

# USING PROPELLERHEADS REASON FOR LIVE P.A.

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Propellerheads Reason is a sequencer and virtual synthesizer which is stable precisely because it doesn't try to be a one-stop-shop for audio. You can't record audio into it. You can't use VST or DirectX plug-ins with it. But you can sequence on it, and since your song information is mainly MIDI, the file sizes are infinitesimally small. This makes the program a cinch to play live as well as exchange songs with other users over the Net.

You need a laptop computer that's rock stable (much more portable than a desktop for live gigs), and a good sound card. It would help to have a MIDI or USB keyboard controller to play notes with, but your QWERTY keys, and a mouse or touch pad can do the trick just as well.

So how exactly can one use Reason in a live P.A. setting? It's really all up to you: what music you play, and how you intend to perform your music.

While I am no expert, I have had some experience using Reason for live gigs. So though there are probably many more ways out there, these are some of the methods that I personally use:

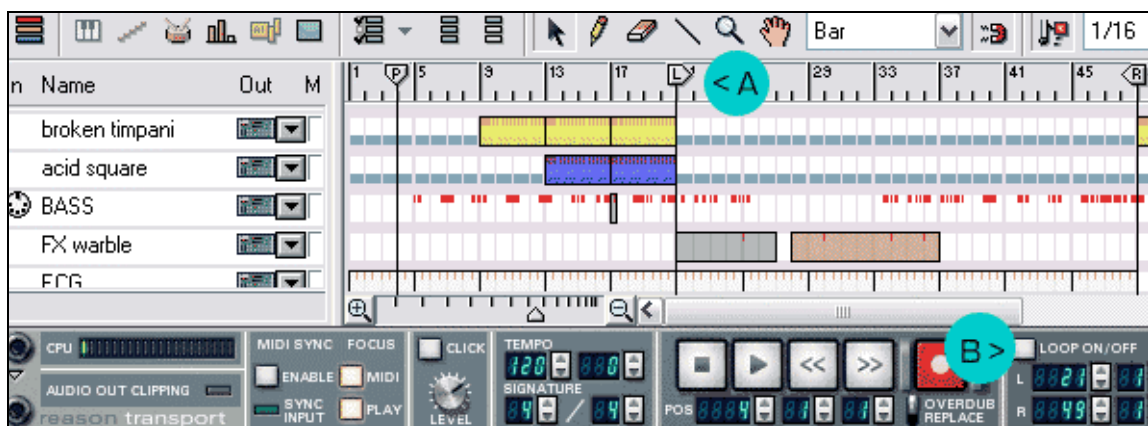
## I. USE REASON AS A SEQUENCER

Reason is a sequencer. So sequence 'em notes then play 'em back!

### 1.) GO LINEAR, FOR THE OBSESSIVE-COMPULSIVE

You can sequence entire songs (or if you want to be strange, or simply want to tax your laptop's resources, you can sequence an entire set) and play the file from start to end in one go. This is one way to make sure a song plays exactly the same way every time. Of course, it's boring and static. But if you're obsessive about details being absolutely perfect each and every time, then this is the way to go.

This isn't too different from spinning records on turntables however, since the tracks will have fixed starts, fixed ends, and fixed song lengths. In short, there's little spontaneity.



There are ways to add variety though:

#### a.) Play with your loop points

You can loop the entire song or just certain sections by using the left and right loop indicators **A** and clicking the "loop on" button **B**, and once the looped section repeats, start changing parameters or muting parts to achieve contrast.

#### b.) Play live keyboard parts on top

Playing live parts atop the pre-sequenced always adds more energy. Even without a keyboard controller, you can use your QWERTY keys via Bome's Mouse Keyboard. It sometimes feels like cheating though if you're not doing anything "live" at a gig.

#### c.) Randomly replace rhythm patterns

Introduce a Dr.Rex, load a random REX pattern, ideally something you don't know, and mute your regular rhythm tracks. See what happens next. Sometimes accidents produce the best results.

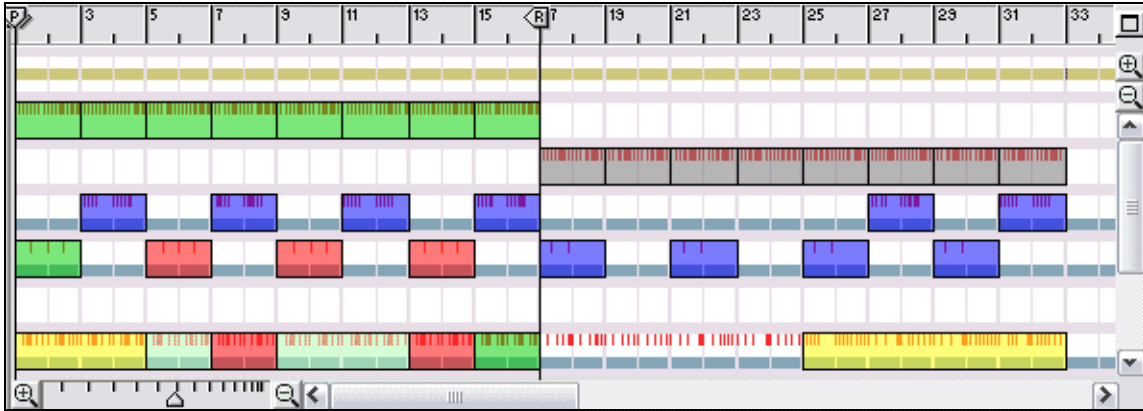
#### d.) Tweak your parameters.

See section III.

## 2.) SHORT GROOVES REPEATING

Another way to keep your song structure flexible is to pre-sequence short phrases (think 16, 32, or 64 measures) set the left and right locators to the length of the phrase, and click "loop on".

You can then have any number of these short phrases throughout a song, and switch back and forth to each phrase by manually adjusting the left and right locators (drag using your mouse, or input using the numbers at the bottom of the control panel). This amounts to having actual sections in your song: verse, chorus, breakdown, coda, etc. and allows you to shuttle back and forth from each section.



Here is an example of a track I made with only two sections, each 16 bars in length. Toggling between sections is the tricky part.

A drawback to this method is that the short grooves sometimes seem too short, just when you need a new section kicking in, there is little time to reset the loop points. The easiest way though is by typing the measure numbers into the transport panel.



*Just remember: wait for the box to appear before typing the new measure number and pressing ENTER. I've stopped my set numerous times by pressing ENTER without looking.*

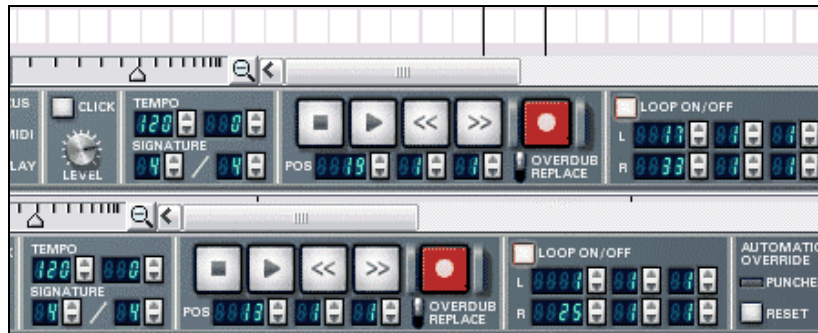
## 3.) BUILD IT FROM SCRATCH

The most radical method of course is to start with one pre-sequenced loop, and program everything else from scratch: your synth notes, your effects settings, your drum loops. With enough practice, this is actually a pretty exciting way to go. But why add stress to a gig, which in itself is stressful enough? Personally, unless you like living on the edge, minimize using this method and do more of #1 and 2.

#### 4.) MIXING SONGS LIKE A DJ

Nice thing about Reason: you can have several songs open and playing at the same time. Shifting from one song to the next can be done by matching the tempo of the first with the next, like what a DJ does. Match up the BPMs of each song and use the volume knob to fade in the new song over the old.

This is perfect for the sort of music I play live: downtempo, with a little house. However, because I only have one audio output, there is no way to preview the beat of the next song without having the entire world hear. Hence the following tips:



Here are 2 songs with the beat counters next to each other for easier monitoring.

#### TIPS:

##### a.) **Latency check:**

Make sure your latency settings are optimized, otherwise it will be hard to match up beats.

##### b.) **Visual Beat-matching:**

This is easy because at the bottom of the transport panel is a constantly changing position meter that shows the beat visually. If you can get the numbers to match up, the beat will usually follow.

##### c.) **Layered parts:**

As an added trick, you can set the 2nd song to loop for 8 bars or so, and use the 2nd song's rhythms as a layer over the 1st song's melodic parts, or vice versa.



Here, the first song's kick drum is soloed while the 2<sup>nd</sup> track is playing.

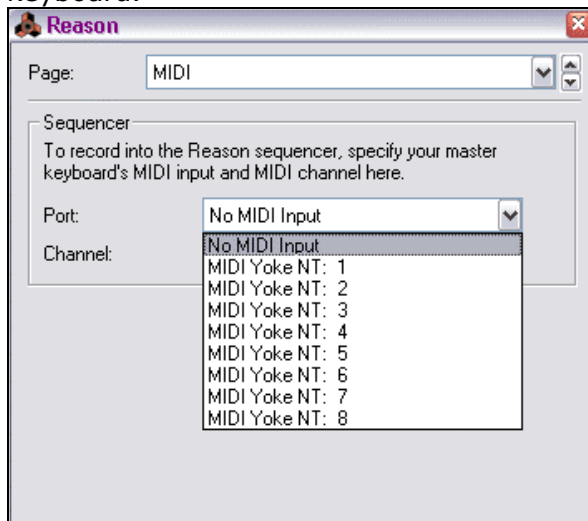
## II. USING REASON AS A TONE MODULE

Another way to harness Reason's power is to connect a MIDI or USB keyboard controller to your laptop. You can control just one tone module at a time, which is the default way. Or better yet layer several synths/instruments so that you achieve a fat, lush sound.

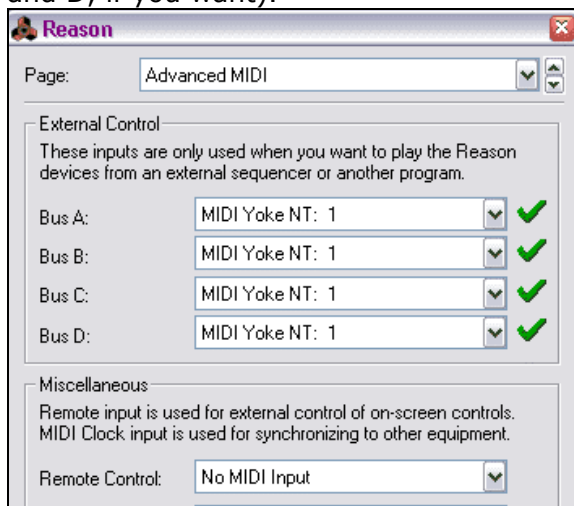
The trick to this is explained on the ReasonStation.com website:

### How To Layer Synths, and control them from one MIDI input:

1. Go to "preferences", click "MIDI" and ensure the correct port is linked to your keyboard.



2. Go to "advanced MIDI" and select the same port for both Bus A and B (and C and D, if you want).



3. Check which MIDI channel your keyboard is set to send MIDI messages from (usually channel 1).
4. In your MIDI interface at the top of your Reason rack, select bus A and from

the dropdown arrow beside channel 1, select the instrument you want to layer (say a Subtractor 1). At Bus B, go to channel 1 and select the next instrument you want to layer (say, a Pad ). Repeat for as many as 4 busses or layers.



Now when you play, the MIDI info from your keyboard will be routed through the busses and through a dedicated channel 1 path to all instruments on that channel.

### III. CHANGING PARAMETERS

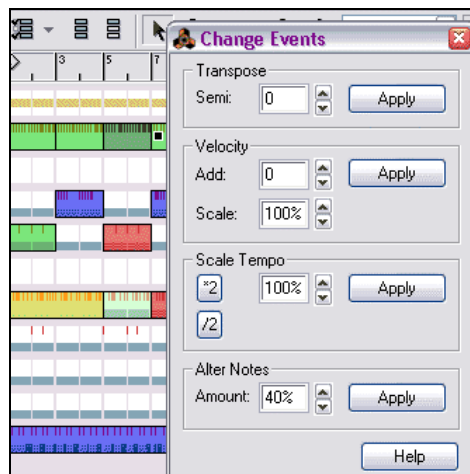
The beauty of the Live P.A. is that you have full control over all your sound parameters. And you have a bunch of built-in effects units in Reason to help you control your sound. This means effects, filters, envelopes, panning, EQ, anything with a knob or slider actually. Reason gives you total control over a whole lot of parameters—something other software cannot match.

#### 1.) TWEAK EFFECTS

The easiest way to "play" with your sound is to tweak your effects units. Because the effects in Reason are built-in, they are wonderfully stable for live use, unlike using plug-ins in a host program. My suggestion: play around with each of them first so you know what each setting can do to your sound.

#### 2.) ALTER NOTES

Highlight some sequenced notes, right-click them, and pick "change events". There are 4 choices, the most usable of which is "alter notes". This randomly changes note position of the selected notes, giving you new melodies and rhythms from old.



### 3.) TWEAK THOSE KNOBS

There are more parameters like: filter, resonance, attack, decay, sustain, release... oodles more. Find out what each can do to a sound. And then play with your sound. Here are some examples:

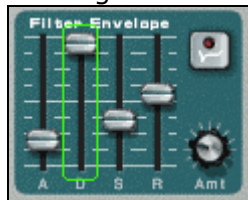
- Frequency sweeps

Set the Matrix (or an arpeggiated sequence) going with a cool rhythm pattern, and then grab the filter FREQUENCY knobs as the pattern plays. Crank it down until the pattern is nothing but a gurgle, and then open it wide for the full sound.



- Envelope decay variations

Same thing: get a pattern going, then grab the decay knob. Tighten up the decay until the notes are clipped off short, then open it until you get a wall of echoing sound.



- Resonance boost

While doing either or both of the above, fiddle with the filter resonance. High resonance with a short decay produces quick rhythmic blips, and when you pull down the filter cutoff the filter will woof. Turn down resonance for a more even sound.

- Oscillator sync sweeps

With 2 oscillators in the Subtractor, you can sweep the pitch of the less dominant oscillator up by a couple of octaves using the coarse tune knob. The perceived pitch won't change: Instead, you'll hear a metallic sweep of the overtones.



- Waveform crossfades. Set up an oscillator tuned an octave or two below the first, and then fade it in and out with your Mix knob. If your synth uses a distortion effect, tune the second oscillator to some other interval (a fifth above the first oscillator, for instance) and bring it in with a knob for a radical thickening of the tone.

## IV. PERSONALIZED SETTINGS

There is no better way to attain full control over your live sound than to personalize your settings so you can simplify life and make things easier and faster.

### 1. KEYBOARD SHORTCUTS

From "options", click "edit keyboard remote" and assign QWERTY keys to the buttons you will need. Personally, I have set it up so that each mixer **channel mute** button, each **Redrum pattern** and each **Matrix pattern** is mapped to a QWERTY key. But you can assign more buttons and map everything you could possibly need in a rush. Mapping allows you to activate something without having to scroll through a tight window with your mouse.



ACID42's Keyboard Map:

Mixer Channel mute buttons

- 1: Q
- 2: W
- 3: E
- 4: R
- 5: T
- 6: Y
- 7: U
- 8: I
- 9: O
- 10: P

Redrum Pattern enable buttons

- 1, 2, 3, 4, 5, 6, 7, 8

- Redrum Bank A enable: shift + 1
- Redrum Bank B enable: shift + 2
- Redrum Bank C enable: shift + 3
- Redrum Bank D enable: shift + 4

## Matrix Pattern enable buttons

1: A

2: S

3: D

4: F

5: G

6: H

7: J

8: K

Matrix Bank A enable: shift + A

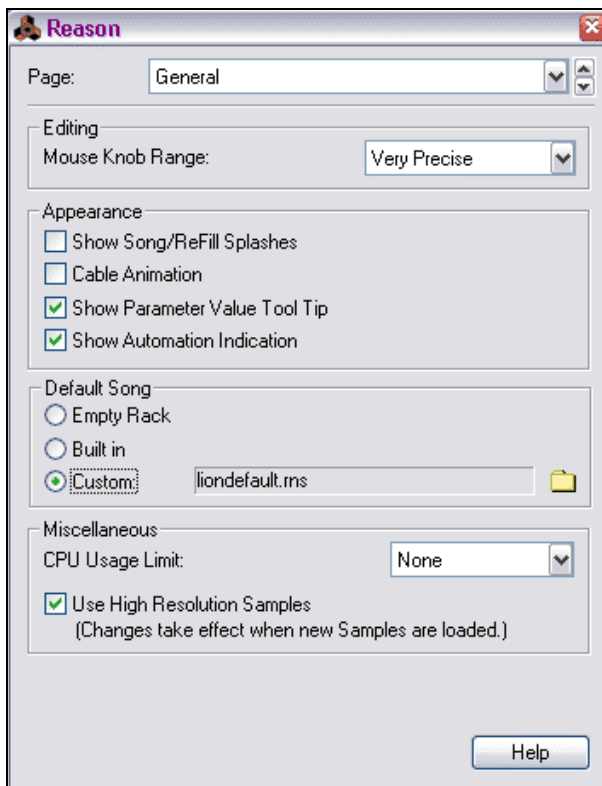
Matrix Bank B enable: shift + S

Matrix Bank C enable: shift + D

Matrix Bank D enable: shift + F

## 2. YOUR OWN DEFAULT SONG

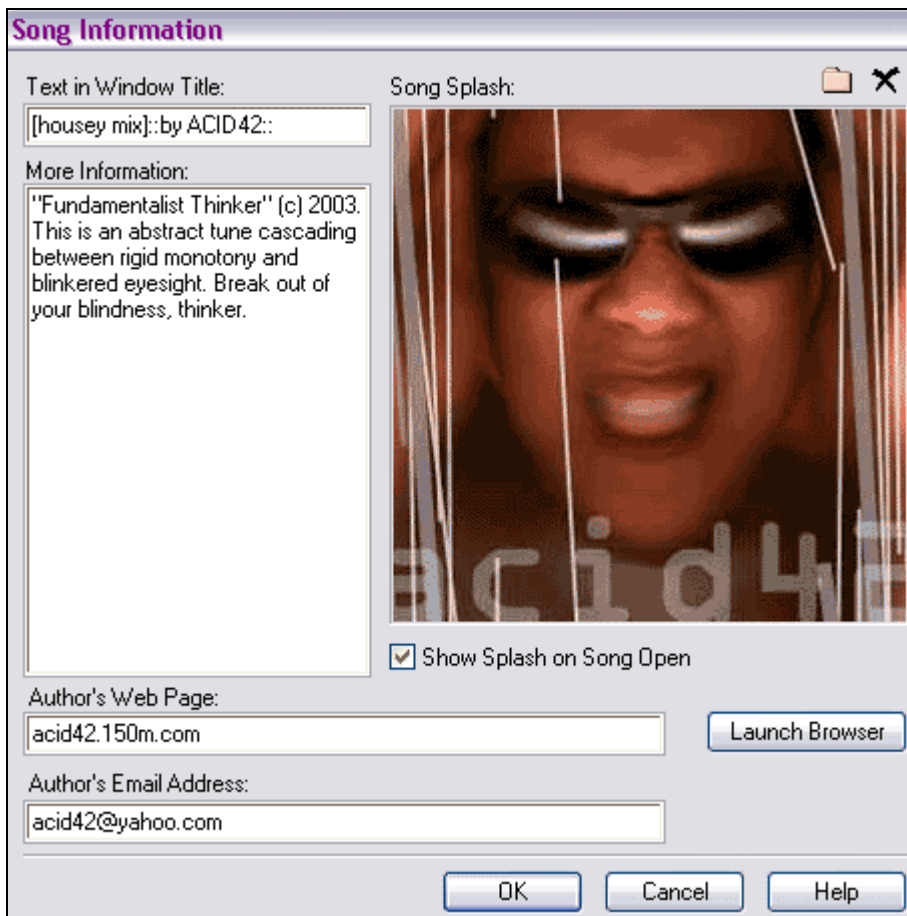
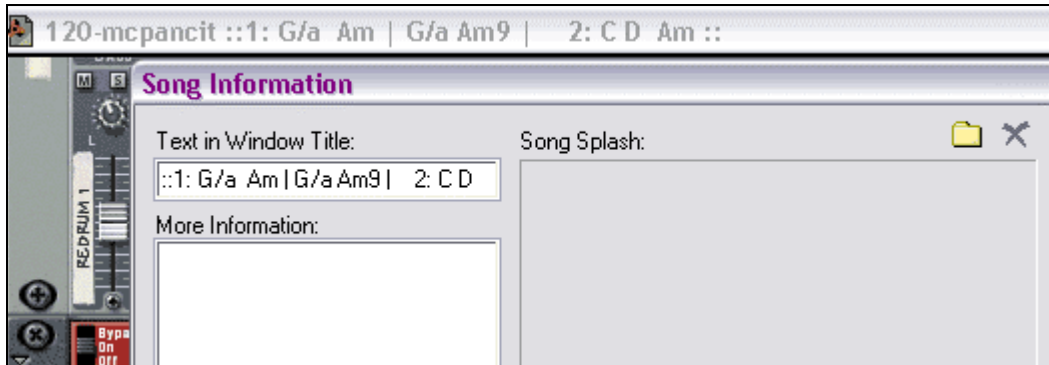
In order not to keep repeating these keyboard mappings with every song, save them in your "Default Song.rns". This saves all your personalized shortcuts with every new song you create. Assuming of course, that you start every song with "Default Song.rns".



### 3. SONG INFORMATION STORES USEFUL INFO

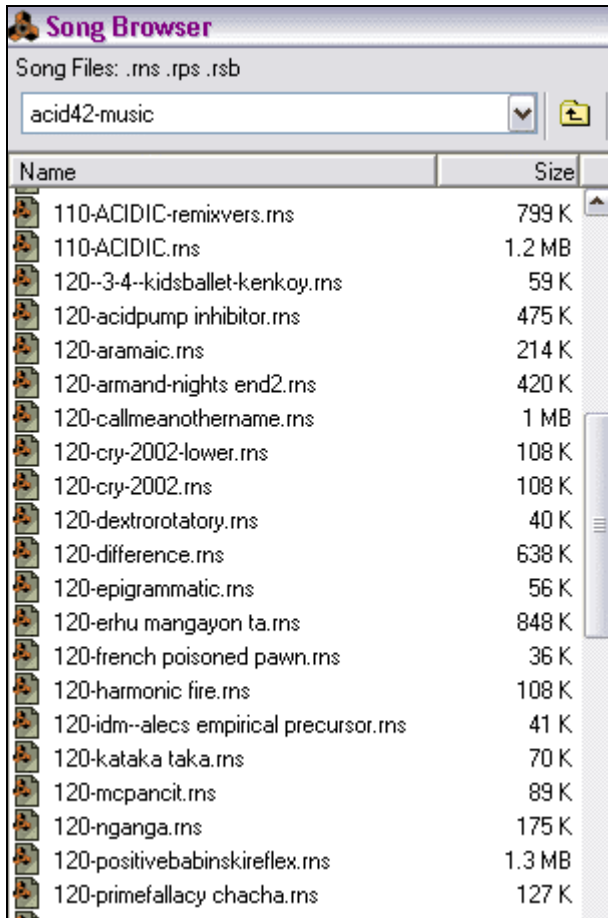
Pressing CTRL+I brings up the Song Information window. Here, ordinarily you store info about the song, composer's name, email and website URL. However, this is also a place where you can place info that may help you during the performance such as for example:

- a.) Chords to the song
- b.) Listing of relevant measure numbers where sections change
- c.) Lyrics even!



#### 4. FILENAMES CAN ALSO HOLD USEFUL INFO

The other way I organize songs is by adding the BPM before a song title. This way, it is easy to find songs which can be beat-matched to one another.



*Hope this tutorial has been useful. If you have any questions or comments or even your own tips, I'd love to hear them. Email me at [acid42@yahoo.com](mailto:acid42@yahoo.com). Thanks for reading!*

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