# MiniDexed Control Center

# User Manual

2023. Jan. 15

Current MiniDexedCC version: 0.9.2.27

# About

MiniDexed Control Center (MiniDexedCC) is a librarian/editor for MiniDexed synth module based on Raspberry Pi and Dexed.

The user interface of MiniDexedCC is based mostly on using a computer mouse to work. It means that the most of the operations are done by clicking or drag&drop.

# Main screen

Main screen is the file librarian. You can work with files from a folder on your filesystem, or work with data stored in database (1).

On the Files tab, select a directory with your files (button with 3 horizontal lines). In the files list (2) you can see your SysEx files from the selected directory.

If you select a SysEx file, it will be analyzed and in the Voices list (3) you can see the DX7 voices from the SysEx file. At the bottom of the Voices list you can see a log from analyzing the file. Analyzing function can also recognize other SysEx formats from DX-Series (DX11 etc.) but the MiniDexedCC will use just the DX7, DX7II and TX7 files.

Now, you can drag&drop a whole file (from 2) or single voice (from 3) to the bank slots (4). The drop area is the field that shows the voice name.

If you dropped a DX7II voice into a slot, the first LED (5) will turn green. Second LED indicates a TX7 voice.

To summarize:

- No LED is green – your voice contains just DX7 voice data (VCED). It may also contain DX7II supplement (ACED) or TX7 function (PCED) data, but if these are at initial values – the LEDs will not turn green.
- Left LED is green – your voice contains DX7 voice data (VCED) and DX7II supplement (ACED)
- Right LED is green – your voice contains DX7 voice data (VCED) and TX7 function data (PCED)


Now, if you intend to collect the voices to the MiniDexedCC databank, first set the additional parameters shown in group 6:

- Select a category for your voices (e.g. Piano, Strings, Synth). Categories need to be defined/added on settings tab
- Type a text for voice's origin (e.g. Mark's collection, Original ROM 1a etc.)

These 2 parameters will be used in the future to do a search in database (filter the results). This isn't yet implemented.

At the top of the panel is a toolbar with following buttons:

- Open SysEx file
- Save the slots to a SysEx file (incl. ACED or PCED parameters)
- Send bank over MIDI to a DX-Series device
- Save the voices to the database (incl. ACED or PCED parameters)

# Parameter viewers

If you click on the LEDs in the Bank slots – a corresponding parameter viewer will pop-up (DX7II or TX7 parameters).

You can also see the DX7 voice parameters if you click on the slot in the empty space before the text "SlotXY".



| | Parameter | DX7 Param. | INIT Values |
|---|---|---|---|
| 0 | OP6_EG_rate_1 | 80 | 99 |
| 1 | OP6_EG_rate_2 | 73 | 99 |
| 2 | OP6_EG_rate_3 | 15 | 99 |
| 3 | OP6_EG_rate_4 | 10 | 99 |
| 4 | OP6_EG_level_1 | 99 | 99 |
| 5 | OP6_EG_level_2 | 19 | 99 |
| 6 | OP6_EG_level_3 | 0 | 99 |
| 7 | OP6_EG_level_4 | 0 | 0 |
| 8 | OP6_KBD_LEV_SCL_BRK_PT | 53   D4 | 39   C3 |
| 9 | OP6_KBD_LEV_SCL_LFT_DEPTH | 0   A-1 | 0   A-1 |
| 10 | OP6_KBD_LEV_SCL_RHT_DEPTH | 0   A-1 | 0   A-1 |
| 11 | OP6 KBD LEV SCL LFT CURVE | 0   LIN | 0   LIN |

Some of the parameters are shown as value + translations (like the note name etc.). The blue-marked parameters are the parameters that are different compared to the initial values.

Clicking on the Parameters column header will change the parameters names between long and short version.

# Performance slots

To select a voice from a SysEx file or database, to edit the MiniDexed-specific parameters, and to save it to performance.ini files – you need to drag&drop the voices to the Performance slots:
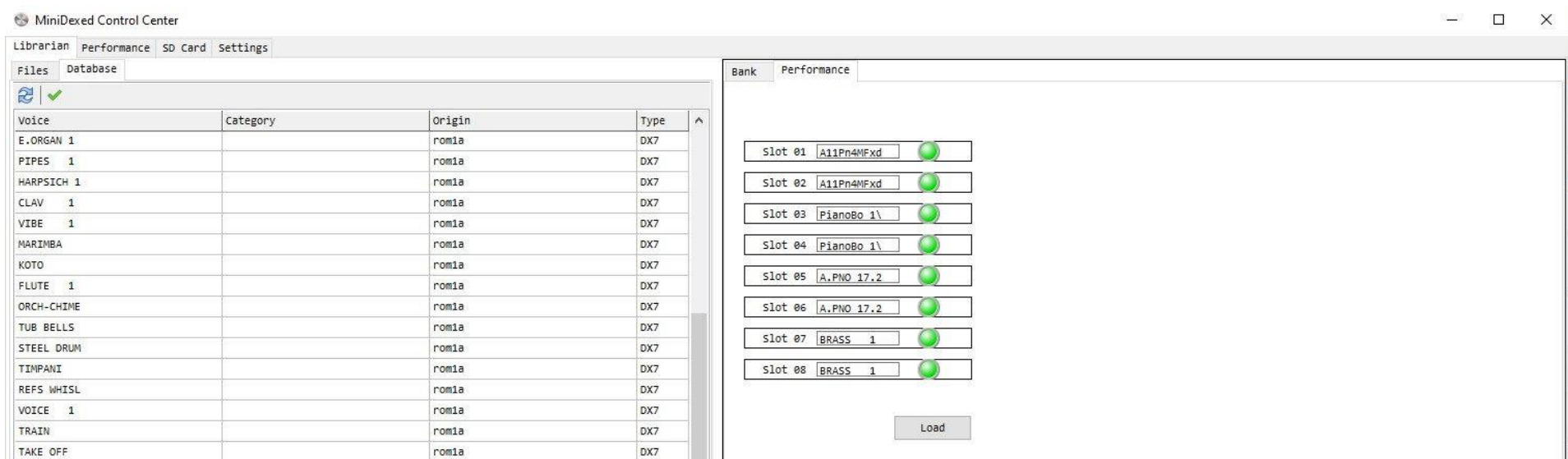


The green LED indicates that supplement parameters are present, either converted from DX7II ACED, TX7 PCED or from the voices that are already stored to the database as MDX PCEDx (MDX=MiniDexed, PCEDx=internal format for supplement data).

Clicking on the LED will bring the Viewer for MDX parameters. You will see here a lot of parameters that still aren't used in MiniDexed.

MiniDexed's ReverbSend parameter is at the moment stored as FX1Send in PCEDx. It may change in the future if more effects gets implemented.

To use the voices in Performance editor (top-most tab selector), you need to send the voices to the editor by clicking on the button Load.

# Database



The database screen is not refreshed automatically. You need to click on the first button from the toolbar (1) – the blue Refresh symbol.

You can drag&drop the voices from here to the Bank or Performance slots.

You can edit the category and origin fields here and commit the changes to the database by clicking the 2nd button on the toolbar (green check symbol).

In the column "Type" you can see if the stored voice contains just the DX7 parameters, or it also contains DX7II, TX7 or MDX additional parameters.

Clicking on column headers will sort the list.

The database is stored in SQLite3 format in user's home directory, subdirectory MiniDexedCC, under the name SysExDB.sqlite.

This is the file you like to keep if you want to back-up your database.

# Performance editor
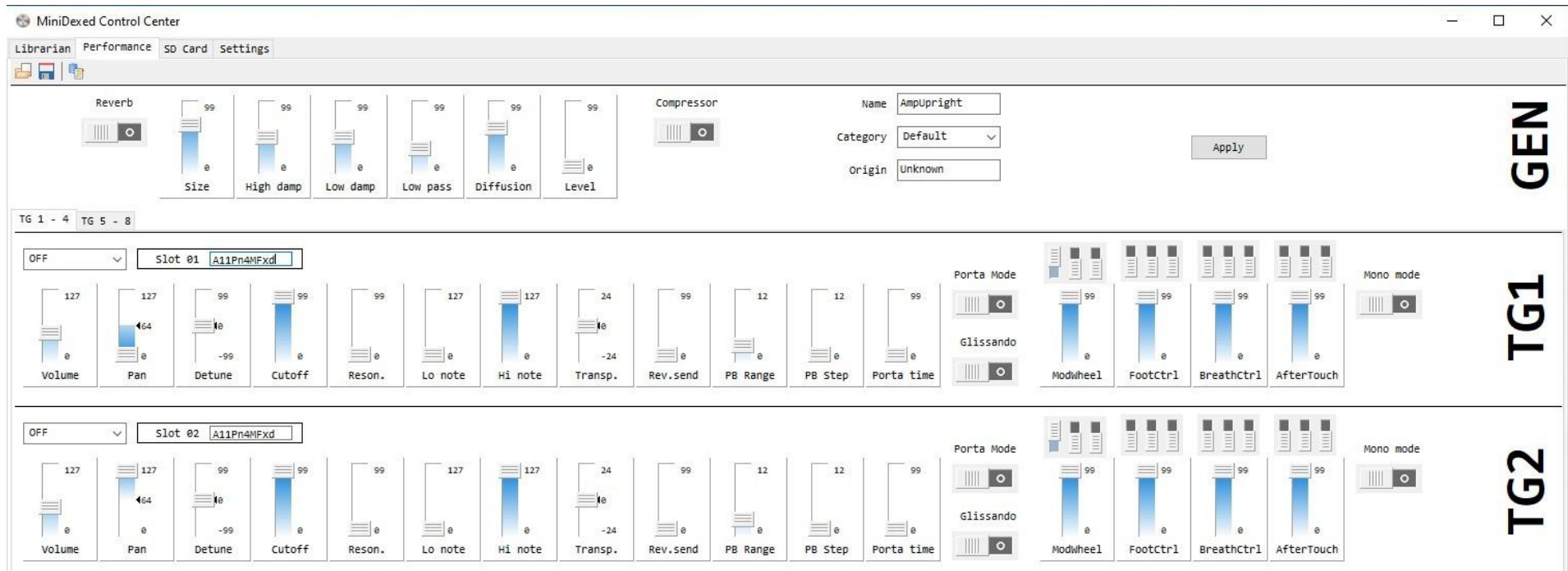


In the performance editor you can edit the supplemental parameters (PCEDx) that you have either loaded through the Librarian tab to the Performance slots, or loaded in this window by using "Open file" icon from the toolbar. Open file will open the performances in INI format. Save file will also save to the INI format.

The last button on the toolbar is to save the TG parameters to the database in DX7 (ACED) + MDX (PCEDx) format. Saving the whole Performance to the database isn't implemented yet.

Before Saving the INI file, or saving to the database, please click on **Apply** button. This will store the state of the sliders, switches etc. to the internal structures. These structures are used at saving the performance to INI file, or to the database.

This operation will be simplified in the future.

# SD Card

This tab has two sub-tabs: **INI Files** and **Syx Files**.

On **INI Files** tab you can edit the minidexed.ini configuration (hardware configuration of your MiniDexed).

There is a bit of error-checking logic in there, so that one GPIO pin can't be selected for more than one hardware connection etc.

For the explanation of options, see MiniDexed documentation.

On **Syx Files** tab you can manipulate (rename, re-order) your **syx** and performance **ini** files on the card without carrying about the prefix numbers needed by MiniDexed. Re-ordering operations are drag&drop-based.

# Settings

On the Settings tab you can select the MIDI ports (MIDI In does nothing at the moment), select the font size (needed because of different real font sizes on the different platforms. One size does not fit all…) and manipulate your Categories database table. Here are also the buttons to **delete** all your data from the database. This operation **cannot** be reverted. Your data will be lost, be warned!

Categories table can be load and saved by using the two buttons under the table/grid.

Adding a new category – click on the last entry and press cursor down button on the keyboard – an empty entry will be added. At saving the entries to the database – the empty rows will be ignored.

All the settings (except the settings with Save functions), last opened files etc. are automatically stored at closing the program. You should be able, at the next usage of the program, to continue your work there where you left it. If it doesn't – please report a bug.

# Links and references

MiniDexed: https://github.com/probonopd/MiniDexed

MiniDexed Control Center (this program): https://github.com/BobanSpasic/MiniDexedLibrarian