
NAME

smf — generate standard MIDI file from Humdrum ****MIDI** input

SYNOPSIS

smf [-t *n.n*] [-v *n*] *inputfile.hmd* > *outputfile.smf*

DESCRIPTION

The **smf** command allows the user to create “standard MIDI files” from Humdrum ****MIDI**-format files. Standard MIDI files (SMFs) are industry-standard binary files that can be imported by a variety of MIDI applications software packages, including sequencer programs and several music notation packages.

The **smf** command accepts as input Humdrum files containing ****MIDI** representations. All ****MIDI** spines present in the input stream are translated to SMF MIDI. Non-****MIDI** spines are ignored and will not affect the SMF output.

OPTIONS

The **smf** command provides the following command-line options:

- h** displays a help screen summarizing the command syntax
- t *n.n*** set initial tempo to *n.n* times the default tempo
- v *n*** specify default MIDI key-velocity value (0-127)

Options are specified in the command line.

The performance tempo may be specified either in the command line or in the input Humdrum representation. The tempo may be specified on the command line by using the **-t** option. The **-t** must be followed by an integer or real value between 0.13 and 3.80. A value of 1.0 corresponds to the default tempo of 66 quarter-notes per minute. A value of 2.0 doubles the tempo, whereas a value of 0.5 halves the tempo. Alternatively, tempo may be specified using the ****MIDI** tandem interpretation for metronome marking (e.g. ***MM96**). Minimum and maximum tempi are 8 and 250 quarter-notes per minute respectively. Tempo specifications found in the input representation take precedence over any tempo specified on the command line. If no tempo information is available, **smf** assumes a default tempo of 66 quarter-notes per minute.

The **-v** option allows the user to specify a key-velocity default. MIDI instruments normally treat key-velocity data as dynamic or accent information — thus higher key-velocity values are associated with accented notes. Permissible key-velocity values range between 0 and 127. The **-v** option can be used to set the default key-velocity for key-on commands with unspecified key-velocities. In the absence of the **-v** option, the default key-velocity value is 64.

DIAGNOSTICS

The **smf** command produces MIDI Standard “format 0” files. When used in conjunction with the **midi** command, the **midi -d** option should be invoked in order to ensure that all notes are turned off.

PORTABILITY

DOS 2.0 and up. DOS 2.0 and up. OS/2. UNIX.

PROPOSED MODIFICATIONS

The program should be modified to allow inputs to contain MIDI control codes and MIDI system exclusive codes.

SEE ALSO

****MIDI** (2), **midi** (4), **perform** (4), **record** (4)

REFERENCES

Use of the Music Quest Inc. MIDI library functions is gratefully acknowledged.