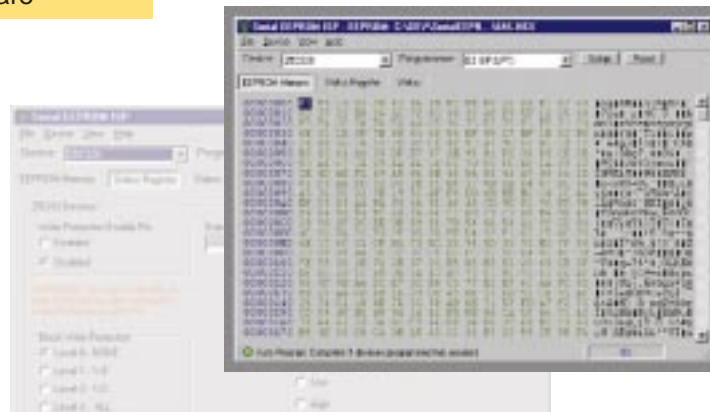# Serial EEPROM Programmer

Ideal for reading and changing car radio EEPROMs, TV repair, QA in production, field updates, product configuration, design debugging and much more.

This is a complete EEPROM programming solution, unlike other products on the market. It provides support not only for the simple 24Cxx devices that use I2C communications but also supports 25Cxx versions using SPI and 93Cxx, which program via Microwire.

The programmer has intelligence to deal with equivalent devices from different manufacturers so you do not have to worry about changing supplier, and also supports 3.3V or 5V programming for even more flexibility.

Software

The software has support for Windows 95/98/ME/NT/XP and features Kanda's easy to use graphical user interface. The simple layout not only simplifies operations but also makes it easy to set up complicated features such as Status Register settings on the 25Cxx devices and allows different addressing modes to be selected, especially useful on 93Cxx devices.

The software includes project files that can be saved and loaded which allows easy swapping between different jobs. Auto-detect of different file types (Intel Hex, Tektronix, Motorola etc) coupled with different file save options gives you control of your data. The neat data buffer allows data to be loaded from a file or a device so that it can be viewed or edited, in Hex or ASCII characters - alternatively just type your data straight in to the buffer!

Operation

Once data has been loaded, either from a file or from a device, or just typed in, the single key press Verify function lets you quickly and easily verify other devices. Auto programming using a single key press makes repeated operations very simple as you can choose to include file reload, device erase, program and verify functions in the Auto Program Options. CRC checksum generation gives confidence in programming reliability, and the Status report allows a whole programming session to be reviewed. A flashing red indicator on the screen immediately and clearly shows any errors.
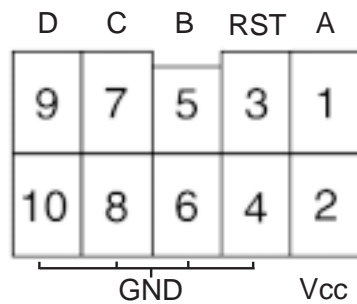
PC Interface

The standard Kanda PC interface allows connection to the Serial or Parallel port on the PC for maximum flexibility and the low profile and small size makes connection easy. The 1 metre (39 inches) cable means no more scrabbling around behind your PC.

The cable terminates in our standard 10-way connector which features interleaved ground lines for maximum EMC noise immunity and improved reliability. It is very simple to alter the connector to suit your own connection purposes e.g. 3 way edge connector or flying leads for In System programming, or alternatively it plugs straight into our programming board (see below) which has a built-in external interface.

MCU RESET

The programmer also allows you to connect a MCU Reset line (RST), which gives far more adaptability during In System operations as any microcontroller in the circuit can be held in reset whilst the EEPROM is read or programmed. This MCU Reset line can be easily configured to deal with microcontrollers with high or low reset circuitry.
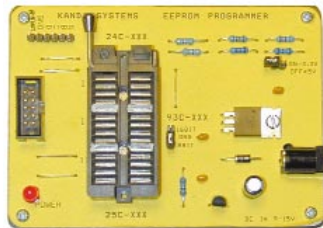
ISP Interface

D	C	B	RST	A
9	7	5	3	1
10	8	6	4	2
	GND			Vcc

	24CXXX	25CXXX	93CXXX
A	N/C	SI	DI
B	N/C	CS (bar)	CS
C	SCL	SCK	CLK
D	SDA	SO	DO

Optional Programming board

The standard programmer can be supplemented with our programming board. This board is cleverly designed for ease of use and features a 28 way ZIF socket giving different, clearly separated, programming positions for each EEPROM family (24C, 25C and 93C).

Also included are simple jumpers for 3.3 or 5V operation and 16-bit or 8-bit addressing for 93C family. The board requires a 9 to 15 V DC supply, using a 3.5 mm barrel connector. A 6-way 0.1 inch (2.54 mm) pin header is supplied for simple external connection to user circuits for In Application programming if preferred. As well as ground and MCU Reset lines, 4 connections are supplied for different programming protocols (I2C, Microwire or SPI).

Ordering Information

PART	PART NO.
Standard Programmer	EEISP
Programmer + Programming board	EEPROG

We can provide quotes for customised DLL or command line versions for integration into test or production software systems. Please call sales or email sales@kanda.com for details.

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