# MODEL CA-F22GF High Gain GP Antenna for 120-175MHz

Instruction Manual

Thank you for purchasing our products.

#### For your safety:

Read this manual carefully for proper handling and operation before using. Keep this manual in a safe place for future reference.

#### [Features]

- · High gain Base Station Antenna.
- Fiberglass with excellent weather resistance, waterproofing and high integrity.

• Resonance Frequency is adjustable, following to the cutting chart.

#### [Specifications]

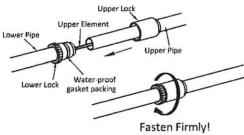
Frequency Range: 120 - 175MHz

Gain: 5.5 dBi Impedance :  $50\Omega$ VSWR: 1.5 or less Length: approx. 3.1m Max Input Power: 150W(FM) Weight: approx. 1.3kg

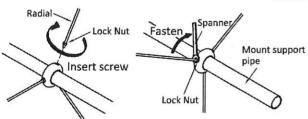
Mounting Mast Diameter: Φ30-62mm Connector: M-J(Female) or N-J(Female)

### [How To Assemble]

- 1. Adjust Lower and Upper elements. (refer on the reverse side of this paper)
- 2. Put Lower Lock into Upper Lock with a rubber washer in between.



3. Assemble three radials. Fasten radial-lock nuts securely with spanner etc....

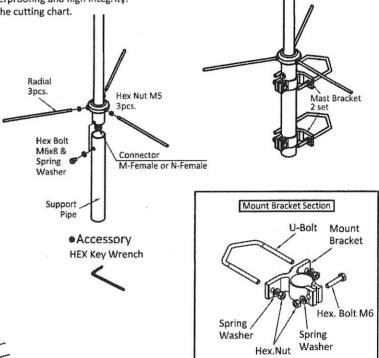


4. Put two mount brackets on the mount support pipe. Pass the coax cable through the pipe, and attach it to power feeding section. Be sure to fasten hex bolts firmly. Then, attach support pipe onto the antenna.

#### COMET CO.,LTD.

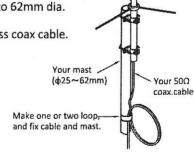
4-18-2, Tsuji, Minami-ku, Saltama-shi, Saltama-Pref, 336-0026. JAPAN TEL: 81-48-839-3131 / FAX: 81-48-839-3136

URL: http://www.comet-ant.co.jp/english



Mount all assembled antennas on your mast. This antenna is so long. Keep your eyes on balance of this antenna and use as strong mast as you can, between 25 to 62mm dia.

\*Make sure to use low loss coax cable.



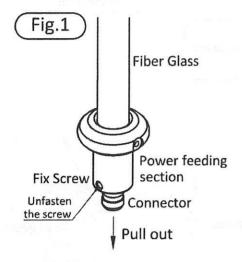
### Darte Liet

Parts List		
1.Lower Element (with phase shifter)		1
2.Upper Element	•••	1
3.Radial with Hex.Nut	•••	3 sets
4.Power feed section	•••	1
5.Hex.bolt with spring washer		1 set
6.Mount support pipe		1
7.Mount Bracket	•••	2 sets
8.U-Bolt with spring washer and Hex.Nut		2 sets

■ Specifications or appearance is subject to change without notice. Copyright (C) 2012 COMET CO., LTD. All Rights Reserved.

# MODEL CA-F22GF

[How to adjust frequency 120-175MHz]



[1] Loosen fix screw at the bottom of Power Feeding section. (Fig.1)

[2] Pull out the entire wiring assembly, as shown in Fig.2

[3] Upper and lower elements are attached to the brackets at both ends of the coil.

Remove the hollow-set screws to disassemble elements.

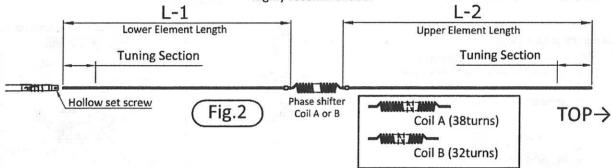
[4]Adjust L1 and L2 length, following to the Adjustment Chart. Below 150MHz, use Coil A(voluminous).

Above 150MHz, use Coil B.

After both length adjustment done, fasten all fix screw tightly.

[5] Put wiring assembly all the way into fiber element, and fasten fix screw tightly.

[6] Prior to insertion, waterproofing silicone on the connector is highly recommended.



### Element Adjustment chart

Frequency	L-1	L-2	Phase shift coil	
120.0MHz	1160 mm	1436 mm		
125.0MHz	1060 mm	1340 mm		
130.0MHz	973 mm	1258 mm	Coil A (38turns)	
135.0MHz	899 mm	1185 mm		
140.0MHz	833 mm	1120 mm		
145.0MHz	776 mm	1062 mm		
150.0MHz	725 mm	1011 mm		
155.0MHz	674 mm	997 mm		
160.0MHz	627 mm	950 mm	Coil B (32turns)	
165.0MHz	586 mm	908 mm		
170.0MHz	551 mm	872 mm		
175.0MHz	520 mm	840 mm		

■ Specifications or appearance is subject to change without notice.

4th Version. Printed in JAPAN.