



## Specifications:

Output:	2 x 300 W/8 Ohm, 2 x 600 W/4 Ohm Distortion: <0.005% (THD+N: 1-100 W / 8 Ohm) IMD<0.0008% TIM<0.002% (10W 8-ohm)
Phono:	Floating RCA (1 set) Load-impedance adjustable from 50 Ohm to 10 kOhm; Frequency response: +/-0.5dB (20 Hz-20 kHz) Noise < -100dB re @ 2V out Distortion < 0.01% (20-20 kHz) RIAA correction curve Gain: 62 dB
Line:	Line 1. line 2, line 3: input impedance: 10 kOhm Gain setting adjustable in 3 steps (3, 6, 12 dB) Digital inputs adjustable in 2 steps 0-6 dB
Digital:	2 x RCA SPDIF (32 – 192 k-samples, 16-24 bit) 2 x TOSLINK optical (32 – 96 k-samples, 16-24 bit) 1 x USB fully isolated, UAC 2, asynchronous (PCM 32 – 192 k-samples, 16-24 bit)
Volume control:	Volume adjustable from -80dB to 0dB in 80 1dB steps
Dimensions:	100 x 440 x 370 mm
Weight:	16.5 kg

## Contents:

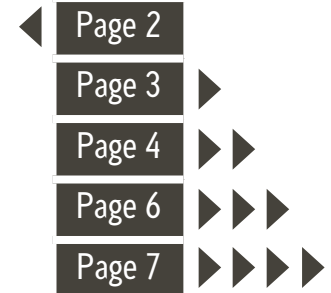
SPECIFICATIONS

SAFETY INSTRUCTIONS

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FRONT PANEL FUNCTIONS

REMOTE FUNCTIONS



## Caution:

**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 this apparatus 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 this apparatus 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. Only place apparatus horizontally and on a suitable table or rack.
11. Refer all servicing to qualified service personnel.

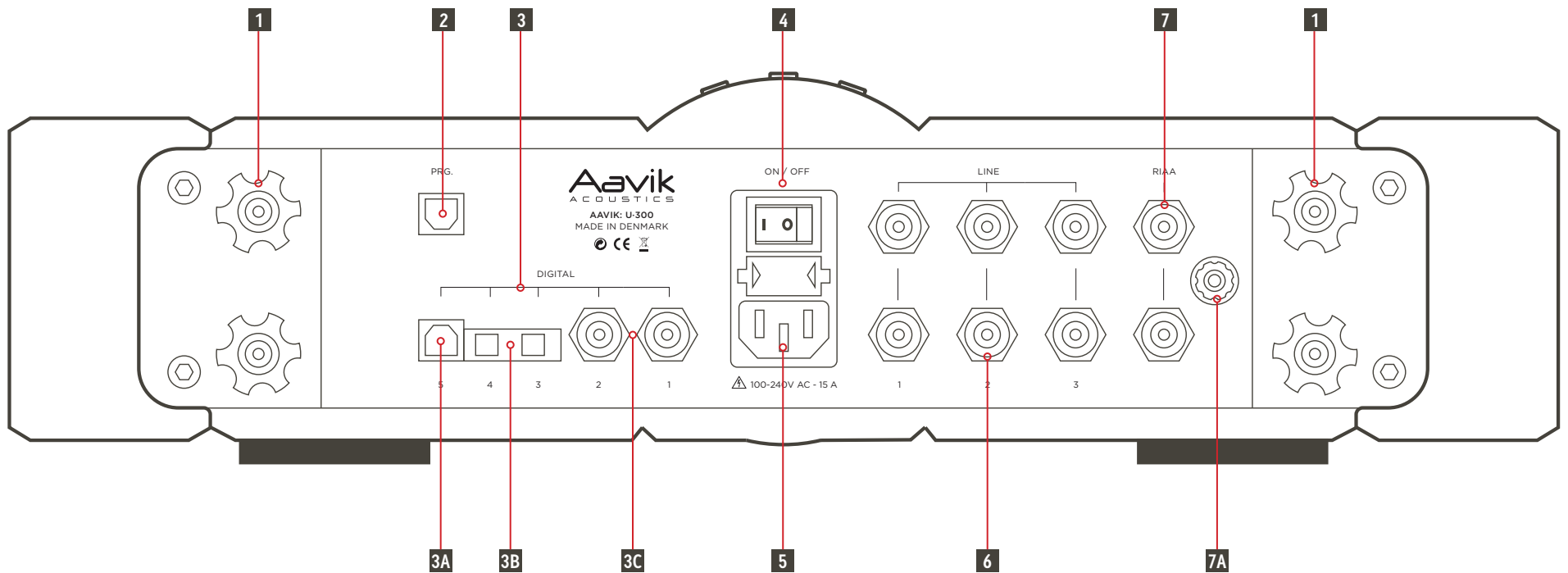
Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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

Rear panel



## Rear panel functions

### 1 SPEAKER TERMINALS

The U-300 amplifier accepts speaker cables terminated with spade connectors and 4 mm 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.

### 2 USB FOR FIRMWARE UPDATE

The U-300 amplifier USB terminal is only suitable for firmware updates. Please contact your local dealer for more information on U-300 firmware updates.

### 3 DIGITAL INPUTS

The U-300 is equipped with the following digital inputs: USB input, TOSLINK optical inputs, and RCA digital inputs.

#### 3A USB INPUT

The U-300 comes equipped with one fully isolated, UAC 2, asynchronous (PCM 32 – 192, k-samples, 16-24 bit) USB input.

#### 3B TOSLINK OPTICAL INPUT

The U-300 comes equipped with two optical (32 – 96 k-samples, 16-24 bit) TOSLINK inputs.

#### 3C RCA DIGITAL INPUTS

The U-300 comes equipped with two RCA SPDIF (32 – 192 k-samples, 16-24 bit) digital inputs.

### 4 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 30 watt.

### 5 POWER INLET (CAUTION!)

The U-300 amplifier accepts mains voltages from 100V to 240V. 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.

### 6 LINE INPUTS

The U-300 amplifier is equipped with three single-ended, RCA line inputs. The load impedance of the three inputs is 10 kOhm fixed.

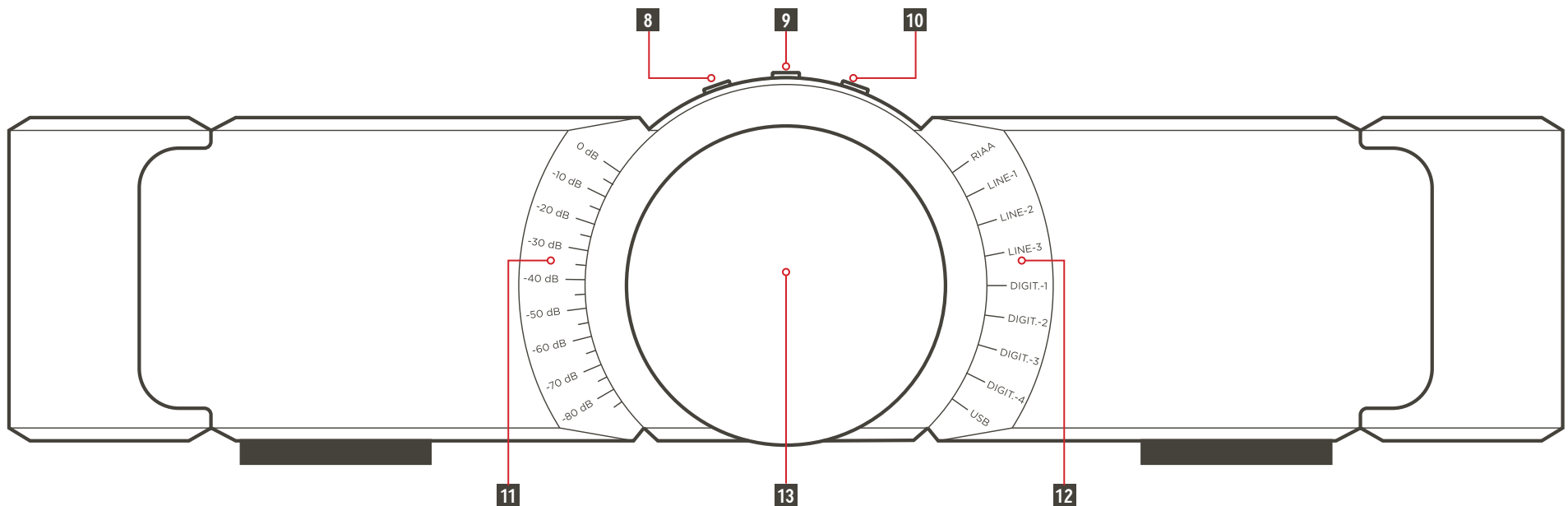
The gain setting for each line input can be individually adjusted. Please see "(8) Mute/Individual Gain Setting".

### 7 PHONO INPUT

The U-300 amplifier is equipped with one RCA phono input. The phono input is fully balanced with floating ground. The ground reference is found on the GND-terminal (7A). To ensure the best performance, use a phono cable with a separate ground wire. The phono section of the U-300 amplifier uses the RIAA equalization curve. The basic gain of the phono section is 62 dB, and through the linestage adjustable to 68 and 74 dB which makes the U-300 phono section suitable most low to medium output MC-cartridges.

The cartridge load impedance is adjustable in 18 steps from 50 Ohm to 10 kOhm. Please see "(8+10) Cartridge Loading Adjustment" on page 7 for guidance.

## Front panel



### 8 MUTE/INDIVIDUAL GAIN SETTING

The mute button has two functions. When you press this button, it will mute the outputs of the amplifier. A small light beneath the mute button will indicate that the outputs of the amplifier are muted. While muted, the volume display will continue to show the volume setting. Pressing the mute button again will reactivate the outputs of the amplifier.

Press and hold the mute button one second to activate the individual gain setting mode. When activated, the LED light of the volume display (11) will be brighter and the bar longer. This mode will let you choose between three gain settings. Please see the Individual Gain Setting Chart for the three gain settings. Turning the rotating knob (13) counter-clockwise will decrease the gain setting, whilst turning the knob clockwise increases the gain setting. Pressing the mute button (8) will deactivate the gain setting mode.

Individual Gain Setting Chart	
dB	dB (gain setting mode)
-85 - -60	0
-55 - -30	6
-25 - 0	12

## Front panel functions

### 9 STANDBY

Press the standby button to place the amplifier in standby mode. When the amplifier is in standby mode, the only light showing on the amplifier will be a dim LED light beneath the standby button.

### 10 NAVIGATION / REMOTE CONTROL PAIRING

The navigation button lets you select the desired source. Pressing the navigation button (10) will activate the navigation. A small light beneath the navigation button will indicate that navigation mode is activated. Turning the rotating knob (13) either clockwise or counter-clockwise lets you select the desired source. The LED light in the source indicator (12) shows the selected source. Press the navigation button again to deactivate navigation mode.

In order to pair your remote control with the U-300 amplifier, press and hold navigation button (10) for more than one second. When the amplifier is ready to pair, the LED light beneath the navigation button (10) will flash slowly. To pair, press random button on your remote control facing it toward the amplifier.

Reset pairing by pressing the navigation button for more than three seconds, when it has been reset the LED light will flash fast. Press the navigation button (10) again to go back to navigation mode.

### 8 10 CARTRIDGE LOADING ADJUSTMENT

While in navigation mode (10) and with the RIAA selected in the source indicator (12), press and hold the mute button (8) for more than three seconds to enter cartridge loading adjustment mode. A flashing LED light in the source indicator and a single LED light in the volume display will indicate that cartridge loading adjustment mode is activated.

Use the volume control (13) to set the cartridge loading. Please refer to the cartridge loading chart. Deactivate the cartridge loading adjustment by pressing the mute button.

### NOTE!

Pressing and holding the mute button (8) for less than three seconds, in navigation mode and with the RIAA selected, will activate the gain setting mode. The button needs to be held for more than three seconds to activate the cartridge loading adjustment mode.

Cartridge Loading Chart			
dB	Ohm	dB	Ohm
-85	50	-40	800
-80	75	-35	900
-75	100	-30	1000
-70	200	-25	1500
-65	300	-20	2000
-60	400	-15	3000
-55	500	-10	4000
-50	600	-5	5000
-45	700	0	10000

### 11 VOLUME DISPLAY

The volume display consists of 18 small LED lights. The volume display has three functions:

1. When the amplifier is in normal setting, the volume display shows the current volume. The volume setting is activated when three LED lights are illuminated in the volume display. Of the three LED lights, the brightest LED light will indicate the current volume.

The volume can be increased or decreased by turning the rotating knob (13).

2. In individual gain setting mode (8), the bar of the volume display will be longer and the LED light brighter. Please see "(8+10) Cartridge Loading Adjustment" on page 7 for guidance.

3. In cartridge loading adjustment mode, one LED light will be illuminated in the volume display. Please see the "(8+10) loading adjustment mode" section for guidance.

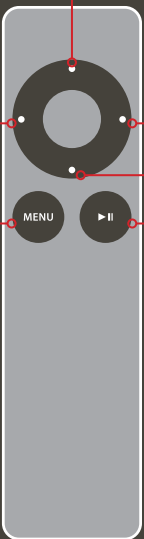
### 12 SOURCE INDICATOR

A single LED light in the source indicator shows the selected source. It is possible to change the source with the rotating knob (13), when navigation mode (10) is activated.

### 13 VOLUME CONTROL (ROTATING KNOB)

Use the rotating knob (16) to change the volume (11), gain setting (8), cartridge loading (8+10) or source (10).

## Remote functions



The diagram shows a vertical remote control with a central circular navigation pad and two buttons below it. Callout A points to the top of the pad, B to the bottom, C to the right, and D to the left. Callout E points to the 'MENU' button and callout F points to the 'MUTE' button (marked with a play/pause symbol).

- A VOLUME UP**  
Press this button to increase the volume setting.
- B VOLUME DOWN**  
Press this button to decrease the volume setting.
- C INPUT +**  
Press this button, to move to the next input. From Line 1 to Line 2 etc.
- D INPUT -**  
Press this button, to move to the previous input. From Line 2 to Line 1 etc.
- E STANDBY**  
Press this button to place the amplifier in standby mode, or to switch the amplifier on from standby mode.
- F MUTE**  
Press the ►|| button to mute the outputs of the amplifier. A small light beneath the mute button of the front panel will indicate that the outputs of the amplifier are muted. Pressing the ►|| button again will reactivate the outputs of the amplifier.