

便携式耳机放大器

AT-PHA10

使用说明书

audio-technica

多谢阁下购买本便携式耳机功率放大器产品。
在使用本产品前，请先查阅本使用说明书，并确定了解产品的正确使用方法。

注意

注意事项
在使用本便携式耳机放大器前，请仔细阅读以下注意事项，以确定能在使用本器材时能遵循有关的安全指引。

- 请勿拆卸或改造本便携式耳机放大器。
- 在不能听到周围声音会构成严重危险的地方（例如在铁路交叉口、火车站、建筑工地或有机车和自行车行驶的道路上），请勿使用本便携式耳机放大器。
- 为防止您的听力受损，请勿将音量开得太高。长时间听响亮的声音可能导致暂时性或永久性听力丢失。
- 请勿将便携式耳机放大器放在阳光直接照射的地方、在发热设备附近或在热、潮湿或多尘的地方。
- 请勿使便携式耳机放大器受到强烈撞击。
- 请勿沾湿本便携式耳机放大器。

电池安全措施

- 不要把电池放置在儿童伸手可及的地方。
- 使用一次性的AAA型7号碱性电池或镍氢可充电电池。
- 安装时注意电池正确的极性记号。
- 立即取出已被耗尽电量的电池。
- 请适当地废弃已使用的电池。
- 不要使用泄漏电解液的电池。如电池漏出电解液，应避免接触到皮肤。如电解液接触到皮肤，应立即以肥皂和清水冲洗。如电池漏出电解液，溅入到眼睛，应尽快用大量的清水冲洗并立即作出治疗。
- 不要把电池暴露在过热的地方，如直射阳光、火焰旁等地方。
- 在处理废弃时，请注意对环境的影响，并遵守当地法律的规定。

根据 FCC 第 15 部分内容 (美国地区)
本设备遵循 FCC 规则的第 15 部分。设备操作必须符合下列两项条件：
(1) 本设备不准造成有害的干扰。(2) 本设备必须接受任何接收到的干扰，包括会造成意外操作的干扰。

FCC 警告
除非本手册另有规定，否则不得擅自变更或修改本设备。若擅自进行此类变更或修改，您可能无法继续对本设备进行任何操作。

注意：
本设备依据FCC规则第15条规定，经测试证明符合B级数位装置之限制。该限制之设计在于提供家用设施合理保护，以防范有害之干扰。本设备会产生、使用并可能放射无线电频率能量，若未依照指示安装、使用，则可能对无线电通讯造成有害干扰。但是，即使特定之安装方式亦无法保证不致发生干扰。若本设备对收音机、电视收视造成有害干扰（可开/关本设备电源确认），建议使用者以下列任一种或多种方式尝试改善干扰：

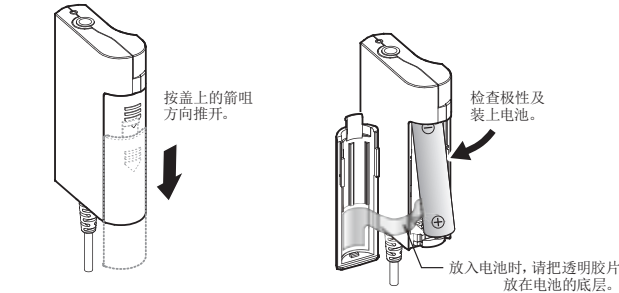
- 调整接收天线的方向或位置。
- 增加本设备与接收装置间之距离。
- 本设备与收视装置分别连接不同回路之电源插座。
- 向商店或有经验的无线电及电视技术人员查询，寻求帮助。

加拿大遵守信息
本B级数位装置遵守加拿大ICES-003。
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

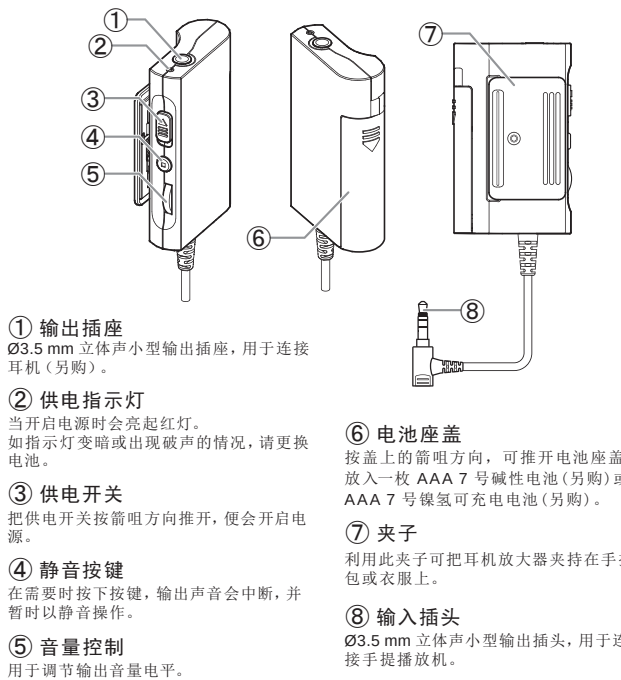
 This product conforms to the EMC Directive 2004/108/EC. The complete declaration of conformity can be obtained from Audio-Technica Limited, Royal London Industrial Estate, Beeston, Leeds, UK, LS11 8AG.

如何更换电池

1. 按盖上的箭咀方向，推开电池座。
2. 放入一枚 AAA 7 号碱性电池或镍氢可充电电池（另购），并确定电池极性 "+" 及 "-" 正确。



各部份及其功能

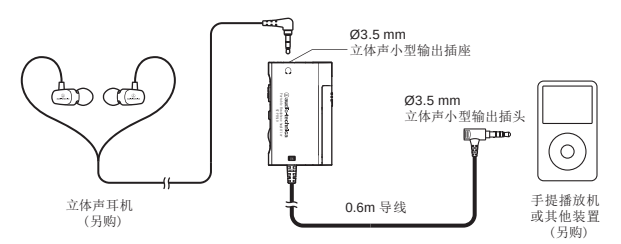


使用操作

※ 请同时查阅本耳机放大器将会连接的手提播放机及收听耳机的使用说明书。

1. 在连接前，请先把耳机放大器和手提播放器的音量控制调至最低。
2. 把耳机放大器的输入插头连接到手提播放器的耳轮输出端。
※ 请抓住插头(非导线)插拔连接。直接拉扯导线可能导致电线损坏。
3. 把耳机插头连接到耳机放大器的输出端插座。如使用 Ø3.5 mm 立体声小型插头以外的耳机，务必配置合适的转换头适配器。
4. 请检查连接到耳机放大器的手提播放器电源已开启，再开启耳机放大器的电源。调节手提播放器和耳机放大器的音量控制至适当设定，以合适的音量收听。
5. 使用完后，请把耳机放大器的供电关闭，并拔出所有连接。
※ 请勿将线缆绕在手提播放器或耳机放大器上。否则可能损坏或拆断线缆。

连接例子



技术指标

最大输出功率	: 16 mW + 16 mW (16Ω, 10% 总谐波失真)
频率响应	: 20 ~ 50 kHz (16 ~ 64 Ω)
总谐波失真	: 小于 0.04 %
信噪比	: 高于 95 dB (JIS-A)
电池	: AAA 型 7 号碱性电池 或 AAA 型 7 号镍氢可充电电池 (另购)
电池寿命	: 可达 50 小时 (碱性电池) 可达 30 小时 (镍氢可充电电池)

(产品会因需要作出改良更新, 而不会作另行通知)

PORTABLE HEADPHONE AMPLIFIER AT-PHA10

USER MANUAL



Thank you for purchasing this portable headphone amplifier.
Before using this, please make sure that you read through this user manual
to ensure that you will use this correctly.

Warnings

Warnings

Please read these warnings before using your portable headphone amplifier. To ensure safety, observe all warnings while using this equipment.

- Do not disassemble or attempt to repair the portable headphone amplifier.
- Never use the portable headphone amplifier in places where the inability to hear ambient sounds presents a serious risk (such as while operating a motor vehicle or bicycle, or at railroad crossings, train stations, construction sites or on roads or where vehicles and bicycles are traveling).
- To prevent damage to your eardrums, never use the portable headphone amplifier at excessive volume levels. Listening to loud sounds for an extended period may cause temporary or permanent hearing loss.
- Do not store the portable headphone amplifier in direct sunlight, near heating devices or in hot, humid or dusty places.
- Do not subject the portable headphone amplifier to strong impact.
- Do not allow the portable headphone amplifier to become wet.

Battery precautions

- Keep batteries out of the reach of children.
- Use disposable LR03(AAA) alkaline batteries or AAA nickel-hydrogen rechargeable batteries.
- Observe correct polarity as marked.
- Remove depleted battery immediately.
- Please dispose of used batteries properly.
- Do not use a leaking battery. If battery leakage occurs, avoid contact with skin. If contact occurs, immediately wash thoroughly with soap and water.
- If battery leakage comes into contact with your eyes, immediately flush with water and seek medical attention.
- Do not expose the battery to excessive heat.
- Always consider the environment issues and follow local regulations when disposing of batteries.

Compliance with FCC rules (USA only)

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canada only

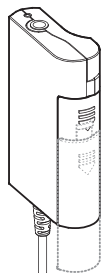
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB -003 du Canada.



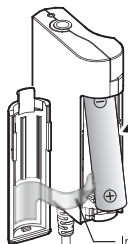
This product conforms to the EMC Directive 2004/108/EC.
The complete declaration of conformity can be obtained
from Audio-Technica Limited, Royal London Industrial Estate,
Beeston, Leeds, UK, LS11 8AG.

How to replace the battery

1. Remove the battery cover by sliding it in the direction indicated by the arrow.
2. Insert one AAA alkaline dry battery (sold separately) or one AAA nickel-hydrogen rechargeable battery (sold separately) while taking care to align the "+" and "-" polarities.



Slide the cover in the direction of the arrow.

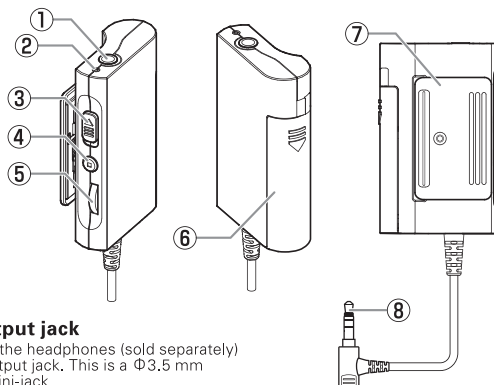


Check the polarities, and insert the battery.

Insert the battery with the transparent film tab underneath it.

3. Put the battery cover back in place.

Parts and Their Functions



① Output jack

Connect the headphones (sold separately) to the output jack. This is a $\Phi 3.5$ mm stereo mini-jack.

② Power indicator

Lights up red when the power is turned on. Replace the battery when the power indicator becomes dim or when the sound starts breaking up.

③ Power switch

The power is turned on when the power switch is slid in the direction indicated by the arrow.

④ Mute button

When pressed, the output sound is temporarily muted.

⑤ Volume control

Used to adjust the volume level of the sound.

⑥ Battery cover

The battery cover is removed by sliding it in the direction indicated by the arrow. Requires one AAA alkaline dry battery (sold separately) or one AAA nickel-hydrogen rechargeable battery (sold separately).

⑦ Clip

Makes it possible to use the headphone amplifier while it is clipped to your bag or clothing.

⑧ Input plug

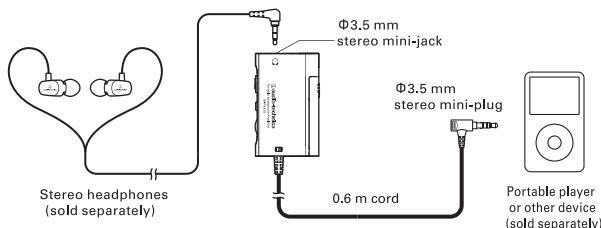
Connects to the headphones jack of the portable player. This is a $\Phi 3.5$ mm stereo mini-plug.

Operation

※ Refer also to the user manual of the portable player and of the headphones to which the headphone amplifier will be connected.

1. Before connecting the units, set the volume controls on the headphone amplifier and on the portable player to the lowest position.
2. Connect the input plug of the headphone amplifier to the headphone output of the portable player.
 - ※ Hold the plug (not the cord) when connecting or disconnecting it.
 - Pulling the plug by the cord may damage the cord.
3. Connect the headphones to the output jack of the headphone amplifier. Obtain the suitable conversion adapter if the headphones have an output jack that does not accommodate a $\Phi 3.5$ mm stereo mini-plug.
4. Check that the power of the portable player connected to the headphone amplifier has been turned on. Then turn on the power of the headphone amplifier, and adjust the volume level of the portable player and of the headphone amplifier to the desired settings, and enjoy the sound played.
5. After use, turn off the power, and disconnect all the connections.
 - ※ Do not wrap the cords around the portable player or around the headphone amplifier itself.

Example of connections



Specifications

Maximum Output Power	: 16 mW + 16 mW (16 Ω , 10 % THD)
Frequency Response	: 20 ~ 50 kHz (16 ~ 64 Ω)
Total Harmonic Distortion	: Less than 0.04 %
Signal-to-Noise Ratio	: Greater than 95 dB (JIS-A)
Battery	: AAA Alkaline Battery or AAA Nickel-Hydrogen Rechargeable Battery (sold separately)
Battery Life	: Up to 50 Hours (Alkaline) Up to 30 Hours (Nickel-Hydrogen Rechargeable)

(For product improvement, this product is subject to modification without notice.)



Audio-Technica Corp.
2206 Naruse, Machida, Tokyo 194-8666, Japan ©2010 Audio-Technica Corp.