Please follow the instructions in this manual to obtain the optimum results from this unit. We also recommend that you keep this manual handy for future reference.

1. SAFETY PRECAUTIONS

• Be sure to read the instructions in this section carefully before use.
• Make sure to observe the instructions in this manual as the conventions of safety symbols and messages regarded as very important precautions are included.
• We also recommend you keep this instruction manual handy for future reference.

Safety Symbol and Message Conventions
Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety hazards.

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

• Do not use the receiver’s neck strap in close proximity to the rotating machinery, such as drill presses, as the strap could become entangled in the machinery, resulting in personal injury.

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

• Switch off the power when inserting an earphone into your ear. The unit’s volume control also functions as the power switch. Using the earphone with the volume increased may produce sudden loud noises, hurting the hearing.

• When the unit is not in use for 10 days or more, be sure to take the batteries out of the unit because battery leakage may cause personal injury, or contamination of environment.

• Make sure to observe the following handling precautions so that a fire or personal injury does not result from leakage or explosion of the battery.
  • Do not short, disassemble, heat nor put the battery into a fire.
  • Never charge batteries of the type which are not rechargeable.
  • Do not solder a battery directly.
  • Be sure to use the specified type of batteries.
  • Note correct polarity (positive and negative orientation) when inserting a battery in the unit.
  • Avoid locations exposed to the direct sunlight, high temperature and high humidity when storing batteries.
2. GENERAL DESCRIPTION

TOA’s WT-2100 is a Portable Receiver designed to receive 470 MHz band radio signals. An optional earphone (not supplied with the unit) is required.

3. FEATURES

- Commercial earphones can also be used (plug diameter: 3.5 mm, impedance: over 16 Ω).
- Up to 5 different channels can be simultaneously used in the same location.
- The battery indicator indicates the state of battery consumption to avoid the unit’s failure due to battery exhaustion.
- Compact size and high reliability.

4. HANDLING PRECAUTIONS

- 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 unit failure.
- Never open nor remove the unit case to modify the unit. Refer all servicing to your nearest TOA dealer.
- Take care not to drop the unit onto the floor nor bump it against a hard object as the unit could fail.
- Do not use the unit in locations where it is exposed to seawater.
- To clean, wipe with a dry cloth. When the unit gets very dirty, use a cloth damped in a neutral cleanser. Never use benzene, thinner or chemically-treated cleaning cloth because such volatile liquids could deform or discolor the unit.
- To avoid damage, do not carry the unit by its antenna.
- To avoid the unit’s failure, do not use the unit in locations which vibrate or where dust accumulates.

5. NOMENCLATURE

[Top]

- Neck strap entry hole
- Earphone output terminal (ø3.5)
- Operation/battery indicator
  - Flashes: Standby mode
  - Lights green: Reception mode
  - Lights red: Indicates battery exhaustion.

[Front]

- Antenna
- Power/volume switch
- Channel selector switch
- Cover lock
- Battery cover

[Rear]

- Clip
- Holder
6. OPERATION

Step 1. Remove the battery cover and place the battery as shown below. (Ensure that the Power/volume switch is set to the OFF position.)

Unlock the battery cover to remove. Place the battery.

Step 2. Replace the battery cover and securely lock it.

Step 3. Set the Channel selector switch to the same channel as the transmitter.

Step 4. Connect an optional earphone to the Earphone output terminal and put the earphone on the ear.

Step 5. Switch on the power by turning the Power/volume switch clockwise, and adjust the volume. The Operation/battery indicator either lights or flashes when the power is turned on.

Step 6. Turn off the power after use.

[Operation/battery indicator-to-WT-2100 Relationship]

<table>
<thead>
<tr>
<th>Indicator</th>
<th>WT-2100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashes slowly.</td>
<td>Standby mode (no signal reception)</td>
</tr>
<tr>
<td>Steadily on</td>
<td>Receiving a signal.</td>
</tr>
<tr>
<td>Changed from green to red.</td>
<td>Battery has been exhausted.</td>
</tr>
</tbody>
</table>

7. HINTS ON OPERATION

- Up to 5 different channels can be simultaneously used in the same location. (Note that communication distances may be shortened by simultaneously using 2 or more channels compared to use of only a single channel.)

8. HOW TO DETACH AND ATTACH THE HOLDER AND NECK STRAP

8.1 Holder
Raise the holder’s tab to detach.

To attach, push the holder till it fits onto the unit with a click.

8.2 Neck Strap
When attaching the neck strap, remove the holder, then fit the strap as shown in the figure.
9. IF YOU THINK THERE IS A FAILURE

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power is not switched on.</td>
<td>Battery is exhausted.</td>
<td>Replace with new battery.</td>
</tr>
<tr>
<td></td>
<td>Incorrect battery polarity connection.</td>
<td>Remove and reinsert battery.</td>
</tr>
<tr>
<td>Receives no radio signal even when distance to transmitter is short. Operation/battery indicator is flashing slowly.</td>
<td>Channel selector switch is not set the same channel as transmitter.</td>
<td>Set Channel selector switch to the same channel as transmitter.</td>
</tr>
<tr>
<td>Receives no radio signal even when distance to transmitter is short. Operation/battery indicator remains steadily on.</td>
<td>Earphone plug is not fully inserted.</td>
<td>Fully insert earphone plug.</td>
</tr>
</tbody>
</table>

10. SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Source</td>
<td>1.5 V DC (Battery)</td>
</tr>
<tr>
<td>Receiving Frequency</td>
<td>470 MHz band (5 ch)</td>
</tr>
<tr>
<td></td>
<td>470.075, 470.150, 470.375, 470.625, 470.725 MHz</td>
</tr>
<tr>
<td>Receiving System</td>
<td>Double super-heterodyne</td>
</tr>
<tr>
<td>Receiving Sensitivity</td>
<td>Better than 25 dB S/N ratio (7 dBμ VEMF input, ±1.7 kHz deviation)</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>200 – 5,000 Hz (Portable transmitter → Portable receiver)</td>
</tr>
<tr>
<td></td>
<td>150 – 6,000 Hz (Desk-top transmitter → Portable receiver)</td>
</tr>
<tr>
<td>De-emphasis</td>
<td>50 μs</td>
</tr>
<tr>
<td>Output Level</td>
<td>4 mW (16 Ω load, 10% distortion)</td>
</tr>
<tr>
<td>Battery Life</td>
<td>18 hours (alkaline)</td>
</tr>
<tr>
<td>Battery</td>
<td>LR6 (1.5 V) x 1</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>−10 to 40°C</td>
</tr>
<tr>
<td>Finish</td>
<td>Resin, dark silver</td>
</tr>
<tr>
<td>Dimensions</td>
<td>62 (w) x 163.6 (h) x 32.5 (d) mm</td>
</tr>
<tr>
<td>Weight</td>
<td>112 g (battery included)</td>
</tr>
</tbody>
</table>

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

- Accessory
  Neck strap .............................................................. 1