MA-3
Authoring Tool
Introduction Guide
(ATS-MA3-L edition)

Ver1.0.0

2004/9/30

YAMAHA Corporation

\<Contents\>

\<Revision\>

Ver.	Date	Description
1.0.0	2004/9/30	Newly release

1. Introduction

This document describes general matters of MA-3 Authoring Tool. Read this document before reading other documents.

2. Folder composition

The contents included in the package of MA-3 Authoring Tool are as follows.

```
¥___ Doc _____ ATS-MA3-L_UM_***.pdf          : MA-3 Authoring Tool Users Manual
   |                |__ ATS-MA3_L_GL_***.pdf       : Contents Authoring Guideline for MA-3 Authoring Tool
   |                |__ ATS-MA3-L_INT_***.pdf      : MA-3 Authoring Tool Introduction Guide
   |
   |__ Installer _____ Setup.exe                : Setup execution file
   |                |__     :
   |                |__     :
   |
   |__ VoiceLibrary__ VLF-MA3                      :FM Voice Library for MA3 Ver*.*.*
   |             |                                    Please refer to manual (VLF-MA3_v***.pdf) in Document folder.
   |             |__ VLP-MA3                        :PCM Voice Library for MA3 Ver*.*.*
   |                                                  Please refer to manual (VLP-MA3_v***.pdf) in Document folder.
   |             |__ VLW-MA3                        :World Voice Library for MA3 Ver*.*.*
   |                                                  Please refer to manual (VLW-MA3_v***.pdf) in Document folder.
   |
   |__ Sample _____ Normal Music _____ Music_sample.MID        ⎫
             |                     |_____ Music_sample.mld            |
             |__ Stream PCM _____ StreamPCM_sample.MID           |
             |                     |_____ StreamPCM_sample.mld         |
             |                     |_____ drop.aif                   |
             |                     |_____ Ha.aif                     ⎬   : SMF＆MLD sample file
             |                     |_____ hen.aif                    |
             |                     |_____ WaveID List.txt            |
             |__ Wavetable _____ Wavetable sample.MID          |
                                  |_____ Wavetable sample.mld        |
                                  |_____ drop1.aif                   |
                                  |_____ Wavetable_e.txt             ⎭
```

3. About configuration of MA-3 Authoring Tool

MA-3 Authoring Tool Software is a tool for authoring, edition and assessment of the contents for portable terminals. This software can run on Windows®2000, or Windows®XP.

With this application, conversion to MLD format, edition of voices, edition of management information, and verification of sounds on the MA-3 Emulator can be performed.

MA-3 Emulator is the software for emulating the function of YAMAHA mobile audio synthesizer LSI "MA-3" on the PC. This emulator is installed simultaneously with the Authoring tool. And it can make sound from the PC speaker.

The following figure shows schematic configuration of MA-3 Authoring Tool.
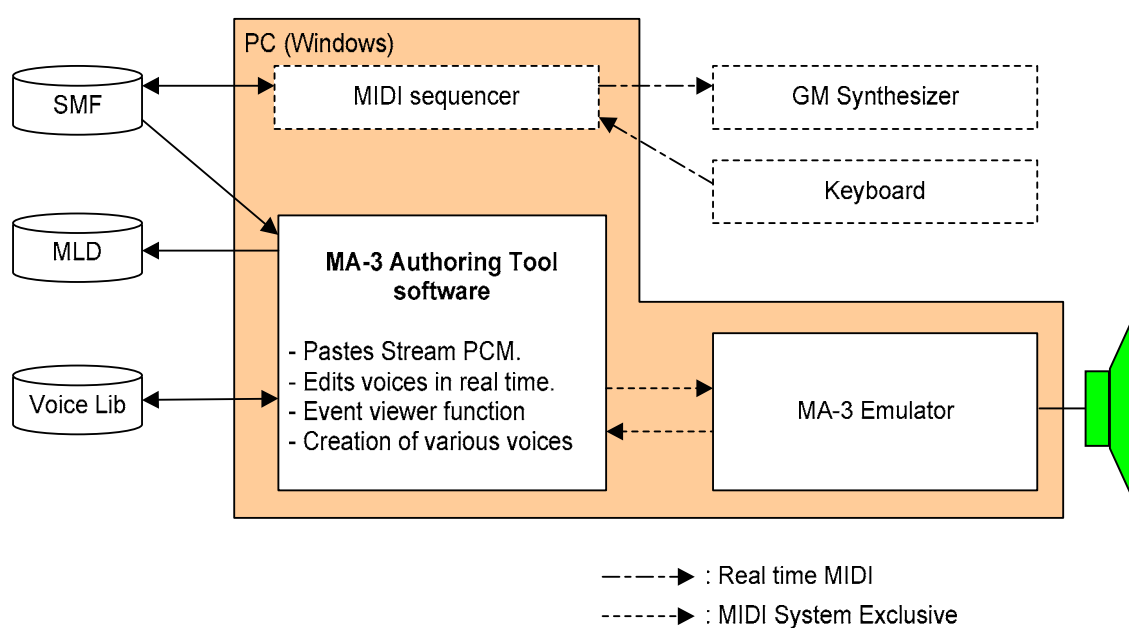
Figure 3.1 Configuration of MA-3 Authoring Tool

4. About functions of MA-3 Authoring Tool Software

► Independence of Authoring Tool from sequencer

MA-3 Authoring Tool is independent application software that is used together with general-purpose MIDI sequencer. Therefore, the user is allowed to select the most familiar sequencer. All operations up to conversion to MLD can be made by performing sequence editing by use of your sequence software, and performing the editing of voices and the editing of management information by MA-3 Authoring Tool.
[NOTE] In order to verify the playback with sequence software, please prepare MIDI sound source separately.

► Stream PCM pasting function

The stream PCM file for performing a synchronous performance with a channel sequence can be read and assigned.

► Event viewer function

● It read a SMF data, and then an event information is allowed to confirm on the event view screen.
● It allows confirming SMF data on the window of event list or piano roll. During confirmation of the playback, the piano roll advances synchronously.
● It allows editing information of music.

► Allows to make various voices

The "MA-3 emulator" adopts two types of synthesizer system; FM synthesizer and PCM synthesizer. (For FM synthesizer and PCM synthesizer, please refer to MA-3 Authoring Tool Users Manual "6.1 Let's think about FM synthesizer").
MA-3 Authoring Tool has FM 16 tone mode and 32 tone mode. The maximum number voices that can be generated synchronously depend upon modes.

● FM 16 tone mode: 4opFM section 16 tones + PCM section 8 tones

● FM 32 tone mode: 2opFM section 32 tones + PCM section 8 tones

On PCM synthesizer, after reading the sound files (AIFF, WAVE) of 16bitPCM (encoded to 4bitPCM or 8bitPCM) or 8bitPCM (encoded to 8bitPCM) and by performing operations, such as frequency change, change of envelope, and setting of loop points, up to eight favorable sounds (the size is limited) are allowed to use.

► Realize the real sound easily by using Voice Library

Voice Library (VLF-MA3/VLP-MA3/VLW-MA3) that contains colorful voice data is attached to this application.

VLF-MA3 is the extended voice library of FM voice, and it allows you to easily extend the sounds in which its effect differs from a default voice and to use.
VLP-MA3 is a PCM voice library, and it is able to realize a different real sound from FM with ease.
VLW-MA3 is Ethnic Library, and it can extend the sound of ethnic musical instruments.

By using these voice libraries, multicolored sounds are easily realizable. For details such as the registration method of each voice library, please refer to manuals (VLF-MA3_v***.pdf, VLP-MA3_v***.pdf, VLW-MA3_v***.pdf).

5. Authoring procedure and flow of data

The following diagram shows basic flow of data development. When PCM data and/or MIDI data exists already, and they are used, another flow is possible.