

Who Needs a Rotator?

—how to do without

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A quad makes a fine DX antenna and, like most beams, it requires a rotator if you want to find DX. But there is a good way to eliminate the rotator and still get many of the DX stations. This is

especially good for a 40 meter or 20 meter monoband quad.

Cut one element for a driven element and the second element as a director. Run a length of coax to the driven element, either RG-8/U or RG-58/U as you prefer.

Then run another length of coax to the director; RG-58/U will do, but make it a multiple of a half wave at

the design frequency. Bring it into the shack and connect a coil across it to tune it as a reflector. Across the coil connect an SPDT toggle switch, so the coil can be shorted out.

A half wavelength of transmission line will repeat the impedance at the end in the shack to the end in the quad. In fact, you can use 300-Ohm twin-lead for the switching line,

as long as you remember to correct for the velocity factor.

When you throw the switch, it will short the coil and, at the same time, close the director loop and make it a director, thus instantly reversing the directivity of the quad.

Face it southwest and it will reverse to northeast, covering most of the DX world. ■