

Atari 8Bit Diskformats and Harddiskformats:

<u>Name:</u>	<u>Sides:</u>	<u>Tracks: (2)</u>	<u>Kbit:</u>	<u>Recording:</u>	<u>BpS: (3)</u>	<u>SpT: (4)</u>	<u>Disksize:</u>	<u>ATR size: (5)</u>
Single	1	40	125	FM	128	18	90 KB	92176 (6)
Medium / Enhanced	1	40	250	MFM	128	26	130 KB	133136 (6)
Double	1	40	250	MFM	256	18	180 KB	183952 (7)
Quad (1)	2	40	250	MFM	256	18	360 KB	368272 (7)
Octa (1)	2	80	250	MFM	256	18	720 KB	736912 (7)
High	2	80	500	MFM	256	36	1440 KB	1474192 (7)
Extra High	2	80	1000	MFM	256	72	2880 KB	2948752 (7)
Harddisk	1	1	xxx	MFM	128	65535	8 MB	8388496 (6)
Harddisk	1	1	xxx	MFM	256	65535	16 MB	16776592 (7)
Harddisk	1	1	xxx	MFM	512	65535	32 MB	33553936 (8)

- (1) Quad = DS/DD, 40 tracks, Octa = DS/DD, 80 tracks, (2) Tracks per Diskside, (3) Bytes per Sector, (4) Sectors per Track
- (5) XFD: subtract -16 Bytes (ATR Header), therefore add +384 Bytes! (XFD saves the full boot sector size / disksize, BUT it does not / cannot save the full sector data – these additional 384 bytes are simply empty!)
- (6) full byte size / disksize (has 128 bytes boot sectors, thus no need to subtract 384 Bytes!)
- (7) byte size minus boot sectors (has 256 byte boot sectors, thus 3x 128 bytes = 384 bytes already subtracted, since the Atari OS only allows 128 byte boot sectors from diskette! the real disksize is therefore 384 bytes larger, but that data is not transferred from the floppy to the computer! most A8 floppy drives would require a firmware change to read/transfer full 256 bytes bootsectors)
- (8) harddisks can use full 512 bytes for bootsectors! floppy disks are still limited to 128 bytes bootsectors!

Diskformats and DOS versions supporting them:

<u>Format</u>	<u>DOS 1.0</u>	<u>DOS 2.0 / Smart DOS</u>	<u>DOS 2.5</u>	<u>DOS 3.0</u>	<u>DOS 4.0</u>	<u>DOS XE</u>	<u>Bibo DOS 6.x</u>	<u>Turbo DOS 2.x</u>
90 KB	YES	YES (1)	YES	YES	YES	YES	YES	YES
130 KB	no	no	YES	YES	no	YES	YES	YES
180 KB	no	YES (1)	no	no	YES	YES	YES	YES
360 KB	no	no	no	no	YES	YES	YES	YES
720 KB	no	no	no	no	no	no	no	no
1440 KB	no	no	no	no	no	no	no	no

- (1) DOS 2.0s can read 180k after a Reset; DOS 2.0d can read 90k after a Reset! DOS.SYS of SmartDOS is based on DOS 2.0! (Rainbow DOS and Black DOS are merely DUP.SYS replacements for DOS 2.0s or DOS 2.0d, there are many others...)
- (2) MyDOS requires a special / external formatter to format 1440 KB - one is available e.g. with the CSS Black Box or the CSS Floppyboard, maybe there are also some other external formatters...?!?
- (3) disk must be formatted with Sparta DOS or SDX or Real DOS, then Bewe DOS can be copied onto it!
- (4) OS A+ 4.1 was advertized being capable of 128 BpS, 256 BpS and 512 BpS, any format from 128 KB to approx. 15,6 MB!
- (5) in 360k mode the two disksides are used as two floppy drives (D1: and D2:) in XDOS!

<u>Format</u>	<u>Top DOS 1.5 Prof.</u>	<u>Mach DOS 3.7</u>	<u>MyDOS 4.5x</u>	<u>Sparta DOS 3.2x / 3.3x</u>	<u>Real DOS 2.x</u>	<u>BeweDOS 1.x</u>	<u>SDX 4.x</u>	<u>Lite DOS 2.x / 3.X</u>
90 KB	YES	YES	YES	YES	YES	YES	YES	YES
130 KB	YES	no	YES	YES	YES	YES	YES	YES
180 KB	YES	YES	YES	YES	YES	YES	YES	YES
360 KB	YES	YES	YES	YES	YES	YES	YES	YES
720 KB	???	no	YES	YES	YES	no (3)	YES	YES
1440 KB	no	no	no (2)	YES	YES	no (3)	YES	???

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<u>Format</u>	<u>Super DOS 5.x</u>	<u>DOS II+D 4.5</u>	<u>DOS II+D 6.x</u>	<u>XDOS 2.4x</u>	<u>K-DOS</u>	<u>OS A+ 2.0</u>	<u>DOS XL 2.3x</u>	<u>OS A+ 4.1</u>
90 KB	YES	YES	YES	YES	YES	YES	YES	no ? (4)
130 KB	YES	YES	YES	YES	no	no	no	YES (4)
180 KB	YES	no	YES	YES	no	YES	YES	YES (4)
360 KB	YES	no	no	YES (5)	no	no	no	YES (4)
720 KB	no	no	no	no	no	no	no	YES (4)
1440 KB	no	no	no	no	no	no	no	YES (4)

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Harddisk partition formats and DOS versions supporting them:

1) 128 Byte sectors (single density):

<u>Partition Size (sectors)</u>	<u>Top DOS 1.5 Prof.</u>	<u>MyDOS 4.5x</u>	<u>Sparta DOS 3.2x / 3.3x</u>	<u>Real DOS 2.x</u>	<u>Bewe DOS 1.x</u>	<u>SDX 4.x</u>	<u>LiteDOS 2.x / 3.x</u>	<u>DOS XE</u>	<u>OS A+ 4.1</u>
512 K (4095)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)
1 M (8191)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)
2 M (16383)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)
4 M (32767)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)
8 M (65535)	YES (1)	YES	YES	YES	YES /3)	YES	YES	YES (2)	YES (4)

- (1) Top DOS Prof. should support subdirs and harddisks, but I have no clue how! (manuals and information missing!);
- (2) DOS XE does support subdirs, but harddisks up to 16MB can only be used with sup8pdct's homebrew DOS XE formatter!
- (3) harddisk must be formatted with Sparta DOS or SDX or Real DOS, then Bewe DOS can be copied onto it!
- (4) OS A+ 4.1 was advertized being capable of 128 BpS, 256 BpS and 512 BpS, any format from 128 KB to approx. 15,6 MB!

2) 256 Byte sectors (double density):

<u>Partition Size (sectors)</u>	<u>Top DOS 1.5 Prof.</u>	<u>MyDOS 4.5x</u>	<u>Sparta DOS 3.2x / 3.3x</u>	<u>Real DOS 2.x</u>	<u>Bewe DOS 1.x</u>	<u>SDX 4.x</u>	<u>LiteDOS 2.x / 3.x</u>	<u>DOS XE</u>	<u>OS A+ 4.1</u>
1 M (4095)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)
2 M (8191)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)
4 M (16383)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)
8 M (32767)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)
16 M (65535)	YES (1)	YES	YES	YES	YES (3)	YES	YES	YES (2)	YES (4)

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- (3) harddisk must be formatted with Sparta DOS or SDX or Real DOS, then Bewe DOS can be copied onto it!
- (4) OS A+ 4.1 was advertized being capable of 128 BpS, 256 BpS and 512 BpS, any format from 128 KB to approx. 15,6 MB!

3) 512 Byte sectors (quad density):

<u>Partition Size (sectors)</u>	<u>Top DOS 1.5 Prof.</u>	<u>MyDOS 4.5x</u>	<u>Sparta DOS 3.2x / 3.3x</u>	<u>Real DOS 2.x</u>	<u>Bewe DOS 1.x</u>	<u>SDX 4.x</u>	<u>LiteDOS 2.x / 3.x</u>	<u>DOS XE</u>	<u>OS A+ 4.1</u>
1 M (2047)	no	no	no	no	no	YES	no	no	YES (4)
2 M (4095)	no	no	no	no	no	YES	no	no	YES (4)
4 M (8191)	no	no	no	no	no	YES	no	no	YES (4)
8 M (16383)	no	no	no	no	no	YES	no	no	YES (4)
16 M (32767)	no	no	no	no	no	YES	no	no	YES (4)
32 M (65535)	no	no	no	no	no	YES	no	no	??? (4)

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