Lightweight VHF or UHF Dipole Antenna: 2 Meter Example

Dipole Dimensions

Length	Feet	Inches
Total	3.20438206	38 7/16
Each Dipole	1.60219103	19 ¼

Materials

- ❑ 2 – Aluminum welding rod 5/32 inch (4 mm) – 3/16 inch (5 mm) use 3/16 inch as is more common. Amazon: SÜA - ER5356 - TIG Aluminum Welding Rod - 36" x 3/16" (2 lb. Pack), https://www.amazon.com/SÜA-ER5356-Aluminum-Welding-Pack/dp/B07Y5G4HLN/ref=sr_1_4?dchild=1&keywords=3%2F16+aluminum+rod&qid=1612629822&sr=8-4
- ❑ 1 – Waterproof 3-way junction box. Amazon: Junction Box Outdoor Waterproof IP68, Larger 3-Way Plug Line External Electrical Junction Box, https://www.amazon.com/Junction-Waterproof-Electrical-Connector-4mm-14mm（Larger-1/dp/B07ZKCYFY6/ref=asc_df_B07ZKCYFY6/?tag=&linkCode=df0&hvadid=385629037133&hvpos=&hvnetw=g&hvrand=12092744438817517343&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvloc
- ❑ 1 – 3 foot length of Coax RG8X
- ❑ 1 – SO-239 connector

Procedure

- ☐ Step 1. Cut two aluminum rods to 19 ¼ inches using a strong wire cutter.
- ☐ Step 2. Cut coax back about two inches. Separate the braid and twist the braid for one side of the dipole.
- ☐ Step 3. Cut back center insulation about a ¼ inch.
- ☐ Step 4. Solder braid to one of the rods and the center wire of the coax to the other.
- ☐ Step 5. Check what junction box washers may need to go on to each of the dipole sides and the coax to seal the junction box. Add them now.
- ☐ Step 6. Insert all parts into the junction box. If the junction box is loose around the parts, cut a piece of foam cloth to fit inside to make the fit tight.
- ☐ Step 7. Complete the process of sealing the junction box.
- ☐ Step 8. Solder the SO-239 on to the end of the coax.

Video

https://www.youtube.com/watch?v=dOSpHzweC9U&t=38s