A Guide to Computer Ports

**Serial Port** - for external modems and old computer mice

A serial port is used to connect external modems or an older computer mouse to the computer. It comes in two versions a 9-pin version or a 25-pin model. The 9-pin is found on most newer computers. Data travels over a serial port at 115 kilobits per second.

**Parallel Port** - connector for scanners and printers

A parallel port is used to connect external devices such as scanners and printers. The 25-pin port is sometimes it is called a printer port. It's also known by the gruesome named: IEEE 1284-compliant Centronics port.

The port is sometimes also called more simply a "printer" port. There are two variants for this type of interface. The ports look exactly like the traditional parallel port but are called ECP (Extend Capabilities Port) and EPP (Enhanced Parallel Port). These interfaces are ten times faster than the older printer port and can support two-way data so that computers can ask for information from a printer as well as send it.

**PS/2 Port** - keyboard and mouse interface

A PS/2 port, sometimes called a mouse port, was developed by IBM. It is used to to connect a computer mouse or keyboard. Most computers come with two PS/2 ports.

Sometimes webcams piggyback on the ports in conjunction with a parallel port. Sometimes it is not necessary to use a mouse port, as some keyboards and mice can be used with a USB port.

**AT Keyboard Port**

Connect a PC to an older keyboard. If you don't plug in a keyboard here, you get the famous BIOS boot error:

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Keyboard not found. Press F1 to continue.
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This giant port is a holdover from the ancient IBM PC AT.

It's apparently physically the same connector found on MIDI synthesizers and instruments, although it's electrically totally different.
**Universal Serial Bus (or USB) Port**

A universal serial bus port, introduced around 1997, is the gateway to your computer. It's used to connect all kinds of external devices, such as external hard drives, printers, mice, scanners and more. There are normally two half-inch long USB ports on the back of computers built since 1998. Sometimes there are USB ports built into a hatch on the front of a computer. If you use a USB hub, you can connect as many as 127 devices to a USB port. It can transfer data to a speed of 12 megabits per second, but those 127 devices have to share that speed. Since USB-compliant devices can draw power from a USB port only a few power drawing devices can connect at the same time without the computer system complaining.

In 2003, USB 2.0 connectors were introduced on computers. These transfer data at 480 Mbps. Older USB devices work with USB 2.0 ports, but at 12 Mbps. USB 2.0 devices also work with older USB ports, again at the lower speed.

**Video DB15 Port - a video port for your monitor**

This connector is used to attached a computer display monitor to a computer's video card. The connector has 15 holes. It sort of looks like a serial port connector, however that port has pins not holes in it.

**Power Connector - for your power plug**

This three-pronged plug looks like a recessed power plug. It connects to the computer's power cable that plugs into a power bar or wall socket.
IEEE 1394 or "Firewire" Port - fast camcorder connector

This port is used to transfer large amounts of data very quickly. Usually camcorders and other video equipment use this port to get data onto a computer. Data can move across the port at up to 400 megabits per second. Apple invented this technology and had branded it Firewire. It was also adopted as an industry standard and is called IEEE 1394 on non-Apple computers. Other companies call it i.link and Lynx. Creative Labs which incorporated it into their SoundBlaster Audigy Platinium products call it SB 1394 (pictured on the right). IEEE 1394 connectors can be used to connect up to 63 external devices to a machine.

TOP: A 6-Pin FireWire 400 connector

Middle: A 4-Pin FireWire 400 connector. This connector is not powered.

Bottom: A 9-Pin FireWire 800 connector

Modem

Connects a PC’s modem to the telephone network. This is an ordinary phone jack, like you’d find in any telephone.

Optical Audio

This is an optical (not electrical) cable to connect your Mac to a set of high-end speakers. The port was introduced with the Mac G5. The digital format is S/PDIF, which in the PC world is often sent over a regular electrical cable (usually with an RCA phono plug).

The geeky advantage of the optical cable (note the red glow) is that it's totally immune to electromagnetic interference—long speaker wires can act as an antenna, picking up the stray 60hz hum that pervades the universe. My powered speaker cables would actually pick up CB radio, so they’d occasionally spit out little snatches of conversation as truckers would go by. It happened rarely enough that I’d begun to doubt my own sanity before my wife figured out what was going on.
Ethernet or 'Network' Port - connect to a network and high speed Internet

For faster Internet connections and for networking, an Ethernet or network port is used. This looks like an oversized North American telephone jack.

The port is used to connect network cabling to a computer. Cable plugged into this port can lead either to a network hub (a junction box that can wire lots of network cables together), directly to a cable modem or DSL modem (both used for high speed Internet) or to an Internet gateway which shares a fast Internet connection between computers.

Most newer computers have one of these ports. They can either be built-in to or appear on the exposed part of an Ethernet PCI card, which inserts into a slot inside the computer. Data moves through them at speeds of either 10 megabits or 100 megabits or 1 gigabit (1,000 megabits) depending on what speed the network card in the computer supports. Little monitor lights on these devices flicker when in use.

The "ACT" light flickers when data is moving through the network to or from the port. The 10 or 100 lights relate to data speed. "10" means data is moving across the network at 10 Megabits per second. "100" means the network is moving data at 100 megabits per second.

Gameport

Connect a PC to a joystick (or two). This port is now mostly replaced by USB.

This DB-15 connector has several (extremely primitive) analogue inputs and a small number of digital inputs and outputs.

Because the MIDI (Musical Instrument Digital Interface) standard scavenged two pins from this port, the port is almost always located on the sound card. Apparently people that use MIDI normally have some sort of big ugly dongle that extracts MIDI signals from their joystick port.

DVI Port

DVI stands for (D)igital (V)ideo (I)nterface.

DVI is a new form of video interface technology made to maximize the quality of flat panel LCD monitors and high-end video graphics cards. It is a replacement for the P&D Plug & Display standard, and a step up from the digital-only DFP format for older flat panels. DVI is becoming increasingly popular with video card manufacturers, and most cards purchased include both a VGA and a DVI output port.

More here
SCSI

DB-25 Male External

Low-Density, 50-Pin, Male External

High-Density, 50-pin, Male External

Low-Density, 50-pin, Male Internal

High-Density, 68-pin, Male External

High-Density, 68-pin, Male Internal

Short for Small Computer System Interface, SCSI pronounced as “Scuzzy” is the second most commonly used interface for disk drives. Unlike competing standards SCSI is capable of supporting eight devices or sixteen devices with Wide SCSI.

SCSI-1 is the original SCSI standard developed back in 1986 as ANSI X3.131-1986. SCSI-1 is capable of transferring up to eight bits a second.

SCSI-2 approved in 1990 SCSI-2 added new features such as Fast and Wide SCSI, support for additional devices,

SCSI-3 was approved in 1996 as ANSI X3.270-1996

SCSI is a standard for parallel interface that transfers information at rate of eight bits per second and faster which is faster than the average parallel interface. SCSI-2 and above supports up to seven peripheral devices, such as a hard drive, CD-ROM, and scanner can attach to a single SCSI port on a system's bus. SCSI ports were designed for Apple Macintosh and Unix computers, but also can be used with PCs.

http://www.cablestogo.com/resources/connector_guide.asp?