

QEX

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November/December 2023

About the Cover

Jacek Pawlowski, SP3L, introduces designs that use closely spaced wires to achieve a wide-band antenna capable of spanning multiple ham bands. This end-fed antenna, named the LPi, has many interesting features. It is ground-independent and is very slim. If used as a vertically polarized antenna, it can be installed in places where a ground plane (GP) antenna does not fit because the GP requires space for its counterpoise. The LPi radiation pattern and gain are very close to that of a half-wave dipole. Ground proximity affects the antenna SWR performance in a very moderate way. It is possible to adjust the LPi bandwidth by changing its proportions. Its bandwidth can be large enough to cover two or, in some cases, even three neighboring ham bands. The LPi is easy to simulate using numerical electromagnetic code (NEC).



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