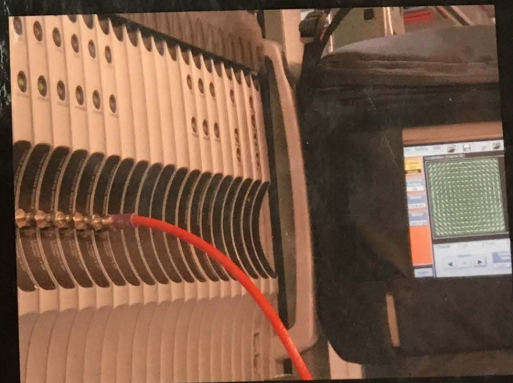


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Modern Cable Television Technology

VIDEO, VOICE, AND DATA COMMUNICATIONS

2nd Edition



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MPEG-4 An advanced set of digital video decoding rules. The basic MPEG-4 is intended to provide for very low data rate transmission of less than entertainment-grade video. MPEG-4 level 10 (also known as AVC, advanced video coding) is intended for entertainment-grade video. Compare with MPEG-2.

MSO Multiple system operator. A company that owns more than one separate cable system.

MTBF Mean time between failure. A measure of the average time interval between circuit restoration from a previous failure and the onset of the next failure in a network.

MTTR Mean time to restore. A measure of the average time required to restore proper network/circuit operation after a failure.

multimode An optical fiber that supports more than one transmission path and thus has a transmission delay whose uncertainty increases with length, thereby limiting bandwidth.

multipath A condition where an over-the-air signal may reach a receiver via more than one path from a transmitter, leading to degraded reception. Applies to all transmission systems and frequencies.

multiplex Use of a single data path for more than one set of data.

multiplexing The combining of many independent signals into one signal path for transmission. Cable systems operate in a *frequency division* multiplexing mode, in which many signals at different frequencies are combined in one signal path. Another common example is *time division* multiplexing, where many signals share the same path but are segregated in terms of time.

mux See *multiplex*.

NCS Network-based call signaling. A signaling profile of the MGCP specified for use with cable-based VoIP systems. Similar to TGCP.

NCTA National Cable Telecommunications Association. A trade organization that represents companies in the cable television industry.

negative trap A technology for denying analog television programs to subscribers who have not purchased them. Negative trap systems work by transmitting normal signals on the cable plant. At the tap of subscribers who have not bought the program, a trap is inserted to remove the picture carrier.

network-based PVR Broadcasts are saved on hard drive at the headend and played out to subscribers as a VOD program.

NICAM Near instantaneous amplitude companding and modulation. A system of transmitting stereo audio digitally in a TV signal, developed in the United