

X-Y-Z

X-copy: An exact, 1:1 copy of audio and/or video material.

X-Curve: eXtended-Curve. As opposed to the *Academy curve*, the X-Curve is also known as the wide-range curve and is codified in ISO Bulletin 2969. Specifications call for *pink noise*, at listening position in a *re-recording studio*, or two-thirds of the way back in a theater, to be flat to 2kHz, rolling off at 3dB per octave after that. The small-room X-Curve is designed to be used in rooms with less than 150 cubic meters, or 5,300 square feet. This standard specifies flat response to 2kHz, rolling off 1.5dB per octave after that. Sometimes a modified small-room curve is used, starting the roll-off at 4kHz, rolling down 3dB thereafter.

XG: A GM specification for MIDI instruments by Yamaha. XG instruments support reverb, chorus, and variation effects sends. Over 20 variation effects are available, including *delay*, *flanging*, *phasing*, *rotary speaker simulation*, *distortion*, and *tremolo*.

XLR: Xtended Locking Round. Developed by ITT/Cannon, XLRs are rugged, locking, multi-pin connectors frequently used in pro audio equipment. While 3-pin XLRs are most commonly seen on microphones and console inputs, other configurations also exist, such as 4-pin XLRs (a standard for stage intercom systems) and 5-pin XLRs (often used on stereo microphones). A designation of “M” after the pin number, such as “XLR-3M” indicates a male connector. Sometimes also called a *Cannon connector*.

X-track: Portions of *production track* that are split off into a separate *unit* or separate track on a workstation because they will be replaced by *ADR*.

X/Y function: Also called a *Lissajous*. Used to determine the *phase* of microphone set-ups, an X/Y function shows phase patterns on an oscilloscope. A *mixer's* left output channel is connected to the X (vertical) input on the scope; the right output channel is connected to the Y (horizontal) input. If these two channels are *panned* center and are *in-phase*, they will show up on the scope as a diagonal line that moves up and to the right. If they are *out-of-phase*, the diagonal line will move down and to the right.

X-Y or XY pair: See *coincident pair*.

XYZ controller: A 3-axis touch pad that transmits voltages based on finger position along the horizontal and vertical axes (X and Y) and *aftertouch*-type pressure (Z).

Y-connector: A Y-connector, also called a Y-cord, consists of two short audio-type cables with the same type of connector at one end, the other ends of both cables being joined to a single connector of the same type, but of different gender. Used to create *split feeds*, where the same signal is sent to two different places. Sometimes a Y-connector is used to short two channels of a stereo signal together as a sort of mixer, to make a *mono* signal. This can be problematic in low-impedance circuits because each half of the y-connector loads the other one, necessitating a series resistor in each signal path.

Y-cord: See *Y-connector*.

Yellow Book: See *Red Book*, *CD*.

yes: When used to indicate agreement to a verbal contract, potentially the most dangerous word in any language. Use wisely and sparingly. See *no*.

Z: The symbol for *impedance*.

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zenith: Another word for *tangency*.

zero-crossing: The point in a *sample* where the *waveform* reaches zero *amplitude*. When editing a *loop*, it is usual that both the beginning and end points of a loop are at a zero crossing. However, zero crossings are not important if the beginning and end points of the loop are at the same signal level and have about the same waveform slope. The *harmonic* content of the wave in the region around the loop point has much more effect on the quality of the loop than whether the loop point is at a zero-crossing.

zero frame: The first frame of a roll of film or video tape, appropriately numbered 00:00:00:00.

zero-level: A level of 0dBV. All measurements are made relative to this level as it represents (in properly calibrated equipment) the optimal recording or broadcast level. Higher signal levels than this indicate the possibility of *overmodulation*. Significantly lower levels than this indicate the possibility of *undermodulation*. See *decibel, operating level*.

zero-locate: See *auto locator*.

zero return: A control on a tape recorder which will automatically stop the tape on rewind when the tape counter reaches zero.

zone: See *split point*.