Thank you for purchasing the Comet CHA-250B Broadband GP antenna. For your safety and to get the best possible results, we recommend that you read this manual to fully familiarize yourself with the CHA-250B. Also, please keep this manual in a safety place for your future reference.

Features:
- Ultra wide-band coverage.
- Thick base element (2mm) for heavy duty operation.
- Utilizing stainless bolts and nuts for longer life.

Before assembly:
Please make sure all parts are enclosed in carton box as listed below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Matching section assembly</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Worm cramp for Aluminum element (1)</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Aluminum element (2)</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Aluminum element (3)</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Aluminum element (4)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Aluminum element (5)</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>U bolt (w/ lock washer, nut)</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Hexagon head screw (M5×35/Wing nut)</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Hexagon head screw (M4×30/Wing nut)</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Hex wrench</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Self adhesive tape (20cm)</td>
<td>1</td>
</tr>
</tbody>
</table>
- **Type**: Ground plane antenna
- **Frequency**: Transmit 3.5 ~ 57MHz / Receive 2.0 ~ 90MHz
- **Max. Power**: 250 Watts (SSB)
- **Impedance**: 50 ohms
- **V SWR**: Less than 1.5 : 1 typical
- **Connector**: SO-239
- **Max. Length**: 23.8 ft (7.13 m)
- **Weight**: 7.11 lb (3.2 Kg)
- **Wind survival**: 67.5 mile/HR (108 Km/Hr)
- **Mast size range**: 1.18 ~ 2.8 in (3.0 ~ 7.2 cm)

**Representative frequency characteristic figure:**

![Graph showing frequency versus return loss and SWR](image)

**Warning:**
- Before you install your antenna, select the most available open site away from electric power lines and telephone lines. To get the maximum performance from your antenna, it must be installed at least 35 feet above the ground.
- This antenna has a long element and is heavy to carry or install by single person. Therefore, you must find assistance before installation. Doing so will prevent you from any severe injuries or death.

**Assembling:**
1. Slide the element(2) into the element(1) 8 inches, and then secure worm clamp.
2. Slide out the element(3) from the element(2) until 2 holes of both elements can be seen together. Using Hexagon head screws(M5 x 35) and Wing nut, tighten both elements.
3. Slide out the element(4) from the element(3) until 2 holes of both elements can be seen together. Using Hexagon head screws(M4 x 30) and Wing nut, tighten both elements.
4. Slide out the element(5) from the element(4) Then slide it again into the element(4) 4 inches, and then tighten them with using a pair of screw sets.
5. Using the supplied U bolts, washer and nuts, tighten them against your mast.
6. Connect a 50 ohms coaxial cable with a PL-259 connector to the antenna connector of the matching section.
7. Tape over the connector with a supplied self adhesive tape.
Note & Remarks on handling and driving:

- Never touch or adjust the antenna while transmitting. Otherwise, severe injuries including burn may result.
- When a lightning is observed, stop operating with the antenna. Don't touch a coaxial cable and so on because it is sometimes struck by electricity.
- Please confirm tight fastening of connector and screws, etc. of antenna. Loosening and falling off will lead to personal injury and property damage.
- Please adjust antenna correctly. Irregular VSWR will lead to heat-up, break-down or power-down of antenna.

Note & for operation:

- This antenna is for amateur radio and Broad Band receipt operator. Do not use other than for the purpose of antenna.
- Please use this antenna within the standard and specifications described in this manual. Failure to this may cause heat up and break down of the unit.
- Whatever damage and the malfunction which is due to the repair and the reorganization at end-user itself occur, it doesn't take the responsibility.

[Maintenance]
☆ If malfunction is occurred, stop operation and try to find the reason. If it is not settled, please contact the store/shop where you purchased the antenna or our Engineering Department.
- Before the practical use when transmitting, please check the VSWR is less than 1.5 at your operating frequency.
- Routinely, please confirm tight fastening of each Screws, clamp, etc.

[Customer Service]
- Replacement parts and accessories are available at our dealer and our factory.
- This quality product is manufactured under strict quality control. Contact the store/shop for those damaged by transportation.
- For further information about assembling work and other technical matters, please contact to our Engineering Department.

COMET CO.,LTD.
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