TROUBLESHOOTING THE MIDI FILE INSTALLATION PROCESS

These files are in Standard MIDI File (.MID) format, therefore you will need a software program or hardware sequencer, such as one built into a keyboard, or a stand alone sequencer or MIDI file player. The files contain system exclusive data, and therefore, your software or hardware must be able to properly send sysex messages.

We have tested the following software applications and know that they work correctly for sending sysex to the PC2. We have also tested many software applications that do not handle sysex correctly, so for this reason we strongly recommend using one of the software programs that we have listed:

PC PLATFORM:

Shareware/Freeware:

* Windows Media Player. You need to have version 5 or later of Media Player - older versions will not work correctly. Windows Media Player can be downloaded at http://www.microsoft.com/windows/windowsmedia/en/Download/default.asp

If you have not used Media Player before to control an external MIDI device, you may need to configure it. Go to the Control Panel (Start - Settings - Control Panel). From Control Panel, select Multimedia, then Midi. Now you can choose your MIDI output instrument.

Please note that Alesis Freeloader, which we recommend for the Mac, is buggy in the PC version and will NOT work correctly.

Commercial software:

* Logic (from EMAGIC)

We do NOT recommend using Cakewalk or Sonar, as these programs have problems with packets, as mentioned below.

MACINTOSH PLATFORM:

Shareware/Freeware:

* MIDIGraphy 1.4.3 (older versions tend to crash w/OS 8 and 9), can be downloaded at http://member.nifty.ne.jp/mmaeda/e/macos.html

* Alesis Freeloader can be downloaded at http://www.alesis.com/downloads/software/freeloader

As of this writing, Freeloader appears to work only with older Macs with a serial port - it does not support USB MIDI interfaces. If you have a USB MIDI interface, you should use MIDIGraphy. If you are using Freeloader, you need to select "Any File Type" in the Edit Menu, instead of "MIDI Files" (For some reason, Freeloader does not recognize our .MID files when the "MIDI Files" option is selected.)

MIDIGraphy also normally supports only serial ports. But if you use OMS and have it configured for a USB interface, you can select OMS as the control with MIDI Port parameter in the MIDI menu of MIDIGraphy and it will use the USB interface.

Please note that Windows Media Player, which we recommend for the PC, is buggy in the Mac version and does NOT work.

Commercial software:

* Performer (from Mark of the Unicorn)
* Logic (from EMAGIC)

TROUBLESHOOTING TIPS FOR UPDATING PROBLEMS

Because a number of people have reported having problems when trying to update their unit, we've done quite a bit of testing, and studying PC2 upgrading process. Because of the wide variety of MIDI interfaces, MIDI software, and computer configurations, it is impossible for us to test all possibilities. However, in virtually all cases where we have found problems, they were tied to software problems, interface/driver issues, or configuration (within the computer) problems.

PC2 ISSUES

* The PC2 itself is very tolerant of timing. You can throw almost anything at it, and it will come through. It's got enough processing power to receive MIDI and use it to control a 64-voice synth in real time while managing the user interface at the same time. When the boot block is receiving data, all this processing power is available to handle the data being received. Needless to say, there is horsepower to spare.

* The PC2 does need several seconds between segments, which it uses to program the Flash ROM. The PC2 boot block will ignore any MIDI it receives during that period. If you send a file without sufficient space between segments, some segments will be missed. After the entire file has been transmitted, the PC2 display will still say "Segment M of N;" it will never read "done." This might occur, for example, if you crank up the playback tempo too high. It could also happen if the MIDI interface is sending the data too slowly. However, if you send the file repeatedly, after two or three attempts all segments will get programmed, and the display will read "done."

INTERFACE AND SOFTWARE ISSUES

* A variety of interfaces, including the newer USB interfaces work without problems. However, many of the early drivers for USB interfaces did not handle sysex messages correctly. You should make sure you have the most current driver/extension for your interface, especially in the case of USB interfaces.

* A variety of interfaces and software don't work. In each case we've examined, the data was getting corrupted before it even got to the PC2. Certain interfaces work with some software but not with other software. Sometimes the interface or software needs to be configured a certain way before it will work.

* In our MIDI files, each segment of data is split up into smaller packets. Without these packets, Media Player wouldn't work. However, the packets confuse some software, such as Cakewalk Pro Audio 8.0 and Sonar. Note that, with or without packets, the MIDI file itself is in full compliance with the Standard MIDI File specification.

RESOLVING VARIOUS INSTALLATION PROBLEMS

* Firstly, using the recommended sequencer software (listed above) can solve many installation problems. Unfortunately, we have observed that many popular sequencers corrupt certain sysex events in Standard MIDI Files.

* If the file begins transmitting, but the display still reads "Waiting for MIDI," none of the MIDI data is making it to the PC2. Check your cables and

connectors. Also check any configuration software you might have which controls whether or not MIDI data is being sent out the MIDI Out port.

* If the display reads "segment 1 of N," and continues with this display for more than about a minute, data is being dropped. If the display reads "data error [ED0] checksum error," the data is being corrupted in transmission. In either of these cases:

* Use one of the recommended sequencers. Be sure to read the specific notes above that apply to the different shareware programs.

* Bypass any MIDI mergers in the data path. MIDI mergers can corrupt sysex data.

* Bypass any other MIDI gear in the data path that might be corrupting the data.

* Some MIDI interfaces can merge the MIDI outputs of multiple applications. Disable any such features on the MIDI interface.

* Some MIDI interfaces allow you to patch MIDI input channels directly to output channels. Disable any such patches.

* Under Windows, make sure the latest drivers are installed. On the Mac, make sure the latest extensions are installed for your MIDI hardware and software.

* Use a different MIDI interface. We have seen reports that some USB interfaces still do not handle sysex messages correctly, even with their current drivers.

* If the entire file transmits, but the display on PC2 still displays "segment M of N," some segments are being received but others are being dropped. Most likely, the sequencer is sending the segments without pausing long enough between each one. In this case:

* Do everything noted above.

* If using a sequencer that allows you to adjust the tempo, reduce the tempo. 120 BPM is nominal.

* If using a sequencer that requires you to transmit the sysex manually, make sure you send the sysex messages one at a time. (Note that none of our recommended sequencers require this.) Each sysex message contains the data for one segment. After the PC2 receives each one, it will say "Programming M of N at XXXXXXXX" for up to 10 seconds (or as little as 0 seconds). Make sure the display returns to "segment M of N," where M is now one larger than it was before. At this point, the PC2 is ready to receive the next segment.

* Resend the file from the beginning. After several attempts, the PC2 will eventually get all the segments, and the display will read "done."