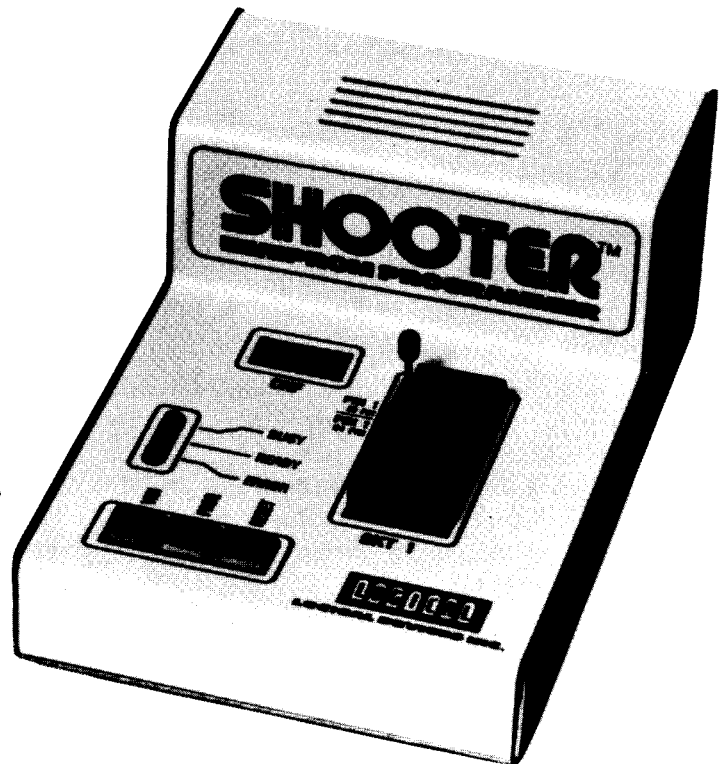


# EPROM Programmer

## SHOOTER

### SHOOTER™

- **Intelligent Programmer with 512K RAM**  
Built-in "Bios" and processor; has many firmware functions.
- **Stand-Alone or RS-232**  
Duplicate EPROMs without a PC or use RS-232 port for connection to ANY computer or terminal.
- **Reliable Operation**  
Over 10,000 units sold to date.
- **Fast Programming Speed**  
Supports both standard and intelligent programming algorithms.
- **Simple Front Panel**  
Pushbutton operations, extremely easy to operate.
- **For Engineering or Service**  
Extensive set of internal commands for use with PC.
- **Supports EPROMs 2716-27512**



DEVICE LIST SUMMARY			INTEL			OKI				
AMD/MMI EPROM	AM2716/B AM9716 AM2532 AM2732/A/B AM9732/A	AM2764/A AM9764 AM27128/A AM27256/C256 AM27512/C512	2716 2732/A/B 2764/A/C64 8751/AH/C51	27128/A/B 27256/C256 27512	2716 2732/A 2764	27128 27256/A 27C256	SEEQ EEPROM EPROM	DQ2816A 2764 27C64/A DQ5133	DQ5213/B13 27128/A/C128 DQ5143 27256/C256	
FUJITSU EPROM	MBM2716 MBM2732/A MBM27C32/A MBM2764S	MBM27C64S MBM27128S/C128S MBM27C256 MBM27C512	MITSUBISHI EPROM	M5L2716K M5L2732K/AK M5L2764K	M5L27128K/C128K M5L27256K/C256 M5L27512K	SIGNETICS EPROM	27C64/A	TI EPROM	TMS2516 TMS2732/A TMS2764/C64	TMS27128/A/C128 TMS27C256 TMX27C512
HITACHI EPROM	HN462716G HN482716 HN27C32 HN462532G HN462732G/P HN472532 HN482732AG	HN27C64G HN482764G/P HN4827128G/P HN27256G HN4827256 HN27C256G HN27512G	NEC EPROM	UPD2716 UPD2732/A UPD2764/A	UPD27128 UPD27C256/A UPD27C512	TOSHIBA EPROM	TMM2732/A TMM2764/AD TMM2764/D/DI TMM27128/AD TMM27128D/DI	TC57256/D TMM27256AD TMM27256D/DI TC57512 TMM27512D		
HITACHI MICRO	HD63701/A01/B01VOC HD63705A05/B05VOC		NATIONAL SEMI EPROM	NMC2816 MM2716E/M MM2758A/B MM2732 NMC27C16/H NMC2732/A NMC27C32/A/H	NMC9716 NMC2764/Q NMC27C64 NMC27C128 NMC27CP128B NMC27C256/A NMC27C512/A	XICOR EEPROM	X2816	X2816A		

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**LOGICAL  
DEVICES, INC.**

## Description

SHOOTER is Logical Devices' low cost, stand-alone EPROM programmer. With 512K-bits of internal RAM, it is capable of programming popular single voltage EPROMS from 2716 through 27512 including CMOS and "A" versions. When connected to a dumb terminal, computer, or modem via the standard RS-232 port, the operator fully controls SHOOTER including: RAM edit, blank check, checksum, upload, download, offset and file transfer format. When operating SHOOTER in stand-alone mode, the user can directly copy and verify EPROMs via the three control switches and LED status indicators. SHOOTER is packaged in a compact, metal enclosure which makes it ideal for portable and field service applications.

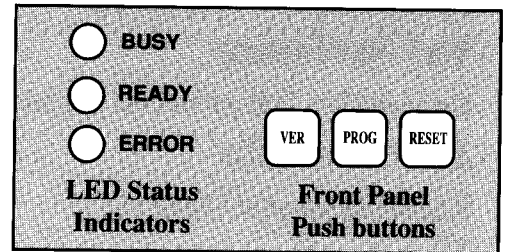
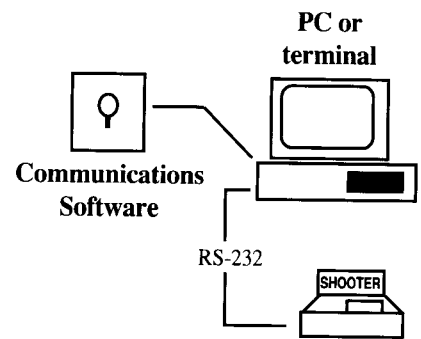
## Stand-alone Mode

**VERIFY                  PROGRAM                  RESET**

This mode is ideal to complete simple duplication tasks performed either by unskilled operators or experienced field personnel. The user simply activates each operation with a single keystroke via front panel pushbutton switches. Different color status LEDs indicate when the programmer is READY, BUSY, or an ERROR has occurred.

## RS-232 Mode

SHOOTER can be controlled by means of simple ASCII commands sent from the terminal. Users can communicate with the product using any standard RS-232 communication, terminal emulator software or use Prolink software as the PC front end user interface. Batch operation is also possible by creating a sequence of ASCII commands and using the DOS copy to COM port command.



### PROLINK PC Software

- Device select
- Load Device
- Program
- Verify
- Edit
- Utilities
- Quit
- R/W file

**PROLINK** is a specialized terminal emulation and file handling software for RS-232 communications. It includes screen/menu selections for the basic commands, and facilitates the upload and download process to the programmer. PC resident hex editing software (in addition to the built-in Shooter editor) is also included allowing users to read and write files to the PC RAM as well as the programmer buffer. This software may also be used to modify or convert file data.

## Commands

? Displays this menu	M Set Shooter to Motorola hex download format
R Read Eprom into memory	U Upload file in Intel, or Motorola hex
V Verify Eprom against memory image	T Download file in Intel, or Motorola hex
N Blank check Eprom in socket	K Upload file in binary format
P Program Eprom using memory image	L Download file in binary format
C Calculate Checksum for memory image	G Upload file in straight Hex format
X Examine/modify memory image	H Download file in straight Hex format
F Fill memory with data pattern	O Offset value, (default is 00)
I Set Shooter to Intel hex download format	

## One Year Manufacturer's Warranty

All Logical Devices products are warranted to be free of manufacturing or workmanship defects for one year from the date of purchase. Logical Devices will repair or replace any such product at our option.

## Lifetime Product Warranty

All Logical Devices products are warranted to be free from engineering and design defects for the life of the product. Logical Devices will upgrade the existing product at no charge or upgrade customers to an alternate product solely for the price differential. This warranty does not apply to support of devices planned for phase out or devices already made obsolete by the device manufacturer.

## Lifetime Yield Warranty

Logical Devices warrants its products to program according to manufacturer specifications for the life of the product. In the event any specifications are not met, the equipment will be adjusted free of charge throughout the life of the product.

## Product Satisfaction Guarantee

Logical Devices, Inc. guarantees complete satisfaction with its products. Simply return the product to us, as received, within 14 days for a full refund.

Order Number	Description	Order Number	Description
PROPP4-512	EPROM/Micro Programmer	MANPP4-USR	User Manual
Options:		MANPP4-SRV	Service Manual
MODPP4-C51	8751/87C51 Module	OPTPP4-GZS	GOLD ZIF Socket
OPTPLC-E28	28 DIP to 32 PLCC Adaptor	ERAT8Z-000	EPROM Eraser
MISCFP-025	Anti Static Foam Pads	SOFLNK-000	Prolink (MS-DOS)
MISPP4-CBL	Serial Cable	SOFLNK-03S	Prolink (Sun-UNIX)
CNFPP4-SET	Configurator Set		

## Specifications

Physical	4.50"W x 7"L x 2.85"H
Weight	3 lbs.
Humidity	0-90%
Temperature	0-40 C
Enclosures	Aluminum and Steel
Input Power	110VAC/60HZ or 220VAC/50Hz
Socket	High quality Zero Insertion Force 28 pin socket
Ram Buffer	512K bits
Programming Capacity	One Device
RS-232 Specs	110, 300, 1200, 2400 baud, 8 data bits, 2 stop bits, no parity
Cable	Included, RJ-11 to DB25 Direct IBM PC compatible
Status LEDs	Busy, Ready, Error
Pushbuttons	Reset/Load, Program, Verify
Error Checks	Checksum
File Formats	Intel Hex, Motorola Hex ASCII, Binary

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