

Hot Tips

Good info for the new ham, and old stuff to refresh your memory



Using a long antenna on your HT

If a newer operator has difficulty hearing others or being heard on an HT, there are a number of remedies the person can try out, to improve handheld performance. One of them is to install a larger or longer antenna, which is a great suggestion, but a long HT antenna has at least one concern that should be considered, and that's the strain it can place on your radio antenna connector.

The amount of torque and stress a long antenna can place on your HT's internal circuit board can be enough to crack the circuit board right at the antenna connector, especially with today's tiny SMA connectors. If you use a quarter-wave antenna, such as a Signal Stick or a Nagoya, its length or weight will not likely overburden your HT. But a half-wave antenna, such as a Smiley telescopic or ABBREE tactical, can place a large amount of stress on your HT's circuit board if you don't use it carefully.



A good way to use a longer HT antenna while relieving some of the strain due to the antenna length or weight is by cradling the HT in your hand, such that your palm is holding the HT body while your index finger and thumb are supporting the weight of the antenna at its base. Another way to help support your longer antenna is to install a washer or other wide mount between the antenna base and your HT, so that when the antenna sways, its base will remain rigid with the HT body.



Tactical antenna (above) and telescopic antenna (right)

Another way to improve the reception and transmission of your HT is by connecting it to a rooftop antenna by means of coax. But this also poses a strain on your HT circuit board by excessive sideways tugging on your connector as you move around while your antenna remains stationary. As much as possible, try and remember to hold still while using your HT in this way.

So, using a longer antenna is a great way to overcome signal difficulties with your HT, as long as you understand the strain it can place on your little radio. If you're careful, the larger antenna can work well for you while keeping your radio safe.