1. SAFETY PRECAUTIONS

• Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
• Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
• After reading, keep this manual handy for future reference.

⚠️ WARNING
Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.
- Since the unit is designed for indoor use, do not install it outdoors. If installed outdoors, the aging of parts causes the unit to fall off, resulting in personal injury. Also, when it gets wet with rain, there is a danger of electric shock.
- Do not touch the antenna cable during thunder and lightning, as this may result in electric shock.

⚠️ CAUTION
Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.
- Install the unit only in stable locations, and make appropriate arrangements to prevent it from falling down or rolling cross the floor. If it falls down or moves, this may cause personal injury and/or property damage.
- Avoid placing the unit in a doorway or other high traffic area as people may trip on the equipment and cords, or be injured by falling objects.

• Leave the installation the antenna to your TOA dealer because the installation requires expert knowledge. Improper installation may cause the antenna to fall, resulting in personal injury or electric shock.
• When connecting the antenna cable to the target unit, turn off the unit’s power. Doing otherwise may cause electric shock.
• Never plug in nor remove the antenna cable with wet hands, as doing so may cause electric shock.
• Do not forcibly pull on the antenna cable, as doing so may cause the connected device to fall, resulting in personal injury.
• Be sure to disconnect the antenna cable when moving the antenna. Otherwise, people may trip over the antenna cable and the connected device may fall, resulting in personal injury.
• Note the following points to prevent the antenna cable from being damaged. If damaged, replace with a new one. Failure to do so may result in fire or electric shock.
  - When inserting or removing the antenna cable, be sure to grasp its connector.
  - Never heat nor place it near heaters.
  - Install it at a location where it is not carelessly damaged.

2. GENERAL DESCRIPTION

The YW-7520 and YW-7570 are antennas for the TRANTEC UHF band wireless system. They are designed to be mounted on a microphone stand (optional).

3. FEATURES

- An omnidirectional antenna YW-7520 designed for receiving radio signal from all 360° directions.
- A directional antenna YW-7570 designed for having higher receiving sensitivity in the directional angle compared with an omnidirectional antenna.

4. NOMENCLATURE AND FUNCTIONS
5. HANDLING PRECAUTIONS

- Place the antenna where a talker having the wireless microphone can directly see it.
- For the YW-7570, point the element's shorter (narrow) side toward the microphone talker.
- Install the antenna at the height of over 1.5 m (4.92 ft).
- Mount the unit on the floor microphone stand with 5/8" (NS5/8) or 3/8" (W3/8) thread.
- Install the unit over 5 m (16.4 ft) apart between antennas.
- Install the unit over 3 m (9.84 ft) from the wireless microphone. Otherwise, idle channels may operate or interference may occur.
- When using a diversity tuner, keep over 5 m (16.4 ft) apart between antennas.
- Install the unit over 30 cm (11.81") from metal objects or electric wire to prevent decline in receiving sensitivity or external noise problem.
- Ensure the connector connection. Improper connection may cause decline in receiving sensitivity or external noise problem.
- Use the low loss high frequency coaxial cable for the antenna cable.
- Keep antenna wiring as short as possible (roughly 10 m or 32.81 ft). To extend it more, use an antenna booster.
- For the antenna booster, contact your TOA dealer.
- Bending or breaking the antenna element sharply reduces receiving sensitivity. Handle it with care.
- Separately prepare the coaxial cable and BNC plug.
- Never place heavy objects on the YW-7520/YW-7570 during storage. It may be damaged.
- Never affix metal label to the antenna element, as doing so may sharply reduces receiving sensitivity.

6. SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model No.</th>
<th>YW-7520</th>
<th>YW-7570</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>570 – 870 MHz</td>
<td>570 – 870 MHz</td>
</tr>
<tr>
<td>Type of Antenna</td>
<td>Dipole antenna</td>
<td>Log-periodic antenna</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50 Ω</td>
<td>50 Ω</td>
</tr>
<tr>
<td>Gain</td>
<td>2.14 dBi</td>
<td>6 dBi</td>
</tr>
<tr>
<td>VSWR</td>
<td>Under 2.0</td>
<td>Under 2.0</td>
</tr>
<tr>
<td>Output Connector</td>
<td>BNC jack</td>
<td>BNC jack</td>
</tr>
<tr>
<td>Finish</td>
<td>FR-4 glass epoxy board, t=2 mm (0.08&quot;)</td>
<td>FR-4 glass epoxy board, t=2 mm (0.08&quot;)</td>
</tr>
<tr>
<td>Mounting Screw</td>
<td>NS5/8 (with adaptor to W3/8)</td>
<td>NS5/8 (with adaptor to W3/8)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>125 (w) x 272 (h) x 31.7 (d) mm (4.92&quot; x 10.71&quot; x 1.25&quot;)</td>
<td>433 (w) x 288 (h) x 31.7 (d) mm (17.05&quot; x 11.34&quot; x 1.25&quot;)</td>
</tr>
<tr>
<td>Weight</td>
<td>165 g (0.36 lb)</td>
<td>315 g (0.69 lb)</td>
</tr>
</tbody>
</table>

**Note:** The design and specifications are subject to change without notice for improvement.