

Survivor Antennas.com

Any antenna is sensitive to its surroundings, especially if they are near metal objects. Our Antennas are based on a very short, highly efficient radiator and thus have a few requirements in order to install them correctly.

you notice pictures in the [website gallery](#) you can see how easy they are to set up. The photos show them being outside and in the clear from other objects. If you have a multiple antenna farm there are some things you need to know.

These antennas are sensitive to surroundings, especially if they are near metal objects. Any conductive surface, whether its metal siding, pipes or wiring, can have an effect on an antenna.

These antennas **MUST** be located a minimum of 5 feet from the ground in order to operate efficiently! 10 feet minimum is recommended. They hate the ground. They **MUST** be farther than 4 feet from the nearest metal object when mounted.

The delay line **MUST NOT** cross the output connection of the choke coil. That is, the delay line coax cannot be laying on or over (touching) the output of the choke coil coax connection.

The choke coil **must not** have its input and output coax cables laying over one another. This will cause the choke to be partially bypassed due to capacitance of the coax jackets and the result in an unstable SWR.

Because the impedance of this antenna is so high, any conductive object near it will tend to detune it slightly. Most of the time this is not a problem and will show up as minor SWR changes. But allowing your coax lines to lay on top of each other and cross over each other will cause the delay line to partially couple to other coaxes and their connections causing strange SWR problems. Try not to coil the delay line up over itself, use a gentle S shape if needed. And don't let your choke output lay over *other* incoming coax connections.

A typical installation is a 10 foot antenna mast made of metal, 1 inch in diameter with the antenna sliding down over the top of the mast. The antenna has a stop bolt inside its mounting pipe to prevent it from moving down too far. You can simply slide it down and forget it. Or you might want to drill a hole in your mast and use the stop bolt to bolt it to the mast so it won't turn, but this is not necessary. On the output side of the choke, you can connect any length of 50 ohm coax you wish to your transmitter. A tuner is required for the 160, 80 and 40 meter antennas if you want to cover the whole band. A tuner is recommended in all installations because it makes using the antenna easier and allows for the lowest SWR possible. If you have an SWR over 3:1 inside the band (except 160), something is wrong and you need to check for coax cables crossing each other. It can be noted that SWR even above 2:1 does not have any noticeable effect on the antenna's performance.

Refer to the photo Gallery on the [Website for views](#) of proper installations. [Http://MiniMaxAntennas.com](http://MiniMaxAntennas.com)

