MODEL **CA-F72GF** Heavy duty, high-gain base station antenna for 440 - 480MHz

C★MET ANTENNA

Thank you for purchasing our products.

Instruction Manual

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 : 5.5dBi base station antenna.
- ●1-piece heavy-duty fiberglass , durable against weather and pollution.
- ●Frequency can be easily adjusted following the element cutting chart.

【Specifications】
Frequency : 440-480MHz [Tunable element]
Gain : 5.5dBi [Two 5λ/8 waves in phase]
VSWR : 1.5 or less (8MHz bandwidth after tuning)
Impedance : 50 ohms
Connector : N-Female
Max.Power : 150W(FM)
Weight : approx. 1kg
Length : approx. 1.12m

【Parts List】

1. Main antenna	- 1	
2. Radial	- 3	
3. Hex. Nut (M5)	- 3	
4. Mount bracket	- 2	
5. Mount support pipe	- 1	
6. Lock bolt w/ sp.washer M6x10	- 1	(Note:1)
7. Hex.bolt w/ sp.washer M6x30	- 2	
8. U-Bolt w/sp.washer & Hex.nut	- 2	

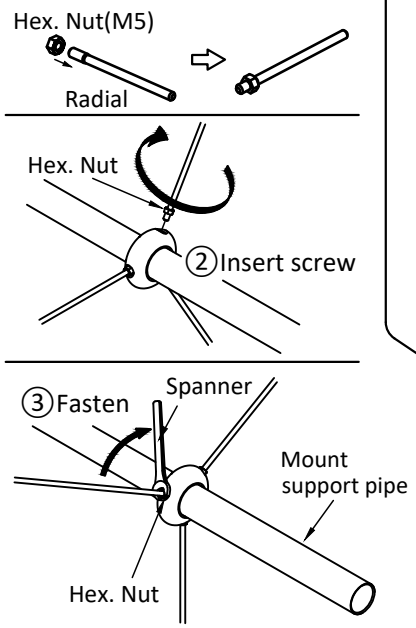
Note 1 : Hybrid hexagon bolt with locking function is used for this product. Compared to conventional hex bolts, a large tightening torque is required for tightening work. Please tighten firmly until the end.

【How To Assemble】
1. Assemble three radials. Fasten radial-lock Nuts securely with spanner etc....

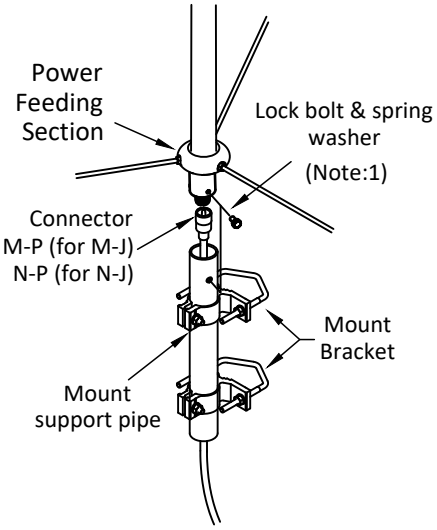
2. Put two mount brackets on the mount support pipe. Pass the coax cable through the pipe,and attach it to power feeding section. Be sure to fasten hex bolts firmly.
Then, attach support pipe onto the antenna.

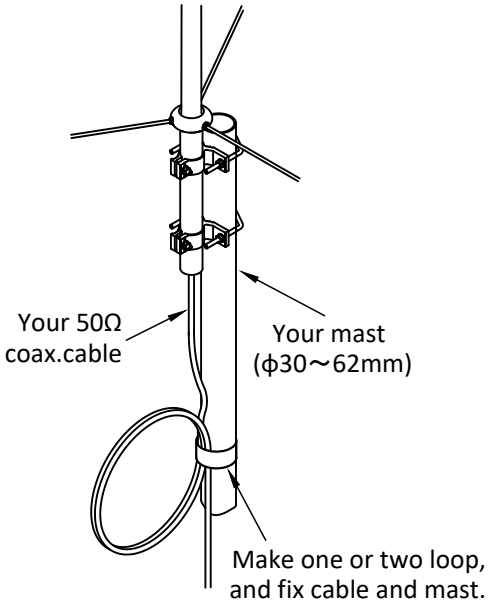
3. Mount all assembled antennas on your mast.
This antenna is so long. Keep your eyes on balance of this antenna and use as strong mast as you can, between 30 to 62mm dia.

①Insert the hexagon nut as far as it will go into the radial thread.
Put one for each radial.



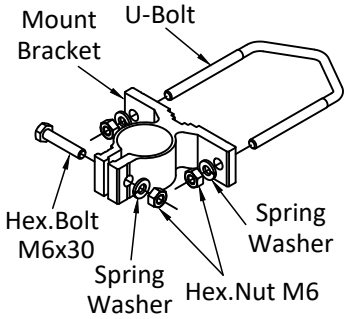
*Make sure to use low loss coax cable.





Note2 : For long-term use, water-proofing with glue, self-fusing tape, and/or vinyl tape is highly recommended.

◆Mount Bracket & U-Bolt



This antenna requires adjusting the element length to set the tuning frequency. Refer to the instructions on page 2 and match the lengths of L-1 and L-2 to the lengths in the table before installing.

Note 3
- ●Because high UHF frequency, please use high quality coax.cable and connectors.
- ●Kindly provide sufficient water-proof works, on connector joint section, for long priod use.

⚠ Precautions for using
- ● This antenna is only for ham radio. Do not use this for other purposes.
- ● Operation outside the specification might damage the antenna.
- ● Adjust the antenna correctly. Elevated SWR could damage the antenna.
- ● Never attempt to modify or fix the antenna by yourself.
- ● Do not touch the antenna while transmitting.

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◆Specifications or appearance is subject to change without notice.

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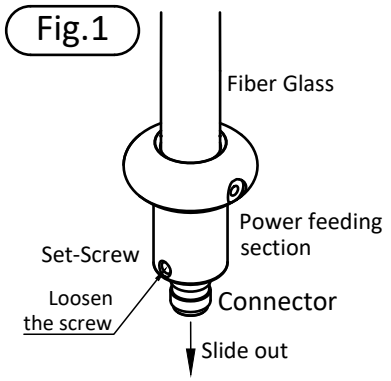


How to adjust frequency

1. Loosen the set-screw at the low end of power-feeding section. (Fig.1)
2. Then, slide out the entire inside wiring assembly as shown in Fig.2

3. Please adjust the length of L-1 and L-2 according to the element adjustment chart.
4. When both elements have been trimmed, reinsert the element into the fibreglass and tighten the set-screw.

5. Before insertion, silicone at the connector section is recommended for complete water-proof.

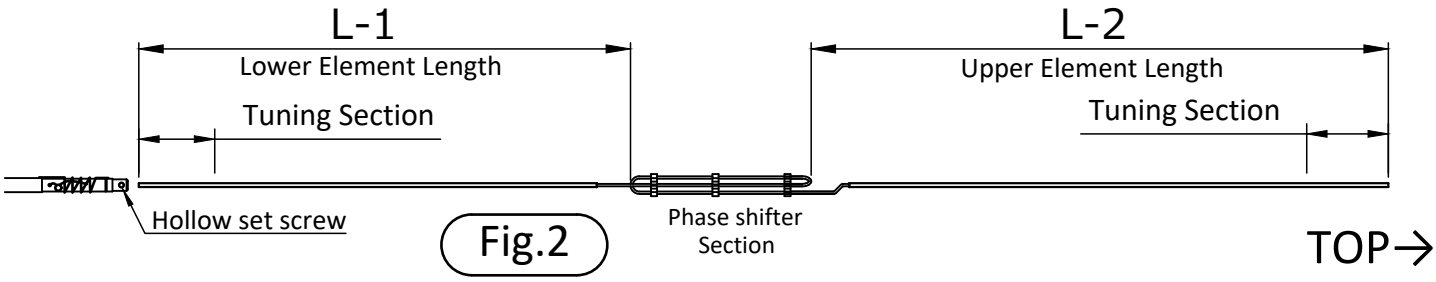
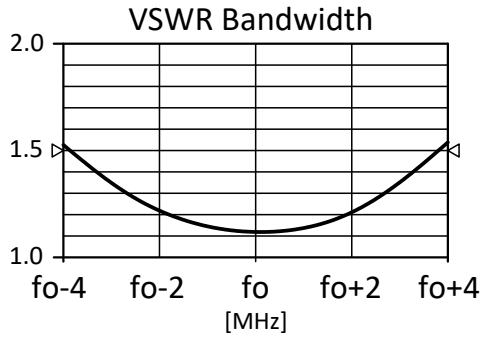
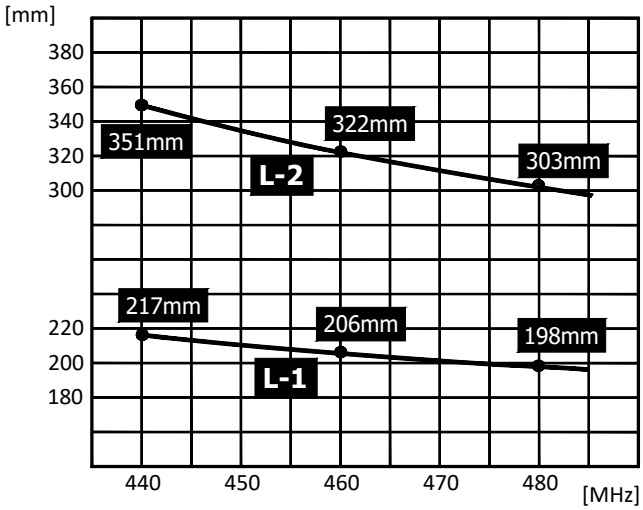


Fig.2





Element Adjustment chart

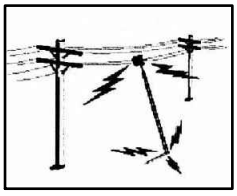
⚠ Warning — Outdoor Installations

Important safety information:

The following instructions and any safety instructions that came with the equipment you are installing must be followed.
- Make sure all the tools and equipment you are using are in good condition. Use non-conductive ladders and all recommended
- safety equipment. Place equipment on level ground.
- Know the phone # to the local power company before installation begins.
- Look over the installation area and be sure there are no power lines overhead or anywhere contact can be made with them. Assume that all overhead lines are power lines.
- Always work together with an assistant. In case of emergency, this partner could save your life.
- Let falling towers or antennas fall, do not attempt to catch them.
- If anything comes in contact with a power line, leave it there and call the power company for assistance
- Foul weather days are not antenna or tower installation days.

Contacting power lines can be deadly:

Be sure no power lines are anywhere possible contact can be made. Antennas,towers and all supporting wires etc must be kept away. To make sure there is no possibility of contact with the tower, mast or antenna, the horizontal distance to the electrical line should be twice the total length of the mast/antenna. This safety measure will ensure that the mast will not contact electrical power during installation or later.



If a person comes in contact with electrical power and cannot move:
- Do not touch that person or you could be electrocuted
- Use a non-conductive dry board, stick or rope to push or pull the person away from contact with the electrical power.
- Once they are not contacting electrical power or you feel you cannot safely move them CALL 911, or summon professional assistance immediately.
- If certified, begin CPR until help arrives.

Make sure all towers and masts are securely grounded and cables connected to antennas have lightning arrestors. This will help prevent electrical and fire damage as well as human injury in case of a lightning strike, static build-up or short-circuit within equipment connected to the antenna.

Refer to the National Electrical Code for grounding details