

Glossary

TRANSCEIVER CABLE — Cable connecting the transceiver to the network interface controller allowing nodes to be placed away from the baseband medium.

TRANSITION SPLICE — A cable splice which connects two different types of cable.

TRANSMISSION — The dispatching of a signal, message, or other form of intelligence by wire, radio, telegraphy, telephony, facsimile, or other means (ISO); a series of characters, messages, or blocks, including control information and use data; the signaling of data over communications channels.

TRANSMISSION CABLE — Two or more transmission lines. See Transmission Line.

TRANSMISSION LINE — A signal-carrying circuit with controlled electrical characteristics used to transmit high-frequency or narrow-pulse signals.

TRANSMISSION LOSS — The decrease or loss in power during transmission of energy from one point to another. Usually expressed in decibels.

TRANSPOSITION — Interchanging the relative positions of wires to neutralize the effects of induction to or from other circuits or, to minimize interference pickup by the lead-in during reception.

TROLLEY WIRE — A round or shaped solid, bare, hard conductor ordinarily used to supply current to motors through traveling current collectors.

TRAY — A cable tray system is an assembly of units or sections, and ancillary fittings, made of noncombustible materials used to support cables. Cable tray systems include ladders, troughs, channels, solid bottom trays, and similar structures.

TRAY CABLE — A factory-assembled multiconductor or multipair control cable approved under the National Electrical Code for installation in trays.

TREEING — Microscopic tree-like channels in medium voltage, e.g., 15 kV, cable insulation that can lead to cable failure.

TRIAxIAL — A three conductor cable with one conductor in the center, a second circular conductor concentric with and insulated from the first, and a third circular conductor insulated from and concentric with the second, and an impervious sheath overall.

TRIBOELECTRIC NOISE — Noise generated in a shielded cable due to variations in capacitance between shielding and conductor as the cable is flexed.

TRUNK CABLE — A main cable used for distribution of signals over long distances throughout a cable system.

TRUE CONCENTRIC — A cable conductor in which each successive layer has a reversed direction of lay from the preceding layer.

TR-XLP — Water tree retardant cross-linked polyethylene.

TUBING — A tube of extruded nonsupported plastic material.

TURNKEY SYSTEM — Any system that is completely assembled and tested and that will be completely operational by turning it "on."

TV CAMERA CABLE — Multiconductor (often composite) to carry power for camera, lights, maneuvering motors, intercom signals to operators, video, etc. Usually heavy duty jacketed.

TW — A UL cable type. Thermoplastic vinyl-jacketed building wire, moisture resistant 60°C.

TWINAXIAL CABLE — A shielded coaxial cable with two central insulated conductors.

TWIN CABLE — A pair of insulated conductors twisted, sheathed, or held together mechanically and not identifiable from each other in a common covering.

TWIN COAXIAL — A configuration containing two separate, complete coaxial cables laid parallel or twisted around each other in one unit.

TWIN-LEAD — A transmission line having two parallel conductors separated by insulating material. Line impedance is determined by the diameter and spacing of the conductors and the insulating material and is usually 300 ohms for television receiving antennas. Also called balanced transmission line and twin-line.

TWINNER — A device for twisting together two conductors.

TWINNING — Synonymous with pairing.

TWISTED PAIR — A pair of insulated copper conductors that are twisted around each other, mainly to cancel the effects of electrical noise; typical of telephone and LAN wiring.

U

U-BEND TEST — A cable test in which the insulation is tested for resistance to corona and ozone.

UF — A UL cable type. Thermoplastic underground feeder or branch circuit cable.

UHF — Ultrahigh frequency, the band extending from 300 to 3,000 MHz as designated by the Federal Communications Commission.

UL — Underwriters' Laboratories, Inc.

UL LISTED — A product that has been tested and found to comply with Underwriters Laboratories' standards.

ULTRASONIC CLEANING — Immersion cleaning aided by ultrasonic waves which cause microagitation.

ULTRASONIC DETECTOR — A device that detects ultrasonic noise such as that produced by corona or leaking gas.

ULTRAVIOLET — Radiant energy within the wavelength range 10 to 380 nanometers. It is invisible, filtered out by glass, and causes suntan.

UNBALANCED LINE — A transmission line in which voltages on the two conductors are unequal with respect to ground, e.g., coaxial cable.

UNBALANCED-TO-GROUND — Describing a two-wire circuit, where the impedance-to-ground on one wire is measurably different from that on the other, compare with balanced-to-ground.

UNIDIRECTIONAL CONDUCTOR — See Concentric-lay Conductor.

UNIDIRECTIONAL STRANDING — A term denoting that in a stranded conductor all layers have the same direction of lay.

UNILAY — More than one layer of helically laid wires with the direction of lay and length of lay the same for all layers. See Concentric-lay Conductor.

USE — A UL cable type. Underground service entrance cable, XLP or rubber-insulated, Hypalon or XLP jacketed.

UTP — Unshielded Twisted Pair. Two wires, usually twisted around each other to help cancel out any induced noise in balanced circuits. An unshielded twisted pair cable usually contains four pairs of wire in a single cable jacket.