

How To Fix a 'Dead' P3 Sequencer CPU

In a small number of cases, the CPU used in P3 has become unable to boot, usually after a firmware update.

This has been traced to a problem with the internal configuration settings used by the CPU to determine whether it should boot a user installed program or the factory bootloader utility.

The symptoms of a 'brain dead' P3 are that the unit fails to show any activity after power-on, except for some LEDs coming on.

What has happened is that the factory bootloader is running instead of the P3 custom bootloader.

The problem can be resolved by using the MIDIOx utility on a PC to send the the factory bootloader a 'start application' command.

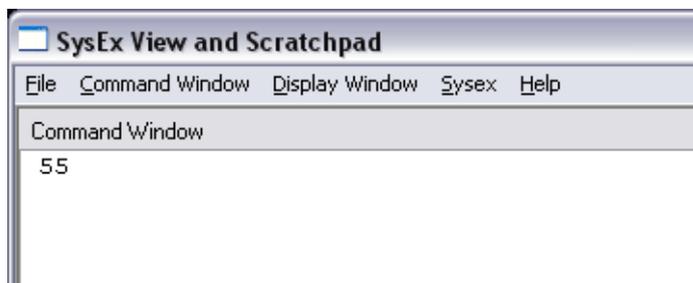
This will invoke the P3 bootloader, which can then be used to install the updated P3 bootloader which will fix the CPU configuration bytes.

You will need:

A PC with a MIDI interface

The MIDIOx program (download free from www.midiox.com)

1. Connect the MIDI output from the PC to the P3.
2. Run MIDIOx
3. Open the Sysex window in MIDIOx by selecting "SysEx..." from the "View" menu
4. In the SysEx View, Command Window, type the number "55" as shown:



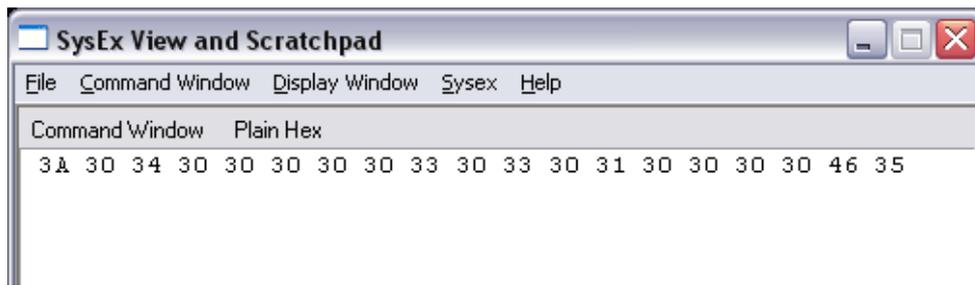
5. Select the "Send Sysex" function from the "Command Window" menu.

This will send the byte "55" to your P3, which should synchronise the factory bootloader.

6. Copy the following text to your clipboard, then paste it into the SysEx Command Window:

```
3A 30 34 30 30 30 30 30 33 30 33 30 31 30 30 30 30 46 35
```

When pasted, the display should look like this:



7. While holding the **FUNC** and **PAGE** keys on the P3, Select the “Send Sysex” function from the “Command Window” menu.

This will send the ‘start application’ instruction to the factory bootloader, which should then pass control to the P3 bootloader.

Since you are holding the Func and Page keys, the P3 bootloader will enter firmware update mode.

If the latest P3 bootloader v3.3 is installed, it should correct any corruption of the CPU configuration, and P3 will be able to boot normally.

If you have an older version of the bootloader installed:

8. Select the “flash” option using the **F3** soft-key.

9. Upload the v3.3 P3 bootloader patch.

This is available from the Sequentix.com downloads page, or Yahoo files, in MID or SYX format.

Once the bootloader patch has been applied, the P3 bootloader will fix the damaged configuration bytes. You can then re-install the P3 main program following the normal firmware upgrade process.

If you have any problems or questions about this operation, please email contact@sequentix.com