

BEATMASTER

Welcome to BeatMaster Help

[What is BeatMaster ?](#)

[What is MIDI?](#)

[Minimal equipment](#)

[BeatMaster functions](#)

[BeatMaster windows](#)

[Credits](#)

What is BeatMaster ?

A computer program for writing, playing, recording and editing music, digitally (Sequencer).

The program allows you to record your music using a midi keyboard, and then play it or edit it, visually.

It is also possible to use the program options (play, edit etc.) on a pre-prepared midi file.

When done, the changes can be saved as a standard midi file.

What is MIDI?

The "Musical Instruments Digital Interface" is a standard format for sending data between digital musical instruments, or for saving the data in a file.

Minimal equipment

- A PC computer
- Windows 3.1
- A midi keyboard for recording
- A sound card or a synthesizer for playing

BeatMaster functions

Playing a MIDI song

Recording a MIDI song

Editing a MIDI song

Editing a MIDI song

The program supplies several levels of editing:

The Song level: The general parameters of the song can be changed through the Song window. Adding or deleting tracks is done through the main menu.

The Tracks level: The parameters of each track can be set individually through the Tracks window.

The Bars level: Bars can be copied, earased, pasted, duplicated etc. through the Bars Window.

The Notes level: individual notes can be added or changed through the Notes window.

Recording a MIDI song

Choose an input device from the menu.

Press the REC button on the Tape recorder.

A new Notes window will open, and show your music in real time.

When done, press the STOP button, and the new track will be added to the song.

Pressing the PAUSE button during record, freezes the time position, and a new REC command will start recording from that position.

Playing a MIDI song

Open a file through the menu option.

Choose an output device from the menu.

Use the Tape recorder to play, stop, or change places in the song.

The general song parameters can be changed through the Song window (at any time).

The parameters of each track can be changed through the Tracks window (at any time).

The Bars window and Notes window show the progress in the song during play.

BeatMaster windows

[Main window](#)

[Tape recorder](#)

[Song window](#)

[Tracks window](#)

[Bars window](#)

[Notes window](#)

Notes window

The piano roll of the tracks.

The x-axis represents time, and the y-axis represents pitch.

The window is created by a mouse click on the serial number in the Tracks window, or from the menu. Several Notes windows can be displayed at the same time.

Clicking in the Numbers' window at the top, centers the window around it's first note.

The small scroll bar at the bottom left, toggles the notes' text display (name or number).

The position of the mouse is shown at the bottom (Bars:ticks).

The length and velocity of a note is shown at the bottom, when the mouse cursor is on it.

The buttons at the bottom choose the working mode.

The insert mode: draw a note at the right position by dragging the mouse.

The erase mode: delete notes using the mouse cursor.

The edit mode: moving a note is done by grabbing from its left side.

changing a note's length is done by pulling it from its right side.

The parameters of the default note are set by pressing the button at the bottom right of the window

Adding a bar at the end is done by pressing the button '+B' at the upper right of the window.

Bars window

Contains a display of the bars in the tracks (each rectangle represents one bar). The current position of the song is shown during play.

Empty bars (don't contain any notes), are shown as hollow rectangles.

To edit a track (in this level) select the relevant bar using the usual click and drag method, then use the main menu '**bars**' pull-down to choose the desired action.

You can '**copy**' and '**cut**' bars to memory and then **paste** it anywhere in the song (including in other tracks). This way you can duplicate repeated bars (very useful when inserting drums parts).

marking the place of the action is done with the mouse.

The '**paste**' action has two modes :

Insert - inserts new bars and then paste the saved bars on them.

Merge - merges the saved bars with the old bars.

The function Insert New Bars, adds new bars at the marked position.

Tracks window

A table of the tracks' parameters (names,instruments, programs, channels, number of bars in track, mute,solo, loop, transposition).

The column "Track name" contains a logical name for the track.

The column "Instrument" contains the instrument name.

The actual instrument of the track is determined by it's program number **only** (appearing in the "prg" column).

Double click on the "instrument" or "prg" columns show a list of instruments to choose from. (relevant only for MIDI-MAPPER users)

A mouse click on the track's serial number shows a piano roll of that track (meaning his Notes Window).

Song window

A dialog window which controls the song parameters (volume, tempo, transposition, metronome, loop etc.)

Tape recorder

Controls all normal playing and recording functions.
also shows the current position in bars, beats and ticks.

Main window

The program frame.

Contains all other windows, and controls all the program functions through it's menu.

The Menu:

The File pull-down contains the regular features.

The Display pull-down determines which window is shown.

The Control pull-down creates the mixer, which controls the tracks' volumes.

The Edit pull-down enables different kinds of editing with tracks (delete, insert, merge, append).

The Device pull-down is for selecting the MIDI device.

The View pull-down shows the contents of the original MIDI file.

The Help pull-down is as usual in Windows.

Credits

BeatMaster was developed by Ramy Segall and Tal Oved, in the Computerized Music Lab of the Technion - Israel Institute of Technology.

Instructing and consulting : Dr. Noam Amir

Any comments will be appreciated.
email : noam@piano.technion.ac.il

