The I-CubeX firmware chip

The new firmware contains bug fixes and other improvements. All current I-CubeX customers should update their I-CubeX Digitizer with the new firmware and new editor software. We have posted the software to our web page download area at: http://www.infusionsystems.com. If you don't have access to the Web, please contact us immediately and we'll send you the software.

Installing the new firmware chip

1) Unplug all connectors. (POWER, sensor, actuator, MIDI IN and OUT)
2) Remove the rubber feet (4) at the bottom of the I-CubeX Digitizer. Unscrew the four screws with a small (#6) Phillips screwdriver.
3) With the lid still on, turn the box over so it's sitting (top up) on a surface. Hold the sensor INPUTS 1-32 plug down and lift the case away to reveal the top of the circuit board.
4) 'Ground' yourself by touching the heat sink (black metal with ten fins - see Figure 1.) This will reduce the chance of static discharge that can damage the circuitry.
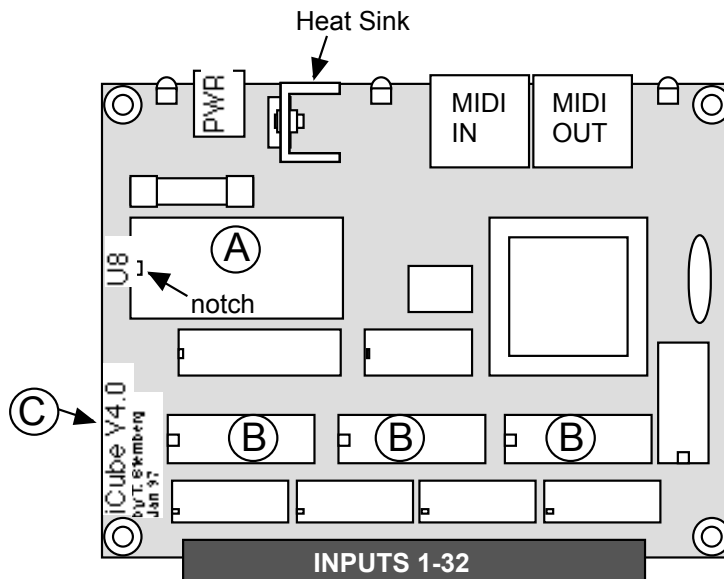5) Locate the 28-pin firmware chip ('A' in Figure 1.), with the "I-CubeX firmware … " label.

Figure 1. The I-CubeX Digitizer's circuit board, as seen from above.
(A) Firmware chip ("I-CubeX firmware … ")
(B) Analog/Digital Converter chips ("TLC2534")
(C) Circuit Board Version Number, Date

6) Carefully remove the chip by prying it up with a flathead (slot) screwdriver, alternating between opposite ends as shown in Figure 2. Be careful not to bend the pins by prying one end a lot farther than the other.
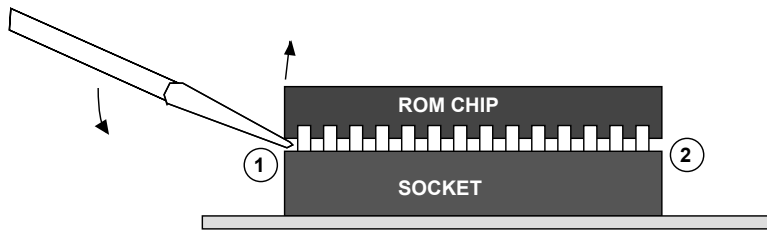

Figure 2. Prying the firmware chip out of the socket with a flat screwdriver by alternating sides (see Step 6)

7) Place the new I-CubeX firmware chip into the empty socket, making sure that its notch faces the same direction as the "U8" label on the circuit board. Make sure that each chip pin is set in its own socket and press the chip into place. It's OK if there's a gap between the chip and the socket.
8) Put the I-CubeX Digitizer casing back together, making sure the three LED's are properly placed in holes in the case. They may need to be bent forward gently. Put the 4 screws back in, followed by the rubber feet.
9) To test the success of the installation, plug the power supply into the I-CubeX Digitizer, while observing the green MIDI Out LED (located to the left of the MIDI Out port). It should blink either once (indicating Host mode) or twice (indicating Stand-Alone mode) if the installation was successful. Yay.

Troubleshooting the firmware chip installation

If after power up the green LED is continuously lit and/or the I-CubeX Digitizer doesn't respond properly to MIDI data or sensor input, there may be a problem with the installation. Check that:
- the I-CubeX firmware chip is properly installed, with all its pins snugly in the socket
- the chip notch faces the "U8" label on the circuit board.
- all connections are secure, and MIDI IN and MIDI OUT plugs are correct

If any problems persist, refer to the I-CubeX supporting documentation for further troubleshooting assistance. The manual is located in the Help folder where you installed the I-CubeX software(*.txt version is also included).

Installing the software

The I-CubeX software is available online at: http://www.infusionsystems.com
If you don't have access to the Web, please contact us immediately and we'll send you the software.

The I-CubeX manual is available in Adobe(tm) .pdf format for both Mac and PC. This is an electronic version of the printed manual. It is available on our website under *Macintosh, I-CubeX Manual.*

You will need an unzip program (such as WinZip, ZipIt or StuffIt) to uncompress the file. You'll also need the Adobe Acrobat Reader(tm) to view the manual. The Adobe Acrobat Reader(tm) can be downloaded from http://www.adobe.com.

Macintosh

A) To download and install software from the website:

1) Next to *Standalone I-CubeX editor*, click **Download**. This will download a self-extracting archive
2) If you'd like to work on some tutorials, click **Download** under/next to *Tutorials for I-CubeX.*

PC (Win95/98/2000)

A) To download and install software from the website:

1) Next to *Standalone I-CubeX editor*, click on **Download.** This will download a .zip file as well as the I-CubeX manual in Adobe's .PDF format.

B) Uninstalling I-CubeX
If you wish to remove the I-CubeX editor from your PC, run Add/Remove program from the Start menu. After removing the I-CubeX editor, please delete the directory where it was installed.