

# MultitrackStudio Patchmap Files

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## Introduction

MultitrackStudio uses patchmap (\*.pmp) files to define the names of patches and drum instruments of hardware synths, so they can be displayed instead of plain numbers where appropriate.

Patchmap files are located in the PatchMaps subfolder (the full path will typically be C:\Program Files\MtStudio\PatchMaps\). Please see this folder for some real-life examples.

Patchmap files can be edited using the Windows Notepad.

Several examples will be shown to demonstrate how to create patchmap files for your own hardware synthesizer. The actual file is black, **comments are red**.

## Example 1: Banks and Patch Names

This example shows a plain simple patchmap having just two banks.

|                        |  |
|------------------------|--|
| [patchmap]             | <b>mandatory identifier</b>  |
| [bank 0]<br>bank=1280  | <b>This sections holds the first bank. Note it's 0, not 1. Also note the space.<br/>The MIDI bank it applies to. This number equals 128 * MSB + LSB.<br/>MSB and LSB correspond to MIDI controllers #0 and #32 respectively.<br/>In this example MSB=10 and LSB=0.</b> |
| 0=Piano<br>1=Bass      | <b>MIDI program 0 is a piano<br/>MIDI program 1 is a Bass<br/>These values can go up to and including 127</b>  |
| [bank 1]<br>bank=1281  | <b>This sections holds the second bank. Banks must be numbered sequentially<br/>MSB=10 and LSB=1</b>   |
| 32=Guitar<br>33=Violin | <b>MIDI program 32 is a guitar<br/>MIDI program 33 is a violin</b>   |

## Example 2: Drum Instrument Names

Assume our synth has one drum patch. Let's add both the patch and the drum instrument names to the patchmap:

[patchmap]

[bank 0]  
bank=1280  
0=Piano

[bank 1]  
bank=1281  
32=Guitar  
33=Violin  
64=Acoustic Drum Kit

The drum patch is on program number 64

[drum 0]  
bank=0  
  
patch=8  
36=Bass Drum  
40=Snare

The drums are in bank 0. This equals  $128 * \text{MSB} + \text{LSB}$ , see explanation in [bank 0] section of example 1.  
The drums are on MIDI program 8  
Note 36 is a bass drum  
Note 40 is a snare

Additional drum kit sections must be numbered sequentially ([drum 1], [drum2] etc.)

## Example 3: Percussion Channel

Assume it's a GM synth, which has one bank only, and drums on channel 10:

[patchmap]  
percussionchannel=10

This value is used by the MIDI Port's "Percussion Channel" button

[bank 0]  
bank=-1

-1 means "all banks", we do this because GM doesn't support banks  
If you omit the "bank=" statement then it will default to 0 because it's the [bank 0] section. [bank 1] defaults to 1 etc.

channel=1,2,3,4,5,6,7,8,9,11,12,13,14,15,16  
0=Piano  
1=Bright Piano  
12=Marimba  
25=Acoustic Guitar  
26=Electric Guitar

[bank 0] is not valid for channel 10

[drum 0]  
channel=10  
36=Bass Drum  
40=Snare

These instrument names are valid for channel 10

## Example 4: Patch Categories

Let's add some categories. They will appear in the MIDI Port's patch selector.

[patchmap]

[category]

#0=Piano

#1=Guitar

This is the section which defines the categories

The first section must be #0. In this case it holds the pianos

The second section holds the guitars

Categories must be numbered sequentially

[bank 0]

bank=-1

0=Piano#0

1=Bright Piano#0

12=Marimba

25=Acoustic Guitar#1

26=Electric Guitar#1

Add #0 to the name, so MultitrackStudio knows it's in category #0

No category specified here, it will end up in the "Other" category

Add #1 to the name, so MultitrackStudio knows it's in category #1

## Example 5: Drum Instrument Categories

Drum Instrument Categories can be defined locally within a drum section:

[patchmap]

[bank 0]

bank=0

0=Piano

1=Bright Piano

[drum 0]

#0=Bass

#1=Snare

35=Acoustic Bass#0

36=Bass Drum 1#0

38=Acoustic Snare#1

39=Hand Clap

40=Electric Snare#1

The first section must be #0. In this case it holds the bass drums

The second section holds the snare drums

Add #0 to the name, so MultitrackStudio knows it's in category #0

Add #1 to the name, so MultitrackStudio knows it's in category #1

No category specified here, it will end up in the "Other" category

## Example 6: Controller Names

Let's override some default controller names with custom ones:

```
[patchmap]
```

```
[bank 0]
```

```
bank=0
```

```
0=Piano
```

```
1=Bright Piano
```

```
[controllers]
```

```
2=Joystick -Y
```

New name for controller 2

```
83=Dynamic Modulation
```

## Example 7: Patch Switch Time

Some synths need quite some time to load a patch. Let's make sure MultitrackStudio sends the patch change messages in time. Note that it's usually not necessary to add this.

```
[patchmap]
```

```
patchswitchtime=750
```

Schedule patch changes 750 milliseconds earlier

```
[bank 0]
```

```
bank=0
```

```
0=Piano
```

```
1=Bright Piano
```