GETTING STARTED WITH
FAMITRACKER
Get Famitracker at http://famitracker.shoodot.net/

INTRODUCTION

At first I have to say: If you came here and it happens you are familar with the general handling of a tracker, go away and delete the file. You probably won't find anything new in here.
Otherwise: Welcome to another great way of wasting your time!

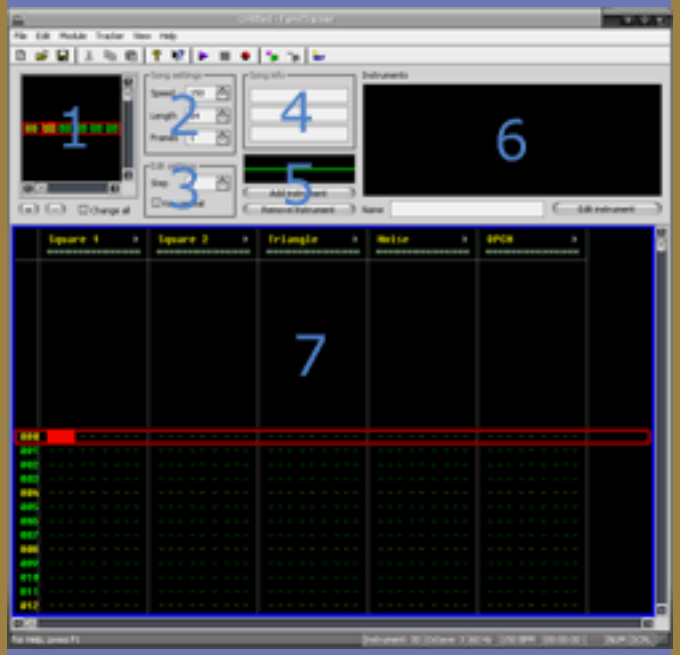
I'll try my best to get you started with the Famitracker and teach you the very basics of handling a tracker in common. It probably won't turn you into the worlds next Jean Michelle Jarre, but at least, it will make you able to start making your own tunes.

Also I'll provide a list with useful links for you to go on and research for your own, after reading this little piece.

Enough for now, let's get started!

GOT IT! WHAT NOW?

After installing Famitracker, I suggest you to open a few songs with it to get an impression, on how it looks.
The look stays the same although. So we just start out with what we are seeing.



This is, what it should look like, when you start the program. The upper menubars should be quit selfexplaining. I guess you already know, how a playbutton looks, don't you?
So what we've got here, are 7 sections to perform our madness with. Let's start explaining!

1

The patternview. Here are the pieces of your song stored. Section 7 is called a pattern. Each pattern has a different number, so you can make changes take place and arrange them in this window. The first two digits are the rownumber. The more rows, the longer your song. The digits to the right represent the channels of the famicom. Don't get worried, I'll explain the use of this later on. :)

2

The song settings. You can change 3 simple things in this section. The song speed, to set the actual bpm of the song. Like 120 for moderate pop songs or around 180 for driving rock tunes. With the field ‚length' you can choose how many notes a pattern should have. This comes in handy for some tunes, but shouldn't bother you in the first time. The framesfield is much more important. Click on it and watch. Yes, you're right! Now you have 2 frames, which means the patternview has now 2 rows.

3

Part 3 is the edit settings field. You can choose, wether to loop your song or not. Just keep it, as it is for now.

4

Tell the people, who made this lovely tune, with this section. First goes the songname, than your name and the last field is for the one who holds the copyright.

5

No audio application is complete without a fancy oscillator! And here it is. Just above one of the most important buttons: ‚add instrument‘. This is for adding a plain and unmodified setting. Without this you‘re never gonna hear something. Of course you can also remove an instrument.

6

The instrument window. This is where all instruments are lined up. You can rename them, to keep them in order. Also a click on one of those automaticly selects it and you don‘t have to type numbers.

7

This is the very heart of Famitracker. You probably will spend most time on this window (and on the instrument settings).
So let‘s start taking a closer look on a so called pattern. All that dashed lines will soon make sense.

THE PATTERN

Here it is! Our scratchpad to fame: the pattern.
5 columns of pure technical power. Each of this columns represents one channel for us to mangle with. From left to right it is:

2x Square: The main channels, which can be altered in a million ways and give our tunes the beloved chippish flavour.

1x Triangle: A need and soft channel. Definitely not as flexible as the square, but essential to a good tune.

1x Noise: The good old white noise. If manipulated correctly, this is your first choice in drumming.

1x DPCM: The sample channel. Here you can load your samples and add them to your tune. As far as I know DPCM stands for Delta Pulse Code Modulation, but I might be wrong.

These are the four keys to the mighty palace of nsf-music. But there is still more to it.
You probably have noticed the bunch of weird digits at the left side of the window. These indicate the position in the current pattern and are just in a hexadecimal way.

Unlike other music programs or standard notation, a tracker is read from top to bottom instead of left to the right. This is why there are columns for the channels. Not a big thing to get used to it. Currently the pattern is empty and nothing is changed, so each horizontal line displays a 16th note.
To your comfort, Famitracker displays each quarter note in another colour, so you won‘t get lost so fast while tracking.

But watch out, since there are still more columns in it! Let‘s take Square1 and have a closer look.

The first is the note column. Here comes the played note. But in a tracker way. Notes in trackers are written like this:

E2 D3 F#3 B3 D4 F#3 B3 D4

The first is the note. A note is part of an Octave which has the following order (from the lowest to the highest):
C,C#,D,D#,E,F,F#,G,G#,A,A#,B
These are repeating through the octaves, which is indicated by the number right next to our note.

You can switch through the octaves by pressing: F2-F9. F2 selecting octave 0 and F9 selecting octave 7.

THE FUNPART

So let's start making some noise! By now you should be able to follow my guide without being confused too much. So we start off, to make a little tune. Just a little. But it shows you the essence of the work to do.

Start out by clicking the little ‚+' under the Patternview (song arrangement), while having the triangle channel selcted.

There should be an 01 now, and next for us to do is to press the ‚add instrument' button and set the song speed to 120. Now click on the newly added instrument and rename it to ‚bass' in the field below.

And here starts the fun. The instrument window. Click on ‚edit instrument' and watch your dreams appear.

Since we're working in the triangle channel, there is not much to tangle with. We just can set up the volume. Everything other than 0 will turn the channel on, while 0 will mute it.

So let's start by checking the little box beside ‚Volume' in the left. In the right field you see an ‚Insert' button. Press it.

As you click on the newly added parameter, the little fields on the right become changeable. But for now we only need to change the volume to 1. Try clicking the piano in the lower field and you should hear our triangle bass. You can now just close the window.

To enter the notes, click in the pattern. Take a look at the frame, that is surrounding the whole patternfield. Blue means you are not in recordmode and just can type anything in to listen to it, or to find a melody. Press the space bar to make it change to red. Now you're able to edit the pattern.

We want to do a bass, so it's a good idea to lower the octaves by pressing F4.

Now to enter the notes you have to know, that your keyboard is layouted like a piano. There's an octave from Z to M corresponding to the notes C to B and S to J for the C# to A#. From Q to U is the next higher octave. So you can play just like on a piano. It's not a hard thing getting used to this layout and most trackers support it.

Now type a D-2 (X) in the row with 000 at the beginning (the first row) and a G-2 (B) at 032. Ready to go. Press play and you hear our bass.

Now on with the square2 channel. I personally use it often as a background while keeping square1 for leadsounds and effects. But that only counts in for the sole composing. Later on, every given space is needed.

So we click the ‚+' again to make the number in the patternview of square2 change to 01. And again we add an Instrument and rename it to ‚rythm'.

In the square channels we have a lot more chances to mangle the sound. Go check the Instrument Editor.

To make a nice backing rythm instrument we firstly need to change the waveduty. So check the box next to ‚Duty/Noise' and then in the ‚sequence select below, select a free one. 1 would be a great choice. The Duty can be altered by entering 0-3 as a parameter. That means you have a total of 4 waveforms to play with. For a nice big rythm I chose 2. Press insert and set the value to 2.

Next we need is a Volume. And here we can enter everything from 0 to 15, while 15 being the loudest and 0 being mute.

Check the volumebox and select a new sequence number. Now we need to press the ‚insert' button 7 times. Note that there is also a field called ‚MML' this is for direct editing of the sound, with the native programming language of the famicom and it comes really handy with the time.

To have a nice ‚beeping' sound I set the first value to the length of 1 and the rest to 0. Now I let the volume decrease from 12 to 0. That makes a value for each inserted instance and leaves me with:

12 10 8 6 4 0

A short and beepy sound. Noticed the MML field? Right it's getting changed too. If you're more familar with the settings you can use this field to enter the values way faster and just press ‚parse' to get them read in. Close the Instrument Editor and get ready to play some arpeggiated chords.

I decided to stick to minor chords in this example. But it would be good, if you learn how chords are built by yourself. I' give you a quick guide for 2 most common chord progressions.

The first one is the major chord. To build a major chord you just have to remember the counting. It's 043. 0 being the note played. Let's say a D like in our example. To build a major chord from it just count the keys up (called halfnotes). 4 more give us a F# and from the F# again 3 up gives us an A. And now we have a chord. Simple isn't it? This works Just fine for every root note you're playing. For minor chords, just count 034 and you're done. Who again said, that music was a cryptic language?

For the example I built minor chords in 8ths. Which just means I played a standard arpeggio (broken up chord) with on line space while entering. So the input for the D in the bass is:

D-3, free line, F-3, free line, A, free line.....
This reapeats until the other note starts. Then it changes to:

G-3, free line, A#3, free line, D-4, free line.....

Once you've entered the complete line, press play and listen to your first arpeggiated backing on the famicom.

For the lead I want some cheese oldschool sound. So we enter the usual procedure. Set the square1 to 01, add a new instrument and rename it to ‚lead'. Now in the instrument editor check the boxes ‚volume', ‚arpeggio' and ‚duty/noise'. For volume use sequence number 2. For duty/noise use 0. Arpeggio now get's number 3. And here comes the funny part you'll probably playing with for hours and hours while creating your first tunes.

The arpeggiocommand is for retriggering the played note. That means it becomes played again without you to enter the note. Click the ‚insert' button thrice. Well we've had a minor chord right? So the first parameter stays as it is now. The 0 is triggering the root note. The next one has to be a 3, since it's 3 halftones above root in a minor chord. Now caution! The next one has to be 7 instead of 4. The program counts from the played root and not from the former input. Click the piano below. Doesn't sound really cool for me. So we make a little loop by clicking the ‚insert' once more and setting the ‚time' to ‚-3'. That means, the sequence gets looped a few times. Now this sounds oldschool!

By now you should be able to experiment with your own imagination for a cheesy leadmelody. So try it out.

THE EFFECTS

While playing around you probably noticed, the before mentioned columns, that are right next to your entered notes. These are the Volumecolumn (what a bad wordplay) in which you can add or substract volume and way more important: the effects.

You enter an effect by first the effectnumber and then the parameters. Look up the helpfile of famitracker for the proper codes to enter. Print them out and lean them against your monitor. I did it and it really helped me getting used to them.

So let‘s say we have made up an instrument which just sometimes should be arpeggiated and that in minor AND major scales. So we just pick the corresponding note and enter in the effect column ‚047‘. That gives us a nice major chord. But we have to tell the program, that only this single note has to be arpeggiated. So on the next note we enter straight ‚000‘ to stop the arp.

That‘s mainly all, how the channel effect codes work. Nothing big in learning, but you can get real big sound effects with it an usually a good effect handling is the salt in your tunesoup.

THE NOISE

In this example we‘ll use the noise channel for our percussion. But you can always use it also for some real good sound effects like thunder or waves. It all depends on how you are altering the Instrument Settings.

Start of with the usual, while making a new instrument. Call it ‚hi-hat‘ and just copy & paste the following line into the MML parser (by now you should know where to find it):

10 10 10 9 8 8 8 9 9 8 7 6 5 4 3 2 1 0

I think, the instrument sounds best while played at an A, but be sure to check out other notes as well to get a feeling on the noise channel and what is possible with it.

Set the newly created hi-hat on every fourth note (the yellow ones if you use standard skin). Now create a closed hat, just like the other one with the following MML code:

10 8 6 4 2 0

Set this closed hat twice before every hi-hat to get a galloplike section.
Press play and listen...doesn‘t sound too bad doesn‘t it?

DPCM INSTRUMENTS

The first I have to admit is: No, you‘re not going to be able to load a whole samplepack into famitracker or something, since the memory space in an nsf ist quite limited.

But for drums or some effects it‘s a great channel! So let‘s fire up a new instrument called ‚dpcm drum‘. Only this time, we don‘t need the first page of the instrument editor. Click the tab saying ‚DPCM samples‘. Here you can load your ready built DPCM samples or just import some wave files to play with. It‘s pretty selfexplaining, so I won‘t loose much words on this. Just load some, assign them to the keys the way you like it and start a beat.

There are also some tools to convert several sampleformats into DPCM. But the import function of famitracker surely does the thing for the beginning.

Once you‘ve found your beat, press play and listen. All channels are spitting out nice retro chiptune music! Yeah, that‘s the way it goes. Now add a new frame at the song settings and start all over. Although you already got the instruments set up. Make your first tune.

SAVING YOUR WORK

I don't have to say, that saving is very important, since a crash or computer shutdown could happen anytime.

The last thing, when finally finished your tune is to enter the song information. Give it some cheesy name and then press the little button that says ‚NSF' or make your way through the menu. In the nsf save window, it's always a good idea to enable bankswitching. Especially if your song is getting longer. It's mainly there for saving space and keep the file a bit smaller as far as I remember, but it's 3:10am here and I'm getting a little tired.

USEFUL LINKS

www.2a03.org
The biggest archive for nsf files on the planet. Also the forum is probably the best. No matter if you're just started or having quite some knowledge by yourself.

www.8bitpeoples.com
Probably the best source for free high quality chiptune releases. Check out the realeses of rushjet1 or x|k to get totally stoked by the possibilities of a famicom.

www.vorc.org
Always the latest news for the chiptune scene and related stuff. From program updates to compos to parties.

NESDev
If you want to get more information on programming the famicom or searching for a good tool, this is your site. Also a good linkarchive and nearly a ton of suitable information for you to read.

THANKS

Hmm...I don't really have an Idea with what I should fill this last column so I say a big THANK YOU! to jsr, who has done such a great job in coding this program.

Greets go out to:

nullsleep, bit shifter, rushjet1, alk, voskomo, DHeijden, r4ndom, snowrobot, x|k, shawnphaze, dmauro, ogge, mooz, prodos and quite all people who keep making such great tunes and developing new tools.

So this is it. If you have any suggestions or questions you can reach me via e-mail: bod@gyya.de (hehe..no link this time!)

I hope I did a good job in getting the world of famitracker understandable to everyone, even if someone hasn't had any experience in tracking before and that some people might get a hold of those lovely musical artform.

bod