

AER Compact Mobile (US Version) Rechargeable Battery Replacement

How to replace the rechargeable battery in the AER Compact Mobile, 1st generation portable acoustic guitar amplifier. This is for the US version which runs on 110V when plugged in and uses two 12V batteries internally.

Written By: Carsten Koscher



INTRODUCTION

I am tearing apart the body parts of the fantastic sounding AER Compact mobile. The guide is for the 1st generation version, there is newer generations, so please verify with AER or your regional distributor on potentially different specs or replacement approach.

Haven not been able to find a lot of information on the amplifier on the internet, so I decided to give it a try. The result is rewarding, I can tell you!

The amp comes new at a price point of approx. USD 1,900 to USD 2,000 (after taxes). Try getting a used one and replace the batteries, if necessary. It sounds almost as good as the Compact 60 II (which I own in a 220 V version - which, living in the US, is not as good as owning a 110V - and, optimally in a mobile variant ... thus, this guide..)



TOOLS:

- Phillips #00 Screwdriver (1)
- 8mm wrench (1)



PARTS:

Battsco UN7-12 Lead Acid Battery 12v
 7ah (1)

Step 1 — The batteries - Battsco UN7-12



- The batteries we need as replacement. Those I found in my beloved AER which I just a few days ago bought used. So - no guarantee that those were not already a replacement for what was delivered by AER originally in the new device. I think they were original since they so nicely fitted into the compartment and looked as if never touched.
- batteries new from
 www.battsco.com. The price in the
 US was less than USD 50 (in
 October 2015) with shipping to NYC
 included. Not bad, in particular
 compared to what I heared from the
 original manufacturer on what a
 battery replacement would cost
 (easily north of USD 300, with labor
 and two-way shipping added)!
- The batteries are 12V with 7Ah. Note that I have seen information on the internet that the device would use two 6V Panasonic batteries with higher Ah, put together in series to get the 12V together necessary to run the device in mobile mode. Not in this case!
- In our case, we already have the 12V, so they should be lined up in parallel to add up to 14Ah.

Step 2 — Taking out the Carrying Handle



- The handle needs to come off to get access to the inner chamber.
- Those screws are a real challenge! They are very hard to take out, so you better have a very robust Philips Screwdriver. There is 8 of them.
- Once you take them out, it is very easy to take out the plastic handle and you get access to the chamber that hosts both the speaker and the batteries.

Step 3 — Take off the Front Grille





- Since my amplifier dates back to the early 2000's, the soft front with the AER logo came off easily, providing access to the grille. It was not glued or otherwise attached.
- To take off the grille, you need to unscrew the four screws in the four corners with your Philips screwdriver.
- This is how the amp looks like once once the Grille has been unscrewed and taken off.
- Please note that the speaker is very fragile, in particular since the tweeter is built in its center, so please be very carefully handling it going forward!
- Note: In my version of the amplifier, there is a bass reflex pipe on the right and a hole without such a pipe on the left.
- You can probably also see the handle is also taken out on the left side of the chamber.

Step 4 — Get the Locks of the Battery holder off







- You can (hopefully) see the size 8 locks on top of the long distance holders the come from the back of the chamber.
- Those need to come off, but only for the part that secures the black batteries on the top, very much right behind the speaker.
- Since it is virtually impossible to remove the locks without removing the speaker, speaker needs to come off. Another four very well fitted Philips screws that need to come off around the front side of the speaker.
- Please find a picture attached for the tool I found in my treasure tool chest. Brought it from Germany.. "It's because of the metric system, you know.."

Step 5 — AER Compact Mobile awaiting new Batteries



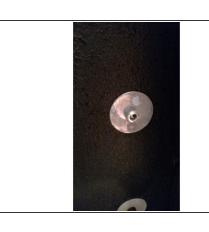




- The back side panel of my AER Compact Mobile. When I bought it used, it only worked on 110V attached via normal power cable. The batteries would not charge (indicator LED did not turn on at all). So, I decided to tear it apart and find out which batteries were mounted to finally replace them and make live music!
- There are seven easy to remove (in my case) short black screws that you need to unscrew to remove the back panel.
- Very good German engineering, the panel comes off completely in one piece and slides out nicely from the amplifier body. Nice!
- I uploaded an image of the screwdriver I used. It is important that it is robust and of good quality. Not so much for the screws we just took out, but for all later ones, where you need to take the deeper screws out of the massive wood, you better do.

Step 6 — The back panel





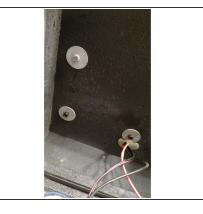


- The back panel with all electronics has come off nicely.
- As you can see, there is four screws on the black back of the speaker compartment which you need to attack in a later step.
- I am showing it here so that you can prepare the tool, it is not yet time to take them out. First, we have to remove the carrying handle and the from grille as well as the speaker.
- Please make sure you get a tool that helps you (In german this would be an 'Imbus', a small one)

Step 7 — Unscrew the Battery Holder Long Distance Holders

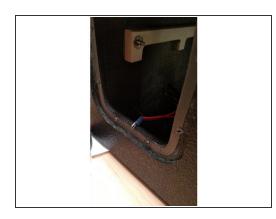


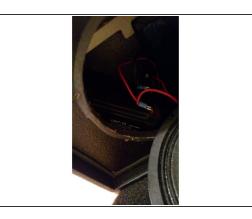




- To get the light color wood battery holders off and to finally take the batteries out, you need to unscrew the top three of the long distance holders that are accessible from the outer back of the speaker chamber.
- Please remember that in a prior step, the counter locks have been removed, so those should come out easily.

Step 8 — Taking out and replacing the Batteries - Then fix it all back together...







- Once the wooden holder comes off, the batteries come out and you can easily and softly unplug them and take them out through the handle hole.
- It is easy to plug in the new batteries (red is red is +), (- is is black) and to put them back in.
- The picture of the battery. Note that there is two (2, dos, dois, dwa, due) of them in the device. No point in just replacing one..!
- Have fun charging and enjoying some 4 hours of 'unplugged' acoustic music... you might run into me on the downtown NY subway.. pardon my playing, but enjoy the sound of the amp.. it is simply beautiful and worth price and replacement effort..

To reassemble your device, follow these instructions in reverse order.