

Glossary

AC: Alternating current. The positive and negative poles of the current change around (alternate) at a fixed rate (50 times a second in Australia). The type of current delivered by power lines to homes, factories, offices etc.

Active antenna: In an antenna with multiple elements, the active antenna is that element connected directly to the transmitter or receiver.

Amplitude: The strength of a signal.

Analogue: A system in which changing values are represented as a continuous movement. eg. An analogue watch has hands that sweep around the dial, showing a continuous change in time, whereas a digital watch displays discrete times – the time is broken up into tenths or hundredths of a second.

Antenna: A device that transmits electromagnetic energy (ie. signals) into space or receives signals from space.

Antenna preamplifier (also called a booster): A device located in the immediate vicinity of an antenna, used to amplify extremely weak signals so that they can be viewed.

Attenuator: A device for reducing the amplitude of a signal

Audio: A term used to describe sounds within the range of human hearing (20Hz – 20kHz).

Balun: Acronym for balanced – unbalanced. A device for matching the impedances of different materials. e.g. Where an antenna and a cable had different impedances. A balun would be used to match the impedances and so allow the signal to flow.

Belling and Lee plug and socket: The male and female version of the plug and socket used throughout the audio-visual industry.

BlackBerry: a smart mobile phone that is widely used in business for its wireless email handling capability.

Booster: See antenna preamplifier

Broadband system: 1. A cable system that carries multiple communications services.

Broadcasting: Transmission of over-the-air signals for public use.

Cable loss: The amount of signal attenuated while it travels on a cable. Cables attenuate higher frequency signals more than lower frequency signals.

Channel : A specified frequency band for the reception or transmission of signals. e.g. Television channel 2.

Coaxial cable: A signal transmission line

comprised of a conductor center inside a metallic tube of shield separated by a dielectric material, and usually covered by a non-conducting jacket for protection against the elements. The signal travels along the central wire while the external conductor remains grounded.

Cross modulation: A form of television signal distortion where modulation from one or more television channels is imposed on another channel or channels.

Cycle: One complete alternation of a wave. e.g. of a sound or radio wave. The rate of repetition of cycles is the frequency.

DC: Direct current. The positive and negative poles stay the same. The type of current delivered by battery and low voltage devices.

dB: Decibel. A measurement that expresses the strength of a signal when compared with a known reference. A signal of 10dB is 10 times the magnitude of the known reference.

Digital: The word digital is most commonly used in computing and electronics, especially where real-world information is converted to binary numeric form (ones and zeros) as in digital audio, digital photography and digital television.

Diplexer: A combiner with 2 inputs.

DVB - T: an abbreviation for Digital Video Broadcasting - Terrestrial; it is the DVB European based consortium standard for the broadcast transmission of digital terrestrial television.

DVB - S: an abbreviation for Digital Video Broadcasting - Satellite; it is the DVB European based consortium standard for the broadcast transmission of digital satellite television.

DVD: Digital Versatile Disk. A form of storage the same physical size as a CD disk that is able to store up to 4.7 gigabytes of data single layered or 9 Gigabytes double layered. Most often used for storing movies and other forms of media.

F-connector: A standard “screw-in” connector used in the RF industry to connect coaxial cable to equipment.

FM: Frequency Modulation

FM Broadcast band: The band of frequencies extending from 88 to 108Mhz.

Frequency: The number of cycles per unit of time, usually measured in hertz; The symbol is Hz.

Gain: Increase signal power expressed in decibel; usually the result of amplification.

Ghosting: A “double image” condition where an antenna receives the desired signal along with one or more identical but time-delayed signals; caused by the main signal reflecting off inanimate objects such as buildings etc.

Grain or graininess: Noise in the picture

Hertz (Hz): A unit of frequency equal to one cycle per second.

Impedance: 1. Something that delays or prevents progress or the preventing of progress. 2. The opposition in an electrical circuit to the flow of alternating current.

Interference: Disturbances of an electrical or electromagnetic nature that introduce undesirable responses into other electronic equipment.

LCD: Liquid Crystal Display

Loss: Reduction in signal strength expressed as decibels.

MATV: Master Antenna Television as in one antenna multiple outlets. e.g. a block of flats.

Mhz: Megahertz: equals 1,000,000 Hertz

Modem: Acronym for modulator-demodulator. A device used to convert signals outputted from one type of equipment into a form suitable for input into another type. One of the main uses is to connect a computer to the telephone system.

Noise: Random electrical signals that mess up transmitted data by introducing errors.

Off air: The reception of television broadcast signals transmitted over the air. Terrestrial.

Plasma: A distinct state of matter made up of a partially ionized gas, in which a certain proportion of electrons are free rather than being bound to an atom or molecule.

RF: Radio Frequency

RF System: 1. A broadcast system.
2. Any system that uses radio frequency signals to relay information.

Satellite: 1. An object that orbits another object. Eg. The moon is a satellite of earth.
2. A man-made object that is projected from earth to orbit either the earth or another astral body such as the moon.

Signal: A variable parameter such as a current, voltage or electromagnetic wave, by which information is relayed between locations.

Splitter: A device in a broadband system that divides the input signal into two or more output signals of lesser power. eg. device that splits a signal from the phone line into the telephone signal and the Internet signal.

Television: A telecommunication system in which both visual and aural information is transmitted for reproduction at a receiver.

Television Set: A piece of electronic equipment that displays images and reproduces sounds.

Terrestrial: The reception of television broadcast signals transmitted over the air.

UHF: Ultra high frequency; 300-3000 Mhz

VCR: Video cassette recorder

VHF: Very high frequency; 30-300 Mhz. ▲