Important Information -- Please Read

You have installed the ARRL version of EZNEC v. 4.0. It's a demo version of EZNEC, except that it has the capabilities of a full, standard EZNEC program when operating on special description files.

It includes the complete on-line manual, and all the features of the standard EZNEC program, with only two exceptions. The first is that the maximum number of segments allowed in any model is the demo limit of 20 rather than the 500 of the standard EZNEC program -- except for specially signed EZNEC ARRL files (explained below). Except for the specially signed ARRL files, the 20 segment demo program restriction limits the complexity of antenna you can model with the ARRL version. The second exception is that you can't update the ARRL version with standard EZNEC v. 4.0 maintenance updates. However, the ARRL version can be updated with EZNEC demo programs. The demo program on the http://eznec.com web site is always up to date, so you can always update your ARRL program by downloading and installing the latest demo program. Once you've run the ARRL version installation from the ARRL Antenna Book CD, any EZNEC demo program (v. 4.0.31 or later) will function as an ARRL version. If you had previously installed a demo program, it has now become an ARRL version with its increased capabilities.

The executable file for EZNEC ARRL is EZWdemo40.exe. EZNEC ARRL is started by running EZWdemo40.exe.

## NOTICE

The EZNEC ARRL program is copyright (c) 2000-07 by Roy W. Lewallen. All disclaimers and restrictions regarding warrantee, use, liability, and so forth stated in the manual apply.

## MANUAL

The full EZNEC v. 4.0 manual is included as an integral part of the program. To access it, start EZNEC ARRL. Click "Help" near the top of the main window. Click "Contents" to view the manual. I suggest that you begin with the "Getting Started" section. It will tell you how to run the "Test Drive", a tutorial on using EZNEC v. 4.0. A printable manual can be downloaded from http://eznec.com/ez40manual.html.

SPECIAL ARRL FILES AND THE DEFAULT DESCRIPTION FILE DIRECTORY

The special ARRL example files were copied to your computer as part of the ARRL Antenna Book installation process. If you chose the default directory for installation, they'll be found in chapter directories under C:\Program Files\ARRL\AntBk21\Modeling. (See the ARRL Antenna Book CD documentation for more information.) If EZNEC ARRL is the first EZNEC version you've installed, this will be the default description file directory -- the one you see when you click Open to open an EZNEC description file. If you had previously installed the EZNEC demo, all the EZNEC files in your default description file directory were copied to this directory and it was set as the default. The special ARRL files, as well as other EZNEC description files, can be copied as desired, so you might want to collect favorites in one directory. You can set any directory as the default description file directory -- see Reference/The Control Center/The Control Center Menus/Options in the EZNEC manual. In that topic, look under Folders. SPECIAL ARRL FILES - DESCRIPTION AND USE

Specially signed ARRL example files can be recognized by the file name prefix "ARRL ". When one of these files is opened, operation changes as follows:

 The segment limit is raised to 500, and the "File" line in the main window changes color to indicate this 500 segment mode.
Combine and Import options are disabled.

All other operations are the same as for the standard version of EZNEC, with a 500 segment limit, until another file is opened, THE CURRENT FILE IS SAVED, OR THE PROGRAM IS ENDED. When a file is saved or opened, operation reverts back to the 20 segment demo version limit unless another special ARRL file is opened. Files saved with this or any other version of EZNEC don't contain the special signature required for EZNEC ARRL to recognize them as special ARRL files, so EZNEC ARRL will treat them like ordinary files and won't do any analysis if the number of segments exceeds 20.

NOTE: When ending the program, the current description is saved in the file Last.EZ, and this file is automatically opened the next time the program is started. Even if the last file being viewed was a special ARRL file, Last.EZ is not, so operation is always restricted to 20 segments maximum when the program first starts.

## DEMO EXAMPLE ANTENNA DESCRIPTIONS

As you'll see, a surprising variety of antennas can be modeled with good accuracy with even the very limited number of 20 segments. The ARRL version comes with a number of demo version example antenna descriptions, which you'll see when you click 'Open' after starting the EZNEC ARRL program. A number of the standard EZNEC descriptions have been modified to fit within the 20 segment limit, and their accuracy is generally very good. After you open one of these examples, click the 'File' menu, then select 'Edit Current Antenna Notes' to see the notes for the antenna description you just opened.

The antenna files which have been modified from the standard versions, or ones with modified Antenna Notes files, have a 'd\_' added to their names. For example, d\_15MQuad.ez is a modified version of the standard EZNEC example file 15MQuad.ez. The Antenna Notes file explains the differences and their effects on results. A few standard EZNEC examples, which fit within the 20 segment limit, are also included. Please note that two of the examples can't be run with the demo version. These are d\_20M5ElYa.ez and d\_ElevRad2.ez. They are included only to illustrate concepts explained in the manual. You'll find more information about them in their Antenna Notes files.

## GUIDELINE CHECK WARNINGS

When you open some of the demo example files, you'll see warnings generated by EZNEC's Guideline Check, telling you that the segments are longer than recommended. This is unavoidable with some of the demo examples, in order to get the number of segments within the 20 segment limit. However, the examples all give good results in spite of the longer-than-recommended segment lengths. Ignore the warnings for the demo example files.

GETTING ACQUAINTED WITH EZNEC

I highly recommend that you take the Test Drive described in the chapter in the manual by that name. It'll quickly get you acquainted with EZNEC operation. There's also important information for new users in the Information and Getting Started chapters.

IF YOU LIKE IT

If you decide to purchase the full EZNEC program, you'll find all the information you need at http://eznec.com. I regret that it's not currently practical to have you "enable" the ARRL or demo version, so it's necessary to download the full program at the time of purchase. Making a demo you can "enable" would require applying software copy protection which I'm reluctant to do, so I hope you'll tolerate the extra effort in exchange for receiving a more trouble-free program.

Have fun with the EZNEC ARRL program!

73, Roy Lewallen, W7EL