

BBC COMPATIBLE 5¼" SINGLE DISK DRIVE



- CS100 is a single sided 40 track drive giving 125K bytes unformatted single density capacity and 250K bytes in double density recording mode.

- CS200D is a double sided 40 track drive giving 250K bytes unformatted single density capacity and 500K bytes in double density recording mode.

- CS200 is a single sided 80 track drive giving 250K bytes unformatted capacity and 500K bytes in double density recording mode.

- CS400 is a double sided drive with 80 tracks on each side giving a total unformatted capacity of 500K bytes single density and 1M byte in double density recording mode.

- All 80 track drives are switchable to 40 track mode.

- All disk drives are Shugart SA400 interface compatible.

- FAST HEAD POSITIONING TIME is achieved by advanced stepper motor and steel belt driving method.

- MEDIA PROTECTION lock lever cannot be locked until media is securely set in correct position to prevent scratching media at clutch engagement.

- HIGH RELIABILITY ceramic head, small stepping motor and powerful direct D.C. drive motor have been designed and developed providing higher accuracy and reliability.

- MAINTENANCE FREE OPERATION is achieved by the adoption of a direct drive brushless motor.

These mini floppy disk systems have been designed to provide mains powered on-line disk storage that will easily interface to the B.B.C. microcomputer. The drives are housed in attractive cabinets with independent P.S.U. The computer interface is via a 34 way ribbon cable which can be inserted into the cabinet and secured by a cable clamp. Mains power input, fuse, and illuminated ON/OFF switch are all located on the rear panel.

Based upon high quality Japanese mini floppy disk drives, the units are interface compatible with the Shugart SA400.

Address selection is easily accessible on the upper printed circuit board (P.C.B.) for interfacing up to 2 drives. An L.E.D. indicator shows which unit has been selected by the computer.

Head positioning, track zero and write protect are controlled by an 'on board' microprocessor, plus an L.S.I. monolithic read amplifier is employed in the data recovery circuit.

Diskettes can be physically write protected by covering a notch on the envelope.

All units are tested individually and then run on one of our system test computers. We have disk test software and hardware which ensures that the full capacity of the unit has been tested, that alignment and mechanical adjustments are correct and that the drives conform to our rigorous specification.

Cumana give a full 12 months warranty and all units are delivered in professional, re-usable packaging to enable us to offer a fast and efficient maintenance service on units returned to our workshops, should this be required.

CUMANA MINI FLOPPY DISK SPECIFICATIONS

	CS100	CS200D	CS200*	CS400*
Media	5¼ inch Diskette	5¼ inch Diskette	5¼ inch 80 Track	5¼ inch 80 Track
Tracks per inch	48	48	96	96
Number of Tracks	40	40	80	80 x 2
Single/Double sided	Single	Double	Single	Double
RECORDING PARAMETERS	Single/Double Density	Single/Double Density	Single/Double Density	Single/Double Density
Encoding method	FM/MFM	FM/MFM	FM/MFM	FM/MFM
Transfer Rate	125/250K bits/sec.	125/250K bits/sec.	125/250K bits/sec.	125/250K bits/sec.
Bytes per track (unformatted)	3125/6250	3125/6250	3125/6250	3125/6250
Bytes per disk (unformatted)	125,000/250,000	250,000/500,000	250,000/500,000	500,000/1,000,000
ACCESS TIME				
Average	81.2 ms	81.2 ms	87.3 ms	87.3 ms
Track to Track	6 ms	6 ms	3 ms	3 ms
Settling Time	15 ms			
Rotational Speed	300 rpm			
MTBF	10,000 power on hours			
MTTR	0.5 hour			
Power 220-240 V.A.C.				
D.C. Current				
12V +/- 5%	0.5A (Typical), 1A (max) at motor start			
5V +/- 5%	0.5A (Typical), 0.7A (max)			
AMBIENT TEMPERATURE				
At Operation	10 – 45 Deg/C			
Relative Humidity	20 – 80% RH (Wet-Bulb temp under 29 Deg/C			
At Operation	non-condensing)			

* Indicates drives are switchable to 40 track mode.

CUMANA SINGLE DISK SYSTEM SPECIFICATIONS

Width	152mm (6")
Height	51mm (2")
Length	312mm (12¼")
Weight	3.25Kg
Power	220-240 Volts a.c.
Controls and indicators	Power ON/OFF (on rear panel) 1 amp Mains Fuse (on rear panel) LED Drive selected indicator and manual door lock on front panel of each Disk Unit.

E. & O.E.

NOTE: It is our policy to take advantage of new techniques and components as they become available. Cumana therefore reserve the right to alter specifications at any time.

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