Operating Instructions

EVOLUTION MP 3.2
EVOLUTION MP 5.2

AVM

AUDIOPHILE MASTERPIECES
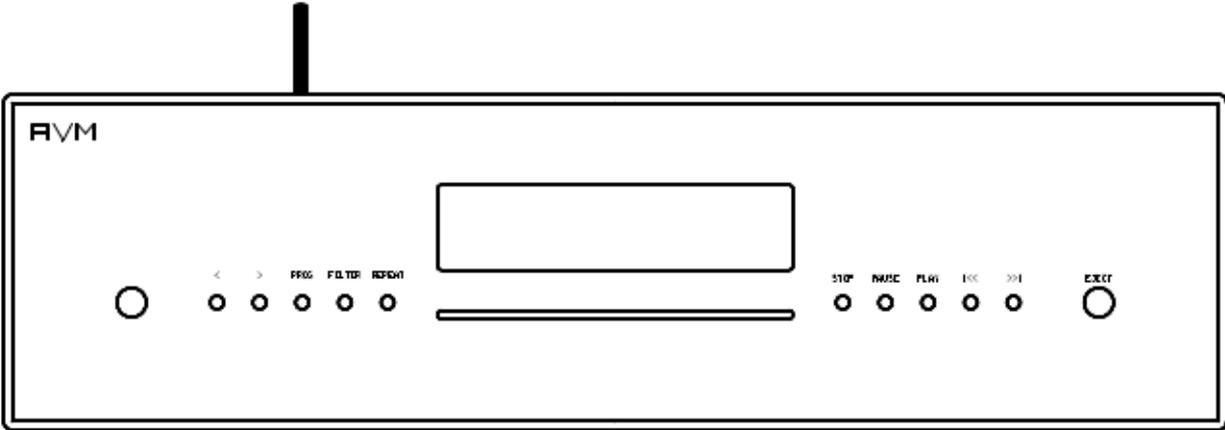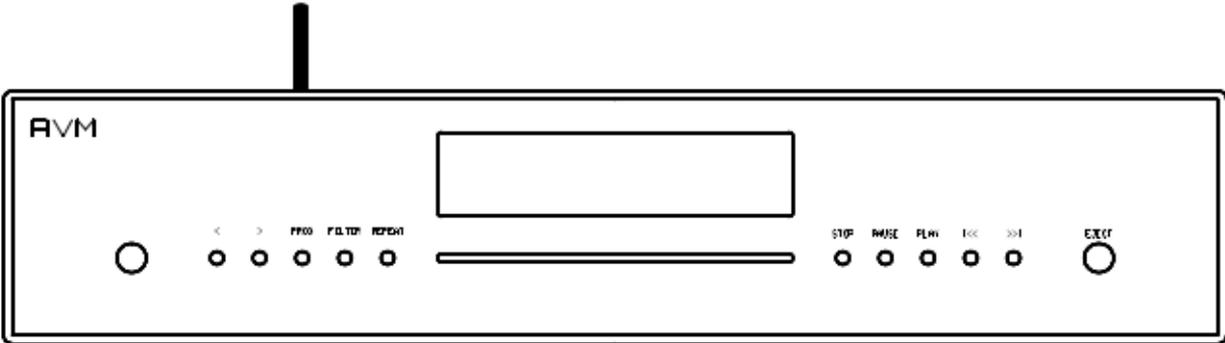
Caution

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

Laserdiode Typ: Ga-Al-As
Wavelength: 755 - 815 nm (25 °C)
Output power: max. 0,7 mW max.

CLASS 1 LASER PRODUCT
LASER KLASSE 1

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

$C\epsilon$

the necessary measurements were taken with positive results.

AVM Audio Video Manufaktur GmbH
Daimlerstraße 8
D-76316 Malsch
Germany

www.avm.audio
info@avm.audio

Dear customer

Thank you for purchasing this AVM product. You now own a versatile, excellent sounding high-end component. Before enjoying your music, please read this manual carefully. After that you will know how to use your new MP 3.2 / 5.2 in the optimal way.

Please note: The range of functions of your AVM hifi component can be easily expanded by means of a software update at any time. Hence, the present operating instructions will require continued updates going forward. You can always download the most current version from our website at **www.avm.audio**.

Sincerely yours,

The AVM Team

Table of contents

1. Getting started

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.

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.
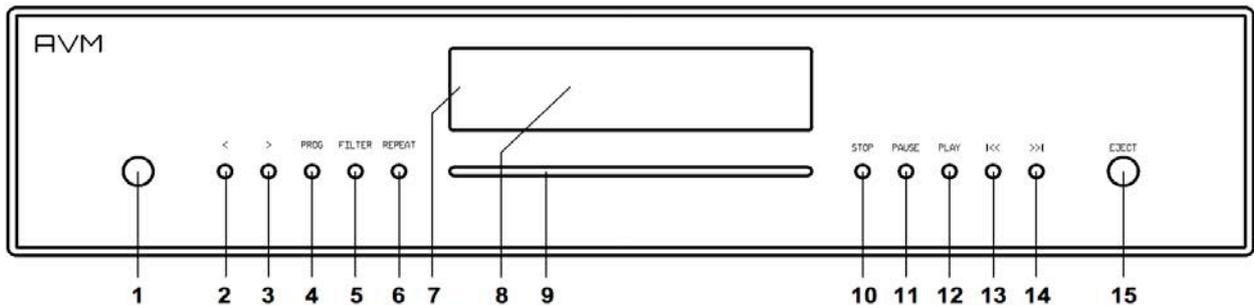
1 Power button (on / off)	9 CD-Slot
2 Option key < (Input, track programming)	10 STOP button
3 Option key > (Input, track programming)	11 PAUSE button
4 PROG button (Track programming, RND)	12 PLAY button
5 FILT button (Filter selection)	13 I<< Skip / Search button
6 REP button (Repeat)	14 >>I Skip / Search button
7 LED (lights up, when unit is in stand-by)	15 EJECT button
8 Display	
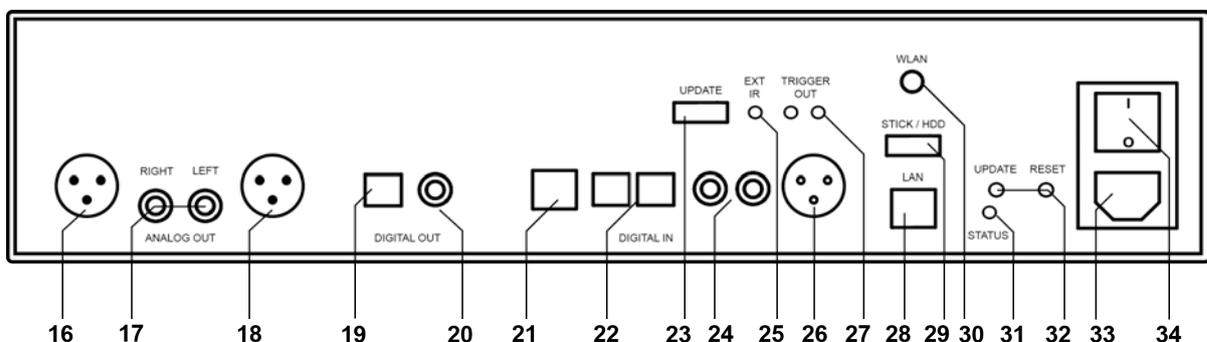
16 Analogue output right (balanced, XLR)
17 Analogue outputs (RCA)
18 Analogue output left (balanced, XLR)
19 Digital output optical
20 Digital output coaxial
21 USB B digital input
22 Digital inputs optical
23 Configuration port (Updates)
24 Digital inputs coaxial

25 Connector for external IR receiver
26 Digital input AES/EBU
27 Trigger outputs
28 Network connection (LAN)
29 USB digital input for storage media
30 WLAN antenna connection
31 Status LED
32 Update and reset button
33 Mains connector
34 Mains switch

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 malfuctions.

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.

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.

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).

RC 9 remote control

The optionally available RC 9 remote control allows for easy and comprehensive control of your devices. 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 0.

A detailed description of the entire functionality of the optionally available RC 9 remote control can be found in a separate manual on the product page of our AVM website at www.avm.audio.

Pairing

In order to control your device with a RC 9 remote control, both components need to be linked first. This process is also referred to as **Pairing**. To start the pairing process, please switch off your device by using the mains switch (30) 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 and navigate to the menu item **Start Pairing** _without_ selecting it with the **Enter** key yet. Switch on your device by using the mains switch (30) on the rear side of the unit and immediately press the **Enter** key of your RC 9 remote control to now start the **Pairing** process. The name of a succesfully detected device will instantaneously be shown on the display of your RC 9 remote control and can be edited by using the alphanumeric input keys of the RC 9 remote control. After confirming the name of the paired device with the **Enter** key, you can also choose one of four available **Hotkeys**. Details on how to use the **Hotkey** function of your RC 9 remote control can be found in a separate manual on the RC 9 product page on our website at www.avm.audio. By pressing the **Enter** key on your RC 9 remote control again, the pairing process is completed.

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 device. The RC S App is available free of charge and can be downloaded from the Apple App Store and the Google Play Store. A detailed description of the entire functionality of the RC S remote control can be found in a separate manual on the product page of our AVM website at www.avm.audio.

Network installation (LAN, WiFi)

In order to use the variety of integrated streaming funtions such as **Music Server** (local NAS drives etc.) or **Online Services** (**TIDAL**, **Qobuz**, **Webradio**, **Podcasts**) your device needs to be connected to the internet via a router in your local home network. You can choose from a wired LAN connection (25) or a wireless WiFi connection. In order to use the wireless WiFi connection of your device, the included WiFi antenna needs to be installed first (23).

LAN vs. WiFi
Before using the wireless WiFi functionality of your device, an initial set-up of a wired LAN connection is mandatory. This non-recurring step is required to set-up an initial WiFi connection between your device and the RC S App via your local home network.

NOTE: To ensure a smooth WiFi operation of your device, it is highly recommended to remove the LAN cable after the intial set-up process described in section 0 has successfully been completed. This is because a wired LAN connection is always prioritized by the device which automatically leads to a wired LAN connection as soon as a LAN cable is connected at a later time and the device has been restarted by switching it off and on again via the mains switch on the rear side of the unit (30).

Please make sure to carefully follow all steps below to successfully set up a wired LAN connection or a wireless WiFi connection.

Setting up a wired LAN connection

✓   Please switch off the device on the rear side of the unit (30).

✓   Plug a LAN cable from your local router into the LAN port of the device (25).

✓ Switch on the device on the rear side of the unit (30). Wait until the device has started and went into stand by mode. Now, switch it on with the power button on the front side (1).

✓ After a brief starting process, your device automatically connects to your local home network and is ready to be operated via the RC S App for iOS and Android.

✓ Launch the RC S App on your smartphone or tablet. The RC S App will now automatically search and list all available AVM devices in your local network with their respective device name and IP adress (e.g. "192.168.xxx.x" etc.).
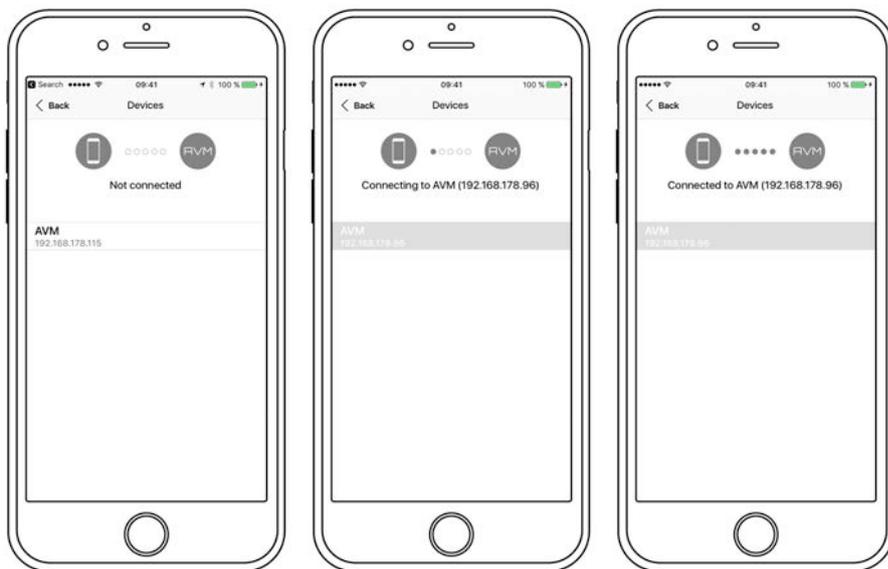
✓ Choose an availbale device and wait until a connection is established.

Setting up a wireless WiFi connection

To set up your device with a wireless WiFi connection, you need to download and install the free RC S App for iOS and Android or use the optionally available RC 9 remote control. The following instructions refer to the installation process by use of the RC S App. For details on how to connect your device with the RC 9 remote control, please refer to section 0. A detailed description of the entire functionality of the RC 9 remote control and the RC S App for iOS and Android can be found in a separate manual on the respective product pages of our AVM website: www.avm.audio.

NOTE: Before using the wireless WiFi functionality of your device, an initial set-up of a wired LAN connection is mandatory. This non-recurring step is required to set-up an initial WiFi connection between your device and the RC S App via your local home network.

✓ Please switch off your device on the rear side of the unit (30).

✓ Plug a LAN cable from your local router into the LAN port of your device (25).

✓ Switch on the device on the rear side of the unit (30). Wait until the device has started and went into stand by mode. Now, switch it on with the power button on the front side (1).

✓ After a brief starting process your device automatically connects to your local home network and is ready to be operated via the RC S App for iOS and Android.

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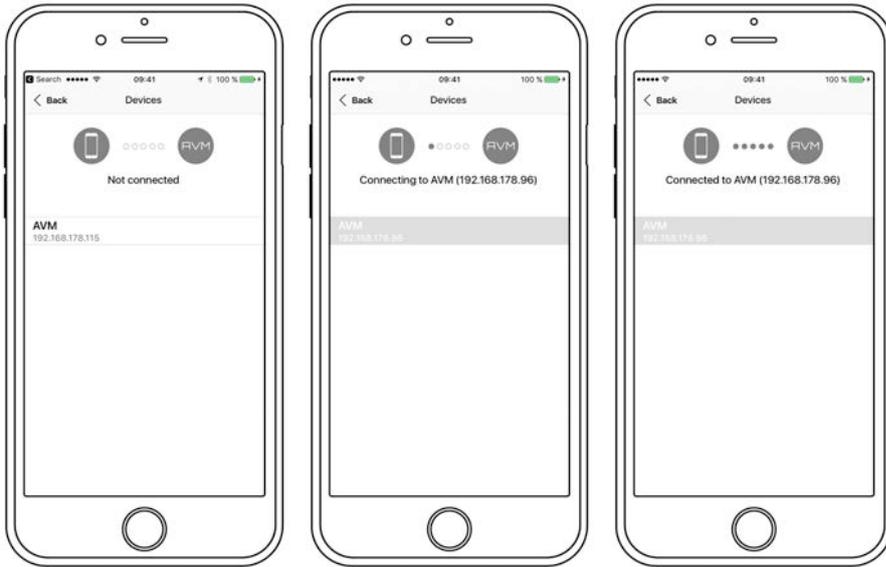
✓ Choose an availbale device and wait until a connection is established.
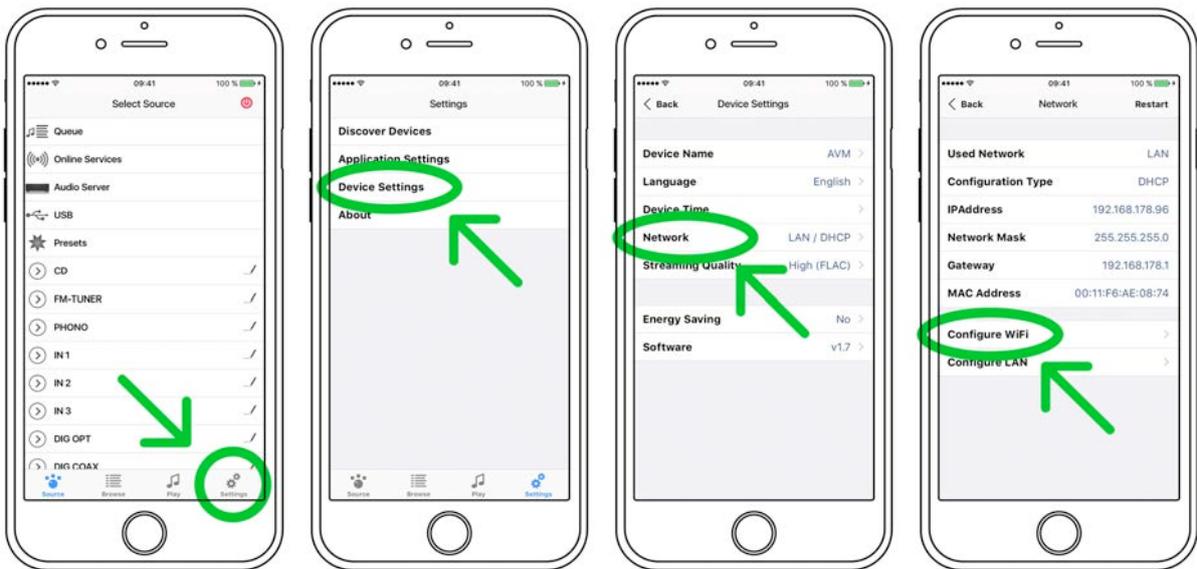
✓ Navigate to the **Settings** tab on the RC S App and choose **Device Settings** / **Network** / **Configure WiFi.**

✓ After you have selected the **SSID** menu option, you will be provided with a list of all available WiFi networks. Choose a WiFi network and select a respective **Security** and **Cipher** setting.
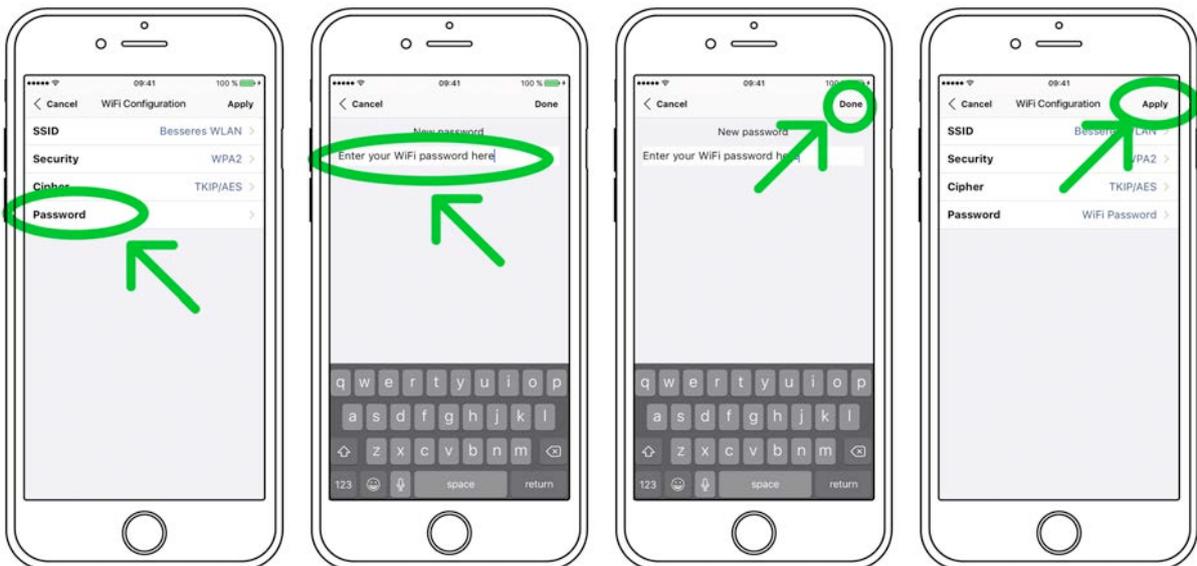
✓ Choose the menu option **Password** and enter your WiFi password. Confirm with **Done** at the upper right-hand corner. Now, confirm your WiFi settings with **Apply** at the upper right-hand corner.

✓ Under **DHCP**, you will be asked if your devide should obtain an IP adress automatically (if yes, please make sure the **DHCP** option is activated). Now, confirm your choice with **Apply** at the upper right-hand corner and **remove the LAN cable from the LAN port (25) right afterwards.**

CAUTION: Unless your local home network has been configured with static IP addresses, we highly recommend to activate the **DHCP** option.

✓ The integrated streaming module of your device will now restart. This process can take up to 30 seconds. Please make sure to not switch off the device while it is restarting (which is happening under the hood without any indication on the display of the device).

✓ The device is now connected with your wireless WiFi network.

PLEASE NOTE: When switching from a wired LAN connection to a wireless WiFi connection or vice versa, a restart of the integrated streaming module is always required. To restart the streaming module via the RC S App, please go to the **Settings** tab, choose **Device Settings**, **Network**, and press the **Restart** button on the upper right-hand corner. Switching off the device on the rear-side with the mains switch (30) also causes a restart of the integrated streaming module.

Software updates

To get the most out of your AVM HiFi streaming system, please make sure you always keep the RC S App and the streaming software of your device up-to-date. You can download the latest version of the RC S App in the [Apple App Store](#) or the [Google Play Store](#). To check whether your device runs the latest version of the streaming software, please make sure the device is connected to the internet (see section 0) and follow the instructions below.

✓ **Streaming software update via the RC S App**: Navigate to the Settings tab and choose *Device Settings / Software / Check for Updates*.

✓ **Streaming software update via the RC 9 remote control**: Navigate to the *Receiver Settings* menu and choose *Software / Update*.

2. Basic operation

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.

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.

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").

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").

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.

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.

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 f 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.

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.

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).

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.

2.1. 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.

Deleting an existing playlist

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

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.

Samplerate and filter setting

By pressing the FILTER button (5) once or several times you can choose between available sample rates and filter setttings 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. **CONVERSION** however indicates an ongoing upsampling process of the incoming signal to a desired sample rate.

The digital filter settings **SMOOTH** 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. **SMOOTH** 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 completey 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 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 availbale for download on the respective product page at www.avm-audio.com.

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

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.

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.

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.

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.

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 I<< or >>I (13,14) to define the character (holding the key pressed changes the character every half second).

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. Appendix

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.

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 (optionally available) doesn't work

a) Charge the included lithium-ion battery of your RC 9 remote control (see **Error! Reference source not found.**).
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 **Error! Reference source not found.**.

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

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

Technical Data

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

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

CD-Player

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

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

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)

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

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.

January 16, 2017.