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INFINITE ELEMENT: REASON REFILL STUDIO

Infinite Element is a truly extraordinary Reason Refill, featuring **over 1200 incredibly powerful, yet easy to use Combinator devices**, custom-built by Push Button Bang. Packaged with **an enormous, exclusive patch library** for all the major Reason instruments, plus **literally thousands of high quality WAV samples**, you'll find *Infinite Element* is **almost a studio in itself**. Use it to get the most of out Reason by creating soundsets and devices that are completely yours alone and make your music absolutely individual.

The Combinators are incredibly powerful, yet easy to use, and the depth and variety of sound sources will take your breath away: from traditional instruments to digital synths to evolving "songs in a box", all with their own real time controls. **Deep basslines, warping arps, razor-sharp leads and soaring pads** are all available, alongside **plentiful SFX patches and morphing sound environments**. Get immediate results from the presets or program your own new sounds on the fly at the push of a button. All Combinators can be easily edited via their intuitive interfaces and come theme-skinned to give you quick visual recognition of the type of device present.

An extensive Redrum drum library contains over 2500 rhythm and percussive FX sounds, arranged into over 220 Redrum Kits and 25 NN-XT Kits. There are even drum machine Combinators which offer a selection of **brain-bending beatboxes for real time future rhythm design**.

A plug-in FX library features over 200 FX and workflow tools to help you change and evolve your sound. This Plug-In section opens up a whole new world of FX control and sound manipulation within Reason and by chaining

devices you can produce further FX changes so **you will never be short of interesting possibilities**.

Plus there are **specially-created Remix Devices**, which enable you to reconfigure the patterns from any number of sound sources in realtime, simply at the turn of a dial.

Infinite Element really does give you infinite Reason possibilities: to discover more about the **amazing potential** of this Refill, please read the *Infinite Element* Quick Start Guide below.

TECH SPECS:

Overview:

- 1.2 GB content
- 24 bit / 44.1 khz WAV
- 4595 Instrument and Combinator Patches
- 3777 WAV Samples

Details:

- 1290 Combinator Patches*
 - 801 Malstrom Patches
 - 700 Subtractor Patches
 - 680 NNXT Patches
 - 600 Thor Patches
 - 300 REX Patches
 - 224 Redrum Kits
-

INFINITE ELEMENT

REASON REFILL STUDIO



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- *Quick Start Guide* -

Welcome to the Infinite Element Reason Refill!

This manual will take you through the basic operation of the Combinator section of the refill. Please see the general hints and tips section for extended help.

SECTION 1 – ALL THOR



While Thor is used throughout the Combinator instruments, the devices in this section use only Thor machines as the primary source of sound generation.

Arp controls	RPG8 led machines: these allow various methods for controlling arpeggiators
Filters	various filter control methods
FX	Special effects control for Thor-specific FX
Gating	arp gate LFO controls: these devices allow you to control a Thor's gate pattern in various ways, amongst other things.
LFO-led	LFO controlled devices offer control on multiple LFO's at once.
Matrix Seq	Sequence control devices: use Matrixes to control aspects of the sequencer.
Pad env	pad making devices: constructing pad sounds from Thor devices using the multiple envelope control.
Various	multiple non-specific Thor control devices

SECTION 2 - ATMOSPHERICS AND FX



These Combinators create atmospheres or special FX sounds.

- | | |
|---------------------|---|
| Atmospherics 1 | Combinators which create backdrop sounds and FX. |
| Atmospherics 2 | Combinators which create highly modulated FX. |
| FX sounds | Very specific FX sounds or control methods |
| Laser controls | Various ways of using LFO's to create builds, sweeps and rhythmic filtered parts. |
| Standalone Vocoders | Plug and play vocoding. |

SECTION 3 - AUTO RYTHMIC



Sound generating devices that use primarily rhythmic structures. These devices rely heavily on the use of patterns and modulation to create rhythmic effects. There are many devices and many different processes. Please refer to the rotary and button guide if you need help with any controls.

All devices marked with "RUN" require the sequencer to play and trigger the patterns in order to achieve the full sound.

SECTION 4 - DIGITAL SHADES



A huge variety of electronic instruments divided into four categories.

LOW	Various methods of synth bass control.
DARK	Evil, sharper, dark types of sound
LIGHT	Sounds more suitable for mellow or peaceful music.
LEAD	Sounds suitable to be used in the mid range.

SECTION 5 - DRUMBOX COMPONENTS



There are many rhythmic starting blocks to choose from. Lets go through a few of them to give you an idea of what to expect.

BOOMBOXES	Use sounds triggered from Subtractors or Thors.
BARCODE	Uses two Matrixes, one to control a sub bass hit and one to control the top glitch.
PATTERN	Controls how you change the patterns in various ways using distortion and delay techniques.
CAMO BOXES	Maps NN-XTs or Thor instruments to the input of a Redrum channel. You program each instruments as a drum hit while retaining control over the instrument's parameters.
CLIKX BOXES	Control various ways of making hi-end / click rhythms.
GRIME BOXES	Feature several drum/instrument patterns which are manually mixable and then apply distortion effects in various ways.
MAELDRUM/ THOR DRUMS	Program Redrum patterns with several Mal or Thor Sources at once.
BUILD MAKERS	Enable you to automatically trigger a drum build.
MAIN EQ	A simple Redrum with each channel mapped to a specific EQ.

FLOOR BOXES	Primarily 4/4 rhythms. There is a kick-drum pattern and a top loop pattern on each. You can alter the side-chaining of the top loop based upon the kick and alter the decay, reverb and EQ amount of the top loop.
HATS LINES	Simple control over hi-hat patterns.
KICK AND CLAP	Starting blocks which give you morphable kick and clap drums.
LUNABOXES	Similar to floor boxes. However these use NN-XTs to create the top loop. They rely on the Lunatix kits in the Redrum section, which contain a disparate array of sound sources in each patch.
SCORPION DRUM MACHINES	These devices use more exotic forms of control to create the rhythms. More suitable to breakbeat and changing rhythmic structures and are mapped into the following:
KIT SWITCHERS	Enable you to switch which audio pattern within the machine is audible at an one time. These are controlled either by a manual button or automated modulation which can be adjusted length and pan drums - enable you to manually or automatically change the length or pan rate of selected sounds.
MATIRX DRUMS	assign channels to the Redrum to be triggered by Matrixes in various ways.
PATTERN CHOP	modulates which Redrum pattern should play at any one time.
RANDRUM	uses Malstrom modulation curves and rates to trigger which pattern will be played at any one time.
SCREAM DRUMS	use various methods of controlling the distortion rates inside the Combinators.
XLUNATIX BOXES	these create random beat sequences based upon mixing together the Lunatix kits from the Redrum section. These are experimental devices, the best way to use these is just twiddle until you have something you like and refine from there.

SECTION 6 - KEYBOARD SPLIT



Split keyboards are usually assigned as two halves – bottom and top. Some are split four times with each split on a different octave. As with the other sections, there are also additional mapped velocity response layers in some Combinators.

Main subfolders in Keyboard Split:

- SPLIT BASSES** octaves are split and play different bass sounds. By loading new bass sounds into each range you can create bass lines with more than one bass sound with one Combinator.
- SPLIT CONTROL** various methods for control multiple instruments in different ranges.
- VARIOUS** a variety of machines which work well in a performance mode.

SECTION 7 - ORCHESTRAL TOOLS

Combinators using the Reason Orchestral Refill. Please note - in order for these to work correctly your reason orchestra soundbank must be installed in the pre-allocated Propellerheads folder: c:/Program Files/Propellerheads/Reason/...

Main Sub folders in Orchestral Tools

- 8 Layer orchestras
- Mallet
- Misc split layers
- Mostly horn
- Piano
- Strings
- Woodwind

SECTION 8 - PLUGINS



When using the effects , it is worth noting the various nuances that can be achieved by changing the order of signal routing and/or using as a direct plug in or an insert FX. There are huge FX possibilities by using the devices in more subtle ways, as well as the overt.

When an FX Combinator has “mix.inp.” in its file name , you must plug external devices into the Combinators main mixer in order to use the device.

CV PLUGS

Plug and play routing for controlling multiple CV ins/outs. Trigger any machines - plug external devices inputs into the spider CV splitters and control the those devices using changeable modulation created by the internal Malstrom device.

DANCE PRODUCTION These are tools specifically designed for house/electro, although they work excellent with any style. They focus primarily on volume shaping controls, side-chaining/compression.

- GROUP SIDECHAINING** plug devices into the Combinators main mixer , not the actual Combinator input. This will enable you to side-chain multiple sources at once.
- DUCKERS** volume automation controlled by a Matrix.
- LYNX AUTO SWITCHES AND MOD SWITCHES** enable you to switch between input sound sources manually or with automation. Plug the devices into the Combinator's mixer not the main Combinator input.
- MOD WHEEL MORPH** plug devices into the Combinators mixer not the main Combinator input. Use the mod wheel to morph between sounds freezes. Generate pseudo buffer over-ride FX using sequenced delay parameters. These devices use multiple delays at very short parameter timing to simulate freezing of the input sound.
- MULTI FX** Various chorus/unison/phase/panning effects. Multi FX usually work best as inserts. There are many to choose from and mostly are designed to subtly color the incoming sound in a specific way.
- REMIKERS** Remikers allow you to alter the incoming signal automatically , in a way which creates a new pattern, loop or sound. Most use a matrix to program the start point. The basic principle relies on delay patterns which are triggered using Matrixes. This enables you to shift different parts of the sound backwards and forwards in a pattern changing which section of audio is being played at any given time. Some devices allow both manual and automatic control and are marked as such. As with all FX , they work differently depending on the incoming source audio. Try using on different types of beats and sounds to see what works best for you.
- REVERBS** Reverb producing Combinators. Features many different ways of controlling reverb.
- RHYTHM MAKERS** These machines are designed to either add extra rhythmic patterns to the input or change the rhythm completely in a variety of ways. While some may seem complex at first, they are really very simple , mostly relying on a combination of LFO modulation and Matrixes to create an imposed pattern on the original signal.
- SCORPION AUX FX** Plug in auxiliary FX for maximum drum loudness. Use these with Scorpion drum Combinators to increase depth and width of the drum sound and gain control of its EQ if needed.
- TOOLS** A selection of tools to link instruments and control a specific element on all channels. Lynx machines enable you to plug in a number of inputs and use the controls to alter a specific element such as filter, pan, aux control, etc. MEMORY is a tool for slow

computers, it enables you to load saved loops in linear order to an NN-XT and trigger with a midi note, i.e. as a mix-down sampler.

VOCODER

Various starting blocks for vocoder building ranging from simple to complex.

SECTION 9 - REX REMIXERS



Most REX Remixers follow the same principle of using Matrixes to trigger parts of the loop in manually designated sequences. If the sound does not play when running the sequencer, the REX file must be triggered manually or laid to the sequencer track in order to play audio.

Any file name marked with "switch" such as Switchblade LFO enables you to switch between patterns of loops manually or in automatic sequences.

A simple example:

At the end of the bar, you can manually switch from one beat to a fill by pressing a button or having a matrix do it. Anything marked with "Pattern" triggers matrix patterns in various ways. Anything marked with "SKIP" shifts the played audio a specific length left or right and then stops the playback.

LOOP REMIXERS	Enable you to remix one loop at a time
MODULES	Remix several loops with control over one or more effects on all.
MULTILOOP REMIXERS	These use a combination of matrices triggering REX and NN-XT players. Each machine has 2-3 sound sources and allows you to mix these in various ways.
OTHER	Template starting blocks to build custom remixers
REX FX	These use exotic combinations of FX chaining to create something new from the REX file. Just load up a sound and twiddle.
REXPEGGIATORS	Pseudo arpeggiators for REX files.

SECTION 10 - SOUNDSCAPE TOOLS



Make soundscape and FX based upon sampled earthbound radio communications.

ROTARY CONTROLS

- SCAN BAND 1/2 Chooses which seamless loops to play from NNXT 1 and 2
- SCAN BAND 3/4 Chooses which seamless loops to play from NNXT 3 and 4
- LEVEL 1/2/FILTER Crossfades volume of NNXT 1 and 2 and sweeps a LP if selected.
- LEVEL 3/4 FILTER Crossfades volume of NNXT 3 and 4 and sweeps a LP if selected.

BUTTON CONTROLS

- SWITCH 1/2 RESET Resets NNXT 1 and 2 to an initial state where only one sample is being played
- SWITCH 3/4 RESET Resets NNXT 3 and 4 to an initial state where only one sample is being played
- FILTERS ON/OFF Turns filter on
- VERB ON/OFF Turns reverb on

HAM SOLAR Make soundscape and FX based upon sampled non terrestrial radio communications.

- SCAN BAND 1 Chooses which seamless loops to play from NNXT 1 and 2
- SCAN BAND 2 Chooses which seamless loops to play from NNXT 3 and 4
- BAND MIXER Crossfades the volume of the playing samples.
- VERB/FILT/PHA Controls various parameters of reverb, phaser and a filter

BUTTON CONTROLS

- SWITCH 1/RESET Resets NNXT 1 and 2 to an initial state where only one sample is being played

SWITCH 2/RESET	Resets NNXT 1 and 2 to an initial state where only one sample is being played
ON/OFF	Turns all sound on or off.
VERB/ FILTER	Turns on FX



BLINGTENDO series Combinators mix FX samples together in various ways to make new ones. They use similar principles in each of the three machines. The main difference in each is the FX are controlled with the Combinator control section.

ROTARY CONTROLS

CONTROL PAD	Volume Crossfades between two played samples to create a mix of both
ATTACK	Sets global envelope attack
DELAY	Controls distortion levels
DESTROY	Controls distortion levels

BUTTON CONTROLS

WARP RATE	Chooses LFO mod rate
WARP	turns LFO on/of
ADD REVERSE	Adds reverse reverb
DESTROY TYPE	Selects distortion type

BLINTENDO 64 specific

BUTTON CONTROLS

FOG	Introduces fog like reverb underlay
FOG TYPE	Selects reverb type
SLIDE/ WARP	Turns on the fast or slow LFO

SLIDE RATE Chooses between fast and slow LFO mod speeds



Each Combinator uses the four rotary dials to control the volume level of one of four seamless FX layers.

BUTTON CONTROLS

- Max turns on maximizer.
- Low width widens the low stereo field
- High width widens the high stereo field
- Width on/off turns stereo imager on/off



Each soundscape generator works in a similar way with slightly altered control methods and machines. The primary method involves playing 4 independent machines together, being triggered from one to several slow playing Matrixes, which change the notes as and when you desire.

ROTARY CONTROLS

- 1/2 MIX any control marked with a / and mix, mixes two sound sources together in a crossfade fashion
- SPECTRUM any control marked with spectrum changes the spectral EQ of the selected sound source within the machine
- <-----> Any control marked in this fashion symbolizes a crossfade mixer.

1-2 PATTERN Any control marked with pattern refers to which pattern is being played on the Matrix for that sound. So for example, 1-2 PATTERN would switch between two pre-programmed patterns on a Matrix assigned to one of the sounds.

BUTTON CONTROLS

PAN / LEVEL MODS Any control marked with a "pan mod " or "level mod" uses a modulation source to change the panning and volume of the playing machines within the Combinator.

BANDTYPE changes EQ band type of selected machine inside the Combinator.

PAT Any control marked with PAT controls an aspect of the Matrix patterns inside the machine.

OTHER SECTIONS

Basic layout of the other sections

- MALSTROM SECTION
- BASS
- FX
- LEADS
- PADS
- RYTHMIC

NN-XT SECTION

- Bass
- Builds and sweeps
- Darks sounds
- FX
- Light sounds
- Pads
- Textures

REDRUM SECTION

- Combi kits 1
- Combi kits 2
- Combi kits 3
- FX kits
- NN-XT kits

REX SECTION (various sub folders inside)

- Combi kit loops
- Remixer loops

SUBTRACTOR SECTION (various sub folders inside)

- Bass
- FX
- Leads and sounds
- Pads

THOR SECTION (various sub folders inside)

- Bass
- Drums
- FX
- Keys
- Pads
- Seqs
- Synth

GENERAL HINTS AND TIPS

Many of the file names for Combinators also act as descriptors. This can give you an idea of the type of controls a device uses for its rotaries and buttons.

Here are some general guidelines to file name descriptors :

<i>att</i>	device uses at least on method of controlling the attack rate of the overall output.
<i>damage</i>	device uses at least one method of distortion.
<i>dcy/decay</i>	device uses at least one method of changing decay rates .
<i>env</i>	device uses at least one method of controlling envelope generation.
<i>flt</i>	device uses at least one method of filtering control.
<i>fltmode</i>	device uses at least one method of changing/combining filter modes
<i>gate</i>	device uses at least one method of gating the audio output of the Combinator.
<i>length</i>	device uses at least one method of controlling the length in time of the output audio.
<i>LFO</i>	device uses at least one method of controlling low frequency oscillators.
<i>mal</i>	device uses at least one Malstrom.
<i>mods</i>	device uses at least one method of combining modulation sources, inputs and outputs.
<i>motionshift</i>	device uses at least one method of controlling a Malstrom motion rotaries.
<i>mute</i>	device uses at least one method of controlling how sounds within the Combinator are muted on and off.
<i>nn</i>	device uses at least one NN-XT.
<i>rate</i>	device uses at least one method of controlling LFO rates.
<i>remix</i>	device uses at least one method of re-arranging the incoming/outgoing audio.
<i>rel</i>	device uses at least on method of controlling the release rate of the overall output

<i>run</i>	requires you to play the sequencer in order to trigger the patterns in the Combinator.
<i>rhythm control</i>	device uses at least one method of altering the output's rhythmic quality.
<i>shift</i>	device uses at least one method of vocode shifting.
<i>speed</i>	device uses at least one method of controlling the rhythmic speed of the output
<i>split</i>	device has its various parts split into sections on the keyboard, either by a certain octave range or by a certain velocity.
<i>sub</i>	device uses at least one Subtractor.
<i>switch</i>	device uses at least one method of switching between individual outputs within the Combinator.

Here is a list of the most common rotary/button Combinator controls:

<---->	Crossfades between two sources.
1, 2, 3, 4, etc.	Usually indicates a button that can trigger a certain part of the sound On or Off. For example, a button marked 1 will usually turn on only sound "1" inside the Combinator.
1/2, 3/4 etc.	Switches between two inputs and plays only one at a time.
Attack	Changes multiple or single attack rates.
Amount	Usually appears with a rate control and alters the amount of signal that is modulated.
Band	Controls the EQ band of part or all of the Combinator.
BP/HP , LP/HP etc.	Switches between filters.
Change step	Alters step time of delays.
Ch/ chorus	Chorus control on or off.
Chop speed	LFO speed controls.
Chop type	Chooses between several modulation curves which best stutter/chop sounds.
Curve	Alters modulation curves.
Damp	Changes reverb parameters.
Delay	Triggers a delay.
Dly type	Changes the type of delay.
Decay	Changes decay rates.

Dry/wet	Changes amount of FX processed signal in the Combinator.
Env att	Alters the final outputs envelope attack rate.
EQ	On buttons usually signifies turning and EQ on/off, on rotaries usually offers control of a specific EQ curve on a specific part of the sound.
Feedback	Controls amount of delays, distortion or more that is applied to the signal to create a feedback effect.
Freq	Frequency control.
Flt env	Controls the filters envelope in some manner.
Flt rate	Controls the modulation speed of a filter
Freq	Alters a specific frequency.
FX	Alters several FX parameters at once.
Hi	Turns on high-band stereo field.
Length	Changes the length of the outgoing audio, usually by means of sustain and release.
Low	Controls low-band stereo field.
Leave alone	Please see the section "What are 'Leave alone' switches?" below.
Level	Controls volume for all or part of the sound.
Mix , mix in/out	Controls two or more overall volume levels.
Mod	Triggers a modulation source, either in an on/off fashion on a button or between different sources on a rotary.
Modes / (flt modes)	Changes filter modes.
Mute	Mute various parts of the output.
Note pattern	Changes the matrix pattern being played on a certain device.
Oct/ octave	Changes the current octave of part or whole of the sound.
Pan	Controls stereo position of sound.
Pattern 1/2. ¾, etc	Used when buttons are assigned to control pattern changes.
Pattern select	Changes the triggering pattern. This may be for the sound of the modulation of the sound.
Pattern select ->	An arrow afterwards means the last pattern is kept blank to create an easy mute
Random rates	Alters speed of modulations semi randomly
Rates	Alters speed of modulations, delays etc

Release	Alters the release times for all or part of the sound.
Res	Alters a specific resonance.
Run	Triggers a matrix to control changes in a pattern or modulation
Semi tone	Changes the semi tone of part or all of the Combinator's sound.
Shift	Usually on a rotary, controls a particular aspect of the sound development, according to its mapped function inside the Combinator.
Sidechain top >	Controls the amount of sidechain to be applied to the source. When the rotary is set fully to the right it indicates the maximum amount.
Solo	Solos a particular part of the Combinator.
Stereo	Activates stereo field
Switch, 1/2, 3/4, etc	Anything marked with switch will change the output between 1 of two or more sources.
Verb	Triggers a reverb
Uni	Unison on the device triggered on/off
Wave 1/2	Usually on a button, will switch between specific LOF waves for that instrument. There are many controls which are instrument specific. Their purpose will be self-evident upon loading the specific Combinator and playing the sound.

GENERAL USAGE ADVICE

Have the sections assigned as folders in your favorites section of the Reason browser. This saves time in navigation.

When browsing for Combinators make sure the browser is set to show "All Combinator Patches". Otherwise some Combinators may appear hidden.

Q&A

WHAT ARE LEAVE ALONE BUTTONS?

There are various controls marked "leave alone" on some Combinators. You do not have to leave these alone. Indeed, by changing this control you can create many changes in the Combinator. Please note that when you save this new Combinator after changing a "leave alone" control, it may function differently to the original Combinator, so best not to overwrite ones you like. Instead save as a new patch.

Its important to note also, that because of the nature of reason, it very easy to transform one Combinator's sound into something completely different. So while you may have a Combinator producing a very dark evil growl, changing the embedded instrument patches in a Combinator can change the sound into something very calming and peaceful.

The point of this is, if you are building your own custom sounds, take note of what controls the Combinator uses and do not be afraid to alter the instrument patches inside.

WHY AM I HEARING NO SOUND FROM THIS COMBINATOR?

You may need to trigger the sound with the sequencer or lay a pattern manually to the sequencer track or you may need to trigger it from a controller keyboard. Check to see if there is a final level coming through the mixer for this Combinator. Make sure it's not routed to a switched off FX Combinator and has a clear signal path to the master mixer.

If being passed through an FX make sure the device is plugged into the correct input on that FX Combinator.

WHEN I COPY A REDRUM PATTERN TO ITS SEQUENCER TRACK IT SOUNDS DIFFERENT. WHY?

Try adjusting the quantized length of the notes laid down, either drag the notes on the arrange page in length, or alter the length of the played sample on the Redrum.

WE HOPE YOU ENJOY THE INFINITE ELEMENTS REASON REFILL!