Errata, Photos, and Figures, from Various Articles on Return Loss Bridges in AR Magazine

Errata:

The Balun cores used were initially obtained from Rockby Electronics and were subsequently found to be equivalent or equal to a type 43 size 202 core. The Jaycar ones are not quite the same material though they are the same size, the type 43 cores will work better at lower frequencies the Jaycar type M7 may be better at higher frequencies, though a type 61 may be better still. For my latest RLB's I use a combination of 43's and 61's, with the 61's closest to the resistor end. I have also found that the thinner RG178 (available from MiniKits) type coax is easier to work with. A number of people have contacted me saying they cannot obtain back copies of AR magazine with these articles. For these people pdf's of the pre magazine editited articles are linked below:
From

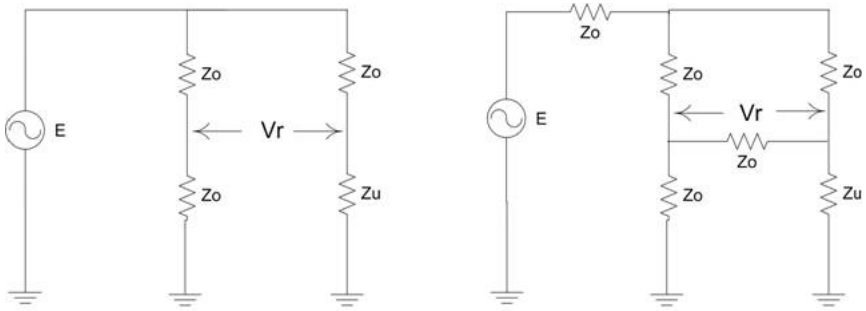
1. "A Simple Wideband Return Loss Bridge Revisited" by Paul McMahon VK3DIP - Amateur Radio Magazine June 2007

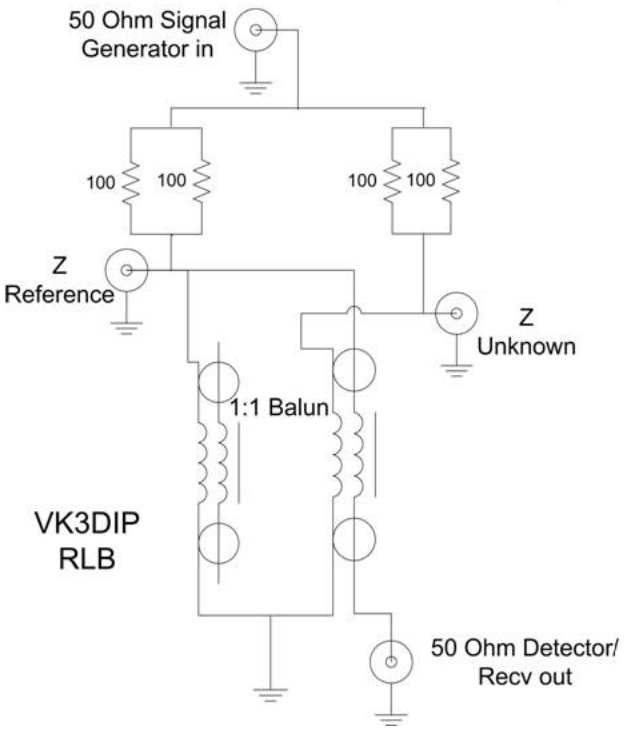
Article1

2.; "Further Reflections on a wideband return loss bridge" by Paul McMahon VK3DIP - Amateur Radio Magazine August 2008

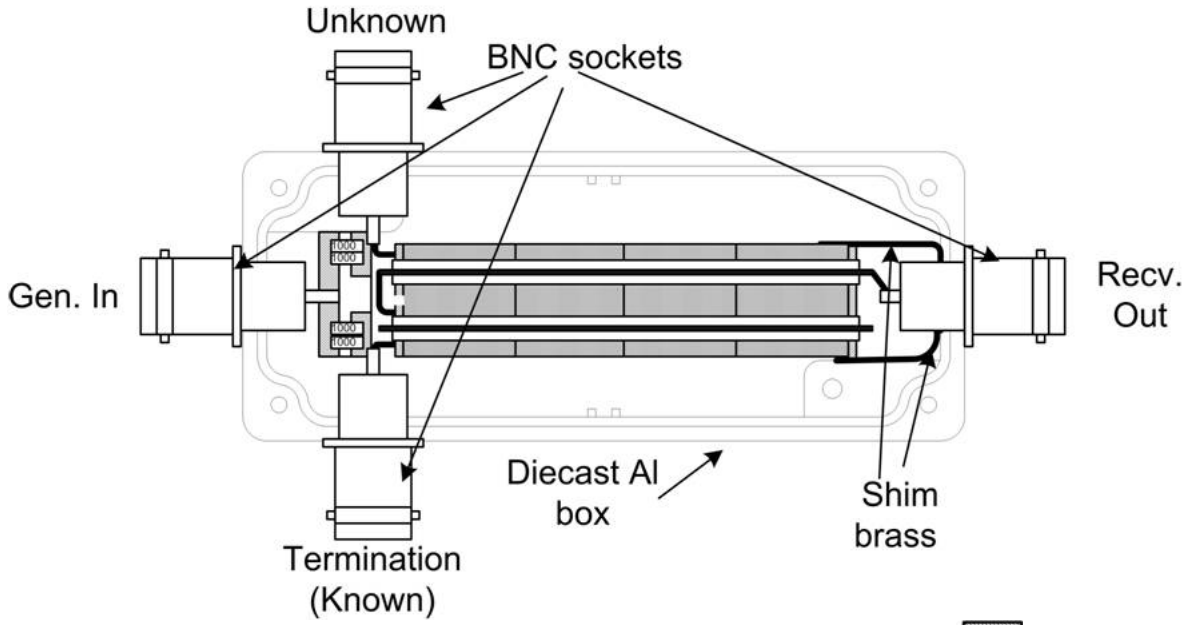
Article2

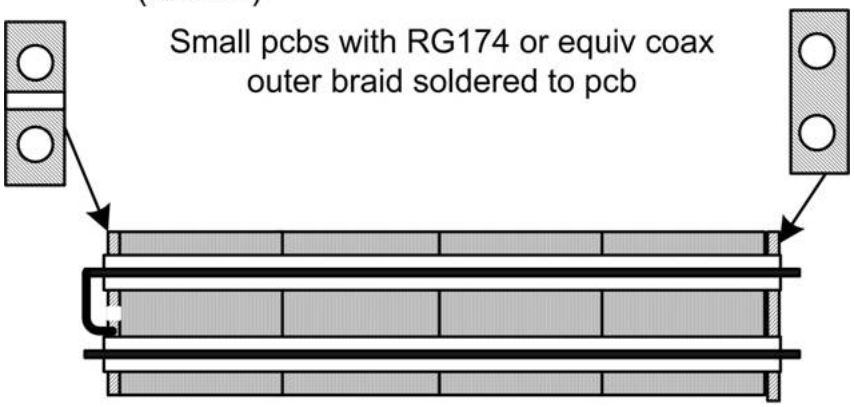
Photos etc. from the first Article:



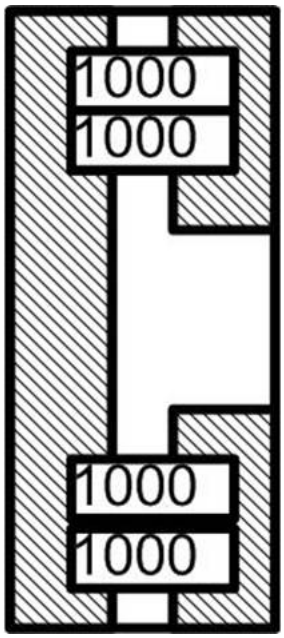


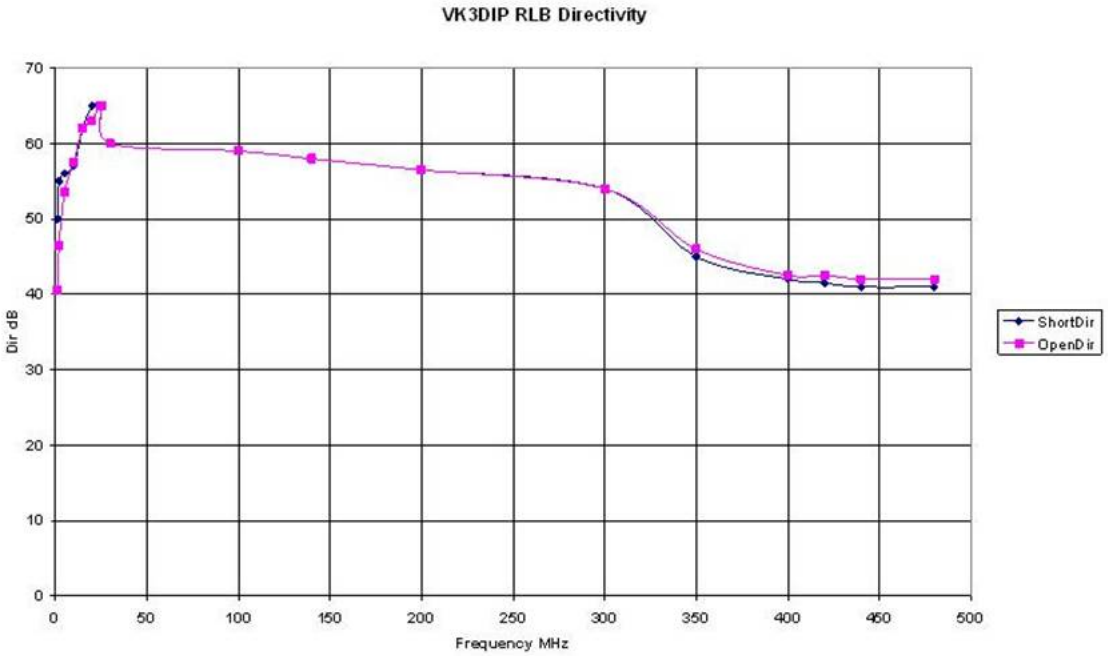
VK3DIP Return Loss Bridge





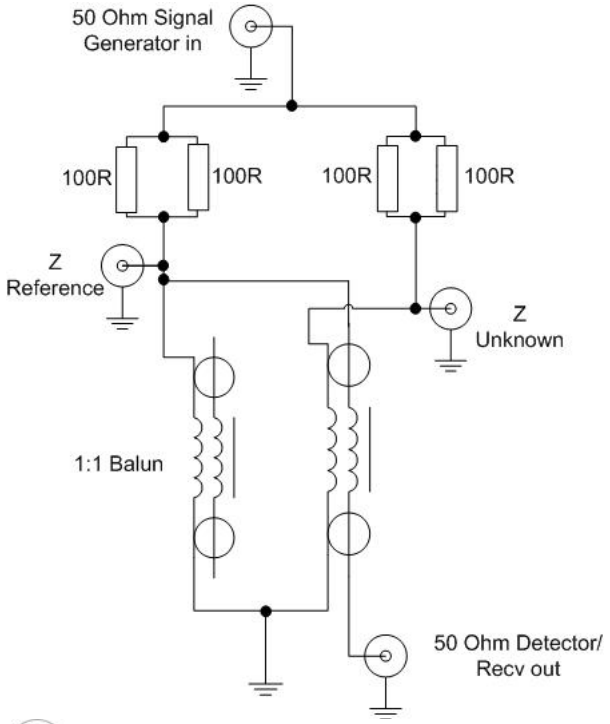
4 balun formers end to end & taped

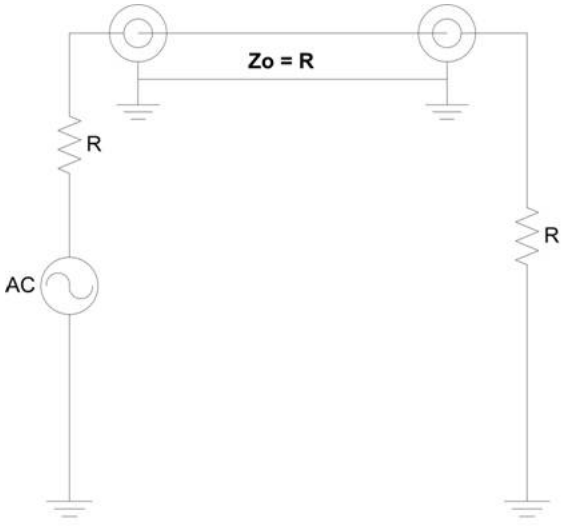



VK3DIP RLB Directivity
Dir dB
Frequency MHz
ShortDir
OpenDir
0
10
20
30
40
50
60
70
0
50
100
150
200
250
300
350
400
450
500


6
2
4
3
1
5
RLB
VK3DIP
16 dB

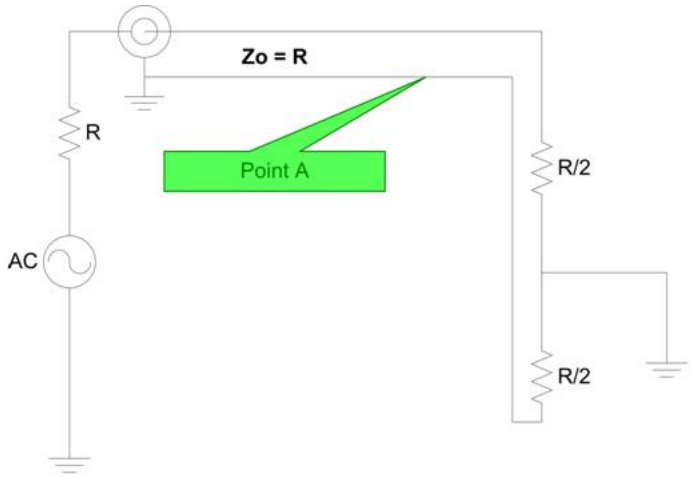
Photos etc. from the Second Article:



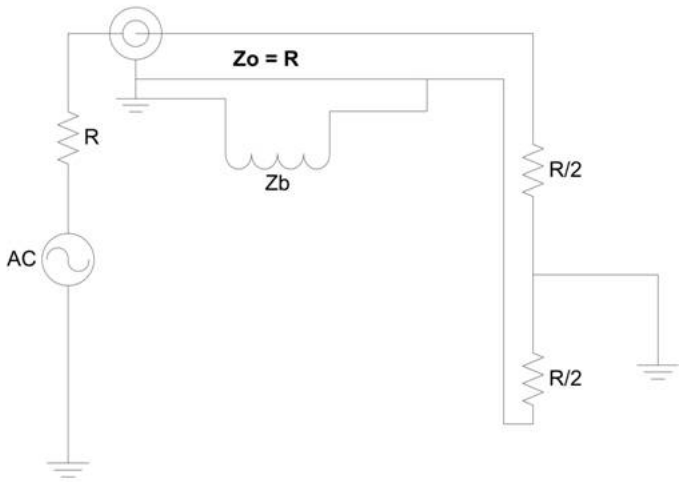


a/. Unbalanced

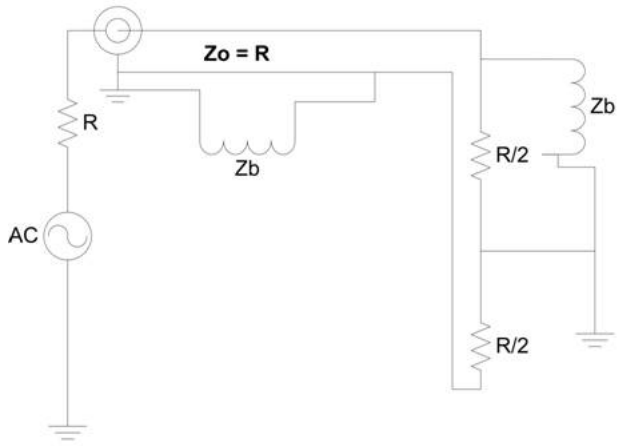
b/. Balanced



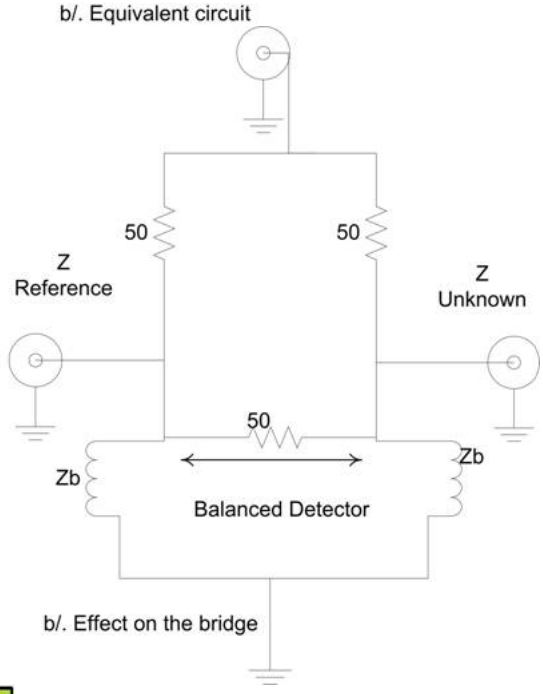
a/. Unbalanced to Balanced



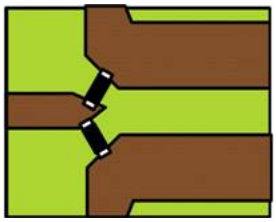
b/. Equivalent circuit

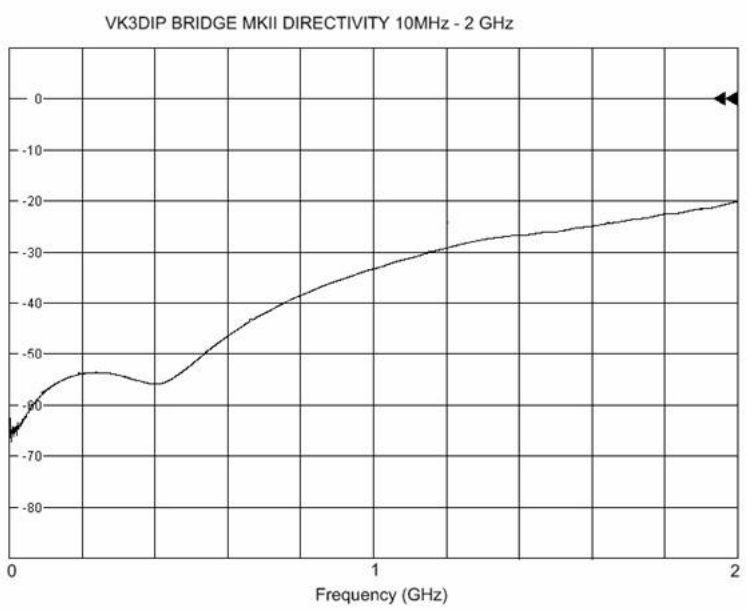


a/. Adding balancing impedance.

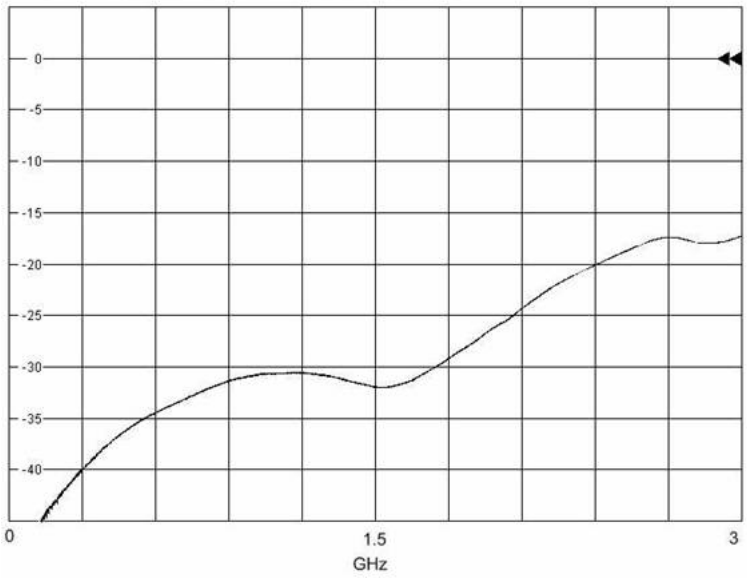


b/. Effect on the bridge

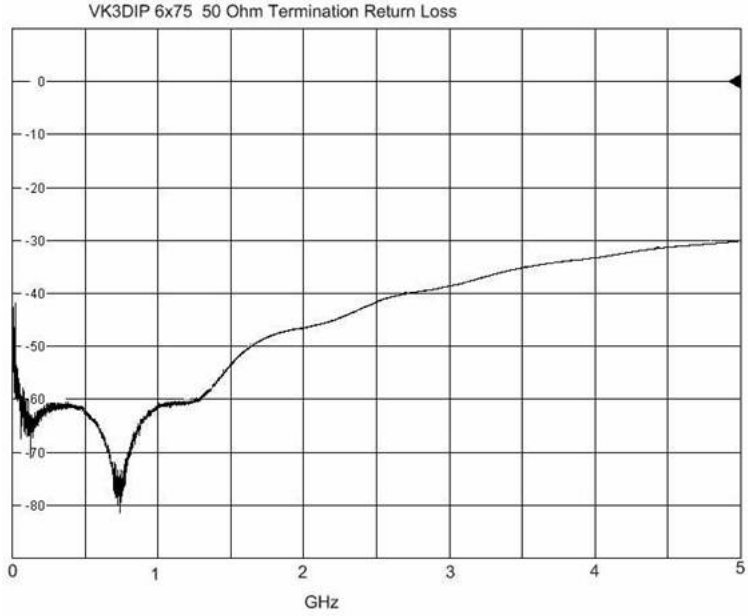


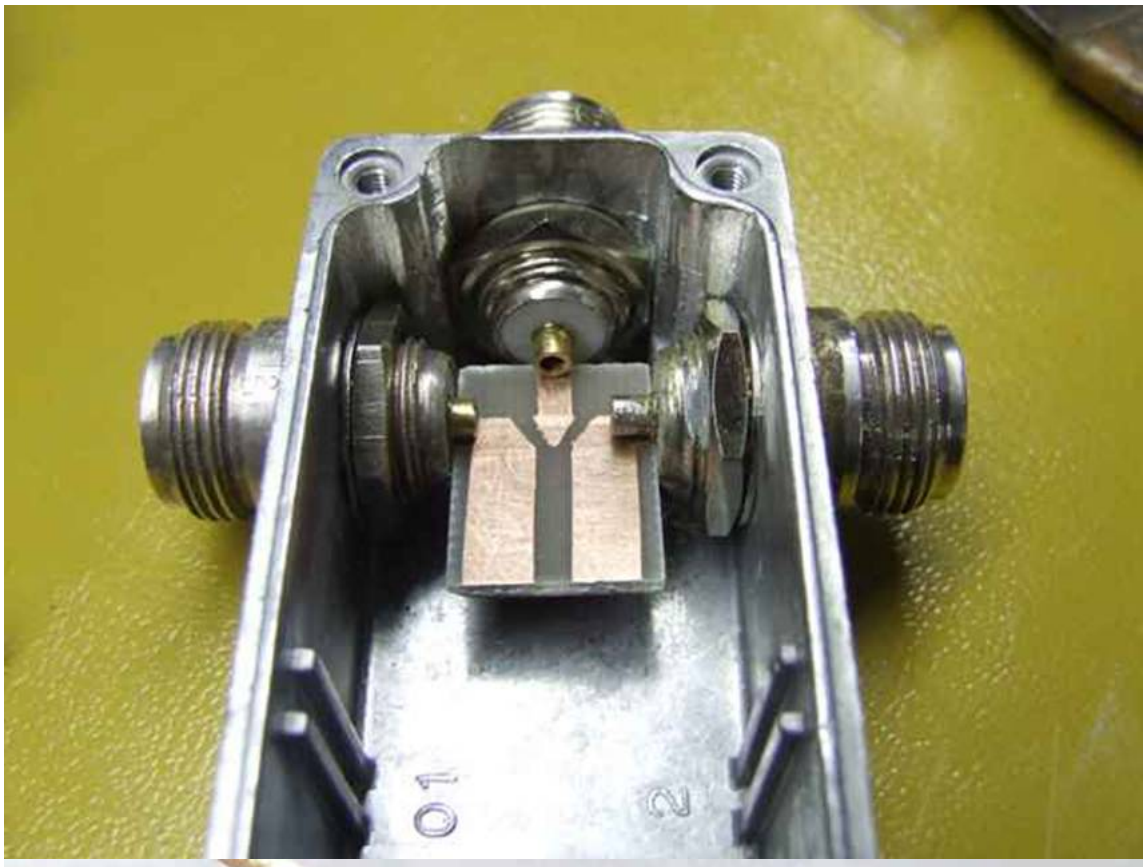


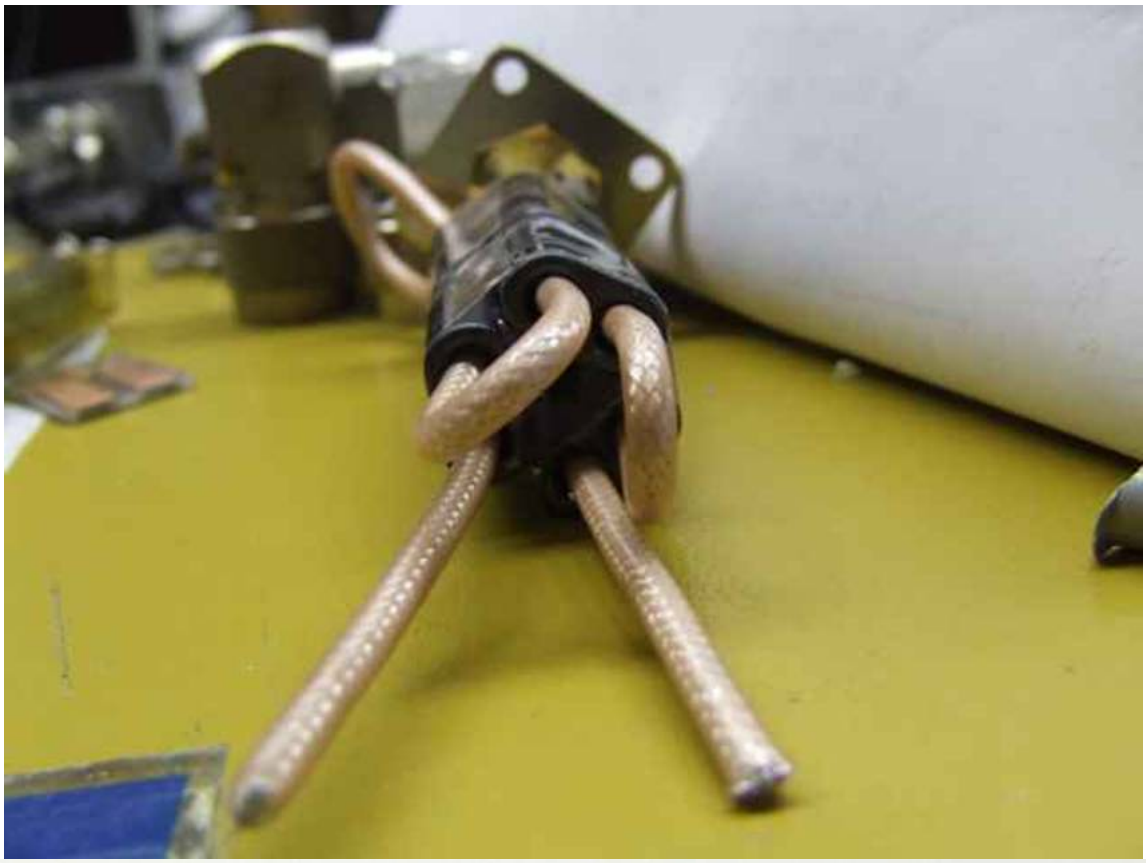
VK3DIP Mark III Return Loss Bridge Directivity 0 - 3GHz

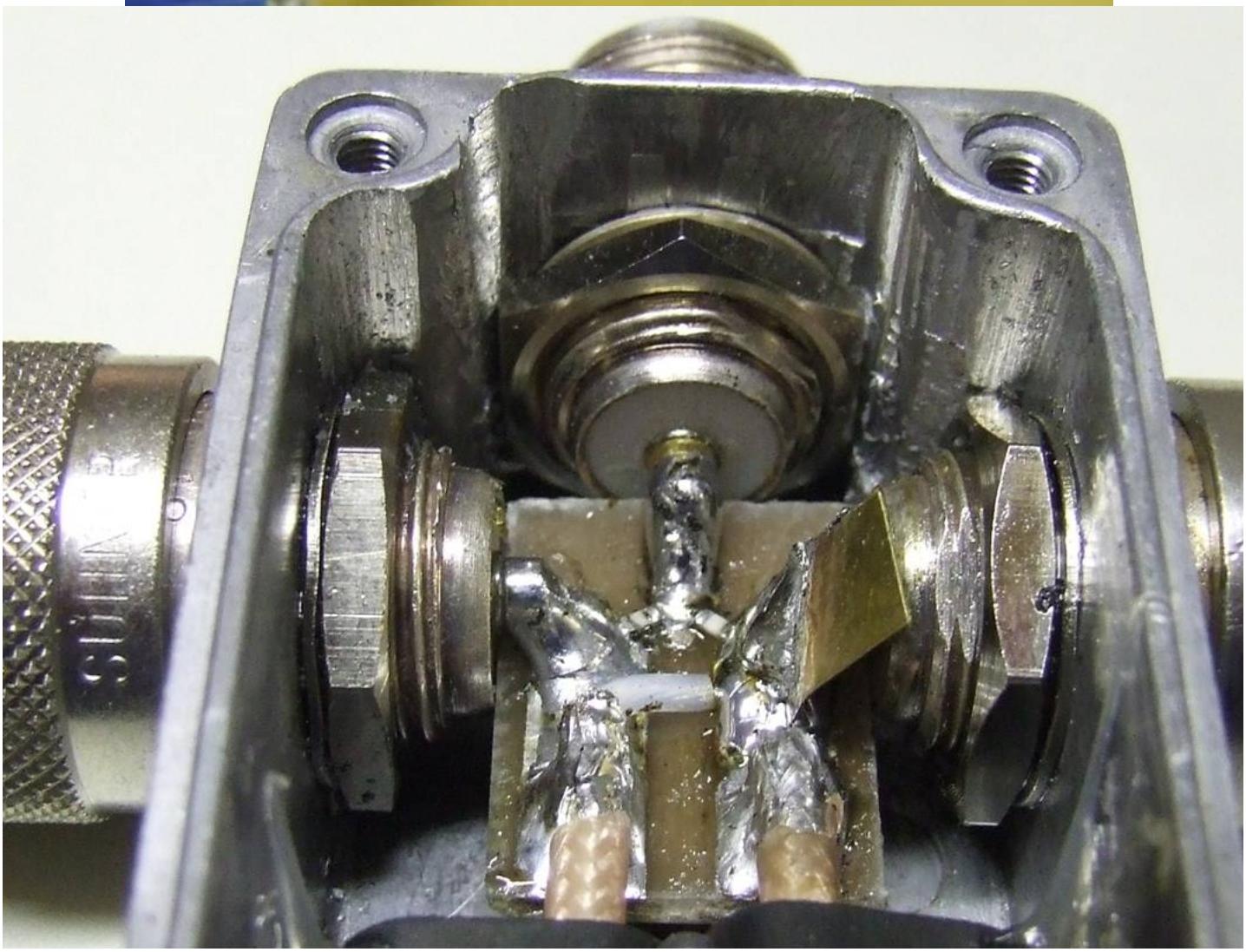


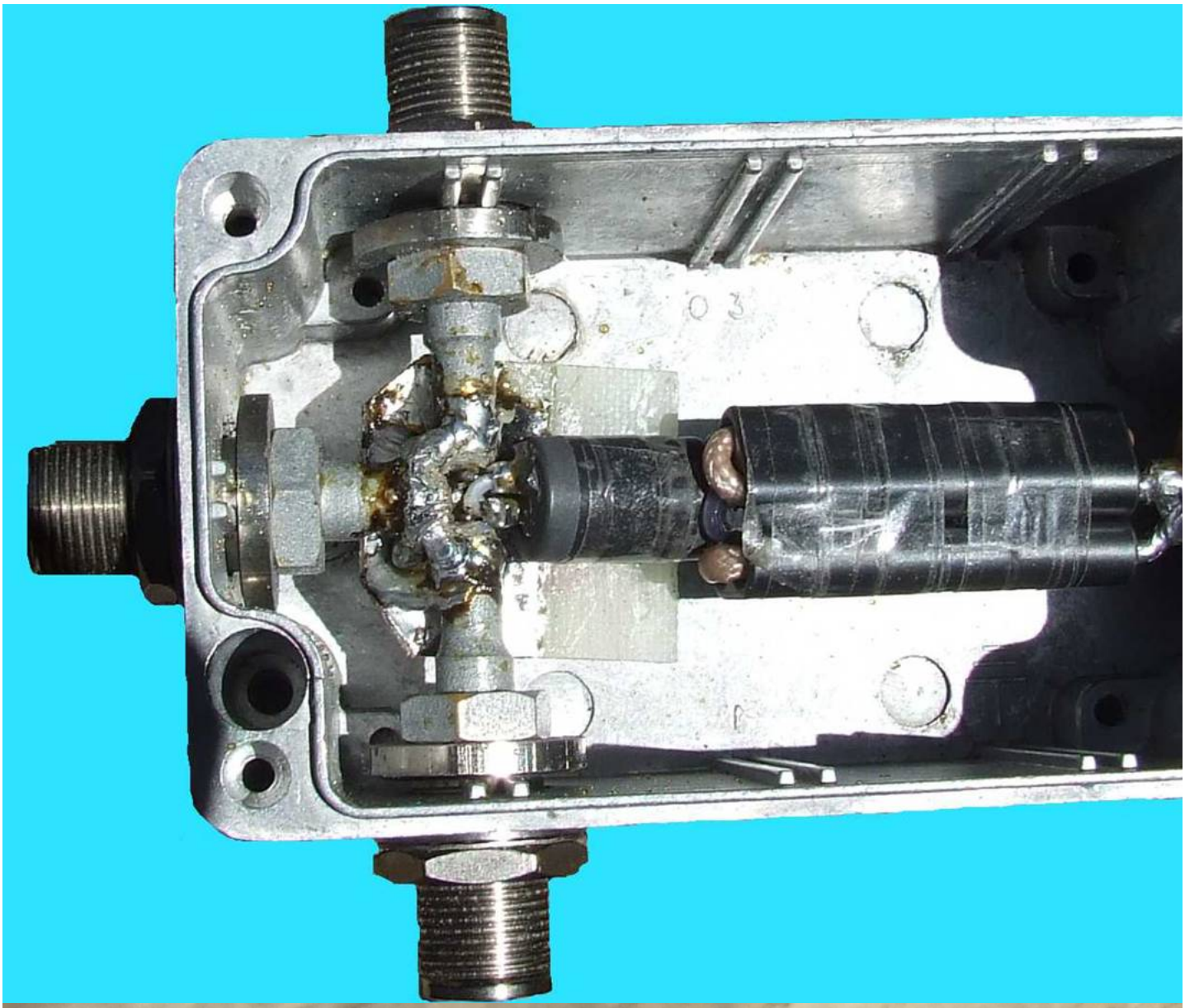
VK3DIP 6x75 50 Ohm Termination Return Loss



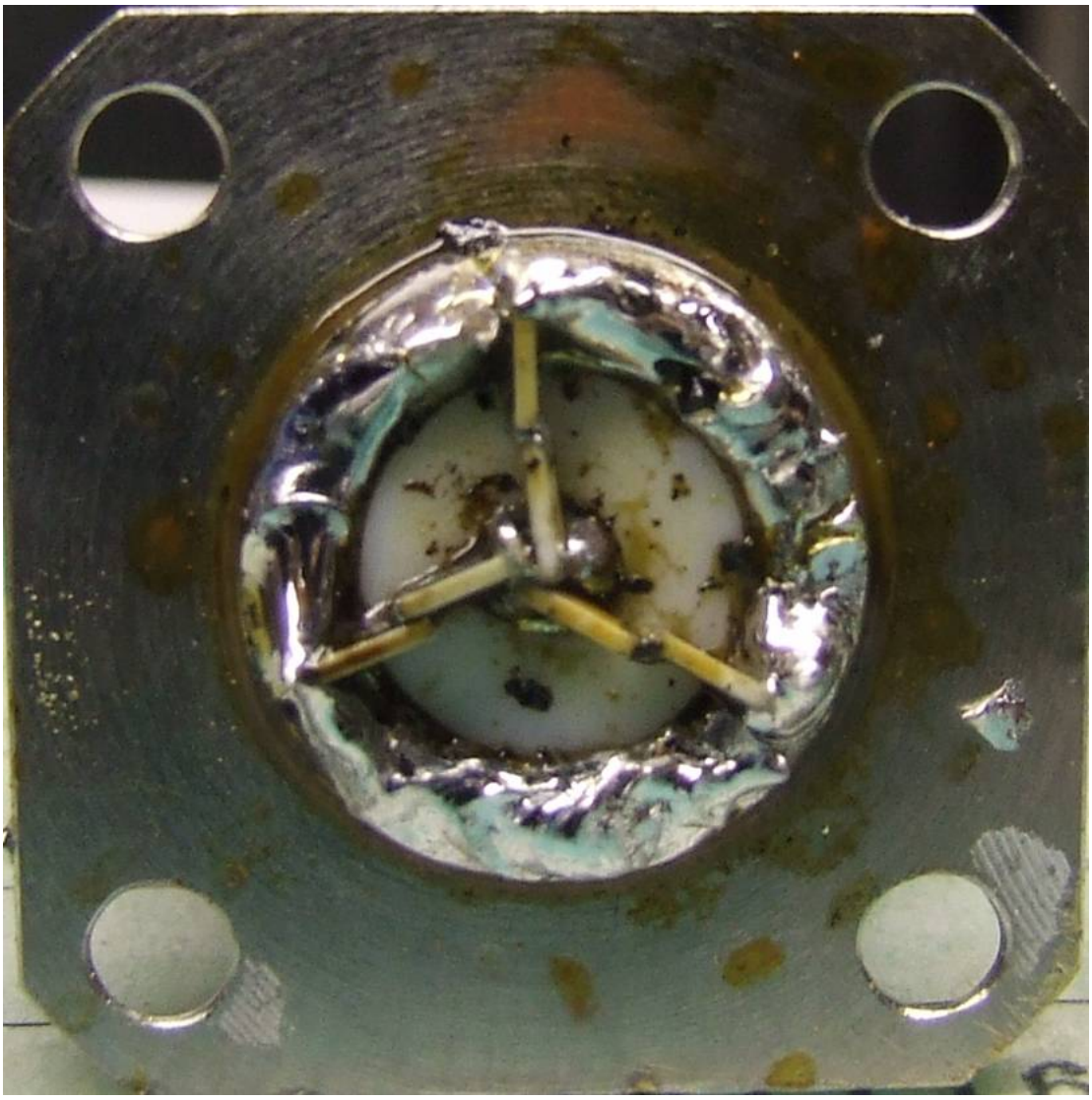

0 1 2








R 16 1 47 05



Projects

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