Apple II
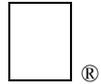# Technical Notes

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Developer Technical Support

GS/OS
#11:   About EraseDisk and Format

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This Technical Note explains how an application can tell when a user chooses Cancel from an `EraseDisk` or `Format` dialog box and explains why the `file_sys_ID` field is ignored in class-zero calls.

Changes since July 1990: Noted that System Software 5.0.3 fixes some of these anomalies.

Detecting a Canceled Erase or Format Dialog Box

GS/OS Reference says that `EraseDisk` and `Format` return with the carry flag set and `A` equal to zero when the user cancels the operation. This is great, except that the calls actually return with the carry clear, making a Cancel hard to distinguish from a successful `EraseDisk` or `Format` operation. This happens in System Software 5.0.2 and earlier; it works as documented in *GS/OS Reference* in System Software 5.0.3 and later.

If you must use 5.0.2 or earlier versions of the system software, this Note presents a safe way around the problem, which works with all versions of the System Software:

1. In the parameter block for class-one `EraseDisk` or `Format`, set the `fileSysID` field to zero. (See note below.)
2. Make the call.
3. If the error code is non-zero, there was an error. Handle it.
4. Otherwise, the error code is zero. Check the `fileSysID` field in the parameter

block. If it is still zero, the user chose to cancel the operation.

Note that this method only works for class-one calls. For the class-zero `ERASE_DISK` and `FORMAT` calls, the `file_sys_ID` word is only an input parameter and always remains unchanged.

About the Class-Zero file_sys_ID Parameter

Even though `fileSysID` is an **input** parameter for the class-zero calls `ERASE_DISK` and `FORMAT`, all versions of the system software ignore the supplied value and always give the user a dialog for selecting a file system. This means no functionality is lost by putting a zero there.

The reasons for this decision are historical. Although the *Apple IIGS ProDOS 16 Reference* indicates that the input parameter `file_sys_ID` would be used in future versions to choose destination file systems, ProDOS 16 always returned an error if the file system specified was not $0001 (ProDOS).

Since this effectively means no `ERASE_DISK` or `FORMAT` call can be made under ProDOS 16 with any `file_Sys_ID` other than $0001, the GS/OS team chose to ignore the parameter and always give users the choice when using class zero calls. Otherwise, no program that existed when GS/OS was released would ever allow users to choose interleaves or file systems (they would always format for ProDOS, file system $0001). (Note that the class-one `Format` and `EraseDisk` calls have a new `reqFileSysID` parameter; if this field is present, the dialog box is bypassed.)

Further Reference
- *GS/OS Reference*
- *Apple IIGS ProDOS 16 Reference*