

# Inspiral

Version 1.0.0

Operation Manual



# ENLIGHTENSPEED

# Table of Contents

Introduction	3
General concepts and workflows	4
Probabilities and Global Mode	6
Singles, Doubles and Chords	8
Velocity Controls	10
Scales	11
Strums	12
Note Repeats & Ratchets	14
Arps	15
Latches	16
The Included Patches	17
Using with other Players	18
Acknowledgements	20

# Introduction

Hello and welcome to Inspiral – the fastest way to end musical creative blocks!

Inspiral began life as an idea to have a plugin that does the opposite of our own Note Filter Rack Extension. Whereas Note Filter removes events based on probabilities, how about something that adds via probabilities?

From there the design process started, and before too long things really got out of hand, and we ended up with probably the coolest device we have ever done. If you like generative music, then Inspiral is for you! If you need creative inspiration, then Inspiral is for you! If you like weird improvs and experiments, then Inspiral is for you!



# **General concepts and workflows**

## **What does Inspiral do?**

When you input a note, Inspiral will usually output something else. Probably.

It might output a chord or a strum or an arpeggiate. The type of output is chosen at random, and the chord is chosen at random. There are a large number of options on the front panel to help you achieve “my kinda random”, but ultimately a lot of the control is deliberately kept away from the user in order to force new creative things to happen and give the users mind some unexpected inspirational creative sparks.

...and it works! Really, really, well!

Due to the number of possibilities in Inspiral, it is probably best to find the settings that suit your style and save them into a patch in your Reason favourites lists.

## **Where to start?**

To give you an idea of how to work with Inspiral, load it up as a Player insert in the normal way for your platform. If this is Reason itself then just drag it in above your chosen instrument or start directly with ID-8 by dragging in Inspiral to an empty space in the rack if that is your preference.

If you are using Inspiral in RRP then please follow the normal instructions for getting MIDI Out from the DAW instrument track.

Once you are looking at Inspiral, let's assume you have the 'Init Patch 2' loaded – note that 'Init Patch 2' is locked to the Major scale whereas 'Init Patch' is Chromatic, so 'Init Patch 2' is a better starting point for this demonstration. Let's suppose I play a C2 note five times with a reasonable sustain time inside a single bar of 4/4 at 120bpm. From this standard setting I receive first an arpeggiate, then a two-note chord (a “Double”), then a slightly different arpeggiate, then a single C2 note, and then a short strum. All are locked to the C Major scale and have only minimal velocity

modulation, so the results are very palatable, and despite being in C Major, could easily be used as a song starter as there is plenty of variation. If I do the same thing a second time, I get a completely different result, although still in the same scale, and the rates of arpeggiation and/or strumming will stay the same.

So, this is just repetition of an extremely simple action giving out great results that can then be built upon.

Everything is still very random though, and not necessarily that adventurous yet. Let's move on to talking about the Probabilities section.

# Probabilities and Global Mode



The starting point for where the decisions are made in Inspiral is the Global Mode control on the left-hand side of the device.

The first setting is Probabilities, and the rest are for each of the event types in isolation. If you set the Global Mode dial to Chords, for example, then all output event types will be chord events.

When we set the Global Mode dial to Probabilities, then all the controls in the Probabilities sections are brought into play. Each of these controls ranges from 0-10, and in conjunction with each other they form a ratio which governs the likelihood of any given event type next. An important thing to understand here is that because these are a ratio then if all settings are at 10 then it is exactly the same as if all the settings are at 1 – note however that if all are at 0 then the device defaults to Singles.

From here the inner workings are fairly simple; if you have a Strum setting of 5 and a Double setting of 10, then you tend to get two Doubles for every Strum. If Strum is 10, Double is 5 and Arp is 5, then you will get roughly 1 Double and 1 Arp for every two Strums. No Randomizing algorithm is perfect so the numbers will rarely be exact over longer periods, but it is close enough for our purposes.

Remember of course, that you can always Remote or Automate the Global Mode, so should you hear something you want from an Arp that was

generated via the Probabilities settings, and decide you need a Strum next etc, then it is easy to make it explicit by just setting Global Mode to Strum. The main point of having things determined by the Probabilities, though, is to force the less predictable things to happen, so if you decide that you need a Strum next, then obviously the creative block is gone :D Typically the most important thing that you will do with Inspiral will happen in the first few notes that are input – you simply make sure that it is getting recorded, decide on the bit you like and move on from there.

# Singles, Doubles, and Chords



Perhaps the most important event types are the most basic ones available. For the majority of uses, the Single, Double and Chord events are the backbone of the phrases and riffs that they will create. Inspiral started out from the basic idea of just having Single, Double and Chord events, and from there on the rest of the event types should really be considered as “extra toppings”.

**Single Events** are single notes which are subject to scale adjustment but no further processing. A C# will, in a C Major scale be quantized to C, while a C will stay the same.

**Double Events** are a single note played directly and subject to scale adjustment, plus a second single note which is a random note within 1 octave either way of the original note, also scaled. This is one of the most effective ways of getting interesting new movements, particularly if using multiple scales when playing.

**Chord Events** also include the single note, which is played directly, subject to scaling. These events can also include up to 4 more notes to make up a chord.

The chords themselves are chosen at random in order to force creativity and unpredictability. This is done in perhaps, a slightly unusual way.



What actually happens is that the chord is made up of a series of harmonic intervals that is chosen at the time the note is pressed and then quantized to the appropriate intervals of the scale (rather than picking the chord and then quantizing to the scale as an afterthought). This has the advantage that you end up with more chord possibilities when moving between scales.

To help manage this, we have the **Chord Complexity** control. This is a number ranging from 1-8, used to signify when the higher complexity harmonic shapes are to be used. When the control is set to 1 only basic harmonic shapes can be selected at random. When the control is set to 8 then there are 32 shapes available.

This gives an incredible level of variance in the output. Once the number of scales and scale degrees is factored in it becomes impossible to guess how many different chords are possible from the existing scale presets, and the scale itself can be customized to any “Western” scale (taking Western scale to be defined as a twelve steps per octave equal temperament scale).

Between the Single, Double, and Chord event types, most users will be able to find good riffs to use and elaborate on, but these still benefit from some external settings, most obviously the Scales, but first we’ll discuss the less glamorous but highly important velocity controls section.

# Velocity Controls



The velocities in Inspiral have three possibilities for user defined control:

- 'Through' – Where no action is taken on the velocity.
- 'Modulated' – Where the velocity is randomized by a user defined amount.
- 'Set' – Where all velocities are set to the specific amount shown on the knob. Note that this is done as a percentage.

To utilise the different types we have two controls, the Velocity Type button and the Velocity Modulation knob. When the Type button is not illuminated we are in Modulation mode.

To get the "Through" function, where no changes are made to the incoming velocity, simply use the Modulation mode, but set the knob to 0, meaning that no modulation is applied, and thus no changes.

To get a modulated velocity output simply set the knob to anything other than 0 when in Modulation mode.

The Set mode is applied when the Velocity Type button is illuminated, and will give an explicit output, scaling the percentage amount to the velocity.

There are no hard rules for this, but you may wish to consider a tactic of using only light modulation for Strums and setting the velocities explicitly for harsh digital sounding Note Repeats and Ratchets.

# Scales



Owners of MeloDramatik may recognise the Scales section. In fact, if you use MeloDramatik you will notice no difference with how the scales work in Inspiral, with one small caveat – we have added a knob to control the scale number. This is simply so that we can have Combinator/MIDI/Remote access to the scale number as this device is intended to be much more of a “jamming” type of device. Under the hood there are only very minor differences in how they work – the user experience is identical.

There are 32 onboard preset scales, and you can change the key of these easily. You can also set up custom scales using the piano keys display.

# Strums



The Strum on Inspiral allows for controls of most aspects explicitly, and some of these are even changeable after the original note has been played.

The dynamic controls which can be altered at any point are:

- Rate
- Type
- Duration
- Length

The static controls which can only be set once for each event, and are set before it is triggered are:

- Complex
- Size

The **Strum Rate** control determines the speed “per complete strum” of the output. If the control is set to 1/8, then a full strum action will be completed once every 1/8<sup>th</sup> of a bar.

The **Strum Type** control determines the direction of the Strum, either Down, Up or Down-Up.

The **Strum Duration** control will set the time taken to get from the start of the first note to the start of the last note of the chord which is being strummed.

The **Strum Length** control will set the end point for the notes in the strum. This is a uniform measurement and when used in conjunction with the duration can produce some interesting effects, as the notes can be cancelled where the Strum Duration is longer than the Strum Length.

The **Strum Complexity** control works exactly like the **Chord Complexity** control. The complexity determines how far down the harmonic intervals table the chords to be played can be chosen from – this roughly means more complex chords become available in the higher settings. Please however, that the harmonic intervals table for the complex timed events (Strum, Note Repeat, Ratchet, Arps) is actually a different table, which will always allow chord events to be up to a size of 8 notes.

The **Strum Chord Size** control determines how many notes will be in the chord that is strummed.

# Note Repeats & Ratchets



The Note Repeat and Ratchet functions are simpler than the Strums and the controls mirror those in the Strum section, only there is no need for a type or a duration control with these.

Repeat and Ratchet functions are essentially the same thing, they take an input and multiply it over a time period, with the only difference being that Note Repeat is generally considered to be over longer periods than Ratchets.

Given this principle we have split the function in two at the  $1/16^{\text{th}}$  mark, where everything longer than  $1/16^{\text{th}}$  is a Note Repeat and everything shorter is a ratchet. For explicit definition we have given you separated controls for the **Rate** and the **Length**.

The other controls in this section are **Complexity** and **Size**, which are shared between the two, and work exactly as they would in Strums and Arps.

# Arps

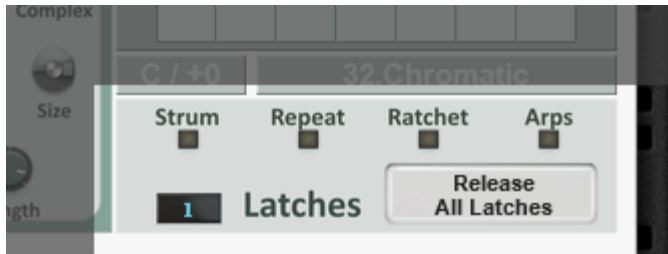


Our final event type is Arps, or arpeggiator. These work exactly as any other arpeggiator you may have encountered before where the notes of a given chord are split to individual events and played sequentially.

The controls for **Rate**, **Complexity**, **Size** and **Length** all mirror the controls in the Strum section exactly.

The **Arp Type** control is almost exactly the same but features one extra setting: "Random". This effectively gives you a random monophonic melody if you desire it. This can be particularly useful when using more than one Arp line and altering it in realtime in conjunction with the Latches and the other Arp Type modes.

# Latches



The last area of the device which needs to be discussed is the Latches function area. If you are already familiar with Strummer or Arp devices then this will work as you would expect.

At this time, we have one button for each timed event type, **Strum**, **Repeat**, **Ratchet**, **Arps**. When each of these controls is active, if a note triggers this type of event it will be latched on and will play continuously until either the Latched is switched off or the Transport Stop Command is given.

There is also a **Release All Latches** button for stopping all events simultaneously.



# **The Included Patches**

We have provided a reasonable number of patches for Inspiral but as noted earlier it is a good idea to find the kind of settings that work for you and your style and then save them into your favourites. The patches included as standard with v1.0 are intended as guideline patches to show the general outline of the device and to provide some basics, but due to the nature of personal taste and the types of things people will be attempting with Inspiral it is not possible to realistically give much more coverage than this.

In the near future we hope to include some combinators which will showcase some really cool setups which are possible with Inspiral.

Patches are loaded and saved in the usual manner for all .repatch files.

# Using Inspiral with other Players

All Player devices in the Propellerhead Shop are standards compliant with The Rack Extension SDK version 4.0 and onwards. This means that a certain set of behaviours are enforced, ensuring interoperability between all Player devices and how they receive and transmit data to other devices, including those which may comply with different standards.

As boring as the above paragraph may sound, it is hugely important when it comes to having fun musically using these devices. Effectively, it means that you are safe to assume that any Player is compatible with Inspiral. Good results are easily and safely obtained when using Inspiral alongside Note Echo, Scales and Chords, Dual Arp, and an ever-growing collection of third-party devices, including our own Loopcracker Suite devices, of course.

There are only two details which really need to be given consideration: Routing and Direct Record.

## **Routing**

Players will always work in a top to bottom order as presented on the rack screen. This starts at the main control unit at the top, which hosts the Direct Record switch and the Bypass All, along with the Send to Track button.

The routing of the Players is then in order from top to bottom unless something is done with CV if applicable connections are present on the device, or a special device is used to break the routing; there are currently 2 such devices in the Propellerhead Shop at the time of writing, which will allow you to do this.

Finally, the note events reach the instrument at the bottom of the stack and **ONLY** that instrument. Should you have multiple instruments that you wish

to send the Player notes to, then all the instruments will need to be present in a Combinator and the Players need to be external to that Combinator. Should you wish separate FX processing for each of these you then need to send the audio outputs to separate Mix Channels.

## **Direct Record**

The Direct Record switch is arguably the most important standard feature of the Player stack. When it is engaged the Player will transmit the output results of whatever manipulations have been set up to the applicable sequencer track. This is all fairly simple if using a Player or CV device as the sole source of note generation, you just record straight into an empty instrument track.

If using data from the sequencer track itself though, another issue arises; a sequencer track cannot act as both source and target for Player notes, it is one or the other.

The solution to this is again to place the instruments in a Combinator, which means you then have two sequencer tracks to play with. From this point you use one as the source and one as the target – the exact nature of this is dependent on what has been setup, and with what intent.

There are multiple possibilities, of course, but no seasoned user should struggle with it. If you are a novice then it's worth visiting one of the Reason user websites such as ReasonTalk and asking for advice, or one of the many social media platforms such as Facebook. We all start somewhere, and with the exception of one or two individuals who have social issues, you tend to find that the majority of the people in these groups are very friendly and wish to help.

Our own Facebook page will be fairly well monitored so if there is any specifics that you need covered then this is one of the best places to do it. Simply like the page, add yourself to the group and send us a message. Our response time will be "reasonable", and we will endeavour to give you the info you need.

# Acknowledgements

The following people made this possible, without them it wouldn't have happened...

## **All family and close friends**

Juhani Ekstrand and everybody at Reason Studios, Stockholm

Kenni Andruszkow and the rest of the fine folks at ReasonTalk

Navi Retlav and all at NaviRetlavSound

Giles Reaves and all at Selig Audio

Bes

Loque

Burningtoken

Diminished

Boombastix

MrFigg

Olive

Challism

All other testers and content providers have our massive gratitude.

Thanks to all the good folks on the various Reason-centric Facebook pages as well for giving moments to laugh, cry and feel inspired about.

Any questions? As in, reasonable ones not answered by this document?

We might not answer at all, if you send us a line to [enlightenspeed@gmail.com](mailto:enlightenspeed@gmail.com)

