

# The MoonFish Cookbook

the document that teaches you the tricks that make it tick

(c) by Bram Bos 1999

## Contents:

- A. Introduction
- B. What makes the MoonFish special ?
- C. The tutorial song

- 
1. How do I create those crazy drum-and-bass breakbeats ?
  2. Can I get a higher resolution than 16th notes ?
  3. What else can I do with the delay ?
  4. Are the "lame-timestretch" and the "long stutter" based on hidden features ?
  5. Where can I get cool samples to use with MoFi ?

## A. Introduction

Welcome to the MoonFish Cookbook. In this file you will find a large variety of tips and tricks that will probably help you to get the more out of the MoonFish than you would have expected to be in there in the first place. I recommend you print this document because I can't imagine anyone really likes reading from a screen...

Please note that this is by no means meant to be a manual on how to use the application. I hope the interface is clear enough to enable you to find that out for yourself. If it is not then I invite you to experiment with the program so you can learn how to use it by playing with it. Don't be afraid - you can't damage anything. All features and functions are implemented in such a way that basically you can't do anything wrong. In the worst case you may end up with some very experimental noise... ..but is that a bad thing ? And besides, I am convinced that anyone who has ever seen a Tracker or a mod-editor in his life will be able to use the MoonFish...

## B. What makes the MoonFish special ?

Well, a number of things certainly put this proggy in the spotlights (although this may be the spotlights at a freakshow). The first thing that makes this tracker stand apart is -of course- its limitation. The availability of only three channels may seem really weird in an era in which software tends to get more flexible and less limited every day. The purpose of this three-channel-policy is more like a challenge. Let me explain this...

The interface challenges you to create a cool piece of music/sound despite the barriers it puts around you. Therefore your creativity may be tickled in new ways. For example it forces you to think of how you really want to use your samples, or which soundlayers are most important to you - or your song. This may sound like complete bullshit to you, but I challenge you to actually try it. I think you may come to new insights in creating tracks when you are aware of the process of creating them. To put it another way: the music-environment is not your slave, but your sparring-partner and the MoonFish is always present to communicate with you while you make music.

Apart from this there are a number of other things that make the MoonFish special, for example:

- The ability to get up to 1230 BPM. No other music composition tool gets that far - which is logical, because it makes no sense ( ...now there is a paradox! ). I have only implemented it because a friend of mine - Zap - once typed 1230bpm instead of 130bpm in a mailinglist-message and we all wondered whether there actually was any application able to create music at such an extreme tempo. Well, now there is... :-)

- The ability to deteriorate your sound with pickup-noise. There's an easy explanation to this one too... When I am developing a sound-application I use test-sounds to check my DSP-routines. In the MoonFish I used this noise-sample and I decided to leave it in there as a special feature to emphasize the fact that the MoonFish is not a high-end application but belongs to the dark regions of the underground. And besides: it is hi-quality noise; sampled from a Technics SL1200 with a broken Stanton needle !

### C. The tutorial song

In the same folder as this file you will find a MoonFish file called *tutorial.mf*. This is not really a song but a collection of example patterns. In this Cookbook I will refer to these patterns to demonstrate the tips I provide here.

## The tricks from le chef...

The recipe for some serious sonic fish-gourmet shit !

### 1. How do I create those crazy drum-and-bass breakbeats ?

*example pattern: tutorial.mf, pattern 1*

In music styles like drum 'n bass, breakbeat and jungle people often make use of sampled loops. Still, they seem to have an unlimited number of variations on these drumloops because no two measures of drums sound the same, right ? Wrong ! The trick is to retrigger the loops at certain points rhythmically to make them sound irregular and non-linear. In applications like HammerHead you could do this by sequencing two parts of the same drumloop together. This is also possible in The MoonFish, but it is done in a very different way...

Let's say you have this normal drumloop. "Normal" in the sense that the snares are on beats 2 and 4 and that nothing really weird happens in it. just a straightforward-from-the-books-4/4-drumloop so to say. The magic to make this loop go berserk is all in the **controller** panel of your LCD-screen. First: make sure the sample is set to loop-mode in the sample-manager to ensure that the duration of it will be exactly 1 measure. Trigger the note on step 1 by clicking in the note grid and selecting your sample from the list you are presented. Press **play** to be able to instantly hear what you are doing. your sample should be looping just fine. Next, you choose a position in the measure where you want the shit to aim for the fan - usually this should be on an odd step number, like 7, but I'll leave the experimenting up to you.

On this step, you click on the little controller-mark (the small rectangle below the note-grid). The controller-settings-panel should pop up now. If it does not then you probably clicked on the wrong spot and that makes you a complete moron ;-). This panel has two sections: the volume section and the note-behaviour section. We'll leave the volume-section untouched for now... so let's focus on the note-behaviour section. In here you may choose from a number of ways you want your note to behave in this particular step (and probably in the next steps). To re-order a breakbeat we need to re-trigger the loop at a rhythmically correct point, so we choose: **retrigger note and continue**. This function allows you to tell at which point the sample should restart playing. You may enter the start-position in the box called **start-position**. The value you can enter in here is a relative number in the range of 0 to 1024. So let's say you want you loop to start playing right in the middle. In this case you should enter 512 as a value ( =  $1024 / 2$  ). Sounds easy and logical, right. Damn right it is... To help you out here are some usefull values you may enter:

0	start of the sample
256	second beat (usually the first snaredrum or accent in a loop)
512	halfway
768	you guessed it: on the fourth beat... traditionally the second snare is found here
1024	at the end of the sample. Somehow I don't think this is a usefull value =)

each 16th note/step is positioned at 64-unit intervals from eachother; so the second step is on position 64 and the third on position 128. I think you can figure out how it works...

Just play around with this feature to create those jungadelic drumloops. If you want an example of how to do it, you may check it out in the tutorial-song, pattern 1.

## 2. Can I get a higher resolution than 16th notes ?

*example pattern: tutorial.mf, pattern 2*

The note-grid of MoonFish only allows 16th notes to be entered. This should usually be a resolution that is high enough for your compositions. Also it allows the composition tool to have an interface that is more usable than one with a grid that is twice as big - featuring 32nd notes. Still there may be occasions where you want to use 32nd steps...

These occasions are usually when you want an out-of-this-world-snare-fill to happen. The MoonFish enables you create such fills using the **retrigger note and loop back** function. The trick is similar to the previous one, but in this one you specify a range of exactly a 32nd note that should be looped. This way your sample will loop through the sample continuously while keeping the right tempo resulting in the fill you wanted.

In more practical details: your loop region has to be exactly 32 units long (half the duration of a 16th step) to be a 32nd step. So let's say you have a nice snaredrum on beat 4 that you want to use for a drumfill. In this case you have to enter the loop-note at the step where you want the fill to start. Next you enter one controller, **retrigger note and loop back** with the following values: **start-position = 768** and **end/loopback position = 800**. Presto: one drumfill that will continue to roll until a new note or another controller is encountered...

## 3. What else can I do with the delay ?

*example pattern: tutorial.mf, pattern 4*

What else did you have in mind? A delay is simply a basic echo function, right? Right ! Or to put it in an even simpler way: it is just a feedback function that feeds an audio signal back into the mixer after a defined period of time. Exactly this feedback functionality allows you create some special effects with my delay-engine! You can create those typical metallic feedback effects with it... Here's the trick:

Just set the delay-period to zero steps. Technically this should imply that the generated signal is fed back into the amp instantly, resulting in total distortion-chaos... to avoid this I have adjusted the delay algorithm to have a minimum delay-time of a few milliseconds. This means you can safely set the number of steps to 0. Next: set the feedback knob to its maximum value... I can almost hear you think: "*This guy is insane! Maximum feedback at no delay means trashed speakers and exploding ears !*". Well, to protect you from yourself I have created a feedback function that does not exceed safe values. Finally raise the delay-amount of the desired channel and there's your mechanic-robot-effect ! Just bounce the pattern to a sample and restore the delay-settings to earthly values. The effect is demonstrated in example pattern 4...

## 4. Are the "lame-timestretch" and the "long stutter" based on hidden features ?

*example pattern: tutorial.mf, pattern 3*

Nope. They are just examples of how you could use the **retrigger note and loop back** and the **retrigger note and stop** functionality. So you could get the same results by entering the right values into the controller-panel. To save you some tedious calculation-time I have created these two functions as some sort of macros that enter those values for you... And at the same time they make it easier for you to experiment with them.

In the third example pattern, for example, I show that you can trigger a new note in a "time-stretched" sample without losing the effect. The controller-values are preserved though, so you still hear the sample play through the regions you have specified (or actually the preset-function did). This allows you to play with the pitch or the note of the sample. You can thus raise the pitch of a voice or a drumsample dynamically without losing the tempo. Yes, that is the basic principle of a timestretch, albeit a lame one ;-)

## 5. Where can I get cool samples to use with MoFi ?

Well, you can search the internet. There are numerous sample archives available that offer free samples of every single synthesizer and drumcomputer you can imagine. For loops and sound effects you can also try some sample CDs. Some music-magazines even enclose CDs with trial-samples of expensive sample CDs.

But why not create your own sounds? There are software-applications available that allow you to design your own sounds the way you want them. May I recommend Stomper to you? It is a simple yet powerfull tool, created by Zap Andersson, which is able to produce deep and fat drumsounds and biting analogue synth sounds... Just try it out and do some experiments with it. Fun and surprising results are guaranteed. You may find it here: <http://www.master-zap.com/stomper>

-----

(c) Bram Bos, September 1999