



## Park-5™

### 5 Band Vertical Antenna

portable, permanent, DXpedition  
2' sections, 500watts, pre-tuned  
add your rig and you are on the air

20-17-15-12-10 meter amateur bands  
Manual Band Change with (2) jumpers

**www.n6bt.com**

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e-mail to: tom@n6bt.com

\*Patents in process



Vertical

Hub  
(enclosure)

(3) 2-part legs

Coax feed line  
(screws into hub)



## Park-5™ Quick Assembly



**Step 1**  
all parts



**Step 2**  
assemble  
3 legs



**Step 3**  
attach  
legs



**Step 4**  
extend  
and  
insert  
vertical



**Step 5**  
attach coax/balun

**Park-5™ is ready to go**



## HOW TO SELECT YOUR BAND

The HUB contains the coils that move the frequency up and down through the 5 bands.

\_\_\_1) The blue jumper wires on each side select your band.

\_\_\_There are 4 screws on each side of the HUB where the jumpers can connect.

\_\_\_2) The short, blue jumper on the bottom selects when the hairpin matching is used.

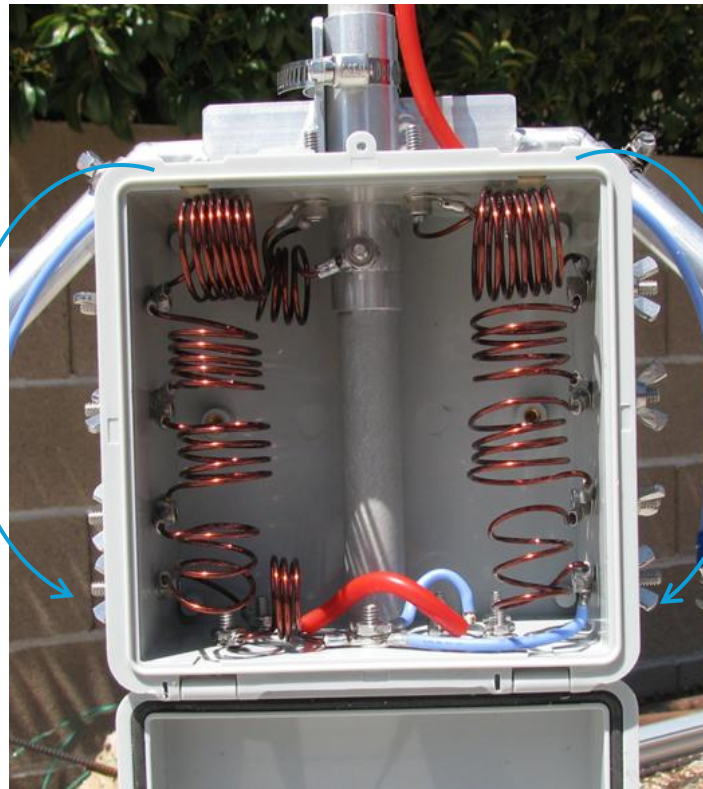
20 mtrs – no  
connection  
Jumper hangs  
loose

17 mtrs

15 mtrs

12 mtrs

10 mtrs



20 mtrs – no  
connection  
Jumper hangs  
loose

17 mtrs

15 mtrs

12 mtrs

10 mtrs

Hairpin jumper  
connect to bottom  
screw when on  
12-15-17-20 mtrs

When on 10 mtrs,  
no connection  
(hangs loose)

Shown connected  
for 12-15-17-20.



Coax feed line connection  
Attach the supplied coax  
and balun here



**QUICK SET-UP – ONLY NEED ONE TOOL → flat blade screwdriver or 1/4 “ nut driver**

\_\_\_\_\_ A. Assemble the (3) base legs.

- \_\_\_ 1) Each leg is 2’ of aluminum and 2’ of fiberglass
- \_\_\_ 2) Insert the “fat” end of the aluminum section into the fiberglass
- \_\_\_ 3) Snug the compression clamp on each leg



\_\_\_\_\_ B. Insert each leg on the (3) solid rods at the top of the HUB

- \_\_\_ 1) Snug the compression clamp on each leg





\_\_\_\_\_ C. Locate the five (5) vertical sections – they are telescoped together. The smallest section is the top ( ¼" diameter tube) and the sections get larger as they go down to the hub.

- \_\_\_ 1) Each section is marked with a ring around the tube at its correct exposed length.
- \_\_\_ 2) Loosen the compression clamp on the bottom (largest section) first.
- \_\_\_ 3) Pull the second section out to its mark and snug the compression clamp.
- \_\_\_ 4) continue extending the vertical sections (total length is 109").
- \_\_\_ 5) Insert the extended vertical into the top aluminum tube of the hub. Loosen the compression clamp first, insert, snug the clamp.



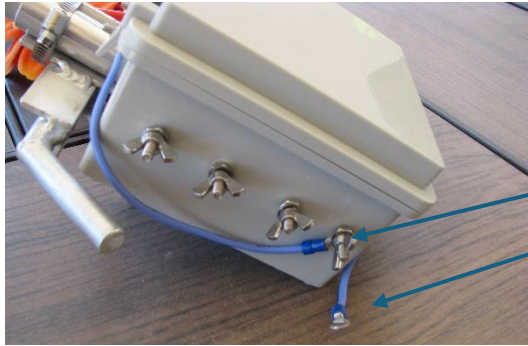
\_\_\_\_\_ D. Attach the coax feed line on the bottom of the HUB (the balun end).

- \_\_\_ 1) Set the jumpers to your band of choice and turn on your radio.
- \_\_\_ 2) YOU ARE ON THE AIR!

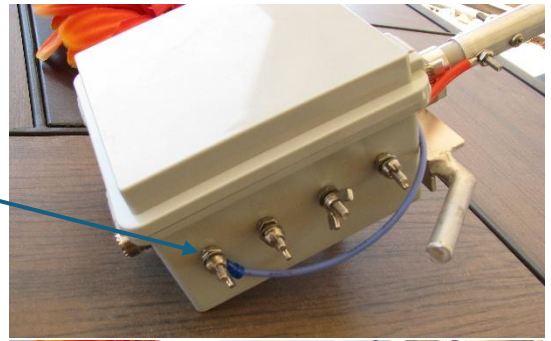




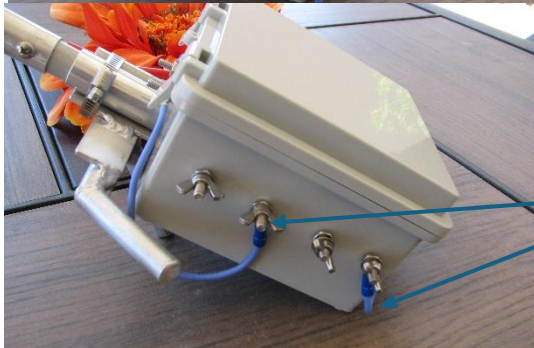
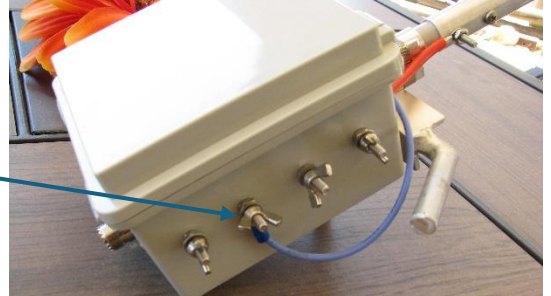
## TUNING DETAIL JUMPERS and HAIRPIN



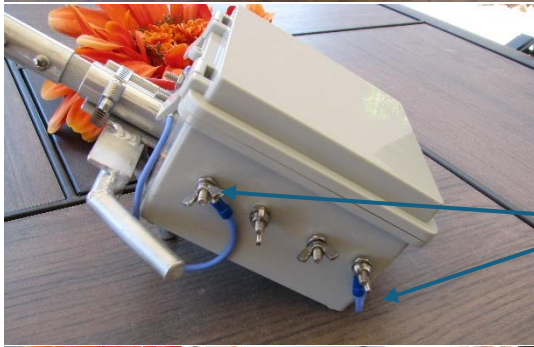
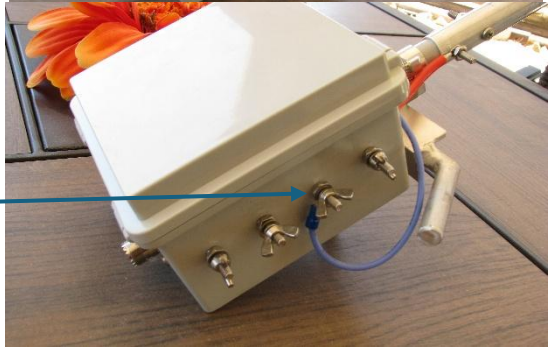
10 mtrs  
jumper  
hairpin  
not attached



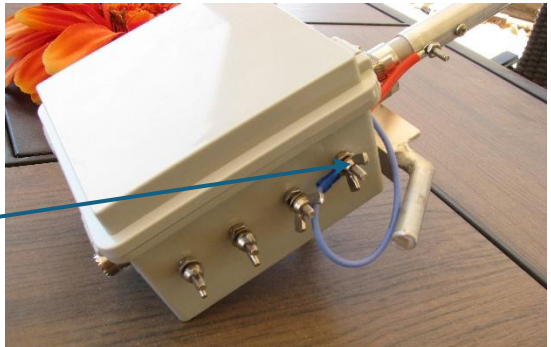
12 mtrs  
jumper  
hairpin  
attached



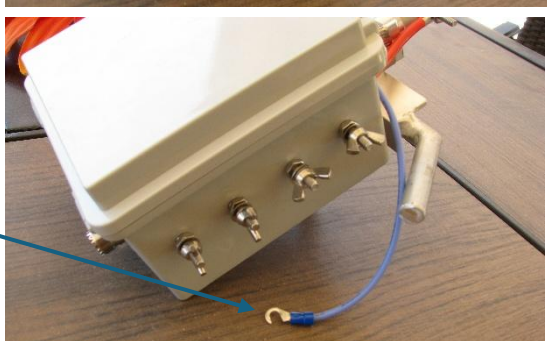
15 mtrs



17 mtrs

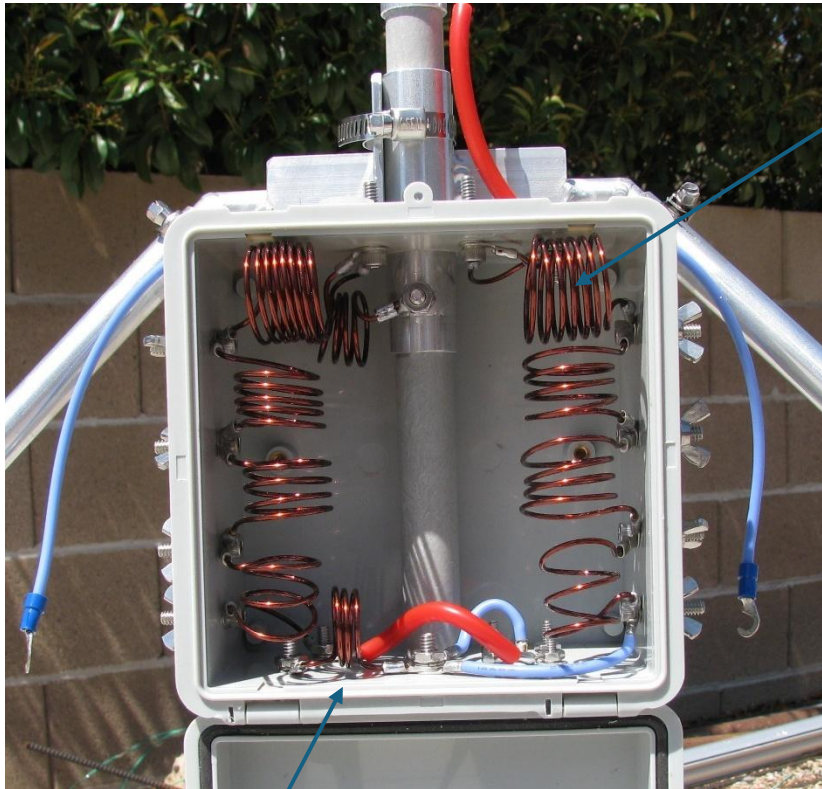


20 mtrs



## TUNING NOTES

**PARK 5™** has been pre-tuned on all the 5 bands in a park, on green grass and also on open dirt. The VSWR will be less than 1.3:1 in the band and the 2:1 VSWR will cover all bands, except for 20 mtrs. This is because the vertical is full-size on 10 mtrs, so it is half-size on 20 mtrs. The 2:1 bandwidth on 20 mtrs is about 200 kHz and is set towards the lower part of the band to include CW, FT-8 and part of the SSB portion. If the main operating is on 20 SSB, **PARK 5™** can be easily shifted upwards. This is done by slightly spreading the turns on the 20 Mtr vertical coil to reach the desired section of the band. This will not affect the other bands.



This is the coil to adjust for 20 mtr.

Expand (make wider) VERY little to move the 20 mtr frequency UP

Compress (make closer) VERY little to move the 20 mtr frequency DOWN

If you have questions on tuning, please send us an e-mail. Thank you.

## HAIRPIN MATCH

A hairpin match steps up the feed point impedance, such as 30 ohms to 50 ohms. **PARK 5™** is natively a 10 mtr vertical system, with a vertical height designed to be longer (taller) than the typical  $\frac{1}{4}$  wavelength. This makes the 10 mtr feed point slightly above 50 ohms, so there is no need to transform it up to 50 ohms. On the other bands, (all lower in frequency), **PARK 5™** is electrically short. It is made electrically correct by the coils inside the HUB and being short makes the feed point lower than 50-ohms. To move it up, the hairpin is inserted across the feed points on these lower bands. This steps up the feed point on the lower bands for an acceptable VSWR.

## PROXIMITY (close to other things)

An antenna will “see” everything near it and be affected in some way (i.e. tuning). This includes metal objects like fences, stucco walls; sometimes trees and shrubs. A good rule is to keep an antenna a  $\frac{1}{4}$  wavelength from all objects, which means 35' in all directions for an antenna covering 20 mtrs. Close-in objects often cause the tuning to be moved down.



**OVERVIEW – for additional information, kindly refer to our website [n6bt.com](http://n6bt.com) or send an e-mail**

Congratulations on your purchase of **PARK-5™**, the portable 5-band vertical antenna from Next Generation Antennas, started by N6BT (founder of the legendary Force 12, Inc.). Since 2010, the focus has been on antennas for limited space and time. **PARK-5™** is designed to meet the requirements for quick deploy, portable operation, with minimal environmental impact, highest efficiency in the smallest package and additional features including:

- ☐ Complete antenna system – just add your radio
- ☐ set-up is about 5 minutes with one tool (flat blade screwdriver or 1/4" nut driver)
- ☐ all 5-bands are pre-tuned, move 2 jumpers to change bands
- ☐ no ground radials, elevated radials, ground rods, or Faraday carpet
- ☐ antenna is aluminum, no telescoping stainless steel or whip
- ☐ all pieces are 2' maximum length, inductors are high efficiency air-core and copper
- ☐ efficiency is more than 85% on all bands
- ☐ integrated tripod with a wide, stable footprint
- ☐ current balun and 25 feet of 50-ohm coax feed line with UHF connectors included
- ☐ power rating 500 watts (can be increased)
- ☐ use the provided equal-length coax and phase two (2) **PARK-5™**'s for 3-4dB gain

**SPECIFICATIONS:**

**Overall height:** vert = 109" (9'1") + base = 140" (11'8")

**Weight:** ~6#

**Efficiency:** minimum 85% all bands; 20 is >85% and rising to >98% on 10mtrs

**Matching system:** hairpin coil on 20-12 mtrs, direct feed on 10mtrs

**Power handling:** 500w with supplied #31 toroid core balun. Can run more power (1kw) with higher capacity 1:1 balun.

**Band coverage:** 10mtrs >1MHz, full coverage on 12-15-17mtrs, 200kHz on 20mtrs

**Thank you for selecting our product and let us know how it performs for you!**

**-----NOTICE-----**

**BE SURE THIS ANTENNA DOES NOT COME NEAR TO, OR IN  
CONTACT WITH POWER LINES, AS YOU CAN BE  
SERIOUSLY INJURED OR KILLED.**

**Supplier: [www.n6bt.com](http://www.n6bt.com) Warranty and Limitation of Liability**

The supplier warrants its products for a period of one year from date of purchase. This warranty covers defects in manufacturing and workmanship. The supplier has the discretion of honoring the warranty if the product appears to have been abused, used in a manner that exceeds the specifications of the unit, or a use for which the product was not designed. This warranty does not cover transportation, installation, punitive, or other costs that may be incurred from warranty repair, or installation. The supplier must be notified and warranty repair authorized (only by the supplier who will issue a return material authorization, an RMA) before the supplier will accept any product returns. Please advise the date of purchase, model number, serial number if there is one and a brief description of the problem. There is a 30% restocking fee on products returned unused with an RMA issued by the supplier, at its sole discretion.

The customer, installer and user of these products individually and collectively acknowledge that these products can cause injury or death and individually and collectively accept full responsibility and liability for any and all personal and property damage (direct, indirect and punitive) caused during installation and/or use of these products and hold the supplier harmless for such damage.  
(warranty notice date 4/1/2010)