

Antenna Rotator Tower “Break-Out Box”

Like many Hams, I have an antenna rotator on the top of my tower, with the control box inside the house, and in my case, in the basement “shack.” Any form of troubleshooting of the rotator operation is very difficult, usually requiring someone inside to operate the control box, and someone outside to verify operation of the rotator etc. Otherwise, a lot of running back and forth is required.

A simple solution is to install a rotator “break-out box” at the base of the antenna, (Fig. 1.) so its real easy to access the wire connections to the rotator from the outside, when needed.

(This is a good thing to do at the time of installation)



This allows you to easily disconnect your inside rotator control box, and substitute another rotator control box outside, where you can see the antenna, and communicate with the guy up on the tower.

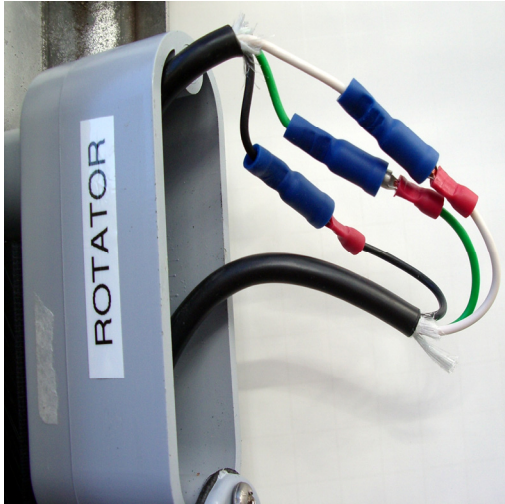
I used a commonly available rigid PVC $\frac{1}{2}$ " conduit access fitting, a Kraloy type LB05, that has a removable cover with gasket, as shown in Fig. 1.

A plastic wine bottle cork cut in half, served as a plug for the unused $\frac{1}{2}$ " port, and also with 2 - $\frac{1}{4}$ " holes drilled into the center, as a weather-proof lead-in plug for the rotator wire, as shown.

With the cover open, (Fig. 2.) you can see the simple “bullet” style connectors I used, (kiss principle) with the insulated ones on top being the live wires from the inside rotator controller. Note that the controller wires can have 30 volts AC on them!)

The red connectors in the photo, (the bullets) are the 3 rotator wires from the top of the tower.

To use, simply disconnect the inside rotator control box at the break-out box by pulling the connectors apart, and plug-in the rotator control box to be used outside. (can be the one from inside the house, if you don't have a spare)



Obviously, any weatherproof plastic box could be used, and with whatever type of rotator you have. (3 or 4 wire, etc)

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