

Chapter 8

MIDI Receive

With its wide range of voices, high polyphony, and multi-timbral capabilities, the PC88 makes an excellent instrument for use with a sequencer. Most sequencers have “Thru” and “Channelize” functions, which means that the sequencer can determine how the MIDI signal coming from a master keyboard (like the PC88) will be routed. If that’s the case, it’s a wise idea to turn Local Control (under the **Global** menu) off, so that you don’t end up with doubled notes and other kinds of confusion.

The PC88 can receive data on up to 16 channels at a time from an external MIDI source. The **MIDI Receive** button in the bottom row of the **Zone parameters** section lets you set up these channels for reception.

Pressing **MIDI Receive** puts the PC88 temporarily into a single-instrument mode similar to Internal Voices. After entering the mode, you can select the channel you wish to work on with the cursor buttons, or you can use a special Intuitive Entry method: hold down the **MIDI Receive** button and press one of the **Select** buttons. The display will jump to the MIDI channel corresponding to the number on the **Select** button. If you now play the keyboard, you will hear the sound assigned to that channel. Each channel has two parameters: on/off and program.

Channel On/Off

Turning a channel **Off** means it will not respond to any incoming data. Turning a channel off is especially useful when you have another instrument receiving data on the same MIDI cable that needs a channel of its own. Turning a channel off in this mode does not affect its MIDI *transmission* status: when you go back to your Setup, if a Zone is assigned to this channel, the keyboard will continue to send data to all of the Zone’s selected destinations.

Program

The Program for the channel is chosen in the usual way, either with the **Select** and **Group** buttons, or the Alpha wheel or numeric keypad, or using Intuitive Entry. If you have the VGM board installed, you can choose from any of its banks (1-3) as well as the PC88’s Internal Voices bank (0). The numeric keypad can be used to change banks quickly, with the “+/-” button acting as a colon between the bank number and the program number. Example: to get program 50 in the General MIDI bank, press 1, +/-, 5, 0, and **Enter**.

When you change the program, you will hear the new sound on the keyboard, and a Program Change command (as well as a Bank Select) is sent out the MIDI cable on the current channel. If the current channel is assigned to one of the Zones in the Setup you’ve been working with, selecting a new program in MIDI Receive mode will change the program on the corresponding Zone. You’ll hear the change when you go back to the Setup.

If you choose a bank that doesn’t have any internal sounds, the Bank Select and Program Change commands will still get sent over MIDI, but the PC88 will be silent, and the display will say “None”. This provides an excellent way to configure a large MIDI system: you can quickly select programs for all instruments “downstream” of the PC88, on any MIDI channels.

To leave MIDI Receive mode, press any of the buttons in the top row of **Zone Parameters** to return to editing your setup. Or, press **Internal Voices** followed by a Sound Select button to return to Internal Voices mode. If you came from a Setup, and you changed the program on a channel assigned to a Zone in that Setup, the Setup will now contain the new program in that Zone — otherwise, it will be just as you left it.

General MIDI Considerations



With the VGM board installed, the PC88 can be configured to receive in General MIDI mode, or it can receive in a mixed mode, taking advantage of all of its sounds.

General MIDI (“GM”) mode is turned on using the General MIDI parameter, under the **Global** menu. It can also be turned on from an external MIDI device that sends the “General MIDI On” message, which is defined in the MIDI Specification. When GM mode is first turned on, all Receive channels are set to Bank 1. (The program number remains the same). In this mode, since all channels are drawing from the VGM board’s sounds, the maximum polyphony of the PC88 is 32 voices, allocated dynamically across the 16 channels.

Channel 10 is the exception: it goes into “drum” mode as the General MIDI spec requires, and is set to “Standard GM Set”. The General MIDI spec only specifies one drum set, but the “GS” instruments from Roland, which contain all GM instruments plus some additional ones, have six other useful drum sets. The PC88 includes equivalent sets. These can be called up in General MIDI mode on Channel 10 (only) with Program Change commands, as follows:

0-8	Standard
9-15	Room
16-23	Power
24	Electric
25-31	Synth
32-39	Jazz
40-47	Brush
48-55	Orchestra

All of the channels are “locked” into the GM bank. If you need a voice from another bank (or you want to get 64-voice polyphony), you will have to go to the **Global** menu and turn General MIDI off.

The General MIDI drum sets are available when you’re not in General MIDI mode, and can be assigned to any channel. You’ll find them in Bank 2, with these program numbers:

67	Standard
68	Room
69	Power
70	Electric
71	Synth
72	Brush
73	Orchestra

Keep going, and you will find some more drum sets in this Bank, which are not related to General MIDI, and are mapped quite differently:

74	Clean
75	Ambient
76	Synth

And there are a couple of more percussion sets, which have totally different maps:

62	Orchestra Percussion
63	Latin Percussion

A complete list of all of the drum sounds, as well as some hints on how to use some of them, is in Appendix C.

Note that when General MIDI mode is off, you can have different drum sets on different channels — as many as you want, if that’s the sort of thing you like to do.