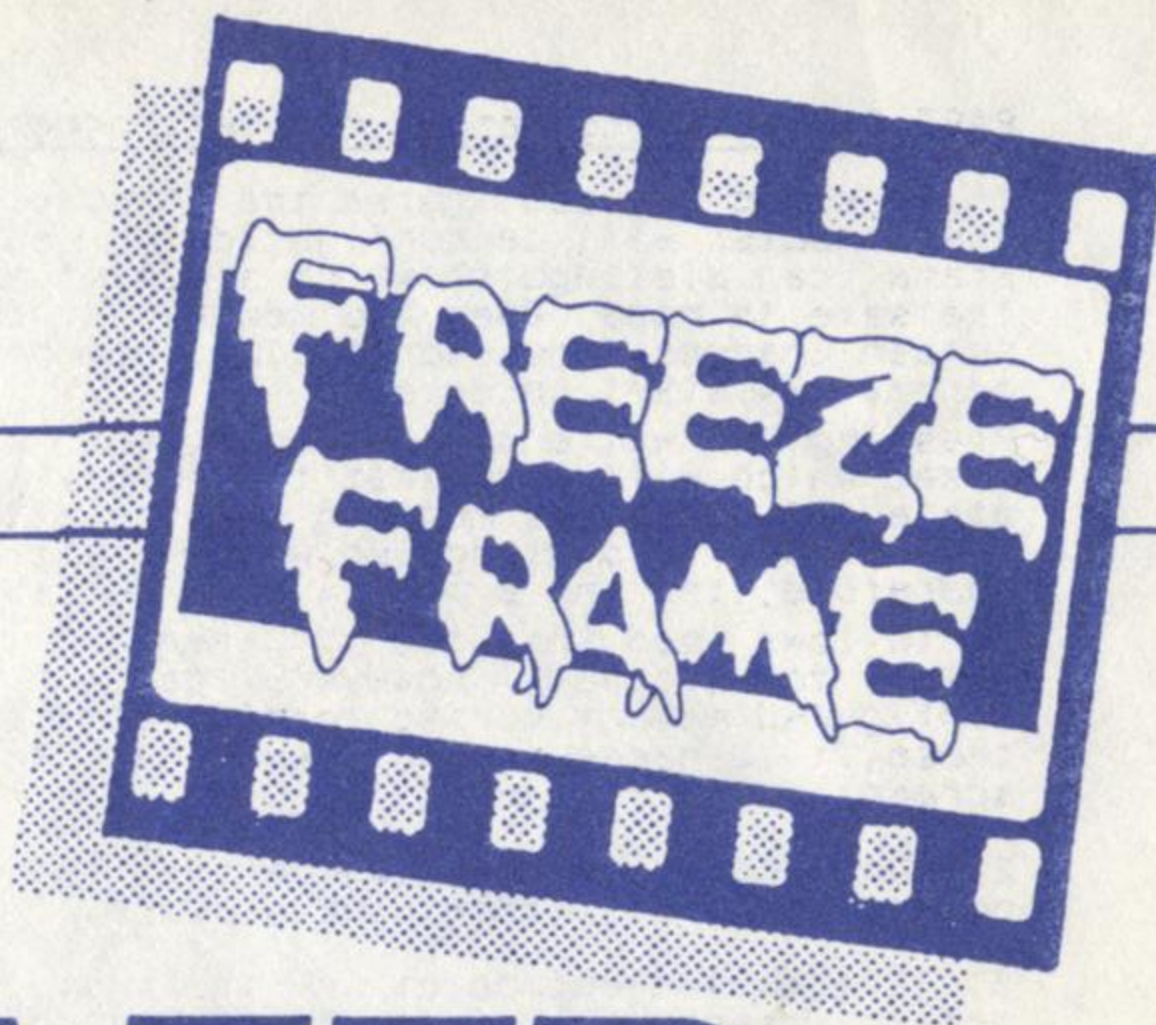


STRICTLY FOR
PERSONAL USE



LAZER

INSTRUCTIONS

OPERATING FREEZE FRAME LAZER

Operation of 'Freeze Frame' is simply a case of following the prompts provided.

With the power switched off plug the cartridge into the cartridge port of the computer. Switch on and you will see a prompt screen as follows.

FREEZE FRAME MkIV.

BY A AGER (C)SOFTCELL 1987
PRODUCED BY EVESHAM MICROS

M	- CONFIGURE MEMORY
R	- NORMAL RESET
S	- SUBSEQUENT PARTS
L	- FAST DISK LOADER
D	- DIRECTORY
F	- FORMAT DISK
C	- FILE COPY

You are now in the standard MkIV operating system by pressing the right hand button on the cartridge you can toggle over to Lazer operation. The first section of the instructions covers the standard MkIV operation. Most of the principals of operating apply equally in either mode, however, there is some extra clarification of the Lazer operation after the section on MkIV.

FREEZE FRAME MkIV AND GENERAL OPERATION

The use of 'Freeze Frame' can be split into three parts, the saving of memory resident programs programmes, the transfer of subsequent parts and the use of other utilities provided.

PART ONE...Saving memory resident programmes.

1) Pressing "M" configures the computers memory. The memory of the computer will be configured in such a way that 'Freeze Frame' can distinguish which areas of memory are being used when the save is made. When the memory is configured the start up screen changes from red to blue. Now press "R" to proceed to the normal '64 start up screen.

Pressing "R" while on the red screen will implement a normal reset which will mean that the memory is in it's normal random state. If a save is made in this condition 'Freeze Frame' will not be able to distinguish which areas of memory are being used, therefore, the whole memory will be saved.

It follows then that the "M" then "R" is the normal method with which to proceed, however, certain programmes check for configured memory during loading as a protection feature, with these it is necessary to use the "R" command from the red screen.

2) LOAD and RUN the programme that you wish to back up in the normal way, be it from disk or tape.

3) At a convenient point in that programme, normally a menu screen, press the left hand button on the "Freeze Frame" cartridge. After a few seconds you will see a screen with coloured flashing horizontal lines.

4) At this stage you can do one of four things.

- i) Press "D" to save a version of the programme to disk. This version will include a fast reload routine.
- ii) Press "S" to save a version of the programme to disk. This version will reload at normal disk load speed.
- iii) Press "U" to save a version of the programme to disk. This version will reload at standard speed and will not include any file compression, this can be useful in two ways, firstly the files are easy to examine if required and secondly reloading with "Dolphin DOS" can

be achieved in less than 10 seconds because there are no pauses for decompression.

- iv) Press RECORD/PLAY on your datasette and then press "T" to save a version of the programme to tape. This will include a tape fast reload.

Wait for the save procedure to be completed. In the case of disk saves supply an appropriate file name when requested.

YOUR BACK UP IS NOW COMPLETE

RELOADING THE BACKUP

When saved with the "D" command use LOAD"PROGRAM NAME",8,1

When saved with the "S" or "U" command use LOAD"PROGRAM NAME",8
(At the READY prompt type RUN<RETURN>)

Reload tape saves by pressing SHIFT RUN/STOP

To perform a normal reset, first press the left hand button. When the screen changes then press the right hand button. You will now be on the normal Commodore power-up screen. (You will notice that the bytes free is about 8K less than usual. This is because the in-built reset routine upsets certain system variables to get past many of the more intricate protection schemes).

HINTS AND TROUBLESHOOTING

(a) Most computers will complete the start up procedure first time every time, however, due to the different tolerances in different batches of '64s, with some it may be necessary to try again should the computer "hang up".

(b) Remember when loading from tape that certain programmes will not load with the disk drive switched on. Usually these only check during loading so you can switch back on when ready to save. Recently some programmes have put a check for the disk drive being present in the programme itself, with this type of programme it will be necessary to switch the disk drive off after loading the back up. It may also be of importance to "press the button" at the correct stage. ie. not when the programme is about to check for the disk drive.

(c) The point at which you press the left hand button is not that important. You may wish to do it at a high level or at a critical point. From the aesthetic point of view it is normally best to choose a still pause or menu screen. If you have a failure with a programme it will be worth trying at a different point in the programme.

(d) Very rarely, with certain very long programmes you will find that the screen that was displayed when you pressed the button may be corrupted on reloading. This is perfectly normal because if "Freeze Frame" cannot find any spare memory to work in it will use the screen display memory area. (pressing the button on the "Game Over" screen just before it moves back to the menu screen is a useful way of disguising this). The screen will only be corrupted once, the next time it is drawn it will be perfect.

(e) Many disk based programmes can be backed up even if they refer to the disk for subsequent information. Use "Freeze Frame" to back up the main part of the programmes and then use the file copier to transfer the files onto the disk.

(g) Users new to disk drives please note that your discs must be formatted before you can save any programmes onto them.

(h) If you are having reloading problems please be sure you are using ,8,1 the secondary address is very important.

(i) Don't forget if a programme won't load or run correctly after using the "M" option try again using "R" from the red screen.

(j) With some programmes it is necessary to switch the disk drive off and back on again to reset it, after you have pressed the Freeze Frame button, while the horizontal lines are flashing. This is because some disk based programmes use the RAM in the disk drive and it needs clearing before it can be used for normal operation. This problem will show itself by no save being made when you press "D", "S" or "U".

PART TWO...Transferring subsequent parts to disk.

This procedure will allow you to transfer the extra parts of some tape based multi stage programmes to disk. Firstly make a 'Freeze Frame' back up of the main body of the programme ie. up to the main menu stage, then follow the steps below.

1) With the disk in the drive switch the computer back on and press "S" from the 'Freeze Frame' menu.

2) At the prompt "FAST OR NORMAL LOADER" press "F" to use the built in fast LOAD/SAVE routines or "N" to use normal speeds (This may be necessary with drives other than the 1541 and very handy for Dolphin DOS users).

3) Make sure the appropriate 'Freeze Framed' disk is in the drive and press <RETURN>.

4) Supply the exact programme name that you gave to the main part of the programme when you 'Freeze Framed' it. Press <RETURN>

At this stage part of the 'Freeze Framed' programme will be loaded in and resaved.

5) At the prompt "POSITION TAPE" make sure the appropriate tape is in the tape deck positioned where it stopped from when you transferred the main part of the programme. Press <RETURN> then press PLAY on the tape deck. The parts will now be loaded in from tape and saved to disk.

With some of the very large programmes you will need to have more than one formatted disk ready. With some it may be best to have a few sides of formatted space available. If a section cannot be saved to disk due to lack of space a prompt to insert a fresh formatted disk will appear. If you have used more disk space than necessary you can always use the file copier to move the files into a more compact form.

6) When all the files are saved you can switch off the computer.

7) Reload the converted programme as explained previously. When the extra files are accessed the reload will be diverted from tape to the newly transferred disk files. On some occasions it may be necessary to have PLAY pressed on the cassette recorder while the extra parts are accessed.

NOTE: The extra parts will be reloaded at speed if the cartridge is plugged in, otherwise they will be at normal slow speed.

If you get a load error (the equivalent of file not found) because the programme is searching for a file that is on another disk do not despair. The programme has been changed so that it will retry approximately every ten seconds, so replace the disk with the correct one and let it retry.

HINTS AND TROUBLESHOOTING

a) If during stage number 4 above, the computer returns the message "TAPE LOADER NOT FOUND" then the programme is one that 'Freeze Frame' can not cope with. At this stage you can either switch off and not proceed any further or press <RETURN> and the process may continue as explained. The tape commands will still be in the programme (not redirected disk commands), but this may be useful to the knowledgeable users who may be able to alter the programme themselves.

For those not so talented we now have a "Freeze Frame Utility disk" that will take care of many multi stage programmes that will not transfer properly, as well as offering other enhancements.

PART THREE...Operating the utilities.

As well as the transfer options 'Freeze Frame' also provides some other options explained below.

L - FAST DISK LOADER

Pressing "L" will allow the fast load to be used. The directory of the disk currently in the drive will be displayed. The following functions can be accessed.

To LOAD programmes use the cursor keys and move the cursor to the line of the desired programme. The various functions are:

F1	Load normal programme
F3	Load "Freeze Framed" programme
F5	Perform LOAD"*,8,1
F7	Display directory of another disk

The following other function commands also apply:

%PROG NAME	LOADs machine code programme (,8,1)
/PROG NAME	LOADs to BASIC (,8)
^PROG NAME	Same as F3
*PROG NAME	Same as F1
@COMMAND	Performs disk command eg.
	@S:NAME to scratch
	@V to verify
	@ to read error channel
f	Switches cartridge out ready for Freeze Frame
RUN/RESTORE	Return to main menu

NOTE: It is only possible to FREEZE a programme from this side of the cartridge if you have used "f" to switch out the cartridge or if the programme to be loaded has already been "Freeze Framed".

D - DIRECTORY

This option will display the directory of the disk currently in the drive. If you wish to pause the listing then press the space bar, the listing will be paused until you press it again.

To return to the main menu just press <RETURN>

F - FORMAT

To proceed with this option simply supply a disk name and ID at the prompts, discs will be formatted in around 20 seconds. At the end the new directory heading will be displayed. Pressing <RETURN> will take you back to the main menu.

C - FILE COPY

The file copy programme is very useful for transferring files around. It loads and saves at high speed (6-7 times normal) and will handle files up to 248 blocks long.

It is very easy to use, follow the prompts, and the directory of the disk will be displayed followed by a prompt "SELECT FILES WITH Y OR N". Press "Y" to select the files that you want to copy and "N" for the ones that you don't want. You can begin copying by pressing RUN/STOP when you have selected all the files that you want, or it will begin automatically at the end of the directory. Prompts as to when to change the discs are provided as well as the option for more than one output.

USE WITH "DOLPHIN DOS"

To get the best from the speed offered by Dolphin DOS use the "S" command to save programmes. These saves load at very high speed, a large programme will load in from boot up in less than 15 seconds including searching and uncompressing. The actual time spent loading from the drive is well under 10 seconds. Alternatively use the "U" command, this is a little heavy on disk space but will allow the whole memory to be reloaded in 10 seconds or less. The subsequent parts work with Dolphin DOS, press "N" when prompted "FAST OR NORMAL LOADER" during the subsequent operation. When using the disk commands for directory, format and copy, Dolphin DOS will not be operative.

We have found that although it is necessary to switch Dolphin DOS out to load from tape that it is possible to switch it back in after the button has been pressed, ie. while the screen is flashing, to benefit from the high speed save.

USE WITH THE UTILITY DISK

The MKIV/LAZER version of Freeze Frame will operate with all versions of the "FF Utility Disk", however, to achieve fast loading of extra parts it is necessary to use V2.1. If you own an earlier version it can be upgraded by returning your old one and a handling fee of £2.00.

FREEZE FRAME LAZER OPERATION

After pressing the right hand reset button you will see the LAZER menu appear. The menu looks the same as the MkIV apart from the last option which is "X - Convert". (Please note that on some computers you will have to hold down the button for a few seconds).

All the functions mentioned in the previous MkIV instructions apply to the LAZER. The difference being that when a programme is "Freeze Framed" in LAZER mode the files are now saved as a USR file. They can only then be reloaded with the cartridge present and will now give you the increased speed. You can use "X" to convert normal Freeze Frame PRG files. Once you have pressed "X" just follow the on-screen prompts and transfer them onto a formatted disk. You can also convert single part programme files using the Convert utility.

You can only copy USR files using the copy utility when in LAZER mode. Also USR files cannot be scratched. To switch out of LAZER mode press the "f" key Freeze Frame operation can now be carried out.

TRANSFER OF MULTIPART PROGRAMMES

To transfer subsequent parts using in-built routines and those requiring the utility disk, an extra formatted disk is required to save converted files. This is because LAZER files cannot be scratched.

Subsequent parts (using in-built routines).

- 1) Freeze Frame main programme.
- 2) Copy "1.NAME" and "2.NAME" onto a new disk.
- 3) When you select subsequent parts, follow the instructions as previous MkIV. NOTE.. Fast load must be selected.
- 4) You will be prompted to "INSERT DISK". At this point insert the new disk and press <RETURN>.
- 5) Once the save has been carried out, the prompt "INSERT DISK" will once again appear. Leave the new disk in the drive and press <RETURN>. You are now ready to load the extra files from tape.
- 6) The operation for loading of the extra tape files is basically the same as the MkIV except that you must press <RETURN> before and after each file is saved on the disk. If the disk becomes full, a prompt for a new disk will be given.

Subsequent parts (using the utility disk).

- 1) Freeze Frame main programme.
- 2) Copy "1.NAME" only onto new disk.
- 3) When you select subsequent parts, follow the instructions as previous MkIV. NOTE.. Fast load must be selected.
- 4) You will be prompted to "INSERT DISK". At this point insert new disk and press <RETURN>.
- 5) Once the save has been carried out, the prompt "INSERT DISK" will once again appear. Now change back to the original disk and press <RETURN>.
- 6) The "2.NAME" file will now be loaded and converted. At the prompt "INSERT DISK", change to the new disk.
- 7) Once the save is complete keep the original disk in the drive and press <RETURN>. You are now ready to load the extra files from tape.
- 8) The operation for loading of the extra tape files is basically the same as the MkIV, except that you must press <RETURN> before and after each file is saved on disk. If the disk becomes full, a prompt for a new disk will be given.

NOTE ... If you do have any problems try transferring in MkIV mode and then converting to LAZER format. However bear in mind that for subsequent parts the "1.NAME" file must not be converted to LAZER.

CREDITS

Our thanks to Angus Ager for producing such a powerful and easy to use product.



LAZER

Incorporating Mk IV Freeze Frame

**THE
ULTIMATE TRANSFER UTILITY**

- TAPE TO TAPE ● DISC TO DISC
- TAPE TO DISC ● DISC TO TAPE

OPERATES WITH CBM 64/128/128D
WITH ANY DISC DRIVE

Produced & Marketed by:
Evesham Micros
Bridge Street, Evesham, Worcs. WR11 4SF
Tel: 0386 41989
DEVELOPED BY ANGUS AGER

LAZER



LAZER

Incorporating Mk IV Freeze Frame

**Disc Load and Save Speed
approx 20 x normal
Loads extra parts at
VERY HIGH SPEED
Includes Reset Button**

OPERATES WITH CBM 64/128/128D
WITH ANY DISC DRIVE

FREEZE

RESET

LAZER

