LED Backlight for Technics amplifiers

Technics SE-A900S
Technics SE-A900SM2
Technics SE-A909S
Technics SE-A1000
Technics SE-A1000M2
Technics SE-A1010

Description

The LED module is designed to backlight the output power level meters in the Technics SE-A900S, SE-A900SM2, SE-A909S, SE-A1000, SE-A1000M2 and SE-A1010 amplifiers. It replaces the original module which has axial light bulbs. Compared to the original module, LED module has lower power consumption, lower operating temperature and many times longer life, reaching tens of thousands of hours.

The LED module does not require any modifications in the design of the amplifier. Assembly method is the same like for the original module. The module also has no effect on the quality of the sound. The module's power supply is based on a classic power supply without inductive components that could affect the operation of audio circuits.

The module allows you to set the brightness of the lighting and adjust it to your liking.

Specification

- Power consumption (default brightness): 1.2 W
- Power consumption (minimum brightness): 0.4 W
- Power consumption (maximum brightness): 8.5 W
- LED correlated color temperature (CCT): 3000 K (warm white)
- Number of LEDs: 2 x 13
- Dimensions:
  - left PCB: 176 x 45 mm
  - right PCB: 176 x 30 mm
- Weight: 55 g
Assembly instruction

The LED module you have may be slightly different from the one shown on the images. Differences may apply to the position of some components and/or labels. However, the assembly method and marking of the elements are the same. Parameters and operation also are the same.

The backlight of the output power level meters varies depending on the amplifier model. The SE-A900S and SE-A1000 amplifiers do not have a backlight switch. The SE-A900SM2 and SE-A1000M2 amplifiers have a mechanical backlight switch located on the rear panel. The SE-A909S and SE-A1010 amplifiers have a backlight switch located on the front panel.

The following assembly instruction contains a description of the assembly steps for all types of amplifiers. The differences are marked as follows:


**A909/A1010** - description applies to SE-A909S and SE-A1010.

Attention! Before assembly, ensure the LED module is configured for your amplifier.

If you have a **SE-A900S, SE-A900SM2, SE-A1000 or SE-A1000M2** amplifier, ensure the JP101 jumper is closed (shorted).

If you have a **SE-A909S or SE-A1010** amplifier, ensure the JP101 jumper is open.
1. Remove the power cable from the amplifier and disconnect any load from the amplifier outputs.

2. Remove 2 screws from left side, 2 screws from right side and 2 screws from back side of the unit.

3. Remove the top cover.

4. **A900/A1000** Remove the backlight power connector from socket CN705. This socket is located at left side of left backlight PCB.

   **A909/A1010** Remove the backlight power connector from socket CN704. This socket is located at left side of left backlight PCB. If you have cables attached to the hole on the right side of the CN704 socket, release them by cutting the cord clamper.

5. **A909/A1010** Remove the backlight switch circuit connector from socket CN707. This socket is located on the right backlight PCB.
6. Remove 2 screws fixing backlight module.

7. Remove the backlight module.

8. Remove 4 screws and pull off original backlight PCB’s.
9. Connect two PCB's of new backlight LED module. PCB are described as “LEFT” and “RIGHT”. Put connector CP201 on right PCB into socket CN201 on left PCB.

10. Mount new PCB’s on backlight base using 4 original screws. Watch out for the direction of assembly.

11. Mount the backlight module on front panel using 2 original screws. Do not overtighten to prevent damaging the alloy from which the front panel is made.
12. **A909/A1010** Insert the backlight switch circuit connector to socket CN202. This socket is located on the right PCB and described as “Relay connector used only in SE-A909/A1010”.

13. Insert the backlight power connector to socket CN101 located on the left PCB. This socket is described as “AC Input”.

**A909/A1010** Use new cord clamper to attach the cables to the hole located on the right side of the CN101 socket.

14. Although this is not recommended, you can optionally set the desired backlight brightness. The instruction is below.

15. Insert the cover and screw it on using 6 screws.
Adjust the brightness of the backlight

Warning! Adjusting the brightness of the backlight requires the amplifier to be turned on without the top cover on. Inside the amplifier are voltages dangerous for life and health. Be very careful to avoid electric shock. In particular, do not touch any components between the rear panel and the main transformer.

The module is pre-adjusted to illuminate the indicators more or less the same as the original backlight. However, you can set the brightness of the backlight. The P101 potentiometer is used for this. It's a good idea to adjust it in the evening to adjust the brightness to the conditions of reduced lighting. Adjustment in the daylight usually makes it too bright. Also remember that when the maximum brightness is set, LEDs and the control module may be warm, what is normal.

1. Plug the power cable to the amplifier.
2. Turn on the amplifier.
3. **A900/A1000** If the amplifier has backlight switch (SE-A900SM2, SE-A1000M2), make sure it is in the ON position.
   **A909/A1010** Turn on the backlight using “METER LIGHT” switch located on the front panel.
4. Set the desired brightness with the potentiometer P101, described as “Brightness”.
5. After adjustment, turn off the amplifier, remove the power cable and insert the top cover.