ZR6KMD 2M BEAM

This design was adapted from an article in the ARRL Handbook and built with simplicity and duplicity in mind. This antenna is a vast improvement over a standard dipole with a forward gain of around 8db with a front to back ratio of 10db.

The design requires no special tools.

Parts:

1X 20mm PVC "TEE"
1X 20mm PVC "4Way Junction"
2m 20mm PVC Pipe
2X 3mm Brazing Rods
4X 20mm PVC "Glands"
PVC Glue

Mounting hardware, coax and connector. The mounting hardware can be salvaged from an old TV antenna or you can use your own design.

Construction:

As seen in the diagram, the 4 way junction and tee piece are connected via a short length of 20mm PVC pipe so that the center measurement between them is exactly 400mm. Cut the first brazing rod to exactly 928mm and insert into the tee. Close the ends with two of the glands and glue in place. Cut the second brazing rod into two 482mm lengths and fit into the 4way junction leaving a 20mm gap between the ends inside the junction. Close the ends with the remaining 2 glands and seal. Connect the coax inner to the top rod and the braid to the bottom rod. The remaining PVC can be cut to any required length to facilitate mounting with you hardware to a mast.

The SWR on this antenna runs at about 1,3:1 over the 2m band and for field station or emergency use this is the ideal candidate.

