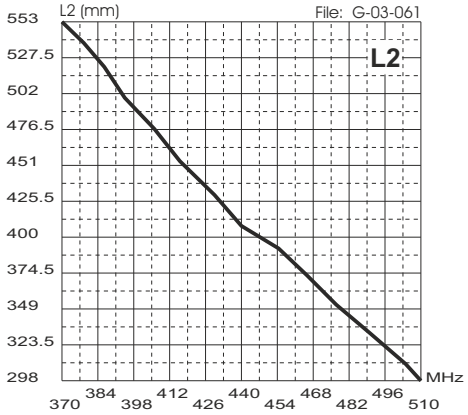
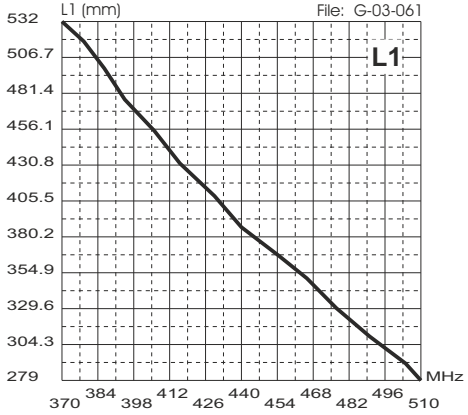
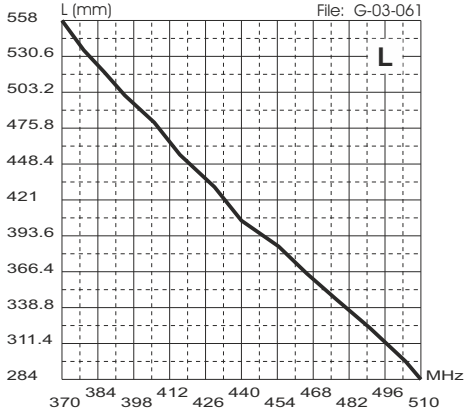
TYPICAL TUNING DIAGRAMS





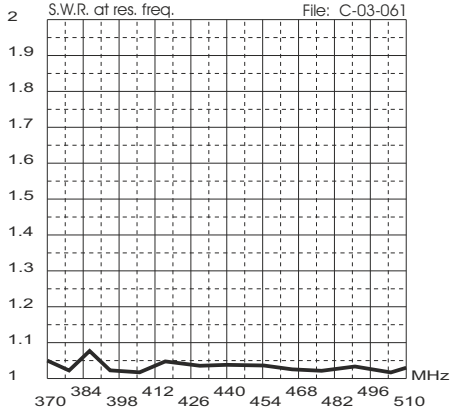


NOTE:

- Use the curves just as a guide. For fine-tuning please use an SWR-Meter.

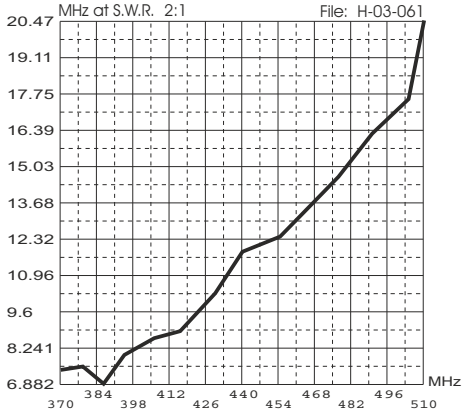
MATCHING DIAGRAM

TYPICAL MATCHING DIAGRAM vs FREQUENCY



BANDWIDTH DIAGRAM

TYPICAL BANDWIDTH DIAGRAM vs FREQUENCY



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HI-QUALITY ANTENNAS MADE IN ITALY

GPF 703 N

UHF Base Station Antenna 370...510 MHz

Installation Manual

DESCRIPTION

3x5/8 λ Ground Plane base station colinear antenna for UHF service. It work on 370...510 MHz by using the cutting diagram enclosed. The matching coil is DC feeded for a perfect protection from the static discharges. GPF 703-N is made of fiberglass, non-corrosive aluminium, stainless steel and its die-cast strong base assures the maximum robustness and the best performance. Tuning is easy by following the attached directions.

SPECIFICATIONS

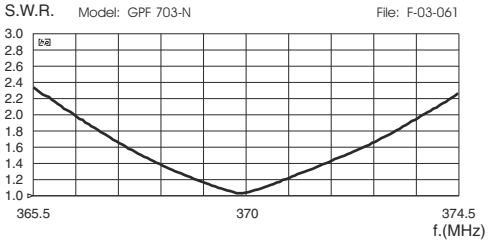
Electrical Data

Type	: 3 x 5/8 λ Ground Plane Colinear
Frequency Range	: 370...510 MHz tunable by cutting
Impedance	: 50 Ω
Radiation (H-plane)	: 360° Omnidirectional - HCM code = 000ND00
Radiation (E-plane)	: Beamwidth @ -3 dB = 25° - HCM code = 013ND39
Radiation angle deg.	: -2°
Polarization	: Linear Vertical
Gain	: 4.6 dBd - 6.75 dBi
Bandwidth @ SWR ≤ 2	: see diagram
SWR @ res. freq.	: see diagram
Max Power	: 200 Watts
Grounding Protection	: All metal parts are DC-grounded, inner conductor shows a DC short
Connector	: "N"-Female, Gold Plated central pin

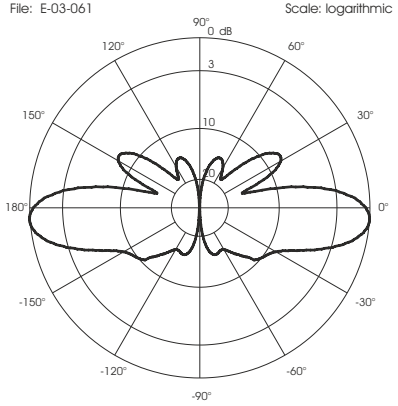
Mechanical Data

Materials	: Fiberglass, Aluminium, Brass
Wind Load / Resistance	: 64 N @ 150 Km/h / 160 Km/h; 99 mi/h
Wind Surface	: 0.055 m^2; 0.58 ft^2
Height (approx.)	: 2230 mm, 7.32 ft
Weight (approx.)	: 1160 gr, 2.56 lb
Radial Length (approx)	: 170 mm, 0.56 ft
Mounting Mast	: ∅ 35-60 mm, ∅ 1.4-2.4 in

TYPICAL S.W.R. RESPONSE



TYPICAL RADIATION PATTERN in E-plane at 440 MHz



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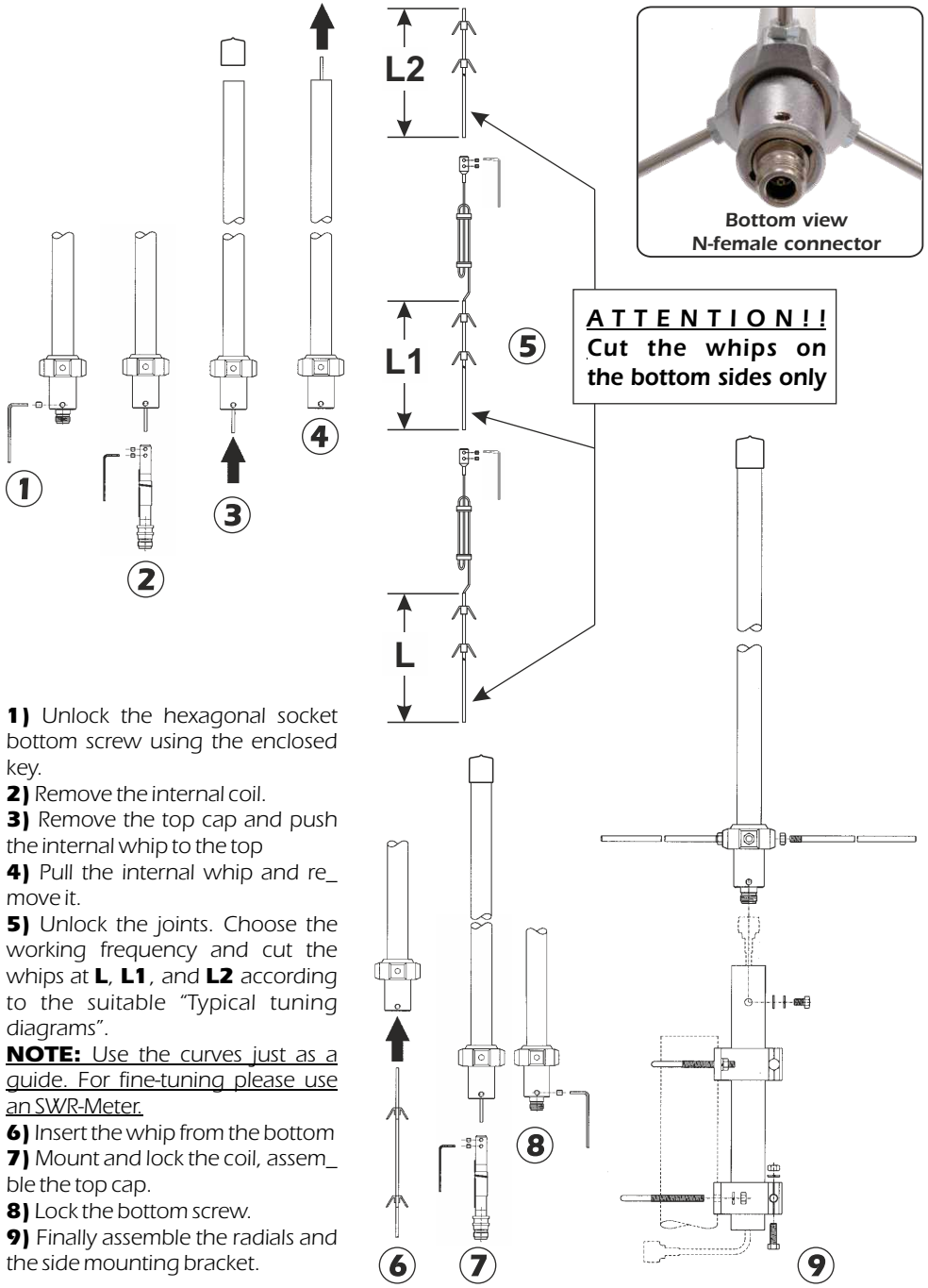
ID448

MOUNTING AND TUNING INSTRUCTIONS



Bottom view
N-female connector

ATTENTION!!
Cut the whips on the bottom sides only

1) Unlock the hexagonal socket bottom screw using the enclosed key.
2) Remove the internal coil.
3) Remove the top cap and push the internal whip to the top
4) Pull the internal whip and re_ move it.
5) Unlock the joints. Choose the working frequency and cut the whips at **L**, **L1**, and **L2** according to the suitable "Typical tuning diagrams".
NOTE: Use the curves just as a guide. For fine-tuning please use an SWR-Meter.
6) Insert the whip from the bottom
7) Mount and lock the coil, assem_ ble the top cap.
8) Lock the bottom screw.
9) Finally assemble the radials and the side mounting bracket.