

Popular Wire Antenna's for Field Day

Pro's

Con's

G5RV & G5RV jr. Dipole

- Multi-band operation: 80—40—20—15—10 meters bands
- Relatively compact size: Total Length 102 feet
- Easy to construct and install: Dipole Inverted V
- Requires a good external tuner for 1:1 SWR
- Lossy: Ribbon to Coax coupling
- SWR (Standing Wave Ratio) issues on 15 meter

Off-Center Fed (OCF) dipole / Windom

- Multi-band operation: 80—40—20—15—10 meters bands
- Potential for directional patterns:
- Simplicity: Inverted V as a Single Wire Antenna
- Common mode current and SWR problems
- Tuning requirements: Requires a good Antenna Tuner
- Feedline considerations: 4:1 Balun required

43-foot vertical antenna

Multi-band operation: 160 to 10 meters
Low-angle radiation: 80 -20 meters lower take-off angles
No rotator needed: omnidirectional but Tuner required
Radial system: A good radial system is crucial

Tuning required: It's not resonant on any specific band
Radial system: is crucial for optimal performance
Ground losses: Ground losses can be significant
Not a "best" antenna: It's a compromise antenna

End Fed Half Wave (EFHW) antenna

Simplicity and ease of deployment: can be sloper antenna
requires a [matching transformer](#) (unun) 9:1 or 49:1

- No need for a long feedline: reduces feedline losses
- Vertical polarization: inverted V
- Single-band operation: Performs very well

- Possible Noise and EMC issues:
- High voltages at the feedpoint:
- Counterpoise or earth connection: Required
May Require 1:1 Air Choke Balun near Transmitter

End-fed non-resonant antennas

- Multi-band operation: Used on Multiple Bands
- Simpler setup: Just a random Wire Antenna
- Versatility: Easy Install as Inverted V
Requires a Good UNUN: 4:1 or 9:1 at Antenna
100 foot RG8X feedline can be used as a Radial with Air Choke

Potential for lower efficiency:
Impedance matching challenges: Tuner
Feedline radiation: requires 1:1 air-choke balun
Efficiency varies with length and configuration:
Non-resonant antennas can exhibit complex radiation patterns

Antenna Tuners, Baluns & UNUNS

Air Choke Balun: <https://www.hamuniverse.com/balun.html> (THE "UGLY BALUN")

Balun Designs: <https://www.balundesigns.com/>

<https://palomar-engineers.com/antenna-products/baluns-and-ununs/1-8-30-mhz-balunsununs>

Common Mode Chokes <https://palomar-engineers.com/antenna-products/1-1-balun-kits>

LDG Antenna Tuners: <https://www.ldgelectronics.com/>

