



**IØJXX** di Donzello Rosanna





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## 4JXX2 BACK

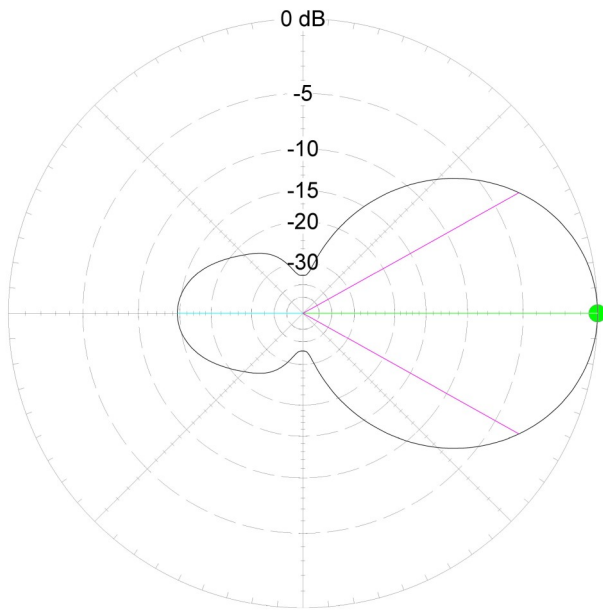
Item		Q.ty	Item		Q.ty
Stainless steel nut M6		2	U Bolt and steel stainless	35 ÷ 60 mm Ø Boom	2
Lock washer 6 mm Ø		2	Clamp steel stainless <a href="http://www.i0jxx.com">www.i0jxx.com</a>		1
Flat washer 6 mm Ø		2	Section boom 20 mm Ø	110 cm.	1
Nylon nut M8		3	Folded dipole with N connector		1
Inbuss key 3 mm.		1	Horizontal element <b>1÷4</b>		3

Total Field

EZNEC Pro/2+

Total Field

EZNEC Pro/2+



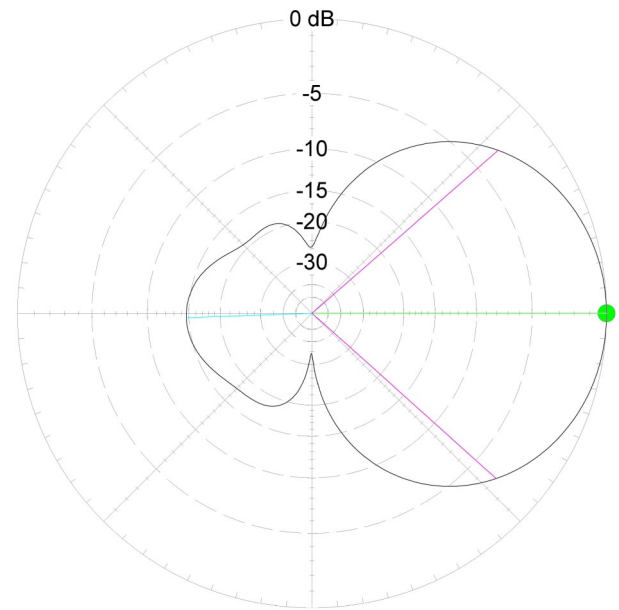
4JXX2

144,3 MHz

Azimuth Plot  
 Elevation Angle 0,0 deg.  
 Outer Ring 9,24 dBi  
 3D Max Gain 9,24 dBi  
 Slice Max Gain 9,24 dBi @ Az Angle = 0,0 deg.  
 Front/Back 14,63 dB  
 Beamwidth 58,4 deg. -3dB @ 330,8, 29,2 deg.  
 Sidelobe Gain -5,39 dBi @ Az Angle = 180,0 deg.  
 Front/Sidelobe 14,63 dB

Cursor Az 0,0 deg.  
 Gain 9,24 dBi  
 0,0 dBmax  
 0,0 dBmax3D

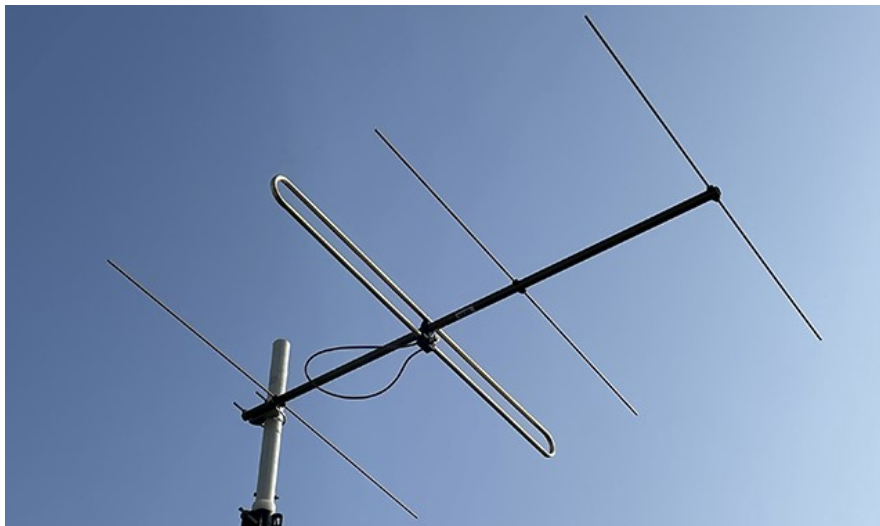
Elevation Plot  
 Azimuth Angle 0,0 deg.  
 Outer Ring 9,24 dBi  
 3D Max Gain 9,24 dBi  
 Slice Max Gain 9,24 dBi @ Elev Angle = 0,0 deg.  
 Front/Back 14,63 dB  
 Beamwidth 83,1 deg. -3dB @ 318,1, 41,2 deg.  
 Sidelobe Gain -5,39 dBi @ Elev Angle = 182,0 deg.  
 Front/Sidelobe 14,62 dB



4JXX2

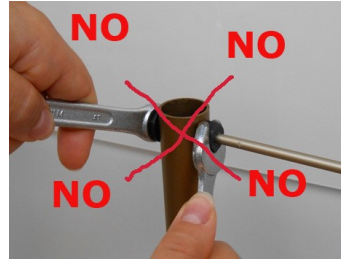
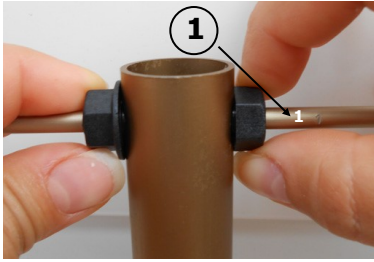
144,3 MHz

Cursor Elev 0,0 deg.  
 Gain 9,24 dBi  
 0,0 dBmax  
 0,0 dBmax3D



IØJXX may vary them without any warning

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Insert elements as shown in the figure 1, hand tighten the nut M8 Nylon (do not use keys as the material used has a self - locking function)



Fügen Sie die Elemente hinein wie in der Abbildung 1 dargestellt, schrauben Sie die Mutter M8 Nylon mit den Händen zusammen (benutzen Sie keine Schlüssel, da das verwendete Material eine Selbstverriegelung hat)



Insertion d'éléments comme indiqué sur la figure 1, serrez à la main l'écrou M8 nylon (ne pas utiliser les touches que le matériau utilisé a une auto - verrouillage)



Inserire gli elementi come riportato in figura 1, stringere a mano il dado in Nylon da M8 (non utilizzare chiavi in quanto il materiale impiegato ha effetto auto - bloccante)



Mount the dipole with screw M4x60 mm, washer and spacer as shown in the photo



Montieren Sie den Dipol mit Schraube M4x60 mm, Unterlegscheibe und Abstandshalter wie auf dem Foto gezeigt



Montez le dipôle avec vis M4x60 mm, rondelle et entretoise comme indiqué sur la photo



Montare il dipolo con vite M4x60 mm , rondella e distanziale come indicato in foto

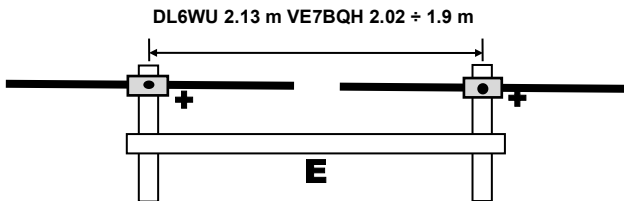
## Stacking

In order to obtain the best results in coupling the antennas, we warmly recommend an adequate antenna stacking calculation which would allow the best forward gain together with low side lobes. The stacking distance may be calculated with the following formula from Güenter Hoch DL6WU

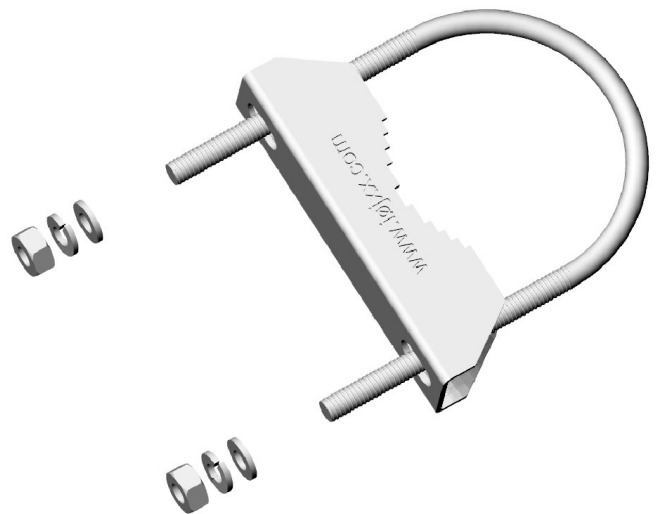
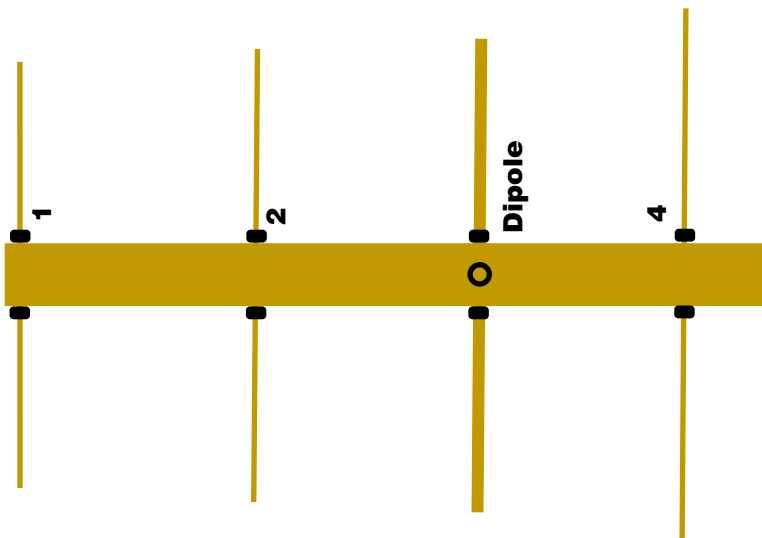
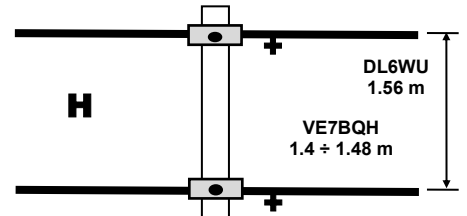
On the basis of further studies conducted by Lionel VE7BQH over the antenna stacking argument, a reduction of 5÷10% may be introduced on stacking distances without noticing significant overall worsening of the characteristics. Do respect the driven element supplying symmetry to allow anti-phase coupling

$$\text{Plane E} = 34.8^\circ = \frac{2079}{2 * \sin(58.4 / 2)} = \frac{2079}{0.9757} \cong 2.13 \text{ m (with VE7BQH from 1.9 m to 2.02 m)}$$

$$\text{Plane H} = 38.2^\circ = \frac{2079}{2 * \sin(83.1 / 2)} = \frac{2079}{1.3265} \cong 1.56 \text{ m (with VE7BQH from 1.4 m to 1.48 m)}$$



$$d = \frac{L}{2 * \sin(\Phi / 2)}$$



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