LV40 *Portable* – Universal Programmer
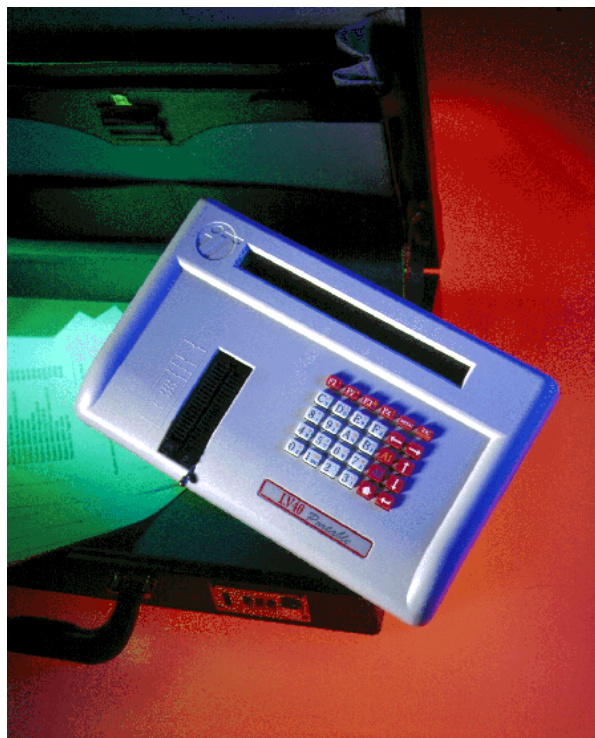

FEATURES

- ▶ Universal device support for memory, PLDs, CPLDs and over 400 microcontrollers
- ▶ Built in 40 x 2 LCD display with back light option available
- ▶ 30 button keypad
- ▶ Supports standard 5V devices & Low Voltage programming down to 1.8V
- ▶ 4 Mbit of data memory as standard, which can be upgraded to 8 Mbit
- ▶ 40 pin ZIF socket
- ▶ Windows® 9x/2000/NT software supplied as standard
- ▶ Flash firmware updates and data download via RS232 serial port or PC parallel port
- ▶ Software and Firmware updates available from Internet web page
- ▶ Mains or battery powered
- ▶ High speed programme & verify: 27C010 in 21 secs
- ▶ Built in Chiptester for TTL, CMOS, DRAM and SRAM devices

An Innovation in Programmer Design

The FIRST truly Portable Universal Programmer

A powerful portable universal programmer with LCD and keypad, which works off batteries.

UNIVERSAL DEVICE

All devices up to and including 40-pin DIP are supported without the need for any additional modules, adapters, resistors or software.

- ✓ 8 and 16 bit Memory: EPROM, Paged EPROM, parallel & serial EEPROM, Serial EPROM and Flash, up to 64Mbit
- ✓ Bipolar memory
- ✓ Programmable Logic: PAL & GAL, PALCE, PEEL etc.
- ✓ Complex PLDs: Vantis MACH, Altera MAX, Xilinx EPLD etc.
- ✓ Peripheral devices: PSD
- ✓ Over 600 microcontrollers: PIC, MCS-48/51/196, 8951, COP8, ST6, Z86, TMS320/370, MC705/711, SAB-C5xx etc.

See full device support list for comprehensive parts listing.

True Low Voltage Programme & verify for 1.8V and 3.3V devices are correctly supported in addition to the standard 5V parts - a unique feature in portable programmers. All on-chip features including Security, Oscillator settings, Watch-Dog Timer, RAM size, Brown-Out etc. are supported and easy to select.

BATTERY OPERATION

- • Works from 8 AA batteries (standard or rechargeable)
- • Long battery life - Programmer automatically powers down during periods of inactivity
- • Built in recharging circuit
- • Ideal for use with Laptop PCs
- • Adapter/recharger supplied. Replacement adapters available

PACKAGE ADAPTERS

As with all ICE Technology Programmers, any device upto 40-pins in DIP packaging is supported without the need for any adapter or module. However, a range of high quality socket adapters is available to support surface mount parts: PLCC, SOIC, TSOP, PSOP etc. See price list for full details.

SPEED OF PROGRAMMING

With larger and larger devices, speed of programming is critical in cutting development and production times. Some programmers may be cheap, but what they save you in initial investment may cost you many times over in lost time. ICE Technology has always prided itself in having the fastest device programmers available.

Device	Time
27C256	5 secs
27C040	84 secs
29F040	90 secs
GAL16V8	2 secs
PIC16C54	1 sec

All given times include total time to download, programme and verify the device

MUCH MORE THAN JUST A PROGRAMMER

With the LV40 you get not only a professional, fully portable, fully Universal programmer, but also a tester for TTL, CMOS, DRAM and SRAM devices - all as standard.

ICE Technology Ltd ● www.icetech.com ● email: sales@icetech.com

SOFTWARE FUNCTIONS

The programmer can be operated using software that operates under Windows® 9x/NT4/2000 environments when connected to the parallel port. Easy to follow step through menus providing full functionality and a clearly defined, Alpha-Numeric/Hexadecimal rubber keypad enable the full power of the LV40 to be accessed even when working away from the PC. Functions include:

- File load, edit and save
- Data formats: Intel Hex, Motorola S-Record, Hex Auto-Recognition TekHex, Ext TekHex, ASCII, Raw Binary, Octal, POF etc.
- Extensive Buffer editing features
- Checksum in 3 popular formats + CRC checking
- Read, Verify, Verify Signature, Bit Test, Blank Check, Programme, Chip Erase, Identify device
- Programming Options for device serialisation, marginal verify, Auto-Programme Pre-test etc.
- Single keystroke action for continuous programming, reducing the margin of operator error
- Supports device features including Oscillator settings, Brown-Out, Watch-Dog Timer, RAM size etc.
- Full Security & Encryption array support
- JEDEC Fusemap editing capability
- Edit and apply test vectors for upto 40-pins DIP/44-pins PLCC
- Checks device position in socket before applying voltages to pins
- Environment option in PC mode allows complete device configuration to be stored, minimising future setup times

Additional features include a "Protection mode" which allows an Engineer to configure the unit for use by an operator not familiar with the programmer, without danger of the buffer contents or device selection being changed accidentally.

Utility software is also provided so that data can be transferred between the PC and the on-board memory. Either the PC parallel ports, or serial ports can be used for this purpose. Serial port data transfer rates can be selected upto 19200 baud.

PROGRAMMER UPDATES

Software updates are available from our Internet Web page, and can be downloaded at any time, giving you the very latest devices and software revisions. The programmer is easily updated with new algorithms by connecting to the PC and downloading the algorithms into on-board Flash memory using the utility software provided.

MANUFACTURER

All device algorithms are implemented using only manufacturer approved programming specifications. ICE Technology works very closely with all of the semiconductor vendors to ensure the complete integrity and reliability of the algorithms.

The LV range of programmers have been Officially approved and are recommended by a number of major manufacturers including Altera, Fairchild, Fujitsu, ICT, Infineon, Intel, Macronix, Motorola, National Semiconductor, ST Microelectronics, Siemens, SST, Winbond and Xilinx.

ENVIRONMENTAL SPECIFICATIONS

CE Compliance :
The LV40 Portable complies to the requirements of the Low Voltage Directive 73/23/EEC and EMC directive 89/336/EEC. It was tested to and met the following standards:

- EN 55022 Emission Test (Class A)
- EN 50082-1 Immunity Tests
- FCC Level B

Temperature :
- +41ºF to +104ºF (+5ºC to +40ºC)

Safety Standards :
- UL1950, TUV EN60950

Humidity :
- 20% to 80% RH non-condensing

GUARANTEE & SUPPORT

- Full refund if not completely satisfied within 30-days
- Full three year warranty
- Selftest software provided for full hardware and firmware diagnostics
- FREE lifetime email technical support

PHYSICAL

- Software operates under Windows® 9x/NT4 or DOS on any PC with parallel port support
- Hard-Disk requirement: 6MB
- Dimensions: 9.5" x 6" x 2" (24 x 15 x 5 cm)
- Weight: approx. 2lbs (1kg)
- Shipping weight: 6lbs (3kg)

Package Includes:
- Programmer
- Mains adapter
- Parallel Cable
- Installation Guide
- Manual
- DOS/Windows PC software
- Fault diagnostic software

Options:
- 4Mbit to 8Mbit Memory Upgrade
- Built in Backlight
- Range of package adapters
- Mains adapters for other voltages (UK, USA, Euro, Japan available)

ORDERING

LV40P-xxx
Backlight option : LV40P-B/L-xxx
8Mb Memory Upgrade : UP-LV40P-8

xxx = mains supply: UK:240V, EUR:230V, JAP:100V, USA:115V

Designed & Manufactured in the UK

For further information, availability & pricing details, contact:

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