

TX81z v1.0 ROM change

By Graham Meredith 2008

If you own a TX81z that has a v1.0 operating system ROM, you may or may not be aware that it has a bug in it that will not allow you to back up your user voices or performance patches properly. What happens is that you can back up your data via voice/performance dump to a MIDI data filer or computer, but you won't be able to reload it. You will get an error message.

This was documented in the Service News bulletin from Yamaha (a copy is in the FILES section on this site). Other ROM versions (v1.1 onwards) do not have this bug (they do have other bugs in them, though, up to v1.4).

So if you are the owner of a v1.0 TX81z, you would do well to change the ROM to a later version.

To check your version, hold down the 2 cursor buttons and switch the power button on. The version number will be displayed for a few seconds. Once it has displayed, switch it off - don't press any other buttons because it will go through a test program if you press yes, and wipe all your data.

OK, so you've got one of these v1.0 TX's. How do you change the ROM?

First, you need to save your user data.

"But didn't you just say that it won't work?" you may ask.

Yes, but it WILL work if you use the **TX81z PROGRAMMER** utility that is on the **Yamaha Black Boxes forum** site in the **FILES** section:

<http://launch.groups.yahoo.com/group/yamahablackboxes/>

It takes into account the bug and corrects the data.

Download the program and install it on your computer.

Use a MIDI interface to connect your TX to the computer. Make sure you plug in both the **MIDI IN** and **MIDI OUT** cables to the TX and the computer - they both have to be plugged in for the program to work. Set your TX to send and receive on MIDI channel 1, and switch EXCLUSIVE to ON.

In the **main program window**, go to the **OPTIONS** menu, and select the "v1.0" option at the bottom of the menu. This setting corrects the bug in the data. Become familiar with the program. Request the TX voice data and load it into the program. Save it as a library to your computer.

Now change the name of a voice in your TX. Save it in the TX. Now reload the previously saved library to the TX. At this point when you send it, you may get an error message in the program - a timeout error or something, asking you to retry. Click on cancel. Look at the TX display and see if the voice name you altered has reverted back to the original name. It should have, despite the timeout error message. It has successfully loaded your old data. You can ignore the error message whenever it does this.

Now back up all of the data in your TX - the voice, performance, system, effects, buffers etc - everything. Save it to your computer. Now you're ready to change the TX's v1.0 ROM.

----- CHANGING THE v1.0 ROM -----

Buy a **v1.6 ROM** for the TX81z - a few of the people at the **Yamaha Black Boxes forum** can sell them to you if you ask them nicely!!

When you get one, unplug the power to the TX module. Unscrew the screws holding the top of the TX on (2 on top, 4 on the sides, 1 around the back). Remove the top panel.

Identify the TX ROM. It will be a 28 pin chip, directly in line and behind the **DEC button** on the front panel. It will be the only chip on the circuit board that is mounted in a **socket**. It should have a silver sticker on it. Mine had XB186 on it, and also a square with a "B" in it. Note the orientation of the chip in its socket - there is a little notch cut out of the end of the chip closest to the front panel. You must insert the new chip in the same way.

Make sure you discharge yourself of any static electricity before touching the circuit board.

Remove your shoes and socks, and do the work on a table, preferably in a kitchen or somewhere where there is no carpet, to reduce static that could damage the chip. Touch the chassis of the TX first before touching the chip. Use an IC chip extractor tool (Google it!!) for best results, or use a screwdriver to carefully lift the IC from its socket. Be careful not to bend the pins, or to touch them with your fingers if you can avoid it. It will probably be ok if you did accidentally, but I wouldn't push it. Remove the IC from the TX.

Take the new v1.6 chip, holding it carefully and not by its pins, and place it in the socket on the board, with the notch in one end facing the front panel. You may have to put one side of pins in the socket gently first, then push the other side's pins into line in the socket with a ruler or flat object. Now gently press down on the chip to get the pins to go into each hole in the socket. Check that they are all going in, don't force it if one has popped out. Try again if so. When they are all in, press firmly around the chip sides to seat it properly in the socket. That's it!!

Put the lid back on the TX. Plug it in and switch it on. It should start up correctly and show its display. It is most likely that it has also retained its voice and performance memories, but I can't guarantee it. Mine did. If it does, you won't have to reload your data!! Congratulations!

Switch it off again. Hold down both cursor buttons and switch the power button on. The display should briefly read "**V YBB 16Oct2006**" or "**v1.6 ...**" depending on if you bought the special **Yamaha Black Box (YBB)** version from one of the guys at YBB, or the standard factory v1.6 (there is no difference, only the YBB pride factor!).

You can now save your TX memory to any MIDI data filer such as a Yamaha MDF2 or Alesis Datadisk etc, or computer and load it back into your TX81z without fear!

Enjoy!!

I take no responsibility for any damage to your TX81z or loss of data if you try this yourself. If you have any doubts, buy the ROM chip and take it to an electronics repair shop with these instructions for them to install it for you. It should not cost you much for them to do it.

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