

Tactical Wire Dipole Antenna

Quick Reference Card



Requirements for deployment

- antenna wire on winding spool (Qty 2)
- nylon halyard on winding spool (Qty 3)
- balun
- 15 m (50 ft) coaxial cable

Antenna selection

This antenna is suitable for communication over short to long distances up to 5000 km (3000 mi), using frequencies of 3–30 MHz. It operates on one frequency corresponding to the length of antenna wire deployed.

The transceiver calculates the length of antenna wire required for the selected frequency.

This antenna does not use the internal antenna tuner of the transceiver.

It cannot be used in scanning networks.

Deploying the tactical wire dipole antenna

To ensure optimal transceiver performance and to avoid exposure to excessive electromagnetic fields, the antenna system must be deployed according to the instructions provided.

The wire dipole antenna is deployed symmetrically about a centre balun, preferably with three support structures oriented in a line at right angles to the direction in which you want to communicate (see diagram).

The support structures should be able to hold the balun and halyard end of the antenna wires approximately 10 m (33 ft) above the ground. Heights below this may reduce the capability for long-distance communications.

Preparing the antenna for deployment

To prepare the antenna:

Select a site that is clear of overhead power lines and other electrical interference.

NOTE

- If a centre support for the balun is available, unwind a halyard from its winding spool and clip to the top of the balun.
- Hook the strain loop of the coaxial cable on the eyelet at the bottom of the balun.
- Connect the end of the coaxial cable to the connector at the bottom of the balun.

- Clip the strain loop of each antenna wire to a clip on the balun.
- Plug each antenna wire into the balun.
- Switch on the transceiver.
- Press **VIEW** to see the channel screen.
- If scanning is on, press **SCAN**, to switch scanning off.
- Use and to select the channel that you want to use.
- Press **TUNE** to see the required length (m) of the each antenna wire (at top right of screen).
- Unwind the length of antenna wire required, using the metal bands as a guide (bands are at 1 m intervals).

NOTE

Both antenna wires must be the same length.

- Secure the antenna wire to the hooked leg of the winding spool using a half-hitch knot.
- Secure the remaining antenna wire on the winding spool with velcro.
- Unwind the halyard from each winding spool and clip to an antenna wire.

Deploying the antenna

To deploy the antenna:

WARNING

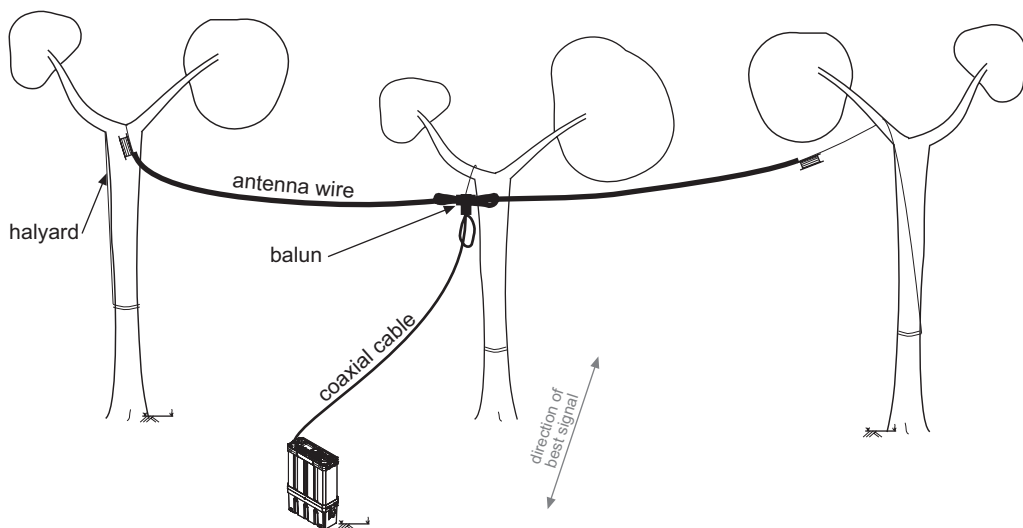
Do not deploy or use the antenna if there is lightning in the area.

- Throw the sinker and halyard over the structure.

NOTE

Swing the sinker on approximately 0.5 m (2 ft) of halyard underarm, while aiming for the structure.

- Repeat for the other side of the antenna, and the halyard attached to the balun.
- Hoist the balun and antenna wires up their supports, then tie off each halyard to its support.



Connecting the antenna to the transceiver

To connect the antenna:

- Switch off the transceiver.
- Connect the coaxial cable to the **⌏** connector on the front panel.
- Switch on the transceiver.
- To view the SWR, press **TUNE**, then PTT. If the SWR is greater than 2.5:1, check all cable connections, and/or change the length of the antenna wires, then view the SWR.

- Ensure that the 50 Ohm connector is activated (**⌏ ATU/50** or **⌏ 50**).

WARNING

High RF voltages are present during transmission and tuning. Do not touch the antenna during these activities.

WARNING

You should not transmit from your transceiver or tune the antenna unless people are standing beyond the safe working distance of 0.2 m (8 in) from the antenna.

Packing up the tactical wire dipole antenna

To pack up the tactical wire dipole antenna:

- Switch off the transceiver.
- Disconnect the coaxial cable from the **⌏** connector.
- Untie all halyards and lower the antenna.
- Disconnect the coaxial cable from the balun, coil, then stow.
- Unclip the halyards, wind up onto each winding spool, secure with velcro, then stow.
- Wind each antenna wire onto its winding spool by rotating the winding spool end-over-end along the antenna wire.
- Unplug and unclip the antenna wires from the balun, secure with velcro, then stow.
- Stow the balun.