

BOOMERANG series

CB & 10m Base Station Antennas

DESCRIPTION

1/4 Wave Ground plane Boomerang antennas working on 27MHz and 10m HAM band. Particularly suitable for balcony installation where reduced dimensions are required. They are made of high quality materials and supplied with a very strong die-cast zamac mount. Available in 2 versions: **Boomerang 27A** whose main whip is completely made of anti-corodal aluminium tubes and **Boomerang 27W** whose whip is made of tapered fiberglass rod with inside helical winding to reduce the length and guaranteeing a good performance. Both models have a loaded fiberglass radial.

SPECIFICATIONS

Electrical Data		
Model	BOOMERANG 27 A	BOOMERANG 27 W
Type	1/4 λ Ground Plane Boomerang	
Frequency Range	27-28.5 MHz	
Impedance	50 Ω	
Radiation (H-plane)	360° Omnidirectional	
Polarization	Linear Vertical	
Gain	0 dBd - 2.15 dBi	
Bandwidth @ SWR \leq 2	1200 KHz	700 KHz
SWR @ res. freq.	\leq 1.2	
Max Power	200 Watts (CW) continuous 600 Watts (CW) short time	150 Watts (CW) continuous 450 Watts (CW) short time
Feed system / position	Direct / Centre	
Connector	UHF-female	

Mechanical Data

Materials	Aluminium, Fiberglass, Steel, Copper, Nylon	Fiberglass, Steel, Copper, Nylon
Wind Load @ 150 km/h	52 N	45 N
Wind Resistance	140 Km/h	
Wind Surface	0.041 m ²	0.035 m ²
Height (approx.)	3900 mm	3500 mm
Radiator / Radial lenght	2750 mm / 1730 mm	1720 mm / 1730 mm
Weight (approx.)	880 gr	800 gr
Mounting Mast	With bracket supplied	

ISTRUZIONI DI TARATURA

1. Montare l'antenna:

Boomerang 27A: stilo L=2750 mm, radiale a 125° circa

Boomerang 27W: radiale a 170° circa.

2. Verificare la taratura dell'antenna utilizzando un ROS-metro. Se non tarata per il canale di utilizzo tagliare il radiale 5 mm alla volta fino a centratura avvenuta.

3. Per la regolazione fine dell'SWR modificare l'angolo di inclinazione del radiale fino a ottenere il miglior adattamento. Eventualmente modificare la lunghezza dello stilo verticale e ripetere la procedura dal punto 2.

TUNING INSTRUCTION

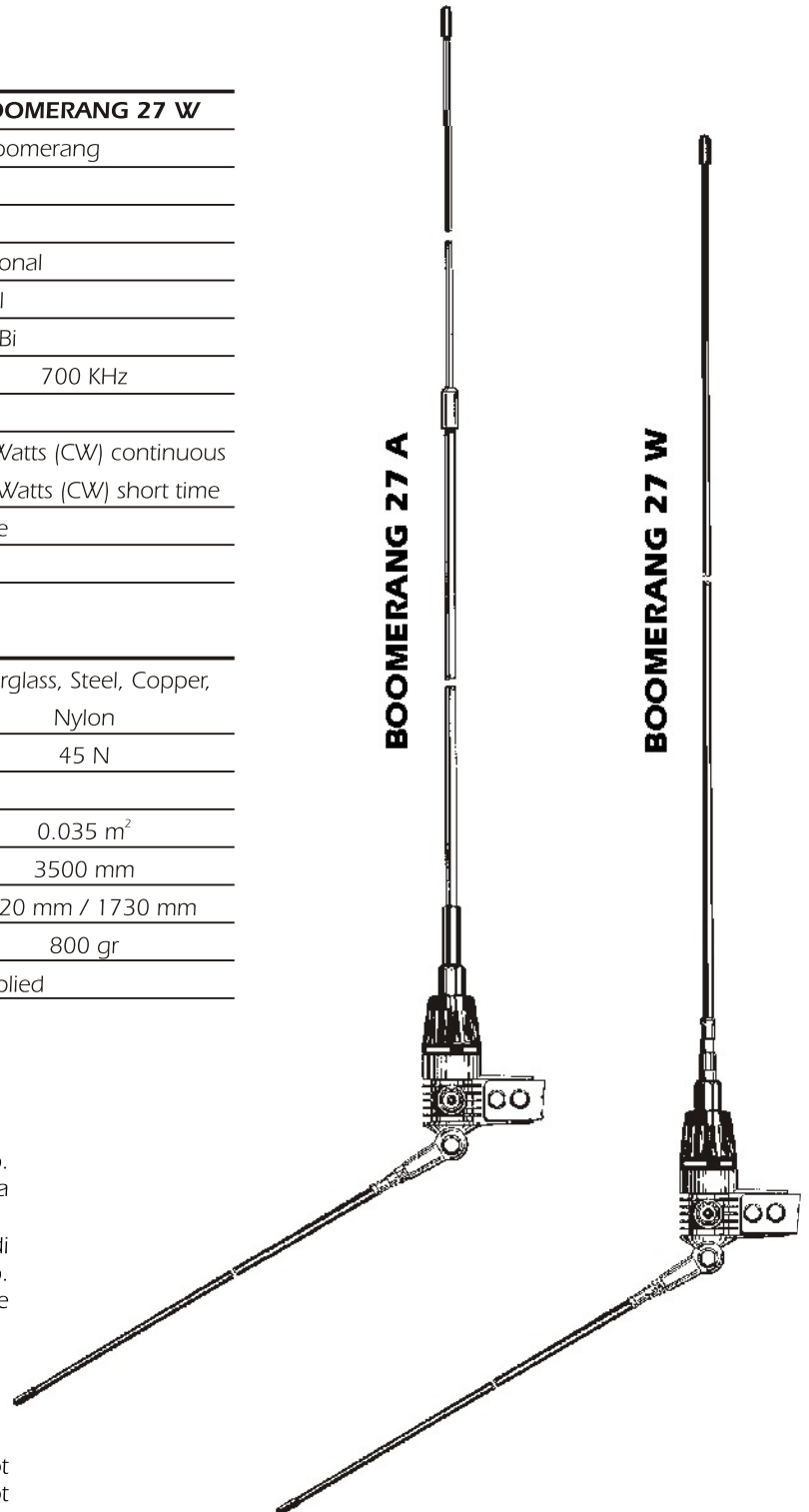
1. Install your antenna by following the standard instruction:

Boomerang 27A: Radiator L=2750mm, Radial at approx 125°

Boomerang 27W: Radial at approx 170°

2. Check the antenna tuning by using a SWR-meter. If it's not tuned on the right channel, you can slightly cut the radial (not more than 5mm per cut) until you get the center band tuning.

3. For the fine tuning of the SWR you can act on the base radial by modifying the inclination angle up to get the best resonance. If it's not enough you have to act on the main radiator following the procedure of point 2.



SIRIO
antenne

HI-QUALITY ANTENNAS MADE IN ITALY

Parts List		
Pos	Q.ty	Description
1	1	Boomerang 27A: PVC cap for \varnothing 5 mm aluminium bar
2	1	Boomerang 27A: \varnothing 5x1400mm aluminium bar (top section)
3	1	Boomerang 27A: 2mm hexagonal key
4	1	Boomerang 27A: M4x4 hexagon socket set screws cup point
5	1	Boomerang 27A: Aluminium tube with joint (bottom section)
6	1	Boomerang 27W: fiberglass main radiator
7	1	mounting base with connector
8	1	fiberglass radial
9	1	Boomerang 27A: PVC cap for fiberglass radial
	2	Boomerang 27W: PVC caps for fiberglass radial and main radiator
10	1	25x200mm steel bracket
11	4	M6 washers
12	4	M6 spring lock washers
13	3	M6x12 hexagon socket head screws
14	1	M6x160 mm U-bolt
15	1	30x65mm steel bracket
16	2	M6 hexagonal nuts
17	1	zinc plated washer

Mounting needed tools:	
n. 1	tape rules (meter)
n. 1	10 mm open key
n. 1	16 mm open key

REMARK: use a good coax cable like BELDEN H1000R, AIRCOM PLUS or RG-213 as short as possible to get the best performance and we recommend to mount your antenna as far as possible from metall roofs, walls, power lines and other antennas.

MOUNTING INSTRUCTIONS

