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Welcome

The S119 and S120 network receivers from Revox combine the latest streaming technology with an audiophile stereo output from the high-end range.

When you see the compact construction, it is easy to forget that there are full-blown toroidal transformers and heavy duty power supplies at work in the network receivers, so that if required, up to 240 watts (S120) are available at the speaker terminals. Combined with the DSP professional speakers and space correction, you, in the company of your Revox speakers, will reach a musical zenith, which need fear no comparison with its peers.

For the benefit of audiophile music lovers, Revox deliberately avoided the use of fans. So that nonetheless, the S119/S120 can keep a cool head, even when the temperatures outside top the 40°C mark, a heat coupler has been used. This aluminium heat pipe dissipates the heat away from the network processor over a gold-plated coating on a large area of copper. The heat can then escape from the inside of the housing through the convection openings. In this way, we achieve a processor temperature that is lower by up to 30°C, which impacts positively on the processor stability and ensures a long working life.

In order to keep the operation on a par with the sophisticated technology, a lot of time and effort was invested in the detail of the optional remote control. You will feel it and see it.

This product innovation from Revox stands out as a true system for life, thanks to its legendary robustness and longevity, which the brand is known for throughout the world.
Setup

Please check the unit and accessories after unpacking, to ensure that everything is there and that there are no signs of transit damage. Read the User manual through carefully before starting to use the unit. Keep the manual for later reference.

A unit that shows signs of mechanical damage or which has had liquid in it should not be connected to the mains supply.

Only use the mains cable supplied. The unit’s power supply and connections values (mains voltage, frequency) must be checked before connecting it to the mains. Fuses used in the device must comply with the factory definitions in the “Technical Data” section.

Scope of delivery

- Network receiver (1x)
- Power cable (1x)
- Network cable (1x)
- Quick Reference Guide
- Network receiver User manual CD *

* Contains the complete S119/S120 German/English User manual in PDF format. A PDF Reader is required.

Safety

Take note of the label on the back of the unit.

In order to avoid the risk of an electric shock, do not open the housing. Maintenance and repairs should only be carried out by qualified experts.
Installation - Safety advice

- Please follow the instructions in the User manual supplied.
- Do not position the unit close to strong heat sources or in direct sunlight.
- Please take note of the following, if the receiver is to be installed in a cabinet or closed shelves. Allow at least 5 cm of free space around the device, so that the air can circulate freely and that there is no build up of heat. Do not cover openings on the back wall or in the base of the unit.
- It must be ensured that the correction functioning of the unit’s ventilation openings is not affected by being covered, e.g. by curtains, newspapers, table cloths, or similar.
- This unit conforms to protection class 2. This means that with this unit, the ground cable is not connected to the housing, in order to effectively eliminate sound-damaging ground-loops. With these network receivers however, Revox uses the ground cable for the reduction of noise fields. For this reason, both the supplied cable and the connection panel are fitted with a ground cable.
- The power plug should be removed from the socket during longer periods of non-use, for instance during an absence.
- Unplug the unit from the mains during storms. Voltage peaks through the mains power supply caused by lightning strikes can damage the unit.
- There must be easy access to the power plug so that the unit can be unplugged at all times.
- Lay the power cable such that it cannot be damaged. The power cable should not have kinks or be laid over sharp edges. It should not be walked on or be exposed to any chemicals. The last point is valid for the whole unit. A power cable with damaged insulation can lead to electric shocks and represents a fire hazard.
- Never pull on the cable when plugging the unit in or out. Always hold the plug.
- Liquids, flammable or other objects should not be inserted in the unit’s openings as this can lead to faults, fire or an electrical shock.
- Do not expose the device to splash water or high levels of humidity. Do not stand containers filled with liquid, e.g. flower vases, on the device.
- It is only designed for operation in temperate, non-tropical climates.
- Take note of and follow the safety advice on the following pages.
**Safety measures**

Read and take note of the following safety advice for your own safety and to avoid unnecessary damage to your equipment. Please keep this safety advice in a safe place for future reference.

Avoid locating the unit in a position which:
- is exposed to direct sunlight
- is directly next to a source of heat
- has poor ventilation
- has a dusty atmosphere
- is unstable
- has high humidity

The guarantee covers the intended usage of the unit.

High build-ups of dust and humidity cause creepage current in the unit that can cause a risk of shocks when touching the unit or lead to a fire.
If you have moved the unit from a cold to a warm environment, leave it switched off for about two hours because of a possible build up of condensation dampness.

You should always switch your S119/S120 off before connecting or disconnecting other devices or speakers.

Protect your unit from:
- damp, dripping water and steam
- impacts and mechanical loads
- magnetic and electrical fields
- cold, heat, direct rays of the sun and severe changes of temperature.
- dust
- accesses to the inside of the device

Do not stand any articles with open flames, e.g. lit candles on the unit.

**Please note**
In order to exclude the risk of an electric shock, do not remove the housing. Only have repair work carried out by a Revox specialist dealer.

**Volume**
Loud music can cause hearing damage. Avoid extremes of volume, particularly over longer periods of time.

**Supervision**
Do not allow children to handle the equipment without supervision. Do not allow children in close proximity to the unit. Do not operate the S119/S120 without supervision. Switch the power switch off or unplug the unit if you are going to be absent for a longer period of time.

**Cleaning**
The unit should be cleaned using just a damp, soft and clean cloth without any abrasive cleaning agents.
Regulations pertaining to the unit

In EU and EEC countries, Revox offers a guarantee on units bought in the EU, over and above the statutory rights of guarantee claims against the seller. The guarantee covers material and labour during the period of the guarantee, which is defined by the Revox Sales Partners in the individual countries that make up the EU.

In all countries, the guarantee services offered by the Revox Sales Agents are over and above the statutory regulations. They are only valid in the country of purchase. Proof of purchase from an authorised Revox Partner must be produced to make a claim on the guarantee.

The guarantee is made null and void in the case of incorrect intervention measures or non-professionally executed repairs.

Fuse

The S119/S120 is equipped with a primary fuse located inside the housing. This internal fuse may not be changed by the user.

In this case of a fault, please contact your nearest Revox Service Point.
**S119/ S120 Front panel**

As well as housing the multi-colour status LED, the front panel of the receiver also conceals a radio module (RF) for the bidirectional data traffic with the optional S208 remote control. The unit is controlled through the S208 remote control.

**Advice about the installation location**

As the radio module is located directly behind the glass panel on the front of the unit, the S119/S120 should be installed so that it is aligned in the direction of the remote control. This guarantees the maximum distance for operating use the S208. Walls and ceilings, particularly those made out of brick or concrete (with reinforcement), significantly reduce the distance.

Front view of the S119 network receiver
Display colours: Status LED

**Dark-blue ●**
- **Quickstart function [off]:**
  In this standby mode, all functions, with the exception of the radio module, are deactivated.
  Power consumption: < 0.6 W*

**Light-blue ●**
- **Quickstart function [on]:**
  Unit is in standby mode. If the Quickstart function is activated, the network processor is switched on permanently. This significantly reduces the switch-on phase, as the connection to the network doesn't have to be built up again. All other sub-assemblies, such as the audio signal processing or the outputs, including the main transformer are switched off, as with normal standby mode. Quickstart mode is also a requirement, in order to be able to control the receiver with a network-based Revox App.
  Power consumption: approx. 4.5 W*

The USB input supports the charging of external devices, e.g. an iPhone in standby mode.

* without USB feed

**Green ● (flashing)**
After switching on at the power switch, the status LED flashes green for about 10 seconds. During this time, the S208 remote control can be paired/ synchronised with the receiver, i.e. these two devices can be connected with each other, functionally. You will find the necessary steps for this procedure explained in the *S208 Remote control* chapter.

**Red ● (flashing)**
A non-defined fault has occurred. If necessary, switch the unit off and on using the power switch.

**Red ● (permanent)**
The timer in the network receiver is active. This can be the case, for example, if the timer function is activated, with which the receiver switches itself on automatically after a certain time.

**White ○**
The receiver is in operation.
S119/ S120 Connection panel

Please take note of the connection information on the following pages.
## Explanation of the connections

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AC Power</strong></td>
<td>Power cable connection (class 2 with ground cable) The voltage definition $[V\sim]$ on the unit label must be adhered to.</td>
</tr>
<tr>
<td><strong>Aux 1 / Aux 2</strong></td>
<td>Analogue audio inputs, max. input voltage: $2.0,V,pp$</td>
</tr>
<tr>
<td><strong>Coax 1 / Coax 2</strong></td>
<td>Digital audio inputs through coaxial cable</td>
</tr>
<tr>
<td><strong>Optional</strong>*</td>
<td>Antenna input for an optional FM/DAB module</td>
</tr>
<tr>
<td><strong>Factory</strong></td>
<td>Reset button for restoring factory defaults. Can be activated using a paper clip.</td>
</tr>
<tr>
<td><strong>Loudspeaker (Right + Left)</strong></td>
<td>Speaker connection / Impedance: at least $4\Omega$</td>
</tr>
<tr>
<td><strong>Network</strong></td>
<td>RJ45 network connection for wired audio streaming (iRadio, NAS) and for App control</td>
</tr>
<tr>
<td><strong>Power switch</strong></td>
<td>Power switch - no power consumption when in off position. Please note: If the power cable is connected, certain internal switching areas are live, even if the switch is in the off position.</td>
</tr>
<tr>
<td><strong>Optical 1/ Optical 2</strong></td>
<td>Digital audio inputs through fibre optic - TOSLink</td>
</tr>
<tr>
<td><strong>Output Analog</strong></td>
<td>Controlled analogue audio output, e.g. for external output</td>
</tr>
<tr>
<td><strong>Output Digital</strong></td>
<td>Digital audio output over coaxial cable (potential-free)</td>
</tr>
</tbody>
</table>
| **Output Sub (Subwoofer)** | Controlled analogue audio output for active subwoofer  
⊕ Pilot signal for subwoofer wakeup available in the S119/S120 basic settings |
| **Start up**              | Start button for start-up from the standby state. Quick Start function is activated for permanent control through an App. |
| **USB**                   | USB B input for the USB data carriers or iPod/iPhone connection.                                |
| **Wi-Fi**                 | WLAN antenna connection for wireless audio streaming (iRadio, NAS) and App control, supplied with the unit |

* not supplied with the S119/S120
S208 Remote control

The optional S208 Remote control offers you the optimum way to control the S119/S120 network receiver. All information is displayed clearly on the TFT colour display, through the bi-directional wireless connection. Additionally, the control of third-party devices with an IR Code can be integrated through a database. The remote control is configured using the free-of-charge S208 EasyCreator PC software that can be downloaded from the Revox homepage.

Initial operation
The remote control battery should be charged up for at least 3 hours before you start to use it. Please refer to Page 15 of this User manual for information on how to do this.

The charger supplied with the remote control is used to charge the lithium ion battery in the S208.

The operation of the S119/S120 using the S208 Remote control is described in the next chapter. The setting options of the remote itself, such as the background colour of the display, are defined in the S208. On the other hand, the menus and setting options that affect the network receiver itself depend on the corresponding device. As a result, the description is split between the S208 and the S119/S120.

One S208 controls several receivers
Up to 24 network receivers can be controlled with one S208 Remote control. However, it can only communicate or have a wireless connection with one receiver at a time. If a connection to a second receiver is established (Select device hotkey), the connection to the first receiver is automatically closed.

Two S208s for one receiver
If you are using several S208 remotes, it should be noted that one receiver can only have a wireless connection to one remote controller at a time. If for example, there is already a connection to remote control 1, remote control 2 cannot establish a connection to the receiver. Remote control 2 can only establish a connection once remote control 1 has ended the connection to the receiver with the button or has established a connection to another receiver.

Lithium battery information
The remote control, with the battery in it, should not be exposed to sources of great heat such as the direct rays of the sun or to fire. Please also read the information concerning the disposal of this product in the Appendix at the end of this User manual.
**S208 Overview**

- **RF module (S208 = S119/ S120)**
- **Brightness sensor**
- **Infrared (IR) transmit diode**
- **Switch network receiver off**
- **Display with feedback**
- **Internet Radio**
  - **Station**
  - **Title**
- **Hotkeys**
- **Option buttons red-green-yellow-blue**
- **Select zone**
- **Short press: network receiver settings**
- **2 sec. press: Remote control settings**
- **Confirm / Accept / Select**
- **Add to “My music”**
- **Call “My music” list**
- **Set volume**
  - **Increase/Decrease**
  - **Mute**
  - **Skip backwards/forwards**
  - **Play**
  - **Stop**
- **Input numbers and letters**
- **Shuffle**
- **Repeat**
- **USB Mini connection**
  - **(Battery charging + S208 EasyCreator)**
  - **Gold contacts (2+2) for charging battery in the charging cradle**
## Explanation of the Remote control

<table>
<thead>
<tr>
<th>Button</th>
<th>Function with S119/S120 network receiver (not IR operation)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Power" /></td>
<td>Switch S119/S120 off</td>
</tr>
<tr>
<td><img src="image" alt="Hotkey" /></td>
<td>hotkey to switch between/switch on network receivers and IR devices.</td>
</tr>
<tr>
<td><img src="image" alt="Option" /></td>
<td>Menu-dependant option buttons - (number input : lower/upper case)</td>
</tr>
<tr>
<td><img src="image" alt="Menu" /></td>
<td>Main menu with source selection (radio, USB, local sources, etc...)</td>
</tr>
<tr>
<td><img src="image" alt="Info" /></td>
<td>Access to (basic) settings. <strong>Short</strong> press: S119/S120 settings (only if there is already a connection to the receiver) <strong>Long</strong> press: S208 settings</td>
</tr>
<tr>
<td><img src="image" alt="Info" /></td>
<td>Displays the information screen about the currently selected source</td>
</tr>
<tr>
<td><img src="image" alt="Add" /></td>
<td>Adds the track that is currently playing to the <em>My music</em> list</td>
</tr>
<tr>
<td><img src="image" alt="Calls" /></td>
<td>Calls the <em>My music</em> list</td>
</tr>
<tr>
<td><img src="image" alt="Quit" /></td>
<td>Quit menu / Up one level / Back</td>
</tr>
<tr>
<td><img src="image" alt="Change" /></td>
<td>Change zone. Displays all available zones</td>
</tr>
<tr>
<td><img src="image" alt="Display" /></td>
<td>Displays the source’s Home menu, e.g. radio, music server, ...</td>
</tr>
<tr>
<td><img src="image" alt="Confirm" /></td>
<td>Confirm / Accept / Select</td>
</tr>
<tr>
<td><img src="image" alt="Right-Left" /></td>
<td>Right-Left / Decrease-Increase / Delete-Cursor to the right</td>
</tr>
<tr>
<td><img src="image" alt="Up-Down" /></td>
<td>Up-Down / Decrease-Increase</td>
</tr>
<tr>
<td><img src="image" alt="Volume" /></td>
<td>Volume control. Volume level can be set from 0 to 40. Comfort start-up volume*</td>
</tr>
<tr>
<td><img src="image" alt="Mute" /></td>
<td>Mute / Un-mute</td>
</tr>
<tr>
<td><img src="image" alt="Decrease-Increase" /></td>
<td>Decrease-Increase / Down-Up</td>
</tr>
<tr>
<td><img src="image" alt="Stop" /></td>
<td>Stop</td>
</tr>
<tr>
<td><img src="image" alt="Track" /></td>
<td>Track down-up / Down-Up</td>
</tr>
<tr>
<td><img src="image" alt="Record" /></td>
<td>Record [currently without function]</td>
</tr>
<tr>
<td><img src="image" alt="Play" /></td>
<td>Play</td>
</tr>
<tr>
<td><img src="image" alt="Pause" /></td>
<td>Pause</td>
</tr>
<tr>
<td><img src="image" alt="Digits" /></td>
<td>Digits 0–9 / Letters A–Z</td>
</tr>
<tr>
<td><img src="image" alt="Start/end" /></td>
<td>Start/end SHUFFLE</td>
</tr>
<tr>
<td><img src="image" alt="Start/end" /></td>
<td>Start/end REPEAT (track/all)</td>
</tr>
</tbody>
</table>

* If the volume is set to a level higher than [Vol 20] when it is switched off, a lower volume level [Vol 10] is used when the device is switched on again.
Charging the battery

The S208 remote control has a rechargeable lithium ion battery that can be charged using either the supplied charger or a mini-USB connection.

Use the charger with the supplied USB cable and the pluggable power supply. Insert the S208 vertically in the charger cradle (Step 1) and then let it slope backwards (step 2). This ensures that there is good contact between the 4 gold contact-connections on the charging cradle and the remote control.

Alternatively, the charger can also be connected to the network receiver’s USB output if this is not needed for any other purpose. In this case, the pluggable power supply is not required.

Charging control / status display

- Battery is being charged - do not interrupt the charging process
- Battery is fully charged - charging process can be ended

Connecting charger to the power supply
Battery care

Keep the number of charging cycles to a minimum
The working life of a lithium ion battery is largely determined by the number of times it is charged, irrespective of whether it is charged from 90% to 100% or from 10% to 100%. For this reason, it makes sense to charge the remote only once the charge-level display is showing [Almost empty] or [Empty]. This will lengthen the working life of the battery with the same number of charging cycles.

Store in a cool environment
If possible, don't place or keep the remote control in warm or hot locations, e.g. on a window sill or other places that get hot. At temperatures above 40°C, the rate of self-discharge increases and irreversibly shortens the overall working life and capacity. Particularly if the remote control is not going to be used for several weeks, it should be kept in a cool location with the battery at 50% to 80% charge.

Total discharge protection
The S208 remote control has a total discharge protection feature that switches the battery that provides its power off, as soon as this is completely discharged either through usage or through longterm storage. Once the S208 is in this state, it no longer reacts to button-presses. In this case, the remote control has to be completely recharged using the charger or the USB connection. This takes at least 3 hours.
S208 Basic settings

The Basic settings for the S208 are called up by pressing and holding the button for > 2 seconds.

Then, you can select from the following basic settings:
- Remote control
- Select device
- Change zone
- Information
- Start pairing

You can make your inputs and selections in the individual menus using the navigation buttons, OK and the number pad.

- Decrease / Delete - Increase
- Up-Down
- Confirm
- Direct input of numbers/letters
- Uppercase-Lowercase

Remote control

Name [Re:control S208]
Time: Hours (0-23) [13]
Time: Hours (0-59) [45]
Stand-by (0-300) [60]
Time in cradle [On]

- Weekday
- Brightness
- Background colour
- Hotkeys
- Change language
- Rename device
- Delete device
- Add zone
- Delete zone
- Transport lock

Name [Re:control S208]
Editing options for the remote control's name, which is displayed in the Home menu.

Time: Hours (0-23) [13]
Time: Hours (0-59) [45]
Time setting in hours and minutes, in case there is no connection to the network through the receiver. Otherwise, the time is updated over the network (Internet).

Stand-by (0-300) [60]
Timeout in seconds until the remote control, not the receiver, switches to standby. A longer timeout shortens the battery life accordingly.
## Weekday
Weekday selection, which appears as an abbreviation (Mo, Tu, We ...) in the status bar at the bottom of the display. This is also important for the receiver's alarm clock function.

## Brightness
The TFT colour display can be operated at three different brightness settings, low / medium / high, as well as in automatic mode. In this case, the integrated brightness sensor (see S208 overview) measures the ambient brightness and adjusts the background lighting accordingly.

- The brighter the background lighting selection, the shorter the battery life.

## Background colour
Five colours are available as background colour: Dark grey / Walnut / Blue / Red / Moss green. On the one hand, this gives you the option of choosing a colour that matches your personal preference but it also makes it easier to differentiate between them, if several remotes are being used.

## Hotkeys
Four hotkeys are available per Zone/Room that can have network receivers or IR devices assigned to them from the list of available devices. Network receivers are integrated into this list by being paired with the S208. IR devices are integrated through the S208 EasyCreator PC program. You can now assign these devices to the hotkeys in the corresponding zones through the hotkey menu. This function is also available in the S208 EasyCreator PC program.

## Change language
Here, you can select the remote control's menu language. You can choose between: English, German, French, Italian, Spanish, Dutch.

## Rename device
This menu allows you to change the names of all devices that are currently available in the remote control. This function is also available in the S208 EasyCreator PC program.

## Delete device
Devices can be deleted through this menu. Deleted IR devices can only be added back in again using S208 EasyCreator. Network receivers can be made available again through the remote control's pairing process.
Add zone
Zones can be added and named through this menu. In the simplest case, a Zone/Room consists of one network receiver or one IR device. Combinations are also possible of course. This function is also available in the *S208 EasyCreator* PC program.

Rename zone
This menu allows you to change the names of all zones that are currently available in the remote control. This function is also available in the *S208 EasyCreator* PC program.

Delete zone
Zones that have been created can be deleted through this menu. A deleted zone can be added back in again either through the Add zone option in the S208 menu or through *S208 EasyCreator*.

Transport lock
The motion detector is disabled when the transport lock option is activated, so that if you are transporting the S208 by car, for example, it won’t remain permanently switched on and discharge the battery. The transport lock option is activated with the OK button. Pressing any other button deactivates the transport lock again.

Select device
You select a device that is available in the remote control and that you want to control, through this menu. All devices are listed here, irrespective of whether they are assigned to a zone or not. The devices can be S119/S120 network receivers or third-party devices that are controlled by infrared (IR). S119/S120 network receivers are added to the device list through the pairing process. IR devices are added to the device list through the *S208 EasyCreator* PC program.

Change zone
This menu enables you to change to or call up another zone. This function can also be called directly through the button.

Information
This menu gives you various details such as serial number, software states or the number of integrated devices. The USB login is also done through this menu of the S208 is to be configured through the *S208 EasyCreator* PC program. For this purpose, a USB connection (USB Mini <-> USB B) is set up between the remote control and a PC running Windows. Then, the red button is pressed in the Information menu. This initiates the S208 connection. If connection is successful, "Connected" appears in the S208 display.
Start Pairing

Background information to pairing
A fixed communication must be created for the bidirectional wireless connection between the S208 remote control and the network receiver, in order that they can communicate securely with each other again after a restart or power outage. This is also necessary because there may be several network receivers and remote controls in one system. The exchange of information for the purpose of uniquely identifying the devices is called Pairing. An S208 remote control can be deployed for the control of several network receivers and as a result can also be paired with several network receivers.

Pairing process
To prepare for the pairing of an S208 and an S119/S120, switch the network receiver off at the power switch and wait until the status LED on the front panel has gone out. If you now switch the receiver back on, the LED flashes green for about 10 seconds. During this time, you have the chance to start the pairing process [Start Pairing], using the OK button. Once a network receiver is recognised, its name appears in the S208 display. Now the name and the preferred hotkeys can be selected. This completes the pairing process.
First contact

Various connections have to be made before setting up your S119/S120 for the first time.

Speakers and outputs

Use cables with sufficient cross section profile to connect your speakers to the S119/S120.

The Revox recommendation:
Length 0 - 5 m: min. 2.5 mm² / AWG 13
Length 5 - 10 m: min. 4.0 mm² / AWG 11

Each speaker must have an impedance of at least 4Ω. You must ensure that all the cable strands are located correctly in the speaker connection terminal and that no individual strand is touching another connector or has contact with the S119/S120 housing.

Fully-insulated banana plugs provide an elegant solution for making speaker connections. The screw connectors must be fully tightened to ensure a secure contact.

Ensure correct polarity when connecting the cables in order to ensure perfect stage sound reproduction. Crossed polarity doesn’t cause any damage to the speaker or the amplifier, but it leads to an imprecise and somewhat diffused sound picture that is weak in the bass ranges.

Power cable

Only use the power cable supplied by Revox. It must also be ensured that the voltage value printed on the type plate corresponds to the available mains voltage. If required, the S119/S120 can be reconfigured for a different mains voltage. This should however only be done by an authorised specialist dealer.

LAN/WLAN network connection

The S119/S120 network receiver is designed for network-based functions, such as playing Internet radio or as a streaming client for your music library that is located on a network hard drive. The receiver needs access to your network for these functions. This can be done preferably through a wired LAN connection, using the supplied RJ45 network cable or wirelessly through a WLAN.

The reason for preferring a wired LAN connection to a WLAN connection is its reduced susceptibility to failures and the option of being able to transmit high-resolution audio formats (≥ 96 kHz) without any interruptions. If a LAN connection is used, the WLAN function is switched off. In this case, the supplied WLAN antenna is not needed. The wireless connection to the S208 remote control is done through the radio module integrated in the glass front panel, which is independent of the WLAN.
The first step - Establishing the connection to the network

Your network
The following description for the cabling and the setup of the S119/S120 makes the assumption that there is a functioning network with router available and that the network is operational.

If you have any questions about the setup and configuration of your network or Internet access, please refer to your System administrator or an IT specialist of your choosing.

WLAN Wireless communication
An access point is required for the wireless communication between the S119/S120 and the router. This can be an external unit or it can be integrated in the WLAN router.

Internet Radio
If you want to use the S119/S120 to receive Internet radio, there must be a broadband Internet access to the router. Setting up the Internet access may involve further costs. The management and use of the Revox Internet Radio Portal is free-of-charge and already included in the purchase price.
The first step - Establishing the connection to the remote control using pairing

All the functions of the S119/S120 network receiver are controlled through the S208 remote control. Through the bi-directional wireless connection, the S208 can display content and operating state, keeping you up to date at all times. Control is not just limited to one network receiver. Actually, up to 24 receivers can be controlled.

To make this possible, each network receiver has to be "introduced" to the remote control one time. This is called pairing.

The picture below shows the pairing process between the S208 and a network receiver. You will find an exact description of this process on the next page.

① The S208 remote control can only communicate or have a wireless connection with one receiver at a time. If a connection to a second receiver is established, the connection to the first receiver is automatically closed.
The first step - Establishing the connection to the remote control

Once all connections are in place, the network receiver can be switched on using the power switch.

After switching on, the green status LED on the front panel flashes for about 10 seconds. Pairing between the network receiver and an S208 remote control can be carried out during this green phase. In the case of a combi-package consisting of network receiver and S208 remote control, Revox will already have carried out the pairing. You can switch the S119/S120 on directly by pressing the hotkey on the remote control with the name S119 or S120. In the example on the right, that would be hotkey A.

Carrying out a pairing with a new S208

In the case of a new S208 remote control that has not been paired, the pairing process is started by confirming the Start Pairing option during the green phase. Now, the S208 tries to connect to the network receiver. If one is recognised, it transmits its name to the S208. This can now be edited and assigned at a later stage to a hotkey. This successfully completes the pairing process and the receiver is automatically switched on.

If the battery icon is already visible on the S208 or if there is no display at all, the battery needs to be charged - see Chapter Charging the battery.
First steps in the Main menu

While the connection is being established to the network, "Please wait... Currently starting up" appears in the display. Then, the S208 Home menu, with the sources is displayed. Sources identified with a ☑ are sources that are available or present. On the other hand, ☐ indicates that these sources are currently not yet available or cannot be reached. In the example on the right, there is a connection to (Internet) radio. A USB device (iOS products/USB memory) or a music server (NAS) on the other hand has not been identified or is not available.

The local inputs are always available even if they are not being used or have not been assigned.

The first item, "Last listened to" stores the last 16 sources or paths to have been selected. These can be Internet radio stations or tracks from a USB mass storage. Local inputs are not taken into account. When the system is first setup, this folder is of course empty.

This completes the first steps. In order to be able take full advantage of the quality and comfort functions of the Revox network receiver, we would invite you to get to know all the details and nuances through our User manual.

You can now make your choice at the remote control, through the four navigation buttons and the OK button.
Radio not available!?  
If Internet radio is not available to you, it was probably not possible to establish an Internet connection. There can be several reasons for this.

- The network cable to the router is not plugged in or a crossover network cable has been used.
- As a factory setting, the S119/S120 is set to DHCP, which means that it gets its IP address automatically from the router. DHCP must therefore be possible and/or activated in the router settings. If this is not wanted, the receiver can also be assigned a fixed IP address. See Chapter Network settings
- The firewall is blocking access. See Chapter NETWORK QUESTIONS / TIPS
- WLAN connection. The WLAN antenna at the receiver / the WLAN router is not available. The WLAN function is deactivated at the router or the router is switched off. See Chapter Network settings and WLAN status.

The main menu is called by pressing the Home button on the S208.

You will find more information about setting up and operating the network receiver in the two main chapters "Settings" and "Operation".
S119/S120 Basic settings

The Basic settings menu offers all those settings that are not needed every day, e.g. automatic switch-off, speaker selection or renaming of the device.

The S119/S120 receiver must have a wireless connection to the S208 in order for basic settings to be made and it must have been selected as a device, e.g. over the corresponding hotkey.

Now press the Setup button and select the option Basic settings in the Device menu. Confirming your choice with the OK button opens the Basic settings menu.

Then, you can select from the following basic settings:
- Speaker Setup
- Network
- Software
- Device Name
- Remote Access
- Clock
- Auto Standby

You can make your inputs and selections in the individual menus using the navigation buttons, OK and the number pad.

- Decrease / Delete - Increase
- Up-Down
- Confirm
- Direct input of numbers/letters
- Uppercase-Lowercase (blue)
Speaker Setup

Through the Speaker menu, you can make all the basic settings to adjust your Revox speakers to optimally match your installation environment and the S119/S120.

For the development of the DSP system, Revox measured all the current Re:sound speakers and their characteristics under studio conditions and added this information to the amplifier characteristic curve. As well as the audio-physical parameters, the performance range of the speaker is taken into account and if necessary, the maximum output performance of the speaker outputs is throttled back. This guarantees that your speaker is only subjected to the power that it can handle both mechanically and thermally, even when the unit is at full load.

Three steps to perfection:

1. Selecting the speakers
Using the buttons, select the Revox speaker type you want to operate with your S119/S120. You can scan through the current Revox models in an endless loop. Needless to say, future models will be made available for selection through a software update. As soon as a Revox speaker is selected, this is indicated when the DSP text on the display changes colour to DSP. If your speaker is not in the list, use the selection: Any/ Unknown. A linear amplifier characteristic curve is used with this setting.

2. Choosing the location
The location of your speakers significantly influences the playback quality, particular in the bass range. The speaker setup offers three location options:

[Neutral]
Your speakers are free-standing: studio conditions

[Near wall]
Your speakers are standing less than 0.5 metres away from a wall. The slightly increased bass reproduction that this causes is compensated for, so that a neutral playback is achieved, in spite of the proximity to the wall.
[Corner]
At least one of your pair of speakers is standing less than 0.5 metres from a corner. The increased bass reproduction that this causes is compensated for, so that a neutral playback is achieved, in spite of the proximity to the corner.

3. Adjusting the subwoofer
Through the third menu item, you define whether an active subwoofer with its own output is connected to the S119/S120.

[Off]
By selecting the setting Off, you define that no bass signal is output through the "Output - Sub" cinch socket. The bass range is output exclusively through the two main speakers.

[On]*
By selecting the setting On, you define that the bass signal is output through the cinch socket to the active subwoofer. At the same time, the bass signal is removed from the main speakers, thereby relieving them of the bass reproduction. The signal is split by a phase-linear, time-compensated filter.

[On + Pilot]*
The On+Pilot setting allows you to use a unique comfort function developed by Revox that ensures that subwoofers with auto-functions are turned on even with low-volume music.

Background
Many subwoofers are equipped with automatic signal recognition that should rouse the subwoofer from standby when there is a signal on its input. Unfortunately with many models, this automatic function only kicks in at higher levels. The subwoofer remains switched off with low-volume music with correspondingly low levels.

Revox solution
The S119/S120 Pilot function solves this switch-on problem by overlaying the low-frequency subwoofer signal with a 10 kHz signal with a higher level. This high pilot signal has no effect on the bass reproduction as it is filtered out reliably by the low-pass filter ahead of the output. The signal recognition auto function however does recognise the high pilot signal, ensuring that the subwoofer is switched on consistently, even at lower bass levels.

*Phase-linear behaviour
Revox sends a phase-linear subwoofer signal to the speaker outputs. In order to achieve an optimum addition of subwoofer and speaker level in the transfer range, you should set the phase regulator at the subwoofer electronics to 0° and select a cut-off frequency of 120 Hz.
network receiver

Network

All the relevant settings for the network communication are defined/ displayed in this menu.

Network Status
Status display of:
- Connection
- IP Address
- Subnet mask
- Gateway IP

WLAN status
(deactivated if LAN used)
Status display of:
- WiFi Signal
- WiFi Channel
- Encryption

IP Settings
Here you can choose whether you want to assign a fixed IP address or whether the S119/S120 will obtain an automatic IP address from the router using DHCP.

1 Factory setting = DHCP

Selection options:
- Automatic (DHCP)
- Manual input

In the case of a manual input, you can make the following settings:
- IP Address
- Subnet mask
- Gateway IP
- DNS Server 1
- DNS Server 2

Pressing the OK button moves you from one input field to the next. After the DNS Server 2 input has been made, the data is applied and the system attempts to establish a connection.

WLAN Settings
Here, you can make the settings for a WLAN connection. If there is no LAN connection, any wireless networks that are found, are displayed in a list. Select the WLAN network you want to use and allow the system to guide you through the connection menu.

If there is already a LAN connection, you can enter the network name (SSID) and establish a connection by inputting the password, the encryption type and the DHCP definitions.

Network Restart
Carry out a restart after modifying the network settings (IP/ WLAN) or when swapping the LAN/WLAN network.
MAC Address
Display of the MAC address that has been uniquely assigned to this S119/S120.

Quick start function
If the Quickstart function is activated [on], the network processor is switched on permanently. This significantly reduces the switch-on phase, as the connection to the network doesn’t have to be built up again. All other sub-assemblies, such as the audio signal processing or the outputs, including the main transformer are switched off, as with normal standby mode.

Quickstart mode [on] is also a requirement, in order to be able to control the receiver with a network-based Revox App.

The receiver can be switched on from standby mode using the Start-up button on the back of the device (Page 10/11). This also activates the Quickstart mode [on], in order to be able to ensure permanent control through the App, without the S208 remote control.

Standby consumption goes up < 0.6 watts to 4.5 watts, if the Quickstart function is activated.
Software

This menu displays the status of the software version with date and enables an update to be carried out.

If you want to update your S119/S120 software, select Update and confirm your intention with the OK button. The following menu appears:

Do not execute any actions at the S119/S120 while an update is running.

Internet

This is a quick and easy option for carrying out an update. This option should however, only be chosen if the S119/S120 has a stable LAN connection. If only a WLAN connection is possible, we recommend using a USB stick for the update. Start the update with the OK button.

USB

[with FAT/ FAT32 formatting]
Download the bin file from the Revox Homepage and save it to the root folder of your USB stick. Do not put the bin file in a sub-folder. Plug the USB stick into the USB socket on the back of the S119/S120 and start the update with the OK button.

NTSC-formatted USB sticks are not recognised by the S119/S120.

The progress of the update is visible on the S208 display while the update is running. Wait until the update is completed.

Here, you now have the option of selecting whether the update should be done over the Internet or using a USB stick.
Device name

As the factory-setting, each network receiver identifies itself as S119 or S120. If you are deploying several network receivers however, it can be beneficial to be able to assign them different names. The device name can be edited through the Device name menu, using the following button functions:

- Delete
- Cursor to the right
- OK Confirm
- 0-9 Direct input of numbers/letters
- 0, 1 Special characters
- Uppercase-Lowercase (blue)

Remote access

If Remote access is activated, UPnP commands from UPnP Control points are accepted. This means that the S119/S120 can be externally controlled through the network (LAN/WLAN), e.g. by UPnP-based apps like the Plug Player. If Remote access is deactivated, the S119/S120 can only be controlled through the S208 remote control.

Clock

Normally, the network receiver gets its time setting from the Internet. In order that it can display the right time for your location, with or without daylight saving, based on the Universal Coordinated Time (UTC), it needs the offset from UTC and the definition of whether daylight saving is currently active or not.

Example offsets from UTC:
0:00 England, Ireland, Portugal
1:00 Germany, Switzerland, Austria, Sweden, Norway, France, Spain, Italy, The Netherlands, Belgium
2:00 Finland

This menu should not be confused with the Time menu for the S208 remote control on Page 17, which only runs there in the background as a backup security system in the event of a power outage, etc.
Auto Standby

The automatic standby function can be activated through this menu. In this way, the network receiver is automatically switched to standby mode if the network connection is interrupted for more than 5 minutes or the playback from USB/iPod media is ended. The same applies for the Music server as well.

Automatic switch off has no effect on the following sources:

- Coax 1/ 2
- Optical 1/ 2
- Aux 1/ 2
- Radio
Operation - Start-up process

Once all the basic settings for the S208 remote control and the S119/S120 network receiver have been made, you can start with the actual operation.

Switch the S119/S120 on directly by pressing the hotkey on the remote control with the name S119 or S120. In the example on the right, that would be hotkey A. Alternatively, if no hotkey is assigned, the network receiver can also be started with the button combination (System)→ Device Selection [Figure 1].

Several network receivers present

If you are deploying several S119/S120 network receivers, it makes sense to give them different names, so that they can be uniquely identified in the device list or through the hotkey assignment when calling or starting them.

Now the S208 remote control initiates a connection query to the corresponding network receiver. [Figure 2]

Once a wireless connection to the S119/S120 could be established, but the network connection is not yet completed, the S208 remote control shows: [Figure 3]

The S119/S120 always starts up with the source that had been selected before it was last switched off.
The configuration options

Essentially, the following relationships exist between multiple S208 remote controls and S119/S120 network receivers:

One S208 can control a maximum of 24 different devices. These devices can be S119/S120 network receivers or Infrared-controlled third-party devices - see Page 17 "Select device".

One S119/S120 network receiver can be paired with and controlled by up to six S208 remote controls - see Page 18 / 21. If the pairing process for a seventh remote control is carried out, the pairing identifier for the first remote control is deleted.

Up to eight zones can be created. The creation and renaming of zones can be done directly at the S208 remote control or by using the S208 EasyCreator PC program - see Page 19.

Up to four four hotkeys can have devices (network receivers or IR devices) assigned in each zone.

Zone

Usually, one zone covers one room to which several devices (network receivers + IR devices) are assigned. This can, for example, be an S119 that plays the sound from a connected television. Both devices (S119 + TV) would be assigned to the "Living room" zone.

IR devices can only be added and assigned to a zone using the S208 EasyCreator PC program.
**Operation**

All the functions and information from the selected S119/S120 network receiver are shown on the S208 remote control colour display. The picture below shows a basic view where a source has been selected and playback has started. This of course can vary from one source to another. As well as the status display for source name, battery, playback function and various alarm clock services, in the centre of the display you have information about the source that is currently playing.

The next pages give you information about the individual sources and the additional functions.

The functions and content are displayed specifically for the selected network receiver [see picture below: Controlled receiver]. If no receiver is active/selected the S208 remote control just shows its own System menu.
Main menu

The main menu is called with the button on the remote control and displays the source overview and the "Last listened to":

- Last Music
- My music
- Radio
- USB/ iPod
- Audio Server
- Local input

Sources identified with a are sources that are available or present. On the other hand, indicates that these sources are currently not yet available or cannot be reached.

The local inputs are always available even if they are not being used or have not been assigned.

ABC search

The alphabetic search function is available in all menus that have alphabetic lists. These can be for example, Internet radio station lists or an album list in a USB folder. To start the ABC search, just press the required letter or number using the number pad, while in the list view. The selected letter is shown at the start of the list. After a short waiting time, dependent on the number of list entries, the S208 shows the search results.

- Last Music

The first item, "Last Music" stores the last 16 sources or paths to have been selected. These can be Internet radio stations or tracks from a USB mass storage. Local inputs are not taken into account.

As some sources may no longer be available because, for example, the USB stick was unplugged, it can happen that the path is no longer valid / no longer exists. This is shown in the display with the message "Can’t play music. Press "OK"."

When the system is first setup, this folder is of course empty.
**My Music**
The **My Music** selection covers all your favourite stations or tracks that you have added through the button [Add to My music]. These can be stations or podcasts from the Internet radio or they can be tracks from a USB stick or a network drive.

**My Music** can also be called directly through the button [Call My music list] on the S208 remote control. There can be a maximum of 18 entries.

As some sources may no longer be available because, for example, the USB stick was unplugged, it can happen that the entry/path is no longer valid / no longer exists. This is shown in the display with the message **“Can’t play music. Press “OK””**.

When the system is first setup, this folder is of course empty.

You can rename or also delete the existing **My Music** entries through the **Change My Music** menu item. To do this, press briefly on the button and select this menu item. [Figure 1]

The name of the entry can be changed through corresponding item in the following menu [Figure 2]. You can also delete individual or all entries. You will find an exact description of this on Page 55.
- **My Music – iRadio**

**Shortening access times**
When you store stations or podcasts through the Internet radio option into the **My Music** folder, a list path is created in the background.

If a **My Music** entry is now called, the receiver uses this path as the route to find the corresponding radio station. The more entries there are in the list, the more time the receiver needs to find the entry again.

It makes sense then to select the shortest list path when adding a **My Music** entry for radio stations or podcasts that you call up on a daily basis.

As a rule this is a call that is made through the Favourites list that you create in the *(Online Services)* option in the Revox Internet Audio Portal (see Page 59).

**Path:** Internet Radio > Favourites > Favourites Group

A good alternative without the Internet Portal is:

**Path:** Internet Radio > Device Location [Country] > Genre

The longest access times result from using the following selection to search for the station:

**Path:** Internet Radio > Countries > Continent > Country > All Stations

By employing a more elegant call-up strategy, you can achieve access times that are 5-times faster.
Radio
Selecting **Radio** gives you two options to choose from:
- Last Music
- Internet radio

致力 Last Music
The "Last Music" selection saves the last 10 Internet radio stations / podcasts to have been selected. It can occur that a station or a podcast transmission is no longer available or has been removed from the programme. This is then shown in the display with the message "Can't play music. Press "OK"." When the system is first setup, this folder is of course empty.

• Internet Radio
The selection **Internet Radio** gives you access to thousands of radio stations available from around the world. As well as the linguistic diversity available, you can also make specific selection based on particular musical directions (Genres). **Podcasts** offer even more individuality. Podcasts are broadcasts such as news programmes, magazine shows, crime dramas, comedies, etc. that are started when you select them. You don’t switch onto a program that is currently running as is usual when listening to (Internet) radio. You actively start the playback of a program.

Currently, the following selection options are available under the Internet radio section:
The selection options in the Internet radio menu are constantly being adapted to meet customer requirements. It can occur therefore, that new or modified selection options are added.

At the time of printing this manual, the following selection criteria were available:

- Favourites
- Added Stations
- Device location (country)
- Location
- Genres
- Podcasts By Location
- Podcasts By Genre
- New Stations
- Most Popular Stations

**Favourites**

Under *Favourites* you will find a list of your preferred radio stations and/or groupings, which you had previously organised through the *Revox Internet Audio Portal* (see Chapter IAP). How to do this and what you have to take into account is described in the Chapter *Setting up Internet Radio* on page 57.

**Added Stations**

The *Added Stations* selection lists those radio stations that you added yourself in the *Revox Internet Audio Portal* (see Chapter IAP, page 57), as these are not listed by default. You need the URL, the Internet path, of the operator of the radio station to be able to add a new Internet radio station in the IAP. You will usually find this on the provider’s homepage or you can display them in a media player, e.g. *RealPlayer*.

Example of an URL: http://213.251.170.124:80

**Device location (country)**

Your S119/S120 knows which country it is in through its IP address. Using this information, it offers the user direct access to the selection of national radio stations. This shortens the time needed to make your selection as you don’t have to go through the continent and country selections first. Correspondingly, an S119/S120 that is located in London (UK), will show *United Kingdom* here.

**Locations**

Selection of radio station by countries. Searching for the required radio stations is made quick and specific through the classification into Continents ➔ Countries.
Gene
Listing of radio stations based on certain music genres, such as rock, jazz, folk, etc. Within the genre, the individual radio stations are either listed alphabetically (All Stations) or by the countries offering this type of music.

Podcasts By Location
Listing of podcast transmissions based on the country/continent where the provider is located.

Podcasts By Genre
Listing of podcast transmission based on the genre these transmissions are assigned to.

New Stations
New radio stations are being added somewhere in the world every day. As you won’t want to go to the effort of searching for new radio station arrivals every day yourself, these are listed in the selection New Stations.

Most Popular Stations
Listing of the Internet radio stations that are currently being most listened to.
Internet radio display

Track and radio station are displayed when playing Internet radio. In the case of a podcast, the corresponding programme name is shown. If the station doesn't have its own station logo, the S119/S120 shows a default logo (130 x 130 pixels).

If the station does have its own station logo, the S119/S120 shows the egg-timer icon until the logo is fully available. (130 x 130 pixel).

Once the station logo has been transmitted in its entirety, it is shown in a larger resolution of up to 150 x 150 pixels. The example shown here is the AVRO station from the Netherlands, which is known for its high quality broadcasting.
USB/iPod®
The USB/iPod selection menu enables access to devices/content connected to the S119/S120's USB input. That can be either an iPod or iPhone from the Apple© Company or a USB storage (USB memory stick* or external USB drive* with/without its own power supply).

USB
USB storage with FAT/ FAT32 formatting. Here, all tracks and music folders from the USB storage medium are displayed. You can make your choice using the navigation buttons. NTSC- or MAC-formatted USB sticks are not recognised by the S119/S120.

Cover display is supported with the USB selection. You can find out what prerequisites are necessary for this on page 48.

iPod®
Connect the Apple product (see next page for Apple product list) with the S119/S120 using a USB cable as shown in the figure below. You should use the original Apple USB cable for this purpose. In addition, Revox offers an iPod Docking station in the same design as the S208 charging cradle (Part no. 1.561.096.00).

After a short time for the connection to be established, the USB/iPod selection can be made. The message “Accessory connected” appears in the display of the Apple product.

Note Battery charging
The battery on your iPod or iPhone is charged by the S119/S120 in all operating states.
iPod selection
At the time of printing this manual, the following selection criteria were available with Apple products:
- Playlists
- Artists
- Albums
- Songs
- Podcast
- Genres
- Composers
- Audiobooks

Use the navigation buttons to make your choice. You can choose the shuffle or repeat options at the playback level.

Cover display is not an option in the iPod selection. For this reason, the standard cover is displayed.

The selection displayed only reflects the Apple software options that were available for a particular iPod model at the time of printing. This can however vary, depending on the model and software version.

The network receiver is certified for the following iPhone/iPod models:

- iPhone 4S
  16GB 32GB 64GB
- iPhone 4
  8GB 16GB 32GB
- iPhone 3GS
  8GB 16GB 32GB
- iPhone
  4GB 8GB 16GB
- iPod touch
  4th generation
  8GB 32GB 64GB
- iPod touch
  3rd generation
  32GB 64GB
- iPod nano
  4th generation (video)
  8GB 16GB

* Further Apple products can be connected. There is no guarantee of full functionality with non-certified products.
**Music server**

The Revox network receiver creates order in your beloved CD collection. Just pack all the tracks that make up your CD collection onto a network disc in the highest quality and then browse through them at your leisure, looking for long-lost tracks or rediscovering some old favourites. No more looking for CDs that have been put back into the wrong box!

Network servers that support the UPnP-AV standard can be accessed through the network (LAN or WLAN). The most usual instance of such a server is a NAS hard disc. The name of a media server is defined at the server itself.

It is however possible to use a normal PC as a network server. This however requires an UPnP-AV software so that the network receiver can find and play stored music files. Such a software is offered, for example, by the company **Twonky Vision** with the software **TwonkyMusic**. The display of the selection menu of such an UPnP-AV server can vary greatly.

**Music server display**

The S208 remote control has an adaptive cover display in the Music server menu field. If no cover is available for the selected track, a standard 130 x 130 pixel icon is displayed:

If a cover does exist however, this shown in a higher resolution of 176 x 176 pixels.

As well as showing the current playing time 03:45, the total playing time [66:46] is shown under the cover. The control functions are described on the next page.

**Important: Music folder name**

The S119/S120 can only find your music tracks on the media server if they are located in a folder called **Music**. Other folder names are not recognised. This folder can be shown with a different name than "Music" in the network receiver display. This depends greatly on the settings and on the various models of this media server.
Control functions
for USB/iPod/Music server

- Play
- Pause
- Stop
- Track forwards/back
- Skip forwards/back

Shuffle
Track shuffle. Depending on which selection criterion you activated the Shuffle function at, either only the tracks within an album (Albums) or all the tracks in the music folder are played in a random order.

Repeat function - Track
With the track repeat function, individual tracks can be repeated.

Repeat function - All
With the all repeat function, complete folders (albums, songs, etc.) can be repeated.

Cover display
The network receiver supports cover display with the iRadio, USB and Music server selections. In the case of iRadio, the station logo from the broadcasting organisation is sent automatically.

With the USB and Music server selection, there can be a cover display if one of the following conditions is met:
- The track contains the cover image as a jpg or a bmp file. PNG files cannot be displayed. Inserting or tagging a cover in a music track can be done for example, using the Mp3tag software.
- The album folder contains the cover image in the file cover.jpg. Make sure that lowercase lettering and the correct file format are used.

Cover
Whether a cover can be displayed and in what quality, depends on the UPnP server software. A resolution of 500 x 500 pixels has proved to be favourable in terms of transmission speed and display quality.
- **Local inputs**
  The S119/S120 offers 6 local inputs of which 4 are digital inputs.
  The following inputs are available on the back of the network receiver:

  - Coax-1  (digital, coaxial)*
  - Coax-2  (digital, coaxial)*
  - Opto-1  (digital, optical)*
  - Opto-2  (digital, optical)*
  - Aux-1   (analogue, asymmetrical)
  - Aux-2   (analogue, asymmetrical)

* Supports uncompressed digital audio-stereo input signals, such as PCM Audio or S/PDIF up to 96 kHz / 24 bit. **Doesn't support any compressed** audio formats such as Dolby Digital, DTS, 5.1, etc. If necessary, change the output format in the source device’s Setup menu.

Rear view "Local sources"
**Rename Input**
The S119/S120 offers the option of assigning freely definable names to its analogue and digital inputs. You no longer have to remember which external device is connected to which input. You can simply give each input a name that makes the assignment obvious.

To do this, select the field "Rename Input" on the remote control. A list of all 6 inputs is displayed. You can now change each input using the following buttons on the S208:

- Delete
- Cursor to the right
- OK Select/Confirm
- 0-9 Direct input of numbers/letters
- 0, 1 Special characters
- Uppercase-Lowercase (blue)

After you have renamed an input and confirmed the change with the OK button, it is displayed in the Play view as follows, for example:

![Lokale Source](image)

The newly assigned name, "CD Player" in this example, is shown within the source logo, while the original name or the input used, is shown above the logo. These means you always have both pieces of information available.
Settings and comfort functions

The S119/S120 offers a wide range of comfort functions to make the daily usage easier. This includes various alarm clock and timer functions as well as sound control and preferred settings.

As these functions are directly connected with the Network receiver, the S119/S120 receiver must have a connection to the S208 and it must have been selected as a device, e.g. over the corresponding hotkey.

By pressing briefly on the button, the Device menu opens with the following selection options:

- Sound setting
- Alarm Clock 1
- Alarm Clock 2
- Short Time Alarm
- Sleep-Timer
- Change My Music
- Device Info
- Basic Settings (Page 27)

Sound Setting

In this menu, you can raise and lower the base and treble settings in the range of ±12dB. Outside the neutral mid-range setting, the indicator changes colour from blue to grey.

By pressing Linear, you can restore the neutral mid-range setting with a single key press, which deactivates the sound control again.

The Balance (the level ratio between the left and right speaker channels) can also be adjusted to the installation requirements through the Sound menu. The Linear function has no influence on the balance controller.
The S119/S120 network receiver has two independent alarm clocks (1/2) that can be set simply and intuitively.

Using the navigation compass, you can set the switch-on time, the sound source, the wake-up volume [max. volume 40] as well as the days of the week when the receiver should wake you up.

The following options are available as the sound source:
- Alarm sound; classical beep
- Radio
- Audio server
- USB
- iPod
- My Music (No. 1-18)

With all sources, except the alarm sound, you must ensure that the source is available at the preset time. If the S119/S120 identifies that it is not possible to play the desired source, it automatically selects one that is available. If none of the audio sources can be played, the alarm sound is used as the last option.

The weekday selection is done simply by using the ◀ ▶ buttons and OK. The blue bar indicates the currently selected day. The day can be activated with OK. A large icon with a blue border indicates a day when the alarm clock will operate. A small black & white icon indicates a day when the alarm clock will remain silent. In the example shown here, the alarm clock is active on Tuesday, Wednesday, Thursday and Friday and is switched off on the other three days of the week.

You can use the Test option to check the alarm clock setting in terms of the volume and the source and correct them if necessary. Selecting OK ends the test. Otherwise, the test stops automatically after 30 seconds.

Deactivating the alarm clock
In the "Switch-on time" line, you can activate/deactivate the alarm clock through the OK button.

The two icons ◀ ▶ in the status line towards the bottom of the S208 display show which alarm clock is currently active.

The Status LED on the network receiver shows permanently red ● after being switched off if an alarm clock is active.
Switching the alarm clock off
When the receiver switches on at the preset time, there are 3 options when it comes to turning it off:

1. Do nothing. The receiver switches off automatically after a predefined time of 60 minutes.

2. The receiver was turned off manually using the button prior to the alarm clock being activated. In order to switch the alarm clock/receiver off, connect to it using the hotkey. The following screen is displayed:

3. The receiver was turned off automatically using the Sleep timer (see page 54) prior to the alarm clock being activated. In this case, a connection is automatically established to the remote control that activated the Sleep timer, when the alarm clock/receiver switches on. The same display as shown under point 2 appears and you can switch the receiver off with the button.

Now you can switch the receiver off using the button.
Short Time Alarm

Using the S119/S120’s timer, you can enjoy a short nap or a siesta. Start up the network receiver as usual and select a music source. Now using the timer, you can define how long it should be before the S119/S120 switches itself back on again. You can choose a time between 10 and 60 minutes. The time shown as Wake-up time indicates when the receiver will switch back on.

The following display appears on the S208 remote control for about 5 seconds as confirmation: see figure top right. Then the connection to the receiver is dropped and the S119/S120 switches itself off.

Confirm your settings with the OK button.

The Status LED on the network receiver shows permanently red after being switched off if a timer is active.

After the pre-defined time, the S119/S120 starts up automatically with the previously selected source. Now, using the hot keys or "Select device", you can establish a connection to the receiver. The receiver displays the following as a welcome screen:
**Sleep-Timer**

The Sleep timer is a countdown timer that automatically switches the network receiver off, after the time that you define. This function is ideal for getting the S119/S120 to send you off to sleep.

The time shown as the Remaining time indicates how many more minutes the S119/S120 will continue to play until it switches itself off.

**Deactivating the sleep timer**

If the Sleep timer needs to be ended/deactivated, you just select the option Off in the Sleep timer menu and confirm with the OK button.

This icon in the status line towards the bottom of the S208 display shows that the Sleep timer is active at the moment.

**Change My Music**

You can change the names or delete entries in My Music through the My Music menu. Also, the complete My Music list can be deleted in this menu.

**Edit Name**

Select the option "Edit Name". The My Music list is displayed. Select the entry you want to change. The following buttons on the S208 are available for editing:

- ⤴ Delete
- ⤵ Cursor to the right
- OK Select/Confirm
- 0-9 Direct input of numbers/letters
- 0, 1 Special characters
- Uppercase-Lowercase (blue)
Delete Titles from My Music
Select the option "Delete Title". The My Music list is displayed. Select the entry/title you want to delete. The deletion process is completed with the OK button. The space created can now be filled with a new entry.
The My Music entries do not automatically realign to fill the space because, for example, the alarm clock may be programmed with a specific entry in the range from 1 - 18.

Delete All
Select the option "Delete All". The complete My Music list will be irretrievably deleted. Confirm the intention to delete with the OK button.

Inserting entries, quickly & simply
If you should accidently have deleted all entries or if they have been deleted automatically by a software update, you can restore them quickly, if they were Internet radio stations. Create a folder through the "Online Services" Internet Portal on www.revox.de that contains all your favourite stations. Next time you start the receiver with Internet access, this folder will transfer automatically to your S119/S120. You will find the folder in the Internet radio Favourites selection (see also page 40, Chapter Internet radio, section Favourites). Here you can call each station directly and add them back to My music quickly and easily, with the [Add to My music] button.
The S119/S120 network receiver is controlled by 3 micro-processors that handle different tasks, e.g. network activity, audio processing, safety monitoring, wireless connection, timer activity, etc.

The **Device info** menu shows the different software and hardware versions. This display is principally intended for the Revox Development and Service departments and doesn’t contain any functions that are needed for day-to-day use.

The **Basic settings** menu offers all those settings that are not needed every day, e.g. automatic switch-off, speaker selection or renaming the device. You will find a detailed description of the options within the S119/S120 Basic settings starting from page 27, Chapter *Basic settings*. 
Setting up Internet Radio

The list of radio stations that appears in the Internet Radio section of your S119/S120 is made available by a service provider and transferred to your network receiver through the Internet connection. You can extend and edit the Favourites and Added radio stations lists in the Internet-Radio menu as you wish, through Support > Revox-Online-Services in Revox’s Internet Portal.

This is done as follows: Open your Internet browser and call the Revox Homepage under:

- www.revox.de Germany
- www.revox.ch Switzerland
- www.revox.com English

Clicking on Revox-Online-Service calls the Revox Internet Audio Portal where you can register and configure your S119/S120 network receiver.
In the Internet Audio Portal (IAP) you can login in (Member Login) if your S119/S120 is already registered. If this is not the case, you can register with little effort. How to do this is described in the next chapter: Initial login
Initial login

You must register your network receiver in order to be able to use the IAP service. Registration is done using the MAC address of your S119/S120, your e-mail address and a password that you define yourself.

Please enter the MAC address of your S119/S120 when making your initial login. This uniquely identifies your network receiver. You can display the MAC address by calling the following menu:

Press the button briefly \Device\Basic settings\Network\MAC address (see figure to the right).

Alternatively, you can read off the MAC address from the label on the rear of the device (see figure below).

The MAC address is made up of six pairs of characters, e.g.: 00:1A:2B:6D:08:15. Don't enter the separators when inputting the address and do use lowercase letters. For the example shown above, the correct input in the IAP would be: 001a2b6d0815
IAP Registration page

Dominating Entertainment.

Create account login

1. Please enter the ID# for your MultiMedia Modul (Please refer to your MultiMedia Modul instruction manual to find your ID#): 

2. Type in your Email Address, then enter your Password twice to verify accuracy, click the register link to continue.

Register for online newsletter

If required, you can subscribe to the free-of-charge Revox Newsletter, which is sent by e-mail. To do this, you just have to complete the corresponding fields and set the checkbox in the corresponding field.

Note

If you are using several network receivers, each one has to be registered individually.

You can transfer a one-time generated Favorites list from one network receiver all other receivers. This is also done in the IAP under the section:

My account

⇒ My preferences
Managing the Revox IAP

Once you have registered, you can make a selection for the extensive pool of radio stations and add it to the favourites list (*Favorites*), add new radio stations to *Added Stations* or search for podcasts.

The transfer of the lists to your network receiver happens automatically over the Internet connection. Shortly after editing your list or adding new stations in the IAP, you will find these changes on your S119/ S120.

Currently, you can make selections on the Internet Audio Portal according to the following criteria:

- **Browse Stations**
  - By location
  - By genre
  - By language
  - New stations

- **Browse Podcasts**
  - By location
  - By genre

Radio station listing in the IAP
Adding radio stations to Favorites

Clicking on the in the station list adds the corresponding radio station to the Favourites in the receiver's Internet Radio selection.

This opens the window shown on the right where you can decide which favourite group the radio station should be added to or if you want to create a new favourites group for it.

A maximum of 9 groups can be generated to organise your favourites.
Error messages

A. Music content not available
Music content has been selected that is no longer available, e.g. a *My Music* entry that points to a track on a USB stick that has been removed from the S119/S120.
The receiver tries for a few seconds to start the music.

The following message appears if it was not possible to start the choice:

Please wait...
Waiting for Music

Thu13:45 S119 DSP
S119

B. Music source not available
A music source has been selected that is no longer available, e.g. an iPod from Apple that is no longer connected to the S119/S120.

Non-available sources are indicated in the Main menu by the [□] character. If the source is available, the square is filled in [■]. At the beginning of the start-up process, not all sources are available even though they are present. Please wait until the Status LED on the front panel of the network receiver lights up white.
The local inputs are always available in the Source menu, even when they have no connection to another device.
C. **Device doesn’t respond**  
The following display appears after you have started a S119/S120 using the hotkey or through "Select device":

![Timeout](image)

**Possible causes:**
- The receiver is outside the range of the remote control. Try to establish a connection again from within sight of the network receiver.
- The network receiver already has a wireless connection to another remote control and therefore cannot connect with your S208.
- The pairing identification has been lost. If necessary, carry out another pairing process - see page 20.
- A radio transmitter is causing massive interference in the 2.4 GHz range and preventing a wireless connection between the Revox devices.

D. **Radio not available**  
The following display appears after selecting Internet radio:

![Radio](image)

As a rule, this display is caused because no Internet connection could be established. There can be several reasons for this.
- The network cable to the router is not plugged in or a crossover network cable has been used.
- As a factory setting, the S119/S120 is set to DHCP, which means that it gets its IP address automatically from the router. DHCP must therefore be possible and/or activated in the router settings. If this is not wanted, the receiver can also be assigned a fixed IP address. See Chapter **Network settings**
- The firewall is blocking access. See Chapter **Network questions / tips**
- **WLAN connection.** The WLAN antenna at the receiver / the WLAN router is not available. The WLAN function is deactivated at the router or the router is switched off. See Chapter *Network settings and WLAN status*.

The Main menu is called by pressing the Home button on the S208.

You will find more information about setting up and operating the network receiver in the chapters *Settings and Operation*. 
Status displays

Status messages

A. Switching the device on

Connection Request

Please wait while remote is trying to establish your connection ...

Thu 13:45 Establishing connection
S119

This display appears shortly after the network receiver is switched on. The remote control is trying to establish a connection to the selected receiver.

B. Waiting for the network

Please wait...

Currently starting up

Wed 13:45 S119
S119

A wireless connection between the remote control and the network receiver is in place. However, there is not yet an Internet connection for the selected source, e.g. Internet radio.

C. Switching the device off

Connection Release

The network receiver has been switched off.

Thu 13:45 Not connected
S119

The S208 remote control has switched the network receiver off and the wireless connection to it is interrupted.
General
The network switch ensures the correct connections between the individual components. In order to make this possible, each device within a network must be capable of being uniquely identified. Each component therefore, is given its own address, the so-called IP address. The IP address is made up four blocks of numbers, each of which can contain up to three digits. These blocks of numbers are separated by a full stop, e.g. 192.168.1.1.

Each of the individual blocks of digits can have a value between 1 and 254. The values 0 and 255 are in part reserved for special functions and therefore shouldn’t be used. In order to ensure a secure function of your network, addresses from the pre-defined range should be used, i.e.: fundamentally, the first two blocks should be 192.168.xxx.xxx; the third block can be selected from the values in the range mentioned above (must be the same for all the devices within a network however) and the fourth block should be used to differentiate each device, e.g.: S119 192.168.001.001
NAS: 192.168.001.002
PC: 192.168.001.003

If you don’t just want to use devices within the local network but also music sources from the Internet (Internet radio), the S119/ S120 must have the possibility of being able to access the Internet. This can be achieved, for example, through a router with a connection to a DSL network. This router is also a part of the network and will be assigned its own IP address. In order to enable this connection to the outside world actually to be established, the S119/ S120 must additionally be informed of the address of the router (Gateway).

It must be ensured that the first three blocks of the Device IP, the Gateway IP and the DNS 1 are within the same address range, e.g. 192.168.0.xxx. The fourth block assigns a unique address (“house number”) to the components in the local network. This number may only occur once within the local network. The Device IP mask should always be given the address 255.255.255.0.

DNS
The Domain Name System (DNS) is one of the most important services in the Internet. Its main task is that of converting Internet address like www.revox.de for example, into its corresponding IP address. As a rule, the router in home networks fulfils the function of the DNS.

If you should decide for the manual network configuration (without DHCP), just enter the address of your router as the DNS address during network configuration.

LAN
Local Area Network
Local cabled network
A LAN connection to the S119/ S120 is the most fault-tolerant and problem free transmission technology, which offers much more security against eavesdropping than WLANs or Power LANs.

Gateway
The computer or router in your network through which the data traffic with the world outside your network, i.e. the Internet is handled.
Client
Network device that draws data out of the network, decodes it and converts it for example, into analogue music signals, which then can be played through amplifiers and speakers. Streaming clients also contain functions for displaying media content and for navigating in the Internet or on servers.

DHCP
DHCP is an abbreviation for Dynamic Host Configuration Protocol. DHCP is primarily used to enable clients to fetch their network configuration automatically from a server or router. The S119/ S120 supports DHCP.

IP Address
Network address. Each device in the network needs an IP address through which it can be reached and uniquely identified. Network addresses may not occur twice. This is important if network addresses are assigned manually. If addresses are issued in your network through DHCP, you don't need to worry about the IP address assignment as the DHCL server automatically handles the question of address management.

MAC Address
The MAC address (Media Access Control) is the unique hardware address that is used for the unambiguous identification of the device in the network.
With the S119/ S120, the MAC address can either be read out in the basic Settings/Network or alternatively, from the MAC sticker on the back of the receiver.

NAS
Network Attached Storage. As a rule, this is a storage device with a very large capacity > 500 GB, which other devices can access. If the NAS server contains an UPnP-AV server service, the S119/ S120 can access and play media files that are stored on the NAS.

Recommendations NAS
- Synology
- QNAP with Twonky Media Server
- Buffalo Link Station

Power Line – LAN
With the Power Line LAN, data is transmitted through the existing power cable network. So-called Power Line Modems are required on the transmitter and receiver side. As a rule, Power Line LANs offer reasonably fault-free data transmission with a data rate sufficient for audio streaming. We recommend Power Line Modems with bit rates of 85 or 200 MBit/s.

Proxy Server
A proxy or proxy server is a computer in the network that makes data transfer quicker and more efficient and that can also increase security by deploying access control mechanisms. Usually, you do not find proxy servers in home networks. In such a case, you don’t need to define a proxy address during the receivers network configuration.
The S119/ S120 allows the use of a proxy server.
Router (WLAN Router)
A central network device that establishes and manages the communication between the network devices. Current devices increasing combine the function of the router with the function of an access point for wireless data communication. These combi-devices are often referred to as WLAN routers.

Normally, the (WLAN) router in a network takes on the function of the gateway to the outside world.

Server
A network device that makes data and services available for other devices in the network. A UPnP-AV server stores for example, audio and video media data and makes this data available to other devices, the streaming clients. Often, UPnP-AV servers also offer functions for the cataloguing and easy identification of medial content according to criteria such as artist, album name, genre, etc.

SSID
Service Set Identifier / Network name. SSID designates the identification of a radio network that is based on IEEE 802.11. Each WLAN has a configurable, so-called SSID or ESSID (Extended Service Set IDentifier), to identify the radio network. The SSID character string can be up to 32 characters long. It is configured in the base station (WLAN router / Access point) of a wireless LAN and defined on all the clients that should have access to it. Do not use SSID names with blanks / special characters.

UPnP-AV
Universal Plug and Play – Audio Video
Network standard that makes media content, e.g. on PCs or NAS discs accessible in networks. A UPnP-AV software must be installed on PCs /NAS storage so that the S119/ S120 can access the stored media data.

Below, you will find a short overview of UPnP software that is suitable for the different operating systems:

Windows:
Twonky Media Server
http://www.twonkyvision.de/
Windows Media Player 11
http://www.microsoft.com/windows/windowsmedia/de/default.aspx

Mac:
EyeConnect of Elgato
http://www.elgato.com/

Linux:
Mediatomb
http://mediatomb.cc/
GmediaServer
http://www.gnu.org/software/gmediaserver/
**WLAN**

*(W-LAN, Wireless LAN)*

Radio network. Network connection is done using radio waves in the 2.4 GHz frequency range. Radio networks are easy to install as no cables have to be laid but are often problematic and unreliable, particularly over longer transmission distances. In many cases, Power Line networks that also don’t require any cabling are a better choice.

In each case, the installation of a network cable is the most fault-tolerant and problem free transmission technology. An additional point is that cabled networks don’t produce any electro smog.

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**WPA**

*Wi-Fi Protected Access (WPA)*

WPA contains the architecture of WEP, but offers additional protection through dynamic keys that are based on the following *(Cipher)* standards:

- **Temporal Key Integrity Protocol (TKIP)**
- **Advanced Encryption Standard (AES)**

WPA offers **Pre-Shared Keys (PSK)** for authentication or **Extensible Authentication Protocol (EAP)** through **IEEE 802.1x**.

The S119/ S120 is based on the authentication PSK and supports both the WPA encryption TKIP and AES.

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**WEP**

*Wired Equivalent Privacy (WEP)* is the previously used standard encryption algorithm for WLANs. It should control access to the network as well as ensuring the confidentiality and integrity of the data. Because of various weak spots, the process is considered to be unsafe. For this reason, WLAN installations should use the more secure WPA encryption. See WPA.

With WPE authentication, a distinction is drawn between two processes:

**Open**

*Open System Authentication* is the standard authentication. The WEP key is used at the same time for authentication: Each client with the correct WEP key gets access to the network.

**Shared**

*Shared Key Authentication* is reputed to be the more secure version. In this case, authentication is done through the Challenge-Response authentication, with a secret key. However, the Challenge-Response process is also based on WEP and demonstrates the same weaknesses.

The S119/ S120 offers both **Open** and **Shared** WEP authentication.

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**Wi-Fi**

Certificate for WLAN products that work according to IEEE802.11 standards and are compatible with other products.
Network: Questions & Answers

Network is OK but there is no sound.
You should be aware that the S119/S120 cannot support all data formats that are available on the Internet. It can occur that a station cannot be played. See Technical data.

Other reasons why your Internet radio doesn’t play:

- Not all radio stations broadcast 24/7
- Radio stations may not be available any more
- The Revox equipment is muted
- The provider’s (Radio Sender/Provider) server capacity is fully utilised

Transmission within your network breaks down because:

- (Internet) network problems
- Server capacity fully utilised

Network questions / tips

The connection is lost after a few minutes:
System-based characteristic of the UPnP standard. Useful communication starts at a port numbered above 1024 and changes this regularly during operation. Not all firewall programs recognise this knocking on different doors as a continuous connection. Depending on the configuration, the firewall decides, in a case of doubt, against an unknown client.

Depending on the firewall software, this can be resolved through the following actions:

- By using a fixed IP and without DHCP, define the S119/S120 as a so-called Trusted Host, i.e. a device from which all communication is considered to be trustworthy.
- Allow the server to accept incoming and outgoing communication with the S119/S120 over ports 1024 - 65535.

Activate the exception setting for "UPnP Framework", e.g. Windows XP Firewall or activate "Permit UPnP communication".
**Network questions / tips**

**The S119/S120 finds my Access Point, however my computer is not displayed.**
- Make sure you have installed an UPnP server on your computer and that this is also activated. Depending on the amount of data and the software, it can take a few seconds before the option appears as a selection on the S119/S120.
- You have activated a MAC address filter on your router. In this case, add the S119/S120 MAC address to your router configuration.
- Your router only assigns fixed IPs. Deactivate DHCP and enter in this case, a fixed IP address in the S119/S120.

**My Access Point (SSID) is not listed.**
- The S119/S120 can only find your Access Point if it is within range. Reduce the distance to the Access Point and try again.
- Depending on the configuration, the router’s SSID may be hidden. If this option is activated, the SSID must be entered manually in the S119/S120 Network menu.

**Network questions / tips**

**A lot of Access Points are displayed that are unknown to me.**
If several Access point, for example those installed in neighbouring buildings are available to the S119/S120, these will also be listed. Select your Access Point and continue with the configuration.

**The S119/S120 indicates to me that my network is encrypted.**
Your network is protected against external attacks with an encryption (WEP / WPA(2)). Enter your key in the S119/S120 Setup so that the S119/S120 is identified as a "User" in the network.

**Where do I get my key from?**
If you installed your network yourself, you will have defined it as part of that work. Otherwise, you will get it from your System Administrator.

**Can other data on my network hard disc or server by read or viewed?**
No, the S119/S120 can only receive data that is released by the UPnP server. In this way, the S119/S120 only accesses your files. Other data on your server is not transferred and cannot be viewed.
**Network activity?**
Two LEDs are integrated in the S119/S120 network socket, which display the bus activity. If the network connection is working, the orange LED lights up permanently while the flashing of the green LED indicates that data exchange is taking place.

**Point-to-Point**
If the S119/S120 is connected directly to a PC without using a router, cabling is done using a **Crossover Cable**.

**Distribution with Router**
If the S119/S120 is connected to the network through a router, a **Patch cable** (1:1) is to be used.

**Network setting?**
Have all the S119/S120 Setup settings been correctly applied and has a restart been carried out following any changes?

**Ping test?**
Does the S119/S120 respond to a Ping attempt? Is it recognised in the network? The S119/S120’s deployed or assigned IP address can be seen in the device Basic settings/Network.

**Encryption protocol?**
Is the implemented encryption protocol (WEP, WPA-SK) and/or the corresponding key correct?

**My WLAN connection?**
Was my Access Point/WLAN router or one from a neighbouring system selected, which because of its locational proximity, can also be received?
Appendix

Warranty

Warranty covers a period of 24 months from the purchasing date. Your specialist dealer is your first contact if you need service help. If he is unable to assist you, send your device, carriage free, without accessories to your national Sales Office. Please supply a complete description of the fault together with your address.

Copyright advice

iPod is a registered trademark of Apple Inc. in the USA and/or other countries. iPhone is a registered trademark of Apple Inc. All other brand and product names cited are trademarks or registered trademarks of their respective holders.

Environmental protection

Packaging

We recommend keeping the original box and packaging material so that if required, the device can be transported safely.

S119/S120

Please note: The EU Directive 2002/96/EC governs the correct return, handling and recycling of used electronic devices. For this reason, electronic used devices must be disposed of separately. This device should not be disposed of with normal domestic waste. You can take your used device free-of-charge to recognised disposal points. You can get further information about the return of such devices from your local authority, also in non-EU countries.

Disposal of the S208 Remote control

The S208 remote control must be disposed of in accordance with valid legislation and regulations. As this product contains a rechargeable battery, it should not be disposed of with normal domestic waste. You must dispose of your S208 remote control when it reaches the end of its working life, in accordance with the corresponding regulations and legislation.
## Technical data

<table>
<thead>
<tr>
<th>Output</th>
<th>S119</th>
<th>S120</th>
<th>Measuring conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output performance RMS</td>
<td>2 x 60 W</td>
<td>2 x 120 W</td>
<td>1 kHz/ 0,1% THD/ 4 Ohms -3 dB</td>
</tr>
<tr>
<td>Frequency range</td>
<td>5 Hz – 55 kHz</td>
<td></td>
<td>8 Ohm load</td>
</tr>
<tr>
<td>Damping factor</td>
<td>100</td>
<td></td>
<td>A-weighted</td>
</tr>
<tr>
<td>Dynamic range</td>
<td>102 dB</td>
<td></td>
<td>1 kHz, 1 Watt at 4 Ohms</td>
</tr>
<tr>
<td>Channel separation</td>
<td>80 dB</td>
<td></td>
<td>25W at 4 Ohm</td>
</tr>
<tr>
<td>Harmonic distortion</td>
<td>0.005 %</td>
<td></td>
<td></td>
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<td></td>
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</tr>
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<td>RMS</td>
<td>2 x 60 W</td>
<td>2 x 120 W</td>
<td>1 kHz/ 0,1% THD/ 4 Ohms -3 dB</td>
</tr>
<tr>
<td>S119/S120-S208 distances</td>
<td>65m</td>
<td>65m</td>
<td>Open space</td>
</tr>
<tr>
<td>Dimensions with feet</td>
<td>88 x 200 x 322</td>
<td>88 x 200 x 322</td>
<td>H x W x D</td>
</tr>
<tr>
<td>Weight</td>
<td>4,9 kg/ 10,8 lb</td>
<td></td>
<td>Without packaging</td>
</tr>
<tr>
<td>Temperature range</td>
<td>150 W</td>
<td></td>
<td>DIN 40040</td>
</tr>
<tr>
<td>Power consumption</td>
<td>14 W</td>
<td></td>
<td>Maximum power</td>
</tr>
<tr>
<td></td>
<td>4.5 W</td>
<td></td>
<td>Normal operation¹</td>
</tr>
<tr>
<td></td>
<td>&lt; 0.6 W</td>
<td></td>
<td>Quickstart: On</td>
</tr>
<tr>
<td></td>
<td>T2,5 AL 250V</td>
<td></td>
<td>Quickstart: Off</td>
</tr>
<tr>
<td></td>
<td>T1,25 AL 250V</td>
<td></td>
<td>100 - 120 VAC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>200 - 240 VAC</td>
</tr>
<tr>
<td>Fuses</td>
<td>T2,5 AL 250V</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T1,25 AL 250V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External inputs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital inputs</td>
<td>2 x Optical, 2 x Coaxial</td>
<td></td>
<td>SPDIFF up to 96 kHz</td>
</tr>
<tr>
<td></td>
<td>16, 20, 24 Bit PCM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analogue inputs (Line)</td>
<td>Aux 1, Aux 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playable formats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streaming Client²:</td>
<td>WAV (96 kHz,32 bit), FLAC (24 bit), AIFF (32 bit), AAC, MP3 (cbr +vbr, 320 kB), OGG-Vorbis, WMA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playlists:</td>
<td>M3U, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Radio Data Base</td>
<td>Revox Internet Audio Portal (Online Services)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supported Mediaserver</td>
<td>UPnP-AV 1.1 and DLNA compatible Server</td>
<td></td>
<td>Microsoft Windows Media</td>
</tr>
</tbody>
</table>

¹ Measured without any speakers or external devices
² estimated date of delivery is 3.quarter of 2012
³ The audio formats listed must be supported by the UPnP server so that the S119/ S120 can play them. It is not enough for the audio files simply to exist on the server.
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Irrtümer und technische Änderungen vorbehalten. E&EO

network receiver User manual / Part no.: 10.30.3200

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