

*** smp ***
v.1.7
SD-card MIDI filer (player/recorder)
* user's guide *

1. What is smp?

smp is SD-card MIDI filer in a box. It is capable to play and record thousands MIDI files from/to an standard SD card. It is great replacement for obsolete diskette MIDI filers like Yamaha MDF2 and other similar standalone units. **smp** can work with any SD card of volume between 32



MB and 2 GB, providing huge space for MIDI files. The small size and weight allow placing and using the unit at any place. Box-less kits are also available for easy embedding in existing systems, instruments, organ consoles etc. Its simple interface consisting of 2x16 LCD display and 7 buttons and allows extremely fast and easy operation.

2. Installing

2.1 Necessary materials:

- **smp** unit;
- **SD card** of 32,64,128,256,512,1024 or 2048 MB, pre-formatted for FAT16 file system (*not included*). Micro SD cards are also acceptable providing that they are used with conversion housing;
- **power supply unit** sourcing 200mA or more at 12V AC/DC (*not included*). The unit will accept DC of any polarity;
- **MIDI cables** (*not included*).

NOTE: Any of above items listed as not included can be separately ordered.

2.2 Installation procedure:

- **Format** the SD card using an SD-card reader. The file system must be FAT 16, otherwise the SD card cannot be accessed by **smp**. Only root directory can be accessed by **smp**, therefore any sub-directories will remain hidden;
- **Copy** your MIDI files on SD-card. All MIDI files must be of format **MIDI0**. If your files are of other MIDI formats, they

must be converted using the following software:

<http://www.largonet.net/midiboutique/downloads/software/midifile.zip>

NOTES:

- *This step may be omitted if you are going to record files directly from your MIDI instrument;*
- *Running Status is **not** supported by this version!*

- **Insert** the SD card into smp SD slot;
- **Connect smp** MIDI output to MIDI input of any MIDI-synthesizer or expander using MIDI-cable;
- **Connect smp** MIDI input to the MIDI output of your MIDI instrument to be recorded using MIDI cable;
- **Connect smp** Power input to external power supply adapter.
- **Switch On smp.** The name of first MIDI file is displayed and the unit is ready for operation.

3. Using smp

3.1 Recording MIDI files

•To **start recording** press REC. A message "Ready for Rec" will be displayed. smp will start recording upon receiving the first MIDI event. During recording, the recording time is displayed.

•To **end recording** and save the file press STOP. File names are assigned automatically and are of format „MMnnn.MIDI" where nnn is a number between 001 and 999. No files are overwritten!

•To **abort recording** without saving the file, press REC for the second time.

3.2. Playing back MIDI files

•To navigate to desired MIDI file use UP/DOWN buttons. One file name at a time can be displayed.

•To **start playing** press PLAY.

•To **pause playing** press again PLAY.

•To **stop playing** press STOP.

•To **skip a file** while playing press and hold down STOP then press UP or DOWN.

•To **change the tempo** while playing press LEFT (slower) / RIGHT (faster). The change can be up to +/- 15 steps from the original tempo. The step size depends on original tempo.

•To **transpose** while playing press UP/DOWN. The tune can be transposed at +/- 24 semitones in both directions which means +/- 2 octaves.

3.3 File operations

•Use the STOP+RIGHT buttons simultaneously to **delete** the current file.

•Use the UP+DOWN buttons simultaneously to **open the menu**.

3.4 Menu

•**Drum channel:** The drum channel can be edited with LEFT/RIGHT .

•**SendNotesOff**: Controls the way of cancelling all notes upon stopping , pausing or transposing. 0 means sending AllNotesOff, 1 means NoteOff is sent for all notes. Since AllNotesOff message might confuse some sampler synthesizers, user decides whether to use it or not, depending on their equipment. 0 or 1 is selected by using LEFT/RIGHT.

•**Mute**: Any of used MIDI channels can be muted/un-muted. Use RIGHT to select a channel and LEFT to mute/un-mute. An "X" will be displayed for muted channels.

•**Repeat mode**: The unit supports up to four repeat modes: 0 = play single file and stop, 1 = repeat single file, 2 = play all-sequence, 3 = repeat all-sequence, 4 = random.

•**Monitor**: Display mode.

4. Credits

This unit is based on Mr-MIDI 2 freeware design by Simon Lehmayr, and is produced under author's express permission.

The original design is published (in German language) on:

http://www.mikrocontroller.net/articles/Midi_Rekorder_mit_MMC/SD-Karte