

OPERATING INSTRUCTIONS

INFORMATION AMPLIFIER

TA-102

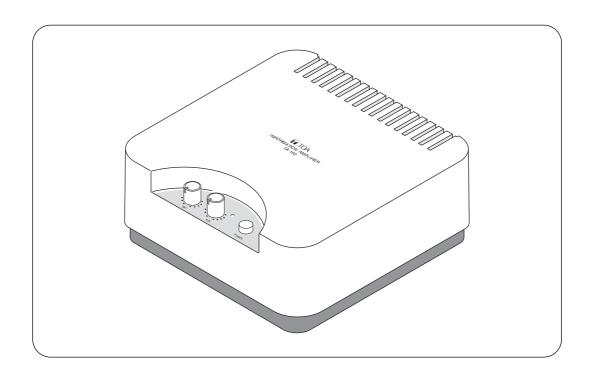


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Please follow the instructions in this manual to obtain the optimum results from this unit. We also recommend that you keep this manual handy for future reference.

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 ⚠ CAUTION

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

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

⚠ WARNING

■ When Installing the Unit

- 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.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, 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.
- Install the unit only in a location that can structurally support the weight of the unit and the mounting bracket. Doing otherwise may result in the unit falling down and causing personal injury and/or property damage.
- To avoid electric shocks, do not touch any high impedance speaker line terminals because the voltage of up to 100 V is applied to these terminals.

■ When the Unit is in Use

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
 - · If you detect smoke or a strange smell coming from the unit.
 - · If water or any metallic object gets into the unit
 - · If the unit falls, or the unit case breaks
 - If the power supply cord is damaged (exposure of the core, disconnection, etc.)
 - · If it is malfunctioning (no tone sounds.)
- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest TOA dealer.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.
- Do not touch the power supply plug during thunder and lightning, as this may result in electric shock.

⚠ CAUTION

■ When Installing the Unit

- Never plug in nor remove the power supply plug with wet hands, as doing so may cause electric shock.
- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.
- When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.
- Do not block the upper panel ventilation slots in the unit's cover. Doing so may cause heat to build up inside the unit and result in fire.
- 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.

■ When the Unit is in Use

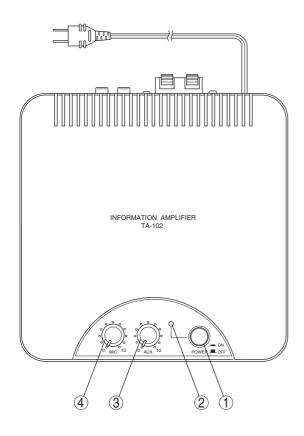
- Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.
- Do not stand or sit on, nor hang down from the unit as this may cause it to fall down or drop, resulting in personal injury and/or property damage.
- Make sure that the volume control is set to minimum position before power is switched on. Loud noise produced at high volume when power is switched on can impair hearing.
- Do not operate the unit 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.
- Contact your TOA dealer as to the cleaning. If dust is allowed to accumulate in the unit over a long period of time, a fire or damage to the unit may result.
- If dust accumulates on the power supply plug or in the wall AC outlet, a fire may result. Clean it periodically. In addition, insert the plug in the wall outlet securely.
- Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more. A fire or electric shock may result.

2. GENERAL DESCRIPTION

Rated at 10 W of output, TOA's TA-102 amplifier is ideal for simple paging in such places as reception desks, waiting rooms, and coffee shops. Its internal single-tone chime generator can be operated by using the optional paging microphone PM-660D.

3. EACH PART NAME AND FUNCTIONS

[Top Panel]



1 Power switch [POWER]

Power is switched on and off with each depression of this switch.

2 Power indicator lamp

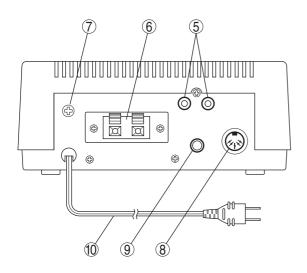
Lights when the power is switched on, and is extinguished when switched off.

3 AUX input volume control [AUX]

4 Microphone volume control [MIC]

Adjusts the volume of the microphone connected to microphone input $\ensuremath{\$}$ or $\ensuremath{\$}$.

[Rear Panel]



(5) AUX input RCA pin jack [AUX IN]

Connects to a tape recorder, CD player, etc. Stereo input signals are converted into monaural signals.

6 Speaker terminal [SPEAKER OUT]

Connects to high-impedance speakers.

Signal grounding terminal [SIGNAL GND]

Ground the unit when installing.

8 Microphone DIN jack [MIC IN]

Connects to the PM-660D paging microphone.

9 Microphone phone jack [MIC IN]

Connects to a low-impedance microphone.

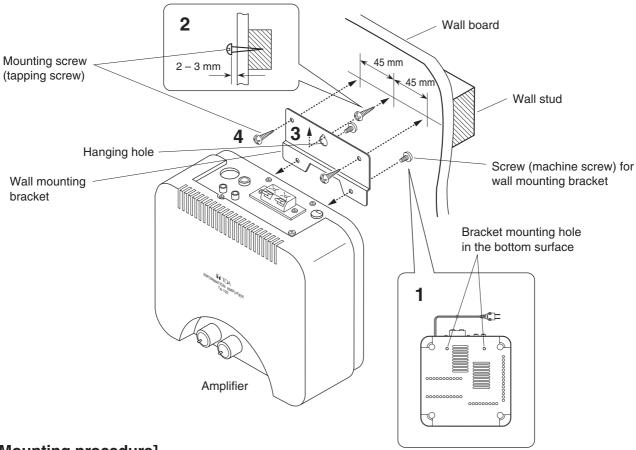
10 Power cord

Connect this cord to a wall outlet of 220 VAC, 50/60 Hz.

4. INSTALLATION

- Use a power source of 220 VAC, 50/60 Hz.
- Connect the signal grounding terminal to the ground.
- Avoid installing the unit in humid, dusty or vibratory locations as well as locations where the unit is exposed to steam or oil-contaminated smoke.
- Do not block vents provided in both the top and bottom surfaces.
- When mounting on the wall, fix securely as illustrated below.

[Mounting diagram]



[Mounting procedure]

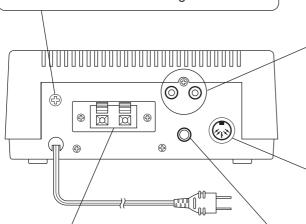
- 1. Attach the wall mounting bracket to the bottom surface.
 - Use the supplied two machine screws (M4 x 8) for mounting.
 - Take care that the mounting bracket is installed correctly.
- 2. Install the mounting screw (for the hanging hole in the center) in the wall.
 - Select the installation location taking into consideration the length of the microphone cable and power cord.
 - To secure speaker mounting, make sure a solid wooden stud is located behind the screw's position.
 - Leave 2 3 mm of the screw sticking out of the wall.
- 3. Hook the hanging hole in the wall mounting bracket (attached to the amplifier) onto the screw.
- **4.** Fix the wall mounting bracket (amplifier) to the wall.
 - Using two mounting screws, fix securely so that the amplifier is positioned horizontally. Also, tighten the mounting screw referred to in Step 2 above.

Note: The supplied mounting screws cannot be used when directly installing them in the plywood or plaster boards. In such cases, contact the shop from whom you have purchased.

5. CONNECTIONS

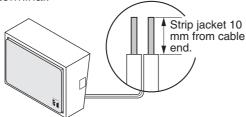
Signal grounding terminal

Connect this terminal to the ground.



Speaker terminal

- Connects to high-impedance speakers. Select the speaker terminal of over 1 k Ω .
- When using multiple speakers, match the speakers' polarities. The total impedance must be higher than 1 $k\Omega$.
- Fully insert the speaker cable into the terminal.



[Precaution]

Do not connect low-impedance speakers because this can cause a failure of the amplifier or breakdown of the speaker.

AUX input jack (RCA pin jack)

- Connect this jack to the line output of a radio tuner, cassette tape player or CD player.
- An RCA pin plug is necessary for connection.
- Stereo outputs are converted into monaural outputs.

Microphone DIN jack

- Connect this jack to an optional paging microphone PM-660D.
- A 5-pin DIN plug is necessary for connection.



Microphone phone jack

- Connect this jack to a low-impedance microphone.
- · Connect using a phone plug.
- When the microphone with balanced output is connected, its output is converted into an unbalanced output.



[Note]

- When both microphone inputs are used simultaneously, the phone jack input takes precedence.
- The unit's internal chime generator cannot be activated from the phone jack input.

6. OPERATIONS

First, check to confirm that the power switch is set to OFF, and each volume control to the 0 position after connection completion. Then, connect the power cord to the wall outlet and set the power switch to ON. The power indicator lamp will light.

6.1 When using the microphone

When the microphone is equipped with a talk switch, turn on the switch and then adjust the volume rotating the microphone volume control slowly.

6.2 When using the AUX input

Adjust the volume rotating the AUX volume control slowly. (Adjust the output level of connected equipment as well.)

Making an announcement at the microphone automatically decreases the volume of other broadcast, such as background music, from equipment connected to the AUX input. The interrupted broadcast is automatically restored after announcement completion.

7. SPECIFICATIONS

Power Source	220 – 240 V AC, 50/60 Hz
Power Consumption	30 W
Rated Output	10 W
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Distortion	Under 3% (1 kHz, rated output)
Frequency Response	100 – 12,000 Hz within ±3 dB
Input	Microphone input: 600Ω , $-60 dBV$, unbalanced
	Phone jack x 1, 5-pin DIN jack x 1 (Phone jack is given
	priority.)
	AUX input: 50 kΩ, -10 dBV, unbalanced
	RCA pin jack x 2
Speaker Output	High impedance, 1 k Ω
S/N Ratio	Over 60 dB
Internal Chime Generator	Single-tone chime, 330 Hz (remote operation by PM-600D's talk switch)
Muting Circuit	AUX input automatically attenuates when microphone announcement is
	made, and is automatically restored upon announcement completion.
	(Attenuation level: 25 – 30 dB, restoration time: 4.5 seconds)
Operating Temperature	-10°C to 50°C
Dimensions	180 (W) x 71 (H) x 180 (D) mm (projection excluded)
Weight	1.8 kg
Finish	Case: ABS resin (off white)
	Chassis: Steel plate/paint (black)

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

Accessories

Instruction manual	1
Warranty card	1
Wall mounting bracket	1
Machine screw for wall mounting bracket	2
Mounting screw (tapping screw)	3

