MIDIbox FM

Intro

MIDIBox FM Synthesiser is a project that uses OPL3 FM soundchips (found from many old soundcards) controlled by MIDIBox as a standalone synthesizer.

Features

List 'em

Skills / Equipment Required

Tools

Soldering

Hardware

What modules do I need?

Adjust List as required:

Core Module

LCD Module

Bankstick Module

DIN Module

DOUT Module

AOUT_LC Module

OPL3 Module

Parts List

List of pots, buttons, faders and blah - suggestions on good parts and where to buy them + how to hook them up - links

[Where to buy Parts](#)

Connections

Connection diagrams

Control Cable Timing Issue

It was been noted on [this forum article](#) that errors can surface if the control cable between CORE and OPL3 boards is too long.

- The error shown in the forum article was found when running the testtone application.
- The specific error in the forum article that tone can be heard on outputs 1&2, but not outputs 3&4, however there is no guarantee that this is the only such error that could arise from long cable.
- The error was solved by shortening the control cable between CORE and OPLE3 boards. The cause was confirmed by switching back to a longer cable, at which point the error re-surfaced.
- The error was shown to be on the control cable (RS/A0/A1/WR), not the data cable (D0-D7), however it is advisable to make both these cables as short as is practicable.

Enclosure / Case

Enclosure ideas - link to case construction tips? / provide space to encourage other users to wikify their case designs

Enclosure References

[Constructing Enclosures](#)

Software

Setting Up

We recommend you read [software](#) before you continue.

Download

Links

Setup Instructions

Up to you

Extra

Usage Manual

Yamaha's Definition of FM Synthesis and How it Works

Overview [uCApps]

User Manual [uCApps]

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