

Card Configuration Window

The Setup program for the Hayes ESP™ Communications Accelerator helps set up the card for compatibility with your computer system.

The program checks your system for the presence of Communications Accelerator cards and also checks other parts of the computer system. It determines and installs setting parameters appropriate for most computers. Typically, all you need to do is to run the Setup program and accept the suggested values.

On startup, Setup displays the Card Configuration window. This lists all the ESP Communications Accelerator cards installed in your computer. The detected configuration settings for the cards are also shown.

At this point, you may be able simply to use the **Exit and Save** button to use the suggested settings. If, however, you know that one of the displayed setting values may be used by other devices in your system and cause a conflict, you can use the Configure button to modify the ESP Communications Accelerator card settings.

For information about setting values displayed in this window, click on it, or press **Tab** to highlight the topic and **Enter** to display it:

- Port
- Mode
- IRQ
- Address

If you have a card with two serial ports built into it, values for the second serial port are listed in the last four columns. These settings must also be unique (except for **Mode**), and not used by any other device, including the first port.

For more details about the settings and suggestions on when and how they should be changed, use the **Configure** button and then display its Help topic. Or refer to the topic Modify Card Configuration Window.

Modify Card Configuration Window

In this window you can modify the port settings of the ESP Communications Accelerator card. Changing a setting is sometimes necessary when you know that a current card setting is the same as that used by another device. This situation could cause a conflict and make the card work improperly or not at all.

Settings on the right, in the Port 2 (Bottom) box, apply to the second, bottom serial port on a Communications Accelerator card that has two ports built into it. If the card has only one port, these setting options are greyed out. If the card has two ports, you can configure both of them, using both left and right boxes. To prevent hardware conflicts, settings (except for **Mode**) in one box must be different from those in the other.

Click on a topic below for information on changing a specific card setting:

- [Bus Width](#)
- [Mode](#)
- [Port](#)
- [I/O Address](#)
- [IRQ](#)

Bus Width

A bus is the channel along which a computer transfers information from one place to another. Most computers now use at least 16-bit buses to transfer information between the computer and serial devices. Some older computers, however, may use 8-bit buses. Theoretically, a 16-bit bus is twice as fast as an 8-bit one. If your computer uses an 8-bit bus, darken the **8-bit** button.

Mode

The ESP Communications Accelerator card can be used in **Enhanced** mode (its standard, high-speed mode) or in **UART** mode. **Enhanced** mode provides maximum throughput and prevents loss of data.

UART mode is for use only with applications that conflict with the Windows communications driver supplied by Hayes. Even when used in this mode, the Hayes ESP Communications Accelerator provides performance improvements over traditional serial ports.

If your card has two ports, you can set both to the same mode or each to a different one.

Port

This setting designates the serial (communications) port the card is assigned to use. A port is a unique identifier used by Windows to select communication channels.

If you have a card with two built-in ports, make sure each port is assigned to a different serial port identifier to avoid conflicts that could make one or both ports work improperly.

The Setup program will initially set the card to use the first (lowest) serial port designator not currently being used by another program or process. If you have a device currently assigned to this first communications port designator, but the port is not currently in use, the program may select a port ID needed for another device. If you recognize this is the case, you should change the port setting to an unused value.

I/O Address

The Input/Output Address is the area of memory used by the computer to communicate with the card. This memory address should be one that is not used by any other device.

If you're using Enhanced Mode, the Setup program suggests a standard setting that will work on most computer systems. If you have two ports on your card, the second port is automatically set to use an address value equal to the first port plus 8. You don't need to adjust the second port's I/O Address setting.

If you're using UART Mode, the I/O Address is selected automatically by the program when you choose a specific communications Port.

IRQ Setting

The Interrupt Request (IRQ) is a unique signal from a peripheral device informing the computer that the device requires attention. IRQs are identified by number.

The Setup program suggests IRQ values that should work on most systems. However, if you want to be certain of selecting IRQ settings appropriate for your system, you can use MSD.EXE, a diagnostic program supplied with Windows 3.1. This program, when run from the DOS prompt, diagnoses and displays available IRQs. Use this information to make your ESP Communications Accelerator IRQ selection. This avoids any possibility of a conflict with other devices installed in your computer.