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Oberheim OB-Mx Preservation Page

This page is devoted to information about a simultaneously fascinating and infuriating synth known as the Oberheim OB-Mx. I'm trying to collect all the data can about this curious and quirky beast.

Schematics

The schematics were provided by [Mark Glinsky](#) of [Manual Manor](#).

- Voice Board: [CPU Section](#), [CV Demultiplexing](#), [Voice A VCO](#), [Voice B VCO](#), [Voice A Processing](#), [Voice B Processing](#)
- Master Board: [Digital Section](#), [Analog Section](#), [Front Panel](#)

ROM Images

I'm not sure what the exact differences are between the various software versions. They're straight binary files. Many thanks to Tom Collins of GTRI for making the images for me; few people around the department still had equipment that could read them! Tom included some text files comparing the different versions; I'm not sure how useful the comparison files are, but here they are anyway.

- Voice board software: [June 14, 1994](#), [Dec. 5, 1994](#); [Comparison of Dec. 5 and June 14 versions](#)
- Master board software: [Version 1.04](#), [Version 2.00](#); [Comparison of V1.04 and V2.00](#)
- [Calibration ROM](#) and [instructions](#) (courtesy Tom Virostek) – The calibration procedure is pretty complex and requires a scope (and preferably the voice board extender card that lets you get to the board while the unit is on). The OB-Mx uses some digital pots with built-in nonvolatile memory. I had always assumed that these were recalibrated upon booting up the OB-Mx, but it turns out they are set in this calibration procedure. I suspect that a lot of errant voice boards that are out there just need recalibrated.

Source code

[Lynx Crowe](#) has kindly provided his original source code for the OB-Mx, provided for noncommercial personal and educational use. This code is provided as-is with no guarantees of completeness or correctness; it's a compilation of various bits of relevant code that Lynx found going through his archives. If you want to delve into this, you are "on your own." Knowledgeable people with time on their hands could potentially do all sorts of neat things with this. Please give Lynx proper credit on anything you do with this.

Here is the [source code as a 7-zip file](#). (Some quick googling will find something that will decompress 7-zip files on your particular system.) Recompiling this will be quite a challenge. Lynx suggested that [the macroassembler AS](#) might be worth trying out.

See the following notes Lynx included in an e-mail:

You have my permission, as the copyright holder, to publish any of the source code or documentation, so long as it's not for profit. If you or anyone else want

to make a profit on it, contact me first and we'll come to some sort of mutually acceptable arrangement.

I never got a chance to properly complete the OB-Mx code, since they released it while I was in the hospital recovering from a heart attack, so I can almost guarantee that it's not up to my usual standards for a completed project, but it will give anyone studying the OB-Mx a good look at what the code looked like an "almost finished" state. There is some debug code still active that slows down processing, particularly the LFO, and it should be removed, or at least disabled, if you should happen to want to actually run the code.

In any case, I hope you find this stuff useful.

[I'd also note that, although Lynx won the rights to the source code he created, as far as the whole OB-Mx goes, other parties, such as Gibson and Don Buchl probably own rights to various bits of IP, such as the front panel designs, so I'd recommend treading carefully.]

Patches

Anyone have patches they want to share?

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