New Technical Notes

Macintosh

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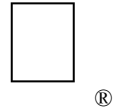
How To Produce Continuous Sound Without Clicking
Toolbox

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This Technical Note formerly described how to use the Sound Driver to produce continuous sound without clicking.
Changes since March 1988: The continuous sound technique is no longer recommended.

Apple currently discourages use of the Sound Driver due to compatibility issues. The hardware support for sound designed into the early Macintosh architecture was minimal. (Many things have changed since 1983–1984.) The new Macintosh computers contain a custom chip to provide better support for sound, namely the Apple Sound Chip (ASC). The ASC is present in the complete Macintosh II family as well as the Macintosh SE/30 and later machines. When the older hardware of the Macintosh Plus and SE are accessed, it is likely to cause a click. This click is a hardware problem. The software solution to this problem was to continuously play silence. This is not a real solution to the problem and is not advisable for the following reasons:

- The Sound Driver is no longer supported. There have always been, and still are, bugs in the glue code for `StartSound`.

- The Sound Driver may not be present in future System Software releases, or future hardware may not be able to support it. The Sound Manager is the application's interface to the sound hardware.

- The technique used to create a continuous sound should have only been used on a Macintosh Plus or SE, since these are the only models that have the "embarrassing click." Do not use this method on a Macintosh which has the Apple Sound Chip.

- Using the continuous sound technique, or the Sound Driver for that matter, will cause problems for the system and those applications that properly use the Sound Manager. Also realize that `_SysBeep`, which is a common routine that everything uses, is a Sound Manager routine.

- The continuous sound technique wastes CPU time by playing silence. With multimedia applications and the advent of MultiFinder, it is important to allow the CPU to do as much work as possible. The continuous sound technique used the

CPU to continuously play silence, thus stealing valuable time from other, more important, jobs.

Further Reference:

- *The Sound Manager,* Interim Chapter by Jim Reekes, October 2, 1988
- M.TB.MultifinderMisc