



REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

R-CONNECT

Smart Home App Documentation

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TABLE OF CONTENTS

1	Introduction.....	4
	Important information on the operating instructions	4
2	Functional overview	5
3	The innovative, modular Smart Home App-concept for the building automation.....	6
3.1	Information about the APPMODULE.....	6
4	Smart Home App installation / update	7
5	Smart Home App Settings.....	8
5.1	R-CONNECT	8
5.2	Device settings.....	8
5.3	Switching inputs (1-16)	9
5.4	Switching outputs (1-8).....	9
5.5	Analog inputs (1-2)	11
6	Attachment.....	12
6.1	Datapoint Types.....	12



1 INTRODUCTION

Thank you for your trust, and the purchase of the **R-CONNECT**-app for the BAB **APPMODULE**. With **R-CONNECT**-app you can now control the IP 8 with the diverse portfolio of the KNX world or with components from the constantly growing variety of devices of the IoT.

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

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 This entails the possibility that parts of this documentation might be out-of-date.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

This app is an independent product, with no legal ties to Wilhelm Rutenbeck GmbH & Co. KG. Neither **BAB APP MARKET** GmbH nor the developer of this app take any claim in the trademarks owned by Wilhelm Rutenbeck GmbH & Co. KG.

2 FUNCTIONAL OVERVIEW

The IP switch actuators IP8 and IP4 from Rutenbeck can now also be controlled with "R-CONNECT" with the attractive portfolio of KNX push-button sensors or visualise e.g. the states of the inputs. With the additionally pre-installed Alexa APP, you can also activate the switching outputs by voice control or have Alexa inform you about the status of the inputs.

This app including APPMODULE is now also available directly from Rutenbeck.

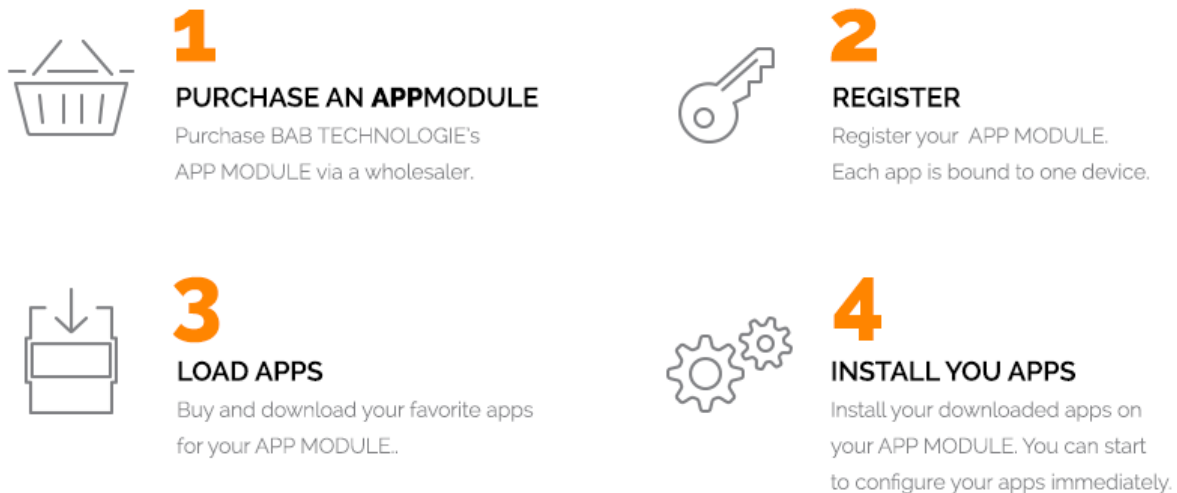
HIGHLIGHTS

- Control of up to 16 switching inputs
- Switch inputs can be used for short and long pressing the buttons
- Control of up to 8 switching outputs
- Status feedback of the 8 switching outputs
- Control of up to 2 analog inputs, variable measured value inputs
- Up to 10 app instances

3 THE INNOVATIVE, MODULAR SMART HOME APP-CONCEPT FOR THE BUILDING AUTOMATION

The innovative, modular Smart Home App concept for building automation. The **APPMODULE** brings the innovative, modular Smart Home 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 Smart Home Apps from the dedicated **BAB APPMARKET**, the **APPMODULE** becomes a tailor-made integration unit for your building automation.

HOW IT WORKS



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

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

Smart Home 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

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 SMART HOME APP INSTALLATION / UPDATE

Please proceed as follows to install a Smart Home 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 Smart Home Apps are listed. The list will be empty if no Smart Home Apps have been installed. Click "Install App" in order to install a new Smart Home App.
5. Now click on "Select App"; a file selector window will appear. Choose the Smart Home App » **R-CONNECT** « and click "OK".

The Smart Home App » **R-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 Smart Home App.

To update a Smart Home App manually you have to proceed as follows

1. To update an already installed Smart Home App, click on the App icon in the "App Manager".
2. The detail view of the Smart Home App appears. Click on "Update App" to select the Smart Home 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 Smart Home App has been updated. Your instance configurations will remain unchanged.

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

In the "App Manager" available Smart Home App updates are reported

Information

To configure the Smart Home App please use Google Chrome.

5 SMART HOME APP SETTINGS

With the R-CONNECT app, you can now also control with an attractive portfolio of KNX touch-push-button. To be able to control the IP switch actuators IP8 and IP4 from Rutenbeck with KNX®, you have to create a new instance for each device.

5.1 R-CONNECT

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 DEVICE SETTINGS

IP address:

Insert the IP address of your device.

Test connection

The inserted address is checked by clicking the button.

Security key

The instance requires a security key in order to authenticate itself when communicating with the Rutenbeck R-Control IP8 device. You can either insert the key directly into the input field or use one the button below to fetch or generate the key. The latter can be unlocked in the device via the web frontend at "Unlock the REST API" or by pressing the physical "Reset" button in your device until the WLAN LED starts flashing.

IMPORTANT: A device can only have one security key at a time. Generating a new key will overwrite the existing key.

Fetch security key

Press the button to generate a security key and to transfer it to the input field.

Generate security key

By pressing the button generates a new security key. The previous key then gets invalid.

Connection status (EIS 14 0-255)

Insert the group address for the device connection status. Values and their corresponding statuses are as follows:

0: No connection and authentication issues.

1: The device can be reached but the app cannot be authenticated.

2: Device cannot be reached.

5.3 SWITCHING INPUTS (1-16)

Switching input 1 (-16): Switching event (EIS 1):

A „1“ will be sent to this group address if switching input 1 (or till 16) changes its status to „on “. If “Differentiate switching duration” is activated, the value will only be sent after a short (less than 400 ms) switching duration.

Switching input 1 (-16): Long switching event (EIS 1):

The input field appears when “Differentiate switching duration” is activated. A „1“ will be sent to this group address after switching input 1 (or till 16) has changed its status to „on“ for more than 400 ms.

Switching input 1 (-16): Differentiate switching duration

Choose this option if you want short and long switching events to be treated separately. In this case values will be sent to “Switching input 1: Switching event” (or till 16) only after a short switching event has been registered.

5.4 SWITCHING OUTPUTS (1-8)

Switching output 1 (-8): On/ Off (EIS 1):

Insert the group address for the switching output 1 on/off command (or till 8).

- 0: switch off
- 1: switch on.

Switching output 1 (-8): State callback (EIS 1)

Insert the group address for the switching output 1: state callback (or till 8).

- 0: switched off
- 1: switched on

In the Rutenbeck configuration, 2 relay outputs can also be parameterized to control shutters. Accordingly, the Connect R- APP also has a checkbox Switch output x+y: Shutter control. If this is activated, the menu for roller shutter operation changes.

Switching output x+y: Move roller shutter (EIS1)

Enter the KNX group address for the Move command here (0 up; 1 down).

Switching output x+y: Invert telegram values

Via this checkbox the telegram values for startup or shutdown (0 down; 1 up) can be rotated.

Switching output x+y: Connection "shutter up“

Select the connection (input) that you have assigned to the Shutter Up command in the Rutenbeck configuration.

Switching output x+y: Connection "Download roll-down"

Select the connection (input) that you have assigned to the Shutter Down command in the Rutenbeck configuration.

In the Rutenbeck web interface of the configuration, "connections" can be assigned to the digital inputs. These can be switch inputs, analogue inputs or timers. Outputs are then assigned to these connections. The same (which input with which output) must also be specified in the R-CONNECT Smart Home App.

Example: Input I1 and I2 are switching roller shutter 3 and 4 (O3 and O4). This configuration is chosen in the Rutenbeck configuration. In our R-CONNECT App, the switching outputs 3+4 must then be provided with group addresses and connection 1 or connection 2 must be selected as switching output 3+4: Connection "Roller shutter up/down".

If "Do not initiate a connection" is selected for the connection type, the switching output is controlled directly. The behaviour is the same as when the black buttons for local operation are pressed on the device. The Move command triggers the closing of the corresponding relay permanently, the Step command opens the relay.

Switch output x+y: Stop roller shutter (EIS 1)

Enter the KNX group address for the step command here.

5.5 ANALOG INPUTS (1-2)

Analog input 1 (-2): Measured value

Insert the group address for the measured value at „Analog input 1 “ (or 2) as floating point value.

Analog input 1 (-2): Measured value data type

Choose the data type for this floating point value.

Analog input 1 (-2): Measured value text display (EIS 15 14 Byte Text)

Insert the group address for the measured value at „Analog input 1 “ (or 2) and its associated unit as text.

Analog input 1 (-2): Voltage value

Insert the group address for the value of the voltage applied to „Analog input 1 “ (or 2).

Analog input 1 (-2): Voltage value data type

Choose the data type for this floating point value.

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)