# P3 Demo1 - a Quickstart Guide to the deeper functionality

This document accompanies the P3Demo1.syx bank in the Yahoo Group Files section. Load this into your P3 (first backing up any data present) and ensure you boot in "6x8 bank" mode (hold Page during power up). Then go through the examples given here. Hopefully they are of some value to both new and experienced owners.

For the purposes of these examples, the P3 will (mostly) be setup as shown below. Some banks *may* deviate from this; the P3 can have different channel assignments per bank, which is very useful.

## P3 Tracks

1. Mono Bass Synth
2. Poly Piano
3. Poly String
4. Poly Organ
5. As track 2
6. As track 4
7. Ch16 (or any unused channel)
8. Ch16 (or any unused channel)

## Synth MIDI Channels

1. Bass (mono)
2. Piano or Electric Piano (poly)
3. Strings (poly)
4. Organ (poly)

If you connected gear as above, let's proceed. I intend to cover a variety of simple examples such as polyrythms, auto track muting and selection, part chains, complex playlists and some cunning use of Aux events. Inevitably, there will be some wildness.

NB I have avoided using lots of specifically ‘synth’ sounds for obvious reasons. Similarly I would usually throw in lots of MIDI controller sequencing but as this varies from synth to synth I have stuck to just a few common CCs like mod wheel, volume, sustain etc. These examples serve only as a starting point and to illustrate some of the tips I've used in the User Manual. If I started again, I'd probably use an entirely different set. This is a Good Thing.

**Bank1**

Starts with a simple bass and encourages you to explore Force To Scale. After some variations, we go into a prepared chord sequence, auto track muting etc. Hit run and enjoy….

- Part 1 has one track active, playing a subtly varying bassline (due to some randomness - look at the aux events by entering pattern edit and see what's going on). FTS is off. After listening for a while, turn the lower knob, just above track 1. Hear how extra notes are added to the sequence. Some sound a little unusual.
- Select Part 2 and the notes are forced to scale. Activate track 8 and hear the pattern change for as long as you keep track 8 active. A good performance trick, I reckon. You've probably seen how the original bass pattern has tie set (randomly) active on some steps - so a sliding legato bass will really show this off. You may also have noted that several steps also have a random value for their velocity and length giving an unexpected feel to some parts of the pattern whilst preserving others. When track 8 is active, turn its lower knob. Turn it to the mid point (about 70 on the display) and hear the sequence length change. Turn it to 90 and hear the length change again. Finally turn it all the way round (127) to hear the full 16 steps. I built in these specific lengths and no others to show how the knobs can be used to give precise control. Take a look how track 8 is changing the values of our bassline using the 'swap all' event.
- Now select Part3. Watch the pretty lights. Each of the parts used has its own playlists, transposes, global bar settings etc. Try playing with them individually. Part 3 employs a pattern in track 7 that sets the part chain length. If I was trying to be a smartass I could even vary this length each time the track is selected but we won't go into that here. Try pushing the lower mode button until you see the gbar countdown - then you can predict when part 5 will switch to part 6. Did you hear how the strings in part 5 got gradually quieter? This is our first use of the accumulators. Take a look at how it was done.
- That's it for Bank 1.

**Bank2**

A piano and organ piece using the accumulators

- Part 1 is a simple piano polyrhythm with two patterns of uneven length looping. At the same time note accumulators are doing their magic - one going up and the other going down. The velocity accumulator is changing the velocities for the 12 step pattern that is dropping in pitch.
- Listen how the organ in track 4 gradually plays more and more

notes. Check out the aux events that are incrementing Aux D and how Aux D contains mask events. As I placed the mask event in row D itself, I have set the xDacD to on so that the values in Aux D that govern the muting are *not* dynamically changed. I could, of course, have placed the mute events in a different row but that wouldn't have given me an excuse to mention xDacD. Experiment with the Aux D offset values, the individual mute step values and the accumulator behaviour. After a long time of silence, the organ will start over and gradually the notes will be taken out again.

**Bank3**

Morphing and some use of the global bar, plus creating a basic MIDI mixer

- Listen to Part1. Track 1 has random trills (not too often - the random value is quite low for each step) and as you turn the lower knob, it morphs into an alternate set of note values. Track 2 morphs automatically into the same notes as track 1 by means of the D accumulator gradually exposing "get all" events. It doesn't stay morphed though because that's not how the accumulator behaviour was set in this case. Track 2 uses the playlist function to transpose itself up an octave compared to the bass it is mirroring. When you've spent some time with the P3, return to this example and see if you can make the auto-morph remain as a "ghost copy" for the duration of the part. Track 4 (organ) plays a pattern that gets gradually longer - up to 16 steps.
- When you activate Part 2, it unmutes track 3 which contains a little 5 step pattern that turns on the sustain for the piano track and adds mod wheel too (for no very good reason, I have to admit). Occasionally, you'll notice that the timbebase of the bassline changes randomly. For clarity we dispense with the organ.
- Part 3 uses a shorter global bar with the various quirky sequences locked to it although the organ track runs to its own length in brownian motion. Try varying the gbar length and see what it does. What's that? Trouble with instrument levels? Try turning the knobs immediately above tracks 6,7 and 8 for your own MIDI mixer. I know, I know, I'm bad.

**Bank4**

Some more randomness and accumulation plus interactive use of the arpeggiator

- Part 1 features our piano track again. Turn the knob above track 2 to directly set the length of the pattern. The piano part uses a little shuffle and some auxilliary notes to create simple chords. Turn the knob directly above track 3 (referred to as the lower track knob cos,

well, there’s one above it) to set the pitch of the sustained string note. The upper track knob for the same track sets the length of the sustained notes. Turn the track off when you're fed up of it. Track 4 has an organ part where one note in the pattern changes in a weird but predictable way. Another note changes too, but less predictably.

- Select Part 2. This has only our organ audible but track 2 remains active ready for you to do something with it. Enter edit for this track - Hold Edit and the track key simultaneously as I'm sure you remember. Now enter arpeggio record using Func and Record. Play some notes via a MIDI keyboard attached to the MIDI input. Experiment with the "reset on new group" setting. The arpeggio is doing strange things occasionally, right? This is because it is taking some aux note values and some note repeats info from another track (track 8 - it doesn't matter that it is muted) and *that* track is running in a random direction. So you never know which of a programmed set of values you'll get. Edit the pattern in track 8 and play with its tbase and direction to learn more about this. Can you think why I used the particular aux events in track 8 that I did, given that it's only their value that's used?
- Finally, activate track 7. This track has a curious knack of muting itself on the very first step. If you practise activating it at various points in the playback, it adds a burst of notes of increasing velocity but always guarantees to stop right after reaching the last step. See how the aux notes are still added to the equation? This could be more useful for drums and stuff but you can maybe think of other reasons it is cool: setting up program changes, sending specific MIDI controllers etc. etc.

**Bank5**

Very simple piece using long playlists and adds variations in tracks 5-8.

- Part1 is, basically, me noodling. The variations aren't complicated because even I accept you can overdo it sometimes. It helps if your organ patch adds leslie using the mod wheel. All the remaining parts are indulgent uses of FTS.

**Bank6**

A complete, interactive performance piece with all tracks running, multiple parts defined and so on.

- Before starting, ensure track 5 is not active. Part 1 features a simple piano motif that repeats in octave increments - up then back again. Turn the lower track knob to negate the effects of the note accumulator - different notes are protected from accumulation at different positions on the knob. On track 3 the string part is pretty plain until you turn the lower track knob to its mid point (70). Then

the pitch starts to rise. Turn the knob further - to 80 - and hear the pitch now start to drop. At other values the pitch doesn't change.

- Now activate track 5 and let it do its thing. It all gets quite manic but then this *is* the last example bank... You should tinker with everything here and make it even wilder and stranger. You know you want to.

I hope these banks show at least some of the more elaborate stuff your P3 can do... drop me a line if there are any examples you don't understand or any I didn't get quite right. Feel free to send me cunning banks of your own cos if there's one thing for definite, it's that I keep discovering new stuff all the time. The more I learn, the happier I am.

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