TOA

OPERATING INSTRUCTIONS

BATTERY CHARGER BC-2000

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

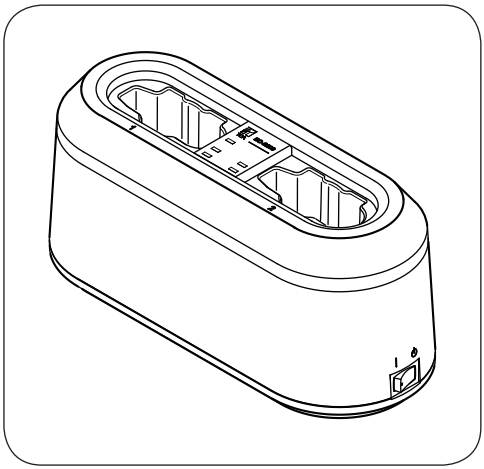


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Traceability Information for Europe

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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.
⚠ **CAUTION**	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.

- 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.

When the Unit is in Use

- Should the following irregularity be found during use, immediately switch off the power, disconnect the AC adapter's 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.)

- 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 qualified service personnel.

- 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 AC adapter's power supply plug during thunder and lightning, as this may result in electric shock.

- Stop charging if the batteries are not fully charged within 4 hours. Failure to do so may cause the batteries to fire, explode, leak, or heat.

⚠CAUTION

When Installing the Unit

- When moving the unit, be sure to remove the AC adapter's 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.
- 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

- Use the dedicated AC adapter AD-5000-2 for the unit. Note that the use of other adapter may cause a fire.
- Avoid charging units installed with rechargeable batteries other than the dedicated WB-2000 battery. Charging any other than the specified battery could result in fire or personal injury due to battery rupture.
- Switch off the power, and unplug the AC adapter's power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more. Doing otherwise may cause a fire or electric shock.

2. GENERAL DESCRIPTION

The TOA BC-2000 is a dedicated battery charger for the WM-D5200 Digital Wireless Microphone and WM-D5300 Digital Wireless Transmitter. It works with the optional AD-5000-2 AC Adapter. The BC-2000 employs a quick charging system for nickel-metal hydride (Ni-MH) batteries, allowing up to 2 units to be fully charged within 3 hours.

3. HANDLING PRECAUTIONS

- Use the BC-2000 in locations where an ambient temperature ranges from 0 to 40 ºC (32 to 104 ºF).
- When cleaning the case, be sure to first switch off the power, then wipe with a dry cloth. Never use benzene, thinner, alcohol or chemically processed towels, as these may damage the charger's components and parts.
- Avoid using the charger as a holder for the wireless microphone.
  Frequently inserting and removing the wireless microphone from the charger will more quickly exhaust the microphone's rechargeable battery, leading to failure.

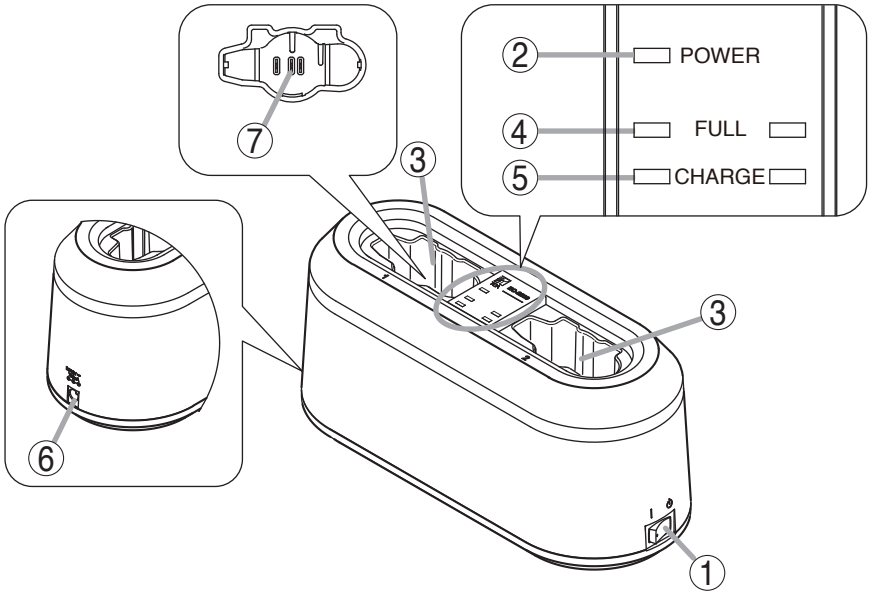
4. SPECIFICATIONS

Power Source	12 V DC (Optional AC Adapter AD-5000-2 must be used.)
Current Consumption	700 mA
Charging Time	Max. 3 hours
Number of Units To Be Charged Simultaneously	2 pieces
Operating Temperature	0 to 40 ºC (32 to 104 ºF)
Operating Humidity	30 to 85% RH (no condensation)
Finish	Case: ABS resin, black, semigloss, paint Rechargeable unit receptacle section: PPE resin, black
Dimensions	238 (w) x 108.5 (h) x 98 (d) mm (9.37" x 4.27" x 3.86")
Weight	550 g (1.21 lb)
AC Adapter AD-5000-2 (option)	LI TONE ELECTRONICS CO., LTD LTE 24E-S2-1 INPUT 100 – 240 V ~, 47 – 63 Hz, 1 A OUTPUT 12 V ⎓, 2 A

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

• **Optional products**
AC Adapter: AD-5000-2
Ni-MH Battery: WB-2000-2 (containing 2 pieces of WB-2000 battery)

5. NOMENCLATURE



1. Power switch
To turn on the power, set this switch to the [I] position. To turn off the power, shift this switch back.

2. Power indicator
Lights when the power is switched on.

3. Rechargeable unit receptacle
Insert the WM-D5200 Digital Wireless Microphone or WM-D5300 Digital Wireless Transmitter containing the dedicated rechargeable battery into this receptacle.

4. Full-charge indicator
Lights green once the battery is fully charged.

5. Charging indicator
Lights red continuously while charging is in progress.

6. Power input terminal
Connect the optional AD-5000-2 AC adapter to this terminal.

7. Charging terminal

[Indicator status table]

Full-charge indicator (green)	Charging indicator (red)	Status
Unlit	Lit	Charging in progress
Lit	Unlit	Charging completed
Unlit	Flashing	Outside the operating temperature range (Refer to p. 8 "TROUBLESHOOTING.")
Both indicators light alternately.		Charging failure (Refer to p. 8 "TROUBLESHOOTING.")

6. CHARGING

⚠CAUTION Avoid charging units installed with rechargeable batteries other than the dedicated WB-2000 battery.
Charging any other than the specified battery could result in fire or personal injury due to battery rupture.

Notes
- Use the charger in locations where ambient temperature ranges from 0 to 40 ºC (32 to 104 ºF).
- Be sure to charge the WB-2000 battery before use.
- If the wireless microphone, and its WB-2000 rechargeable battery, has been left unused for 10 days or more, be sure to fully charge the battery before operating the microphone.
- Do not use the charger in locations subject to strong vibrations as poor electrical contact may result, preventing correct charging.
- Do not frequently insert and remove the unit from the charger during charging as this could degrade the WB-2000 battery performance.
- If the battery operating time is extremely short even when it has been fully charged, be sure to replace it with a new WB-2000 as the battery has reached the end of its life.

  Tip: Under normal use condition, the battery can cycle through about 500 charges and discharges, after which it will usually need to be replaced.
- Only recharge the microphone's battery after it has been completely exhausted.
  (The wireless microphone can be continuously used for approximately 8 hours per recharging.)
  Frequent battery charging following short-term use may accelerate battery exhaustion.

Step 1. Connect the optional AD-5000-2 AC adapter to the charger's power input terminal.
After connection, fit the cord into the charger's bottom slot to prevent the AC adapter plug from accidentally slipping out of place. (See the next page, "Handling the power cord.")

Step 2. Connect the power cord to the AC adapter, then to an AC wall outlet.

Step 3. Set the charger's power switch to ON.
The power indicator will light.

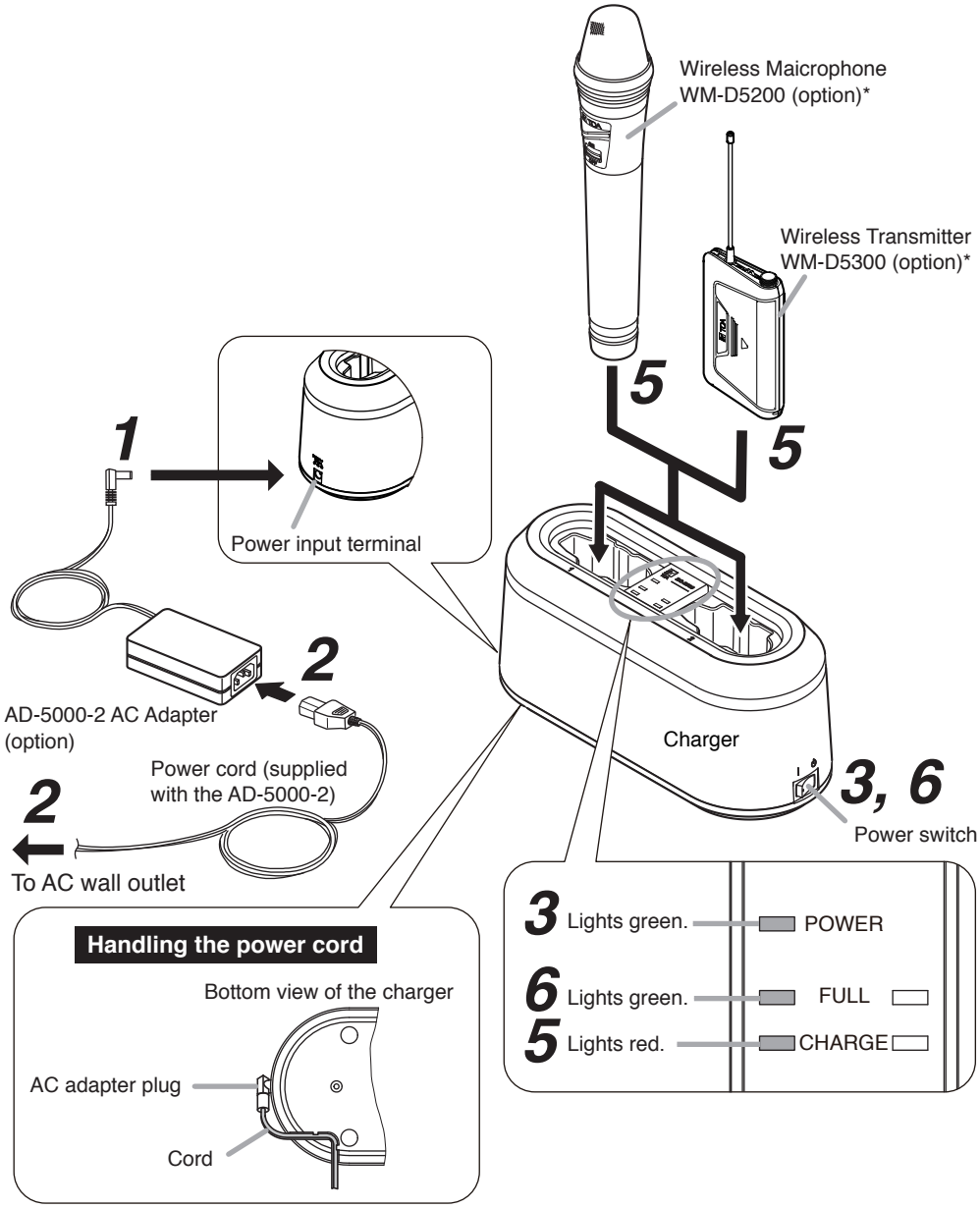
Step 4. Turn off the power switch of the unit to be charged, then load the WB-2000 battery in the unit.
For battery insertion instructions, please refer to the instruction manual enclosed with the wireless microphone.

Step 5. Insert the WM-D5200 or WM-D5300 fully into the charger's rechargeable unit receptacle as illustrated on the next page.
Ensure that the charging status indicator lights red.
Charging takes about 3 hours, after which the full-charge indicator lights green. (Charging time may vary depending on remaining battery capacity when charging begins.)
Notes
- Do not move the wireless microphone during charging.
  The battery may not fully or correctly charge due to disconnection from the charging terminal's contacts.
- Be sure the wireless microphone is fully inserted into the charger.
- The WM-D5200 microphone can be charged while facing in any direction (front, back, left, right).
- The DM-5300 microphone is designed to fit into the shape of the receptacle.

Step 6. Turn off the charger's power after charging is complete.

Notes

- The fully-charged unit becomes warm, however this is not a failure.
- Hold the charger when detaching the unit from the charger.



* Loaded with one (1) WB-2000 rechargeable battery.

7. TROUBLESHOOTING

Symptom	Possible cause	Remedy
Power indicator does not light even if the power switch is turned on.	The AC adapter is not plugged into a working AC outlet, or is not plugged in correctly.	Make sure the AC adapter is plugged in to a working AC wall outlet correctly.
	AC adapter plug is not connected to the charger.	Connect the plug to the charger's power input terminal.
Charging indicator (red) does not light even when the unit is inserted into the rechargeable unit receptacle.	The batteries used in the unit may not be dedicated WB-2000 batteries.	Install the appropriate dedicated WB-2000 battery in the unit.
	The unit may not be seated correctly in the rechargeable unit receptacle.	Make sure that the unit is inserted fully into the receptacle as far as it will go.
Inserting the unit into the rechargeable unit receptacle causes the charging indicator (red) to flash.	The ambient temperature may exceed the permissible operating temperature range (0 to 40 °C, or 32 to 104 °F), preventing charging.	Perform charging within the operating temperature range (0 to 40 °C, or 32 to 104 °F).
Full-charge indicator (green) always lights soon.	The dedicated WB-2000 battery has probably reached the end of its life cycle (usually after about 500 charges and discharges).	Replace the WB-2000 battery with a new one.
Full-charge indicator does not light even 4 hours after charging has been started (maximum charging time: 3 hours).	The battery may be at the end of its life.	Replace the WB-2000 battery with a new one.
Both the charging indicator (red) and the full-charge indicator (green) light alternately.	The unit may have been installed with a non-WB-2000 battery.	Use a dedicated WB-2000 battery in the unit.
	There may be foreign objects (such as metals) in the rechargeable unit receptacle.	Remove such foreign objects.
	The battery may be at the end of its life.	Replace the WB-2000 battery with a new one.
	The ambient temperature may exceed the permissible operating temperature range (0 to 40 °C, or 32 to 104 °F), preventing charging.	Perform charging within the operating temperature range (0 to 40 °C, or 32 to 104 °F).
	The charging terminals of either the wireless microphone or the bottom of the charger microphone receptacle may be dirty.	Clean out all dirt with a dry cloth. If the charging terminals are extremely dirty, clean using a cotton swab dampened with anhydrous ethanol (absolute alcohol).