

# Attaching the AH-109PB and CX-10G to a pole

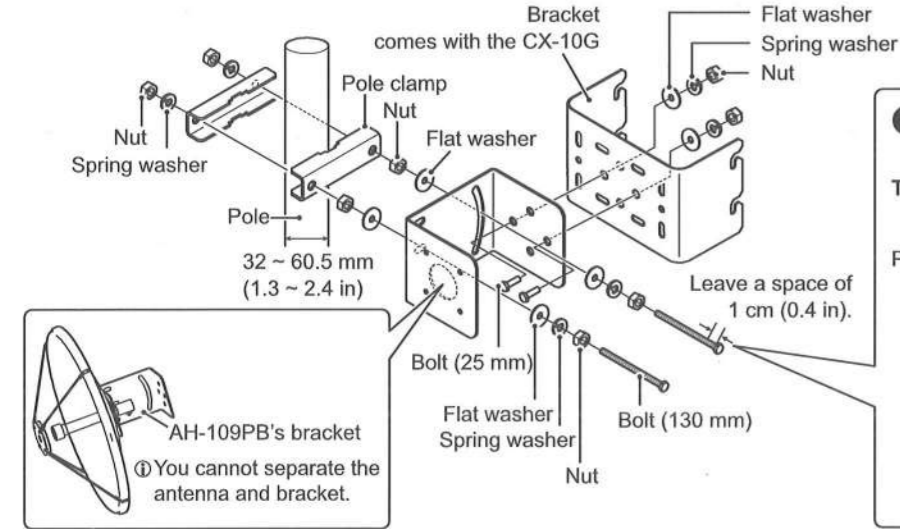
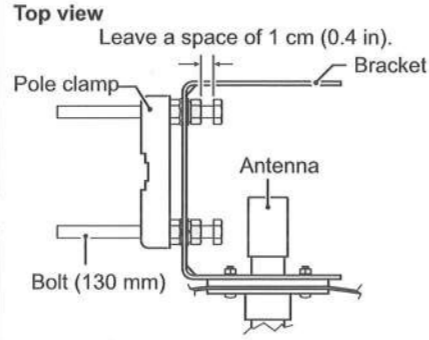
## 10 GHz PARABOLA ANTENNA AH-109PB

Thank you for choosing this Icom product.  
**READ ALL INSTRUCTIONS** carefully and completely before using this product.

**3 Attach the AH-109PB to a pole.**

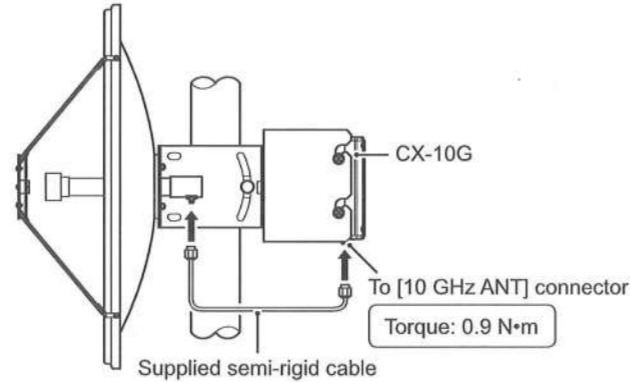
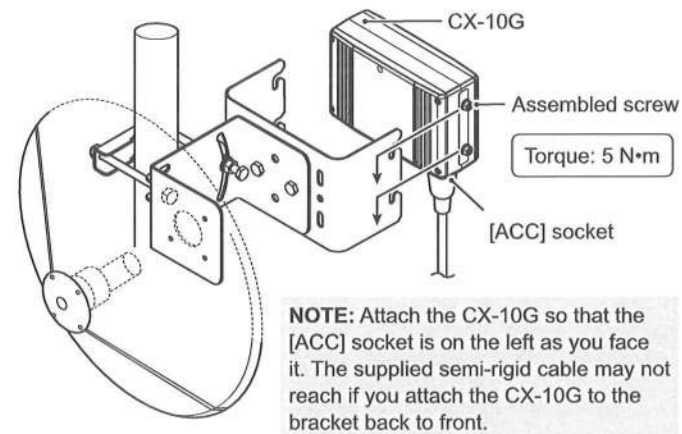
**2 Attach the CX-10G's bracket to the AH-109PB.**

**1 Attach the clamp to the AH-109PB's bracket using 2 nuts on each bolt.**

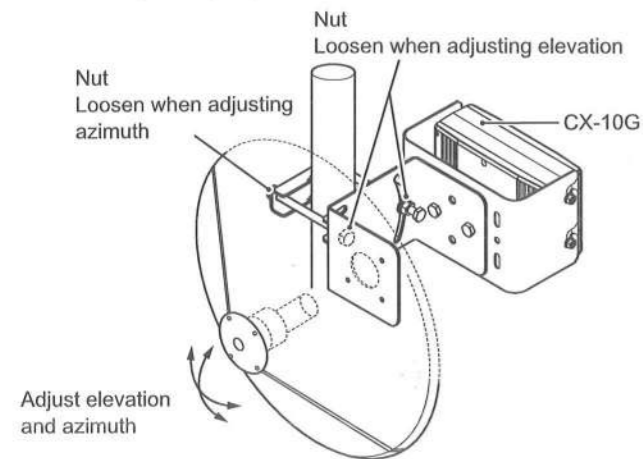


**4 Attach the CX-10G to the bracket, and then tighten the assembled screws.**

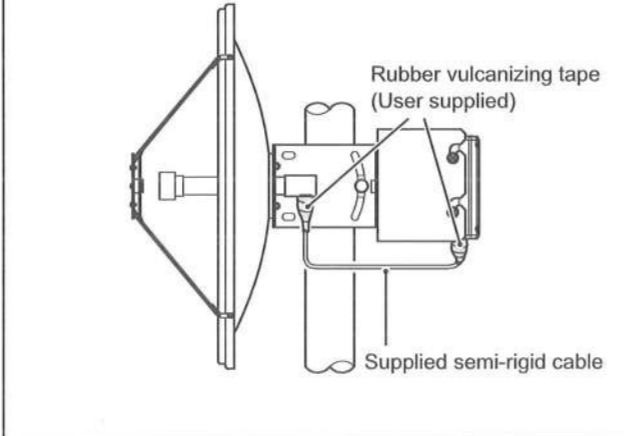
**5 Connect the AH-109PB and CX-10G with the supplied semi-rigid cable.**



**6 Loosen the nuts to adjust the angle of the AH-109PB. After adjusting, tighten the nuts again.**



**TIP:** After connecting, covering the connectors with a rubber vulcanizing tape prevents water from seeping into the connection.



**NOTE:** When adjusting azimuth, be careful not to loosen the nuts too much causing the antenna to fall.

### Important

**SAVE THESE INSTRUCTIONS**— These instructions contain important safety and installation instructions for the AH-109PB.

### Explicit definitions

WORD	DEFINITION
<b>WARNING!</b>	Personal injury, fire hazard or electric shock may occur.
<b>CAUTION</b>	Equipment damage may occur.
<b>NOTE</b>	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

Icom is not responsible for the destruction, damage to, or performance of any Icom or non-Icom equipment, if the malfunction is because of:

- Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, other natural disasters, disturbances, riots, war, or radioactive contamination.
- The use of Icom antennas with any equipment that is not manufactured or approved by Icom.

### Disposal

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

### About CE

Versions of the AH-109PB which have the "CE" symbol on the product, comply with the essential requirements of the 2014/30/EU directive for Electromagnetic Compatibility.

**Below statement is for UKCA purpose only**  
United Kingdom Authorised Importer: Icom (UK) Ltd.  
Address: Blacksole House, Altira Park, Herne Bay, Kent, CT6 6GZ, U.K.

### Precautions

**BE CAREFUL!** When you attach the antenna, wear gloves to avoid cutting your hand on the sharp edges of the antenna.

Icom is not responsible for any building breakage, any damage resulting from a drop of the mounting bracket from a high place or unstable site, or any personal injury or any accident in any other case. Be sure to consult an expert engineer for installation help.

**WARNING HIGH RF VOLTAGE! NEVER** touch an antenna or antenna connector while transmitting. This could cause an electrical shock or burn.

**WARNING HIGH RF VOLTAGE! NEVER** put the antenna in any place that person easily touch the antenna while transmitting. This could cause an electrical shock or burn.

**WARNING! NEVER** disassemble, modify or repair the antenna. This may result in an electrical shock, cause a fire or damage the antenna.

**WARNING! NEVER** touch the antenna with wet hands. This may result in an electrical shock or damage the antenna.

**CAUTION: DO NOT** put the antenna in any unstable place, such as on a slanted surface or a place that vibrates. This may cause an injury and/or damage the antenna.

**CAUTION: DO NOT** use the antenna in strong magnetic fields or in an area with high static electricity. This could damage the antenna.

**CAUTION: DO NOT** use harsh solvents such as benzene or alcohol to clean the antenna, as they can damage the antenna's surfaces. If the antenna becomes dusty or dirty, wipe it clean with a dry, soft cloth.

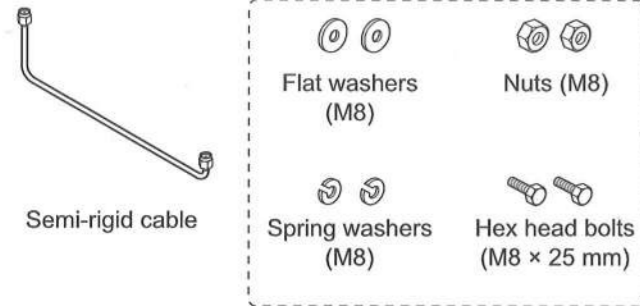
**DO NOT** place or leave the antenna in excessively dusty environments.

**BE SURE** to check your local regulations or laws to select the appropriate operating frequency.

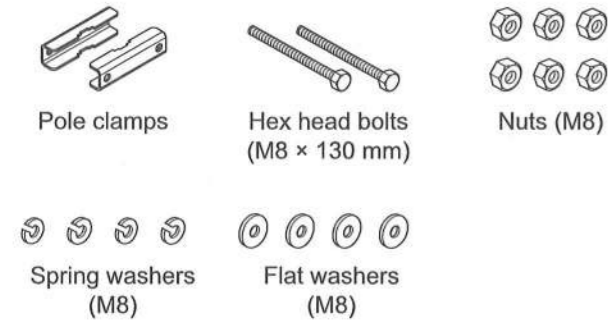
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## Supplied accessories

### For connecting and attaching to the CX-10G



### For attaching to a pole



## Selecting a location

**NEVER** place the antenna in areas such as:

- An unstable place that slopes or vibrates.
- Too close to each other or other devices, such as TV antennas.
- Near a radio tower emitting strong radio waves.
- Near a metal structure, such as warehouses.
  - ① If there is a metal wall, handrail, or pillar where the radio wave from the antenna travels, the radio wave may be reflected irregularly.
- A place without direct lightning protection, such as lightning rods.
- A place where the antenna is affected by wind, and interferes with the wall or the other device around the antenna.

### NOTE:

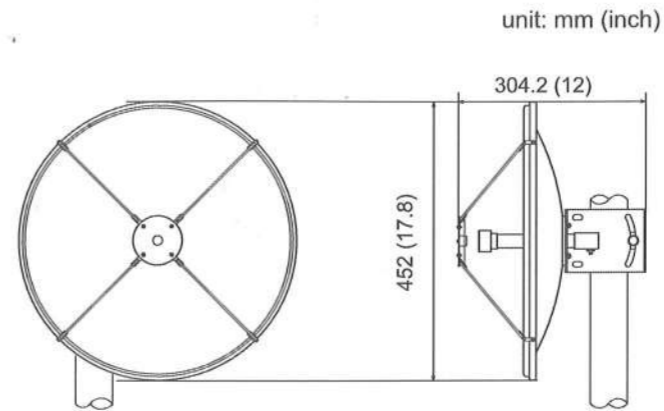
- Attach to a stable pole. Communication may be temporarily unavailable or interrupted if the antenna sways in the wind.
- **DO NOT** attach the antenna in any orientation other than these instructions. Be sure to have the same polarization as the destination.
- **DO NOT** bend, extend, or cut the supplied semi-rigid cable. Using other cables may cause more losses.
- **DO NOT** paint the antenna surface. The metal composition contained in the paint may attenuate the radio signals.

## Specifications

- Antenna type: Splash plate feed antenna
- Frequency range: 10.0 ~ 10.5 GHz
- Gain: 31 dBi (typical)
- Maximum input power: 10 W
- Half power beam width (approximate): 4 degrees in the E plane
- Polarization: Vertical
- Impedance: 50 Ω (typical)
- VSWR: 2.0 or less
- Connector: SMA-J
- Wind velocity survival rating: 50 m/s (111.8 mph)
  - ① When attaching to a pole with a diameter of 60.5 mm (2.4 in).
- Attaching pole diameter: 32 ~ 60.5 mm (1.3 ~ 2.4 in)
- Weight (approximate): 2.0 kg, 4.4 lb (with the bracket)

① All stated specifications and design are subject to change without notice or obligation.

## Dimensions



## Radiation pattern (in the vertical plane)

The AH-109PB provides vertical polarization and has directional dependence in the vertical plane, as shown below.

① You cannot attach the AH-109PB to provide horizontal polarization.

