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1 - Introduction

What is Megalomania?

Megalomania (noun) 1 : a mania for great or grandiose performance 2 : a delusional mental disorder that is marked by infantile feelings of personal omnipotence and grandeur

Megalomania is a Macintosh application that turns your MIDI system into a unique tool for performance and composition.

Megalomania is a real-time processor of MIDI data. The processing that takes place is designed by the user via an icon-based interface. The user designs a process by connecting together icons. Each icon represents a simple computation (delay, transposition, etc...) and the connections represent the flow of MIDI data.

Megalomania is like a *MIDI effects box* for your MIDI system. Since the processing that occurs is configurable, the program is in some ways a MIDI analog to multi-effects processors in the audio domain.

What You Need

- A Macintosh Plus, or later model.
- A MIDI interface attached to the modem or printer port.
- At least one MIDI-compatible synthesizer attached to the MIDI interface.
- Your Macintosh should be running with System 6.0, or later.

2 - Test Drive

It is presumed that you have the required hardware and are running the Macintosh with System 6.0, or later. Start the application up by double-clicking on the application icon from the Finder.

Setting Up the MIDI Port

The first time you use the program you should select the **Setup MIDI...** command from the **Edit** menu. The Setup MIDI dialogue box will allow you to select the port to which your interface is attached.

What is Here

When the application starts it presents an untitled window within which the design of a process occurs. This is a **Sketch Pad** window. Left of the Sketch Pad window is the **Tools** palette and the **Play** window.

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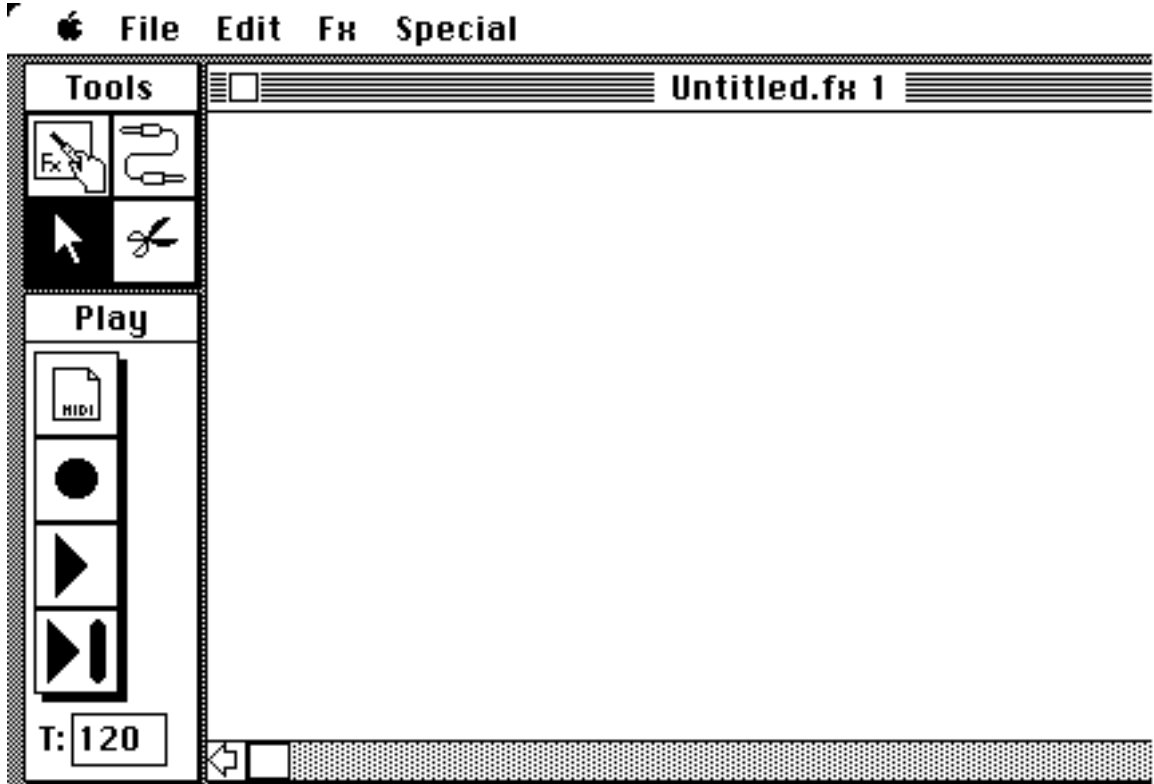


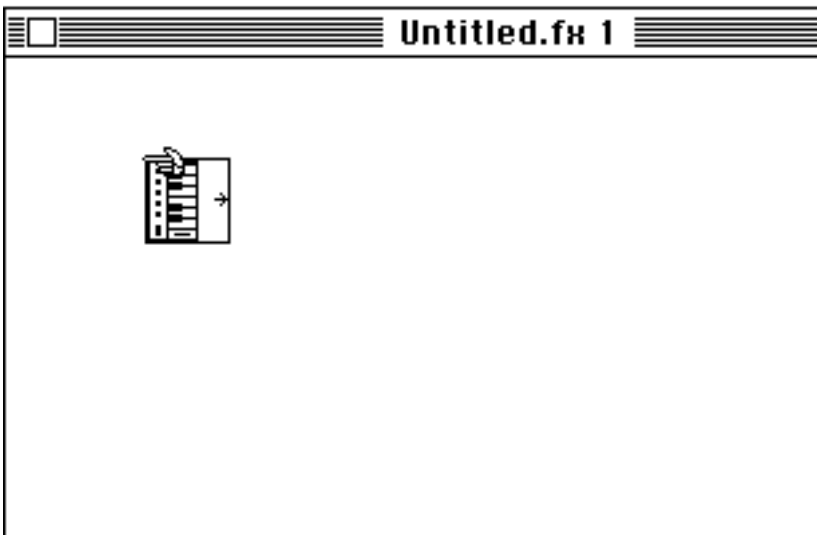
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Installing Midi In and Midi Out

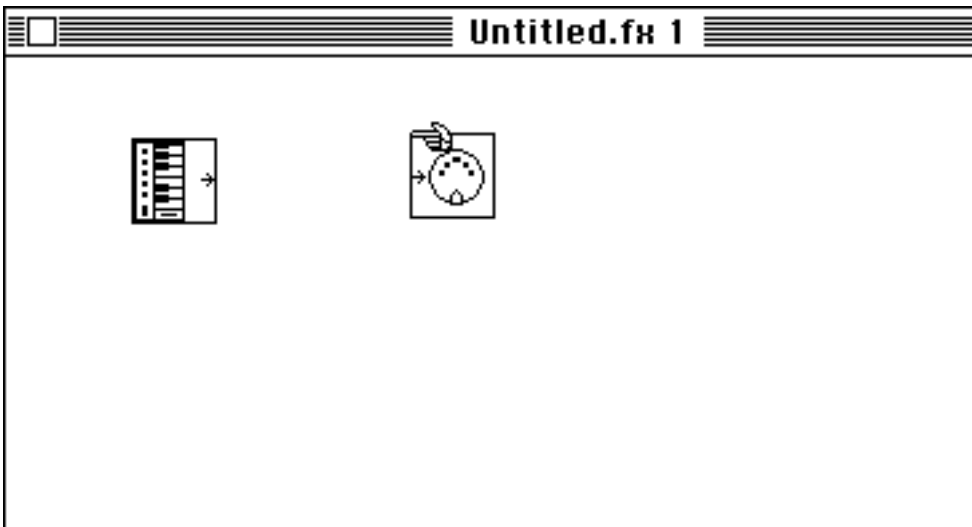
Each process needs **Midi In** and **Midi Out** modules. First, click on the **Install** tool in the Tools palette.



Second, select the Midi In item in the **Fx** menu. Third, click once in the Sketch Pad window. An icon should appear that resembles a small keyboard.



Forth, select the Midi Out item in the Fx menu. Fifth, click once in the Sketch Pad window. Now there should also be an icon that resembles a MIDI plug.



The Midi In module is the source for all MIDI data. All the MIDI data which comes into the computer via the MIDI interface is accessed in the Sketch Pad window via the Midi In module. The Midi Out module is the terminus for all processing that takes place in the Sketch Pad window. Data sent to the Midi Out goes out of the computer via the MIDI interface.

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Now, add one more module. First, select the **Note Transpose** item in the Fx menu. Second, click once in the Sketch Pad window. Now there should be an icon that resembles two notes separated by an interval.

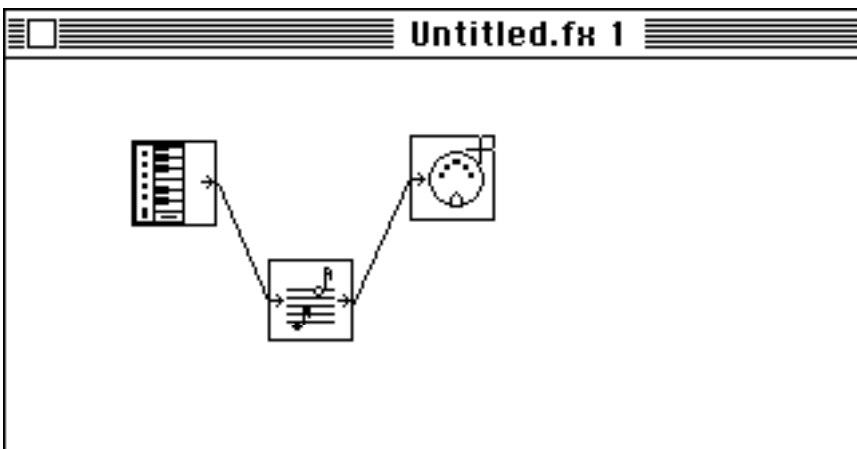
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Wiring Modules

To make these modules work they need to be **wired** together. First, click on the **Wire** tool in the Tools palette.



Second, click once on the Midi In icon and drag a **wire** onto the Note Transpose icon. Third, click once on the Note Transpose icon and drag a wire onto the Midi Out icon. Things should look sort of like this:



This process sends MIDI input to the Note Transpose module, which sends its output to the Midi Out module, which sends the MIDI data to the MIDI interface. So, this process simply transposes all notes by some interval.

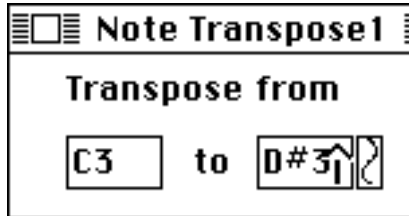
Adjusting Parameters

To adjust the parameters associated with the Note Transpose module, or any other module, double-click on the icon with the **Arrow** tool. First, click on the Arrow tool in the Tools palette.



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Second, double-click on the Note Transpose icon. The **parameter** window for the module will open. This window has two controls which allow the transposition interval to be adjusted. The two controls are **Value** controls and are adjusted by clicking in the upper or lower portion of the control. Clicking and holding in the upper portion control will cause the values to increase in value. Clicking and holding in the lower portion control will cause the values to decrease in value. The cursor will change into a arrow appropriately pointing upward or downward.

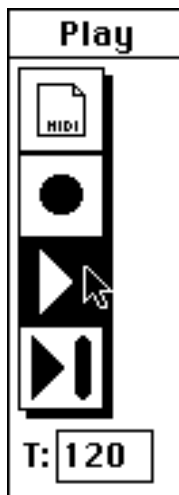


MIDI input can be used to set values as well. If the **Use MIDI Value** command in the **Special** menu is selected then MIDI input into the module will set the value of the selected control. To turn this option off, unselect the Use MIDI Value command. If you want to stop MIDI input from changing the value of the selected control then just click someplace else within the window to unselect the control.

Keyboard entry can be used to set values as well. When you cmd-click on a Value control (clicking with the command key held down) then a small dialog pops up, enabling you to type in the value desired.

Start Processing

The application will actually start processing when the **Start** button in the Play window is pressed. Press this button and doodle with your MIDI controller.



You should find that all the notes that go through the Macintosh are transposed by the interval set by the Note Transpose module.

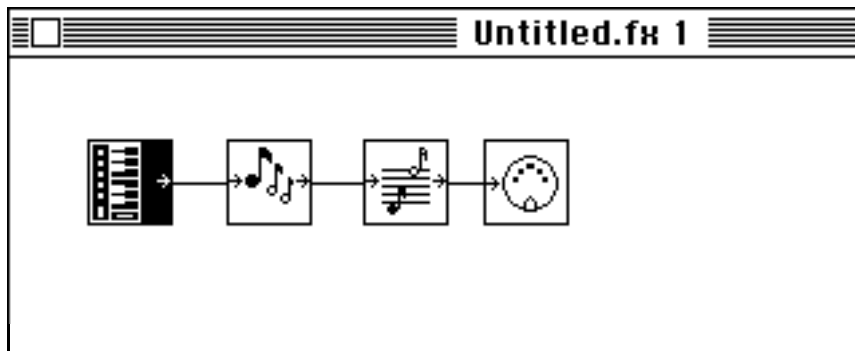
Adding More Modules

To make things more interesting you might want to add a **Delay** module. First, select the Install tool in the Tools palette. Second, select the Delay item in the Fx menu. Third, click once in the Sketch Pad window. Now there should be a new icon that represents delayed notes.

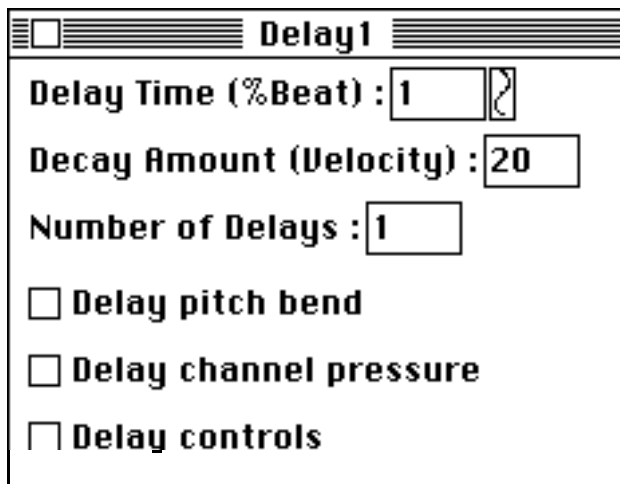
Now, the Midi In module will be disconnected from the Note Transpose module. First, select the **Scissors** tool from the Tools Palette. Second, click once at some point on the wire that connects the Midi In icon to the Note Transpose icon. The wire will vanish once it has been cut.

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Now, use the Wire tool to connect the icons as in the following:



To adjust the parameters of the Delay module double-click on the Delay icon with the Arrow tool. The **Parameter** window for the Delay module will open.



Again, values can be adjusted by clicking in the upper or lower portion of the Value control. The Delay module delays MIDI data by a percentage of a beat (the tempo is set in the Play window). The velocity of a note is decreased for each delay. Pitch bend, channel pressure, and controls will also be delayed if the appropriate check boxes are checked.

Again, processing will not begin until the Play button is pressed. Press the Play button and doodle with your MIDI controller.

You should find that all the notes going into the Macintosh are delayed and transposed according to the parameters you have set in the parameter windows for the Delay module and the Note Transpose module.

At this point it may be a good idea to experiment with some of the examples that come with Megalomania.

Caveats

As with signal processors in the audio domain, many simultaneous effects will load a CPU down. It is very easy to create Megalomania processes that will tax the Macintosh CPU to the extent that you will probably hear latencies and various hiccups. To some extent this can be avoided. If you imagine each module as a little computer you can begin to picture *hot spots* in your design.

For instance, in the last example the Note Transpose module is positioned after the Delay module. This means that multiple copies of each note are created and each copy must be transposed before it

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is played. It would be more efficient to transpose the incoming note first, and then send it to the Delay module, where multiple copies would be made of the already transposed note.

Essentially, it is a good idea to keep as much processing as you can before delays and branches.

3 - Sketch Pad Window

The **Sketch Pad** window is the place where you design a process, or *MIDI effect*.

A new Sketch Pad is created when you select the **New** command from the **File** menu. The contents of this window may be saved and retrieved to and from disk via the **Open...**, **Save**, and **Save As...** commands in the File menu. The **Close** command from that menu will close the window, after asking you if you wish to save your material, if appropriate.

The **Tools** palette and **Edit** menu are used to manipulate modules in the Sketch Pad window (see Tools Palette and Edit Menu sections). Associated with each Sketch Pad are four **Note Maps** (see Note Map section). These are edited via the **Note Map...** command in the Special menu (see Special Menu section).

Several Sketch Pad windows may be open at the time. Also, the current Sketch Pad (the front window) may be switched during processing. So, the nature of the processing can be changed during performance simply by selecting a new Sketch Pad window.

4 - Tools Palette

The **Tools** palette allows you to select cursor tools with which you can manipulate modules in the Sketch Pad window. A tool is selected by clicking on it with the mouse.



Install Tool

When the **Install** tool is selected the cursor changes into a hand when positioned over a Sketch Pad window. When the mouse is clicked in a Sketch Pad window with the Install tool a new module will be installed and its icon will appear in the window. The module that is installed is determined by the currently checked item in the **Fx** menu.

The Install tool is automatically chosen when you select an item in the **Fx** menu.

Wire Tool

When the **Wire** tool is selected the cursor changes into a cross when positioned over a Sketch Pad window. Two modules are wired together by clicking on the icon of one module and dragging a wire over to the icon of another module.

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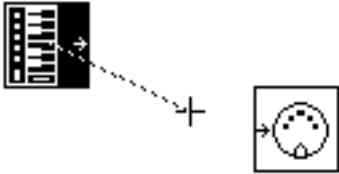
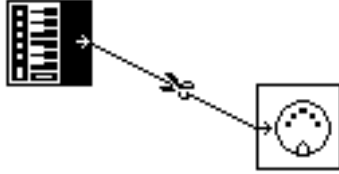


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Scissors Tool

When the **Scissors** tool is selected the cursor changes into scissors when positioned over a Sketch Pad window. The wire connecting two modules can be severed by clicking on the wire with the scissors cursor.



Arrow Tool

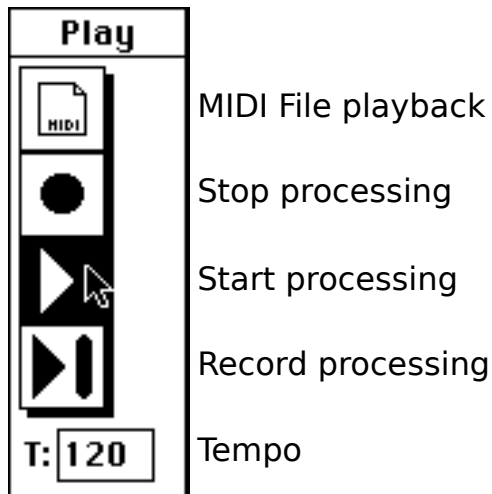
When the **Arrow** tool is selected the cursor changes into an arrow when positioned over a Sketch Pad window. Clicking on an icon in a Sketch Pad window will **Select** the module. When a module is selected it can be cut by selecting the **Cut** command from the **Edit** menu (sorry, the module can not be copied, pasted, or duplicated) (see Edit Menu section).

The icon can be given a name when it is selected. This is done by selecting the **Fx Name...** command in the Edit menu. A dialog will pop up, enabling you enter in a name for the icon. This name will then appear in the Sketch Pad and will define the name of that modules parameter window.

Also with the Arrow tool, clicking on an icon and dragging will reposition the icon. And, double-clicking on an icon will open the parameter window for that module.

5 - Play Window

The **Play** window controls several global aspects of processing.



MIDI File playback

A MIDI File will be merged with input from the MIDI interface when the **MIDI File** button has been pushed. First, a MIDI File has to be imported. To import a MIDI File select the **Import Midi File...** command from the **File** menu.

If a MIDI File has not been imported and the MIDI File button is pushed it will not remain selected. This indicates that there is no MIDI File to playback. When a MIDI File has been

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imported the MIDI File Button will remain selected when pushed. This indicates that the MIDI File will be merged with input from the MIDI interface when the application begins processing.

The MIDI File may be looped during playback, that is, when the end of the file is reached it will begin playing from the beginning again. This option may be enabled by selecting the **Loop MIDI File** command in the Special menu.

Stop Processing

When the **Stop** button is pushed the application will halt processing. If the modules are still processing MIDI data when the Stop button is pressed the button will remain selected and the cursor will change into a spinning clock. When the modules are finished the regular cursor will appear and the Stop button will no longer be selected.

This behavior is desirable when you want delay buffers to *flush out* before actually stopping.

If the application is in this flushing state you can force it to stop, or *kill* the flush, by pressing the space bar.

When the application is processing, before a halt, pressing the space bar will trigger the Stop button.

Start Processing

When the **Start** button is pushed the application will begin processing. The Start button can also be triggered by pressing the space bar when the application is not processing.

Record Processing

The processed MIDI data can be recorded and saved as a MIDI File. When the **Record** button is pushed all **Record** modules will record the MIDI data that they receive through the wires (see Midi Record section).

This recording can be saved to disk as a MIDI File by selecting the **Export Midi File...** command from the **File** menu.

Pressing the Enter key will trigger the Record button.

Tempo

This Value control adjusts the global tempo of the processing. This value is used to determine parameters for processing in the time domain, such as delay, and for controlling the playback of a MIDI File.

6 - Memory Window



This window shows you how much memory you have left. It is like a fuel gauge, you start out full and slide towards empty as the number of your processing modules increase.

7 - Module Controls

Apart from the standard Macintosh controls there are two controls which are used extensively in the parameter windows for the modules. These are the **Value** control and **Graph** control.

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Value Control



The Value control is a rectangle with either a numerical or note value within it. The value is adjusted by clicking in the upper or lower portion of the control. The cursor will change into an arrow pointing upwards or downwards, indicating the direction in which the value is being scrolled.



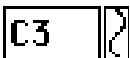
MIDI input can be used to set values as well. If the Use MIDI Value command in the Special menu is selected then MIDI input into the module will set the value the control when it is selected. To turn this option off, unselect the Use MIDI Value command. If you want to stop MIDI input from changing the value of the selected control then just click someplace else within the window to unselect the control.

Keyboard entry can be used to set values as well. When you cmd-click on a Value control (clicking with the command key held down) then a small dialog pops up, enabling you to type in the value desired.

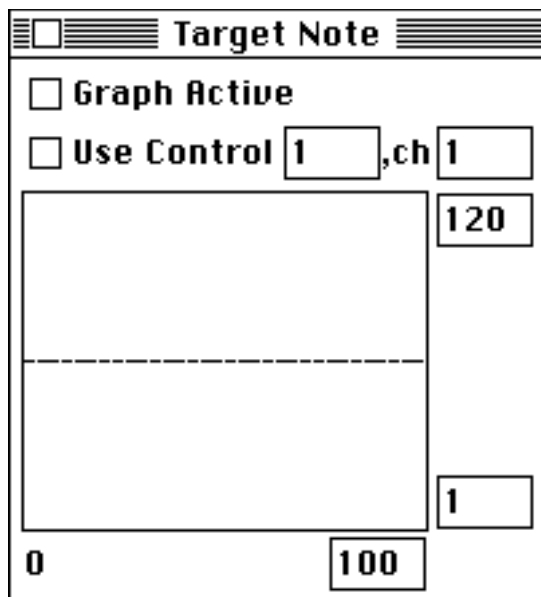
Graph Control

Graph controls are like low frequency oscillators that are attached to parameters in the various parameter windows. You can define the shape of the waveform and the period for this low frequency oscillator. But, it does more. A MIDI control can override the waveform and provide it's own values instead. This gives you real-time control over parameters via MIDI.

When a Value control has a Graph button attached to the right, this indicates that a Graph control is present.



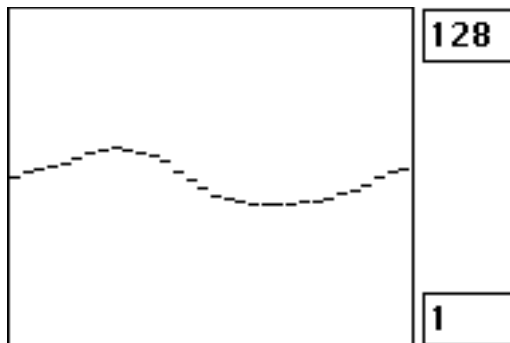
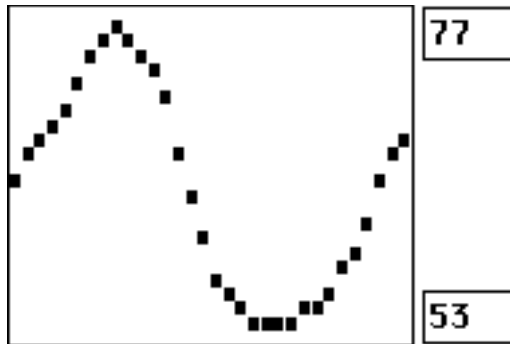
Clicking on the Graph button will open the Graph window.



This, for instance is the Graph window for the target note in the **Note Transpose** parameter window. The two numbers at the bottom show you the period of the Graph in percentage of a beat, right now the period is a beat long. The period is set by adjusting the Value control at the

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bottom of the window. Adjusting the two numbers at the right change the view of the waveform but do not actually change the waveform.



This example shows two views on the same waveform. The graph actually modulates the parameter it is attached to when the **Graph Active** box is checked. You will not actually see values change on the screen (as this takes up too much processing time) but inside the module the values are changing.

If the **Use Control** box is checked then the waveform is overridden by the last value of the specified control. This value is scaled to the values which describe the view of the waveform.

Graph Active

Use Control ,ch



In this example, control number 5 on channel 10 is being used to modulate the target note. Incoming control values can range from 1-128 but here they are scaled to range from 11-54.

IMPORTANT NOTE ABOUT GRAPHS:

Since Graphs vary parameters over time it is possible to misalign note on/off commands with respect to their associated note on/off commands. For instance, the target note in the Transpose Note module may be varied with a Graph. If the transposition changes between a note on & off then the note will hang. There is no book keeping to prevent this since it is computational expensive.

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Hanging notes can be prevented by placing a Duration Assign module at the output of any module that may misalign note ons & offs via the use of a graph. This will force an aligned note-off to occur.

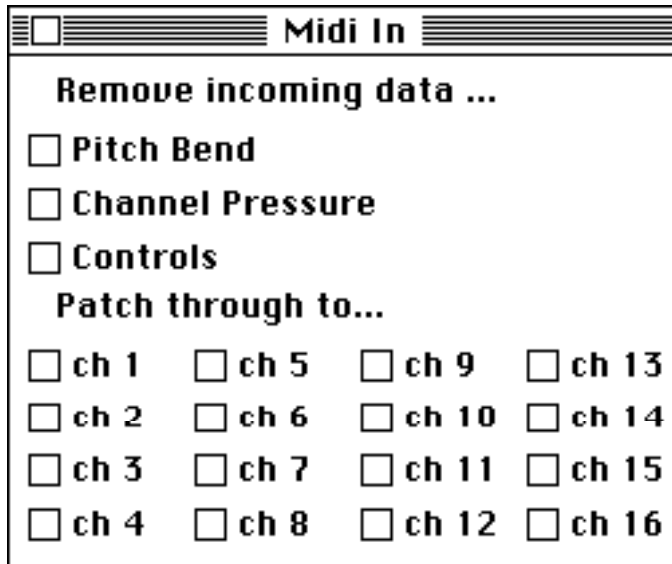
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8 - The Modules

Midi In



Midi In icon



The **Midi In** module is the source of all MIDI data for a Sketch Pad window. There can only be one Midi In module per Sketch Pad window.

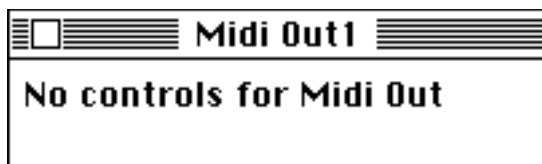
The Midi In module allows Pitch Bend, Channel Pressure and Controls to be filtered out. Processing continuous controls demands a lot of the CPU (see Caveats section). So, if you do not need to deal with some of the continuous control data, it is desirable to remove that data.

Incoming data can be patched directly to a MIDI channel via the twelve check boxes at the bottom of the parameter window.

Midi Out



Midi Out icon



The **Midi Out** module is a sink for all MIDI data. All data sent to the Midi Out module is sent to the MIDI interface attached to the Macintosh.

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Midi Record



Midi Record icon



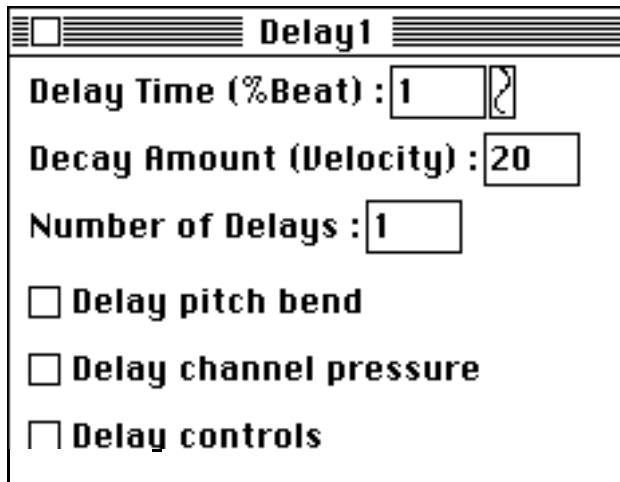
The **Midi Record** module is a sink for all MIDI data. All data sent to the Midi Record module is recorded when the **Record** button is pressed. This recording may then be saved as a MIDI File (see Play Window section).

The recording functionality is separated from the **Midi Out** module. This is useful when you want to record a subset of all the material actually being sent to the MIDI interface. For instance, you might import a click track as a MIDI File, and practice playing along with it. When you record, you may want to record your playing but not the click track. The click track can be separated with any of the filtering modules and sent to a Midi Out module but not to a Midi Record module. Your playing can be separated with any of the filtering modules and sent to a Midi Out module and a Midi Record module.

Delay



Delay icon



The **Delay** module creates a *MIDI delay*. The MIDI data is delayed by a percentage of a beat, where the tempo is determined by the setting in the **Play** window. The number of repetitions can be set with a Value control. For note on data the velocity can be decremented upon each repetition. This can be set with a Value control.

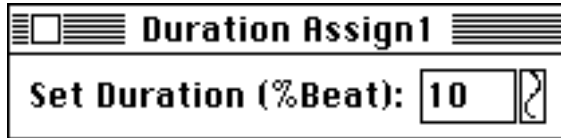
Normally, only note data is delayed and all other data is ignored. But, continuous controls can also be delayed by checking the appropriate boxes. The decay amount has meaning only with respect to note on data.

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Duration Assign



Duration Assign icon



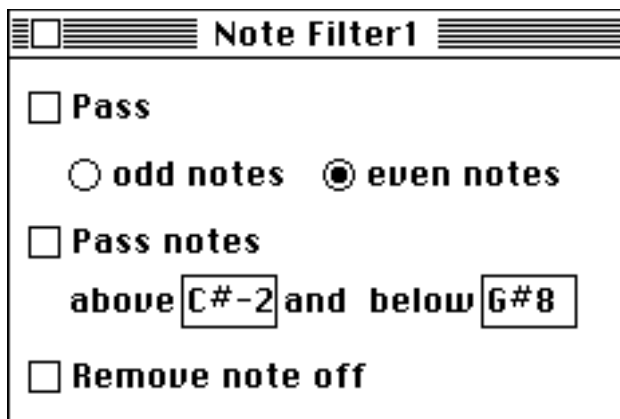
The **Duration Assign** module sets the duration of notes. This means that for each note on the module receives it will create a note off at a time determined by the duration value. This value may be adjusted with a Value control. The duration is specified as a percentage of a beat, where the tempo is determined by the setting in the Play window.

All other data is passed without change.

Note Filter



Note Filter icon



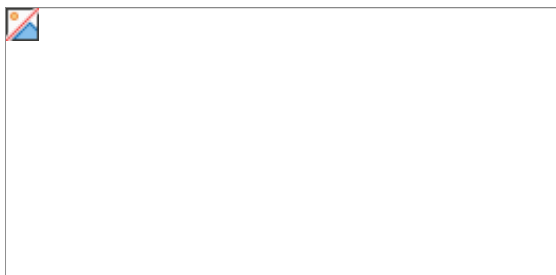
The **Note Filter** module removes note on and note off data meeting certain criteria. All other data is always passed.

If the **Pass** box is checked then notes with either odd values or even values are passed through the module. If the **Pass notes** box is checked then notes within the specified range are passed through the module. If both boxes are checked then notes that meet both criteria are passed through the module.

If the **Remove note off** box is checked then all note off data is removed. This is useful when you have the **Duration Assign** module set at the end of a processing chain. Since the duration will be assigned it is not necessary to process note off data before that module. So, you can remove note off data at the beginning of the chain, and thus not burden the rest of the processing chain with that data. And, CPU time will be used more efficiently.

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Note Filter {Single}

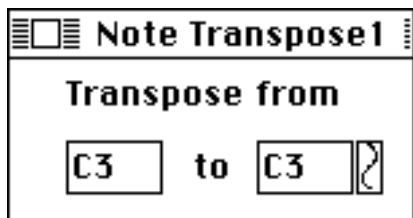


The **Note Filter {Single}** module serves a single purpose. It only passes note information for the single note specified.

Note Transpose



Note Transpose icon

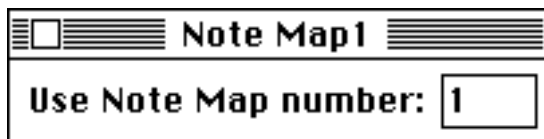


The **Note Transpose** module transposes all note data by the interval described by the two values in the parameter window. All other data is passed without change.

Note Map



Note Map icon



The **Note Map** module uses the four Note Maps associated with the Sketch Pad window. Each note map associates each of the twelve pitches in the octave with a pitch in the same, lower, or upper octave.

The Note Maps for a Sketch Pad window are edited by selecting the **Note Map...** command from the **Special** menu. This command presents a dialogue box with which the maps can be adjusted.

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Map 1		Map 2		Map 3		Map 4		
C3	to	C#3	C3	to	C2	C3	to	C3
C#3	to	C#3	C#3	to	D#3	C#3	to	C#3
D3	to	D#3	D3	to	B4	D3	to	D3
D#3	to	D#3	D#3	to	D2	D#3	to	D#3
E3	to	F#3	E3	to	A2	E3	to	E3
F3	to	F#3	F3	to	F#5	F3	to	F3
F#3	to	F#3	F#3	to	F#5	F#3	to	F#3
G3	to	G#3	G3	to	C#-1	G3	to	G3
G#3	to	G#3	G#3	to	D1	G#3	to	G#3
A3	to	A#3	A3	to	B3	A3	to	A3
A#3	to	A#3	A#3	to	A#3	A#3	to	A#3
B3	to	C#4	B3	to	B3	B3	to	B3

In this example Note Map 1 maps all notes to accidentals. Note Map 2 maps notes to different octaves sometimes. Note Maps 3 and 4 do nothing.

All note data is adjusted according to the Note Map selected in the parameter window. All other data is passed without change.

Note Hold



Note Hold icon

<input type="checkbox"/>	Note Hold1
Number of notes: <input type="text" value="1"/>	

The **Note Hold** module selectively delays the passage of note off data. This creates chords with n pitches, where n is the adjustable value in the parameter window. This is done by always leaving n notes *hanging*. After n notes are hanging the entry of a new note into the module will turn off the oldest hanging note.


All other data is passed without change.

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Note Cluster



Note Cluster Icon

Cluster1	
Delay Time (%Beat) :	<input type="text" value="1"/>
Delay Inc. (%Beat) :	<input type="text" value="0"/>
Decay Amount (Velocity) :	<input type="text" value="0"/>
Decay Inc. (Velocity) :	<input type="text" value="0"/>
Number of Delays :	<input type="text" value="1"/> 

The **Note Cluster** module is similar to the Delay module. Note on and note off information is delayed.

The initial delay is set by the Delay Time control. Again, all delay times are expressed as a percentage of a beat. After the first delay each following delay is longer or shorter. This is determined by the Delay Inc. control. For example, with an initial delay of 50% and an incremental change of 25% the delay times would increase: 50%, 75%, 100%, 125%, etc...

The initial change in velocity for each delay is set with the Decay Amount control. After the first delay each following delay has a greater or smaller change in velocity. This is determined by the Decay Inc. control. For example, with an initial decay of 5 velocity values and an incremental change of 1 the decay values would increase: 5, 6, 7, 8, etc...

The number of delays is set by the Number of Delays control. This control can be assigned to a graph, allowing the number of delays to change over time or be adjusted by MIDI controllers.

Only note on and note off data is delayed, all other data is ignored.

Velocity Filter



Velocity Filter icon

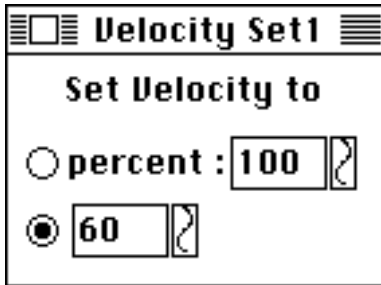
Velocity Filter1	
<input type="checkbox"/> Pass velocity with	
<input type="radio"/> odd value	<input checked="" type="radio"/> even value
<input type="checkbox"/> Pass velocity	
above <input type="text" value="1"/>	and below <input type="text" value="128"/>

The **Velocity Filter** module removes note on and note off data meeting certain criteria. All other data is always passed.

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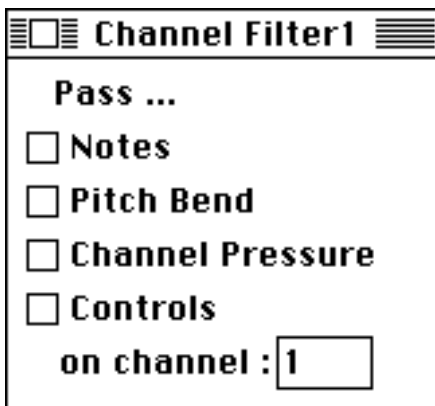
If the **Pass velocity with** box is checked then notes with either odd velocities or even velocities are passed through the module. If the **Pass velocity** box is checked then notes with velocities within the specified range are passed through the module. If both boxes are checked then notes that meet both criteria are passed through the module.

Velocity assign



The **Velocity assign** module changes the velocity of note on data. The velocity may be set to a constant value or may be changed by a percentage. All other data is passed without change.

Channel Filter



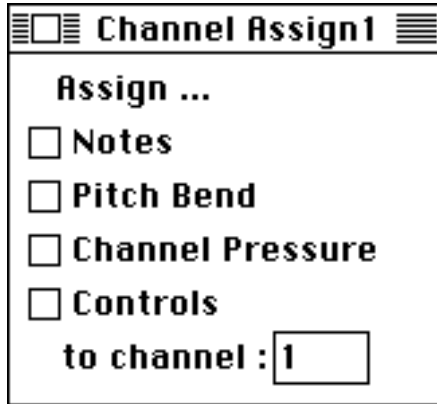
The **Channel Filter** module selectively passes data on the selected channel. The channel is selected by adjusting the Value control and the type of data is selected by checking the appropriate boxes.

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Channel Assign



Channel Assign icon

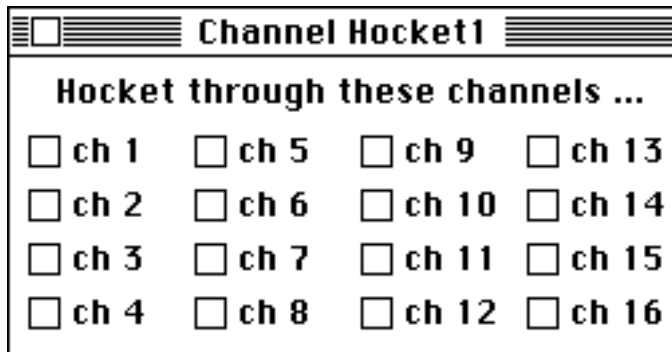


The **Channel Assign** module assigns data to the selected channel. The channel is selected by adjusting the Value control and the type of data is selected by checking the appropriate boxes.

Channel Hocket



Channel Hocket icon



The **Channel Hocket** module changes the channel of note on and note off data. This module *hockets* notes through selected channels. For example, if channels 1, 3, and 5 are checked then the first note entering the module would be assigned to channel 1, the second note to channel 3, the third note to channel 5, the fourth note to channel 1, and so on. The module assigns note off data to the correct channel, i.e., note off data follows note on data on the channel that it was assigned to.

All other data is not passed through this module.

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Program Change



Program Change icon

Program Change1			
On	Pgm	<input type="text" value="0"/>	, Chan <input type="text" value="1"/>
Send Pgm	<input type="text" value="0"/>	, Chan	<input type="text" value="1"/>

The **Program Change** module allows one-to-one program change mappings. When an incoming program change meets the criteria (program change number and channel) a program change is sent with the selected parameters (again, program change number and channel). The original program change is not passed. All other data is passed without change.

Control Map



Control Map icon

Control Map1	
Map from:	
<input type="radio"/>	Pitch Bend
<input type="radio"/>	Channel Pressure
<input checked="" type="radio"/>	Control <input type="text" value="1"/>
to:	
<input type="radio"/>	Pitch Bend
<input type="radio"/>	Channel Pressure
<input checked="" type="radio"/>	Control <input type="text" value="1"/>

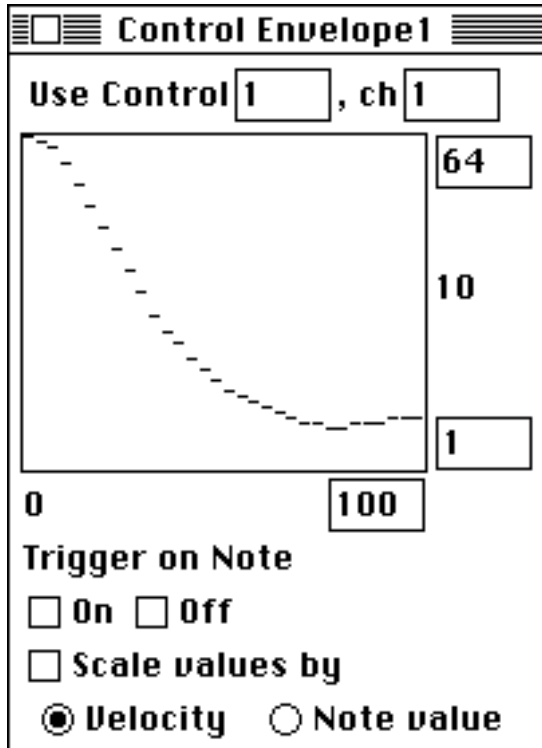
The **Control Map** module allows one-to-one continuous control mappings. When an incoming continuous control meets the criteria (pitch bend, channel pressure, or control number) a continuous control is sent with the selected parameters (again, pitch bend, channel pressure, or control number). The original continuous control is not passed. All other data is passed without change.

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Control Map



Control Envelope icon



The **Control Envelope** module generates controller data over time as described by the graph in it's parameter window. The controllers number and channel may be set. The duration of the envelope is set by the rightmost control at the bottom of the graph. Like all graphs, the view of the data can be changed by adjusting the controls along the right edge of the graph.

The data is generated by incoming note on and/or note off data. The controller data can be altered by the note data. If the controller data is scaled by note velocity then the amplitude of the envelope will be at it's maximum when the note velocity is at its maximum. For example, when the velocity is 128 then the controller data is unchanged and when the velocity is 64 then the controller data is scaled by 50%. If the controller data is scaled by note value then the amplitude of the envelope will be at it's maximum when the note value is at its maximum. For example, when the note value is G#8 then the controller data is unchanged and when the value is E3 then the controller data is scaled by 50%.

9 - Menus

File Menu

- New*
- Open...*
- Close*
-
- Save*
- Save As...*
-
- Import Midi File...*
- Export Midi File...*
-

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Transfer...

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Quit

New - Creates a new Sketch Pad window.

Open - Opens a Sketch Pad window that has been saved to disk.

Close - Closes the front Sketch Pad window.

Save - Saves the front Sketch Pad window.

Save As - Saves the front Sketch Pad window.

Import Midi File - Imports a MIDI File that has been saved to disk, this application supports version 1.0 of the MIDI File specification. This MIDI File can be merged with input from the MIDI interface by selecting the MIDI File button in the Play window.

Export Midi File - The MIDI data which is recorded with the Midi Record module can be saved as a MIDI File.

Transfer - Allows you to exit to another program without going to the Finder first.

Quit - Bye.

Edit Menu

Undo

-

Cut

Copy

Paste

Clear

Duplicate

-

Setup Midi...

Fx Name...

The *Cut*, *Copy*, *Paste*, *Clear*, and *Duplicate* commands all apply to modules in the Sketch Pad window.

Setup Midi.... - Allows you to choose the port for MIDI transmission.

Fx Name... - Allows you to assign a name to an icon. This name appears in the Sketch Pad window and is the title of the associated parameter window.

Fx Menu

When the Install tool is clicked in a Sketch Pad window the module that is currently checked in this menu will be installed. Selecting an item in this menu automatically selects the Install tool.

See the module section of this manual for a full description of module operation.

Special Menu

Note Map...

Clean Up Icons

Use MIDI Value

Sys-Ex thru

Loop MIDI file

Receive Sync

All Notes Off

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Note Map... - Opens the note map editor for the front Sketch Pad window.

Clean Up Icons - Nudges all icons to a predefined grid in the Sketch Pad Window.

Use MIDI value - When this option is selected Value controls in parameter windows can be set by MIDI data entering the module. This only applies to controls which are selected in windows that are the frontmost window. When a control has been set to the desired value you can deselect the control by clicking elsewhere in the parameter window.

Sys-Ex thru - When this option is selected system-exclusive data is passed through the MIDI port unaltered when the Play button is engaged.

Loop MIDI file - When this option is selected the MIDI File is looped during playback, that is, when the end of the MIDI File is reached playback will begin from the beginning again.

Receive Sync - When this option is selected incoming MIDI beat clocks will set the global tempo for Megalomania processing.

All Notes Off - Kills the processing in the front window, sends an all notes off message and sends note off data for each note on all channels, restarts processing.

Window Menu

This menu lists all open Sketch Pad windows. Selecting an item in the menu will bring the chosen Sketch Pad window to the front.

10 - MIDI Manager™

Megalomania supports Apple's MIDI Manager. MIDI Manager provides the following advantage. You can run more than one MIDI program simultaneously in MultiFinder, passing data back and forth between MIDI programs.

A disadvantage is that MIDI Manager can tax the processing power of your Macintosh. If you have a Macintosh Plus or Macintosh SE, you may find that intensive Megalomania processing will cause timing to become sluggish.

To benefit from the use of MIDI Manager you need another MIDI program that is compatible with it. The files needed to install MIDI Manager are not provided with Megalomania. Please consult your other MIDI programs documentation to install MIDI Manager.

Once MIDI Manager has been installed, start up Megalomania and make sure that the MIDI Manager option is set in the Setup MIDI... dialog. To view Megalomania's MIDI Manager configuration, open the PatchBay™ desk accessory or application. When you open PatchBay, you will see something like this after starting up Megalomania.

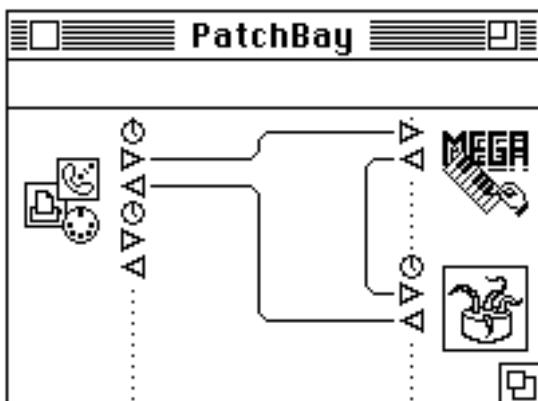


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Connections between Megalomania and other programs are made by wiring together their respective input and output ports.

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