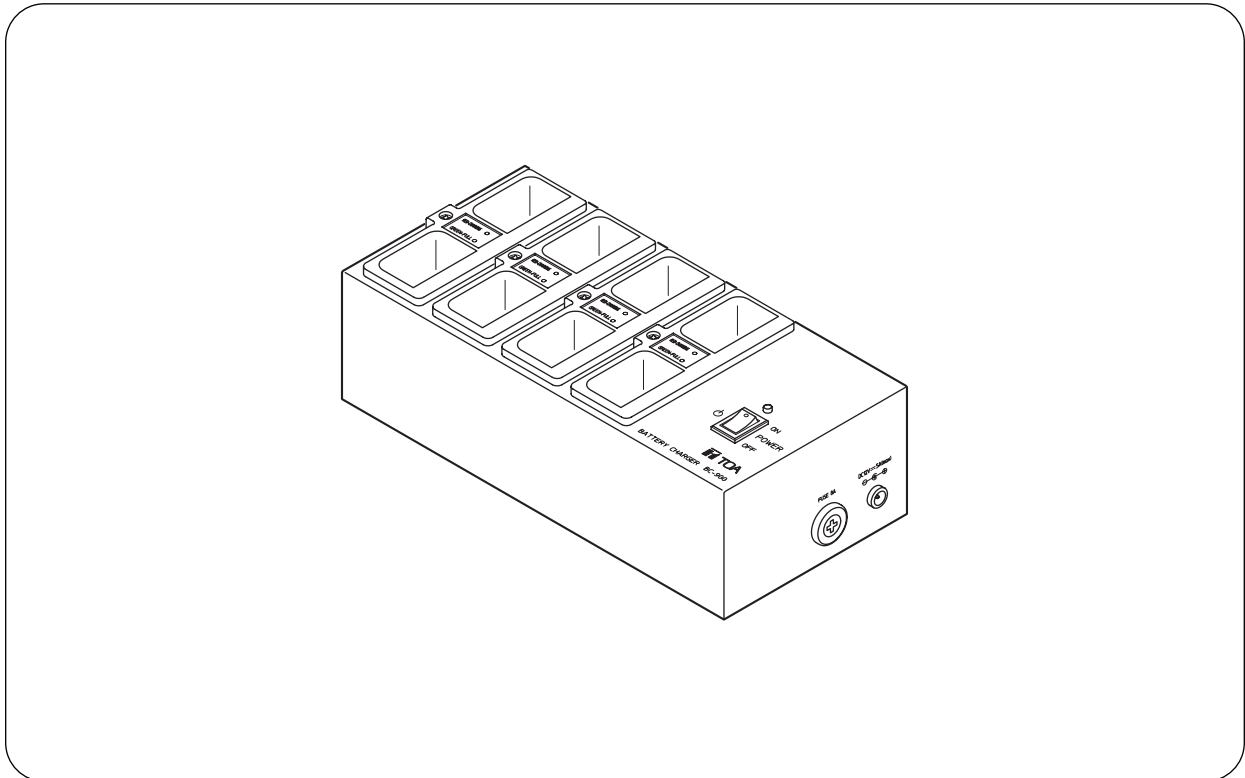




# OPERATING INSTRUCTIONS

## BATTERY CHARGER

## BC-900



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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.

**TOA Corporation**

# 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.

## 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.



**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.
- 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.

### 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.)

- 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.

- Avoid inserting or dropping metal or combustible objects or other foreign objects in the Charger's interior or battery receptacles, as this could result in fire or electric shock.

- Do not touch a power cord plug during thunder and lightning, as this may result in electric shock.

- Stop charging if batteries are not fully charged within 5 hours. Continuously charging over 5 hours may cause batteries to fire, explode, leak, or heat.



**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 supplied AC adapter's ventilation slots. Blocking air flow to these slots will cause heat to build up in the adapter, possibly resulting 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.
- 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. Doing otherwise may cause a fire or electric shock.
- Use the dedicated AC adapter for the unit. Note that the use of other adapter may cause a fire.
- Remove the power supply plug of charger from the AC outlet after charging completion, as doing otherwise may cause a fire.
- Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

#### **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.

This is a class A product .

In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

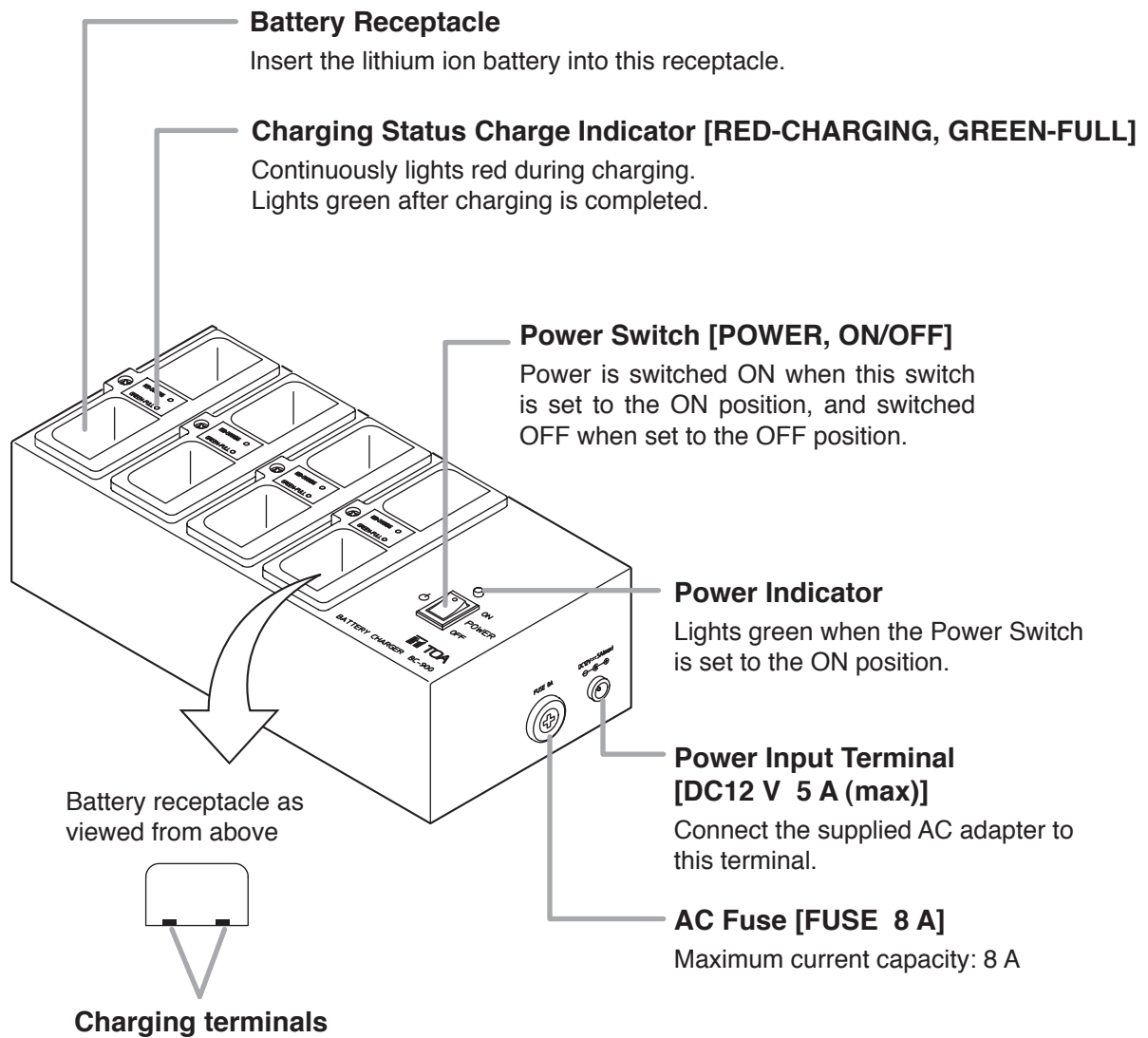
## **2. GENERAL DESCRIPTION**

The TOA BC-900 is a dedicated battery charger for BP-900 lithium-ion batteries used in the TS-801 and TS-901 Chairman Units, and TS-802 and TS-902 Delegate Units of TOA's Infrared Conference System. The BC-900 features an exclusive charging system for lithium-ion batteries, and permits up to 8 batteries to be simultaneously charged within up to 5 hours.

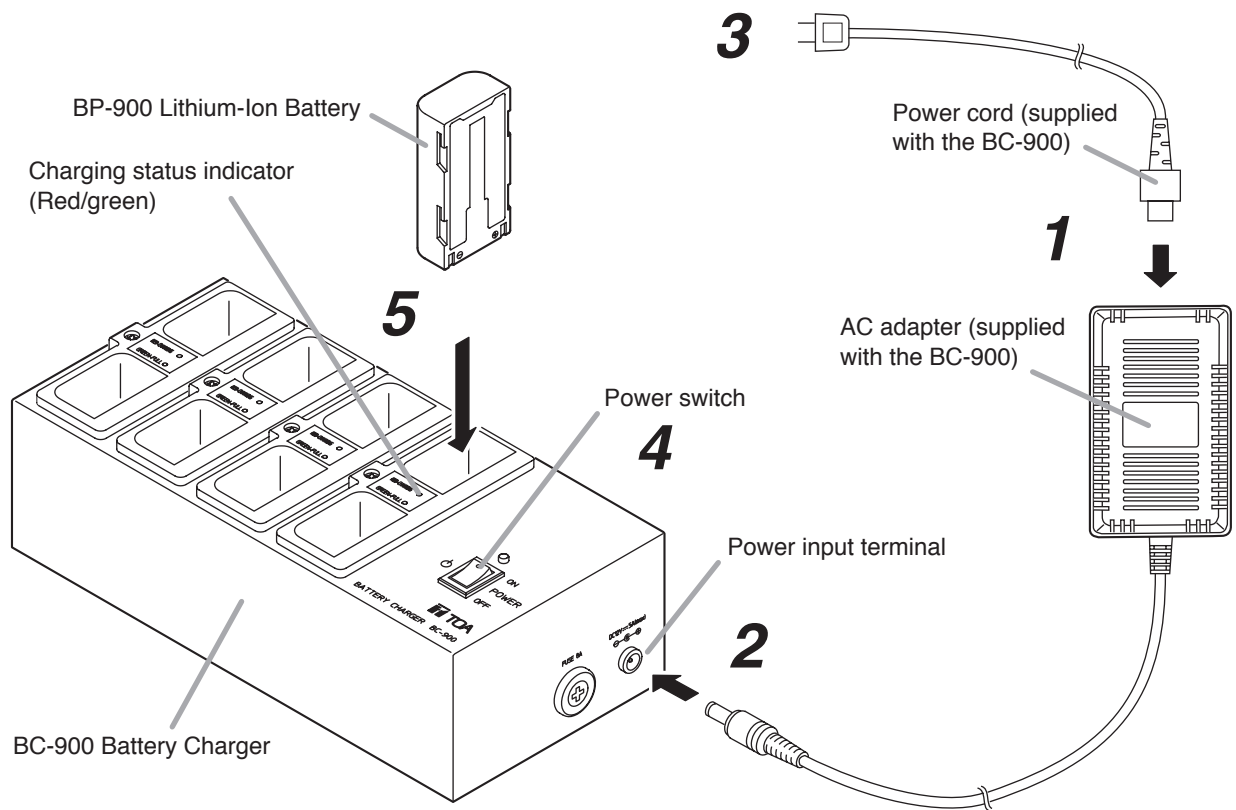
## **3. HANDLING PRECAUTIONS**

- Use the unit in locations where the temperature is between 0 and +40°C.
- Avoid installing the Battery Charger in locations exposed to vibration. Batteries may not be correctly charged due to poor contact.
- To clean, be sure to first switch off the unit's power, then 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.
- Clean the charging terminals periodically with a dry cotton swab. Dirty terminals could cause bad contact, thus preventing batteries from being correctly charged.

## 4. NOMENCLATURE AND FUNCTIONS



## 5. CHARGING



**Step 1.** Connect the power cord to the supplied AC adapter.

**Step 2.** Connect the AC adapter to the Charger's power input terminal.

**Step 3.** Insert the AC plug into the AC wall outlet.

**Step 4.** Turn on the power switch.  
The Power indicator lights green.

**Step 5.** Insert the battery fully into one of the Charger's battery receptacles with the battery oriented to the proper direction.  
Ensure that the charging status indicator lights red. If it does not light, check to see if the battery is correctly inserted.

Charging is completed within 5 hours and the charging status indicator lights green.

### **WARNING**

Stop charging if batteries are not fully charged within 5 hours. Continuously charging over 5 hours may cause batteries to fire, explode, leak, or heat.

### **CAUTION**

Remove the power supply plug of charger from the AC outlet after charging completion, as doing otherwise may cause a fire.

#### **Note**

Switching the Charger's power OFF and back ON again with fully-charged (charging completed) batteries inserted will result in repeated recharge of the batteries. Battery life could deteriorate from this repetitive charging.

## 6. TROUBLESHOOTING

Symptom	Possible Cause	Remedy
The power indicator (green) does not light even when the power switch is set to ON.	The AC plug is not inserted into the wall outlet.	Insert the AC plug into the wall outlet.
	The fuse has blown off.	Have the fuse replaced. Contact your TOA dealer for replacement.
The charging status indicator (red) does not light even if the lithium-ion battery is inserted into the battery receptacle.	The lithium-ion battery is not correctly inserted into the battery receptacle.	Insert the lithium-ion battery fully into the battery receptacle.
	The charging terminals are dirty.	Clean the terminals with a dry cotton swab.
Charged battery operating durations are short.	(The lithium-ion battery life has deteriorated.)	Replace with a new BP-900 lithium-ion battery.

## 7. SPECIFICATIONS

Power Source	100 – 240 V AC, 50/60 Hz (supplied from accessory AC adapter)
Current Consumption	Max. 5 A
Charging Time	Approx. 5 hours
Charging Capacity	8 BP-900 batteries (option)
LED Indicator	Charging status (Green: Full charge, Red: On charge), Power indicator
Operating Temperature	0°C to +40°C
Finish	Case: Steel, black, paint Battery receptacles: PPO resin, black
Dimensions	240 (w) x 70 (h) x 115 (d) mm
Weight	Unit: 1.1 kg, AC adapter: 520 g
AC adapter (accessory)	LI TONE ELECTRONICS CO., LTD LTE60E-S2-1 INPUT 100 – 240 V ~, 47 – 63 Hz, 2 A OUTPUT 12 V $\square$ , max. 5 A

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

### • Accessories

AC adapter .....	1
Power cord (2 m) .....	1

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

Manufacturer:  
TOA Corporation  
7-2-1, Minatojima Nakamachi, Chuo-ku, Kobe, Hyogo,  
Japan

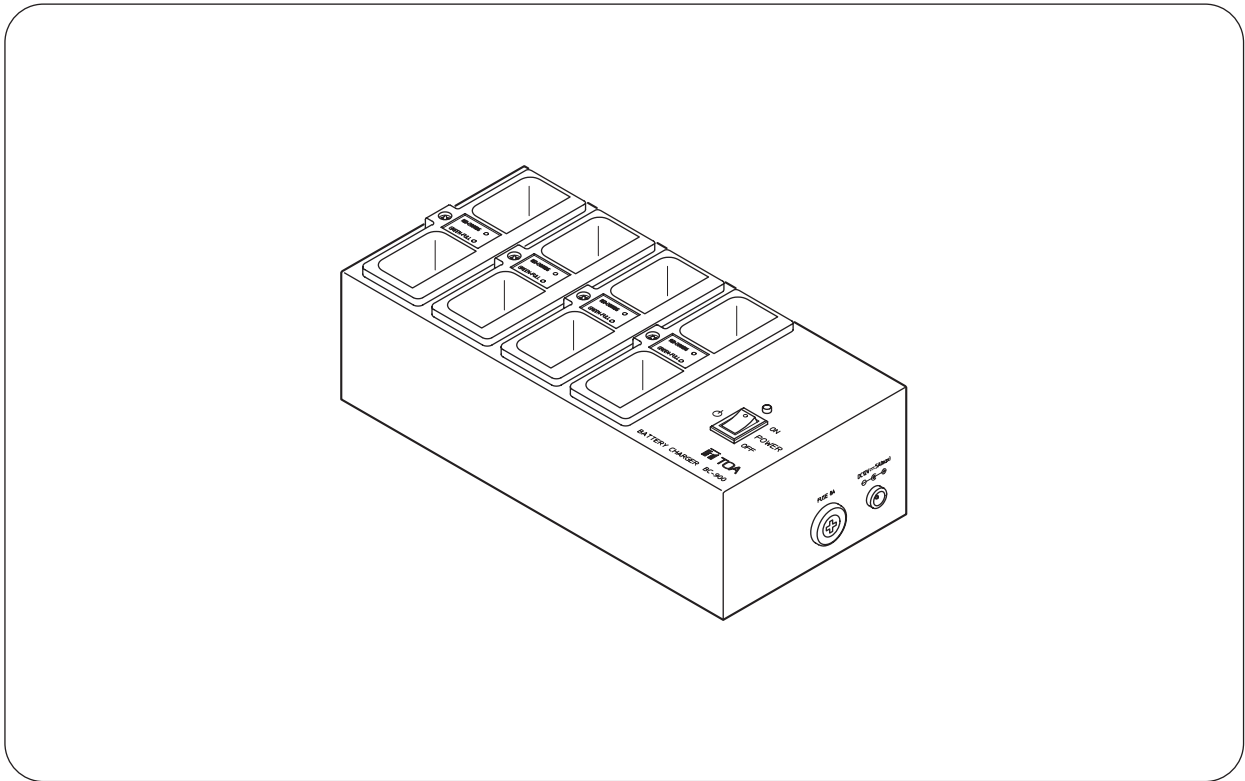
Authorized representative:  
TOA Electronics Europe GmbH  
Suederstrasse 282, 20537 Hamburg,  
Germany



使用说明书

# 电池充电器

# BC-900



## 目录

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承蒙您购买TOA电池充电器。  
请仔细根据本手册的指导使用，以确保设备长期、无故障的运行。

## 1.安全预防措施

- 安装或使用前，请务必仔细阅读本栏说明，确保正确安全操作。
- 以下所示的注意事项，记录了与安全有关的重要内容，请务必遵守。
- 阅读完毕后，请务必将其妥善保管，以便随时取阅。

### 安全符号与信息惯例

本手册中使用了以下安全符号与信息，以防由于操作不当而引起的人身伤害与财产损失。为预防安全隐患，在操作本产品之前，请仔细阅读本手册并充分理解这些安全符号与信息。



**警告**

该标志表示，存在潜在的安全隐患，误操作时可能导致死亡或严重伤害。



**注意**

该标志表示操作不当时，有可能造成中度或轻微的人身伤害和/或财产损失。



**警告**

#### 安装设备时

- 请勿将设备置于雨中或可能被水或其他液体浸湿的环境中，否则会引起火灾或触电。
- 仅可在设备指定的电源电压下使用。在超过标示的电源电压下使用可能会引起火灾或触电。
- 请勿剪切、扭绞、损坏或改装电源电缆。此外，请勿在加热器附近使用电源电缆，不得将重物（包括设备本身）放置在电源电缆上，否则会引起火灾或触电。
- 请勿将设备安装在不稳定的位置，例如摇晃的平台或倾斜的表面。否则可能会引起设备掉落，造成人身伤害和/或财产损失。

#### 使用设备时

- 如果在使用中出现以下异常情况，请立即切断电源开关，从插座上拔出电源插头，并与离您最近的TOA经销商联系。在此类情况下，不得进一步使用设备，否则可能会引起火灾或触电。
  - 如果设备中产生烟雾或异味
  - 如果水或任何金属物质进入设备
  - 如果设备摔落或设备外壳破损
  - 如果电源电缆受损（内核暴露，断开等）

- 为防火灾或触电，请勿打开或拆除设备外壳进行改造。请将维修工作交由最近的TOA经销商来处理。

- 请勿将茶杯、碗碟或其他液体或金属物容器放置在设备顶部。如果此类物体意外进入设备，则可能引起火灾或触电。
- 请勿将金属物品，易燃性物体，异物插入或丢入充电器内部或电池插座中，否则可能会导致火灾或触电。
- 请勿在雷电气候中接触插头或天线，否则可能会引起触电。
- 如果电池在5小时之内未完全充满，请停止充电。继续充电超过5小时可能会导致电池发生火灾、爆炸、泄露或过热。



**警告**

#### 使用设备时

- 请勿用湿手插拔电源插头，否则可能会引起触电。
- 当按下电源电缆时，请确保拿住电源插头；不得拉拽电缆本身。使用电源电缆受损的设备则可能引起火灾或触电。



- 当移动设备时，请确保从墙面输出口拆除其电源电缆。在电源电缆与输出口连接的情况下移动设备可能会引起电源电缆损坏，引起火灾或触电。当拆除电源电缆时，请确保拿住插头，将其拔下。
- 请勿堵塞AC适配器的通风口。否则可能会引起热量在设备内部聚集，引起火灾。
- 请勿将设备安装在潮湿或积满灰尘、暴露在阳光直射、靠近灼热器或产生浓烟或蒸汽的位置，否则可能会引起火灾或触电。
- 如果在电源插头上或墙面插座中堆积了灰尘，则可能引起火灾。应定期清理。此外，请将插头牢固插入墙面输出口。
- 当设备闲置10天或更长时间不使用时，为确保安全，请关闭电源开关，将电源插头从插座上拔出。否则可能会引起火灾或触电。
- 使用设备专用的AC适配器。请注意，使用其他适配器可能会引起火灾。
- 充电完成后将充电器的电源插头从AC插座上拔出，否则可能会引起火灾。

### 使用设备时

- 请勿在设备上放置重物，因为这可能引起设备掉落或破裂，造成人身伤害和/或财产损失。此外，重物本身也可能掉落，引起人身伤害和/或财产损失。

## 2.一般说明

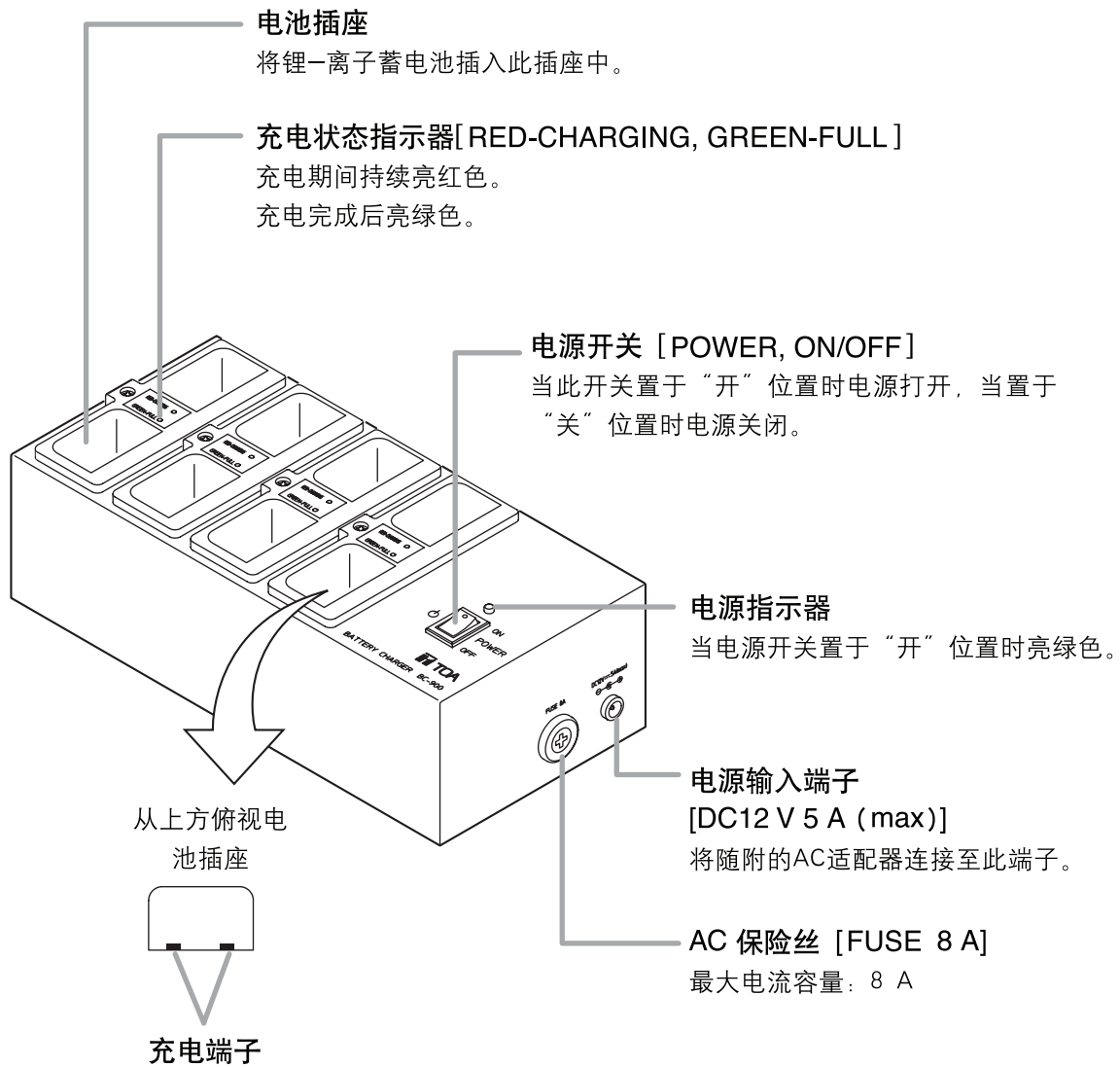
TOA BC-900 是TOA红外线会议系统的主席单元TS-801和TS-901以及代表单元TS-802 和TS-902使用的BP-900 锂-离子蓄电池的专用电池充电器。

BC-900 配备专门的充电系统供锂-离子蓄电池使用，在长达5小时内允许多达8个电池同时充电。

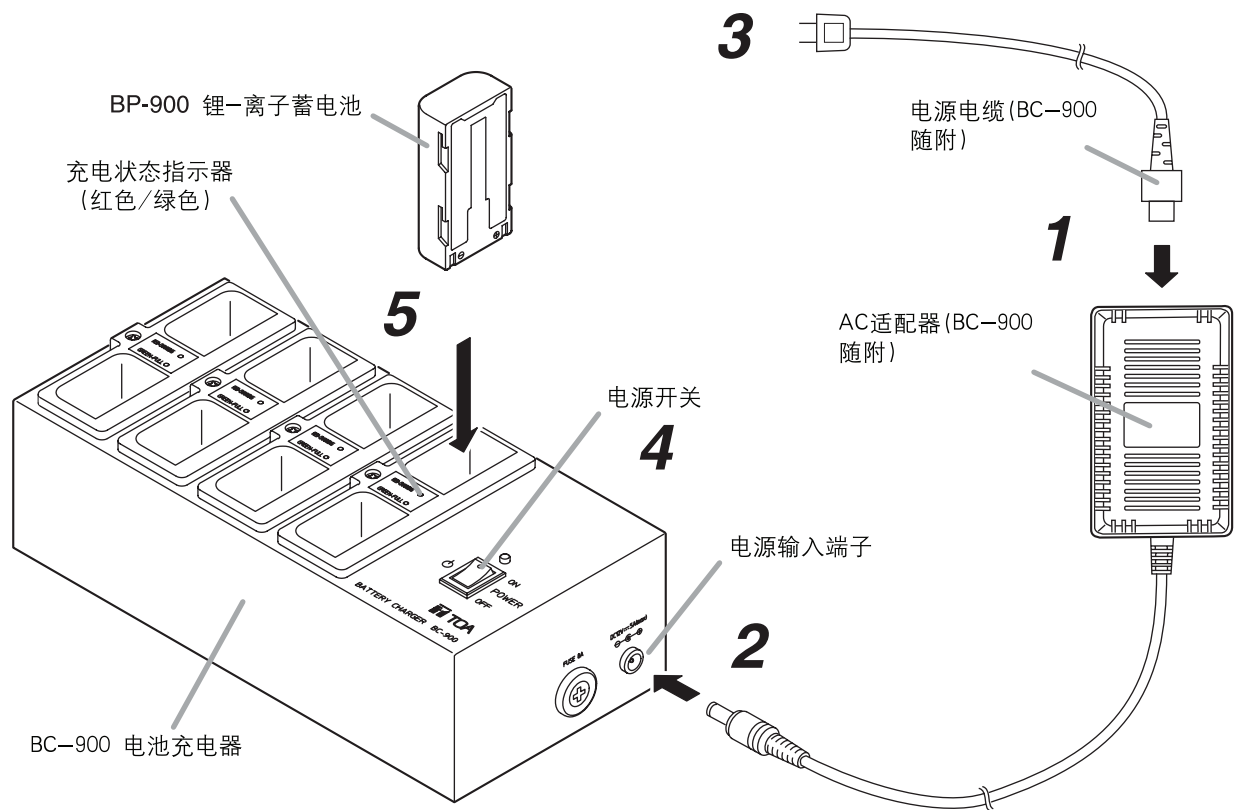
## 3.使用注意事项

- 请在温度为0 ~ +40°C的环境中使⽤设备。
- 避免将电池充电器安装暴露于振动的位置。电池可能由于接触不良而无法正确充电。
- 对本设备进行清扫时，请务必切断电源，并用干布进行擦拭。对于顽固的污渍使⽤蘸有中性洗涤剂⼲的布擦拭。绝对不能使⽤苯、稀释剂或经过化学处理的清洁布等。因为此类挥发性液体会使设备变形或退⾊。
- 定期使⽤干燥的棉签清洁充电端⼦。端⼦脏污会导致接触不良，从而导致电池不能正确充电。

## 4.名称和功能



## 5. 充电



步骤1. 将电源电缆连接至随附的AC适配器中。

步骤2. 将AC适配器连接至充电器的电源输入端子。

步骤3. 将AC插头插入AC壁式插座。

步骤4. 打开电源开关。  
电源指示器亮起绿色。

步骤5. 将电池完全插入一个充电器电池插座中，同时保持电池方向正确。  
确保充电状态指示器亮起红色。如果不亮，检查电池是否正确插入。  
充电在5个小时之内完成，并且充电状态指示器亮起绿色。

**警告**

如果电池在5小时之内未完全充满，请停止充电。  
继续充电超过5小时可能会引起电池发生火灾、爆炸、泄露或过热。

**注意**

充电完成后将充电器的电源插头从AC插座上拔出，否则可能会引起火灾。

### 注

在将充满电（充电完成）的电池插入时，关闭充电器的电源并再次打开会导致电池重复充电。电池使用寿命会由于重复充电而降低。

## 6.故障排除

症状	可能原因	解决方法
即使当电源开关置于“开”位置时电源指示器（绿色）仍不亮。	AC插头未插入壁式插座。	将AC插头插入壁式插座。
	保险丝熔断。	更换保险丝。 联系TOA经销商进行更换。
即使锂-离子蓄电池插入电池插座中，充电状态指示器（红色）仍不亮。	锂-离子蓄电池未正确插入电池插座中。	将锂-离子蓄电池完全插入电池插座中。
	充电端子脏污。	使用干燥的棉签清洁充电端子。
充电电池运行时间过短。	（锂-离子蓄电池使用寿命降低。）	更换新的BP-900锂-离子蓄电池。

## 7.规格

电源	12 V DC, 5 A (最大)
充电时间	5小时 (最长)
充电容量	最多8个
工作温度	0°C ~ 40°C
材料	钢, 黑色油漆
尺寸	240 (宽) x 70 (高) x 115 (深) mm
重量	1.2 kg

注：设计和规格若有变更，恕不另行通知。

### •附件

AC 适配器 .....	1
电源电缆 (2 m) .....	1