

Abstract

A novel FH/MFSK (frequency-hopping/M-ary frequency shift keying) receiver is proposed to operate under conditions of stationary multitone jamming. The principle of operation of this receiver relies on power measurements at all of the M-frequencies for each M -ary band before the signal is received in it. The performance of the receiver is evaluated by analytical methods using results obtained by computer simulation. Two cases of multitone jamming were studied, single tone and double tone per M-ary band. These cases represent the worst case of multitone jamming. The proposed receiver outperforms the conventional receiver under these jamming conditions