

# **Revox Multiuser Driver for Control4**

## Introduction

In the area of Multiroom Systems, Revox is the leading provider of special solutions for more than 30 years, in order to bring music in the highest audio quality simultaneously and appropriately into many rooms. The music playback is uncompressed and loss-free, as well as with minimal response time and time-synchronous in every room. For more information about the Multiuser System, please visit: <a href="https://revox.com/en/multiuser-multiroom/">https://revox.com/en/multiuser-multiroom/</a>

Control4, a popular home automation system, can be used to control Revox Multiuser Systems.







# **Revox Multiuser Driver for Control4**

Driver

The **Revox user control driver** (RevoxUser.c4z) connects the Multiuser System users as a source with the Revox AV-Switch driver. One Revox User Control driver is required for each Multiuser System user in the Control4 System.

The **Revox AV switch driver** (RevoxAVSwitch.c4z) connects the Multiuser System users to the rooms. The AV Switch enables switching of any user to any room, to turn on and off a room and control of the room volume. One Revox AV Switch driver is required per Control4 System.

The **Revox amplifier driver** is required for each room in the Revox Multiuser System. Depending on the amplifier, this driver offers different local inputs and outputs and is therefore also suitable for audio/video integrations.

- The RevoxV219.c4z driver can be used for both the V219 and the V219b Multiuser Amplifier.
- The RevoxM51.c4z driver can be used for the Revox M51 Surround Amplifier in standalone mode as well as in a Multiuser System (in combination with integrated multiuser card).
- The RevoxM100.c4z driver can be used both for the Revox M100 Stereo Amplifier in standalone mode as well as in a Multiuser System (in combination with integrated multiuser submodul).



**Functions and advantages** 

The Revox Multiuser System offers a Control4 project a Multiroom solution with many functions and advantages:

- The driver can integrate up to 30 Revox users (hotel mode).
- Up to 36 Multiuser rooms can be controlled.
- Allows different Revox user profiles to be played in each room.
- The Revox Multiuser System offers individually per user a variety of music sources (Internet radio, Podcasts, Music Server, Tidal, Deezer, Spotify Connect, Airplay1 and local sources).
- Local amplifier inputs and outputs can be used for audio/video integrations.
- Streams are played uncompressed, lossless, and time-synchronized.
- You can play, create or manage your music sources quickly and easily via the Control4 interface.
- The control from the Revox Multiuser System can take place over Control4 touch panels, Control4-NEEO, remote controls, browsers and Apps.
- In addition, the system can be operated with Revox Multiuser wall and remote controls or the free apps for Android and IOS.
- On the optional Revox Control V255 Display (5.5" with PoE and WLAN), both the Control4 app and the Spotify and Revox Multiuser app can be installed.
- The Revox Multiuser System is a wired and therefore reliable and radiation-free system.



#### Requirements

The Revox Control4 drivers require:

- Control4 version 2.10 or higher
- Control4 Composer 2.10 or higher

The Revox Multiuser System requires:

- Multicast capable network
- Revox Multiuser Software version 2.4.8 or higher
- Revox M51 Software version 2.07b
- Revox M100 Software version 2.08a

#### Important notes on installation

The installation instructions assume that the Control4 and the Revox Multiuser System have already been installed and set up correctly.

#### **Driver availability**

All Revox Control4 drivers including configuration instructions can be downloaded free of charge from our support page after registration: <u>https://support-revox.de/</u>

Control4 is currently certifying our drivers. As soon as the drivers are certified, they are available in the Control4 online database and via the SSDP function.



**Configuration** *System Design – AV Switch* 

First of all, create an additional room for the Revox AV Switch and the Revox User Control drivers. In our example we call this room "Equipment".

Hide the equipment room then in the navigator settings.

Under "Search" you will find both Revox drivers (Revox AV Switch and Revox User Control). Drag and drop them into the Equipment room.



2	rop	erties		
	Au	dio Video Devices	Navigator	Miscell
		Menu Settings		
		Hide Room in	n Location M	enu





**Configuration** *System Design – User Control* 

The Revox User Control driver can be opened several times. The corresponding number of users is specified by the Revox Multiuser System.

With the rename function, you can label the users individually.



Now enter the IP address of the multiuser server in the user driver under "Server Address" and then click on "Set". Now a drop-down selection appears at "User". Select the correct user profile and save it with "Set". Repeat these steps for the other user drivers.

Properties		Properties Su
Advanced Properties		
Properties Lua		
Server Address	10.1.20.20	
State	Connected	
Version	2	
Debug Mode	Off	~
User	Sarah (#U00224DD062764)	~
	Sarah (#U00224DD062764) Peter (#U00224DD062765)	



## **Configuration** System Design – Room V219(b)

If you have rooms in the Multiuser System with a V219(b) amplifier, drag & drop the Revox V219 driver into the corresponding room. In our example it is the room "Kitchen". Afterwards the amplifier can be labeled.



Now select the corresponding room in the V219 driver under "Room" and then click on "Set".

Properties	Properties							
Advanced Pro	Advanced Properties							
Properties	Documentation	Lua						
Version			1					
Debug Mo	de		Off					
Room			Living (#R5410ECBD30DD0) Kitchen (#R0004A3D23F5E0)					



#### **Configuration** System Design – Room M51/M100

If you have rooms in the Multiuser System with an M51 or M100 amplifier, drag & drop the Revox M51 or M100 driver into the corresponding room. In our example it is the room "Living Room". Afterwards the amplifier can be labeled.



Now select the corresponding room in the M51 or M100 driver under "Room" and then click on "Set".

Properties	Properties					
Advanced Properties						
Properties Documentation Lua						
Version	1					
Log Mode	Off					
Room						
M202 IP Address	Living (#R5410ECBD30DD0) Kitchen (#R0004A3D23F5E0)					
State	Disconnected Error 111: Connection refused					



**Configuration** System Design – Room M51/M100

Now enter the IP address of the Revox M202 Ethernet interface module and then click on " Set ".

The M202 module is absolutely necessary in connection with an M51 or M100 amplifier.

Properties	
Advanced Properties	
Properties Documentation Lua	
Version	1
Log Mode	Off
Room	Living (#R5410ECBD30DD0)
M202 IP Address	10.1.20.55
State	Connected





**Configuration** *Connections – User Control* 

In the composer, switch to the "Connections" tab and then select the first user driver (in our example, user Sarah).



Now drag & drop the Revox user (in our example user 1 Sarah) onto user 1 of the Revox AV Switch.

Repeat this procedure for the other user drivers in consecutive order (Revox user 2 on user 2 of the Revox AV Switch, etc.).

Control & Audio	o Video Conn	ections				
Sarah						
Name	Туре	Connection	Input/Output	Connected To		
Audio/Video Output	ts					
Revox User	Audio	RF_REVOX_USER	Output			
RF_REVOX_USER Inpu	ut Devices					
Device		Name		Location	Connections	
Revox AV Switch	Ň	User 1		Equipment		
Revox AV Switch	ис. Чт	User 2		Equipment		
Revox AV Switch		User 3		Equipment		
Revox AV Switch		User 4		Equipment		
Revox AV Switch		User 5		Equipment		
Revox AV Switch		User 6		Equipment		
Revox AV Switch		User 7		Equipment		



Next, under "Connections" select the first room (in our example Kitchen) so that the connections can be set up.



Now drag & drop the Network Audio 1 onto Room 1 of the Revox AV Switch.

Control & Audio Video Connections						
Revox V219						
Name	Туре	Connection	Input/Output	Connected To		
Audio/Video Inputs						
Network Audio 1	Audio	RF_REVOX_AUDIO	Input			
🄏 Audio Input	Audio	STEREO	Input			
📥 Audio Input	Audio	DIGITAL_OPTICAL	Input			
Audio Input	Audio	DIGITAL_COAX	Input			
Audio/Video Outputs -						
🌯 Audio Out	Audio	STEREO	Output			
Room Control						
Room	RoomControl	AUDIO_SELECTION	Output			
Room	RoomControl	AUDIO_VOLUME	Output			
AUDIO_SELECTION Output	ut Devices					

-			
Device	Name	Location	Connections
EA-1	HDMI AUDIO OUT End-Point	Equipment	
Revox AV Switch	Room 1 📐	Equipment	
Revox AV Switch	Room 2	Equipment	
Revox AV Switch	Room 3	Equipment	
Revox AV Switch	Room 4	Equipment	



Select the audio selection under "Room Control" and drag & drop it onto the "Audio End Point" of Room 1 (Kitchen).

Control & Audio V	ideo Conn	ections			
Revox V219					
Name	Туре	Connection	Input/Out	put Connected	То
Audio/Video Inputs	1				
Network Audio 1	Audio	RF_REVOX_AUDIO	Input	Revox AV S	Switch->Room 1
🄏 Audio Input	Audio	STEREO	Input		
Audio Input	Audio	DIGITAL_OPTICAL	Input		
Audio Input	Audio	DIGITAL_COAX	Input		
Audio/Video Outputs —					
🌯 Audio Out	Audio	STEREO	Output		
Room Control					
Room	RoomContro	AUDIO_SELECTION	Output		
Room	RoomContro	AUDIO_VOLUME	Output		
AUDIO_SELECTION Input Dev	vices				
Device	1	lame		Location	Connections
😴 Equipment	A	udio End-Point 1		1st Level	
👕 Equipment	\	/ideo's Audio End-Point 1		1st Level	

•			
C	Equipment	Video's Audio End-Point 1	1st Level
P	Equipment	Audio End-Point 2	1st Level
P	Equipment	Video's Audio End-Point 2	1st Level
C	Kitchen	Audio End-Point 1	1st Level
P	Kitchen	Video's Audio End-Point 1	1st Level
P	Kitchen	Audio End-Point 2	1st Level
P	Kitchen	Video's Audio End-Point 2	1st Level



Then select the audio volume under "Room Control" and drag & drop it onto the audio volume 1 of Room 1 (Kitchen).

Control & Audio Vio	deo Connect	ions			
Revox V219					
Name	Туре	Connection	Input/Outpu	t Connected To	
Audio/Video Inputs	1				
Network Audio 1	Audio	RF_REVOX_AUDIO	Input	Revox AV Switch->Roon	11
🄏 Audio Input	Audio	STEREO	Input		
Audio Input	Audio	DIGITAL_OPTICAL	Input		
Audio Input	Audio	DIGITAL_COAX	Input		
Audio/Video Outputs					
🌯 Audio Out	Audio	STEREO	Output		
Room Control					
Room	RoomControl	AUDIO_SELECTION	Output	Kitchen->Audio End-Poin	t 1
Room	RoomControl	AUDIO_VOLUME	Output		
AUDIO_VOLUME Input Devices	3				
Device	Name	)		Location	Connections
💽 Equipment	Video	Volume 1		1st Level	
💓 Equipment	Audio	Volume 1		1st Level	
💓 Equipment	Video	Volume 2		1st Level	
💓 Equipment	Audio	Volume 2		1st Level	
🐨 Kitchen	Video	Volume 1		1st Level	
👿 Kitchen	Audio	Volume 1		1st Level	
💓 Kitchen	Video	Volume 2		1st Level	
👿 Kitchen	Audio	Volume 2		1st Level	

Repeat these connections for the remaining rooms with a V219(b). Make sure that you always connect the audio selection and audio volume objects to the correct room in each case...



If the optional In/Out module is installed on the Revox V219(b) Multiuser Amplifier, three audio inputs and one audio output are available. These inputs and outputs can be linked to other devices in the composer under "Connections". This feature makes the V219(b) Multiuser Amplifier suitable for audio/video integrations.

Control & Audio V	/ideo Connec	tions		
Revox V219				
Name	Туре	Connection	Input/Output	Connected To
Audio/Video Inputs —				
Network Audio 1	Audio	RF_REVOX_AUDIO	Input	Revox AV Switch->Room 1
🎭 Audio Input	Audio	STEREO	Input	
📥 Audio Input	Audio	DIGITAL_OPTICAL	Input	
Audio Input	Audio	DIGITAL_COAX	Input	
Audio/Video Outputs -				
🌯 Audio Out	Audio	STEREO	Output	
Room Control				
Room	RoomControl	AUDIO_SELECTION	Output	Kitchen->Audio End-Point 1
Room	RoomControl	AUDIO_VOLUME	Output	Kitchen->Audio Volume 1



**Configuration** *Connections – Room M51/M100* 

Under "Connections" select the room with an M51 or M100 (in our example Living Room) so that the connections can be set up.



Now drag & drop the Network Audio 1 onto the Room 2 of the Revox AV Switch.

		And solve the ball				
Revox M51						
Name	Туре	Connection	Input/Output	Connected To		
Audio/Video Inputs	.h		A			
Network Audio 1	Audio	RF_REVOX_AUDIO	Input			
Video 1	Audio	DIGITAL_OPTICAL	Input			
Video 2	Audio	DIGITAL_COAX	Input			
Video 3	Audio	DIGITAL_COAX	Input			
Video 4	Audio	STEREO	Input			
Video 5 Audio		STEREO	Input			
Video 6 Audio		STEREO	Input			
Audio/Video Outputs						
Audio Out 1	Audio	STEREO	Output			
Audio Out 2	Audio	DIGITAL_OPTICAL	Output			
Room Control						
Room	RoomControl	AUDIO SELECTION	Output	Living Room->Audio E	nd-Point 1, Living Room->Vide	
Room	RoomControl	AUDIO_VOLUME			oom->Video Volume 1, Living Room->Audio V	
RF_REVOX_AUDIO Outp	ut Devices					
Device		Name		Location	Connections	
Revox AV Switch		Room 1		Equipment	Revox V219->Network Audio 1	
Revox AV Switch		Room 2		Equipment		
Revox AV Switch		Room 3		Equipment		
Revox AV Switch		Room 4		Equipment		
Revox AV Switch		Room 5		Equipment		
Revox AV Switch		Room 6		Equipment		
Revox AV Switch		Room 7		Equipment		
					Version 2.01	



# **Configuration** *Connections – Room M51/M100*

# The connections for audio/video are automatically created by the M51/M100 driver. If this is not desired, the connections can be adjusted manually...

Control & Audio	Video Connec	tions			
Revox M51					
Name	Туре	Connection	Input/Output	Connected To	
Audio/Video Inputs	A				
Network Audio 1	Audio	RF_REVOX_AUDIO	Input	Revox AV Switch->Room 2	
Video 1	Audio	DIGITAL_OPTICAL	Input		
Video 2	Audio	DIGITAL_COAX	Input		
Video 3	Audio	DIGITAL_COAX	Input		
Video 4	Audio	STEREO	Input		
Video 5	Audio	STEREO	Input		
Video 6	Audio	STEREO	Input		
Audio/Video Outputs					
Audio Out 1	Audio	STEREO	Output		
Audio Out 2	Audio	DIGITAL_OPTICAL	Output		
Room Control					1
Room RoomControl		AUDIO_SELECTION	Output	Living Room->Audio End-Point 1, Living Room->Vide	
Room	RoomControl	AUDIO_VOLUME	Output	Living Room->Video Volume 1, Living Room->Audio V	
AUDIO_SELECTION I	nput Devices				
Device		Name		Location	Connections
C Equipment		Audio End-Point 1		1st Level	
C Equipment		Video's Audio End-	Point 1	1st Level	
C Equipment		Audio End-Point 2		1st Level	
Equipment		Video's Audio End-	Point 2	1st Level	
😴 Kitchen		Audio End-Point 1		1st Level	Revox V219->Room
<b>Kitchen</b>	Kitchen Video's Audio End-Point 1		1st Level		
Kitchen Audio End-Point 2			1st Level		
🐨 Kitchen		Video's Audio End	Point 2	1st Level	
Living Boom		Audio End-Point 1	· ·····	1st Level	Revox M51->Room
Living Room		Video's Audio End	Point 1	1et Level	Revox M51->Room
Video s Audio End-Point T			I OILL I	ISL LEVEL	HEVOX MD1-2HOOM



**Configuration** *Connections – Room M51/M100* 

The Revox M51/M100 Amplifiers offer local audio in- and outputs. This feature makes the M51/M100 Amplifier suitable for audio/video integrations. Depending on the equipment (e.g. optional I/O modules), the number of connections on the amplifier can vary. Therefore, the M51/M100 driver has 6 linkable inputs in the composer, which can be assigned to the desired input by means of remote mapping on the M51/M100.

control di Addio	video connec	uons		
Revox M51				
Name	Туре	Connection	Input/Output	Connected To
Audio/Video Inputs -	A	1 - Constant and		
Network Audio 1	Audio	RF_REVOX_AUDIO	Input	Revox AV Switch->Room 2
Video 1	Audio	DIGITAL_OPTICAL	Input	
Video 2	Audio	DIGITAL_COAX	Input	
Video 3	Audio	DIGITAL_COAX	Input	
Video 4	Audio	STEREO	Input	
🍡 Video 5	Audio	STEREO	Input	
Video 6	Audio	STEREO	Input	
Audio/Video Outputs				
Audio Out 1	Audio	STEREO	Output	
Audio Out 2	Audio	DIGITAL_OPTICAL	Output	
Room Control				
Room	RoomControl	AUDIO_SELECTION	Output	Living Room->Audio End-Point 1, Living Room->Vide
Room	RoomControl	AUDIO_VOLUME	Output	Living Room->Video Volume 1, Living Room->Audio V



# **Configuration** *Example of a TV solution with an M51*

If you want to play back the TV sound via a Revox M51 and connect this at Control4 level, proceed as described:

In the composer, link the TV Out (Optical) with the M51 Video 1 Input.

Control & Audio	Video Conn	ections		
Revox M51				
Name Audio/Video Inputs	Туре	Connection	Input/Output	Connected To
Network Audio 1	Audio	RF_REVOX_AUDIO	Input	Revox AV Switch->Room 2
🔳 Video 1	Audio	DIGITAL_OPTICAL	Input	TV->Audio Out
Video 2	Audio	DIGITAL_COAX	Input	
<b>A</b> A		DIDITAL COLM		

Now call up the "Remote" menu in the setup of the Revox M51 and link the remote button "Video1" with the source "Optical".



This ensures that the Revox M51 driver also selects the correct input on the amplifier.



# **Configuration** *Remote Mapping – M51/M100*

#### Remote Mapping M51

Video 1	Audio	DIGITAL_OPTICAL	Input
Video 2	Audio	DIGITAL_COAX	Input
Video 3	Audio	DIGITAL_COAX	Input
💊 Video 4	Audio	STEREO	Input
🎭 Video 5	Audio	STEREO	Input
🎭 Video 6	Audio	STEREO	Input

The audio inputs in the M51 Control4 driver must be configured in the remote mapping of the Revox M51 Amplifier. The remote buttons Video 1-6 must be connected to the desired source in the M51 remote menu. Please note that only Video 1-3 can be used for digital audio inputs in the M51 Control4 driver.

#### Remote Mapping M100

Video 1	Audio	DIGITAL_OPTICAL	Input
Video 2	Audio	DIGITAL_OPTICAL	Input
Video 3	Audio	DIGITAL_COAX	Input
🖲 Video 4	Audio	DIGITAL_COAX	Input
🎭 Video 5	Audio	STEREO	Input
💊 Video 6	Audio	STEREO	Input

The same applies to the Revox M100 Amplifier with regard to remote mapping. Note that in the M100 Control4 drivers Video 1-4 are usable for digital audio inputs.



**Configuration** *Remote Mapping – M51/M100* 

#### Tuner/CD-DVD Remote Mapping M51/M100

If you want to use the integrated CD/DVD player or the FM, DAB or internet radio of an M51/M100, the TUNER and DVD remote button must be mapped with the corresponding source in the "Remote Mapping" menu of the Revox M51/M100.

The tuner and CD/DVD connections in the Control4 Composer are automatically generated when the M51/M100 driver is added.



If the two local sources Tuner and CD/DVD are not required, they can be hidden under "System Design - Navigator - Lists".

In the Revox M51 menu of the visualization the Surround Settings can be found.

#### **Recommendation:**

Use the Tuner and CD/DVD sources only if the Revox M51/M100 is not integrated into a Multiuser System. In the Multiuser System, the M51/M100 Tuner and CD/DVD sources are already available by the multiuser card.





**Visualization** System Design – Navigator

Now all users and amplifiers are set in the composer. Accordingly, they are visible in the Control4 visualization afterwards. If not every Revox user or individual M-Series sources should be visible in every room, this can be adjusted under "System Design". To do this, navigate to the room to be adjusted and then select the "Navigator" tab under the properties and click on "Listen".

System Design P	Properties				Properties	Summary	List
System	Audio Video Devices Navig Menu Settings Hide Room in Locati Experience Menus	on Menu	is de Room's Thermostat <b>lity and Display Order</b>			Mod	ify
⊕ Vitchen ☐ Viting Room ⊕ W TV ⊕ ₩ TV ⊕ ₩ Revox M51	Confort Lights Listen Security Shades Watch	Visibility Visible Visible Visible Visible	Device [Sessions] [Now Playing] Sarah Peter	Location Living Room Living Room Equipment Equipment			
	Cameras Channels Lighting Scenes Locks & Sensors Movies Music Pools Stations	Visible Visible Visible Hidden Hidden	Revox M51 FM/DAB+ Tuner CD/DVD TV Panasonic TV Apps	Living Room Living Room Living Room Living Room Living Room			
					ettings to other roor	ns: Apply	То

Now users or sources can be selected and hidden or shown again with "Modify". Attention: Please always make sure that the user access authorization in the Revox Multiuser Configurator is matching with the composer settings!

🗸 room a	mplifier									
0	R0004A3D23E8E0	Kitchen	1 2	3	4	5	6	7	8	
ò	R0004A3D23F5E0	Living Room	1 2	3	4	5	6	7	8	
							Ver	sion 2	2.01	



# Visualization Refresh and test

The last step is to refresh the navigator. Select the "File" entry, press "Refresh Navigators" and test the system.



🚰 Composer Pro 3.2.0 / OS Management 3.1.3 - Example Pi							
File	Driver	Go	Tools	Help			
	Clear Pr	oject			Strg+N		
	Load Pro	oject			Strg+O		
	Cloud N	lanag	ement				
	Backup	to Clo	ud				
	Connect	t to Di	rector				
	Disconnect from Director						
	Back Up				Strg+S		
	Back Up	As					
	Refresh				F5		
	Refresh	Navig	ators	Ν	Umschalttaste+F5		
	Validate	Proje	ct	14	Strg+F5		
	Exit						



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