

Notes:

- 1) Antenna may be deployed in a T or inverted-V configuration
- 2) Precise length is not critical for the 21m legs
- 3) Spacing distance must be at least 1.2m
- 4) Keep any segment of the antenna wire at least 2m from the ground
- 5) Suggested height of the midpoint is 12m / 42ft for best results

Note: Dimensions are not to scale for clarity of design

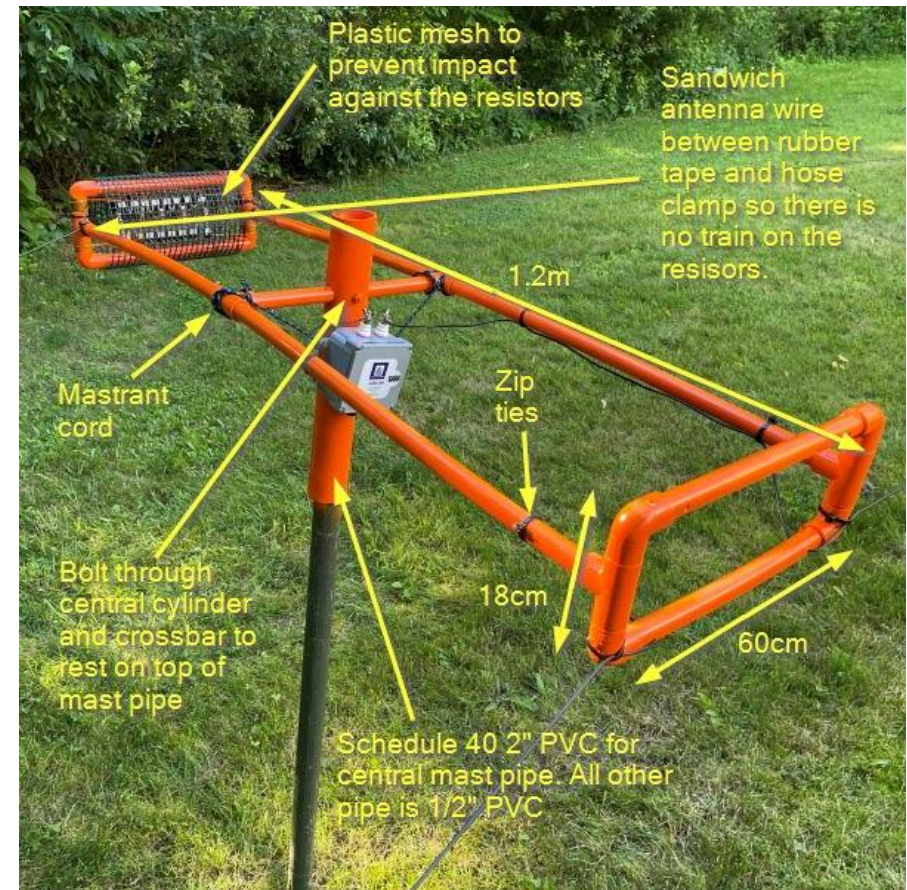
Title: Terminated Folded Dipole
Freq: 160m – 10m
Author: Jason McCormick N8EI
Date: 2022-01-05
Revision: 3

Bill of Materials

- 92m / 300ft of
- Ohmite AP101 220R J (Digikey #AP101220RJ-ND) [220Ω 100W resistor] – Qty 16
- Array Solutions AS-800 16:1 Balun
- Copper strap or small diameter copper pipe – Qty 5
- Schedule 40 PVC ½" pipe, 1.2m length – Qty 6
- Schedule 40 PVC ½" pipe, 0.6m length – Qty 4
- Schedule 40 PVC ½" pipe, 60cm length – Qty 5
- Schedule 40 PVC ½" pipe, 3.5cm length – Qty 8
- Schedule 40 PVC ½" T-joint – Qty 10
- Schedule 40 PVC ½" 90° elbow joint – Qty 8
- Schedule 40 PVC 4" ID pipe, 50cm length – Qty 1
- Hose Clamp for 1" – Qty 2
- Zip Ties – Qty 14+
- Rubber/self-vulcanizing tape
- Nylon or paracord rope for end tie-offs and balun mount
- PVC glue

Assembly

- 1) Build PVC center frame as shown to the right
- 2) Assemble resistor termination pack and mount it in one end of the center frame. Use nylon rope and tape to secure the termination pack into place but enough flex that twisting of the PVC does not pop any of the solder joints.
- 3) Secure the balun to the center pipe using rope through the eyelets
- 4) Attach T-joints to the each end of two of the 1.2m PVC spreader bars
- 5) Cut the wire in half and run half of the wire through the center of the 1.2m PVC from step 4 and bring each end out of the T connector making a U shape
- 6) Connect each end of the U shape for both segments of wire from step 5 to the resistor pack on one end and the balun on the other. This should form a rectangle of wire ~42m long and 1.2m wide.
- 7) Using zip ties, rubber tape, and pipe clamps make sure there is no strain on the resistors or balun. Attach the other two spreader bars at even spacing along each leg of the antenna.
- 8) Run a length of nylon rope or paracord through the end bars of each leg for the tie-offs/ staking. If making an inverted-V shape, make sure there is sufficient tie-off length to keep the end of the antenna at least 2m off the ground.



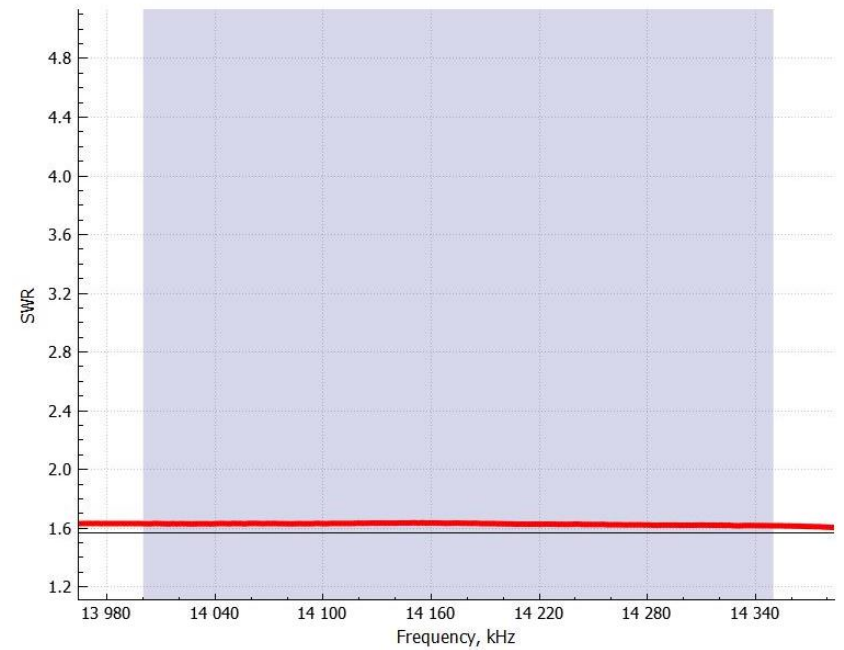
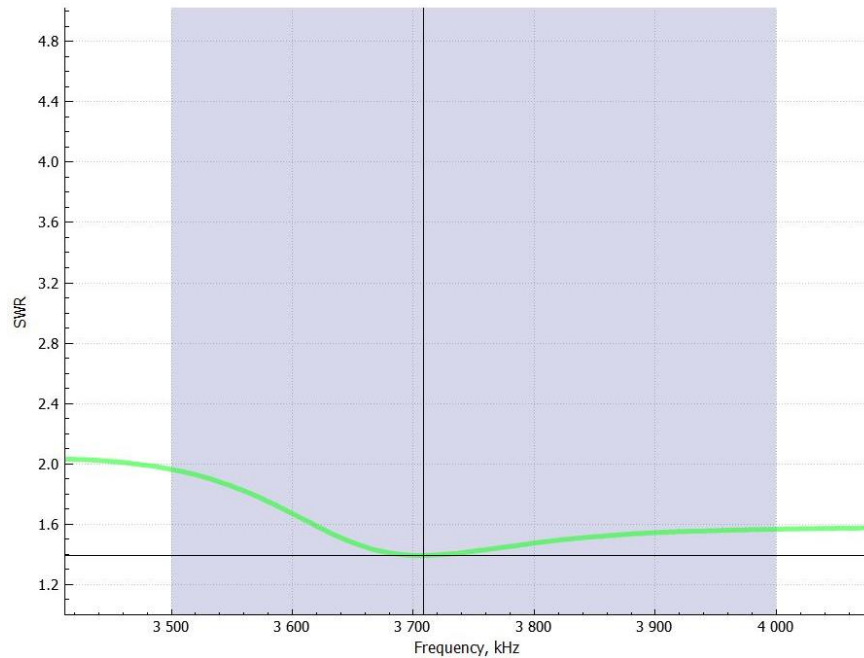
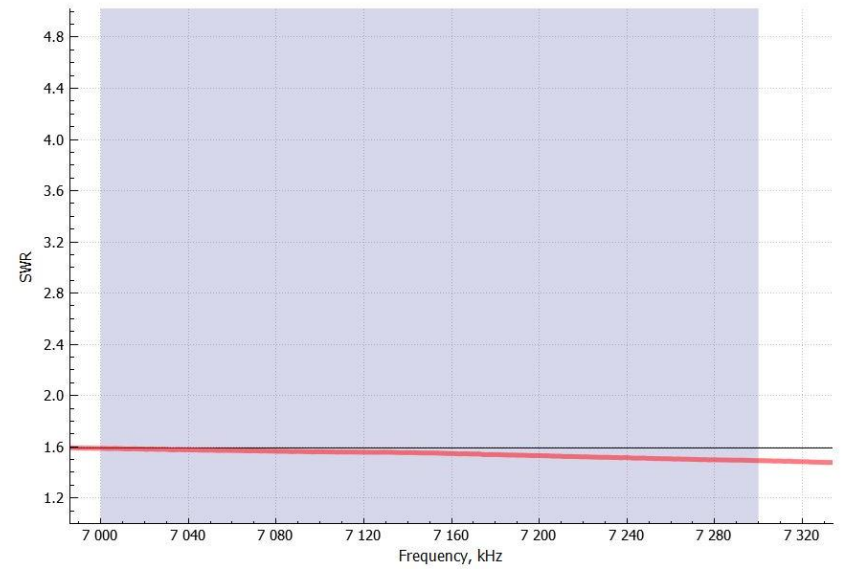
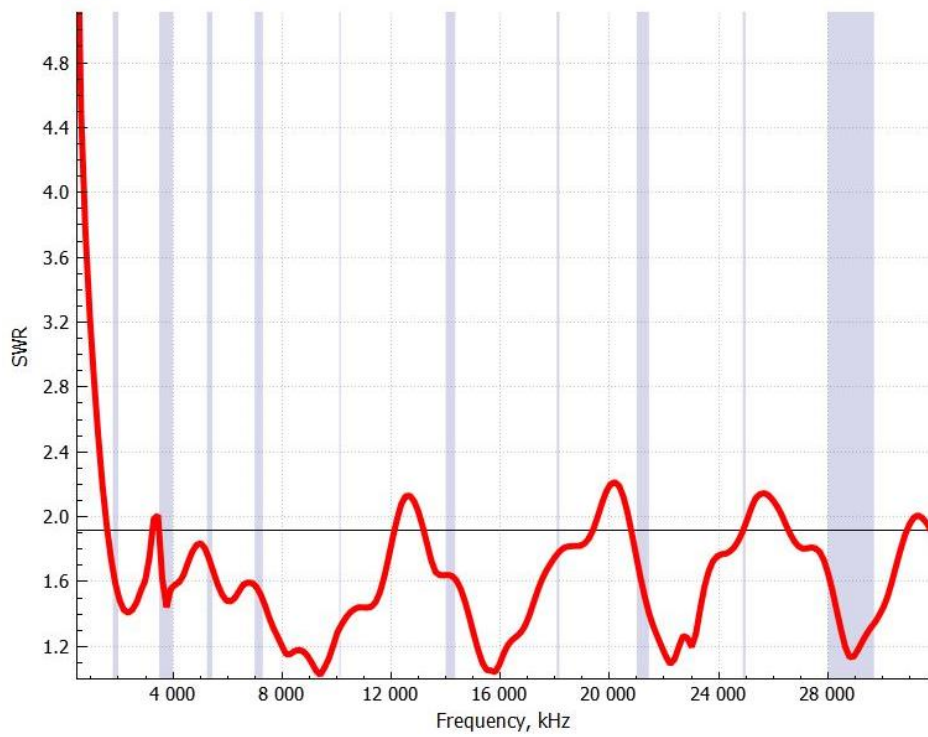
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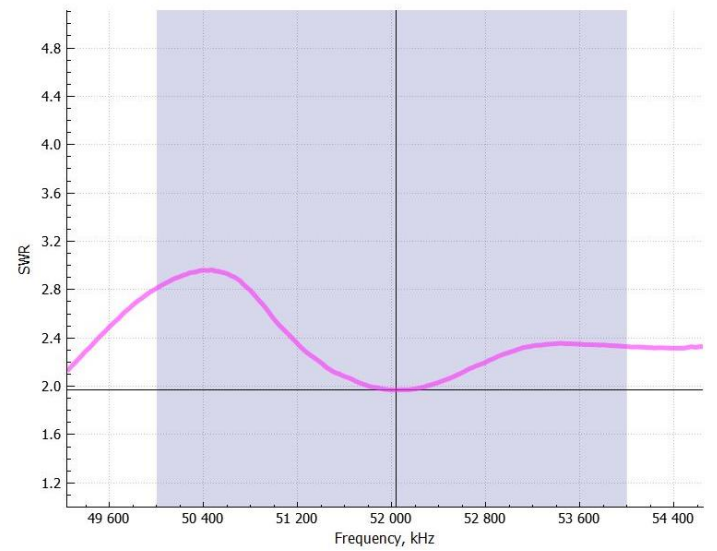
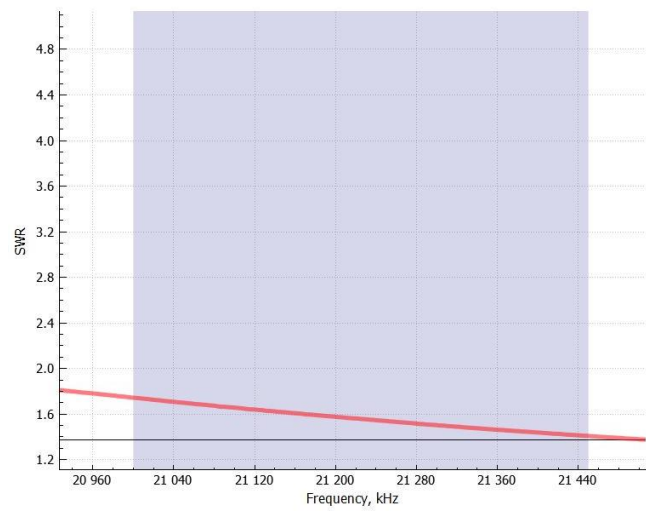
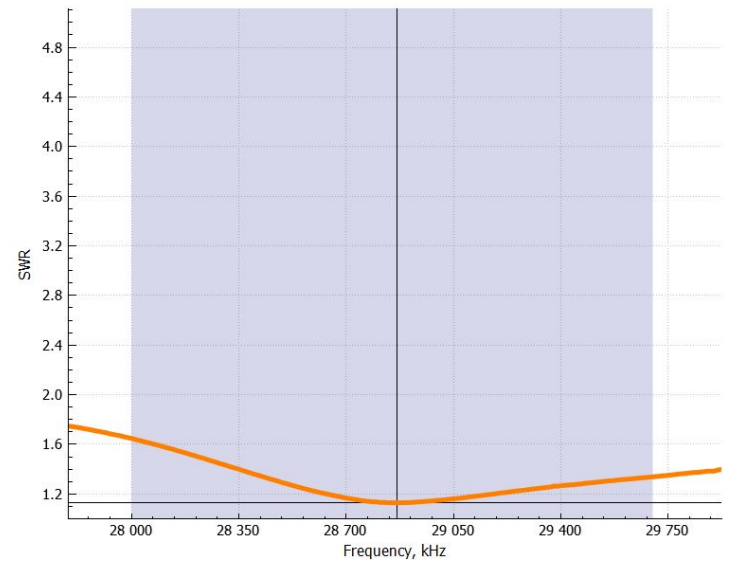
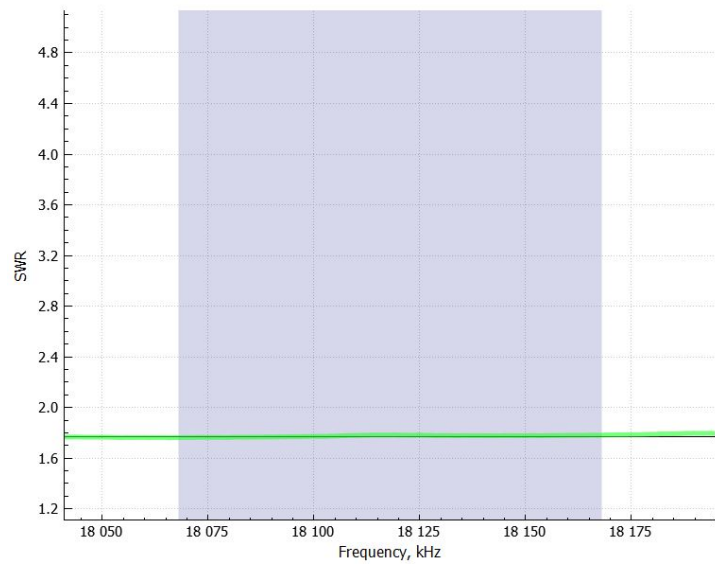
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