

# CHANGING THE TUBES -A10 CLASSIC AMPLIFIER-

Tube amplifiers offer a warm and unique sound, but their electronic tubes wear out over time. A tired tube can cause a loss of dynamics, noise, or even complete amplifier failure.

In this tutorial, we'll look at **when and how to change the tubes** in your amplifier, as well as the precautions to take to ensure proper installation and extend the life of your new tubes.

You can contact your reseller, distributor or Advance Paris after-sales service to purchase new tubes. You can buy directly the tubes from different brand but we urge you not to buy old tubes from the internet...

## Level of difficulty:

## NECESSARY TOOLS AND EQUIPMENT

TOOLS EQUIPMENT



Screwdriver Phillips head n.2



Cotton gloves
or clean cloth
(to avoid touching
the tubes with your fingers)



Set of 2 tubes ECC81 / 12AT7

## PRECAUTIONS AND SAFETY



### **CAUTION:**

Tube amplifiers contain high voltages (up to several hundred volts), even after the device has been turned off!

- Turn off and unplug the amplifier before performing any maintenance.
- Allow the tubes to cool for at least 15 minutes after turning off the power (they become very hot during operation).
- Do not touch the tube pins with your bare hands to avoid leaving greasy marks that could shorten their lifespan.

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## S1. Disassembly steps

- 1. Standby mode
  - o Put the product in **Standby mode**.
- 2. Power off and disconnect
  - o Turn the device to **Power OFF**. (3)
  - Unplug the power cord.



## S2. Disassembly steps

- 3. Accessing the rear panel
  - Go to the rear of the device.
  - Unscrew the 5 screws on the rear panel.
- 4. Removing the side panels
  - Unscrew the 2 screws on the right side panel.
  - o Unscrew the 2 screws on the left side panel.







## S3. Disassembly steps

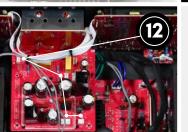
Remove the cover by gently pulling the sides apart.



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## S4. Accessing the tube board (PCB tubes)

## 1. Removing the board

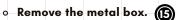
- Locate the tubes PCB.
- Unscrew the 2 screws holding it in place.
- o Disconnect the 4 cables connected to the board. You need to press on the plugs latches to be able to pull them gently.
- Remove the board from the device.



## S5. Accessing the tube board (PCB tubes)

## 2. Removing the tubes

- o On the board, unscrew the 2 additional screws.











S6. Remove the tubes.

Put on your protective gloves.

Gently remove the two tubes with a delicate backand-forth motion.

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## S7. Replacement and reassembly

- 1. Install the new tubes (and the metal box with the 2 screws).
- 2. Screw the card fasteners back in place.
- 3. Reconnect the 4 cables.
- 4. Replace the card in the amplifier and secure it with the 2 screws.



















## S8. Replacement and reassembly

- 5. Screw the side panels back on (2 screws each).
- 6. Screw the rear panel back on (5 screws).
- 7. Reconnect the power cord. 🔞
- 8. Turn on the device and perform a test. 🙆



You can now enjoy again the great sound of your A10 Classic!