Thank you for purchasing TOA's Ceiling Mount Microphone.
Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

1. GENERAL DESCRIPTION

The AN-9001 is an electret condenser microphone designed for ambient noise detection. It is used in conjunction with the AN-001T Ambient Noise Sensor Input module in the 9000 Series system. It can be mounted in a 1-gang electrical box (American type) in the ceiling or wall.

2. DIMENSIONAL DIAGRAM

[Front] [Side] [Rear]
Unit: mm

Microphone output terminal
[Hot, Cold, Earth]
Electronically-balanced 3P removable terminal block.
Sensitivity: -5 dB (1 kHz, 0 dB = 1 V/Pa)
Output impedance: 200 Ω

3. CONNECTION

The AN-001T and AN-9001 are connected as illustrated below and used to control the speaker sound volume in a room or such closed space.

4. INSTALLATION

Step 1. Install a 1-gang electrical box in a wall or ceiling.
Step 2. Mount the AN-9001’s Main unit to the installed electrical box. Use the 2 screws (No.6-32UNC x 30) supplied with the AN-9001.

Note
The AN-9001 comes with 2 types of machine screws: No.6-32UNC x 30 (unified threads) and M4 x 30 (metric threads). Be sure to use correct ones.

Step 3. Let both detents on the panel’s rear into the detent insertion openings of the Main unit.

Tips
For detent insertion, refer to the following points:
(A) Align 2 triangular marks on the panel with the extended line connecting between Main unit’s mounting screws.
(B) Align the panel’s center hole with the Main unit’s microphone.

Step 4. Rotate the panel clockwise. The panel locks into place by rotating it about 20° in the “Lock” direction.

5. REMOVABLE TERMINAL PLUG CONNECTION

Be sure to use the supplied removable terminal plugs for connections to the removable terminal blocks.

Notes
- Be sure to use shielded cables for audio signal lines.
- Avoid soldering stranded or shielded cable, as contact resistance may increase when the cable is tightened and the solder is crushed, possibly resulting in an excessive rise in joint temperatures.

[Cable end treatment]
- Solid or stranded cable
- Shielded cable

[Connector connection]
Step 1. Loosen the terminal screw, then insert the cable.
Step 2. Retighten the terminal screw. (Pull on the cable to ensure it is securely connected.)

Tip
Recommended slotted screwdriver type: Screwdriver with 3 mm blade width

6. SPECIFICATIONS

<table>
<thead>
<tr>
<th>Type</th>
<th>Electret condenser microphone</th>
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<tbody>
<tr>
<td>Phantom Power</td>
<td>14 – 26 V DC</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>1 mA (at 24 V DC)</td>
</tr>
<tr>
<td>Directivity</td>
<td>Omnidirectional (hemispherical)</td>
</tr>
<tr>
<td>Impedance</td>
<td>200 Ω</td>
</tr>
<tr>
<td>Rated Sensitivity</td>
<td>-5 dB (1 kHz, 0 dB = 1 V/Pa)</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>100 – 10,000 Hz</td>
</tr>
<tr>
<td>Output Terminal</td>
<td>Removable terminal block (3 pins)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-10 to +40°C</td>
</tr>
<tr>
<td>Finish</td>
<td>ABS resin, white</td>
</tr>
<tr>
<td>Dimensions</td>
<td>ø130 x 37 (d) mm</td>
</tr>
<tr>
<td>Weight</td>
<td>170 g</td>
</tr>
</tbody>
</table>

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

• Accessories
Removable terminal plug (3 pins) .......... 1
Machine screw No. 6-32 UNC x 30 ........... 2
Machine screw M4 x 30 ..................... 2

Traceability Information for Europe (EMC directive 2004/108/EC)

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