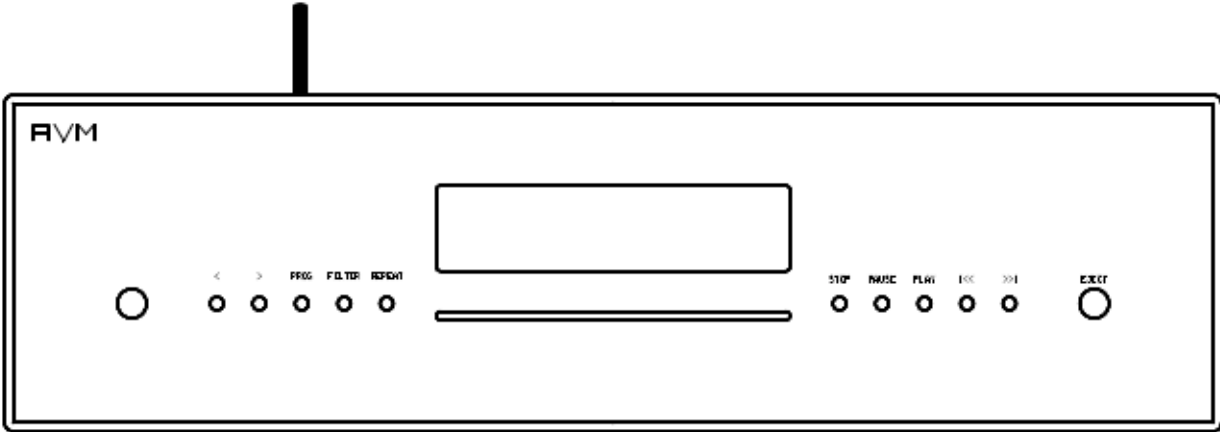
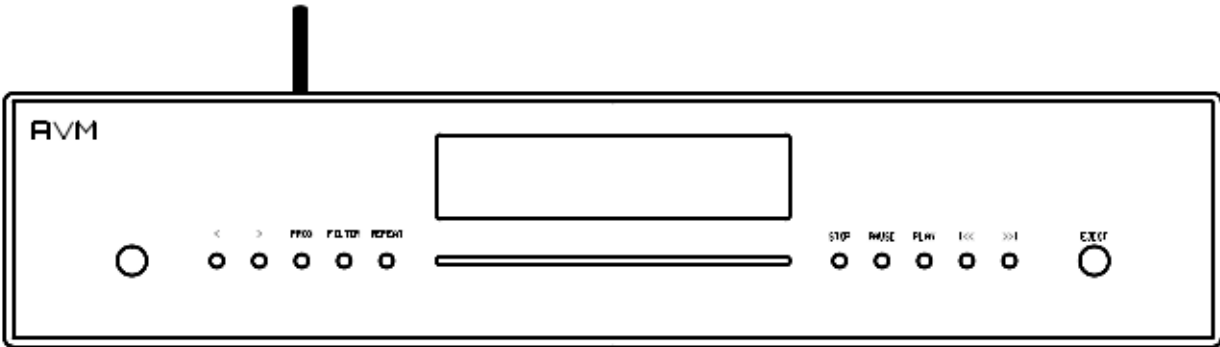


# Operating Instructions

## EVOLUTION MP 3.2 EVOLUTION MP 5.2



## Dear Music lover

thank you for making AVM your choice. You now own a versatile and excellent sounding hifi component. Before enjoying music, please read thru 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.



## 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](http://www.avm-audio.com), [info@avm-audio.com](mailto:info@avm-audio.com)

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# Getting started

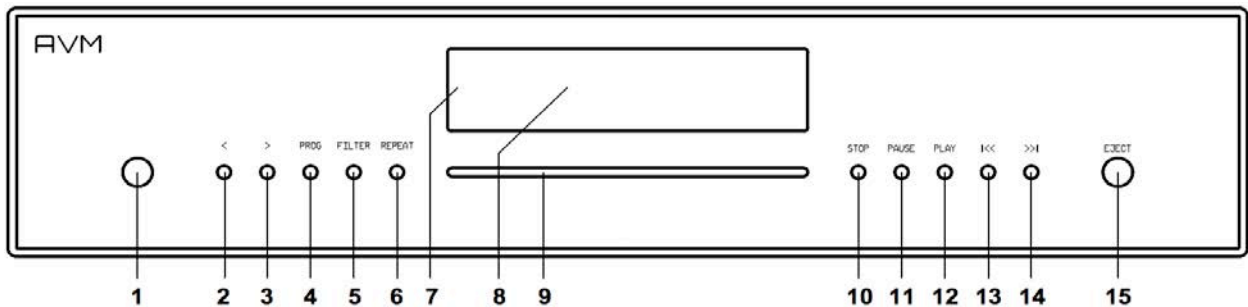
## 1.1 What's in the box?

- **EVOLUTION MP 3.2 / MP 5.2 Media Player**
- **WLAN antenna**
- **Power cable**
- **Optionally available RC 9 remote control with docking station, power supply unit, USB charging cable**

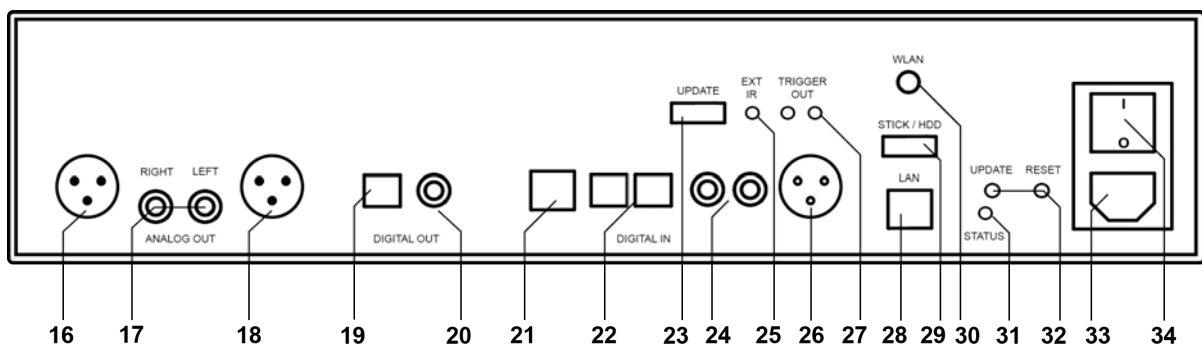
**CAUTION:** After unpacking, please check the scope of delivery to ensure that all the parts have been supplied and are undamaged. In case the original packing has already been opened, please contact your local dealer. Often, your dealer prepares your new device prior to delivery to adapt and change 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)                   | 9 CD-Slot                   |
| 2 Option key < (Input, track programming)   | 10 STOP button              |
| 3 Option key > (Input, track programming)   | 11 PAUSE button             |
| 4 PROG button (Track programming, RND)      | 12 PLAY button              |
| 5 FILT button (Filter selection)            | 13 I<< Skip / Search button |
| 6 REP button (Repeat)                       | 14 >>I Skip / Search button |
| 7 LED (lights up, when unit is in stand-by) | 15 EJECT button             |
| 8 Display                                   |                             |



16	Analogue output right (balanced, XLR)	25	Connector for external IR receiver
17	Analogue outputs (RCA)	26	Digital input AES/EBU
18	Analogue output left (balanced, XLR)	27	Trigger outputs
19	Digital output optical	28	Network connection (LAN)
20	Digital output coaxial	29	USB digital input for storage media
21	USB B digital input	30	WLAN antenna connection
22	Digital inputs optical	31	Status LED
23	Configuration port (Updates)	32	Update and reset button
24	Digital inputs coaxial	33	Mains connector
		34	Mains switch

### 1.3 Installation and cooling

The unit can become warm depending on 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 and may cause unwanted malfunctions.

### 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 Connection to a preamplifier or integrated amplifier

Connect the analogue outputs (16,17,18) to the high level inputs of a preamplifier or integrated amplifier.

The RCA-cinch outputs and the balanced XLR outputs are fully decoupled from each other and can be used independently.

### 1.6 Connection of digital sources

#### Digital sources

Connect the outputs of your digital sources to the corresponding inputs of your Media Player:

- Optical inputs (22)
- Coaxial inputs (24)
- USB B input (21)
- AES/EBU input (26)

#### Digital out

The input of a digital recorder must be connected to the digital outputs (19, 20). The signal on the digital outputs depends on the selected source (built-in CD, digital input).

### 1.7 Network connection (LAN, WLAN)

In order to make use of the streaming and network functions your Media Player needs to be connected with a local area network (LAN). You may choose between a LAN cable connection or a wireless WLAN connection. In order to use the WLAN connectio, the included WLAN antenna needs to be installed. Please align the antenna until straight and screw it on the antenna socket (30). Afterwards you may 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).

## 1.8 RC 9 remote control

The optionally available RC 9 remote control allows for easy and comprehensive control of your AVM Media Player. 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.

### 1.8.1 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

## 1.9 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 Media Player was not connected to mains a self test will be performed when it is switched on by the mains switch (34) 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 (8) lights up and the LED (7) 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 (34) or pull the mains plug.

### 2.3 Display

When the unit is on, the display shows information about the current settings and state of your Media Player. Apart from informations about the operating status (CD Player, Digital Input etc.) the lower line shows you currently active settings of the D/A converter: On the left-hand side the sample rate and bit depth is displayed. On the right-hand side you will find the current filter setting ("Smooth" or "Steep").

#### 2.3.1 Display in CD player mode

##### **TRACK**

On the left-hand side both the current title is displayed (big figures) and the total number of available tracks of the inserted CD (small figures).

##### **TIME**

At the centre of the display the total duration of an inserted CD is displayed, while stopped (STOP). As soon as the CD is played (PLAY) or paused (PAUSE), the time already elapsed of the current track is displayed.

##### **STATUS**

On the right-hand side the current operating status is displayed (STOP, PLAY, PAUSE).

##### **PROG**

In case of a currently active track programming both the currently playing track and the total number of programmed tracks is displayed on the left-hand side (for example "PROG 2/17").

##### **RND**

In case of an active random play the currently playing track and the total number of programmed tracks of the random play is displayed on the left-hand side (for example "RND 5/12").

#### 2.4 Display in D/A converter mode

On the left-hand side the name of the currently selected input is displayed. If there is no incoming signal available at the currently selected input, "NO SIGNAL" is displayed right next to the input name.

## 2.5 Playable disc formats

Your Media Player can play back all compact discs which are recorded according to the red book standard (means the standards for audio CDs established by Philips and Sony). Furthermore all CDRs and CDR/Ws with good reflection recorded according to this standard are playable. Most copy protected discs are also playable. But we cannot take responsibility that all future copy protection systems are playable.

## 2.6 Insert / eject a CD

### Insert a CD

Your Media Player is provided with a slot-in CD drive. Insert the CD (coverside up) and push slightly. The drive will now automatically draw the disc inside. After that the player reads the TOC and shows it on the display. Most left is the number of the actual track followed by the total number of tracks on the CD (for example "1/17"). The middle of the display shows the total playing time of the CD.

**NOTE:** If there is still a CD inside or the unit is in stand by, the slot will be blocked. If the inserted disc is not readable (DVD, data-CD) the display will show "no playable disc"-

### Eject CD

Press the EJECT button (15). Then the disc will be ejected.

### AUTO-CD function

If CD is not selected as source the unit will automatically change to CD from any other input after you have inserted a CD.

## 2.7 CD playback

If a disc is inside playing is started by pressing the play button (12). If you press PAUSE (11) the unit will go into the pause mode until PLAY (12) or STOP (10) is pressed.

Using the skip buttons (13, 14) you can easily access any title on the disc. When you press one of the skip buttons for longer than a second while the unit is playing, it begins to play in fast forward or reverse mode.

The actual state (PLAY, PAUSE, STOP) is shown in the display (8). Furthermore the display shows the actual playing time, the actual title number and the total number of titles.

## 2.8 Repeat

Press the repeat button (6) once to repeat the actual title, twice to repeat the whole CD or the programmed sequence. A third pressing returns to the normal playing mode. The repeat state is displayed in the upper line of the display (8).

## 2.9 Programming an individual playlist

If a disc is inside the player you can program your individual playing sequence as follows: Tip on the PROG button (4) to enter the playlist-menu.

- Pressing STOP (10) exits the menu and the unit will return to normal mode.
- Pressing PAUSE (11) generates a random playlist.
- Pressing PLAY (12) leads you to the programming menu.



The display shows on the left side the actual title ("TRCK"), below the playing time of this title ("TIME"). Pressing the buttons < or > (2, 3) selects a title.

Pressing PLAY (12) adds the selected title to the playlist. The display shows on the right side the number of programmed titles ("PGM-QTY"), below the playing time of the programmed list ("P-TIME").

The button PROG (4) stores the playlist, if you want to exit without storing, press STOP (10).

**NOTE:** The maximum number of programmed tracks is 99, the maximum program duration is 99 minutes.

## 2.10 Programming an individual playlist (example)

The CD inside the player contains 15 titles. You want to play only titles 7, 3 and 8.

- Press PROG (4) and the PLAY (12). The display now shows "TRCK 1/15".
- Select title 7 using the buttons < or > (2, 3). Display shows "TRCK 7/15".
- Now add this track (pressing PLAY (12)) to the playlist.
- Select title 3 using the buttons < or > (2, 3). Display shows "TRCK 3/15".
- Now add this track (pressing PLAY (12)) to the playlist.
- Select title 8 using the buttons < or > (2, 3). Display shows "TRCK 8/15".
- Now add this track (pressing PLAY (12)) to the playlist.
- Now press PROG (4) to finish the programming and store the playlist.

### 2.10.1 Deleting an existing playlist

Press PROG (4) and after that STOP (10). and the playlist is deleted.

## 2.11 Random play

Press PROG (4) and after that PAUSE (11). Now a random playlist will be generated.

Deleting a random playlist: Press PROG (4) and after that STOP (10). and the playlist is deleted.

## 2.12 Samplerate and filter setting

By pressing the FILTER button (5) once or several times you can choose between available sample rates and filter settings for a specified source (CD or digital input). The currently selected sample rate is displayed at the bottom left corner (44.1, 48, 88.2, 96, 176.4, 192 kHz). **NATIVE** indicates that the incoming sample rate of the signal is being directly processed and converted. **CONVERSION** however indicates an ongoing upsampling process of the incoming signal to a desired sample rate.

The digital filter settings **SHARP** and **STEEP** can be set according to your personal preference. Technically speaking, the setting **SHARP** indicates a steep filter characteristic at the upper end of the frequency band, leading both to a flat amplitude frequency response and a rather strong phase rotation. **STEEP** however leads to a less steep filter characteristic by showing a slightly earlier attenuation of the amplitude frequency response with almost no phase rotation.

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.

## 2.13 USB B Digital Input

If a digital signal from a computer (PC or Mac) is connected to the USB B digital input of your Media Player, you can choose between two different modes (**LO RES** or **HI RES**) by pressing the PROG button (4).

**LO RES** 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.

**HI RES** 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](http://www.avm-audio.com).

**HI RES** bietet Ihnen die Wiedergabe von Sampleraten von bis zu 192kHz. Mac OSX benötigt hierzu ebenfalls keine zusätzlichen Treiber. PC-Systeme mit Windows hingegen benötigen einen zusätzlichen Treiber, der Ihnen auf der entsprechenden Produktseite unter [www.avm-audio.com](http://www.avm-audio.com) zum Download zur Verfügung steht.

Below the LO RES and HI RES display, the currently active data format is displayed (**PCM** or **DSD**).

Please note that you need to select the **HI RES** mode in order to play back a DSD64 file.

## 3 Advanced settings

### 3.1 Personal setup menu

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 (34). Keep the PROG button (4) pressed while you switch on the unit again. As soon as the display shows **\*\*\* personal setup \*\*\*** menu you can release the PROG button (4).

When the personal setup is active you can select the desired function using the option keys (2,3). Use the Skip buttons (13,14) to apply changes to a selected function. **EXIT** exits the personal setup and stores the settings.

#### 3.1.1 Set display brightness

Sets display brightness between 25% and 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.

#### 3.1.2 Set autoplay

When AUTOPLAY is ON, your Media Player will start playing automatically every time a new CD is inserted. If AUTOPLAY is OFF, the player will read the TOC (Table Of Content) of the inserted disc and then go to STOP mode.

#### 3.1.3 Skip unused inputs

Deactivate unused inputs ("SKIP"). The unit will then skip these inputs when the option keys are pressed (2,3) or if you select the inputs via the remote control.

#### 3.1.4 Define input names

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

Press < or > (2,3) to select the input. Press REPEAT (6) to select the position and |<< or >>| (13,14) to define the character (holding the key pressed changes the character every half second).

### 3.2 Reset menu (Factory Settings)

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

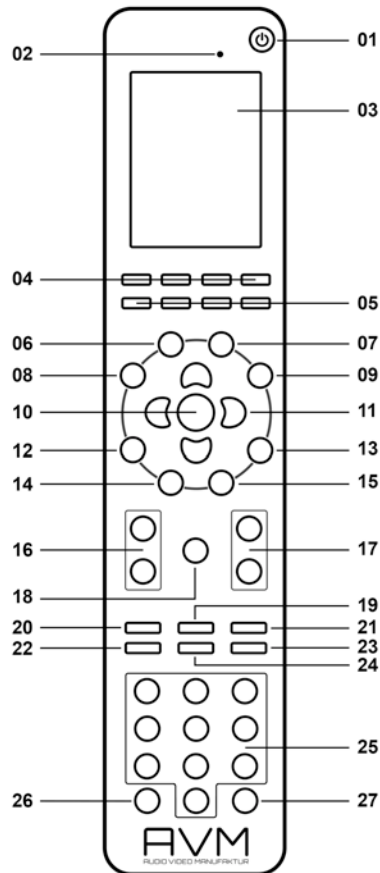
To enter the reset menu, please switch off your device on the rear of the unit at the mains switch (34). Keep both the REP button (6) and the STOP button (10) pressed while you switch on the unit again (34). As soon as the display shows the reset menu you can release both buttons (6,10).

Select if you just want to clear the input names (**NAMES**) with the **PAUSE** button (10) or reset the unit completely (**ALL**) by pressing the **PLAY** button (12).

Pressing the **STOP** button (10) will bring the unit back to normal operating mode without resetting any item (**CANCEL**).

## 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 1.8.1)
- 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 your AVM device 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 AVM device 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 AVM device 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 MP 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 AVM device 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 AVM device 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 AVM device (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 AVM device 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 may 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 AVM device 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 AVM device 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 AVM device 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 AVM device, 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 AVM device 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 Media Player 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 Media Player 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 Media Player 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 Media Player at vTuner**

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

To register your Media Player 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 Media Player 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 Streaming DAC 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 Media Player 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 Media Player 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 Media Player 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 Media Player device (please refer to section **How to register your Media Player 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 Media Player (please refer to section **How to register your Media Player 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 Media Player 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.

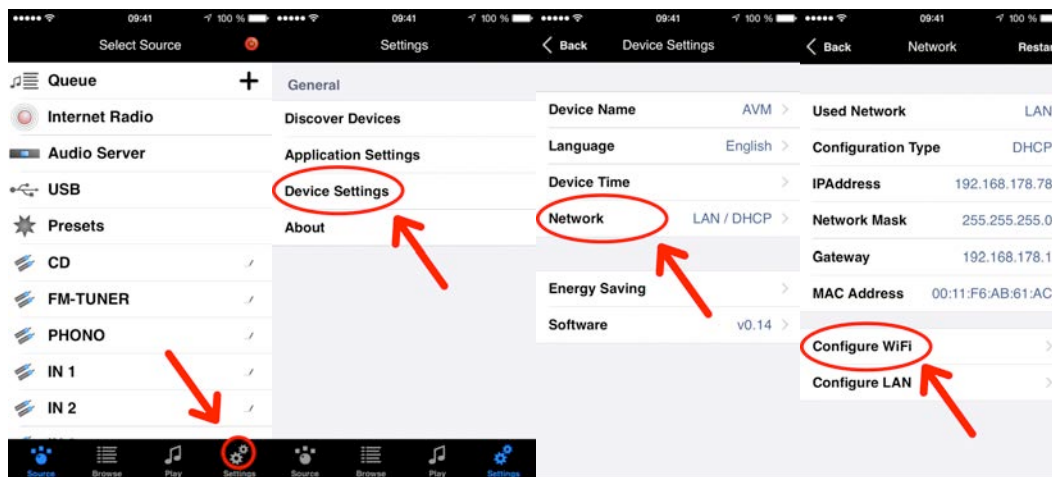
2. Switch on your AVM device by turning on the mains switch on the rear-side of the unit. Wait until the starting procedure is completed and your AVM device has gone to stand-by mode. Now, switch on your AVM device by pressing the power-button on the front panel of the unit.

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

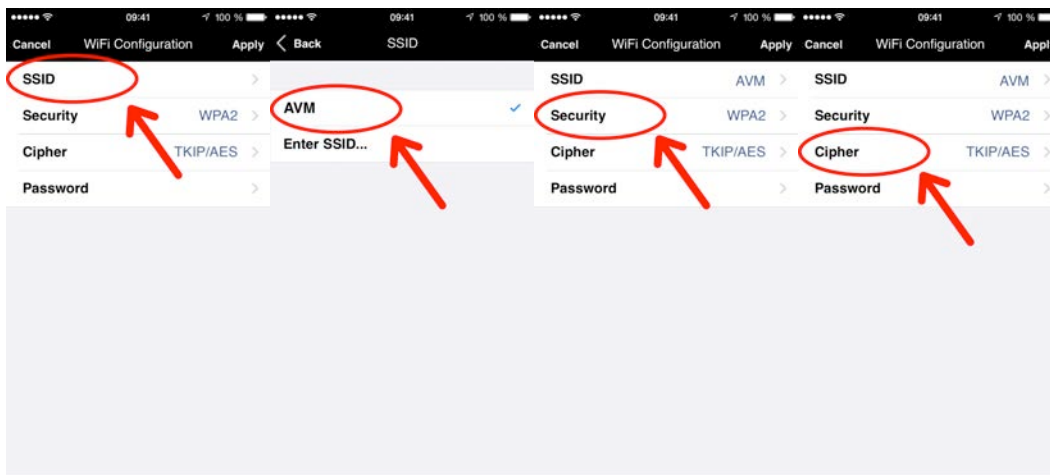
4. As soon as the RC S App has launched, you will be led to the settings menu which is automatically searching for available AVM devices in your local network. After a quick search run, your AVM device will be detected and listed with its respective device name (default name is “AVM”) and its unique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



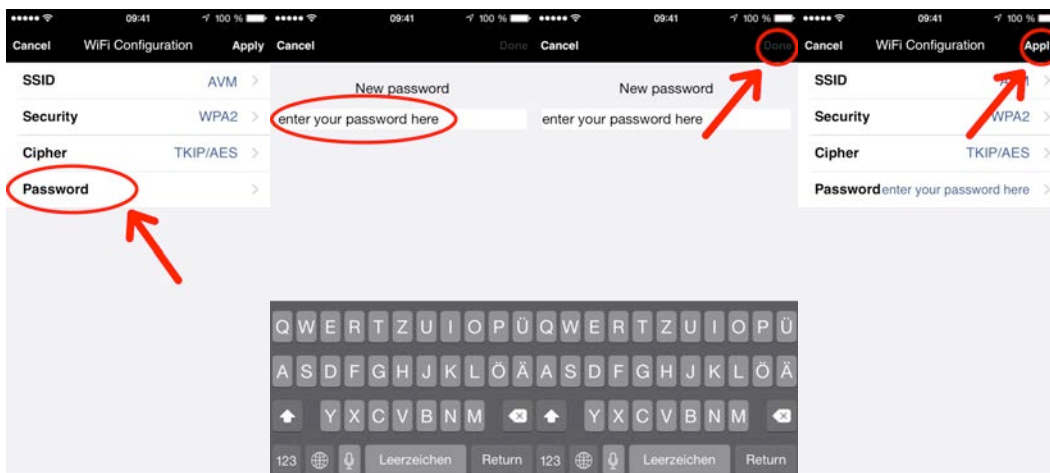
5. Select the “Settings” menu in the lower-right corner of the RC S App and navigate to the “Device Settings” menu. Now, go to the “Network” menu and select the “Configure WiFi” tab.



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.

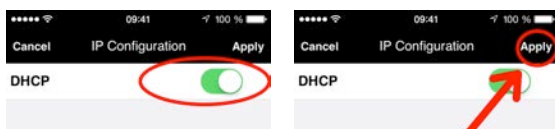


7. Select the “Password” tab, enter your WiFi key and confirm by selecting “Done” in the upper-right corner of the RC S App. Confirm your WiFi configuration data you just entered by selecting “Apply” in the upper-right corner.

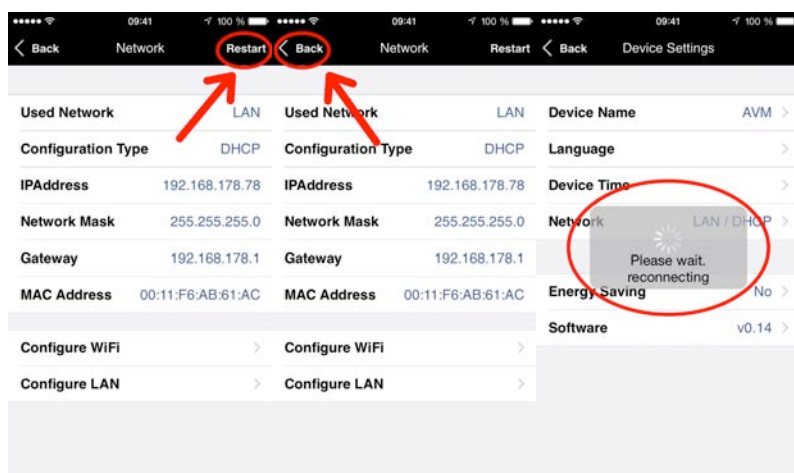


8. Choose an IP configuration setting from the pop-up menu and confirm by selecting “Apply”.

**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.

### 1. No music playback

a) 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. Unit switches off during normal operation

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

### 3. RC 9 remote control doesn't work

a) Charge the included lithium-ion battery of your RC 9 remote control (see 1.8.1).

- b) Point with the remote control transmitter directly to the unit.
- c) Reconnect the RC 9 remote control with your unit. 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

## **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 your local distributor or dealer to process the warranty

## 9 Technical Data

### 9.1 Digital input

Input impedance Coax / XLR	75 Ohm / 110 Ohm
Input format Coax / XLR	S/P-DIF, 32 kHz – 192 kHz / 16 – 24 Bit
Input format Optical	S/P-DIF, 32 kHz – 96 kHz / 16 – 24 Bit
Input format USB	Asynchronous, galvanically isolated PCM max. 48 kHz / 16 Bit PCM max 192 kHz / 24 Bit (additional driver installation is required for Windows PCs) 64DSD (2,8 MHz)
Sampling frequency	Native, 32 kHz - 192 kHz / 16 - 24 Bit up/downsampling switchable to 44,1 kHz - 192 kHz / 24 Bit
Deemphasis	yes, automatic

### 9.2 Digital output

Output impedance Coax	75 Ohm
Output format Coax	S/P-DIF, as input format, max 192 kHz / 24 Bit
Output format Optical	S/P-DIF, as input format, max 96 kHz / 24 Bit

### 9.3 CD-Player

CD formats	CD Audio, CDR (according to Red Book standard)
Frequency response CD	<20 Hz – 20 kHz

### 9.4 Analog output

Output voltage	2,5 V
Frequency range MP 3.2	DC – 75kHz
Signal-to-noise ratio MP 3.2	105 dB
Frequency range MP 5.2	<2Hz – 38kHz
Signal-to-noise ratio MP 5.2	97 dB

### 9.5 Streaming capabilities

Streaming formats	WMA, OGG Vorbis, AAC/MP4, MP3, ALAC (up to 96kHz via LAN), WAV, PCM, FLAC, AIFF (up to 92kHz/24Bit via LAN)
Supported media server	UPnP, 1.1, UPnP-AV and DLNA-compatible server, Microsoft Windows Media, Connect Server (WMDRM 10), DLNA-compatible server: NAS
Radio Database	vTuner / Airable Internet Radio Service (automatic updates)

## 9.6 Miscellaneous MP 3.2

Supply voltage	100 V - 240 V, 50 - 60Hz
Power consumption during operation	typ. 15W
Stand-By power consumption (quickstart disabled)	< 1 W
Power consumption in sleep mode (quickstart enabled)	< 4 W
Dimensions (B x H x T)	430 x 100 x 325 mm
Weight	7,9 kg

## 9.7 Miscellaneous MP 5.2

Supply voltage	100 V - 240 V, 50 - 60Hz
Power consumption during operation	typ. 20W
Stand-By power consumption (quickstart disabled)	< 1 W
Power consumption in sleep mode (quickstart enabled)	< 4 W
Dimensions (B x H x T)	430 x 130 x 370 mm
Weight	9,2 kg

Changes reserved without prior notice.