

CEIBO MP-51 PROGRAMMER - SOFTWARE UPDATE

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1. NEW HARDWARE FOR MP-51 - SOFTWARE NOT COMPATIBLE!

Usually you had to replace the 32K EPROM inside the MP-51 to update the algorithms, in case they changed for new devices. This was not necessary each time a new device has been added to the list, but it is a must for those chip with changes in the programming technology which are not backward compatible.

As this method cannot be used anymore because the 32K are not enough to hold all the algorithms, we are now offering two possible solutions:

a. *MP51FB expansion board* - this piece of hardware can be installed inside the programmer. Algorithms are downloaded into a RAM memory and not taken from the old EPROM. Furthermore, MP51FB has some more hardware improvements, allowing serial communications at 115K instead of 9600 baud, as well as 256K RAM to hold the programming data.

The Windows software downloads the firmware into the MP-51FB board and the current firmware version is V4.70.

Price of this hardware upgrade: US\$190 / Euro 210. Call Ceibo or any of our distributors to get MP51FB upgrade.

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b. *V4.60 and V4.61* - are the current firmware versions for the 32K EPROM solution; they already include most of the latest algorithms.

If there is a particular device not supported by V4.60 or V4.61, which can be programmed only with MP51FB additional hardware, and you are not willing to invest in the hardware update, please report your needs to support@ceibo.com and we will try to help you with a customized solution.

2. HOW TO UPDATE THE SOFTWARE

- a. *MP-51 systems equipped with MP51FB expansion board* These systems are automatically updated after downloading a new PC software version release. The current firmware version used can be identified invoking the Settings | About dialog in the Windows software. Also using the DOS version which is found when running MPHWVER utility.
- b. **Old MP-51 systems** These systems require manual update and replacement of the firmware EPROM inside the MP-51 system.
 - I. Load the desired hex file from the **firmware** folder. Program a 27C256 EPROM with 200ns or less access time.
 - II. Loosen the four screws on the lower half of the MP-51 box.
 - III. Open the box.
 - IV. Replace the EPROM (U3).
 - V. Check that the following plugs remain properly connected:
 - * J2 to the cable connected to the 25-pin D-type connector
 - * J1 to + 5VDC (pin 4 and 5 from the 5-pin power connector)
 - * J8 to +30VDC (pin 1 and 3 from the 5-pin power connector)

3. SOFTWARE VERSIONS HISTORY AND NEW SUPPORTED DEVICES

a. *Firmware* V4.70 - This is a version only for MP-51 systems equipped with MP51FB expansion board. The firmware is already embedded in one of the Windows Software DLLs and NOT available as a 32K EPROM version.



Includes support for:

Atmel: AT89C55WD

Atmel: AT89C51RC

Atmel: AT29C256/7 and AT29C512

Atmel: AT89C55 (programming fixed)

Atmel WM: T89C51R(I)B2/R(I)C2

Atmel WM: T89C51RD2

ICS: IS89E54/58/64.

ISSI: IS89C52

Philips: PXA-G49 (revised algorithm)

Philips: P87C51Rx+, P89C51RD2 (revised algorithms)

Philips: P87C591 (added lock bits after program verification)

Philips: P89C591 and P87LPC76x

SST: SST89C54/58

b. *Firmware* **V4.61** - This is a version for MP-51 systems equipped with 32K EPROM for firmware update (old systems). Includes support for the following devices since V4.60:

Removed Support from V4.60: PCA5097

Added Support: SST SST89C54/58

c. *Firmware V4.60* - This is a version for MP-51 systems equipped with 32K EPROM for firmware update (old systems). Includes support for the following devices since V4.45:

Atmel: AT89C55WD Atmel: AT89C51RC Atmel: AT89C55 (programming fixed) Atmel WM: T89C51RD2 ISSI: IS89C52

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Philips: P87C51Rx+, P89C51RD2 (revised algorithms) Philips: P87C591 (added lock bits after program verification) Philips: P89C591 and P87LPC76x.

Removed Support in V4.60:

WSI: PSD301/11/L, PSD302/12/L, PSD303/13/L

Atmel: AT22V10, ATV750, ATV2500, ATV5000, ATV5100

e. Firmware V4.45 - Latest 32K EPROM version with WSI PSD3xx and Atmel PLDs.

4. WINDOWS SOFTWARE

The program has been tested with the programmer under Windows 95, Windows 98 and Windows NT. We recommend using 256 or more colors.For setting display colors, please refer to the Windows user's manual.

5. WINDOWS COMMAND LINE SWITCHES

The following command line switches are supported. In order to add a command line switch to the Windows MP-51 programmer, open the properties of the icon, and add the switch at the end of the execution line.

Switch Abbreviation Description:

/P:filepath Will automatically load the specified MPF file.

/Com:nn Will look for the MP-51 Unit at the specified communication port. Use /Com:1 for Com1 and so on.

/Scan Will search all com ports for the MP-51 Unit.

/QUICKPULSE /QP Program using the QuickPulse(TM) algorithm instead of the standard Intelligent Programming(TM) algorithm. This will only affect 2764-27512 EPROMs programming.

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/FPGM:5 Faster programming for some of the newer 51Microcontrollers. MP51 unit may program 51 Microcontrollers using only 5 programming pulses, instead of the standard 25. Use the command line switch to enable this option. This will only affect EPROM based 51 Microcontrollers programming.

/NOFB Disables the usage of MP51FB memory expansion board for large ram buffer devices. This switch forces the software to use the normal MP-51 32k ram instead.

/Demo Forces the program to enter and stay in demonstration mode.

Note 1: The /Scan switch overrides the /Com:nn switch.

Note 2: The QuickPulse algorithm is not supported in older devices, and by some vendors. Check your EPROM data sheets whether the QuickPulse algorithm is supported prior to using this option. If programming error occurs or the programmed EPROMs do not function correctly after programming, disable this option.

Note 3: The 5 pulse programming is not supported in older devices and by some vendors. Check in your 51 Microcontroller data sheets whether this programming algorithm is supported, prior to using this option. If programming error occurs or the programmed Micocontrollers do not function correctly after programming, disable this option.

6. HOW TO CONTACT US

We hope you will find our products to your utmost satisfaction. We are constantly working on improving and updating our products. Any comments that you might have on our products will be considered and appreciated.

For free software updates visit our web site: **<u>www.ceibo.com</u>**.

Any questions or comments? Send them to: support@ceibo.com.

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