PROM PROGRAMMER 82S23/82S123 74S288/74S188 v 1.0



The PROM programmer PRGM2025 is very simple to use. By default, it operates at 5V and automatically generates the necessary voltages for its operation. In particular, it can program PROMs at both 10.5V and 15V. The 10.5V mode is the most suitable for programming the indicated memories (82S23, etc...), while the 15V mode is reserved for special PROMs but will not be used in this manual. The decimal point on the displays indicates, if lit, the 10.5V mode; if off, the 15V mode.



In the figure, the jumper (which can also be a switch, depending on the type of PCB you will receive) should be left on 10V. With this mode, it is possible to program the PROMs following the algorithm indicated in the datasheets, using the pulsed CE line. Normally, the programmer is in 'read' mode and will display the active address on the 7-segment display, and with the LEDs (L0..L7) it will show the state of the outputs. When an LED is on, there will be a condition 1 on the corresponding output, while when the LED is off, there will be a condition 0. By default, all 'virgin' PROMs

have their outputs set to 0 in all cells. With the programmer, we can change the state of each individual bit from 0 to 1, but not vice versa. Once a 1 is programmed on an output, in fact, the PROM will no longer allow a return to state 0, so be very careful during programming.

HOW TO PROGRAM A MEMORY

Insert your blank PROM into the plinth, making sure that the notch indicating PIN 1 is at the top, as shown in the image. Use the UP and DOWN keys to select the cell that you want to edit. At this point, press the button relating to the output to be programmed at logic value 1 (you can program only one bit at a time) and press the two programming keys PGM1 and PGM2 at the same time.

At this point all the output LEDs and the red PGM LED will light up and you can release the programming buttons (but keep the button for the output to be programmed pressed!). After about 2 seconds the cell is programmed and the programmer switches to the reading state. Release the output button you had pressed and the LED should remain on indicating that the bit has been correctly programmed to 1. If the LED goes out, try the same procedure again.

After correctly programming all the bits of the cell, you can move on to the next cell.

It is not necessary to program the cells in sequence, just as it is not necessary to program all the bits of a cell in one go, although, of course, doing things methodically is better than jumping around between memory addresses.

The display shows the active cell in hexadecimal, both in read and write mode. In some cases, it is possible to program multiple outputs of the same cell simultaneously by simply pressing the respective buttons and carrying out the programming.

With certain memories, this is guaranteed and it works, although it is not recommended.