

## Description of the MIDIREC program ver. 1.1 - author Ireneusz Kuczek

Program for recording and playback of MIDI sequences in any REC format.

### 1) Equipment requirements:

- any 8bit Atari is best with an additional memory, e.g. 130XE  
(size of the buffer for MIDI files calculated from the formula  $BUFOR [kB] = RAM - 39$   
program displays exact value after launch)
- MIDI In / Out interface, e.g. as described in Practical Electronics 6/98  
connected with + 5V voltage at the end of 8 SIO connectors
- keyboard or synthesizer with MIDI In / Out connectors

### 2) Record MIDI sequences

- connect "MIDI Clock Out" (the keyboard must send a MIDI Clock signal  
to ensure correct timing of the program)
- the program records all MIDI events except for the message  
\$ FE = ActiveSensing
- if you record from the keyboard in the link AccompOut On
- if you do not want accompaniment, switch it to AccompOut Off  
then you can set the tempo to 255 which will provide the best resolution †  
recording (the program has a resolution of 24 positions per † drill † notes ©)
- if you have the combined function Local On in the keyboard, do not connect it  
in the program, because you will lose the polyphony
- Local On / Off function only works when MIDI data is registered
- pauses in the sequence can not exceed approx. 10 † rows † notes in the opposite  
if longer, the interval will be reduced to this value
- you start recording after pressing the "R" key
- stop recording via "SPACE"

### 3) Playing MIDI sequences

- all MIDI data to the first NoteOn message are sent  
without time intervals.  
And so if there were problems with setting the colors, etc.  
it may help you to press at the beginning of the recording which key will be used  
taking into account the original intervals. For some explanation  
instruments do not bother to set parameters for fast data transfer  
SysEx.
- stopping playback via "SPACE", the program does not silence the players  
d, please use the "G" key GM1 System On.

### 4) Other functions:

- ESC-return to DOS (without warning)
- D - display of the catalog
- Shift + Clear - clearing the RAM buffer in the computer
- T - tempo setting 1-255 for playback (ignored for recording)
- N - enter the name of the song
- F - enter the file name
- S - saving the file to disk
- L - read file from disk

## 5) Notes:

- The MIDIREC program plays recorded sequences without them conversion to General MIDI. This may cause in some situations Incorrect playback of songs on other devices.  
The listed REC files are an example of this.  
It has been recorded on the YAMAHA PSR-220 keyboard and contains heavy media percussion on channels 9 and 10 (not as GM requires only # 10).  
In order to properly play songs on other devices  
MIDIs that are not compatible with the PSR series should be turned off to receive data on channel # 9.  
This will cause a slight depletion of the tracks with a part of the drum layer, but we will not hear PIAN's rumble on the # 9 channel  
s is in the air.
- The program was checked with the following DOSs: BIBODOS7.0 and DOS2.5CP  
It should also work with any DOS that provides free RAM  
for programs from the address \$ 2200.
- The program's start address is \$ 2200, so you can go to DOS after exiting  
program by using the RUN \$ 2200 (DOS2.5CP) command.

## 6) Description of the REC file format

Byte 1 - tempo of the song 1-255  
Byte 2-5 - rate saved as text  
Byte 6-48 - text (e.g., title and author of the song)  
Byte 49 and others - MIDI data

The program uses the conversion © \$ F8 as per the rule:  
F8 F8 F8 F8 .... (\$ X times) = \$ F8 \$ X  
At the end of the MIDI data, the program enters \$ F0.

- 7) The program and attached REC files can be copied without any limitations unless it is used commercially (eg for commercial purposes).

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