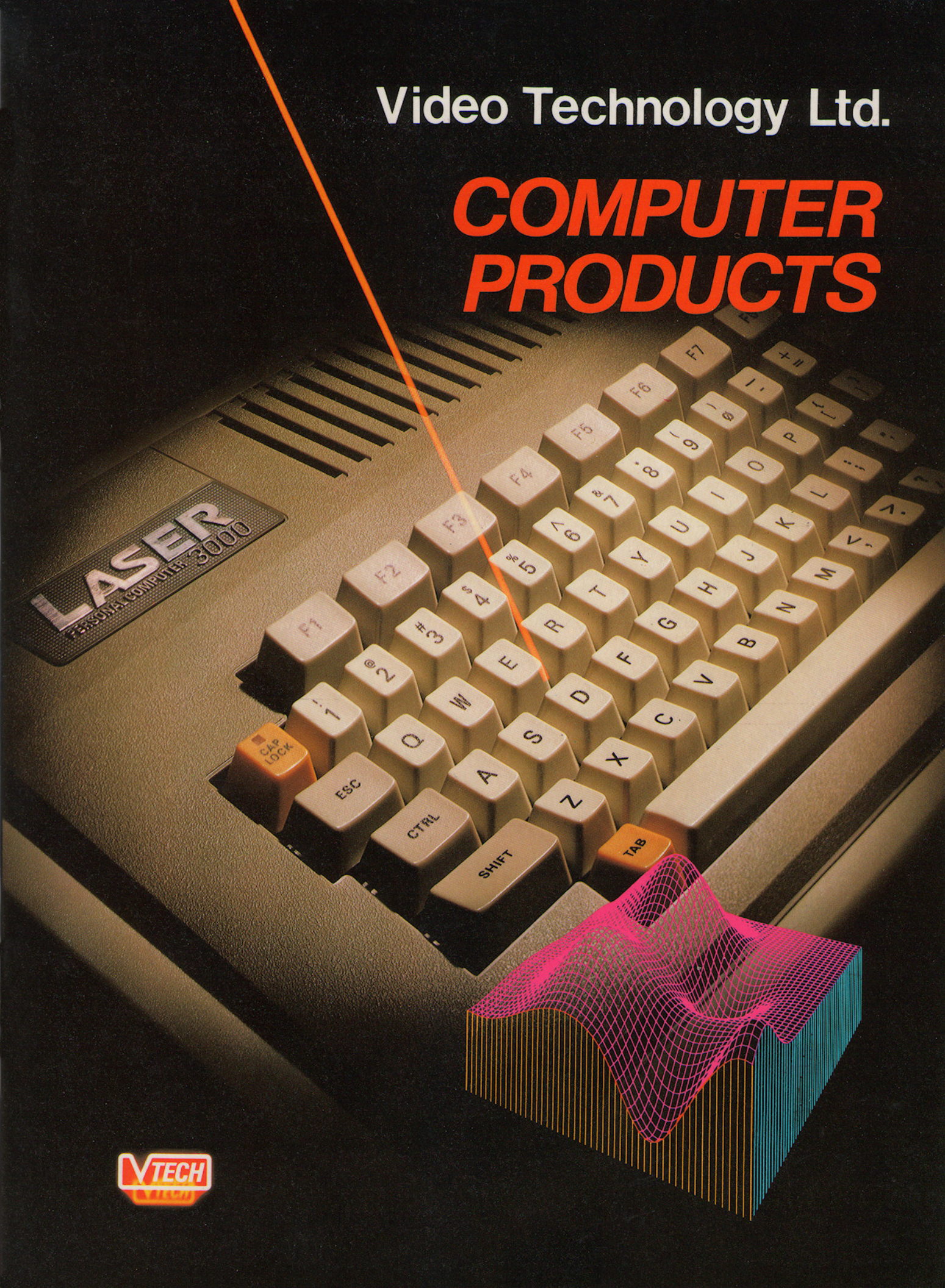
Video Technology Ltd.

COMPUTER PRODUCTS



COMPUTERS

- **LASER** *3000* Personal Computer
- **LASER** *310* Color Computer
- **LASER** *200* Color Computer
- *LASER 2001* Home Computer

LASER™ 2001

HOME COMPUTER

3 Systems in ONE

VTECH

From the computer wizards of Video Tech

HOME COMPUTER

LASER™ 2001

3 systems in one!

The LASER 2001 is probably the most versatile personal computer on the market today. Not only does it function as a powerful personal computer, but it is also specially designed to deliver the ultimate in game-playing excitement.

Along with a full range of games and software, you can buy an inexpensive interface unit that allows you to run all COLECOVISION™ games and software. And another interface unit is available which allows you to run all ATARI® Video Computer System™ games and software.

And you can play all three systems for a lot less than you'd usually pay for an ordinary personal computer.

Microsoft* BASIC is built right in

You don't have to buy expensive BASIC programmes or manuals. Microsoft* BASIC , the world's most popular and easy to use programming language is built right into your LASER 2001. The easy-to read BASIC manual, which is included with the LASER teaches you how to use the language and the Applications manual teaches you how to apply it to create your own software and games.

Powerful graphics and sound utilities

Working in conjunction with the Microsoft* BASIC are the extended graphics and sound commands.

The user can easily create any complicated pictures and objects on the screen and manipulate them in any way he desires, with only a few commands. In addition, the powerful sound utilities allow the user to program any sound like an explosion, with a single command, where other computers will take lines of program to generate the same effect.

Even beginners can be creating their own exciting games within a few hours.

Super hi-res 256 X 192 dot displays

The graphics capabilities of the LASER 2001 are simply beyond compare with most ordinary personal computers. The LASER 2001 addresses 49,152 individually programmable dots on-screen. So the resolution of any type of graphics or text is miles ahead of what you've seen on other computers. Only seeing is believing.

16-color graphics

You can enjoy ready-to-run programmes and games and create your own programmes in 16 bright, true-to-life colours.

4-channel sound generation

Rather than the single channel most computers give you for sound, the LASER 2001 delivers 4 full channels. So you can generate sound effects or music on a scale you've never heard before.

8 ready-to-run software packages are included

You don't have to spend a fortune accumulating software. The LASER 2001 gives you 8 professional packages. You get games, educational and Business packages. So you can start off with a full library.

2 Fast-Response Joysticks are included

When you buy the LASER 2001, you will find two Fast-Response, 8-direction Joysticks as part of the standard equipment. Usually costing a great deal of extra money, these Joysticks even feature dual firing controls and plug right into the LASER with no extra cords or interface units necessary.

THE ONE TO GROW ON

The LASER 2001 gives you a lot of power and capability right from the start, but you can add on peripherals to make one of the world's most complete computer systems.

ColecoVision™/Atari® VCS™ expansion modules

You can add an inexpensive unit which lets your LASER 2001 run all the ColecoVision™ games and programmes. Part of the Coleco-Vision™ system is another unit which allows you to run all of the Atari® VCS™ games and programmes. Your LASER 2001 will support both of these units. So you actually get three systems in one.

LASER™ PP40 Graphics Printer/Plotter

Specially developed for use with the LASER 2001, the Printer Plotter uses 4 pens of different colours and allows you to create intricate computer-generated graphics with exceptionally high resolution.

LASER™ DR10 Data Cassette Recorder

This specially made cassette recorder eliminates the need for precise volume control settings such as are necessary on ordinary cassette players. So you can load, copy, program and store with no fear of loss of data.

Light Pen

For instant interaction with on-screen graphics and designs, the light pen allows you to add, erase and move lines and figures immediately.

Modem

Exchange information with friends across town or across the world. Just plug in this inexpensive modem unit and send text, graphics or whole software packages over the phone in seconds.

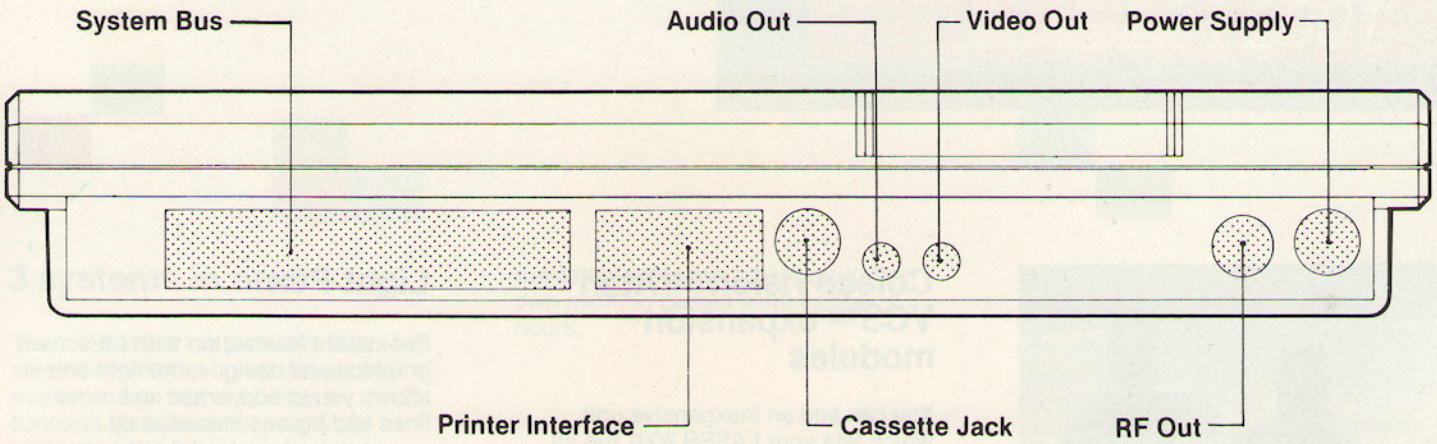
Special design allows full transmission of even large blocks of data with no fear of interference or noise.

Printers for every application

Your LASER 2001 will support daisywheel printers, matrix printers or dot matrix text/graphics printers. A Centronics® bus interface is built right in.

Everything you need is built-in

You don't need to buy expensive interface units or have dozens of little boxes sitting around. The LASER 2001 provides for virtually all the peripherals you will ever need with a full range of communication ports and built-in interface units. So all you have to do with peripherals is plug them in.



LASER™ 2001 Specifications

LASER 2001 is a complete ready to use computer based on the 6502A micro-processor. Standard features include 16K Microsoft* BASIC in ROM; high resolution color graphics, 4 channel programmable sound generator 16K Byte user RAM and 16K Byte display RAM, cassette interface,printer interface, game joystick connector, power supply, video monitor output and TV RF output. Also included as standard are: demonstration cassette tape and detailed reference and BASIC programming manuals + 2 joysticks.

CPU:
6502A running at 2MHz

Memory
RAM
– 16K Bytes user RAM
– 16K Bytes display RAM
ROM
– 16K Enhanced Microsoft*BASIC
Expansion
– a cartridge socket provided for game cartridges.

Video display
The LASER 2001 has two software selectable video display modes text mode and high resolution color graphics mode.
TEXT
– 36 characters/line, 24 lines.
– Lower and upper case characters.
– Full cursor control for editing.
High resolution color graphics
– 256X192 resolution
– 16 colors
– Easy to use BASIC graphics commands.

I/0
Keyboard
– Standard pitch keyboard.
– 48 keys.
Video/Sound output
– Composite video output for monitor.
– RF modulator built-in for connecting to home television.
– 4 channel programmable sound generator built-in.
I/0 Interface & peripherals
– 300 baud audio cassette interface standard.
– Centronics bus printer interface standard.
– Joystick connectors and game cartridge connector built-in.
– Data cassette recorder optional.
– Floppy disk controller module optional.

BASIC
LASER 2001 Microsoft*BASIC is a fast floating point BASIC that includes the following features.
– Any-length variable names (e.g. ABCDE, XYZ$)
– Multiple statements on one line.

– Integers from – 32767 to + 32767
– Floating point from 10^{-38} to 10^{+38}
– Hexadecimal numbers.
– Number of DIM up to 255, number of elements per DIM is 32767.
– Graphics commands: COLOR, PLOT, CIRCLE, etc.
– Commands to set diaplay mode for Text and Graphics.
– Immediate execution of BASIC statements.
– Break and continue program execution.
– Debug commands, e.g.: TRACE ON and TRACE OFF'
– Direct memory access. e.g.: PEEK, POKE, CALL, VPEEK, VPOKE etc.
– Cassette commands include CLOAD, CSAVE, STORE and RECALL.
– Full floating point and integer functions, inclued ABS, SGN, SQR, LOG, EXP, INT, RND, SIN, COS, TAN, ATN.
– Full string functions include LEN, STR$, VAL, LEFT$, RIGHT$, MID$, ASC, CHR$, GET, HEX$.
– Special sound effects commands: SOUND, MUSIC, SGEN, etc.
– Fully interruptable.

Power and TV System
– Power supply: AC adaptor included for 110V/120V 50Hz/60Hz and 200V/ 220V/ 240V 50Hz/60Hz.
– PAL, video system available.
– UHF & VHF channels available.

Dimension & Weight

– UNIT DIMENSION	35 X 24 X 6cm
– WEIGHT	3Kg (included AC Adaptor)
– GIFT BOX DIMENSION	47 X 30 X 11cm
– CARTON DIMENSION	48 X 47 X 32cm (4 pack)
– GROSS WEIGHT	16.5Kg

PERIPHERALS

- **GAMMA** FD100 Single Floppy Disk Drive
- ***LASER*** FDM-100 Series Floppy Disk Drive
- ***LASER*** PP40 Printer Plotter

GAMMA™

FD100 SINGLE FLOPPY DISK DRIVE

APPLE® DISK II COMPATIBLE

VTECH

GAMMA™

FD100 SINGLE FLOPPY DISK DRIVE

APPLE® DISK II COMPATIBLE

SPECIALLY DESIGNED TO WORK WITH APPLE® II AND LASER COMPUTERS

The GAMMA FD series has been built to mesh perfectly with APPLE®II and LASER personal computers. The GAMMA Disk Drive unit allows you to take advantage of all the design innovations incorporated into APPLE®II and LASER the latest computer technology. To make data storage and retrieval fast, quiet and sure.

SUPERIOR PERFORMANCE WITH ANY COMPUTER

Although designed specifically for APPLE®II and LASER personal computers, the GAMMA Disk Drive unit offers definite price/performance benefits over ordinary disk drives. Capacity is a good example. You get a massive 160 K-bytes per side of each disk for FD 100. Or 320 K-bytes if you use FD 200.

GOOD VALUE FOR ALL COMPUTERS

Even with all these advantages, the GAMMA FD series Single-sided floppy disk drive is priced a lot lower than ordinary units which do not have comparable specifications. Look around and compare. You'll find that in terms of features per dollar, there is no better buy than the GAMMA FD series for any personal computer. In future development, the GAMMA series will include Shugart , IBM PC & Commodore C64 compatible disk drives.

TECHNICAL SPECIFICATIONS

	FD100	FD200
Media	Standard 5.25 inch single sided floppy diskette	
Track Density	48 tpi	96 tpi
Track/Diskette	40	80
Sector/Track	16	16
Bytes/Sector	256	256
Capacity	160 KB	320 KB
Disk rotation speed	300 rpm	300 rpm
Track to Track Access time	less than 12 msec	less than 6 msec

GENERAL SPECIFICATIONS

Unit Dimensions : 26 X 19.5 X 7 cm
Unit Weight : 1.9 kg
Gift Box Dimensions : 33.5 X 23 X 10 cm
Carton Dimensions : 52 X 48 X 37 cm (0.1 cbm)
(10 PACKS)
Gross Weight : 22 kg
Net Weight : 20 kg

APPLE is a registered trademark of Apple Computer Inc.
SHUGART is a registered trademark of Shugart Associates.
IBM & IBM PC are registered trademark of International Business Machines Corporation
COMMODORE & COMMODORE C64 are registered trademark of Commodore Business Machines, Inc.

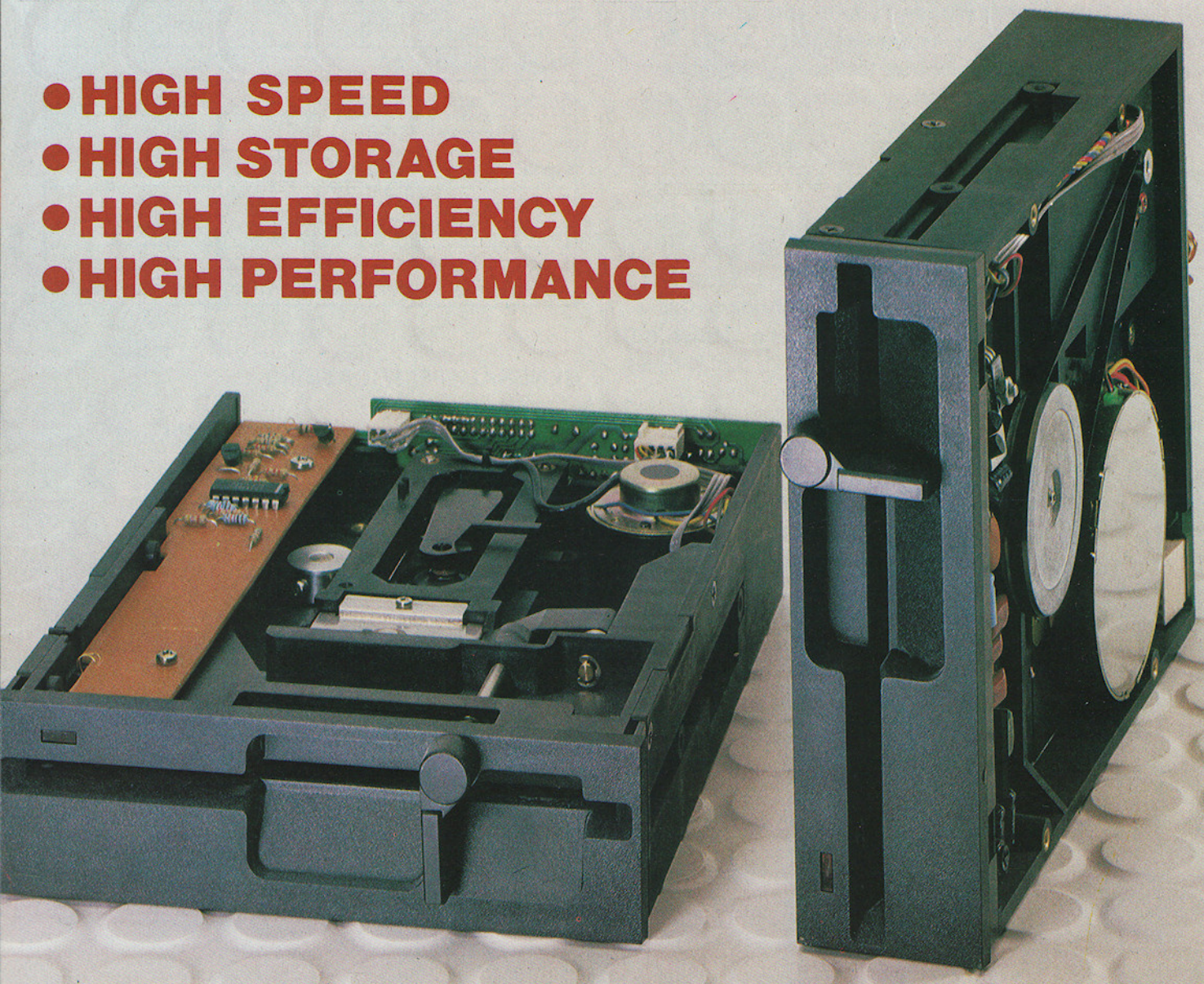
LASER™

FDM-100 SERIES

5.25″ FLOPPY DISK DRIVES

A proven disk drive to fit your system and your budget

- **HIGH SPEED**
- **HIGH STORAGE**
- **HIGH EFFICIENCY**
- **HIGH PERFORMANCE**



VTECH

VIDEO TECHNOLOGY LTD.

LASER™

FDM-100 SERIES

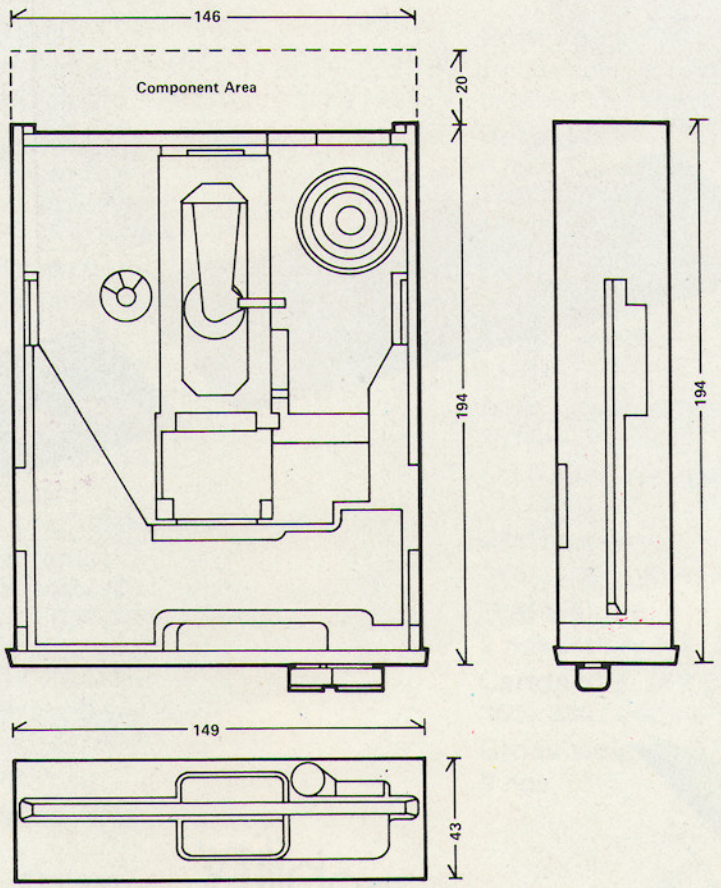
5.25" FLOPPY DISK DRIVES

A proven disk drive to fit your system and your budget

Proven with the popular LASER personal computers, the LASER disk Drive unit offers definite price/performence benefits over ordinary disk drives. Speed is a good example. Track-to-track access is less than 6 msec. Capacity is another. You get a massive 160K-bytes or 320K-bytes per side of each disk. 640K-bytes if you use double-sided disks. The only drive good enough to put your name on.

TECHNICAL SPECIFICATION

MODEL		FDM 110	FDM 120	FDM 130	FDM 140	FDM 145	FDM 150	FDM 160
Interface		For LASER 3000 or APPLE® II		Shugart* compatible interface			For LASER 3000 or APPLE® II	Shugart* Compatible Interface
TYPE		Single-Sided				Double-Sided		
Track Density		48 tpi	96 tpi	48 tpi	96 tpi	48 tpi	96 tpi	96 tpi
Track/Diskette		40	80	40	80	80	160	160
Capacity	Unformatted per disk	250 KB	500 KB	250 KB	500 KB	500 KB	1000 KB	1000 KB
	Formatted per disk	160 KB	320 KB	160 KB	320 KB	320 KB	640 KB	640 KB
Track to track Access time		12 ms	6 ms	12 ms	6 ms	12 ms	6 ms	6 ms
Settling time		15 ms	15 ms	15 ms	15 ms	15 ms	15 ms	15 ms
Motor start time		500 ms						
Rotation speed		300 rpm						
Data Transfer rate		250 K bits/sec.						
Power		12 V ± 5 % 5 V ± 5 %						
Operating Temperature		+4° ~ +46°C						
Relative Humidity		20 ~ 80 % RH (non-condensing)						



General Specifications

Unit Dimensions : 214 X 149 X 43mm

Unit Weight : 1.1Kg

Box Dimensions : 245 X 180 X 70mm

Master Shipping Carton Size (10 packs) : 38 X 37 X 27cm (0.04cbm)

Gross Weight : 13Kg.

Net Weight : 11Kg.

APPLE is a registered trademark of Apple Computer Inc.

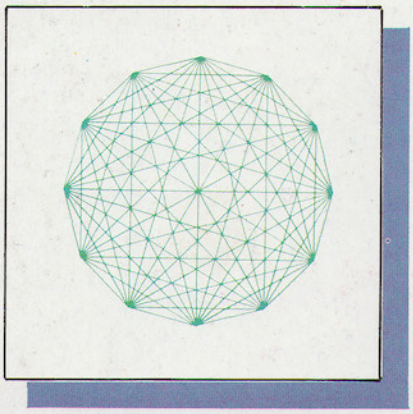
SHUGART is a registered trademark of Shugart Associates.

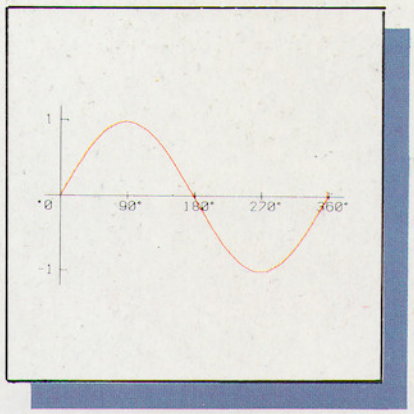
LASER™ PRINTER PLOTTER PP40

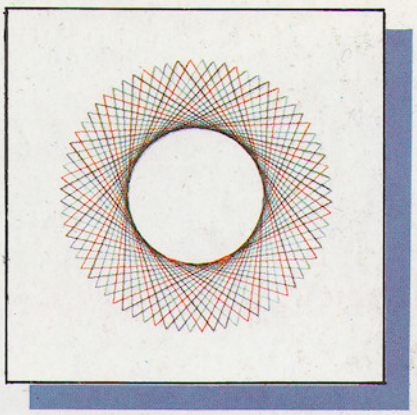
4-color capability
at a price anyone can draw on!

VTECH

VIDEO TECHNOLOGY LTD.







EVERYTHING YOU EVER WANTED IN FINE-LINE GRAPHICS INCLUDING THE LOW PRICE

The LASER™ PP40 Printer/Plotter offers full 96 character ASCII text capability along with fine-line 4-colour graphics. For graphs, charts, designs and even portraits. Anything you can show on your computer screen, the LASER PP40 can print.

80, 40 or 26 characters per line

The text modes are software selectable. What you see on your screen is what you'll get on the print-out. An easy, fool-proof way to avoid unpleasant surprises.

4-colour ball-point plotting

Your colours include Blue, Red, Green and Black. And with 0.2 mm resolution per dot, you can actually fill in coloured areas almost solidly.

Easy to install

The LASER PP40 attaches to any Centronics® Bus 36-pin interface, the most popular interface unit in the world of microcomputers. So it will work with the following computers: Apple® II, VIC 20, Dragon, Spectrum, TI 99/4A and more. All you have to do is plug it in.

Specifications

Size:
245 (L) x 140 (W) x 50 (H) mm

Weight:
650gm approx. (paper not included)

Power:
AC 220/110V for adaptor
DC 5V 500mA

Power consumption:
2W while printing, no power in stand by.

Interface:
Centronics printer bus (36 pins)

Characters set:
ASCII (96 characters)

Color:
4 colors (Black, Blue, Green, Red)

Graphic:
With graphic functions, can be set to any figure by software re-setting.

Character/line:
80, 40 or 26.

Mode Switching:
Software switching.

Printing:
Ball point pen recording.

Printing speed:
10 characters/sec (Average for the smallest characters)

Resolution:
0.2mm

Line drawing speed:
52mm/sec (max.)

Paper feed:
Friction feed.

Paper Width:
116mm

Max. paper roll diameter:
70mm

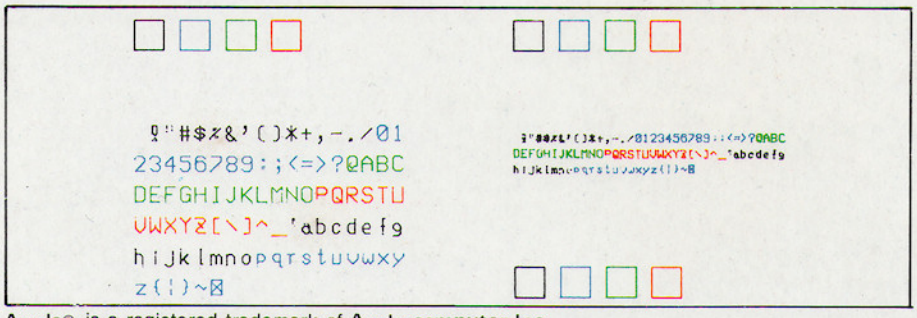
Operating temperature:
5° to 40°C

Gift box dim.:
340 x 230 x 80 mm

Unit weight:
2 Kgs (Includes AC Adaptor)

Carton dim. (4 Pack):
350 x 330 x 240 mm

Gross weight:
9 Kgs.



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Cables: VITECHNO HONG KONG

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