

MA-3 Authoring Tool ATS-MA3-SMAF

First Step Guide

Please understand firstly, it is assumed that this application software would be used by users who have basic knowledge of MIDI and synthesizer.

And the actual sound by mobile phone may differ slightly from the sound by your PC.

~First Step~

Explains the usage of this application software briefly.

●1. Extract and install files

Extract the downloaded file (.zip) by extracting tool. Then, double-click “SetupMA3ATS ” in the folder and complete the installation in accordance with the instructions of menu.



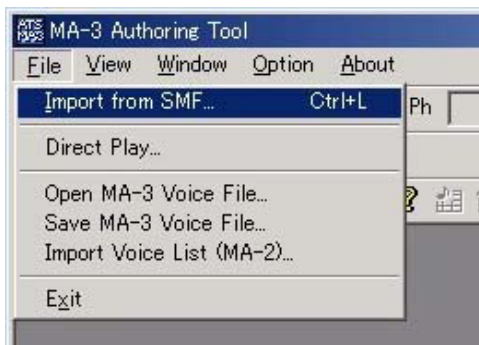
●2. Start application

Double-click the icon of ATS-MA3 on the PC desk top to start.



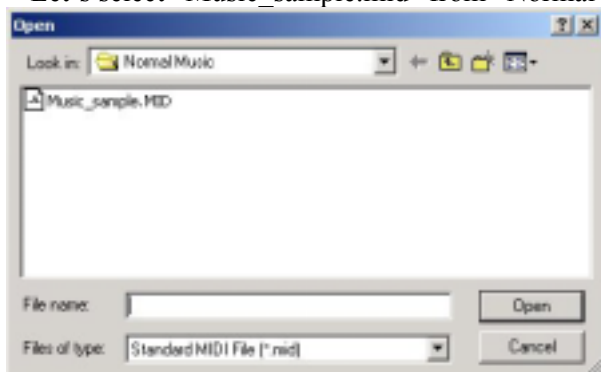
●3. Read SMF

Select “Import from SMF ...” from “File” menu of ATS-MA3.

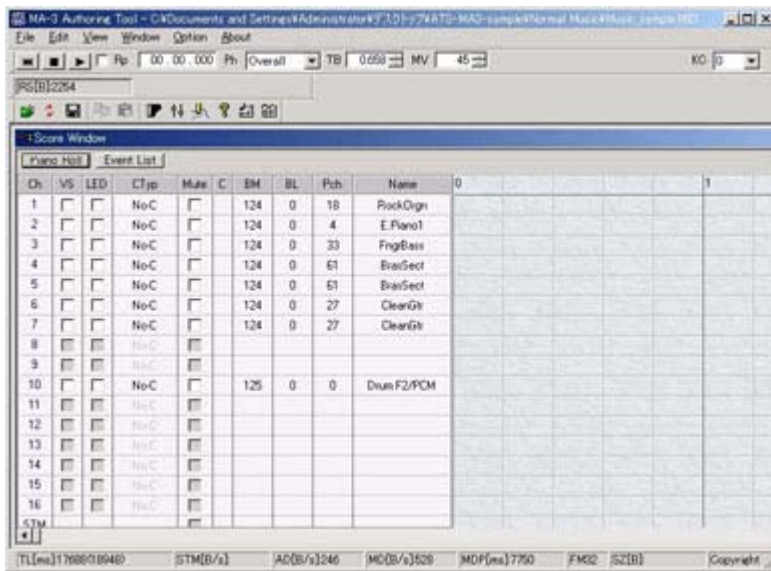


Select SMF file from File Open dialogue.

Let's select “Music_sample.mid” from “Normal Music” (sample) folder here.

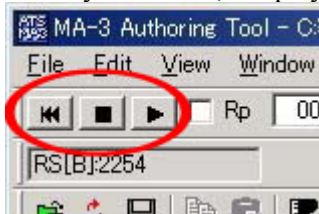


Score Window is displayed on the window of ATS-MA3.



●4. Play music

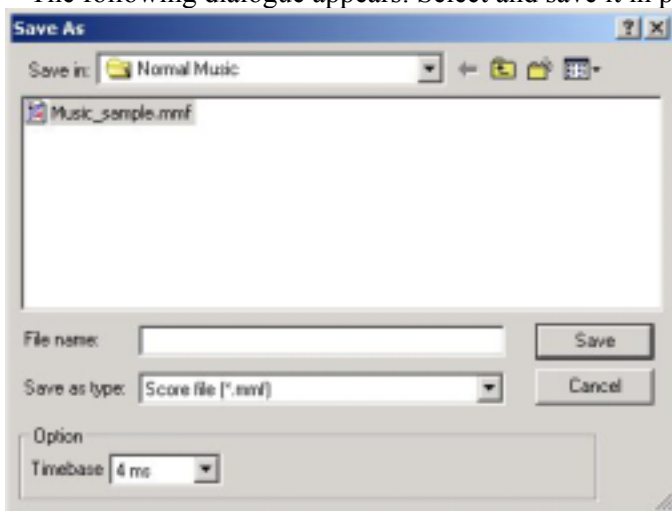
Click ▲ (black colored play button), then the player starts the music play.
 At the first play of the music after SMF opened, the data is analyzed and converted before play starting.
 (In the case of simple data, the play will start in a few seconds. In the case of complex data, it will need a few minutes.)
 When you click ■, the player stops the music play. (In the following figure, it is surrounded by red circle to be legible.)



Can you hear the sound from your PC?

●5. Save music data

When you can confirm the music sound, save it with SMAF file format.
 Select "Save" from "File" menu of ATS-MA3.
 The following dialogue appears. Select and save it in place.



The created file can be sent to mobile phone by attaching in e-mail.
 Its method differs by the model of mobile phone. If the target mobile phone, which has MA3 chip, receives the file, it can be played.
 That's all for the simplest explanation of ATS-MA3 usage.



Point of the music data creation

There are more limitations compared with general MIDI file, because it is necessary to make the data as small as possible for mobile phone.

Please pay attention to the following items when you create SMF (Standard MIDI File) for converting by ATS-MA3.

- 1) 2 kinds of SMF, FORMAT-0 and FORMAT-1 are commonly used, but please create SMF by FORMAT-0.
- 2) Please use the extension “.mid” or “.MID” for SMF.
- 3) If you use Pitch Bend and Controller, please pay attention so that the data may not become oversize.

When you create SMF by almost 1/24 to 1/16 of a beat as the standard for the resolution of play data, ATS-MA2 can convert it in the shorter time and can also play as your image.

When there is much amount of data like common SMF etc., conversion to SMAF may take the time for several minutes. When you delete excessive data beforehand using MIDI sequence software, you can work efficiently in a short time.

- 4) You can use all MIDI channels (16 channels) of original SMF. As for the number of simultaneous pronunciation, FM synthesizer section becomes 32 sounds or 16 sounds with the mode. In addition to it, 8 sound of PCM can be used together. The total number of the maximum pronunciation becomes 40 sounds. The voice map of general voice and drum kit is almost as common as GM.
- 5) The Program Changes other than Drum are compatible with GM and XG, but that Bank Select are unique.
FM normal voice: MSB,LSB(CC #0, 32) = 124, 0~9, and Drum voice: 125, 0
- 6) The kind of MIDI event, which can be used, is limited. For example, Portamento cannot be used, but PitchBend, Modulation and Volume can be used. The kind of controller which can be used increases compared with MA2, and it corresponds also to Hold and Expression. Please refer to “Ringing Melody Authoring Guidelines” for the details.
- 7) In SMF, Bank Select MSB, LSB (CC#0,32)=124, 1~9 are prepared for User Bank of normal voice. You can select FM sound or PCM sound and set it for every voice on ATS-MA3.

Program Change 2~9 are prepared for User area of Drum voice like normal voice. You can select FM or PCM in the range of note numbers 13~91 and set it for every note.

Note Numbers 0~12 of Drum, and 92~110 are used for controlling the pronunciation of Stream PCM.



About PCM waveform data

16 bits or 8 bits data can be read, but please prepare 16 bit data at read in order to convert “4 bit ADPCM” which data size becomes smaller.

The limit of sampling frequency and mono/stereo changes by the following case.

- As a part of user voice, the file of WAVE (.WAV) or AIFF (.AIF) form can be read, and can be played as PCM sound. In this case, please create PCM wave file with mono and less than 48kHz sampling frequencies.
- As a stream PCM, the file of WAVE or AIFF form can be read. In this case, the sampling frequency should be from 4kHz to 16kHz.

(When encoding to 8bit PCM, the sampling frequency should be to 8kHz.)

In the case of stereo file, it is read as a pair of two mono files.