repeat a bar's music, it may repeat ANY bar that it has played so far this piece.

For a voice that repeats the same bar of music for the duration of a piece, use the following :

**Repeat Bars Percent** 100

For a voice that repeats 50 percent of its bars of music, and when it does repeat a bar, it repeats only the LAST bar played, use :

**Repeat Bars Percent** 50

**Repeat Bar History** 1

**Important Note:** A RepeatBar Voice Type will be 'composed' from the very beginning of the piece to harmonize with the voices playing from the beginning. This is most noticeable if you set the Repeat Bars Percent to 100%. For example, if you set the Volume and Velocity of this Voice to zero for say the first half of the piece, when the volume comes up the Voice will be playing what was actually composed when the piece first started (as it repeats 100%), and NOT from when the volume or velocity is non-zero. The fact that the RepeatBar Voice Type composes from the beginning of the piece means that the piece will follow the constraints of this voice (and the patterns composed) from the very start of the piece, even though you cannot hear it (i.e. the volume and velocity may be very low).

---

### See also

[Repeat Bar History](#)

[Mutation Factor](#)

[Mutate No. Bars](#)

## Repeat For Bars

---

### Location

View 4 

### Description

Defines the number of bars that will be repeated when the voice type has been set to a RepeatBar. Is used in conjunction with the other Repeat Bar parameters, such as Repeat Bar History.

### Range of Values

1 - 100


### Typical value

2

## Repeat For Bars Range

---

### Location

View 4 

### Description

Defines the range on how many bars will be chosen to repeat with the Repeat For Bars parameter. This value is added to that of the Repeat For Bars parameter.

### Range of Values

0 - 100

### Typical value

2

## Repeat Specific Voice

---

### Location

View 4 

### Description

This is where you define which voice (by its Voice Name) you want the RepeatBar Voice Type to repeat. You can repeat any voice in the piece, even including a Follows or FixedPattern voice. Select the voice you want to repeat from the drop-down combo box. Most often you will set a voice to repeat itself.

**Note:** If you have this value set to ? then the voice will repeat itself. If you want it to repeat another voice you must explicitly define the voice you want it to repeat. You can, of course, create a list of voices from which it can choose to repeat one when the piece starts.

### Range of Values

? (meaning repeat itself), or any voice (via its Voice Name) available in the piece.

### Typical value

Default Voice

## Reverb (91)

---

### Location

View 7 

### Description

Sets the reverb level for any patches played by a voice. This is the value used for the reverb throughout the piece for that particular voice.

### Range of Values

0 to 127 (0 is no reverb and 127 is maximum reverb).

### Typical value

0



## Rhythm Rule(s)

---

### Location

View 6 

### Description

For the voice that uses it, the Rhythm rule determines the likelihood of a new notes duration. You can select which rule is used for a voice from the list of already pre-defined Rhythm rules (which you can add to/modify in the Rhythm rule Window by selecting the Rhythm rule button on the top toolbar or selecting Groups Rhythm Rules from the menu). The SKME calls on the probabilities defined in this rule when it comes to determining what will be the duration of the next note to be played by the voice. Each voice can have its own distinct Rhythm rule.

**Note:** If the value is set to ? it will use the first Rhythm rule defined in your piece (you can see these in the [Rhythm rule window](#)).

### Range of Values

Can be set to any Rhythm rules you may have created or a ?

### Typical value

Default Rhythm Rule

---

### See also

[Rules](#)

[Rhythm Rule](#)

## Rhythm Rule(s) Value

---

### Location

Rhythm Rule view 

### Description

Displays the Rhythm Rule window, where you can see the probability bars for each Rhythm rule defined/available. The probability bars determine the likelihood of a note playing being of a certain duration(i.e. quarter note(crotchet)/ eighth(quaver)note etc.)

### Range of Values

Each bar can be from zero to maximum height, where the higher it is the more likely it is to play.

### Typical value

Mid range

---

### See also

[Rules](#)

[Rhythm Rule](#)

## Scale Rule

---

### Location

Piece view 1 

### Description

Determines which Scale rule the piece uses as a default (in the event of no Scale rules being defined at the voice level), and is selected from the list of already defined Scale rules. It is also used to create a list of Scale rules (refer to lists) from which the piece can randomly choose a Scale rule with the **Piece Random Scale** parameter.

### Range of Values

If no Scale rules are specified at the voice level (by setting that parameter to ? in View 6), the piece will use the rule defined here for that voice. Each voice can override this Scale rule with its own Scale rule.

### Typical value

Major

---

### See also

[RulesScale Rule](#)

[Scale Rule\(s\) - View 6](#)

## Scale Rule(s) Availability \*\*

---

### Location

Scale Rule view 

### Description

Allows you to define the availability of any scale rule throughout the piece. It is found under the Scale Rule parameter display. It is a property of each Scale Rule defined in the piece.

### Range of Values

If not defined for each Scale rule used by a piece, the default is an envelope with 100% availability throughout the piece.

### Typical value

Envelope with a range of values.

**Note:** This is a powerful feature that allows you to have a predetermined/ random set of shifting Scale rules in a piece, thus building more expression into it (for this to be operative though, you will need to set the Piece Random Scale and Piece Root Bars parameters). For instance, you may have 3 Scale rules defined in your piece; Major, Minor and Minor 7 for example. You can define the availability of each rule so that e.g. the Major rule was 100% available between 25% and 50% of the way through the piece and not available outside these times (accomplished by setting its availability to 0% outside these times). Likewise the Minor at 100% available between 50% and 75% of the way through the piece. If the Minor 7 rule was available at a level of 30% throughout the piece, then when the scale rule changes the SKME will choose between all the available Scale rules according to their relative probability. Thus if 60% through the piece it was time to change the scale the chances would be 1 (100%) to .3 (30%) that it would choose the Minor 7 scale.

---

### See also

[Rules](#)

[Scale Rule](#)

[Piece Random Scale](#)

## Scale Rule(s) Value

---

### Location

Scale Rule view 

### Description

Displays in the probability grid the probability bars for the notes in the scale.

### Range of Values

Each bar can be 0 to 10, where the higher the number means the more likely it is to play.

### Typical value

Mid range

---

### See also

[RulesScale Rule](#)

## Scale Rules(s)

---

### Location

View 6 

### Description

Determines which Scale rule each Voice uses as a default, and is selected from the list of already defined rules.

### Range of Values

If no rule specified it will use the Piece Default Scale Rule, or if specified, each Voice can override this with its own Scale rule.

### Typical value

Minor

If your Koan piece is to use a Scale Rule at the piece level you must define the Scale rule for each voice as a ?. To do this simply select the Scale Rule parameter from View 6 and use the RHS mouse to click on the parameter value. This will call up the Edit Scale Rule Parameters dialog, which is where you edit lists, if present. Make sure you delete every Scale rule and then press Close. You will now be left with a ? for the Scale rule, meaning it is defined at the piece level.

---

### See also

[RulesScale Rule](#)


[Scale Rule\(s\) - Piece A view](#)

## SCC1 Attack

---

**NOTE:** Only relevant for Roland SCC1 soundcard owners.

### Location

View 13 

### Description

Sets the attack level for a voices patch, determining how quickly the sound starts. Generally the patches you get on your sound card will be optimized to sound their best, but fast or slow attacks can create interesting effects.

### Range of Values

-50 to 50. 0 is the default setting for normal attack.

### Typical value


0

## SCC1 Decay

---

**NOTE:** Only relevant for Roland SCC1 soundcard owners.

### Location

View 13 

### Description

Sets the decay level for a voices patch, determining how quickly the patches sound will die away after the note has been played. Generally the patches you get on your sound card will be optimized to sound their best, but fast or slow decays can create interesting effects.

### Range of Values

-50 to 50. 0 is the default setting for normal decay.

### Typical value

0




## SCC1 Release

---

**NOTE:** Only relevant for Roland SCC1 soundcard owners.

### Location

View 13 

### Description

Sets the release level for a voices patch, determining how the note plays when a metaphorical key which has been pressed down is then released. A slow release will mean the sound will die away over a long time. Generally the patches you get on your sound card will be optimized to sound their best, but fast or slow releases can create interesting effects.

### Range of Values

-50 to 50. 0 is the default setting for normal release.

### Typical value

0

## Soft (67)

---

### Location

View 7 

### Description

Defines the softness of the notes played by any instrument in a given voice throughout the piece (provided your soundcard supports this controller).

### Range of Values

0 to 127 (0 is no softness, 127 is maximum softness)

### Typical value

35

Makes the instrument sound like it is played softly, meaning it is great for use in ambient pieces.

## Sostenuto (66)

---

### Location

View 7 

### Description

Defines the sostenuto applied to the notes played by any instrument in a given voice throughout the piece (provided your soundcard supports this controller).

### Range of Values

0 to 127 (0 is no sostenuto, 127 is maximum sostenuto)

### Typical value

35

This is effectively the same as sustain, and affects how smoothly the notes are played.

## Tempo

---

### Location

Piece view 1 

### Description

The selectable minimum tempo at which your piece will play.

### Range of Values

1 to 199 (beats per minute - bpm)

### Typical value

60

---

### See also

[Tempo Range](#)

## Tempo Change

---

### Location

Piece view 1 

### Description

Determines whether you will allow the piece tempo to change or not.

### Range of Values

Yes or No

### Typical value

Yes.

If you allow the tempo to change, changes are governed by the Tempo Envelope parameter. Any changes to this parameter only take effect when a piece is started.

### See also

[Tempo Envelope](#)

[Tempo Envelope Range](#)

[Tempo](#)

[Tempo Range](#)

## Tempo Envelope \*\*

---

### Location

Piece view 1 

### Description

The envelope of the desired tempo throughout the piece.

### Range of Values

Determined by parameters Tempo Minimum and Tempo Range

### Typical value

Anything from 0 to 127

However, the minimum and maximum values of this envelope are set by the Tempo Minimum and Tempo Minimum Range parameters. If these are set to be very close to each other the envelope will have a high degree of resolution and will offer very fine control over the pieces tempo. This envelope can be dragged while the piece is playing to allow manual changes to be made (provide the Tempo Change parameter has been set to yes).

### See also

[Tempo Change](#)

[Tempo](#)

[Tempo Range](#)

[Tempo Envelope Range](#)

[Envelopes](#)

[Envelope Tools](#)

## Tempo Envelope Range

---

### Location

Piece view 1 

### Description

Determines the spread of tempos over which the tempo envelope operates.

### Range of Values

0 to 127

### Typical value

20

Once you have set the minimum tempo with Tempo Minimum, the Envelope Range determines the resolution of the envelope. If the range was 25, then you could vary the tempo by up to 25 bpm throughout the piece; if it was 75 you could vary it by 75bpm.

---

### See also

[Tempo Change](#)

[Tempo](#)

[Tempo Envelope](#)

## Tempo Range

---

### Location

Piece view 1 ▣

### Description

Range of tempos allowed for the piece above the minimum

### Range of Values

1 to 199 (beats per minute - bpm)

### Typical value

20

A tempo will be chosen for the piece when it plays, and this will be somewhere in between the minimum and the minimum plus the range. I.e., if the minimum was 35 and the range 40 the piece could start playing at anything from 35 to 70 bpm.

---

### See also

[Tempo](#)



## Title

---

### Description

Name of the piece

### Range of Values

Text entry, best kept to less than 25 characters


### Typical value

Finding Mellow Spells

## Velocity \*\*

---

### Location

Envelope View 

### Description

Minimum velocity envelope of a voice throughout the piece

### Range of Values

Velocity envelopes are only accessed as a new note is played. For CONTINUOUS control over the absolute volume of a voice through the duration of a piece, use the Volume parameter.

0 to 100 (in the form of an envelope throughout the pieces life). A default envelope is supplied with constant value of 64.

Use the default envelope or edit it to make your own.

### Typical value

64 (default)

---

### See also

[Velocity Range](#)

[Velocity Change](#)

[Velocity Change Range](#)

[Envelopes](#)

[Envelope Tools](#)

## Velocity Change \*\*

---

### Location

Envelope View 

### Description

The velocity change envelope defines how much the velocity of a voice's new note may differ from the velocity of that voice's previous note.

### Range of Values

This variation of a voice's note velocities over time, gives the piece some additional dynamism, and gives the impression of the voice "interpreting" the notes that it plays.

0 to 100 (in the form of an envelope throughout the pieces life). A default envelope is supplied with constant value of 5.

A voice's velocity will never be set outside of the limits determined by the Velocity and Velocity Range parameters.

### Typical value

Default Envelope

---

### See also

[Velocity Change Range](#)

[Velocity Range](#)

[Velocity](#)

[Envelopes](#)

[Envelope Tools](#)

## Velocity Change Range \*\*

---

### Location

Envelope View 

### Description

Range of velocity above the Velocity Change Envelope.

### Range of Values

0 to 100 (in the form of an envelope throughout the life of the piece). A default envelope is supplied with constant value of 5.

### Typical value

Default Envelope

---

### See also

[Velocity Change](#)

[Velocity Range](#)

[Velocity](#)

[Envelopes](#)

[Envelope Tools](#)

## Velocity Range \*\*

---

### Location

Envelope View 

### Description

The 'Range' of velocities that can be expected to occur above and beyond the Velocity envelope.

### Range of Values

0 to 100 (in the form of an envelope throughout the pieces life). A default envelope is supplied with constant value of 10.

### Typical value

Default Envelope

---

### See also

[Velocity](#)

[Velocity Change](#)

[Velocity Change Range](#)

[Envelopes](#)

[Envelope Tools](#)

## Voice (piece view 2)

---

### Location

Piece view 2 

### Description

Simply a list of Voice used in the piece. This parameter is mainly for support purposes and we recommend you do not use it.

### Range of Values

List of all the voices used in the piece.

### Typical value

Piano 1

## Voice Name

---

### Location

See [Common parameters](#)

### Description

This is the name you wish to give to the voice. Type in some text (e.g. PIANO 1) and press enter.

### Range of Values

Any text you want.

### Typical value

Piano 1

## Voice Type

---

### Location

Each of the 13 views in the Power View and in Voice X view. See [Common parameters](#).

### Description

[Rhythmic](#), [Ambient](#), [Follows](#), [RepeatBar](#) or [FixedPattern](#).

### Range of Values

Entirely depends on what templates you are using on which to base your piece.

### Typical value

Rhythmic

---

### See also

[Forcing a voice to play](#)


[Scratch mixing](#)



## Volume \*\*

---

### Location

Envelope View 

### Description

Volume envelope of a voice throughout the piece.

### Range of Values

Use the default supplied or edit it to make your own.

### Typical value

Default envelope.

---

### See also

[Envelopes](#)

[Envelope Tools](#)

## Volume Step Change

---

### Location

View 1 

### Description

The volume envelope normally works by allowing smooth changes in volume throughout the life of a piece. However, there may be times when you want to have a change in volume happen immediately, rather than interpolating between two points on the volume envelope (most noticeable for very long pieces, where volumes change slowly and voices do not come in quickly). In this case, set this parameter to be YES, and changes from one point to another in the volume envelope will happen immediately. For instance, this could be used to cleanly bring in drums in a long piece.

### Range of Values

Yes or No

### Typical value

No

## Wave file

---

### Location

View 2 

### Description

Allows playback of a WAV file in the Koan piece. Any number of voices can be assigned to play WAV files.

### Range of Values

Type in the name of the WAV file and its path. This parameter supports lists.

### Typical value

WAVFILE1.WAV

OR

C:\KOAN\KOANALB\WAVFILE1.WAV

The path to the WAV file can be specified; if not, Koan will look for it in the same directory as the piece.

WAV files are triggered by instructions (notes) sent out by the Koan engine. The actual notes sent out are governed by the voice type (e.g. Ambient, Rhythmic, Fixed Pattern and Repeat Bar) and other parameters such as Phrase Length and Phrase Gaps etc. Once started, a WAV file will continue playing until it reaches its natural end, the piece stops or it is interrupted by a voice *playing the same WAV file*. This could be the same or another voice..

If you play a note that lasts for 10 seconds (this can be achieved with the Ambient and FixedPattern voicetypes) and your WAV file is 5 seconds long it will play for 5 seconds and then start playing again in another 5 seconds (when the next note is played). However, if your WAV file is longer than the note played, Koan will start playing the WAV file again as soon as the new note is triggered. For instance, you have a WAV file of 5 seconds length but your note length is only 2 seconds, this means you will only ever hear the first 2 seconds of the WAV file and it will be clipped short. A way around this is to have long rests between each phrase and make the phrase length 0 so that no notes accidentally clip it:

Parameter	Value
Wave file	WAVFILE1.WAV
Phrase Length	1
Phrase Length Range	0
Rests Btween Phrases	15
Rest Between Phrase Range	5

**Note 1:** All Voicetypes except Ambient and FixedPattern have a maximum note length of 240 (1 measure - a whole note/semibreve).

**Note 2:** A voice can only start playing a WAV file if there is no other WAV file being played at the time - this is a Windows limitation. This means one voice can be playing a WAV file but it will not be interrupted by *another* voice trying to play a different WAV file.

**Note 3:** You can edit the WAV file string directly by selecting the WAV cell with the CTRL+left mouse button, or selecting the cell and pressing CTRL+ENTER. This brings up the text string behind the dialog for you to edit.

---

### See also

[Ambient Duration](#))

[Phrase Gaps](#)

[Phrase Gaps Range](#)

Phrase Length

Phrase Length Range

Forcing a voice to play

## Voice

---

### **Description**

Simply a list of all the Voices used in the Piece.

### **Range of Values**

Any number

### **Typical value**

5 different voices

## Polyphony and the Drum Set

---

Polyphony - playing of multiple instruments at the same time (concurrently).

All soundcards support different levels of Polyphony (generally reaching up to around 32 concurrent voices), but Windows 3.1 puts a limit on how many MIDI channels can be triggered simultaneously, this being 16.

SSEYO Koan Pro composes music one MIDI channel at a time, and does not support chords *within* a voice, meaning that for voices with *different* instruments, it can only play 16 at once (and thus 16 concurrent notes). However, when sharing the same instrument, SSEYO Koan Pro allows you to specify a number of voices up to the polyphony limit of your card (e.g. 24 on SCC1 or 32 on the AWE32) to share the *same* MIDI channel/part. This means you do not have to be restricted to playing only 16 concurrent notes when exploiting the full polyphonic nature of your soundcard.

### The Drum Set

The Drum Set can be seen as being similar to an instrument patch. Each MIDI note sent by SSEYO Koan Pro to your soundcard via whatever MIDI channel will contain frequency information. When your Voice uses an instrument patch the notes played will be of the same timbre, but different pitch; for the Drum Set the frequency information is still sent, but instead of each note having a different pitch, it represents a different sound (drums in MIDI have no pitch information). ALL voices will use the same Drum Set, which is defined at the piece level. The Drum Set channel is always on MIDI channel 10 (standard MIDI value generally reserved for drums). So, if you have many voices using drums, each one counts as sharing the same instrument patch and so you can share a MIDI channel. As you could quite easily use 10 drum sounds at once, if your soundcard is 24 note polyphonic it leaves you another 14 to play with.

Drum sounds are those instruments which begin with a D in the Instrument patch list (e.g. D042 - Closed High Hat). When SSEYO Koan Pro is given free choice (i.e. you have not forced the MIDI channel to be a specific value and so it shows as 0) instruments which are not drums sounds will be allocated automatically to MIDI channels 1-9 or 11-16. Instruments which are Drum sounds will automatically allocated to MIDI channel 10.

Look in you soundcard manual to see what drum sets are available from your card.

---

### See also

[Drum Set](#)

[MIDI Channel](#)

