

MODEL CA-52HB

COMET ANTENNA

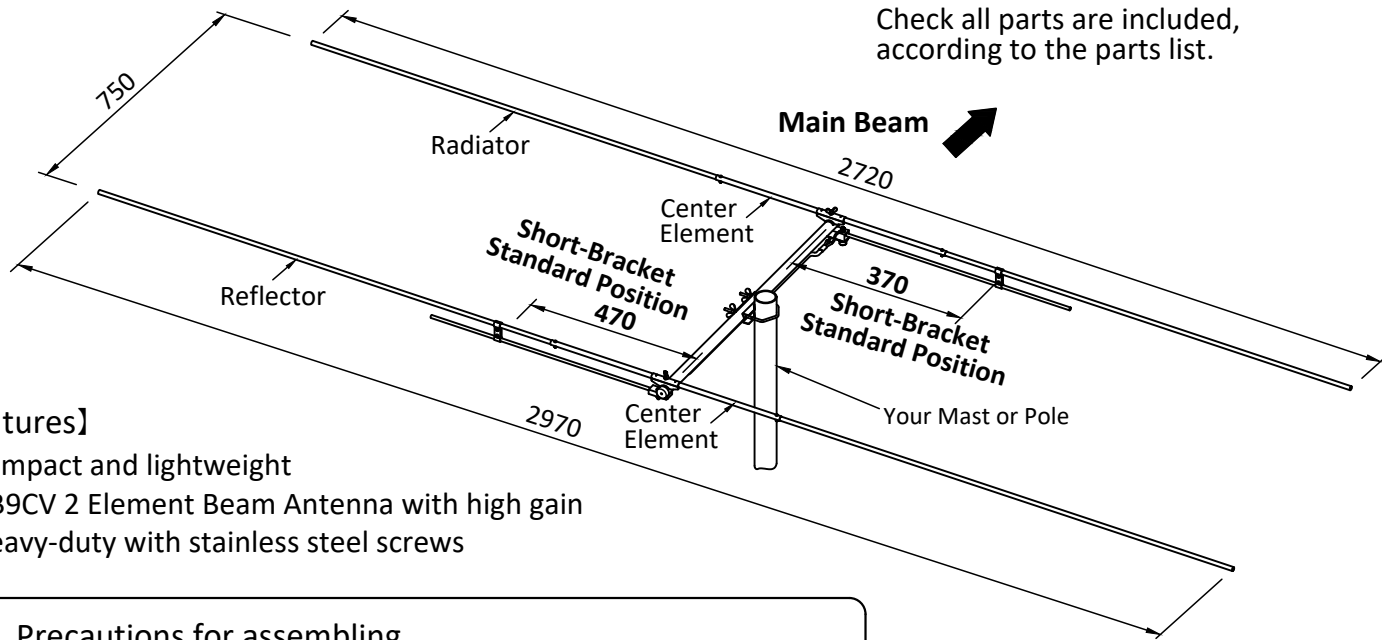
HB9CV type Beam antenna
for 50~52MHz

Instruction Manual

Thank you for purchasing our product.

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

Check all parts are included,
according to the parts list.



【Features】

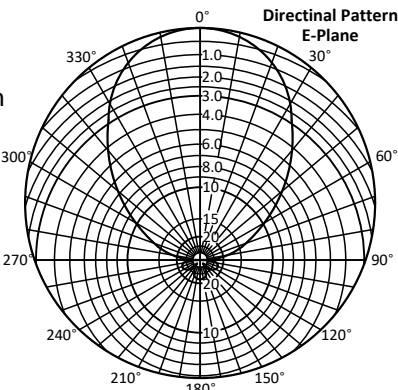
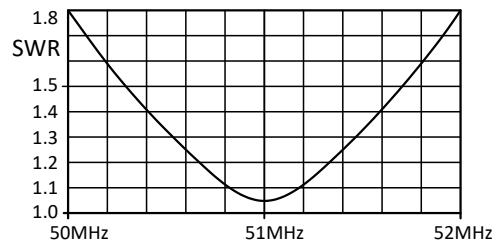
1. Compact and lightweight
2. HB9CV 2 Element Beam Antenna with high gain
3. Heavy-duty with stainless steel screws

⚠ Precautions for assembling

- Wearing a safety hat and a life line during installing on a roof top or any high places is highly recommended.
- Do not erect this antenna near any electrical power lines and/or street lights.

【Specifications】

- Frequency : 50 – 52MHz
- Gain : 6.3 dBi
- F/B ratio : 24dB or more
- Half-power angle : approx 68°
- Input Power : 200W(FM)
- Impedance : 50Ω
- V.SWR : 1.8 or less at 50 – 52MHz
- Connector : SO-239 (M-J) type
- Turning Radius : approx 1.54m
- Mounting Mast Diameter : φ25 – 62mm
- Max Wind Survival : 30m/sec
- Wind Load : approx 0.054m²
- Boom Length : approx 0.79m
- Length : approx 2.97m
- Weight : approx 910g (antenna body)



⚠ Precautions for Installation

- Choose a safe place to erect this antenna, complying with the laws and regulations in your country.
- Be sure to tighten and waterproof all screws, nuts and bolts.
- Do not erect this antenna near any overhead wires, steel towers, buildings or any other obstacles.

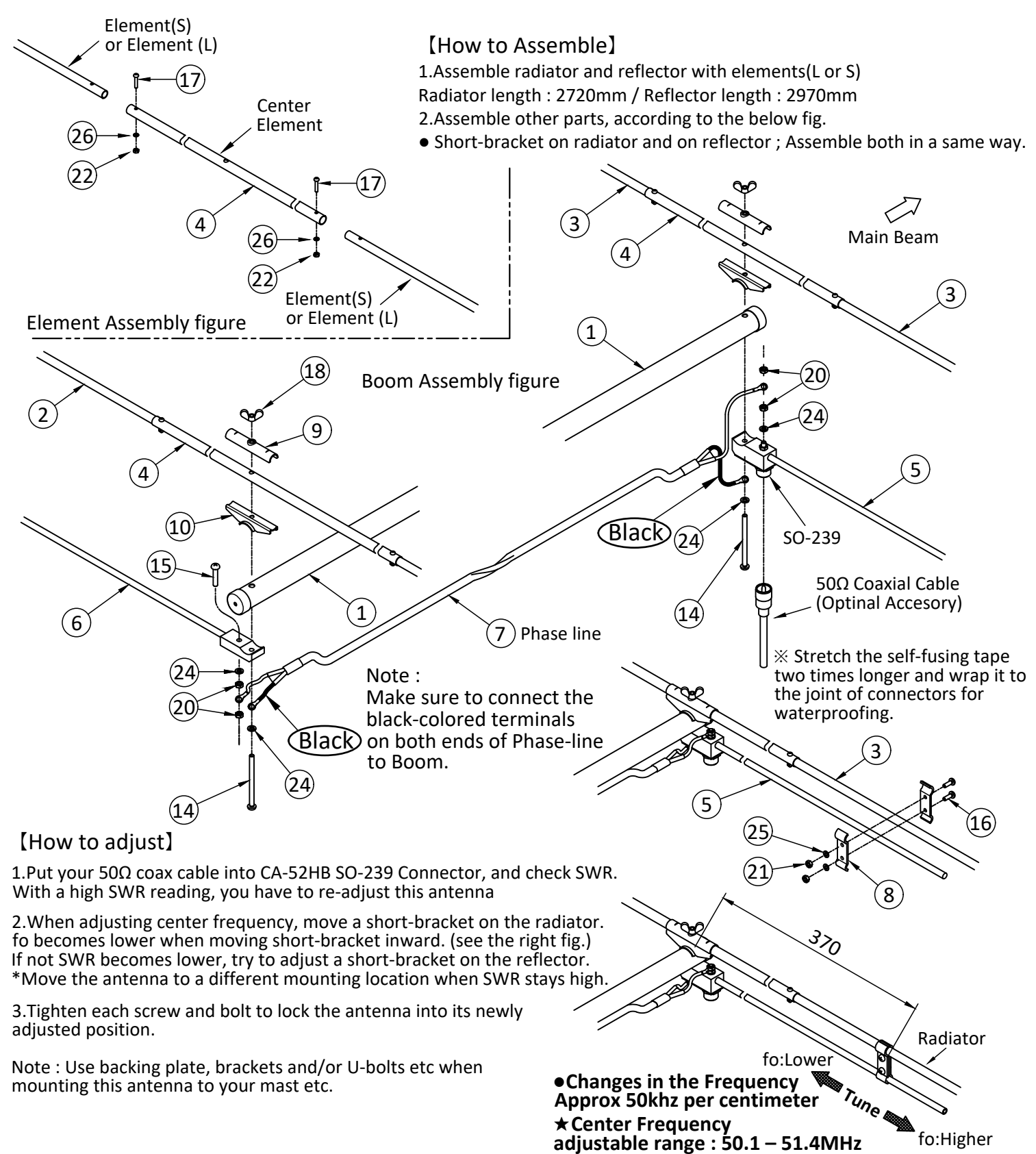
【Parts List】

Parts Name		Qty.
1 Boom with cap	φ 25 × 790 mm	1
2 Element(L)	φ 9.5 × 1215 mm	2
3 Element(S)	φ 9.5 × 1090 mm	2
4 Center Element	φ 11 × 600 mm	2
5 Regulating Rod(1)	with SO-239(M-J) Connector	1
6 Regulating Rod(2)	Rod without Connector	1
7 Phase Line	with terminal	1
8 Short-bracket	aluminum plate	4
9 Element-holder (A)	aluminum	2
10 Element-holder (B)	aluminum	2
11 Backing plate	stainless plate	1
12 Fixing bracket	stainless plate	1
13 U-Bolt	M 6	1
14 Pan-head Screw	M 5× 70	2
15	M 5× 25 Preinstalled with Regulating Rod(2)	1
16	M 4× 10	4
17	M 3× 16	4
18 Wing Nut	for M 5	2
19	for M 6	2
20 Hex. Nut	for M 5 four preinstalled with Regulating Rod	4
21	for M 4	4
22	for M 3	4
23 Spring washer	for M 6	2
24	for M 5 two preinstalled with Regulating Rod	4
25	for M 4	4
26	for M 3	4
27 Self-fusing tape	20cm	1

appearance and/or specification is subject to change.

【How to Assemble】

1. Assemble radiator and reflector with elements(L or S)
Radiator length : 2720mm / Reflector length : 2970mm
2. Assemble other parts, according to the below fig.
● Short-bracket on radiator and on reflector ; Assemble both in a same way.



Note :
Make sure to connect the black-colored terminals on both ends of Phase-line to Boom.

※ Stretch the self-fusing tape two times longer and wrap it to the joint of connectors for waterproofing.

【How to adjust】

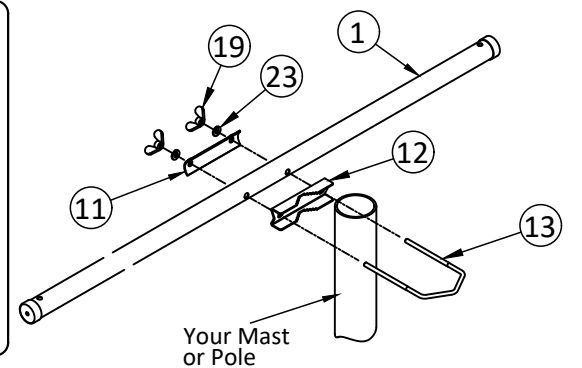
1. Put your 50Ω coax cable into CA-52HB SO-239 Connector, and check SWR. With a high SWR reading, you have to re-adjust this antenna
2. When adjusting center frequency, move a short-bracket on the radiator. fo becomes lower when moving short-bracket inward. (see the right fig.) If not SWR becomes lower, try to adjust a short-bracket on the reflector.
*Move the antenna to a different mounting location when SWR stays high.
3. Tighten each screw and bolt to lock the antenna into its newly adjusted position.

Note : Use backing plate, brackets and/or U-bolts etc when mounting this antenna to your mast etc.

● Changes in the Frequency Approx 50kHz per centimeter
★ Center Frequency adjustable range : 50.1 – 51.4MHz

⚠ 【Precautions for operating】

- Check if the Cable Connector fits into the Antenna Connector.
 - Keep children away from this antenna, especially while transmitting.
 - Stop the use of this antenna immediately if you see the slightest trouble.
 - DO NOT use this antenna out of spec.
 - DO NOT use this antenna without element or with extra element.
 - Never attempt to perform modification by yourself.
 - While lightening, DO NOT touch this antenna.
- Remove the radio, antenna and/or cable etc from devices.
Also check SWR after lightening.



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