

**General MIDI (GM)** was developed by MIDI manufacturers to try to address the issue of non-standardization of sound categories and number assignments. It was inconvenient not to have a standard for patch numbers called for by each file. Resulting playback varied greatly from machine-to-machine. GM established a standard list of 128 sounds divided into certain categories. A full chart of sound categories, names, and number assignments follows.

### General MIDI (GM) categories, patch numbers, and instrument names

<b>Category</b> Patch # / Instrument	<b>Category</b> Patch # / Instrument	<b>Category</b> Patch # / Instrument	<b>Category</b> Patch # / Instrument
<b>Piano</b> 1 Acoustic Grand 2 Bright Acoustic 3 Electric Grand 4 Honky-Tonk 5 Electric Piano 1 6 Electric Piano 2 7 Harpsichord 8 Clav	<b>Bass</b> 33 Acoustic bass 34 Electric Bass (finger) 35 Electric Bass (pick) 36 Fretless Bass 37 Slap Bass 1 38 Slap Bass 2 39 Synth Bass 1 40 Synth Bass 2	<b>Reed</b> 65 Soprano Sax 66 Alto Sax 67 Tenor Sax 68 Baritone Sax 69 Oboe 70 English Horn 71 Bassoon 72 Clarinet	<b>Synth Effects</b> 97 FX1 Rain 98 FX2 Soundtrack 99 FX3 Crystal 100 FX4 Atmosphere 101 FX5 Brightness 102 FX6 Goblins 103 FX7 Echoes 104 FX8 Sci-Fi
<b>Chromatic Percussion</b> 9 Celesta 10 Glockenspiel 11 Music Box 12 Vibraphone 13 Marimba 14 Xylophone 15 Tubular Bells 16 Dulcimer	<b>Strings</b> 41 Violin 42 Viola 43 Cello 44 Contrabass 45 Tremolo Strings 46 Pizzicato Strings 47 Orchestral Strings 48 Timpani	<b>Pipe</b> 73 Piccolo 74 Flute 75 Recorder 76 Pan Flute 77 Blown Bottle 78 Shakuhachi 79 Whistle 80 Ocarina	<b>Ethnic</b> 105 Sitar 106 Banjo 107 Shamisen 108 Koto 109 Kalimba 110 Bagpipe 111 Fiddle 112 Shanai
<b>Organ</b> 17 Drawbar Organ 18 Percussive Organ 19 Rock Organ 20 Church Organ 21 Reed Organ 22 Accordion 23 Harmonica 24 Tango Accordion	<b>Ensemble</b> 49 String Ensemble 1 50 String Ensemble 2 51 SynthStrings 1 52 SynthStrings 2 53 Choir Aahs 54 Voice Oohs 55 Synth Voice 56 Orchestra Hit	<b>Synth Lead</b> 81 Lead 1 (Square) 82 Lead 2 (Sawtooth) 83 Lead 3 (Calliope) 84 Lead 4 (Chiff) 85 Lead 5 (Charang) 86 Lead 6 (Voice) 87 Lead 7 (Fifths) 88 Lead 8 (Bass + Lead)	<b>Percussive</b> 113 Tinkle Bell 114 Agogo 115 Steel Drums 116 Woodblock 117 Taiko Drum 118 Melodic Drum 119 Synth Drum 120 Reverse Cymbal
<b>Guitar</b> 25 Acoustic Guitar (nylon) 26 Acoustic Guitar (steel) 27 Electric Guitar (jazz) 28 Electric Guitar (clean) 29 Electric Guitar (muted) 30 Overdriven Guitar 31 Distortion Guitar 32 Guitar Harmonics	<b>Brass</b> 57 Trumpet 58 Trombone 59 Tuba 60 Muted Trumpet 61 French Horn 62 Brass Section 63 SynthBrass 1 64 SynthBrass 2	<b>Synth Pad</b> 89 Pad 1 (New Age) 90 Pad 2 (Warm) 91 Pad 3 (Polysynth) 92 Pad 4 (Choir) 93 Pad 5 (Bowed) 94 Pad 6 (Metallic) 95 Pad 7 (Halo) 96 Pad 8 (Sweep)	<b>Sound Effects</b> 121 Guitar Fret Noise 122 Breath Noise 123 Seashore 124 Bird Tweet 125 Telephone Ring 126 Helicopter 127 Applause 128 Gunshot

MIDI sounds are indicated according to GM standards and general descriptions of types of sounds suggested if looking within a synthesizer beyond the GM bank. If the synthesizer is current, these additional sounds might be preferable, since GM sounds have been around for a while and can be somewhat dated.

Selected sounds are intended to be able to be used in conjunction with standard organ registration or may be used alone as desired. Organists with consoles equipped with more than one MIDI coupler in each division have the option of adding additional MIDI sounds at their discretion. When choosing sounds, consider original instrumentation of the piece being played but don't be constrained by that. Don't be afraid to mix traditional acoustic and orchestral instrumental sounds with electronic sounds.

Want to learn more about MIDI? See the new publication from Wayne Leupold Editions, Inc., listed below, from which this entire page is excerpted.

Stanton, Geoffrey. *The Digital Musician: An Introduction to MIDI, Digital Instruments and Beyond*. Colfax: Wayne Leupold Editions, Inc. (WL800019).