

TECH BENCH

Fixing Windows XP MIDI Port Problems

by Craig Anderton

So there I was, reviewing a **Yamaha Motif XS6**, which has all kinds of cool MIDI options. I downloaded the USB MIDI driver and installed it; its little applet booted up, and it showed up as a fully functioning MIDI device . . . except no sequencer could see it. Say what? Turned out I was a victim of the dreaded **Windows XP/NT/2000** MIDI device driver limitation problem.

These operating systems can install a maximum of ten MIDI device drivers; after that, they fall down and say “no más!” And it’s not hard to use them up if you have

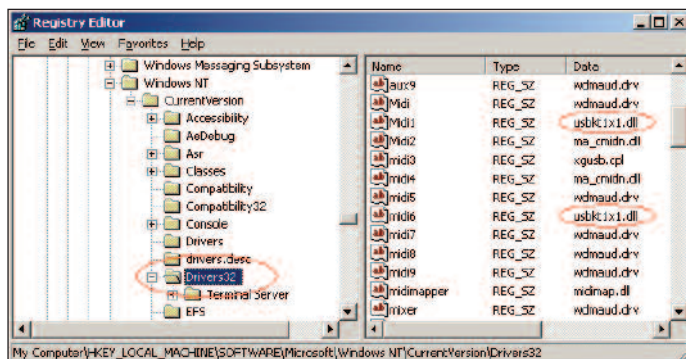


Fig. 1: The Drivers32 sub-key shows the registry entries for MIDI device drivers in the right pane.

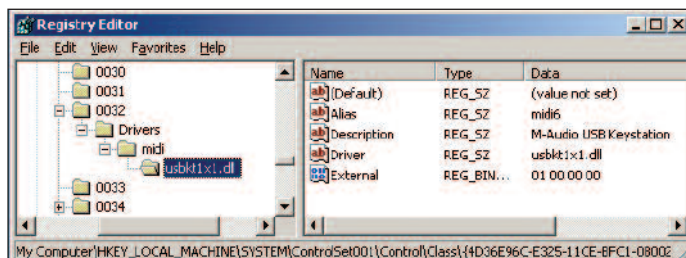


Fig. 2: Searching on a registry entry can reveal more information about it. In this case, the entry shows that the usbkt1x1.dll device driver is associated with the M-Audio USB Keystation.

lots of devices. For example, if you install a USB MIDI device driver while it’s plugged into one USB port, then plug it into a different USB port and install the driver again, you now have a duplicate driver and have used up two MIDI device drivers. The same will happen if the interface is on a PCI card, and you change its slot. The solution: Go into the registry, hunt down duplicate driver entries, and delete them.

RME has an excellent FAQ on this subject by Matthias Carstens at http://www.rme-audio.de/en_support_techinfo.php?page=content/support/en_support_faq_10entryd. However, it’s written more for intermediate users, so we’ll deal with the issue on a more basic level. Ready? Let’s fix it.

DEALING WITH THE REGISTRY

The Windows registry is a scary place for the neophyte, but we won’t be doing anything too drastic. Still, it’s a good idea to back up your registry in case you commit some egregious error, as messing up the registry could screw up your computer big-time (so don’t blame us). Refer to

Microsoft’s instructions for registry backup at <http://support.microsoft.com/kb/322756/>.

(Incidentally, if you don’t want to edit the registry, **M-Audio** offers a “MIDI Fix” utility at <http://www.m-audio.com/index.php?do=support.drivers&k=driver&s=8&o=Windows+XP&f=84>. This clears out previously-installed MIDI devices, as described in a text file included with the utility, but you will have to reinstall the deleted drivers manually.)

1. Go Start > Run and type Regedit.
2. Locate the HKEY_LOCAL_MACHINE key and click on the + sign to its left to expand it.
3. Go down and open the tree as follows: Software > Microsoft > Windows NT > Current Version.
4. Under Current Version, click on the Drivers32 key. A list of sub-keys will show up in the right pane (Fig. 1); locate the Midi sub-keys (Midi, Midi1, Midi2 . . . Midi9).
5. At this point, you have two options. Either one involves deleting a MIDI sub-key by right-clicking on the key name and choosing Delete. One option is to delete each Midi sub-key (Midi – Midi9), thereby guaranteeing you’ve deleted any duplicates, and re-install any necessary device drivers from scratch. The other option is to verify which keys are duplicates, and delete the duplicates. If you delete a “wrong” driver key, worst case is that you’ll need to re-install the driver for that device (if that forces you to check the net for the latest drivers, that might actually be a good thing!).
6. In Fig. 1, note how there are two entries for usbkt1x1.dll (both are circled in red). To verify that these are duplicates, type Ctrl+F to call up the Find function, and type in (for example) usbkt1x1.dll. Keep hitting F3 to find all occurrences of usbkt1x1.dll.
7. Once you get out of the Drivers32 key, you’ll find individual instances where the drivers occur, with information in the right pane (Fig. 2). This example shows that Midi6 represents the driver for the M-Audio USB Keystation. However, it turns out Midi1 also shows an M-Audio USB Keystation driver with the same characteristics — clearly a duplicate.
8. After verifying the duplicate, return to the Drivers32 key and delete either one of the duplicate sub-keys. You’ve now freed up a MIDI device driver.

In my situation, after deleting two duplicates there was plenty of room for the Yamaha Motif XS6, and all four of its ports appeared. So next time you try to install a MIDI driver and nothing shows up . . . check your registry! **EQ**