

You receive all parts you need for assembling the antenna. The material is not handled in any way and it will be all your work and is on your own risk.

This manual is only a recommendation on how you can build up a working antenna with the delivered parts. Individual adjustments are possible. In all cases the customer is responsible for the proper function of the antenna.



All lengths and measurements of these antennas have to be followed exactly, or you will not have the predicted results.



Mounting of boom and 28 MHz elements

Please follow the instructions in the manual “Short construction manual for 28 Ohm and 50 Ohm design 28 MHz (10m) and 27 MHz (CB) yagis”.

You can download this document on our website

<http://www.nuxcom.de/pdf/nuxcom-construction-manual-10-11.pdf>

Please follow the following hints:

- a) Follow the instructions of the 50 ohm cable choke
- b) Mount the coax socket directing to the reflector because on the other side you need the space for the open sleeve element.

Mounting of the 50 MHz elements:

Important information: Do not drill the hole for the 50 MHz open sleeve element into the boom before you have made the fine tuning by finding the best distance between radiator and open sleeve element!

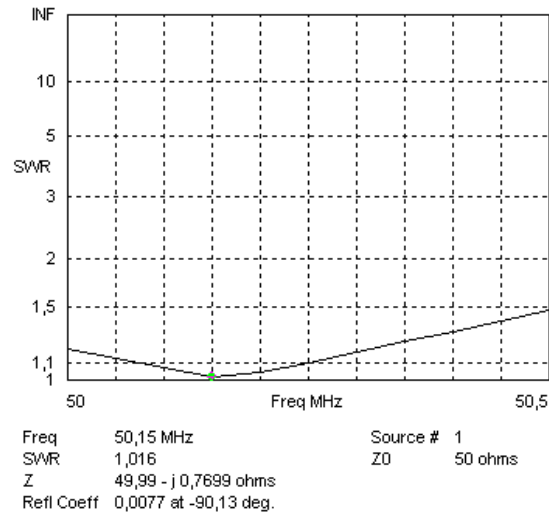
The 50 MHz elements are also tapered with 16mm and 12mm tubes. The middle part of the 16mm tube is 1m long, the 12mm tubes will be pushed into the 16mm tubes until they have the desired length according to the table. The tubes are also fixed together with the hose clamps.



The elements are fixed to the boom with black polyamide element clamps. First drill a centered 5,5mm hole through the boom on the mounting point. Then put a flat washer on the screw and push them through the element. Fix the element clamp over the mounting hole on the boom. Attach the element with the screw onto the element clamp so that the screw comes out on the bottom side. Fix it with another flat washer and the hex nut.

Fine tuning of the 50 MHz open-sleeve element

Fix the open sleeve element with insulating tape onto the element clamp and attach it to the boom where it should be according to the dimensions table – but DO NOT FIX IT with a screw. Check the 50 MHz resonance point with a VSWR meter. If it is OK for you, you shouldn't change anything. It should be about 1:1.1 on the resonance frequency.



You can adjust the VSWR by changing the distance between radiator and open sleeve element. The best matching is with 50 ohm feeding impedance and with a reactance "J" +/- 0.

The following interaction can be seen at the finetuning:

	Feeding impedance 50 MHz	Reactance „J“ 50 MHz
Increase distance	rising fast	rising slow
Decrease distance	falling fast	falling slow
Make element longer	falling slow	rising fast
Make element shorter	rising slow	falling fast

The 28 MHz part of the antenna is not being influenced by this fine tuning.

If you have critic or suggestions regarding this manual, please contact us:

Attila Kocis Kommunikationstechnik
Lenzenweg 2
D-96450 Coburg
GERMANY
Fax: +49 9561 3551883
E-Mail: nuxcom@nuxcom.de