

# **Performance Of Wireless OFDM System Channel Estimation With Different Pilot Patterns**

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## **Summary**

Orthogonal frequency division multiplexing (OFDM) is well-known to be effective against multipath distortion. Channel estimation for mobile OFDM systems requires transmission of pilot symbols. The paper addresses the important issue of selecting the location of these pilot symbols to achieve low error rates. It addresses the effect of Doppler spread of the channel on different pilot arrangements and proposes a new scheme for inserting pilot symbols. It is shown that, for pedestrian channels, the proposed scheme performs better than other pilot insertion schemes.

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