

MAIN CONTENTS

MAIN CONTENTS	1
INTRODUCTION	2
OVERVIEW	2
ADD-ONS	2
HOW IT WORKS	2
FIRST THINGS FIRST	2
WHATS ADDED	2
WORKFLOW AREA	3
SAMPLE OPTION	4
NEW PATCH SNAPSHOT	5
IMPORT OPTIONS	5
IMPORT FILE WINDOW	5
DUPLICATES FOUND WINDOW	6
DUPLICATES LIST	6
EXPORT OPTIONS	6
BINARY DUMP	6
EXPORT PATCH SNAPSHOT	6
PARSE	9
ADAPT	9
SNAPSHOT EDITOR	9
PARAMETER LISTS	9
PARAMETERS	10
PARAMETER VALUES	11
PATTERN	11
SEQUENCER	11
PATCH PRESET	13
LAYER	13
PATCHES	14
PATCH	14
LOW FREQUENCY OSCILLATOR	14
VOLTAGE CONTROLLED OSCILLATOR MODULATOR	15
VOLTAGE CONTROLLED OSCILLATORS	16
HIGH PASS FILTER	18
VOLTAGE CONTROLLED FILTER	18
VOLTAGE CONTROLLED AMPLIFIER	19
ENVELOPE 1	20
ENVELOPE 2	21
DELAY	22
PORTAMENTO	23
OTHER	23
BACKUP\RESTORE	24
HIDDEN CHORUS EFFECT	24
PATCH SHEET PLUGIN	25
INDEX	26

## INTRODUCTION

Thank you for purchasing the SynthTools SoundDiviner Synthesiser Plugin for Roland Boutique JP-08. This Synthesiser 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 also require the Roland Boutique JP-08 synthesiser but as with other SoundDiviner Plugins this is not its sole purpose.

## OVERVIEW

This Boutique JP-08 Plugin can be used as a converter, an editor and as a librarian, opening up the functionality of the JP-08 Boutique synthesiser. JP-08 Snapshots can be viewed, imported and exported using File, Directory or Disk Interface. Individual patches can be edited using a full range of functions available from the Roland JP-08 front panel and managed using the SoundDiviner tools.

## 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 Roland Boutique JP-08 Plugin is a Synthesiser Plugin and is designed to work with the physical hardware but additional functionality can be obtained when using Patch Sheet and Adaptor Plugins, see below for more details.

## HOW IT WORKS

Snapshots can be made directly from the Roland Boutique JP-08 USB port.

Snapshots can be transferred back to the Roland Boutique JP-08 using the USB port.

Previously saved or downloaded Snapshots can be imported to increase the patch library collection.

Patch Snapshots can be viewed, organised and named for easy transferral back to the Roland JP-08.

Patch Snapshots can be edited using all available Roland Boutique JP-08 Parameters.

Patch lists can be easily created using large libraries and saved to disk as “.img” files for non SoundDiviner users or transferred back to the Roland JP-08 using extraction and restoration.

SoundDiviner Projects containing finalised JP-08 Patch Snapshots can be downloaded free from SynthTools (<https://synthtools.co.uk/sound-library/downloads/category/Roland-JP-08/>)

## FIRST THINGS FIRST

It is recommended that you read through this manual and get a good understanding of how Plugin Roland JP-08 works and interacts with SoundDiviner and the differences between SoundDiviner terminology and the original Roland JP-08 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 Disk Interfaces, Disk Snapshots and if required DISK SNAPSHOTS STEP BY STEP; also, the section related to Patch Snapshots as these sections will give you a good understanding of the Boutique JP-08 Plugin.

## WHATS ADDED

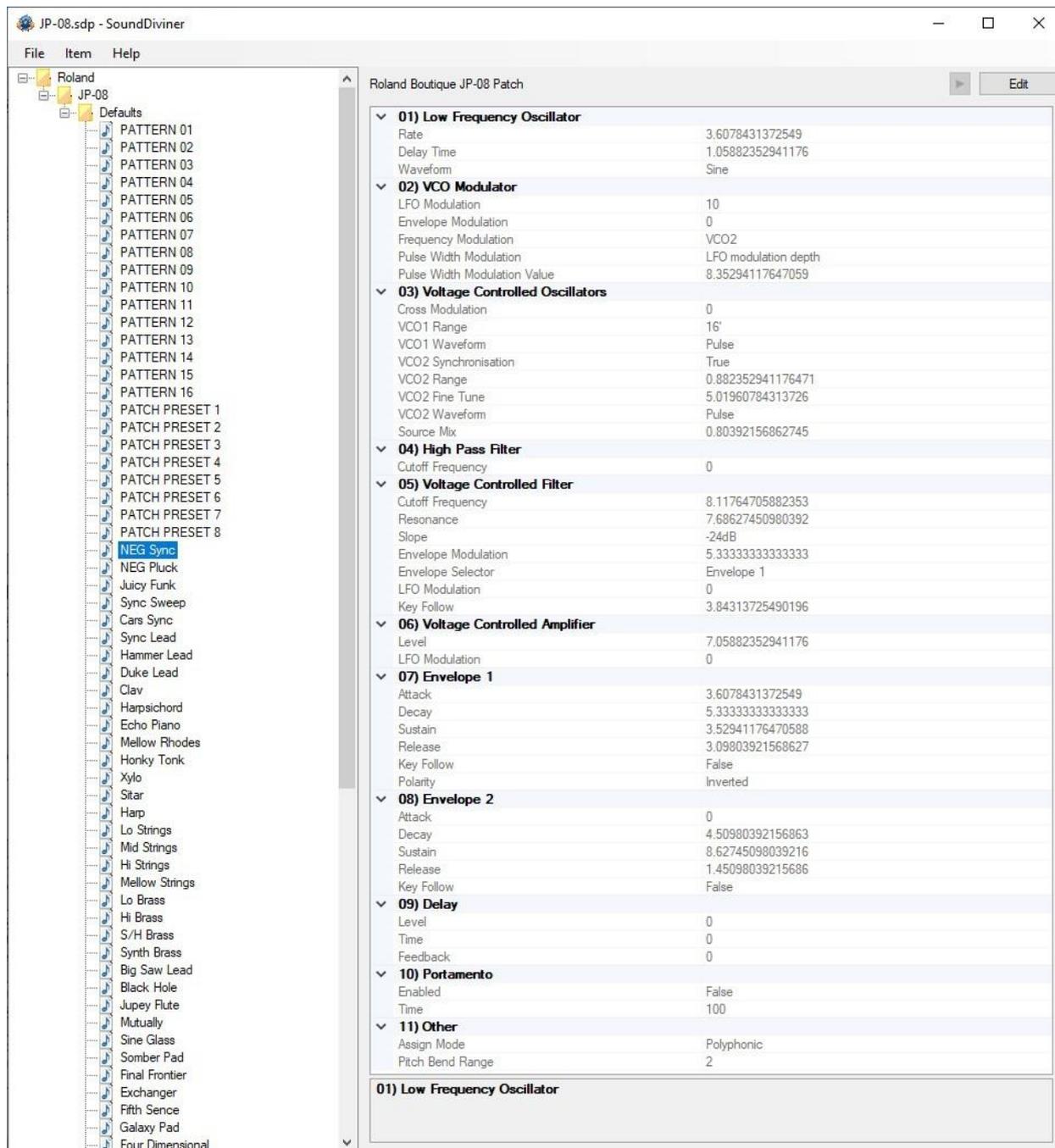
Roland JP-08 will be added to the Plugin list and available for selection in the Select Device Windows.

Roland JP-08 Synthesiser Plugin enables previously greyed Functions and makes others available.

The Workflow Area can now contain Patch Folders and three different JP-08 Patch Snapshot Types.

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 JP-08 Patch Snapshot including the step sequences and patch presets, but is both destructive and disconnected as fully detailed below.



FigureJP-08a

**WORKFLOW AREA**

Now the JP-08 Plugin has been installed the Workflow Area can contain Patch Folders and the different Patch Snapshot Types that are compatible with the JP-08 synthesiser as detailed below and outlined in the main manual. After converting or importing Disk Snapshots the Workflow Area will display Patch Folders that contain eighty-eight Patch Snapshots, each one representing the different types of presets stored within the Roland Boutique JP-08 memory as detailed below.

**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.

**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

Three different Patch Snapshot Types are available to this Plugin, Patches, Patch Presets and Patterns as detailed below and in the Roland Boutique JP-08 manual.

#### Roland Boutique Series Pattern

##### PATTERN 01

After importing from File or Disk Interface the first sixteen Patch Snapshots will all be Roland Boutique Series Patterns, each one representing a step sequence. By default, these sixteen Patterns will be named in accordance with their Preset Name "PATTERN 01-16" (see FigureJP-08a above). Items can be renamed at any point and this will be stored in both the SoundDiviner Project and the Roland JP-08 memory when transferred back to the synthesiser. Note that the Information bar displays the selected Patch Snapshot as "Roland Boutique Series Pattern".

#### Roland Boutique JP-08 Preset

##### PATCH PRESET 1

After importing from File or Disk Interface the next eight Patch Snapshots that proceed the first sixteen Patterns as listed above, will all be Roland Boutique JP-08 Presets, each one representing a Patch Preset as listed in the Roland Boutique JP-08 manual and detailed below. By default, these eight Patch Presets will be named in accordance with their Preset Name "PATCH PRESET 1-8" (see FigureJP-08a above). Items can be renamed at any point and this will be stored in both the SoundDiviner Project and the Roland JP-08 memory when transferred back to the synthesiser. Note that the Information bar displays the selected Patch Snapshot as "Roland Boutique JP-08 Preset".

#### Roland Boutique JP-08 Patch

##### NEG Sync

After importing from File or Disk Interface the next sixty-four Patch Snapshots that proceed the sixteen Patterns and eight Patch Presets above, will be Roland Boutique JP-08 Patches. A Roland Boutique JP-08 Patch contains all the Parameter Values required to make a Patch sound the way it does as listed in the JP-08 manual and fully detailed below. By default, these sixty-four Patches have been named in accordance with their Preset Name, see FigureJP-08a above or the Roland JP-08 sound list. Any Patch that you have created and stored in your own backups will also be named in accordance with the Patch that you originally amended or selected last before entering Manual Mode. Patches created directly after the JP-08 was switched on but before selecting a Patch Number will have a blank name as with any subsequent copies, these Patches will be named in accordance with their patch number or Preset Number as detailed in the SoundDiviner main manual. Note that the Information bar displays the selected Patch Snapshot as "Roland Boutique JP-08 Patch".

### SAMPLE OPTION

As detailed in the main manual, Sample Options are used to assign an audible example to Snapshot Items but are mainly used to Finalise Patch Snapshots. All Packs available from the SynthTools Sound Library have been Finalised using 22khz 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 JP-08 Preset to the one selected. Patterns can still be Finalised by assigning a Sample but it's worth remembering only the step sequence is stored within them. 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 Roland Boutique JP-08 from the available manufacturer lists in the Create Patch Snapshot Window, the required Patch Snapshot Type can be selected from the available list. New Patch Snapshots will be created in the Workflow Area and all Parameter Values set to “True Zero”. True Zero values may not be how you assume them to be as the internal structures are different to the Roland JP-08 front panel control values and switch selections; for example, Source Mix is a rotary control “0” being centre 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. Each Patch Snapshot Type is different and will populate the Parameter Lists in accordance with the chosen type, see Parameter Lists below. New Patch Snapshots can be used to create quick templates with known or anticipated results for exporting to the JP-08 for hands on audible editing before importing back into SoundDiviner for Finalising and adding to your own libraries.

## IMPORT OPTIONS

Now this JP-08 Plugin is installed, new Import Options are possible by selecting the Device Roland Boutique JP-08 from the available Select Device Window during the related Import Option. As detailed in the main manual selecting Roland Boutique JP-08 Plugin instead of Unknown Device at the appropriate time in the Import File Process or Import Disk Process will create Patch Snapshots instead of Disk Snapshots, for more information see IMPORTING SNAPSHOT FILES and the IMPORT FILE PROCESS or READ DISK SNAPSHOT and the Import Disk Process in the main manual or if you are familiar with these processes see IMPORT FILE WINDOW below. As a Roland Boutique user, you should already be aware of the data backup/restore method as detailed in the Roland JP-08 manual, these previous backups can be imported using the Import Directory Process as detailed in the main manual (see Directory... or Import Directory in the main manual).

Single Patch files can also be Imported, see BINARY DUMP below or multiple Patch Snapshots can be imported using the SoundDiviner project options as detailed in the main manual.

Remember; SoundDiviner defines the Roland Boutique JP-08 as a USB mass storage device and will be available in the Choose Removable Drive Window as “Drive1(E:) JP-08 (1.00MB)”, drive number and letter may differ. For additional help see DISK SNAPSHOT GUIDE, READING DISKS, USB mass storage device and USB Synth in the main manual.

## IMPORT FILE WINDOW

Available when importing Files or directly from the Disk Interface (see IMPORT OPTIONS) in the main manual for full details, Roland Boutique JP-08 Plugin will now be available as a Device.



FigureJP-08b

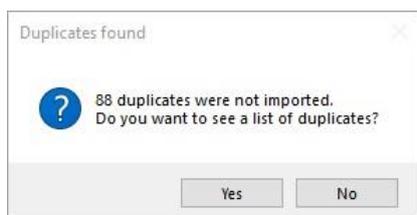
### Device

Used to open the Select Device Window as listed in the main manual, expand the manufacturer list for Roland and select the Boutique JP-08 and then click OK to use the Plugin. Once selected the Do Not Import Duplicate 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 FigureJP-08b above).

## DUPLICATES FOUND WINDOW



FigureJP-08c

The total amount of Duplicates Found in the Import Process will be displayed in the Duplicates Found Windows, see FigureJP-08c 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 Roland Boutique JP-08 Preset Name that matched the Patch Snapshot in your SoundDiviner Project, as detailed below.

Example

Roland\JP-08\Defaults\NEG Sync = Neg Sync

Conclusion

Patch Snapshot “NEG Sync” located in your SoundDiviner Project “Roland\JP-08\Defaults\” was Duplicated in the Import Process with Roland Boutique JP-08 Preset Name “Neg Sync”.

## EXPORT OPTIONS

This Roland Boutique JP-08 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 multiple Patch Snapshots can be exported using the SoundDiviner project options as detailed in the main manual, or directly to the Roland Boutique JP-08 using the Export Item Process see EXPORT PATCH SNAPSHOT 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, but not for Patch Presets as this Patch Snapshot Type references other project Items. A Roland Boutique Series Pattern can be saved to File using the extension “.sdbd\_RBouPtn” and a Roland Boutique JP-08 Patch uses the extension “.sdbd\_JP08PAT”. These Files can then be imported or shared with other compatible SoundDiviner JP-08 Plugin users.

## EXPORT PATCH SNAPSHOT

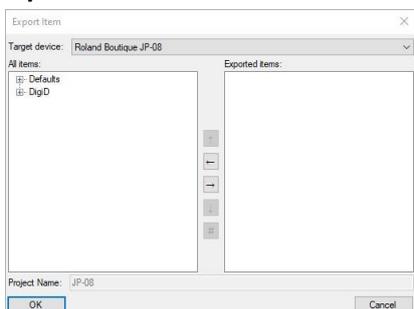
After correct Item selection; Export File or Export Disk Image automatically starts the Export Item Process, see below. If more than one Plugin is installed the selections in this process can become more complex as detailed in the main manual, for a better understanding of Exporting Patch Snapshots see 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 Roland Boutique JP-08 Plugin gives you the ability to create Export lists that contain eighty-eight Patch Snapshots one for every memory location, or Preset as defined in the SoundDiviner main manual. It doesn't matter in which order you build the list as SoundDiviner will keep a running total of the different Patch Snapshot Types and both organises and limits the list to sixteen Patterns, eight

Patch Presets and sixty-four Patches. Lists can be exported directly to the Roland JP-08 using the Disk Interface or saved to File in “.img” format. Remember; The Roland Boutique JP-08 must be connected as a USB mass storage device or USB Synth as detailed in the SoundDiviner main manual when exporting, for more information see Data Backup/Restore in the JP-08 manual and below.

**Export Item Window**



FigureJP-08d

After selecting a Patch Folder in the Workflow Area (see FigureJP-08a above), in this example “JP-08” all compatible Items within the Parent Folder “JP-08” will be included in the Export Item Window – All Items list (see FigureJP-08d above). Full details on using the Export Item Window can be found in the main manual but the following is included to help with Roland JP-08 list building.

**Target Device**

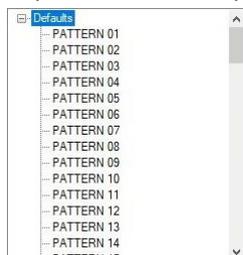


If the Roland Boutique JP-08 is not already selected by default choose it now before continuing.

**All Items**



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, different Patch Snapshot Types can be selected and added to the Exported Items list in any order you require, filling the Roland JP-08 memory locations from slots “1-16” for Patterns, “1-8” for Patch Presets and “1-64” for Patches as detailed below.

**Exported Items**

As you should be fully aware the Roland Boutique JP-08 has eighty-eight memory locations as mentioned above or the Preset memory capacity as defined in the SoundDiviner main manual, due to this the Exported Items list can only contain a maximum of eighty-eight Patch Snapshots. Not all of these locations need to be filled as Exported Items will be automatically filed into the JP-08 memory replacing the lower slots first and leaving any remaining Presets untouched, however exceeding the Exported Items list will result in warning and or error as detailed below.

**Exported Items List**



Items can be selected and moved up or down in the Exported Item List using the Control Buttons automatically changing the JP-08 Preset Number, as detailed in the main manual.

### Exported Item

All three different Patch Snapshot Types can be added to the list as mentioned above and each Type will be listed and managed differently as detailed below.

### Patterns

... [PTN1] PATTERN 01 (Defaults)

Items will be listed by the Roland JP-08 memory location "Preset Number" displayed using [PTN1-16] followed by the Patch Snapshot Name "Preset Name" and Patch Folder. Roland JP-08 supports Preset Numbers and Preset Names so only these will be stored. Remember; Roland Boutique JP-08 supports a maximum of sixteen characters for Preset Names, larger names will be truncated.

### Patch Presets

... [PATPRE1] [+2 refs] PATCH PRESET 1

Items will be listed by the Roland JP-08 memory location "Preset Number" displayed using [PATPRE1-8] followed by the number of referenced Patch Snapshots and Patch Snapshot Name "Preset Name". Roland JP-08 supports Preset Numbers and Preset Names so these will all be stored. Remember; Roland JP-08 supports a maximum of sixteen characters for Preset Names, larger names will be truncated.

### Preset Reference

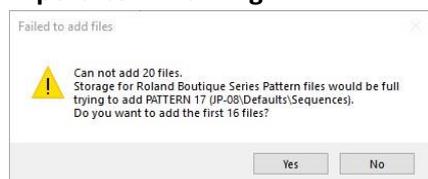
Roland Boutique JP-08 Patch Presets are special Presets that reference two Patch Snapshots contained within the current SoundDiviner Project. These Patch Snapshots will be automatically added when writing to File or directly to the Roland Boutique JP-08. Remember; add these Patch Snapshots to the Exported Items List or leave enough slots to prevent exceeding the Preset memory capacity or an error will occur when writing, for more information see disk space errors below.

### Patches

... [PATCH1] NEG Sync (Defaults)

Items will be listed by the Roland JP-08 memory location "Preset Number" displayed [PATCH1-64] followed by the Patch Snapshot Name "Preset Name" and Patch Folder. Roland JP-08 supports Preset Numbers and Preset Names so these will be stored. Only the Items in the list will be exported to the Roland JP-08, automatically replacing the Preset Numbers used and leaving the remaining Presets intact as mentioned above. It is important to take into account when overwriting some Presets and leaving others that any remaining Patch Presets that reference Patches that will be replaced will now reference the replacements and therefore sound differently. Remember; Roland JP-08 supports a maximum of sixteen characters for Preset Names, larger names will be truncated.

### Export Item Warning



When trying to add more Patch Snapshots to the Export List than there are available Preset spaces will result in a 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

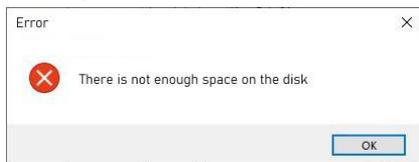


When trying to add a Patch Snapshot to an already full Export Item List you will receive an Export Item Error. Failed to add files; Cannot add XX files.

OK

Click the OK Button to acknowledge the Error.

### Disk Space Error



If you have received a Disk Space Error when trying to write a File or directly to the JP-08 then you have accidentally exceeded the Preset memory capacity. The Preset limit for Patches is “64” but if you have included Patch Presets that reference Patches not included in your Export List, then SoundDiviner is attempting to add these at the building stage. Unfortunately, you will need to start the Export Process again, either including the referenced Patches or leaving enough space so not to exceed the Preset limits (see Exported Items, Patch Preset, Preset Reference and Patches above).

### PARSE

As detailed in the main manual Parse is used to extract Patch Snapshots from JP-08 Disk Snapshots. Any compatible Disk Snapshot in your existing SoundDiviner Project can be selected and then converted to a Patch Folder containing all eighty-eight Patch Snapshots by using Parse. The new Patch Folder will be named in accordance with the original Disk Snapshot and all Patch Snapshots will be named using the JP-08 Preset Names, 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. Roland Boutique JP-08 Synthesiser Plugin is currently compatible with the following Plugins.

Synthesiser Plugins

Roland Jupiter-8, Roland Sound Cloud Jupiter-8 and Arturia Jup-8V.

Patch Sheet Plugins

Roland Boutique JP-08.

Adaptor Plugins

Roland Boutique JP-08<-> Boutique JP-08 Patch Sheet, Roland Boutique JP-08<->Roland Jupiter-8, Roland Boutique JP-08<->Roland Sound Cloud Jupiter-8, Roland Boutique JP-08<->Arturia Jup-8V

### SNAPSHOT EDITOR

After Patch Snapshot selection the Snapshot Area becomes the Snapshot Editor see FigureJP-08a 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 the different Boutique JP-08 Patch Snapshot Types and the values that have been selected, for full details on the Snapshot Editor see the main manual. Additional details for Pattern and Patch Presets are listed below. Remember; All JP-08 controls and settings are known as Parameters in all SoundDiviner manuals.

### PARAMETER LISTS

As listed in the main manual; Parameter Lists will be populated with all of the Parameters available to each Roland Boutique JP-08 Patch Snapshot Type, all arranged in Parameter Groups. As there are three different Patch Snapshot Types the Parameter Lists will change depending on the selected Patch Snapshot Type as detailed below.

Roland Boutique Series Pattern (PATTERN01)

<b>Sequencer</b>	
Scale	Sixteenth
Pattern Length	16
Pattern	

FigureJP-08e

Roland Boutique JP-08 Preset (PATCH PRESET 1)

<b>Layer</b>	
Key Mode	Dual
<b>Patches</b>	
Upper	Big Saw Lead
Lower	Black Hole

FigureJP-08f

Roland Boutique JP-08 Patch (NEG Sync)

<b>01) Low Frequency Oscillator</b>	
Rate	3.6078431372549
Delay Time	1.05882352941176
Waveform	Sine
<b>02) VCO Modulator</b>	
LFO Modulation	10
Envelope Modulation	0
Frequency Modulation	VCO2
Pulse Width Modulation	LFO modulation depth (LFO)
Pulse Width	8.35294117647059
<b>03) Voltage Controlled Oscillators</b>	
Cross Modulation	0
VCO1 Range	16'
VCO1 Waveform	Pulse
VCO2 Synchronisation	True
VCO2 Range	3.9375
VCO2 Fine Tune	0.01960784313726
VCO2 Waveform	Pulse
Source Mix	0.80392156862745
<b>04) High Pass Filter</b>	
Cutoff Frequency	0
<b>05) Voltage Controlled Filter</b>	
Cutoff Frequency	8.11764705882353
Resonance	7.68627450980392
Slope	-24dB
LFO Modulation	0
Envelope Modulation	5.33333333333333
Envelope Selector	Envelope 1
Key Follow	3.84313725490196
<b>06) Voltage Controlled Amplifier</b>	
Level	7.05882352941176
LFO Modulation	0
<b>07) Envelope 1</b>	
Attack	3.6078431372549
Decay	5.33333333333333
Sustain	3.52941176470588
Release	3.09803921568627
Key Follow	False
Polarity	Inverted
<b>08) Envelope 2</b>	
Attack	0
Decay	4.50980392156863
Sustain	8.62745098039216
Release	1.45098039215686
Key Follow	False
<b>09) Delay</b>	
Level	0
Time	0
Feedback	0
<b>10) Portamento</b>	
Enabled	False
Time	100
<b>11) Other</b>	
Assign Mode	Polyphonic
Pitch Bend Range	2

FigureJP-08g

PARAMETERS

All of the original Roland Boutique JP-08 Parameters are listed below but more details can be found in the original synthesiser manual. All choices and values are the same as the original synthesiser, including some that required MIDI CC to select them. Only Parameters that are stored and restored using the data backup\restore process as detailed in the Roland JP-08 manual will be available. Settings including temporary ones that are lost after JP-08 power off will not be available and neither will the additional Hidden Chorus Effect as detailed below. The Roland Boutique JP-08 is a true digital synthesiser that has some analogue controls, the Parameter Values for these will not be displayed as you may assume as they emulate the eight-bit data derived from the original flag ship Roland Jupiter-8 synthesiser from the 80's, for more information see PARAMETER VALUES below.

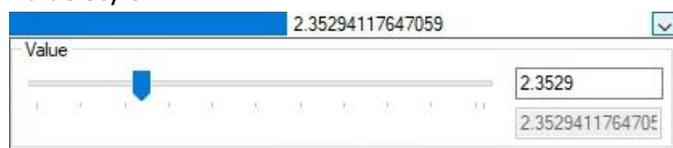
## PARAMETER VALUES

All Parameter Values will be stored in the selected Patch Snapshot and can be managed using all of the available SoundDiviner tools. Once exported back to the JP-08 synthesiser via the Disk Interface they can be modified as usual with the synth front panel for hands on audible editing and then imported back into SoundDiviner for naming, finalising and storing in your expanding library.

### Analogue Values

The Roland JP-08 is a true digital synthesiser with analogue controls, that emulates the famous Roland Jupiter-8 analogue synthesiser as outlined above. Due to this the values displayed are derived from the original Jupiter-8's eight-bit ADC and recalled by the DAC when updating the analogue circuitry. These values can be displayed down to a maximum of sixteen decimal places depending on the actual location of the Roland Jupiter-8 or JP-08 control. As I am sure you are aware all potentiometers are slightly different and all Jupiter-8 synthesisers will be calibrated slightly differently, giving each one its own unique sound and characteristics. This is not the case with the Roland JP-08 as every unit is designed to sound exactly the same every time. The potentiometers may well be slightly different and trying to use an old-style patch sheet will probably result in a different sounding Patch especially considering the physical size of the controls but retaining these accurate values is very useful when comparing different units, software and the original hardware.

### Value Style 4



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 JP-08 controls more familiarly whilst the lower screen displays the emulation value. Note that due to hardware limitations odd number values like “1,3,5,7 and 9” cannot be obtained exactly but if you enter them, they will auto round.

## PATTERN

A Roland Boutique Series Pattern or step sequence as they are listed in the Roland Boutique JP-08 manual, allow up to sixteen notes to be stored and played back in a loop.

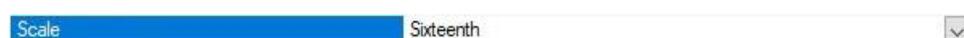
## SEQUENCER

▼ Sequencer	
Scale	Sixteenth
Pattern Length	16
Pattern	

### FigureJP-08h

Sequencer is the only Parameter Group available to Roland Boutique Pattern Patch Snapshots and is used to display and create the step sequences used by the Roland Boutique JP-08.

### Scale



Scale is used to define the rhythmical count. Four different choices are available, Thirty-Second “1”, Sixteenth “2”, Sixteenth triplet “3” and Eighth triplet “4”.

#### Thirty-Second

Choice “1” True Zero, Thirty-Second is the fastest rhythmical count by using every eighth beat or demisemiquaver “thirty-second note”.

#### Sixteenth

Choice “2”, Sixteenth is the Roland Boutique JP-08 default and probably the more common selection as the rhythmical count will equal every quarter beat or semiquaver “sixteenth note”.

Sixteenth Triplet

Choice “3”, Sixteenth Triplet will be quicker than Choice “2” but slower than Choice “1”, as every two quarter beats become three.

Eighth Triplet

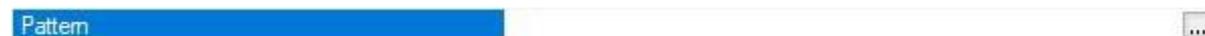
Choice “4”, Eighth Triplet is the slowest of all the counts as every two half beats become three.

Pattern Length



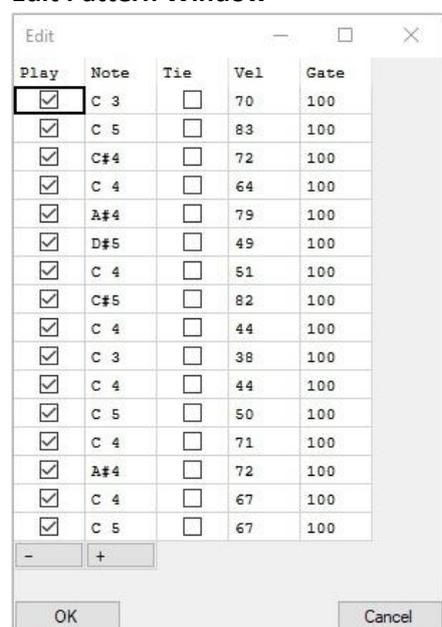
The Pattern Length defines how many steps are used when the Pattern plays, from one to sixteen. A single step sequence pattern is very useful for playing a continuous note not dissimilar to using a hold or sustain pedal, but with the freedom to play additional notes without them being held.

Pattern



Each Pattern contains sixteen steps and each step contains five different Parameters used to control which and how each note is played. To open the Edit Pattern Window, click “...”.

Edit Pattern Window



FigureJP-08i

A Pattern or step sequence as detailed in the Roland Boutique JP-08 manual contains everything required to make a Pattern trigger notes the way it does.

Play

Play or note On\Off as detailed in the Roland Boutique JP-08 manual is used to trigger the Note at that step (see Note below), tick the box for “On” or untick for “Off”.

Note

Defines the key that will be triggered if Play is ticked “see Play above”. Select the key and then double click to access the key drop down list used to select a different key, or enter the note followed by a space and then the octave “C 3”.

Tie

Increases the duration of a Note by joining two steps together, allowing the Note to sound across both steps. When Tie is not ticked “Off” the steps trigger as normal, one after another. When Tie is already ticked “On” the following step will have the same Parameter Values as the ticked step and these can’t be edited as both steps will trigger as one dual length step, the more step Ties the larger the trigger length becomes. When a Tie is added to a step “ticked on”, the following step will automatically acquire the Tie step Parameters. Remember; When a step has a Tie to a previous step you can’t change any Parameters until the Tie is removed, but Tie can still be “ticked on” adding a Tie to the next step to increase the trigger length if required.

**Vel**

MIDI Velocity is used to set how hard or soft the key is triggered, Parameter ranges from “0-127”. Remember; Roland Boutique JP-08 Key Velocity must be set to “Touch” as detailed in the manual, or velocity changes will not have any effect on the volume of the key triggered.

**Gate**

Defines the key trigger time, the higher the value the longer the trigger duration. This Parameter ranges from “0-127” but values below “20” maybe too quick to trigger unless the sequencer tempo is very slow. When setting values with the JP-08 “C2” controller the value range is from “20-100”.

**Minus**

Decreases every Note by one semitone, allowing Patterns to be transposed down.

**Plus**

Increases every Note by one semitone, allowing Patterns to be transposed up.

**OK**

Closes the Edit Pattern Window and keeps any changes.

**Cancel**

Closes the Edit Pattern Window and discards any changes.

**PATCH PRESET**

A Roland Boutique JP-08 Preset or Patch Preset as they are listed in the Roland JP-08 manual, is a special type of patch more akin to a performance patch as described in synthesisers from the 90’s and onwards. Patch Presets don’t contain any sound creating Parameters per se but combine Patches by using links or a Preset Reference as detailed above. Designed as a special feature for the original Roland Jupiter-8, these quick recall patches allowed for single push access in live situations.

**Hidden Patches**

Unlike the Roland Boutique JP-08; SoundDiviner has been developed to hold large libraries of Patch Snapshots in complex projects, so using a straight forward Preset Reference as detailed above is not a sensible idea. If you consider that Snapshot Items can be moved, copied, edited or even deleted it’s more appropriate to store all of the Patch Snapshot Parameters within the Roland Boutique JP-08 Preset Patch Snapshot as well, as this becomes a backup within a backup. Patch Snapshots that have been deleted from a project but are referenced by a Patch Preset, will be recreated in the route of your project when reopened in SoundDiviner. When using Copy\Paste, a Patch Folder of the same name will be created with all three Snapshot Items within.

**LAYER****FigureJP-08j**

Originally Layer had three modes available but unfortunately Roland have not implemented Split on the Boutique JP-08, as documented in the original Roland Jupiter-8 manual.

**Key Mode**

Defines how the Patches (see below) should be layered. Two choices are available, Whole and Dual.

**Whole**

In this Key Mode only the Upper Patch will sound when played (see Upper below). Remember; In this Key Mode, up to four keys can be played at any one time “4 note polyphony”.

**Dual**

In this Key Mode both the Upper and Lower Patches will sound when played, see PATCHES below. Remember; In this Key Mode, up to two keys can be played at any one time “2 note polyphony”.

**PATCHES**

▼ Patches	
Upper	Big Saw Lead
Lower	Black Hole

FigureJP-08k

The Patches Parameter Group is used to define the Upper and Lower Patches as mentioned above.

**Upper**



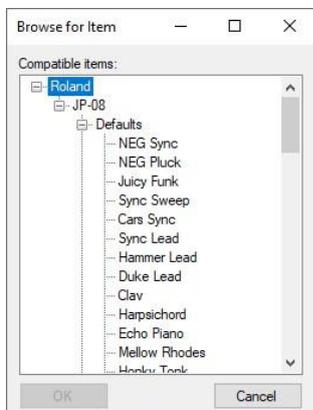
The Upper Patch is played in either Key Mode as mentioned above and references a Patch Snapshot within the current SoundDiviner Project “Big Saw Lead” in this example. To choose a different Patch click “...” to open the Preset Reference Window, see below for more details.

**Lower**



The Lower Patch is only played when the Key Mode is set to Dual as mentioned above and references a Patch Snapshot within the current SoundDiviner Project “Black Hole” in the example. To choose a different Patch click “...” to open the Preset Reference Window as detailed below.

**Preset Reference Window**



FigureJP-08l

The Preset Reference Window is used to browse your SoundDiviner Project to select the required Patch Snapshot, only compatible Roland Boutique JP-08 Patch Snapshot Items will be listed. Expand any of the Folders within your Project and select the Patch Snapshot you require and click “OK”.

**PATCH**

A Roland Boutique JP-08 Patch or Patch as they are listed in the Roland Boutique JP-08 manual, contains all the Parameter Groups and Parameters required to make a Patch sound the way it does. There are eleven Parameter Groups containing forty-four different Parameters as detailed below.

**LOW FREQUENCY OSCILLATOR**

▼ 01) Low Frequency Oscillator	
Rate	3.6078431372549
Delay Time	1.05882352941176
Waveform	Sine

FigureJP-08m

The Low Frequency Oscillator or LFO as listed in the Roland Boutique JP-08 manual is the modulation source of the sound engine, used to create a range of different effects. Only one LFO is available to the JP-08 but it can be used to modulate VCO1 and VCO2 pitch, Pulse Width, Filter Cutoff and VCA loudness. Unlike many analogue synthesisers of the time the original Roland Jupiter-8 had a choice of four different LFO shapes, this has been increased to six on the Boutique JP-08 for more flexibility.

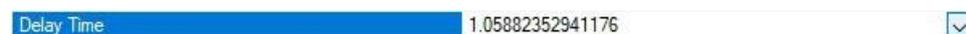
**Rate**



Rate or Rate slider as listed in the Roland Boutique JP-08 manual, sets the cycle speed or Rate of the LFO, the lower the Parameter Value the slower the cycle speed. When Rate is at minimum “0” the

cycle speed will be around “0.04Hz” or “25 seconds”, when the Rate is at maximum “10” the cycle speed will be around “37Hz” or “26ms”.

**Delay Time**



Delay Time or Delay Time slider as listed in the Roland Boutique JP-08 manual, specifies the time from when the tone sounds until the LFO reaches its maximum amplitude. Unlike other synthesisers LFO Delay Time, the JP-08 like the original Jupiter-8 fades the LFO Modulation effect in. When the Delay Time is at minimum “0” the LFO Modulation is as the key is pressed but when at maximum “10” the effect will start at around “3.4 seconds” slowly rising to its maximum around “6.5 seconds”. Remember; the Delay time is not reset until any modulating notes are no longer held.

**Waveform**



Waveform or Waveform knob as listed in the Roland Boutique JP-08 manual, specifies the wave shape or Waveform used by the LFO. Originally only four choices were available but this has been increased to six on the JP-08. The Choices are Sine “1” True Zero, Triangle “2” (the first of the new choices), Reverse Saw “3”, Square “4”, Random “5” and Noise “6” (another new choice).

**VOLTAGE CONTROLLED OSCILLATOR MODULATOR**

<b>02) VCO Modulator</b>	
LFO Modulation	10
Envelope Modulation	0
Frequency Modulation	VCO2
Pulse Width Modulation	LFO modulation depth (LFO)
Pulse Width	8.35294117647059

FigureJP-08n

The Voltage Controlled Oscillator Modulator or VCO MOD as listed in the Roland Boutique JP-08 manual is used to generate movement within the oscillators themselves by varying frequency “pitch” and/or pulse shape over time, using the LFO and/or Envelope 1 as detailed below.

**LFO Modulation**



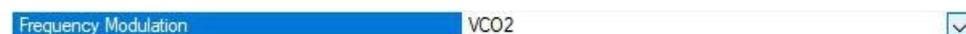
LFO Modulation or LFO MOD as listed in the Roland Boutique manual, sets the amount if any that the LFO (detailed above) will modulate the frequency “pitch” of VCO1 and/or VCO2 as defined by the location of the Freq Mod switch (see Frequency Modulation below). When LFO Modulation is set to minimum “0” the LFO (detailed above) will have no effect on the pitch of the oscillators, but when set to maximum “10” the LFO will have full effect on the oscillators pitch. LFO Modulation of frequency or pitch as better described is more commonly known as vibrato, however when set to maximum it is worth noting that the pitch shift will be across two octaves, one up and one down.

**Envelope Modulation**



Envelope Modulation or ENV MOD as listed in the Roland Boutique manual, sets the amount if any that Envelope 1 (detailed below) will control the frequency “pitch” of VCO1 and/or VCO2 as defined by the location of the Freq Mod switch (see Frequency Modulation below). When Envelope Modulation is set to minimum “0” Envelope 1 (detailed below) will have no effect on the pitch of the oscillators, but when set to maximum “10” Envelope 1 will have full control on the oscillators pitch. Envelope Modulation of frequency or pitch as better described is more commonly known as a pitch slide or glissando, used in combination with LFO MOD above to create a vibrato slide. It’s worth noting that when ENV MOD is at maximum “10” the pitch range will be three octaves from the key note, either up when Polarity is Normal or down when Inverted (see Polarity below).

**Frequency Modulation**



Frequency Modulation or FREQ MOD as listed in the Roland Boutique JP-08 manual, sets which Voltage Controlled Oscillators are modulated by LFO MOD and ENV MOD (detailed above). Three

choices are available; True Zero VCO2 “1”, VCO1 and VCO2 “2” or VCO1 “3”.

**Pulse Width Modulation**



Pulse Width Modulation or the Pulse Width Mod Switch as listed in the Roland Boutique JP-08 manual, sets how the Pulse Width (detailed below) will be controlled.

**EG1 modulation depth (Envelope 1)**

When this choice is selected the Pulse Width (detailed below) will be controlled by Envelope 1 (also detailed below). Remember; The Pulse Width Parameter detailed below must be greater than “0” for Envelope 1 to have any effect on the waveshape, large values result in a greater effect depth.

**Pulse width size (Manual)**

When this choice is selected the pulse size will be controlled manually by the Pulse Width Parameter detailed below. Remember; VCO1 and/or VCO2 Waveform must be set to “Pulse” as detailed below.

**LFO modulation depth (LFO)**

When this choice is selected the Pulse Width (detailed below) will be modulated by the LFO detailed above. Remember; The Pulse Width Parameter detailed below must be greater than “0” for the LFO to have any effect on the waveshape, larger values result in a greater effect depth.

**Pulse Width**



Pulse Width or Pulse Width Slider as listed in the Roland Boutique JP-08 manual, defines the waveshape used by VCO1 and/or VCO2 when Waveform is “Pulse” as detailed below. A pulse wave or asymmetrical pulse as listed in the JP-08 manual is a wave shape that can change from a square wave at minimum “0” to a small or thin pulse at maximum “10”. By using the Pulse Width Parameter, you can choose the waveshape, the smaller the pulse the thinner the sound.

Remember; When Pulse Width is at minimum “0” or square wave, neither the LFO nor Envelope 1 can modulate the pulse wave shape, the greater the value the deeper the effect becomes.

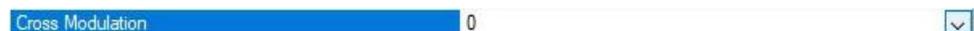
**VOLTAGE CONTROLLED OSCILLATORS**

<b>03) Voltage Controlled Oscillators</b>	
Cross Modulation	0
VCO1 Range	16'
VCO1 Waveform	Pulse
VCO2 Synchronisation	True
VCO2 Range	3.9375
VCO2 Fine Tune	0.01960784313726
VCO2 Waveform	Pulse
Source Mix	0.80392156862745

FigureJP-08o

The Voltage Controlled Oscillators or VCO1 and VCO2 as they are listed in the Roland Boutique JP-08 manual, are the main building blocks for creating sound. Both oscillators are different to allow for a vast number of possibilities as detailed below and this in turn added to the original Jupiter-8 sound. Changes have been made to both oscillators as detailed below and this allows the JP-08 to differ from the original Jupiter-8 in some instances, so not all creations on one will work on the other.

**Cross Modulation**



Cross Modulation or Cross MOD as listed in the Roland Boutique JP-08 manual, sets how much if any VCO2 will modulate the pitch of VCO1. When VCO2 is in Normal Range (see VCO2 below), Cross Modulation of VCO1 will produce metallic sounds similar to ring modulation. When VCO2 is in Low Frequency Range (see VCO2 below), Cross Modulation of VCO1 will produce effects more akin to using the LFO and LFO MOD Parameter as detailed above. Like the other modulation Parameters there will be no effect at minimum “0” and full effect at maximum “10”.

**VCO1 Range**



VCO1 Range as listed in the Roland Boutique JP-08 manual, is used to set the basic pitch range or

octave of the oscillator. The smaller the value the higher the pitch of the oscillator, six choices are available 64' True Zero (pronounced sixty-four foot), 32', 16', 8', 4' and 2'; originally a standard pitch designation borrowed from organ technology, indicating specific pitches placed one octave apart. The original Jupiter-8 only supported four ranges, omitting both 64- and 32-foot choices so not all creations on the JP-08 will sound correctly on the Jupiter-8.

### VCO1 Waveform

VCO1 Waveform

VCO1 Waveform or VCO1 Wave knob as listed in the Roland Boutique JP-08 manual, is used to set the wave shape used by VCO1. Six different wave shapes are available, Sine "True Zero", Triangle, Sawtooth, Pulse "asymmetrical pulse" used in combination with Pulse Width detailed above, Square and finally Noise. Originally only four choices were available to the Jupiter-8 omitting both triangle and noise, so not all creations on one will work correctly on the other.

### VCO2 Synchronisation

VCO2 Synchronisation

VCO2 Synchronisation or Sync as listed in the Roland Boutique JP-08 manual, forces VCO2 to be synchronised with the output of VCO1. Sync can be used to provide simple tuning between the two oscillators or to generate rich harmonics to add colour to the tone. Two choices are available, True "On" or False "Off" True Zero.

### VCO2 Range

VCO2 Range

VCO2 Range as listed in the Roland Boutique JP-08 manual, is used to set the basic pitch range of the oscillator. Unlike VCO1 above, VCO2 allows for the range to be adjusted in half steps as the control is adjusted through the range. Footage markers are still provided to indicate the points at which VCO2 will be in tune with VCO1, in the relative octaves. As with VCO1, the smaller the value the higher the pitch of the oscillator. This Parameter uses a custom control to enable correct display of the footage markers "64', 32', 16', 8', 4', 2'" as the range is adjusted. Due to the scale of this custom Parameter; several values will equate to the same audible pitch making identification troublesome, especially between "8' to 32'" and where the half steps are concerned. Note; the value for Roland Boutique Cloud Patch "Neg Sync" is set just below its audible four-foot. The original Jupiter-8 only supported a range from sixteen-foot up to two-foot, omitting the lower range of sixty-four-foot up to sixteen-foot so not all creations on the JP-08 will sound correct on the Jupiter-8.

### VCO2 Fine Tune

VCO2 Fine Tune

VCO2 Fine Tune or Tune knob as listed in the Roland Boutique JP-08 manual, allows adjustment between the half steps selected by VCO2 Range detailed above. The Fine Tune range is +-60 cent, at minimum "-5" the pitch will be down 60 cent or just over half a semitone, when at maximum "5" the pitch will be up just over half a semitone. Remember; due to value rounding the twelve o'clock position or "0" will not display as such, by entering the required value the rounding is automatic.

### VCO2 Waveform

VCO2 Waveform

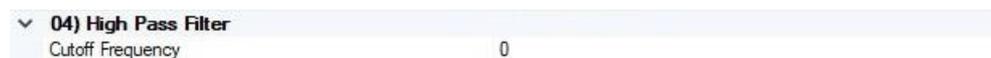
VCO2 Waveform or VCO2 Wave knob as listed in the Roland Boutique JP-08 manual, is used to set the wave shape used by VCO2. Six different wave shapes are available, Sine "True Zero", Sawtooth, Pulse ("asymmetrical pulse" used in combination with Pulse Width detailed above), Low Frequency Sine, Low Frequency Sawtooth and finally Low Frequency Pulse. The Low Frequency or LOW FREQ choices as labelled on the front of the JP-08 are very useful when using VCO2 as an LFO to Cross Modulate VCO1 as detailed above, allowing the LFO also detailed above to cycle separately. Originally four shapes were available to the Jupiter-8 which included noise and each of these shapes could be switched into low frequency mode. Unfortunately, these differences mean not all creations on the Jupiter-8 will work correctly on the Boutique JP-08.

### Source Mix



Source Mix as detailed in the Roland Boutique JP-08 manual, is used to adjust the volume balance of VCO1 and VCO2. When set to minimum True Zero “-5” only VCO1 will be audible but when set to maximum “5” only VCO2 will be audible, adjusting the control away from minimum or maximum will slowly introduce the other oscillator creating the balance or mix you require. Remember; due to value rounding the twelve o’clock position or “0” will not display as such but by entering the required value the rounding will be automatic and display as “0.01960784313726”.

### HIGH PASS FILTER



FigureJP-08p

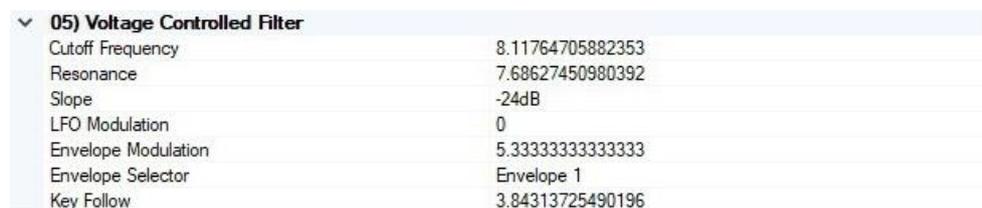
The High Pass Filter or HPF as listed in the Roland Boutique JP-08 manual is the first of the filters in the JP-08 and is used to remove unwanted bass frequencies, sometimes referred to as muddiness.

#### Cutoff Frequency



The Cutoff Frequency or CUTOFF slider as detailed in the Roland Boutique JP-08 manual, sets the Cutoff Frequency of the High Pass Filter. When this Parameter is at minimum “0” no filtering will occur, by increasing the value more of the lower harmonics will be removed until the sound becomes thinner or less full in body at maximum “10”.

### VOLTAGE CONTROLLED FILTER



FigureJP-08q

The Voltage Controlled Filter or VCF as listed in the Roland Boutique JP-08 manual is the second of the filters in the JP-08 and is used to control the tonal quality or timbre of the sound by removing and emphasising different harmonics in the VCO waveforms. Unlike the first filter listed above this filter is a low pass filter and cuts high frequency allowing the lower harmonics to pass, but being a resonant filter, harmonics can be boosted or emphasised as detailed below.

#### Cutoff Frequency



Cutoff Frequency or CUTOFF slider as listed in the Roland Boutique JP-08 manual, sets the Cutoff Frequency of the Voltage Controlled Filter allowing only the frequencies below this point to pass. When set to maximum “10” no filtering will occur, by decreasing the value more of the higher frequencies will be removed progressively creating a mellower sound until no frequencies can pass at minimum “0”, and no sound will be audible. Unlike the Cutoff of the High Pass Filter detailed above this Cutoff Parameter can be modulated or controlled by other Parameters detailed below.

#### Resonance



Resonance or Res slider as listed in the Roland Boutique JP-08 manual, is used to emphasise the frequencies at the point where the Cutoff Frequency begins to filter the sound. When set to minimum “0” Resonance will have no effect, but as the Parameter is increase more emphasis or harmonic boosting will occur at the cutoff point until at maximum “10”, when full harmonic ringing will occur. Unlike some synthesisers the Jupiter-8 filter did not go into self-oscillation but

has a very pleasing characteristic of its own that has been duplicated in operation on the JP-08.

**Slope**



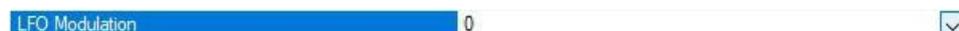
Slope as listed in the Roland Boutique JP-08 manual has two available choices, -12dB or -24dB. -12dB

This Slope choice is used to add a more acoustic -12dB/octave cutoff Slope and permits more high frequencies to pass in any given Cutoff point, creating a brighter tone. This choice was intended for acoustic and string ensemble sounds but has been favoured by many famous Jupiter-8 users.

-24dB

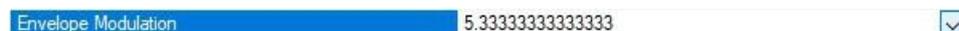
The -24dB/octave cutoff Slope choice permits more bass and fewer high frequencies at the Cutoff point, producing a strong distinctive sound normally associated with classic synthesiser sounds.

**LFO Modulation**



LFO Modulation or LFO MOD as listed in the Roland Boutique JP-08 manual, sets the amount if any the LFO detailed above will modulate the VCF Cutoff Parameter also detailed above. When set to minimum “0” the LFO detailed above will have no effect on the VCF Cutoff, but as the value is increased so does the modulation of the Cutoff until reaching maximum depth at “10”. Cutoff modulation can be used to create a large range of effects from wah-wah to resonant sweeping.

**Envelope Modulation**



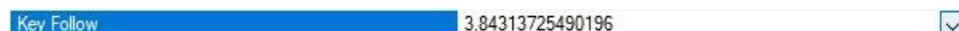
Envelope Modulation or ENV MOD as listed in the Roland Boutique JP-08 manual; sets the amount if any the envelope selected by the Envelope Selector detailed below, will control the VCF Cutoff Parameter (detailed above) over time. When set to minimum “0” Envelope 1 or Envelope 2 “see below” will have no effect on the VCF Cutoff, but as the value is increased so does the depth of control the selected envelope will have on the VCF Cutoff until reaching maximum effect at “10”. Using envelopes to control the VCF Cutoff is a very useful tool when creating both natural or synthetic sounds and can be subtle and/or extreme especially when combined with LFO Modulation.

**Envelope Selector**



The Envelope Selector or ENV-1/ENV-2 switch as listed in the Roland Boutique JP-08 manual, defines which envelope will be used to control the VCF Cutoff as specified by the Envelope Modulation Parameter detailed above. Two choices are available, Envelope 1 or Envelope 2 “True Zero”.

**Key Follow**



Key Follow as listed in the Roland Boutique JP-08 manual, adjusts the way in which the keyboard pitch controls the VCF Cutoff in much the same way acoustic instruments do. When the value is at minimum “0” the Cutoff Frequency will not change in relation to the key played, allowing higher scaled notes to actually sound more mellow than the lower notes. As the Parameter value is increased the Cutoff Frequency will start to rise allowing the tone colour of the higher notes to become more akin to the lower until at maximum “10” when the upper notes will be brighter.

**VOLTAGE CONTROLLED AMPLIFIER**

<ul style="list-style-type: none"> <li> <span style="font-size: 0.8em;">v</span> <b>06) Voltage Controlled Amplifier</b> </li> </ul>	
Level	7.05882352941176
LFO Modulation	0

FigureJP-08r

The Voltage Controlled Amplifier or VCA as listed in the Roland Boutique JP-08 manual, adjusts the volume of the sound. No amplification takes place in the VCA but the contours of sounds passing through the VCA can be controlled by Envelope 2 detailed below and the LFO detailed above.

**Level**

Level

Level as listed in the Roland Boutique JP-08 manual, defines the depth or loudness range that Envelope 2 detailed below and the LFO detailed above can control. When the value is at minimum “0” there will be no volume but as the value is raised the volume increases until at maximum “10” full volume. Use this Parameter to even out sounds and prevent output distortion.

**LFO Modulation**

LFO Modulation

LFO Modulation or LFO MOD switch as listed in the Roland Boutique JP-08 manual, has four choices available which apply different amounts of the LFO to modulate the output level. A range of different modulation effects can be generated including tremolo and gating depending on the LFO Waveform selected, “see LFO Waveform above”. When set to minimum “0” the LFO will have no effect on the volume, with the next three choices generating progressively deeper modulations.

**ENVELOPE 1**

07) Envelope 1	
Attack	3.6078431372549
Decay	5.33333333333333
Sustain	3.52941176470588
Release	3.09803921568627
Key Follow	False
Polarity	Inverted

FigureJP-08s

Envelope 1 or ENV-1 as listed in the Roland Boutique JP-08 manual, is used to create time-varying changes to VCO Freq, Pulse Width and/or VCF Cutoff depending on other Parameter settings as detailed above. Envelope 1 is the first of two available to the JP-08, both being standard Attack, Decay, Sustain, Release or “ADSR” envelopes as detailed below. The difference between Env-1 and Env-2 is that Envelope 1 can be Inverted as detailed below.

**Attack**

Attack

Attack or A slider as listed in the Roland Boutique JP-08 manual, is a time control and defines the amount of time it takes for the envelope to reach the maximum point after receiving note on. When set to minimum “0” the attack time will be instant but as the value is increased so does the attack time until reaching maximum “10” or 5 seconds. The original Jupiter-8 specifications listed the attack time as 1.5ms to 6 seconds, this varies on analogue synthesisers but not on the JP-08.

**Decay**

Decay

Decay or D slider as listed in the Roland Boutique JP-08 manual, is a time control and defines the amount of time it takes for the envelope to reach the Sustain (detailed below), after completing the Attack as detailed above. When set to minimum “0” the decay time will be instant but as the value is increased so does the decay time until reaching maximum “10” or 44 seconds. The original Jupiter-8 specifications listed the decay time as 1.5ms to 12 seconds, this varies a lot on analogue synthesisers but not on the JP-08.

**Sustain**

Sustain

Sustain or S slider as listed in the Roland Boutique JP-08 manual, is a level and not a time control like the others (A, D and R) and defines the level at which the envelope will Sustain after Decay completion but before note off. When set to minimum “0” the level will be at its lowest point in relation to the Parameter controlled by ENV-1, as the Sustain value increases so does the level of the controlled Parameter until at maximum “10” or the highest point. When controlling ENV MOD (detailed above) or pitch for example; the Sustain level will define the constant pitch of the note after any slides set by the Attack and Decay detailed above.

**Release**

Release 3.09803921568627

Release or R slider as listed in the Roland Boutique JP-08 manual, is a time control and defines the amount of time it takes for the envelope to complete after receiving note off. When set to minimum “0” the release time will be instant but as the value is increased so does the release time until reaching maximum “10” or 36 seconds. The original Jupiter-8 specifications listed the release time as 1.5ms to 12 seconds, this varies a lot on analogue synthesisers but not on the JP-08.

**Key Follow**

Key Follow False

Key Follow as listed in the Roland Boutique JP-08 manual, defines whether Envelope 1 should be a constant or fixed time as set by the Parameters “A, D, R” detailed above or relative to the pitch of the key note. Two choices are available “True or False”; when set to False “Off” the envelope will be a constant and any time changes will be equal to the envelope settings, for example any changes to VCO Freq, Pulse Width or VCF Cutoff will be at the same time no matter what notes are played. When set to True “On” the envelope will be relative to the note received and higher notes will have faster envelopes whilst lower notes have longer envelopes, for example any changes to VCO Freq, Pulse Width or VCF Cutoff will be relative to the key note and therefore different for each note.

**Polarity**

Polarity Inverted

Polarity or  switch as listed in the Roland Boutique JP-08 manual, is only available to Envelope 1 as mentioned above. Two choices are available “Normal and Inverted” as detailed below.

**Normal**

When Normal Polarity is selected the envelope will operate in the same way as ENV-2 detailed below, in a positive direction. When controlling VCO Freq for example; the pitch of VCO-1 and/or VCO-2 will always travel up the scale heading away from and back to the key note, likewise when controlling VCF Cutoff the value will increase and return only as low as the starting value.

**Inverted**

When Inverted Polarity is selected the envelope will operate in the reverse direction allowing for negative envelope shaping. When controlling VCO Freq for example; the pitch of VCO-1 and/or VCO-2 will always travel down the scale heading away from and back to the key note, likewise when controlling VCF Cutoff the value will decrease and return only as high as the starting value. However, when controlling Pulse Width, the envelope direction will not be Inverted but remains as Normal detailed above and in fact inverts the pulse waveshape using negative pulse instead of positive.

**ENVELOPE 2**

<b>08) Envelope 2</b>	
Attack	0
Decay	4.50980392156863
Sustain	8.62745098039216
Release	1.45098039215686
Key Follow	False

FigureJP-08t

Envelope 2 or ENV-2 as listed in the Roland Boutique JP-08 manual, is used to create time-varying changes to VCA loudness and VCF Cutoff if required (see Envelope Selector above). ENV-2 is the second envelope available to the JP-08, both being standard Attack, Decay, Sustain, Release or “ADSR types” as detailed above and below. The difference between Env-2 and Env-1 is that Envelope 2 cannot be Inverted as with ENV-1 detailed above. Primarily ENV-2 was designed to control the VCA loudness contours, as unlike some synthesisers there is no simple gate option and without the envelope no sound would be audible.

**Attack**

Attack 0

Attack or A slider as listed in the Roland Boutique JP-08 manual, is a time control and defines the

amount of time it takes for the envelope to reach the maximum point after receiving note on. When set to minimum “0” the attack time will be instant but as the value is increased so does the attack time until reaching maximum “10” or 5 seconds. The original Jupiter-8 specifications listed the attack time as 1.5ms to 6 seconds, this varies on analogue synthesisers but not on the JP-08.

**Decay**

Decay

Decay or D slider as listed in the Roland Boutique JP-08 manual, is a time control and defines the amount of time it takes for the envelope to reach the Sustain (detailed below) after completing the Attack as detail above. When set to minimum “0” the decay time will be instant but as the value is increased so does the decay time until reaching maximum “10” or 43 seconds. The original Jupiter-8 specifications listed the decay time as 1.5ms to 12 seconds, this varies a lot on analogue synthesisers but not on the JP-08. Remember; If the Sustain Parameter detailed below is set to maximum, decay times are still followed but no loudness changes will occur.

**Sustain**

Sustain

Sustain or S slider as listed in the Roland Boutique JP-08 manual, is a level and not a time control like the others “A, D and R” and defines the level at which the envelope will Sustain after Decay completion but before note off. When set to minimum “0” there will be no audible signal and any held keys reaching this envelope point are terminated, not proceeding to the Release detailed below. As the Sustain value increases so does the loudness in relation to the VCA Level Parameter detailed above, until at maximum “10” the loudest point available. Remember; When a key is released before the Sustain point is reached, the Release detailed below will still be followed.

**Release**

Release

Release or R slider as listed in the Roland Boutique JP-08 manual, is a time control and defines the amount of time it takes for the envelope to complete after receiving note off. When set to minimum “0” the release time will be instant but as the value is increased so does the release time until reaching maximum “10” or 35 seconds. The original Jupiter-8 specifications listed the release time as 1.5ms to 12 seconds, this varies a lot on analogue synthesisers but not on the JP-08.

**Key Follow**

Key Follow

Key Follow as listed in the Roland Boutique JP-08 manual, defines whether Envelope 2 should be a constant or fixed time as set by the Parameters “A, D, R” detailed above or relative to the pitch of the keynote. Two choices are available (True or False); when set to False “Off” the envelope will be a constant and any time changes will be equal to the envelope settings, for example any changes to VCA loudness or VCF Cutoff if selected, will be at the same time no matter what notes are played. When set to True “On” the envelope will be relative to the note received and higher notes will have faster envelopes whilst lower notes have longer envelopes, for example any changes to VCA loudness or VCF Cutoff will be relative to the key note and therefore different for each note.

**DELAY**

▼ 09) Delay	
Level	0
Time	0
Feedback	0

FigureJP-08u

Delay or Delay Effect as listed in the Roland Boutique JP-08 manual, can be used to create basic repeat effects that range from a very fast metallic ringing to timed pattern repeats.

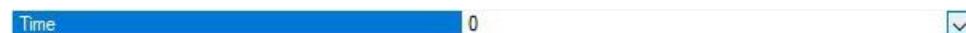
**Level**

Level

Level or Delay Level as listed in the Roland Boutique JP-08 manual, defines the loudness of the effect generated by the Time and Feedback Parameters detailed below. Sixteen different choices are

available, starting with minimum “0” or “Off” followed by “1” being hardly audible and then gradually increasing until at maximum “15”, which is slightly less than the original sound for the first repeat and getting progressively quieter over the duration of the effect Feedback (detailed below).

**Time**



Time or Delay Time as listed in the Roland Boutique JP-08 manual, defines the Time by which the repeat will be delayed. Sixteen choices are available starting with minimum “0” or very fast and gradually increasing to a maximum of “15” or around 700ms, the slowest repeat choice.

**Feedback**



Feedback or Delay Feedback as listed in the Roland Boutique JP-08 manual, defines the number of repeats used by the effect. Sixteen choices are available starting with minimum “0” or one repeat, gradually increasing the number of repeats until reaching the maximum “15” or full Feedback, which depending on the Time Parameter (detailed above) could continue for over two hundred repeats.

**PORTAMENTO**

10) Portamento	
Enabled	False
Time	100

FigureJP-08v

Portamento as listed in the Roland Boutique JP-08 manual, is used to create smooth pitch changes between one key and the next key played.

**Enabled**



Enabled or Portamento Switch as listed in the Roland Boutique JP-08 manual, defines whether the Portamento effect is switched “On” True or “Off” False. When the Portamento effect is “True” notes will pitch slide from the last played key to the next played key, either sliding up or down to the new played key depending on the location of the last played key. The speed of the pitch slide is governed by the Time Parameter detailed below.

**Time**



Time or Portamento Time as listed in the Roland Boutique JP-08 manual, defines the speed of the pitch slide as mentioned above. When set to minimum “0” the pitch slide will be so quick that it will not be noticed unless using the full key scale but becomes more noticeable as the Parameter is increased until reaching maximum “255” which is so slow that notes may not have actually reached the correct pitch before another key is played. Originally the JP-08 minimized the value to “100” as detailed in the JP-08 manual, but this has been increased to “255”, the maximum eight bit value.

**OTHER**

11) Other	
Assign Mode	Polyphonic
Pitch Bend Range	2

FigureJP-08w

Other is the last of the Roland Boutique JP-08 Plugin Parameter Groups, containing two Parameters.

**Assign Mode**



Assign Mode or Solo/Unison/Poly Mode as listed in the Roland Boutique JP-08 manual, defines how the keyboard keys trigger the JP-08 notes or voices as more commonly known.

**Solo**

When Solo Assign Mode is selected the JP-08 becomes a monophonic synthesiser and only one key or voice can be played at any one time (one note or voice polyphony).

### Unison

When Unison Assign Mode is selected the JP-08 becomes one large synthesiser playing all four voices simultaneously or in Unison. Unlike some synthesisers the original Jupiter-8 used the unison mode to its advantage by sharing the voices between the keys played as is the case with the JP-08. When one key is played all four voices are used, when two keys are played the voices are shared “two each” and so on, this way Unison can still be polyphonic as required instead of monophonic as is the case with many other synthesisers.

### Polyphonic

When Polyphonic Assign Mode is selected the JP-08 becomes a four note or voice synthesiser, playing or assigning one voice for every key or note played. In this mode chords can be played and envelopes can be honoured polyphonically allowing for some keys to release without getting instantly replaced as they are in Unison detailed above.

### Pitch Bend Range



Pitch Bend Range or Bend Range as listed in the Roland Boutique JP-08 manual, specifies the range in semitones assigned to MIDI pitchbend. Twenty-five choices are available starting with minimum “0” or “Off”, followed by “1 – 24” each number representing a semitone of pitchbend up/down. By default, Roland have selected “2” but True Zero is “Off”. The JP-08 LED’s will only identify “1-12” semitones, “13-24” are all identified as “24” even though the exact value has been stored.

### BACKUP\RESTORE

Backup\Restore as detailed in the Roland Boutique JP-08 manual, enables the JP-08 to become a USB mass storage device or USB Synth as detailed in the SoundDiviner main manual. Once in mass storage mode SoundDiviner can read from and write to the JP-08 virtual drive but you will still need to complete the writing process by pushing the Manual button as detailed in the JP-08 manual. To activate Backup\Restore, turn the JP-08 “On” whilst holding patch number “2” then release the patch number button when the lights come on. A drive window will open called “JP-08 (X:)” where “X” is the assigned drive letter, you can close this as it is not required. Remember; When accessing Removable Drive JP-08 (1.00MB), you will need to confirm Admin Rights and User Account Control as detailed in the main manual to access the virtual drive (see READ or WRITE DISK SNAPSHOT).

### HIDDEN CHORUS EFFECT

The Hidden Chorus Effect that was introduced to the Roland Boutique JP-08 with firmware update “1.10” uses MIDI Control Change messages or MIDI CC as more commonly listed. This effect is not backed up using the JP-08 Backup/Restore process as detailed in the Roland Boutique JP-08 manual and not included in this SoundDiviner Boutique JP-08 Plugin. It is worth noting that when the Hidden Chorus Effect is enabled and saved to a patch number, the effect will stay enabled even when the Preset Number is over written with a new Patch Snapshot from SoundDiviner or when restored using the Roland Backup\Restore method. The only way to remove the Hidden Chorus Effect from a stored patch number, is to use the MIDI CC switch (detailed below) and re-save the patch number, or save over the patch number with a different patch number that has the Hidden Chorus Effect switch off, or to remove the Hidden Chorus Effect from all of the patch numbers do a factory reset as detailed in the Roland Boutique JP-08 manual.

### MIDI Control Change

MIDI Control Change messages can be used to control any Parameter within the JP-08 as listed in the Roland JP-08 MIDI Implementation Chart available from Roland as a download.

### MIDI CC 93

Control Change number “93”, can be used to switch the Hidden Chorus Effect into four positions, Chorus Off “0”, Chorus 1 “1”, Chorus 2 “2” and Chorus 3 “3”, each one a slightly faster effect.

#### PATCH SHEET PLUGIN

Unlike the Roland Boutique JP-08, some synthesisers don't have program or Preset memory and these models are supported in SoundDiviner through the use of Patch Sheet Plugins. Patch Sheets have always been a very useful way to share and keep records for all synths not just those without memory, taking this all into account the JP-08 Patch Sheet Plugin is also available separately.

#### Roland Boutique JP-08 Patch Sheet Plugin

After installation Roland Boutique JP-08 (patch sheet) will be available as a Device and should be considered as a Device in its own right that works independently of the Roland Boutique JP-08 Synthesiser Plugin described throughout this manual. Either used on its own or in combination with the Synthesiser Plugin the Patch Sheet Plugin is a very useful addition that is supplied with the required Adaptor Plugin for Patch Snapshot conversion (Roland Boutique JP-08<-> Roland Boutique JP-08 Patch Sheet), for more information on the Roland Boutique JP-08 Patch Sheet Plugin see the related Patch Sheet Plugin manual.

## INDEX

---

**A**

ADAPT .....	9
Adaptor Plugins.....	9
ADD-ONS.....	2
All Items .....	7
Analogue Values .....	11
<b>Assign Mode</b> .....	23
<b>Attack</b> .....	20, 21

---

**B**

BACKUP\RESTORE.....	24
BINARY DUMP.....	6

---

**C**

Cancel .....	13
Conclusion .....	6
<b>Cross Modulation</b> .....	16
<b>Cutoff Frequency</b> .....	18

---

**D**

<b>Decay</b> .....	20, 22
DELAY.....	22
<b>Delay Time</b> .....	15
Device .....	5
<b>Disk Space Error</b> .....	9
Do Not Import Duplicates .....	5
Dual.....	13
DUPLICATES FOUND WINDOW .....	6
DUPLICATES LIST .....	6

---

**E**

<b>Edit Pattern Window</b> .....	12
Eighth Triplet .....	12
<b>Enabled</b> .....	23
ENVELOPE 1 .....	20
ENVELOPE 2 .....	21
<b>Envelope Modulation</b> .....	15, 19
<b>Envelope Selector</b> .....	19
Example .....	6
Export Item Process .....	6
<b>Export Item Warning</b> .....	8
<b>Export Item Window</b> .....	7
EXPORT OPTIONS.....	6
EXPORT PATCH SNAPSHOT .....	6
Exported Item .....	8
Exported Items.....	7
Exported Items List .....	7

---

**F**

<b>Feedback</b> .....	23
FigureP61a .....	3
FigureP61b .....	5
FigureP61d .....	7
FigureP61e .....	10
Finalised .....	4
FIRST THINGS FIRST.....	2
<b>Frequency Modulation</b> .....	15

---

**G**

Gate .....	13
------------	----

---

**H**

HIDDEN CHORUS EFFECT .....	24
Hidden Patches .....	13
HIGH PASS FILTER.....	18
HOW IT WORKS.....	2

---

**I**

IMPORT FILE WINDOW .....	5
IMPORT OPTIONS.....	5
INDEX .....	26
INTRODUCTION.....	2
<b>Item Error</b> .....	8

---

**K**

<b>Key Follow</b> .....	19, 21, 22
<b>Key Mode</b> .....	13

---

**L**

LAYER .....	13
<b>Level</b> .....	20, 22
<b>LFO Modulation</b> .....	15, 19, 20
LOW FREQUENCY OSCILLATOR .....	14
<b>Lower</b> .....	14

---

**M**

MAIN CONTENTS.....	1
Minus .....	13

---

**N**

NEW PATCH SNAPSHOT .....	5
No6, 8	
Note .....	12

---

**O**

OK9, 13	
OTHER .....	23
OVERVIEW .....	2

---

**P**

PARAMETER LISTS .....	9
PARAMETER VALUES .....	11
PARAMETERS .....	10
PARSE .....	9
PATCH .....	14
Patch Folder .....	3
PATCH PRESET .....	13
Patch Presets .....	8
PATCH SHEET PLUGIN .....	25
Patch Sheet Plugins .....	9
Patch Snapshot .....	3
Patch Snapshot Type .....	4
Patches .....	8
PATCHES .....	14
<b>Pattern</b> .....	12
PATTERN .....	11
<b>Pattern Length</b> .....	12
Patterns .....	8
<b>Pitch Bend Range</b> .....	24
Play .....	12
Plus .....	13
<b>Polarity</b> .....	21
PORTAMENTO .....	23
Preset Reference .....	8
<b>Preset Reference Window</b> .....	14
<b>Pulse Width</b> .....	16
<b>Pulse Width Modulation</b> .....	16

---

**R**

<b>Rate</b> .....	14
<b>Release</b> .....	21, 22
<b>Resonance</b> .....	18
Roland Boutique JP-08 Patch .....	4
Roland Boutique JP-08 Preset .....	4
Roland Boutique Series Pattern .....	4

---

**S**

SAMPLE OPTION .....	4
<b>Scale</b> .....	11
SEQUENCER .....	11
Sixteenth .....	11
Sixteenth Triplet .....	12
<b>Slope</b> .....	19
SNAPSHOT EDITOR .....	9
<b>Source Mix</b> .....	18
<b>Sustain</b> .....	20, 22
Synthesiser Plugins .....	9

---

**T**

Target Device .....	7
Thirty-Second .....	11
Tie12	
<b>Time</b> .....	23

---

**U**

<b>Upper</b> .....	14
--------------------	----

---

**V**

Value Style 4 .....	11
<b>VCO1 Range</b> .....	16
<b>VCO1 Waveform</b> .....	17
<b>VCO2 Fine Tune</b> .....	17
<b>VCO2 Range</b> .....	17
<b>VCO2 Synchronisation</b> .....	17
<b>VCO2 Waveform</b> .....	17
Vel .....	13
VOLTAGE CONTROLLED AMPLIFIER .....	19
VOLTAGE CONTROLLED FILTER .....	18
VOLTAGE CONTROLLED OSCILLATOR MODULATOR .....	15
VOLTAGE CONTROLLED OSCILLATORS .....	16

---

**W**

<b>Waveform</b> .....	15
WHATS ADDED .....	2
Whole .....	13
WORKFLOW AREA .....	3

---

**Y**

Yes .....	6, 8
-----------	------