ALPHA DISC LTD
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CANON/SANYO DISC DRIVE SALES PRICE LIST

THE CANON MDD RANGE OF 5¼" SLIM FLOPPY DISC DRIVES.

DRIVE MODEL NO:

MDD 110: 40 track, single-sided, CAPACITY 250K, or 100K on BBC Micro.

MDD 6108: 40 track, double-sided, CAPACITY 500K or 200K on BBC Micro. This is the belt driven version of the MDD 210, being sold at an exceptional price. Alpha Disc's normal warranty terms apply.

MDD 210: 40 track, double-sided, CAPACITY 500K, or 200K on BBC Micro.

MDD 220: 80 track, double-sided CAPACITY 1Mb, or 400K on BBC Micro. NB: This drive is 40/80 track switching, with 2-colour LED to show mode selected.

MDD 221: 80 track, double-sided, CAPACITY 1Mb, or 400K on BBC Micro. This is Canon's latest product. A super-slim drive only 33.5 mm in height (approx 1/3 of standard). This drive also features a 2-colour mode LED..

SD596D: (SANYO) The Sanyo disc drive is our latest acquisition in quality Japanese products. This is a "half-height" unit of standard dimensions. 80 track,double-sided, 40/80 switching, 400K.

ALL INCLUSIVE DISC DRIVE PRICE LIST

	CANON					SANYO
MODEL	110	6108	210	220	221	596D
Single density Formatted Capacity per drive on BBC Micro:	100K	200K	200K	400K	400K	400K
Single drive & case:	£89	£75	£99	£139	£199	£149
*Single drive & case/PSU:	£114	-	£124	£174	£229	-
Dual drive & case/PSU:	£214	-	£234	£299	£409	£309

*Single drive in dual upgradable case add £20.

DIRECTORS: Jon Pavitt, Geoff Fuller, Roy Weller, Michael Clinger (U.S.A.)
Registered Office: Ashby House 64 High Street Walton-on-Thames Surrey KT12 1BW
Registered in England. Reg No 1687289 Vat No 384 1408 53

Canon MDD ⅔ Height 5¼" Mini Floppy Disc Drives

Lower Profile, Higher Performance & More Data Capacity
Canon's new MDD floppy disc drive is only two-thirds the height of standard units, but provides even higher levels of performance. It is an ideal drive for small business microcomputers and word processing systems.
The MDD range of floppy disc drives includes units giving capacities from 250K unformatted (MDD 110) to one megabyte of unformatted data (MDD 220). They support both MFM and FM recording formats and incorporate the superior reliability, maximum performance and extended service life inherent in all Canon products.
Significant design features include.

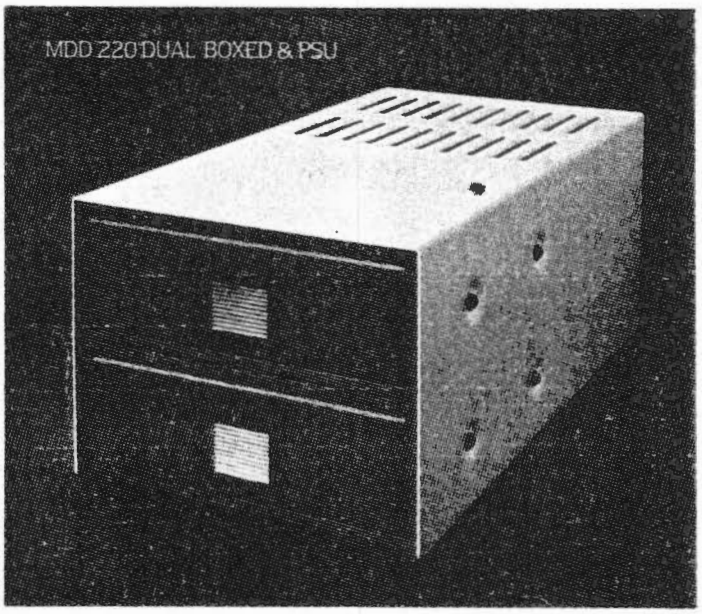
Precision Positioning Mechanism
The read/write heads are accurately positioned by a steel belt, fitted with the pulley of a high-precision stepping motor. The mechanism is designed to compensate automatically for diskette expansion due to temperature, greatly reducing the possibility of data error.

Protects Against Accidental Erasure
An onboard jumper is provided to select the protect of the diskette from unintentional erasure. The diskette may be protected if the write protect notch is closed or open. For even more data integrity, a voltage-sensing circuit disables the write logic when the power is low, thus preventing spurious writes when the power is switched on or off.

Handles Discs With Care
The MDD features an independent head-load solenoid and a special soft-pressure pad for more delicate handling of your valuable diskettes.

Disc Centering Mechanism
As soon as diskettes are inserted into the drive, they are rotated to assure proper seat and center alignment.

Improved Read/Write Heads
The MDD heads are tunnel erase ceramic type, which form non-recorded ranges between each track to avoid crosstalk, and increase interchangeability.



The structure of the head is designed to minimize diskette contact wear. Heads are also steel-shielded for greater accuracy and more accurate performance.

Specification Summary

PERFORMANCE

Unformatted Capacity	Model MDD 110	Model MDD 210	Model MDD 220
No of Heads	1	2	2
Tracks per Head	40	40	80
K Bytes per Disc (FM)	125	250	500
(MFM)	250	500	1000
Bytes per Track (FM)	3.125	3.125	3.125
(MFM)	6.250	6.250	6.250

ENCLOSURE

Height:	57.5 mm
Width:	146 mm
Depth:	196.5 mm
Weight:	1.3 kg

RELIABILITY

MTBF:	10,000 power-on hours
MTTR:	30 minutes
Error Rates	
Soft Errors:	1 per 10^{-9} bits read
Hard Errors:	1 per 10^{-12}
Seek Errors:	1 per 10^{-6} seeks
Component Life:	5 years
Safety Standard:	Complying with U.L.

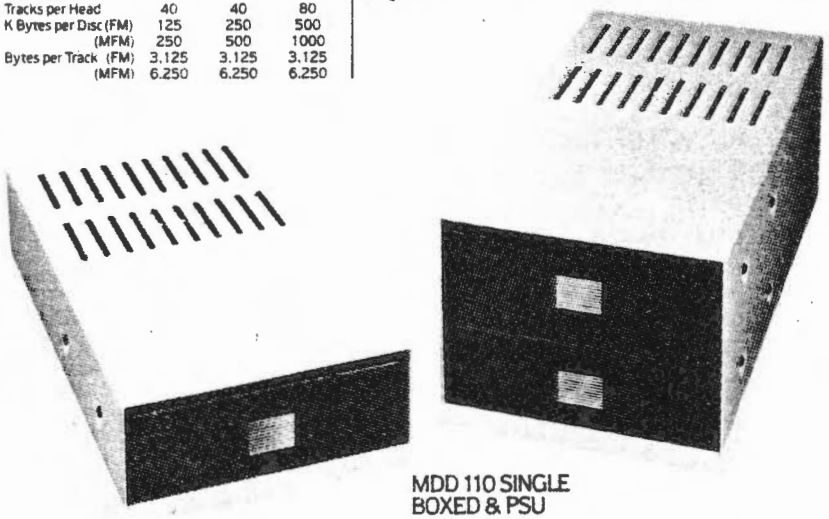
Specifications subject to change without notice.

FUNCTIONAL

Transfer Rate	(MFM) 250K bits per second (FM) 125 bits per second
Access Time	
Track-to-track:	3 milliseconds
Setting Time:	15 milliseconds
Average:	95 milliseconds
Head Load Time:	25 milliseconds
Drive Motor Start Time:	One second
Spindle Speed:	300 rpm
Recording Density:	(MFM) 5922 bpi (FM) 2961 cpi
Track Density:	48 tpi *220 (96 tpi/48 tpi selectable)
Encoding Method:	(MFM / FM
Door Lock:	Hardware or software selectable (Optional)

PHYSICAL

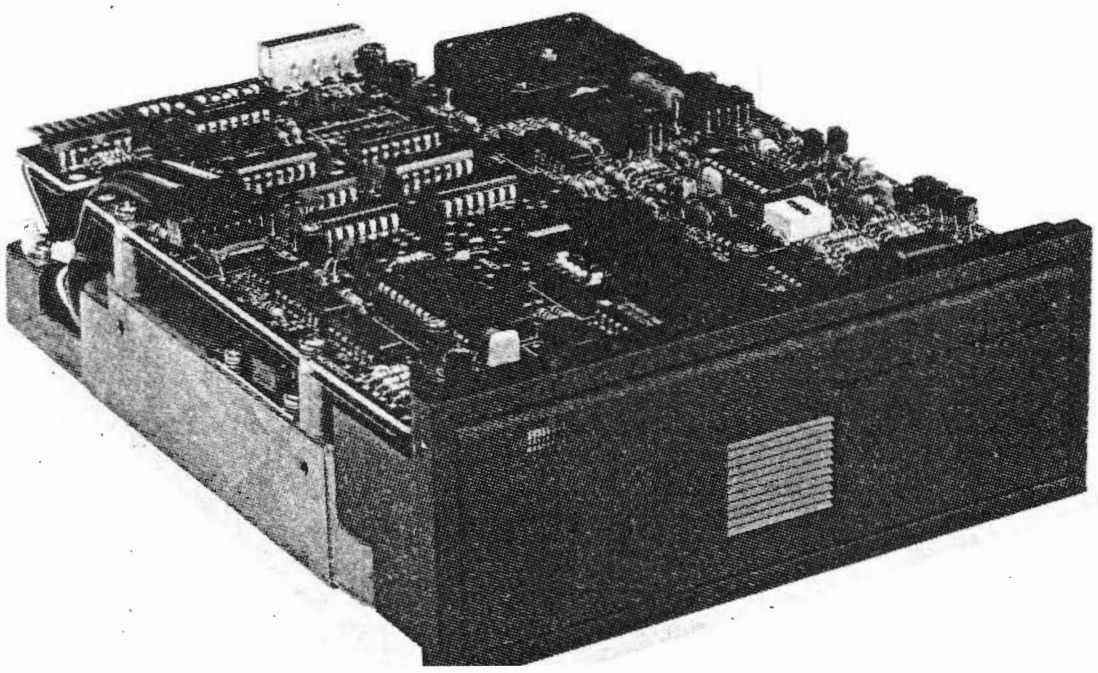
Operational Temperature:	5° to 45°C (40° to 122°F)
Transport Temperature:	-40° to 62°C (-40° to 144°F)
Storage Temperature:	-22° to 55°C (-8° to 117°F)
Relative Humidity:	20% to 80% (Non-condensing) Wet bulb temperature less than 29°C (84°F)
Power Requirements:	+12V DC ± 5%. 1.8A max., 0.8A typ. +5V DC ± 5% 1.0A max., 0.8A typ.
Power Dissipation:	14 watts operating. 4 watts standby. 7.5 watts motor on and deselected



MDD 210 DUAL BOXED & PSU

MDD 110 SINGLE BOXED & PSU

STANDARD INTERFACE COMPATIBLE WITH:
BBC® MICRO + TRS 80® + VIDEO GENIE® + NASCOM® ++++



Advanced Direct Drive Motor
The DC spindle motor, utilizing a direct drive brushless motor, is rated for a long service life of more than 10,000 hours. Data accuracy is enhanced, due to the absence of motor-generated electrical noise.

Two-Colour LED Motion Check Indicator (MDD 220 only)
The LED on the front panel tells the user when the drive is in motion. The signals are lit in red for 96 tpi track pitch and green for 48 tpi. Signal Names include: (1) In Use, (2) Select, and (3) Head Load. The 48/96 tpi double step generator is hardware or software selectable.