PROGRAMMING SYSTEMS

Frequently Asked Questions

Technical questions and answers about using the EPP-1F and EPP-2 programmers

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Technical Support

Frequently Asked Questions

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Disclaimer

Programming Systems B.V. is not responsible for damage of any kind or data loss while using programmer hardware, software and manual or while following the actions described in this Frequently Asked Questions list.

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1 Installation

Q: The installation program keeps asking for disk 2, even when it is in the drive?
A: This is a problem sometimes found when installing on Windows 3.1x. Windows doesn't want you to switch disks when there are files open on that disk, in our case SETUP.EXE. When you copy the disks to harddisk (first disk 2 then disk 1 in a single directory), and run the program from there, everything should work (see below).

Q: How do I install the software for Windows 3.1x:
A: Copy the files of both disks to a temporary directory on your harddisk. Now run 'SETUP.EXE' from this directory. The setup procedure will install the program for you. Online help is available. Double click on the PromProg for Windows icon. The first time you start the program you need to change the communication and programmer settings. Press the HELP button from the welcome screen to get started and learn how to set up and use PromProg for Windows.

Q: How do I install the software for Windows 95/98:
A: Insert disk 1/2 in your drive and run 'SETUP.EXE' on the disk. The setup procedure will install the program for you. Online help is available.

Before using PromProg for Windows for the first time, please turn off the FIFO buffers of the used serial port. The settings are to be found browsing the following path: Start, Settings, Control Panel, System, Device Manager, Ports, Communications Port COMx, Port Settings. The correct settings are:

Baudrate / Bits per seccond:	115K2
Data bits:	8
Stopbits:	1
Flow control:	CTS/RTS or hardware
Advanced:	Use FIFO buffer (requires 16550 compatible uart): OFF

These settings have nothing to do with the settings from the device selection within PromProg for Windows, but are essential for operating the programmer reliably.

To start PromProg for Windows, just double click on the PromProg for Windows icon, or select PromProg for Windows from the start menu. The first time you start the program you need to change the communication and programmer settings. Press the HELP button from the welcome screen to get started and learn how to set up and use PromProg for Windows.

Q: Can I use the software with Windows NT?
A: No, PromProg for Windows does not work when using Windows NT.

Q: How do I install the software for DOS:
A: Copy the files in the directory DOS on disk 1/2 to a subdirectory on your harddisk. You are now ready to use the programs in this directory. See the 'README' file for further information. Change to the directory you copied the files to. Type 'PROMPROG.EXE' and press ENTER. It is not recommended starting PromProg directly from disk.

2 Communication

Q: I can't get the programmer to communicate with my PC?

A: Check if you are using an 1:1 RS232 serial cable and that no null modem cables or adapters are being used. See diagrams below for cable specifications:

PC (25 pins)	↔	EPP (25 pins)
1 Cable Shield	↔	Cable Shield 1
2 TxD	→	RxD 2
3 RxD	←	TxD 3
4 RTS	→	CTS 4
5 CTS	←	RTS 5
6 DSR	←	HIGH 6
7 GND	↔	GND 7

PC (9 pins)	↔	EPP (25 pins)
2 RxD	←	TxD 3
3 TxD	→	RxD 2
5 GND	↔	GND 7
6 DSR	←	HIGH 6
7 RTS	→	CTS 4
8 CTS	←	RTS 5

Q: I have problems with Windows 95 and communication, what to do?

A: Check the settings of the COM-port in the device-manager. The FIFO buffers probably aren't turned off. The settings are to be found browsing the following path: Start, Settings, Control Panel, System, Device Manager, Ports, Communications Port COMx, Port Settings. The correct settings are:

Baudrate / Bits per seccond:	115K2
Data bits:	8
Stopbits:	1
Flow control:	CTS/RTS or hardware
Advanced:	Use FIFO buffer (requires 16550 compatible uart): **OFF**

These settings have nothing to do with the settings from the device selection within PromProg for Windows, but are essential for operating the programmer reliably.

Q: I get messages that indicate communication problems, like 'unable to reset the programmer' or other messages?

A: This can originate from:

1. Turning on the programmer after starting the program. Try to test the connection. This will close and reopen the port, resetting the communication. Probably you have a connection afterwards.
2. If you don't receive a response from the connection test. It is most likely, that the program can not find the configuration (.CFG) files. Try (re)installing these files.
3. Another possibility is that the wrong device is selected.
   Go to the menu. Choose COMMUNICATION|SELECT DEVICE. When no programmer is selected (the text behind selected device is XXX) try autodetect. When you have selected a programmer, but the list of baudrates is empty, the program can't find the configuration (.CFG) file. Try reinstalling the configuration files.
4. You installed the 'EPP-1' configuration files instead of the 'EPP-1F or EPP-2' configuration files for the EPP-1F. Reinstall the configuration files.

NOTE

Reinstalling the configuration files is not easy and should be done by people who know what they are doing. If you don't know what to do, delete all ART directories and delete the [ARTDEVICES] section of the WIN.INI file.

Q: I tried the suggestions above but I still have communication problems?

A: Check the following:

- If the FIFO buffers are turned off from the right port.
- You followed the instructions given in the welcome screen by pressing the help button. In this screen you get information on how to get started and learn how to set up and use PromProg for Windows.
- If the right serial cable is used (1:1 with TxD-RxD, CTS-RTS, DTR-DSR and GND connected)
- The programmer works with software flow control XON-XOFF
- The programmer works with an other serial cable
- The programmer works on an other serial port
- The programmer works with the DOS software
- The programmer works on an other PC
- Try to reinstall the serial port and PromProg software:
    1. Be sure you have the newest version of PromProg for Windows. You can download the newest version of the software on http://www.artbv.nl
    2. Reset your computer and write down the serial port settings of your PC which are shown on start up or in your bios configuration screen or application which are accessible during start up.
    3. Start Windows and de-install the serial port (control-panel, system, device manager, ports, COMx → remove).
    4. After which you have to re-install the serial port manually (control-panel, add new hardware).
        a. This will start the 'Add New Hardware Wizard'. Select 'NO' on the question 'Do you want Windows to search for your new hardware'.
        b. On the next screen select 'Ports (COM & LPT)'.
        c. Use the serial port drivers provided with your computer when provided with the 'Have Disk...' button (preferred) or select 'Standard port types' and 'Communications Port'.
        d. Check in the next screen if the settings are correct with the ones found in step 2.
        e. After you pressed the 'Finish' button in the next screen the port has been installed.
    5. If the settings shown in step 4d were not correct, you can adapt these by browsing control-panel, system, device manager, Ports, COMx, Resources. Here you have to enter the settings found at step 2.
    6. Restart your computer.
    7. Delete the [ART DEVICES] section of the WIN.INI file.
    8. Delete all ART directories, default this will be C:\ART. Don't forget to backup self created files first.
    9. Install the newest version of PromProg for Windows.
    10. Restart your computer.

Q: I downloaded new software, and now my programmer doesn't work anymore?

A: It is possible you have an old hardware version of the programmer. Some old hardware versions works on different baudrates, so the settings on the PC and programmer are different after switching. However, all hardware versions start at 9600 baud. If you set this baudrate in the software (DOS or Windows), you will be able to work. This is also the maximum baudrate the old hardware type is capable of, so you won't have any performance loss.

3 DOS Software

Q: I get a format error while using FFC (File Format Convertor)?

A: Some programs don't use increasing addresses when writing data to a file. With structured formats, such as Motorola and Intel HEX, this is no problem, but FFC wants to parse the file line by line. When a lower address is encountered, FFC can't write the data (the address is allready used), and exits with an error.

Solution: Use PromProg for Windows. This program can read the entire file in a buffer. You can then write the entire file to disk, and convert if necessary.

Q: How do I use the offset with PromProg for DOS?

A: There are two address area's:

1. The buffer in the PC
2. The E(E)Prom address layout.

PromProg for DOS uses the buffers' start and stop addresses. You can adapt the target (E)prom addresses by changing the offset. PromProg for DOS can only program the buffer to a lower address, e.g.:

Start:	00100	This will program the buffer addresses 00100 - 00FFF to (E)Prom addresses 00000 - 00EFF.
End:	00FFF	
Offset:	00100	

This is done because many compilers generate files in which the code will be placed in the real memory map, which often don't start at address 0. However the file should normally start at E(E)Prom address 00000 because the E(E)prom addresses will be relocated using chip select hardware.

4 Windows Software

Q: Blank check does not work, it keeps telling me the device is blank, although I'm sure it is not?

A: This problem has been solved since PromProg for Windows version 1.2. Please download the newest version of PromProg for Windows from our WebSite (http://www.artbv.nl).

Q: Can I use the software with Windows NT?

A: No, PromProg for Windows does not work when using Windows NT, only Windows 3.1x, 95 and 98 are supported.

Q: Why do the sumcheck of PromProg for DOS and PromProg for Windows are different for the same devices?

A: PromProg for Windows uses a different method for calculating the sumcheck. Maybe in a future release we will revert to the old method.

Q: Autodetect doesn't work, and now I am unable to work with the program?

A: In general, the autodetect should always work. Try resetting the programmer (disconnect from the mains, wait about 10 seconds, reconnect). A second problem could be that you forgot to install the configuration files. If these files aren't installed, the program doesn't know how to communicate to the programmer. Try re-installing these files.
A final solution could be to modify the configuration files yourself (only recommended for advanced users).

1. Copy the sections from the device INI file to the file PPW.INI. Remember to leave the other (program) settings unchanged.
2. Modify the path behind the 'configfile' entry in the 'settings' section, pointing it to the file EPP-X.CFG on your harddisk (where X = type of programmer. Usually 1 or 2)
3. Restart PromProg for Windows

Q: I get the message "Invalid Directory ", and the program exits?

A: You have one of the following files more than once on your harddisk: IDAPI01.DLL, IDBAT01.DLL, IDPDX01.DLL, IDQRY01.DLL, IDR10009.DLL and ILD01.DLL. These files should only be once on your harddisk, preferable in the WINDOWS\SYSTEM directory or the PPW directory. The most likely problem is you have installed Delphi (2.0) on another drive as the PromProg files. Move the directory IDAPI on your 'delphi drive' to the windows\system directory, and everything should work fine.

Q: How do I use the offset with PromProg for Windows?

A: There are two address area's:

1. The buffer in the PC
2. The E(E)Prom address layout.

PromProg for Windows uses the E(E)Proms' start and stop addresses. You can adapt the buffer start and end addresses by changing the offset. PromProg for Windows can relocate the file to every position within a E(E)Prom, e.g.:

Start:	00100	This will program the buffer addresses 01100 - 01FFF to E(E)Prom addresses 00100 - 00FFF.
End:	00FFF	
Offset:	01100	

This is done because many compilers generate files in which the code will be placed in the real memory map, which often don't start at address 0. However the file should normally start at E(E)Prom address 00000 because the E(E)prom addresses will be relocated using chip select hardware.

Q: Why can't I move my mouse pointer after I start PromProg for Windows?

A: Problems are known to exist with Logitech Mouse drivers. When you run Windows 3.1x, and you have the Logitech Mouse drivers installed, and you move the mouse when the program is trying to detect the number of COM ports on your system, then your mouse could hang. But the program still works, so you can close Windows properly using the keyboard. (Usually, the combination ALT+F4, and an occasional Y or N should do the trick).

Solutions are:

- Don't move the mouse on startup. Just wait until the startup screen is gone, and your harddisk stops.
- Install other drivers. The default drivers have no problem. You loose the third button though.

NOTE

In Windows 95/98 no known problems exist with the drivers.

5 EPP Maintenance Issues

Q: Do I have to turn of the programmer after I used it?
A: Yes you better remove the power cable. The EPP programmer does not turn itself off in a so-called 'Green Mode'. So turn off your EPP in order to save the programmer, energy and the environment.

Q: Do I have to clean the programmer?
A: Yes you have to. Below you can read why and how to do it.

NOTE

Do not use acid or oil based products to clean the programmer!

Q: Why do the programming results drop after a certain period of time?
A: Both the ZIF socket and the pins of the programmable device are made of metal or metal like materials. This means that in due time a little oxide layer will grow on the contact points of the ZIF socket and the pins of the programmable device. This will often lead to poor electrical contacts and programming results.

Q: How do I remove the oxide layer from the ZIF socket?
A: Buy a quick drying spray specially made for anti oxidising purposes for electrical contacts. Open the ZIF socket and take care that the spray is sprayed in all contacts. After that firmly blow the ZIF socket dry.

NOTE

Do not use acid or oil based products to clean the ZIF socket!

Q: How do I remove the oxide layer from the programmable device's pins?
A: There are two methods to do this:

1. Use the same spray as used for cleaning the ZIF socket. Spray it over the pins and blow them dry.
2. Take an ordinary eraser and use this rub this over the pins.

NOTE

Do not use acid or oil based products to clean the programmable device's pins!

6 How to get technical support?

We want to help you as good as we can. Therefore we need as much information as we can get. But for this we need your help. Please walk through this complete FAQ, many problems will be solved.

To get technical support send an E-mail to: artbv@iae.nl, containing the following information:

- Type of programmer.
- Serialnumber.
- Supplier and date of purchase.
- Software version.
- Operating system.
- PC configuration.
- A detailed description of the encountered problems, (error) messages and what you have tried to solve it already.

If you do not have any communication at all, please make a text log file with a terminal emulator (like Windows Hyper Terminal) using the following:

1. Start a with the following settings:
   - 9600 baud
   - 8 databits
   - 1 stopbit
   - no parity
2. Connect the power cable to the programmer.
3. After that type 'QQQ' and press ENTER.
4. Save the results of steps 2 and 3 to a text file and attach this file to the E-mail.

Our technical support department will try to help you as soon as possible.