

HB9CV-III For Receiving 82.5MHz Built Being Based On The Data By JA1CPA

Manufacturing & Review



Condition1. Set the phase gap between the radiator and the reflector to 225° , the best value by MMANA (requoted from the site by JA1CPA).

Condition2. Details about the phase gap and the space between the radiator and reflector for HB9CV-II are all repeated.

Condition3. The antenna is built on the veranda of the second floor of my house. HB9CV-II is built on the housetop of the three-story building next door. The place is close to a utility pole and power lines that are suspects of strong noises.

Manufacturing process: The HB9CV-II with 1635mm elements turned out to be resonant with 80.5MHz. Therefore I shortened them into 1600mm for the next antenna. However it turned out to be resonant with 83.8MHz. I lengthened them into 1620mm but it was resonant with 83.5MHz. Why?? Were the first data wrong? Belatedly I gave up deciding the length by applying the shorting rate I gathered.

I returned to the cut-and-try method. Having notched the ends of elements in units of 5mm in order to read the increased length with sleeves, I set up the antenna provisionally and carried out the adjustment while reading the resonant frequency with a dip meter. The exact element length needed turned out to be **1690mm**. I dismantled it again, fixed the sleeves with bolts, painted and installed it on to the mast to complete as HB9CV-III.

Review: 1. The gain monitored was 56db⁺. It was 47db with HB9CV-I. 2. The tuner monitor showed one simple peak. With HB9CV-II it showed three peaks. 3. Rain, even when it started, it caused no noise nor difference on the monitor. 4. Warning indicator lights occasionally. There seem to be some strong noises other than the power line noises.