How to use PonyProg2000 for the Microrobot AVR Products(Rev 0.3)

Contents

What is PonyProg2000?

PonyProg is a serial device programmer software with a user-friendly GUI framework available for Windows95, 98, 2000 & NT and Intel Linux. Its purpose is reading and writing every serial device. At the moment it supports I²C Bus, Microwire, SPI EEPROM, the Atmel AVR and Microchip PIC micro.

For more details, visit http://www.lancos.com/e2p/ponyprog2000.html or read ponyprog2000.html in the CD.

How to install?

Run the setup.exe file.

Preparation

- Supply proper power to the (CPU) board.
- Connect the downloading adapter to the PC printer port. Then connect the downloading adapter and the board with the flat cable.
- Turn on the power switch on the board. Power LED turns on (when applicable).
- Compile the source file you want to download.

How to download a program using PonyProg2000

Run the PonyPorg2000 program.

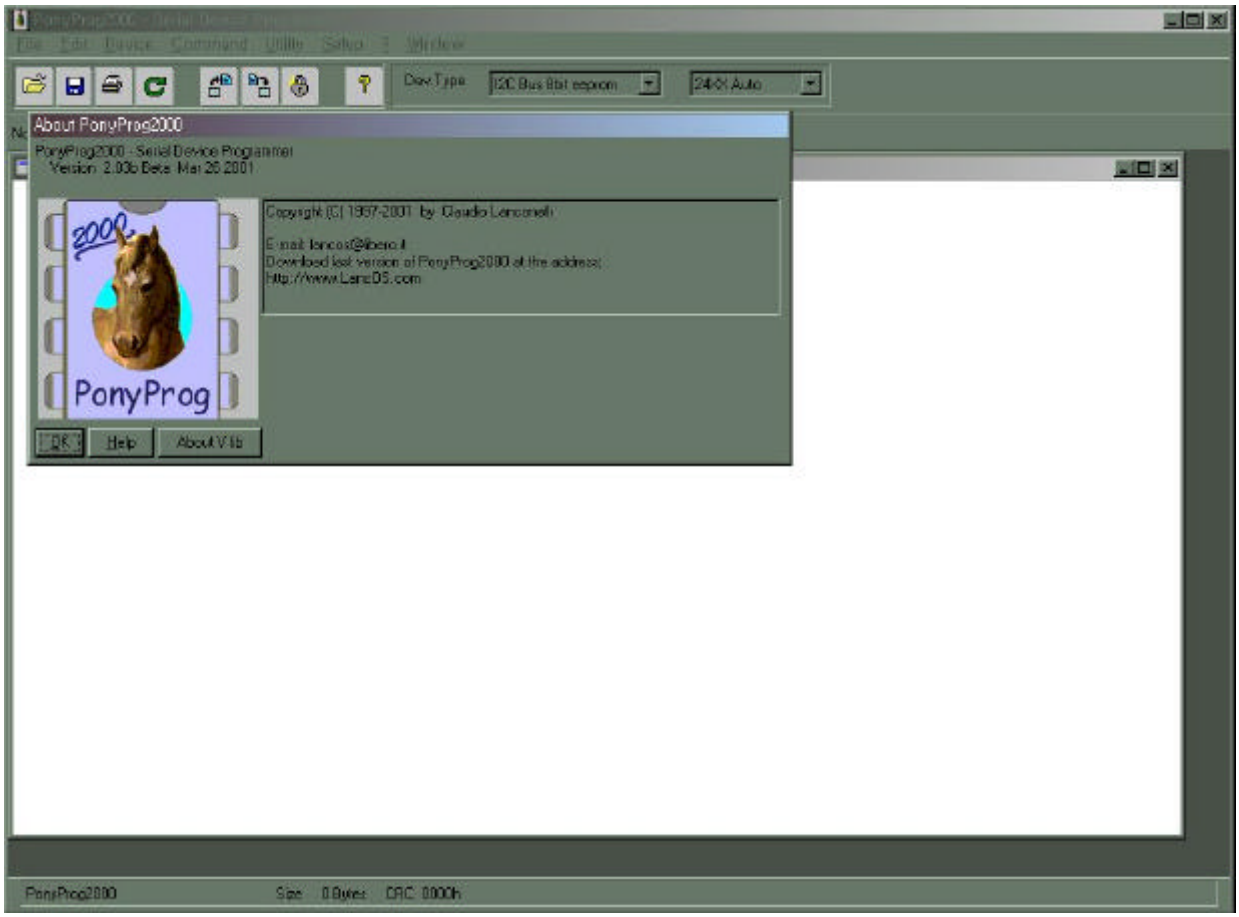

Fig 1.0

Click on OK. The following window appears.

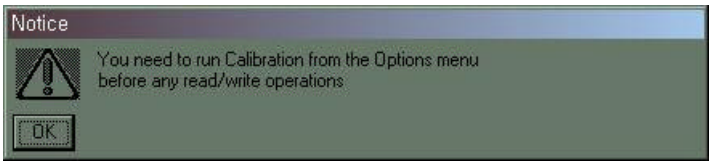

Fig 1.1

Click on OK. Select ‘Setup → Calibration’.

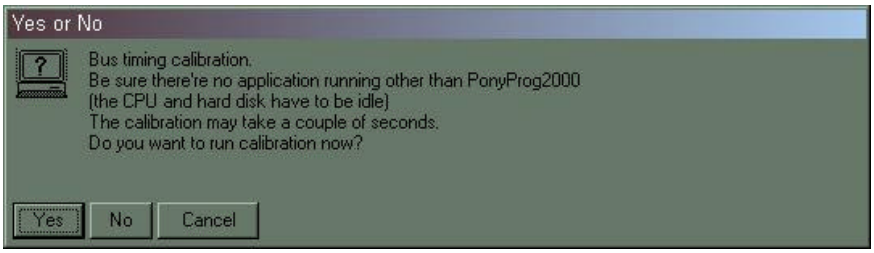

Fig 1.2

Click on Yes button. The following window appears.

Fig 1.3

Click on OK.

Select 'Setup → interface Setup' and set up as shown below (Parallel, Avr ISP I/O, LPT1) and click on Probe. 'Test Ok' message appears. Click on OK. Click on OK.

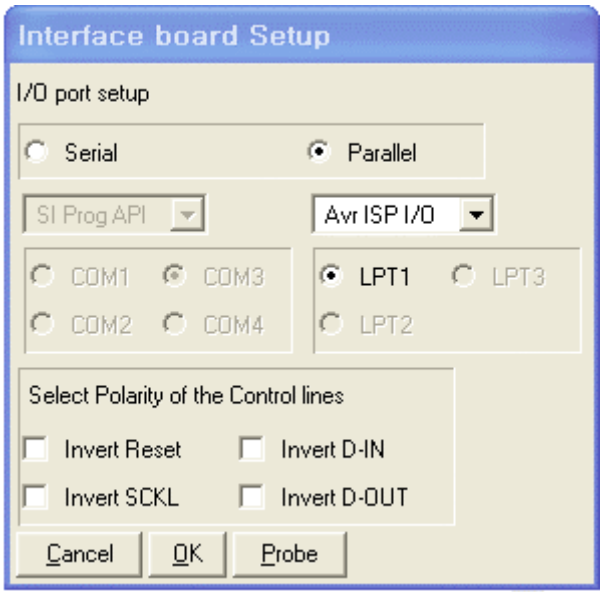

Fig 1.4

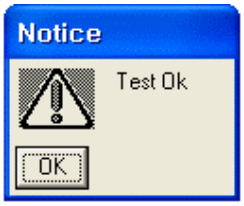

Fig 1.4.2

Select the device you want. ('Device → AVR micro → XXX', XXX is the device you want)

Select 'Command → Program Options' and check as shown below. (Reload Files, Erase, Write Program memory)

Click on OK.

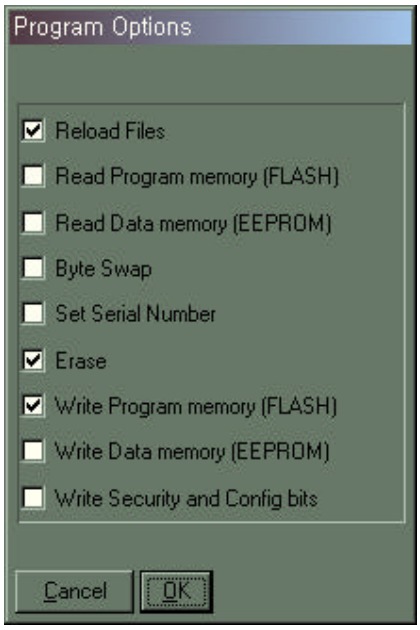

Fig 1.5

Some devices require 'Flash Fuse Bits Setting' for the desired clock source setting.

For example, CKSEL3..0 bits of the ATmega8535 and Atmega8515 devices need to be set 1 to select the External Crystal clock source mode. Refer to 'Clock Options' of the device sheet for the detailed bit setting.

If you need to set the bits, select 'Command → Security and Configuration Bits…'.

Click on Read button, uncheck the CKSEL3..0 bits and then click on Write button.

Fig 1.6 shows a 'Security and Configuration Bits' dialog box as an example.

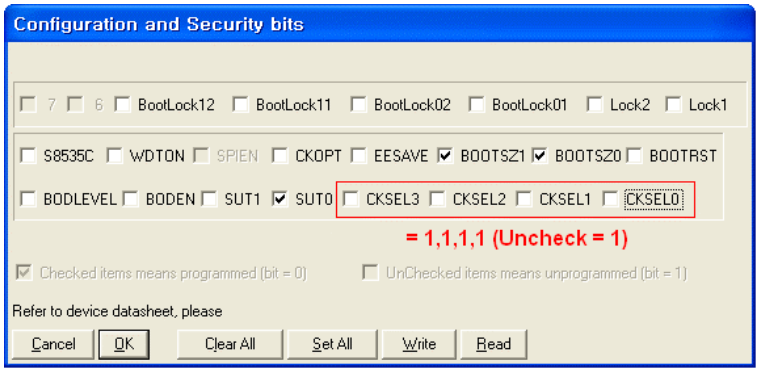

Fig 1.6 CKSEL bits Setting for ATmega8535(MR-8535)

Note: If the board has an AT90S-type CPU instead of ATmega-type, the setting is not required.

Select 'File → Open Program File' and load the *.rom(or *.hex) file.

Select 'Command → Program' or press 'Ctrl + P' to start the downloading. If no 'Program Failed' message appears, the downloading has been completed successfully.