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inches per second A unit of velocity equal to exactly 2.54 centimeters per second, or 0.0254 meters per second. Its abbreviation is **in/s**, or **ips**.

inching The rapidly opening and closing of a circuit, such as that controlling a motor or electromagnet, to produce small movements. Also called **jogging**.

incidence angle The angle formed between the line of an incident ray or wave and a perpendicular line arising from the point of incidence. Also called **angle of incidence**.

incidence plane The plane containing light, sound, particles, waves, or the like, which is reflected off a surface, object, or region. Also called **plane of incidence**.

incident 1. That which strikes, or otherwise falls upon a surface or body. For example, light which is falls upon a photosensitive material, or sound waves striking a diaphragm. 2. An action or occurrence. It is similar to an **event** (1), but an event may imply a more significant happening than an incident. 3. In communications and computers, an **incident** (2) with possible adverse consequences, such as a security breach.

incident light Light which falls upon a surface or body.

incident particle A particle which strikes a surface or body.

incident power The power reaching a given point, such as an impedance mismatch in a transmission line, or an air-glass interface in an optical fiber.

incident radiation Radiation which strikes a surface or body.

incident ray A ray which strikes a surface or body.

incident sound Sound which strikes a surface or body.

incident wave 1. A wave which reaches a given point, such as a medium with different propagation characteristics. 2. A wave which strikes a surface or body.

incidental AM Amplitude modulation of a signal when frequency or phase modulation is desired. It is an abbreviation of **incidental amplitude modulation**. Also called **incidental modulation** (2), or **residual AM**.

incidental amplitude modulation Same as **incidental AM**.

incidental FM Frequency modulation of a signal when amplitude or phase modulation is desired. It is an abbreviation of **incidental frequency modulation**. Also called **incidental modulation** (3), or **residual FM**.

incidental frequency modulation Same as **incidental FM**.

incidental modulation Also called **residual modulation**. 1. In an RF signal, noise produced by variations of a carrier in the absence of any intended modulation. Also known as **carrier noise**. 2. Same as **incidental AM**. 3. Same as **incidental FM**. 4. Same as **incidental PM**.

incidental phase modulation Same as **incidental PM**.

incidental PM Phase modulation of a signal when frequency or amplitude modulation is desired. It is an abbreviation of **incidental phase modulation**. Also called **incidental modulation** (4), or **residual PM**.

inclination 1. The angle between a given plane and a reference plane. For instance, that between a geocentric orbit and the equator. 2. For a given location on the surface of the earth, the angle between the horizontal plane and the direction of the lines of force of the earth's magnetic field. Inclination is 0° at the magnetic equator and 90° at each of the magnetic poles. Also called **magnetic dip**, **magnetic inclination**, or **dip** (3). 3. The action of bending or tilting. 4. A surface with a slant. Also, the slant itself.

inclinometer An instrument which measures and indicates **inclination** (1), or **inclination** (2).

inclusive OR A logical operation which is true if any of its elements is true. For example, if one or more of its multiple inputs have a value of 1, then the output is 1. Its output is 0 only when all of its inputs have a value of 0. For such functions, a 1 is considered as a true, or high, value, and 0 is a

false, or low, value. Although inclusive OR is the same as **OR**, the former is used to distinguish from **exclusive OR**. Also called **inclusive OR operation**.

inclusive OR circuit Same as **inclusive OR gate**. Also called **OR circuit**.

inclusive OR gate A circuit which has two or more inputs, and whose output is high if any of its inputs is high. Also called **inclusive OR circuit**, or **OR gate**.

inclusive OR operation Same as **inclusive OR**.

incoherence Also spelled **incoherency**. 1. A lack of a definite phase relationship between two or more waves. Two waves, for instance, are in not phase if their crests and troughs do not meet at the same point at the same time. Also called **non-coherence** (1). 2. Any lack of temporal or phase correlation. Also called **non-coherence** (1). 3. A lack of clarity or intelligibility, as may occur in a voice transmission.

incoherency Same as **incoherence**.

incoherent Characterized by **incoherence**.

incoherent bundle An assembly of optical fibers in which the relative spatial coordinates of the individual fibers are not the same at both ends. Such a bundle serves to transmit light, but not images. Also called **incoherent fiber bundle**, or **non-coherent bundle**.

incoherent detector A detector whose output signal amplitude does not depend on the phase of its input signal. Also called **non-coherent detector**.

incoherent fiber bundle Same as **incoherent bundle**.

incoherent light Light in which there is not a definite phase relationship between any given points of the waves composing it. Such light may contain waves of different wavelengths. There are many sources of incoherent light, including sunlight, incandescent lamps, and light-emitting diodes. Also called **non-coherent light**.

incoherent light source A source, such as a light-emitting diode, of incoherent light. Also called **non-coherent light source**.

incoherent pulses Pulses which are not in a fixed-phase relationship with each other. Also called **non-coherent pulses**.

incoherent radiation Radiation in which there is not a definite phase relationship between any given points of a cross section of the beam. Also called **non-coherent radiation**.

incoherent scattering Scattering in which there is not a definite phase relationship between the incident and dispersed waves or particles. Also called **non-coherent scattering**.

incoherent waves Two or more waves of a single frequency which do not have a definite phase relationship. Also called **non-coherent waves**.

incoming line A line entering a device, piece of equipment, facility, or the like.

incoming mail server A server, using a protocol such as POP or IMAP, which enables the retrieval and storage of emails. Usually utilized in conjunction with an **outgoing mail server**, which uses a protocol such as SMTP.

incomplete circuit A circuit which is broken, or which otherwise does not have a complete and uninterrupted path for the flow of current. Also called **open circuit** (1), or **discontinuous circuit**.

incorporate To unite into a single body or entity, or to combine with something else to constitute a whole.

incorporated United into a single body or entity, or combined into something else to constitute a whole.

increment 1. The process of gradually increasing a quantity or variable. Also, the increase in the quantity or variable. 2. A small variation in a quantity or variable. 3. A specific interval representing a variation in a quantity or variable. For example, a single click in either direction of a volume control with fixed steps.

incremental backup A data backup technique in which the only files copied are those that have been modified since the last backup, and in which all versions are saved, not just the last one, as is the case of a **differential backup**. This also contrasts with a **full backup**, in which all files are copied, including those that have not been modified since the previous backup. Also called **cumulative backup**.

incremental computer A computer, such as a differential analyzer, which processes variations in a quantity or variable.

incremental permeability The measured permeability of a material when a small alternating magnetic field is superimposed on a large static field.

incremental representation In an **incremental computer**, the representation of a variable as a function of a change in its value, as opposed to the value of the variable itself.

incremental search A search in which searching begins as soon as the first character is typed, as opposed to waiting for a command such as enter. Seen, for instance, when accessing the help index of an application, where results starting with the typed string are displayed as each letter is entered.

incremental sensitivity For an instrument or device, the smallest detectable change in the value of a quantity or variable.

incumbent local exchange carrier A communications entity which offers local telephone service. Such an entity may also offer other services, such as long-distance calling, Internet access, and so on. The term usually implies that said entity has been in this business for a long time. Its abbreviation is **ILEC**.

incursion An intrusion in which damage is done.

independent events Two events for which the occurrence of one in no way alters the probability of the other occurring.

independent failure 1. A failure which is not caused by another component in the same system. 2. A failure which does not affect any other component in the same system.

independent hardware vendor An organization which manufactures computer components and/or peripherals, as opposed to complete systems. Such an organization may, for instance, make circuit boards or disk drives. Its abbreviation is **IHV**.

independent operation 1. Said of a component, circuit, device, piece of equipment, or system which can or does function independently of any other given component, circuit, device, piece of equipment, or system. 2. Said of component, circuit, device, piece of equipment, or system with its own power source.

independent software vendor An organization, which is not owned or controlled by a hardware manufacturer, that develops software. Its abbreviation is **ISV**.

independent variable 1. A variable which determines the change in another variable, called **dependent variable**. 2. A variable whose value does not depend on the changes in another variable.

indeterminacy principle A principle stating that for a given particle it is not possible to simultaneously know with absolute accuracy both its location and momentum. No matter how accurate the measurements are, the mere observing or measuring said particle will interfere with it in an unpredictable fashion. This principle also applies to other observations or measurements. Also called **Heisenberg uncertainty principle**, or **uncertainty principle**.

index It plural form is **indices**, or **indexes**. 1. A list or table which serves to guide or facilitate reference. Also, to create such a list or table. 2. In computers, a list or table together with references or keys which serve to identify and locate the contents of disks, directories, files, records, or the like. Also, to create such a list or table. Also, to locate informa-

tion through the use of the references or keys of said index. 3. An **index (2)** used in a database. Also, to create such an index. Also, to locate information through the use of the references or keys of said index. 4. A number or symbol which usually appears as a subscript or superscript in a mathematical expression, and which indicates an operation to be performed, a specific element within a sequence, and so on. An example would be the use of such a number as a superscript to indicate an exponent. 5. A usually dimensionless quantity indicating a magnitude of a physical quantity or a ratio between two, such as an index of refraction.

index counter In a magnetic tape device, such as a tape deck or VCR, a counter which indicates how much tape has traveled in a given direction, and which serves, for instance, to easily locate a given portion. Also called **tape counter**.

index error In an instrument, an error in indicated values due to a misalignment of the pointer and/or the calibrated scale from which readings are taken. Such an instrument, for instance, would have either a positive or negative reading when there is no input. Depending on the direction of the erroneous reading, adding or subtracting a fixed value is usually an adequate corrective measure.

index hole A hole punched into a floppy disk which serves to indicate the beginning of the first data sectors of said disk.

index mark A signal, code, hole, notch, or other mark which indicates the beginning point of each track on a computer disk.

index of modulation Also called **modulation index**, or **modulation factor**. 1. A measure of the degree of modulation, usually involving the ratio of a peak variation to a steady non-peak value. The result may be multiplied by 100 to obtain a percentage. 2. In frequency modulation, the ratio of the peak variation of the carrier-wave frequency, to the frequency of the modulating signal. The result may be multiplied by 100 to obtain a percentage. 3. In amplitude modulation, the peak amplitude variation of the composite wave, to the unmodulated carrier amplitude. The result may be multiplied by 100 to obtain a percentage. 4. In amplitude modulation, the ratio of half the difference between the maximum amplitude and minimum amplitude, to the average amplitude. The result may be multiplied by 100 to obtain a percentage.

index of refraction Also called **refractive index**. Its symbol is n . 1. The ratio of the phase velocity of a wave in free space, to the phase velocity of the same wave in a given medium. Also called **absolute index of refraction (1)**. 2. The ratio of the phase velocity of light in free space, to the phase velocity of light in a given medium. Also called **absolute index of refraction (2)**. 3. The ratio of the phase velocity of a wave in a given medium, to the phase velocity of the same wave in another medium.

index register A computer register whose stored value can be added to a given address to form an effective address.

indexed address An address which has been modified by an **index register**.

indexed sequential access method A method for accessing records that are sequentially stored, in which an index provides direct access to key fields, providing faster access to the data. Its abbreviation is **ISAM**.

indexing To create or utilize an **index (1)**, **index (2)**, or **index (3)**.

indicating device A device, such as a meter or counter, which indicates the instantaneous, average, peak, or effective value of a magnitude or quantity being measured. Also, a device, such as an indicator lamp, which visually conveys information. Also called **indicator device**.

indicating fuse Same as **indicator fuse**.

indicating instrument An instrument which visually indicates the instantaneous, average, peak, or effective value of