## Overview of *Port Watcher*

Do you use your Mac for real-time conversations via the serial port? Do you run programs on remote computers that take a long time to execute? If you ever have to wait for information to arrive through one of your Mac's serial ports, you may find *Port Watcher* useful. It alerts you when something is received by one of the ports. In addition, *Port Watcher* can cover the windows on the screen after an adjustable period of time in case you are worried about screen burn-in. This program is shareware.

*Port Watcher* is a desk accessory that works with most terminal emulators. The accessory does not interfere with the operation of the emulator. Several parameters can be set to customize *Port Watcher's* behavior. To install this program you should know how to use Apple's *Font/DA Mover*.

*Port Watcher* has been tested on a 512K Mac and a Mac Plus. The accessory should also work on a 128K Mac although the size may be too large for some terminal emulators. This program may not work on a Mac XL or new types of Macintoshes.

## Installation

Use Apple's *Font/DA Mover* to install *Port Watcher* in the System you use for your terminal emulator.

## Operation

After *Port Watcher* is started it watches for information entering one or both of the serial ports. If there is a period of inactivity and then something is received by the Mac, *Port Watcher* will produce a short beep.

If there is a long period of inactivity, *Port Watcher* will enter its idle mode and the screen will be "blanked" — a black window with "kinetic string art" will cover the screen. Ten seconds before the screen is blanked two tones will be produced. The second tone will have a lower pitch than the first ("going down"). This gives you a chance to see what is on the screen before it is covered.

The screen can be restored in three ways. Holding the OPTION key will temporarily restore the display. Pressing a character key or the mouse button will reset the screen to its normal state. Finally, if anything is received by the Mac the screen will return to normal and another two tones will be produced. This time the second tone will have a higher pitch than the first ("coming up").

*Port Watcher* will not produce any sound if the Mac's volume has been set to zero. Other aspects of *Watcher* 's behavior can also be changed.

At least one of the serial ports must be opened by some program for *Port Watcher* to work. This condition is usually met when a terminal emulator is started. If you are only using a word processor, though, *Port Watcher* will not be able to recognize when something is received because the serial ports will not be open.

*Port Watcher* ignores data sent by the Mac via serial ports.

## Commands

Starting *Port Watcher* is easy; just select it from the  menu. There will be no visible sign that it has started. If there is a beep as soon as the accessory starts, then there is not enough memory for *Port Watcher* to do its job.

Selecting *Port Watcher* again from the  menu will display the version number, copyright information, and four buttons. “Blank Now” will blank the screen immediately. “Stop Watching” will turn off *Port Watcher*. “Return to Application” will just remove the dialog box from the screen. “Change Parameters” will let you adjust the parameters.

## Parameters

When you press “Change Parameters” another dialog box will appear. The three buttons at the bottom let you return to your application. “Change” causes the displayed parameters to be used until *Port Watcher* is stopped or you quit the application. “Make Default” does what “Change” does and it also records the parameters so they will be used in the future when *Port Watcher* is started. “Cancel” does not make any changes.

Two timing parameters can be adjusted. “Time before considered idle” is the amount of time *Port Watcher* should wait after receiving the last character before it blanks the screen. This time can be set in seconds or in minutes. If you never want the screen blanked then set this value to a large number. “Attention span in seconds” is the number of seconds that you usually watch the screen after the last character was received. If there is a period longer than the attention span when no characters are received and then something arrives, *Port Watcher* will produce a short beep. If there is never a quiet period longer than the attention span then *Port Watcher* will do nothing.

The following table illustrates what happens if the attention span is 15 seconds and the idle delay is 900 seconds:

| Seconds between 2 characters | Action when 2nd char. received |
|---:|---|
| 5 | nothing |
| 16 | beep |
| 899 | beep |
| 901 | screen restored and 2 tones made |

(the screen would have been blanked after 900 seconds of no activity)

"Notify before blanking" indicates if the two-tone notification should be given before the screen is blanked. This does not affect the two tones produced when the screen is restored.

"Watch modem port" and "Watch printer port" determine which of the serial ports are monitored for activity.

## Working with *Switcher*

*Port Watcher* is especially useful when you have a terminal emulator and another program loaded into *Switcher* since you can tell when something is received without looking at the emulator. Remember that *Port Watcher* will not work if there is not a terminal emulator running or suspended by *Switcher*.

Suppose you have loaded a terminal emulator and a word processor. If you start *Port Watcher* from the word processor, then whenever you are in the word processor the serial ports will be monitored. If you also want the ports to be monitored while you are in the emulator, you must start *Port Watcher* there also. *Port Watcher* will beep and blank as usual in the word processor. In addition, if you are in the terminal emulator and receive something and then switch to the word processor, *Port Watcher* will beep. This is a side-effect of how the ports are monitored.

If *Port Watcher* works with your terminal emulator but does not work with another application while the emulator is suspended by *Switcher* there are two possibilities you might explore. First, before being suspended by *Switcher* some terminal emulators may send an XOFF character to the remote computer system. When the emulator is started again it sends an XON character. This causes the remote computer system to not send anything to the Mac when the emulator is not on the screen; thus, there will be nothing for *Port Watcher* to sense. Second, if you use ⌘-], ⌘-[, or ⌘-\ to switch out of the terminal emulator a non-printing character may be sent to the remote computer. This character may cause the remote system to suspend output to the Mac.

## Distribution Notice

The algorithm that generates the kinetic string art was adapted with permission from a program written by Steve Medwin.

*Port Watcher* is shareware. If you use it regularly, please send what you think it is worth to:

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