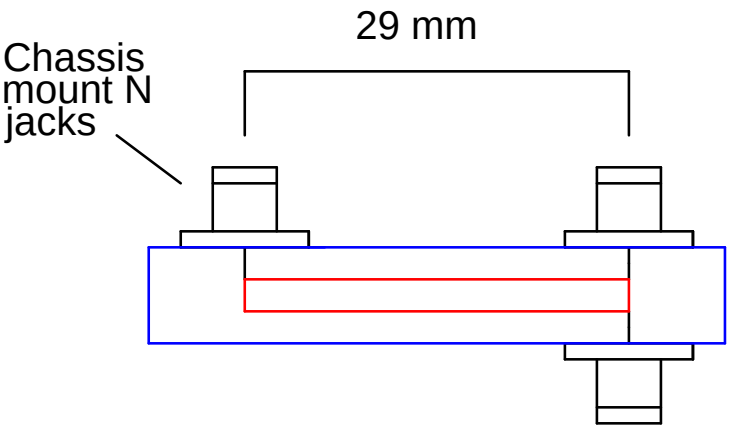
2.4 GHz RF Power Divider/Combiner



Solder the N center connector pins directly to the inner copper conductor

12.7 mm (1/2 inch) outer diameter (OD) copper conductor

25.4 mm (1 inch) square aluminum tube, with a wall thickness of 3.2 mm (1/8 inch)

Equation

D = The inner width of the tube
d = The outer diameter (OD) of the inner conductor
Z = Impedance

Z = 138 x log (1.08 x (D / d))

For a 1/4 wave power divider, the impedance needs to be around 35.4 ohms