

Delta C-240 Compact, HD 40m Yagi. 7m long, 11.5m wide



# **Description**

Available through WiMo Germany and DX Engineering in the USA - for Direct factory supply, Email us for pricing and time lines.

www.dxengineering.com - www.wimo.com

# The DELTA 2-140 is a rugged 40m Yagi (11.5m) wide and 7m long with exceptional bandwidth - SERIOUS HD!!



The Delta 2-140 has a number of unique benefits. First it covers up to 120KHz of the 40m band under 2:1 SWR without an ATU. this is not a characteristic that most 'short' Yagis share, this is a result of the combination of capacity hats and large diameter coils that have been moved further out along the element lengths.

Coil loading is a required aspect of many lower HF antennas but is not by any means efficient. Additionally, the closer any coils are to the dipole centre, the more inefficient they become (and the narrower their bandwidth). Capacity loading is the most efficient loading method but typically is not capable of reducing elements by more than a few percent.

Justin G0KSC has combined the use of high-efficient, wide-spaced coils and capacity loading to produce a 12m wide 40M rotating dipole with a radiating efficiency of just over 89% and secured far more bandwidth than us usual on a Yagi this size.

#### **NO GUYS NEEDED on elements!**

The capacity loading has allowed for the coils to be moved further out along the element lengths to improve efficiency and bandwidth and the solid structure with fast taper ensures no guying is needed as the antenna can fully support its own weight.

This Antenna is Seriously HD. Centre dipole section is 55mm (almost 2"1/4) Diameter with 2mm wall and the antenna has a fast taper to the end sections which are still a full 25mm (1") diameter where the capacity loading is. Boom is 60mm diameter with s 2mm wall.

The Delta C-240 has avoided the narrow-banded mistakes of other competitive products by combining loading methods and shifting them further out on the element structure. This is combined within a very high quality mechanical package that uses marine grade stainless steel components throughout, provides a 40m dipole that is truly second to none.

## Large Hairpin matching, not centre coil

Often on lower band Yagis like this, a centre coil is used to achieve a 50? feed impedance. This is certainly the cheapest way to do this however, it does drastically reduce bandwidth. In order to achieve the incredibly wide bandwidth of the Delta C-240, a large adjustable hairpin match is used.

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The Delta C-240 below a 50MHz 6el LFA Yagi at K9US

"I got my 6M and 40M beams up.

Just worked a new county on 6M tonight and worked into EU and Asia on the 40M beam.

Tim K9US"

If you want the very latest in highly efficient, short-dipole technology look no further than the InnovAntennas Delta C-240 2 element 40m Yagi.

#### **Specifications**

2:1 SWR Bandwidth: up to 120KHz - class leading

Freepsace Gain: 6.29dBi

**Gain 20m up:** 10.53dBi

**F/B:** 15dB typ. \*

Antenna width: 11.5m

Antenna Length: 7m

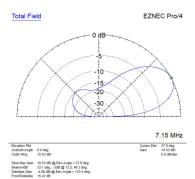
Turing Radius: 6.73m

 $\textbf{Effective Wind area: } 1.25 \; \mathsf{SqM}$ 

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### Antenna Weight: 50 Kilos

\* Adjustments to elements tip lengths can increase F/B. However, forward gain will drop





The Delta C-240 without any boom guys to show size and strength.



The Large diameter Hairpin of the Delta C-240 that contributes to the exceptional bandwidth of this antenna



The Delta C-240 above a 20m 4el Yagi for size comparision



A close-up of the Capacity loaded end sections of the Delta 2-140 and the 'spiral' configuration of the spokes which are 8mm diameter

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