
DOCUMENTATION FOR

PHOTONIX II

(Translation by David Danielson)

(C)opywrite 1990 - FTA and TOOLBOX
6 rue Henri Barbusse - 95100 ARGENTEUIL - FRANCE

CARTE D'ENREGISTREMENT

N°: 523

Merci pour l'achat du logiciel PHOTONIX II. Ce formulaire est destiné à ce que vous puissiez recevoir les mises à jour du programme.

Le logiciel PHOTONIX II n'est pas protégé contre la copie. Dans le corps du programme, nous avons placé le numéro de votre Carte d'Enregistrement.

NOM: -----

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Version 2.30
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1. INTRODUCTION

Photonix II is a new copying program for the Apple IIGS : it brings together esthetics and technical performance with an attractive look, efficiency, and speed and effectiveness of its copying options.

1.1 Minimum requirements for the use of Photonix II

- An Apple IIGS - ROM 00, 01, or 03
- A minimum of 1 Apple 3.5" disk drive (a second drive is useful)
- at least 1.128 Megabytes of memory

Please note that **Photonix II** only functions correctly with original Apple 3.5 disk drives. **Photonix II** does not work with Unidisk's Apple 3.5 or compatibles (ie. AMR).

1.2 Running Photonix II

To execute **Photonix II**, it is sufficient to insert the program disk in drive 1 and turn on your computer. **Photonix II** will load itself automatically and you will see the title screen appear in about 10 seconds.

Please note that if you hit the Option key while the program is loading, you will pass directly to the main menu of **Photonix II** without seeing the title screen.

1.3 Installing Photonix II on a hard disk

To install **Photonix II** on a hard disk, all that is necessary is to copy two files (PHX.SYSTEM and PHX.DATA) from the program disk of **Photonix II** to the hard disk (in the same directory). To execute the program from the hard disk, execute the program PHX.SYSTEM (which is of the P8 standard).

2. THE PRESENTATION OF THE PROGRAM

Once loaded, go past the title screen (by pressing any key) and the principle screen of **Photonix II** will appear. This screen is composed of many parts as described below.

2.1 Disk Windows

If you have 2 disk drives, the upper window represents drive 1 and the lower window is drive 2. If, however, you only have 1 drive, the lower window will appear broken. These windows will show

you what to do with the disks during the copy procedure depending on their contents.

2.2 The commentary window

Found to the left of the Drive 1 and Drive 2 windows, this window is where you will see messages from the copying routine. It should be noted that the language used by the message generator is English or French. To change the language used, see section 4.11.

2.3 The Format Information Windows - Indicators

These windows are situated above and below the commentary window. The top window is reserved for the original diskette, in other words, the disk you wish to copy. The bottom window is reserved for the disk to be copied to or the destination diskette. These windows contain information of the format used on the diskette (interleave and drive number) as well as a copy indicator which shows the time remaining to finish the copy.

2.4 The two ICON lines

The ICONS (at the bottom of the screen) are used to choose the copy options and for adjustments. To select an ICON, move the robot arm with the mouse and click on the ICON in question. The ICONS are found on 2 lines : on the first are the command ICONs and on the second are the option ICONs.

2.5 The Clock Window

This window is found to the right of the first line of ICONs and is used to show the time of the internal clock of the Apple IIGS. By pushing (with the aid of the robot arm) on the yellow button below the numeric display, the number of copies made with **Photonix II** since its installation on your Apple IIGS will be displayed for several seconds.

3. THE COMMANDS

The commands are of two types: those made by choosing one of the command ICONs, and those made via the keyboard. In **Photonix II**, most of the commands are accessible by an ICON.

3.1 The Keyboard Commands

The commands are not case sensitive and are available in the main menu (when the robot arm is visible on the screen).

3.1.1 The key 'Q'

To quit **Photonix II** and boot another disk. Please note that if you hit 'Q' without inserting a disk, **Photonix II** will re-boot what is available ie. It will re-boot from the hard disk if no floppy is installed in the floppy drive.

3.1.2 The key 'V'

Used to know the version number of **Photonix II**.

3.1.3 The key 'M'

Display the window which shows the status of memory ie. To show if there is a disk in memory ready to be rewritten.

If it is not possible to go to the copy mode immediately, **Photonix II** indicates that memory is empty.

This is even more useful if the information window has been erased for some reason, to know which disk has just been read.

3.1.4 The key 'C'

This key allows the display, for several seconds, the number of copies made with **Photonix II** in place of the time. This is the same function as pressing on the yellow button below the numeric counter (see section 2.5).

At all times, the Esc key can be used to interrupt an operation in process and return to the main menu (the robot arm reappears).

3.2 Commands accessible by the command ICONs

3.2.1 ? (In blue)

Display a page of information about the authors of **Photonix II**.

3.2.2 Battery (In brown)

Save all settings in battery backed-up RAM. The settings are saved in octets \$C0 to \$C8 on the BRAM.

3.2.3 Format (In brown)

Format a diskette and install the catalogue and volume name that you provide (the default name is UNTITLED or SANSNOM according to the display language.) This is the same format as COPYII+, but execution is quicker.

3.2.4 DISK and ? (In brown)

Read and display the ROOT directory. You can move in this display using the arrow keys. It must be noted that **Photonix II** remains in this mode. This means that if you insert a new disk, the directory of this new disk will be displayed.

Push ESC or RETURN to return to the main menu.

3.2.5 FT (In brown)

Selection of interleaving. Disks under GS/OS or PRODOS 8 use 2:1 format and those formatted under PRODOS 16 use 4:1. 3:1 is not normally used. AUTO will force the copy to the same format as the original.

3.2.6 Speaker (In blue)

Volume ON/OFF for noises and music except for the error siren which is always operational.

4. COPY OPTIONS

Unlike the commands, all of the options are selected by the ICONS (the keyboard is not used). The second line of ICONS is for the copy options and are either on or off. The current state of the option is indicated by the color of the ICON. For example, in section 4.1 the Format option is explained. If the ICON is light green, this option is active. If it is dark green, it is not active.

Certain options are adjustments or refinements to other options.

4.1 Format (In green)

Force a complete format of the disk copy even if all of the blocks of the source disk are not utilized.

4.2 FS (In green)

Used to copy disks with a special format. This format was initially created to have much faster disk access but was quickly abandoned. Few programs use the FS format (except for some Freeware) and this option is normally not selected.

4.3 ZAP (In red)

If this option is activated, the copier reads only the blocks indicated in the VTOC (block allocation table) of the original disk. If your original is not full, the reading of the disk will be much faster. If this option is not selected, the copier will read all of the blocks of the disk. This option works the same in writing. In this case, you can force the formatting of blank tracks with the FORMAT command (see section 4.1).

4.4 MASS COPY (In red)

Use this and you only need a single read of the source disk to make a number of copies. (After having installed and read the source disk one time, one can copy to many disks without having to re-read the original each time.)

4.5 Drive (In red)

If this option is active, the copy mode is entered and all you need to do is follow the instructions contained in the disk windows to begin the copying session. If this option is inactive, the options "anti-virus" and "verification" will be made without actually copying. In other words, the reading of the source disk is all that is performed.

4.6 File (In red)

If this option is active, **Photonix II** will reorganize the VTOC of the destination disk to obtain a better efficiency for reading. This option is very useful if you have had a lot of work with your disk

(successive erasures of files for example) or with application disks.

There are two modes to reorganize the files (See 4.11) The mode 'Directory First', like its name implies, places all of the sub-directories of the disk at the beginning of the storage space to accelerate disk access.

The sequential mode writes the files in the order they are found if they follow the directory order or not. This mode permits, in theory, to reorganize system disks but we advise that you make some tests to find which mode of reorganization is the most efficient for the structure of the disk.

At the end of the reorganization, some statistics are provided :

FILES	Number of valid files on the disk
DELETED	Number of files that were previously deleted and now the space from these files has been recovered
DIR	Number of directories on the disk which are in the main directory.

In the case of problems during the reorganization, the message "Directory Damaged" appears and the operation is stopped. If **Photonix II** thinks it has found some bad files, the list will be shown...

Attention: During the reorganisation, only data errors on the files were detected: the bad blocks were not taken into account. If this list is important, you can move the cursor with the arrow keys like in the directory screen, and the **ESC** and **RETURN** keys allow you to return to the main directory.

4.7 Check Mark (In red)

If this option is active, **Photonix II** will verify, after writing, that your disk is correctly copied. Surely, this will take a bit more time, but at least you will be sure your copy is good. We advise you to use this option.

4.8 Face - Anti Virus (In red)

The increasing problem of viruses installed on a disk gave us the idea to provide this option. If this option is active, when **Photonix II** reads the original disk, it will indicate if there is a virus present or not. We advise that you use this option.

In case of a virus being present, the copy will be made without the found virus. Attention however, because the virus present on your original will always be there because **Photonix II** does not modify your original disks. We advise that you use this option, because with it your disks should remain virus-free.

The "anti-virus" will automatically detect the most recent viruses : "Lode Runner", "Dave", and "Starfighter I and II".

Photonix II will also automatically look for viruses on the boot sectors of disks, but this option is more or less weak. If a virus is detected, analyze the boot area of your disk (or contact TOOLBOX). Never the less, you can try to follow the instructions of **Photonix II**, but without any guarantee of success.

4.9 Disk and Cross (In green)

This option "Disk Shaker" could make you laugh, and as well, there isn't much more serious.

Imagine, for example, that your disk has a bit of dust on its surface. A read or write to the disk could cause an error. But, if you have activated the option "Disk Shaker", Photonix II will prompt you to eject the disk, tap the disk (softly) on its edge, and then put the disk back in the drive. With a little luck, the read or write will start again and will proceed without problem. Tapping is simply giving a few soft hits on the side of the disk. It is not recommended to put your fingers on the surface of the disk at any time !

4.10 Write Protect Switch (In green)

If this switch is active, the reading of the original will be impossible if the disk is not write protected with the write protect switch. This is to prevent putting the original into the drive for the copy by mistake.

4.11 Option Panel (In gray)

This option will display a new menu with new options. To choose an option, click in the corresponding box.

4.11.1 Reorganisation

Choices: Directory First/Sequential

Permits the choice between 2 modes of reorganisation.

4.11.2 Language

Choices: American/French

Permits the choice of the display language.

4.11.3 Reading

Choices: 1, 3, or 16 times

Allows the choice of the number of re-tries to write/read in case of an error before the program officially announces an error. This option can be used if you have a disk with a block of the program which is difficult to read.

4.11.4 Change Drive

Choices: Yes/No

Permits you to swap the functions of drives 1 and 2. This option can only be activated if you have two disk drives.

4.11.5 Eject Sound

Choices: Classical/Burp

Permits the choice between 2 disk eject sounds.

All of these options are saved in Battery RAM.

5. COPY MAC DISK

Photonix II also correctly copies the 400K and 800K disks of the MAC without problem. But, it is suggested to remove the reorganisation and anti-virus options. In the event that a Macintosh disk is detected, the message "MAC DISK 400KB (or 800KB) is displayed along with the volume name of the disk.

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