

# OVATION MA 8.3 / SA 8.3

---

## Operating Instructions



**Declaration of conformity (for EC only)**

We herewith confirm, that the unit to which this manual belongs fulfills the EC rules necessary to obtain the sign



the necessary measurements were taken with positive results.

**AVM Audio Video Manufaktur GmbH**

**Daimlerstraße 8**

**76316 Malsch**

**Germany**

**[www.avm.audio](http://www.avm.audio)**

## **1 Getting started**

- 1.1 What's in the box? ... 1
- 1.2 Control and operating elements ... 1
- 1.3 Installation and cooling ... 4
- 1.4 Connection to mains ... 5
- 1.5 First start-up ... 6
- 1.6 Connecting trigger inputs ... 7
- 1.7 AIR Trigger (AVM Intelligent Remote) ... 7
- 1.8 Firmware update ... 8
- 1.9 Connecting a preamplifier ... 9
- 1.10 Connecting loudspeakers ... 9

## **2 Basic operation**

- 2.1 POWER button ... 13
- 2.2 DISPLAY button ... 13
- 2.3 Operation of the menu system ... 14
- 2.4 Display brightness ... 14
- 2.5 Display modes ... 15
- 2.6 Operating modes ... 15
- 2.7 Define load impedance ... 16
- 2.8 Set illumination ... 16

## **3 Appendix**

- 3.1 Cleaning ... 17
- 3.2 Troubleshooting ... 17
- 3.3 Conditions of warranty (EC only) ... 21

# 1. Getting started

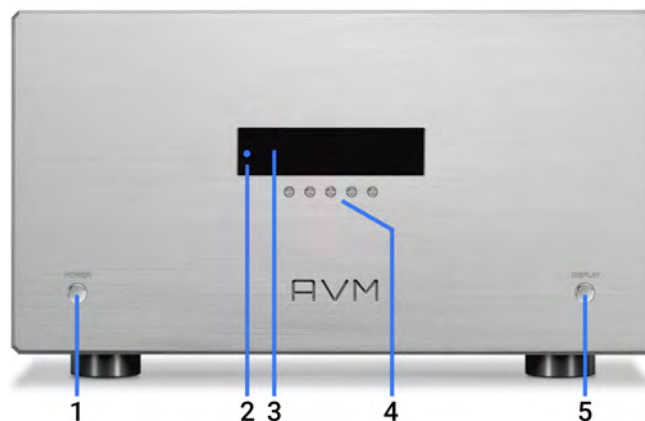
## 1.1 What's in the box?

- OVATION MA 8.3 (Pair) / SA 8.3
- Power cord (in some countries)
- Trigger plug(s) 3,5mm

## 1.2 Control and operating elements

The numbers in the figures below mark the control elements. They refer to the numbers in the text, where the operation of the unit is described.

**Fig. 1. Front panel**



## Getting started

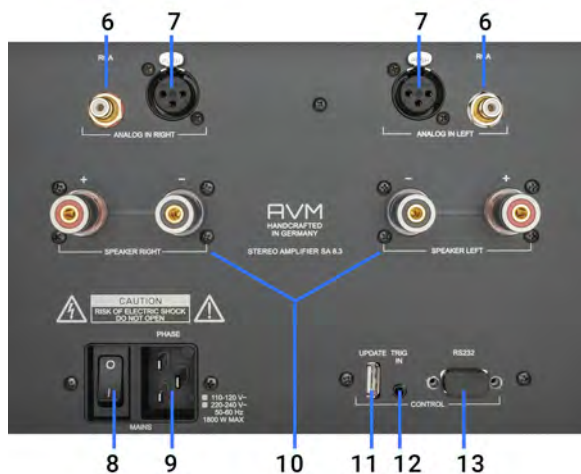
---

1. Power button on/off
2. Control LED
3. Display
4. Menu buttons (soft keys) a-e
5. Display button

**Fig. 2. Rear panel MA 8.3**



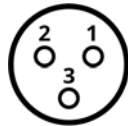
**Fig. 3. Rear panel SA 8.3**



6. RCA input (MA) / RCA inputs (SA) unbalanced
7. XLR input (MA) /XLR inputs (SA) balanced
8. Mains switch
9. Mains outlet
10. Speaker terminals
11. Configuration port (firmware updates)
12. Trigger input
13. Serial port (RS232)

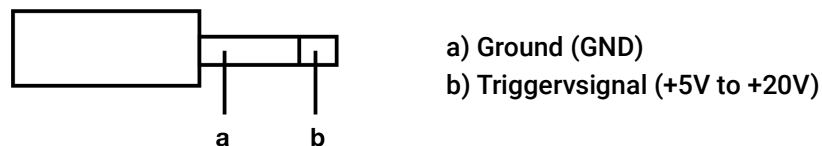
### 1.2.1 Pin assignment

**Fig. 4. Pin assignment of XLR input(s)**



- 1) Ground (GND)
- 2) Non inverting input POS (+)
- 3) Inverting input NEG (-)

**Fig. 5. Pin assignment of 3,5 mm trigger input (12)**



### 1.3 Installation and cooling

The unit can become hot depending on the demanded output power or environmental temperature. Therefore, it is important, that the cooling air can flow unhindered into the air inlets in the bottom and flow out through the holes in the rear panel. Set up the power amplifiers so that there is at least 10 cm distance around the device to adjacent components or walls. When placing the amplifier on a carpet, make sure that the feet of the unit do not sink in (if necessary, underlay pucks) and that the carpet pile does not seal the air slots in the floor. Direct exposure to sunlight is not recommended because this will heat up the unit and may cause unwanted malfunctions.

#### **i** NOTE

**The installed transformers emit magnetic stray fields. To prevent interference, it is recommended to not place the unit(s) either directly on or near a preamplifier or a record player.**

### **i** CAUTION

Heat sensitive objects such as candles, plastics, records or CD's may also be damaged by the generated heat of the MA / SA 8.3. Great care should also be taken to ensure small children do not burn themselves by accidentally touching the amplifier(s). The housing does not feel extremely hot to adults but small children generally react more sensitively.

## 1.4 Connection to mains

Connect the supplied mains cable to the power socket (15) and plug it into a Schuko socket.

### **i** NOTE

Keep the unit(s) switched off until all audio connections are made. Also, keep your loudspeakers disconnected when switching the unit on for the first time. If the device is still cold after unpacking from transport, place it in your listening room for about one hour without a mains connection so that it can adapt to the room temperature.

### **i** CAUTION: Important information on electrical safety

Depending on the connected loudspeaker and the required output power, the power amplifiers can take up to 3500 watts from the mains. The power consumption can be up to 16 amps. Therefore, standard mains cables (maximum current



10 Ampère) cannot be used. The supplied power cord is designed for up to 16 amperes. If you wish to replace the mains cable with another cable, please note that it is approved for at least 16 amperes and has a suitable coupling on the device side (IEC-60320 C19).

Connect each output stage to a separate socket. Do not use power distribution strips, as those are not designed for the high currents required in total.

If the power amplifiers are in standby mode, they are not completely disconnected from the mains. To protect your device from damage, unplug the device during a thunderstorm or when you are away for a longer period of time or switch off the device with the mains switch (8).

### 1.5 First start-up

#### **i** NOTE

If your power amplifiers are still cold after unpacking due to a previous transport, place them in your listening room for at least one hour without mains connection so that they can adapt to the room temperature. Otherwise, condensation could damage or destroy the unit.

Do not connect any loudspeakers during the initial start-up. Turn on the power switch (8). While the AVM logo appears in the display (3), the amplifier performs a self-test and switches to standby mode after a few seconds. The power LED (2) lights up.

As soon as the self-test is completed, switch off the amplifier at the mains switch (8). The device is now ready for wiring with other components of your system.

### CAUTION

**Never connect cables to switched-on devices or disconnect cables from switched-on devices. This could damage your power amplifier or any other connected device. Before doing so, turn off the power switch or unplug the power cord.**

## 1.6 Connecting trigger inputs

If you use a pre-amplifier that is equipped with trigger outputs, connect them to the trigger input(s) of your MA / SA 8.3 (11) which will automatically switch on and off together with your pre-amplifier. The pinning of the trigger outputs is described in section 1.6 Connecting trigger inputs.

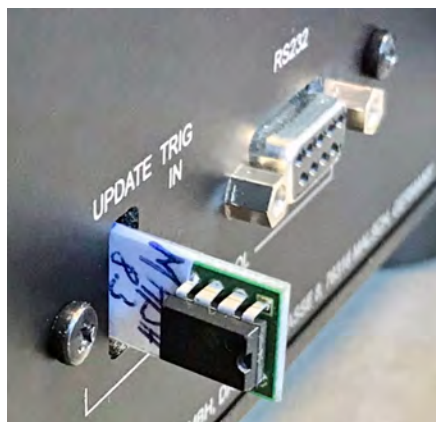
### 1.6.1 AIR Trigger (AVM Intelligent Remote)

If you have connected a compatible AVM model such as the OVATION PA 8.2 as a preamplifier, no separate trigger connection is needed, since those AVM preamplifiers send switch-on/off signals to your power amplifier inaudibly via the connected audio cable (6, 7).

### 1.7 Firmware update

The firmware of the MA / SA 8.3 can be updated via the configuration port (11) using a special AVM update dongle. To update your amplifier, switch it off at the mains switch (8). Now plug in the dongle as shown in the following figure and switch on the device again.

**Fig. 6. Firmware update with a special AVM dongle at the configuration port (11)**



The display (3) now shows the version number of the currently installed firmware in the left section under **current**. On the right side the version number of the available update is shown under **new**. With the menu buttons 4a and 4e you may select whether you would like to start the process (**UPDATE**) or cancel it (**EXIT**). After the update has been completed, switch off the device at the mains switch (8) and remove the dongle. After restarting, the device starts with the new firmware.

## 1.8 Connecting a preamplifier

The MA 8.3 provides one RCA (6) and one XLR input socket (7) each, which can only be used alternatively. Here the preamplifier is connected with a suitable cable.

The SA 8.3 is equipped with two RCA (6) and two XLR input sockets (7), which can also only be used alternatively. Here the preamplifier is connected with a suitable cable.

For longer distances, we recommend the use of a balanced XLR connection, as this may shield interferences more effectively than a RCA connection.

### CAUTION

**Please make sure that either the RCA or the XLR cable is connected to the analog inputs. Otherwise, depending on the output impedance of the connected source device, simultaneous assignment of the RCA (6) and XLR (7) connectors may result in unfavorable sound effects or even a short circuit.**

## 1.9 Connecting loudspeakers

### IMPORTANT NOTES on electrical safety

**The MA 8.3 is a bridge output stage. This means not only the red (+) loudspeaker terminal carries the signal, but also the black (-) terminal. Never connect one of the speaker terminals to the cabinet or the signal ground - this may damage your power amplifier or other devices of your HiFi system.**

**Since the MA 8.3 delivers over 1000 watts of power, high voltages can occur at the loudspeaker terminals. Therefore, do not touch the terminals of either the power amplifier or the loudspeaker during operation. If you want to change or reconnect the speaker cables, first switch off the power amplifier using the mains switch (8).**

**We recommend owners of SA 8.3 also follow the above instructions.**

Make sure small children or pets do not touch the terminals or speaker cables while the system is in operation. To connect speakers to the output jacks (10), use only good quality speaker cables of sufficient cross-section. If in doubt, ask your dealer to recommend the best cable for your speaker.

Make sure the polarity is correct when connecting the speakers. The red output terminals (10) must be connected to the red speaker terminals or to the speaker terminals marked with a plus sign. On the SA 8.3, the right and left channels must have the same polarity of the loudspeakers for optimum sound reproduction.

If you are using banana plugs, turn the outer parts of the speaker terminals tight (to the right) before plugging them in so that they do not cause annoying rattling noises at a later time. If you want to contact bare cable ends or cable lugs, turn the outer parts of the speaker terminals to the left as far as they will go, insert the stripped cable ends or cable lugs from below into the openings provided in the speaker terminals and then tighten the outer parts of the speaker terminals by turning them to the right.

To take full advantage of the monoblock concept, we recommend you place the MA 8.3 as close as possible to the respective loudspeaker. This results in shortest possible dis-

tances for the transport of the electrical power from the amplifier to your loudspeaker. This installation method also saves you long and expensive loudspeaker cables and, last but not least, makes playback less sensitive to interference.

If your loudspeakers react to cables that are too short with tight but too thin bass, this may be due to the fact that those loudspeakers were designed to operate with long cables. The cable is therefore a 'component of the crossover' and has an effect on the bass reproduction. As a result, we recommend you use longer cables to operate such speakers. In case of doubt, please get in touch with your dealer.



## 2. Basic operation

### 2.1 POWER button

In **permanent** mode the unit is switched on and off by pressing the POWER button (1). In other operating modes (see section 2.6 Operating modes), the power stage is switched on and off from an external source. The POWER button is ineffective in these operating modes, which is indicated on the display when pressed.

After switching on, the power amplifier needs a short amount of time to warm up the tube section. The message **tube warmup** appears in the display. Please wait until the entire **waiting for tube warmup** display changes completely from lower case to upper case characters. The two analog transformers for the power amplifiers are then switched on and, after checking that there are no errors, the protective relay is released (a sequence of clicks can be heard from the device). The MA 8.3 / SA 8.3 is now ready for operation.

### 2.2 DISPLAY button

If you wish to switch off the display while listening to music, you may deactivate it by pressing the DISPLAY button (5).



## **2.3 Menu sytem**

The MA 8.3 and SA 8.3 provide a variety of individual settings via a key-controlled menu system. The corresponding function of a key is shown in the display above the respective key. If no display appears above a key, no function is assigned to this menu item. The menu system works both in operation and in standby mode by pressing the Menu key (4c).

### **2.3.1 Operation of the menu system**

To enter the menu, press the middle menu button (4c). The display (3) now shows the first menu item.

The current setting is highlighted by a frame. You may change the setting by pressing the right menu buttons (4d, 4e). To access other menu items, press the left buttons (4a, 4b). To exit the menu and save your settings, press the middle menu button (4c).

If no button is pressed for more than 10 seconds, the menu switches off automatically. Previously made settings are still saved.

## **2.4 Display brightness**

Adjusts the display brightness: 100% / 75% / 50% / 25% / from remote signal. See also section 2.6 Operating modes.

### 2.5 Display modes

**bargraph & value:** During operation, a bar indicates the current output level. A numeric display indicates the current peak power.

**bargraph only:** During operation, a bar indicates the current output level.

**value only:** A numeric display shows the current peak power output.

### 2.6 Operating modes

**permanent (key POWER):** The MA 8.3 / SA 8.3 is always ready for operation as soon as it is switched on with the mains switch (8) (standby mode).

**auto:** The MA 8.3 / SA 8.3 switches on automatically as soon as an audio signal is detected from the preamplifier. If no signal is detected for more than about 6 minutes, the power amplifier switches back to standby mode.

**trigger:** The switch-on signal of a preamplifier with switching output activates the MA 8.3 / SA 8.3 as soon as the preamplifier is activated. If the preamplifier is switched off, the output stage also goes into standby mode. See also section 1.6 Connecting trigger inputs.

**remote:** If you are using an AVM model of the PA or SD series, set the operating mode to **remote**. The MA / SA 8.3 switches on automatically as soon as the corresponding PA or SD component with preamp function is switched on. The same applies to the switch-off process. The digital switching signal

is transmitted inaudibly and without any influence on the sound via the audio line (RCA or XLR). The connection of a separate trigger cable is not necessary in this case. In addition, the display brightness of the display (4) is also adapted to the setting of the connected PA or SD component (see section 2.4 Display brightness).

### **i** NOTE

If you press the POWER button in one of the operating modes **automatic**, **trigger** or **remote**, the display shows this button is without function. If you want to change this setting, press the menu button 4c.

## 2.7 Define load impedance

Here you can adjust the impedance of the connected speakers: 2 / 4 / 8 Ohm. This setting is used exclusively for calibrating the power display and has no effect on the power amplifier itself.

## 2.8 Set illumination

This menu item allows you to activate and deactivate additional blue LEDs in the device as a special optical effect.

## 3. Appendix

### 3.1 Cleaning

The surface of the housing is largely scratch-resistant and may be cleaned with mild soapy water or a glass cleaner and a soft dust cloth.

#### **i** CAUTION

**Never allow liquid to enter the inside of the housing during cleaning. For safety reasons, the power cord should also be disconnected before damp wiping. Do not use solvents or abrasives as they may damage the surface or printing. The plexiglas panel of the cover is very sensitive.**

### 3.2 Troubleshooting

Often, supposed defects can be traced back to operating errors. Before you contact us about a defect, please check the functions of your power amplifier(s) according to the following checklist:

### **3.2.1 Device is switched on, but the display is dark**

The display brightness is set too dark. Set the display to a different setting (see also 2.2 DISPLAY button and 2.4 Display brightness).

### **3.2.2 Device is turned on, but does not play music**

First check whether the preamplifier and the selected signal source are working (e.g. connect headphones).

You have plugged headphones into the preamplifier, which mutes the outputs.

Check the connection cables between source and preamplifier and between preamplifier and power amplifier.

Check your speaker cables for an open or short circuit.

### **3.2.3 Device does not switch on or switches to standby mode while listening to music**

This can happen if the power amplifier is in **auto** mode and you hear at a very low volume level. In this case, the signal voltage is not sufficient to trigger the automatic. Select the permanent operating mode instead (see section 2.6 Operating modes).

If the power amplifier is in **trigger** mode, check the trigger cables between the preamplifier and power amplifier for a short circuit or interruption.

The **remote** operating mode is selected but no compatible AVM preamplifier model is connected. Select another operating mode (see section 2.6 Operating modes).

### **3.2.4 After switching off the preamplifier, the power amplifier does not automatically go into standby mode (after about 6 minutes), although the operating mode "auto" is selected**

Check to see if you can hear any humming or chirping noise from the speakers even after the preamplifier has been switched off. If this is the case, interference in the cable will interfere with the automatic switch-on/off function. It interprets the interference as a music signal and therefore does not switch off the device.

**Solution:** Position your cables in a different way, so that no interference is interspersed. Check the pin assignment of your balanced XLR cables (see section 1.2.1 Pin assignment).

### **3.2.5 Humming during music playback**

The cause is usually a ground loop caused by an antenna amplifier or cable. Check whether the humming decreases if you disconnect the antenna cable from your tuner (if connected, also from a TV). If this should help, a sheath current filter must be installed in each antenna cable of the connected receiver.

Cable fault: The shield of an audio cable is interrupted, the RCA plug does not have a good ground contact (bend it carefully). Check the pin assignment of your balanced XLR cables (see section 1.2.1 Pin assignment).

### **3.2.6 The display shows "OVERHEAT" and the unit switches off**

Switch off the mains supply via the mains switch (8) and allow the amplifier to cool down for approx. 15 minutes. Check that the amplifier is correctly installed (see 1.3 Installation and cooling).

Check your speaker cables for short circuits.

### **3.2.7 The display shows "OVERLOAD" and the unit switches off**

Switch off the mains supply via the mains switch (8).

Check your speaker cables for short circuits.

### **3.2.8 The display shows "INTERNAL FAILURE or DC on input" and the device switches off**

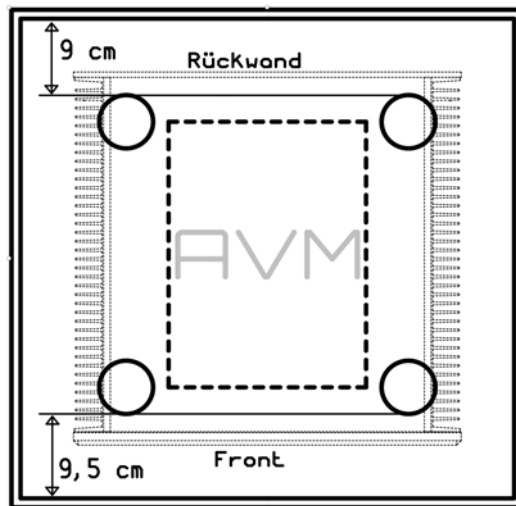
Check to see if your preamplifier is outputting DC voltage (some tube preamplifiers do this for a short time after powering on).

The MA 8.3 / SA 8.3 was overmodulated due to heavy output levels. In this case it switches off automatically to protect itself and the loudspeakers. Switch off the power amplifier, reduce the volume and switch on the power amplifier again.

### 3.2.9 Packaging

The bottom of the flight case in which the unit is delivered is not symmetrical. If you want to pack the unit into the case at a later point in time, please make sure to position the unit correctly.

**Abb. 4. Bottom of the AVM flightcase: Make sure the feet of the amplifier are correctly positioned.**



### 3.1 Conditions of warranty (EC only)

If despite expectations a defect occurs that cannot be repaired by yourself or your dealer, we undertake the repair of your unit free of charge for up to three years from date of purchase. The warranty covers the costs of material and working time, transport costs are to be borne by the owner.



Provisions for this warranty are:

1. The unit must have been purchased from an authorised dealer. Equipment from other sources will not be repaired, not even at charge.
2. The warranty registration card, together with a copy of the bill of sale, must be received by us within four weeks of the date of purchase.
3. The defect must not have been caused by improper handling or misuse.
4. Return the unit to us only in its original packing. If this is not possible we are entitled to refuse acceptance. We will not assume responsibility for transport damage under any circumstances.
5. A short description of the defect is to be included with the returned unit.
6. In cases of doubt we reserve the right to request a copy of the bill of sale.
7. We also reserve the right to levy a handling charge for items returned without good or valid reason, or if the unit proves to be not defective.

**PLEASE NOTE:** If you are returning the unit from a country other than Germany you should ensure that correct export documents are obtained. We cannot accept any charges for costs arising from improper or incomplete export documentation. If you have purchased your unit from a dealer outside Germany please refer to him or the relevant importing firm to process the warranty.