

QEX (ISSN: 0886-8093) is published bimonthly in January, March, May, July, September, and November by the American Radio Relay League, 225 Main Street, Newington, CT 06111-1494. Periodicals postage paid at Hartford, CT and at additional mailing offices.

POSTMASTER: Send address changes to: QEX, 225 Main St, Newington, CT 06111-1494 Issue No 281

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Subscription rate for 6 issues:

In the US: ARRL Member \$24, nonmember \$36;

US by First Class Mail: ARRL member \$37, nonmember \$49;

International and Canada by Airmail: ARRL member \$31, nonmember \$43;

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November/December 2013

About the Cover

Richard Harris, G3OTK, describes a method for measuring the equivalent circuit components, or motional parameters of quartz crystals for the design of crystal ladder filters. With his microprocessor controlled test set to measure motional inductance, capacitance and resistance, and then perform the calculations and display the data or output it to a computer and spreadsheet program, he can measure up to 150 crystals in an hour.

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An Automated Method for Measuring Quartz Crystals Richard J. Harris, G3OTK

Half Wavelength Versus Quarter Wavelength Vertical Antennas

Al Christman, K3LC

Mathematical Stability Problems in Modern Nonlinear Simulation Programs

Ulrich Rohde, N1UL and Rucha Lakhe

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