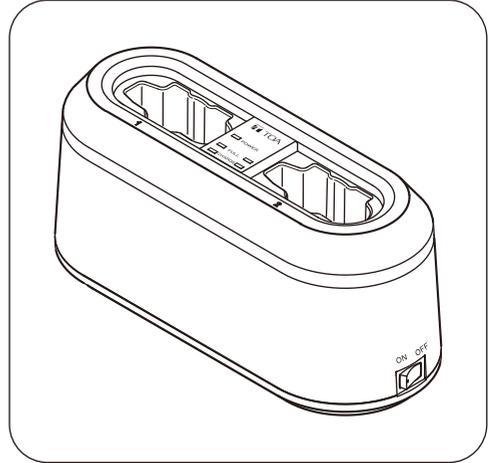


**BATTERY CHARGER****BC-2000A**

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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# 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.



## **CAUTION**

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

### **When Installing the Unit**

- 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 personal injury.

### **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 result in personal injury.
  - 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

- 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.
- Do not insert nor drop metallic objects or flammable materials in the rechargeable unit receptacle, as this may result in fire or personal injury.

The socket-outlet shall be installed near the equipment and the plug shall be easily accessible.

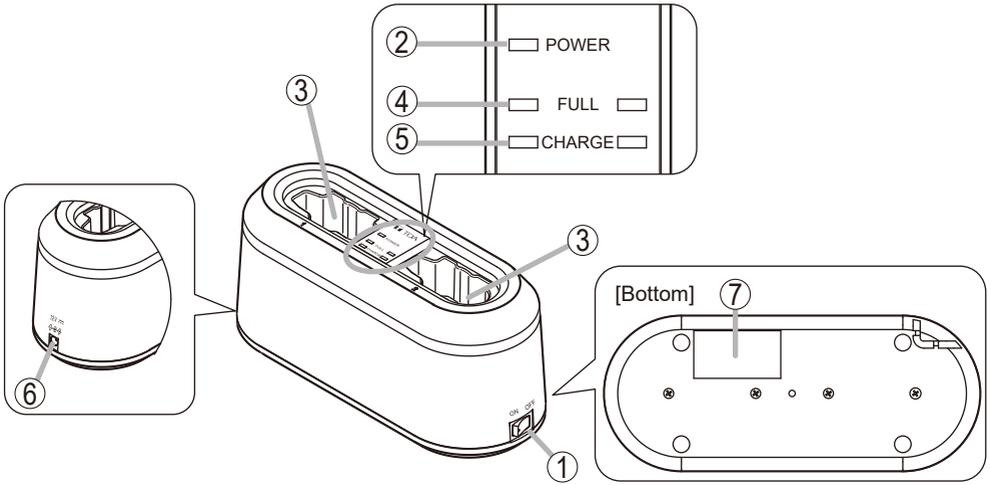
## **2. GENERAL DESCRIPTION**

The TOA BC-2000A 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-2000A employs a quick charging system for nickel-metal hydride (Ni-MH) batteries, allowing up to 2 units to be fully charged about 2 hours.

## **3. HANDLING PRECAUTIONS**

- Use the BC-2000A in locations where an ambient temperature ranges from 0 to 40 °C (32 to 104 °F).
- Occasionally clean the charging terminals located on the bottom of the wireless microphone with a dry cotton swab or the like. If the terminals become dirty, they could cause poor contact and prevent proper charging.
- When cleaning the case, be sure to first switch off the power, then wipe with a dry cloth. If it becomes especially dirty, gently wipe with a soft cloth lightly soaked in diluted neutral detergent, then wipe dry. Never use benzene, thinner, alcohol or chemically processed towels, as these may damage the charger's components and parts.

## 4. NOMENCLATURE



### 1. Power switch

To turn on the power, set this switch to the "ON" position. To turn off the power, set this switch to the "OFF" position.

### 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. Name label

Manufacturer name, product name, electrical rating, and other information are listed.

### [Indicator status table]

| Full-charge indicator (green)                | Charging indicator (red)                     | Status  |
|--|--|---|
| <input type="checkbox"/> Unlit               | <input checked="" type="checkbox"/> Lit      | Charging in progress  |
| <input checked="" type="checkbox"/> Lit      | <input type="checkbox"/> Unlit               | Charging completed  |
| <input type="checkbox"/> Unlit               | <input checked="" type="checkbox"/> Flashing | Outside the operating temperature range<br>(Refer to p. 7 "TROUBLESHOOTING.") |
| <input checked="" type="checkbox"/> Flashing | <input checked="" type="checkbox"/> Flashing | Charging failure<br>(Refer to p. 7 "TROUBLESHOOTING.")                        |

## 5. 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 °C (32 to 104 °F).
- 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.
- 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.

- Do not recharge fully-charged battery. Doing so deteriorates its performance.
- Once overdischarged, its usable capacity could not restore even after charge. So, charging for about 5 minutes every 6 months is advisable when leaving it unused for a long period of time.

**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 WM-D5200 or WM-D5300 to be charged, then load the WB-2000 battery in the WM-D5200 or WM-D5300.  
For battery insertion instructions, refer to the instruction manual enclosed with the wireless microphone.

**Step 5.** Insert the WM-D5200 or WM-D5300 into the charger's rechargeable unit receptacle as illustrated on the next page.  
Ensure that the charging status indicator lights red.  
Charging takes about 2 hours, after which the full-charge indicator lights green. (Charging time may vary depending on remaining battery capacity when charging begins.)

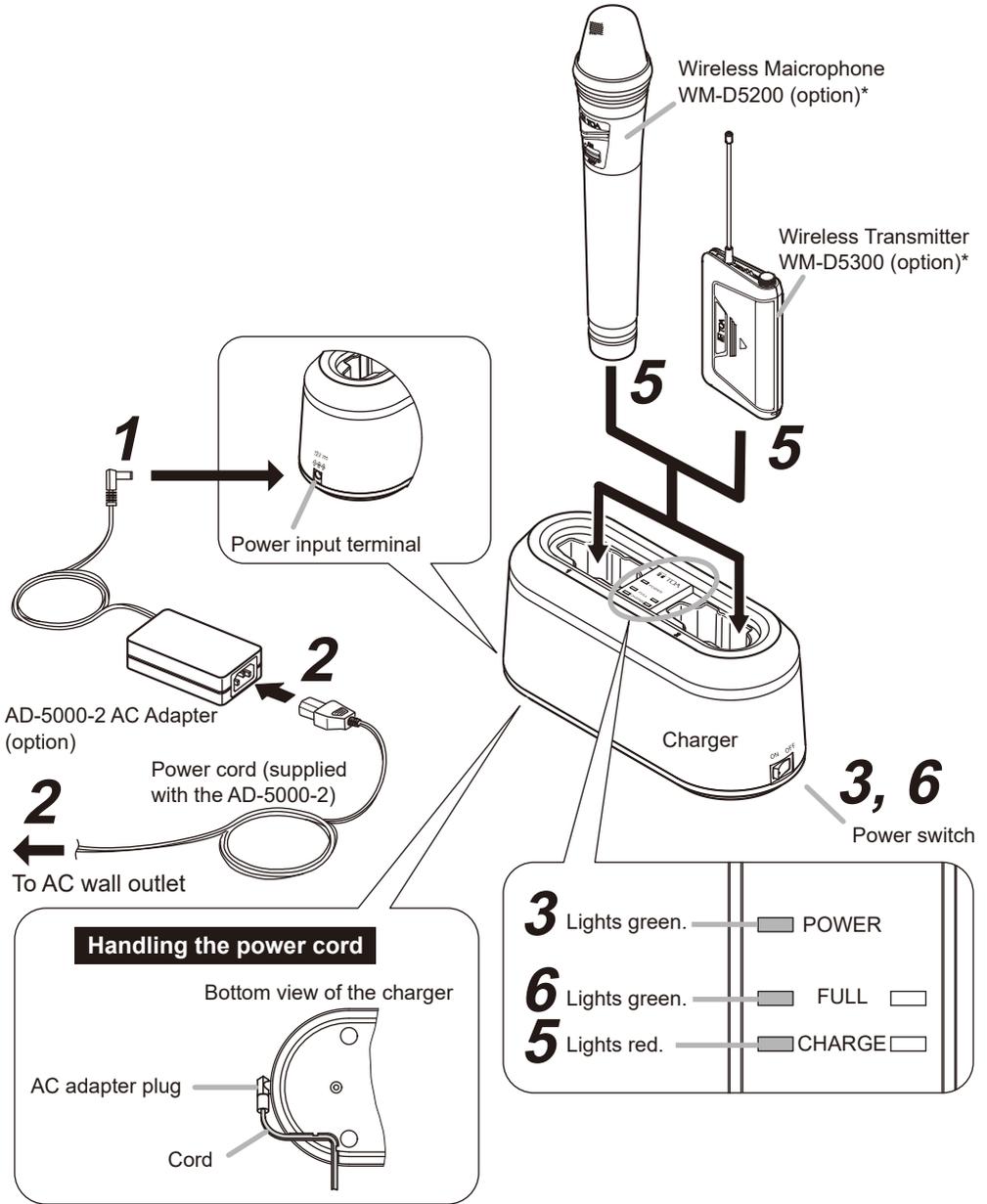
#### Notes

- 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.
- The WM-D5200 microphone can be charged while facing in any direction (front, back, left, right).
- Align the WM-D5300 Wireless Transmitter with the shape of the charger's receptacle opening, and insert until it clicks into place.

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

**Note**

The fully-charged unit becomes warm, however this is not a failure.



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

## 6. 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 rechargeable unit is inserted into the rechargeable unit receptacle. | The batteries used in the rechargeable unit may not be dedicated WB-2000 batteries.  | Install the appropriate dedicated WB-2000 battery in the rechargeable unit.   |
|  | The rechargeable unit may not be seated correctly in the rechargeable unit receptacle.   | Make sure that the rechargeable unit is inserted fully into the receptacle as far as it will go.                        |
| Inserting the rechargeable 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.   |
| Both the charging indicator (red) and the full-charge indicator (green) flash.   | Is the optional AD-5000-2 AC adapter being used?   | Use the optional AD-5000-2 AC adapter.  |
|  | The rechargeable unit may have been installed with a non-WB-2000 battery.  | Use the dedicated WB-2000 battery in the rechargeable unit.   |
|  | There may be foreign objects (such as metals) in the rechargeable unit receptacle.   | Remove such foreign objects.  |
|  | The charging terminals of the wireless microphone may be dirty.  | Clean the charging terminals (metallic parts) on the bottom of the wireless microphone using a cotton swab or the like. |
|  | The battery may be at the end of its life.   | Replace the WB-2000 battery with a new one.   |
|  | Was the charger subjected to any shocks or vibrations while charging?<br><b>Note</b><br>Charging may have stopped due to poor contact. | Pull out the rechargeable unit and insert it fully into the charger again.  |

## 7. SPECIFICATIONS

|  |  |
|--|--|
| Power Source                                 | 12 V DC (Optional AC adapter AD-5000-2 must be used.)  |
| Current Consumption                          | 750 mA   |
| Charging Time                                | Approx. 2 hours  |
| Number of Units To Be Charged Simultaneously | 2 pieces   |
| Operating Temperature                        | 0 to 40 °C (32 to 104 °F)  |
| Operating Humidity                           | 30 to 85% RH (no condensation)   |
| Finish                                       | Case: ABS resin, black, semigloss, paint<br>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                                       | 500 g (1.1 lb)   |

**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)