



REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

ekey KNX Connect

Smart Home App Documentation

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1 INTRODUCTION

Thank you for your trust, and the purchase of the **ekey KNX Connect** -Smart Home App for the BAB **APPMODULE**. With **ekey KNX Connect** -Smart Home App you connect the versatile functions of your ekey system with KNX and other IoT components with the **APPMODULE**.

This documentation will help you get started with the Smart Home 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 This entails the possibility that parts of this documentation might be out-of-date.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 Smart Home App is an independent product, with no legal ties to ekey biometric systems GmbH. Neither **BAB** APPMARKET GmbH nor the developer of this Smart Home App take any claim in the trademarks owned by ekey biometric systems GmbH.

2 EKEY KNX CONNECT FUNCTIONAL OVERVIEW

The finger as a key is a comfortable, secure and simple alternative to conventional access solutions. With an ekey fingerprint, you can individually control doors, garage doors, alarm systems or, for example, garden doors. Depending on the control unit, a different number of functions can be carried out and other ekey fingerprints or keypads can be controlled. With "**ekey KNX Connect Pro**" you combine the versatile functions of your ekey system with KNX and other IoT components via the **APPMODULE**.

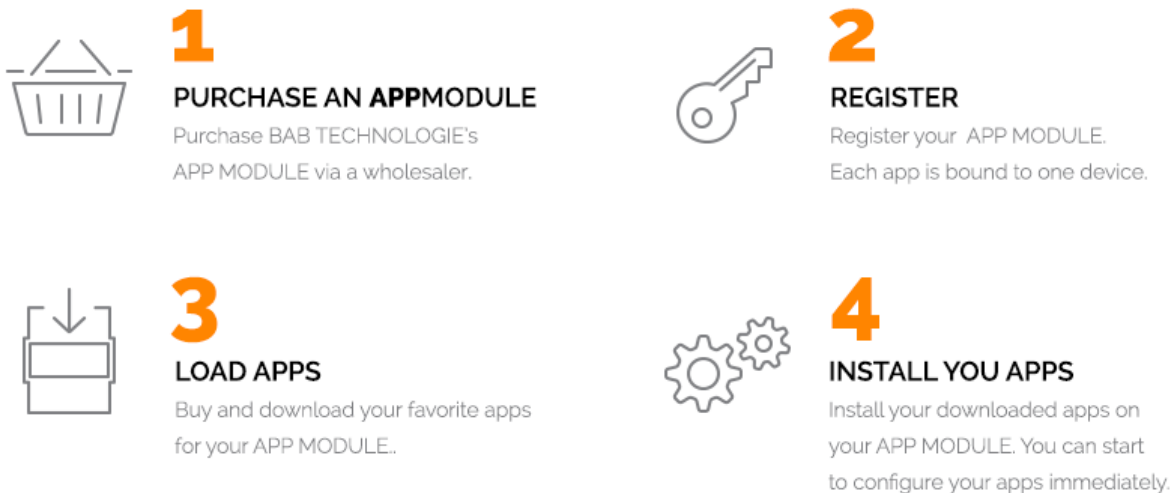
HIGHLIGHTS

- Compatible with ekey multi protocol
- Compatible with the ekey net V2 protocol
- Configurable up to 125 users
- Up to 125 user groups can be configured
- Up to 125 functions per user or user group
- Support of up to 5 CV LAN (only pro version)

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.

<https://bab-tec.de/appmodule#downloads>

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 » **ekey KNX Connect** « and click "OK".

The Smart Home App » **ekey KNX 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

The fingerprint access system from ekey offers a secure and very convenient way to open doors. Lost and forgotten keys are now a thing of the past. With «**ekey KNX Connect**», you connect the versatile functions of your ekey system with KNX and other IoT components with the **APPMODULE**.

5.1 EKEY KNX CONNECT

Note:

After inactivity of 60 minutes the browser session is automatically closed. Unsaved changes will be lost.

As soon as the Smart Home 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 SETTINGS

ekey Protocol

Select the protocol which matches your ekey access solution.

- ekey multi
- ekey net

ekey net/home CV LAN IP-Address

Insert the IP address of your ekey net or ekey home CV LAN device. This instance will only evaluate incoming UDP packets with this sender IP.

Local Port Number (49152–65535)

Local port number in this device. Add this port number along with the IP address of this device (see „Configuration -> Network“) to the UDP transmission settings of your ekey net or ekey home CV LAN device.

Use Wildcard

If this option is activated, incoming messages will be evaluated regardless of which registration unit connected to your ekey net or ekey home CV LAN device has produced the message.

5.3 USERS

ekey User

Here you can configure up to 25 users.

Another window opens for processing the ekey users if select Add, Copy or Edit.

Internal ID (1–99)

Insert the internal ID taken from the ekey user data.

Name

Insert the name of your ekey user.

Enable/ Disable User For Functions (optional) (EIS 1)

Insert the group address for enabling or disabling this ekey for triggering functions (0: disable, 1: enable).

5.4 GROUPS

ekey User Groups

Here you can configure up to 25 user groups.

Another window opens for processing the ekey user groups if select Add, Copy or Edit.

Name

Insert the name of this ekey user group.

Members

Select all ekey users who are members of this ekey user group.

Enable/ Disable User Group For Functions (optional) (EIS 1)

Insert the group address for enabling or disabling all ekey users in this user group for triggering functions at once (0: disable, 1: enable).

5.5 FUNCTIONS

ekey Functions

Here you can configure up to 25 functions.

The "Add", "Copy" and "Edit" selection fields open another window for editing the ekey user groups.

Functions Name

Enter a name for this function.

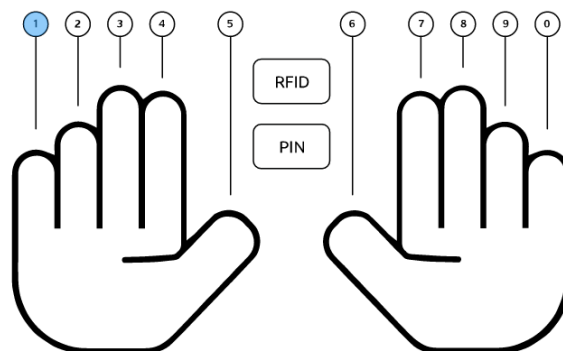
User/Group

Select an ekey user or an ekey user group as the first condition for triggering this function.

Trigger

Select a trigger (finger or other event) as the second condition for triggering this function.

- 1: Left little finger
- 2: Left ring finger
- 3: Left middle finger
- 4: Left index finger
- 5: Left thumb
- 6: Right thumb
- 7: Right index finger
- 8: Right middle finger
- 9: Right ring finger
- 0: Right little finger
- : No Finger
- P: Pin code
- @: RFID chip



Enable/ Disable Function (optional) (EIS 1)

Insert the group address for enabling or disabling this function (0: disable, 1: enable). If this field is left empty, only the two conditions above will apply for triggering this function.

Value Address

Insert a group address to which a telegram is sent when this function is triggered.

Value address Data Type

Select the data type of the value to be sent.

EIS 1: 1 Bit

EIS 5: 2 Byte Float

EIS 6: 0%..100%

EIS 9: 4 Byte Float

EIS 10s: 2 Byte -32768..32767

EIS 10u: 2 Byte 0..65535

EIS 11s: 4 Byte -2147483648..2147483647

EIS 11u: 4 Byte 0..4294967295

EIS 14s: 1 Byte (-128..127)

EIS 14u: 1 Byte (0..255)

EIS 15: 14 Byte Text

Value

Insert a valid telegram value which will be sent to „Value Address“.

5.6 SPECIAL FUNCTION (ALL SETTINGS OPTIONAL)

Known Rejection

Insert a feedback address for “Known Rejection” events.

Known Rejection: Data Type

Select the data type of the value to be sent to “Known Rejection”.

EIS 1: 1 Bit

EIS 14u: 1 Byte (0..255)

Known Rejection: Value

Insert a valid telegram value which will be sent to “Known Rejection”.

Maximum Number of Known Rejections allowed per Minute (0–10)

If the number of known rejections within a minute exceeds this value, a telegram will be sent to “Known Rejection”.

Unknown Rejection

Insert a feedback address for “Unknown Rejection” events.

Unknown Rejection: Data Type

Select the data type of the value to be sent to “Unknown Rejection”.

EIS 1: 1 Bit

EIS 14u: 1 Byte (0..255)

Unknown Rejection: Value

Insert a valid telegram value which will be sent to “Unknown Rejection”.

Maximum Number of Unknown Rejections allowed per Minute (0–10)

If the number of unknown rejections within a minute exceeds this value, a telegram will be sent to “Unknown Rejection”.

Rejection inactive

Insert a feedback address for “Rejection Inactive” events.

Rejection inactive: Data Type

Select the data type of the value to be sent to “Rejection Inactive”.

EIS 1: 1 Bit

EIS 14u: 1 Byte (0..255)

Rejection inactive: Value

Insert a valid telegram value which will be sent to “Rejection Inactive”.

6 ATTACHMENT

6.1 DATAPPOINT TYPES

Function	EIS type	Data point type	Typical value	Data	Identifier
Switching	EIS 1	DPT 1.yyy	[0] = Off FALSE; [1] = On TRUE	1 Bit	1-bit
Relative Dimming	EIS 2	DPT 3.yyy	„Dimming steps“: [[0],[2...7]] Darker [2, 4, 8, 16, 32, 64]-Steps and [[1],[2...7]] Brighter [2, 4, 8, 16, 32, 64]-Steps „Start/Stop Diming“: [0,8] Stop; [1] Darker und [9] Brighter	4 Bit	4-bit
Time	EIS 3	DPT 10.yyy	hh:mm:ss	3 Byte	Time
Date	EIS 4	DPT 11.yyy	dd:mm:yyyy	3 Byte	Date
Floating point number (short)	EIS 5	DPT 9.yyy	-671 088,64 ... 670 433,28	2 Byte	2-byte float value
Percent, Position, Brightness, ...	EIS 6	DPT 5.yyy	0 ... 100%	1 Byte	8-bit unsigned value
Blinds Drive/adjust	EIS 7	DPT 1.yyy	[0] = up; [1] = down When driving [0,1] = stop	1 Bit	1-bit
Priority	EIS 8	DPT 2.yyy	[0], [1] Switch on, off; [3] = Forced off; [4] = Forced on	2 Bit	1-bit controlled
IEEE Floating point number (long)	EIS 9	DPT 14.yyy	4-Octet float value; IEEE 754	32 Bit	4-byte float value
Counter 16 Bit Unsigned	EIS 10u	DPT 7.yyy	0 ... 65.535	16 Bit	2-byte unsigned value
Counter 16 Bit Signed	EIS 10	DPT 8.yyy	-32.768 ... 32.767	16 Bit	2-byte signed value
Counter 32 Bit Unsigned	EIS 11u	DPT 12.yyy	0 ... 4.294.967.295	32 Bit	4-byte unsigned value
Counter 32 Bit Signed	EIS 11	DPT 13.yyy	-2.147.483.648 ... 2.147.483.647	32 Bit	4-byte signed value
Access control	EIS 12	DPT 15.yyy	Access data	4 Byte	Entrance access
ASCII Character	EIS 13	DPT 4.yyy	Char	1 Byte	Character
Counter 8 Bit Unsigned	EIS 14u	DPT 5.yyy	0 ... 255	8 Bit	8-bit unsigned value
Counter 8 Bit Signed	EIS 14	DPT 6.yyy	-128 ... 127	8 Bit	8-bit signed value
String	EIS 15	DPT 16.yyy	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)