



AV-RECEIVER

AVR-280



Instruction manual

TABLE OF CONTENTS

Table of contents 01

IMPORTANT INSTRUCTIONS

Important safety instructions 02

EQUIPMENT AND ACCESSORIES

Accessories 03

REMOTE CONTROL

Installation of batteries 04

Using the remote control 04

Remote control functions 05

FRONT PANEL AND CONNECTIONS

Front panel 06

Connections 06

SYSTEM SETUP

Outline of audio-video connections 07

Connection through SCART cable 07

Connection through analogue audio/video cable 08

Connection through digital audio/video cable 09

Connection of loudspeakers 09

Loudspeaker arrangement 10

Installation of AM antenna 11

Connection of AM antenna 11

Installation and connection of FM indoor-

antenna 12

FM cable connection 12

Connection to the mains supply 13

OPERATION AND FUNCTIONS

ON and OFF, STANDBY 14

Selection of input source 14

Loudspeaker setup 15

DSP, Mode, Mute and Bass Boost 15

Selection of input signal 16

Use of radio (tuner) 16

Manual and automatic tuning 17

Storing of radio stations 17

Selection of station and RDS 17

Selection of digital optical/coaxial inputs 18

Selection of analogue AUX 1 / AUX 2 inputs 18

TV selection 18

TECHNICAL DATA

Technical data 19

Batteries 19

TROUBLESHOOTING

Troubleshooting 20

Congratulations on your new AV receiver. Please read this manual carefully to avoid malfunction and damage to the receiver and to ensure that the receiver will be a source of great pleasure to you for a very long time.

Important safety instructions

1. Do not expose the receiver to direct sunlight, high humidity, dirt, heavy vibration or extreme temperatures.
2. Place the unit on a solid and plane surface.
3. Make sure that there is sufficient ventilation around the receiver. Do not place the unit on a soft surface such as a carpet. Make sure that there is a clearance of 20 cm behind the unit.
4. Do not open the cabinet. Only qualified technicians are allowed clean the internal parts.
5. Make sure that liquid and foreign matter cannot penetrate the unit.
6. If service or repair is required, this must be carried out by qualified technicians.
7. Unplug the unit in the following cases:
 - A. The mains plug or the mains cable is defective.
 - B. Foreign matter or liquid has penetrated the receiver.
 - C. The unit cannot be operated properly.
 - D. The unit has fallen down or the cabinet has been damaged.
8. Store this instruction manual carefully for future reference.
9. Use a duster or a slightly damp, soft and non-fluffy rag to clean the receiver.
10. Do not use corrosive or strong cleaning agents. Make sure that no moisture penetrates the receiver during cleaning. Unplug the unit before cleaning.
11. The fuse of the unit is accessible to the user but shall only be replaced by qualified technicians if required.
12. Check that the mains voltage indicated on the back of the receiver corresponds to the mains voltage that the unit is connected to.
13. Read the instructions under "Troubleshooting" before handing in the receiver for repair.
14. Unplug the unit if the receiver is not to be used for a long time.



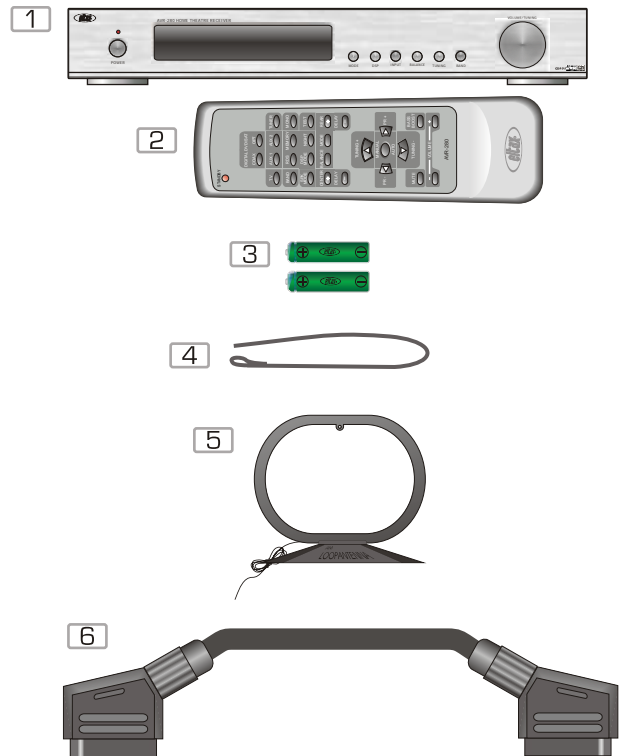
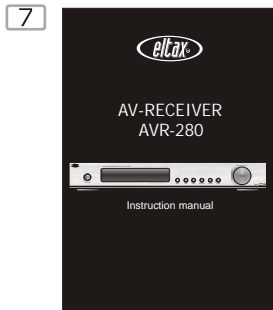
Disclaimer

Despite extensive efforts we cannot guarantee that the technical data indicated are correct, complete and updated. We reserve the right to make technical changes without notice.

Please read these safety instructions carefully before you start using the receiver!

Tilbehør

- 1 1 x AVR-280 Receiver
- 2 1 x AVR-280 Remote control
- 3 2 x Batteries
- 4 1 x FM-Antenna
- 5 1 x AM-Loop antenna
- 6 1 x Scart-Cable
- 7 1 x Instructions manual



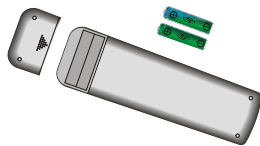
This instruction manual describes everything you need to know about your Eltax Surround Sound amplifier. Please read this manual carefully before you start using the receiver!

Installation of batteries

1 Remove the cover as illustrated.



2 Insert two batteries of the type AAA/R03/UM4. Make sure that the terminals correspond to the symbols shown (see bottom).



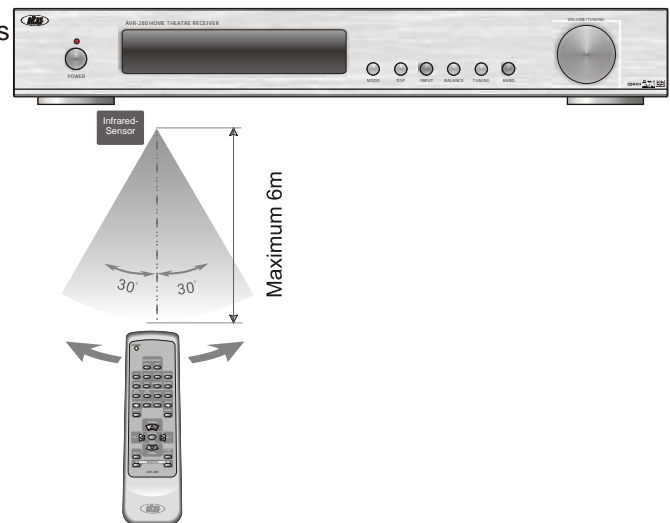
3 Replace the cover.



- Do not mix new and old batteries, and do not use different types of batteries.
- If the remote control is not used for prolonged periods, remove the batteries from the remote control to prevent corrosion.

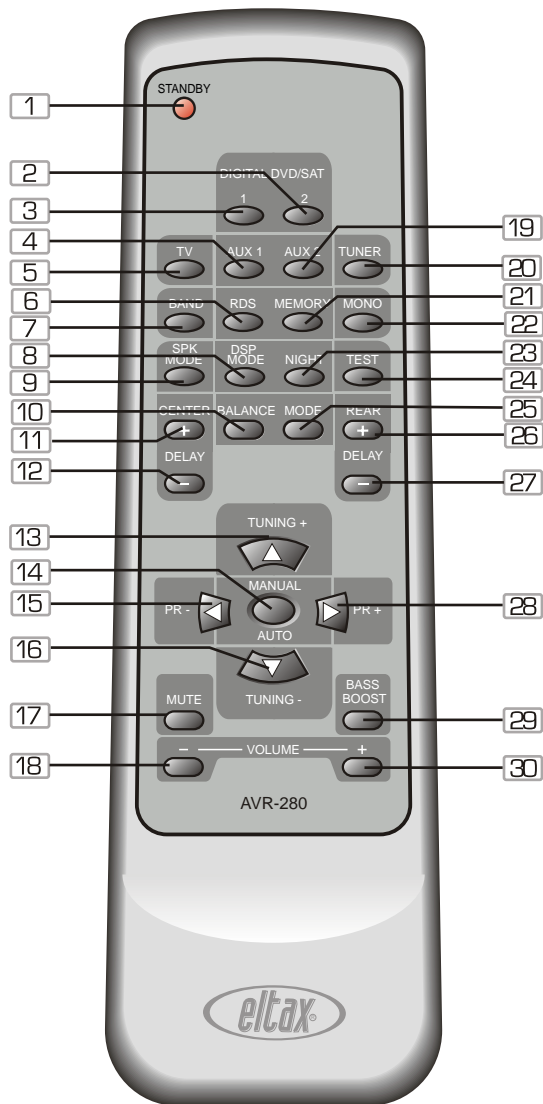
Using the remote control

Aim the remote control at the sensor on the receiver's front panel. When the remote control signal is received, the receiver will respond accordingly. The remote control works within a range of about 6m.



- Do not expose the unit to strong sources of light. This may disable the use of the remote control.
- Do not use other remote controls near the unit. This may cause a malfunction.
- Do not place any objects on the remote control as the batteries may be discharged if a key is depressed continuously.
- Do not place large objects between the remote control and the receiver.
- Do not place the receiver behind tinted glass. This will reduce the range of the remote control.

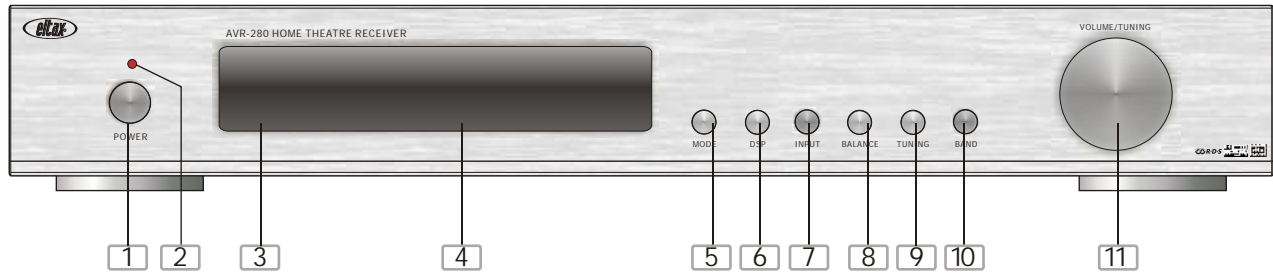
Remote control functions



- 1 Standby
- 2 Digital Optical Input
- 3 Digital Coaxial Input
- 4 AUX 1
- 5 TV
- 6 RDS
- 7 Band (FM/AM)
- 8 DSP mode
- 9 SPK mode (Speaker mode)
- 10 Balance
- 11 Center delay +
- 12 Center delay -
- 13 Tuning up
- 14 Tuning mode
- 15 Preset -
- 16 Tuning down
- 17 Mute
- 18 Volume decrease
- 19 AUX 2
- 20 Tuner
- 21 Memory
- 22 Mono/Stereo (FM)
- 23 Night (Dynamic Compression)
- 24 Test
- 25 Mode [Stereo/PL II Musik/ PL II Movie, DTS/ Dolby Digital]
- 26 Surround delay +
- 27 Surround delay -
- 28 Preset +
- 29 Bass Boost
- 30 Volume increase

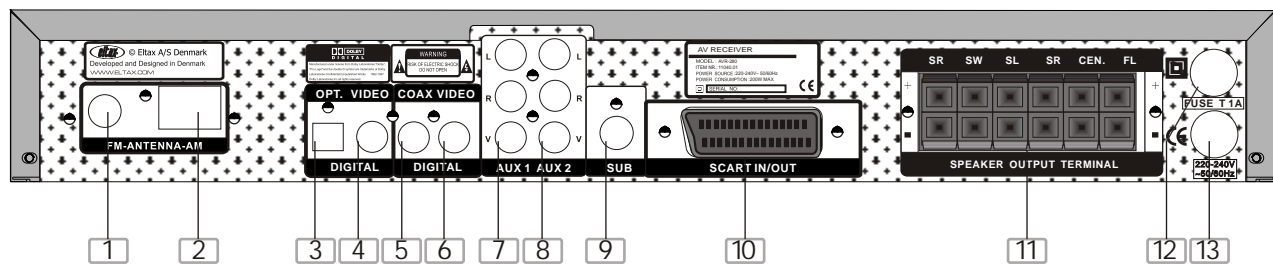
Some of the AV receiver's functions can only be performed by means of the remote control. Some functions are connected with the signal input source selected. Some keys on the remote control thus may not be available if the corresponding signal input source has not been selected.

Front panel



- | | |
|--|-------------|
| 1 POWER On/Off | 8 Balance |
| 2 Standby LED | 9 Tuning |
| 3 Remotecontrol sensor | 10 Band |
| 4 Display | 11 Multijog |
| 5 Mode (Dolby Digital, DTS, PL II
Movie, PL II Music, Stereo) | |
| 6 DSP Program | |
| 7 Input | |

Connections

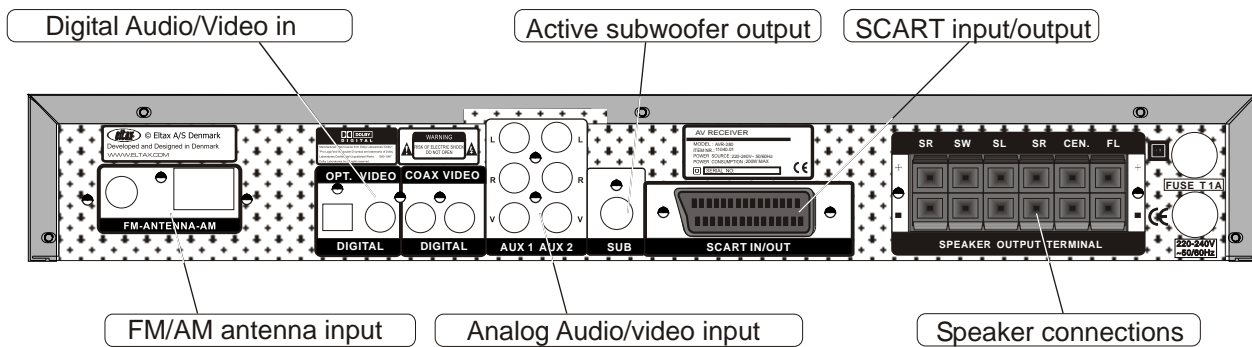


- | | |
|--|---------------------------|
| 1 FM Antenna input | 8 AUX 2 analog input |
| 2 AM Antenna input | 9 Active subwoofer output |
| 3 Optical input | 10 SCART input/output |
| 4 Composite video input (for optical in) | 11 6 x speaker output |
| 5 Coaxial input | 12 Fuse |
| 6 Composite video input (for coaxial in) | 13 Main power |
| 7 AUX 1 analog input | |

The receiver shall not be connected to the mains supply before all other system connections have been made.

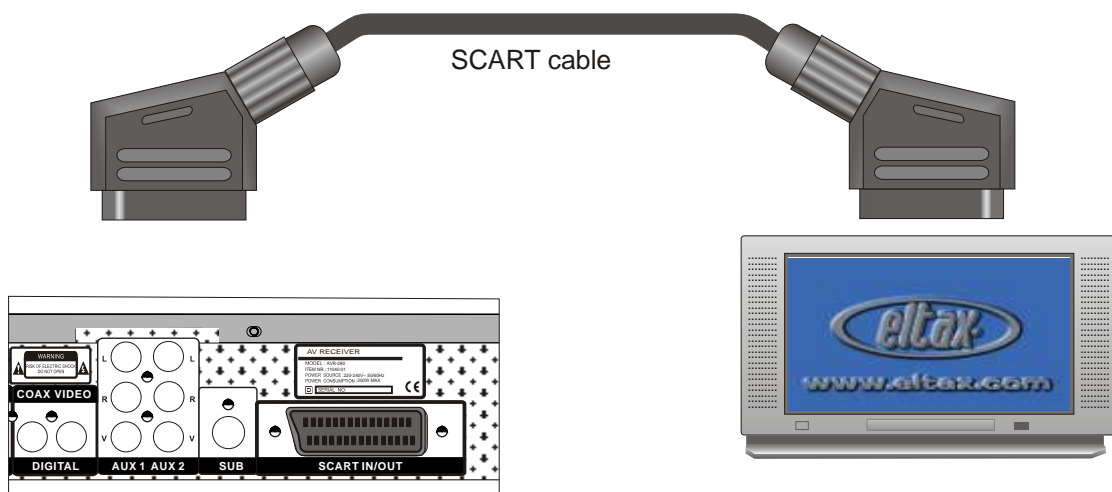
Outline of audio/video connections

The receiver is provided with two analogue and two digital audio/video inputs. A video or digital camera may e.g. be connected through the analogue audio/video inputs. The DVD player is connected through the digital inputs (optical or coaxial). The video signal is transmitted to the television set through the SCART connection. It is also possible to transmit the audio signal from the television set to the receiver through the SCART connection. This will allow you to watch films with Dolby Surround sound if the films are coded.



Connection through SCART cable

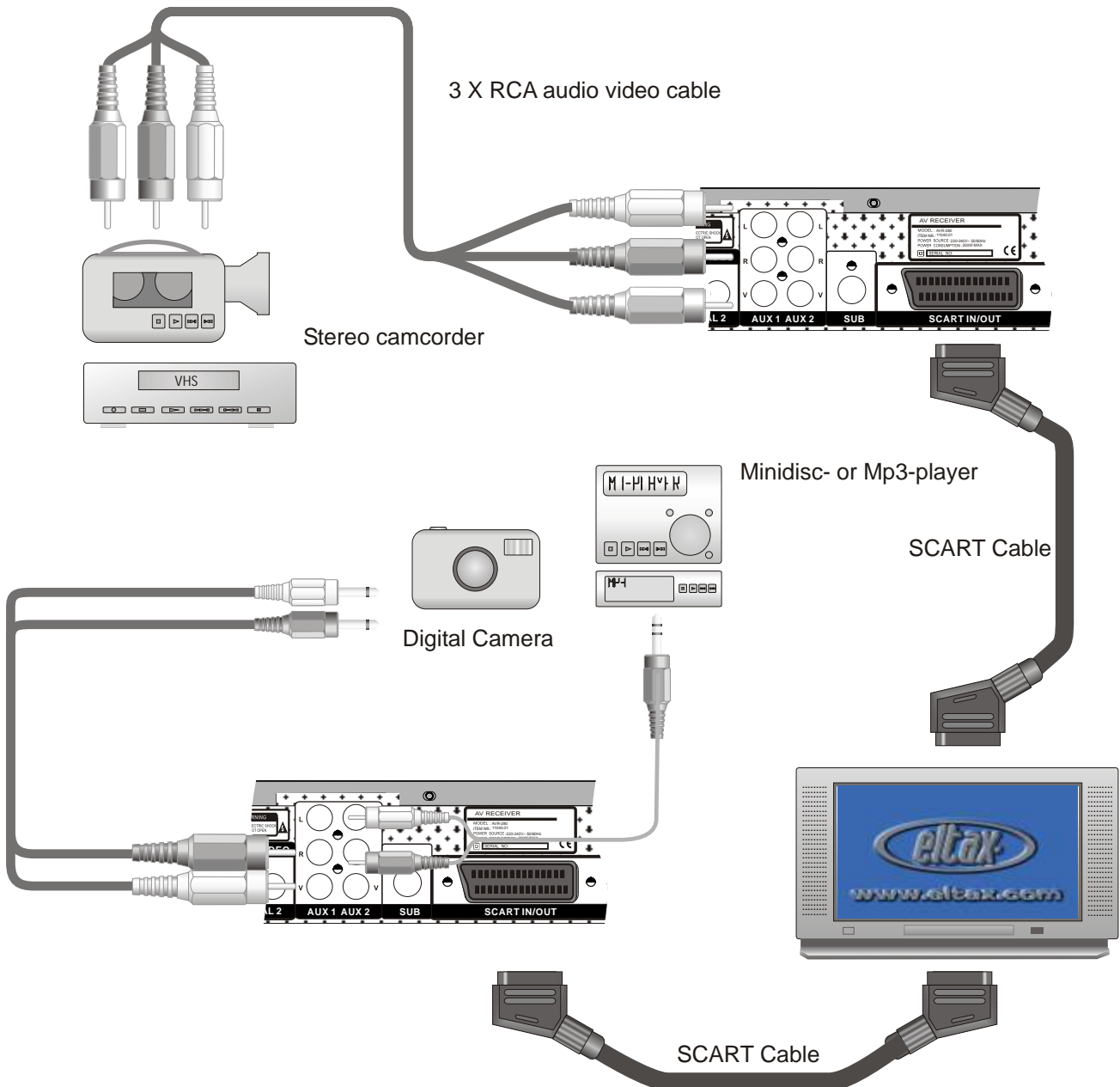
The Composite video (CVBS) and audio signals (stereo) are available at the television set's SCART output. This means that you can use the SCART cable to quickly set up an operational system that can reproduce the television set's audio signals through the receiver.



- Some television sets are provided with two SCART connections! Make sure that you pick the SCART connection marked IN/OUT! If in doubt, please read the manual provided with your television set.
- Make sure that you use a fully mounted SCART cable to ensure that the receiver is fully utilised.

Connection through analogue audio/video cable

The audio/video jacks of the video camera are connected to the ELTAX AV receiver through an audio/video cable. As you wish to see the film through your television set, the camera must also be connected to the television set. Use the SCART cable for this purpose (see illustration). For simplicity, the individual conductors have been marked by different colours.

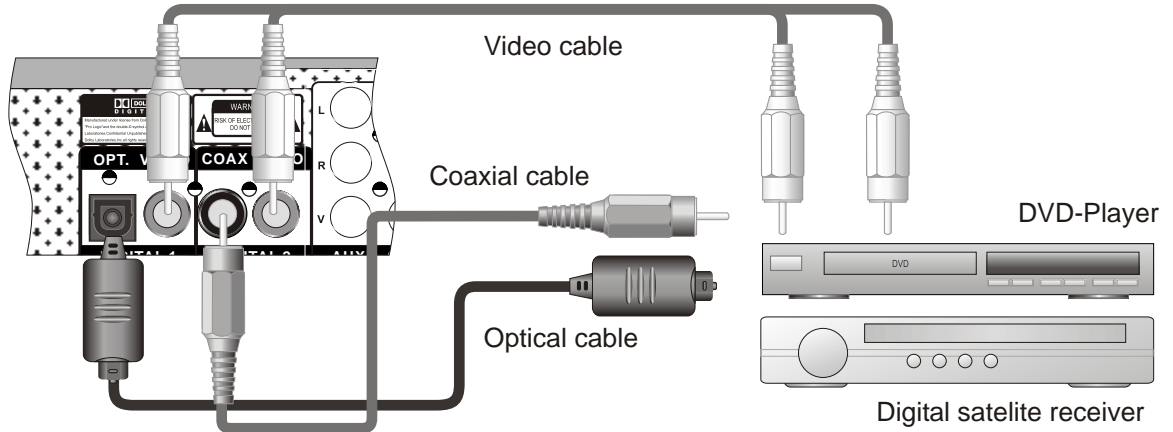


The audio/video jacks of the digital camera are connected to the ELTAX AV receiver through an audio/video cable. As you wish to see the film through your television set, the camera must also be connected to the television set. Use the SCART cable for this purpose (see illustration). For simplicity, the individual conductors have been marked by different colours.

- The audio/video cables used in the illustration may deviate a little from camera to camera! If in doubt, please read the manual provided with your video camera/digital camera.

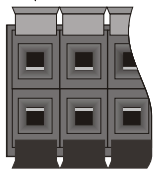
Connection through digital audio/video cable

The DVD player's coaxial or optical digital output must be connected with the corresponding digital input on the AV receiver (OPT/COAX). Make sure always to use the corresponding video input! Switch to the corresponding signal source by means of the INPUT key.

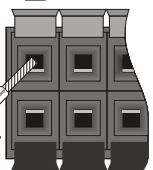


- Most DVD players with digital outputs are factory-set at the PCM data format. Make sure that the DVD player has the same configuration under Setup.
- The video signal may also be transmitted directly from the DVD player to the television set.

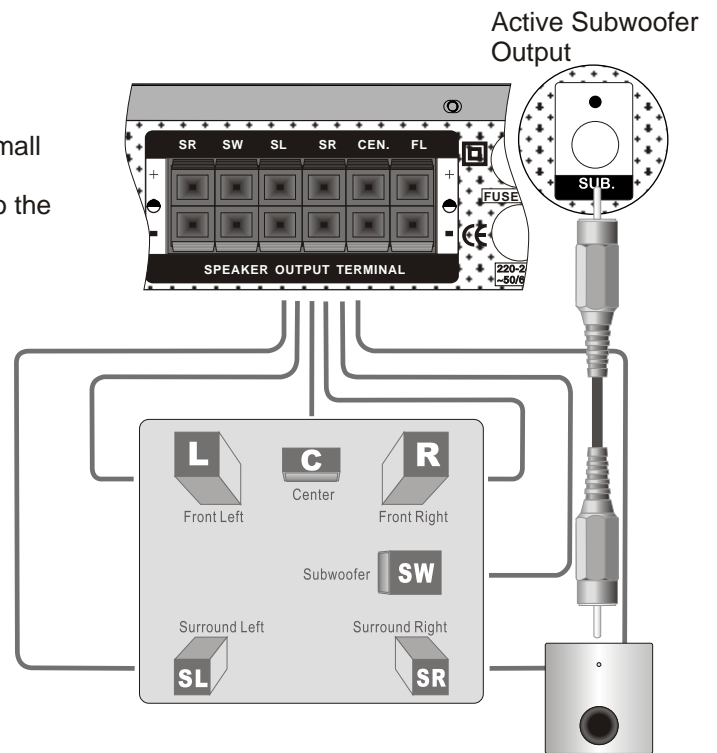
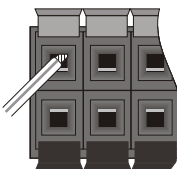
Connection of loudspeakers



Remove about 15 mm of the cable insulation. Twist the strands carefully. Open the terminals by pressing the small button. Insert the bare twisted cable ends into the openings. Release the button again.



Follow the same procedure to connect the individual speaker outputs with the corresponding loudspeakers. Make sure that the polarity is correct. The red terminal of the receiver should always be connected to the marked conductor of the connecting cable and the black terminal to the non-marked conductor.



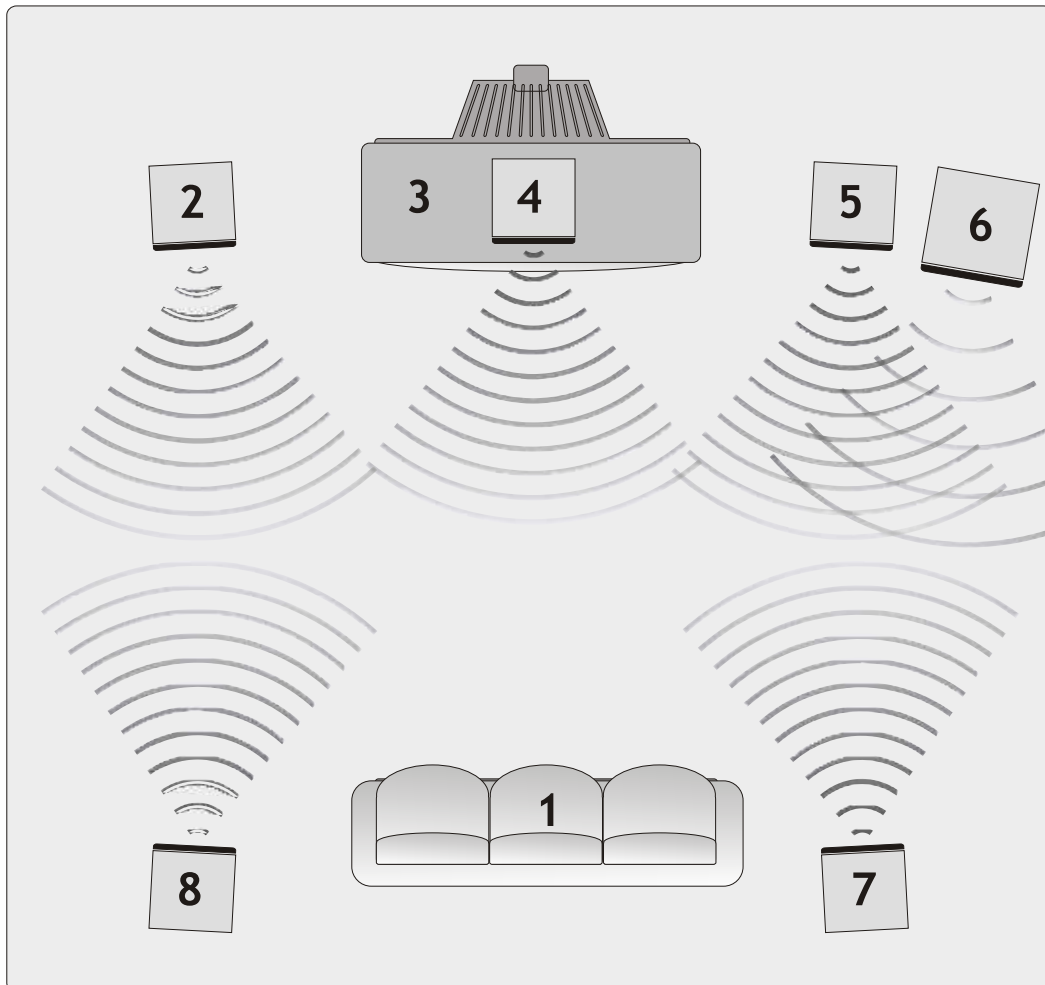
An active subwoofer can be connected through Subwoofer (SUB)!

- To avoid damage to electronic equipment, it must be checked that the two poles of the speaker cable are not in contact with each other.



Loudspeaker arrangement

Before connecting the loudspeakers, these should be positioned correctly. Correct positioning is crucial to ensure optimal sound. The optimal location depends on the characteristics of the room and the walls. The illustration below shows an example of a speaker arrangement.



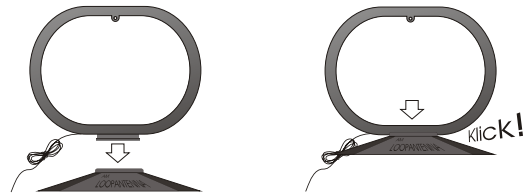
- | | |
|------------------------|---------------------------|
| 1. Listening position | 5. Left front speaker |
| 2. Right front speaker | 6. Subwoofer |
| 3. TV | 7. Right surround speaker |
| 4. Centre speaker | 8. Left surround speaker |

The front and centre speakers should be placed in ear height. The rear speakers should be placed a little above ear height. The subwoofer can be placed anywhere in the room. If the subwoofer is placed in a corner of the room, its performance will improve. The subwoofer should not be placed too close to the television set to avoid magnetic disturbance.

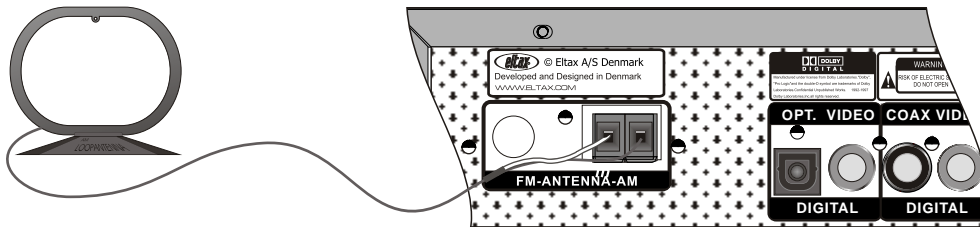
Installation of AM antenna

Install the AM antenna by mounting it on the fixing device (see illustration).

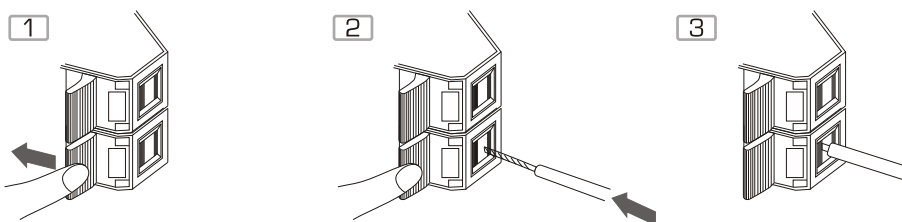
Place the antenna in the position where the best signal is received, as far away from the system, the television set and the cables as possible. If the signal quality is not satisfactory, an outdoor antenna may be required.



Connection of AM antenna

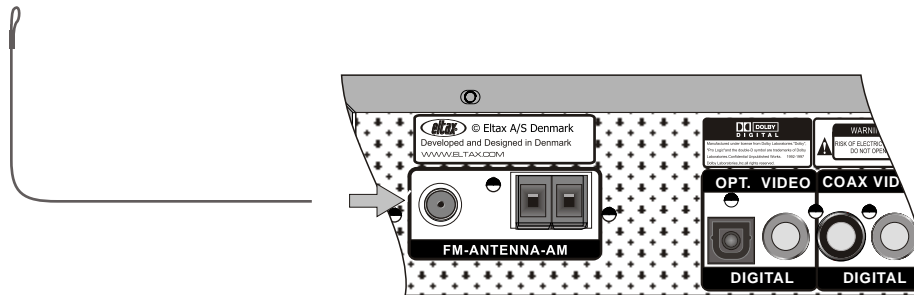


Connect the two loop antenna wires to the inputs marked AM (see illustration). Press the corresponding button (1), insert the bare cable end into the opening (2) and release the button again.



Installation and connection of FM antenna

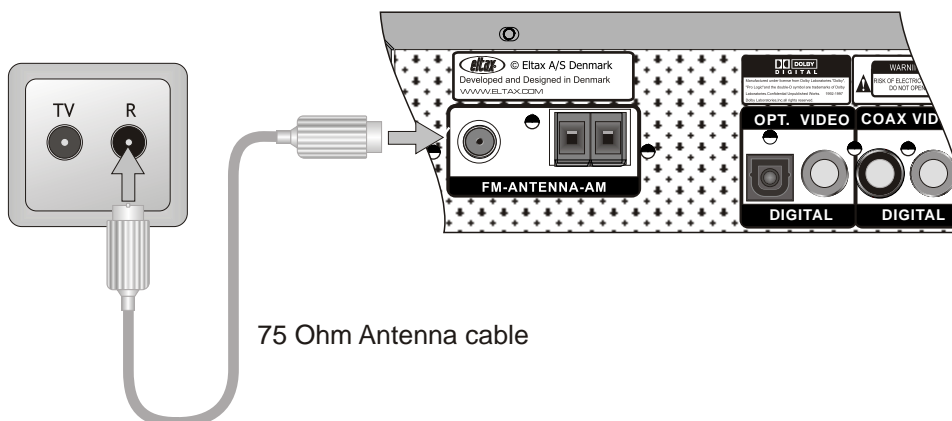
Connect the FM indoor antenna to the antenna connection marked FM 75. For this purpose, place the cable shoe on the pin in the middle of the connecting bush.



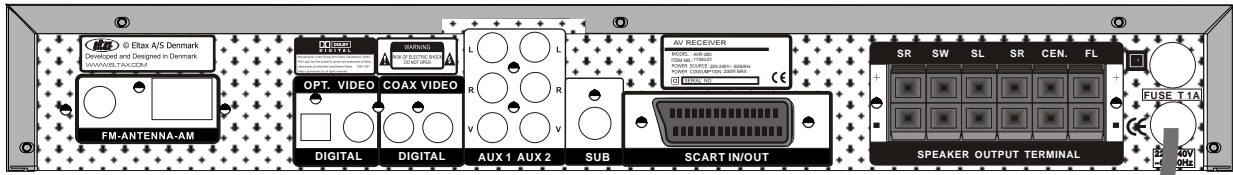
- Tune in to a station and place the antenna in the position where the best and clearest signal is received. If the signal quality is not satisfactory, an outdoor antenna may be required.

FM cable connection

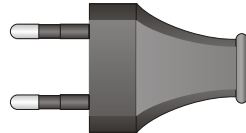
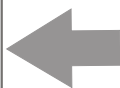
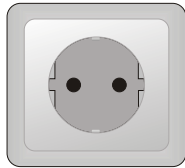
If you have cable television, the cable network radio connection may also be connected to this bushing. Use a 75 Ohm antenna cable for this purpose.



Connection to the mains supply



220-240V ~50/60Hz



Do not connect the receiver to the mains supply before all system connections have been made correctly.
 Check that all connections have been made correctly before connecting the receiver to the mains supply.
 Check that the mains voltage is 220-240V~50/60Hz before connecting the receiver to the mains supply.

Connection to the mains supply

Before inserting the power plug into the socket it should be checked that all other system connections are correct and safe.

Insert the power plug into a suitable socket.

If the receiver is to be used abroad, you may need an adapter.

On and Off, standby

- 1 Switch on the receiver through the mains switch.
- 2 Press the STANDBY key of the remote control to switch to standby mode. The display is switched off and all functions are reduced to a minimum. Thus the power consumption of the receiver is reduced to a minimum. In standby mode the receiver only responds to the STANDBY key of the remote control.
- 3 To completely switch off the receiver and prevent any power consumption, the receiver must be switched off through the mains switch.



Consider the environment and switch off the unit after use.



Selection of input source

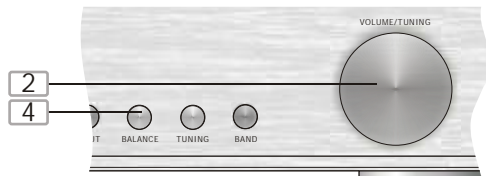
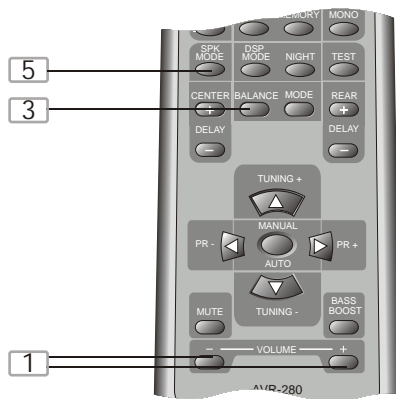
Switch on the AV receiver and the television set, if desired.
Select the corresponding audio/video input on the television set.
Now you can call the currently active input source. Select tuner to listen to the radio, AUX 1 or AUX 2 if an analogue device has been connected, or Optical or Coaxial in connection with a digital signal from a DVD player or a digital satellite receiver.
Select TV if you wish to hear a television broadcast through the receiver.



Some television sets require a special setting on the television set to ensure correct use of the SCART channel.

If in doubt, please read the manual provided with your television set.

Loudspeaker setup

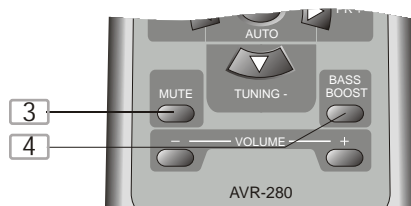
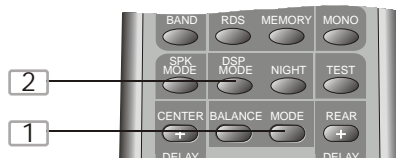


- 1 Press the VOL+ key to increase the volume, press the VOL- key to decrease the volume.
- 2 Turn Multijog to the right to increase the volume and to the left to decrease the volume
- 3 Press the BALANCE key repeatedly and then the VOL+/- keys to adjust the volume for all channels. This way you control the balance of the front speakers and the volume of the centre speaker, subwoofer and rear speakers.
- 4 Press the BALANCE key on the front panel repeatedly and then turn Multijog (2) to adjust the volume for all channels. This way you control the balance of the front speakers and the volume of centre speaker, subwoofer and rear speakers.
- 5 Press the SPK MODE key until "SPK CON I"* or "SPK CON II"* is displayed. This menu will also appear if you press the BALANCE key repeatedly. Select the settings by means of Multijog (2).

* SPK CON I: This option should be selected if the system speakers are powerful enough to reproduce the entire frequency range.

* SPK CON II: This option should be selected if the corresponding speakers are not powerful enough to reproduce the lower frequencies of the audio signal. If so, channel frequencies below 180 Hz are led to the subwoofer.

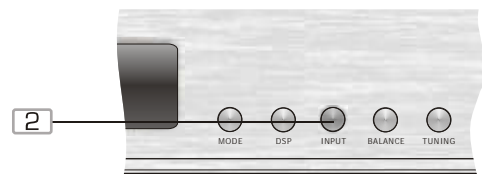
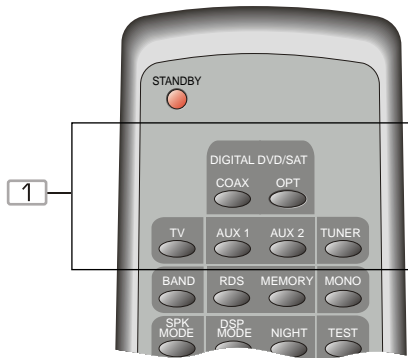
DSP, Mode, Mute and Bass Boost



- 1 Press the MODE key on the remote control or on the receiver to switch between stereo, ProLogic II-Movie and ProLogic II-Music. DTS and Dolby Digital can also be selected in connection with the digital inputs.
- 2 Press the DSP MODE key to switch between various preset equaliser modes. The DSP MODE key is also available on the receiver.
- 3 Press the MUTE key to make all speakers silent. This is an advantage for instance if the telephone rings.
- 4 Use the BASS BOOST key to switch the bass boost on or off.

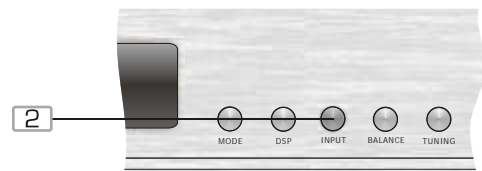
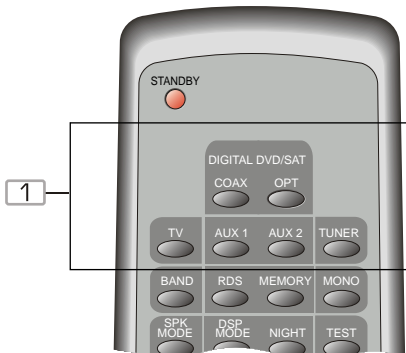
Selection of input signal

- 1 Press the DIGITAL OPT/DIGITAL COAX/TUNER/AUX1/AUX2/TV key to select the corresponding input.
- 2 Press the INPUT key on the front panel repeatedly to switch between the following inputs: DIGITAL OPT/DIGITAL COAX/TUNER/AUX1/AUX2/TV.

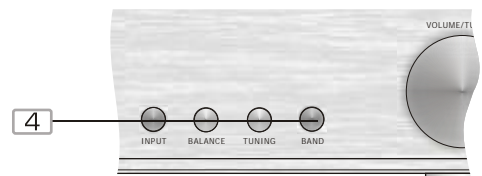
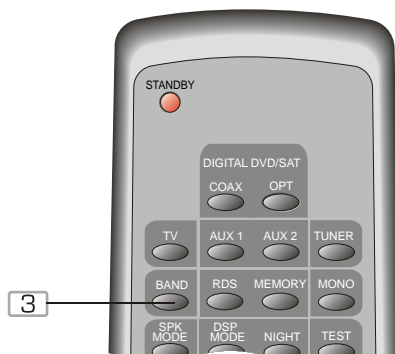


Use of radio (tuner)

- 1 + 2 1 + 2. Press the TUNER key on the remote control or the INPUT key on the receiver to select tuner.

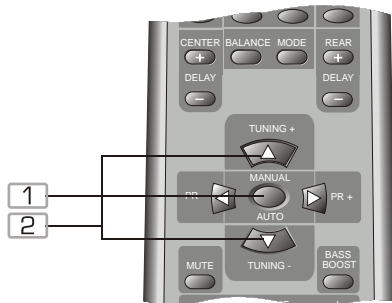


- 3 + 4 3 + 4. Press the BAND key on the remote control or on the receiver to select AM or FM band.



If you have cable television, you should use the cable network radio connection for optimal radio reception. Use a 75 Ohm antenna cable for this purpose (see page 12).

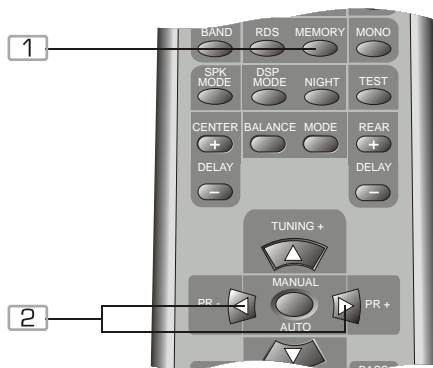
Manual and automatic tuning



- 1 Press the TUNING key to switch between "TUN STEP" (manual) and "TUN SCAN" (automatic).
- 2 Press either the TUNING UP key or the TUNING DOWN key to start searching.

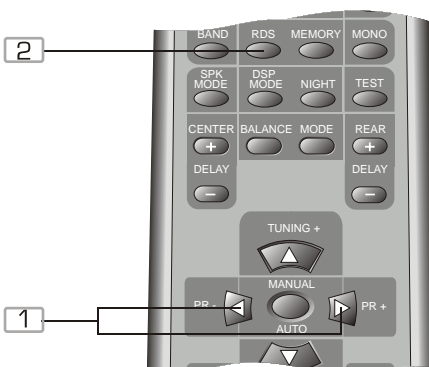
The search function may also be activated directly from the front panel. Press the TUNING key and start searching by means of the Multijog.

Storing of radio stations



- 1 + 2 To store a radio station, press the MEMORY key and then the PR +/- keys to select a place to store the station and then press the MEMORY key again to store the station.

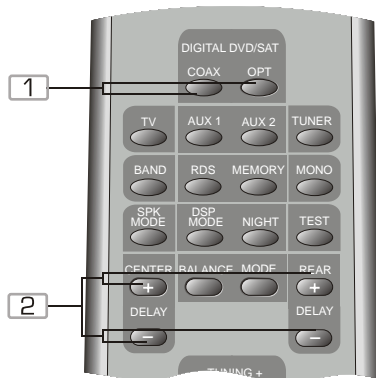
Selection of station and RDS



- 1 Press the PR +/- keys to select a stored station.
- 2 Press the RDS key to activate the RDS function. Press the RDS key repeatedly to switch between "SCAN PS", "SCAN PTY" and "SCAN TP".

- RDS SCAN PS: the name of the programme (name of station)
- RDS SCAN PTY: programme type registration (genre)
- RDS SCAN TP: traffic radio registration (travel news)

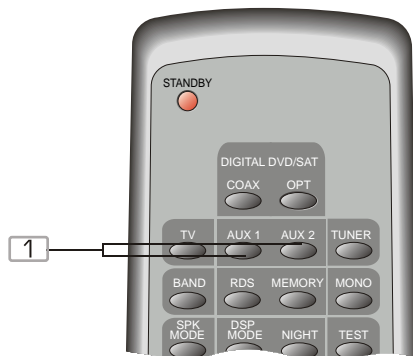
Selection of digital optical / coaxial inputs



- 1 Press the DIGITAL OPT/DIGITAL COAX keys to activate the digital inputs. Check that the Setup (digital output) of the peripheral devices are set at RAW and bitstream respectively.
- 2 Depending on the size of the room, the speakers may be configured through CENTRE DELAY and SURROUND DELAY.
- 3 Selection is also possible through the front panel by pressing the INPUT key repeatedly.

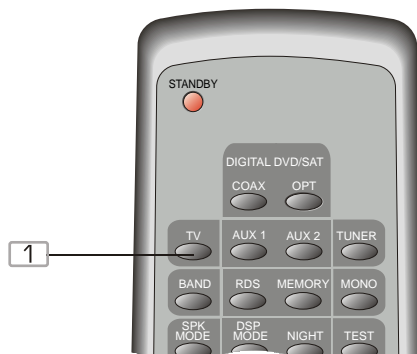
- Digital 1: Optical digital input
 - Digital 2: Coaxial digital input
 - Centre delay: The centre channel is delayed if the front speakers are placed very far apart!
 - Surround delay: Depending on the listening position the surround channels should be reduced or increased. The distance from the listening position to all the individual speakers should be the same.
- Night:** Press this key for dynamic compression of the DTS or Dolby Digital sound. This can be used to reduce strong dynamic peaks. The difference between the murmur of a river and a bomb explosion is reduced.

Selection of analogue AUX 1 / AUX 2 inputs



- 1 Press the AUX 1/ AUX 2 keys to activate the analogue inputs.
- 2 Selection is also possible through the front panel by pressing the INPUT key repeatedly.

TV selection



- 1 Press the TV key to activate the analogue SCART input/output.
- 2 Selection is also possible through the front panel by pressing the INPUT key repeatedly.

Technical data

Frequency respons	20-20.000Hz
S/N	>105dB
THD	<0.1%
Digital inputs	Optical and coaxial
Analog input	RCA
Video input	RCA
Power	220-240V~50/60Hz
Power consumption	200W
Music power	5 x 50W + 1 x 75W
Measures	430 x 58 x 330mm
Weight	ca. 6kg.

We reserve the right to change the technical data and design without notice as a result of further development.

Troubleshooting

PROBLEM	CAUSE/REMEDY
Nothing happens, all displays are dark.	The mains plug has not been inserted (don't laugh - check it out!) There is no mains voltage. Check that the socket used carries current (e.g. by means of a lamp). The receiver is not switched on.
Only the POWER LED is alight.	The receiver is in standby mode. Press the STANDBY key on the remote control.
The system does not respond to the remote control.	Check that no objects block the way between remote control and receiver. Replace the remote control batteries.
Systemet leverer ingen lyd.	The cable connections of the speaker terminals are loose or have no contact. Press the TEST key on the remote control.
No sound on the digital input.	Check the setup settings. Set the DVD player in the Setup menu. Set Audio out to the data format RAW or bitstream. Check the digital input connected and select it.
The receiver does not receive the radio station properly.	Check that the indoor antenna is correctly positioned and, if the house connection is used, check that the signal is correct. Check the cable for fracture.
No reproduction of TV signals or incorrect reproduction.	Check the SCART connection, that the SCART cable is fully mounted and that SCART IN/OUT has been selected on the television set.
No reproduction of analogue signals through AUX or incorrect reproduction.	Check that that the RCA plugs are correctly inserted into the inputs, that AUX 1 / AUX 2 have been properly selected, and that the speaker volume is not set at 0 for reproduction of portable devices (CD/MP3/MiniDisc players)

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