**How to connect to electricity supply**

- **Preparation of the water resistant cap**
  - Clip off the end of water resistant cap according to the diameter of the coaxial cable.

- **Preparations of coaxial cable (SCFB)**
  - F-Type connector is sold separately.
  - Tools needed: cutter, knife, scissors or nipper, plier.

- **Connecting coaxial cable to the antenna and water proofing**
  - Connect the coaxial cable to the antenna feeder assembly and tighten the connector with pliers, etc. Do not overtighten the connector. The torque should be about 2.0 N.m (20 kgf-cm).
  - Complete with the water resistant cap tightly inserted towards the feeder assembly. It is recommended that additional protection to wrap self adhesive tape around the connector then cover with the water resistant cap for regions that might have salt damages and/or heavy rain.

**Note**

- Cutting the center connector diagonally will make it easier to connect the cable.

**Parts name**

- **wire mesh**
- **aluminum ring**
- **cable insulator**
- **aluminum foil**
- **F-type connector**

**specifications**

<table>
<thead>
<tr>
<th>Models</th>
<th>AU14AF</th>
<th>AU14AF</th>
<th>AU14AF</th>
<th>AU20AF</th>
<th>AU20AF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving Channels</td>
<td>13~69</td>
<td>13~69</td>
<td>13~69</td>
<td>13~69</td>
<td>13~69</td>
</tr>
<tr>
<td>Number of elements</td>
<td>8</td>
<td>14</td>
<td>20</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Operating gain</td>
<td>4.2~8.4</td>
<td>6.8~10.9</td>
<td>6.8~11.1</td>
<td>8.9~12.4</td>
<td>8.0~12.5</td>
</tr>
<tr>
<td>Impedance</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VSWR (less than)</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half bandwidth</td>
<td>6.5~21</td>
<td>15~25</td>
<td>17~25</td>
<td>18~25</td>
<td>18~25</td>
</tr>
<tr>
<td>Wind endurance (N/kgf)</td>
<td>34~(35.5)</td>
<td>93.5 (9.5)</td>
<td>89 (8.1)</td>
<td>114 (11.8)</td>
<td>108 (11.1)</td>
</tr>
<tr>
<td>Dimensions L x W x H [mm]</td>
<td>70X5X36-180</td>
<td>189X36X172</td>
<td>189X36X172</td>
<td>189X36X172</td>
<td>189X36X172</td>
</tr>
<tr>
<td>Mass (Weight) [kg]</td>
<td>0.4</td>
<td>0.8</td>
<td>0.7</td>
<td>0.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Suitable mast diameter [mm]</td>
<td>22~32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Specifications**

- **Tools needed:** cutter, knife, scissors or nipper, plier.
- **Remove the insulator portion (14mm) as shown in the dotted line of the coaxial cable (cut about 1mm)**
- **Cut off the outer cover and pierce the aluminum ring**
- **Turn over the wire mesh**
- **Remove the insulator about 3mm in length**
- **For improvement and/or change of the product, the information presented in this manual is subject to change without notice.**

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**Thank you for purchasing Nippon Antenna products. Please read this manual carefully before using. Keep this manual in a safe place for future reference.**

**Features**

- **Terrestrial Digital TV Antenna**
- **Obtained the maximum front/rear ration, gain, and VSWR for the wide frequency range employing the dual dipole array feeding system.**
- **Employing the corner reflector to reduce the ghost interference with improved front/rear ratio.**
- **Aluminum arm stand is used for anti-corrosion and better durability.**
- **Stainless antenna probe is used for better durability.**

**Specifications**

- **Models:** AU14AF, AU14AF, AU20AF
- **Receiving Channels:** 13ch ~ 69ch
- **14 pieces of antenna probe for horizontal and vertical waves**

**AU14AF**

- **Receiving Channels:** 13ch ~ 69ch
- **14 pieces of antenna probe for horizontal and vertical waves**

**90 DAY LIMITED WARRANTY**

Nippon Antenna Company warrants this product against any defects in materials or workmanship within 90 days from date of purchase. No warranty claim will be honored unless at the time the claim is made, you present proof of purchase to an authorized Nippon Antenna Company dealer (if unknown, please contact Nippon Antenna Company (North America Distributor) in Canada). Nippon Antenna Company will either repair or replace the defective product at no charge to you. This warranty covers parts, but does not cover any costs incurred in removal, shipping or reinstatement of the product. This limited warranty does not apply if the product is damaged, deteriorated, malfunctioning or fails from misuse, improper installation, abuse, neglect, accident, tampering, modification of the product as originally manufactured by Nippon Antenna Company, usage not in accordance with product instructions or acts of nature such as damage caused by wind, lightning, ice or corrosive environments such as salt spray and acid rain. The 90-Day Warranty is provided on the condition that the equipment is properly delivered with all handling and freight charges prepaid to your Nippon Antenna dealer for return to our distributor for repair or replacement. Nippon Antenna Company dealers will arrange for the replacement or repair and return to you without charge the product that failed due to defective material or workmanship.

**NIPPON ANTENNA COMPANY WILL NOT ASSUME ANY LIABILITIES FOR ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, MADE BY ANY OTHER PERSON. ALL OTHER WARRANTIES WHETHER EXPRESS, IMPLIED OR STATUTORY INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY ARE LIMITED TO THE 90-DAY PERIOD OF THIS WARRANTY.**

The foregoing shall be the sole and exclusive remedy of any person, whether in contract, tort or otherwise, and Nippon Antenna Company shall not be liable for incidental or consequential damage or commercial loss, or for any other loss or damage except as set forth above.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion of limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights, which vary from state to state and Canada.

Nippon Antenna Company (North America Distributor) www.karmond.com

**Cautions and Safety Notice**

- Make sure to consult with specialist for the installation of antenna at roof top, and to secure it safely.
PRECAUTIONS

Read and heed the instructions and the cautions listed in this manual. Store this manual in a safe place for future reference.

Pictorial indication: Please understand the meaning of the following pictorial indications and heed the instructions. Otherwise it may cause injuries to users, others and property damages.

⚠️ Warning
This indicates that it may cause serious injuries to human body or death if it is ignored.

This symbol indicates “Prohibited actions” and is accompanied with exact nature of “Prohibited actions” with this “circle with crossed out line symbol”.

⚠️ Warning
This remark shows the possibility of injury on human and physical damage if ignore or wrong handling in spirit of this remark.

⚠️ Caution
This remark shows the possibility of injury on human and physical damage if ignore or wrong handling in spirit of this remark.

⚠️ Caution
Do not hang laundry to antenna or metal fittings which may cause injuries due to fallen or broken antenna.

⚠️ Warning
If there is thunder, please do not touch the antenna and cable. This action may cause an electrocute.

⚠️ Caution
After storm or hurricane, a malfunction or loose fitting of antenna setting may happen. Neglect such situation may cause damage and human injuries. Please consult with professional engineer or service company.

Concrete instructions are illustrated.

⚠️ Warning
Keep away from power lines. Work in the safe environment. Avoid injuries while installing.

⚠️ Caution
Locate the receiving antenna in a direct line of sight to the transmitting stations.
Locate the receiving antenna away from heavy traffic and (or) high-tension wires.
Locate the receiving antenna away from other antenna as far as possible.
Locate the antenna (place, height & direction) where you can get the best reception.
Secure the coaxial cable away from eavestrough and roof so that it does not touch them in any weather conditions.

How to assemble antenna

1. Assembling reflector
Open arms up and down to the lock-in position.

2. Assembling supporting stay
Loosen bow nut, insert stay at Arm Band A to ensure bolt head is inserted up to the end. Fasten bolt nut.

3. Assembling antenna stay
Fit the screw head for the positioning in the slot on the arm band, then tighten the wing nut.

4. Assembling of driven elements
Fit the prong on the feeder assembly into the hole on the arm and tighten the wing nut.

5. Attaching to the mast
Make sure all screws and nuts are tighten before attaching it to the mast.

Note: These slots are for packaging.

When setting it vertically, loosen the wing nut from the stay. Rotate it 90° as shown below.