



REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

ekey bionyx connect

Smart Home App Documentation

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1 INTRODUCTION

Thank you for your trust and purchase of the smart home app "**ekey bionyx connect**" for the **APPMODULE**. With "**ekey bionyx connect**" you easily control up to five ekey actions for KNX and IoT devices.

This documentation improves your experience with the product and helps you get there faster.

GENERAL NOTES

We reserve the right to make technical and formal changes to the product in the interests of technical progress. Therefore, the information in this documentation may differ from the current status. Information about the current status of the Smart Home app can be found at

www.bab-appmarket.de

This smart home app is an independent product and has no legal connection to ekey biometric systems GmbH. Neither BAB APP MARKET GmbH nor the developer are in possession of the above trademark.

2 EKEY BIONYX CONNECT FUNCTION OVERVIEW

Into the smart home with your fingerprint.

With ekey xLine, ekey sLine and ekey dLine, intelligent building use with smart functions starts as soon as you get home. By using an ekey fingerprint, smart home systems recognize who triggers an action. The fingerprints from ekey can be installed directly in the front door, in the door intercom or on the wall. With the **APPMODULE** and the smart home app "ekey bionyx connect", you can connect the flexible ekey products with KNX and IoT components. With your finger, you can, for example, switch on your favorite playlist or the light, start the charging process of your electric vehicle or entire smart home scenes.

Additionally, the Notification API provides you with a more flexible and personalized system experience, especially when you want to implement individual automations or require fast response times. Integration via the third-party API (HTTP requests) remains a useful option for simple, static workflows.

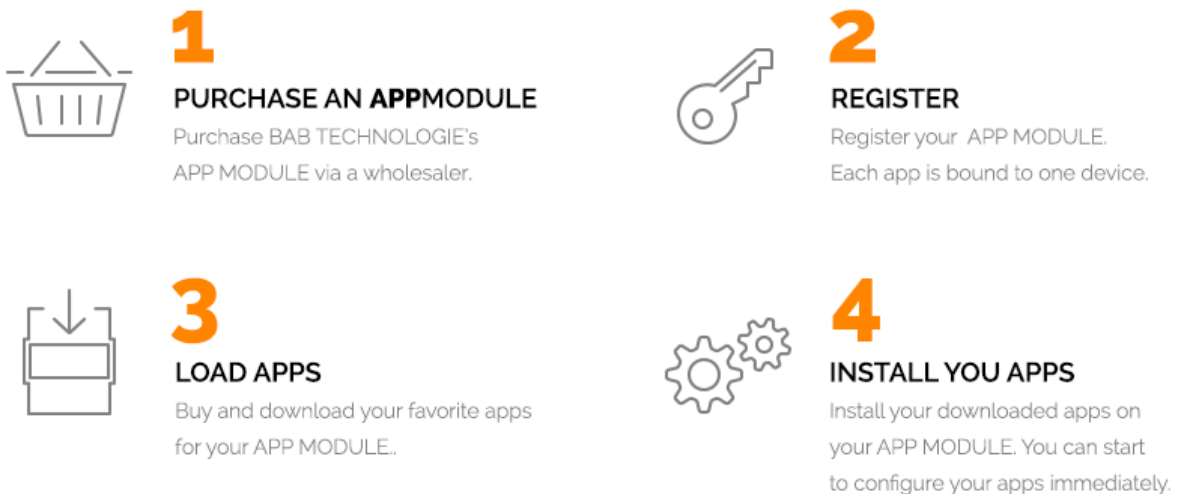
Highlights

- Compatible with ekey fingerprints xLine, sLine and dLine
- Easy integration of fingerprints in KNX
- Control up to 5 ekey actions
- Link up to 10 KNX and IoT devices per ekey action
- Via the Notification API up to
 - 20 controllers
 - 20 users and
 - 10 functions

3 THE INNOVATIVE, MODULAR SMART HOME APP CONCEPT FOR BUILDING

The **APPMODULE** brings the innovative, modular smart home app concept to building automation. A wide variety of applications are available for the integration of third-party applications, which can be combined with each other as desired. With the help of these Smart Home Apps, from the BAB APP MARKET created especially for the **APPMODULE**, the **APPMODULE** becomes an individually assembled integration module for building control.

HOW IT WORKS



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

Distribution of smart home apps for the **APPMODULE** [BAB APPMARKET GmbH](#)

Developer of smart home [REAL SMART HOME GmbH](#)

3.1 INFORMATION ON THE APP MODULE

For a detailed product description and commissioning instructions please refer to the separate product documentation for the **APPMODULE**

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

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

- **APPMODULE KNX** – for independent operation on the KNX bus
- **APPMODULE Easywave** – for operation in radio networks based on Easywave

4 SMART HOME APP INSTALLATION AND UPDATE

To install a smart home app:

1. Call the web interface of your **APPMODULE**: To do this, enter the IP address of the device in the address line of your web browser and confirm the entry. The web interface of the **APPMODULE** opens.
2. Log in to your **APPMODULE** with your login data. How to log in to the **APPMODULE** is described in the **APPMODULE** documentation.
3. Click on the menu item "App Manager".
4. You are now in the area where all already installed Smart Home Apps are listed. If no Smart Home App has been installed yet, the page is empty. To install a smart home app, click on "Install App".
5. Next, click on "Select app", select the directory in which the smart home app "ekey bionyx connect" is stored and click on "OK".

As soon as the message "Installation successful" appears, click on "OK" and parameterize your smart home app. If you have purchased the **APPMODULE** in the bionyx version, the smart home app "ekey bionyx connect" is already pre-installed.

To update a smart home app:

1. Click on the "App Manager" menu item. If an update is available for a smart home app, the message "Update available" appears.
2. Next, click on "Install update now" to start the installation process.

To update the smart home app "**ekey bionyx connect**", click on the app icon with the left mouse button.

Note:

An update can also be installed manually. To do this, click on "App Manager", then on the desired smart home app and then on "Update app". Now select the corresponding file and confirm with "OK".

When the Smart Home app is updated, the previously configured parameters are applied.

5 SMART HOME APP SETTINGS

Note:

Please use Google Chrome as browser to configure the Smart Home app. After 60 minutes of inactivity, the browser session will end automatically. Any unsaved changes will be lost.

To create an instance, please click on the following icon "+ Create instance". Please note that the number of instances that can be created varies depending on the Smart Home app and variant.

5.1 BASIC SETTINGS

Instance Name:

Select the name for the new instance here. Use a meaningful name to make it easier to find the action later. The name you assign here will also be displayed in the bionyx app on your iOS or Android device.

Comment:

A short text can be entered here, e.g. a note or description. The comment is only visible at this point and helps to better understand the configuration or understand it later.

Notification API:

Activate this option to use the ekey bionyx Notification API instead of the Third Party API.

NOTE ON FURTHER CONFIGURATION

If the 'Notification API' option is **activated**, further configuration is carried out according to the instructions in chapter '5.2 Notification API'.

If this option is **not activated**, continue the configuration according to chapter '5.3 Third Party API'.

Depending on the setting, the configuration is displayed differently.

Note

This option can only be activated for one instance in the Smart Home app.

5.2 NOTIFICATION API

BEFORE configuring the instance

The following two steps must be carried out in preparation for the Notification API to be used.

ACTIVATING THE NOTIFICATION API

Firstly, the interface must be activated via the ekey bionyx app.

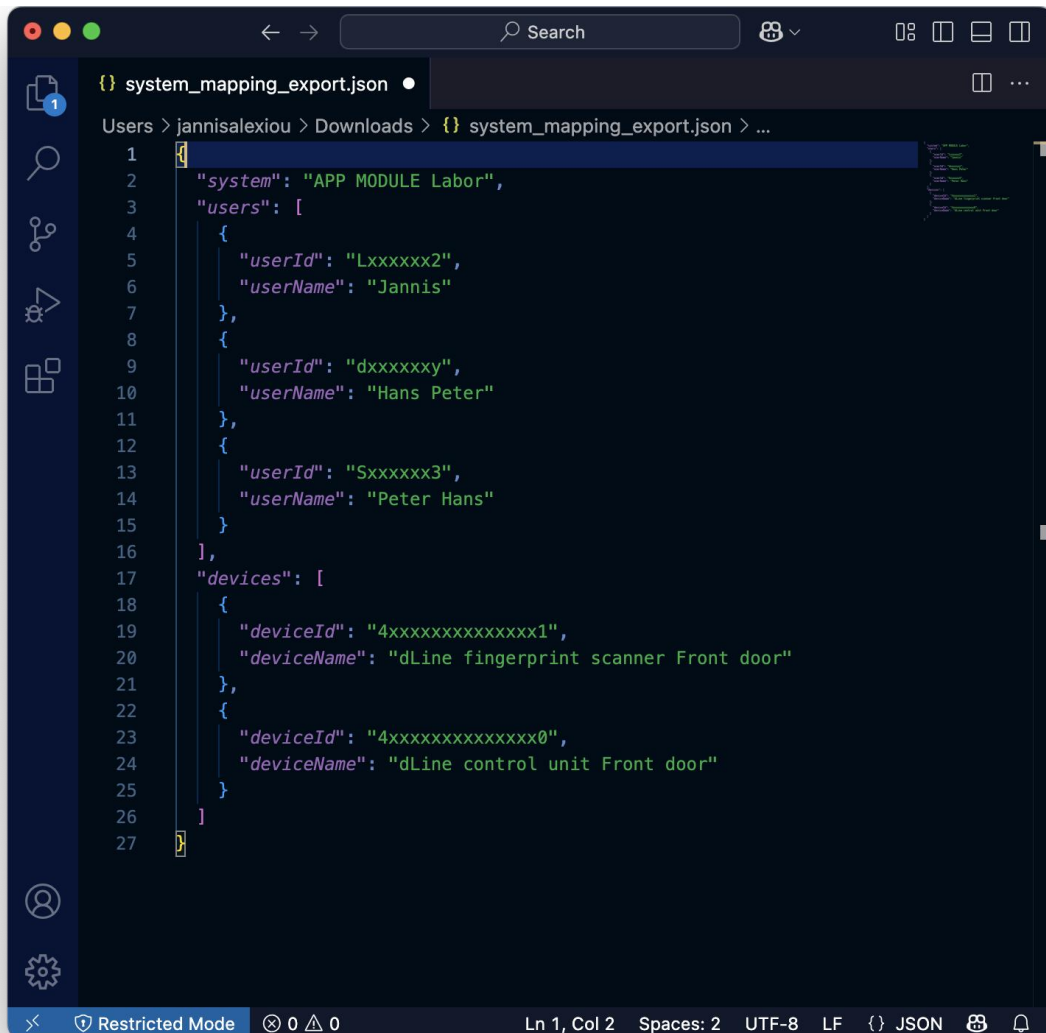
This option can be found in the ekey bionyx app under **'Settings' > 'Smart home connections'**. The **'Activate Notification API'** switch must be activated here.

EXPLORING THE SYSTEM INFORMATION

Then export the required information from the ekey bionyx app that is needed for further configuration. This export can be found in the app under **'Settings' > 'Smart home connections' > 'Export system mapping'**.

The export can be transferred from the ekey bionyx app by e-mail, message or via the clipboard.

The exported file is in **JSON format** and can be opened and viewed with a simple text editor (see screenshot).



```
{
  "system": "APP MODULE Labor",
  "users": [
    {
      "userId": "Lxxxxxx2",
      "userName": "Jannis"
    },
    {
      "userId": "dxxxxxy",
      "userName": "Hans Peter"
    },
    {
      "userId": "Sxxxxxx3",
      "userName": "Peter Hans"
    }
  ],
  "devices": [
    {
      "deviceId": "4xxxxxxxxxxxxx1",
      "deviceName": "dLine fingerprint scanner Front door"
    },
    {
      "deviceId": "4xxxxxxxxxxxxx0",
      "deviceName": "dLine control unit Front door"
    }
  ]
}
```

**AFTER the instance has been configured.**

Note: This step is only possible after the instance has been fully configured and saved.

To complete the setup, the **APPMODULE's AppLink** must be entered in the ekey bionyx controller.

The **destination address** required for this can be found in the instance overview.

Open the entry with the **'Notification'** instance that was previously created in order to copy the **AppLink** (see screen shot below).

APPMODULE
Version 1.7.6

> Start > App Manager > ekey bionyx connect

Delete App

Update App

+ Create Instance

ekey bionyx connect

With the smart home app «ekey bionyx connect», you can easily control up to five smart ekey actions for KNX and IoT devices.

Version

2.0.0 (03.12.2025)

Author

Felipe Sales / REAL SMART HOME GmbH

Installed

Wed December 03 2025 10:22:24 GMT+0200

Manual

[Show Manual](#)

Instances (2/5)

> Haupteingang

||

✓ Zugang Labor

||

AppLink

[Destination address for the controller \(right-click -> Copy link\)](#)

Logging

Errors



The copied **destination address** (AppLink) is entered in the ekey bionyx app under the following menu item:

'Settings' > 'Smart home connections' > 'Configuration'

Enter the address in the **'URL'** field (see screenshot below).

The remaining settings must be made as shown in the screenshot.

The screenshot shows the 'Configuration' screen in the ekey bionyx app. At the top, the status bar shows the time 10:07 and battery level. Below the status bar is a back arrow. The title 'Configuration' is prominently displayed. The form contains several sections: 'Name' with the value 'Notification Webhook', 'URL' with the value 'https://192.168.1.223/scripts/rest/scripts/...', 'Timeout' with a slider set to 1s, 'Level of security' with the value 'TlsAllowSelfSigned', and 'Authentication' with the value 'No authentication'. A large 'Save' button is at the bottom.

10:07

<

Configuration

Name
Notification Webhook

URL
https://192.168.1.223/scripts/rest/scripts/...

Timeout
1s

Level of security
Level of security
TlsAllowSelfSigned

Authentication
Authentication
No authentication

Save

5.2.1 CONTROLLER SERIAL NUMBER

To add a controller, the serial number of the 'Controller' is required.
This ID can be found in the '**Export system mapping**'.

The required serial number can be found in the '**dLine control unit Front door**' section.

Note: A maximum of 20 controllers can be added.

5.2.2 USER

Users are identified by a unique user ID, which is contained in the '**Export system mapping**'.

The following information is specified for each user:

- **Name:** freely selectable, serves only for information and better allocation.
- **User ID:** must be taken exactly from the export and must not be changed.

Note: A maximum of 20 users can be stored.

5.2.3 FUNCTION

Functions can now be assigned to the previously created users.

A function can be assigned to one or more users. This determines whether and which users are authorised to trigger functions.

A specific finger can also be specified so that a user can trigger several functions.

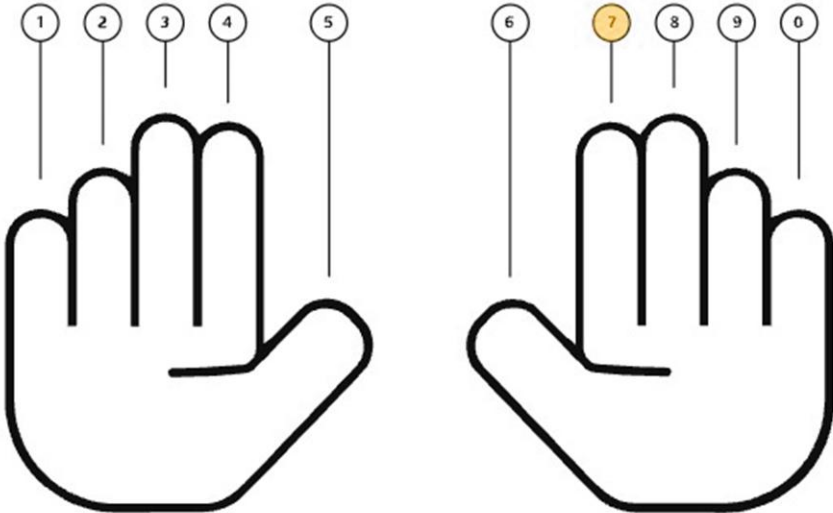
Alternatively, the 'No assignment' entry can be selected - in this case, the function is triggered regardless of the recognised finger.

Each function is configured using the following information (see screen shot below):

- **Function name:** Freely selectable to describe the function (e.g. 'Welcome', 'Close garage').
- **User:** Selection of one or more users via checkboxes. The function is then only executed for the selected users.
- **Finger:** Selection of the finger via a drop-down list with which the function is to be triggered.
- **Select data type:** Selection of the data type via a drop-down list for the telegram value to be sent:
 - EIS 1: 1 Bit
 - EIS 5: 2 Byte floating point
 - EIS 6: 0%..100%
 - EIS 9: 4 Byte floating point
 - 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)

- **Control address:** Input of the group address to which the specified telegram value is sent when the function is triggered.
- **Value to be sent:** Enter the value to be sent to the specified group address.
Important: The value must correspond to the selected data type.

Funktionen

Name der Funktion	Willkommen zuhause
Nutzer	☐ Stefan ☒ Daniela ☒ Max ☒ Svenja
Finger	Rechter Zeigefinger
	
Datentyp auswählen	EIS 1: 1 Bit
Steueradresse	1/1/1 >
Zu sendender Wert	1
Abbrechen OK	

Note: A maximum of 10 functions can be created.

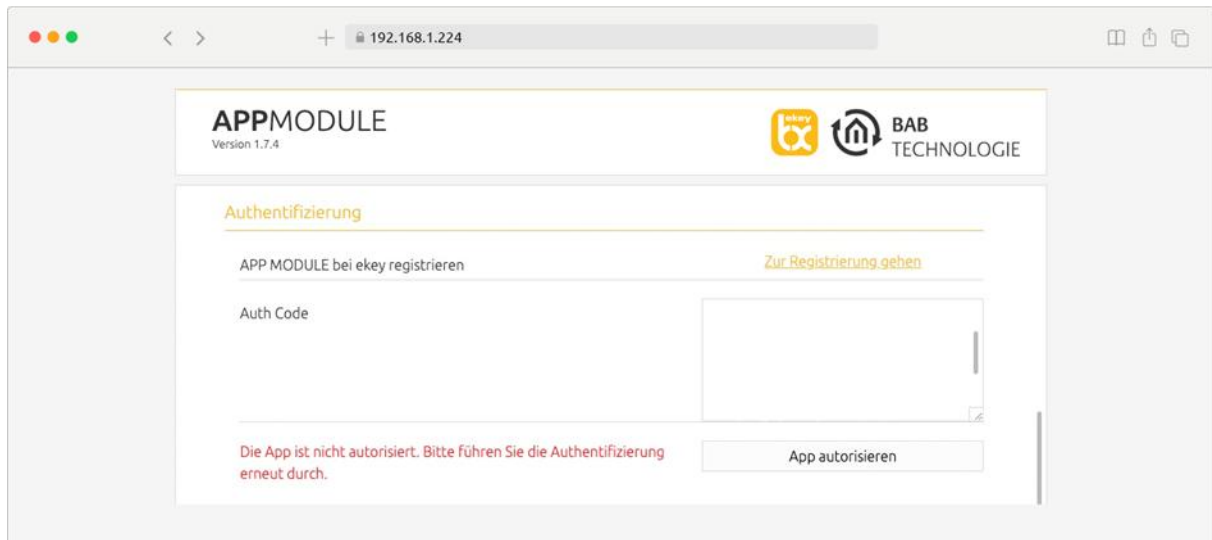
5.3 THIRD PARTY API

5.3.1 AUTHENTICATION

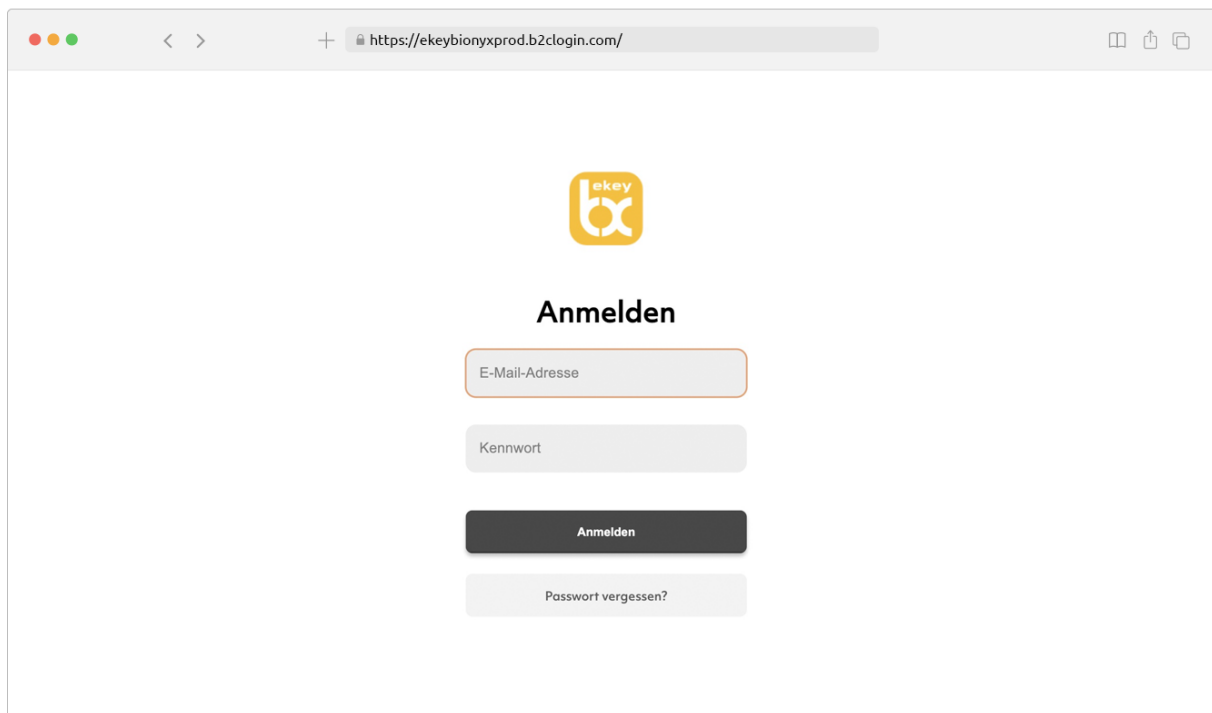
Note:

To register your APPMODULE with ekey, you need an existing ekey bionyx account. If you do not yet have an account, first create one in the bionyx app on your iOS or Android device. Here is the translation.

Please note that third-party integration is only possible with the bionyx owner account.



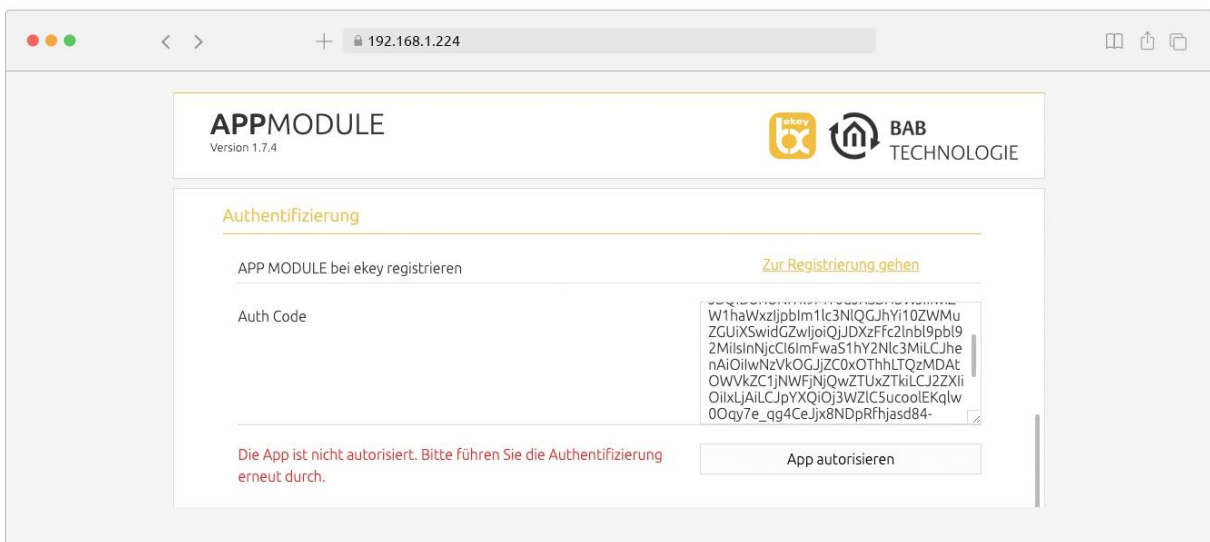
In the smart home app "ekey bionyx connect", click on the link "Go to registration" to start the registration process. You will now be redirected to the ekey bionyx registration page.



After successful registration you will be redirected to the BAB TECHNOLOGIE Service Website.



Your individual authentication code is displayed here. Copy the code with the "Copy Auth-Code" button and return to the configuration of the Smart Home App.



Now paste the contents of the clipboard into the Auth Code field and click the "Authorize app" button. After successful authorization, the "Authentication" area is hidden and your APPMODULE is connected to your ekey bionyx account. You can now start configuring the ekey actions.

NOTE ON CHANGING THE EKEY ACCOUNT

If the ekey account used here needs to be changed, please ensure that a new auth code is generated after logging in with the new ekey account.

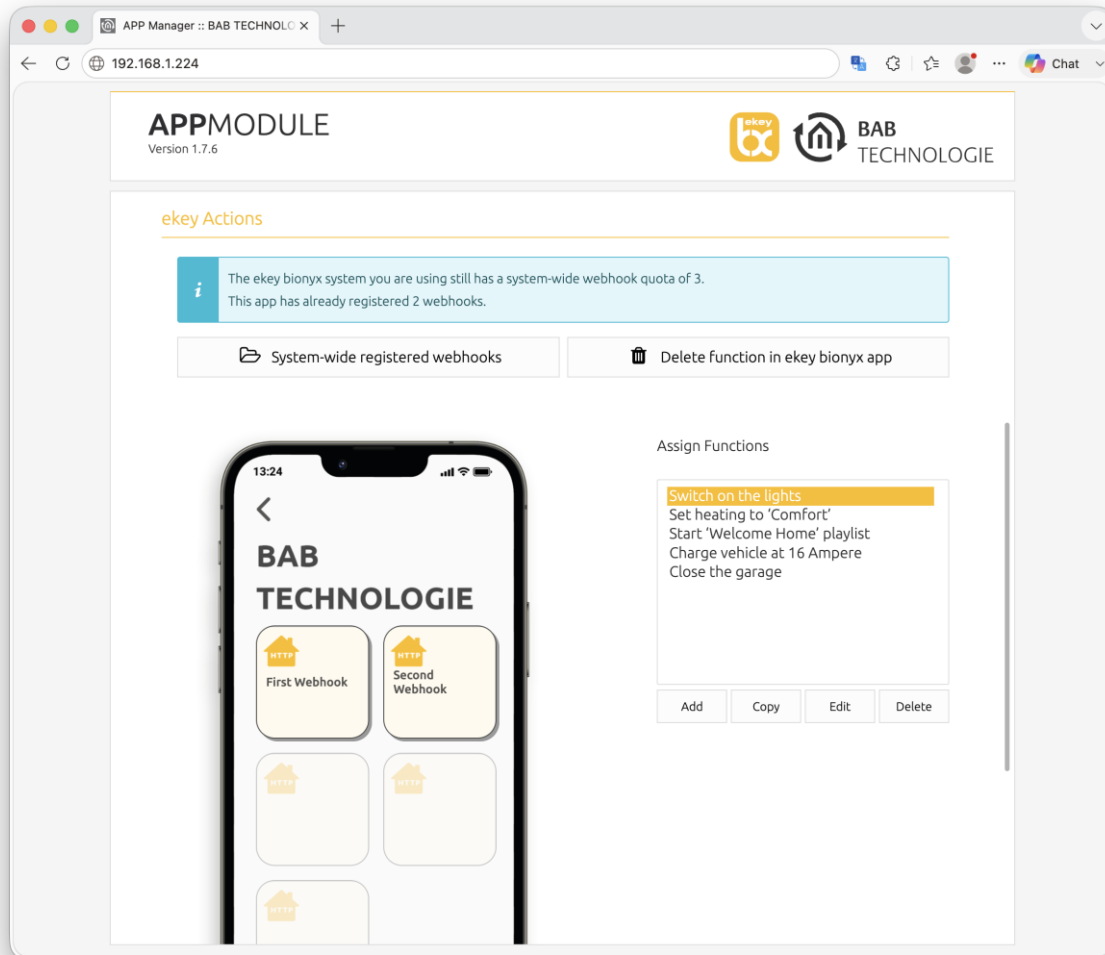
If the old authentication code is still displayed with the new ekey account, clear your web browser cache and log in again.

Once the new auth code has been entered in one of the instances, all instance must be saved and restarted.

5.3.2 EKEY-ACTIONS

With the ekey bionyx connect – Smart Home App, you can create up to five ekey actions. Each action is configured in its own instance and can contain up to ten different functions, which are executed automatically one after another when the action is triggered.

After configuration, the ekey actions can be conveniently triggered via the ekey bionyx app for iOS and Android devices or directly via an ekey fingerprint sensor.



WEBHOOK INFORMATION AND MANAGEMENT

The 'Info' field displays the number of webhooks registered by this smart home app and the remaining system-wide webhook quota.

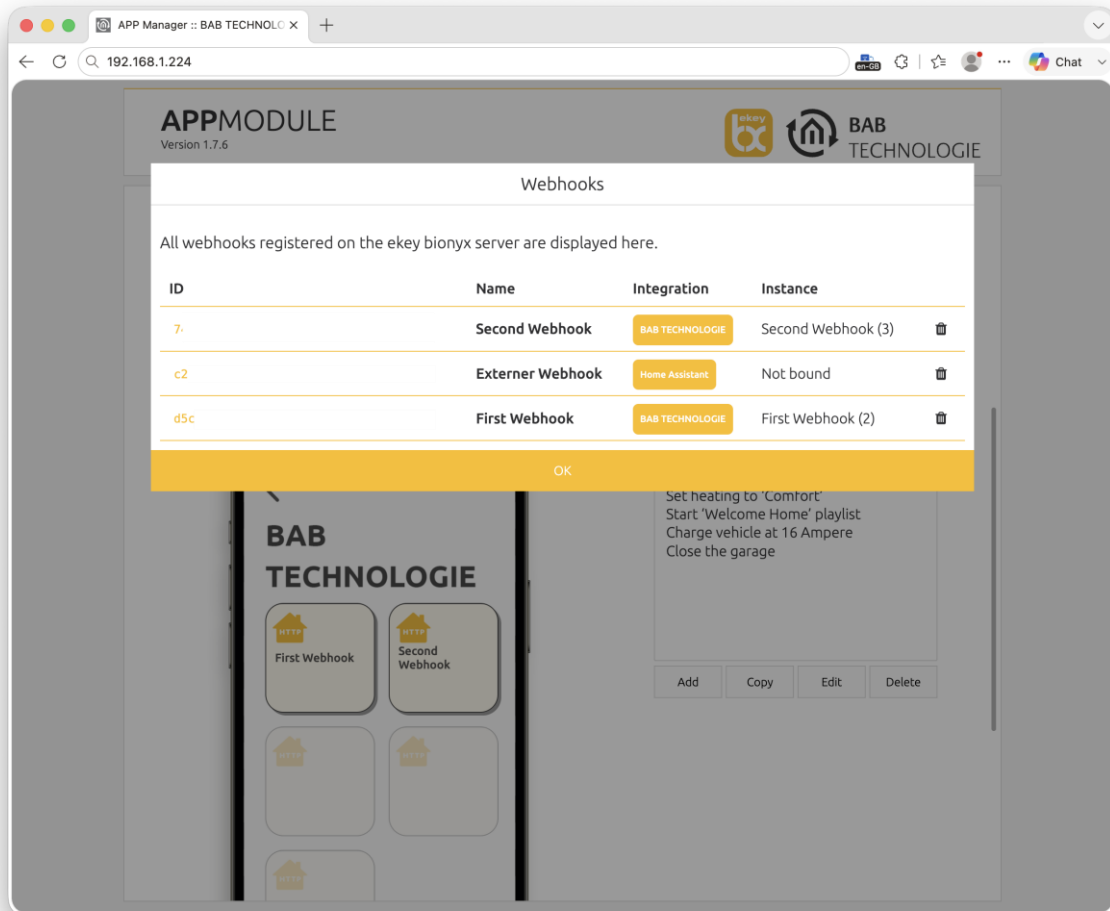
The maximum number of available webhooks is determined by the ekey system.

Note: The remaining webhook quota applies system-wide and may be affected by other applications. The registered webhook count includes only webhooks registered by this smart home app.

System-wide registered webhooks

The 'System-wide registered webhooks' button opens an overview of all webhook endpoints currently registered in the ekey bionyx system. The overview is primarily intended for diagnosing and monitoring system-wide webhook registrations.

For the ekey-bionyx integration, this can be used to check whether the callback endpoint required for an app instance is present. The **APPMODULE** receives action calls from the ekey-bionyx system via this endpoint and then executes the configured functions.



This dialogue also allows you to delete individual webhooks. This function also applies to webhooks that were not created via the **APPMODULE**.

NOTE: The deletion must then be confirmed in the ekey bionyx app! Until then, this function will be marked as 'Deletion requested' in this overview. Once the deletion has been successfully completed, the function can no longer send any actions to the app instance or to the **APPMODULE**.

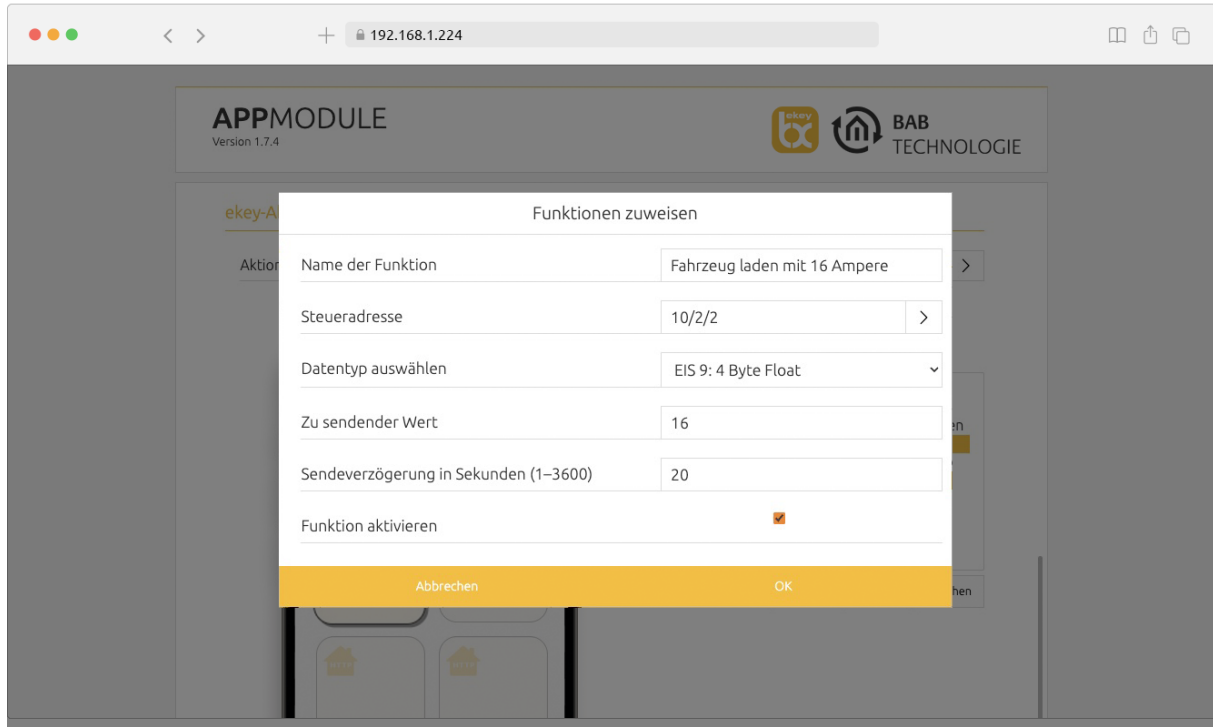
Delete function in the ekey bionyx app

This button sends a request to delete the function linked to the current app instance.

FUNCTIONS

Assign functions

Add the desired functions here. You can create up to 10 functions. Each of the functions can send different values with different data types and delay times.



The screenshot shows a web browser window with the address 192.168.1.224. The main interface is titled 'APPMODULE Version 1.7.4' and features logos for 'ekey' and 'BAB TECHNOLOGIE'. A modal dialog box titled 'Funktionen zuweisen' is open, allowing the user to configure a function. The dialog contains the following fields and options:

Field	Value
Name der Funktion	Fahrzeug laden mit 16 Ampere
Steueradresse	10/2/2
Datentyp auswählen	EIS 9: 4 Byte Float
Zu sendender Wert	16
Sendeverzögerung in Sekunden (1–3600)	20
Funktion aktivieren	☒

At the bottom of the dialog are two buttons: 'Abbrechen' and 'OK'.

Function name

Enter a name for this function. It is best to assign a name that describes the function well.

Control address

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

Select data

Select the data type of the value to be sent.
Possible data types are (DPT format see appendix):

- EIS 1: 1 Bit
- EIS 5: 2 Byte floating point
- EIS 6: 0%..100%
- EIS 9: 4 Byte floating point
- 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)

Value to send

Enter here the value you want to send to the control address. Make sure that you use a value corresponding to the selected data type.

Send delay in seconds (1-3600)

The delay interval to wait before sending the action. Without an entry, the value will be sent without delay. So make sure that the field is empty if you do not want to use a delay.

Activate function

Newly created functions are always activated. You can deactivate individual functions if necessary to take them temporarily out of operation.

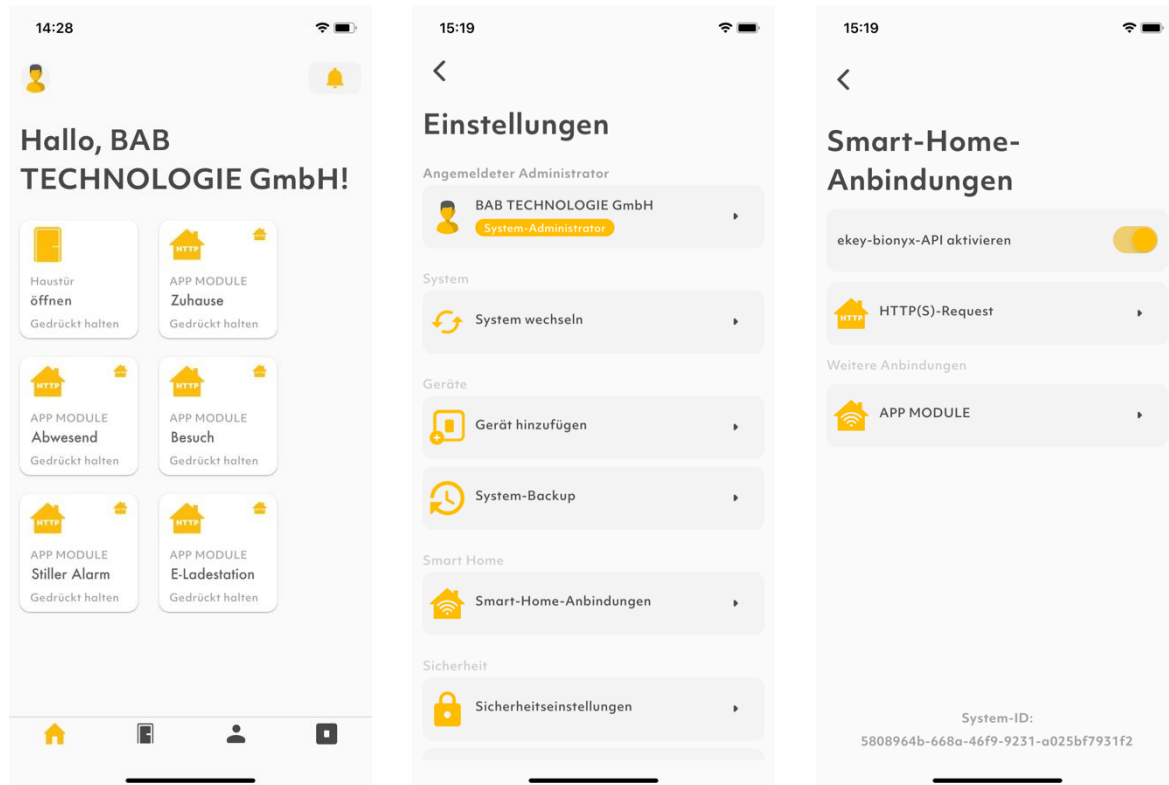
ACTION STATUS (EIS 1)

Enter the address to which it should be reported that the action has been started.

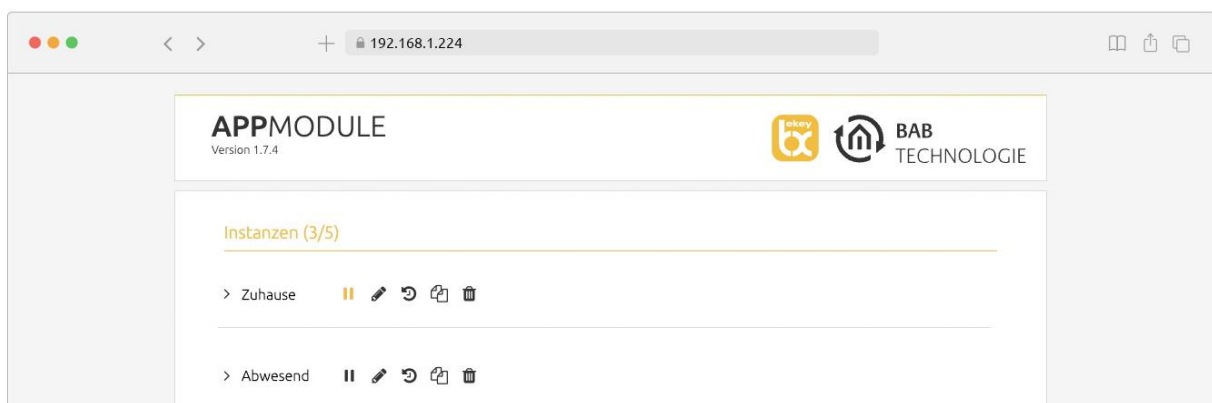
Note:

In order for the ekey actions to work in your bionyx system, you must activate the "ekey-bionyx-API" in your bionyx app for iOS or Android devices. To do this, proceed as follows:

- Open the bionyx app and log in as system administrator.
- Tap on the "Smart Home Connections" button.
- Navigate to the settings menu and select "Smart home connections".
- Switch on the "Enable ekey bionyx API" option.



If you want to change the name of an instance or delete it, this change will only become active when you switch the "Activate ekey-bionyx-API" option off and on again. To do this, navigate to the "Smart home connections" area as described above and perform the steps again.



Pause and restart the instances (with the play/pause symbol) afterwards.



6 APPENDIX

6.1 DATA POINT TYPES

Function	EIS-type	DPT-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 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).