2m/70cm/23cm TRI-BAND HIGH PERFORMANCE RADIALLESS MOBILE GAIN WHIP ANTENNA
Hold over structure.
NR2000NA is for U.S. amateur bands.

NR2000NA

OPERATING INSTRUCTIONS

Description

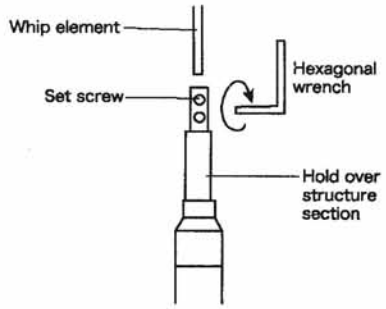
1.Since the antenna employs radialless structure which does not require any ground planes, it works well at temporary fixed station, bicycle or with handheld transceiver.
2.The antenna employs gold plated connector center conductor.
3.Hold over structure permits the antenna to be tilted for any direction to eliminate troublesome antenna detachment when your car is parked in the garage.
The antenna can be used to operate on all three bands simultaneously by using optional DIAMOND's antenna triplexers.

Installation

Since the antenna employs radialless structure, it works well on virtually any place on your car.
In any case, use DIAMOND's genuine gutter or trunk lid bracket or magnetic base with N receptacle.

Adjustment

The antenna is factory adjusted at center frequencies on all 2m, 70cm and 23cm bands so that it can be used as it is.
If readjustment of the center frequency is required, it can be adjusted by putting the whip element in and out from the element holder bracket.
Loosen two set screws with hexagonal wrench attached and put the whip element in and out from the holder to get lowest VSWR at desired frequency. Refasten those set screws firmly after readjusting.



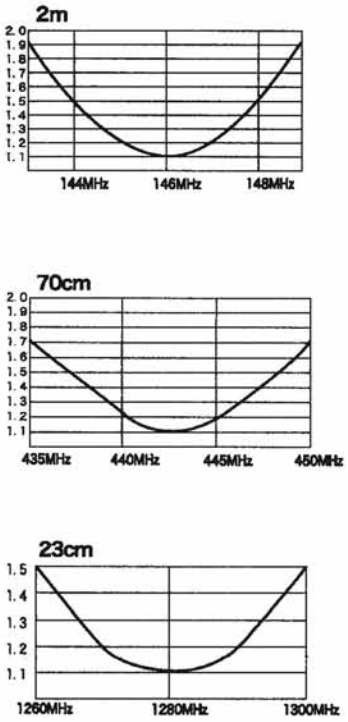
To tilt the antenna

If the antenna has to be tilted in order to park the car in a garage, pull the antenna up at tiltable whip section and incline it for desired direction. Be sure not to drive the car with the antenna tilted. Since tilted antenna moves freely for any direction, it may hurt pedestrians or cars around your car if the car is being driven with antenna tilted.

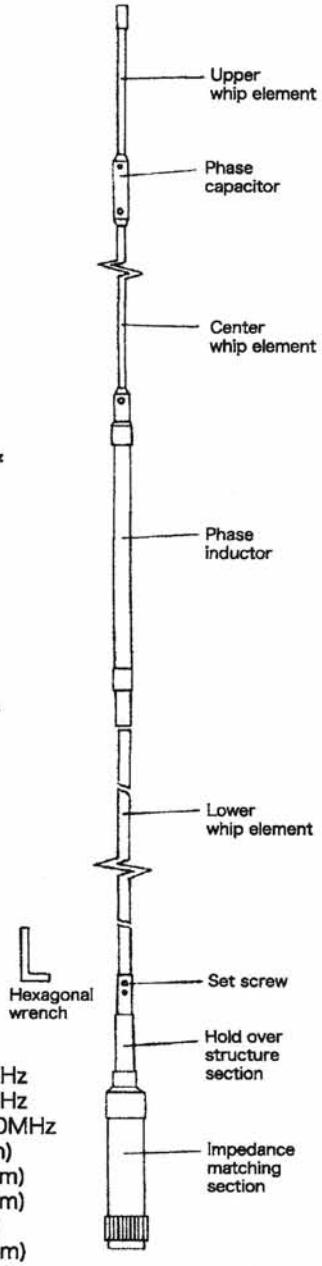
Note

1. Since set screws on the antenna may be loosened due to the vibrations during driving, be sure to fasten those screws after several drives especially the antenna is right off from the package.
2. Since the antenna employs DC ground structure in its impedance matching section, circuit across the lower whip element and ground section of impedance matching section is short-circuit when measured by volt-ohm meter. Circuit across the center conductor of impedance matching section and lower whip element, however, is open-circuit.
3. Be sure to use good and reliable coaxial cable and connector,since quality of those parts effect apparently to VSWR and wave radiation of the antenna especially on 23cm band.

VSWR charts



Part name



Specifications

Frequency	144-148MHz 435-450MHz 1260-1300MHz
Gain	3.15dB(2m) 6.3dB(70cm) 9.7dB(23cm)
Max. power rating	100W(2m) 100W(70cm) 50W(23cm) 100W(If trnsmitted simultaneously)
Impedance	50ohms
VSWR	Less than 1.5:1
Length	0.99m(39.0")
Weight	300g(0.66lbs.)
Connecter	N male
Type	C-Load radialless gain whip antenna(2m) Two 5/8-wavelength C-Load phased-element radialless gain whip antenna(70cm) Five 5/8-wavelength C-Load phased-element radialless gain whip antenna(23cm)