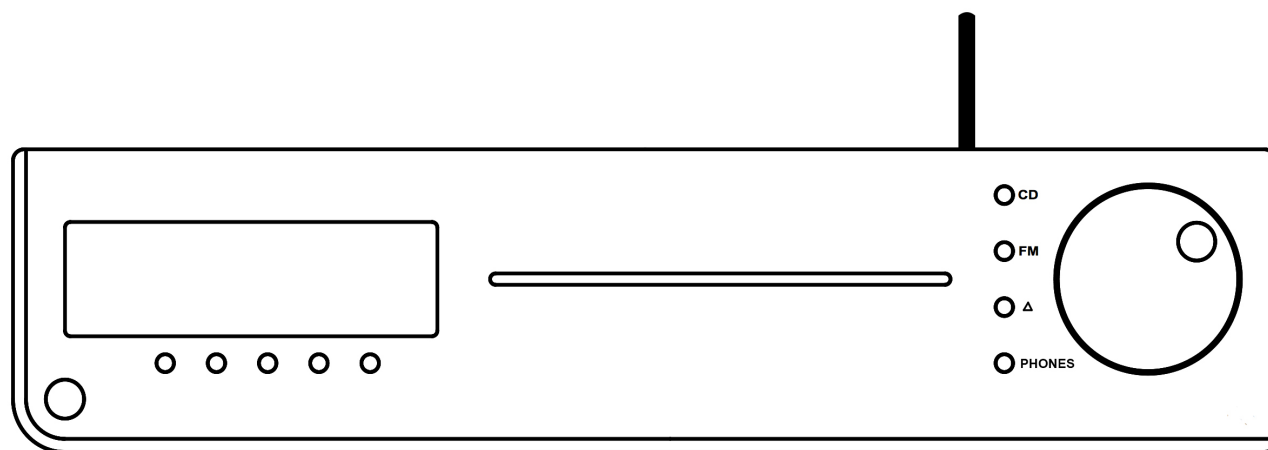


Operating instructions

INSPIRATION CS 2.2



AVM
AUDIO VIDEO MANUFAKTUR

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.

Please note that 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 you can always download the most current version from our website at www.avm-audio.com.

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

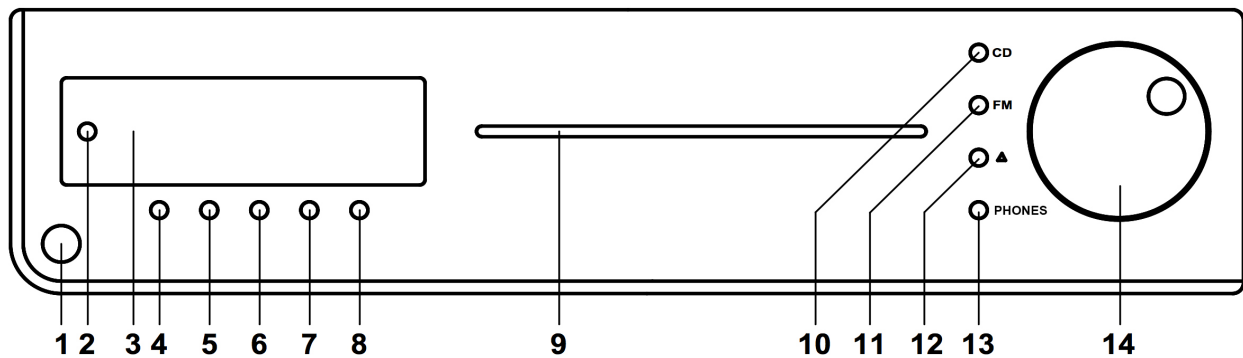
1.1 What's in the box?

- **INSPIRATION CS 2.2 Compact Streaming CD-Receiver**
- **RC 9 remote control with docking station, power supply unit, USB charging cable**
- **WLAN antenna**
- **Power cable**

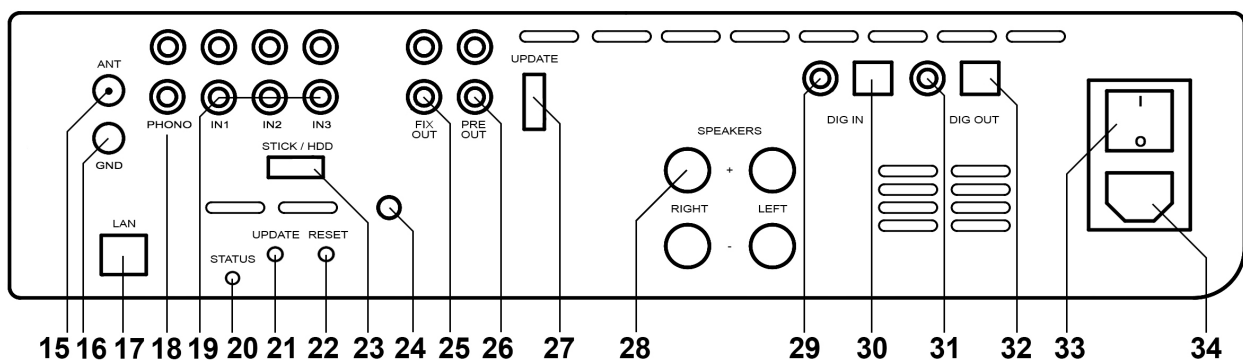
CAUTION: After unpacking, please check the scope of delivery to ensure that all the parts have been supplied and are undamaged. In case the original packing has already been opened, please contact your local dealer. Often, your dealer prepares your new device prior to delivery to adapt and change the 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) | 8 | Multifunctional button (soft key) |
| 2 | Control LED | 9 | CD-Slot |
| 3 | Display | 10 | Source selector CD |
| 4 | Multifunctional button (soft key) | 11 | Source selector Tuner |
| 5 | Multifunctional button (soft key) | 12 | Source selector |
| 6 | Multifunctional button (soft key) | 13 | Headphone output |
| 7 | Multifunctional button (soft key) | 14 | Volume knob |



15	Antenna socket	25	Output for recorder (fixed level)
16	Ground socket for turntable chassis	26	Preamplifier output
17	Network connection	27	USB configuration port
18	Phono input	28	Speaker terminals
19	High-level analogue inputs	29	Digital input coaxial
20	Status LED	30	Digital input optical
21	Update button	31	Digital output coaxial
22	Reset button	32	Digital output optical
23	USB digital input	33	Mains switch
24	WLAN antenna connection	34	Mains connector

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 analogue signal sources

High-level sources

Connect the outputs of your signal sources to the inputs (19). The upper row is for left channel, the lower row is for right channel.

Turntable

Connect the output of your turntable with phono inputs (18) and connect the chassis ground wire to the ground connector (16). The CS 2.2 phono input is suitable for MM cartridges as well as for high and medium level MC cartridges. Sensitivity can be adjusted (see 2.3.1).

1.6 Connecting digital signal sources

Inputs SPDIF/ (RCA Cinch, optical)

Connect the outputs of your digital sources to the corresponding inputs of the CS 2.2 (29, 30).

Digital out

The input of a digital recorder must be connected to the digital outputs (31, 32). The signal on the digital outputs depends the selected source (build in CD, dig in).

1.7 Network connection (LAN, WLAN)

In order to make use of the streaming- and network functions the CS 2.2 needs to be connected with a local area network (LAN). You have the choice between a LAN cable connection or a wireless WLAN connection (see 1.13). Please note that the WLAN connection is deactivated as soon as the LAN connection is operating (see 4.5.1).

1.8 RC 9 Remote control

The included RC 9 remote control allows for easy and comprehensive control of the CS 2.2. Before you can use the RC 9 together with your CS 2.2, 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 Connecting a recorder

Connect the recorder's output to one of the inputs (19). The inputs of the recorder must be connected to the fixed level output (25).

1.10 Connecting subwoofers

Aktiver Subwoofer ohne Frequenzweiche

If you use an active subwoofer (with built in power amplifier), simply connect it's inputs to the unit's pre out (26) and adjust the bass level at the subwoofer.

1.11 Connecting loudspeakers

Connect the speakers to the speaker terminals (28). Use only good speaker cables with sufficient diameter. Make sure, that the red terminals are connected to the red or "+" terminals of the speakers and the black terminals to the black or "-" terminals of the speakers.

1.12 Tuner antenna

Connect the antenna cable to the antenna socket (15).

1.13 Connecting the WLAN antenna

In order to use the WLAN connection of the CS 2.2, the included WLAN antenna needs to be installed. Please align the antenna until straight and screw it on the antenna socket (15). Afterwards you can adjust the angle of the antenna according to your needs.

2 Basic operation

2.1 First operation / self test

In case the CS 2.2 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 (3) lights up and the LED (2) 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 (33) or pull the mains plug.

2.3 Selecting the signal source

The signal source can be selected by pressing the source selector (12) until the desired source appears on the display. For selecting Tuner or CD, use the direct access keys 10 / 11.

CAUTION: If you switch to another source while playing a CD, the drive will stop first. This may take a few seconds. If you activate a digital input that has no valid signal, "NO DIG SIGNAL" is indicated in the display (3). In this case the source can not be changed.

3.4 Volume setting

Use the rotary encoder (14) 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 (3).

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

2.3.1 Setting of input sensitivity

The level of signal sources differs often by several dBs. You recognize a step in volume, when switching between two different inputs. With the sensitivity setting menu you can avoid this. The sensitivity of each input can be adjusted between – 9.5 dB and + 10.0 dB.

Select any input (but NOT the Tuner or CD) and choose a convenient volume level. Now press the multifunctional button 6 under the display for more than 2 seconds. The button is now marked "EXIT LVL". Pressing this button again will exit the level setting mode and bring the unit back to normal operating mode.

While level setting is active the display shows the actual level instead of the volume. Level can be set using the volume knob (6). Now you can switch between the sources (also CD and tuner) and adjust the levels.

When this is done press the "EXIT LVL" knob and bring the unit back to normal operating mode. All level settings are now stored.

NOTE: While the level setting mode is active the unit will not respond to any RC 9 remote control command.

2.4 Tuner

The basic functions of the tuner can be accessed by the buttons right under the display (4 – 8). More sophisticated functions and all web radio features are available via the menu and the included RC 9 remote control.

2.4.1 Tuning

Depending on the selected mode (manual / auto) the far right buttons (7, 8) under the display (3) are named ◀ **3AUT** ▶ or ◀ **3MAN** ▶. In AUT-mode a tip on one of the buttons lets the tuner automatically seek the next upper or lower station. In MAN mode the frequency changes in 50 kHz-steps as long as the button is pressed. In this case the tuning indicator shown in the display (3) helps you to tune correctly to the desired station. If tuning is correct it will show "locked".

NOTE: To optimize the sound quality you can use the functions **mode**, **sensitivity** and **bandwidth**, which are described later on in chapter 3.

2.4.2 Station and memory

Storing a new station

If you want to store a certain station in the memory, press the button MENU (6) under the display (3) for more than 2 seconds. The display will propose the next free memory position for storage (for example: if 5 stations are already stored, position 6 will be proposed). Using the "MOVE" buttons (4, 5) you can change the position.

Modifying, moving or deleting an existing station

If the tuner is set to an already stored station you can change its settings, move it to a different position or delete it. If you, want first change settings (mono/stereo, bandwidth or other). Then press the button MENU (6) under the display (3) for more than 2 seconds. If you then press "STORE" the station will be stored a new at the old position with the changed settings. Using the buttons "MOVE" allows you to change the position of this station before storing. "DELETE" will erase the station out of the memory. "EXIT" will bring the unit back to normal operating mode without changing the memory.

NOTE: The station memory allows you to store up to 63 stations. It stores not only their frequency, but also the individual setting (mono/stereo, bandwidth or other).

2.4.3 Selecting a station out of the memory

The buttons ◀ **STAT** ▶ (4, 5) select the stations stored in the memory. A short tip switches to the next / previous station. Holding the button down scans automatically up / down. The number of the actual station is shown in the display ("STAT xx").

2.5 CD-Player

The basic functions of the CD player can be accessed by the buttons right under the display (4 – 8). For more sophisticated functions see chapter 3.

2.5.1 Insert / eject

Insert a CD

The CS 2.2 has a slot-in CD drive. Insert the CD (cover side 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. Furthest 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 button (7) under the display (3). 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.

2.5.2 PLAY, PAUSE, STOP

While the player is stopped the buttons or (4, 5) select the title. A short tap switches to the next / previous title. Holding the button down scans automatically up / down. The number of the actual title is shown in the display.

Pressing PLAY (8) starts the player. While playing, the button changes its function to PAUSE.

While the player is playing, the button (7) under the display shows the STOP-symbol. When the player is stopped this button changes its function to the EJECT symbol.

2.5.3 SEARCH / SKIP

While the player is stopped, the buttons 4 and 5 select the title. A short tap switches to the next / previous title. Holding the button down scans automatically up / down. The number of the actual title is shown in the display.

While the player is playing a short tap on the buttons 4 and 5 selects the previous / next title. Holding down the buttons starts the rewind / fast forward function. Rewind / fast forward stops automatically when the begin / end of the actual title is reached.

2.6 Repeat

CD must be selected as source

Choose repeat mode: "one" (actual title), "all" (whole CD or programmed sequence), "off".

2.6.1 Programming an individual playlist

If a disc is inside the player you can program your individual playing sequence as follows: Hold the button **MENU** (6) down for more than 2 seconds to enter the playlist-menu.

The display shows on the left side the actual title ("TRCK"), below the playing time of this title ("TIME"). Pressing the buttons 4 and 5 allows you to select a title.

Pressing **ADD** (6) 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 **STORE** (7) stores the playlist.

NOTE: The program function is only available while the player is stopped. The maximum number of programmed tracks is 99, the maximum program duration is 99 minutes. In case the Level setting is active. You must exit first.

Example

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

Press MENU (6) for more than 2 seconds. The display now shows "TRCK 1/15".

- Select title 7 using the buttons 4 and 5. Display shows "TRCK 7/15".
- Now add this track (pressing **ADD** (6)) to the playlist.
- Select title 3 using the buttons 4 and 5. Display shows "TRCK 3/15".
- Now add this track (pressing **ADD** (6)) to the playlist.
- Select title 8 using the buttons 4 and 5. Display shows "TRCK 8/15".
- Now add this track (pressing **ADD** (6)) to the playlist.
- Now press STORE (7) to finish the programming and store the playlist

Deleting an existing playlist

Press **MENU** (6) for more than 2 seconds. Then press **DEL PGM** (8) and the playlist is deleted.

3 Advanced Settings

The CS 2.2 offers a lot of custom specific settings in its menu system. To enter the menu just tap on the button MENU (6). 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 ▶ (4, 5). The setting is done using the buttons ◀ VALUE ▶ (7, 8). Depending on the actual source the menu system offers a range of settings described in the following.

3.1 RDS-Display

Tuner must be selected as source

Choose if station NAME, RDS-TEXT or FREQUENCY is displayed.

3.2 Scanmode

Tuner must be selected as source

Set tuning mode between "auto" or "manual" (see also 2.4.1).

3.3 2-CH-Mode

Tuner must be selected as source

Set tuner to mono or stereo to obtain best sound.

NOTE: Depending on actual setting the threshold for auto tuning will change (sensitive in MONO, less sensitive in STEREO).

3.4 Bandwidth

Tuner must be selected as source

Select bandwidth "narrow" / "wide" for best reception.

3.5 Sensitivity

Tuner must be selected as source

Choose between "local" (in case the tuner operates from a cable) and "distant" (if operated from antenna).

3.6 tone control

Set tone control to "bypass" (= linear) or "active". In case the tone control is activated "TONE ON" is shown in the display (4), otherwise "LINEAR".

You can choose if you want to change bass and treble settings simultaneously for all inputs ("global") or especially for the actual input ("individual"). See 10.1.6

The loudness function depends on speakers and properties of the listening room and is therefore always "global".

NOTE: In case tone control is set to "bypass" the menu will skip the bass, treble, and loudness settings (see 3.7-3.9).

3.7 set bass

Set bass level between – 5 dB and + 9 dB.

3.8 set treble

Set treble level between – 7 dB and + 7 dB.

3.9 set loudness

If you listen to music at low levels, you often recognize that bass and treble reproduction are weak. This is because the human ear is not sensitive to bass and treble at low sound levels. To compensate this you can use the parametric loudness function of the CS 2.2. This function will increase bass and treble levels when you decrease the volume. When the volume is increased the frequency response will be more and more flat and remain linear at high volume levels. In order to obtain best results you have to proceed in the following way:

Set the amplifier to a moderate volume level. Using the buttons ◀ **VALUE** ▶ (7, 8) choose in the loudness menu a curve ("of" and 1 to 9) which gives best sound impression and exit the menu (button **EXIT** (6)).

NOTE: The loudness function selects automatically the correct curve depending on actual volume setting. So if you change volume a different curve than previously selected may be shown in the loudness menu. This is not a malfunction.

3.10 set balance

Set the balance between right and left channel for optimal stereo image.

3.11 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.

3.12 bass & treble control

Choose if you want to change bass and treble settings simultaneously for all inputs ("global") or especially for the actual input ("individual").

3.13 skip unused inputs

Deactivate unused inputs ("SKIP"). The unit will then skip these inputs when the source selector (12) is pressed or if you select the inputs via the RC 9 remote control.

3.14 define input names

You can individually set the names (max. 8 characters) of the different sources shown in the display (3). 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** ▶ (4, 5) select the input, the keys ◀ **POS** ▶ (7, 8) select the position of the character to change. The marked character can be set using the volume knob (14). When you are ready, simply press BACK (6). and the new names will be stored.

3.15 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 the CS 2.2 offers the fixed gain function (only for inputs 1-3).

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.

3.16 FM auto store

This function is useful when storing a large quantity of stations from cable. Please note that the stations are stored including the actual tuner setting (see 3.1-3.5). For cable we recommend: RDS-display = name, scanmode = auto, 2-ch mode = stereo, bandwidth = narrow, sensitivity = local.

Once the tuner parameters are set in the desired way enter the personal setup and select "FM auto store". Then press the button START (4). While the auto store function is in progress all stations are played audibly for half a second. When the function is terminated the display shows for 2 seconds the number of stations found. Then the unit comes back to normal tuner operating mode.

If desired you can now shift certain stations to different positions, change the settings and store back or delete unwanted stations (see 2.4.2).

3.17 Set autoplay

When AUTOPLAY is ON, the CD player will start playing automatically every time a new CD is inserted. If AUTOPLAY is OFF, the player will read the TOC of the inserted disc and then go to STOP mode.

3.18 Reset

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

To perform the reset switch the unit to standby (power button (1)). Then press and hold the middle key (6) under the display (3). While holding that key switch the unit on (power button (1)). The display now will show the reset menu.

Select if you want to clear the station memory ("STAT"), the input names ("NAME") or reset the unit completely ("ALL").

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

3.19 personal setup

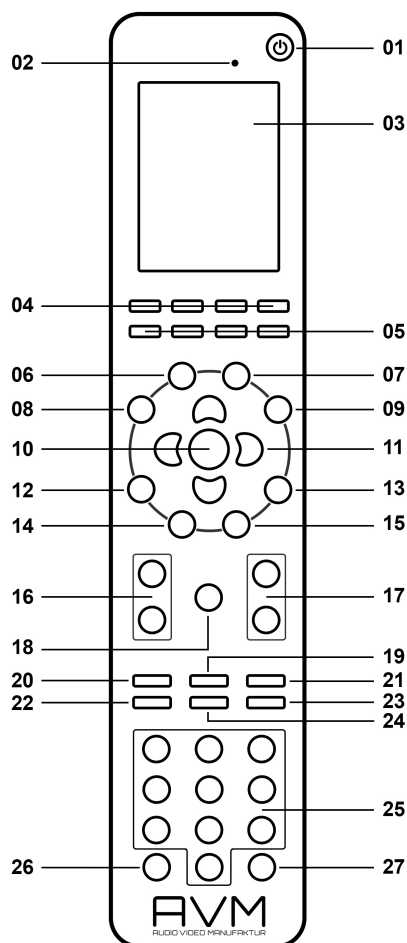
Several settings can be done in the personal setup.

To access the personal setup switch the unit to standby (power button (1)). Then press and hold the most right key under the display (8). While holding that key switch the unit on (power button (2)). The display now will show "***personal setup***". Release the button (8) and the unit is in personal setup mode.

When the personal setup is active you can select the desired function using the buttons ◀ **ITEM** ▶ (4, 5). The button SELECT (8) activates the function. The setting is done using the buttons ◀ **VALUE** ▶ (7, 8). BACK (6) leads you back to other settings. EXIT (6) exits the personal setup and stores the settings.

4 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 right navigation key (11) is used to insert a blank character. The blue option key (5) is used to toggle between upper and lower case characters. For special characters please press the "1" key of the Alphanumeric input keys (25) repeatedly.

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 information on the current connection status. The lower part of the footer section is divided into four parts which can be assigned with so-called 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. With 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. If you happen to use the RC S App to control your AVM components as well, the respective name of the device may be changed again.

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 CS 2.2 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 CS 2.2 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 CS 2.2 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 CS 2.2) 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 CS 2.2 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 CS 2.2 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 CS 2.2 (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 CS 2.2 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 CS 2.2 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 CS 2.2 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 CS 2.2 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 CS 2.2. 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 CS 2.2 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 Streaming DAC 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 Streaming DAC 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 Streaming DAC 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 Streaming DAC at vTuner

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

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

6 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. RC9 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 CS 2.2. 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.

7 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

8 Technical Data

8.1 Amplifier

Sensitivity (25 W/4 Ohm)	12.5 mV to 125 mV (adjustable)
Sensitivity PHONO (25 W/4 Ohm)	40 µV to 400 µV (adjustable)
Input impedance	6.8 kOhms
Input impedance PHONO	47 kOhms / 100 pF
S/N	96 dB(A)
S/N PHONO	83 dB(A)
THD (25 W/4 Ohm)	< 0,1 %
Frequency response (4 Ohm)	< 5 Hz - > 50 kHz
Damping factor (8 Ohm)	>100
Output power	> 2 x 110 Watt (8 Ω) / 2 x 165 Watt (4 Ω)

8.2 Tuner

Frequency range	87,5 MHz – 108,0 MHz
Tuning step	50 kHz
Sensitivity mono / stereo	50 Ω
Empfindlichkeit mono / stereo	1,5 μ V / 50 μ V
S/N ratio mono / stereo	73 dB(A) / 68 dB(A)
THD+N mono / stereo	0,1% / 0,3%
Frequency response	30 Hz – 16 kHz
Channel separation	55 dB

8.3 CD-Player / D/A Converter

Formats	CD Audio, CDR (according to red book standard)
Upsampling	192 kHz / 24 Bit
Frequency response CD	<20 Hz – 20 kHz
Frequency response USB	<20 Hz – 24 kHz
Frequency response SPDIF	<20 Hz – 90 kHz
Deemphasis	automatically
Input Dig in opt	SPDIF, linear PCM 33 kHz – 96 kHz / 16 Bit – 24 Bit
Input Dig in coax	SPDIF, linear PCM 33 kHz – 192 kHz / 16 Bit – 24 Bit
USB Input	up to 48 kHz / 16 bits
Dig out opt/coax (S/PDIF/TOSLINK)	SPDIF 44,1 kHz / 16 Bit (CD-Player) SPDIF, or input format (Dig in opt / coax/USB)
Input impedance dig in coax	75 Ω
Input level dig in coax	according to IEC 908
Output impedance dig out coax	75 Ω
Output level dig out coax	according to IEC 908

8.4 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)

8.5 Other

Supply voltage	230 Volt / 50 Hz / 450 VA (stand-by <1 VA)
Dimensions (W x H x D)	340 mm x 80 mm x 350 mm
Weight	10 kg

Changes reserved without notice.