

2014 ARRL Handbook CD Companion Software

In addition to the supplemental files, several useful *Windows* applications are included on the CD-ROM.

TubeCalculator

TubeCalculator, a *Windows* application by Bentley Chan and John Stanley, K4ERO, accompanies the tube type RF power amplifier discussion in the **RF Power Amplifiers** chapter. To install, click on the file name and follow the instructions. All files needed to run the software, along with a tutorial and characteristic curves for many popular amplifier tubes, will be installed in the *TubeCalculator* folder.

TONNE SOFTWARE

The following *Windows* programs are provided by Jim Tonne, W4ENE. They are all self-extracting installation files. To install, click on the file name and follow the instructions. For more information about this software or to check for newer versions, visit the Tonne Software website at www.tonnesoftware.com.

ClassEinstall204.exe

Designs the single-ended Class E RF amplifier. Enter the design parameters and the design is computed. Various design items can be “tuned” in 1% steps to see how the design changes.

DiplexerInstall209.exe

Designs both the high-pass/low-pass and band-pass/band-stop types of diplexers to allow transmitters to look into a constant load in the stop band as well as the passband. Includes tuning and analysis.

HelicalInstall206.exe

Designs and analyzes helical-resonator bandpass filters usually used in the VHF and UHF frequency ranges. Includes tuning and analysis.

JJSmithInstall210.exe

A graphics-intensive transmission-line calculator for both advanced and beginning users. Based on the venerable Smith chart, it provides high-accuracy computations without recourse to paper, compass or straightedge.

LCinstall257.exe

Elsie, a lumped-element filter design and analysis program handling all of the usual options (family, topology, bandwidth, etc.). It has a nice toolbox including real-time tuning modes, editing and optimization. Outputs are presentation quality. This is the free Student edition; go to the Tonne Software site for info on the full Professional Edition.

MeterBasicInstall304.exe

Designs and prints professional-quality analog meter scales on your printer. No time or usage limits. This program is a subset of full-featured *Meter*, available from Tonne Software. The manual for *Meter* is included as a PDF file on the CD.

OptLowpassInstall203.exe

Designs and analyzes very efficient transmitter output low-pass filters. Based on the author's article in the September/October 1998 *QEX*.

PIEInstall217.exe

Designs and analyzes pi-L networks for transmitter output. Includes tuning mode and analysis.

QuadNetInstall203.exe

Designs and analyzes active quadrature ("90-degree") networks for use in SSB transmitters and receivers. Orders 2 to 10, odd and even, with tuning modes and analysis. Graphics-intensive.

SVCFilterInstall212.exe

Standard-value component routine to design low-pass and high-pass filters and delivers exact-values as well as nearest-5% values. Handles orders 3 to 7 (odd and even), various families, tuning mode. Outputs include transmission, return and VSWR plots as well as schematic.

