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INTRODUCTION

Thank you for purchasing the SynthTools SoundDiviner Soft Synth Plugin for Korg Legacy Polysix. This Soft Synth Plugin is designed to work in conjunction with SoundDiviner and will not function as a standalone application. To use this Plugin to its full potential you will require the Korg Legacy Collection Polysix software emulator, the Korg PolySix hardware synthesiser and the PolySix Synthesiser Plugin but as with other SoundDiviner Plugins they have many uses.

OVERVIEW

This Legacy Polysix Plugin is used as both a converter and an editor as well as adding additional library features to the Legacy software application. Legacy Polysix Snapshots can be viewed, imported, exported, edited and managed using all the SoundDiviner tools and even converted into Polysix Programs with the use of additional Plugins available separately, and transferred back to the Polysix hardware synthesiser using the Tape Interface.

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 Legacy Polysix Plugin is a Soft Synth Plugin and is designed to work with the Korg Legacy Collection Polysix software application emulation. Technically Soft Synth Plugins are synthesiser Plugins as mentioned in all SoundDiviner manuals but are designed to work with the related software application and not hardware synthesisers, unless used in conjunction with the related hardware Synthesiser Plugin and appropriate Adaptor Plugin available separately, see below for more details.

HOW IT WORKS

New Patch Snapshots can be created, edited and managed in the same way as any Patch Snapshot. Items can be imported\exported individually or in groups using different Import\Export Options. Previously saved or downloaded Snapshots can be imported to increase the patch library collection. Patch Snapshots can be managed using all SoundDiviner tools including Finalising. Patch Snapshots can be edited using all available Korg Legacy Polysix Parameters. Patch lists can be easily created using large libraries and saved to disk as ".fxb" files. Individual Patch Snapshots can be exported in different ways including ".fxp" files. Patch Snapshots from the new Korg Collection Polysix can be imported to increase the patch library. SoundDiviner Projects containing finalised Legacy Polysix Patch Snapshots can be downloaded from SynthTools (https://synthtools.co.uk/sound-library/downloads/category/korg-Legacy-Polysix/).

FIRST THINGS FIRST

It is recommended that you read through this manual and get a good understanding of how Plugin Korg Legacy Polysix works and interacts with SoundDiviner and the differences between SoundDiviner terminology and the Korg Legacy Polysix manual, which you should also have to hand. If you have not already read through the main SoundDiviner manual yet then it's recommended that you do that first but if that seems a bit daunting then it's a good idea to read all the sections related to Patch Snapshots, Import Options and Export Options, focusing on sections related to Files.

WHATS ADDED

Korg Legacy Polysix will be added to the Plugin list and available for selection in the Select Device Windows. Korg Legacy Polysix Plugin enables previously greyed Functions and makes others available. The Workflow Area can now contain Patch Folders and Legacy Polysix Program Patch Snapshots. Sample Options, New Patch Snapshot, Import Options, Export Options and Parse will all have available Functions as listed below and even Adapt will be accessible through additional Plugins. The Snapshot Viewer becomes the Snapshot Editor when Patch Snapshots are selected and

the Edit Control will also be available. Edit Mode gives access to change any of the Parameters used to create a Legacy Polysix Patch Snapshot, but is both destructive and disconnected.

ra	K 1 D 1 D		
Legacy Polysix	Korg Legacy Polysix Program		Edi
	V 01) Voltage Controlled Osci	illator	
E- Defaults	Vibrato Intensity	0	
Fat Line Bass	Octave	8"	
J Thick Bass	Waveform	Sawtooth	
J Square Bass	PW/PWM	0	
🔰 Unison Bass	Pulse Width Modulation Speed	0	
J Flange Lead	Sub-Oscillator	One	
🥑 Scream Uni Lead	 Voltage Controlled Filte 	r	
J Velo Filter Lead	Cutoff	2.890625	
Stab Saw	Resonance	0.549999997019768	
Trance Anthem	Envelope Generator Intensity	2.45000004768372	
Analog Pizzo	Keyboard tracking	5.02500012516975	
Cosmic Nag	V 03) Voltage Controlled Amp	lifier	
P6 Orch Hom	Mode	Envelope Generator	
Velo Resonance	Attenuator	0	
VCF Oscillation	V 04) Envelope Generator		
Reso Bell	Attack	0	
Invert Envelope	Decay	3 19999992847443	
Swell Pad	Sustain	0	
Influx Pad	Polozoa	2.0500007152557	
Square Hollow	OE) Madulation Committee	3.000000/15255/	
P6 Strings	US) Modulation Generator	Value Controlled October	
Wurty Piano	Node	voltage Controlled Oscillator	
P6 Ana Clay	Frequency	5.5500000/15255/	
penomenon	Delay	0	
'hill Pad	Level	0	
weenv Pad	Key Synchronisation	Irue	
eepy rau	Tempo Synchronisation	False	
ave Arp	Tempo Synchronisation Base No	ite 1/16	
elocity Arp	Tempo Synchronisation Multiplier	r 1	
Jownward Arp	✓ 06) Effects		
ythmic Perc	Mode	Off	
nor /th Chord	Spread	0	
ord Hit	Speed/Intensity	0	
Sweep	V 07) Output		
	Pan	0	
	Volume	10	
	✓ 08) Arpeggiator		
	Enabled	False	
	Latch	False	
	Range	One Octave	
	Mode	Up	
	Speed	4.0000005960464	
	Key Synchronisation	False	
	Tempo Synchronisation	True	
	Tempo Synchronisation Base No	ite 1/16	
	Tempo Synchronisation Multiplier	r 1	
	 Og) Pitch 		
	Bend Bange	2.0000005960464	
	Transpoce	0	
	Tupe	0	
	× 10) External Medulatica 1	v	
		Velocity	
	Jource VCO Interaction	velocity	
	VCO Intensity	0 700000000107	
	VCF Cutoff	0.799999833107	
	VCA Gain	0	
		11 - 21 AM A MARKA - 1 - 1 O D - 7 - 7	

FigureP6-B01

WORKFLOW AREA

Now the Legacy Polysix Plugin has been installed the Workflow Area can contain Patch Folders and Patch Snapshots that are compatible with the Korg Legacy Polysix software application as listed in the main manual. After importing or converting Binary Snapshots the Workflow Area will display Patch Folders that contain the thirty-two Patch Snapshots, each one representing a Preset within the Korg Legacy Polysix program list (see page 46 of the Korg Legacy Collection manual for more details).

Patch Folder

Patch Folders are really no different to any Folder Item in a SoundDiviner Project as they are just containers, once created they can be managed in the same ways as before. New Folder Items can be created within them and all Patch Snapshots listed can be managed as with any other Snapshot Item as detailed in the main manual. The free Packs online will contain eight Patch Snapshots per Folder as this represent the bank\program structure of the Legacy Polysix (A1-8 to D1-8). Patch Snapshot

Selecting a Patch Snapshot now changes the Snapshot Area to the Snapshot Editor as described in the main manual (see Patch Snapshots), for full details on the SNAPSHOT EDITOR see below. Patch Snapshot Type

Only one Patch Snapshot Type is available to this Plugin and this is a Korg Legacy Polysix Program.

Fat Line Bass

After importing from File, Patch Snapshots will be named using the associated program name. Note that the Information bar displays the selected Patch Snapshot as "Korg Legacy Polysix Program".

SAMPLE OPTION

As detailed in the main manual, Sample Options are used to assign an audible example of the actual Legacy Polysix Preset to the Patch Snapshot. All Packs available from the SynthTools Sound Library have been Finalised using 22khz mono samples for identification and Edit protection. Finalised

Once a Sample is assigned to a Patch Snapshot it is defined as Finalised and is not editable as detailed in the main manual, obviously editing the Patch Snapshot would create a different sounding Polysix Preset to the one selected. Remember; Edit Mode is both destructive and disconnected, it is standard practice to Edit Patch Snapshot copies as this also removes the assigned Sample as detailed in the main manual (see Snapshot Editor in the main manual for more information).

NEW PATCH SNAPSHOT

Used to create a New Patch Snapshot as detailed in the main manual (see New Patch Snapshot), by selecting Type Korg Legacy Polysix Program from the available manufacturer lists in the Create Patch Snapshot Window, a Legacy Polysix Program Patch Snapshot will be created in the Workflow Area. New Patch Snapshots will always have the Parameter Values set to "true zero" and this may not be how you assume them to be as it will be the lowest value on the available scale; for example, VCF EG Intensity is on a scale from "-5 to +5" but true zero will be "-5" as this is the lowest value that can be selected with this control or Parameter as described in all SoundDiviner manuals, see Parameter Values below. These Patch Snapshots can be used to create quick templates with known or anticipated results for exporting to the Legacy Polysix for hands on audible editing before importing back into SoundDiviner for Finalising and adding to your own library's.

IMPORT OPTIONS

Now this Polysix Plugin is installed, new Import Options are possible by selecting the Device Korg Legacy Polysix from the available Select Device Window during the related Import Option. As detailed in the main manual selecting Korg Legacy Polysix Plugin instead of Unknown Device at the appropriate time in the Import File Process will create Patch Snapshots instead of Binary Snapshots, for more information see IMPORT FILE PROCESS in the main manual or if you are familiar with this process see IMPORT FILE WINDOW below. Single Patches can also be Imported using (.fxp) files or by using Binary Dump, see BINARY DUMP below. Multiple Patch Snapshots can be imported using the Import Directory Process (see Directory... or Import Directory in the main manual) or by using the SoundDiviner project option also detailed in the main manual, or using (.fxb) files, see below.

IMPORT FILE WINDOW

Available when importing Files (see IMPORT OPTIONS) in the main manual for full details, Korg Legacy Polysix Plugin will now be available for selection as a Device.

Name:	My Patches	
Device	Korg Legacy Polysix	
Do not ir	nport duplicates	

FigureP6-B02

Device

Used to open the Select Device Window as listed in the main manual, expand the manufacturer list for Korg and select the Legacy Polysix and then click OK to use the Plugin. Once selected the Do Not Import Duplicates tick box is now available for selection if required (see below).

Do Not Import Duplicates

Clicking this Tick Box instructs the Import Process to check all of the Patch Snapshots to be imported with the ones currently in your SoundDiviner Project and only imports any that are different. Using this Function, you can quickly see any new Patch Snapshots as only these are available in the new Patch Folder created using the Name inserted (see FigureP6-B02 above).

DUPLICATES FOUND WINDOW

Post-				
?	32 duplicates we Do you want to	ere not impo see a list of	orted. duplicates?	

FigureP6-B03

The total amount of Duplicates Found in the Import Process will be displayed in the Duplicates Found Window, see FigureP6-B03 above.

Yes

Click the Yes button to display the list of Duplicates Found, see Duplicate List below.

No

Click the No button if you do not want to see the Duplicate List, see below.

DUPLICATES LIST

A standard Windows text file containing a list of the Duplicate Patch Snapshots Found will be created, passed and automatically displayed in Windows Notepad. Entries will be listed using the full SoundDiviner Project path and Patch Snapshot Name followed by the Preset Name of the Korg Legacy Polysix program that matched the Patch Snapshot in your SoundDiviner Project, see below. Example

Korg\Legacy Polysix\Factory\Defaults\Fat Line Bass = Fat Line Bass Conclusion

Patch Snapshot "Fat Line Bass" located in your SoundDiviner Project "Korg\Legacy

Polysix\Factory\Defaults\Fat Line Bass" was Duplicated in the Import Process with the data located in the Korg Legacy Polysix (.fxb or .fxp) file named "Fat Line Bass".

EXPORT OPTIONS

This Korg Polysix Plugin enables Patch Snapshots to be exported using a range of different functions. Single Patch Snapshots can be exported and saved with the Binary dump function see BINARY DUMP below, or using (.fxp) files. Multiple Patch Snapshots can be exported using the SoundDiviner project option as detailed in the main manual, or by using (.fxb) files (see FXB and FXP below).

BINARY DUMP

By selecting a Patch Snapshot you can now use (Item – Export – Binary Dump...), to open the Save As Window used to save a Patch Snapshot to a File using the extension ".sdbd_KLCP6Fxp". These Files can then be used for importing or shared with other compatible SoundDiviner Polysix Plugin users.

EXPORT PATCH SNAPSHOT

After correct Item selection; Export File automatically starts the Export Item Process, see below. If more than one Plugin is installed the selections in this process can become more complex as detailed in the main manual, for a better understanding of Exporting Patch Snapshots see EXPORT PATCH SNAPSHOT in the main manual unless you are totally familiar with all of these processes and just need details relating to this Plugin.

Export Item Process

This Korg Polysix Plugin gives you the ability to create Export lists that contain thirty-two Patch Snapshots, one for every Preset memory location or program number as detailed in the Legacy Polysix manual. These lists can then be saved to File in ".fxb" format as detailed in the main manual, or ".fxp" format if only one Patch Snapshot was originally selected or in the Exported Items List.

Export Item Window

Export Item		×
larget <mark>d</mark> evice:	Korg Legacy Polysix	~
All items:	Exported items:	
. Defaults		
Project Name:	Factory	
OK		Cancel

FigureP6-B04

After selecting a Patch Folder in the Workflow Area (see FigureP6-B01 above), in this example "Defaults" all compatible Items within the Parent Folder "Factory" will be included in the Export Item Window – All Items list (see FigureP6-B04 above). Full details on using the Export Item Window can be found in the main manual but the following is included to help with Korg Legacy Polysix list building.

Target Device

Korg Legacy Polysix

If the Device Korg Legacy Polysix is not already selected by default choose it now before continuing. All Items

⊡ • Defaults

Patch Folders can be selected and added to the Exported Items list for quick list creating, or expanded so that specific Patch Snapshots can be selected for compilation list building.

~



By using the scroll bar, Patch Snapshots can then be selected and added to the Exported Items list in any order you require, filling the Korg Legacy Polysix memory locations from slot "00 - 31".

Exported Items

As you should be fully aware the Korg Legacy Polysix has thirty-two memory locations and due to this the Exported Items list can only contain a maximum of thirty-two Patch Snapshots; not all of these locations need to be filled as Blank Programs will be used to fill any remaining spaces, for more information on these (see Blank Programs below), however exceeding the Exported Items list will result in warning and or error as detailed below.

Exported Items List

[1] Fat Line Bass (Defaults)	
[2] Thick Bass (Defaults)	
[4] Unison Bass (Defaults)	
[5] Flange Lead (Defaults)	
[6] Scream Uni Lead (Defaults)	
[8] Stab Saw (Defaults)	
[9] Trance Anthem (Defaults)	
[10] Analog Pizzo (Defaults)	
- [11] Cosmic Nag (Defaults)	
[12] P6 Orch Horn (Defaults)	
[13] Velo Resonance (Defaults)	
- [14] VCF Oscillation (Defaults)	
[15] Reso Bell (Defaults)	

Items can be selected and moved up or down in the Exported Item List using the Control Buttons automatically changing the Legacy Polysix program location, as fully detailed in the main manual.

Exported Item

--- [1] Fat Line Bass (Defaults)

Items will be listed by the Legacy Polysix program location "Preset Number", followed by the Patch Name and Patch Folder. Korg Legacy Polysix supports Preset Numbers and Patch Names other information is not stored. Remember; Do Not Import Duplicates creates lists of Preset Number, Patch Name and Folder Names.

Blank Program

Any Preset Numbers that are not used will be filled with Blank Programs; Blank Programs have all Parameter values set to "true zero" as with New Patch Snapshots, for more information on this see New Patch Snapshot above and Parameter Values below.

Export Item Warning



When trying to add more Patch Snapshots to the Export List than there are available Preset spaces will result in the following Warning message Window. Failed to add files; will report how many Patch Snapshots you are attempting to place in the Export List and the total amount that would then be in the Export List, followed by a question "Do you want to add the first XX files".

Yes

Click the Yes button to add the first XX files you selected to add to your Export Item List.

No

Click the No button to cancel the selection and not add any files to the Export Item List.

Export Item Error



When trying to add a Patch Snapshot to an already full Export Item List you will receive an Export Item Error. Failed to add files; Cannot add XX files.

ОК

Click the OK Button to acknowledge the Error.

FXB & FXP

Both of these file extensions are generally associated with software synthesisers as listed in the main manual. Both FXB and FXP files are supported by Korg Legacy Polysix.

FXB

This file extension, known as "Effects Bank", is used when saving thirty-two Presets together. FXP

This file extension, known as "Effects Program", is used when saving single Presets. When using the Import Directory Process large amounts of FXP files can be imported at the same time, for more information (see Directory... or Import Directory in the main manual).

PARSE

As detailed in the main manual Parse is used to extract Patch Snapshots from Legacy Polysix Binary Snapshots. Any compatible Binary Snapshot in your existing SoundDiviner Project can be selected and then converted to a Patch Folder containing all thirty-two Patch Snapshots or a single Patch Snapshot depending on the Binary Snapshot originally imported, by using Parse. The new Patch Folder will be named in accordance with the original Binary Snapshot and all Patch Snapshots will be named using the Legacy Polysix program name, for full details see the main manual.

ADAPT

Adapt is used to convert Patch Snapshots between compatible Synthesiser Plugins as detailed in the main manual. For this function to work, you require two Synthesiser Plugins and the related Adaptor Plugin. Korg Legacy Polysix Synthesiser Plugin is currently compatible with the following Plugins. Synthesiser Plugins Korg PolySix and Korg Poly-61 Adaptor Plugins

Korg PolySix<->Legacy Polysix and Korg Poly-61<->Legacy Polysix

SNAPSHOT EDITOR

After Patch Snapshot selection the Snapshot Area becomes the Snapshot Editor see FigureP6-B01 above, click the Edit button on the Control Bar to start Edit Mode and make Parameter changes unless Finalised in which case a copy is required as listed above. The Snapshot Editor has been designed so you quickly see all of the Parameters available to a Legacy Polysix Patch Snapshot and the values that have been selected. Due to the number of Parameters available the scroll bar will probably be required unless Parameter Group lists are hidden, for full details on the Snapshot Editor see the main manual. Remember; All Legacy Polysix controls are known as Parameters in all SoundDiviner manuals.

PARAMETER LISTS

As listed in the main manual; the Parameter Lists have been populated with all of the Parameters available to the Korg Legacy Polysix as detailed in the full software synthesiser manual (KLC_AE07_OM_E1.pdf), available online. Parameter Lists are divided into each Parameter Group as detailed in the main manual, see FigureP6-B05 below or for more information see Snapshot Editor in the main manual. When importing ".fxp" files from Korg Collection Polysix version 2.0 or higher, the Parameter Lists will not include any of the new effects settings as these are not available to the Korg Legacy Polysix, only the Parameters available to the Legacy Polysix will be imported.

Patch Snapshot (Fat Line Bass)

~	01) Voltage Controlled Oscillator	
	Vibrato Intensity	0
	Octava	0'
	Waysfam	Sautaath
	Wavelonn Dial (Diala)	Sawtoon
		0
	Pulse Width Modulation Speed	0
	Sub-Oscillator	One
~	02) Voltage Controlled Filter	
	Cutoff	2.890625
	Resonance	0.549999997019768
	Envelope Generator Intensity	2.45000004768372
	Keyboard tracking	5.02500012516975
×	03) Voltage Controlled Amplifier	
	Mode	Envelope Generator
	Attenuator	0
	04) Fevelene Constant	0
*	04) Envelope Generator	
	Attack	0
	Decay	3.19999992847443
	Sustain	0
	Release	3.05000007152557
×	05) Modulation Generator	
	Mode	Voltage Controlled Oscillator
	Frequency	5.55000007152557
	Delay	0
	Level	0
	Key Sundamniestion	True
	Terrer Conduction	rue.
	Tempo Synchronisation	Faise
	Tempo Synchronisation Base Note	1/16
	Tempo Synchronisation Multiplier	1
~	06) Effects	
	Mode	Off
	Spread	0
	Speed/Intensity	0
×	07) Output	
	Pan	0
	Volumo	10
	Volume	10
~	U8) Arpeggiator	
	Enabled	False
	Latch	False
	Range	One Octave
	Mode	Up
	Speed	4.0000005960464
	Key Synchronisation	False
	Tempo Synchronisation	True
	Tempo Synchronisation Base Note	1/16
	Tompo Synchronization Multiplior	1
	OO) Da -L	
	0. J.B.	2 00000000000000
	bend hange	2.00000003960464
	Iranspose	0
	Tune	0
~	10) External Modulation 1	
	Source	Velocity
	VCO Intensity	0
	VCF Cutoff	0.799999833107
	VCA Gain	0
	MG Level	0.2999997138977
~	11) External Modulation 2	
	Source	Control Change Source 1
	VCO Internetiv	n
	VCC CALE	0 7400000007071
	VCP Cuton	0.7400008073071
	VCA Gain	U
	MG Level	U
~	12) Key Assign	
	Hold	False
	Mode	Unison
v	13) Voices	
	Unison	1
	Total	6
~	14) Unison	28 J
*	Patras	0
	Cereral	7 54000005004000
	spread	7.04999395231628
~	15) Other	
	Analog	1.29999995231628



PARAMETERS

All of the original Korg Legacy Polysix Parameters are listed below but more details can be found in the original software synthesiser manual. As the Korg Legacy Polysix is a true emulation of the Korg Polysix analogue synthesiser with true analogue controls, the Parameter Values will not be displayed as you may assume. All displayed values are calculated from the 32-bit floating point values stored within the program data, for more information on this see PARAMETER VALUES below.

PARAMETER VALUES

All Parameter Values will be stored in the selected Patch Snapshot and can be managed using all of the available SoundDiviner tools and exported for use with the Korg Legacy Polysix software. Remember; The effect settings from any new Korg Collection Polysix programs will not be available. Analogue Values

The Korg Legacy Polysix is a true analogue emulation and due to this the values displayed are derived from the 32-bit floating point values stored within the program data as outlined above. These values can be displayed down to a maximum of seventeen decimal places depending on the

actual location of the Legacy Polysix control but as with the original hardware rounding will occur. Value Style 4

Value						2.3	52941	1764	7059		
Value											2.3529
15	25	10,2	22	38	187	- 5	55	22	38	30	2 3529411764705

Parameter Values can be changed using one of three different Value Styles as listed in the main manual but Analogue Values have access to a fourth style similar to Value Style 2, but instead of one Value display there are two. The top Value display is rounded to four decimal places and can be used to input smaller values that represent the Legacy Polysix controls more familiarly whilst the lower screen displays the factual value stored in the program data. Note that due to rounding some number values cannot be obtained exactly but will not be far off.

VOLTAGE CONTROLLED OSCILLATOR

Y	01) Voltage Controlled Oscillator	
	Vibrato Intensity	0
	Octave	8'
	Waveform	Sawtooth
	PW/PWM	0
	Pulse Width Modulation Speed	0
	Sub-Oscillator	One

FigureP6-B06

The Voltage Controlled Oscillator or "VCO" as labelled on the front of the Legacy Polysix is the basic sound source of the synthesiser, six Parameters are available one more than the original, see below. Vibrato Intensity



Octave

Octave	8'	V
		harmond (

Octave determines the basic pitch range, the smaller the value the higher the pitch of the Oscillator, three choices are available in the following order 16' "foot", 8' and 4'.

Waveform

Waveform Sawtooth

0

Waveform determines the Oscillator timbre; three waveforms are available in the following order, Sawtooth, Pulse Width and Pulse Width Modulation.

Pulse Width/Pulse Width Modulation

PW/PWM

PW/PWM as labelled on the front of the Legacy Polysix interacts differently depending on the Waveform selected but having no effect on Sawtooth, see FigureP6-B06 above. When Waveform Pulse Width selected; wave shape varies from "0" square "50% cycle" to "9.9" narrow pulse, after this the pulse becomes so narrow as to collapse. This differs from the original hardware synthesiser that collapses around "8", making the ratios different on both.

When Waveform Pulse Width Modulation is selected, the width of the VCO Pulse Waveform is continuously changed or modulated by the Pulse Width Modulation Speed Parameter below. The PW/PWM Parameter now becomes the depth control for this effect. At "0" there is no effect or modulation just a constant square "50% cycle". At around "9.9" the effect will be from square wave to narrow pulse and back, but once beyond "9.91" pulse collapse will introduce a stutter effect similar to hard gating as the VCO shuts off for part of the cycle. Remember; this ratio is different on the original Polysix synthesiser so the stutter effect will not be as pronounced.

Pulse Width Modulation Speed

Pulse Width Modulation Speed

V

~

V

Pulse Width Modulation Speed or PWM Speed as it is labelled on the front of the Legacy Polysix has

0

no effect on Waveform Pulse Width or Sawtooth, but when set to Pulse Width Modulation the Parameter is used to set the time it takes for the PWM cycle to complete. Used in conjunction with PW\PWM detailed above, the greater the Value the faster the effect speed.

Remember; PW\PWM must be set greater than "0" for this Parameter to be audible.

Sub O	scil	lator
-------	------	-------

Sub-Oscillator	One	V	1
a second s		the second secon	_

Sub Oscillator or Sub Osc as it is labelled on the front of the Legacy Polysix is used to add a second tune either one or two octaves below the VCO pitch as listed in the Legacy Polysix manual. This second Oscillator is a constant square "50% cycle" and has three available choices, Off, One & Two.

VOLTAGE CONTROLLED FILTER

Y	02) Voltage Controlled Filter			
	Cutoff	2.890625		
	Resonance	0.549999997019768		
	Envelope Generator Intensity	2.45000004768372		
	Keyboard tracking	5.02500012516975		

FigureP6-B07

The Voltage Controlled Filter or VCF as labelled on the front of the Legacy Polysix is used to control the tonal quality or timbre of the sound by removing and emphasising different harmonics of the VCO Waveform. The Legacy Polysix is only supplied with one filter type and this emulates the original 4 pole 24db low pass filter, used to remove any harmonics above the Cutoff Frequency allowing those below to pass, whilst the Resonance value allows any harmonics at the point of Cutoff to be emphasized as detailed below and in the Korg Polysix synthesiser original paper manual. **Cutoff**

	170A01510303	
Cutoff	2.890625	~

Cutoff sets the frequency working point of the low pass filter, when set to "10" maximum all harmonic content will pass creating bright sounds, but when set to "0" minimum all of the Waveform is filtered out leaving no signal at all.

Resonance

Resonance

0.549999997019768

Resonance is used to boost the harmonics at the point of Cutoff and is used to create a range of subtle or dramatic effects, when set to "0" minimum no harmonic boosting occurs and the filter simply acts as a LPF but when set to "10" maximum any harmonics at the Cutoff point are fully boosted creating dramatic effects to the point of self-oscillation, by adjusting the Resonance you can emphasize just as much as required or use the VCF as a sound source in its own right.

Envelope Generator Intensity

Envelope Generator Intensity

2.45000004768372

~

V

Envelope Generator Intensity or EG Intensity as labelled on the front of the Legacy Polysix is used to set how much if any the Envelope Generator is used to control the VCF Cutoff frequency and in which direction, negatively or positively. When this value is set to "0" the Envelope Generator is not used to control the VCF Cutoff frequency and the level remains static but when set to "-5" or "true zero" the VCF Cutoff frequency is fully controlled by the Envelope Generator allowing the harmonic content to change over time in a negative direction, by adjusting this value you can reduce the depth of the effect allowing for more subtle harmonic changes as the value becomes closer to "0". When this value is set to "5" or "+5" as labelled on the Legacy Polysix control the VCF Cutoff frequency is also fully controlled by the Envelope Generator allowing for the VCF Section frequency is also fully controlled by the Envelope Generator the VCF Cutoff frequency is also fully controlled by the Envelope Generator the VCF Cutoff frequency is also fully controlled by the Envelope Generator but in a positive direction as it is when used for the VCA see below. Adjusting this value closer to "0" also reduces the depth of the effect allowing for more subtle harmonic changes in the same way as before.

Keyboard Tracking

Keyboard tracking

5.02500012516975

~

Keyboard Tracking or KBD Track as labelled on the Legacy Polysix front panel, is used to control the amount that the filter tracks the keyboard and follows the notes as they are played up and down the

key range. When set at "0" there is no tracking and sounds played in the lower register will sound bright and lively when the upper registers will be dull and could even disappear. The variable nature of the Legacy Polysix KB Tracking allows for different effects as fully detailed in the Polysix owner's manual but not the Legacy manual, it is worth noting that values around "100" should be one to one (100%). Values below "100" will cause the VCF effect to lag behind the played note whilst values above "100" cause the VCF Cutoff to increase faster.

VOLTAGE CONTROLLED AMPLIFIER

Y	03) Voltage	Controlled	Amplifier	
---	-------------	------------	-----------	--

03/ voltage controlled / inpliner		
Mode	Envelope Generator	
Attenuator	0	

FigureP6-B08

The Voltage Controlled Amplifier or VCA controls the volume of the sound, it is used to produce volume changes over time in the same way the VCF can control timbers.

Mode

Mode	Envelope Generator	~

VCA Mode as labelled on the Legacy Polysix front panel has two Modes of operation, Simple Gate or Envelope Generator as detailed below. Note that Simple Gate is the first in the list "true zero". Simple Gate

Simple Gate is used instead of the Envelope Generator to control the volume of the sound. Simple Gate is a square wave trigger and works as expected, when the key is pressed, the volume is instantly set to maximum and remains at this constant level until the key is released and the volume is instantly return to zero or off.

Envelope Generator

The Envelope Generator is used to control the volume of the sound over time, see ENVELOPE GENERATOR below or page 39 of the Legacy Polysix owner's manual or PDF document page 48.

Attenuator

Attenuator	0	v
reconductor	0	~

The Attenuator is used to control the overall volume of the program or Preset, across a range totalling 20dB. The minimum value is "-10dB" or true zero to a maximum of "10dB".

ENVELOPE GENERATOR

*	04) Envelope Generator		
	Attack	0	
	Decay	3.19999992847443	
	Sustain	0	
	Release	3.05000007152557	

FigureP6-B09

The Envelope Generator is used to produce changes to volume, timber or both over time and is used to create movement and expression in the sounds you create, see Legacy manual for more details.

Attack

Attack	0	~

Attack is a time value and is used to determine how long it takes for the volume and or the Cutoff frequency to rise to their maximum level after the key is pressed, when the value is set to "0" the Attack time will be as the key is pressed (about 1 millisecond), increasing to about 19 seconds when the value is set to "10". This differs from the Korg Polysix synthesiser which is around 15-30 seconds. **Decay**

Decay 3.1999992847443 Decay is also a time value and is used to determine how long it takes for the volume and or Cutoff frequency to fall from the maximum level to the Sustain Level, Decay time starts after the Attack time is reached and during the period the key is pressed, when the value is set to "0" the Decay time is instant (about 1 millisecond), but increases to about 19 seconds when set to "10". Again, this

differs from the Korg Polysix synthesiser which is around 15-30 seconds. **Sustain**

0

Sustain

Sustain is a level value and not a time value and is used to determine the level for the volume and or Cutoff frequency after the Decay time is reached and during the period the key is pressed or Hold remains On, when set to "0" the level will be off but when set to "10" the level will be maximum as reached at the end of the Attack time.

V

V

Release

Release	3.05000007152557	~
Release is a time value and is used to	determine how long it takes for	the volume or Cutoff
frequency to reach zero "off" after yo	ou release a key, when set to "0"	the Release time will

frequency to reach zero "off" after you release a key, when set to "0" the Release time will be instant (about 1 millisecond), but increases to around 19 seconds when set to "10". Again, this differs from the Korg Polysix synthesiser which is around 15-30 seconds.

Remember; when the Envelope level reaches zero "off" the key period ends.

MODULATION GENERATOR

05) Modulation Generator			
Mode	Voltage Controlled Oscillator		
Frequency	5.55000007152557		
Delay	0		
Level	0		
Key Synchronisation	True		
Tempo Synchronisation	False		
Tempo Synchronisation Base Note	1/16		
Tempo Synchronisation Multiplier	1		
	05) Modulation Generator Mode Frequency Delay Level Key Synchronisation Tempo Synchronisation Tempo Synchronisation Base Note Tempo Synchronisation Multiplier	O5) Modulation Generator Mode Voltage Controlled Oscillator Frequency 5.5500007152557 Delay 0 Level 0 Key Synchronisation True Tempo Synchronisation Base Note 1/16 Tempo Synchronisation Multiplier 1	

FigureP6-B10

The Modulation Generator or MG as listed in the Legacy Polysix owner's manual is a Low Frequency Oscillator or LFO, used to create modulation effects. This MG has been improved on the original Korg Polysix hardware synthesiser and now has eight Parameters instead of the original four. **Mode**

Mode

Voltage Controlled Oscillator

Mode as listed in the Legacy Polysix manual and software front panel is used to select which Parameter the LFO is connected to and the kind of modulation effect you want to obtain. Three choices are available: Voltage Controlled Amplifier "VCA" true zero, Voltage Controlled Filter "VCF" and Voltage Controlled Oscillator "VCO".

VCA

This choice is used to create volume modulation effects or tremolo as it's more commonly known. VCF

This choice is used to create wah-wah like effects or Cutoff modulation as it's commonly known. VCO

This Choice is used to create pitch modulation effects or vibrato as it's more commonly known. Changes to the scale of this modulation effect make it different to the original Korg Polysix synthesiser hardware, see Level below for full details.

Frequency/Times

Frequency/Times as labelled on the front of the Legacy Polysix is a dual function control and is used in conjunction with the Tempo Synchronisation Parameter below. This dual control is actually two independent values both stored within the Legacy Polysix Presets, both using different scales as listed in the Legacy Polysix manual. As these values are stored individually, they have been listed as two Parameters, Frequency as follows and Times (see Tempo Synchronisation Multiplier below). When Tempo Synchronisation (see below) is set to "False" the Frequency Parameter is used but when set to "True", the Tempo Synchronisation Multiplier Parameter is used (see below).

Frequency

Frequency

5.55000007152557



0

0

When Tempo Synchronisation (see below) is set to "False" this Parameter adjusts the Frequency or speed of the LFO as originally intended on the Korg Polysix synthesiser. When set to the minimum value "0" the speed will be around 20 seconds per cycle (0.05Hz), but when set to the maximum value "10" the speed will be around 20ms per cycle (50Hz) or fifty cycles per second. Note that the minimum speed is faster than the original Korg Polysix which was around 30 seconds per cycle but the maximum speed is technically the same.

Delay Delay

Delay determines the time if any before the modulation effect starts after the key is pressed, when the value is set to "0" there will be no Delay and the modulation effect is applied as the key is pressed but this increases to around 10 seconds when set to value "10" the maximum setting. Note that this maximum setting is around 8 to 12 seconds on the original Polysix synthesiser. **Level**

V

V

~

V

Level

Level controls the depth of the modulation effect, when set to minimum "0" there will be no effect at all, but as the Level is increased the effect becomes greater until reaching its maximum at "10". Note that when modulating VCO, this Parameter does not emulate the Korg Polysix synthesiser identically but instead has been vastly exaggerated as follows. When Level is set to "1" the pitch of the VCO is modulated up and down by one tone, which corresponds with the original Korg Polysix synthesiser when set to "10" and is used to create vibrato effects as listed in the manual. When Level is set to "5" the pitch of the VCO is modulated up and down by seven tones or a full twooctaves, more in line with the Polysix pitch bender range. When Level is set to its maximum "10" the pitch of the VCO will be modulated up and down twelve tones, or a range of forty-two semi tones and way beyond the original hardware specification and creates extreme pitch modulation effects. **Key Synchronisation**

Key Synchronisation

Key Synchronisation or Key as labelled on the front of the Legacy Polysix is a new Parameter, not previously available on the Korg Polysix synthesiser. When set to "True", the modulation cycle is restarted every time a new key is pressed unless a key is already held or Hold is on. Note that the cycle is always started from the highest Level, when modulating VCO this will be the upper most pitch point which could be twenty-one semi tones above the note you are actually playing.

Tempo Synchronisation

Tempo Synchronisation

False

True

Tempo Synchronisation or Tempo as labelled on the front of the Legacy Polysix is another new Parameter, not previously available on the Korg Polysix synth. When set to "True" the Modulation Generator will synchronise to the Legacy Cell's TEMPO controller (when operating in standalone mode), or the tempo of the host application (when operating as a plugin), and utilizes the Base Note and Multiplier Parameters below and not the Frequency Parameter above as previously mentioned. Note, if you have selected a MIDI device as the Master Clock in the Legacy Polysix Preference MIDI Settings dialog box, the Modulation Generator will synchronise to the MIDI clock from that device. **Tempo Synchronisation Base Note**

Tempo Synchronisation Base Note 1/16

The Tempo Synchronisation Base Note or Base Note as listed on the front of the Korg Legacy Polysix, is only used when Tempo Synchronisation is set to "True" as detailed above. Ten different choices are available for selection as the Base Note "1/1 to 1/32", combined with the Tempo Synchronisation Multiplier (detailed below), to determine the MG cycle speed as follows. When the Base Note is set to "1\1" the MG cycle will be one bar (see Multiplier below). When the Base Note is set to "1\4" the MG cycle will be one beat (see Multiplier below). When the Base Note is set to "1\8" the MG cycle will be twice every beat (see Multiplier below).

When the Base Note is set to "116" the MG cycle will be four every beat (see Multiplier below). When the Base Note is set to "132" the MG cycle will be eight every beat (see Multiplier below).

Tempo Synchronisation Multiplier

The Tempo Synchronisation Multiplier or dual functioning Frequency\Times control as detailed above and listed on the front of the Korg Legacy Polysix is used instead of the Frequency Parameter (detailed above), when Tempo Synchronisation is set to "True" as fully detailed above. This Parameter in conjunction with the Base Note (see Tempo Synchronisation Base Note above), are used to determine the MG cycle speed. Note; the Times control on the front of the Legacy Polysix works in reverse order, minimum being "16" the slower setting and maximum being "1", the faster. **Times**

Tempo Synchronisation Multiplier	1	~	
rempo synchronisation malapila	1	\sim	

When Tempo Synchronisation (see above), is set to "True" this Parameter works in conjunction with the Base Note (detailed above), to determine the MG cycle speed as follows.

When Times is set to maximum "1" the MG cycle will be as defined by the Base Note above. When Times is set to minimum "16" the MG cycle will be sixteen times slower than the Base Note. Example 1

```
Base Note = 1\1 and Times = 1: MG cycle speed = 1 bar.
```

Base Note = $1\1$ and Times = 16: MG cycle speed = 16 bars.

Example 2

Base Note = $1\setminus4$ and Times = 1: MG cycle speed = 1 beat.

Base Note = 1\4 and Times = 16: MG cycle speed = 4 bars.

Example 3

Base Note = $1\8$ and Times = 1: MG cycle speed = 2 per beat.

Base Note = $1\8$ and Times = 16: MG cycle speed = 2 bars.

Example 4

Base Note = 1\16 and Times = 1: MG cycle speed = 4 per beat.

Base Note = $1\16$ and Times = 16: MG cycle speed = 1 bar.

EFFECTS	
---------	--

Y	06) Effects	
	Mode	Off
	Spread	0
	Speed/Intensity	0

FigureP6-B11

This section is the famous Korg Polysix Effects unit that can be used to apply Chorus, Phase or Ensemble to the Preset to create fatter or rhythmical shifting sounds. Originally only two settings were available but a third has been included, see Spread below.

Mode

Mode	Off

Mode as labelled on the front of the Legacy Polysix is used to select which if any Effect is used, four option are available including "Off", followed by the three Effects detailed below.

~

Chorus

Chorus is listed in the Korg Polysix owner's manual as a relatively subtle ambiance type of effect, but faster speeds make this sound like a rotary speaker due to the depth reducer.

Phase

Phase is listed in the Korg Polysix owner's manual as more pronounced with a mild resonant edge, but this phasing effect is more apparent when at slower speeds.

Ensemble

Ensemble is listed in the Korg Polysix owner's manual as producing heavy complex modulations which are very useful for string and orchestral sound without the need for speed adjustment.

0

Spread

Spre	ead				0						~
_											

Spread as listed on the front of the Legacy Polysix is a new setting not available on the original Korg Polysix synthesiser. This Parameter is used to adjust the width of the Effect across the stereo image. **Speed/Intensity**

V

Speed/Intensity

As listed in the Korg Legacy Polysix owner's manual the Speed/Intensity Parameter works differently for Chorus and Phase than it does for Ensemble. When used with Chorus and Phase the value adjusts both the Speed and the depth of the Effect, when set to "0" the speed is at its slowest, increasing until you reach maximum at "10", to prevent unnatural side effects a built-in depth reducer is applied as the Speed increases (as detailed in the original Polysix manual) and appears to be the case with the emulation. When used with the Ensemble Effect this Parameter adjusts the Intensity, the lower values creating milder effects that become more intense when increased. These complex modulation patterns do not require speed adjustments according to the original literature.

OUTPUT

~	07) Output	
	Pan	0
	Volume	10

FigureP6-B12

This Parameter Group was never on the original Korg Polysix and contains two new Parameters. **Pan**

Pan	0	~
Pan as Labelled on the front of the Lega	acy Polysix is used to adjust th	ne position of the Legacy Polysix
output within the stereo field. When se	et to minimum, true zero "-5"	or maximum "+5" the Output

will be fully left or fully right respectively, when set to "0" the full stereo field is used. Remember; the Spread Parameters use the stereo field, panning will affect this effect.

Volume

Volume	10	~

The Volume Parameter is used to adjust the Legacy Polysix output level from maximum "10" to minimum "0" or no Volume at all.

ARPEGGIATOR

~	08) Arpeggiator					
	Enabled	False				
	Latch	False				
	Range	One Octave				
	Mode	Up				
	Speed	4.0000005960464				
	Key Synchronisation	False				
	Tempo Synchronisation	True				
	Tempo Synchronisation Base Note	1/16				
	Tempo Synchronisation Multiplier	1				

FigureP6-B13

The Arpeggiator Parameter Group for the Legacy Polysix has more Parameters than the original Korg Polysix and the Values can also be stored with the Presets.

Enabled

Enabled	False	\sim
Enabled or ON\OFF as labelled on the f	front of the Legacy Polysix is used to Enable	le the Arpeggiator.
When set to true zero "False" the Arpe	ggiator will be off.	

Latch

Latch		False			~	
	 	_		<i>u</i>		

Latch is one of the original Arpeggiator Parameters, when set to true zero "False" the Arpeggio will stop when notes are released but when set to "True" the notes continue playing after note off. Any

latched Arpeggio will be cancelled when the Legacy Polysix receives a new note on. **Range**

Range

One Octave

V

V

V

Range is another of the original Parameters and has three available choices as follows.

One Octave

When set to One Octave "true zero", only the notes currently played or latched will be Arpeggiated. Two Octaves

When set to Two Octaves, the notes currently played or latched are Arpeggiated, plus the same notes an octave higher.

Full

When set to Full, the notes currently played or latched are Arpeggiated, plus the same notes on the next five higher octaves which differs from the original as this only used the key bed range. **Mode**

Mode

Mode is another of the original Parameters and defines the direction of the arpeggio as follows. Up\Down

Up

When Up\Down "true zero" is selected the notes played will Arpeggiate Up the scale and then Down. Unlike some Arpeggiators all the notes will be played Up the scale and then again Down the scale and this in turn results in the lower and upper notes repeating.

Down

When Down is selected the notes played will Arpeggiate Down the scale, when Range values other than One Octave (see Range above), are used the arpeggio starts from the highest note of the Range and not the notes that are played as it does when Range is set to One Octave.

Up

When Up is selected the notes played will Arpeggiate Up the scale, starting with the lowest note played and continuing up the full Range.

Speed\Times

Speed\Times as labelled on the front of the Legacy Polysix is a dual function control and is used in conjunction with the Tempo Synchronisation Parameter below. This dual control is actually two independent values both stored within the Legacy Polysix Presets, both using different scales as listed in the Legacy Polysix manual. As these values are stored individually, they have been listed as two Parameters, Speed as follows and Times (see Tempo Synchronisation Multiplier below). When Tempo Synchronisation see below, is set to "False" the Speed Parameter is used but when set to "True", the Tempo Synchronisation Multiplier Parameter is used (see below).

Speed		
Speed	4.0000005960464	~
When Tempo Synchronisation below is	"False", Speed controls the Arpeggiator	cycle speed.

Key Synchronisation

Key Synchronisation	False	~

True

Key Synchronisation or Key as listed on the front of the Legacy Polysix is a new Parameter not available on the original Korg Polysix synthesiser. When set to "True" the arpeggio will be forced to restart every time a note on is received unless a key is already held.

Tempo Synchronisation

Tempo Synchronisation

Tempo Synchronisation or Tempo as labelled on the front of the Legacy Polysix is another new Parameter, not previously available on the Korg Polysix synth. When set to "True" the Arpeggiator will synchronise to the Legacy Cell's TEMPO controller (when operating in standalone mode), or the tempo of the host application (when operating as a plugin), and utilizes the Base Note and Multiplier Parameters below and not the Speed Parameter above as previously mentioned.

Note, if you have selected a MIDI device as the Master Clock in the Legacy Polysix Preference MIDI

Settings dialog box, the Arpeggiator will synchronise to the MIDI clock from that device.

Tempo Synchronisation Base Note

Tempo Synchronisation Base Note	1/16	~
---------------------------------	------	---

The Tempo Synchronisation Base Note or Base Note as listed on the front of the Korg Legacy Polysix, is only used when Tempo Synchronisation is set to "True" as detailed above. Ten different choices are available for selection as the Base Note "1/1 to 1/32", combined with the Tempo Synchronisation Multiplier (detailed below), to determine the Arpeggiator cycle speed or Arp cycle. When the Base Note is set to "1/1" the Arp cycle will be one bar (see Multiplier below). When the Base Note is set to "1/4" the Arp cycle will be one beat (see Multiplier below). When the Base Note is set to "1/4" the Arp cycle will be twice every beat (see Multiplier below). When the Base Note is set to "1/8" the Arp cycle will be four every beat (see Multiplier below). When the Base Note is set to "1/16" the Arp cycle will be four every beat (see Multiplier below). When the Base Note is set to "1/32" the Arp cycle will be eight every beat (see Multiplier below). Tempo Synchronisation Multiplier

The Tempo Synchronisation Multiplier or dual functioning Speed\Times control as detailed above and listed on the front of the Korg Legacy Polysix is used instead of the Speed Parameter (detailed above), when Tempo Synchronisation is set to "True" as fully detailed above. This Parameter in conjunction with the Base Note (see Tempo Synchronisation Base Note above), are used to determine the Arpeggiator cycle speed. Note; the Times control on the front of the Legacy Polysix works in reverse order, minimum being "16" the slower setting and maximum being "1", the faster. **Times**

Tempo Synchronisation Multiplier

~

When Tempo Synchronisation (see above), is set to "True" this Parameter works in conjunction with the Base Note (detailed above), to determine the Arpeggiator cycle speed or Arp cycle as follows. When Times is set to maximum "1" the Arp cycle will be as defined by the Base Note above. When Times is set to minimum "16" the Arp cycle will be sixteen times slower than the Base Note. Example 1

1

Base Note = $1\1$ and Times = 1: Arp cycle speed = 1 bar.

Base Note = $1\1$ and Times = 16: Arp cycle speed = 16 bars.

Example 2

Base Note = $1\4$ and Times = 1: Arp cycle speed = 1 beat.

Base Note = $1\4$ and Times = 16: Arp cycle speed = 4 bars.

Example 3

Base Note = $1\8$ and Times = 1: Arp cycle speed = 2 per beat.

Base Note = $1\8$ and Times = 16: Arp cycle speed = 2 bars.

Example 4

Base Note = $1\16$ and Times = 1: Arp cycle speed = 4 per beat.

Base Note = $1\16$ and Times = 16: Arp cycle speed = 1 bar.

~	09) Pitch		
	Bend Range	2.0000005960464	
	Transpose	0	
	Tune	0	

FigureP6-B14

Technically Pitch is another new Parameter Group as these Parameters are stored with a preset and only available as global settings on the original Korg Polysix synthesiser.

Bend Range

Bend Range	2.0000005960464	\sim
------------	-----------------	--------

Bend Range is used to specify the amount of pitch change applied by MIDI Pitch Bend. When set to minimum "0" no pitch change will occur but when set to "1" the pitch change will be one semi tone up and down. When set to maximum "12" the pitch change will be twelve semi tones or one octave

0

up and one octave down or a full range of two octaves. Note that the Bend Range can be adjusted between the semi tones in "10 cent" steps.

Transpose

Transpose	0	~
Transpose is used to adjust the oscillat	or pitch in semi tone steps across a range	of forty-eight semi
tones or plus and minus two octaves. V	Vhen set to minimum, true zero "-24" the	pitch will be two
octaves lower and two octaves higher	when set to maximum "+24", at "0" there	is no pitch change.
Tune		

Tune

Tune is used adjust the oscillator pitch in one cent steps across a range of two semi tones. When set to minimum, true zero "-5" the pitch will be one semi tone down and one semi tone up when set to "+5", at "0" there is no pitch change. Remember; new Patch Snapshots will be set to "-5".

~

EXTERNAL MODULATION 1

10) External Modulation 1					
Source	Velocity				
VCO Intensity	0				
VCF Cutoff	0.799999833107				
VCA Gain	0				
MG Level	0.2999997138977				
	10) External Modulation 1 Source VCO Intensity VCF Cutoff VCA Gain MG Level	10) External Modulation 1 Source Velocity VCO Intensity 0 VCF Cutoff 0.799999833107 VCA Gain 0 MG Level 0.299997138977			

FigureP6-B15

This Parameter Group is used to assign a MIDI controller to affect a range of different Parameters. **Source**

Source			Velo	city				~
						_		

This Parameter is used to select the MIDI controller to use for External Modulation 1, nine choices are available as follows, including "None" true zero.

None

No MIDI controller assigned.

Velocity

Keyboard Velocity is assigned allowing velocity values to adjust any of the four Parameters below. Keyboard Track

The Keyboard Tracking is assigned allowing changes to any of the four Parameters below as you play up and down the keyboard scale in the same way the KB Track Parameter above functions.

Pressure

Channel Pressure, more commonly known as After Touch, is assigned allowing changes to any of the four Parameters below when Pressure is received.

Pitch Bend

Pitch Bend is assigned allowing MIDI Pitch Bend to adjust any of the four Parameters below. Control Change Source 1

This option allows the MIDI CC value that has been selected for Source 1 in the Legacy Polysix Config View, External Modulation Control Change settings as listed on page 44 of the Legacy manual. Control Change Source 2

This option allows the MIDI CC value that has been selected for Source 2 in the Legacy Polysix Config View, External Modulation Control Change settings as listed on page 44 of the Legacy manual. Control Change Source 3

This option allows the MIDI CC value that has been selected for Source 3 in the Legacy Polysix Config View, External Modulation Control Change settings as listed on page 44 of the Legacy manual. Control Change Source 4

This option allows the MIDI CC value that has been selected for Source 4 in the Legacy Polysix Config View, External Modulation Control Change settings as listed on page 44 of the Legacy manual.

VCO Intensity

VCO Intensity	0	V	

VCO Intensity or VCO Pulse Width as labelled on the front of the Legacy Polysix front panel, sets how much if any the Source Parameter above adjusts the VCO PW/PWM Intensity. When set to minimum, true zero "-5" the VCO Pulse Width is adjusted by the Source Parameter above in a negative direction (when Source = Velocity, lower values generate a narrow pulse when higher are closer to a square wave "50/50"). When set to maximum "+5" the VCO Pulse Width is adjusted by the Source Parameter above in a positive direction in the same way as moving the PW/PWM control by hand. When set to "0" the VCO PW/PWM Intensity is not adjusted by Source Parameter above. Note; when VCO Waveform above is set to Sawtooth this Parameter has no effect.

VCF Cutoff

_			_	_
1	APP P	~		
- 14			of	t
	U	<u>u</u>	cor.	ι.

0.799999833107

0

V

V

The VCF Cutoff Parameter allows you to set how much if any the Source Parameter above controls the VCF Cutoff. When set to minimum, true zero "-5" or maximum "+5" the Source Parameter above will control the VCF Cutoff negatively or positively in the same way as moving the Cutoff Parameter by hand. When set to "0" the VCF Cutoff will not be controlled by the Source Parameter. **VCA Gain**

VCA Gain

The VCA Gain Parameter allows you to set how much if any the Source Parameter above controls the VCA Gain. When set to minimum, true zero "-5" or maximum "+5" the Source Parameter above will control the VCA Gain negatively or positively in the same way as moving the VCA Gain Parameter by hand. When set to "0" the VCA Gain will not be controlled by the Source Parameter. **MG Level**

MG Level	0.2999997138977	\sim
The MG Level Parameter a	allows you to set how much if any the Sour	ce Parameter above controls

the MG Level Parameter allows you to set how much if any the Source Parameter above controls the MG Level. When set to minimum, true zero "-5" or maximum "+5" the Source Parameter above will control the MG Level negatively or positively in the same way as moving the MG Level Parameter by hand. When set to "0" the VCA Gain will not be controlled by the Source Parameter.

EXTERNAL MODULATION 2

~	11) External Modulation 2					
	Source	Control Change Source 1				
	VCO Intensity	0				
	VCF Cutoff	0.74999988079071				
	VCA Gain	0				
	MG Level	0				

FigureP6-B16

This Parameter Group is used to assign a second External MIDI controller as with the first, see External Modulation 1 above for full Parameter details.

Source

Source	Control Change Source 1	
This Parameter is used to se	lect the MIDI controller for External Mod	lulation 2, nine choices are
available as detailed above,	including "None" true zero, see External	Modulation 1 – Source above.
VCO Intensity		
VCO Intensity	0	~
VCO Intensity or VCO Pulse	Width as labelled on the front of the Lega	acy Polysix is used to set how
much if any the External Mo	odulation 2 Source controls the VCO Wave	eform as detailed above.
VCF Cutoff		
VCF Cutoff	0.74999988079071	~
VCF Cutoff sets how much it	f any the Source above controls the Cutof	ff, as detailed above in External
Modulation 1, VCF Cutoff.		
VCA Gain		
VCA Gain	0	~

VCA Gain sets how much if any the Source above controls the Gain, as detailed above in External

Modulation 1, VCA Gain.

MG Level

MG Level	0	~

MG Level sets how much if any the Source above controls the MG Level, as detailed above in External Modulation 1, MG Level.

KEY ASSIGN

~	12) Key Assign	
	Hold	False
	Mode	Unison

FigureP6-B17

The Key Assign Parameter Group is used to define how the Legacy Polysix will respond to the notes received over MIDI, two different Parameters are available as follows.

Hold

Hold	False	\sim

Hold is used to create indefinite sustain unless the Sustain Parameter is set to "0" in which case Hold will not sustain the note any longer than the Release time.

Mode

Mode	Unison	~
------	--------	---

Mode or Chord, Unison and Poly as listed on the front of the Legacy Polysix, can only be set to one of the three choices as detailed below.

Chord

Chord is used to memorise notes that are pressed and used to replay the Chord from a single key. Note; Chord is the true zero value for Mode but no Chord has been memorised to replay. Unison

Unison Mode is used to play all the voices at the same time but only works monophonically. The original Korg Polysix only had six voices so playing a key in Unison Mode would sound all six voices together but the Legacy Polysix has a maximum of thirty-two voices depending on the amount set in the Voices Total Parameter below.

Note; Unison Mode works in conjunction with the Unison Parameter Group below. Poly

Poly Mode sets the Legacy Polysix to play polyphonically. The original Korg Polysix only had six voices so could only play six keys at once, the Legacy Polysix can play up to thirty-two keys depending on the values set in the Voices Parameter Group below.

VOICES

~	13) Voices	
	Unison	1
	Total	6

1

6

FigureP6-B18

This Parameter Group is used to set how many Voices are available to the Legacy Polysix and how these Voices are allocated, two Parameters are available as detailed below.

Unison



This Unison Parameter lets you set how many voices should be played each time a note is received. Traditionally only one Voice would be played when a note is received unless in Unison Mode as detailed above but Unison Mode only works monophonically. This Unison Parameter works in conjunction with the Total Parameter below to enable polyphonic playing with Chord and Poly Modes above. Note; Unison works in conjunction with the Unison Parameter Group below. **Total**

V

V

Total

This Parameter as outlined above is used to set the Total amount of Voices available to the Legacy

Polysix. As mentioned above the original Korg Polysix only had a maximum of six Voices but the Legacy Polysix can be set to a maximum of thirty-two using this Parameter. Used in conjunction with the Unison Parameter above multiple Voice polyphony can be enabled. Remember; if Total set to "6" and Unison above set to "2" only three keys can be played but each sound two Voices, these three keys could be memorized with Chord Mode and replayed from a single key.

U	NI	SO	Ν
~		20	

1	14) Unison		
	Detune	0	
	Spread	7.54999995231628	

FigureP6-B19

This Parameter Group is used to define how the simultaneous Unison Voices should sound. **Detune**

Deturne

Detune 0

This Parameter is used to set the amount of Detune between the simultaneously-sounding Voices when Unison Mode (see above), is selected or the Unison Parameter above is set to "2" or more. When set to minimum "0" the Voices will all sound but will not resemble the pitch phasing associated with traditional Unison, by increasing this Parameter the detuning between the Voices will become incredibly wide when reaching the maximum "10".

~

Spread

Spread	7.54999995231628	\sim
--------	------------------	--------

This Parameter is used to Spread the Unison Voices across the stereo field. When set to minimum "0" the Spread will be directly centre but increases to the full stereo image when set to maximum "10". When Spread is set to "10" and the Unison Parameter above is set to "2", one Voice will be fully left and the other fully right. When the Unison Parameter above is set to an odd number one voice will always be located in the field centre. Remember; Pan affects the Spread Parameter.

OTHER

15) Other
 Analog

1.29999995231628

FigureP6-B20 This Paramete

This Parameter Group only contains one Parameter as detailed below.

Analog

Analog 1.29999995231628
The Analog Parameter is used to set how much randomness is applied to the oscillator pitch and the

filter Cutoff frequencies of each note. At minimum "O" there will be no change but as the Parameter is increased the random changes will increase to emulate the differences associated with the original Korg Polysix synthesiser's six different voice units and their calibration differences.

SYNTHESISER PLUGIN

Not all Software synthesisers are emulations of a hardware synthesiser like the Legacy Polysix but if they are it can open up new possibilities. When used in combination with a compatible hardware synthesiser Plugin and related Adaptor Plugin all available separately, Patch Snapshots from the software synthesiser can be converted and transmitted to the hardware synthesiser and vice versa. Korg PolySix Synthesiser Plugin

After installation the Korg PolySix Plugin will be available and is designed to communicate directly with the Korg PolySix hardware synthesiser but this is not its only purpose like all SoundDiviner Plugins. Tape Snapshots for Korg PolySix can be converted into compatible Patch Snapshots and then converted into Legacy Polysix Patch Snapshots using the required Adaptor. For more information on the Korg PolySix Synthesiser Plugin see the related manual.

Korg Poly-61 Synthesiser Plugin

The Korg Poly-61 is obviously a different synthesiser to the Korg PolySix or Legacy Polysix but has

similar enough attributes as to be considered compatible. After installation the Korg Poly-61 Plugin will be available and is designed to communicate directly with the Korg Poly-61 hardware synthesiser but this is not its sole purpose as with all SoundDiviner Plugins. Tape Snapshots for Korg Poly-61 can be converted into compatible Patch Snapshots and then converted into Legacy Polysix Patch Snapshots using the required Adaptor. For more information on the Korg Poly-61 Synthesiser Plugin see the related manual.

ADAPTER PLUGINS

As mentioned above Adaptor Plugins available separately, can be installed and used to convert Patch Snapshots from the Korg Legacy Polysix to the Korg PolySix or the Korg Poly-61 or vice versa. Korg PolySix<->Legacy Polysix

This Adaptor Plugin is used to connect the Korg PolySix Synthesiser Plugin and the Korg Legacy Polysix Software Synthesiser Plugin to enable bidirectional converting. Due to differences between the software emulation and the hardware synthesiser as detailed in this manual, conversions will not be exact but should be close enough. Due to the nature of analogue synths and the obvious differences between all Korg Polysix hardware synthesisers and the unique calibration characteristics of each and every Polysix, conversions may well require slight adjustment as detailed in the related Adaptor Plugin manual.

Korg Poly-61<->Legacy Polysix

This Adaptor Plugin is used to connect the Korg Poly-61 Synthesiser Plugin and the Korg Legacy Polysix Software Synthesiser Plugin to enable bidirectional converting. Due to the differences between the Legacy Polysix and the Korg Poly-61, conversions will not be exact but should be a close approximation as detailed in the related Adaptor Plugin Manual. Due to the nature of analogue synths and the obvious differences between all Korg Poly-61 hardware synthesisers and the unique calibration characteristics of each and every Poly-61, conversions may well require slight adjustment as detailed in the related Adaptor Plugin manual.

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