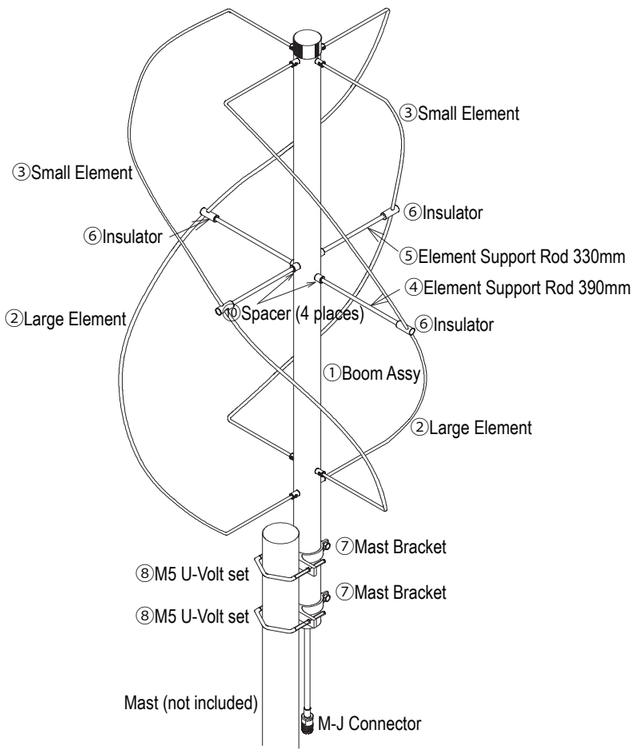
Circularly polarized omnidirectional antenna

DP-KE137

This is receiving antenna for ACARS and weather sateliite NOAA.

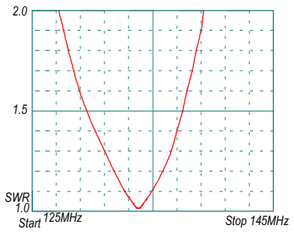


Specification

LENGTH
around 1.0m
FRONT / BACK / LEFT / RIGHT
around 0.42m
WEIGHT
1.10kg
CONNECTOR
M-J

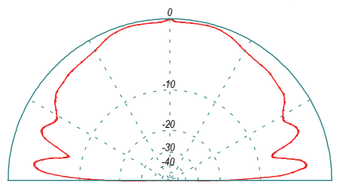
Standard SWR chart

SWR changes depending on the location and surrounding.
Could be slightly different from the chart.

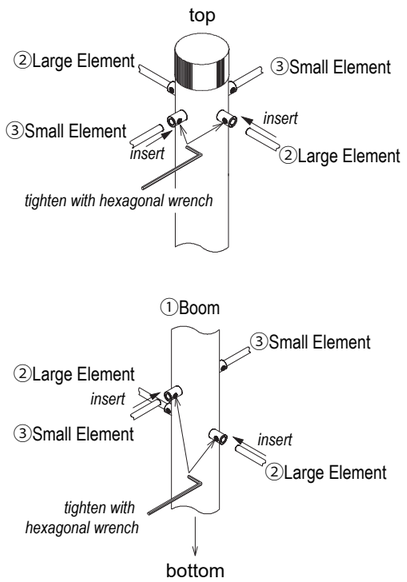


radiational pattern from side

Horizontal and vertial ware are composed.



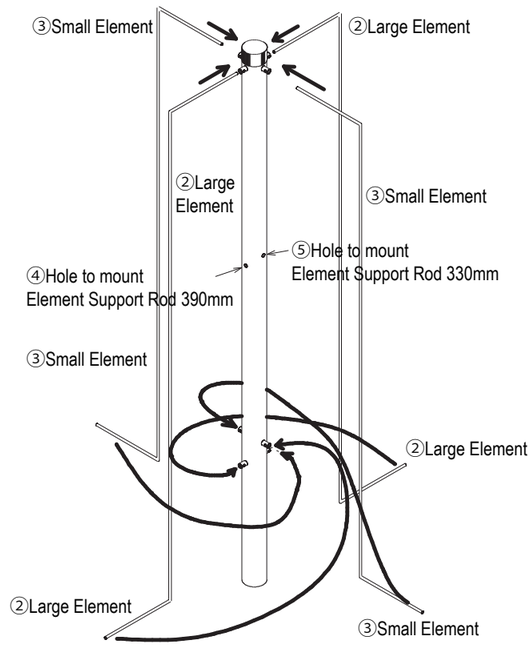
How to mount element



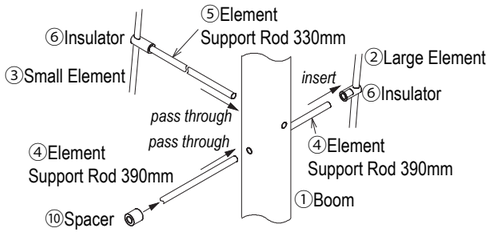
1) The one with the black cap on the boom is on top.
There are four sockets for the element just below the cap.
2) There is a small element socket approximately 70cm below the upper socket.
3) Below that, there is a large element socket in the 3.8 cm perpendicular direction.
4) There are two types of elements, long and short, with no top and bottom. Can be inserted from either side.
5) Before attaching the element, use hex wrench to loosen all the hex set screws in each socket. Be sure not to drop.
6) Check the element length and installation position,then insert the element.

Parts List

No.	Parts Name	Amount
1	Boom Assembly	1
2	Large Element	2
3	Small Element	2
4	Element Support Rod 390mm	1
5	Element Support Rod 350mm	1
6	Insulator (with Element)	4
7	Mast Bracket	2
8	M5 U-Volt Set	2
9	6mm Hexagonal Wrench	1
10	Spacer	4
11	4x5 Screw Set (spare)	1



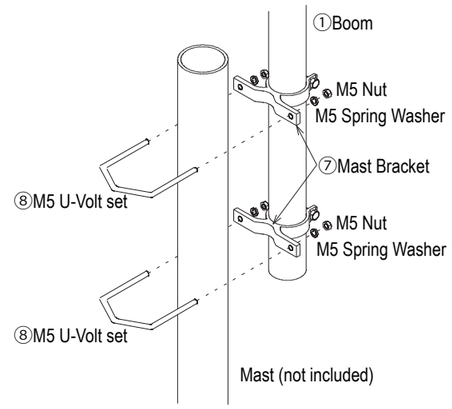
7) When inserting the lower part of the element to the lower socket, make sure that the boom is counterclockwise when viewed from directly above.
8) Bottom part of the element should mount on 180-degree back side.
9) Insert one end of the small element until it touches the back of the upper socket. Lightly tighten the screw for temporarily fix.
10) Pull the lower part of the installed small element along the boom, and lift it up when the end of the bent element exceeds the boom and insert it into the socket.
11) Install the remaining elements in the same way, and tighten the socket screws firmly.
12) Leave the element bent in the natural state inserted into the sockets at both ends.



After passing the support rod throught the boom, insert in the spacer. Adjust the spaver so width on both sides should be even.

13) The boom near the center of the element has two holes at the top and bottom. This is hole to insert support rod.
Be careful when inserting the support rod. Coaxial cable passes through the boom.
14) After passing the support rod through the hole above, insert the spacer into the support bar and adjust the spacer so that the width of the support rod is symmetrical.
15) Move the insulator inserted into the small element and insert it into the tip of the support rod. The other side of the support rod is also inserted into the insulator using the elasticity of the support rod and the elasticity of the element. Insert the support rod firmly into the insulator.
16) Pass the support rod through the bottom hole, use the spacer to target the support rod to the left and right, and insert the large element insulator as far as it will go.
18) Adhesive is not used, but it will not come off due to the elasticity of the element.

How to mount on the mast



1) Pass the mast bracket through the boom, then fix it at an appropriate position using M5 U-volt.
2) Be careful that the mast should not be too close to the element so they will not contact.

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