

# COM File Format

By Max Maischein

COM Format  
Intel byte order

Information from File Format List 2.0 by Max Maischein.

-----!-CONTACT\_INFO-----

If you notice any mistakes or omissions, please let me know! It is only with YOUR help that the list can continue to grow. Please send all changes to me rather than distributing a modified version of the list.

This file has been authored in the style of the INTERxxy.\* file list by Ralf Brown, and uses almost the same format.

Please read the file FILEFMTS.1ST before asking me any questions. You may find that they have already been addressed.

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-----!-DISCLAIMER-----

DISCLAIMER: THIS MATERIAL IS PROVIDED "AS IS". I verify the information contained in this list to the best of my ability, but I cannot be held responsible for any problems caused by use or misuse of the information, especially for those file formats foreign to the PC, like AMIGA or SUN file formats. If an information it is marked "guesswork" or undocumented, you should check it carefully to make sure your program will not break with an unexpected value (and please let me know whether or not it works the same way).

Information marked with "???" is known to be incomplete or guesswork.

Some file formats were not released by their creators, others are regarded as proprietary, which means that if your programs deal with them, you might be looking for trouble. I don't care about this.

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The COM files are raw binary executables and are a leftover from the old CP/M machines with 64K RAM. A COM program can only have a size of less than one segment (64K), including code and static data since no fixups for segment relocation or anything else is included. One method to check for a COM file is to check if the first byte in the file could be a valid jump or call opcode, but this is a very weak test since a COM file is not required to start with a jump or a call. In principle, a COM file is just loaded at offset 100h in the segment and then executed.

| OFFSET | Count  | TYPE    | Description |
|--------|--------|---------|-------------|
| 0000h  | 1 byte | ID=0E9h |             |
|        |        | ID=0Ebh |             |

Those are not safe ways to determine whether a file is a COM file or not, but most COM files start with a jump.