User Manual

S56Sys v1.03

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Introduction

How S56Sys was born

I am the happy owner of an Akai S5000, not really with full options, but sufficiently to have been working with it on a regular basis since I bought it, not long after it started to be sold, somewhere between 2000 and 2001. After several years, the cancellation of most hardware samplers development, the shining of all-in-software-you-got-it was there. I must admit I jumped into that like many others but then got an overdose of instabilities, incompatibility issues due to fast pace obsolescence in this computer and software world, and probably above all, an overdose of bloated functions and buttons that leads you to ruin your workflow and gets you an original sound mostly… by chance. I went back to hardware. Unfortunately, support from Akai was gone, drivers no longer available for modern computers, so the interoperability of this machine with home studios was clearly starting to hold back people from it, me included, especially with the lack of big must-have nowadays screen.

I started to develop some code using Sysex protocol provided by some documentation from Akai in 2017, as this was the only source of information I had to communicate with this machine at that time. It had some goods, but it lacked the most important thing: interoperability for a fluent workflow using samples upload/download functions which is a must-have for a sampler ! Sysex is a protocol within MIDI and file transfer was little to no supported, at least it was not implemented by Akai for this machine. Besides, MIDI through special connectors where also started to disappear for MIDI through USB. SCSI hard drive or SCSI2SD was very nice for direct to disk playing or recording but I felt, fast exchange with PC to completely redesign the samples or to synthesize some was not there.

Then in 2018 I succeeded to get a USB extension but AkSys was no longer functional since several years ago, I was stuck in Windows xp 32 bits, preventing me to updgrade my DAW and many signal processing tools. Thus I started a long, long, long and tedious journey on my free time to try to reverse engineer the communication between AkSys and the sampler through USB, that is so to speak, to spy what goes through the cable to understand the language between the two to be able to reproduce it. It took me two years with a lot of efforts, struggles, despairs, to get a fully functional communication and I think, very stable (contrary to what used to be AkSys).

All this story to tell you that, despite I am not a graphical user interface developer, I really hope you will like this piece of software, which I think is far better than AkSys in terms of usability, stability and available on the up-to-date computer of your studio.

Target users

Clearly speaking, this software does not remove the need of an external storage system. USB transfer speed on this machine is not appropriate to transfer big files. You can do it, and I commonly transfer tracks of around 5 to 6 minutes with **S56Sys** without any single problem, but the transfer time is around 60% of the duration of a stereo wave file. However, the main job of a sampler is not to be a recorder of tracks but to build up instruments using small samples, and there, the USB link of this machine shines and thus **S56Sys** will make your workflow very nice.

So if you spend hours hurting your neck in front of your sampler to build incredible unique sounds, give your neck a break and launch **S56Sys** to change position for a while, still letting your inspiration go on.

What does S56Sys provide ?

As of today, **S56Sys** is made of **S56Sys screen**. This piece of software:

• duplicates your sampler screen on your computer at whatever size you need, no matter if your sampler's screen is off, damaged or dead

• allows you to completely remotely control the front panel of your sampler through USB, using your mouse and keyboard and notably

• data change

• navigation through menus

• (re)naming files

• allows you to transfer wave files, programs and multis between your computer and your sampler's memory back and forth

This means that you can do everything that you can do when you are in front of your sampler, plus you can load sounds from and to your computer, though **S56Sys screen** is not able yet to transfer files to and from an external drive you can have plugged on your sampler. However you can load files from an external drive using the load page of the sampler from **S56Sys screen**.

It comes with a piece of program (a driver) that will install on your computer so that the operating system of your computer recognizes the sampler.

If you have a S5000, and not a s6000, note that using **S56Sys screen** you can have the user keys just as if it was a S6000. There are no hardware buttons on the S5000 but the code beneath on the sampler is there ! Last but not least you can choose the 2 colors of the sampler screen on your PC at your liking !

Supported platforms

Supported platforms are Windows 7 & Windows 10, both 32 and 64 bits. It should be easy to make it for Linux and I may consider it if people ask for it.

Care should be taken concerning USB ports you have on your computer. Your BIOS **must allow EHCI mode**, and not be in XHCI mode only (USB 3.0 only). Some motherboards do not support EHCI backward compatibility.

Getting your S56Sys up and running

This should be very easy to setup up S56Sys, you only need to launch the installer that was sent to you. This installer will ask you permission to install the drivers for your computer to recognize the sampler when you plug its USB connection to your sampler. Then it will install **S56Sys screen**. Please make sure you install **S56Sys screen** on the hard drive that you provided as input to receive your license.

Once the software is installed, put your license file within the same folder of the installation and you are ready to go. Turn on your sampler, wait for your computer to detect it (the usual usb device recognition popup should show up near the clock on your Windows task bar). You can now launch S56Sys that will appear as below, colors may change a bit depending on the revision you receive, but the overall presentation will be the same.
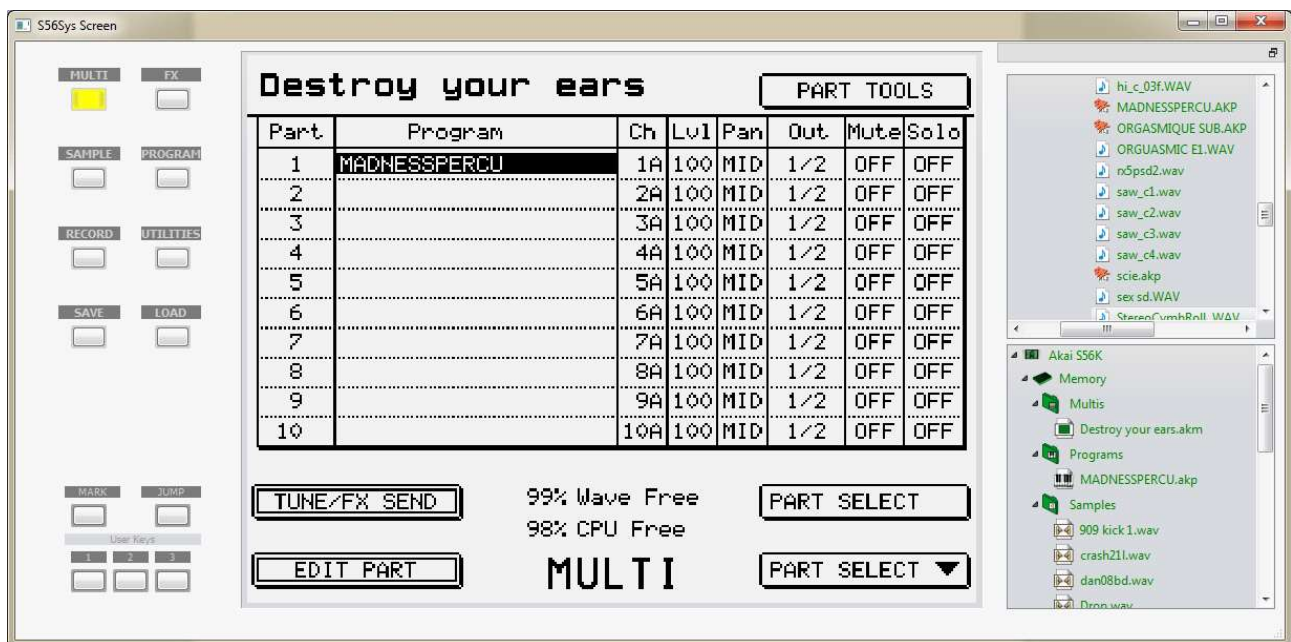

Basic usage

Overview

On the left side of the screen you have access to the physical buttons that are actually

real buttons on your sampler to switch between pages. You get access to mark/jump buttons but also to user keys. If you have a S5000, and not a s6000, note that using **S56Sys screen** you can have the user keys just as if it was a S6000; there are no hardware buttons on the S5000 but the code beneath on the sampler is there ! These user keys are so valuable for the workflow and they are now there also for your S5000.

On the right side of the screen you have the tree view to do files transfer and in the center the actual reproduction of what appears on your sampler screen in real time. Note that if you have configured a screensaver on your sampler and that your screen turns off, it does not affect **S56Sys screen**, which will still reproduce what would be on the sampler's screen if it was still on. This also means that this software will save you if your sampler's screen is damaged or dead (I do not wish you that though).

Navigation/edition

You have probably noticed some of the "physical" buttons are missing on **S56Sys screen**. This is a choice from me to make the interface simple. The missing buttons are actually not needed because you have them physically, they are on your keyboard ! These are:

• numbers from 0 to 9, + and -, these are on the numpad of your keyboard

• play/stop, which is the **[Enter]** button on the numpad of your keyboard (**not the [Return]**), you press it to start, and release it to stop (except if your sound is in "oneshot" mode)

• Alphabet upper/lower case, space key; and you are not limited to a qwerty keyboard like on your sampler, just use whatever local keyboard you have from your computer ! There are also several special characters you can use, more than what is written in Akai

sampler's user manual, I let you discover them.

To fill a name where needed, just type it on your keyboard and press the [**Return]** key to validate. The data wheel has disappeared in **S56Sys screen**, it is your mouse wheel ! To change data values you can also use either:

• your numpad, just type the number (no need to validate)
• +/- keys
• arrows up/down

Your mouse wheel has actually the same use as the data wheel on the sampler, i.e. it lets you also navigate through lines for e.g. through tracks in multi mode. You can also use the up/down keys if you prefer.
Navigating horizontally is done through the right/left keys.

The window key has also disappeared, but I was not using it anyway on the sampler because you can just double tap on the F1-F16 buttons to do the same.
By the way the physical F1-F16 are not present because you can just click (or double click if you want to open a "window") with the mouse on the elements you want to select at the sides of the screen (note that you can still press physical keys if you really want to, your F1-F8 keys on your keyboard do exactly map to the sampler's F1-F8. F9-F16 are done using F1-F8 using shift at the same time)

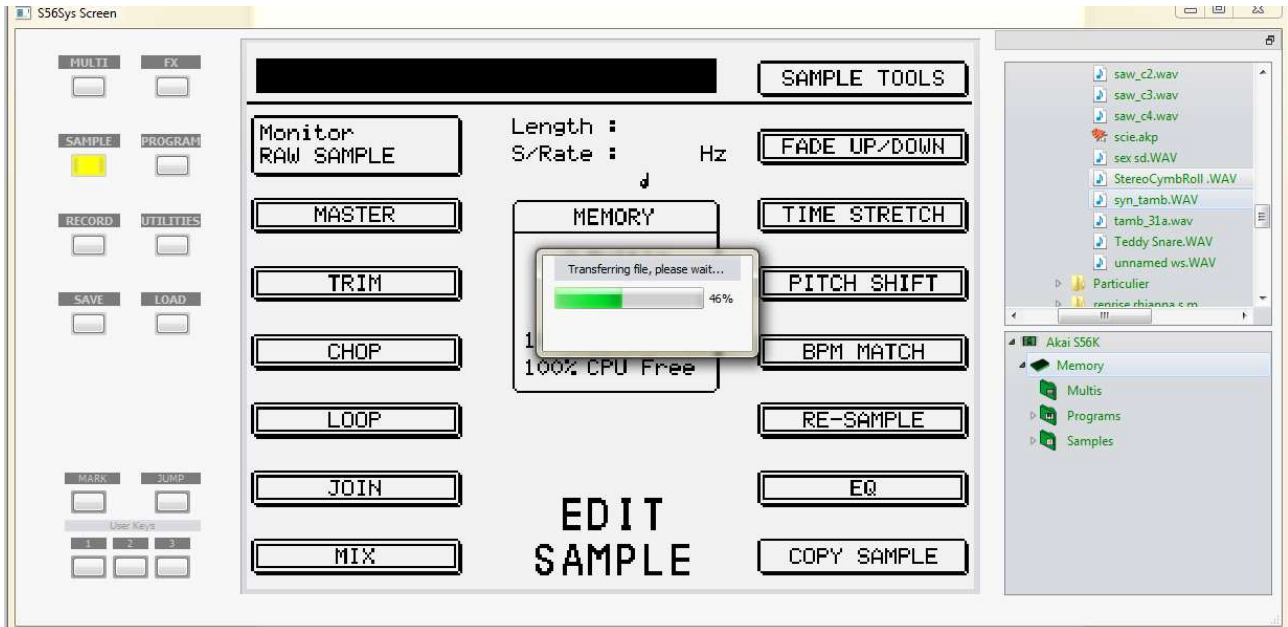## Transferring sounds through USB

Transferring files between the sampler and the computer back and forth is done by a simple drag-and-drop action using the mouse. This is done on the right side of the interface. At the top you have the tree view of your computer and below the tree view of the memory of the sampler. This part of the interface can be "undocked", that is, pulled out of the **S56Sys screen** window to a different location (like a second screen of your computer) for your convenience. Just press the top bar of this tree view and drag it out of the window. To put it back in the original docked state, just double click this bar or drag it back within **S56Sys screen** main window. Note that you can redefine the proportions between the 2 tree views vertically, pressing your left click between the two tree views when your mouse cursor change shape to a resize icon. The same applies to widen the tree views, pressing at the left of the tree views.

To upload on the sampler any wave, program or multi, just drag it from the computer tree view. You can drop it on "Program" or "Samples" or "Multi" on the sampler's tree view below, but you do not need to, you can simply drop it on the "Memory" node, the file will automatically land where it should. A dialog will appear to show you the progress of the upload. Note that the computer tree view is there for your convenience but you can drag from any location on your computer and not necessarily within **S56Sys screen**.

To download or save sounds from your sampler to the computer, just do the same drag and drop the other way round, i.e. drag a file from the sampler's memory tree view to a location on the computer tree view. You cannot drag a file from your explorer or desktop

yet.

Bar to press to drag the treeview out of the mainwindow

Please note that for safety reasons, if you try to drop, from sampler's tree view to the computer treeview a file already existing on the computer at the drop location, **S56Sys screen** will silently ignore your drop to avoid not recoverable overwrite. I may change this behavior if people think it should allow overwrite. For now, please manually remove from your computer OS a file having the same name, change drop location.
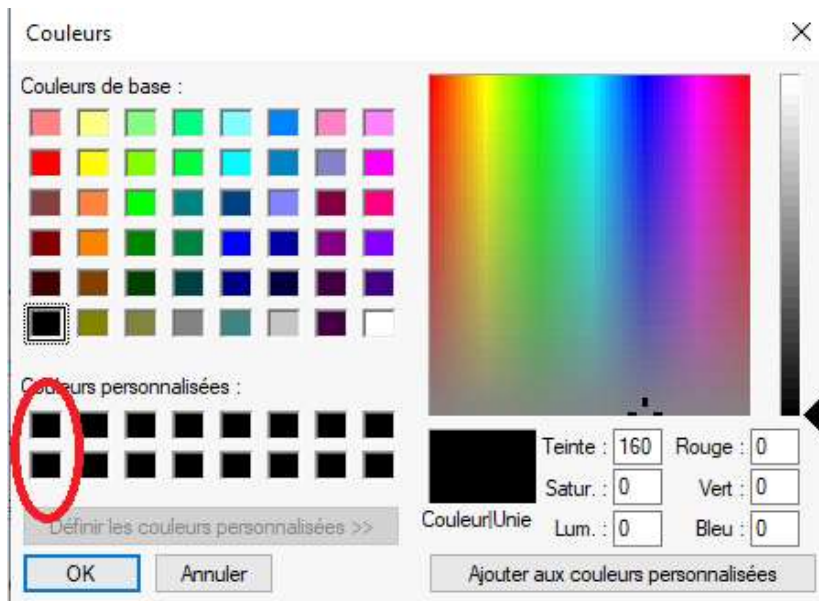
On the contrary, when dropping from computer to sampler's memory, be cautious, it will actually overwrite the file on the sampler's memory if it already exists.

If it happens that you manually uploaded files on your sampler's memory from another source and not using **S56Sys screen**, you can refresh **S56Sys screen** by right clicking on the "Memory" node from the sampler's tree view and select "refresh" popup that will appear. This will update the sampler's memory tree view.

Changing the sampler's screen colors on your PC

Right clicking anywhere in s56sys screen (but not in the tree view), a context menu showing "options" will appear. By selecting this options menu, a color selector will appear. Modify the first 2 custom colors at your liking to change the sampler's screen colors inside

s56sys, one is the background color, the other one is the text color.

For example, you can come close to the original colors of your sampler if you prefer (here white and dark blue), or even goes to pinky style it is up to you !

FAQ

Where is used S56Sys screen ?
As of today, as the website is hosted on a french server, it is no surprise that S56Sys screen is widely used in France. As far as we can tell, the software is also used in Germany, Canada, Croatia, Australia, USA, UK and South Corea.

Does S56sys screen support windows 7 in 32 bits ?
Yes S56sys screen does support windows 7 in 32 bits. Please, let us know when you need a 32 bits version, as by default it is not included in the installer to reduce its size, 32 bits being quite rare these days.
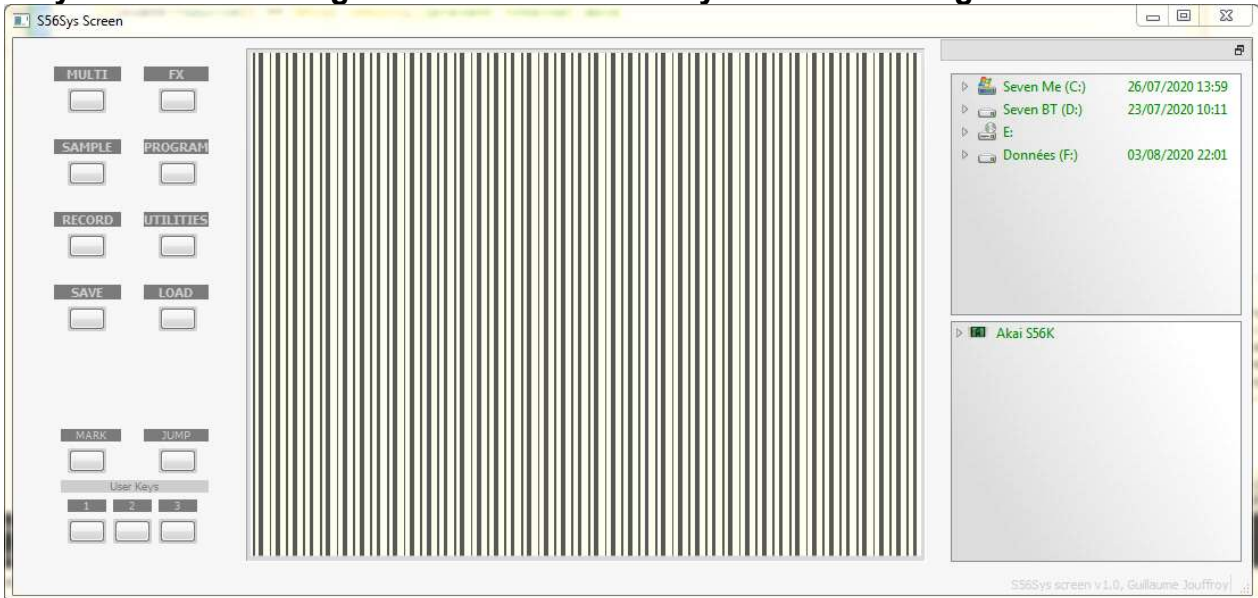
Do you support Z series or MPC series ?
No. Concerning Z series, their screen are too small, it makes no sense to try to send their image on a 24" PC screen. It may becone interesting when s56sys will add programming like Aksys used to do. For MPC series, we are happy to add support to them. We are looking for a volonteer who has a MPC and Aksys working to help confirm some protocols details. No need for any knowledge, we will tell you what to do.

When I am in record mode I do not see the record level animates ?
I know that for every single DAW user, CPU usage is precious. Thus, **S56Sys** completely disables itself if you are not actively using it after three seconds. Keep in mind that the

copy of the sampler's screen that shows **S56Sys screen** is a real time data stream of the sampler's screen, this can be assimilated as video streaming through USB, consuming CPU usage (unlike Firewire). As soon as you click anywhere on **S56Sys screen** or any of its buttons any keyboard key or use mouse wheel, it will update the view for three seconds.

Why do I see this image the screen and not my akai actual image ?

You have probably loaded the software before your computer recognized the sampler. Please restart the software without turning off the sampler. If this does not work you may have driver issues, please contact support at s56sys@free.fr.

I renamed some samples. They are correctly renamed in the sampler. Why I do not see them in the treeview of the sampler ?

When you do this you directly interact with the sampler, **S56Sys screen** does not know so to speak what you are working on. After renaming a set of files please use the refresh functionality as described in the user manual at the end of section "Transferring sounds through USB".