

QEX

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Kazimierz "Kai" Siwiak, KE4PT
Editor

Lori Weinberg, KB1EIB
Assistant Editor

Ray Mack, W5IFS
Contributing Editor

Production Department
Becky R. Schoenfeld, W1BXV
Director of Publications and Editorial

Jodi Morin, KA1JPA
Assistant Production Supervisor

David Pingree, N1NAS
Senior Technical Illustrator

Brian Washing
Technical Illustrator

Advertising Information
Janet L. Rocco, W1JLR
Business Services
860-594-0203 – Direct
800-243-7768 – ARRL
860-594-4285 – Fax

Circulation Department
Cathy Stepina
QEX Circulation

Offices
225 Main St., Newington, CT 06111-1400 USA
Telephone: 860-594-0200
Fax: 860-594-0259 (24-hour direct line)
Email: qex@arrl.org

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January/February 2024

About the Cover

Riccardo Gionetti, IØFDH, introduces the design of a tracking generator (TG), which along with a spectrum analyzer, enables the measurements at low frequencies with the same accuracy as for high frequencies. This TG produces a sinusoidal RF signal at the same frequency that the spectrum analyzer is tuning. The two are synchronous in frequency, hence when the TG output is connected directly to the input of the spectrum analyzer, a single flat line is plotted on the spectrum analyzer screen at a constant signal level. When the direct connection between the output of the TG and the spectrum analyzer is replaced by a network Device Under Test (DUT), the scalar response of the network at the low frequency will change the signal level of the TG on the screen, and thus the DUT low frequency transfer function will be plotted on the spectrum analyzer screen.



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