

User Manual
STUDIOMASTER

M300 / M500

Introduction	3
Unpacking	3
Network requirements for M300 / M500	3
Included in delivery	3
Front part M300 / M500	4
Connection panel M300 / M500 on the back	5
Multiuser system – what is that?	6
Integration	7
First steps	7
Integration into the network with Revox Connect	7
About Room	9
Reset options	9
Operation	10
Switching on / off	10
Select source	11
Source options	11
Determine user favorites	12
Adding music from the Play View to User Favorites	12
Sort User Favorites	13
Manage user favorites in folders	13
Add User	14
Select and sort users	14
User settings	15
Enable/disable music services	15
Assign users	15
Assign local sources	15
Assign rooms	16
Assign zones	16
About User	16
Room/device-specific settings	17
Edit name	17
Edit alias	17
Sound settings	17
Alarm & Sleep-Timer	18
Audio input trigger	18
Bluetooth headphones	18
Room information	19
3-point symbol	20
Play Local symbol	20
User volume	20
Update	21
.....	21
Define Zone	22
Settings	23
App settings	23
Multiuser settings	23
Device settings	24
Tools	26
Revox Connect	26
Room Debug	26
Configurator call	26
Send action	26
Configurator: Integration of a network hard disk (NAS)	27
Special feature: Integration of a Synology NAS	27
Configurator: Define Revox speakers	28
Revox Info	30
Technical Data	31

Introduction

Congratulations on acquiring your new **STUDIOMASTER M300 / M500**. We would like to thank you for the trust you have shown in our company by purchasing this high-quality product. Before commissioning your Revox **STUDIOMASTER**, you should pay attention to the following instructions in order to fully benefit from the acoustic qualities of the product.

For **general safety instructions**, **information on how to dispose of your old devices** and the **warranty terms**, please refer to the enclosed leaflet.

Pay attention to the warning labels on the device and/or its external power supply unit:



In order to prevent the risk of electric shock, do not remove any coverings. Maintenance and repairs are only to be performed by qualified specialists!

Unpacking

We recommend keeping the packaging materials in case the product needs to be transported at a later point in time. Please check the **STUDIOMASTER M300 / M500** and its accessories after unpacking to ensure that it is complete and has not suffered any damage during transport. Before commissioning the device, please read through the operating manual carefully. Keep it as a reference document.

A device which has suffered mechanical damage or which liquids have penetrated into is not to be connected to the mains.

Network requirements for M300 / M500

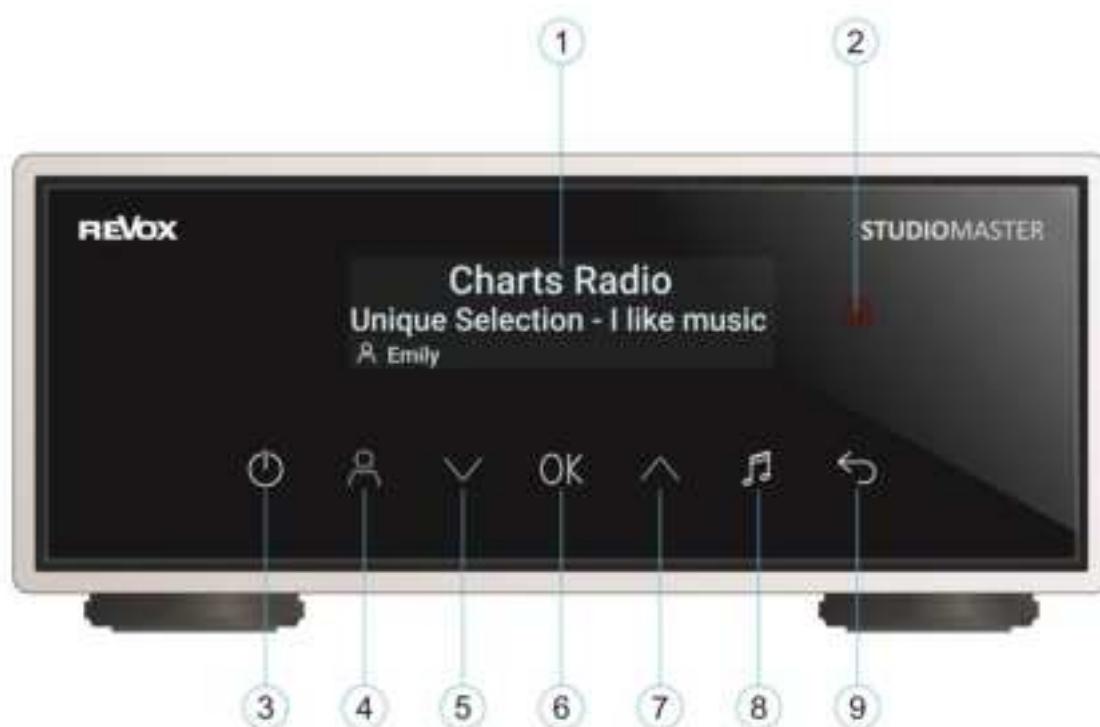
The **STUDIOMASTER Audio System** is a network receiver and requires a network connection for operation. It can be integrated into the network with a cable (LAN) or via a 2.4 GHz or 5 GHz WiFi interface that supports 802.11 g/n/a/ac wireless technology. You can find more about this in the "Integration" chapter. The Revox Multiuser app is available free of charge in the store for Android devices from Android 7.0 and Apple devices from iOS 9.35.

Included in delivery

- **STUDIOMASTER Audio System**
- WiFi antenna 2,4/ 5 GHz
- Adapter for antenna sockets from F socket to coaxial for FM/DAB+
- Power cable 3-pol
- Network cable 2m
- Leaflet *Safety instructions & Warranty terms* (1x)
- Welcome letter
- Warranty card

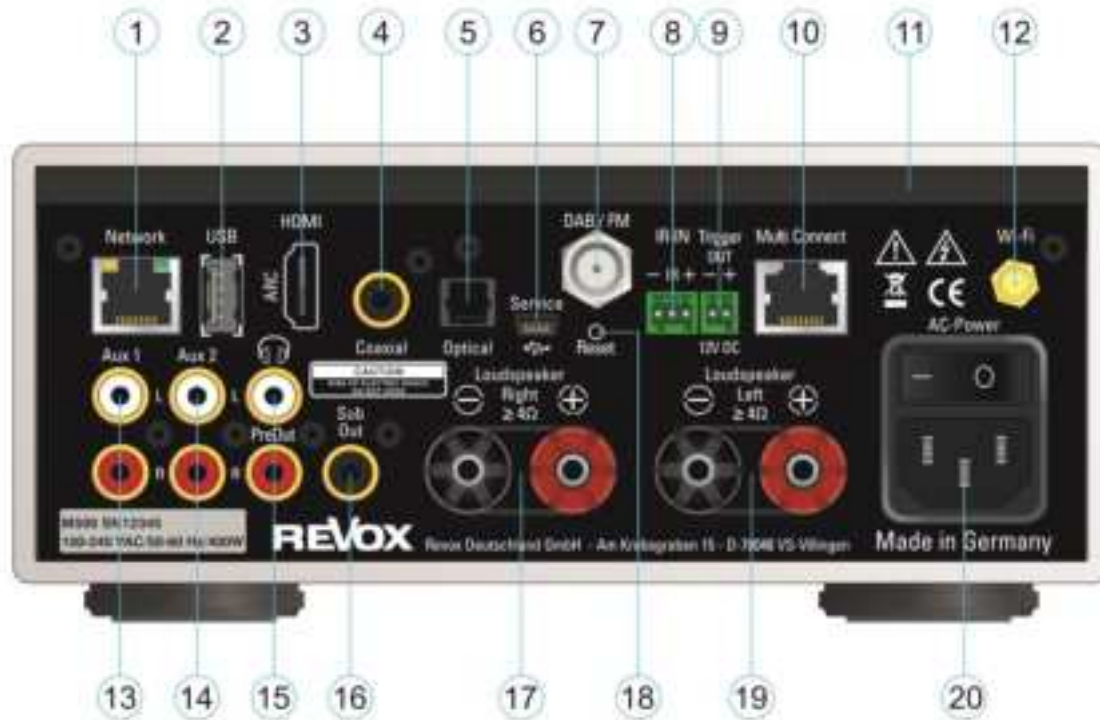
Described software version: 0.6.4 (see [Room information](#))

Front part M300 / M500



No.	Function	Description
1	Display	Display of status messages such as user, title, volume, etc. on a monochrome OLED display
2	IR sensor	Infrared receiver for optional multiuser remote control C100 [RC5 Code]
3	On/Off switch	Switching the audio system on/off.
4	User select	Change to another user (users can be configured via the Multiuser app)
5	Volume down / down in list	Volume down / move down in a list
6	OK / Setup	Confirm selection (e.g. user) / press setup call > 2 seconds
7	Louder / up in list	Increase volume / go up in a list
8	User favorite selection	Change of favorites within a user (user favorites are defined in the Multiuser app)
9	Back	Switch back to the main menu from a submenu

Connection panel M300 / M500 on the back



Nr.	Funktion	Erklärung
1	Network access via LAN	Wired network connection with LAN cable (1Gbps)
2	USB storage	Connection of a USB mass storage device (USB-A, 5 volts) with a max. current consumption of 500 mA
3	HDMI-ARC socket	Audio connection to the TV set with HDMI cable for digital signals [SPDIF]*
4	Coaxial digital input	Digital audio input for stereo signals* [SPDIF] up to max. 192 kHz / 24 bit via coaxial socket (RCA)
5	Optical digital input	Digital audio input for stereo signals* [SPDIF] up to max. 192 kHz / 24 bit via TOS link socket
6	Service USB socket	Service socket for in-house applications
7	DAB+/ FM antenna input	Connection via F socket for DAB+ or FM (VHF) antenna. Adapter for coaxial plugs included
8	Input infrared receiver	Connection for Revox IR receiver IR-204 or C18 Wall Remote
9	Trigger output 12V DC	Voltage output 12 V DC; 80mA max.
10	Multi Connect interface	Connection via patch cable to other Revox devices that are Multi Connect-capable
11	Air inlet openings	Air inlet opening for internal device cooling – keep a distance of 5 cm to adjacent surfaces
12	Wifi socket	Connection of the WLAN antenna 2.4 / 5 GHz, which is included in the scope of delivery
13	Analog audio input Aux1	Cinch (RCA) input for an analogue stereo signal*
14	Analog audio input Aux2	Cinch (RCA) input for an analogue stereo signal*
15	PreOut	Analog stereo signal for ext. amplifiers or headphones. DSP equalizer available in the configurator
16	Subwoofer output	Analogue subwoofer output for external active subwoofers, i.e. with their own power amplifier
17	Speaker output - right	Right speaker with impedance ≥ 4 ohms
18	Reset push-button	Reset button for restoring factory settings [paper clip]
19	Speaker output - left	Left speaker with impedance ≥ 4 ohms
20	power cord connector	Mains cable connection 100 - 240 VAC (class 2 with protective earth). Power switch - no power consumption in the off position. Attention: when the mains cable is connected, certain internal circuit areas are live despite the Off position!

* with optional input detection

Note DAB+/FM parallel reception


A DAB/FM splitter is required for parallel reception of DAB and FM signals via the F socket of the tuner module. The two inputs FM (87.5 - 108 MHz) and DAB+ (174-239 MHz) are combined on a common HF output. Revox optionally offers an optimized FM/DAB switch under the **order number 156109701**.

Note on USB storage



Revox recommends using the USB connection only for data storage media up to 32 GB, since the reading time increases enormously with large amounts of data or it may be impossible to record the data. A network hard drive (NAS) is recommended for a large music collection, e.g. the Revox Joy Audio Server S37 with integrated CD ripping function.

Multiuser system – what is that?

With the Multiuser system from Revox, the focus is on individual users and their preferences. The possibility of adapting music sources specifically to one's own needs is greater today than ever. And there is a time when you know which DAB station or Internet radio station is playing your favorite music and which local audio input the CD player is connected to. All of these sources can be easily and intuitively saved under Revox's patented user favorites.

And this is where the advantages of the Revox Multiuser System come into play: every Revox system, regardless of whether it is set up in one room or in several rooms as a multiroom solution, offers several user profiles with their own user favorites. When purchasing additional M300 or M500, the existing system is expanded by 4 user profiles each (if desired). Each user can enter his name, so every family member is visible. After you have selected your user profile, this can be further personalized in the app, for example by selecting your favorite station and adding it to your user favorites using the 3-point symbol . The new user favorite is placed at the bottom of the favorites list and can be sorted there by holding and sliding. With the M300 / M500, the following audio sources are available for storage under user favorites:

- Internet radio stations
- Musik services Spotify*, TIDAL, Deezer
- DAB+ stations
- FM stations
- Podcasts
- Music server (music from a network storage)
- USB audio
- Bluetooth
- Local sources (analogue and digital inputs including HDMI ARC input)
-

This creates a list of your favorite music or listening content that you can easily access. The selection is made either in the multiuser app (e.g. on the **STUDIOCONTROL** C200 or your mobile phone) or by pressing a single button on the optional wall control (C18 Multiuser Wall Control) or the optional IR remote control (C100 Multiuser Remote Control). Furthermore, users  and the favorites  list can be selected directly via the glass front on the M300 / M500.



* If the Spotify trigger is activated, the M300/M500 is automatically switched on/over as soon as a user from the Multiuser system is selected as the playback device in the Spotify app. The Spotify trigger can be found in the Multiuser Configurator under Source/User-Music/Spotify.

Integration

First steps

A network connection is required so that the M300/ M500 can be started and later operated. If the connection to your own network does not take place via LAN using the supplied network cable, you will need a mobile device (Revox C200, smartphone or tablet) with Bluetooth and WLAN functions. As a first step, please download the Revox Multiuser app from the Apple App Store or the Google Play Store and install it on your device.

You can get a direct link via the QR code (see orange marking), which is located as a protective film on the glass front of your M300 / M500. Simply take a picture of the QR code on the right with the QR scanner on your handset and follow the associated link. The link is equally valid for iOS and Android devices.



Fig.: Protective film on M300 / M500 glass front



Fig.: Multiuser App symbol

Integration into the network with Revox Connect

After switching on for the first time using the switch on the back above the mains cable, the display shows the following content in German and English:



The M300 /M500 is now ready to be set up via the Multiuser app.

Revox Connect is a connection routine that uses Bluetooth to create an initial connection between the M300 / M500 and your mobile phone. The audio system can now be informed of the WLAN network with its key (password) via the Bluetooth connection using the Revox Multiuser app.

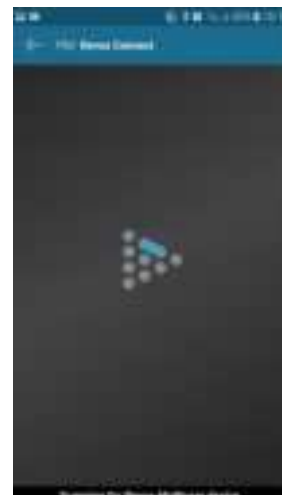


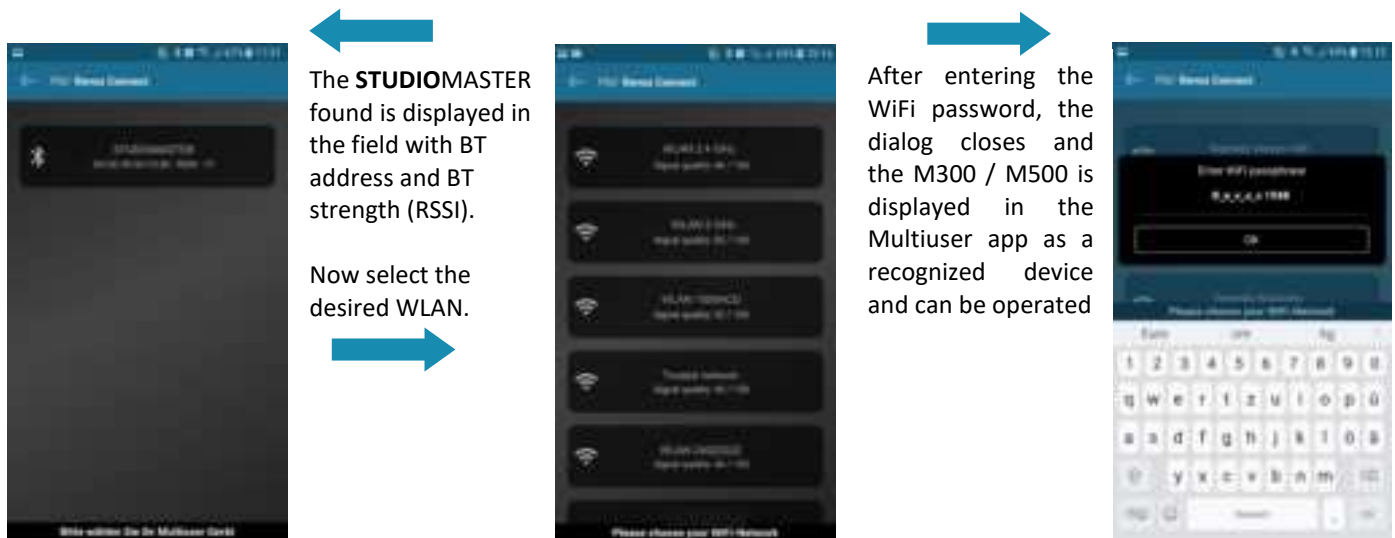
Open the Multiuser app and press the blue connect sign on the bottom right.

Pressing the Bluetooth field starts the search for Multiuser devices.



The Multiuser app icon is shown during the search.





Establish a new

WLAN connection with Revox Connect

If the Multiuser system is to be integrated into a new WLAN network and was previously registered in another network, the Revox Connect menu can be called up again using the routine shown.

- Press the OK button for more than 2 seconds. This takes you to the setup menu of the **STUDIOMASTER** device.
- Confirm the **Revox Connect** option with **OK**.
- Now the M300 / M500 is ready again to establish a new WLAN connection via the Bluetooth interface in combination with the Multiuser App, as described in the previous chapter.



Note

The M300 / M500 remembers all WLAN accesses in the background. If a WiFi network fails or is very weak, it can connect to the previous WiFi network without reconnecting. If this is not desired, a **Reset network** can be carried out in the setup of the multiuser app in the **Device settings** using the **Reset** switch.



About Room



With the room information you can get an overview of the status of the M300 / M500. This menu can be called up via the M300/ M500 front. To do this, press the **OK** button for more than 2 seconds and navigate to **Roominformation** using the buttons. **OK** then shows the user-relevant data shown below.

The following information is listed:

- Name: Device name for display in the app
- ID: Unique assignment option in the multiuser system, with the MAC address being part of it
- Alias: Alias name used when programming via text commands, which is independent of names
- Hostname: Name of the host (entity offering the services)
- Network Interface: Display of whether WLAN or LAN was selected as network access
- IP: IP address that was assigned to the M300/ M500 in the network
- MAC: MAC address that the M300/ M500 has
- Multiuser: Version display of the Multiuser system
- OS: Version of the operating system or the firmware of the M300/ M500
- Reboot [OK button to confirm]

The device can be restarted via the *Reboot* menu field.

Reset options



You can use the three reset functions to reset specific setting areas of the M300 / M500. These reset options are also available in the Multiuser App.

Reset manifest

Put simply, the manifest includes all device-specific settings that can be made in the configurator. These can be settings for the two equalizers, but also source names or the different triggers of the M300/ M500. All these settings are reset to the factory settings during a **Reset manifest**.

Reset network

A network reset includes the following areas:

- WLAN reset → SSIDs and passwords are deleted
- fixed IP's for WLAN are reset and DHCP is activated
- Fixed IPs for LAN are reset and DHCP is activated.

Factory Reset

A **factory reset** erases all settings, including Wi-Fi and manifest, and brings the M300 / M500 back to factory settings. It thus returns to the state it was in when it was delivered.

Operation

After integration into the network, the M300 / M500 can be operated via the Revox Multiuser app.

Switching on / off

The power symbol (see orange circle) can be used to switch the currently selected **STUDIOMASTER** device on and off with a simple press.

If there are several **STUDIOMASTER** units in the Multiuser system, there is an extended switch-off function. A long press on the power icon will bring up a selection menu (see picture below right), which now provides two options:

User off

All rooms of the currently selected user, which in the example on the right is the user *Peter*, are switched off. All other room amplifiers remain switched on.

System off

The complete system, i.e. all room amplifiers in the Multiuser network, are switched off. This is very useful, for example, if you want to leave the house and make sure that no music is playing anywhere.



Select source

By pressing the user favorites symbol at the bottom right, all available sources are displayed. You can now select a source temporarily, as you are used to with conventional hi-fi systems. The selected source is retained until you select a new source. The source is retained even after the M300/M500 is switched off.

The M300 / M500 provides the following sources:

- Internet radio stations
- Music services Spotify, TIDAL, Deezer
- DAB+ stations
- FM (UKW) stations
- Podcasts
- Bluetooth
- Airplay 2 (not visible as source in the multiuser app)
- Music server (USB audio via USB-A socket or music from network storage)
- 2 analog inputs Aux 1, Aux 2
- 1 digital, optical input via a TOS-Link socket
- 1 digital coaxial input via black cinch socket
- 1 HDMI ARC input via an HDMI socket



Source options

The local sources (digital & analogue inputs, tuner, Bluetooth, HDMI Arc) offer the possibility to adjust the **name**, the source icon and the **input gain** to your own needs. To do this, select the overview of all local sources of the M500 and then call up the selection option for the respective source via the 3-dot symbol ⋮.



Overview source options




Source icon selection







Input gain -6 bis +6 dB

Determine user favorites

So that you have quick and easy access to sources that you listen to often, it is worth saving them as user favorites. To do this, navigate to the favorite music content and press the 3-dot icon  in the tile. Now save the selected source under your user favorites with "**Add to user favorites**" or "**Add to user favorites folder**". This favorite selection is assigned to the user that is displayed in the top left of the app. In the example on the right, the user **Emily**. This creates an individual list of personal music for each user in the Multiuser system.

You have quick access to your user favorites in a variety of places:

1. In the Multiuser app via the user favorites symbol at the bottom right 
2. Directly via the glass front of the M300/ M500 via the note symbol 
3. Via the optional remote control C100 Multiuser Remote Control 
4. Via the optional wall control C18 Multiuser Wall Control 

Add to Radio Favourites

For Internet radio stations, it is also possible to store stations in the **Radio Favourites** category within Internet Radio. The radio favourites are offered by the Internet radio provider and cannot be called up specifically via remote or wall control. It is therefore recommended that you add the Internet radio stations directly to the **user favourites**.



Adding music from the Play View to User Favorites


Another option for adding music titles to the User favorites is integrated in the Play View. By swiping up over the cover picture, a list appears showing all titles or stations from the current selection. This selection can be, for example, a music album or a category from the Internet radio. The list shows the currently playing title/station with a light background, while the others are shown slightly grey. All titles/stations can be selected directly by tapping. Using the 3-point menu in the Play View list, the desired content can be added to the **User favorites** (see below). It is also possible to add the title/station to the selection services; in the example below, to the TIDAL favorites.

The advantage of using the list selection is that you can listen first and then decide whether the title/station should be added to the favorites.

The list that is displayed is also retained if you leave the play view for a short time.



Sort User Favorites

The list of user favorites can be rearranged at any time or entries can be removed from the list. To do this, tap on the 3-point symbol  for the entry to be edited and the adjacent menu appears. With the 5 menu items, the desired placement can be achieved or the entry can be deleted. Confirmation is required for deletion.

Alternatively, the entries can also be rearranged by **holding** and **moving** (drag & drop).

In this menu it is also possible to create or change an alias name for the source/transmitter. This alias name is only required for programming functions by higher-level (house) controllers. In everyday use the alias name has no meaning.


* How to integrate a network hard disk is described in the chapter [Settings](#) - Configurator.



Manage user favorites in folders

New User Favorites are always placed in the User Favorites list first. From there, in the second step, the entry can either be moved within the list (Figure 1) or placed in a new or existing folder (Figure 2).

The folders thus offer the possibility of making the User Favorites list even clearer, for example sorted by genre or source type. The Alias function allows User Favorites folders or their contents to be called up specifically via wall or remote control (C18/C100).

You can either use the 3-dot-symbol  or drag&drop to place the entry into a folder. In the latter case, please note that the entry to be moved must be dragged over the folder icon until it is highlighted in blue (Figure 3). Then let go.

Within a folder, entries can be organized in the same way as in the main list (Figure 4).



Fig. 1



Fig. 2




Fig. 3





Fig. 4

Add User

As already mentioned, the user and his patented user favorites are the focus of the Multiuser System. With the purchase of the M300 or M500, 4 user profiles are supplied free of charge. If other people need their own user profile, the system can be expanded by 4 users each when purchasing an additional M300 or M500. If you are planning a system with a large number of users, we recommend purchasing a V400 multiuser server, which can expand the system by up to 16 users with the appropriate licenses.

A user is already created with the factory configuration of the M300/M500. If you would like to activate additional users, press the  symbol for the basic settings and proceed as follows:

As already mentioned, the user and his patented user favorites are in the Revox Multiuser System. Select the  **Settings** section and, if there are several systems, select the correct device under Device settings.

- Under **Users**, enter the desired number of user one. The M300 and M500 have a maximum of 4 to choose from.
- Confirm the field that appears with "**Apply now**"
- In the basic settings, in the **Users** section, you will now find the new number of users
- Each user can be assigned an individual name using the 3-point symbol  (same procedure can also be used to reduce the number of users)



Note

If **all** users are deactivated on an M300 or M500 (0 users), the **STUDIOMASTER** becomes a pure room amplifier (client) and in this case always requires a server (e.g. another **STUDIOMASTER** or a V400 Multiuser server).



Select and sort users

The user field is located in the upper area of the display so that the user can make quick selections in day-to-day operation. The current user is displayed to the right of the user icon with his name. Selecting this field opens the user selection.


The order of the displayed user profiles can be rearranged with drag & drop.



User settings

All relevant needs that are important for the individual user can be set in the user settings.

Enable/disable music services

Each user can hide sources that are not relevant to them. The **Enable/disable music services** menu can be selected via the 3-point symbol  in the user settings and can be set individually for each user. The local sources are divided into the local sources of all available Multiuser systems.



Assign users

In the default setting, each user can see the other users and also select them. When controlling with the Revox C200, which can be used equally by all users, it makes sense if all users are visible and available.

However, if the individual users always use their personal smartphone to control the Multiuser system, it can be helpful that only their own user is displayed. This gives you an overview and accidental selection of other users is ruled out.



Assign local sources

Multiuser devices, such as the Multimaster M300/ M500 or a Multiuser Amplifier M30, have local sources in addition to network sources. These can be analogue or digital inputs, but also a Bluetooth interface. All local sources from an amplifier are available to the entire system, but only one local source per device can be streamed into the Multiuser system at the same time. In hotel projects, it is not desired that local sources can be selected across rooms. In the menu **Assign local sources**, only one or more "own" local sources can now be specifically assigned to the users. Other local sources are then no longer visible and selectable for these users.



Assign rooms

As a basic setting, one user can see and control all rooms in the Multiuser system. It is possible to hide certain rooms via the **Assign rooms** menu. It can be arranged that a user only sees the rooms that are important to him. This also avoids unintentionally activating rooms that are used by other users.

The "All" switch activates or deactivates all rooms at the same time. This is especially helpful and time-saving for large multi-user systems with many rooms.



Assign zones

Zones are groups of individual rooms (devices) that can be operated together and play the same music (also known as party mode). In the **Assign zones** menu, it is now possible to make individual zones accessible to specific users.







About User

All user-relevant data such as name, ID (identifier) and alias are displayed in the user information. In addition, specific data on the multiuser device that the user is currently using is also displayed.





Room/device-specific settings

Specific settings can be made for each room in the Multiuser System. Since there is a Multiuser audio system (e.g. M500) or a multiuser amplifier (e.g. M30) behind every room, this is also a device setting. To do this, press the  symbol for the basic settings and use the room symbol  to select the room/device that you want to change. If there is only one room, you can open the room configuration directly via the 3-point symbol . In a Multiuser installation with several rooms/devices, first open the room list using the  symbol.

Edit name

Use this menu item to edit the name of the room/device. This name is then also displayed and used as the room name in the multiuser app.

Edit alias

The alias is a name for a variable that is used when programming in the Multiuser configurator. The name for the room can be changed as desired, but programming via the alias in the background is not affected and continues to work. The alias is irrelevant for the simple operation of the Multiuser system via the app.

Sound settings

The everyday sound settings are made in the sound settings. More in-depth settings, e.g. for the specific optimization of Revox loudspeakers, are made in the Multiuser configurator.

The following individual settings are possible:

- Volume:** Adjust device volume. A maximum volume can be set individually for each M300 / M500 in the configurator.
- Direct mode:** this deactivates all sound-specific settings (balance, bass, treble) and replaces them with a linear amplifier characteristic. This also affects the speaker-specific settings in the configurator!
- Speaker balance:** Balance adjustment right/left. If you reduce the level of one channel, the other increases by the same value, so the room volume always remains the same.
- Bass / Treble:** Bass / treble adjustment
- Pre-Out DSP Bypass:** Deactivation of the specific preamp characteristic defined in the configurator
- Pre-Out balance:** Balance adjustment right/left. If you reduce the level of one channel, the other increases by the same value, so the absolute level always remains the same.

Note

The M300 / M500 has 2 independent DSP settings that are defined in the configurator. The **first** DSP (Digital Signal Processor) is responsible for the output characteristics of the stereo output stage, which enables optimized playback of all Revox loudspeakers currently in question or self-defined characteristics. This characteristic is activated or deactivated with the **Direct mode** switch.

The **second** DSP serves the analog preamp output of the M300/M500. Here, for example, linear output stages can be connected that are to be operated with a specific equalization. Another field are headphones, which may also be connected directly to the preamplifier output. The DSP can be used to correct inadequacies in the frequency response of the headphones or your own hearing.



Alarm & Sleep-Timer

In this menu you can set the alarm clock, whereby both an **on** and **off** function is available. The switch-on function corresponds to the classic alarm clock, which goes on at a certain time. The last listened to user favorite serves as the source.

With the switch-off alarm clock, a time can be set at which the device or the entire Multiuser System switches off, regardless of when or who switched it on. This wake-up mode is useful when you're listening to music in the morning and then leaving the house. So you can define that the Multiuser system is switched off at a certain time.

The sleep timer, on the other hand, can be set quickly and easily in 6 time steps (5, 10, 15, 20, 30, 60 minutes) in order to switch off the M300/M500 after the set time. This is useful if, for example, you want to be lulled to sleep in bed by music.

If one or more timers are active, an alarm clock icon is displayed next to the room name.



Audio input trigger

The **STUDIOMASTER M300/ M500** has 6 audio inputs (Aux 1/2, Optical, Coaxial, Bluetooth and HDMI ARC), which can be defined as sensitive inputs if required. This means that as soon as a signal is detected at the respective input, the M300/M500 automatically executes the command that is defined in the **Audio Trigger** area of the configurator.

In the factory setting, automatic switching on or switching to the respective input is stored. The **Timeout** setting (0 - 300 sec.) can be used to define the time until the device automatically returns to the previously heard source if no signal is detected at the input. If the M300/M500 was previously in standby, the device automatically returns to standby.

Other or additional actions, e.g. a specific volume when switching on/off, can be defined using the Multiuser text commands in the configurator.

The **Sensitivity** setting can be used to define the signal strength at which the system switches to the respective input.

Note

The settings for *Audio input trigger* apply to all the above-mentioned inputs together and can be defined both in the Multiuser app and in the Configurator.



Bluetooth headphones

The **STUDIOMASTER M300 / M500** allows the use of Bluetooth headphones. The Bluetooth transmitter can be activated in this menu item. On first use, a Bluetooth scan must be performed by flipping the Scan Bluetooth switch. All active Bluetooth receivers in the vicinity are listed. These can be BT headphones, but also BT speakers or BT amplifiers. An M300/M500 can be operated **either** as a BT receiver **or** as a BT transmitter. It is not possible to use both variants at the same time.

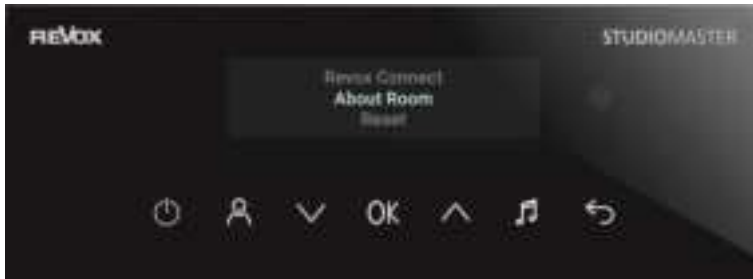
If your Bluetooth headphones were detected during scanning, you can select them and use them without further confirmation.



Room information

With the room information you can get an overview of the status of the M300 / M500.

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The following information is listed:

- Name: Device name for display in the app
- ID: Unique assignment option in the multiuser system, with the MAC address being part of it
- Alias: Alias name used when programming via text commands, which is independent of names
- Hostname: Name of the host (entity offering the services)
- Network Interface: Display of whether WLAN or LAN was selected as network access
- IP: IP address that was assigned to the M300/ M500 in the network
- MAC: MAC address that the M300/ M500 has
- Multiuser: Version display of the Multiuser system
- OS: Version of the operating system or the firmware of the M300/ M500
- Reboot [OK button to confirm]

The device can be restarted via the *Reboot* menu field.

Room status information

3-point symbol

The three dots under the standby icon of a room or zone indicate that the room or zone is being used by another user. By pressing the standby icon, you can take over the room or zone. Then the music selection of the user shown in the top left of the display also plays in this room/zone.



Play Local symbol

All local sources from an amplifier are available to the entire system. If a user plays a local source in multiple rooms, this creates a delay (latency) in the audio playback. This latency can be annoying (mainly related to image sources). For this reason, a **Play Local** symbol appears next to the room that makes its local sources available to other rooms.

If you now want to play back this room without latency, the Play Local function can be triggered by pressing the corresponding symbol. The source plays without latency and only in the room where it originated! All other rooms are switched off.

If you only start playback of a local source in the same room (all other rooms are switched off), playback is automatically latency-free. Playback only takes place via a Multiuser server and thus with a certain latency when additional rooms are switched on.

The local sources on the M300 / M500 include all analog and digital inputs including HDMI ARC, the tuners for DAB+ and FM, and the Bluetooth receiver.

All streaming sources such as Internet radio, podcasts and the various music services are made available via the server instance of the Multiuser system and are generally subject to a latency.



User volume

If several rooms/devices are used by a user, the user volume menu can be called up by pressing the right volume symbol. All rooms/devices that are currently switched on are listed there and their volume can be controlled either individually or as a group (bottom controller).



Update

The Multiuser system is constantly being improved and corresponding updates are made available.

The update is loaded in the background from the Revox update server to the M300 / M500. This is indicated by a white circle next to the user icon in the home screen - see picture on the right.

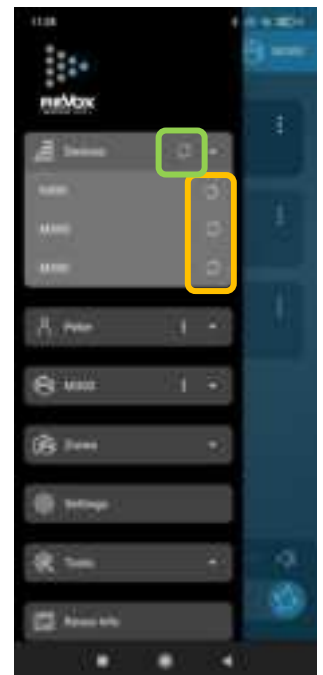
If one opens the page list, an update window appears, which shows all systems with an available update - see picture below right. If you press on the update icon in the title list (green mark), you update all systems, if you tap on the update icon of the individual systems (orange mark), you trigger the update of the selected system.

After the update, the white circles disappear and the new functions are available. The software version (OS) of your system can be found under the user or room information.

In addition, the M300/M500 shows a notification in the display in German and English, prompting the user to restart the unit.

A restart can be carried out in the Multiuser App under the heading *Basic settings/ Rooms/ About Room -> Reboot*.


From version 0.5.2, the display of the M300/ M500 also indicates when an update is available. It is then possible to trigger the restart directly by pressing the **OK** button on the front.







Define Zone

Zones can be created when multiple Multiuser audio systems or room amplifiers work together as a Multiroom system. The rooms combined into a zone can then all be controlled together. An example of this is the Living Zone, which consists of the kitchen, dining and living areas. With a single **STUDIOMASTER M300** or **M500**, we recommend setting the number of zones to zero so that operation is even clearer.

The next few steps show you how to set the right number of zones, or switch them off completely. To do this, first press the symbol  for the basic settings and proceed as follows:

- Select the  **Settings** section and, if there are several systems, select the correct device under Device Settings
- Enter the desired number of zones under **Zones**. The M300 and M500 have a maximum of 8 zones to choose from.
- Confirm the field that appears with "**Apply now**"
- In the basic settings, in the **Zones** section, you will now find the new number of zones.
- Each zone can be assigned an individual name using the 3-point symbol . This is where the room assignment takes place as well as the alarm clock and sleep settings.



① Alias (here for the zone)

The alias is a name for a variable that is used when programming in the Multiuser *configurator*. The name for the zone can be changed as desired, but programming via the alias in the background is not affected and continues to work. The alias is irrelevant for the simple operation of the Multiuser system via the app.



Settings

The settings menu includes global settings, such as the language of the Multiuser operation, as well as local and device-specific definitions.

App settings

- **Color scheme**
The darker color scheme has the advantage of extending the battery life of mobile devices while reducing exposure to UV light. The latter is particularly advantageous in the evening hours in order not to disturb people's day-night rhythm.
- **Static Menu Server IP**
In some installations there is a network separation by VLANs between the installed devices and the WLAN handsets. So if the M300/ M500 (Server1) is in a different network, it can still be controlled by entering its IP address in this field.

¹ an M300 / M500 is always a server as soon as it has at least one user.

Multiuser settings

- **Language**
The language setting affects all displays in the Multiuser system. This can be the language in the M300 /M500 display, as well as the language in the Multiuser app itself. German and English can currently be selected.
- **Menu mode**
With the menu mode, it is possible to limit or completely block the range of functions and display of the **settings** in the Multiuser app. There are 3 different modes available:

[default]

> All settings can be changed by any app user.

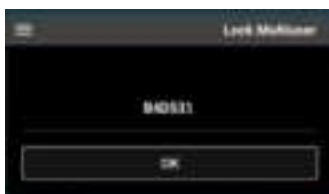
[basic]

> Only the everyday setting and configuration options are displayed. More in-depth settings such as the Multiuser configurator are hidden. Users can independently restore the extended menu mode!

[locked]

> When *locked* is selected, a window appears in which the unlock password must be entered to activate the lock. The password consists of the last 6 letters/numbers of the MAC address of a Multiuser device that is in the Multiuser system. This can be an M300/M500, or a Multiuser Server V400 or a Multiuser Amplifier M30/V219. With the help of an IP scanner (e.g. Advanced IP Scanner for WIN) can be used to determine the MAC address. It is also possible to determine the MAC address on the display of the M300, M500, M30 or V219. In the example below, an M500 has the MAC address: C0EE40**B4D531**.

The last 6 characters are now used [**B4D531**] and entered. The lock is then activated with OK.



Unlock: Press and hold the key symbol and then enter the last 6 letters/numbers of the MAC address of any multiuser device that is currently in the multiuser system.



- **Expert mode**

In expert mode, the room latency for LAN and WLAN can be set separately. The space latency indicates the maximum total delay of the data packets in the network. The lower this is, the fewer propagation delays occur between a local source and playback in the entire system (also note the Play Local function on this topic). However, for a small latency time, it must also be ensured that the network infrastructure is correspondingly well equipped. This means that routers, switches and access points must be designed for a sufficiently high bandwidth and speed, coupled with comprehensive WLAN area coverage. For the LAN room latency, times between 75 - 400 ms can be selected, for the WLAN room latency it is 75 - 800 ms.

Device settings

- **Device**

In this section, select the Multiuser device for which you want to make the settings listed below.

Users

Each M300 / M500 is delivered with 4 users. Select here the number of users that you need for your needs. After a change, the selection must be confirmed with **"Apply now"**.

Note: If all users are already covered by other Multiuser devices (e.g. additional M300/M500 or V400) and you select **0** users, the **STUDIOMASTER** becomes a room amplifier (client) and only the local inputs are available.

Zones

Select up to 8 zones in which multiple rooms can be combined. After a change, the selection must be confirmed with **"Apply now"**. A detailed description can be found in the chapter *"Defining zones"*.



- **Allow remote access**

The optional *Remote license* provides the option of maintaining or configuring the multiuser system remotely. The function is activated via the **Allow remote access** slider. A detailed description of the purchase and installation of this license can be found in the Multiuser/Multiroom download area of the Revox homepage.

- **Revox Connect**

With this slider, the Wi-Fi integration routine **Revox Connect** can be manually activated for individual devices via the app. This allows an M300 / M500 that is already connected to a WLAN to be integrated into another WLAN. This function can also be activated via the front panel of the M300 / M500 (press the OK button for 2 seconds and select Revox Connect). Note: After a **WLAN** or **factory reset** (see next chapter), the Revox Connect function is automatically reactivated so that it can be integrated again if no LAN cable is connected.

- **Allow client updating**

In a multiuser system there can be several servers, e.g. in which two or more M300 or M500 are installed. Each M300 or M500 or V400 then has the option to update client devices (M30, V219 (b), M100 / M51 with multiuser card). In order to clearly regulate which server provides the clients with updates, the option **Allow client update** should only be activated **for one** server. This function should be deactivated for all other servers. Otherwise, an update loop can occur that continues until all servers are on the same software status. If there is only one server in a Multiuser system, the update function must be active on this server (default setting).

- **Reset**

You can use the 3 reset functions to reset specific setting areas of the M300 / M500.

Reset manifest

Put simply, the manifest includes all device-specific settings that can be made in the configurator. These can be settings for the two equalizers, but also source names or the different triggers of the M300/ M500. All these settings are reset to the factory settings during a **Reset manifest**.

**Reset network**

A network reset includes the following areas:

- WLAN reset → SSIDs and passwords are deleted
- fixed IP's for WLAN are reset and DHCP is activated
- Fixed IPs for LAN are reset and DHCP is activated

Factory Reset

A **factory reset** erases all settings, including Wi-Fi and manifest, and brings the M300 / M500 back to factory settings. It thus returns to the state it was in when it was delivered.



Tools

Various utilities are available in this section, dealing with integration, analysis and advanced settings.

Revox Connect

With Revox Connect you can integrate an M300/ M500 into a WLAN network using the Bluetooth interface. This routine is also always available in the start screen of the Multiuser app if no network connection to a Multiuser server/system can be established.

A detailed description can be found in the chapter [Integration](#).

Room Debug

This small analysis program shows the most important information about the network integration of the M300/ M500 and is mainly intended for installers and developers.

Configurator call

With the Configurator, a tool is available with which more in-depth settings can be made. Two areas are important for the end user, firstly the **integration of stored music on network attached storage (NAS)** into the Multiuser system and secondly the selection of **Revox speakers in the DSP Amplifier** menu.

A separate window is opened in the handset for the Configurator. Alternatively, for a better overview, you can also enter the IP address of the M300/M500 on a PC/notebook that is in the same network as the M300/M500. The interface of the Multiuser App then appears and you can select the Configurator there under the entry Tool.

Note: The IP address of the system can be found under the *About Room* menu in the settings of the Multiuser App.

Send action

In this field, you can run tests or diagnostics with the help of Multiuser text commands and is mainly intended for installers and developers.



Configurator: Integration of a network hard disk (NAS)

The integration of a network hard disk is done under the heading **source**.

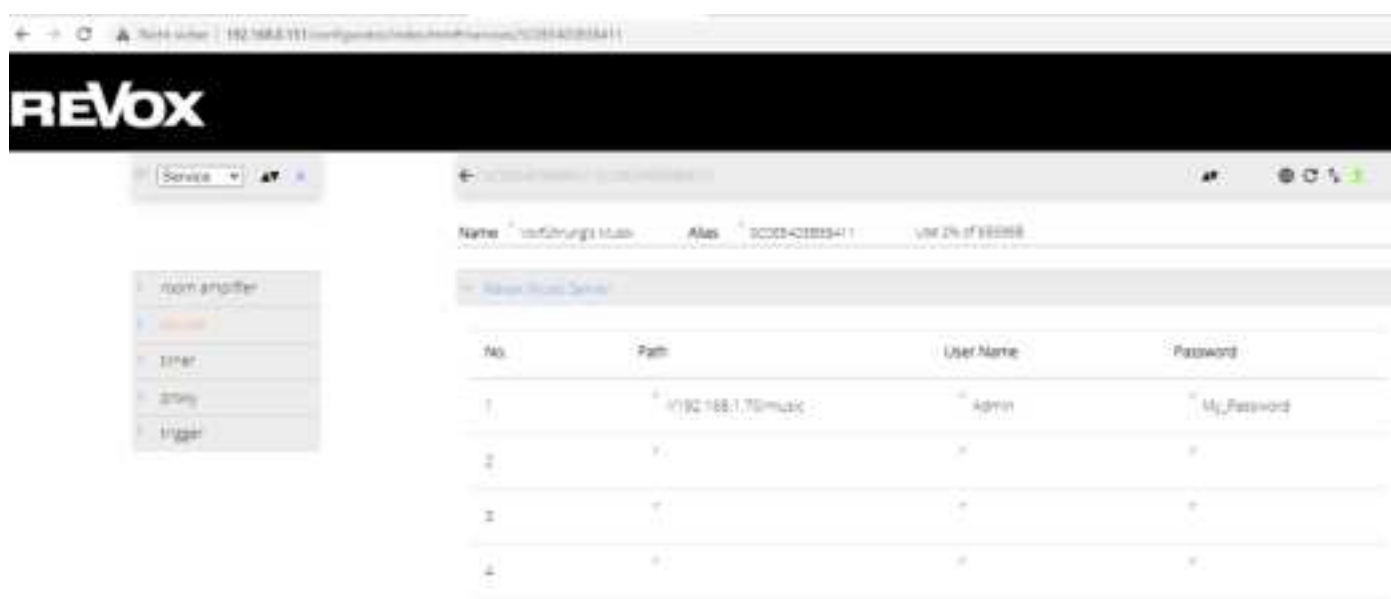
The first entry includes all settings for the local sources of the M300/M500. These include the inputs coaxial, optical, tuner (DAB/FM), analogue and HDMI ARC. Here, among other things, inputs can be activated or levels can be adjusted.

The **second entry** includes the **Revox Music Server**. Here you have the option of integrating up to 4 network hard drives. For this purpose, the //IP address NAS/music is stored in the path. If the NAS access is protected by a password, the **User Name** and the corresponding **Password** must be entered. Revox recommends the integration of the NAS in the network via a fixed IP address outside the DHCP range.

Attention: In the case of large file inventories with many hundreds or thousands of titles, it can take **10 - 15 minutes** until all albums/ titles are visible in the Music Server selection of the Multiuser App and can be selected.

The transfer of the music library is based on the Samba protocol and accordingly the network hard disk must provide at least the **SMB protocol 2** or higher.

Important: After each change in the Configurator, the **upload arrow** turns **green** and must be pressed for a final transfer.



Special feature: Integration of a Synology NAS

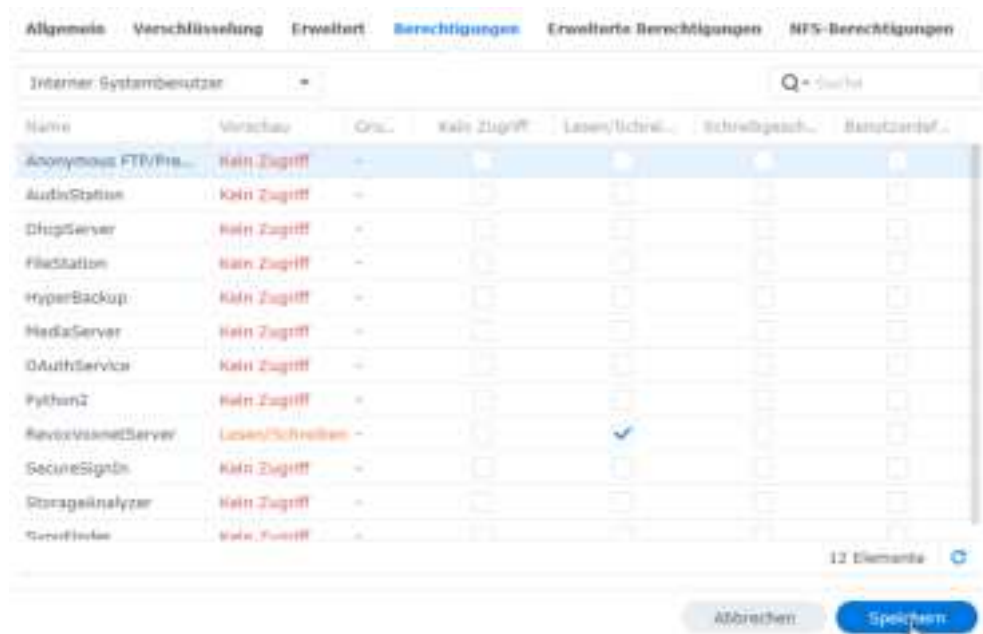
With the Synology DSM version 7.0 fundamental changes in the access authorization took place. Therefore the following steps are very important for the function of the music server in the Multiuser system.

Settings for Synology internal storage (default folder "music")

1. Open the Control Panel and click "Shared Folder".
2. Click on the folder with the stored music (default: "music").
3. Then select "Edit" and open the "Permission" tab.
4. Switch from "Local users" to "Internal system user" in the drop down menu.



5. Add read and write rights to the internal system user "Revox Server" and save it.



6. If there are more music folders on the Synology NAS that you want the multiuser system to access, repeat steps 2 to 5.

Updating the music library through the Multiuser App

If you have added more albums/ tracks to one of the storage locations at a later time, you should carry out an update of the music library by long pressing in the Multiuser App on one of the 6 selection fields (Artists, Albums, Genres, Composers, Latest tracks, Folders) of the music server.

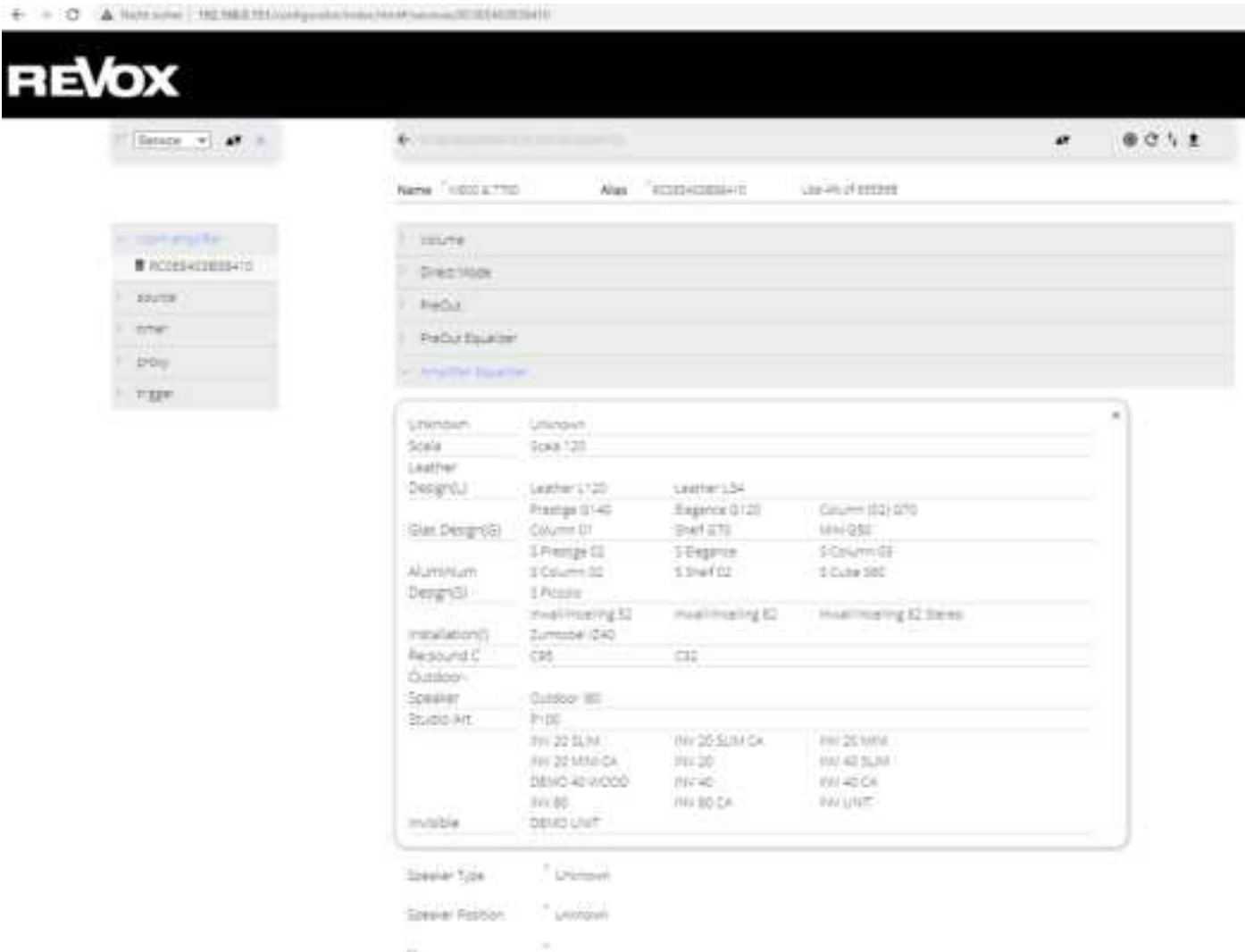
Configurator: Define Revox speakers

Revox has measured all the current Revox speakers and determined their characteristics under studio conditions and incorporated them into the amplifier characteristic curve. This increases the sound quality even more and protects the loudspeaker from mechanical overload in the low bass range.

Attention: Invisible speakers

The Invisible speaker has a high-pass filter, important for operational safety, which prevents the drivers of the Invisible board from receiving high-energy frequencies below 80-100 Hz. If the M300/ M500 is connected to Invisible loudspeakers, it is therefore mandatory that the loudspeaker selection is also **Invisible XX**.

The illustration below shows the current overview of the speakers that can be selected in the Configurator. There are independent setting options for the *PreOut Equalizer* and *Amplifier Equalizer* sections. The first is for the analogue preamplifier output of the M300/M500. The second is for its built-in stereo power amplifier.



Speaker Position

Here, an adjustment to the installation location can be selected for floor-standing and compact speakers. For installation speakers, a selection of supported installation housings is shown that Revox offers.

Revox Info

In the Revox Info area there is a wide selection of instructions, How-To videos and FAQs. In addition, a changelog shows the differences in the individual software versions and there is a direct link to the Revox homepage (Revox Info).



Technical Data

General	Data	Measurement conditions
Max. Power amplifier stage RMS	max. 2 x 140 W RMS [M500 @ 3 Ohm] max. 2 x 120 W RMS [M500 @ 4 Ohm] max. 2 x 60 W RMS [M500 @ 8 Ohm]	(1 kHz/ 2% THD)
	max. 2 x 95 W RMS [M300 @ 3 Ohm] max. 2 x 80 W RMS [M300 @ 4 Ohm] max. 2 x 40 W RMS [M300 @ 8 Ohm]	
Frequency range	15 Hz – 60 kHz	- 3 dB point / linear
Damping factor	1200	8 Ohm load
Harmonice distortion	0.005 %	25W at 4 Ohm
Temperature range	+10°...40°C	DIN 40040
Dimensions ¹ with feet	87 x 200 x 342	height x width x depth ¹
Weight	4,4 kg	Without packaging
Power consumption ²	0 W < 8 W Standby < 13W	Off position of mains switch Standby Normal operation without signal
Display	Real glass front with integrated infrared (IR) receiver and OLED display, luminous white, 256x64 pixels, with 7 touch sensors	
Accessoires	WLAN antenna, antenna adapter, power cord, patch cable	
Interfaces		
USB	USB-A, 5 volts, max. 500 mA	
Apple interface	AirPlay 2	
Bluetooth	BT5.2 /BLE with apt-X, apt-X HD, AAC (+), MP3, SBC	
MultiConnect	1x RJ45 for further Revox Multi Connect devices	
Audio formats	AAC, ALAC, AIFF, FLAC, MP3 (cbr + vbr), OGG Vorbis, WAV, MWA	
Playlist formats	ASX, M3U, M3U8, PLS, WPL	
Music services	Spotify, TIDAL, Deezer	
Radio	FM, DAB+, Internet Radio	
Network		
LAN	1 Gbps via RJ45 socket	
WiFi	IEEE 802.11 ac/a/b/g/n (Dual Band Option)	
External inputs		
Digital inputs	1 x optical, 1 x coaxial 16, 20, 24 Bit PCM - SPDIF up to 192 kHz	
Analogue inputs (Line)	700 mV / 39 kOhm (for full scale)	
External outputs		
Analogue output	Max. 2.0V/ Stereo / regulated	
Subwoofer outputs	Mono / regulated	
FM Tuner module		
Frequency range HF	87,5 – 108,0 MHz	
Signal to noise ration (stereo)	65 dB	115 dBµV / 1 kHz
Distortion factor THD+N	0,17%	115 dBµV / 1 kHz
Cross-talk	37 dB	115 dBµV / 1 kHz
Audio frequency range	40 – 12.500 Hz	-3 dB point
DAB Tuner module		
Frequency range HF	174,0 – 239,0 MHz	
Signal to noise ration (stereo)	90 dB	115 dBµV / 1 kHz
Distortion factor THD+N	0,05%	115 dBµV / 1 kHz
Cross-talk	90 dB	115 dBµV / 1 kHz
Audio frequency range	20 – 20.000 Hz	-3 dB point

¹ allow for a further 5 cm for cables and plugs



REVOX
Studio Sound Quality

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