Abstract

Orthogonal frequency division multiplexing (OFDM) is a special case of multicarrier transmission, where a single data stream is transmitted over a number of lower rate subcarriers. Orthogonal frequency division multiplexing (OFDM) has been chosen as modulation technique for different application wireless communications. OFDM can provide large data rates with sufficient robustness to radio channel impairments. The purpose of this paper is to provide a MATLAB simulation of the basic processing involved in the generation and reception of an OFDM signal in a physical channel and to provide a description of each of the steps involved. For this purpose, we shall use one of the proposed OFDM signals of the Digital Video Broadcasting (DVB) standard for the European digital television service i. e. Digital Video Broadcast-Terrestrial (DVB-T).

References

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