REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

Lithe KNX Connect

Smart Home App Documentation

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REAL SMART HOME GmbH

Hörder Burgstraße 18
D-44263 Dortmund

E-Mail: info[at]realsmarthome.de

Fon: +49 (0) 231-586 974 -00
Fax: +49 (0) 231-586 974 -15
www.realsmarthome.de

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1   INTRODUCTION

Thank you for your trust, and the purchase of the **Lithe KNX Connect**- Smart Home App for the BAB **APP**MODULE. With the **Lithe KNX Connect**- Smart Home App, you can easily connect Lithe Audio's versatile Wi-Fi product range with KNX components such as touch sensors or other IoT products such as Amazon® Alexa.
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 This entails the possibility that parts of this documentation might be out-of-date.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 Lithe Audio Limited. Neither **BAB** APPMARKET GmbH nor the developer of this Smart Home App take any claim in the trademarks owned by Lithe Audio Limited.

2   LITHE KNX CONNECT FUNCTIONAL OVERVIEW

With our smart home app « **Lithe KNX Connect** », you can easily connect Lithe Audio's versatile WiFi product range with KNX components such as touch sensors or other IoT products such as Amazon® Alexa.
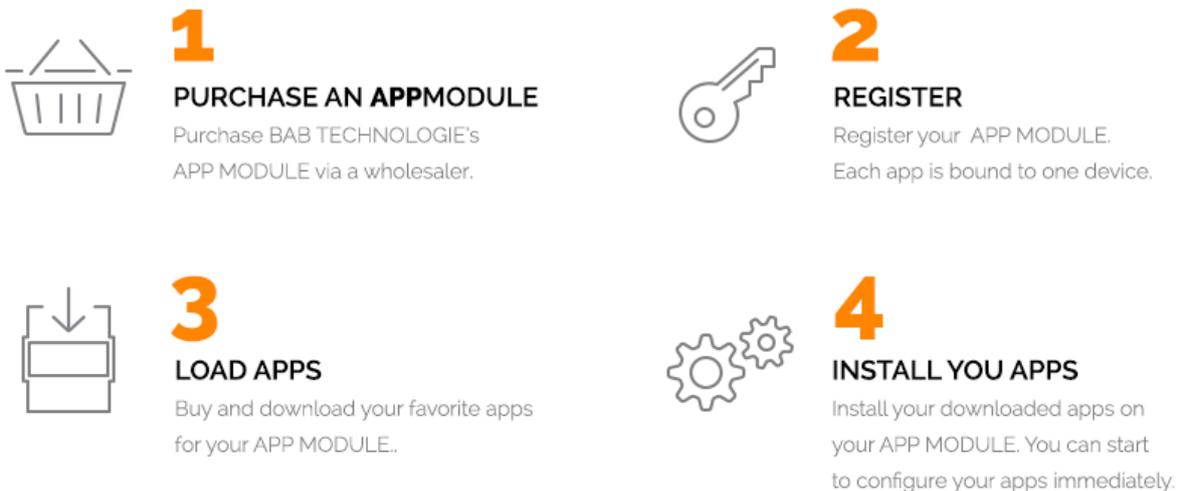
2.1   HIGHLIGHTS

- Easy integration in KNX based home automation systems,
- Playback controls including shuffle and repeat,
- Current playing song metadata: artist, album, title, playlist, source
- Speaker settings: name, channel selection
- Doorbell function
- Party mode,
- Group controls,
- Playback playlist controls

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

The innovative, modular Smart Home App concept for building automation. The **APP**MODULE 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 ingrate third-party solutions. With these Smart Home Apps from the dedicated **BAB** APPMARKET, the **APP**MODULE becomes a tailor-made integration unit for your building automation.

HOW IT WORKS

1 PURCHASE AN **APP**MODULE
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 **APP**MODULE BAB TECHNOLOGIE GmbH

Distribution of all Smart Home Apps for the **APP**MODULE 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 **APP**MODULE for a detailed product description and setup instructions.

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

Product variants:
The **APP**MODULE is available in three variants:

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

4 SMART HOME APP INSTALLATION / UPDATE

Please proceed as follows to install a Smart Home App.

1. Open the **APP**MODULE web page: Enter <IP Address of **APP**MODULE > into your browser's address bar and press Enter. The **APP**MODULE web interface will appear.

2. Log in with your user credentials. Please refer to the **APP**MODULE 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 » **Lithe KNX Connect** « and click "OK".

The Smart Home App » **Lithe 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

With this app you can connect Lithe Audio speakers to the KNX world in next to no time.

Information:

The browser-session expires after a period of 60 minutes due to inactivity. Unsaved changes to the configuration is lost.

5.1   LITHE KNX CONNECT

Once the app is installed, you can create an "instance". 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

Click on the **Refresh** field to display existing Lithe Audio speakers in your network. If the desired Lithe Audio speaker is not available for selection, check the network settings on this device. Use the manufacturer's documentation for this.

Select Lithe Audio Speaker:

Select the main Lithe Audio speaker in the network you want to control with this app instance.

Connection Status (EIS 1):

Insert the group address for the speaker connection status (0: Speaker cannot be reached, 1: Speaker can be reached).

RSSI-Level (dBm) (EIS 15 14 Byte Text)

Insert the group address for the RSSI level in dBm.

5.3 VOLUME CONTROL ADDRESSES (ALL SETTINGS OPTIONAL)

Absolute Volume Control (EIS 6 0-100%):

Insert the group address for the absolute volume control (e.g. for sliders).

Volume Feedback (EIS 6 0-100%):

Insert the feedback group address for the volume.

Absolute Group Volume Control (EIS 6 0-100%):

Insert group address for the absolute group volume control (e.g. for sliders)

Group Volume Feedback (EIS 6 0-100%):

Insert the feedback group address for group volume.

Mute (EIS 1):

Insert the group address for mute (0: unmute, 1: mute).

Mute Feedback (EIS 1):

Insert the feedback group address for mute (0: not muted, 1: muted).

5.4 PLAYBACK CONTROL ADDRESSES (ALL SETTINGS OPTIONAL)

Playback Data Type:

Select the data type you want to use for playback control.

Play/Pause (EIS 1):

Insert the group address for play/pause. Default behavior: Send "1" to resume or begin playback and send "0" to pause playback (Please keep that in mind when using physical switches). If the checkbox "Invert Play Value" below is checked, "1" will pause and "0" will resume or begin playback.

Playback Feedback (EIS 1):

Insert the feedback group address for playback. Sends "1" if playback is active and sends "0" in all other cases. If the checkbox "Invert Play Value" below is checked, "0" indicates active playback while "1" applies to all other cases.

Invert Play Value:

If this option is active, the values on the "Play/Pause" address will be interpreted differently. Sending "1" will pause, while sending "0" will resume or begin playback. This setting is necessary e.g. when integrating this app with Alexa.

Stop (EIS 1):

Insert the group address for stop. Default behavior: a "1" will stop playback, a "0" has no effect. If the checkbox "Invert Stop Value" below is checked, a "0" will stop playback, and a "1" has no effect.

Stop Feedback (EIS 1):

Insert the feedback group address for stop. Sends "1" if playback is stopped and sends "0" in all other cases. If the checkbox "Invert Stop Value" below is checked, a "0" indicates that playback is stopped while "1" applies to all other cases.

Invert Stop Value:

If this option is active, the values on the "Stop" address will be interpreted differently. Sending "0" will stop playback, while sending "1" has no effect.

Previous / Next Track (EIS 1):

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

Repeat Mode (EIS 14 0-2):

Insert the group address for repeat mode. Send a "0" to deactivate repeat mode, a "1" to repeat the current track and a "2" to repeat the current album or playlist.

Repeat Mode Feedback (EIS 14 0-2):

Insert the feedback group address for repeat mode (0: repeat off, 1: repeating current track, 2: repeating album or playlist).

Shuffle On/Off (EIS 1):

Insert the group address for shuffle on/off (0: shuffle off, 1: shuffle on). Shuffle

Feedback (EIS 1):

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

5.5 SOURCES (ALL SETTINGS OPTIONAL)

Select Source (EIS 14 0-5):

Insert the group address for source selection. Send one of the following values in order to play a specific source:

- 0: AUX
- 1: Bluetooth
- 2: Google Cast
- 3: SD card
- 4: Spotify
- 5: USB storage.

Add/Remove Favorite (EIS 1):

Insert the group address for adding or removing a favorite. Send a "1" to add the current track to favorites or remove it, a "0" has no effect.

5.6 METADATA ADDRESSES (ALL SETTINGS OPTIONAL)

Now Playing: Artist (EIS 15 14 Byte Text):

Insert the group address for information about the artist of the currently playing title.

Now Playing: Album (EIS 15 14 Byte Text):

Insert the group address for information about the album of the currently playing title.

Now Playing: Title (EIS 15 14 Byte Text):

Insert the group address for information about the current title.

Now Playing: Playlist or Station (EIS 15 14 Byte Text):

Insert the group address for information about the current playlist or station.

Now Playing: Source (EIS 15 14 Byte Text):

Insert the group address for information about the current source.

5.7 MISCELLANEOUS ADDRESSES (ALL SETTINGS OPTIONAL)

Speaker Name (EIS 15 14 Byte Text):

Insert the group address for the Speaker Name.

Speaker Channel (EIS 14 0-2):

Insert the group address for the speaker channel (0: stereo channel, 1: left channel, 2: right channel).

Speaker Channel Feedback (EIS 14 0-2):

Insert the feedback group address for the speaker channel (0: stereo channel, 1: left channel, 2: right channel).

Speaker Doorbell (EIS 14 1-5):

Enter the group address for the speaker doorbell. Send "1", "2", "3", "4" or "5" to play the doorbell ringtone, a "0" has no effect.

Party Mode (EIS 1):

Insert the group address with which to toggle party mode (1: begin Party Mode, 0: end Party Mode). In Party Mode, all other Lithe Audio devices in your network will join this device and play whatever it is playing.

Party Mode Feedback (EIS 1):

Insert the group address for the party mode feedback. A "1" indicates that this Lithe Audio device is currently Master in Party Mode, while a "0" means it is not currently the master. Some other Lithe Audio devices might be the master of a current Party Mode, or Party Mode might be disabled.

5.8   GROUP CONFIGURATION CONTROLS (ALL SETTINGS OPTIONAL)

Set Group (EIS 14 0-255):

Insert the group address of the KNX object which sets up a group. For details, see the tooltip of "Assign Group Configuration."

Current Group Configuration Name (EIS 15 14 Byte Text):

Insert the group address for the current group configuration name display. The names for each configuration can be set under "Assign Group Configuration".

Assign Group Configuration:

With this feature, you can assign integers from 1 up to 10 to several group configurations. The groups here will be automatically configured with the device controlled by this instance as group leader. Transmit the integer on the group address specified above so a group can be set up. If you want to dissolve a group that includes this device, transmit the value "0".

> **Name:**
>
> Group name
>
> **ID of Multiroom Group (1-255):**
>
> The ID with which the group is activated via the KNX address.
>
> **Master Volume in % (0-100):**
>
> Master Volume to be set when activating the group.

5.9   PLAYBACK PLAYLIST CONTROLS (ALL SETTINGS OPTIONAL)

Select Playlist (EIS 14 1-10):

Insert the group address with which to select a playlist for playback. By sending the assigned value (1 to 10) you will be able to begin playing the playlist from your device. Assign Playlists: With this feature, you can assign integers from 1 up to 10 to each playlist. Select one playlist and assign a number to it. By sending the assigned integer as a telegram, you will be able to begin playing the playlist from your device.

> **Desired Playlist:**
>
> The playlist to be played…
>
> **Corresponding Integer (1-10):**
>
> …if this number is sent as a telegram value.

6   ATTACHMENT

6.1   DATAPOINT 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)