SY77 Librarian

a public domain program
©1992 by Ralph P. Ritchey

Disclaimer and Distribution Guidelines

This program is in the public domain. It may be freely copied and distributed as long as the following guidelines are met:
1.   All files are to be included (meaning the program and the documentation are bundled together.
2.   No modifications to the program or to the documentation are made without permission from the programmer, Ralph P. Ritchey.
3.   Bugs are reported as found so that they can be fixed.
      To report bugs, I may be reached at the following temporary e-mail address.
      urritche@mcs.drexel.edu
      alternately: urritche@king.mcs.drexel.edu

I assume no responsibility for what happens as a result of use of this program. This program is written in good faith in the hopes that other users out there may more easily use their equipment and get more enjoyment out of it.

Features

SY77 Librarian is a program that is designed to let it's user download and upload voice patches to a Yamaha SY77 synthesizer for storage and manipulation. By using the window based operating system of the Macintosh computer, the user is able to see all 64 voices at one time, letting the user easily select and move those patches about, not only in the same window, but between windows. The user simply points to select a voice, copies it, selects a destination, and pastes it much like they would in a word processor. It also has the capability to output to output to a text file a listing of the names of the voices so that they may be imported into a database program so the user can keep track of what sounds are in what files.

MIDI Interface Support

The program should work on any standard MIDI interface that can be hooked up to either the printer or modem port. The program defaults to the modem port, but can be changed by selecting the item PORT under the MIDI menu. A dialog box will appear allowing the user to select either the printer or modem ports. The program also defaults to a 1Mhz, but like the port being used, this also can be changed by using the Mhz item under the MIDI menu. The channel that MIDI data is transferred on can also be changed from it's default value of channel 1, to any of the 16 possible MIDI channels.

Downloading & Uploading

To download and upload a bank of 64 voices, simply select the appropriate item under the SYNTH menu. Downloading from the synth will put a dialog box up on the screen indicating what voice is currently being sent from the synth. Uploading a bank will do the same, but in order to upload a bank to the synth, make sure that memory protect is off on your synthesizer. In order to do this, hit the UTILITY button on the upper left hand corner of your synth, then on the display of your synth you will see a selection marked MIDI appear above one of the function keys. Select the function key corresponding to it, and another display will appear. Again, select the option that is marked CHANNEL SET. Look at the display and make sure that BULK PROTECT is OFF. If it isn't, then change it. This is also the location to see what MIDI channels your synth is transmitting and receiving data on. Make sure that both your synth and the computer are working on the same channel, or else data will not be able to be transferred.

Saving & Opening Files

You can save and open files in this program just like any other Mac program. Simply select the appropriate item under the FILE menu, and the computer will prompt you accordingly

using standard dialog boxes, and will either save or open a file containing all the data that makes up all of the 64 voices in one bank. You may also select the item named EXTRACT NAMES which will save *only the names* of the 64 voices in the current window to a text file that will allow you to import them into a database.

Copying & Pasting

To select a voice to be copied from or to, simply click in the box containing that voice. The box will then become inverted, indicating what the current selection is. Then either select COPY or PASTE from the EDIT menu, and the appropriate action will take place. It is advisable to work on a duplicate of a file rather than the original, as there is not undo command at this point in time. So remember, when PASTEing items, you will lose the voice in that position.

It is also nice to know that the voices are displayed in an 8x8 grid. This corresponds nicely to how the voices are selected on the synth. The first row corresponds to Bank A, voices 1-8, the second row corresponds to Bank A, voices 9-16, row three corresponds to Bank B, voices 1-8, etc. This makes it much easier to see what and where things are located.

MIDI Problems

If you are notified of an error while trying to download or upload data to the synth, check to make sure that all cables are connected properly, and that the MIDI channels that the the computer and the synthesizer are using are the same. Also make sure that if you are trying to upload data to the synthesizer that the BULK PROTECT item is turned off. If it is turned on, the synthesizer will not permit uploading of voice data. Please note also that while uploading voices to the synth, the synth will display on the bottom line of its display what voice was received. If the numbers don't seem to increment by 1 as expected, don't be alarmed. The computer can upload data to the synth much faster than the synth can update its display. The synth is receiving all of the voices, it just can't keep up dating the display fast enough.

Development Notes

This application was started on a Mac SE with 2 megs of memory running system 6.0.x, and was finished on a Mac IIci with 8 megs of memory and running system 7.0. The program is small and fairly quick. The only slow part of the program involves downloading voices from the synth. I chose individual voice downloading over bulk in order to make getting each voice into its own data structure easier. The program was written and compiled using Symantec's THINK Pascal, and the MIDI I/O routines were supplied by Altech Systems in a package called MIDI Pascal. Source code is available, but by e-mail only. The program originally started out as a personal project so I could keep track of my voices in a database program, and

it then turned into a class project which then made me build it into a complete librarian. This is my first complete Mac application, so the user interface may not be as refined as it should, but hopefully with the feed back from you the user, I can turn it into a better program through criticisms and suggestions. Thanks for using it, pass it along, and hope you enjoy it!!

Version History

1.0   This is the first release of the program, hopefully with more to come as I get feedback from other users, and as I make modifications.

Questions, Comments & Answers:

Questions, comments and answers can be directed to the following internet address up until around June of 1993. After this point in time, there is no guarantee that I will still have that e-mail address. I've also supplied variations on the same address, as some people have had problems reaching me.

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