

Aavik
ACOUSTICS

P-300 Stereo power amplifier

User's guide



Specifications:

Contents:

Power output:	8Ω: 2x150W, 0.01% THD 4Ω: 2x300W, 0.01% THD
Input impedance:	11kΩ (XLR), 12kΩ (RCA)
Gain:	28dB Input sensitivity for full power 1.35V RMS
Distortion:	<0.005% 10W, 1kHz, 8Ω
Trigger input:	5-15V DC 1/8" socket, for stereo or mono jack, with positive pole on the tip
Dimensions:	440 x 480 x 133 mm (width/depth/height)
Weight:	35 kg

SPECIFICATIONS
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CAUTION: To reduce the risk of electric shock, do not remove cover (or back).
No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose the amplifier to rain or moisture.



The lightning flash with an arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Safety instructions

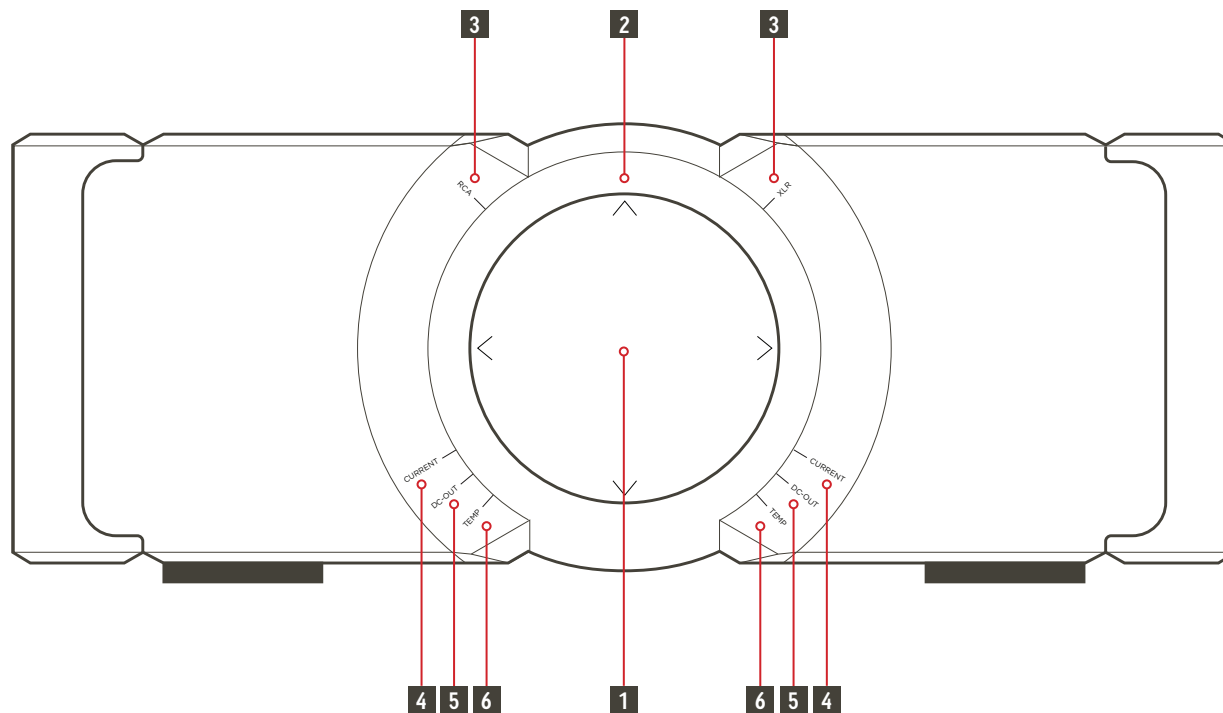
1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Clean the amplifier only with a dry, lint-free cloth. For more thorough cleaning, unplug the amplifier from the mains supply and go over it lightly with a damp, lint-free cloth. Do not use any type of chemical solvents or other cleaning products for cleaning.
6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
7. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
8. Unplug the amplifier during lightning storms or when unused for long periods of time.
9. Do not defeat the safety purpose of the polarized or grounding-type plug.
10. Place the amplifier horizontally and on a suitable table or rack.
11. Refer all servicing to qualified service personnel.
12. Servicing is required when the amplifier has been damaged in any way, such as when the powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the amplifier, the amplifier has been exposed to rain or moisture, does not operate normally, or has been dropped.

The amplifier should be serviced by qualified service personnel

The amplifier should be serviced by qualified service personnel when:

- A. the power-supply cord or the plug has been damaged, or
 - B. objects have fallen, or liquid has been spilled into the amplifier, or
 - C. the amplifier has been exposed to rain, or
 - D. the amplifier does not appear to operate normally or exhibits a marked change in performance, or
 - E. the amplifier has been dropped or the enclosure damaged.
1. **WARNING** - Take care that objects do not fall and liquids are not spilled into the enclosure through any openings. The amplifier shall not be exposed to dripping or splashing. Liquid-filled objects such as vases should not be placed on the amplifier.
 2. The amplifier has been designed for use in moderate climates and in domestic situations.
 3. Only connect the amplifier to a power supply of the type described in the operating instructions or as marked on the amplifier. The primary method of isolating the amplifier from the mains supply is to remove the mains plug. The amplifier must be installed in a manner that makes disconnection possible.
 4. If an abnormal smell or smoke is detected from the amplifier, turn the power off immediately and unplug the amplifier from the wall outlet. Contact your dealer and do not reconnect the amplifier.

Front panel



1 FRONT ROCKER BUTTON

The button has four functions. To switch the amplifier on, press the top of the button. To switch it off, press the bottom. To select the balanced input, press the right side of the button, and press the left side to select the unbalanced input.

The balanced/unbalanced selector, is not a true input selector - it only optimises the amplifier for the selected mode of operation. The amplifier will play, with the incorrect mode selected.

Note: The button can move diagonally also, but it is only intended to move up/down and left/right.

2 STANDBY/POWER INDICATORS

When the amplifier is in standby mode, the only light showing on the amplifier will be a dim LED light above the rocker button. With the amp on, the brightness of the LED increases, and the right and left sides of the display window will be diffusely lit. During the power-on phase, green diffuse lights flash on the sides as well.

3 INPUT INDICATORS

The two RCA and XLR indicators show which input is selected.

4 CURRENT INDICATORS

If one or both of the current indicators switch on, too much current is running through the output stage. This usually occurs because of a short circuit in the speaker wiring. When the error is detected, the speaker output(s) will be switched off, and you have to switch the amplifier off and back on, to re-enable normal operation. Before you switch the amp back on, make sure that there are no wiring errors. The error could be strands of wire from the speaker cable touching each other or the metalwork of the amplifier. If the indicators come on again after power cycling the amplifier, and even with speakers disconnected, the amplifier has been damaged, and will need servicing.

5 DC-OUT INDICATORS

If one or both of the DC-out indicators switch on, DC is present on the output(s) of the amplifier. When this occurs, the speaker output(s) are disabled to protect the speakers. If music is playing, the sound will be distorted and low in level. The DC could come from the preamp or a signal source. Try switching the amplifier off and back on. If the DC error is still present, try switching the amplifier off, disconnect the input cable(s), and switch the amp back on. If the DC error persists, with input cables disconnected, the error is in the power amplifier. Otherwise the error is in the preamplifier or the signal source.

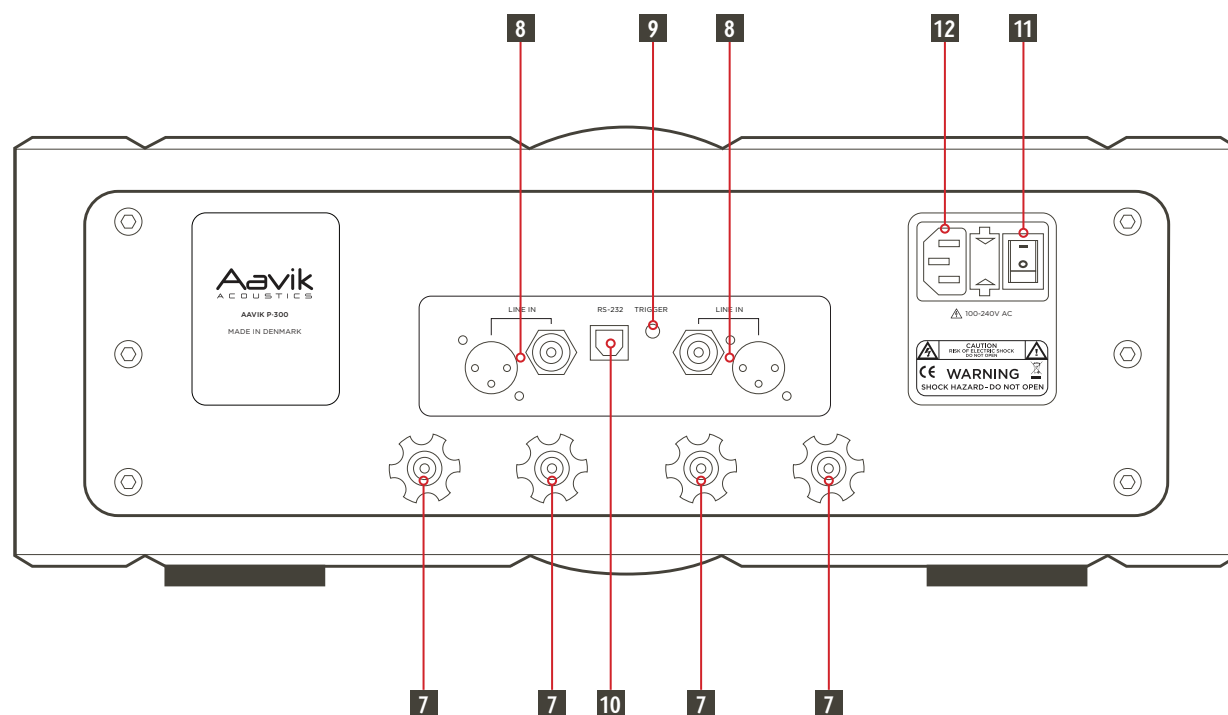
Front panel functions

The DC indicators may switch on during power up, and then switch off again after a couple of seconds. This is just the DC levels of the preamplifier or power amplifier that take a bit of time to stabilise. This causes no problems, and is not an error.

6 TEMP INDICATORS

If one or both of the temp indicators switch on, the temperature inside the amplifier is reaching critical levels. This can occur if the ambient temperature is too high and/or the amplifier has been delivering large amounts of power into low impedance speakers. When the indicators first switch on, it is only a warning. If the temperature drops again, the indicators will switch off. If the temperature continues to rise however, the amplifier will switch off. In that case, you have to let the amplifier cool off for some time, and then switch it off and on using the main power switch on the back panel.

Rear panel functions



7 SPEAKER TERMINALS

The P-300 amplifier accepts speaker cables terminated with spade connectors and 4mm banana plugs.

To connect speaker wires terminated with spades, loosen the isolation knob and insert the spade between the isolator and copper terminal. Tighten the isolation knob to secure the spade.

To connect speaker wires terminated with banana plugs, insert the banana plug into the centre hole of the copper terminal.

The positive speaker terminal is white, and the negative is black.

8 LINE INPUTS

The P-300 amplifier is equipped with an unbalanced (RCA) and a balanced

(XLR) line input. Only one input type can be used at a time, and no cable can be connected to the unused input.

XLR pin-out:

- 1: Ground
- 2: + (non-inverting)
- 3: - (inverting)

9 TRIGGER INPUT

Connect the trigger input to the trigger output of the preamp, to get remote controlled power on/off switching. When the amplifier is in standby mode, it can be switched on by applying 5-12VDC to the trigger input. The amplifier switches off again, when the trigger voltage is removed.

10 RS-232

The RS-232 connection is used for firmware updates, or for remote control.

11 POWER ON/OFF SWITCH

Toggle the switch to turn the amplifier fully on or fully off.

When the amplifier is in standby mode, the power consumption is less than 0.5 watt. When the amplifier is fully on and there is no applied signal, the power consumption is less than 100 watts.

12 POWER INLET (CAUTION!)

The P-300 amplifier accepts mains voltages from 100 to 240VAC 50-60Hz. The power inlet accepts power cables with an IEC 60320-C13 female connector.

To ensure the best performance, please consult your Aavik Acoustics dealer for a suitable mains cable.

Personal notes:

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