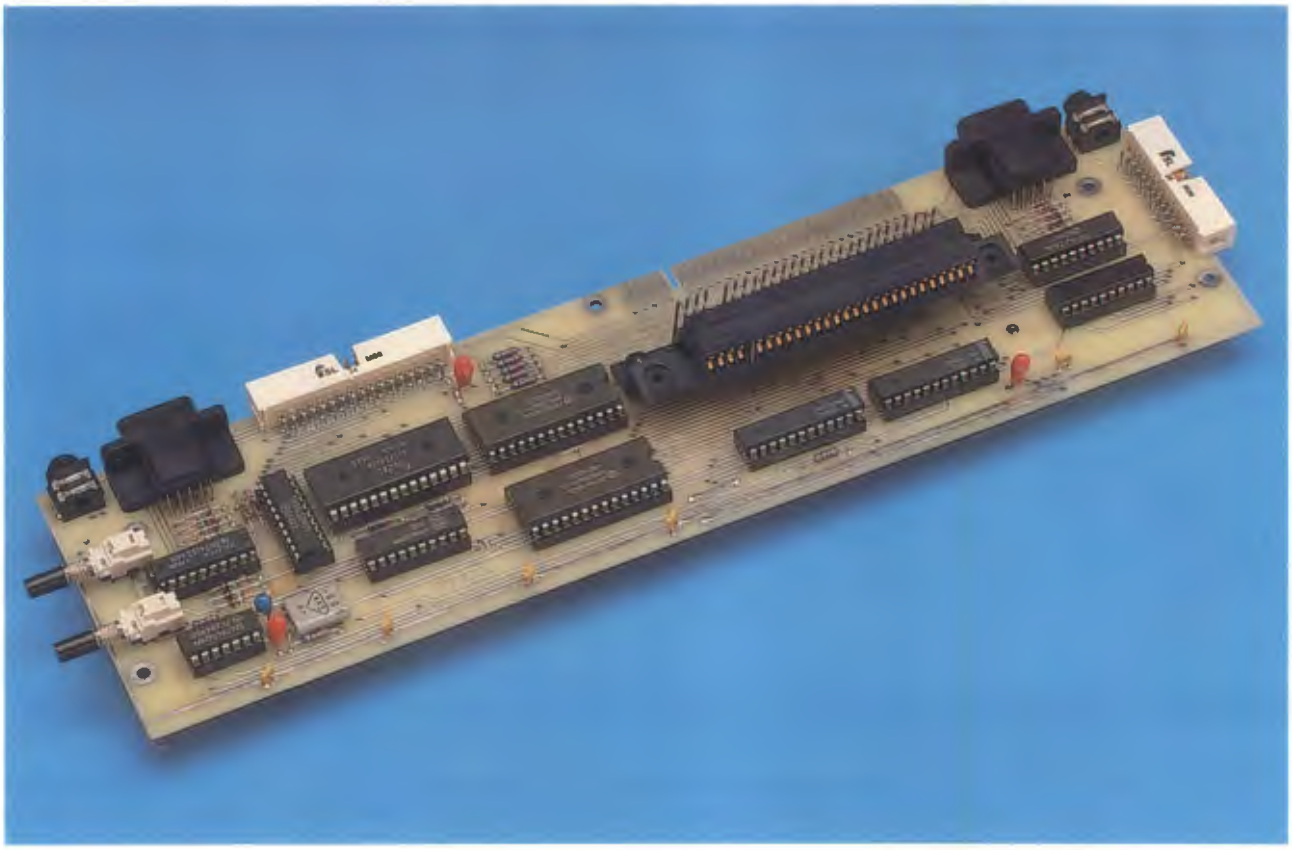
Launched at PCW:
The answer to the Spectrum-user's prayer...

the disciple



At last, a multi-purpose Spectrum interface which allows you to connect disk drives, a printer, two joysticks — or even to network. Cased in an attractive Interface 1-style unit which fits neatly beneath the computer, The Disciple is designed to take your Spectrum to the limit.

Massive storage, instant access — The disk interface gives you up to 1.6 Mb of storage on two drives. And you've never seen your Spectrum saving and loading at this speed — an incredible 3.5 seconds for a full 48K program. There's a **Snapshot Button** too: this lets you save a program at any point and as often as you wish.

Easy to use — There's nothing you have to learn — no new Basic, no special codes, no channels to open. Just use the normal Spectrum Basic (or, if you prefer, the Microdrive commands).

New scope for games — Whether you're a games player or a games designer, The Disciple offers exciting new opportunities with its two joystick ports, Snapshot Button and rapid reloading from disk. And the joystick ports are both Kempston and Sinclair compatible.

Total compatibility — The Disciple will happily work with any standard disk drive and the whole range of Centronics/Parallel printers. When you buy your Disciple, you simply follow the easy instructions in our software to set the operating system for your equipment — and you need never do it again.

the disciple

The ultimate disk, printer, joystick and network controller for the Spectrum

£84.75 (inc VAT)

Designed by Miles Gordon Technology for Rockfort Products (a trading division of Vignesh Ltd)

Photographed, Designed, Reproduced & Printed in England by Fidelity Colour Printers, Basildon, Essex · Basildon (0268) 44066

SPECIFICATIONS

GENERAL

Compatibility: With the entire range of ZX Spectrum computers, including the ZX Spectrum 128.

Dimensions: 295mm wide x 94mm deep x 27mm high at rear.

Fixing: The Disciple slots into the expansion port of the Spectrum and fits beneath the computer, leaving the keyboard at a comfortable typing angle. When connected to the Spectrum +, only a section 295mm x 36mm is visible at the rear of the computer.

Weight: Approx 200 grams.

Power requirement: Power is taken from the Spectrum 9 volt line with internal regulation, drawing +5 volts at 200 mAmps with 800 mWatt (dissipation).

INTERFACES

1. Disk Interface: Standard SA400 supporting single and double density operation. A standard (BBC Micro type) 34-way IDC connector at the rear edge of the unit allows connection to two disk drives of 3", 3½" or 5¼" type.

The operating system **software** is initially supplied on a cassette to cater for the wide variety of drive types in use. The first time the system is used, values are set up for the chosen drives (and printer), which are then stored with the operating system on a formatted disk.

Storage Capacity (formatted)	*Single Density*	*Double Density*
40 track single-sided	100K	200K
40 track double-sided	200K	400K
80 track single-sided	200K	400K
80 track double-sided	400K	800K
Data Transfer Rate:	125 Kbits/sec	250 Kbits/sec
Nominal access and load time of 7K (SCREEN$ LOAD):	800 mSeconds	350 mSeconds
Typical access/load time:	1 second	0.5 second

2. Printer Interface: Standard Centronics/Parallel.
8 bit data output with Strobe line.
1 bit input on BUSY line.

The Printer Interface supports the Sinclair BASIC syntax of LPRINT and LLIST, with variables of printer set-up, line length, and high resolution graphic screen dumps POKEd to the operating system via the software supplied.

Connector: 26-way (BBC Micro type) IDC compatible for 36-way AMPHENOL printer connection.

Software: **Driver:** MOREX software-compatible driver resident in Disk Operating System, and full high resolution screen graphics, dump and listing graphics, or user-defined graphics available.

3. Dual Joystick Interface: Kempston standard for single joystick use; Sinclair standard for dual joystick use.

Connector: 9-pin 'D' type Atari standard connector.

4. Network System: Sinclair Interface 1 compatible.

Network Connectors: 2 PC-mounted JACK sockets — 3.5mm (standard).

Network Software Driver: Sinclair Interface 1 compatible driver and syntax operation. Disk Operating System also supports file server and shared resource facility.

5. Other features: **Snapshot Button** — to save entire contents of computer's memory to disk instantly.

Inhibit Button — to disenable the disk interface temporarily: printer, joystick and network interfaces remain operational.

Through port — for connection of other standard Spectrum peripherals.

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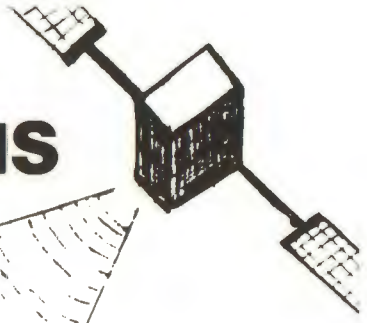

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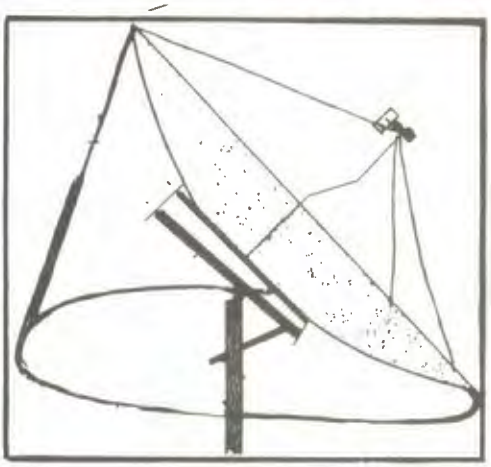

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FEATURES	
PRINTING CHARACTERISTICS	
Print Speed (Draft)	100 cps
(NLQ)	25 cps
Dot Matrix (Draft)	9×9
(NLQ)	18×23
Character Pitch	5,6,8.5,10,12,17 cpi
Bidirectional Logic Seeking	Draft Mode
Unidirectional	NLQ Mode
Tabulation: Horizontal	136 positions max.
Underlining	Yes
Subscript/Superscript	Yes
Condensed	Yes
Emphasised	Yes
Double Strike	Yes
FX and IBM PC Modes	Yes (Switch selectable)
Character Sets	12 International character sets Character sets 1 and 2 including block graphics
Hex Dump Mode	Yes
Self Test Mode	Yes
Max Columns at 10 cpi	80
Number of Copies	Original plus two copies
GRAPHICS (8 PIN)	
Pin-Addressable Density:	
Horizontal Dots Per Inch	60,72,80,90,120,144,240
Horizontal Dots Per 8-Inch Line	480, 576, 640,720,960,1152,1920
Vertical Paper Motion	n/72 ins, n/216 ins
PAPER HANDLING	
Cut Sheet Paper Handling	Yes (A4)
Fanfold (Tractor or Friction)	Yes (4" to 10")
Paper Out Detector and Alarm	Yes
Remote Selection of Paper Out Function	Yes
Forms Length	(11" or 12")
Lines per inch	6 or 8
CONSUMABLES	
Ribbon Cassette	500K character cassette
Operator replaceable Print Head	50 million characters
ENVIRONMENTAL	
Noise Level	<60 dbA
TEMPERATURE	
Operating	41°F to 95°F (5°C to 35°C)
Storage	−4°F to 140°F (−20°C to 60°C)
HUMIDITY	
Operating	20%-80% (No Condensation)
Storage	5%-95% (No Condensation)
PHYSICAL DIMENSIONS	
Width	13.1 ins (33.4 cm)
Depth	7.7 ins(19.5 cm)
Height	2.8 ins(7.0 cm)
Weight	7.8 lb (3.5 kg)
INTERFACES AND COMMUNICATIONS	
Centronics Parallel and Serial RS232	Standard
Buffer	2K
RS232 (baud rates: 110, 150, 300, 600, 1200, 2400, 4800, 9600)	Standard
ELECTRICAL REQUIREMENTS	
Voltage Input	220 V or 240 V, 50/60 Hz
Power Consumption	30 watts
OPTIONS AND ACCESSORIES	
Tractor Unit with Cover	4- to 10-inch paper
Roll Paper Holder	Up to 8.3-inch wide (21.1 cm) 2.8-inch (7.0 cm) dia. max.

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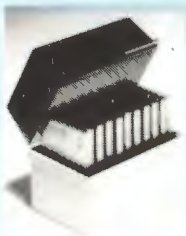

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