

OFDM and its application in DVB-T digital terrestrial television

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Abstract: This topic focuses on the necessity of Orthogonal Frequency Division Multiplexing (OFDM) for the Digital Video Broadcast Terrestrial (DVB-T) system. The objective is to research and implement an efficient OFDM solution to improve signal transmission quality. Through a combination of theory and experimentation, the topic aims to build and test a DVB-T system using OFDM, determine optimal parameters, and evaluate the impact of this method on the performance of digital terrestrial television. The expected results will provide the industry with new technical solution information, enhance signal processing capabilities, and improve television service quality.

Keywords: OFDM, DVB-T, Signal transmission, Experimental research