W

General MIDI numbers

- General MIDI patch numbers
- General MIDI Percussion (on Channel 9)
- MIDI Controller numbers
- How this information came from the MIDI Perl module
- Is this page too wide for your screen? Here's a narrower version.

General MIDI patch numbers

0	Acoustic Grand	32	Acoustic Bass	64	Soprano Sax	96	FX 1 (rain)
1	Bright Acoustic	33	Electric Bass(finger)	65	Alto Sax	97	FX 2 (soundtrack)
2	Electric Grand	34	Electric Bass(pick)	66	Tenor Sax	98	FX 3 (crystal)
3	Honky-Tonk	35	Fretless Bass	67	Baritone Sax	99	FX 4 (atmosphere)
4	Electric Piano 1	36	Slap Bass 1	68	Oboe	100	FX 5 (brightness)
5	Electric Piano 2	37	Slap Bass 2	69	English Horn	101	FX 6 (goblins)
6	Harpsichord	38	Synth Bass 1	70	Bassoon	102	FX 7 (echoes)
7	Clav	39	Synth Bass 2	71	Clarinet	103	FX 8 (sci-fi)
8	Celesta	40	Violin	72	Piccolo	104	Sitar
9	Glockenspiel	41	Viola	73	Flute	105	Banjo
10	Music Box	42	Cello	74	Recorder	106	Shamisen
11	Vibraphone	43	Contrabass	75	Pan Flute	107	Koto
12	Marimba	44	Tremolo Strings	76	Blown Bottle	108	Kalimba
13	Xylophone	45	Pizzicato Strings	77	Shakuhachi	109	Bagpipe
14	Tubular Bells	46	Orchestral Harp	78	Whistle	110	Fiddle
15	Dulcimer	47	Timpani	79	Ocarina	111	Shanai
16	Drawbar Organ	48	String Ensemble 1	80	Lead 1 (square)	112	Tinkle Bell
17	Percussive Organ	49	String Ensemble 2	81	Lead 2 (sawtooth)	113	Agogo
18	Rock Organ	50	SynthStrings 1	82	Lead 3 (calliope)	114	Steel Drums
19	Church Organ	51	SynthStrings 2	83	Lead 4 (chiff)	115	Woodblock
20	Reed Organ	52	Choir Aahs	84	Lead 5 (charang)	116	Taiko Drum
21	Accordion	53	Voice Oohs	85	Lead 6 (voice)	117	Melodic Tom
22	Harmonica	54	Synth Voice	86	Lead 7 (fifths)	118	Synth Drum
23	Tango Accordion	55	Orchestra Hit	87	Lead 8 (bass+lead)	119	Reverse Cymbal
24	Acoustic	56	Trumpet	88	Pad 1 (new age)	120	Guitar Fret Noise
4	Guitar(nylon)	30	Trumpet	00	1 au 1 (liew age)	120	Guitai Fict Noise
25	Acoustic Guitar(steel)	57	Trombone	89	Pad 2 (warm)	121	Breath Noise
26	Electric Guitar(jazz)	58	Tuba	90	Pad 3 (polysynth)	122	Seashore
27	Electric Guitar(clean)	59	Muted Trumpet	91	Pad 4 (choir)	123	Bird Tweet
28	Electric Guitar(muted)		French Horn	92	Pad 5 (bowed)	124	Telephone Ring
29	Overdriven Guitar	61	Brass Section	93	Pad 6 (metallic)	125	Helicopter
30	Distortion Guitar	62	SynthBrass 1	94	Pad 7 (halo)	126	Applause
31	Guitar Harmonics	63	SynthBrass 2	95	Pad 8 (sweep)	127	Gunshot

General MIDI Percussion (on Channel 9)

Bass	KeyNun	n Sound	Treble	KeyNun	n Sound
A_{-}	33	Metronome Click			
B_b	34	Metronome Bell			
B_{-}	35	Acoustic Bass Drum			
\mathbf{C}	36	Bass Drum 1	C	60	Hi Bongo
C#	37	Side Stick	C#	61	Low Bongo
D	38	Acoustic Snare	D	62	Mute Hi Conga
Eb	39	Hand Clap	D#	63	Open Hi Conga
E	40	Electric Snare	E	64	Low Conga
F	41	Low Floor Tom	F	65	High Timbale
F#	42	Closed Hi-Hat	F#	66	Low Timbale
G	43	High Floor Tom	G	67	High Agogo
G#	44	Pedal Hi-Hat	G#	68	Low Agogo
A	45	Low Tom	A	69	Cabasa
Bb	46	Open Hi-Hat	Bb	70	Maracas
Bn	47	Low-Mid Tom	Bn	71	Short Whistle
c	48	Hi-Mid Tom	c	72	Long Whistle
c#	49	Crash Cymbal 1	c#	73	Short Guiro
d	50	High Tom	d	74	Long Guiro
eb	51	Ride Cymbal 1	d#	75	Claves
e	52	Chinese Cymbal	e	76	Hi Wood Block
f	53	Ride Bell	f	77	Low Wood Block
f#	54	Tambourine	f#	78	Mute Cuica
g	55	Splash Cymbal	g	79	Open Cuica
g#	56	Cowbell	g#	80	Mute Triangle
a	57	Crash Cymbal 2	a	81	Open Triangle
bb	58	Vibraslap		82	_
bn	59	Ride Cymbal 2		83	

MIDI Controller numbers

0	Bank Select (MSB)	32	Bank Select (LSB)	64	Sustain Pedal	96	Data Increment	
1	Modulation (MSB)	33	Modulation (LSB)	65	Portamento on/off	97	Data Decrement	
2	Breath Control (MSB	1 (MSB)34 Breath Control (LSB)60)66	Sostenuto Pedal	98	non-reg param lsb	
				67	Soft Pedal	99	non-reg param msb	
4	Foot Control (MSB)	36	Foot Control (LSB)	68	Legato Pedal	100	Reg-Param (LSB)	
5	Portamento Time MSB	37	Portamento Time LSB	69	Hold 2	101	Reg-Param (MSB)	
6	Data Entry (MSB)	38	Data Entry (LSB)	70	Sound Variation			
7	Channel Volume MSB	39	Channel Volume LSI	3 71	Resonance			
8	Balance (MSB)	40	Balance (LSB) 72 Release Time					
				73	Attack Time			
10	Pan (MSB)	42	Pan (LSB)	74	Cut-off Frequency	,		
11	Expression (MSB)	43	Expression (LSB)	75	Decay Time			
12	Effects Controller 1			76	Vibrato Rate			
13	Effects Controller 2			77	Vibrato Depth			
				78	Vibrato Delay			

```
16 Gen Purpose 1 (MSB) 48 Gen Purpose 1 (LSB) 80
                                                  Gen Purpose 5
17 Gen Purpose 2 (MSB) 49 Gen Purpose 2 (LSB) 81
                                                  Gen Purpose 6
18 Gen Purpose 3 (MSB) 50 Gen Purpose 3 (LSB) 82
                                                  Gen Purpose 7
19 Gen Purpose 4 (MSB) 51 Gen Purpose 4 (LSB) 83
                                                  Gen Purpose 8
                                                  Portamento
                                               84
                                                  Control
                                                                   120 All Sound Off
                                                                        Reset All
                                                                   121
                                                                        Controllers
                                                                   122 Local Control
                                               91 Reverb Depth
                                                                   123 All Notes Off
                                                  Tremolo Depth
                                                                   124 Omni Off
                                               93 Chorus Depth
                                                                   125 Omni On
                                                                        Mono On (Poly
                                               94 Celeste (De-tune) 126
                                                                        Off)
                                                                        Poly On (Mono
                                                                   127
                                               95 Phaser Depth
                                                                        Off)
```

Controller numbers 64 to 69 are ON/OFF; if the 3rd byte is 64 or greater that means ON.

To set a Registered Parameter, first send controllers 101 and 100 with the required Number, then send controllers 6 and 38 with the two bytes of data, then send controllers 101 and 100 with the numbers 127.

Some useful Registered Parameters are:

Pitch Bend Sensitivity: cc101=0, cc100=0, cc6=0..24 semitones, cc38=0, cc101=127, cc100=127 Modulation Depth Range: cc101=0, cc100=5, cc6=0..6, cc38=0..127, cc101=127, cc100=127

The patches and percussion lists came from the <u>MIDI-Perl</u> module (you need to install MIDI-Perl anyway, to <u>get muscript's MIDI output working</u>) using a little Perl script such as the following . . .

```
#! /usr/bin/perl
use MIDI;
print "\nGeneral MIDI patch numbers:\n";
foreach (sort {$a<=>$b} keys %MIDI::number2patch) {
   print "$_ $MIDI::number2patch{$_}\n";
}
print "\nGeneral MIDI Percussion (on Channel 9):\n";
foreach (sort {$a<=>$b} keys %MIDI::notenum2percussion) {
   print "$_ $MIDI::notenum2percussion{$_}\n";
}
```

See also: <u>www.pjb.com.au</u> <u>www.pjb.com.au/midi</u> <u>www.pjb.com.au/muscript</u>