Glossary

This glossary defines terms commonly used in data communications.

Analog Transmission	A continuous electronic signal. Analog phone lines transmit at a relatively slow speed compared to a computer's speed. Technology has increased this speed significantly but it is still slower than digital transmission. *See Digital Transmission for comparison.*
Any Key Abort	Pressing any key on the computer keyboard aborts a dialing sequence at any time before connection is established.
Asynchronous Inverse Multiplexing (AIMux)	A protocol that allows asynchronous devices to pass data over one or two synchronously bonded channels.
Asynchronous Transmission	A method of transmitting data which does not require a common clock (as in synchronous transmission), but rather transmits data one bit at a time separating fields of data by start and stop bits. *See Synchronous Transmission for comparison.*
AT Command Set	Hayes-compatible commands used to send instructions to the modem. The commands are referred to as AT Commands because each command must start with the attention characters "AT".
Attention Characters (AT)	A two-character prefix that comes before a command or command string.
B-channel	In ISDN terms, a "Bearer" channel, so called because it bears data or voice communication. ISDN lines provide two 64 kbps B-channels that can work either individually or in tandem.
Basic Rate Interface (BRI)	The basic ISDN-to-user connection containing three separate channels: two B-channels that carry user "conversations" from a telephone, computer, fax or almost any other device, and one D-channel that carries call set-up information for the network, but can also carry user data transmissions.
Bits Per Second (bps)	A measurement of the speed at which bits of data are transmitted over a communications medium.

Buffer	An allocated area of computer memory that is used for temporary storage of data during input and output operations (e.g., a modem's command buffer).
Central Office (CO)	The local telephone office. The local telephone office is responsible for the public telephone network to which devices, such as telephones, fax machines, etc., are connected.
Central Office Switch	A device, located at the telephone company's central office (CO) to which devices such as telephones, fax machines, modems, and terminal adapters can connect. *See also, Switch.*
Channel	A path or circuit along which information flows.
Clear to Send (CTS)	An EIA-232 control signal used with Request To Send (RTS) to perform flow control.
Command	A keyboard entry that causes the computer to carry out a specific operation. It is usually executed by pressing the **RETURN** key.
Command Mode	An operating mode which allows the modem to interpret information it receives from the local computer as modem commands. This mode instructs the modem or an ISDN modem to accept configuration commands. *See Data Mode for comparison.*
Configure	The process of setting up a port, terminal, or printer so that it communicates with another device.
D-channel	A "Data" channel shared by all users of ISDN that carries call set-up, signaling, and other user information.
Data Carrier Detect (DCD)	An EIA-232 status signal that indicates the presence of a carrier signal from a remote modem.
Data Communications Equipment (DCE)	This is the modem.
Data Mode	An operating mode which allows the modem to interpret information it receives from the local computer as data not commands. *See Command Mode for comparison.*
Data Set Ready (DSR)	An EIA-232 control signal that indicates the establishment of a connection to the telephone line.

Data Terminal Equipment (DTE)	The device that generates or is the final destination of data. This is the computer.
Data Terminal Ready (DTR)	An EIA-232 control signal that indicates to the modem that the local computer is ready for data communications.
Default	The factory setting for an option. Any setting assumed, at startup or reset, by the computer's software and attached devices, and operational until changed by the user.
Dial Modifiers	Part of the AT command Dial Command that modifies the dial sequence by inserting pauses, wait for another dial tone, or other information. Dial modifiers can be entered on a Dial Command line to control the way the modem originates the call.
Digital Transmission	An incredibly fast string of on and off electronic signals that represents either ones or zeros. Computers can understand the one/zero pattern and can convert the signal into any combination of text, graphics, colors, voice, or video.
Directory Number (DN)	The ISDN equivalent of an ordinary telephone number.
Escape Characters	A sequence of +++ characters that switches the modem from the Data Mode to Command Mode.
Flow Control	A feature that compensates for different bit rate speeds between devices. Controls the flow of data input to and output from a modem or other device.
Handshaking	A sequence two modems use while connecting. The handshaking sequence allows the modems to negotiate information needed for transmitting data before the data transmission begins.
High Level Data Link Control (HDLC)	The link layer protocol defined by ISO and the basis for most error control protocols used in data communications.
Integrated Services Digital Network (ISDN)	A design for a completely digital telephone/telecommunications network to carry voice, data, images, video, etc., at high speed by sending digitally-encoded signals. Though these are optimally sent over fiber lines, ISDN can work on the copper wiring phone lines that service most homes and businesses today.

Internet	The world-wide network that provides services such as file transfer, information, remote login, mail, etc. to registered users.
ISA	Industry Standard Architecture. A standard bus for PC compatible add-in cards.
ITU	International Telecommunications Union.
kilobits per second (Kbps)	A thousand bits per second; a common measurement of data transmission speed.
LCD	Liquid Crystal Display.
LED	Light Emitting Diode.
Modem (Modulate/Demodulate)	A device that converts digital data from a computer into an analog signal for transmission over the telephone line. The receiving modem converts the signal back to digital.
Multipoint	A circuit made up of three or more connected stations.
NI-1 (National ISDN-1)	Bellcore's standard definition of protocols and services for BRI and PRI lines. NI-1 allows devices and switches to connect regardless of their manufacturers.
NT1 (Network Termination Type)	A device that terminates the 2-wire U-interface line from the telephone company and converts U-interface signals to S/T-interface signals.
Nonvolatile RAM	User-programmable Random Access Memory (RAM) retains data when modem power is turned off.
POTS (Plain Old Telephone Service)	Pre-ISDN equipment such as your home phone.
Point-to-Point	A circuit that connects two stations directly.
Point-to-Point Protocol (PPP)	A standard that allows a computer to use the TCP/IP protocols with a standard telephone line and a high speed modem.
Port	A modem's physical input/output interface (usually located at the rear of most modems).
Protocol	A formal set of conventions governing the format and control of inputs and outputs between communication devices.

Public Switched Telephone Network (PSTN)	Standard domestic and commercial phone service.
Request to Send (RTS)	An EIA-232 control signal used with the Clear To Send (CTS) command to control data flow.
Ringer Equivalence Number (REN)	A standard requirement established by the Federal Communications Commission (FCC) for devices such as a telephone or answering machine. The REN requirement can be found on a label on the bottom of your telephone or answering machine.
RJ11 Jack	The Universal Standard Order Code (USOC) for standard home and business phone jacks.
RJ45 Jack	The Universal Standard Order Code (USOC) for a standard ISDN connector.
Service Profile Identifier (SPID)	A unique number assigned to each device connected to the ISDN that identifies what types of services and features are supported (e.g., Call Waiting, Caller ID, etc.). SPIDs are optional in the ISDN standard, but usually required in North America.
Service Provider	An commercial organization providing telecommunications connections.
Softload	A process that allows new software for upgrades to be downloaded into the ISDN modem.
Switch	A device used by the telephone company to route multiple calls simultaneously.
Synchronous Transmission	A method of transmitting data in a continuous stream, one bit at a time, in a timed sequence. The entire stream is preceded by instruction bits that start the timing. This transmission is faster than asynchronous transmission because it does not require start bits, stop bits, or parity for each information segment.
Terminal	A device whose keyboard and display are used for sending and receiving data over a communications link.
Terminal Adapter (TA)	A device that allows a computer's digital signal to be transmitted over a digital phone line (ISDN). Sometimes referred to (inaccurately) as a digital modem or ISDN modem.

Terminal Equipment Identifier (TEI)	A number that uniquely identifies each terminal equipment device. This identifier is usually automatically allocated when the device is attached to the network.
V.120	A standard rate adaption protocol for terminal adapter equipment.
Worldwide Web (WWW)	A worldwide network of connected databases, electronic services, and multiple information sources.