

Switch-A-Roo

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Switch-A-Roo is for the Mac 2, and will **NOT** work on other Macs!

While Switch-A-Roo is free, it is **NOT** in the public domain; I retain all rights to it. You may distribute Switch-A-Roo, providing:

[1] You do **NOT** change any code or data or any other part of Switch-A-Roo. Feel free to hack with your own copy to your hearts delight; just make sure that you give away or upload the original version.

[2] You **MUST** include this documentation.

[3] You may **NOT** charge anything for Switch-A-Roo; I want it to be **FREE**. I spent a great deal of time and effort creating Switch-A-Roo, and if I'm not going to make any money off it, I don't want you to either. I specifically exclude commercial time share networks (like CompuServe, for example) and BBS' that charge a fee for membership, but not for individual downloads, from the above *make-money* restriction. I also specifically exclude **NON-PROFIT** user groups from the above *make-money* restriction if they want to include Switch-A-Roo on a disk they sell from their groups disk library. Note that this does **NOT** apply to companies that sell "public domain" software disks for profit.

[*] If you've have a scheme to make money with Switch-A-Roo, fine, just make sure you get in touch with me first...

Bill Steinberg – Sept 1987

CompuServe	= 76703,1027
AppleLink	= X0542
MacNet	= Bills
Delphi	= Bills
GEnie	= Bills

What's Switch-A-Roo anyway?

Switch-A-Roo is an FKey. An FKey (Function Key) is a small program that you install in your system file. Once an FKey is installed, you may invoke it by holding down the ⌘ key and the <shift> key, and then typing the number of the FKey. You probably know about FKeys already, though you may not have known what they were called. Apple includes four FKeys in the System. FKeys 1 & 2 eject the floppy in the internal and external drives, FKey 3 does a screen dump to the disk, and FKey 4 does a screen dump to the printer. Switch-A-Roo comes set to be FKey number 9, though you can change the number when you are installing it.

How do I install an FKey into my System file?

The traditional way to install FKeys is with a utility called ResEdit. ResEdit is a programmers tool that Apple distributes, and it's used for moving resources from one file to another. There are much better ways available now though. (If you are at home using ResEdit, there is nothing special about this FKey; just open it, copy the FKEY resource, and paste it into your system file. You can ignore the other resources, they're there for the desktop icons). A better way is to use a program called FKey Manager, written by Carlos Weber. It is free and can be found on Compuserve. FKM works much like the Font/DA Mover but also has some extra features. You can install as many FKeys as you want into your system file (or by using Suitcase™ see below), and access them via a pop-up scrollable menu that appears anywhere on the screen whenever you click the mouse. You can even configure your numeric keypad to be an FKey pad, so that to invoke an FKey, just hit a number. No more ⌘-<shift>-X. The program is extremely easy to use, and very flexible. You can have an unlimited number of FKeys at your disposal without having to submit yourself to any of Resedit's headaches. Highly recommended. Many of us also use a product called SuitCase™, which allows you to have as many DAs, Fonts, FKeys as you want, without ever having to install them into your system file. You just put them in a folder in your system folder, and SuitCase finds them and makes them available to you as if you had installed them the hard way. Contact Software Supply at (408) 749-9311 if you're interested. Also Highly recommended.

What does Switch-A-Roo do? (be-doo)

Switch-A-Roo will quickly switch all your video monitors from one preset mode to another preset mode. A mode, in this case, is whether the monitor is displaying color or monochrome, and how many colors or grays are displayed. Think of Switch-A-Roo as a two position switch. When the switch is first thrown, all the monitors in your system are set to their Switch A settings; when the switch is next thrown, all the monitors in your system will be set to their Switch B settings. Each time you throw the switch, the monitors toggle between their Switch A and the Switch B settings. Naturally, you get to select what the two switch modes are for each monitor in your system. You throw the switch by invoking the FKey.

Why use Switch-A-Roo when the Control Panel can do this?

The Control Panel is S-L-O-W to use, and Monitors has a much wider range of uses; Switch-A-Roo does one thing, very well. Monitors is used for three things:

- [1] Setting up the makeup of your working desktop. (ie, setting the relative positions of your monitors, which one is the main monitor, and which one is the startup monitor. If you only have one monitor hooked up, you may not have realized that the Monitors cdev does this).
- [2] Setting up the mode your monitor(s) will come up in when you boot.
- [3] Changing the mode any given monitor is in, right now, one at a time.

Option three, by the way, has the unfortunate side effect of changing the boot settings (like option number two, since both option number two and option number three are set with the same controls). Switch-A-Roo is designed to speed up and simplify option number three (switching the monitor(s) modes, right now). I wrote Switch-A-Roo because I found myself needing to change the mode of my monitor at least a dozen times a day (sometimes I swear it was hundreds). You know what I mean, half the programs you're using must be run in 1-bit, and half the programs you're writing and testing must be run in 8-bit. Every pass through MPW, I'd have to change the monitor state twice (no one likes to scroll full screen in 8-bit mode, give me a fast 8-bit card someone, *please...*).

[Flame On] Because I have a zillion (≈ 75) files and folders in my system folder, and a million (≈ 15) cdevs that come up in my Control Panel, even with the everything in the cache (no disk access required), the Control Panel takes a minimum of five seconds to come up for me, and Monitors takes another two seconds on top of that. Not only that (!!!), but half the time when I'm developing, I leave the monitor in 1-bit mono, run my program, blow up into a totally munged TMon, and then wind up rebooting in 1-bit mode, my beautiful full color desktop scene (thank you Paul...) looks like poo-poo, I gotta go reset monitors (10 seconds this time, because the cache isn't loaded with the Control Panel), reboot... sigh-whine.

[Flame Off] So.... I wrote Switch-A-Roo, and life is good again. It was really David Ramseys idea in the first place; he told me he was busy and "could I whip this FKey up for him; should take me a night or two at the most, after all."

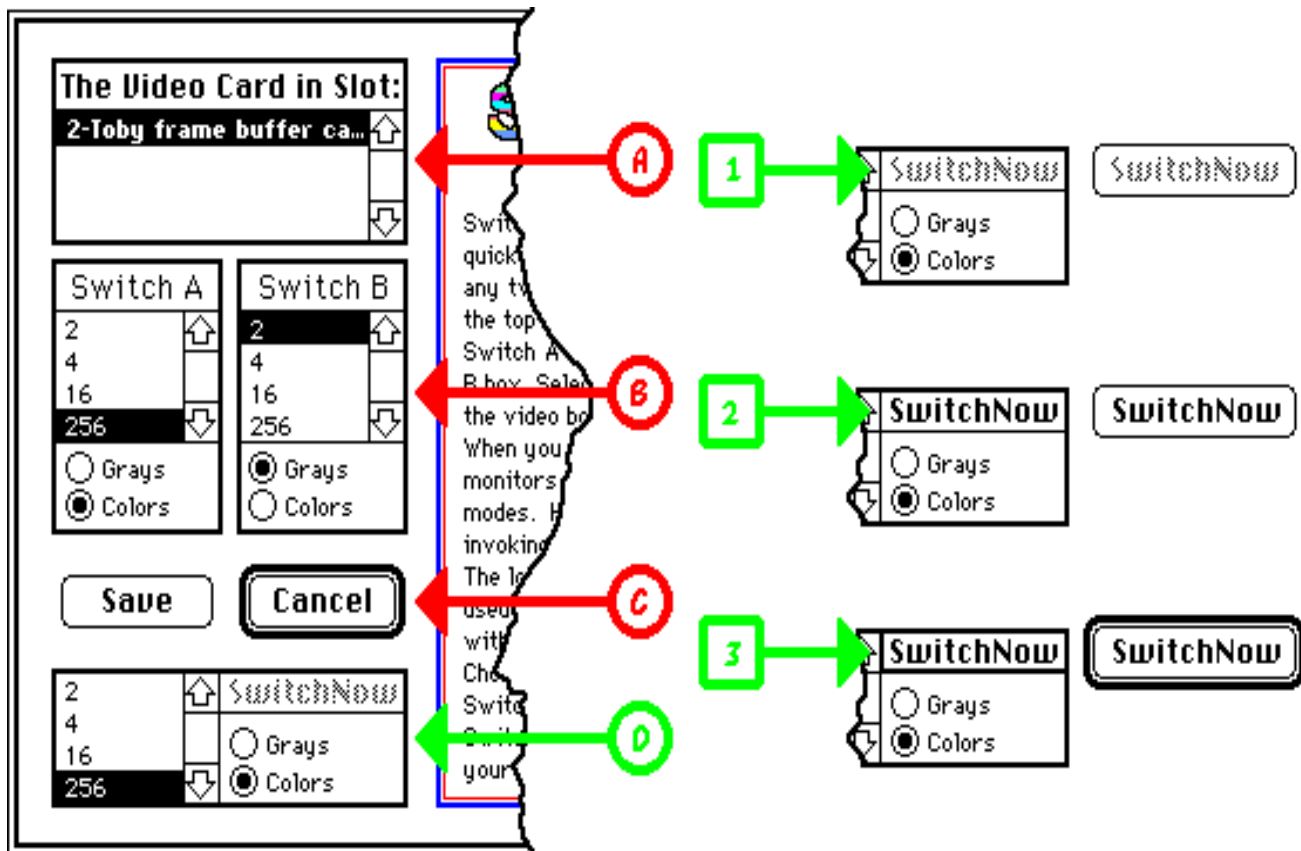
The Users Manual:

This part is easy... I am assuming at this point you have Switch-A-Roo installed by whatever means, and you're about to $\text{⌘} - \text{<shift>} - 9$, (or whatever), but you'd like to know what's going to happen...

Fire the FKey, and you'll find yourself in the configuration dialog. Switch-A-Roo keeps all the information about how you want your monitors to switch in a file called "Roo File", in your System Folder. The configuration dialog comes up for one of three reasons.

- [1] There is no configuration file in your system folder (that will be the case the first time you fire Switch-A-Roo, or if you throw away, move, or rename the "Roo File" thereafter. You don't have to keep track of the "Roo File", if it's ever missing or damaged, Switch-A-Roo will make a new one for you, on the spot).
- [2] The configuration file holds bogus information (You've changed the number of video cards in your system, you moved them to different slots, or the settings file just plain got trashed).
- [3] You held down the control key while you fired the FKey. (This **you** do when everything is fine, but you want to change the switch settings, or make an instant change to one of the monitors).

Here is a picture of the configuration dialog with circles and arrows, that will save me a thousand words, and was fun to do anyway:



First, let's look at the Switch-A-Roo settings part, the three top boxes and the two buttons below them. They're labeled **A**, **B**, and **C**, in red, in the picture above. The top box (labeled **A**), holds a list of all the video cards in your system. Each video card is identified by the slot number it's in, and the name the designer burned into the rom on the card. The card whose screen has the menubar will be selected. If you have more than one video card, you can select each card from this list. As you select each video card, the values in the other boxes will change to reflect the settings for the card you just selected. The two boxes (labeled **B** above) just below the video card box hold the Switch A setting and the Switch B setting for the selected video card. You'll want to set them to the modes you want that monitor to toggle between. I toggle my main monitor between 256 colors (set in the Switch A box) and 2 grays (set in the Switch B box). If your "Roo File" has been corrupted or erased, you'll find that the Switch A and Switch B boxes come up with the same setting, which happens to be the current mode of the selected card. Once you've set the Switch A and Switch B modes you want for each card in the system, you can save the new settings by choosing the Save button, or you can forget the new settings by selecting the Cancel button. (both labeled **C** above).

Below the Save and Cancel buttons you'll find the SwitchNow box (labeled **D** above). This SwitchNow box is a convenience; it doesn't change any Switch-A-Roo settings. It's used to change the current mode of the video card you've selected (in the top box). I threw this feature in because it was so handy; I rarely use it, but every now and then I want to look at something in 4-bit, and it's **so** much faster than going through the control panel twice. The SwitchNow box will be set to the mode the selected video card is in, and the SwitchNow button will be dimmed (more on this later). Just change the mode to whatever you want, and click in the SwitchNow button, which will no longer be dimmed. OK, here comes the story... In order to make everything fit nicely, I took a little liberty with the user interface, and I "invented" my own button. Check out the diagram above, particularly the parts labeled 1, 2, and 3. These are the three states that the SwitchNow button can be in. To the right of each is a standard Macintosh button in the same state. It works just like the standard button, it just looks a little different. If you have not changed the setting in the SwitchNow box, or you return it to its original setting, the button will be in state 1, dimmed, and you can't select it. If the setting is different, the button will be enabled, and will be in either state 2 (enabled, but not the default response), or state 3 (enabled, the default response [ie hit return]). Anyway, it's not really that complicated; just hold down the control key, fire Switch-A-Roo, set the mode you want in the SwitchNow box, and click SwitchNow or hit return. When you're through fooling around in that mode, just fire Switch-A-Roo and you'll wind up in your normal (Switch A) mode.

You really won't spend much time in the configure dialog. Once you set the switches, Switch-A-Roo spends most of time doing, not showing. You may notice Switch-A-Roo saying hello in the menubar as the screen updates, but other than that, Switch-A-Roo just, well, switches. A few things you might like to know... If the Switch A and Switch B settings are the same for a video card, that card will always be put in that mode (unless it was already in that mode, in which case nothing will be done). Those of you who have multiple monitor setups, with some of the monitors being monochrome, will appreciate this, as it will allow you to toggle your color monitors, while leaving your monochrome monitors alone. If you have Chicago 9 available, the top list will use it. Click on the version number.

Enjoy. If you like Switch-A-Roo, drop me a note and let me know. You can get me on **Compuserve (76703,1027)**, Delphi (Bills), GENie (Bills), MacNet (Bills), or AppleLink (X0542) — Bill Steinberg • October 1987

Updates:

Version 1.1 fixes a bug that left the boardName for each video card in a small locked block in the heap. • November 1987 •

Version 1.2 adds an ActivatePalatte call each time a video card has a bit-depth change. Below is a copy of a note included with the current release of Monitors. Note the warning about PortList, which is relevant to Switch-A-Roo too. • November 1987 •

Monitors cdev (Version 3.2 released with System Tools 5.0)

ActivatePalette is now called when the bit depth changes. This prevents double updates in some applications, and takes care of inaccuracies in the color environment which persisted until the next call to the Palette Manager.

The monitors cdev is vulnerable to other program's sloppiness in handling ports. To change the bit depth, Monitors must scan the portlist which Color QuickDraw maintains in low memory. If applications fail to call ClosePort before disposing of a grafport's memory, or allocate a memory for the port in such a way that it can move between the calls OpenPort and ClosePort, an invalid port is left on the portlist. The next time the portlist is scanned, which may be much later, various sorts of mayhem result (usually a bus or address error).

Version 1.3 adds a couple of calls to my menubar mucking so that color menus don't lose their color (thanks jbx!). I was also leaving a copy of the real menuBar structure around before, now I'm not.

Version 1.4 fixes a bug with the current resource file pointer. Versions prior to 1.4 had the side effect of resetting the current resource file pointer to the top file, even if it wasn't pointing there when Switch-A-Roo was fired; this version preserves the current resource file pointer. (Thanks to Russ Wetmore, who spotted this).

• August 1988 •