

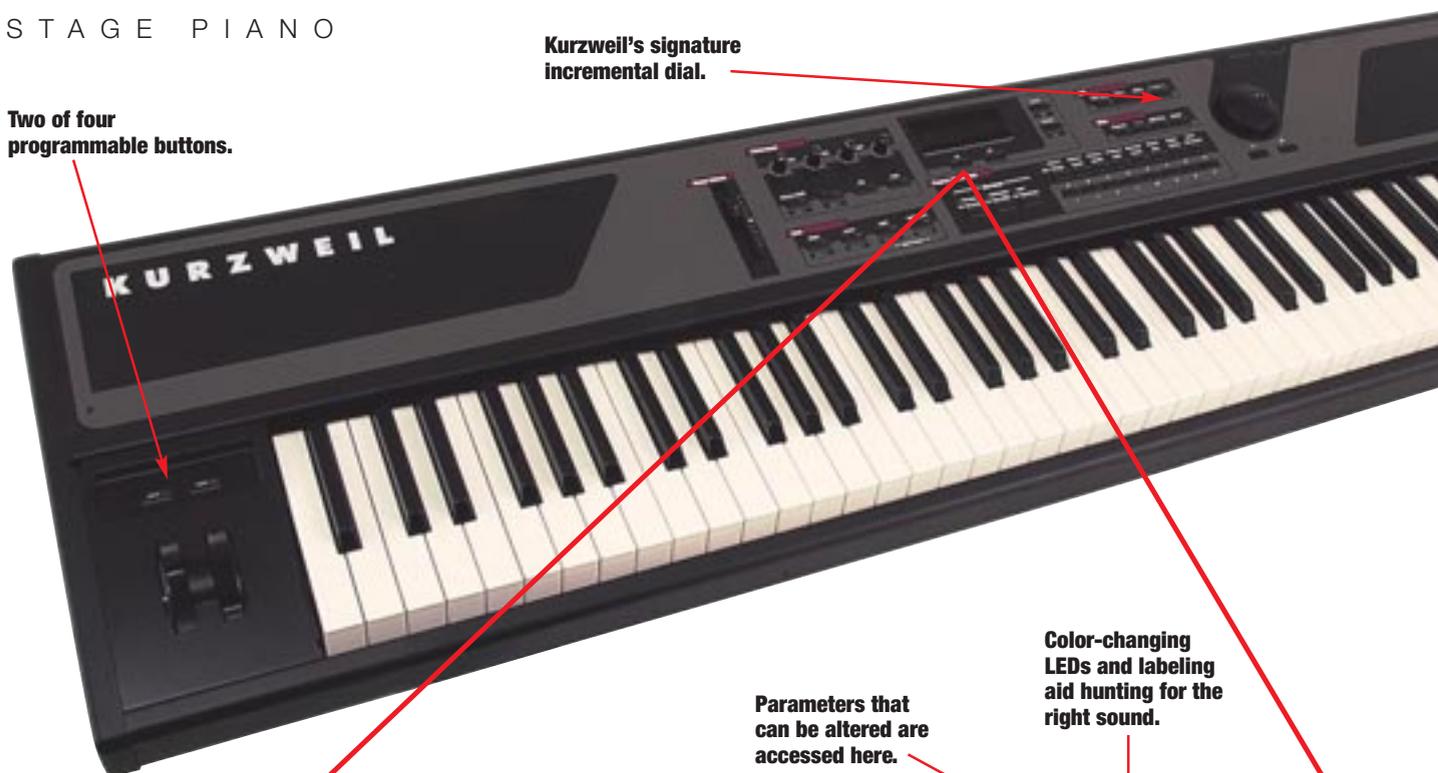
# KEYBOARD Reports

## Kurzweil PC1X

STAGE PIANO

Two of four programmable buttons.

Kurzweil's signature incremental dial.

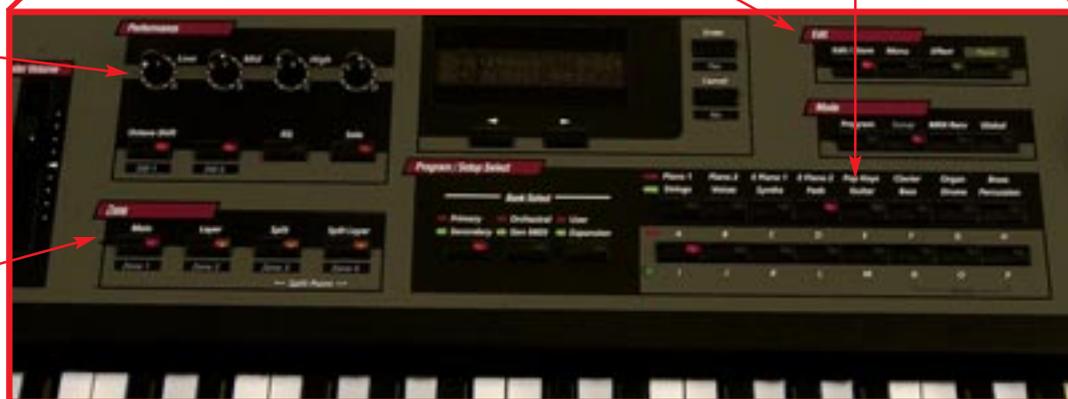


Color-changing LEDs and labeling aid hunting for the right sound.

Parameters that can be altered are accessed here.

Tweak sound and FX parameters in real time with these, including the great-sounding 3-band EQ.

In Setup mode, these select and mute zones. In Program mode, they do quick splits and layers.



by Stephen Fortner

In a typical two-tier gig rig, the bottom keyboard is weighted and covers piano and meat-and-potatoes sounds, leaving the smaller top keyboard to deal with synth comps and leads, orchestral stuff, and other timbres for which I won't attempt a food metaphor. For gigs where budget, space, or cartage issues

make bringing just one axe attractive, it's nice to have a "bottom" board that can do some "toppish" things well. This is one reason Kurzweil's PC2X has long been a respected stage workhorse. Now comes the PC1X, essentially a streamlined PC2X at a more aggressive price. Does it belong on a tier of your keyboard stand?

### Overview

As on the PC2X, the nerve center is Setup mode, used for playing the keyboard multitimbrally and as a master controller. A Setup can include up to four Zones, each of which consists of an internal and/or external sound program as well as an independent set of MIDI control assignments. Editing is geared towards creating your own Setups, and towards altering the

Stage piano with synthesizer and controller features.

**Pros:** Excellent sounds, especially the pianos. Orchestral block standard. Balanced 24-bit outputs. Great bang for the buck.

**Cons:** Very few voice parameters can be edited and saved. No digital output. Knobs seem fragile, especially the LCD contrast pot on rear.

**Kurzweil, 253-589-3200, [www.kurzweilmusicsystems.com](http://www.kurzweilmusicsystems.com)**

**\$1,495**



The Thru-Out switch turns the MIDI thru into a second MIDI out, which is useful when using the keyboard as a master controller. There's no breath control input, but you can plug in an optional ribbon controller. The outs are 24-bit and balanced, a rare nicety at this price.

effects. Within a single Program, you can edit a few parameters that happen to be factory-assigned to a physical controller (these often include filter and envelope settings), but you can't go as deep as changing waveforms, filter types, or other aspects taken for granted on fully-programmable synths.

Now for the main differences: The PC1X has four knobs instead of sliders, a simplified button layout, and includes the orchestral expansion for the PC2X, but lacks its KB3 organ-modeling mode, digital audio output, numeric keypad, and 128-voice polyphony expansion capability.

## Sounds

If you know and love the PC2 sounds, you'll be right at home. Evaluating the PC1X with fresher ears? Here are some standouts.

The piano bank is based on Kurzweil's well-known triple-strike sample, which still stands up next to the best pianos from the current crop of ROMpler/workstations. At this level of quality, piano sounds are somewhat a matter of taste, but I'm comfortable saying that to get indisputably better, one would have to use something quite specialized, such as the Generalmusic ProMega-3 or a GigaStudio library. The electric pianos are good — even very good — with especially detailed midrange. They're a bit polite at the extreme ranges of the keyboard, save for the Wurlies,

which have killer low-end bark. My review unit did not include the "Classic Keys" expansion, which I'm told is partly based on the K2600's ROM4 block (reviewed Mar. '03), and promises superior electric pianos to what's already onboard.

With the orchestral option now standard, there are more solo instruments in addition to the base ROM's ensemble-oriented brass and strings. Nailing every articulation that real symphonic players employ is the job of huge libraries these days, and getting ideal results from them requires a degree of expertise in how those players think. What stands out about the PC1X's orchestral sounds is not just their pristine, natural character, but their playability by the rest of us. You can think like a keyboardist and yet convincingly cop the vibe of, say, a cello, oboe, or any type of section. Isn't that one of the major points of synthesizers?

Spoiled by KB3 mode and dedicated clones, I was happy to discover something that increased the realism of the PC1X's ROM-based organs. When a B3 sound is dialed up, the effects engine gives you a dead-on Hammond-style chorus, and an average rotary emulation respectively controlled by the SW2 button and mod wheel. But wait. Engaging the SW4 button brings in an entirely *different* Leslie effect, identified as "VAST Rotary" in the manual, with the wheel still governing speed. This one is *way* ballsier, and has clear and distinct motion differences between bass and treble rotors. Setting the FX

bus mixes completely dry left it intact, showing it to be built right into the sound program itself, not the effects. This means you can't get in and tweak its parameters, but it sounds damned good as-is.

Analog-style synth programs are remarkably smooth and creamy, with hardly any artifacts, and there's no unwanted noise when you sweep knobs C and D, which are most often mapped to the cutoff and resonance of the keyboard's real resonant filters. "Solar Lead" continues to be one of my favorite solo patches ever, great for stylings from Chick Corea to P-Funk, and the thick pad "Dream Catcher" shines on like a crazy cubic zirconium.

## Effects

The dual-engine onboard processor is a great balance of simplicity and sound that would be impressive in a home studio-priced outboard unit, let alone a keyboard. FX Bus A is mainly for "effecty" effects; FX-B is dedicated to 30 high-quality reverbs. Routing options are kept simple. Bus A can be chained into B serially, but can splits and layers have different effects on different sounds? Yes, subject to the limitation that there are only two discrete effects to work with. Since the wet/dry mixes for each bus are just MIDI controls, and since a Setup has separate control assignments per zone, that bass-piano split could enjoy a squishy compressor down low and a nice

airy reverb up top. Of course, even in a maxed-out Setup with four parts, each Zone can partake of however much of effect A, B, or both that it wants.

It's not really an effect, but for space reasons, I'll mention the arpeggiator here. Accessible from Setup mode, I found it useful on drum kit sounds to create basic rhythms, and great for retro-hooks like the synth intro to Chaka Khan's "Ain't Nobody." Most programs use SW3 to turn it on and off.

### In Use

The feel is perceptibly lighter than the PC2X (as well as couple of other staples I compared it to: a Yamaha S90 and Roland A90), but more weighted than the 76-key versions of the PC2 and K2600. I could see primarily pianistic players perhaps pondering [*That burns your alliteration quota for 2004.* —Ed.] if it's a bit *too* light. In a rock or pop band context, I found it to be ideal, offering all the dynamics I could want for piano and other percussive sounds, yet with a snappy enough response that my show-off synth riffs weren't hindered at all. No sore fingers at the end of the night, either, a problem I've often

### Vital Stats

|                              |  |
|------------------------------|--|
| <b>Synthesis type</b>        | PCM sample-playback plus subtractive   |
| <b>Polyphony</b>             | 64 voices  |
| <b>Multitimbral parts</b>    | 16   |
| <b>Keyboard</b>              | 88 keys, weighted action, velocity and aftertouch  |
| <b>Controllers</b>           | pitch and mod wheels, 4 assignable knobs, 4 assignable buttons   |
| <b>Display</b>               | 2 lines x 20 character LCD   |
| <b>Internal programs</b>     | 256 base, 128 orchestral, 128 General MIDI   |
| <b>Internal setups</b>       | 64   |
| <b>User memory locations</b> | 128 Programs, 128 Setups   |
| <b>Wave ROM</b>              | 32MB   |
| <b>Effects</b>               | two-bus system derived from KDFX engine  |
| <b>Bus A</b>                 | over 150 types, incl. dynamics, distortion, rotary simulation, tap delay, chorus, phaser, etc.   |
| <b>Bus B</b>                 | 30 reverb types  |
| <b>Data storage</b>          | sys-ex   |
| <b>Audio outputs</b>         | L/R 1/4" balanced TRS, 1/4" stereo headphone out   |
| <b>MIDI I/O</b>              | in, out, switchable thru/out   |
| <b>Expansion options</b>     | PCR-2 16MB ROM (Classic Keys)  |
| <b>Optional accessories</b>  | ribbon controller, FS-1 switch pedal, KFP-1 piano-type sustain pedal, KFP-2M dual piano-type pedal, CC-1 continuous pedal, PC-MDS music rack |
| <b>Dimensions/weight</b>     | W 54.3" x D 14" x H 4.3"; 50 lbs.  |

encountered when covering many different kinds of parts on a weighted keyboard. It *was* sluggish when I tried rapid-fire Hammond key-slapping a la “Fly Like an Eagle,” but less so than a heavier 88’s would’ve been.

The four Zone buttons access a performance feature that existed on the PC2, but it’s so darned useful it bears repeating. AutoSplit is a procedure for creating multitimbral setups on the fly, and here’s how it works: Left to right, the buttons are labeled Main, Layer, Split, and Split Layer. Let’s say you’re playing piano in Program mode and want to add strings. Hit Layer, select a sound, and *voilà*. Uh-oh! Your bass player

broke a string and the next song is being counted off! Press Split, call up a bass sound, and the keyboard will now play it up to G#3 (the default split point, and yes, you can change it), while leaving the piano-string layer intact above that point. Split Layer is for adding a second program to whatever’s in the lower range of the keyboard. A very nice touch is that whichever of the four zones are active or muted, single-clicking on a button will select that Zone for the purpose of assigning a sound; pressing it again will then make the Zone active if it was muted, or vice-versa, with an inset LED showing that

status. Of course, results can be saved as a User Setup, and to get outside the format of a two-range split with up to two layers per range, you’ll have to create or edit one in the more usual way. Having often done exactly this on my K2600 between songs, or *during* songs as I held a pad on another keyboard, I can assure you AutoSplit is comfortably superior when under the gun.

Overlap — my word for the ability to sustain notes, change sounds, and have the old notes continue speaking until released — is silky smooth, save for very subtle bumps heard when the new sound uses markedly different effects. In Program mode, I could hold a pad with one hand, switch to a piano with the other, and solo away with the pad still there. Trying a similar move in Setup mode, the button I pressed flashed, and the old Setup remained active across the whole keyboard until *all* notes were released. Whichever way you like more, the ability to go on a sound hunt without getting cut off by your button-presses is a vital tool for hitting curve balls thrown at you during a set, especially if your “bottom” keyboard is your *only* keyboard.

A word of caution about handling: Though knobs on anything should never bear strong downward pressure, the PC1X’s seem more delicate than average. In particular, the LCD contrast shaft protrudes farther than anything else on the rear panel, and resting the keyboard on its backside will put a lot of weight on that little knob, possibly damaging the circuit board on which it’s mounted. Recessing it or putting a protective flange near it would be a good design move.

### Conclusions

The PC1X is basic and yet thoroughly professional. Kurzweil has chosen to trim a few features instead of giving the user fewer (or lesser-quality) sounds, and in my opinion they chose exactly the ones that a broad segment of cost-conscious and busy keyboardists are least likely to miss. As a versatile “bottom keyboard,” it makes few compromises. However, it also has loads of “top keyboard” sound and application not necessarily found on comparable stage pianos. The closest competitor with similar sonic diversity and quality is likely the Yamaha S90, which is more programmable, more expandable, and more expensive. If you’re looking to plug in and sound great in a hurry, the PC1X’s value can’t be overstated. ■

*Steve Fortner is a keyboardist, philosophy professor, producer, and music journalist working in Los Angeles and Santa Barbara, California.*