



REAL SMART HOME

REAL SMART HOME GmbH

**APPMODULE**

# **Russound Connect**

## Smarthome App Documentation

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REAL SMART HOME GmbH

Hörder Burgstraße 18  
D-44263 Dortmund

Email: [info\[at\]realsmarthome.de](mailto:info@realsmarthome.de)

Tel.: +49 (0) 231-586 974 -00  
Fax.: +49 (0) 231-586 974 -15  
[www.realsmarthome.de](http://www.realsmarthome.de)

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# 1 INTRODUCTION

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Thank you for your trust, and the purchase of the Russound Connect -app for the BAB **APP**MODULE. With Russound Connect -app can now integrate products based on the RIO protocol into KNX systems.

This documentation will help you get started with the app and aims to improve your setup experience.

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## IMPORTANT INFORMATION ON THE OPERATING INSTRUCTIONS

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We reserve the right continually improve the product. This entails the possibility that parts of this documentation might be out-of-date. You will find the latest information at:

[www.bab-appmarket.de](http://www.bab-appmarket.de)

This app is an independent product, with no legal ties to Russound/FMP, Inc. Neither **BAB APP MARKET** GmbH nor the developer of this app take any claim in the trademarks owned by Russound/FMP, Inc.

## 2 FUNCTIONAL OVERVIEW

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Russound® multi-room audio amplifiers represent the best the market has to offer. With the APP MODULE and this Smarthome App you can now integrate products based on the RIO protocol into KNX systems. With this version of the app you control 1 receiver with up to 8 zones.

### HIGHLIGHTS

- Supports up to 8 zones
- In depth functional integration

## 3 THE INNOVATIVE, MODULAR APP-CONCEPT FOR THE BUILDING AUTOMATION

The innovative, modular Smarthome App concept for building automation. The **APPMODULE** brings the innovative, modular Smarthome App concept into building automation. You can mix and match any of the diverse applications that are available to integrate third-party solutions. With these Smarthome Apps from the dedicated **BAB APPMARKET**, the **APPMODULE** becomes a tailor-made integration unit for your building automation.

### HOW IT WORKS

**1****PURCHASE AN APPMODULE**

Purchase BAB TECHNOLOGIE's APP MODULE via a wholesaler.

**2****REGISTER**

Register your APP MODULE.  
Each app is bound to one device.

**3****LOAD APPS**

Buy and download your favorite apps for your APP MODULE..

**4****INSTALL YOU APPS**

Install your downloaded apps on your APP MODULE. You can start to configure your apps immediately.

Manufacturer of the **APPMODULE** [BAB TECHNOLOGIE GmbH](#)

Distribution of all Smarthome Apps for the **APPMODULE** [BAB APPMARKET GmbH](#)

Smarthome App developer [REAL SMART HOME GmbH](#)

### 3.1 INFORMATION ABOUT THE APPMODULE

Please refer to the separate product documentation of the **APPMODULE** for a detailed product description and setup instructions.

[http://www.bab-tec.de/index.php/download\\_de.html](http://www.bab-tec.de/index.php/download_de.html)

**Product variants:**

The **APPMODULE** is available in three variants:

- **APPMODULE** KNX/TP – for stand-alone use on KNX/TP Bus
- **APPMODULE** EnOcean – for stand-alone use in the EnOcean wireless network
- **APPMODULE** IP – for use in an IP-based KNX installation (KNXnet/IP) or as extension for an EIBPORT

## 4 SMARTHOME APP INSTALLATION / UPDATE

Please proceed as follows to install a Smarthome App.

1. Open the **APPMODULE** web page: Enter <IP Address of **APPMODULE** > into your browser's address bar and press Enter. The **APPMODULE** web interface will appear.
2. Log in with your user credentials. Please refer to the **APPMODULE** documentation for login details.
3. Click on the menu entry "App Manager"
4. You are now on the page where already installed Smarthome Apps are listed. The list will be empty if no Smarthome Apps have been installed. Click "Install App" in order to install a new Smarthome App.
5. Now click on "Select App"; a file selector window will appear. Choose the Smarthome App » **Russound Connect**« and click "OK".

The Smarthome App » **Russound Connect** « must first be downloaded from the **BAB** APPMARKET (www.bab-appmarket.de).

After the message "Installation successful" appears, click "OK". You are ready to configure the Smarthome App.

To update a Smarthome App manually you have to proceed as follows

1. To update an already installed Smarthome App, click on the App icon in the "App Manager".
2. The detail view of the Smarthome App appears. Click on "Update App" to select the Smarthome App package and start the update. The update version must be downloaded from the **BAB** APPMARKET.

After the message "Installation successful" appears, click "OK". The Smarthome App has been updated. Your instance configurations will remain unchanged.

The Smarthome App can also be updated directly in the web interface. Without having to download the Smarthome App from the **BAB** APPMARKET first.

In the "App Manager" available Smarthome App updates are reported

### **Information**

To configure the Smarthome App please use Google Chrome.

## 5 APP SETTINGS

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With the **APPMODULE** and this app you can now integrate products based on the RIO protocol into KNX systems. With this version of the app you control 1 receiver with up to 8 zones. Note that each zone can only be controlled by one instance.

### 5.1 RUSSOUND

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As soon as the app is installed, you can create so called "Instance". An Instance is one of several objects of the same class.

In order to create an instance, click on the symbol "Create Instance".

#### **Instance Name:**

Choose a name for this new instance.

#### **Comment:**

Insert a description what this instance does.

### 5.2 CONNECTION PARAMETERS

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#### **RUSSOUND® Receiver IP**

Insert the IP addresses of your RUSSOUND® receiver (it must have static IP for the app to work reliably).

#### **Destination Port (1–65535)**

The port number on which your RUSSOUND® receiver listens (default is TCP/IP port 9622).

#### **Update Interval (5–3600)**

Defines the interval in seconds with which your RUSSOUND® receiver should be pinged.

Note: This is not a polling of value, as the receiver announces changed values independently. The ping merely assures that the connection state is being checked regularly.

#### **Set Connection Parameters**

Press this button in order to set IP address, destination port and update interval as configured above as global connection parameters for all instances.

#### **Select Zone**

Select a zone you want to control with this instance out of the remaining available zones. Please note that each zone can be assigned to only one instance.

## 5.3 MEDIA STREAMER PLAYBACK CONTROL ADDRESSES

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### Play/Pause Toggle (EIS 1)

Insert the group address for the play / pause toggle. Send “1” as a telegram to toggle between playing and pausing the current playback.

### Stop (EIS 1)

Insert the group address for the stop command. Send “1” as a telegram to stop the current playback.

### Shuffle (EIS 1)

Insert the group address for the shuffle mode control (0: off; 1: on).

### Shuffle Status Feedback (EIS 1)

Insert the group address for the shuffle status feedback (0: off; 1: on).

### Repeat Mode (EIS 14 0–255)

Insert the group address for the repeat mode selector (0: off; 1: single; 2: all).

### Repeat Mode Status Feedback (EIS 14 0–255)

Insert the group address for the repeat mode status feedback (0: off; 1: single; 2: all).

### Previous/Next Track (EIS 1)

Insert the group address for the previous / next track command (0: previous track; 1: next track).

### Party Mode (EIS 14 0–255)

Insert the group address for the party mode selector (0: off; 1: on; 2: on and set the zone controlled by that instance as master).

### Party Mode Status Feedback (EIS 14 0–255)

Insert the group address for the group party mode status display (0: off; 1: on; 2: on and set the zone controlled by that instance as master).

## 5.4 VOLUME CONTROL ADDRESSES

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### Relative Volume Control (EIS 1)

Insert the group address for the relative volume control (0: down; 1: up).

### Volume Dimmer (EIS 2 relative Dimming)

Insert the group address for the relative volume dimmer.

### Volume Dimming Time (1000–22000)

Insert the duration (in ms) that a complete dimming process (0-100) should take.

Note: every volume step will be send to the device individually. This internally calculates, how to increment in order to achieve the desired dimming duration while contacting the Russound receiver every 220ms. If you wanted to have the most precise dimming possible, which is sending an increment of 1 every 220ms, then you would need to set this value to 22000 (22 seconds).

### Volume Feedback (EIS 6 0–100%)

Insert the group address for the volume feedback.

### Mute (EIS 1)

Insert the group address for the mute control (0: off; 1: on).

### Mute Feedback (EIS 1)

Insert the group address for the mute feedback (0: off; 1: on).

### Bass Setting (EIS 14 -128–127)

Insert the group address for the bass setting control.

### Bass Setting Feedback (EIS 14 -128–127)

Insert the group address for the group bass setting feedback.

### Treble Setting (EIS 14 -128–127)

Insert the group address for the treble setting control.

### Treble Setting Feedback (EIS 14 -128–127)

Insert the group address for the treble setting feedback.

### Balance Setting (EIS 14 -128–127)

Insert the group address for the balance setting control.

### Balance Setting Feedback (EIS 14 -128–127)

Insert the group address for the balance setting feedback.

### Loudness Setting (EIS 1)

Insert the group address for the loudness setting control (0: off; 1: on).

### Loudness Setting Feedback (EIS 1)

Insert the group address for the loudness setting feedback (0: off; 1: on).

## 5.5 FAVOURITES SELECTION ADDRESSES

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### Select Global Favourite (EIS 14 0–255)

Insert the group address for the global favourite selector. Send a value between 1 and 32 as a telegram to select the global favourite that is stored for this value.

### Select Zone Favourite (EIS 1)

Insert the group address for the zone favourite selector. Send “0” as a telegram to select zone favourite 1 and “1” for zone favourite 2.

## 5.6 GLOBAL META DATA ADDRESSES

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### Source Type (EIS 15 14 Byte Text)

Insert the group address for the source type display.

### Source Name (EIS 15 14 Byte Text)

Insert the group address for the source the name display.

## 5.7 STREAMER META DATA ADDRESSES

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### Artist Name (EIS 15 14 Byte Text)

Insert the group address for the artist name display.

### Song Name (EIS 15 14 Byte Text)

Insert the group address for the song name display.

### Album Name (EIS 15 14 Byte Text)

Insert the group address for the album name display.

### Playlist Name (EIS 15 14 Byte Text)

Insert the group address for the playlist name display.

### Provider Mode / Streaming Service (EIS 15 14 Byte Text)

Insert the group address for the provider mode or streaming service display.

### Source Channel Name (EIS 15 14 Byte Text)

Insert the group address for the source channel name display.

## 5.8 RADIO META DATA ADDRESSES

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### Tuner Frequency (EIS 15 14 Byte Text)

Insert the group address for the tuner frequency display.

### Program Service Name (EIS 15 14 Byte Text)

Insert the group address for the Program Service Name (PSN) display.

### Radio Text First Line (EIS 15 14 Byte Text)

Insert the group address for the first line of radio text display.

## 5.9 MISCELLANEOUS CONTROL ADDRESSES

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### Sleep Mode Countdown Time (EIS 14 0-255)

Insert the group address to receive the countdown time to automatic power off.

### Do Not Disturb (EIS 1)

Insert the group address for the Do Not Disturb control (0: off; 1: on).

### Do Not Disturb Feedback (EIS 14 0-255)

Insert the group address for the Do Not Disturb feedback (0: off; 1: on).

### Zone On/Off (EIS 1)

Insert the group address for zone on/ off control (0: zone off; 1: zone on).

### Zone On/Off Feedback (EIS 1)

Insert the group address for the zone on/ off feedback (0: zone off; 1: zone on).

### Last Error (EIS 15 14 Byte Text)

Insert the group address for the last error display.

### Page Status (EIS 15 14 Byte Text)

Insert the group address for the page status display.

### All Zones On/Off (EIS 1)

Insert the group address for the all zones on/ off control. (0: all zones off; 1: all zones on).

### Save

Press the button to save and activate the settings.

### Save and close

Press the button to save, activate and exit the settings in one step.

## 6 ATTACHMENT

### 6.1 DATAPOINT TYPES

function	EIS type	DPT	typical function	typical values	data	identifier
PriorityPosition	EIS1	DPT 1*	Wind alarm	1=high and inhibit	1 Bit	1-bit
Switch	EIS1	DPT 1*	Light switching	0=Off; 1=On	1 Bit	1-bit
DimControl	EIS2	DPT 3*	Dimming	0=Off; 1=On xxx=relative dimming 0-255=absolute dimming	1Bit 4Bit 8Bit	3-bit controlled
Time	EIS3	DPT 10*	Time	hh:mm:ss	3Byte	Time
Date	EIS4	DPT 11*	Date	dd:mm:yyyy	3Byte	Date
Value	EIS5	DPT 9*	Float Value IEEE	[-671088.64 ... 670760.96]	1Byte	2-byte float value
DimValue	EIS6	DPT 5*	Percent	0...100%	1Byte	8-bit unsigned value
DriveBlade Value	EIS6	DPT 5*	Angle value	0...100%; 0...255	1Byte	8-bit unsigned value
DriveShutter Value	EIS6	DPT 5*	Position value	0...100%; 0...255	1Byte	8-bit unsigned value
Position	EIS6	DPT 5*	Control value Heating	0...100%; 0...255	1Byte	8-bit unsigned value
DriveMove	EIS7	DPT 1*	Move shutter	0=up; 1=down	1Bit	1-bit
DriveStep	EIS7	DPT 1*	Adjusting the slat	0=up; 1= down; 0 or 1 during movement=stop	1Bit	1-bit
PriorityControl	EIS8	DPT 2*	Priority	0,1 switch; 3=forced off; 4=forced on	2Bit	1-bit controlled
FloatValue	EIS9	DPT 14*	IEEE	Floating-point value	4Byte	4-byte float value
Counter 16bit	EIS10	DPT 7*	Counter 16 bit	0 ... 65.535	2Byte	2-byte unsigned value
Counter 16bit	EIS10	DPT 8*	Counter 16 bit signed	-32.768 ... 32.767	2Byte	2-byte signed value
Counter 32bit	EIS11	DPT 12*	Counter 32 bit	0 ... 4.294.967.295	4Byte	4-byte unsigned value
Counter 32bit	EIS11	DPT 13*	Counter 32 bit signed	-2.147.483.648 ... +2.147.483.647	4Byte	4-byte signed value
Access Control	EIS12	DPT 15*	Access control	Card number	4Byte	Entrance access
Char	EIS13	DPT 4*	ASCII characters	Character	1Byte	Character
Counter 8bit	EIS14	DPT 5*	Value	0 ... 255	1Byte	8-bit unsigned value
Counter 8bit	EIS14	DPT 6*	Value signed	-128 ... 127	1Byte	8-bit signed value
String	EIS15	DPT 16*	String	max. 14 characters	14 Byte	Character string

EIB/KNX devices exchange fixed prescribed data formats with each other. These are defined in types. The old designations of the types are EIS (EIB Interworking Standard) The new designations are DPT (Data Point Type)