

Ares

The CaHRtenna Ares is a 9:1 End Fed Random Wire (EFRW) Antenna designed for portable use on any bands between 40 and 6. As with any 9:1 antenna, the Ares is designed to work with a tuner. The Ares is a lightweight but rugged kit that any ham will be able to assemble with basic tools that are readily available in most ham shacks. The antenna has been tested at 50w digital and 100w SSB.

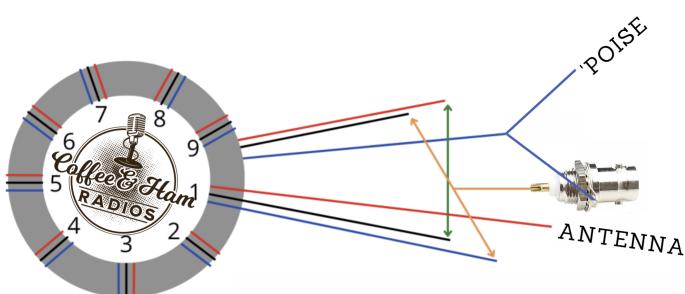
60'	Antenna and Counterpoise Wire
3	Lengths of Colored Wire
1	Large Heat Shrink
1	Small Heat Shrink
1	CaHR Frame
1	Sticker
1	Velcro Strap
2	Screws and Nuts
4	Ring Terminals
1	BNC Connector
1	Toe-Roid
6	Zip Ties





Take a look at that antenna winder. *She's a beaut Clark.* Find the screw and nut included in your kit. Place these together in the lower left of the frame as shown. (Or wherever you want, what do we know?)

Install the BNC connector, with the female BNC being protected by the shroud. You can install a piece of coax or an adaptor onto the female side to give you a place to grip the BNC without deforming it.



Each pass through the center is a "turn" and you're gonna want 9 of them.

Probably the most fun part of the kit is winding that big toe-roid.

Think of it as being one long wire when you're finished (in fact, there ain't no reason you can't make it one long wire if you have some on hand).

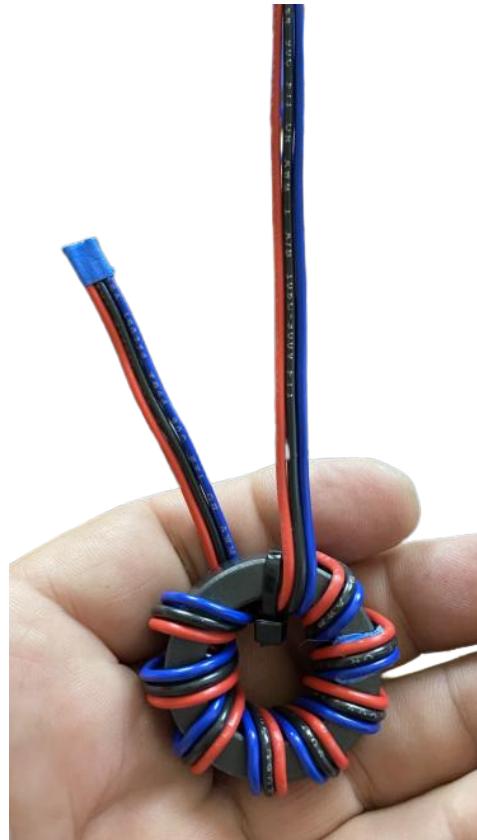
Start with a 4" tail - You might use one of those zip-ties we sent to hold the first turn in place and be your best friend through this process.

Once you've gotten all wrapped up, connect the upper red wire to the lower black wire.

Then the upper blue wire goes to the 'poise lug and shield.

Next take the upper black and lower blue, marry them together and send them off to the honeymoon suite.

The lower red wire is for your antenna element connection.



Attach your toe-roid to the Ares winder with 2 zip ties. Orient it so that the leads lie properly to connect the BNC connector and your antenna wire. The heads of the Zip Ties should be below the surface of the toe-roid so that they don't snag the heat shrink.

We've got some soldering to do on the coax side of the antenna. Strip off the jacket from the wire where you'll be soldering and get after it. Here's what you'll want:

1. Solder the Black and Blue wires to the BNC connector
2. Solder the single Blue wire to the BNC's ground lug.
3. Make a jumper out of left-over Blue wire to connect from the ground lug to the nut & bolt on the winder. Chuck has a great technique for removing the red jacket from the ring terminal and crimping/soldering that on. Once done, land that on the ground lug.
4. Use Chuck's trick to put a ring terminal on the Red wire and place that on your nut/bolt and find a good hole to shove it on like above.



Time to get your hands dirty(er). Grab your antenna wire and cut off the first 41' for your Element. Then 17' for your counterpoise. (Leave a couple of extra inches at the end for a hanging loop)



Take the antenna wire and fish one end through the end of the Ares winder, up on the first hole and down on the second hole and then up on the third hole. (There is a hole in the edge). Strip back the end of the wire and Solder a ring terminal to it and land it on the bolt.

Leave a small loop in the end of the wire and double zip-tie it for strenf.

Put the same loop in the end of your counterpoise wire.



With your counterpoise wire, add your last ring terminal, fish it through the frame for some strain relief and attach it to the counterpoise bolt.

Now, sit back and enjoy your antenna - 'cuz that's all folks! This antenna is now ready to connect to your tuner and radio and get after making some QSOs!