

## **PatchMan: The UltraSound Patch Manager**

*PatchMan* lets you control which instrument patches are loaded into your UltraSound's memory and lets you audition patches that are loaded.

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## Quick Tour

This quick tour will acquaint you with many of *PatchMan's* features. Make sure the Ultra Wave and MIDI Synth driver is loaded before you start.

### 1. What you see when you start

When you start PatchMan, you will see four main windows which display patch numbers, names and sizes. The two left windows show what patches are available (on disk) for melodic and percussion instruments. The two right windows show which melodic and percussion patches are currently loaded into UltraSound's memory. The two right windows might well be empty, unless you have previously loaded patches using PatchMan or have played a MIDI file with a program such as Media Player.

### 2. Load a patch

Now select Acoustic Grand (patch 0) in the upper left window by clicking on it with the mouse. Press the double right arrow button to load the patch. This patch now appears in the upper right window indicating it is loaded. Notice that the Memory Remaining number in the lower right corner has decreased and the memory gauge below it is starting to fill up.

### 3. Audition the patch on the synthesizer

Select the patch name in the right hand window by clicking on it with the mouse. Then move the mouse pointer onto the PatchMan synthesizer. Press the left mouse button to play a note. Drag the pointer around the synth keyboard to play several notes.

### 4. Audition a group of notes

Now click on the Note Memory button so that it is checked. Play a note on the synth keyboard. Each note played is now highlighted. To un-highlight a note, and remove it from Note Memory, click on it with the right mouse button.

Select a few notes and then click on the patch name in the upper right window. The group of selected notes now plays with the patch name selected.

### 5. Audition other patches

Load a few more melodic patches (as in Step 2) and click on each one in the Patches Loaded window. Each patch will play the notes selected on the synth.

### 6. Audition drums

Load in a few percussion patches as described in Step 2 and click on one of these. The PatchMan synth keyboard now displays a grey keyboard with some white keys. Each white key corresponds to an individual drum sound—try it! Note Memory does not work for drum patches, because the keys play the drum sounds individually.

### 7. Adjust the volume on the synthesizer

Press one of the buttons with an up or down arrow on it in the middle top of the synth. This will adjust the audition volume. Note that the red LEDs to the right of the buttons show you the current volume.

### 8. Display several audition keyboards

Choose ALL... under the AUDITION menu. A group of audition keyboards will be displayed, one for each loaded patch. They can be played with the left mouse button. Notes will play as long as the left mouse

button is held down.

You can adjust the volume of the currently selected audition keyboard with the VOLUME control in the toolbar at the top. For melodic patches, you can select a different instrument for the current keyboard by pressing the INSTRUMENTS... button on the toolbar.

The audition windows can be moved around and resized just like any other window. When you are finished with these audition keyboards, close the window.

### **9. Load patches used by a MIDI file**

Get back to the initial PatchMan window, the one with the four lists of patches. Choose GET FROM MIDI FILE... from the FILE menu. Select the name of a MIDI file. PatchMan reads the MIDI file and loads the patches it needs. You can then play the MIDI file with another program that does not know how to load patches.

### **10. Change the patch names**

Choose PREFERENCES... under the OPTIONS menu. Click the check box labelled USE NAMES FROM PATCH FILES and then OK. The names shown in the list of patches are now those that are stored in the patch files, rather than the General MIDI names for the corresponding patch number.

## **Procedures**

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## Commands

Instruments

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## Definitions

Memory Remaining  
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## How to Load and Unload Patches

### Loading Patches

There are three methods for loading patches.

(1) Select patch names in one of the left hand boxes labelled Patches Available. Several patches can be selected at a time by dragging the mouse, or by extending an existing selection by a shift-click of Ctrl-click. Then press the button labelled >>. The patches loaded will be displayed in the right hand box labelled Patches Loaded.

A single patch can be quickly loaded by double-clicking its name in the Patches Available box.

Note that if there are more patches selected than can fit in memory, the melodic patches will be loaded first, in numerical order, then the percussion patches, in numerical order, until memory is full.

Sometimes a patch won't fit into memory even though the Memory Remaining indicates there is enough room. That is because the UltraSound memory is partitioned into segments of 256K and patches won't load across a segment boundary.

(2) The patches required by a MIDI file can be loaded using the Get from MIDI file... command under the **File** menu.

(3) There is an indirect way to load patches. Some Windows software (such as Media Player) will load patches when it plays a MIDI file. The Patches Loaded boxes are updated by PatchMan when control is given to it.

### Unloading Patches

Select patch names in one of the right hand boxes labelled Patches Loaded. Several patches can be selected at a time by dragging the mouse, or by extending an existing selection by a shift-click of Ctrl-click. Then press the button labelled <<. The selected patches loaded will move to the left hand box labelled Patches Available.

### Related Topics

[Loading patches from a MIDI file](#)

## How to Play the Synthesizer

First select a patch name in one of the Patches Loaded boxes. Then click the left mouse button on the notes you wish to play. Notes play as long as the mouse button is held down. Dragging the mouse across the keys will play several notes.

If Note Memory is on, the notes played will be colored gray and played when a patch name is selected in the Load Patches box. Notes can be removed from Note Memory by clicking them with the right mouse button. All selected notes can be cleared by turning off Note Memory.

The volume that the notes are played can be adjusted by clicking the volume buttons on the synthesizer. The red LEDs indicate the current volume.

### Related Topics

[How to Load and Unload Patches](#)

[How to Audition Patches](#)



## How to Audition Patches

You must first load the patch you want to audition. You can then audition the patch by playing the synthesizer or by creating audition windows.

## **How to Change Patches Available**

The patches that are available to load and audition with PatchMan are those that are available in a particular Windows session. When Windows is started up, the UltraSound Windows driver looks for the environment variable ULTRADIR. The ULTRADIR directory contains the file ULTRASND.INI which lists the names of the patch files for each patch number. These are the patches that will be available for that Windows session. To change to a different patch set, you must use a different ULTRASND.INI file and restart Windows.

If there is no patch file listed for a number, or if the patch file name is "BLANK", then the patch name does not appear in the list of Patches Available.

## How to Change Patch Names

There are two possibilities for the names that are displayed in the Patches Available and the Patches Loaded boxes. The default is to use the names in accordance with the General MIDI standard. However, each patch file can contain its own name and you may wish to display this instead (since a patch need not conform to the General MIDI standard).

To use the patch name that is stored in its file, choose the Options menu, select *Preferences...* and click the *Use names from patch files* option.

## **Toolbar Control: Instruments...**

When a melodic audition is window is active, you can change the patch for that window by pressing the *Instruments...* button on the toolbar. A list of available patches is displayed. Click on the desired one and it will become the patch for that window.

## Menu Command: Audition

You can create one or more audition keyboards for the loaded patches by selecting the *Audition* menu. The following options are available from this menu:

- Melodic**      A single new audition window will be created for a melodic patch. The patch associated with the window can be changed by pressing the Instruments... button in the toolbar.
- Percussion**      A single new audition window will be created for all the percussion patches. Each available patch is assigned to a key (in conformance with MIDI convention). The keys with an available patch are white; the rest are grayed out.
- All**              Several auditions windows are created, one for each of the melodic patches loaded and one for all the percussion patches loaded.

### Related Topics

[How to Audition Patches](#)

## Menu Command: Options

The Options menu has a single item in it, **Preferences...**, which allows you to change patch names.

## **Toolbar Control: Volume**

The volume control in the toolbar of the audition window allows you to change the volume that a patch will play in the current window. Note that each patch window has its own volume.

### **Related Topics**

[How to Audition Patches](#)

## **Menu Command: Get From MIDI File...**

This command lets you load patches that are needed to play a MIDI file. This command is available under the **File** menu. When selected, it asks you to choose the name of a MIDI file. The file you select is read and the patches used in the file are loaded. Any patches already in memory are removed first.

Once the patches are loaded, the MIDI file can be played by other Windows MIDI software that you may have, even if it is not UltraSound-aware.



**Memory Remaining**

The amount of UltraSound memory remaining for holding patches.

**Note Memory**

When selected, notes pressed on the PatchMan synthesizer will be remembered and shown in gray. These notes are played when a melodic patch name is selected in the Patches Loaded box. Note Memory is inactive for percussion patches.

