BOOMERANG series
Base Station Antennas

DESCRIPTION

1/4 Wave Ground plane Boomerang antennas working on 27MHz. 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 fiberglass rod with helical winding to reduce the length and guaranteeing a good performance. Both models have a fiberglass radial with helical winding.

WARNING

INSTALLATION OF THIS PRODUCT NEAR POWER LINES IS DANGEROUS. FOR YOUR SAFETY AND BEFORE YOU BEGIN INSTALLATION, READ THE SEPARATE SAFETY INFORMATION SHEET.

SPECIFICATIONS

Electrical Data		
Model	**BOOMERANG 27 A**	**BOOMERANG 27 W**
Type	1/4 λ Ground Plane Boomerang	
Frequency Range	26.8 ... 27.6 MHz	
Impedance	50 Ω	
Radiation (H-plane)	360° Omnidirectional	
Polarization	Linear Vertical	
Gain	0 dBd - 2.15 dBi	
Bandwidth @ SWR ≤ 2	800 KHz	
SWR @ res. freq.	≤ 1.2	
Max Power	300 Watts (CW) continuous 900 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	47 N	39 N
Wind Resistance	140 Km/h; 87 mi/h	
Wind Surface	0.41 ft^2; 0.038 m^2	0.33 ft^2; 0.031 m^2
Radiator lenght (approx.)	2750 mm, 9 ft	1330 mm, 4.35 ft
Radial lenght (approx.)	1330 mm, 4.35 ft	1280 mm, 4.2 ft
Weight (approx.)	780 gr, 1.7 lb	750 gr, 1.65 lb
Mounting Mast	With bracket supplied	

ISTRUZIONI DI TARATURA

1. Montare l'antenna:
Boomerang 27A: stilo **L**=2750 mm, radiale a 140° circa
Boomerang 27W: radiale a 140° circa.

2. Verificare la taratura dell'antenna utilizzando un ROS-metro. Se non tarata per il canale di utilizzo:
Boomerang 27A: cambiare la lunghezza dello stilo verticale
Boomerang 27 W: spostare la vite in testa allo stilo verticale

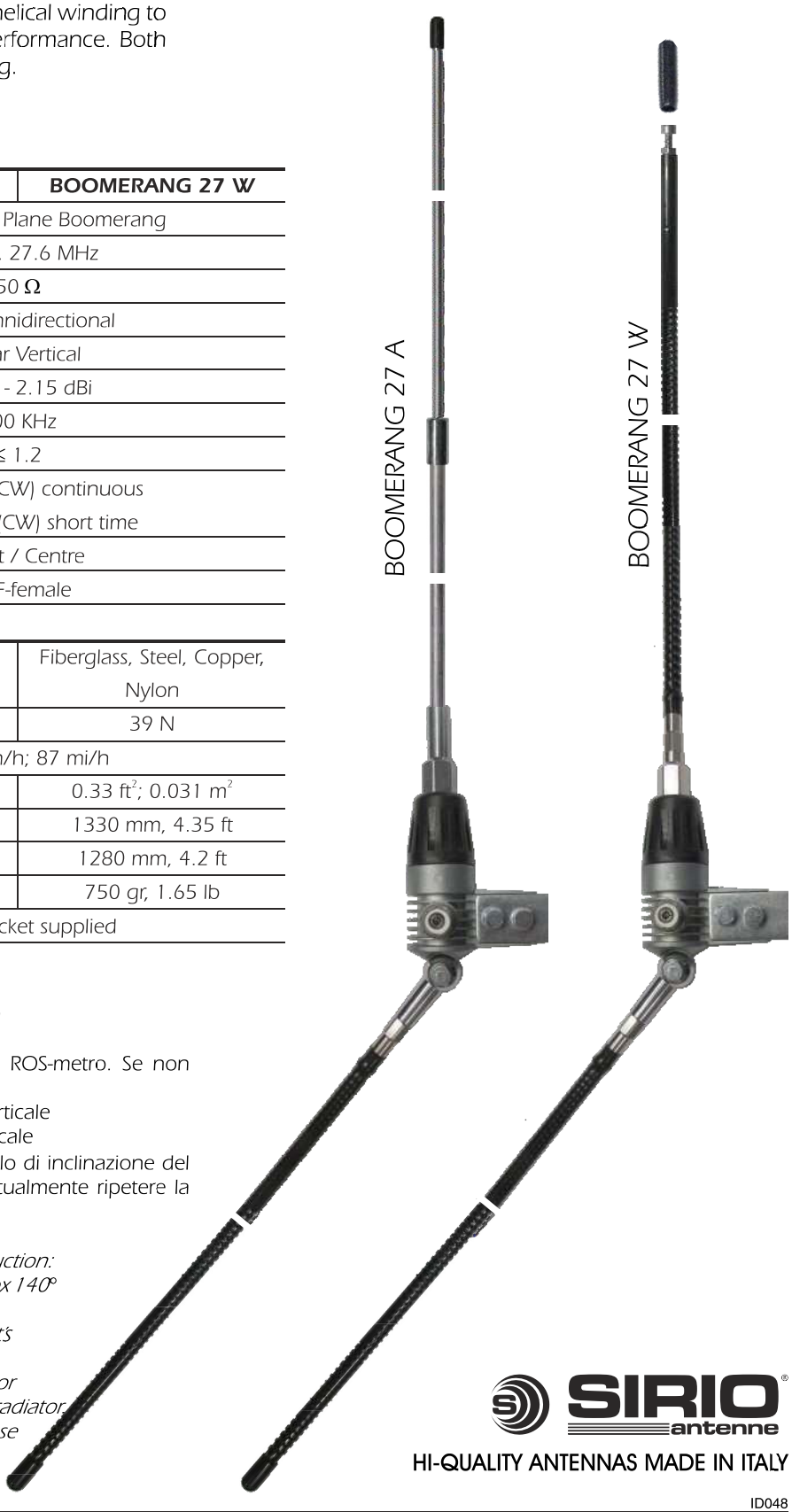
3. Per la regolazione fine dell'SWR modificare l'angolo di inclinazione del radiale fino a ottenere il miglior adattamento. Eventualmente ripetere la procedura dal punto 2.

TUNING INSTRUCTION

1. *Install your antenna by following the standard instruction:*
Boomerang 27A: Radiator L=2750mm, Radial at approx 140°
Boomerang 27W: Radial at approx 140°

2. *Check the antenna tuning by using a SWR-meter. If it's not tuned on the right channel:*
Boomerang 27A: change the length of vertical radiator
Boomerang 27W: acting on the screw on the vertical radiator.

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 re do from point 2.*



SIRIO antenne

HI-QUALITY ANTENNAS MADE IN ITALY

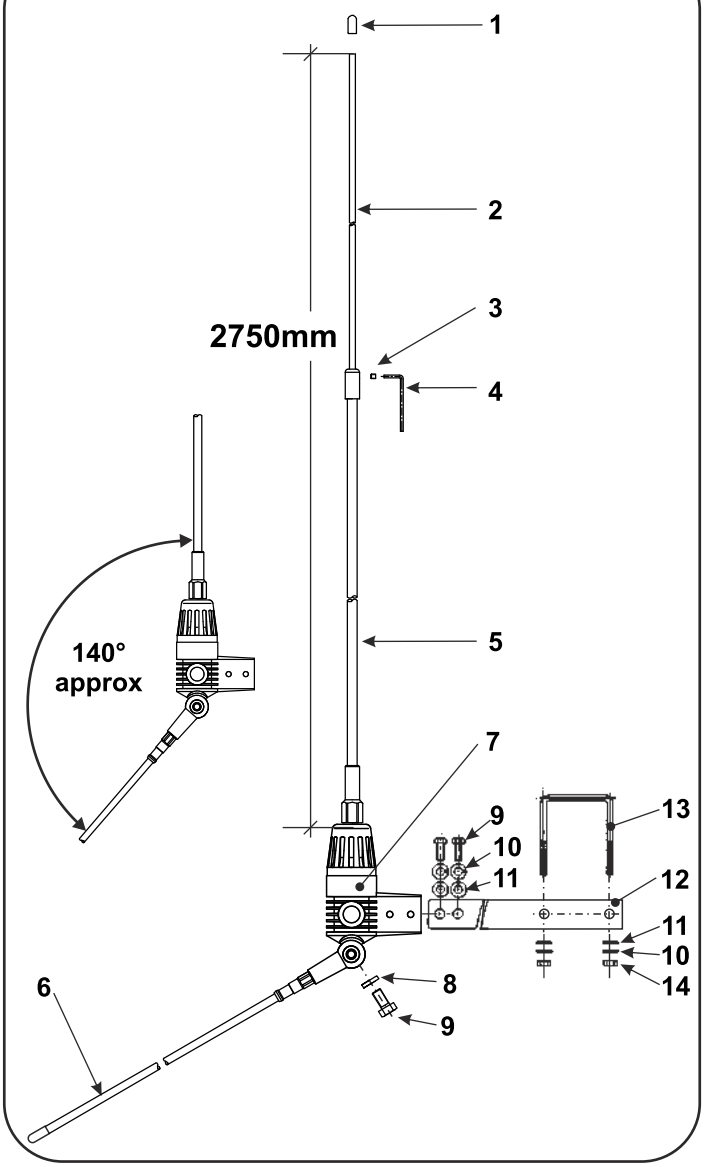
Parts List		
Pos	*Q.ty*	*Description*
1	1	**Boomerang 27A:** PVC cap for ∅ 5 mm aluminium bar
2	1	**Boomerang 27A:** ∅ 5x1400mm aluminium bar (top section)
3	1	**Boomerang 27A:** M4x4 hexagon socket set screws cup point
4	1	**Boomerang 27A:** 2mm hexagonal key
5	1	**Boomerang 27A:** Aluminium tube with joint (bottom section)
6	1	**Boomerang 27A:** 1300mm radial w/ helical winding
7	1	mounting base with connector
8	1	zinc plated washer
9	3	M6x12 hexagon socket head screws
10	4	M6 washers
11	4	M6 spring lock washers
12	1	25x200mm steel bracket
13	1	M6x160 mm U-bolt
14	2	M6 hexagonal nuts
15	1	**Boomerang 27W:** PVC caps
16	1	**Boomerang 27W:** M5x20 screw
17	1	**Boomerang 27W:** M5 hexagonal nuts
18	1	**Boomerang 27W:** fiberglass main radiator
19	1	**Boomerang 27W:** 1250mm radial w/ helical winding

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

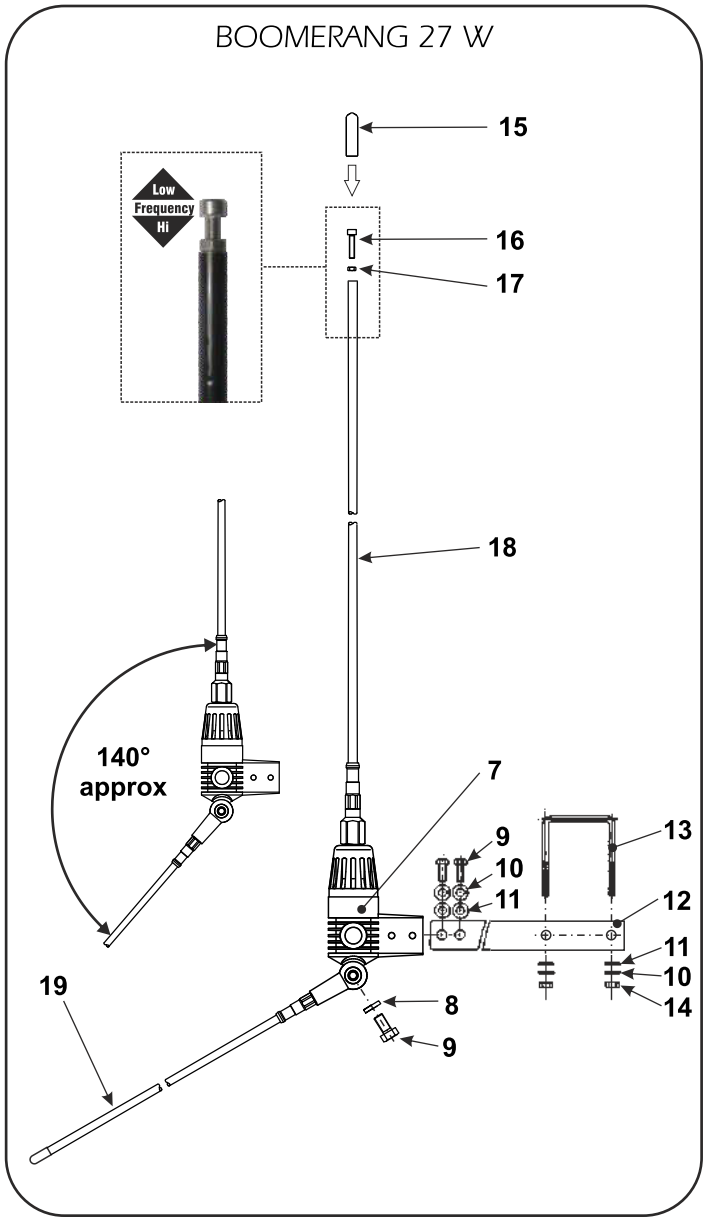
REMARK: use a good coax cable like BELDEN H1000R, AIRCOM PLUS or RG-213 as short as possible to get the best performance and we recommend to mount your antenna as far as possible from metall roofs, walls, power lines and other antennas.

MOUNTING INSTRUCTIONS

BOOMERANG 27 A



BOOMERANG 27 W



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