

# Playing MIDI Song Files with the Fantoms

I've been seeing several Fantom/Juno-G users with difficulties using MIDI song files with their keyboards. This is a simple guide on how to use, edit and play MIDI files. During this guide I will assume you have a Fantom X and a WinXP based PC with Fantom driver installed. Sorry for not including XR/XA/S/Juno-G/other system but the lack of time and resources don't let me do it. I believe that the procedures are close enough for everyone to understand.

You will find several places over the net on what MIDI, MIDI files and Standard MIDI Files are so make sure you do some search of your own for further information. Also, please aloud for some missing details. This document is ver.1 but will not be updated unless seriously necessary or requested :-)

## PART I – MIDI and MIDI FILES

### 1 - What's a MIDI File?

MIDI stands for MIDI Communication Digital Interface and it's a communication standard to aloud instruments to have a "conversation" between them. This conversation most often "says" what note to play, at which intensity (velocity), which sound is used to play it and how loud it plays (volume). This "conversation" can be recorded using a machine or software called "sequencer" and this is how you'll get a "sequence" or "song file" that you can save and re-play later - just as you would save a letter you type in a word processor. Similarly, just as having a file you saved from a word processor does not immediately gives you a "printed paper" also a MIDI file does not gives you "sound" since the MIDI stream does not transport "sound" but "instructions". So you must keep all your audio connections made in order to hear the "conversation". Also, like word processors, most sequencers have a native format for their files but somewhere in time everybody agreed to have a "common" file format in order to aloud users of different equipment to exchange sequences/files between them and so the "MIDI file" was born. You will find these all over the net as "songname.mid" files. Finally, there are 3 types of MIDI Files. Type 0 has one track that contains all the information for the entire song. Type 1 includes two or more tracks (usually each one on his respective channel). The less common Type 2 is a sort of a combination of the other two types. It has several tracks, but each one includes a different sequence which may not necessarily be played simultaneously. Generally is used with drum machines. The Fantom only recognizes Types 0 and 1.

### 2 – What's a Standard MIDI File (SMF)?

An SMF is just a MIDI File which the "conversation" is recorded in an standardized way. This means that before the song itself, some "non musical" information is sent in order to make the sound source play the song correctly (we can call this the "sound set information" for that specific song) and that some "rules" are to be followed when recording. The "sound set information" is supposed to be sent to the sound module in the first measure of the song and should include "Program Change" (meaning the sound/patch you want to be played in the track), "Volume", "Pan" (were there the patch should be located at left, right or centre of the sound spectrum), "Reverb" effect amount and "Chorus" effect amount.

As examples for recording rules you should observe that :

1 – The sound set information must be sent in channel order – meaning channel 1 information goes first, then channel 2 information and so on.

2 – Keep an instrument performance types in the same channel numbers – meaning that "first accompaniment instruments" (generally piano or keyboard sounds) should be at channel 1, "bass lines" should be on channel 2, "melody" on channel 4 and drums/percussion on channel 10 of the files.

3 – If the file is supposed to be played by an GM/GS/XG sound source, make sure you place a GM,GS or XG system exclusive reset message at the very begging of the song file. No other "system exclusive message" should be used in the SMF song file.

Most often these "rules" are not used on the files available for download over the internet and you often find yourself with files with missing or wrong information. So we can't exactly call these SMF but just MIDI Files. For the purpose of this document we will use just "MIDI File" and lets assume that at least some part of the information is there.

## PART II – TRANSFERING FILES

So you have your MIDI File in your computer and you want your Fantom to play it. First of all make sure you are in PERFORMANCE mode. You then have 2 ways for doing it:

A – Using your software sequencer to play the file using the Fantom as sound module

B – Transfer the file into the Fantom's sequencer and play it from there

### **A – Using your software sequencer to play the file using the Fantom as sound module.**

Using a MIDI interface:

1. Connect a MIDI cable from the MIDI OUT of the interface to the MIDI IN of your Fantom.
2. Whatever software you use, you should select your MIDI driver as “MIDI device” for playing back MIDI. Check the software/MIDI Interface owners manual to do this.
3. Open the MIDI File and play it. If everything is fine you should hear your Fantom sounds through your connected speakers/phones playing the song.

Using USB

1. Put your Fantom in USB-MIDI mode. Select MENU-SYSTEM-USB-USB MODE = MIDI
2. Start your sequencer software
3. Whatever software this is, you should select the Fantom as “MIDI device” for playing back MIDI. Check the software's owners manual to do this.
4. Open the MIDI File and play it. If everything is fine you should hear your Fantom sounds through your speakers/phones playing the song.

### **B – Transfer the file into the Fantom's sequencer and play it from there**

Again, I will assume that you have already installed the driver.

If you have your Fantom in USB-MIDI mode you will have to change it to Storage Mode. Go to MENU-SYSTEM-USB and select Storage. Press F8 System Write and then EXIT (you only need to do this once).

Now:

1. Select MENU-USB STORAGE- F3 Internal
2. Your Fantom should appear in Windows as a removable drive like “FANX USER (E:)” or similar.
3. Open this drive
4. Open the Roland folder
5. Open the SEQ folder
6. Open the SNG folder
7. Locate your midi file in you computer local hard disk and copy it to this folder
8. Close all Folders and follow the usual procedure to terminate the USB connection.
9. Press Song Edit. You will see the file name (if you have chosen to transfer the file to the memory card make sure you press F2 Card to look for it).

Be aware of the fact that you can also use the steps above to transfer files FROM the Fantom into the PC. Also, as you probably already know, you can also copy files do the Card (if any). In that case select F6 Memory Card in step 1.

Now, make sure you have the Fantom in Performance Mode. This is how the Fantom works as a multi-timbral sound source playing up to 16 sounds simultaneously. If it's in Patch Mode you won't be able to hear all tracks playing.

You can immediately preview this song pressing PLAY. If you want to hear and edit the file press F8 LOAD and this will take us to...

## PART III – EDITING

Now you have your MIDI File in the sequencer but it does not play as you would expect, you want to edit it doing some adjustments to the mix, change sounds or whatever. The easiest way to do it is by erasing some information, specially the “sound set information” and others which can make sense in other cases but can limit the full use of your Fantom. However, always be aware that you can also erase some important information making the file unusable later. Like I mentioned a MIDI file can contain a lot of information some of which can be non musical. This sets the sound source, in this case your Fantom, to play the song as the original producer of the file wanted. So before erasing anything you should know some of these messages you'll find, aside the obvious note messages:

### **System Exclusive (SysEx)**

System Exclusive MIDI messages are worth a book of its own. I'm won't go that way. I'm mention them for the simple fact that in some rare cases these messages can be the cause of strange behaviours on the song. If this is the case you should erase them. If they are present but you don't see what they're doing, its most likely that they are not doing nothing and so you should also erase them. See it this way: every single parameter of each MIDI instrument can be controlled by these messages and each MIDI instrument has its own set of these - that's why they are called “exclusive”. This means that a certain SysEx message can be used in a instrument but will not be recognizable by other. Generally speaking I would say that if you have a MIDI file with SysEx you certainly don't need it unless you're an advanced user.

### **GM/GS/XG reset**

This is a “general” MIDI Exclusive message. It sets the sound source to work in GM, GS or XG modes. If it gives you some compatibility in the sounds used, since it takes all MIDI instruments to play in the “same” mode, it also limits you in this. For example, the GM mode only gives you access to 128 sounds/patches. This message is usually at the very beginning of the song. The Fantom recognizes the GM and GS reset messages. If you keep a GM (GS or XG) reset message you wont be able to change the sounds used in the song 'cause every time you start it, the message resets the Fantom to the GM MODE and so you'll be stucked to those 128 sounds. If no other message to select sounds (see PC below) follows this one in the song, you will get all tracks played by the GM PIANO1 patch.

### **Program Change (PC)**

This message selects the sound (patch) to be used in the track. So you'll probably get a PC message for each track/part playing. Usually it is also placed at the beginning of the song but can also appear anywhere else. If you change a patch in a track and don't erase this message it will reset the track patch to the originally selected at the time were the message is placed.

### **Control Change (CC) Messages**

Like the name says, these messages control several functions. Some are directly related on how the track sounds. Check for Volume (CC7), Pan (CC10), Expression (CC11), Reverb (CC91) and Chorus (CC93). Again, usually these message are at the beginning of the song for the obvious reasons but can also be anywhere in the song – you can have CC7s for doing fade in/outs for example. There are also other common messages, like Hold (CC64) message, which sustains sounds and CC0 and CC32 Bank Select. You should have a little knowledge on these before deciding what to do. Look for a complete listing on CC messages to find out more.

Now, as I said, you can just go and erase all these messages but keep in mind that you can lose something on the way. For example, you can lose fade-in/outs if you erase CC7, or lose sound changes in a track if you erase PC. Also, you can erase messages in just a certain region of a song and keep the rest – it's up to you to decide. You can check where and which MIDI information is present in each track using MICRO EDIT and erase each message individually or go directly to TRACK EDIT and just erase what you know is not necessary in the all song.

As example, If you have Volume changes that you don't want to keep in a song, you will have to erase CC7 messages. To erase CC7 (Volume messages) in 3 measures of a song go to:

1. SONG EDIT
2. F7 Track Edit
3. Select ERASE (or press PAD 2) and press F8 SELECT
4. Now set: Track/Pattern = TRK ALL. This selects all tracks for erasing. If you want to erase messages on just a specific track/pattern select that track/pattern.
5. CH/Part = ALL. This selects all MIDI channels for erasing. If you want to erase a specific channel/part select that channel/part.
6. MEASURE 0002 FOR 3 - This means we're erasing 3 measures starting at measure 2 so we're erasing messages in measure 2, 3 and 4. If you want to erase this in all the song set MEASURE 0001 FOR ALL.
7. STATUS – here you select the type of messages to erase – in this case select “Control Change”
8. Range Min = 7 (Volume) / Range Max = 7 (Volume). Make sure you select the same in Min and Max to erase just Volume messages.
9. F8 – Exec

and you're done.

Volume changes are also often done with CC11 Expression messages. Check which one is used.

If track 3 resets to the same patch every time you start it and you don't want to keep that patch but select one of your choice go to:

1. SONG EDIT
2. F7 Track Edit
3. Select ERASE (or press PAD 2) and press F8 SELECT
4. Now set: Track/Pattern = TRK 3. This selects tracks 3 for erasing.
5. CH/Part = ALL. This selects all MIDI channels for erasing. I'm assuming this track only has MIDI channel 3 messages so you can keep ALL selected. If track 3 includes messages for several channels you must select channel 3. Otherwise we'll erase information for all channel in this track
6. MEASURE 0001 FOR ALL - This means we're erasing messages in all the song .
7. STATUS – here you select the type of information to erase – in this case select “Program Change”
8. Range Min = 1 / Range Max = 128.
9. F8 – Exec

and you're done.

Program Change messages are also often combined with CC0 and/or CC32 Bank Select messages and you should also check these.

You can now continue and erase other types of messages not needed until you get a “clean” file. After this you can choose any patch from the Fantom sounds and mix to your liking. You can even edit every single drum instrument. Make sure you save this “new” file as .svq – Fantom's native format – not SMF. This way you will keep the original file while preserving all editing in a new Fantom file.

You should also know that doing the opposite, meaning picking a svq file and saving as SMF will make you lose all the mixing/sound information of the song. Although, in my opinion, this was unnecessary, it happens to maintain the above mentioned compatibility with other sequencer to which the Fantom internal MIDI information would not “make sense”.

This document was made for the [www.ROLANDCLAN.info](http://www.ROLANDCLAN.info) members using long years of owner manuals and other documentation reading. Make sure you also do some ;-)

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