

Antenna Master

Version 2.1.0

October 15, 2003

Hi, and thanks for giving Antenna Master a try!

First things first... What is it?

Antenna Master is a program that allows the Radio Enthusiast to quickly design antennas. It is NOT an antenna analysis package (like MININEC) in that it doesn't determine how an antenna design performs.

Instead, you select the type of antenna and the desired characteristics, and Antenna Master gives you the suggested design for the described antenna.

Why? Well, it's a lot faster for one (I'd say by a factor of several hundred times). That's the big benefit.

You can design several types of antennas. These types include:

- Dipole
- Fat Dipole
- Yagi
- J-Pole
- Super J-Pole
- Log Periodic
- Cubic Quad
- Vertical (over a ground plane)

You can't design an antenna of an arbitrary design. Of course, I hope to be adding many more types of antennas (Helical and Phased Arrays come to mind).

You can also perform the following additional calculations:

- LC calculations - by entering two of the following: L, C, frequency, the third is calculated
- Coil design - by entering three of the following: L, diameter, length, number of turns, the fourth is calculated
- Transmission line loss - given the type of cable, length, and band, computes the loss in dB, also computes the additional loss caused by SWR.
- L Network - L matching network
- Pi Network - Pi matching network
- Impedance - Calculate the impedance of a capacitor or inductor at a given frequency
- Wire inductance - Calculate the inductance of a straight piece of wire

Use:

Just select the desired antenna type from the list in the small window, or calculation type from the Tool menu, and fill in the requested information.

That's it! It's really that simple.

Terms:

This software is shareware. If you find it useful, please consider paying the \$15 registration fee. This will help encourage the development of future versions of this program, as well as other ham radio programs.

Please also write me with your comments and suggestions, and any bugs you may find.

Paying for Antenna Master is fairly simple. If you want to pay by check, money order or cash, you can fill out the Cash/Check/Money Order Form, and mail it directly to me, along with your payment:

Chris Smolinski, N3JLY
4708 Trail Court
Westminster, MD 21158

If you want to pay by credit card, there are two options:

To register Antenna Master on the web with a credit card, go to the following URL:

<http://www.blackcatsystems.com/register/antenna.html>

You'll need to enter your name, email address, and mailing address, and select the program(s) you want to register (in this case Antenna Master). Then click the continue button to enter your credit card information (you can use a secure version of the form).

To register Antenna Master with a credit card using the enclosed Register By Credit Card application (Macintosh users only), follow these steps: Select how many copies of Antenna Master you want to register, select the payment method, and follow the instructions.

Press the Copy... button, and paste the copied text into your email editor. Email the text to shareware@kagi.com and they will process your order, and let me know that you've registered. You may also print out the form and send it to Kagi via mail.

Please be sure to include your email address when you register! I need this to get in contact with you, if necessary.

You can always find the latest version of Antenna Master at this URL:

<http://www.blackcatsystems.com/software/antenna.html>

If you have any questions, comments, suggestions, or bug reports, please email them to me at:

antenna@blackcatsystems.com

My snail mail address for directly sending your registration fees (please use email for any questions you want answered) is:

Chris Smolinski, N3JLY
Black Cat Systems
P. O. Box 2293
Westminster, MD 21158 USA

Distribution of this software:

This software may only be distributed under the following conditions:

1. It is distributed as an entire package of all files, including all documentation.
2. It may only be distributed without any charge or fee, with the exception below.
3. If in any form of fee is charged, then the distribution package and any documentation must clearly state that any shareware programs must be registered with the author, if they are used beyond the evaluation period.

Thanks again for giving Antenna Master a try.

Chris Smolinski, N3JLY
Black Cat Systems
PO Box 2293
Westminster, MD 21158

email: antenna@blackcatsystems.com
Web: <http://www.blackcatsystems.com/software/antenna.html>

Registering by Check or Money Order Form

To order by check, please fill out and mail the following form, along with your payment. You can pay with a wide variety of cash from different countries but at present if you pay via check, it must be a check or money order drawn in US Dollars. While there is the risk of loss in the mail, currency is also OK, including foreign currency.

Please make sure you include your email address with your payment. That way we can send the registration code to you. If you do not send us a valid email address, we have no way to send you the code.

I would like to order _____ copies of Antenna Master at \$14.99 US each.

If you'd like a copy of Antenna Master (as well as demos of all of our other programs) on a CDROM, please order one: (Macintosh Only)

I would like to order _____ Black Cat Systems CDROMS at \$10 US each. (incl shipping)

Name: _____

Address: _____

City: _____ State/Province: _____

ZIP/Postal Code: _____ Country: _____

Email Address: _____

Computer Model: _____ Operating System Version: _____

Enclosed, please find my check / money order / cash in the amount of \$_____

Mail this form, along with payment, to:

Black Cat Systems
PO Box 2293
Westminster, MD 21158
USA

Registering By Credit Card Online

To register online with a credit card, go to the following URL:

<http://www.blackcatsystems.com/register/antenna.html>

You will be sent to our order page at Kagi. Kagi handles our credit card payment processing.

Please make sure you include your email address when you register online. That way we can send the registration code to you. If you do not send us a valid email address, we have no way to send you the code.

Registering by Credit Card

Note, if you'd like to register by credit card online, please read the previous section.

Open the Register program that accompanies Antenna Master. Enter your name, your email address, and the number of single user licenses you desire for each program you wish to purchase.

You can either Copy the data from Register and paste into the body of an email message or you can Save the data to a file and you can attach that file to an email message. There is no need to compress the data file, it's already pretty small. If you have a fax modem and would like to fax the data to Kagi, just print the data to the Kagi fax number.

Payments sent via email are processed within 3 to 4 days. You will receive an email acknowledgement when it is processed. Payments sent via fax take up to 10 days and if you provide a correct internet email address you will receive an email acknowledgement.

If you are mailing your credit card payment to Kagi, send it to:

Kagi
1442-A Walnut Street PMB #392-SZ
Berkeley, California 94709-1405
USA

Please make sure you include your email address with your payment. That way we can send the registration code to you. If you do not send us a valid email address, we have no way to send you the code.

Revision History

2.1.0:

Added impedance calculator.

Added wire inductance calculator.

2.0.1:

Fixed a calculation error in the inductor design tool.

Fixed a calculation error in Yagi antenna design

2.0.0:

Complete re-write, also first OSX and Windows versions.

1.4.0:

Added L and Pi network calculations

1.3.0:

Added transmission line loss calculator

1.2.1:

Fixed bug in Cubic Quad design

1.2.0:

Added Cubic Quad antenna

Fixed bug in Log Periodic display

1.1.0:

Bug fix. Bug caused heap errors on some systems resulting in System Error 33.

1.0.0:

Initial release

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