# TIGER TAIL ANTENNA

**Background:** A good antenna makes good RX and TX operation possible.

**The Problem:** Most hand held radios don't provide an efficient antenna. At 146 MHz, the antenna supplied with the radio has a loading coil in the base to compensate for the short radiating element and the radio itself is too small to provide an effective counterpoise.

**A Solution:** A Tiger Tail antenna add-on. Here's how to make one.

**Parts:**

[1] Insulated 18 gauge zip cord (stranded) wire. (Can lighter, but this is a good and commonly available size.[1])

[2] Crimp-on ring connector for your wire size and a hole to fit over your connector.[2] (Heat shrink connector type preferable, but not required.)

[3] Heat shrink tubing to fit over crimp-on connector (if not on connector).

**Tools:**

[1] Wire cutter (diagonal pliers)

[2] Crimping tool.

[3] Heat source for heat shrink material. (Hot air source preferred, but a match will do.)

**Directions (146/445 MHz):**

[1] Measure and cut off a piece of wire 55.6 cm (21¼ inches) long.[3]

[2] Measure 17.8 cm (7 inches) from one end, then cut and peel off one of the two wires.

[3] Strip about 0.5 cm (¼ inch) of insulation from each of the remaining adjacent wires.

[4] Twist bare wire ends together

[5] Crimp on the ring connector.

[6] Shrink tubing over the crimp-on connector the make weather tight.

[7] Shrink some tubing over both wires where the 17.8 cm wire ends and another at the end of the 55.6 cm wire to keep out water.

[8] Unscrew antenna, put Tiger Tail over connector, and reinstall antenna. Let the Tiger Tail hang straight down. If the antenna connector turns out to be difficult to use, try connecting the Tiger Tail to a belt clip screw.

## DONE!

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[1] Common lamp cord or speaker wire will do.

[2] Use ⅜-inch hole for SMA female connectors on the radio. Use ½-inch for BNC connectors. Smaller hole size as needed to use a belt clip screw.

[3] Length is ¼ wave plus 5% to allow for the insulation.