

COHERENT PSK DETECTOR NOT REQUIRING CARRIER RECOVERY

ABSTRACT

A coherent phase-shift keying (PSK) detector in a receiver generates an unmodulated carrier signal, without attempting to synchronize the unmodulated carrier signal in frequency or phase to the carrier employed at the PSK transmitter. The instantaneous phase of the received PSK signal is detected with reference to the unmodulated carrier signal to create an instantaneous phase signal. Phase rotation due to frequency offset between the two carrier signals is detected and removed from the instantaneous phase signal, then a remaining phase offset is detected and removed. Data are recovered from the resulting instantaneous phase signal.

This Sheet Has Been Replaced



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