## **WHF/UHF** Base Station Antenna Instruction Manual

1. Connect upper and center elements. To pull out element joint bracket at the top of center element, make upper part of the element down and shake lightly.



Note: Be sure to assemble the antenna from upper element. If the antenna is being assembled from lower element, the element can not be pulled out from outershell and fasten properly.



- After connecting these elements with a screw, push back center element downward in advance to connect upper and center outershells. Then connect upper and center outershells at upper joint bracket section.
- 3. Fasten upper part of the joint bracket (A) with a special wrench attached by holding lower part of the joint bracket (A) firmly with the wrench. Use narrow gap section of the wrench to fasten and hold each part of the bracket. For perfect waterproof, fasten the bracket until there is no gap between each part.

Note: Be sure to fasten the bracket firmly, otherwise it may lead water leakage problem. Adhesive NOTE seal is attached on the joint bracket. Remove the seal before installing the antenna. Gasket and gasket holders have to be fixed at 10cm from the edge of FRP outershell.



Connect center and lower elements.



Note ; Do not pull out lower element.

5. Fasten lower part of joint bracket (B) just as the same way as the joint bracket (A) with a special wrench attached. Use wide gap section of the wrench to fasten and hold each part of the bracket. For perfect waterproof, fasten the bracket until there is

no gap between each part.



Note: Be sure to fasten the bracket firmly, otherwise it may lead water leakage problem.

6. Attach three radial elements as shown in Fig. 1.

7. Attach two mast brackets on support pipe and fix them. Then connect a coaxial cable. with a connector for the to the feed point section through the pipe.



8. Fix support pipe and feedpoint section of the antenna with lock screw by aligning the holes at the bottom of the section and upper part of the pipe.

9. Attach assembled antenna on a mast by taking whole balance into account as shown in Fig. 2. Turn the coaxial cable once to make a loop at right below the antenna to escape excess load from the cable.

Note: Though acceptable mast diameter is from 30mm (1.18"), it is recommended to use large diameter mast as possible because the antenna is relatively large.

## Note

Though all this antenna employs DC ground structure, circuit across center conductor section and ground section of the connector is open (not conducted) if it is measured by a volthom meter. If it is closed (conducted), check to see coaxial cable and/or connector thoroughly. Be sure to install the antenna vertically. Full performance of the antenna can not be guaranteed if the antenna is not installed vertically. Since connector is relatively complicated compared with conventional type connector, utmost care has to be taken to handle connector to coaxial cable connection. It is recommended to practice test transmission for adjustment as short and least power as possible.

## Warning

Do not touch or come close to the antenna during transmission. Do not install the antenna where is easily reached by the children.