

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	4
SAMPLE OPTION	4
NEW PATCH SNAPSHOT	4
IMPORT OPTIONS	4
IMPORT FILE WINDOW	5
DUPLICATES FOUND WINDOW	5
DUPLICATES LIST	5
EXPORT OPTIONS	5
BINARY DUMP	6
EXPORT PATCH SNAPSHOT	6
BIN	7
PARSE	8
ADAPT	8
SNAPSHOT EDITOR	8
PARAMETER LISTS	8
BLANK PATCH	8
PARAMETERS	10
PARAMETER VALUES	10
LOW FREQUENCY OSCILLATOR	10
VOLTAGE CONTROLLED OSCILLATOR MODULATOR	12
VOLTAGE CONTROLLED OSCILLATORS	14
HIGH PASS FILTER	16
VOLTAGE CONTROLLED FILTER	16
VOLTAGE CONTROLLED AMPLIFIER	18
ENVELOPE 1	19
ENVELOPE 2	20
PITCH BEND	22
ARPEGGIATOR	23
EFFECTS	24
DELAY	25
REVERB	26
OTHER	27
PATCH SHEET PLUGIN	29
INDEX	30

INTRODUCTION

Thank you for purchasing the SynthTools SoundDiviner Soft Synth Plugin for Roland Cloud JUPITER-8. 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 also require the Roland Cloud JUPITER-8 software emulator, but as with other SoundDiviner Plugins this is not its sole purpose.

OVERVIEW

This Cloud JUPITER-8 Plugin can be used as both a converter and an editor as well as adding additional library features to the Cloud JUPITER-8 software emulator. Cloud JUPITER-8 Snapshots can be viewed, imported, exported, edited and managed using all the SoundDiviner tools. Individual patches can be edited using a full range of functions and even converted for use with other different Jupiter 8 hardware\software synthesisers, with the use of additional Plugins available separately.

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 Cloud JUPITER-8 Plugin is a Soft Synth Plugin and is designed to work with the Roland Cloud JUPITER-8 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

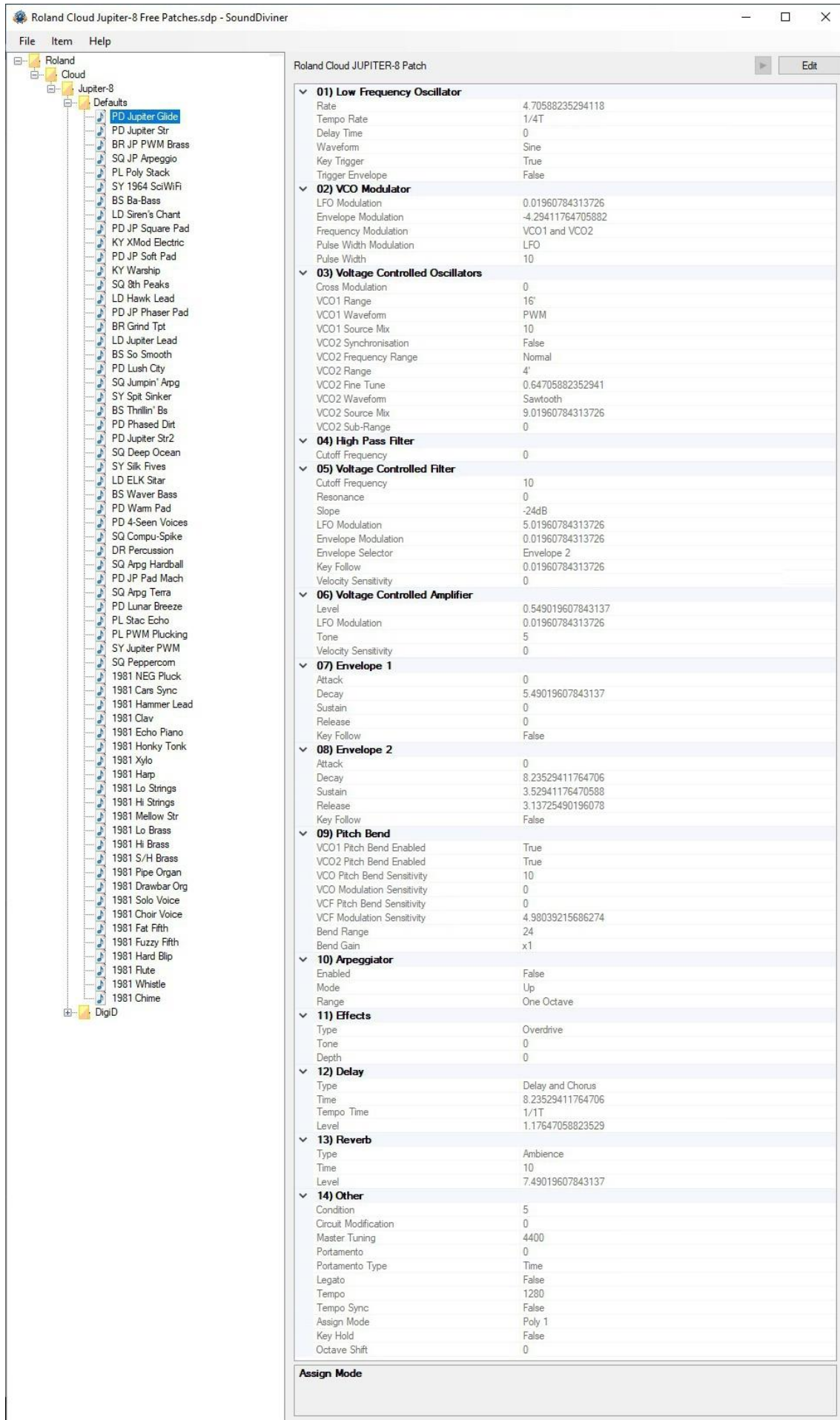
New Patch Snapshots can be created, edited and managed in the same way as any Patch Snapshot. Items can be imported\exported individually or in groups using different Import\Export Options. Previously saved or downloaded Snapshots can be imported to increase the patch library collection. Patch Snapshots can be managed using all SoundDiviner tools including Finalising. Patch Snapshots can be edited using all available Roland Cloud JUPITER-8 Parameters. Patch lists can be easily created using large libraries and saved to disk as “.bin” files. Individual Patch Snapshots can be imported\exported and shared with other Plugin users. SoundDiviner Projects containing finalised Roland Cloud JUPITER-8 Patch Snapshots can be downloaded from SynthTools (<https://synthtools.co.uk/sound-library/downloads/category/Roland-Cloud-JUPITER-8/>).

FIRST THINGS FIRST

It is recommended that you read through this manual and get a good understanding of how Plugin Roland Cloud JUPITER-8 works and interacts with SoundDiviner and the differences between SoundDiviner terminology and the original Roland Cloud JUPITER-8 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 as these sections will give you a good understanding of the Cloud JUPITER-8 Plugin.

WHATS ADDED

Roland Cloud JUPITER-8 will be added to the Plugin list and available for selection in the Select Device Windows. Roland Cloud JUPITER-8 Plugin enables previously greyed Functions and makes others available. The Workflow Area can now contain Patch Folders and Roland Cloud JUPITER-8 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 Roland Cloud JUPITER-8 Patch Snapshot, but is both destructive and disconnected.



FigureJUP-8a

WORKFLOW AREA

Now the Cloud JUPITER-8 Plugin has been installed the Workflow Area can contain Patch Folders and Patch Snapshots that are compatible with the Roland Cloud JUPITER-8 software application as listed in the main manual. After importing or converting Binary Snapshots the Workflow Area will display Patch Folders that contain sixty-four Patch Snapshots, each one representing a Preset stored within the Roland Cloud JUPITER-8 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

Only one Patch Snapshot Type is available to this Plugin and this is a Roland Cloud JUPITER-8 Patch.

Roland Cloud JUPITER-8 Patch



After importing from File, Patch Snapshots will be named using the patch memory name. Note that the Information bar displays the selected Patch Snapshot as "Roland Cloud JUPITER-8 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 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 Cloud JUPITER-8 Patch different 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 Roland Cloud JUPITER-8 from the available manufacturer lists in the Create Patch Snapshot Window, a Cloud JUPITER-8 Patch Snapshot will be created in the Workflow Area. New Patch Snapshots will be created in the Workflow Area and all Parameter Values set to "Blank Template". Blank Template values are the same as the Roland Cloud JUPITER-8 initial memories but the LFO Rate is also set to "0", as detailed below. New Patch Snapshots can be used to create quick templates with known or anticipated results for exporting back to the Roland Cloud JUPITER-8 for hands on audible editing before importing back into SoundDiviner for Finalising and library building.

IMPORT OPTIONS

Now this Cloud JUPITER-8 Plugin is installed, new Import Options are possible by selecting the Device Roland Cloud JUPITER-8 from the available Select Device Window during the related Import Option. As detailed in the main manual selecting Roland Cloud JUPITER-8 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 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 (.bin) files, see below.

IMPORT FILE WINDOW

Available when importing Files (see IMPORT OPTIONS) in the main manual for full details, Roland Cloud JUPITER-8 Plugin will now be available as a Device.



FigureJUP-8b

Device

Used to open the Select Device Window as listed in the main manual, expand the manufacturer list for Roland and select the Cloud JUPITER-8 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 FigureJUP-8b above).

DUPLICATES FOUND WINDOW



FigureJUP-8c

The total amount of Duplicates Found in the Import Process will be displayed in the Duplicates Found Windows, see FigureJUP-8c 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 Cloud JUPITER-8 Preset Name that matched the Patch Snapshot in your SoundDiviner Project, as detailed below.

Example

Roland\Cloud\Jupiter-8\Defaults\PD Jupiter Glide = PD Jupiter Glide

Conclusion

Patch Snapshot “PD Jupiter Glide” located in your SoundDiviner Project “Roland\Cloud\Jupiter-8\Defaults\” was Duplicated in the Import Process with Roland Cloud JUPITER-8 Preset Name “PD Jupiter Glide”, or patch memory name as described in the Roland Cloud JUPITER-8 manual.

EXPORT OPTIONS

This Roland Cloud JUPITER-8 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 by using (.bin) files (see BIN 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_CJP8PAT”. These Files can then be imported or shared with other compatible SoundDiviner Cloud JUPITER-8 Plugin users.

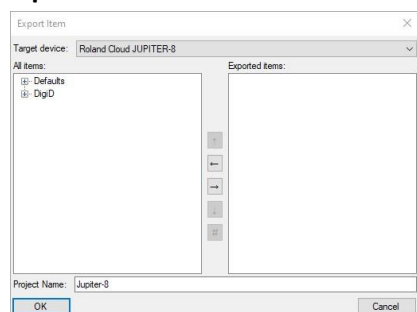
EXPORT PATCH SNAPSHOT

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 Roland Cloud JUPITER-8 Plugin gives you the ability to create Export lists that contain sixty-four Patch Snapshots, one for every memory location or Preset as defined in the SoundDiviner main manual. These lists can then be saved to File in “.bin” format as detailed below and will not require renaming as mentioned in the main manual as the Roland Cloud JUPITER-8 supports “.bin” Files, as fully detailed below (see BIN for more information).

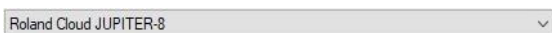
Export Item Window



FigureJUP-8d

After selecting a Patch Folder in the Workflow Area (see FigureJUP-8a above), in this example “Defaults” all compatible Items within the Parent Folder “Jupiter-8” will be included in the Export Item Window – All Items list (see FigureJUP-8d above). Full details on using the Export Item Window is listed in the main manual but the following is included to help with Cloud JUPITER-8 list building.

Target Device



If the Roland Cloud JUPITER-8 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 Snapshots can be selected and added to the Exported Items list in any order you require, filling the Cloud JUPITER-8 memory locations from slots “1-64”.

Exported Items

As you should be fully aware the Roland Cloud JUPITER-8 has sixty-four memory locations in each bank 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 sixty-four Patch Snapshots. Not all of these locations need to be filled as Blank Patches will be used to fill any remaining spaces, for more information on these (see Blank Patches below), 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 Roland Cloud JUPITER-8 Preset Number, as detailed in the main manual.

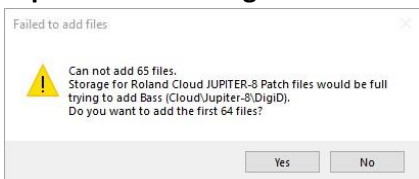
Exported Item

... [A1] PD Jupiter Glide (Defaults)

Items will be listed by the Roland Cloud JUPITER-8 memory location “Preset Number” displayed [A1-H8] followed by the Patch Snapshot Name “Preset Name” and Patch Folder. Roland Cloud JUPITER-8 supports Preset Numbers and Preset Names so these will be stored.

Remember; Roland Cloud JUPITER-8 supports a maximum of sixteen characters for Preset Names, larger Patch Snapshot 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.

BIN

When exporting a bank of sixty-four memories from the Roland Cloud JUPITER-8 software synthesiser they will be saved using the file extension “.bin” and not “.fxb”, as with the majority of

soft synths. This Cloud JUPITER-8 Plugin also exports sixty-four Patch Snapshots as detailed above using the file extension “.bin”, for direct importing into the Roland Cloud JUPITER-8 software synthesiser. SoundDiviner also uses the File extension “.bin” when exporting Binary Snapshots as fully detailed in the main manual, which slightly complicates the process but does however confirm the necessity to correctly name Binary Snapshots on creation, as detailed in the main manual.

PARSE

As detailed in the main manual Parse is used to extract Patch Snapshots from Cloud JUPITER-8 Binary Snapshots. Any compatible Binary Snapshot in your existing SoundDiviner Project can be selected and then converted to a Patch Folder containing all sixty-four Patch Snapshots 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 Roland Cloud JUPITER-8 Preset Names.

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 Cloud JUPITER-8 Synthesiser Plugin is compatible with the following Plugins.

Synthesiser Plugins

Roland Jupiter-8, Roland Boutique JP-08 and Arturia Jup-8V.

Patch Sheet Plugins

Roland Cloud JUPITER-8.

Adaptor Plugins

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

SNAPSHOT EDITOR

After Patch Snapshot selection the Snapshot Area becomes the Snapshot Editor see FigureJUP-8a 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 Cloud JUPITER-8 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 Cloud JUPITER-8 controls 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 a Roland Cloud JUPITER-8 Patch Snapshot, as detailed below and in the original software application PDF manual. The Parameter Lists will not include any step sequence data relating to the Roland System 8 as these are not supported by the Cloud JUPITER-8, only the Parameters available to the Roland Cloud JUPITER-8 will be imported.

BLANK PATCH

As with the Roland Cloud JUPITER-8, Blank Patches have all the Parameter Values set to the default positions, (see Roland Cloud JUPITER-8 Blank Template). The only difference is the LFO Rate control will also be set at “0” to match the actual LFO Rate and not as displayed by the Roland software.

Patch Snapshot (PD Jupiter Glide)

▼ 01) Low Frequency Oscillator	
Rate	4.70588235294118
Tempo Rate	1/4T
Delay Time	0
Waveform	Sine
Key Trigger	True
Trigger Envelope	False
▼ 02) VCO Modulator	
LFO Modulation	0.01960784313726
Envelope Modulation	-4.29411764705882
Frequency Modulation	VCO1 and VCO2
Pulse Width Modulation	LFO
Pulse Width	10
▼ 03) Voltage Controlled Oscillators	
Cross Modulation	0
VCO1 Range	16'
VCO1 Waveform	PWM
VCO1 Source Mix	10
VCO2 Synchronisation	False
VCO2 Frequency Range	Normal
VCO2 Range	4'
VCO2 Fine Tune	0.64705882352941
VCO2 Waveform	Sawtooth
VCO2 Source Mix	9.01960784313726
VCO2 Sub-Range	0
▼ 04) High Pass Filter	
Cutoff Frequency	0
▼ 05) Voltage Controlled Filter	
Cutoff Frequency	10
Resonance	0
Slope	-24dB
LFO Modulation	5.01960784313726
Envelope Modulation	0.01960784313726
Envelope Selector	Envelope 2
Key Follow	0.01960784313726
Velocity Sensitivity	0
▼ 06) Voltage Controlled Amplifier	
Level	0.549019607843137
LFO Modulation	0.01960784313726
Tone	5
Velocity Sensitivity	0
▼ 07) Envelope 1	
Attack	0
Decay	5.49019607843137
Sustain	0
Release	0
Key Follow	False
▼ 08) Envelope 2	
Attack	0
Decay	8.23529411764706
Sustain	3.52941176470588
Release	3.13725490196078
Key Follow	False
▼ 09) Pitch Bend	
VCO1 Pitch Bend Enabled	True
VCO2 Pitch Bend Enabled	True
VCO Pitch Bend Sensitivity	10
VCO Modulation Sensitivity	0
VCF Pitch Bend Sensitivity	0
VCF Modulation Sensitivity	4.98039215686274
Bend Range	24
Bend Gain	x1
▼ 10) Arpeggiator	
Enabled	False
Mode	Up
Range	One Octave
▼ 11) Effects	
Type	Overdrive
Tone	0
Depth	0
▼ 12) Delay	
Type	Delay and Chorus
Time	8.23529411764706
Tempo Time	1/1T
Level	1.17647058823529
▼ 13) Reverb	
Type	Ambience
Time	10
Level	7.49019607843137
▼ 14) Other	
Condition	5
Circuit Modification	0
Master Tuning	4400
Portamento	0
Portamento Type	Time
Legato	False
Tempo	1280
Tempo Sync	False
Assign Mode	Poly 1
Key Hold	False
Octave Shift	0

FigureJUP-8g

PARAMETERS

All of the original Roland Cloud JUPITER-8 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, but some are displayed differently. Only Parameters that are used by the Roland Cloud JUPITER-8 will be available, any Roland SYSTEM-8 related settings will be ignored and not available. The Roland Cloud JUPITER-8 is a true interpretation of the original Jupiter-8 synthesiser from the 1980's, a software emulation of an analogue classic in digital form. Like other Jupiter-8 related Plugins in SoundDiviner, Parameter Values will not be displayed as you assume as they emulate the eight-bit data derived from the original flag ship Roland Jupiter-8 synthesiser, as detailed 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 Roland Cloud JUPITER-8 software. Remember; The settings related to the Roland SYSTEM-8 will not be available.

Analogue Values

SoundDiviner supports a full range of Jupiter-8 Plugins as listed above, that all emulate 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, JP-08 or Cloud JUPITER-8 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 Roland Cloud JUPITER-8 has included a Condition Parameter (see below), to help emulate these differences but again these will sound exactly the same on every computer recalling the data. The sliders displayed in the Cloud JUPITER-8 software are a visual representation of the original Jupiter-8 synthesiser and appear to run from "0 to 10 or -5 to +5", but have values of "0-255 or -128 to +128", either way they equate to "256". All of these Parameter Values will be displayed on a scale of "0-10 or -5 to +5", as with the original Jupiter-8 hardware. All Plugins comply to the same standard allowing for accurate comparisons between software, digital and analogue 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 Cloud JUPITER-8 sliders more closely, 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. When using Parameter Values of "-5 to +5" the centre value "0" is displayed as "0.0196".

LOW FREQUENCY OSCILLATOR

▼ 01) Low Frequency Oscillator	
Rate	4.70588235294118
Tempo Rate	1/4T
Delay Time	0
Waveform	Sine
Key Trigger	True
Trigger Envelope	False

FigureJUP-8h

The Low Frequency Oscillator or LFO as listed in the Roland Cloud JUPITER-8 manual is the

modulation source of the sound engine, used to create a range of different effects. Only one LFO is available to the Cloud JUPITER-8 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 Cloud JUPITER-8 as it was for the Boutique JP-08 allowing for more flexibility. Additional functionality has been added to the Cloud JUPITER-8 that is not available to the Jupiter-8 or JP-08 as detailed below. Due to these additions some conversions are not possible, as detailed below.

Rate

Rate

Rate as listed in the Roland Cloud JUPITER-8 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 “0.043Hz” or “23 seconds”, when the Rate is at maximum “10” the cycle speed will be around “37Hz” or “27ms”. Remember; when synchronising to MIDI tempo, cycle speed is determined by the Tempo and the Tempo Rate (see Tempo, Tempo Rate and Tempo Sync below).

Tempo Rate

Tempo Rate

Tempo Rate or Rate as listed in the Roland Cloud JUPITER-8 manual; is the first of the additional LFO Parameters and sets the cycle speed or Tempo Rate of the LFO when Tempo Sync is on “True”, see Tempo Sync below. Technically Tempo Rate and Rate are derived from the same internal value unlike some software synthesisers that keep these separate, so changing one automatically updates the other but the scales and cycle speeds are both different. When Tempo Sync is off “False” the LFO cycle speed will be defined by the LFO Rate (see Rate above). Tempo Rate has twenty-five different choices available from minimum “2/1” or two bars for every LFO cycle, to maximum “1/128” or one bar for every one hundred and twenty-eight LFO cycles

Delay Time

Delay Time

Delay Time as listed in the Roland Cloud JUPITER-8 manual, specifies the time from when the tone sounds until the LFO reaches its maximum amplitude. Unlike other synthesisers LFO Delay Time, the Cloud JUPITER-8 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 “2.7 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

Waveform as listed in the Roland Cloud JUPITER-8 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 Cloud JUPITER-8. The Choices are Sine “1” default, Triangle “2” (the first of the new choices), Reverse Saw “3”, Square “4”, Random “5” and Noise “6” (another new choice). Random “RND1” as labelled on the Cloud JUPITER-8 front panel, randomly selects between the four choices before it “Sine – Square”. Noise “RND2” as labelled on the Cloud JUPITER-8 front panel but labelled as Noise on the front of the Roland JP-08, is possibly rapid selection of shapes “Sine – Square”, but seems to closely resemble the Noise generated from VCO’s 1+2 so has been labelled as such in this Plugin.

Key Trigger

Key Trigger

Key Trigger or Key Trig Switch as listed in the Roland Cloud JUPITER-8 manual is the second of the additional LFO Parameters and defines when the LFO cycle should start. If set to on “True” the LFO cycle will start when a key is pressed, but if “False” the LFO cycle will not be triggered by a key. Remember; once the LFO has been triggered it will not be retriggered until all keys have been released (all notes off).

Trigger Envelope

Trigger Envelope

Trigger Envelope or Trig Env Switch as listed in the Roland Cloud JUPITER-8 manual is the third of the additional Parameters and enables the LFO to retrigger both Envelopes at the start of each cycle (see Envelope 1 & 2 below). If set to on “True” the LFO will retrigger both Envelopes at the start of each new cycle, but if “False” the LFO cycle will not retrigger the Envelopes. Remember; the positive section of the LFO cycle acts like a key on and the negative section of the cycle acts like a key off.

VOLTAGE CONTROLLED OSCILLATOR MODULATOR

02) VCO Modulator	
LFO Modulation	0.01960784313726
Envelope Modulation	-4.29411764705882
Frequency Modulation	VCO1 and VCO2
Pulse Width Modulation	LFO
Pulse Width	10

FigureJUP-8i

The Voltage Controlled Oscillator Modulator or VCO MODULATOR as listed in the Roland Cloud JUPITER-8 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 and Envelope 2 in the case of pulse shape as detailed below. Additional functionality has been added to this Parameter Group for the Cloud JUPITER-8 which differs to both the JP-08 and original Jupiter-8 hardware.

LFO Modulation

LFO Modulation

LFO Modulation or LFO MOD as listed in the Roland Cloud JUPITER-8 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 VCO-1\2 switch (see Frequency Modulation below). Unlike the JP-08 and original Jupiter-8 hardware, this Parameter has positive and negative values. When LFO Modulation is set to halfway up the scale “0” default, the LFO (detailed above) will have no effect on the pitch of the oscillators. When LFO Modulation is set to minimum “-5” the LFO (detailed above) will have full effect on the pitch of the oscillators, but starts with a negative pitch and raises up the scale when LFO triggering is used (see Key Trigger and/or Trigger Envelope above). When LFO Modulation is set to maximum “+5” the LFO (detailed above) will have full effect on the pitch of the oscillators, but starts with a positive pitch and falls down the scale when LFO triggering is used (see Key Trigger and/or Trigger Envelope above). LFO Modulation of frequency or pitch as better described is more commonly known as vibrato, however when set to maximum\minimum it is worth noting that the pitch shift will be across two octaves, one up and one down or vice versa.

Envelope Modulation

Envelope Modulation

Envelope Modulation or ENV MOD as listed in the Roland Cloud JUPITER-8 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 VCO-1/VCO-2 switch (see Frequency Modulation below). Unlike the JP-08 and original Jupiter-8 hardware, this Parameter has positive and negative values to replace the original envelope polarity switch. When Envelope Modulation is set to halfway up the scale “0” default, Envelope 1 (detailed below) will have no effect on the pitch of the oscillators. When Envelope Modulation is set to minimum “-5” Envelope 1 (detailed below) will have full effect on the pitch of the oscillators, but operates below the key note on the negative scale. When set to maximum “+5” Envelope 1 (detailed below) will have full control on the oscillators pitch, but operates above the key note on the positive scale. 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 minimum “-5” or maximum “+5” the pitch range will be three octaves from the key note, either up or down depending on the selected value.

Frequency Modulation

Frequency Modulation VCO1 and VCO2

Frequency Modulation or FREQ MOD as listed in the Roland Cloud JUPITER-8 manual, sets which Voltage Controlled Oscillators are modulated by LFO MOD and ENV MOD (detailed above). Three choices are available; VCO2 "1", VCO1 and VCO2 "2" default or VCO1 "3".

Pulse Width Modulation

Pulse Width Modulation LFO

Pulse Width Modulation or the Pulse Width Switch as listed in the Roland Cloud JUPITER-8 manual, sets how the Pulse Width (detailed below) will be controlled.

Manual (default)

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

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.

Envelope 1 Positive

When "E1+" is selected the Pulse Width (detailed below) will be controlled in a positive manner by Envelope 1 (also detailed below). This positive action is the same as moving the Pulse Width slider upwards defined by the Attack time, to create an ever-thinner pulse shape until it reaches the value set by the Pulse Width, and then back down depending on the remaining Envelope values.

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.

Envelope 1 Negative

When "E1-" is selected the Pulse Width (detailed below) will be controlled in a positive manner by Envelope 1 (also detailed below), exactly the same as "E1+" detailed above. The difference between "E1- and E1+" is the Waveform itself, "E1-" resulting in a negative pulse shape instead of a positive pulse shape (see VCO1/2 Waveform below). This positive action is the same as moving the Pulse Width slider upwards defined by the Attack time, to create an ever-thinner pulse shape until it reaches the value set by the Pulse Width, and then back down depending on the remaining Envelope values. 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.

Envelope 2 Positive

When "E2+" is selected the Pulse Width (detailed below) will be controlled in a positive manner by Envelope 2 (also detailed below). This additional positive action is the same as moving the Pulse Width slider upwards defined by the Attack time, to create an ever-thinner pulse shape until it reaches the value set by the Pulse Width, and then back down depending on the remaining Envelope values. Remember; The Pulse Width Parameter detailed below must be greater than "0" for Envelope 2 to have any effect on the waveshape, large values result in a greater effect depth.

Envelope 2 Negative

When "E2-" is selected the Pulse Width (detailed below) will be controlled in a positive manner by Envelope 2 (also detailed below), exactly the same as "E2+" detailed above. The difference between "E2- and E2+" is the Waveform itself, "E2-" resulting in a negative pulse shape instead of a positive pulse shape (see VCO1/2 Waveform below). This additional positive action is the same as moving the Pulse Width slider upwards defined by the Attack time, to create an ever-thinner pulse shape until it reaches the value set by the Pulse Width, and then back down depending on the remaining Envelope values. Remember; The Pulse Width Parameter detailed below must be greater than "0" for Envelope 2 to have any effect on the waveshape, large values result in a greater effect depth.

Pulse Width

Pulse Width

Pulse Width or Pulse Width Slider as listed in the Roland Cloud JUPITER-8 manual, defines the waveshape used by VCO1 and/or VCO2 when Waveform is “PWM” as detailed below. A pulse wave or asymmetrical pulse wave as listed in the Roland Cloud JUPITER-8 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 either Envelope can modulate the pulse waveshape, the greater the value the deeper the effect becomes.

VOLTAGE CONTROLLED OSCILLATORS

03) Voltage Controlled Oscillators	
Cross Modulation	0
VCO1 Range	16'
VCO1 Waveform	PWM
VCO1 Source Mix	10
VCO2 Synchronisation	False
VCO2 Frequency Range	Normal
VCO2 Range	4'
VCO2 Fine Tune	0.64705882352941
VCO2 Waveform	Sawtooth
VCO2 Source Mix	9.01960784313726
VCO2 Sub-Range	0

FigureJUP-8j

The Voltage Controlled Oscillators or VCO-1/VCO-2 as they are listed in the Roland Cloud JUPITER-8 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 has allowed the JUPITER-8 to differ from the original Jupiter-8 and the JP-08 in some instances. Not all creations on the JUPITER-8 will adapt to the JP-08 or original Jupiter-8 but all creation made on the Jupiter-8 and JP-08 will adapt into JUPITER-8 creations, as all the combinations from both are available (see below).

Cross Modulation

Cross Modulation

Cross Modulation or Cross MOD as listed in the Roland Cloud JUPITER-8 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

VCO1 Range as listed in the Roland Cloud JUPITER-8 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’ (pronounced sixty-four foot), 32’, 16’, 8’ “Default”, 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 Cloud JUPITER-8 will sound correctly on the original Jupiter-8.

VCO1 Waveform

VCO1 Waveform

VCO1 Waveform as listed in the Roland Cloud JUPITER-8 manual, is used to set the wave shape used by VCO1. Six different wave shapes are available, Sine, Triangle, Sawtooth “Default”, 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.

VCO1 Source Mix

VCO1 Source Mix 10

VCO1 Source Mix or Level VCO-1 as detailed in the Roland Cloud JUPITER-8 manual, is used to adjust the level of VCO1. Adjustable from “0” not audible to “10” maximum level, “5” is Default.

VCO2 Synchronisation

VCO2 Synchronisation False

VCO2 Synchronisation or Sync Switch as listed in the Roland Cloud JUPITER-8 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” Default.

VCO2 Frequency Range

VCO2 Frequency Range Normal

VCO2 Frequency Range or Normal/Low Freq Switch as listed in the Roland Cloud JUPITER-8 manual, Defines both the frequency range and keyboard behaviour of VCO2. When “Normal” is selected the pitch\frequency range of VCO2 will be the same as VCO1 and follow the keyboard keys normally. When “Low Frequency” is selected VCO2 will act more like an LFO, where Sub Range (see below) defines the pitch\frequency of VCO2 and the keyboard keys have no effect.

VCO2 Range

VCO2 Range 4'

VCO2 Range as listed in the Roland Cloud JUPITER-8 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' (pronounced sixty-four foot), 32', 16', 8' “Default”, 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 Cloud JUPITER-8 will sound correctly on the original Jupiter-8.

VCO2 Fine Tune

VCO2 Fine Tune 0.64705882352941

VCO2 Fine Tune as listed in the Roland Cloud JUPITER-8 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 but by entering the required value the rounding will be automatic.

VCO2 Waveform

VCO2 Waveform Sawtooth

VCO2 Waveform as listed in the Roland Cloud JUPITER-8 manual, is used to set the wave shape used by VCO2. Six different wave shapes are available, Sine, Triangle, Sawtooth “Default”, 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 square. The Boutique JP-08 has only three choices available omitting both triangle, square and noise. Unfortunately, these differences mean not all creations on the Cloud JUPITER-8 will work correctly on the original Jupiter-8 or the Boutique JP-08.

VCO2 Source Mix

VCO2 Source Mix 9.01960784313726

VCO2 Source Mix or Level VCO-2 as detailed in the Roland Cloud JUPITER-8 manual, is used to adjust the level of VCO2. Adjustable from “0” not audible to “10” maximum level, “5” is Default.

VCO2 Sub Range

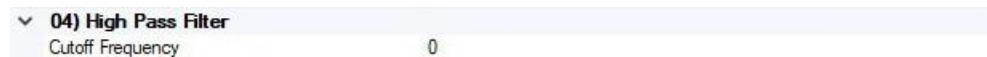
VCO2 Sub-Range 0

VCO2 Sub Range or Sub Range as detailed in the Roland Cloud JUPITER-8 manual, is used to adjust the pitch of VCO2 in semitone steps, both down or up thirty-six semitones or three octaves from the

footage selected by the Range Parameter detailed above. This additional Parameter replaces the variable range control implemented on both the Jupiter-8 and JP-08, so not all creations on the Cloud JUPITER-8 will work correctly on either the Jupiter-8 or the JP-08.

Remember; these new footages “512’, 256’, 128’, 1’, ½’ & ¼” may not be audible to all and can damage speakers at loud volumes.

HIGH PASS FILTER



FigureJUP-8k

The High Pass Filter or HPF as listed in the Roland Cloud JUPITER-8 manual, is the first of the two filters and is used to remove unwanted bass frequencies, sometimes referred to as muddiness.

Cutoff Frequency



The Cutoff Frequency or Cutoff Freq as detailed in the Roland Cloud JUPITER-8 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

▼ 05) Voltage Controlled Filter	
Cutoff Frequency	10
Resonance	0
Slope	-24dB
LFO Modulation	5.01960784313726
Envelope Modulation	0.01960784313726
Envelope Selector	Envelope 2
Key Follow	0.01960784313726
Velocity Sensitivity	0

FigureJUP-8l

The Voltage Controlled Filter or VCF as listed in the Roland Cloud JUPITER-8 manual is the second of the filters in the Cloud JUPITER-8 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 Freq as listed in the Roland Cloud JUPITER-8 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 almost no frequencies can pass at minimum “0”, and almost no sound is audible. Unlike the High Pass Filter detailed above this Cutoff Parameter can be modulated or controlled by other Parameters as detailed below.

Resonance



Resonance or Res as listed in the Roland Cloud JUPITER-8 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 original Roland Jupiter-8 low pass filter does not go into self-oscillation but has a very pleasing characteristic of its own that has been duplicated in operation on the Roland Cloud JUPITER-8.

Slope

Slope

Slope or Slope Switch as listed in the Roland Cloud JUPITER-8 manual, has three available choices, -12dB Default, -18dB or -24dB as detailed below.

-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.

-18dB

This Slope choice is an addition and was not included on the original Jupiter-8 or the JP-08 so any conversion using this choice will sound differently.

-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

LFO Modulation or LFO MOD as listed in the Roland Cloud JUPITER-8 manual, sets the amount if any the LFO detailed above will modulate the VCF Cutoff Parameter also detailed above. When set to the mid-point "0" the LFO detailed above will have no effect on the VCF Cutoff but as this value is increased or decreased so will the modulation of the Cutoff until reaching maximum depth at "+\5". Originally this Parameter only had positive values, a range that was also adopted by the JP-08, but negative values have been introduced for the Cloud JUPITER-8. Technically; negative modulation values enable the filter Cutoff to start low "filtering more" and raising "filtering less", when positive modulation values will work in reverse. However; unless using LFO Key Trigger (see above), or Tempo Sync (see below), and metronomic playing methods this filter Cutoff direction will not be noticeable. Cutoff modulation can be used to create a large range of effects from a basic wah-wah or resonant sweeping, to more complex rhythmical filtering.

Envelope Modulation

Envelope Modulation

Envelope Modulation or ENV MOD as listed in the Roland Cloud JUPITER-8 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 the mid-point "0" Envelope 1 or Envelope 2 (see below) will have no effect on the VCF Cutoff, but as the value is increased/decreased so does the depth of control the selected envelope will have on the VCF Cutoff until reaching maximum effect at "+\5". Originally this Parameter only had positive values, a range that was also adopted by the JP-08 and negative values could only be achieved through the envelope polarity switch available to envelope 1 only. Obviously positive values enable the filter Cutoff to rise and fall, opening and closing the filter as controlled by the selected Envelope (detailed below), whilst negative values enable the filter Cutoff to fall and rise over time as controlled by the selected Envelope. Using envelopes to control the VCF Cutoff is a very useful tool when creating both natural or synthetic sounds and can be both subtly and/or extreme especially when combined with the Trigger Envelope (detailed above), and or LFO Modulation also detailed above.

Envelope Selector

Envelope Selector

The Envelope Selector or Env Mod Switch as listed in the Roland Cloud JUPITER-8 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 "Default" or Envelope 2.

Key Follow

Key Follow

Key Follow or Key FLW as listed in the Roland Cloud JUPITER-8 manual, adjusts the way in which the

keyboard pitch controls the VCF Cutoff in much the same way acoustic instruments do. When set to the mid-point “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 “+5” when the upper notes will be brighter. As the Parameter value is decreased the Cutoff Frequency will start to fall, mellowing the tone colour of the higher notes until at maximum “-5” when the upper notes become increasingly filtered. Key Follow negative values are a Cloud JUPITER-8 feature and not available on the JP-08 or original Jupiter-8.

Velocity Sensitivity



Velocity Sensitivity or Vel Sens as listed in the Roland Cloud JUPITER-8 manual, adjust the amount if any that keyboard dynamics will affect the Cutoff Frequency (detailed above). When set to minimum “0” keyboard dynamics or MIDI velocity will have no effect on the Cutoff Frequency, but as this Parameter is increased so will the dynamic control until at maximum “10” full control. The lower the velocity value the lower the Cutoff Frequency “lighter dynamic’s result in more filtering”, or the higher the velocity value the higher the Cutoff Frequency “harder dynamic’s result in less filtering”. Velocity Sensitivity is a great way to allow dynamics to control the brightness of natural sounds or the tonal quality of wah-wah effects. Originally not available on the Jupiter-8 or the Boutique JP-08 so any conversions will not utilise this addition.

VOLTAGE CONTROLLED AMPLIFIER

▼ 06) Voltage Controlled Amplifier	
Level	0.549019607843137
LFO Modulation	0.01960784313726
Tone	5
Velocity Sensitivity	0

FigureJUP-8m

The Voltage Controlled Amplifier or VCA as listed in the Roland Cloud JUPITER-8 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. Additional controls have been added to this Parameter Group as detailed below.

Level



Level as listed in the Roland Cloud JUPITER-8 manual, defines the depth or loudness range that Envelope 2 detailed below, the LFO detailed above and Velocity Sensitivity also detailed below 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 or LFO MOD as listed in the Roland Cloud JUPITER-8 manual, defines how much the LFO detailed above will modulate the output level if at all. When set to the mid-point “0” the LFO detailed above will have no effect on the VCA Level but as this value is increased or decreased so will the modulation of the VCA Level until reaching maximum depth at “+/-5”. Originally this Parameter only had three positive value choices, a range that was also adopted by the JP-08, but a full positive and negative range has been introduced for the Cloud JUPITER-8. Technically; negative modulation values enable the VCA Level to start low “no volume” and raising, when positive modulation values will work in reverse “set Level” and falling. However; unless using LFO Key Trigger (see above), or Tempo Sync (see below), and metronomic playing methods this Level direction will not be noticeable. A range of different modulation effects can be generated including tremolo and gating depending on the LFO Waveform selected, “see LFO Waveform above”. Remember; differences in this Parameter can only be converted to the closest choice on the Jupiter-8 and JP-08.

Tone



Tone as listed in the Roland Cloud JUPITER-8 manual, adjusts the tonal character of the VCA. When set to half way “0” no tonal change will occur. When adjusted positively the tonal character will become increasingly trebly until reaching maximum “+5”, but when adjusted negatively the tonal character will become increasingly bassy until reaching maximum “-5”. Remember; Tone is an additional Parameter and was not available to the Jupiter-8 or the JP-08.

Velocity Sensitivity



Velocity Sensitivity or Vel Sens as listed in the Roland Cloud JUPITER-8 manual, adjust the amount if any that keyboard dynamics will affect the Level (detailed above). When set to minimum “0” keyboard dynamics or MIDI velocity will have no effect on the Level, but as this Parameter is increased so will the dynamic control until at maximum “10” full control. The lower the velocity value the lower the loudness “lighter dynamic’s result in quieter keys”, or the higher the velocity value the higher the loudness “harder dynamic’s result in louder keys”. Velocity Sensitivity is a great way to allow dynamics to control the Level of individual keys. Not available on the Jupiter-8 and not adjustable on the Boutique JP-08 so any conversions will not utilise this addition.

ENVELOPE 1

07) Envelope 1	
Attack	0
Decay	5.49019607843137
Sustain	0
Release	0
Key Follow	False

FigureJUP-8n

Envelope 1 or ENV-1 as listed in the Roland Cloud JUPITER-8 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 Cloud JUPITER-8, both being standard Attack, Decay, Sustain, Release or “ADSR” envelopes as detailed below. Unlike the original Jupiter-8 and the JP-08, Envelope 1 does not have a polarity switch as this is now controlled individually by the destination points, each Parameter having positive\negative values as detailed above.

Attack



Attack or A as listed in the Roland Cloud JUPITER-8 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 5.98 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 that remains at five seconds. However, the Cloud JUPITER-8 can allow the attack time to deviate slightly decreasing\nincreasing with positive\negative changes to the Condition, as detailed below.

Decay



Decay or D slider as listed in the Roland Boutique JUPITER-8 manual, is a time control and defines the amount of time it takes for the envelope to reach the Sustain level (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 42.5 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 that remains at forty-four seconds. However, the Cloud JUPITER-8 can allow the decay time to deviate slightly decreasing with either positive\negative changes to the Condition, as detailed below.

Sustain



Sustain or S slider as listed in the Roland Cloud JUPITER-8 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 Delay 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 increase 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 values detailed above. This value can vary on analogue synthesisers but not on the JP-08 or Cloud JUPITER-8 even with Condition adjustments (see below).

Release



Release or R slider as listed in the Roland Cloud JUPITER-8 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 37 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 that remains at thirty-six seconds. However, the Cloud JUPITER-8 can allow the release time to deviate slightly increasing\decreasing with either positive\negative changes to the Condition (see below).

Key Follow



Key Follow or Key Flw Switch as listed in the Roland Cloud JUPITER-8 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.

ENVELOPE 2

08) Envelope 2	
Attack	0
Decay	8.23529411764706
Sustain	3.52941176470588
Release	3.13725490196078
Key Follow	False

FigureJUP-8o

Envelope 2 or ENV-2 as listed in the Roland Cloud JUPITER-8 manual, is used to create time-varying changes to VCA loudness, Pulse Width and/or VCF Cutoff depending on other Parameter settings as detailed above. ENV-2 is the second envelope available to the Cloud JUPITER-8, both being standard Attack, Decay, Sustain, Release or “ADSR types” as detailed above and below. Unlike the original Jupiter-8 and the JP-08, Envelope 2 can produce negative values as well as positive as defined by the destination points as detailed above through positive\negative values. 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. Remember; Envelope 2 could not be used to control Pulse Width on the original Jupiter-8 or the JP-08.

Attack



Attack or A as listed in the Roland Cloud JUPITER-8 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 5.98 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 that remains at five seconds. However, the Cloud JUPITER-8 can allow the attack time to deviate slightly decreasing\increasing with positive\negative changes to the Condition, as detailed below.

Decay

Decay

Decay or D slider as listed in the Roland Boutique JUPITER-8 manual, is a time control and defines the amount of time it takes for the envelope to reach the Sustain level (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 42.5 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 that remains at forty-four seconds. However, the Cloud JUPITER-8 can allow the decay time to deviate slightly decreasing with either positive\negative changes to the Condition, as detailed below. 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 Cloud JUPITER-8 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 point 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. This value can vary on analogue synthesisers but not on the JP-08 or the Cloud JUPITER-8 when controlling VCF Cutoff or Pulse Width, but when controlling VCA Level the Condition Parameter detail below increases\decreases with positive\negative changes. 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 Cloud JUPITER-8 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 37 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 that remains at thirty-six seconds. However, the Cloud JUPITER-8 can allow the release time to deviate slightly increasing\decreasing with either positive\negative changes to the Condition, (see below).

Key Follow

Key Follow

Key Follow or Key Flw Switch as listed in the Roland Cloud JUPITER-8 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, Pulse Width 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, Pulse Width or VCF Cutoff if selected will be relative to the key note and therefore different for each note.

PITCH BEND

09) Pitch Bend	
VCO1 Pitch Bend Enabled	True
VCO2 Pitch Bend Enabled	True
VCO Pitch Bend Sensitivity	10
VCO Modulation Sensitivity	0
VCF Pitch Bend Sensitivity	0
VCF Modulation Sensitivity	4.98039215686274
Bend Range	24
Bend Gain	x1

FigureJUP-8p

Pitch Bend or Portamento\Pitch Bend\Modulation as listed in the Roland Cloud JUPITER-8 manual, refers to the performance control section. This Parameter Group slightly differs from the Cloud manual as all Portamento Parameters are not included (see Other below). The performance control panel was available on the original Jupiter-8 but was not stored or recalled with patches as it is on the Cloud JUPITER-8 and some but not all are also available on the JP-08 as listed below.

VCO 1 Pitch Bend Enabled

Level

VCO 1 Pitch Bend Enabled or 1/2 Switch as listed in the Roland Cloud JUPITER-8 manual, specifies whether MIDI Pitch Bend should be used to control the frequency or pitch of VCO-1. When On “True”, MIDI pitchbend is used to adjust the pitch of VCO-1 by the amounts set by the Bend Sensitivity, Range and Gain as detailed below. When Off “False”, MIDI pitchbend will have no effect on the pitch of VCO-1. Note; in the Roland Cloud JUPITER-8 manual it states that this switch also enables\disables MIDI modulation from controlling the pitch of VCO-1, however this is not the case. The original Jupiter-8 had switches for both bender and modulation but these will require manual setting in any conversions, the JP-08 supports this but only for Pitch Bend through the bender range.

VCO 2 Pitch Bend Enabled

Time

VCO 2 Pitch Bend Enabled or 1/2 Switch as listed in the Roland Cloud JUPITER-8 manual, specifies whether MIDI pitchbend should be used to control the frequency or pitch of VCO-2. When On “True”, MIDI pitchbend is used to adjust the pitch of VCO-2 by the amounts set by the Bend Sensitivity, Range and Gain as detailed below. When Off “False”, MIDI pitchbend will have no effect on the pitch of VCO-2. Note; in the Roland Cloud JUPITER-8 manual it states that this switch also enables\disables MIDI modulation from controlling the pitch of VCO-2, however this is not the case. The original Jupiter-8 had switches for both bender and modulation but these will require manual setting in any conversions, the JP-08 supports this but only through the bender range.

VCO Pitch Bend Sensitivity

Feedback

VCO Pitch Bend Sensitivity or Bend Sens VCO as listed in the Roland Cloud JUPITER-8 manual, specifies how much of the Bend Range detailed below will be used. When at minimum “0” none of the available range will be used but this increases until maximum “10” when the full range will be used. This Parameter allows MIDI pitchbend to create slight detune effects when applied to one VCO only, with more control than a conventional pitchbend range only supporting semitones.

VCO Modulation Sensitivity

Feedback

VCO Modulation Sensitivity or Mod Sens VCO as listed in the Roland Cloud JUPITER-8 manual, specifies the range used by MIDI modulation to modulate pitch. When at minimum “0” none of the available range will be used but this increases until maximum “10” when the full range will be used. This Parameter allows MIDI modulation to create subtle vibrato effects by applying less LFO to modulate both VCO’s based on the amount set.

VCF Pitch Bend Sensitivity

Feedback

VCF Pitch Bend Sensitivity or Bend Sens VCF as listed in the Roland Cloud JUPITER-8 manual,

specifies the depth of filter Cutoff range used by MIDI pitchbend. When at minimum “0” none of the available range will be used but this increases until maximum “10” when the full range will be used. This Parameter allows MIDI pitchbend to control the filter Cutoff detailed above.

VCF Modulation Sensitivity



VCF Modulation Sensitivity or Mod Sens VCF as listed in the Roland Cloud JUPITER-8 manual, specifies the range used by MIDI modulation to modulate filter Cutoff as detailed above. When at minimum “0” none of the available range will be used but this increases until maximum “10” when the full range will be used. This Parameter allows MIDI modulation to create subtle auto-wah style effects by applying less LFO to modulate the filter Cutoff based on the amount set.

Bend Range



Bend Range as listed in the Roland Cloud JUPITER-8 manual, specifies the range used by MIDI pitchbend in semitones. When at minimum “1” the Bend Range will be one semitone down\up multiplied by the Bend Gain detailed below. When at maximum “24” the Bend Range will be twenty-four semitones down\up multiplied by the Bend Gain detailed below.

Bend Gain



Bend Gain as listed in the Roland Cloud JUPITER-8 manual, is a multiplier used to extend the Bend Range detailed above. Bend Gain has four available choices “x1” minimum, “x2” doubling the Bend Range Parameter detailed above, “x3” tripling the range and “x4” maximum. Note; when using “x3 & x4”, filter Cutoff and note ranges maybe exceeded.

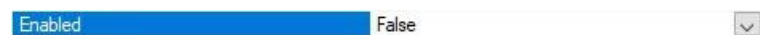
ARPEGGIATOR

10) Arpeggiator	
Enabled	False
Mode	Up
Range	One Octave

FigureJUP-8q

The Arpeggiator or Arpeggio as listed in the Roland Cloud JUPITER-8 manual, is the Parameter Group used to setup the keyboard arpeggio. The original Jupiter-8 implemented its arpeggio slightly differently to others of its era by allowing the keys to be arpeggiated in the order in which they are played and not their alpha\numerical order and this has been adopted by the Cloud JUPITER-8.

Enabled



Enabled defines if the keyboard should function normally or in arpeggio mode. Two choices are available “False” default or “True” On. Remember; the Arpeggiator speed is controlled by the DAW tempo, if the Patch is to be used on the System-8, use the Tempo Parameter detailed below.

Mode



Mode as labelled on the front of the Roland Cloud JUPITER-8 software, defines the direction in which the held keys should trigger. Four choices are available as detailed below.

Up (default)

When this Mode is selected the keys will sound in the sequence they are played but arpeggiate up the keyboard octaves as defined by the Range Parameter detailed below. Remember; keys are stored in sequence steps (steps 1,2,3,4 etc), replacing any step with a different key will still allow it to sound in the same order. Note; releasing a key and playing a new key at the end of a sequence can cause the last step to play twice before the sequence starts again placing the new key in order.

Up/Down

When this Mode is selected the keys will sound in the sequence they are played and arpeggiate up the keyboard octaves as defined by the Range Parameter detailed below, and then sound in reverse order as they sound down the keyboard octaves. Remember; the last note of the up sequence is the

first note of the down sequence (steps 1,2,3,4,3,2 or 1,2,3,4,1,2,3,4,3,2,1,4,3,2 etc if Range “2”)

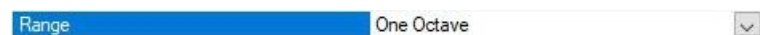
Down

When this Mode is selected the keys will sound in the reverse sequence order and arpeggiate down the keyboard octaves as defined by the Range Parameter detailed below. Remember; the first key always sounds correctly before proceeding to the next highest step (steps 1,4,3,2 etc).

Random

When this Mode is selected the keys will sound in a random order. Remember; the first key could be sounded at any of the available octaves selected by the Range Parameter below.

Range



Range or Range 1-4 as listed in the Roland Cloud JUPITER-8 manual, is used to define how many octaves the Arpeggiator will arpeggiate across. Four choices are available as detailed below.

One Octave

Range 1 or “One Octave” Default, defines that only the keys played will be arpeggiated in accordance with the Mode detailed above.

Two Octaves

Range 2 or “Two Octaves” defines that all played keys are arpeggiated as well as the same keys from the next octave up, in accordance with the selected Mode detailed above.

Three Octaves

Range 3 or “Three Octaves” defines that all played keys are arpeggiated as well as the same keys from the next two octaves above them, in accordance with the selected Mode detailed above.

Four Octaves

Range 4 or “Four Octaves” defines that all played keys are arpeggiated as well as the same keys from the next three octaves above them, in accordance with the selected Mode detailed above.

EFFECTS

11) Effects	
Type	Overdrive
Tone	0
Depth	0

FigureJUP-8r

Only available to the Roland Cloud JUPITER-8, the Effects Parameter Group defines which effect is to be used and how the effect is configured as detailed below.

Type



Type or effects type as listed in the Roland Cloud JUPITER-8 manual, defines which of the available six Effects is to be selected as detailed below.

Overdrive

Overdrive is a particular form of distortion created when pushing an amplifier beyond its capability to producing a clean tone. Tube amplifiers have a naturally clean sound at lower volumes by design and begin to distort as the volume exceeds specific points. Overdrive is the default selection.

Distortion

Distortion effects have been around for over fifty years. Designed originally to create a similar sound to that created when overdriving a tube or transistor amplifier, but at low volume.

Metal

Metal effects have been around since the 80’s and tend to focus on heavy clipping to create a more extreme sound with increased lows and high’s, often referred to as the Swedish chainsaw.

Fuzz

Fuzz effects have been around since the early 60’s and create a special type of distortion with harmonic overtones. Fuzz effects tend to emphasize upper frequencies whilst cutting the mid’s, but the familiar satisfying tone has stood the test of time.

Crusher

Crusher or Bitcrusher is a low-resolution digital distortion effect that came about in the mid 90's. Originally a side effect of lofi or low-resolution digital audio, the Crusher effect is used to create artificial aliasing by dividing the sample rate to distort the signal until almost unrecognizable.

Phaser

Phasing is a modulation effect that utilises phase cancelation, originally released in the early 70's the Phaser uses an LFO to create sweeping effects.

Tone



Tone as listed in the Roland Cloud JUPITER-8 manual, specifies the character of the Effect Type selected (see Effect Type above). By increasing the Tone Parameter, the effect becomes brighter.

Depth



Depth as listed in the Roland Cloud JUPITER-8 manual, specifies the depth of the selected Effect Type (see Effect Type above). When at minimum "0" or "Off" no effect will be audible, but as this increases the effect becomes greater until maximum "10" full effect. Generally, this Parameter works as expected with all of the Effect Types but controls the speed of the Phaser.

DELAY

12) Delay	
Type	Delay and Chorus
Time	8.23529411764706
Tempo Time	1/1T
Level	1.17647058823529

FigureJUP-8s

Only available to the Roland Cloud JUPITER-8, the Delay Parameter Group defines which Delay effect is to be used and how the effect is configured as detailed below.

Type



Type or delay type as listed in the Roland Cloud JUPITER-8 manual, defines which of the available six Delay effects is to be selected as detailed below.

Delay

Delay effects use media to store a signal and then repeat it after a period of time. Often referred to as an echo, this type of effect has been available since the 1950's. The delay effect is available to the Roland JP-08 but the Jupiter-8 did not have any effects available. Delay is the default selection.

Pan Delay

Pan Delay effects are a variation on the Delay effect detailed above. Often referred to as ping-pong delay due to the back-and-forth motion created when the repeated signals sound right then left.

Chorus 1

Chorus effects can be traced back to the 1930's but where not available in pedal form until the 70's. The chorus effect is probably the most popular of the phase modulation effect's that's created using fast delay techniques. Chorus 1 is the more dramatic of the two choices available and produces more phase-shifting. The Chorus effect is available to the Roland JP-08 but only through MIDI Control Change "093", as detailed in the JP-08 Plugin manual (see HIDDEN CHORUS EFFECT).

Chorus 2

Chorus 2 as with Chorus 1 above, is a phased modulation effect that's created using fast delay techniques. Chorus 2 is more subtle than Chorus 1 and produces less phase-shifting. The Chorus effect is available to the Roland JP-08 but only through MIDI Control Change "093", as detailed in the JP-08 Plugin manual (see HIDDEN CHORUS EFFECT).

Flanger

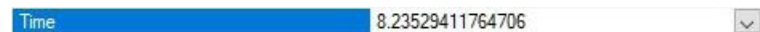
Flanger effects where first experimented with back in the 1950's but where not available in pedal form until the 70's. Like chorus the flanger is also a phase modulation effect that is created using

delay techniques. Flanger's are designed to emphasise the phase-shift or jet plane sweeping sound that has been used to great effect by many artists.

Delay and Chorus

Delay and Chorus is a combination of the Delay and Chorus 1 effects detailed above. When this choice is selected the additional Time and Level Parameters detailed below will only make adjustments to the Delay effect and the Chorus remains fixed.

Time



Time as listed in the Roland Cloud JUPITER-8 manual, is used to adjust the Time of the selected Delay effect. When any of the repeat effects are selected "Delay, Pan Delay or Delay and Chorus", low values create a quicker repeat and high values create a slower repeat. When any of the phased modulation effects are selected "Chorus 1, Chorus 2 or Flanger", low values create a slow modulation and higher values create a faster modulation. Remember; when Tempo Sync detailed below is "True", only the Time of the repeat effects is controlled by Tempo Time detailed below.

Tempo Time



Tempo Time is only used when Tempo Sync detailed below is on "True", but is also linked to the Time Parameter above, so changing either automatically adjusts the other. Tempo Time has sixteen choices available from "1\32" or one repeat every thirty-second beat being the quickest, to "1\1" or one repeat every bar being the slowest. Remember; Tempo Time only applies to the repeat effects "Delay, Pan Delay or Delay and Chorus" detailed above.

Level



Level as listed in the Roland Cloud JUPITER-8 manual, adjusts the volume of the selected Delay effect. When set to minimum "0" or off the effect will not be audible but as it increases so does the selected Delay effect until at maximum "10" or full volume.

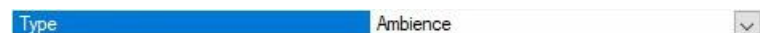
REVERB

13) Reverb	
Type	Ambience
Time	10
Level	7.49019607843137

FigureJUP-8t

Only available to the Roland Cloud JUPITER-8, the Reverb Parameter Group defines which Reverb effect is to be used and how the effect is configured as detailed below.

Type



Type or reverb type as listed in the Roland Cloud JUPITER-8 manual, defines which of the available six Reverb effects is to be selected as detailed below.

Ambience

Ambience Reverb is often used to simulate small or medium rooms with minimal decay times. Traditionally used on voice, guitar or percussion sounds.

Room

Room reverb is often used to simulate very small rooms used for dialog or voice overs but can be used to fatten up high energy sounds like those recorded through instrument amplifiers.

Hall 1

Hall Reverb is usually used to simulate concert halls or arenas, both using long decay times. Hall 1 is the default selection and the smaller of the two available.

Hall 2

Hall Reverb is usually used to simulate concert halls or arenas, both using long decay times. Hall 2 is the larger of the two hall choices.

Plate

Plate Reverb was originally designed to replace purpose-built echo chambers that themselves often contained metal objects or adjustable plates. Plate reverbs used large thin metal sheets suspended on springs with transducers attached to allow an audio signal to vibrate the plate and capture the resulting effect. Plate Reverb has been used for years to enhance music and percussion.

Modulation

Modulation Reverb is usually used to simulate unrealistic acoustic spaces that contain high levels of chorus like effect. Modulation Reverb is very useful when creating infinite soundscapes.

Time



Time or reverb time as listed in the Roland Cloud JUPITER-8 manual, defines how long the selected Reverb Type as detailed above will sound. At minimum “0” the effect will sound for the shortest period available, slowly increasing until at maximum “10” the longest period available.

Level



Level as listed in the Roland Cloud JUPITER-8 manual, adjusts the volume of the selected Reverb effect. When set to minimum “0” or off the effect will not be audible but as it increases so does the selected Reverb effect until at maximum “10” or full volume.

OTHER

14) Other	
Condition	5
Circuit Modification	0
Master Tuning	4400
Portamento	0
Portamento Type	Time
Legato	False
Tempo	1280
Tempo Sync	False
Assign Mode	Poly 1
Key Hold	False
Octave Shift	0

FigureJUP-8u

Other is the last of the Roland Cloud JUPITER-8 Plugin Parameter Groups, containing eleven different Parameters as detailed below. Some Parameters were added in Cloud JUPITER-8 software version 2.

Condition



Condition or aging knob as listed in the Roland Cloud JUPITER-8 manual, simulates the way in which the sound of an original Jupiter-8 synthesiser is affected by age. Unlike some vintage synthesisers, the age of a Jupiter-8 does not usually contribute to drifting of the individual voices as they are renowned for their stability. Even the envelope tracking of VCO pitch and VCF frequency remain incredibly constant and only the time scales tend to drift. Technically; these drifts effect both envelopes by offsetting the Parameter values, either positively or negatively as specified by the Condition. Attack, Decay and Release times are all effected by the Condition Parameter but Sustain Level offset’s only effect the VCA whilst VCO and VCF remain unaffected.

Circuit Modification



Circuit Modification or circuit mod as listed in the Roland Cloud JUPITER-8 manual, is new in JUPITER-8 version 2 and simulates the calibration trimmer on the mother board. Unlike some vintage synthesisers the voice tuning on the original Jupiter-8 is very accurate and stable, but can be adjusted internally to create unevenness or fatness to the sound if desired. Earlier software version patches will default this Parameter to “0” as this is the calibration starting point, the greater the value the more unevenness or pitch difference there will be between the eight voices. Remember; Circuit Modification adjusts the pitch of each voice so no effect is audible when Assign Mode (detailed below), is set to Mono or only one voice is played in either Poly-1 or Poly-2 modes.

Master Tuning

Master Tuning 4400

Master Tuning or tune knob as listed in the Roland Cloud JUPITER-8 manual, adjusts the overall pitch of the Cloud JUPITER-8. When set to the centre position “4400” or 440Hz, Concert Pitch will be used. When set to minimum “4300” or 430Hz (Classical Pitch) forty cents down from centre, slowly increasing to maximum “4500” or 450Hz, not quite forty cents up from centre.

Portamento

Portamento 0

Portamento as listed in the Roland Cloud JUPITER-8 manual, adjusts the time over which pitch change occurs when Portamento is applied. Portamento is a pitch sliding effect that allows the pitch of the played key to slide up\down from the previously played key within a specific time or a given speed, see Portamento Type below. When set to minimum “0” or “Off” default, no pitch change will occur. As this Parameter is increased so is the Portamento slide time\speed, very fast at first until reaching maximum “10” or very slowly. Remember; when using slow Portamento values the played key may not have reached its correct pitch before starting to slide to the pitch of the new key.

Portamento Type

Portamento Type Time

Portamento Type as listed in the Roland Cloud JUPITER-8 manual, is new in JUPITER-8 version 2 and has two available options as detailed below.

Time

Time (default), was the original and only option available to all previous JUPITER-8 software versions. Using this option, the pitch changes within the time specified by the Portamento Parameter (detailed above), regardless of the distance between the pressed keys.

Speed

Speed is a new option and only available to JUPITER-8 version 2 software users. Using this option, the pitch changes at the speed specified by the Portamento Parameter (detailed above), regardless of the distance between the pressed keys.

Legato

Legato False

Legato as listed in the Roland Cloud JUPITER-8 manual, applies Portamento only when you play using a legato technique (I.E., when you play a new key before releasing the last key).

Tempo

Tempo 1280

Tempo as listed in the Roland Cloud JUPITER-8 manual but removed from JUPITER-8 version 2, specifies the speed of the step sequencer, Arpeggiator, LFO and related Delay's. Actually, the Tempo will be controlled by the DAW or host application and this value is not used to control the speed but comes into play when the patch is used as a plug-out by the Roland System-8. The default setting is “1280” or “128.0 Bpm” but can be as slow as “400 or 40 Bpm” minimum, or as fast as “3000 or 300.0 Bpm” maximum. Remember; setting this Parameter to match the DAW or Host application keeps it consistent when plugged-out.

Tempo Sync

Tempo Sync False

Tempo Sync as listed in the Roland Cloud JUPITER-8 manual, defines whether the cycle speed of the LFO and related Delay effects are synchronized to Tempo or not. When set to “False” default, the LFO cycle speed is controlled by the LFO Rate as detailed above, and the relevant Delay effects will be controlled by the Delay Time as detailed above. When set to “True” the LFO cycle speed will be controlled by the LFO Tempo Time detailed above, and the relevant Delay effects will be controlled by the Delay Tempo Time detailed above.

Assign Mode

Assign Mode as listed in the Roland Cloud JUPITER-8 manual, defines how the voices will be assigned to the keys played. Four choices are available as detailed below.

Mono

Mono or Solo as its labelled on the original Jupiter-8 and JP-08, sets the keyboard to play monophonically. This choice uses one voice per key and only allows one key to be played at any time in the same way as any monophonic keyboard.

Unison

Unison is a way of assigning all eight voices to one key to create one massive mono synth and was used by various manufacturers on many different synthesisers. The Jupiter-8 utilised a special version of Unison that allowed for chord play unlike other manufacturers that only enabled monophonic playing. This special version of Unison has also been emulated on the Roland Cloud JUPITER-8 as follows. When one key is pressed all eight voices will sound but when two keys are pressed four voices will sound per key and so on until one voice sounds per key.

Poly-1

Poly-1 is the first of the polyphonic choices and like Poly-2 below and Unison above, they all follow the same basic keyboard logic of first note priority. When eight keys have been played and held no new notes can be sounded until one of the original eight keys has been released. When all eight keys have been played and released “even if the envelope Release time is incomplete”, new notes will replace the voices of the previous notes in the order they were played. This basic logic allows for the most natural and fluid playing with most patches.

Poly-2

Poly-2 is very similar to Poly-1 detailed above, again assigning one voice to each key played. The primary advantage of Poly-2 is that only the last key or keys played together receive their specified Release length. Any keys previously played will have instantaneous releases regardless of the Release Parameter value. This choice has the advantage of being less muddy when using patches with long release times as it works similar to a damper pedal.

Key Hold

Key Hold as listed in the Roland Cloud JUPITER-8 manual, activates the virtual keyboard Key Hold function. When enabled “True” any software virtual key clicked will be held until another key is clicked holding the new key instead or the Key Hold function is deactivated “False”. Keys received over MIDI are not held by the Key Hold function but if the current held key receives a MIDI note off message the key will be released.

Octave Shift

Octave as listed in the Roland Cloud JUPITER-8 manual, allows the software virtual keyboard to be shifted down or up in octave steps.

PATCH SHEET PLUGIN

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 synthesisers not just those without memory, taking this all into account the JUPITER-8 Patch Sheet Plugin is also available separately.

Roland Cloud JUPITER-8 Patch Sheet Plugin

After installation Roland Cloud JUPITER-8 (patch sheet) will be available as a Device and works independently of the Roland Cloud JUPITER-8 Synthesiser Plugin, detailed above. Either used on its own or in combination with the Synthesiser Plugin, the Patch Sheet Plugin is a very useful addition. Supplied with the required Adaptor Plugin for Patch Snapshot conversions. For more information on the Roland Cloud JUPITER-8 Patch Sheet Plugin see the related Patch Sheet Plugin manual.

INDEX

A

ADAPT	8
Adaptor Plugins.....	8
ADD-ONS.....	2
All Items	6
Analogue Values	10
ARPEGGIATOR.....	23
Assign Mode	29
Attack	19, 20

B

Bend Gain	23
Bend Range	23
BIN	7
BINARY DUMP.....	6
BLANK PATCH.....	8

C

Circuit Modification	27
Conclusion	5
Condition	27
Cross Modulation	14
Cutoff Frequency	16

D

Decay	19, 21
DELAY.....	25
Delay Time	11
Depth	25
Device	5
Do Not Import Duplicates	5
DUPLICATES FOUND WINDOW	5
DUPLICATES LIST	5

E

EFFECTS.....	24
Enabled	23
ENVELOPE 1	19
ENVELOPE 2	20
Envelope Modulation	12, 17
Envelope Selector	17
Example	5
Export Item Process	6
Export Item Warning	7
Export Item Window	6
EXPORT OPTIONS.....	5
EXPORT PATCH SNAPSHOT	6
Exported Item	7

Exported Items	7
Exported Items List	7

F

FigureJUP-8a	3
FigureJUP-8b	5
FigureJUP-8d	6
FigureJUP-8e	9
Finalised	4
FIRST THINGS FIRST.....	2
Frequency Modulation	13

H

HIGH PASS FILTER.....	16
HOW IT WORKS.....	2

I

IMPORT FILE WINDOW	5
IMPORT OPTIONS.....	4
INDEX	30
INTRODUCTION.....	2
Item Error	7

K

Key Follow	17, 20, 21
Key Hold	29
Key Trigger	11

L

Legato	28
Level	18, 26, 27
LFO Modulation	12, 17, 18
LOW FREQUENCY OSCILLATOR	10

M

MAIN CONTENTS.....	1
Master Tuning	28
Mode	23

N

NEW PATCH SNAPSHOT	4
No5, 7	

O

Octave Shift 29
 OK7
 OTHER 27
 OVERVIEW 2

P

PARAMETER LISTS 8
 PARAMETER VALUES 10
 PARAMETERS 10
 PARSE 8
 Patch Folder 4
 PATCH SHEET PLUGIN 29
 Patch Sheet Plugins 8
 Patch Snapshot 4, 9
 Patch Snapshot Type 4
 PITCH BEND 22
Portamento 28
Portamento Type 28
Pulse Width 14
Pulse Width Modulation 13

R

Range 24
Rate 11
Release 20, 21
Resonance 16
 REVERB 26
 Roland Cloud JUPITER-8 Patch 4

S

SAMPLE OPTION 4
Slope 17
 SNAPSHOT EDITOR 8
Sustain 20, 21
 Synthesiser Plugins 8

T

Target Device 6

Tempo 28
Tempo Rate 11
Tempo Sync 28
Tempo Time 26
Time 26, 27
Tone 19, 25
Trigger Envelope 12
Type 24, 25, 26

V

Value Style 4 10
VCO 1 Pitch Bend Enabled 22
VCO 2 Pitch Bend Enabled 22
VCO Modulation Sensitivity 22, 23
VCO Pitch Bend Sensitivity 22
VCO1 Range 14
VCO1 Source Mix 15
VCO1 Waveform 14
VCO2 Fine Tune 15
VCO2 Frequency Range 15
VCO2 Range 15
VCO2 Source Mix 15
VCO2 Sub Range 15
VCO2 Synchronisation 15
VCO2 Waveform 15
Velocity Sensitivity 18
Velocity Sensitivity 19
 VOLTAGE CONTROLLED AMPLIFIER 18
 VOLTAGE CONTROLLED FILTER 16
 VOLTAGE CONTROLLED OSCILLATOR MODULATOR 12
 VOLTAGE CONTROLLED OSCILLATORS 14

W

Waveform 11
 WHATS ADDED 2
 WORKFLOW AREA 4

Y

Yes 5, 7