

UHF-TV RECEPTION

I welcomed your article on improving UHF-TV reception (**Radio-Electronics**, July 1981), but a number of important points were not mentioned. Among them:

1. Never use MIL or JAN RG-59/U or RG-6/U coaxial cable. It is far too lossy and leaky. Use only RG "type" cable having a foam dielectric insulation and a 100% shield made of aluminum foil.

2. Never use cheap coax bought at a discount. Some of the stuff sold in electronics-hobbyist stores is incredibly poor in quality. Spend a few dollars extra for a 100%-sweep-tested coax, such as Belden 9243.

3. Always wrench-tighten connectors for a positive mating and low VSWR.

4. Keep lead-ins as short as possible.

5. Use an antenna having a 75-ohm output whenever possible. That saves the loss of a balun, and eliminates the potential problems thereof.

6. Don't buy an antenna based on meaningless claims of sensitivity based on mileage. Use an accurate field-strength meter to determine the signal intensity, and build the system accordingly.

7. Don't scrimp on quality! A professional-quality UHF antenna system costing \$200 will outperform and outlast *any* jury-rig system. If you are in a remote area, you can't afford to be "penny-wise and pound foolish."

Antenna systems share a characteristic in common with lawn-sprinkler systems: If you try to "get by" with a mediocre installation, you'll spend more money in the long run than you would if you had put in a top-quality system in the first place.

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