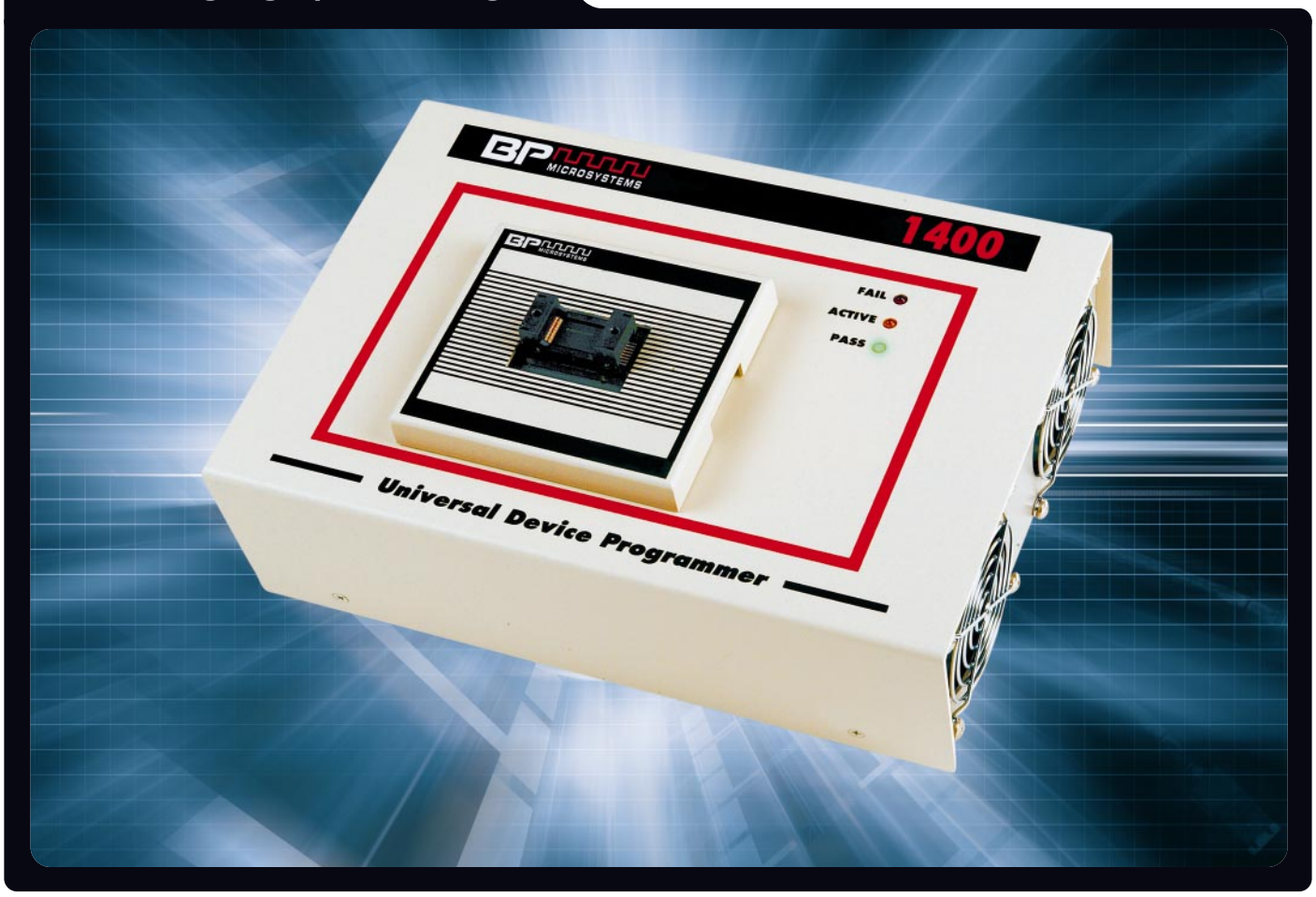
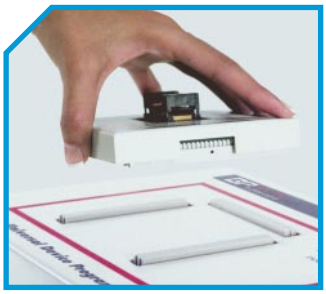
BP MICROSYSTEMS

1400/240 Universal Engineering Programmer





1400/240 Universal Engineering Programmer

Built to meet the rigorous demands of the world's leading engineers and programming centers, the 1400/240 will exceed your highest expectations. The 1400/240 is a truly universal device programmer supporting all device technologies and comes standard with 240 pin drivers for complete continuity and functionality testing on all pins, unlike other competitive programmers. The 1400/240 also offers free lifetime software support and a 3-year warranty. The 1400/240 also comes with JobMaster™ software, a powerful tool that incorporates the use of ".bp" files. A feature exclusive to BP Microsystems programmers, ".bp" files are valuable for both production and engineering departments. Customers can easily share data securely around the world, transfer designs between engineering and manufacturing, and share programming files between customers and programming centers.

- **Supports over 18,000 devices with voltages down to 2.4V (Vdd) including, but not limited to, EPROM, EEPROM, Flash EPROM, Microcontrollers, PLD, CPLD, FPGA and antifuse FPGAs**
- **Compatible with all existing socket modules, standard and automated**
- **Patented solution to guard against passing blank parts—available only from BP Micro**
- **Supports all device packages, including but not limited to, DIP, SDIP, PLCC, TSOP, SSOP, PCMCIA, SOIC, LCC, QFP, PQFP, PGA, SIMM, CSP, BGA, µBGA, TQFP and TSSOP**
- **Ideal for design engineering**

General

Power:	90-260VAC, 47-63 Hz., 1.2 KVA, IEC inlet connector for worldwide use
Dimensions:	11.75" (298mm) x 8.65" (220mm) x 4.68" (119mm)
Mass:	7.22 lbs. (3.28 kg)

Software

Required:	BPWin or BPDOS
File Type:	including, but not limited to, binary, Intel, JEDEC, Motorola, POF, RAM, straight hex, Tekhex, Extended Tekhex, ASCII hex, Formatted Binary (.DIO), AFM, OMF, LOF
Device Commands:	blank, check sum, compare, options, program, test, verify
Features:	data editor, revision history, session logging, on-line help, device and algorithm information

Hardware

Calibration:	automatic self-calibration
Diagnostics:	pin continuity test, RAM, ROM, CPU, pin drivers, power supply, communications, cable, calibration verification timing, ADC, DAC
PC System Requirements:	Microsoft Windows 95 or above

PIN Drivers

Quantity:	240-pins standard
Slew rate:	0.001 to 2500V/µs
Vpp Range:	0-25V in 25mV steps
Ipp Range:	0-70mA continuous, 250mA peak
Vcc Range:	0-12V
Icc Range:	0-1A, 12µA resolution
Very low voltage:	to 2.4V (Vdd)
Rise Time:	800ps
Overshoot:	none
Protection:	overcurrent shutdown, power failure shutdown
Independence:	pin drivers and waveform generators are fully independent and concurrent on each site

Standard Accessories Included

software on CD-ROM
user manual on CD-ROM
power cable
data cable
48-pin DIP socket module (not pictured)
3-year hardware warranty

Features

File Loading:	automatic file type identification; no download time because programmer is PC controlled; supports Intel, JEDEC, Motorola S-record, POF, straight hex, hex-space, Tekhex, and other file formats
Device Selection:	intelligent device selector allows you to type as little or as much of the part number as you like then choose from a list of devices matching your description
Devices Supported:	including, but not limited to, Antifuse, Low Voltage, PROM, EPROM, EEPROM, Flash EEPROM, Microcontrollers, SPLD, CPLD, FPGA
Continuity Test:	each pin, including Vcc, ground, and signal pins, may be tested before every programming operation
Protection:	overcurrent shutdown; power failure shutdown; ESD protection, reverse insertion, banana jack for ESD wrist straps
Options:	available Socket Modules including, but not limited to, Universal PLCC, standard PLCC, PGA, CSP, BGA, µBGA, SOIC, QFP, TSOP, LCC, SDIP, PCMCIA, SIMM—JobMaster™ software, and Advanced Feature Software
Programming Yield:	assured by independent universal pin drivers on each socket, short distance from pin drivers to device, and accuracy of waveforms
Algorithms:	all algorithms are manufacturer approved or certified (if required)—BP Microsystems has an excellent record of being first to provide certified algorithms for new devices
Algorithm Updates:	free software updates are available eight times per year

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BP MICROSYSTEMS
Setting the standard in device programming

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