Thank you for purchasing TOA's Wide Range Speaker.
Please carefully follow the instructions in this manual in order to ensure long, trouble-free use of your equipment.

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.

- Install the speaker only in a location that can structurally support the weight of the speaker and the mounting bracket. Doing otherwise may result in the speaker falling down and causing personal injury and/or property damage.
- Do not stand or sit on, nor hang down from the speaker as this may cause it to drop, resulting in personal injury and/or property damage.

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

- Do not operate the speaker for an extended period of time with the sound distorting. This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.

2. GENERAL DESCRIPTION AND FEATURES

TOA’s CS-304U outdoor speaker features a resin enclosure and stainless steel hardware for all-weather durability. It is designed to offer the weather resistance and high efficiency of horn speakers combined with the high sound quality of cone speakers. The CS-304U also employs a constant directivity horn for clear sound output over the limited horizontal range of dispersion.

3. APPEARANCE AND DIMENSIONS

4. WIRING DIAGRAM

**Note**
The rotary switch is factory-preset to 330 Ω.
5. IMPEDANCE CHANGE
Input impedance is factory-preset to 330 Ω. To change the impedance, change the rear panel-mounted rotary switch position to the desired impedance (wattage) using a standard screwdriver.

Notes
- This speaker is designed to operate on a 70 V or 100 V line. Do not connect it to the amplifier's low impedance line.
- No sound is output when the switch is set to the OFF position.

Caution
Never set the switch to "—" position for 100 V line operation, as doing so may result in damage to the speaker.

6. CONNECTION
Make the connections using marrets (wire nuts) inside a UL Listed junction box.

Note
This product shall be installed in accordance with the National Electrical Code, ANSI/NFPA 70.

7. INSTALLATION

- Be sure to direct the speaker down towards the ground. Otherwise, rain floods the speaker, causing its failure.
- No mounting hardware such as bolts and nuts is supplied with the speaker. Use commercial mounting hardware appropriate for the installation environment.
- Please install only with either flexible conduit or flexible wiring.

8. SPECIFICATIONS

<table>
<thead>
<tr>
<th>Speaker Component</th>
<th>12 cm cone speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Input</td>
<td>30 W</td>
</tr>
<tr>
<td>Impedance</td>
<td>(170 Ω)*, 330 Ω, 500 Ω, 1 kΩ</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>120 – 15,000 Hz</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>98 dB (1 W, 1 m)</td>
</tr>
<tr>
<td>Finish</td>
<td>Body: ABS resin, off-white, paint</td>
</tr>
<tr>
<td></td>
<td>Bracket: Stainless steel</td>
</tr>
<tr>
<td></td>
<td>Net: Aluminum, gray, paint</td>
</tr>
<tr>
<td>Dimensions</td>
<td>366 (w) x 230 (h) x 272 (d) mm</td>
</tr>
<tr>
<td>Weight</td>
<td>3.1 kg</td>
</tr>
</tbody>
</table>

* Impedance for 70 V line

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