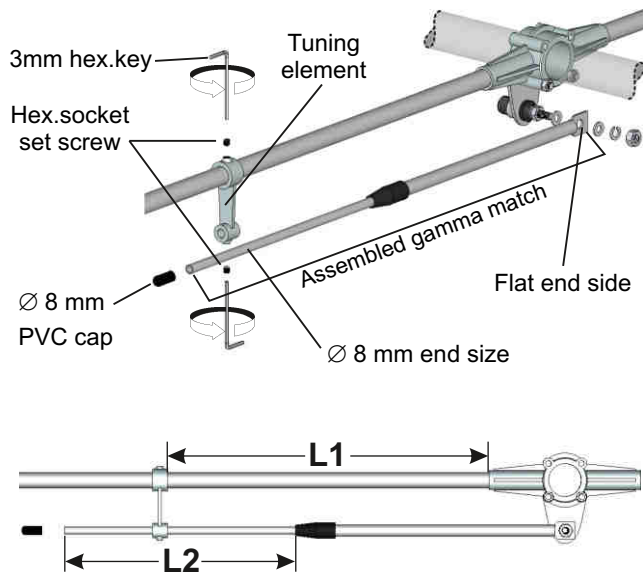


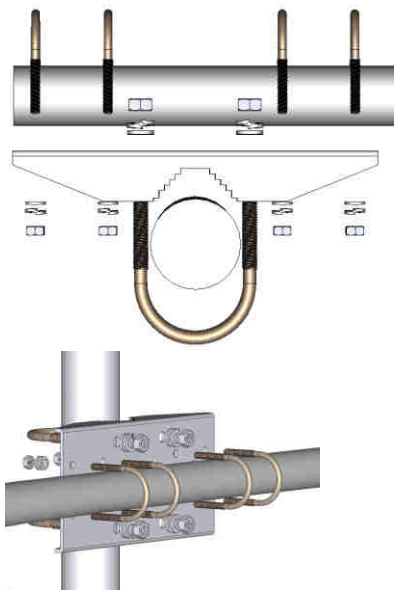
### Gamma Match Mounting

- 1) Fix without locking the flat end of the gamma-match by using the supplied nut and washer.
- 2) Insert the opposite side ( $\varnothing 8$ ) of gamma match in the tuning element and fix it at L1 by means of the enclosed hardware.
- 3) Check that the last part of your gamma match ( $\varnothing 8$ mm) is correctly positioned at L2 and fix it with hardware.
- 4) Lock the nut on the flat end of the gamma match and mount the PVC cap.



Hardware parts list	
Q.ty	Description
2	M6x6 Hexagon socket set screw
1	3mm Hexagonal Key
1	$\varnothing 8$ mm PVC cap
2	M6 Flat washer
1	M6 Grower washer
1	M6 Hexagonal nut
1	Tuning element
Re-order code: SA090	

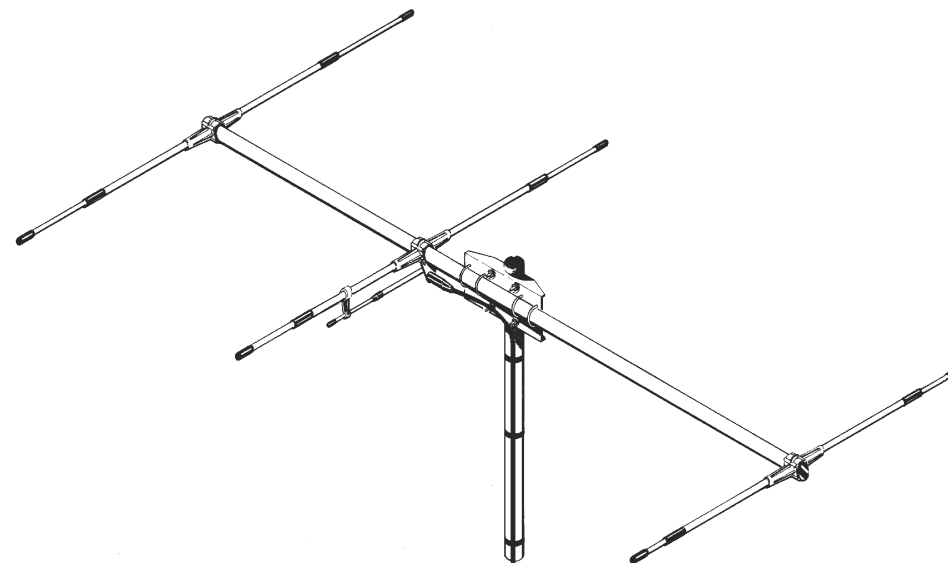
### SD/SY Mounting bracket



SD/SY bracket parts list	
Q.ty	Description
1	SD/SY Steel bracket
2	M8x200 U-bolt
4	M8 Hexagonal nut
4	M8 Grower washer
4	M8 Flat wascher
4	M6x125 U-bolt
8	M6 Hexagonal nut
8	M6 Grower washer
8	M6 Flat wascher
Materials: Zinc Plated Steel	
Weighth: 865 gr	
Re-order code: SA088	

## SY 50-3

50 ... 54 MHz Tunable 3 Elements Yagi Antenna



### SPECIFICATIONS

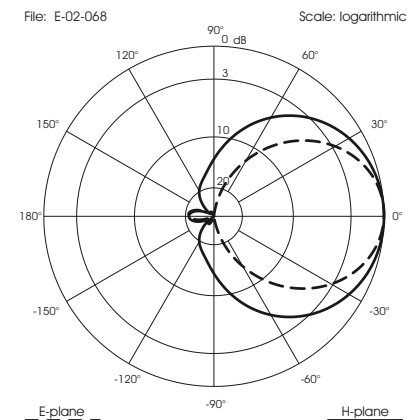
#### Electrical Data

Type	0.34 $\lambda$ 3 Elements Yagi Antenna
Frequency Range	50 ... 54 MHz tunable (see table)
Impedance	50 $\Omega$
Radiation (H-plane)	beamwidth @ -3 dB = 93°
Radiation (E-plane)	beamwidth @ -3 dB = 60°
Polarization	Linear Horizontal
Front to Back ratio	20 dB typical
Gain	6.4 dBd - 8.5 dBi
Bandwidth @ SWR $\leq$ 1.5	$\geq$ 1.0 MHz @ 50.5 MHz
SWR @ res. freq.	$\leq$ 1.2
Max Power	600 Watts (CW) @ 30°C
Connector	UHF-female

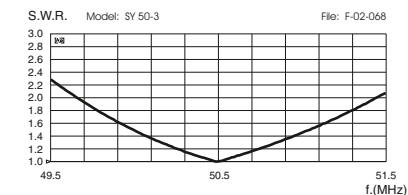
#### Mechanical Data

Materials	Aluminium, EPDM rubber, Zamak, Zinc plated steel, Chromed brass
Wind Load / Resistance	113 N @ 150 Km/h / 120 Km/h
Wind surface	0.09 m <sup>2</sup>
Dimensions (approx.)	3000 x 2060 x 100 mm
Boom Length/Diameter	2060 mm / $\varnothing$ 33 mm
Max. element length	3000 mm
Element diameter	$\varnothing$ 12-16 mm
Turning radius	1900 mm
Weight (approx.)	4000 gr
Mounting mast	$\varnothing$ 35-50 mm side mast with "U" bolt

#### TYPICAL RADIATION PATTERN at 50.5 MHz



#### TYPICAL S.W.R. RESPONSE

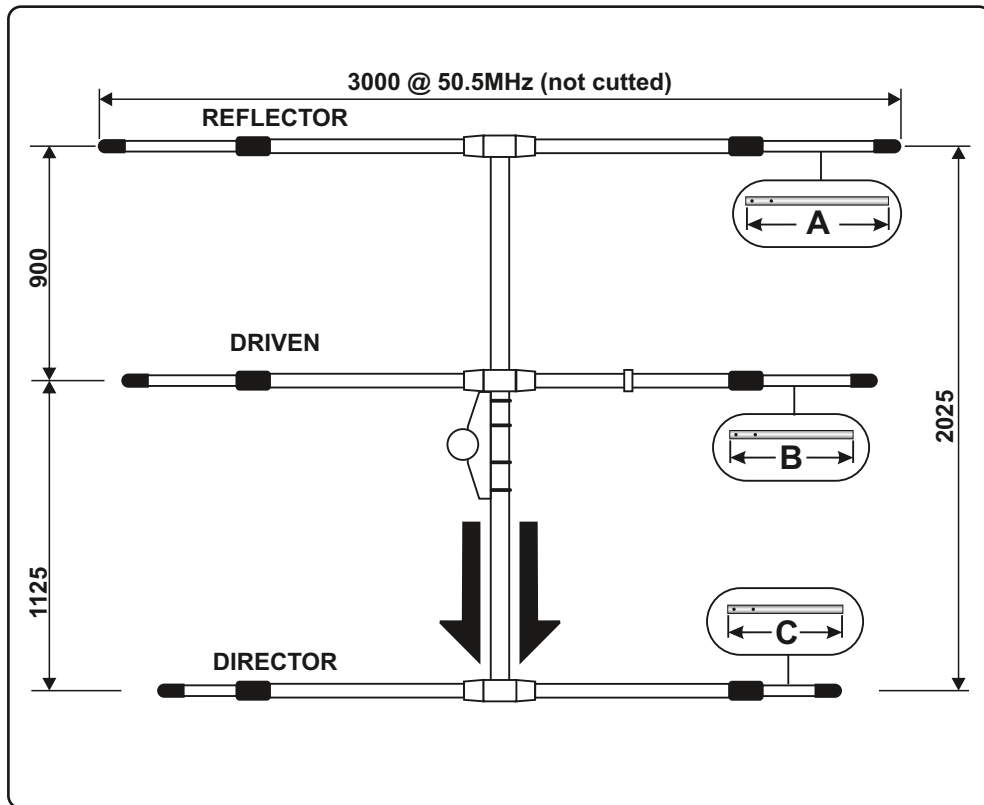


TUNING TABLE					
Freq. (MHz)	A (mm)	B (mm)	C (mm)	L1 (mm)	L2* (mm)
50-51 (not cutted)	450	350	250	281	192 ± 3
51-52	363	315	200	296	200 ± 3
52-53	340	285	176	289	200 ± 3
53-54	315	240	150	339	213 ± 3

\* For the best tuning, please adjust only the gamma match L2 with an SWR-Meter, about indicated range.

- Mounting needed tools:**
- n. 1 tape rules (meter)
  - n. 1 hacksaw
  - n. 1 screwdriver cross point
  - n. 1 10mm open key
  - n. 1 13mm open key

**REMARK:** use a good coax cable like RG-8 or RG-213 as short as possible to get the best performance and we recommend to mount your antenna as far as possible from metal roofs, walls, power lines and other antennas.



### Elements mounting

Ø 12 mm end section tube  
**Do not cut this side**

A (reflector)  
B (driven)  
C (director)

Jointing sleeve

Ø 12 mm PVC cap

Philips screws

- 1) From tuning table select the working frequency and cut the Ø12mm tube of end section at length A, B and C.
- 2) Insert the jointing sleeves and the Ø12mm tubes of end section then fix all using the phillips screws. Place the PVC cap.
- 3) Insert without looking the tuning element on one Ø16mm tube on DRIVEN and fix the tubes with supplied hex socket screws and key.

**Be careful to check that all parts are well locked.**

Hex.socket set screw

3mm hex.key

Tuning element

Mounting Elements parts list	
Q.ty	Description
2	Ø 17.5mm Plastic jointing sleeve
2	Ø 12 mm PVC cap
4	Ø 3.9x6.5mm phillips tapping screw
4	M6 Hexagonal nut

Re-order code: SA253