

**MODERN
DICTIONARY
of
ELECTRONICS**

SEVENTH EDITION

REVISED AND UPDATED

Rudolf F. Graf



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transmission selective—The transmission of electromagnetic energy at wavelengths other than those that are reflected or absorbed.

transmission speed—The number of information elements sent per unit time, usually expressed as bits, characters, word groups, or records per second or per minute.

transmission system—1. An assembly of elements capable of functioning together to transmit signal waves. 2. One of two broad groups of communication means, distinguished by their information-carrying bandwidth and referred to as either wideband or narrow-band transmission systems. The wideband system includes tropospheric scatter radio relay and submarine cables, and has an information bandwidth of more than four voice-frequency (3 to 4 kHz bandwidth) channels. The narrow-band system includes high-frequency radio (single sideband, amplitude modulated, ionospheric scatter) and landlines, and has an information-carrying bandwidth of four voice channels or less.

transmission time—The absolute time interval between transmission and reception of a signal.

transmission-type frequency meter—A frequency meter in which a tuned electrical circuit or a cavity is used to transmit the energy from the signal source under test to a detecting load.

transmission wavemeter—A device that makes use of a cavity to transmit maximum power at resonance so that maximum deflection is obtained on a readout meter at the frequency of resonance.

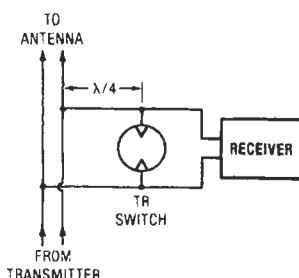
transmit—To send a program, message, or other information from one location to another.

transmit current—The current drawn by a transmitter when in the transmit mode.

transmit-on-alarm—A security device that activates only when triggered. Most security devices are of this nature; however, in multiplexing systems, it is usually impossible to determine whether or not transmit-on-alarm devices are actuated or whether the transmitter has failed or the communication channel is inoperative.

transmit-on-interrogation—The response of a security device that stores an alarm until it is interrogated in an appropriate manner. Used in multiplexed systems to avoid the problem of two simultaneous transmissions of alarm by two or more different stations.

transmit-receive switch—Also called a tr switch, tr box, tr tube, or duplexing assembly. An automatic device employed in a radar to prevent the transmitted energy from reaching the receiver, but allowing the received energy to do so without appreciable loss.



Transmit-receive switch.

transmit-receive tube—See tr tube.

transmittal mode—The method by which the contents of an input buffer are made available to the

program and the method by which records are made available by a program for output.

transmittance—1. Of a material, the ratio of the radiant power transmitted through the material to the incident radiant power. 2. As a transfer function, a response function for which the variables are measured at different ports (terminal pairs).

transmitted-carrier operation—Amplitude-modulated carrier transmission in which the carrier wave is transmitted.

transmitted wave—See refracted wave.

transmitter—1. Equipment used to generate and amplify an rf carrier signal, modulate this carrier with intelligence, and radiate the modulated rf carrier into space. 2. In telephony, the microphone that converts sound waves into electrical signals at an audio-frequency rate. 3. Apparatus for converting electrical energy received from a source into radio-frequency electromagnetic energy capable of being radiated. 4. The device in a telephone handset used to convert speech to electrical energy. 5. A device that translates the low-level output of a sensor or transducer to a higher-level signal suitable for transmission to a site where it can be further processed.

transmitter distributor—In teletypewriter operations, a motor-driven device that translates teletypewriter code combinations from perforated tape into electrical impulses and transmits these impulses to one or more receiving stations.

transmitter frequency tolerance—The extent to which the carrier frequency of a transmitter may legally depart from the assigned frequency.

transmitter start code—Usually a two-letter call that is sent to an outlying machine to automatically turn on its tape transmitter.

transmitting antenna—A device for converting electrical energy into electromagnetic radiation capable of being propagated through space.

transmitting current response—Of an electroacoustic transducer used for sound emission, the ratio of the sound pressure apparent at a distance of 1 meter in a specified direction from the effective acoustic center of the transducer to the current flowing at the electric input terminals. Usually expressed in decibels above a reference-current response of 1 microbar per ampere.

transmitting efficiency (projector efficiency)—Ratio of the total acoustic power output of an electroacoustic transducer to the electric power input.

transmitting element—In fiber optics, the light-radiating side of the terminus in an optical conductor.

transmitting loop loss—That part of the repetition equivalent assignable to the station set, subscriber line, and battery supply circuit that are on the transmitting end.

transmitting power response (projector power response)—Of an electroacoustic transducer used for sound emission, the ratio of the effective sound pressure apparent at a distance of 1 meter in a specified direction from the effective acoustic center of the transducer to the electric power input. Usually expressed in decibels above a reference response of 1 microbar square per watt of electric input.

transmitting station—A location at which the transmitter of a radio system and its antenna and associated equipment are grouped.

transmitting voltage response—Of an electroacoustic transducer used for sound emission, the ratio of the sound pressure apparent at a distance of 1 meter in a specified direction from the effective acoustic center of the transducer to the signal voltage applied at the electric input terminals. Usually expressed in decibels above a reference-voltage response of one microbar per volt.