Chapter 10
PC88 in the Real World

The PC88 offers you tremendous variety and flexibility in many settings. To get you thinking, here are four situations that a PC88 might find itself in, and how you might configure it in each.

At a Gig

You're using the PC88 all by itself. Maybe you've got a singer and a bass player, or maybe they didn't show up.

- Arrange your setups for the night in the order you'll need them, and use one Switch Pedal in every Setup for "Setup Increment". When you need more than one Setup in a tune, set the Assignable Buttons to "Goto Setup" with the appropriate Setup numbers so you can move quickly. (Don't forget to set the Buttons in those Setups so you can get back!)
- If you have the VGM board, create some 64-Voice Setups (using Banks 0 and 3, with alternate note maps) for Piano or Guitar solos. Use lots of reverb, and make sure the two processors are the same.
- Create some Setups in which one or more Zones are muted when the Setup is called, and then un-mute them to broaden the sound as you play.
- Design some Setups in which you crossfade between two Zones using one of the Pedals (assign it to MIDI Controller #7, and set the Scaling on one Zone to -100%). If one of the two Zones uses a sound from the Internal Voices bank, and the other uses a VGM sound, set up the two effects processors very differently, so not only the sound but the whole space around it changes.
- Have a drummer available at any time. Set the On Ctrl for SwitchPdl 2 to Seq Start, and the Off Ctrl to Seq Stop. Set the SwType to Toggle. Make sure in the **Global** menu that Clock is set to Internal and Clock Transmit is set to Seq. Connect a reliable drum machine to the PC88's MIDI Out jack, and set it to receive external sync. When you're ready for the drums, press the pedal. When you want to go ahead without them, press it again. Another chorus with the drums, press it again, and the drum machine resets and starts at the top.

In the Recording Studio

The PC88 is the controller for a MIDI rig with several instrument modules. You've got to be able to get to the right sounds quickly, without fumbling for them, and you've got to sound great.

- Set the destination on as many channels as you need to cover all the outboard synths to "MIDI", and set the rest to "Local". Create Setups that have one Zone addressing a Local channel, and the others addressing each of the outboard synths.
- If the modules use non-standard numbering for their patches, set the Program Number Display on each Zone accordingly: a Yamaha synth will like 1-128, while a Roland may want 11-88. If one of the modules is a K1000 or K2000, use those modes for Bank Select. If one of the modules follows the General MIDI spec, set the Program Name Display to General MIDI, and you won't have to guess where the sounds on it are.
- Use the physical controllers in all of the Zones to bring individual synths in and out of the mix: the four sliders, for example, can each be assigned to MIDI Volume in a different Zone. Or assign one slider to control Volume in the four Zones, but scale it differently so the mix changes as you crescendo and decrescendo. Use the crossfading power (opposite scalings) of the controllers to blend sounds and move between different ones smoothly.
- When you're driving a screaming electric guitar patch on an external patch, set the pitchbend range on the Zone driving the guitar synth to 12 semitones. The message will go out over MIDI as a Registered Parameter and set the guitar synth's range. Then set Wheel 1

Up to Pitch Up, with a Scaling of 16%, and Wheel 1 Down to Pitch Down, with a Scaling of 100%. The pitchbend wheel will now "bend" strings in the up direction as far as a whole step, and be a "whammy bar" in the down direction, dropping down as low as an octave.

- Use aftertouch (mono pressure) with a Cosine curve, a negative offset, and a high scaling factor so you can bring in accenting voices — like high strings or brass — in some Zones, but only by pushing on the keys really hard. Use aftertouch at the same time to control vibrato on the main voice, and you can make the sound change radically with a little finger action.

In the MIDI Composing Studio

The PC88 is the master controller for a vast array of synthesizers and signal processors, all going through a central computer running sophisticated sequencing software through a multiport interface.

- Put the PC88 on its own MIDI In cable. Turn MIDI Receive On on all 16 channels, and turn Local Control off. This will make the PC88 a slave to the computer, and anything you play on the keyboard will be routed through the computer before you hear it.
- If you have the VGM board, set some of the channels to Bank 1 (General MIDI), and some to the Expansion Voices (Bank 2) to take advantage of all of the sounds the instrument has to offer without having to go searching for them.
- Most of the time, you only need to use one Zone: the computer will normally channelize all of the MIDI data, so there's no advantage in sending data on different channels. Assign all of the physical controllers to different, useful MIDI Controllers, which will give you maximum flexibility when laying tracks.
- If the sequencer will pass multiple MIDI channels, then use multiple Zones, either splitting or layering them. Assign some of your physical controllers to MIDI signal processors, so that they can adjust parameters like delay time or feedback, reverb decay time, flanging, filtering, or pitch shift.
- Set a Switch pedal to Stop and Continue the sequencer (don't set it to Start, or you'll always find yourself back at the beginning) and the use the PC88's Internal clock, with tempo assigned to a slider, to control the sequencer's tempo.
- If you have synthesizers that do special things when they are in mono mode (for example, Yamaha DX and TX-series synths let you do true legato, Oberheim Matrix synths put all the voices in unison for a very fat sound, and Casio CZ synths go into a multi-channel, single-note mode), then set up a button with Controller 126 (Mono On) as the On Controller (the value doesn't matter, but it shouldn't be zero) and Controller 127 (Poly On) as the Off Controller, and you can switch back and forth between mono and poly mode instantaneously.

In the Home

- Use the Internal Voices for piano practice and for family sings. The keyboard feel is the same as an acoustic piano — your teacher should have no objection to you practicing on the PC88. And you can practice any hour of the day or night with headphones.
- Design thick Setups, with multiple processors and keyboard splits to impress your friends, and pretend you're on stage at the Royal Albert Hall.
- Put the PC88 in General MIDI mode, and play back GM files on floppy disk or CD-ROM from your "multimedia" computer. Hear what the files are *really* supposed to sound like (as opposed to what they sound like with some two-bit sound card), and use a sequencer to edit them, adding your own orchestrations and other personal touches. Get an accompaniment program, which can play rhythm and background tracks while you solo on top, changing from sax to trumpet to flute to bagpipe with each chorus.
- Play along with your favorite records. If they're out of tune, adjust the pitch on the PC88 with the Tuning parameter.
- Put on headphones, get the Arpeggiator going, and start fooling around. You could induce an Alpha state before you know it. Above all, have fun!