

## Audio

**RCA:** By far the most common audio connector. Used for every sort of analog input and output, these come in color-coded pairs (usually red for right and black or white for left). Also used for composite-video (coded yellow) and coaxial digital audio cables. "Coaxial" means the signal carrier and its shield are aligned along the same axis (generally a signal wire runs down the middle of a cylindrical shield). First used to connect early electronic record players to radios and still sometimes called "phone jacks."



**XLR:** A very robust, three-pin locking connector widely used in professional audio; also called a Cannon connector after one of its most prominent original manufacturers. In analog applications, particularly in some high-end consumer audio equipment, XLR connectors are used with balanced lines for optimal interference rejection. The pins in an XLR connector usually "point" in the direction of signal flow.



## Audio/Video

**BNC:** A very secure bayonet-style locking connector used in broadcasting gear for both video and radio signals. It is also common on professional test equipment. In consumer audio/video, BNC connectors are mostly used in high-def set-top receivers and high-end video monitors, often as RGB or component video inputs.



**F-Type:** The ubiquitous cable TV and FM antenna connector, used in conjunction with 75 ohm coaxial cable. Cheap, simple to install, and relatively secure in its screw-on form. Also available as a non-threaded slip-on connector, which can be useful if connections have to be changed often.



### **Audio/Video (continued)**

IEEE 1394 (Firewire): An interface standard adopted by the Institute of Electrical and Electronics Engineers for very fast (400 megabits per second) digital data transfer, especially of streaming video. Also called FireWire (Apple Computer's trademarked name) and i.Link. In A/V applications, tiny but robust 1394 connectors have so far been used mostly for digital camcorder outputs, but they will become extremely important in computer controlled home entertainment or communication or appliance networks.



RJ-11: The common modular telephone jack. Universal on phones, modems, faxes, and the like and used in satellite TV receivers to keep track of things like pay-per-view transactions. RJ-11 has 4 connecting wires.



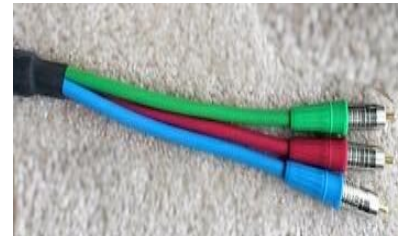
RJ-45: Similar in appearance to RJ-11, this jack is used for network connections like ISDN and Ethernet. RJ-45 has 8 connecting wires.

USB (Universal serial bus): Another computer connection, USB allows computer peripherals, including eventually some A/V gear, to be added in daisy-chain fashion. The connector is similar to IEEE 1394, but it transfers data at a slower rate, a maximum of 12 megabits per second. Far from universally adopted, though provided on many of the latest Wintel and Macintosh computers, USB may be supplanted by a USB2 in the near future.



## Video

**Component Video:** The color difference signals in a component video connection usually flow through triple RCA or BNC connectors in the case of professional gear. Some digital TVs accept both component video signals through RCA connectors and RGB signals through a VGA/SVGA connector.



**RCA:** Physically and electrically identical to audio RCA connectors.



**S-Video:** Small multipin connector that carries separate brightness and color signals from a source component like a DVD player or satellite receiver to a TV set. In the usual plastic form, these are difficult to orient properly when plugging them in, which is typical of connectors of DIN (Deutsche Industrie Normen) origin.

