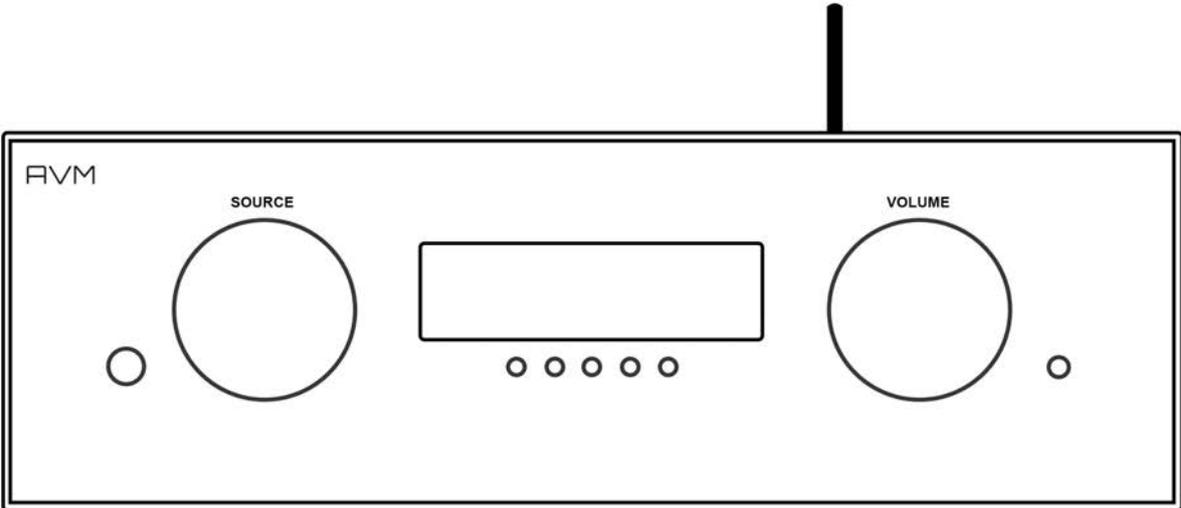
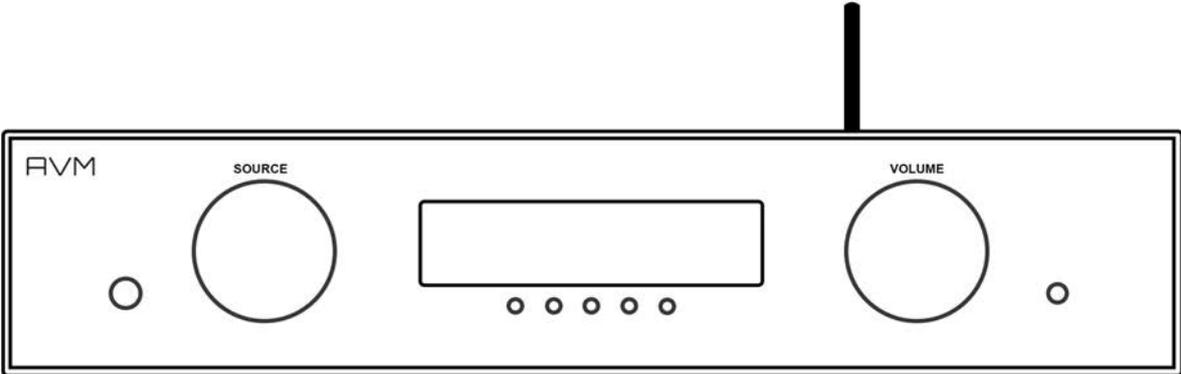


Operating instructions

EVOLUTION SD 3.2 EVOLUTION SD 5.2



Dear customer

thank you for purchasing this AVM product. You now own a versatile, excellent sounding hifi component. Before enjoying music, please read this manual carefully. After that you will know how to use your new AVM component in the optimal way.

Sincerely yours,

The AVM Team

CAUTION : This unit contains a class 1 laser diode. Do not open. Invisible laser radiation can damage your eyes.

Laser diode Type : Ga-Al-As
Wavelength : 755 - 815 nm (@ 25 °C)
Output power : 0,7 mW max.



NOTE: Use only high quality cables for connection between the unit and the other components of your hifi set. We recommend cable lengths under 50 cm to avoid interference which can affect the reception of radio and TV tuners.

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, D-76316 Malsch
www.avm-audio.com, info@avm-audio.com

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1 Getting started

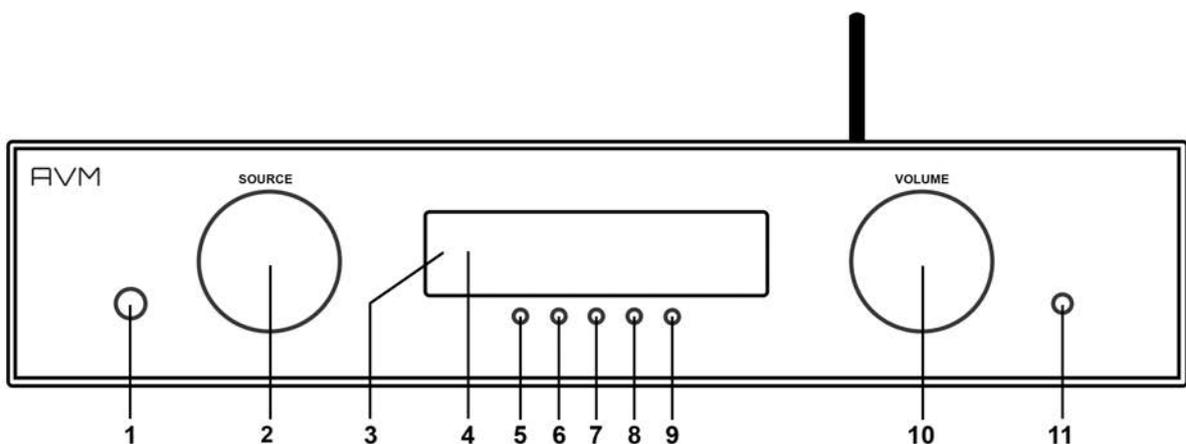
1.1 What's in the box?

- **EVOLUTION SD 3.2 / 5.2**
- **WLAN antenna**
- **Power cable**
- **Optional accessory: RC 9 remote control with docking station, power supply unit, USB charging cable**

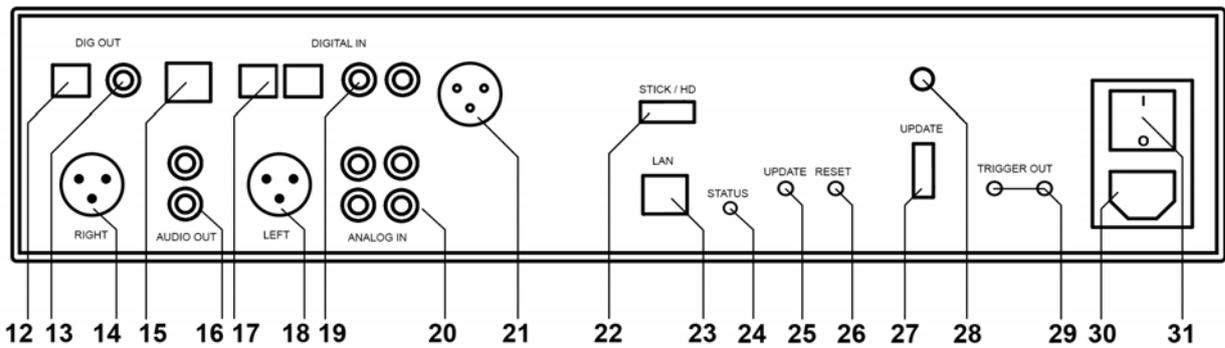
CAUTION: After unpacking, please check the scope of delivery to ensure that all the parts have been supplied and are undamaged. In case the original packing has already been opened, please contact your local dealer. Often, your dealer prepares your new device prior to delivery to adapt and change the configuration to your personal needs.

1.2 Control and operating elements

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



- | | | | |
|---|-----------------------------------|----|-----------------------------------|
| 1 | Power button (on / off) | 7 | Multifunctional button (soft key) |
| 2 | Source selector | 8 | Multifunctional button (soft key) |
| 3 | Control LED | 9 | Multifunctional button (soft key) |
| 4 | Display | 10 | Volume knob |
| 5 | Multifunctional button (soft key) | 11 | Headphone output |
| 6 | Multifunctional button (soft key) | | |



- | | |
|--|--|
| 12 Digital output optical | 22 USB digital input for storage media |
| 13 Digital output coaxial | 23 Network connection (LAN) |
| 14 Analogue output (Balanced XLR) | 24 Status LED |
| 15 USB B digital input | 25 Update button |
| 16 Analogue output (RCA) | 26 Reset button |
| 17 Digital inputs (optical) | 27 Configuration port |
| 18 Analogue output (Balanced XLR) | 28 WLAN antenna connection |
| 19 Digital inputs coaxial | 29 Trigger outputs |
| 20 Analogue inputs (RCA) | 30 Mains connector |
| 21 Digital input AES/EBU (only SD 5.2) | 31 Mains switch |

1.3 Installation and cooling

The unit can become hot depending on demanded output power / environmental temperature. Therefore it is important, that the cooling air can flow unhindered into the air inlet in the bottom and flow out through the holes in the rear panel. Direct exposure to sunlight is not recommended because this will heat up the unit.

1.4 Connection to mains

Connect the unit to the mains outlet by using the power cord which is (in some countries) delivered together with the unit. Make sure that mains voltage is according to the value printed on the rear panel of the amp (near mains connector).

CAUTION: Keep the unit switched off until all audio connections are made.

1.5 Connecting digital and analogue signal sources

Digital sources

Connect the outputs of your digital sources to the corresponding inputs of your SD 3.2 / 5.2:

- Optical inputs (17)
- Coaxial inputs (19)
- USB B input (15)
- AES/EBU input (21) (only SD 5.2)

High-level sources

Connect the outputs of your signal sources to the analogue RCA inputs (20). The upper row is for left channel (white), the lower row is for right channel (red).

Digital out

The input of a digital recorder must be connected to the digital outputs (12, 13). The signal on the digital outputs depends the selected source (build in CD, dig in).

1.6 Network connection (LAN, WLAN)

In order to make use of the streaming- and network functions your SD 3.2 / 5.2 needs to be connected with a local area network (LAN). You can choose between a LAN cable connection or a wireless WLAN connection. In order to use the WLAN connection of the SD 3.2 / 5.2, the included WLAN antenna needs to be installed. Please align the antenna until straight and screw it on the antenna socket (17). Afterwards you can adjust the angle of the antenna according to your needs.

Please note that the WLAN connection is automatically deactivated as soon as the LAN connection is operating (see 4.5.1).

1.7 RC 9 remote control

The optionally available RC 9 remote control allows for easy and comprehensive control of your SD 3.2 / 5.2. Before you can use the RC 9 together with your device, both components need to be connected. This process is also referred to as 'Pairing'. In order to start the pairing process, please follow the instructions as described in section 4.4.5.

For a detailed description of functions and features of the RC 9 remote control, please refer to chapter 4.

1.7.1 Battery charge

In order to charge the included lithium-ion battery of your RC 9 remote control, please connect the power supply unit with the USB cable. On the other end, please connect the USB charging cable optionally with the RC 9 remote control or with the supplied docking station. The charge starts automatically, as soon as the power supply unit is connected to the power supply system and if necessary, the RC 9 remote control is placed in the charging cradle of the docking station.

NOTE: Due to the included motion sensor of the RC 9 remote control, the device may be unintentionally activated during transportation. For this reason, the RC 9 is delivered with a fully discharged battery. In view of a long lifecycle of the lithium-ion battery, we recommend fully charging the battery before using it for the first time. Please follow the above mentioned instructions and do not interrupt the charging procedure until the status bar in the upper right corner of the display indicates a fully charged battery.



Battery is fully charged, remote control is connected to the charger, charging completed



Battery is almost fully charged, remote control is connected to the charger



Battery is empty, remote control is not connected to the charger

1.8 RC S App for iOS and Android

The RC S App for iOS and Android will turn your smartphone or tablet into an easy-to-use remote control and provides a variety of intuitive features to get the most out of your network-enabled AVM device. The RC S App is available free of charge and can be downloaded from the Apple App Store and the Google Play Store. For detailed instructions on how to set-up your AVM device with the RC S App, please refer to section 5.

2 Basic operation

2.1 First operation / self test

In case your SD 3.2 / 5.2 was not connected to mains a self test will be performed when it is switched on by the mains switch (31) for the first time. The unit will check its configuration and that all the installed components work properly. The procedure is shown in the display. Afterwards the unit will switch to stand-by.

2.2 Switching on / stand-by

Using the button power (1) You can switch between on (operate) and stand-by. In the on state the display (4) lights up and the LED (3) is off. In stand-by mode the display is off and the LED is on to indicate that the unit is still connected to mains.

CAUTION: When switched to stand-by the unit is still connected to the mains. In case of a thunderstorm or if you leave the house for a longer time we recommend that you switch the amplifier off by using the mains switch (31) or pull the mains plug.

2.3 Selecting the signal source

The signal source can be selected by turning the source selector (2) until the desired source appears on the display. You can choose from a total of 6 (SD 3.2) or 7 (SD 5.2) signal sources. The selected sound source is labelled with **SOURCE** and is being shown in large capitals on the left hand side of the display.

CAUTION: If you choose a digital input that has no valid signal, **NO DIG SIGNAL** or **NO USB PLUGGED** is indicated on the display (4).

3.4 Volume setting

Use the rotary encoder (2) to set the desired volume. Depending on rotating speed the volume increases / decreases in 0.5 dB steps (slow) or 2 dB steps (fast). The actual setting is shown in the display (4). The current volume level is labelled with **VOLUME** and is being shown in large capitals on the right hand side of the display.

Please note that if the volume is changed using the RC 9 remote control, the level always increases / decreases in 2 dB steps.

2.4 Sample rate and filter settings

If a digital input is selected, you can choose from a variety of different sample rate settings by using the multifunctional buttons (5, 6) entitled **CONV**. The currently selected sample rate is always shown at the upper right hand side of the display (44.1, 48, 88.2, 96, 176.4, 192 kHz). The acronym **NAT**, standing for "native", entails a direct processing of the signal without changing the original sample rate. The acronym **CNV**, standing for "Conversion", indicates an applied upsampling process to the incoming signal.

Please note that a digital signal can not be downsampled to a lower sample rate (e.g. from 96kHz to 88.2kHz). In case you should listen to music compilations with a variety of different sample rates, we recommended to primarily make use of the settings **NAT SMOOTH** or **NAT SHARP**. The digital filter settings **SMOOTH** or **SHARP** can be set according to your personal preference. Please note that a chosen filter setting is only true for a selected input and is being recalled every time you select the respective input again, even when the device has completely been switched off before.

USB B digital input

If a digital signal from a computer (PC or Mac) is connected to the USB B digital input of your SD 3.2 / 5.2 you can choose between two different modes (**CLASS 1 USB** or **CLASS 2 USB**) by pressing two of the multifunctional buttons (8 , 9).

CLASS 1 USB can be used to play back a digital input signal with a sample rate of up to 48kHz without the need for an additional audio driver on your Windows PC or Macintosh Computer.

CLASS 2 USB can be used to play back a digital input signal with a sample rate of up to 192kHz without to install an audio driver on your Macintosh Computer. If you are using a Windows PC you will need to install an additional driver which is available for download on the respective product page at www.avm-audio.com.

Please note that you need to select the **CLASS 2 USB** input mode in order to play back a DSD64 file.

3 Advanced Settings

Your SD 3.2 / 5.2 offers a lot of custom specific settings in its menu system. To enter the menu just tap on the button MENU. The button now changes to EXIT. A second tap on this button leads you to the normal operating mode. When the menu system is active you can select the desired function using the buttons ◀ ITEM ▶ . The setting is done using the buttons ◀ VALUE ▶ .

Depending on the actual source the menu system offers a range of settings described in the following.

3.1 set display brightness

Sets display brightness 25% to 100%.

NOTE: The setting 100% can lead to "burn in" effects on the display if the unit is operated in this setting for a very long time. So please switch the unit to stand by, if not in use.

3.2 bass & treble control

The bass & treble control option allows you to define if the tone settings are being applied globally (**GLOBAL**) or to an individual input only (**INDIVIDUAL**).

3.3 skip unused inputs

Deactivate unused inputs (**SKIP**). The unit will then skip these inputs when the source selector (2) is being used or if you select the inputs via the RC 9 remote control.

3.4 define input names

You can individually set the names (max. 8 characters) of the different sources shown in the display (4). Proceed as follows:

Press **SELECT**. The display shows now on the left side the old name, on the right side the new name. The character to change is marked by an underscore. The keys ◀ ITEM ▶ select the input, the keys ◀ POS ▶ select the position of the character to change. The marked character can be set using the volume knob (10). When you are ready, simply press **BACK**. and the new names will be stored.

3.5 gain fix / variable

In a surround system the channel balance, tone setting and bass management are done by the decoder. This setting must not be altered by another component because the channel balance the would be incorrect. For this application your SD 3.2 / 5.2 offers a fixed gain function.

Set the input where the main channels of the surround system are connected to fixed gain. When this input is selected, tone controls are bypassed, balance is set to neutral position and the gain is on a fixed level independently of the volume setting on the other inputs.

3.6 Reset

This function cancels certain or all settings and makes the unit return to default settings.

To enter the reset menu, please switch off your device on the rear of the unit at the mains switch (31). Keep the middle key under the display pressed (7) while you switch on the unit again (31). As soon as the display shows the reset menu you can release the multifunctional button (7).

Select if you just want to clear the input names (**NAMES**) or reset the unit completely (**ALL**).

CANCEL will bring the unit back to normal operating mode without resetting any item.

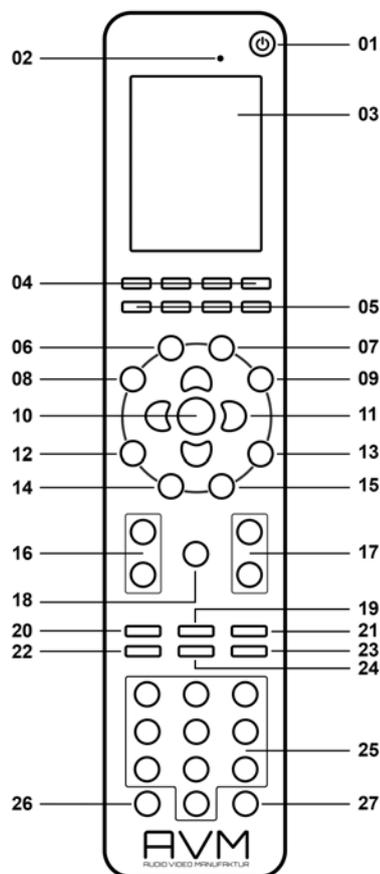
3.7 personal setup

The personal setup offers you a range of settings to individualize the device according to your personal needs. To enter the **personal setup** menu, please switch off your device on the rear of the unit at the mains switch (31). Keep the most right key under the display pressed (9) while you switch on the unit again (31). As soon as the display shows the **personal setup** menu you can release the multifunctional button (9).

When the personal setup is active you can select the desired function using the buttons ◀ **ITEM** ▶ . The button **SELECT** activates the function. The setting is done using the buttons ◀ **VALUE** ▶ . **BACK** leads you back to other settings. **EXIT** exits the personal setup and stores the settings.

4 RC 9 remote control

4.1 Overview



- | | | | |
|----|---|----|---------------------------|
| 1 | Power button (Standby mode)* | 15 | Favorites list |
| 2 | Light sensor | 16 | Volume |
| 3 | Colour display | 17 | Increase/Decrease |
| 4 | Hotkeys 1-4 | 18 | Mute |
| 5 | Option keys (red, green, yellow, blue) | 19 | Play |
| 6 | Home menu | 20 | Skip (backward) |
| 7 | Zone menu | 21 | Skip (forward) |
| 8 | Info menu | 22 | Record |
| 9 | Settings | 23 | Stop |
| 10 | Enter key | 24 | Pause |
| 11 | Navigation keys (left, right, up, down) | 25 | Alphanumeric input keys** |
| 12 | Return key (quit, undo) | 26 | Shuffle |
| 13 | Favorites menu | 27 | Repeat |
| 14 | Context menu | | |

*) To switch on a connected device, please pick up your RC 9 remote control which automatically switches on due to the integrated movement sensor. Then, please choose one of the connected devices from the list and press the Enter button (10). Notes on the optional quick start function can be found in section 4.5.1.

***) The left navigation key (11) is used to delete entered characters and numbers. The blue option key (5) is used to toggle between upper and lower case characters.

NOTE: Before you can use your RC 9 remote control to switch on your device, both components need to be paired (for more information on the pairing process please refer to section 4.4.5).

4.2 Colour display

The colour display divided into three sections in any operating mode:

- 1 Header section: In the header section the current control area is shown (e.g. source, system, internet radio etc.). On the right-hand side is the charging status of the integrated lithium-ion battery (for an explanation of the charging status symbols please refer to section 1.7.1)
- 2 Content section: The content section is the central user interface of your RC 9 remote control where both menu points of the currently accessed control area and graphical user elements are being shown.
- 3 Footer section: In the upper part of the footer section you can both find the actual time and informatin on the current connection status. The lower part of the footer section is divided into four parts which can be assigned with socalled Hotkeys (please refer to sections 4.3 and 4.4.4 for detailed information on Hotkeys).

4.3 Hotkeys

The four hotkeys (4) offer direct access to a total of four devices of a currently active zone. All four devices can be directly accessed from the lower part of the footer section. For details and an explanation of the term "zone" please refer to section 4.4.2.

4.4 System Settings

To access the System Settings menu please press the Settings key (9). The following menu points can be selected via the four Navigation keys (11) and the Enter key (10): "Device Selection", "Change Zone", "System Information", "User Settings", "Start Pairing".

4.4.1 Device Selection

Under the menu "Device Selection" you can find all available and recently paired devices with their respective names. Wih the navigation keys (11) please choose one of the devices from the list and confirm with the Enter key (10). The menu point "Device Selection" is also shown when the RC 9 remote control is waking up from standby mode and hasn't already been connected with a device.

NOTE: Please note that only one device can be controlled by the RC 9 remote control at a time. If you happen to choose another device, the connection to the formerly linked device will be interrupted.

4.4.2 Change zone

If you have multiple devices which can be controlled with the RC 9 remote control, you can group those devices into several zones such as different rooms or appliance combinations. The "Change Zone" option allows you to switch between different zones and is also available via the Zone menu (7). Each zone is provided with four assignable Hotkeys (4) for a direct access to its four associated devices (see 4.4.4 and 4.3).

4.4.3 System Information

The menu item "System Information" contains information on technical details of your RC 9 remote control such as the current firmware version, serial number and more. Furthermore, the firmware of the RC 9 remote control can be easily updated by pressing the red Option key (5). Please note that the RC 9 remote control needs a direct USB connection with a personal computer in order to conduct the update process.

4.4.4 User Settings

The menu item "Settings" offers a series of useful functions which can be accessed by pressing the Navigation keys (11), the Enter key (10) or the alphanumeric input keys (25).

NOTE: The left Navigation key (11) is used to delete entered characters and numbers. The blue Option key (5) is used to toggle between upper and lower case characters.

Name

This option allows you to customize the name of your RC 9 remote control.

Time

The option "Time" enables you to adjust the time settings of your RC 9 remote control. Hours and minutes are displayed in individual rows.

Stand-by

The option "Stand-by" allows you define the amount of time until your RC 9 remote control switches to stand-by mode. The preset value of 60 seconds can either be reduced to a minimum of 10 seconds or increased to a maximum of 300 seconds (= 5 minutes).

Time in cradle

If the option "Time in cradle" is enabled, the RC 9 remote control will display the current time on its colour display when placed in the cradle (included docking station). Please note that the "Time in cradle" option is not available when the RC 9 remote control is being charged via the USB cable.

Brightness

Choose between three different brightness levels of the colour display. All changes are applied immediately after selection.

HKEY Configuration

HKEY Configuration allows you to assign four different devices to the four available Hotkeys (4) of your RC remote control. This way, you can comfortably select up to four devices of a currently active zone with the touch a single button.

Please note that only one device can be controlled by the RC 9 remote control at a time. If you happen to choose another device from the Hotkeys menu, the connection to the formerly linked device will be interrupted.

Change language

Choose one of the currently available languages of your RC 9 remote control: English, German, French, Italian, Spanish, Dutch. The RC 9 remote control will automatically change its language once selected.

Rename device

The menu item "Rename Device" provides the option to rename a paired device by using the alphanumeric input and navigation keys (25) (11). Please note that the renaming applies only locally on the RC 9 remote control. The device name via UpnP or anything similar will stay the same.

Delete Device

The menu item "Delete Device" contains a list of all formerly paired devices. When chosen a device, this is deleted along with all known information. In order to add a deleted device again, please refer to section 4.4.5.

Add Zone

The menu item "Add Zone" provides you with an option to create a new zone with an individual name. In order to assign a device to a certain zone, please return to System-Settings/User-Settings and chose the menu item "HKEY Configuration" (see above).

Rename Zone

The menu item "Rename Zone" lists all known zones and provides the possibility to rename them (living room, kitchen, etc.) by using the alphanumeric input and navigation keys (25) (11).

Delete Zone

The menu item "Delete Zone" provides a list of all existing zones and the possibility to delete these along with all known data.

Transportation lock

The transportation lock deactivates the motion sensor and secures the RC 9 remote control against unintentional power-up and thus saves battery while moving. In order to activate the transportation lock please navigate to the menu item "Transportation lock" and press the Enter key (10). In order to deactivate the transportation lock again, please press any key on your RC 9 remote control.

4.4.5 Pairing

In order to control a SD 3.2 / 5.2 with your RC 9 remote control, both devices first need to be linked. This process is also referred to as "Pairing". In order to start the pairing process, please switch off your SD 3.2 / 5.2 by using the mains switch (34) on the rear side of the unit. Now please navigate to the "Systems Settings" menu on your RC 9 remote control by pressing the Settings key (9) and navigate to the menu item "Start Pairing" **without** selecting it with the Enter key yet. Switch on your SD 3.2 / 5.2 by using the mains switch (34) on the rear side of the unit and immediately press the Enter key of your RC 9 remote control (10). The name of a successfully detected device (such as your SD 3.2 / 5.2) will instantaneously be shown on the display of your RC 9 remote control and can be edited by using the alphanumeric input keys (25). After confirming the name of the paired device, you can also choose one of four available Hotkeys (see 4.3.). By pressing the Enter key (10) again, the pairing process is completed.

4.5 Source Menu

As soon as a connection between your RC 9 remote control and your SD 3.2 / 5.2 has been established (for details please refer to section 4.4.5), the Source Menu offers a choice of available sound sources such as "Internet Radio", "Audio Server", or "Local Input". The Source Menu can be accessed by pressing the Home menu key (9) on your RC 9 remote control. In addition to the possibility of selecting a sound source, the Source Menu also offers a menu item named "Receiver Settings" where system settings of the included streaming module of your SD 3.2 / 5.2 can be edited (Network, Software, Quick Start, Clock).

4.5.1 Receiver Settings

The menu item "Receiver Settings" offers a series of useful options to configure your SD 3.2 / 5.2 (Network settings, Software Updates, Quick Start Function, Time etc.).

Network

By selecting the menu item "**Network Status**" you get access to a number of current information on an established network connection such as Connection Type, IP Address, Subnet Mask, Gateway IP.

By selecting the menu item "**Wlan Status**" you get access to a number of current information on an established wireless connection such as Signal Quality, WiFi channel, and Encryption type.

By selecting the menu item „**MAC-Address**“, the current MAC Address of your SD 3.2 / 5.2 is being displayed. This name is used as a reference for other computers located in the same network (UPnP).

The menu item „**IP Settings**“ offers you the choice between an automatically assigned IP address ("Automatic (DHCP)") or a manual IP address ("Manual input"). Unless you are an expert with a good understanding of local network protocols, we strongly recommend to choose the "Automatic (DHCP)" option. When in doubt, please consult your local dealer who can help you to set up your network configuration.

The menu item „**Wlan Settings**“ provides a list of all available wireless networks (SSIDs) which can be accessed with the navigation keys (11) and selected by pressing the Enter key (10). After entering the

password and selecting an IP configuration mode ("Automatic (DHCP)" or "Manual input") your SD 3.2 / 5.2 is connected to the selected WiFi network.

The selection of the menu item „**Network restart**“ both resets all network options and restarts the streaming module of your SD 3.2 / 5.2 which can take up to approximately 30 seconds.

NOTE: When changing from LAN to WLAN or vice-versa a network restart is mandatory.

By activating the "**Quick start function**" the network processor of your SD 3.2 / 5.2 is permanently activated which leads to faster start up times of the streaming functionalities such as Internet Radio or Music Server etc. Please note that an activation of the Quick Start Function leads to higher power consumption.

Software

By selecting the menu item „**Software**“ both the current software version of the SD 3.2 / 5.2. streaming module and the release date of the software is displayed. By selecting the "Update" option, a software update can be installed via Internet or from a connected USB drive.

Clock

The menu item „**Clock**“ gives you access to the clock settings. In case of an existing internet connection both the SD 3.2 / 5.2 and the RC 9 remote control receive their time from a NTP server (Network Time Protocol for clock synchronization).

4.5.2 Webradio

4.5.2.1 Quick start

The integrated webradio offers you a wide range of radio stations from all over the world. You can either browse the many webradio stations by format, location, or language by using the RC 9 remote control or the RC S App for iOS and Android.

4.5.2.2 Advanced settings

The webradio of your SD 3.2 / 5.2 provides you with some handy comfort functions enabling you to discover and organize the vast amount of available webradio stations in a simple way. Here you can collect your favorite radio stations in so-called **Favorite Groups** or add new radio stations to the **My Added Stations** list.

Before you can start using the comfort functions of your webradio you need to register your SD 3.2 / 5.2 device online at the AVM portal by vTuner. vTuner lets you access their vast collection of webradio stations and transmits them directly to your registered SD 3.2 / 5.2 device (internet connection provided). The following step-by-step-instructions will show you how to set-up and organize your vTuner account.

How to register your SD 3.2 / 5.2 at vTuner

In order to make use of the handy comfort functions of your SD 3.2 / 5.2 (such as **Favorite Groups**, **My Added Stations**) you need to register your device online at the AVM portal by vTuner.

To register your SD 3.2 / 5.2 you need to identify the ID of your device. The ID is a string of letters and numbers which is being displayed either on your RC 9 remote control or the RC S app for iOS and Android.

How to identify the ID by help of the RC S App: Please make sure there is a connection established between your RC S App and your SD 3.2 / 5.2 device. Select the menu item **Source** at the lower left of the screen. Now, scroll down in the webradio menu displayed. At the bottom of the webradio menu you will find a string of letters and numbers which is marked with "#ID".

How to identify the ID by help of the RC 9 remote control: Please make sure there is a connection established between your RC 9 remote control and your SD 3.2 / 5.2 device. Navigate to the source selection menu by pressing the Home key (6). Choose **Internet Radio** from the list that appears and confirm with the Enter key (10). At the bottom of the following list you will find a string of letters and numbers which is marked with "#ID".

To enter the ID of your SD 3.2 / 5.2 please visit the website of the AVM portal by vTuner: <http://avmaudio.vtuner.com>

Please adjust the language settings of the website at the upper left side of the screen to your personal needs.

Navigate to the bottom of the page where you will find an input field asking you to enter the ID for your Digital Media Player.

Enter the just identified ID of your SD 3.2 / 5.2 and confirm by clicking on the field with the rightward pointing arrow.

Setup of your vTuner account

If you are a registered vTuner user or your SD 3.2 / 5.2 has already been registered, you can skip this section and proceed to the login page of the AVM portal by vTuner:

<http://avmaudio.vtuner.com>

To set up a new vTuner account please follow the instructions above on how to register your SD 3.2 / 5.2 device (please refer to section **How to register your SD 3.2 / 5.2 at vTuner**)

After registering with your ID (please see above for an instruction on how to identify the ID of your device), please click on the menu point **User Login** in the upper right area of the webpage. Now, please enter your email address and set a password. If you do not wish to receive information from vTuner via email, please uncheck the box below and confirm by clicking on the **Register** button.

How to manage your vTuner account

After you have registered your SD 3.2 / 5.2 (please refer to section **How to register your SD 3.2 / 5.2 at vTuner**) you can browse the whole range of webradio stations via the AVM portal by vTuner. Please enter a name in the search field to search for a certain radio station, or sort the available lists by musical style, location, language or certain content such as news, radio drama, or podcasts. Furthermore you can combine your favorite radio stations in certain **Favorite Groups**. **My Added Stations** allows you to compile a list of new radio stations which are not included in vTuners lists yet. All settings on the AVM portal by vTuner are automatically synced with your local SD 3.2 / 5.2 device and can be immediately accessed via the RC S App for iOS and Android or the RC 9 remote control.

Favorite Groups

Favorite webradio stations can be added by clicking on the following symbol:



As soon as the above symbol is clicked, a new window will pop up (please make sure to have your pop-up blocker deactivated) where you can add the radio station to an existing group or create a new group for the selected radio station. To delete a webradio station from a **Favorite Group**, please click on the following symbol located next to the respective radio station:



In order to remove a complete **Favorite Group** it is necessary to remove all included webradio stations in the respective list. As soon as a **Favorite Group** is empty, you can delete this group by clicking on the button **Remove Group**.

My Added Stations

My Added Stations allows you to create a new list of radio stations which aren't included in the current lists provided by the AVM portal by vTuner. To add a new radio station, please navigate to the section entitled **My Added Stations** and click on the following symbol:



Now, please enter the name of the radio station, the URL, location, some information on the musical style and select a streaming format (MP3, AAC, etc.).

5 RC S App for iOS and Android

The RC S App for iOS and Android will turn your smartphone or tablet into an easy-to-use remote control and provides a variety of intuitive features to get the most out of your network-enabled AVM device. The RC S App is available free of charge and can be downloaded from the [Apple App Store](#) and the [Google Play Store](#).

5.1 LAN Setup

How to set up your AVM device in your local area network (LAN) by using the RC S App

1. Before you start, make sure the following requirements are met:

- Use a LAN cable to connect your AVM device with your local network router.
- On the AVM device plug the LAN cable into the socket marked with "LAN". On the WiFi router choose one of the available LAN sockets and plug in your LAN cable.
- Make sure you have downloaded and installed the RC S App from the Apple App Store or Google Play Store.

2. Switch on your AVM device by turning on the mains switch on the rear-side of the unit. Wait until the starting procedure is completed and your AVM device has gone to stand-by mode. Now, switch on your AVM device by pressing the power-button on the front panel of the unit.

3. Launch the RC S App by clicking on the App icon on your smartphone or tablet.

4. As soon as the RC S App has launched, you will be led to the settings menu which is automatically searching for available AVM devices in your local network. After a quick search run, your AVM device will be detected and listed with its respective device name (default name is "AVM") and its unique IP address (e.g. "192.168.187.1"). By selecting the AVM device, a connection between your AVM device and your smartphone or tablet running the RC S App is established.

5.2 WiFi Setup

How to set up your AVM device in your local WiFi network by using the RC S App

1. Before you start, make sure the following requirements are met:

- Use a LAN cable to connect your AVM device with your local network router.
IMPORTANT: Although you are aiming to use the wireless WiFi connection of your AVM device, it is mandatory to connect the unit with a LAN cable during first start-up.

- On the AVM device plug the LAN cable into the socket marked with “LAN”. On the WiFi router choose one of the available LAN sockets and plug in your LAN cable.
- Make sure the supplied WLAN antenna is screwed on the respective WLAN antenna connection of your AVM device.
- Make sure you have downloaded and installed the RC S App from the Apple App Store or Google Play Store.

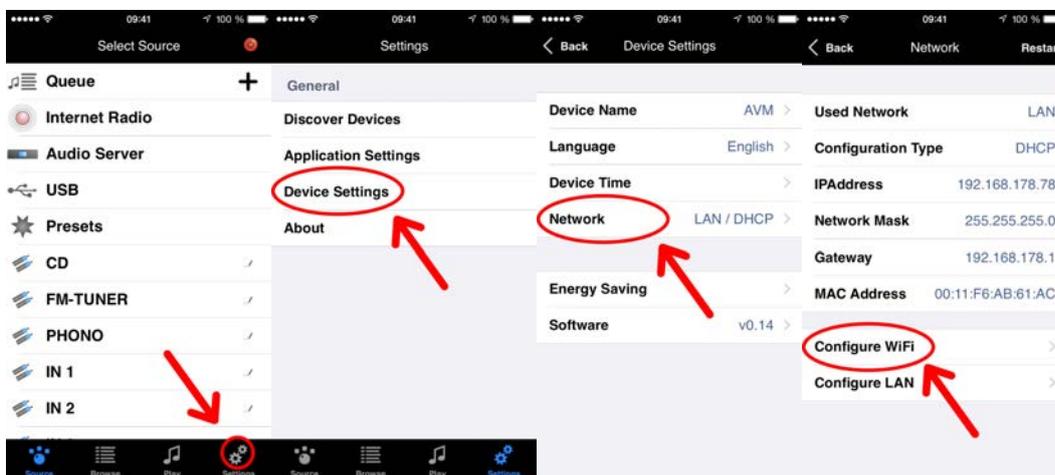
2. Switch on your AVM device by turning on the mains switch on the rear-side of the unit. Wait until the starting procedure is completed and your AVM device has gone to stand-by mode. Now, switch on your AVM device by pressing the power-button on the front panel of the unit.

3. Launch the RC S App by clicking on the App icon on your smartphone or tablet.

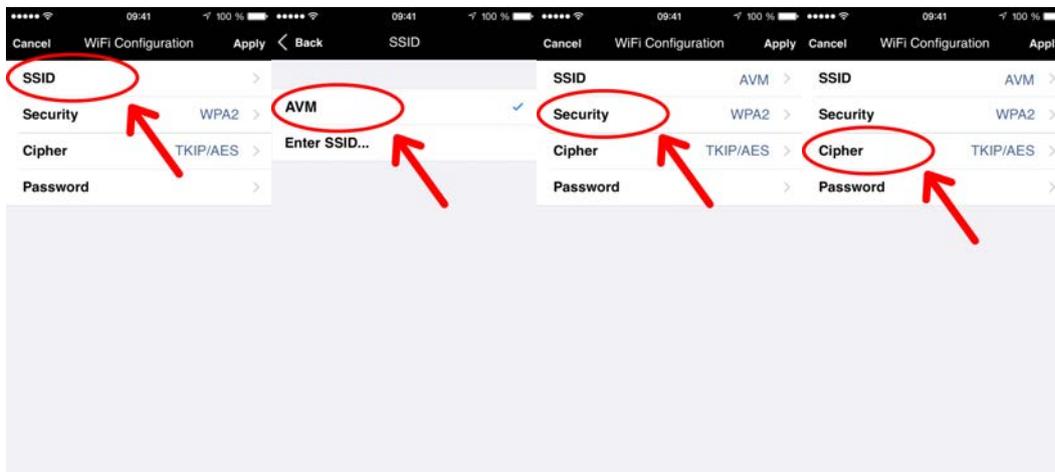
4. As soon as the RC S App has launched, you will be led to the settings menu which is automatically searching for available AVM devices in your local network. After a quick search run, your AVM device will be detected and listed with its respective device name (default name is “AVM”) and its unique IP address (e.g. “192.168.178.1”). By selecting the AVM device, a connection between your AVM device and your smartphone or tablet running the RC S App is established.



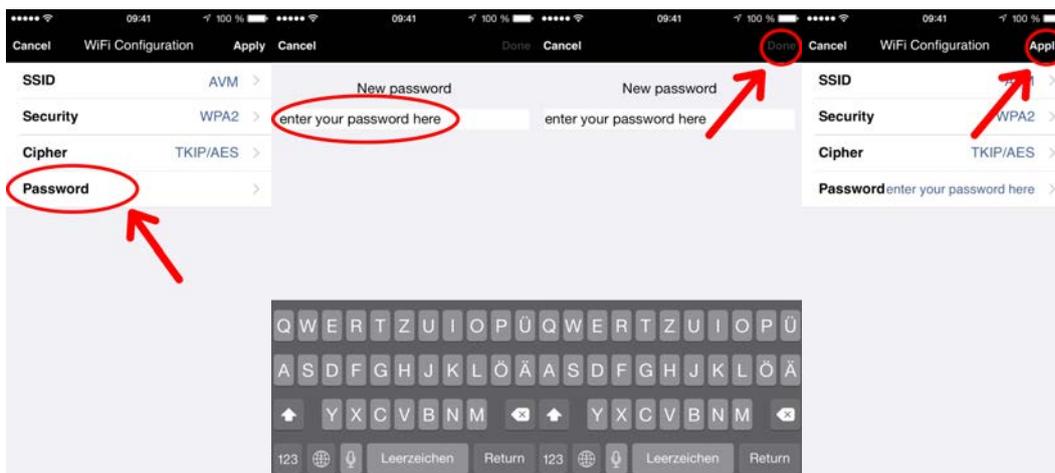
5. Select the “Settings” menu in the lower-right corner of the RC S App and navigate to the “Device Settings” menu. Now, go to the “Network” menu and select the “Configure WiFi” tab.



6. Under “SSID” select the name of the desired WiFi network you wish to connect to and choose the respective encryption and cipher modes via the “Security” and “Cipher” tabs according to the settings of your WiFi network. For details, which encryption and cipher mode you need to select, please refer to the settings menu of your WiFi router or consult your network administrator.

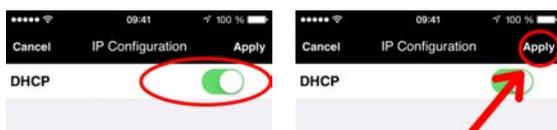


7. Select the “Password” tab, enter your WiFi key and confirm by selecting “Done” in the upper-right corner of the RC S App. Confirm your WiFi configuration data you just entered by selecting “Apply” in the upper-right corner.

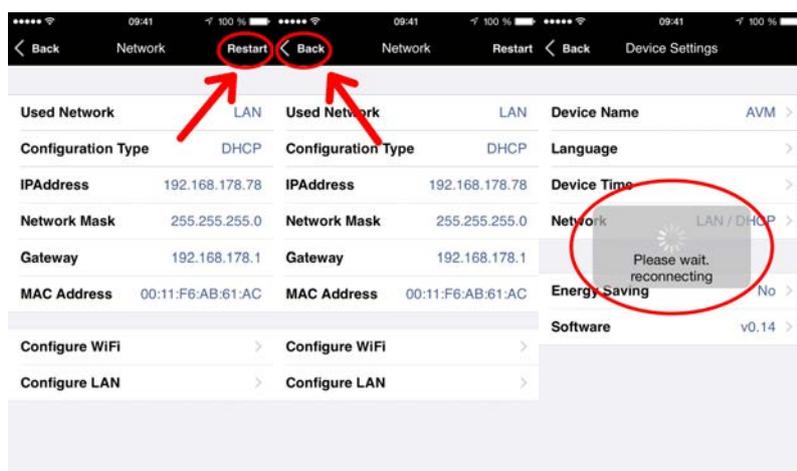


8. Choose an IP configuration setting from the pop-up menu and confirm by selecting “Apply”.

NOTE: Unless your local network is not set up with fixed IP addresses, it is highly recommended to enable the DHCP option.



9. Select “Restart” in the upper-right corner of the RC S App to restart the internal streaming module of your AVM device. Then, click on “Back” in the upper-left corner of the RC S App and wait for the pop-up message “Please wait. Reconnecting” to disappear.



10. Switch your AVM device into stand-by mode by pressing the power-button on the front panel of the unit.

11. Disconnect the LAN cable from your AVM device.

12. After switching on your AVM device again by pressing the power-button on the front panel of the unit, everything is set to use your AVM device in your local WiFi network by using the RC S App.

6 Cleaning

Use a soft cloth and normal glass cleansing fluid.

CAUTION: Make sure that no fluid comes into the unit. Do not use scouring cleaners. They may damage the surface.

7 If something doesn't work.....

Some putative defects are often caused by mistakes in operation. Sometimes other units connected to the amplifier can cause problems. Therefore please read the following tips before you consult Your dealer or us.

1. Amplifier is muted

- a) Mute function is active, press button MUTE on remote control or increase volume using the rotary encoder (14).
- b) Inadvertent switching to standby by remote control. Press power button (1). If the LED indicator and display do not light up a fuse can be blown due to overvoltage (thunderstorm). Please contact your dealer.

2. Amplifier switches off during normal operation

This can happen if the temperature inside the unit becomes too high. In this case the amplifier switches off and the display shows 'overheat'. Switch the unit off and let it cool down for five minutes.

3. Hum

- a) Hum while playing records: Make sure that the chassis of your record player is properly grounded.

4. RC 9 remote control doesn't work

- a) Charge the included lithium-ion battery of your RC 9 remote control (see 1.7.1).
- b) Point with the remote control transmitter directly to the unit.
- c) Reconnect the RC 9 remote control with your SD 3.2 / 5.2. This process is also referred to as 'Pairing'. In order to start the pairing process, please follow the instructions as described in section 4.4.5.

5. The display shows „now disc“ although a CD is inserted

- a) Please make sure the CD has not been damaged and is inserted with the correct side facing up
- b) Please clean your CD with a soft cleaning cloth

6. No RDS display

- a) The receive signal is too weak, hence data can't be decoded and aren't displayed.
- b) Certain radio stations do not support and broadcast RDS.
- c) Einige Sender strahlen noch keine RDS-Daten aus.

8 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:

- The unit must have been purchased from an authorised dealer. Equipment from other sources will not be repaired, not even at charge.
- 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.
- The defect must not have been caused by improper handling or misuse.
- 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.
- A short description of the defect is to be included with the returned unit.
- In cases of doubt we reserve the right to request a copy of the bill of sale.
- 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.

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

9 Technical Data

9.1 Preamplifier

Input sensitivity	20 mV to 350 mV (adjustable)
Input impedance (line)	10 kOhm
Frequency response	< 5 Hz - > 80 kHz, 30 Hz - > 20 kHz
TIM	SD 5.2: 0,01% (mostly K2) SD 3.2: < 0,01%

9.2 D/A Converter

Sampling frequency	upsampling switchable up to 192 kHz / 24 Bit
Frequency range	<20 Hz – 20 / 80 kHz (depending on input sampling frequency)
Deemphasis	yes, automatic
Input format Dig in opt/coax	SPDIF, 33 kHz – 96 / 192 kHz / 16 – 24 Bit
DSD (via USB)	64DSD (2,8 MHz)
Synchronous USB input	48 kHz / 16 Bit (no driver needed) 192 kHz / 24 Bit (driver needed)
TIM (related to digital 0)	SD 5.2: 110 dB(A) SD 3.2: 120 dB(A)

9.3 Streaming

Streaming Formats	MP3 , WMA, AAC, OGG Vorbis, FLAC (192/32 via LAN), WAV (192/32 via LAN), AIFF (192/32 via LAN), ALAC (96/24 via LAN)
Supported formats	UPnP 1.1, UPnP-AV and DLNA compatible server, Microsoft Windows Media Connect Server (WMDRM 10), DLNA compatible server: NAS
Radio Database	vTuner (automatic updates)

9.4 Miscallenous SD 5.2

Power supply	230 Volt / 50 Hz or 120 Volt / 60 Hz
Power consumption max.	25 W
Measurements (W x H x D)	430 x 130 x 370 mm
Weight	10 kg

9.5 Miscallenous SD 3.2

Power supply	230 Volt / 50 Hz or 120 Volt / 60 Hz
Power consumption max.	18 W
Measurements (W x H x D)	430 x 100 x 325 mm
Weight	8 kg

Changes reserved without notice.