MAIN CONTENTS

SYNTHTOOLS SOUNDDIVINER ADAPTOR PLUGIN POLYSIX<->LEGACY POLYSIX

INTRODUCTION
"SynthTools SoundDiviner Adaptor Plugin for Korg PolySix<-> Korg Legacy Polysix" is designed to work in conjunction with SoundDiviner and its related Plugins and will not function as a standalone application. This Adaptor Plugin requires the Korg PolySix Synthesiser Plugin and the Legacy Polysix Plugin, both available separately to have any function within the SoundDiviner application.

OVERVIEW
This Korg Adaptor Plugin is used as a link between the Korg PolySix Synthesiser Plugin and the Korg Legacy Polysix Soft Synth Plugin. This link or Adaptor as they are described in all SoundDiviner manuals is used when converting Patch Snapshots between the Soft Synth Plugin and the Synthesiser Plugin to create a new hardware to software compatibility option.

ADD-ONS
SoundDiviner is an application that can be extended with additional synthesiser and adaptor plugins as listed in the main manual. As outlined above this Korg Plugin is an Adaptor Plugin and is designed to work with the PolySix Synthesiser Plugin and the Legacy Polysix Soft Synth Plugin, both available separately. Technically Adaptor Plugins are not available for selection per se but instead allows the required Device to be selected when converting between Plugins, see below for more details.

HOW IT WORKS
Patch Snapshots created with the Korg PolySix Synthesiser Plugin can be converted to Korg Legacy Polysix Program Patch Snapshots using the Adapt Function, for more details see below.
Patch Snapshots created with the Korg Legacy Polysix Soft Synth Plugin can be converted to Korg PolySix Program Patch Snapshots using the Adapt Function, for more details see below.
Patch Snapshots created with either Korg PolySix or Legacy Polysix Plugins can be compiled in lists, converted where required and transferred directly to the Korg Polysix hardware synthesiser via the Audio and Tape interfaces or exported as a ".wav" file or as ".fxb" or ".fxp" files for use with the Korg Legacy Polysix software emulation by using both synthesiser Plugins and the adaptor Plugin.

FIRST THINGS FIRST
It is recommended that you read through this manual and get a good understanding of how this Plugin works and interacts with SoundDiviner and the required Plugins and the differences between SoundDiviner terminology and the original Korg Polysix and Legacy Polysix manuals. If you have not already familiarised yourself with the section in the main manual relating to Patch Snapshots, this would be a good time, especially the Adapt function as this will now be available if not before.

WHATS ADDED
After installation of this Korg Adaptor Plugin; Converter Korg PolySix Program to Korg Legacy Polysix Program and Converter Korg Legacy Polysix Program to Korg PolySix Program will be added to the available Plugin List (see below). No additional functionality will be added to SoundDiviner unless you already have the Korg PolySix Synthesiser Plugin and Korg Legacy Polysix Soft Synth Plugin installed. Once these Plugins are installed, Patch Snapshots from either Device will be compatible with each other enabling the Adapt Function and allowing both devices to become available in any of the appropriate Export processes, for more information see below.

ADAPT
Assuming that all of the correct Plugins are installed as detailed above; Adapt has two ways of working, the Adapt Function as described in the main manual (see Adapt Function) Remember; the Target Device is either Korg PolySix when converting from Legacy Polysix Program, or Korg Legacy Polysix when converting from PolySix Program. The second way of working is through the Export Item Process as detailed in the main manual (see EXPORT PATCH SNAPSHOT) in the main manual or

in either of the related Plugin manuals for full details on that Plugin as the Target Device, or below for additional information and pointers. Remember; As both of these Korg Plugins are related to different devices, one hardware and the other software, the conversions will not sound alike in all instances and may require some fine adjustments see CONVERTING below.

EXPORT PATCH SNAPSHOT

After correct Item selection; Export File automatically starts the Export Item Process as detailed in the main and Plugin manuals. Now the Adaptor Plugin and the Korg synthesiser Plugins are installed, both devices will be available for selection as the Target Device (see below). Remember when exporting to ".fxb" or ".wav" File, the Export List is restricted to thirty-two Patch Snapshots as this is the limit available to both the Korg Polysix hardware synthesiser and the Legacy emulation software as detailed in the related Plugin manuals (see Korg PolySix or Legacy Polysix Plugin manuals).

After correct Item selection; Export Tape Play automatically starts the Export Item Process as detailed in the main and Plugin manuals. Now the bidirectional Adaptor Plugin and both Korg PolySix and Legacy Polysix Plugins are installed, Program Patch Snapshots from either Device will be compatible with the Korg Polysix hardware synthesiser and will be available in the All Items List, for more information see the Korg PolySix Plugin manual.

Target Device

Select the Device Korg PolySix to convert Legacy Polysix Program Patch Snapshots to PolySix Program Patch Snapshots or select Device Korg Legacy Polysix for the opposite conversion. Remember; Patch Snapshot Type is displayed in the Information Bar.

CONVERTING

Due to the nature of analogue synthesisers and the unique differences between each Korg Polysix and the Korg Legacy Polysix as detailed in the related Plugin manuals, any conversions between devices will probably require adjustments as mentioned above. Fundamentally the Korg Polysix and Legacy Polysix are the same synthesiser, so any conversions should sound more similar than two structurally different synthesisers like the Korg Polysix and Poly-61. However, inconsistencies and different functionalities between the Legacy Polysix and Polysix as detailed in the Legacy Polysix Plugin manual has made this process slightly more incompatible than a true emulation may have. The new SoundDiviner Softmods available to the PolySix Plugin are not available to the Legacy Polysix so this has also introduced some more differences detailed below.

PARAMETERS

The Korg Legacy Polysix Plugin has a total of fifty-eight Parameters available as detailed in the Legacy Polysix Plugin manual where the Korg PolySix Plugin has a total of twenty-three available, so not all Parameters will be required or used in the conversion process. The Korg Legacy Polysix has twenty-one Parameters in common with the Korg PolySix that will be used when converting from Legacy to PolySix as detailed below. The Korg PolySix has twenty-nine Parameters in common with the Legacy Polysix that will be used when converting from PolySix to Legacy as detailed below. Any Parameters that are not used in either conversion process will be set to their True Zero Value as detailed in the related Plugin manuals, see Korg Legacy Polysix Plugin or Korg PolySix Plugin manuals for details.

ADAPTOR

After correct installation of this Adaptor Plugin, it will be listed along with all the other Plugins as Adaptor: PolySix<->Legacy Polysix. This bidirectional Adaptor Plugin contains two Converters; Korg PolySix Program to Korg Legacy Polysix Program and Korg Legacy Polysix Program to Korg PolySix Program as listed above. These Converters have been designed to make the Adapt process as seamless as possible but some hands-on fine Parameter modification is likely as mentioned above and fully detailed below, (See CONVERTERS below for more information).

CONVERTERS

As mentioned throughout this manual this Adaptor Plugin contains two Converters detailed below.

Korg PolySix to Korg Legacy Polysix

This Converter is used when you Adapt Korg PolySix Program Patch Snapshots to Korg Legacy Polysix Program Patch Snapshots by selecting Korg Legacy Polysix as the Target Device. This Converter uses twenty-nine Parameters as these are compatible with the Korg Legacy, see KLP Twenty-Nine below. Some of these Parameter values will be automatically adjusted to correct known differences between the Korg Polysix and the Korg Legacy Polysix. No auto correction is made to compensate for the unique differences between Korg Polysix hardware, this will need to be done using the Legacy software front panel for accurate hands-on audible correction. After conversion and transferal back to the Legacy software, generally only two or three small adjustments are required to obtain near perfect results, but sometimes this could be more or less depending on the type of Patch Snapshot you Adapt. The more familiar you become with your synthesiser and the differences between it and the Legacy software, the simpler and quicker these slight corrections will become.

KLP Twenty-Nine

The KLP Twenty-Nine Parameter list is divided into two types, Hot and Cold as detailed below, all other Legacy Parameters will be set to True Zero, see Legacy Plugin manual for full details.

KLP Cold List

The Cold list consists of fifteen Parameters, the first five will always be correct and will not require any adjustments after conversion as they are fixed selections. The next two Parameters will also be correct unless Softmods were used as detailed below. The following eight Parameters have been assigned default values that represent how the hardware Polysix synthesiser performs in use.

1	VCO Octave = Selected	9	Output Pan = 0
2	VCO Waveform = Selected	10	Output Volume = 5
3	VCO Sub Oscillator = Selected	11	Pitch Bend Range = 2
4	VCA Mode = Selected	12	Pitch Transpose = 0
5	VCA Attenuator = Selected	13	Pitch Tune = 0
6	MG Mod = See Softmods	14	Key Assign Mode = Poly
7	EFFECTS Mode = See Softmods	15	Voices Total = 6
8	VCO Vibrato Intensity = 10		All other values = True Zero

Softmods

These Parameters have selections available to the PolySix that are not available to the Legacy as detailed in the PolySix Plugin manual.

VCA Mod

If the selection was either of the three standard settings "VCO, VCF or VCA" then the selected will be used by the Converter, but if the selection was Softmods "VCF&VCO" then "VCF" will be selected.

Effects Mode

If the selection was either of the three standard settings "Chorus, Phase or Ensemble" then the selected will be used by the Converter, but if any of the Softmods Combinations were selected then the first listed will be used "Chorus" in most cases or "Phase" in the remaining.

KLP Hot List

The Hot list consists of fourteen Parameters that may or may not require slight modification after conversion. Some of the Hot list Parameters are more likely to require adjustment than others and these are known as the Main Six, those remaining are called the After Eight as detailed below.

KLP Main Six

These six Parameters should be treated as the most likely culprits when sounds don't respond correctly over their duration once played. Four of these Parameters are the Envelope Generator as there are differences between the Korg Legacy and the Polysix as detailed in the Legacy Plugin manual and again below. The two remaining Parameters are the EG Intensity as this links the

Envelope Generator to the filter Cutoff and finally the KB Track which controls the amount the filter tracks the keyboard, but this Parameter is one of the least relevant of the Main Six.

Envelope Generator

The EG contains four Parameters, Attack, Decay, Sustain and Release and due to the following differences, it is very likely that these will require slight adjustment. If you consider that the Legacy has a time range of "0-19 seconds" for each of the time related settings (Attack, Decay & Release), when the Polysix has a time range of "0-15 seconds up to 30 or more", then it is very likely that the scale and ratio of these three Parameters will not match unless "0". The Decay Parameter is always a good starting place unless "0" followed by Attack then Release. When testing our Polysix the durations of the "A, D & R" Parameters were all slightly different from each other but greater than all of the Legacy "A, D & R" times, so any fast time settings required decreasing to match and any slow times needed increasing if obtainable. Any times exceeding the Legacy capabilities must be considered unobtainable and a value of "10 or 19 seconds" must be used. As Sustain is a level and not a time value this Parameter is less likely to require changing but still may, especially when adjusting the Cutoff in connection with the EG Intensity listed below.

EG Intensity

This Parameter has three points "-5, 0 & +5", where adjustment after conversion is not required but you will probably find that a slight adjustment is required for any other settings but not always as adjustments to the Envelope Generator Parameters may have corrected any conversion issues, but if they did not the EG Intensity is usually the next Parameter to finely adjust.

KB Track

This Parameter has two points "0 & 15", where adjustment after conversion is not required. Technically there is a third point "1:1 ratio or 10", where adjustment after conversion is not required but due to differences with this point on the Polysix hardware it cannot be guaranteed and may require slight adjustment as with any other to obtain the required results.

Remember; Usually only one or two of these Parameters will require adjusting to obtain near perfect results, taking time restrictions into account as detailed above. It is best practice to try one Parameter but then reselect the program again if the required results were not achieved before adjusted a second Parameter. If the first Parameter produces the correct results, then move onto the second if more adjustments are required but reselect the program again if this Parameter produces the wrong results. Start the process again with the first Parameter and then a different second as this way you will remember what changes are being made unless you are confident that you know where the conversion issues may be.

KLP After Eight

The remaining eight Parameters are described in list order and are only likely to require fine adjustment in specific conversions as detailed below.

1 – VCO PW\PWM

This Parameter will not require adjustment if the original Waveform selection was Saw, but in any other selection it may require slight adjustment. The Legacy Polysix has a different audible dropout point than the Polysix and this has been automatically adjusted by the Converter but it may still require a slight adjustment to produce the desired pulse width or range when in PWM mode. Remember; As the Polysix has a greater dropout ratio than the Legacy, PWM may not be truly matched but increasing the value to "10" will still result in a pulse gating effect if required.

2 – VCO PW Speed

This Parameter will not require adjustment unless the original Waveform selection was PWM, in which case it is likely to require slight adjustment as it is unlikely to be a perfect match.

3 – VCF Cutoff

This Parameter will not usually require adjustment after conversion but on some occasions it might. In practice if the Cutoff does need adjusting the EG Intensity may also need tweaking but again this will depend on the original Patch Snapshot and the hardware calibration.

4 – VCF Resonance

This Parameter will not usually require adjustment after conversion but again this may depend on the original Patch Snapshot and the calibration of your hardware.

5 – MG Frequency

This Parameter will only require adjustment if the MG Level is above "0" or MIDI Modulation is to be used, in which instance it is likely to require some adjusting to match. It's worth noting that the Korg Legacy has a whole assortment of MG Parameters that are not supported by the Polysix as detailed in the Legacy Plugin manual. The Converter will only use the MG Frequency Parameter and all others will be at True Zero. Another difference between the Polysix and Legacy is the cycle speed of the Frequency Parameter as detailed in the Legacy Plugin manual, so straight conversions will still require adjustment. Remember; when the Polysix is set to "0" the cycle speed will be around thirty seconds but a setting of "0" on the Legacy will be around twenty seconds so the slower speeds will be beyond the range of this Parameter but should be possible with the Tempo Synchronisation Parameters (see Legacy Plugin manual for full details). Values of "10" should be almost identical as the faster cycle speeds are technically the same but too fast to confirm by ear.

6 – MG Delay

This Parameter will only require adjustment if the MG Level is above "0", in which instance it may require some adjusting to match that of the original.

7 – MG Level

As this Parameter is a level and not time related it is likely to be ok after conversion, but it is worth noting that the Polysix and the Legacy are vastly different in some MOD selections as detailed in the Legacy Plugin manual. When MOD VCF is selected, the MG Level may need slight adjustment to match precisely but this may have been corrected elsewhere. When MOD VCO is selected the Converter will automatically rescale this value to match the larger Legacy range.

8 – EFFECTS Speed\Intensity

This Parameter will only require adjustment if the Effects Mode is set to anything other than "Off", in which case it may require slight adjustment for a near perfect match.

Korg Legacy Polysix to Korg PolySix

This Converter is used when you Adapt Korg Legacy Polysix Program Patch Snapshots to Korg PolySix Program Patch Snapshots, by selecting Korg PolySix as the Target Device. This Converter uses twenty-one Parameters as these are compatible with the Korg PolySix, see KP Twenty-One below. Some of these Parameter Values will be automatically adjusted to correct known differences between the Korg Legacy Polysix and the Polysix. No auto correction is made to compensate for the unique differences between Korg Polysix hardware, this will need to be done using the synthesisers front panel for accurate hands-on audible correction. It is always a good idea to have your Korg Polysix hardware regularly serviced and calibrated but it is very unlikely that any two hardware units would be exactly the same for all of the Parameter Values. After conversion and transferal back to the Polysix hardware, generally only two or three small adjustments are required to obtain near perfect results, but sometimes this could be more or less depending on the type of Patch Snapshot you Adapt. The more familiar you become with your hardware and the actual Parameter Values your unit is storing in relation to the location of the front panel controls, the simpler and quicker these slight corrections will become.

KP Twenty-One

The KP Twenty-One Parameter list is divided into two types, Hot and Cold as detailed below.

KP Cold List

The Cold list consists of seven Parameters that will always be correct and will not require any adjustments after conversion as they are fixed selections as follows.

1 – VCO Octave = Selected

2 – VCO Waveform = Selected

3 – VCO Sub Oscillator = Selected

4 – VCA Mode = Selected

5 – VCA Attenuator = Selected

6 – MG Mod = Selected

7 – EFFECTS Mode = Selected

KP Hot List

The Hot list consists of fourteen Parameters that may or may not require slight modification after conversion. Some of the Hot list Parameters are more likely to require adjustment than others and these are known as the Main Six, those remaining are called the After Eight as detailed below.

KP Main Six

These six Parameters should be treated as the most likely culprits when no sound is audible after a key is pressed on the Polysix hardware Keyboard. Four of these Parameters are the Envelope Generator as there are differences between the Korg Legacy and the Polysix as detailed in the Legacy Plugin manual and again below. The two remaining Parameters are the EG Intensity as this links the Envelope Generator to the filter Cutoff and finally the KB Track which controls the amount the filter tracks the keyboard, but this Parameter is one of the least relevant of the Main Six.

Envelope Generator

The EG contains four Parameters, Attack, Decay, Sustain and Release and due to the following differences, it is very likely that these will need adjusting especially if no sound is audible. If you consider that the Legacy has a time range of "0-19 seconds" for each of the time related settings (Attack, Decay & Release), when the Polysix has a time range of "0-15 seconds up to 30 or more", then it is very likely that the scale and ratio of these three Parameters will not match unless "0". The Decay Parameter is always a good starting place unless "0" followed by Attack then Release. When testing our Polysix the durations of the "A, D & R" Parameters were all slightly different from each other but greater than all of the Legacy "A, D & R" times, so any fast time setting required increasing to match and any slow times needed decreasing to match. As Sustain is a level and not a time value this Parameter is less likely to require changing but still may, especially when adjusting the Cutoff in connection with the EG Intensity listed below.

EG Intensity

This Parameter has three points "-5, 0 & +5", where adjustment after conversion is not required but you will probably find that a slight adjustment is required for any other settings but not always as adjustments to the Envelope Generator Parameters may have corrected any conversion issues, but if they did not the EG Intensity is usually the next Parameter to finely adjust.

KB Track

This Parameter has two points "0 & 10", where adjustment after conversion is not required. Technically there is a third point "1:1 ratio", where adjustment after conversion is not required but due to the nature of analogue synthesisers and the calibration of this point it cannot be guaranteed and may require slight adjustment as with any other to obtain the required results.

Remember; Usually only one or two of these Parameters will require adjusting to obtain near perfect results. It is best practice to try one Parameter but then reselect the program again if the required results were not achieved before adjusted a second Parameter. If the first Parameter produces the correct results, then move onto the second if more adjustments are required but reselect the program again if this Parameter produces the wrong results. Start the process again with the first Parameter and then a different second as this way you will remember what changes are being made unless you are confident that you know where the conversion issues may be.

KP After Eight

The remaining eight Parameters are described in list order and are only likely to require fine adjustment in specific conversions as detailed below.

1 – VCO PW\PWM

This Parameter will not require adjustment if the original Waveform selection was Saw, but in any other selection it may require slight adjustment. The Legacy Polysix has a different audible dropout

point than the Polysix and this has been automatically adjusted by the Converter but it may still require a slight adjustment to produce the desired pulse width or range when in PWM mode.

2 – VCO PW Speed

This Parameter will not require adjustment unless the original Waveform selection was PWM, in which case it is likely to require slight adjustment as it is unlikely to be a perfect match.

3 – VCF Cutoff

This Parameter will not usually require adjustment after conversion but on some occasions it might. In practice if the Cutoff does need adjusting the EG Intensity may also need tweaking but again this will depend on the original Patch Snapshot and the hardware calibration.

4 – VCF Resonance

This Parameter will not usually require adjustment after conversion but again this may depend on the original Patch Snapshot and the calibration of your hardware.

5 – MG Frequency

This Parameter will only require adjustment if the MG Level is above "0" or the modulation wheel is to be used, in which instance it is likely to require some adjusting to match. It's worth noting that the Korg Legacy has a whole assortment of MG Parameters that are not supported by the Polysix as detailed in the Legacy Plugin manual. The Converter will always use the MG Frequency Parameter value even if this was not used by the Legacy Patch Snapshot, for more details see the Legacy Plugin manual MG Frequency\Times. Another difference between the Legacy and Polysix is the cycle speed of the Frequency Parameter as detailed in the Legacy Plugin manual, so straight conversions will still require adjustment. Remember; when the Legacy is set to "0" the cycle speed will be about twenty seconds but a setting of "0" on the Polysix will be around thirty seconds so this will need increasing to match. Values of "10" should be almost identical as the faster cycle speeds technically match.

6 – MG Delay

This Parameter will only require adjustment if the MG Level is above "0", in which instance it may require some adjusting to match perfectly.

7 – MG Level

As this Parameter is a level and not time related it is likely to be ok after conversion, but it is worth noting that the Legacy and the Polysix are vastly different in some MOD selections as detailed in the Legacy Plugin manual. When MOD VCF is selected, the MG Level may need slight adjustment to match precisely but this may have been corrected elsewhere. When MOD VCO is selected the Converter will automatically rescale this value to match the Polysix. Remember; the Legacy range for this vibrato effect vastly exceeds that of the Polysix so any Legacy Parameter Value greater than "1" cannot be considered viable and will become "10" on the Polysix.

8 – EFFECTS Speed\Intensity

This Parameter will only require adjustment it the Effects Mode is set to anything other than "Off", in which case it may require slight adjustment for a near perfect match.

INDEX