

# NIRVANA

To load NIRVANA type RUN"DISC or RUN"NIRVANA

The main menu offers seven options:

(1) NIRVANA

Select Nirvana and after a short delay the opening screen will appear. A scrolling message requests that you insert your source disc into drive A. Remove Nirvana from the drive and insert your source\* disc then press any key.

\*The source disc is the disc which you wish to back-up, copy files from, format etc.

Nirvana's working screen now appears and is divided into two sections:

(1) The **upper section** displays information concerning the files on the source disc.

The first line of the **lower section** shows:

- (a) The number of Kbytes free disc space
- (b) How many files selected together with their size
- (c) The disc format
- (d) Present source and destination drive selection

The remainder of the lower section shows the commands available within Nirvana.

Upper Section - file information

Information about each file on the source disc is displayed in four columns. Each column contains the following information about each file:

USER NUMBER	FILENAME & EXTENSION	READ/WRITE STATUS	"S" IF SYSTEM
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Example: 10 NIRVANA.BIN \* S

In this example the file is:

USER 10	NIRVANA.BIN	READ ONLY	SYSTEM
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Lower Section - command keys

The commands are selected using a single keypress are as follows:

CURSOR KEYS... Move cursor	R... Rename a file
COPY KEY.....Select/deselect a file	D... Copy a disc
C....Copy a file	A...File attributes
F...Format a disc	E...Erase a file
L...Log in a disc	S...Select a drive
ESC..... Exit Nirvana	

Cursor Keys Use the cursor keys to highlight the file(s).

Copy key Use the copy key to select or deselect files

Please Note

Files must first be selected before any, attempt is Copy, Erase, Rename or Change file attributes.

Copy a File Source and destination drives together with files to be copied must be selected before choosing this option. Whilst file copying, Nirvana will make use of the rear bank on the 6128 or any additional (DK'tronics) memory on all three CPC's (up to 256K). This option gives full on-screen reporting of how file transfer is progressing.

Copy a Disc Use this option to copy individual tracks or back-up your own discs. As Nirvana is capable of backing-up some commercial discs it is vital that the user is aware that :

IT IS AN OFFENCE UNDER THE 1988 PATENTS, DESIGN & COPYRIGHT ACT TO MAKE COPIES OF COMMERCIAL SOFTWARE (EVEN FOR YOUR OWN USE). AUTHORITY SHOULD FIRST BE OBTAINED FROM THE COPYRIGHT HOLDER BEFORE ATTEMPTING TO MAKE A BACK-UP COPY.

Source and destination drives should first be selected. This option also gives full on-screen reporting of how disc copying is progressing.

Format Both Data and Vendor(system) formats are catered for. Care should be taken when using this option because formatting will erase any files present on the disc. Ensure the write-protect tab is closed. Once either data or vendor format has been selected you are requested to insert the disc in the appropriate drive. Adequate opportunity is given to escape from this option should you so desire.

Log in a Disc Used to change the source disc.

Erase a file Both single and multiple erasure of files is possible. Files should first be selected.

Rename a File Both single and multiple renaming of files is possible. Files should first be selected.

File Attributes Four options are available. Single or multiple files should be selected before using any of these options:

- 1) RW/DIR - file is both Read and Write and can be erased. It is a Directory file and can be catalogued.
- 2) RW/SYS - file is both Read and Write and can be erased. It is a System file and cannot be catalogued.
- 3) RO/DIR - file is Read Only and cannot be erased. It is a Directory file and can be catalogued.
- 4) RO/SYS - file is Read Only and cannot be erased. It is a System file and cannot be catalogued.

Select Drives This option allows any disc drive combination to be selected. It will also read and write to 3.5" and 5.25" drives running under AMSDOS.

Directory Editor After selecting the appropriate drive the discs' directory will be read and displayed on screen. There are twelve options listed at the foot of the screen and all are self explanatory.

Disc Map After selecting the appropriate drive the whole disc will be mapped. The resultant map can be shown on screen or sent to your printer. The map shows the name of the file, its type together with the tracks and sectors it occupies. This option is best used prior to searching through a disc using the sector editor as it shows what tracks/sectors any particular file can be found on.

Sector Editor After selecting the appropriate drive you are requested to enter a track number followed by a sector number. The first 256 bytes of the selected sector will then be displayed in both HEX and ASCII. Use the cursor keys to move and the numeric keypad for the other options. The copy, key will write the modified track and sector information back to disc.

Data Format Sector Map can be found at the rear of this instruction book and has been included to help guide you round a data formatted disc.

The directory track on a data format disc starts at track 0 sector C1. Every file on disc will be written to track(s) and sector(s).

These are listed as BLOCK numbers in the row immediately under the filename and are in ascending, but not necessarily sequential, alpha-numeric order.

With very long files the sixteen bytes allocated for one entry may not be sufficient and there will be a second or subsequent entry followed by a further row of block numbers.

Catalogue Example

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00 58 31 20 20 20 20 20 41 53 43 00 00 00 10 OX1 0000ASC0000
02 B1 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0000000000000000
00 4E 31 20 20 20 20 20 20 42 49 4E 00 FF 00 2E ON10000BIN0000
03 04 05 06 07 08 00 00 00 00 00 00 00 00 00 0000000000000000
```

In this example the file X1.ASC is stored at block numbers 02 and B1. Block 02 equates to track 0 sectors C5 and C6 and block B1 equates to track 39 sectors C4 and C5. This is unusual and indicates that the disc is, or has been, at maximum capacity.

Archive/Restore a Disc This option is very much akin to "Tape Streamers" on PC machines used to "back-up" the machines hard disc.

It will automatically save to a cassette tape, in Data format, the entire contents of a disc extremely, quickly. A data formatted disc will archive in about 15 minutes without any attention from the operator. Restoration of a previously archived tape will also take about 15 minutes.

Also included is the option to write a header (of up to 80 characters) at the beginning of the tape. This enables an archived tape to be easily identified at a later date.

A verify option is included allowing archived material to be checked against the original.

It can be used to back-up important discs so that, should the program be lost, the disc can be re-written from the archived tape. It can also be used to archive seldom used programs which may be needed at some future date thus allowing recovery of valuable disc space.

To archive a disc follow the prompts. All information on the disc will be transferred to tape in 8 track sections.

Should you have several files/programs on different discs you can archive them as follows:

Format a disc to Data format and proceed to transfer all the required programs/files to this disc. Once the disc is complete select the archive option and follow the prompts.

To verify the tape rewind it and select the verify option and follow the prompts.

When using the restore option the program will show what format the original disc was. The receiving disc must be the same format.

File Archive This option is similar in operation to Disc Archive but differs in its method. It archives any files on disc by name and in alpha-numeric order. Any number of files can be archived as follows:

Format a disc as Data format and proceed to transfer all the required files to this disc. When all files are present select this option and follow the prompts. No further attention is required by the operator.

As with Disc Archive it uses are to back-up important or seldom used programs so that, should any program be lost, the program can be recovered from the archive tape.

Verification of archived material can be confirmed by CATaloguing the tape ensuring the blocks of each file check out Ok.

File Restore is used to restore files from tape which have been archived with the above option.

We recommend the use of a freshly formatted Data disc for restoring archived files.

Having selected this option you are prompted to enter the number of files to restore. If you do not know how many files on the tape then enter "0" (zero).

You are then asked if you wish to restore Automatically or Manually. Normally you would select "A" for automatic which will restore all files on tape using their original filenames. However, if you only wish to restore some of the files or should you require to rename any file during the restore operation then use "M" for manual mode. As each file is retrieved from tape the program will wait for you to enter a save name. Pressing the enter key will restore the file under its original name. If you do not wish to restore a file pressing the CLR will cause the program to skip to the next file.

Full information on each file is given as it is restored can be echoed to your printer by pressing the Copy key.

DATA FORMAT SECTOR MAP

T  
R  
A  
C  
K

SECTOR

	C1	C2	C3	C4	C5	C6	C7	C8	C9
00	00	00	01	01	02	02	03	03	04
01	04	05	05	06	06	07	07	08	08
02	09	09	0A	0A	0B	0B	0C	0C	0D
03	0D	0E	0E	0F	0F	10	10	11	11
04	12	12	13	13	14	14	15	15	16
05	16	17	17	18	18	19	19	1A	1A
06	1B	1B	1C	1C	1D	1D	1E	1E	1F
07	1F	20	20	21	21	22	22	23	23
08	24	24	25	25	26	26	27	27	28
09	28	29	29	2A	2A	2B	2B	2C	2C
10	2D	2D	2E	2E	2F	2F	30	30	31
11	31	32	32	33	33	34	34	35	35
12	36	36	37	37	38	38	39	39	3A
13	3A	3B	3B	3C	3C	3D	3D	3E	3E
14	3F	3F	40	40	41	41	42	42	43
15	43	44	44	45	45	46	46	47	47
16	48	48	49	49	4A	4A	4B	4B	4C
17	4C	4D	4D	4E	4E	4F	4F	50	50
18	51	51	52	52	53	53	54	54	55
19	55	56	56	57	57	58	58	59	59
20	5A	5A	5B	5B	5C	5C	5D	5D	5E
21	5E	5F	5F	60	60	61	61	62	62
22	63	63	64	64	65	65	66	66	67
23	67	68	68	69	69	6A	6A	6B	6B
24	6C	6C	6D	6D	6E	6E	6F	6F	70
25	70	71	71	72	72	73	73	74	74
26	75	75	76	76	77	77	78	78	79
27	79	7A	7A	7B	7B	7C	7C	7D	7D
28	7E	7E	7F	7F	80	80	81	81	82
29	82	83	83	84	84	85	85	86	86
30	87	87	88	88	89	89	8A	8A	8B
31	8B	8C	8C	8D	8D	8E	8E	8F	8F
32	90	90	91	91	92	92	93	93	94
33	94	95	95	96	96	97	97	98	98
34	99	99	9A	9A	9B	9B	9C	9C	9D
35	9D	9E	9E	9F	9F	A0	A0	A1	A1
36	A2	A2	A3	A3	A4	A4	A5	A5	A6
37	A6	A7	A7	A8	A8	A9	A9	AA	AA
38	AB	AB	AC	AC	AD	AD	AE	AE	AF
39	AF	B0	B0	B1	B1	B2	B2	B3	B3