

XFORMAT

Version 2

User Guide

MOONSTONE COMPUTING
Strathclyde Business Centre
31 Clyde Street
Clydebank
Glasgow G81 1PF
Tel: 041-941 3120

MOONSTONE
COMPUTING

XFORMAT

Version 2

USER GUIDE

(c) MOONSTONE COMPUTING 1987

1. INTRODUCTION	2
2. INSTALLING XFORMAT-2	3
2.1 Distribution Files	3
2.2 Copying your Distribution disc	3
3. USING XFORMAT-2	5
4. COPY A DISC	6
4.1 Copy a 200K disc in Drive A	6
4.2 Copy a 800K disc in Drive B	6
4.3 Copy a 200K disc FROM Drive B TO Drive A	7
4.4 Aborting during a copy	7
5. FORMAT A DISC	8
5.1 Formatting a 200K disc in Drive A	8
5.2 Formatting a 800K disc in Drive B	8
5.3 Verifying a formatted disc	9
6. VERIFY A DISC	10
6.1 Disc corruption and damage	10
6.2 Verifying a disc	11
NOTES	12

COPYRIGHT NOTICE

All parts of the XFORMAT-2 program, as well as all associated documentation, technical bulletins, including this manual, and all future releases, enhancements and upgrades of any or all of the above, are wholly copyrighted by Moonstone Computing, (c) 1987. All rights are reserved.

No part of the XFORMAT-2 program may be copied other than for the purposes of personal security backup by the registered owner; no part of said program or its associated manuals or supplementary technical information may be otherwise duplicated or distributed by any person whatsoever without the express written permission of Moonstone Computing.

If copies of the program are made, these must only be for the purpose of security backup as described above. Only one such copy, or the original, may be in use at any one time. Multiple use licenses are available directly from Moonstone Computing under exceptional circumstances.

No changes whatsoever may be made to any part of the XFORMAT-2 program or its associated manuals and technical information without the express written authorisation of Moonstone Computing; failure to observe this condition will immediately absolve Moonstone Computing of any and all liability for any subsequent use, and any consequences thereof, of any part of the XFORMAT-2 program.

Published by Moonstone Computing 1987.

Printed in the UK.

1. INTRODUCTION

Welcome to the Users' Guide for Moonstone Computing's XFORMAT-2 extended disc formatting program for the PCW8256/8512. This program is designed to fully replace the DISCKIT utility supplied by Amstrad - using XFORMAT-2, you can format, verify and copy discs just as you can with DISCKIT, but with the important difference that your discs can hold more!

XFORMAT-2 allows you to create, copy and use discs in Drive A to a 200K format; these then have 192K free for your files - an increase of approximately 20K over the normal Amstrad CP2 format. Drive B discs fare even better - XFORMAT-2 formats these to 800K, giving them 784K free for files instead of the normal 706K, an increase of approximately 80K! In addition, Drive A discs are allowed 96 directory entries instead of Amstrad's measly 64 - no more Disc or Directory full errors just when you want to save your most important file!

Discs formatted or copied using XFORMAT-2 are completely compatible with both CP/M Plus and LocoScript. You do not need to run any special software before you can use XFORMATTed discs; the PCW detects and uses their extra capacity automatically!

Please read the Copyright notice at the beginning of this manual. This notice means that you may not alter the supplied software in any way without our permission, and you may not copy any or all of the software or its associated manuals for distribution to any other person. You may however make any number of backups, provided that these are solely and exclusively for your own use and that only one such copy, or the original, is in use at any one time. We recommend that you do make at least one security backup of the distribution disc before using it, in case it should become damaged or corrupt during use.

We are quite willing to offer all reasonable support and assistance to our customers; if you have a problem or a special requirement please contact us. If you write, we would appreciate a stamped S.A.E for our reply.

2. INSTALLING XFORMAT-2.

XFORMAT-2 requires NO special installation before it can be used, as it has been specially written for an Amstrad PCW8256/8512. It will NOT run on any other computer.

However, for technical reasons it is only possible for XFORMAT-2 to run under CP/M version 1.4

You can determine your CP/M version by looking at your computer's sign-on message when you boot.

If you have a different version of CP/M, XFORMAT-2 will NOT run.

If you find that you have an earlier version of CP/M, you should contact Amstrad themselves and request an upgrade of your CP/M and LocoScript disc to the current release; they will do this for you free of charge. Please do NOT ask us for an updated CP/M - we CANNOT supply it!

If you find that you have a more recent version of CP/M, please let us know - we'd like to hear about it!

2.1 Distribution files

The XFORMAT-2 program is contained in a single file, named XFORMAT2.COM, on the distribution disc. If your copy of XFORMAT-2 has been supplied as part of the MFU Multi-Format system, you will find it on Side B of the MFU distribution disc.

2.2 Copying your distribution disc.

Please, before you do anything else, make a working copy of your XFORMAT-2 distribution disc! Then put the original safely away to prevent it becoming corrupted or damaged in use. NEVER use the master copy of the software as the working version - sooner or later you will have a very frustrating (and expensive) disaster, as we cannot supply replacement discs in the event of such an accident.

Please note that XFORMAT-2 is supplied on one of its "own" 200K discs - Amstrad's DISCKIT copying program CANNOT copy this!

Consequently, you must copy the distribution disc EITHER using a FILE copying program such as PIP.COM (NOT DISCKIT, OR by using XFORMAT-2's Copy disc option.

3. USING XFORMAT-2

XFORMAT-2 will run happily from any disc drive, including Drive M. The computer must be running CP/M, not LocoScript, before you can use XFORMAT-2. If you are in LocoScript, copy any work you have in Drive M onto a real disc and then put a copy of your CP/M disc into Drive A. Press **SHIFT+EXTRA+EXIT** to reset and reboot the computer; this will startup CP/M.

At the **A>** prompt, put a disc with a copy of XFORMAT-2 into Drive A and type

A>xformat2

There will be a short delay while the program loads, then the screen will clear and XFORMAT-2 will sign on and display the Main Menu of options. At this point, you can remove the program disc and put it away (you don't want to format it by mistake!).

The Main Menu presents you with a choice of three alternatives -

- C - Copy a disc
- F - Format a disc
- V - Verify a disc

If you press **EXIT** at this point, XFORMAT-2 will stop and you will be returned to CP/M.

The easiest way is to simply copy the XFORMAT2.COM file to another disc. To do this, put a copy of your CP/M system disc into Drive A. If you are not already in CP/M, press **SHIFT+EXTRA+EXIT** to reset and reboot the computer.

A>pip

Now put your XFORMAT-2 distribution disc into Drive A and type

***m:=a:xformat2.com[y]**

This will copy the program off the distribution disc into the RAMdisc (Drive M). The **[v]** option tells PIP to verify that the copied version is the same as the original. Note that Drive M should have at least 2MK free or you will run out of room!

Now you can put the disc on which you want to save the program into Drive A and type

***a:=m:xformat2.com[y]**

After you have made at least one copy of the program, put your distribution disc away in a safe place and always use one of your copies to run the program.

4. COPY A DISC

If you select this option from the Main Menu by pressing C, you will be presented with a new screen. This explains the differences between the three different copying operations you can perform, and asks you to choose one.

Pressing EXIT at this point will return you to the Main Menu.

With the COPY option, you can make an exact duplicate of either a 200K or a 800K disc. Please note that XFORMAT-2 cannot copy discs which have been formatted using either Amstrad's DISCKIT program, or the old version of XFORMAT (Version 1.02). Similarly, DISCKIT cannot copy discs formatted using either version of XFORMAT-2. This is due to incompatibilities in the formatting systems used by the different programs.

Also, the disc onto which you are going to make the copy must previously have been formatted by XFORMAT-2; unlike DISCKIT, XFORMAT-2 cannot format a blank disc while it is copying.

You should always make sure that the disc you are copying FROM is write-protected. This prevents unfortunate accidents if you get the two discs mixed up by mistake!

You again have three main choices. These are :

- A - Copy a 200K disc in Drive A
- B - Copy a 800K disc in Drive B
- C - Copy a 200K disc FROM Drive B TO Drive A

4.1 Copy a 200K disc in Drive A

This option will allow you to copy a 200K disc in Drive A onto another 200K disc, also in Drive A. XFORMAT-2 will prompt you to swap discs whenever necessary. If you only have one disc drive, this is the ONLY way to make a copy of a 200K disc. If, however, you have two drives, you should normally use option G described below - this will be faster and you will not need to swap discs in the middle.

4.2 Copy a 800K disc in Drive B

Similarly, this option allows you to make a copy of a 800K disc in drive B, swapping discs when required. This is the ONLY way to copy 800K discs.

4.3 Copy a 200K disc FROM drive B TO Drive A

If you have two disc drives, this option is the fastest and easiest way to make a copy of a 200K disc. Put the SOURCE disc into Drive B and the DESTINATION disc into Drive A. It is NOT possible to copy a disc in the opposite direction.

There is no equivalent way to copy an 800K disc between drives, as although the PCW's Drive B can read both 200K and 800K discs, Drive A can only use 200K discs.

4.4 Aborting during a copy

At any time during a copy, you can abort by pressing the EXIT key. You will be given the choice of confirming the abort request and returning to the previous menu, or cancelling it and continuing with the copy.

If you cancel a copy operation, you must not attempt to use the DESTINATION disc. Although it may appear to be all right and show all the files correctly in LocoScript (or with a CP/M dir command), many of the files will almost certainly not have been fully copied.

The SOURCE disc is not affected in any way by a copy operation.

5. FORMAT A DISC

Selecting F from the Main Menu will present you with a new screen explaining the two formatting options available.

XFORMAT-2 can format a disc for use in either drive. In Drive A, the disc will be a single-sided, 40-track format compatible with Amstrad CF2 but with 200K of formatted capacity, while in Drive B the disc will be formatted to double-sided, 80-track compatible with Amstrad CF2DD but with 800K capacity.

In addition, a 200K disc formatted in Drive A will be initialised to have 96 directory entries, 32 more than allowed by Amstrad in their CF2 format.

5.1 Format a Single Sided 200K disc in Drive A.

Press A to select the appropriate Format option. You will be prompted to insert a blank disc. If you do not want to continue, then press EXIT at this point and you will be returned to the previous menu.

Put a 3" disc into Drive A, with the side you want to format facing towards the left. Press RETURN to start the formatting process.

Data on the other side of the disc will not be affected, but the side of the disc you are formatting will be initialised. This means that any programs or data on it will be overwritten and cannot be recovered. So if you want to re-format a used disc, make sure first that there is nothing on it which you want to keep!

You can pause the format operation at any time by pressing the EXIT key. This will offer you the option of continuing with the format, or of aborting by pressing EXIT a second time. If you abort in the middle of formatting a disc, it should not be used until it has been fully reformatted.

5.2 Format a Double Sided 800K disc in Drive B

Press B to select this option. Again, you will be prompted to insert a blank disc or press EXIT to cancel the command.

Note that an 800K disc uses both sides of the disc to store information - you can't turn it over (as you do with 200K discs) and get another 800K on the other side! So if you have previously used a disc as a CF2 or 200K XFORMAT disc in Drive A, make sure you don't want to keep anything from either side before re-formatting it for use as a 800K disc.

As above, you can pause or abort the format operation at any time by pressing the EXIT key.

5.3 Verifying a formatted disc

After the formatting operation is complete, you will be offered the option to verify the disc for errors. This allows you to make sure that the disc has no manufacturing faults on it, and that it has not been damaged in any way.

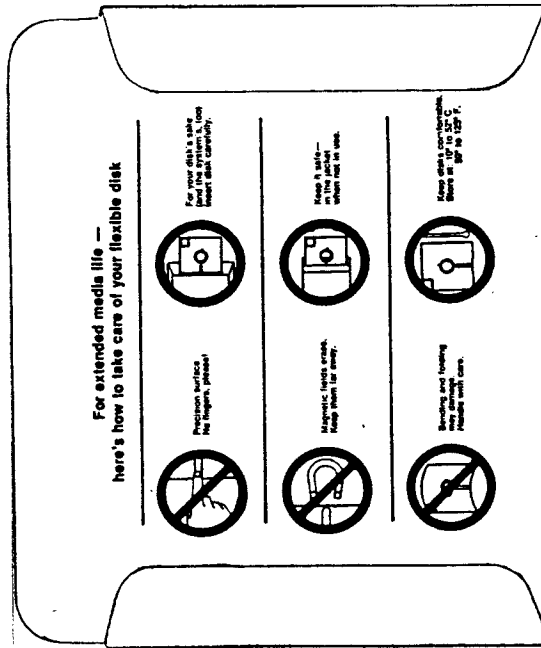
Please see Section 6 for more information on this function.

6. VERIFY A DISC

Selecting the V option from the Main Menu lets you verify a disc's physical format to check for errors. This is useful if you find problems while using a disc; error messages from CP/M or LocomoScript which appear for no apparent reason are often due to a disc either being physically damaged or the data on it corrupted.

6.1 Disc corruption and damage

Data on discs can be corrupted quite easily if they are handled wrongly, often in ignorance. Most disc sleeves for 5.25" discs have a list of "DON'Ts" and "DON'Ts" printed on their backs; unfortunately, 3" discs seem rarely to come with these! A typical example is shown below:



You should make sure that these rules are observed by anyone handling your discs. Most of the ways you can damage a disc are physical — someone spills coffee over it, or it warps under the heat from the sun if you leave it beside a window.

It is also possible, however, to corrupt or even destroy the information stored on a disc without damaging the disc itself. This can happen if you put a disc too near a source of strong electromagnetic radiation or magnetic field, such as television, electric motor, microwave oven or even an old telephone with a bell!

If a disc has been corrupted in this way, the only thing to do is attempt to recover as much information from it as you can (by copying any files which are undamaged to another disc) and then reformat the disc.

6.2 Verifying a disc

To verify a 200K disc, you must put it into Drive A and select the A option from the Verify menu. To verify a 800K disc, put it into Drive B and select the B option from the Verify menu.

Note that the verify operation does not damage or alter any data on the disc — it is carried out non-destructively.

Any errors found during the verification process will be reported, and you will be given the option of continuing or aborting. If you continue, then XFORMAT-2 will try to verify the remainder of the disc.

After all tracks have been verified, a count of the total number of errors detected is displayed.

If you verify a disc and it is found to have errors, then the only safe course of action is to reformat it and hope that the fault was "soft" (i.e. only magnetic corruption, rather than "hard" physical damage). If you have already been using the disc, then try to copy off as many of the files on it as you can onto another disc using pip or LocomoScript's Disc Manager, reformat the disc and reverify it. If you still get errors, throw it away! It isn't worth risking valuable programs or data on a suspect disc just to try and save a pound or two.

At any time during the verify operation, you can pause it by pressing the EXIT key. You will then be offered the option of continuing with the verify, or aborting by pressing EXIT a second time.