REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

Bluesound Connect

Smart Home App Documentation

Version: 1.3.4
Type: Application
Article No.: BAB-059

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1   INTRODUCTION

Thank you for your trust, and the purchase of the **Bluesound Connect** -Smart Home App for the BAB **APP**MODULE. With **Bluesound Connect**-Smart Home App you get Integrate **Bluesound** speakers into your Smart Home based on KNX, EnOcean and IP. The seamless connection with »**Bluesound Connect**« enables control with all Smart Home components and building visualisations.

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 This entails the possibility that parts of this documentation might be out-of-date.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 a standalone product and has no legal connection to Bluesound® or NAD Electronics. Neither BAB APP MARKET GmbH nor the developer owns the above mentioned trademark. This Smart Home App may be used in conjunction with third party services. The respective manufacturer is responsible for data protection.

2   BLUESOUND CONNECT FUNCTIONAL OVERVIEW

Clear, detailed sound in the usual superior **Bluesound** quality. The »**Bluesound Connect**« Smart Home App enables you to easily connect your **Bluesound**® music system to the KNX® system. This means that the controller can not only be fully integrated into the visualization, but can also be combined with other services or easily controlled via KNX® buttons. This allows you to control and manage your entire music without detours.
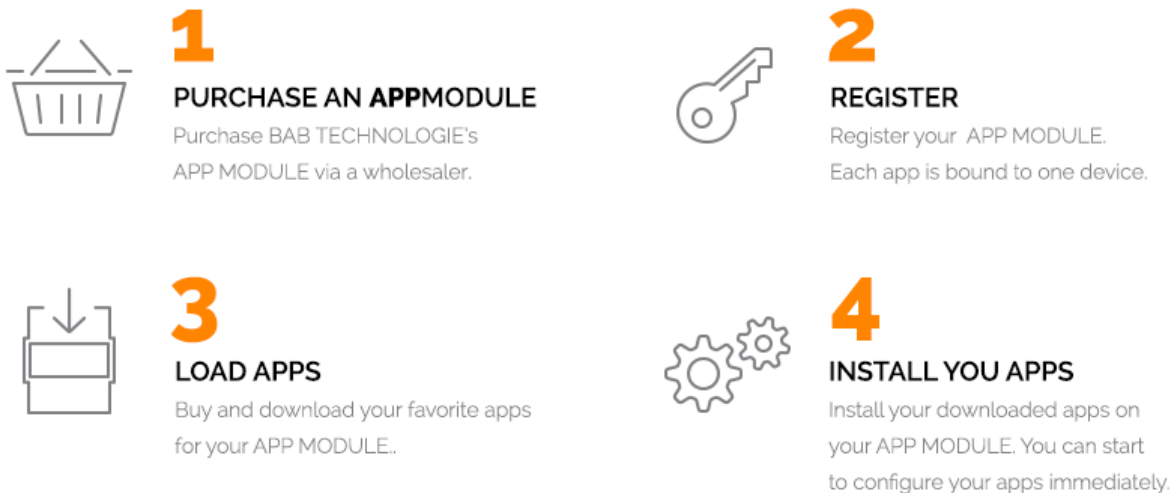
HIGHLIGHTS

- Integration based on the BluOS protocol
- Compatible with all **Bluesound** products
- Compatible with all NAD Electronics products
- Control with other Smart Home Apps such as »IFTTT Connect«, »BAB Alexa« or »BAB Assistant«.

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.

http://www.bab-tec.de/index.php/download_de.html

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 » **Bluesound Connect** « and click "OK".

The Smart Home App » **Bluesound 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

Clear, detailed sound in the usual superior **Bluesound** quality. The »**Bluesound Connect**« app enables you to easily connect your **Bluesound**® music system to the KNX® system. This means that the controller can not only be fully integrated into the visualization, but can also be combined with other services or easily controlled via KNX® buttons. This allows you to control and manage your entire music without detours.

5.1 BLUESOUND 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 or comments what this instance does.

5.2 NETWORK-SETTINGS

IP Address of device:

Enter IP address of the required device.

For the search, please turn on device!

Before searching, please turn on the corresponding device.

Port:

For standard port please enter „11000". This Port 11000 is used for all BluOS players except the NAD CI580 (4-zone stereo multiroom music streamer). The CI580 has four streaming zones in one chassis, Zone 1 using Port 11000, Zone 2 using Port 11010, Zone 3 using Port 11020 and Zone 4 using Port 11030.

5.3 PLAY-CONTROL

Play / Pause (EIS 1)

Enter group address for play function of the device: If broadcast "1" the device turns on, if "0" playback is interrupted (break). Depending on the system this function has to be inverted.

Play / Pause Status (EIS 1)

Enter group address for feedback from device: when received "1" the device is turned on, if "0" the playback is interrupted. When inverted the values are reversed.

Invert for Play / Pause (EIS 1)

When enabled, On=1 and Off=0 are reversed (depending on the system, e.g. control via ALEXA).

Stop (EIS 1)

Enter group address for turn off (standby) the device. The correct turn off behavior, whether "0" or "1", must be set at device depending on the feedback / status. It may be necessary to reset that value when replaying.

Stop status (EIS 1)

Enter group address for feedback from device for turn off/ standby: Whether "0" or "1" is system dependent.

Back / Next (EIS 1)

Enter group address for skip function: previous track "0" and next track "1".

Shuffle (EIS 1)

Enter group address for shuffle play: "1" shuffle on, "0" shuffle off.

Shuffle Status (EIS 1)

Enter group address for feedback from device: whether shuffle is on "1" or off "0".

Repeat (EIS 14 0..255)

Enter group address for repeat function: repeat playlist "0", repeat track "1", "2" no repeat.

Repeat Status (EIS 14 0..255)

Enter group address for feedback from device for repeat function: repeat playlist "0", repeat track "1" track "2" no repeat.

5.4 VOLUME CONTROL

Absolute Volume (EIS 6 0%..100%)

Enter group address to set up the volume between 0 and 100; the device changes to the value of volume.

Relative Volume Control (EIS 1)

Relative volume control with fixed step level (0: down, 1: up). The step level can be set via the menu.

Volume Step Level (1–10)

Integer value which will serve as the step level of the relative volume control. The default value is 1.

Absolute Volume status (EIS 6 0%..100%)

Enter group address for feedback from device about current volume. That will be in range 0 till 100.

Relative Volume (Dimming) (EIS 2 relative Dimming)

Relative volume increase or decrease (for start/ stop dimmers).

Volume Step Dimming (EIS 2 relative Dimming)

Relative volume increase or decrease (for step dimmers).

Volume Dimming Duration (1000–22000)

Insert the duration (in ms) that a complete start/stop dimming process (0-100) should take.
Note: Every volume step will be sent to the device individually. This internally calculates, how to increment in order to achieve the desired dimming duration while contacting Bluesound speaker device 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).

Mute (EIS 1)

Enter group address for the muting. When broadcast "1" playback will not be interrupted but the volume is on 0. Broadcast "0" resets the volume to the previous volume.

Mute Status (EIS 1)

Enter group address for feedback of the muting. If the mute function has been activated, the feedback will be displayed "0". If displayed "1" playback is going at preset volume.

Volume for connected Speakers

If function enabled all speakers connected to the device will be included into the volume control.

5.5   PLAYLIST

Playlist (EIS 14 0..255)

Enter group address for the integer number (ID) of the playlist which assigned in a separate field. By broadcast the number the corresponding playlist will be played.

Playlist

The playlists from device are displayed here and can be assigned to an ID (number). In this way a desired playlist can be started or assigned to a function or scene in the building control.

When enabled by adding, copying, and editing another window opens.

ID

Assign an integer to identify the playlist.

Playlist

Select an existing playlist.

5.6 PRESETS

Trigger for Presets (EIS 14 0..255)

Enter the group address for the integer number (ID) of the Presets, as assigned in a separate field. By sending the number, the corresponding Preset is started.

Preset list

The Presets available in the device are displayed here and you can assign them to an ID (number). With this can be started a desired Preset or to assign it to a function or scene in the building control.

When enabled by adding, copying, and editing another window opens.

ID

Assign an integer to identify the Preset.

Preset

Select an existing Preset on the device.

5.7 ANNOUNCEMENT MODE

Announcement Mode (EIS 14 0..255)

Inserted die group address, which shall be used to activate Announcement Mode. Sending an integer will cause the device to play the pre-defined announcement. Once the announcement is finished, device will automatically return to its pre-defined configuration. You can end Announcement Mode prematurely by sending a "0". Both announcement content and behavior of the Bluesound device after Announcement Mode can be specified at menu below.

Announcements

With this feature you can assign integers from 1 to 100 to announcements. Options for announcement include playlist, audio files generated by the "Speech" App. Furthermore, Announcement Mode can in this case only be ended manually by sending a "0" to the group address "Announcement Mode" or by sending either a pause or stop command.

When enabled by adding, copying, and editing another window opens.

Announcement Content

Select the announcement you want to play.

Corresponding Integer

Announcement takes place what happens when this number is sent as the content of a telegram.

Enable Announcement Volume

Enable the announcement volume. The announcement volume value can be configured by the following entry.

Announcement Volume (0–100)

Insert an integer value between 0 and 100. If the announcement volume is activated, the volume of the speaker will be change to the inserted value at the beginning of the announcement.

After Ending Announcement Mode

Select the behaviour of the Bluesound devices as all previous zone configurations have been restored after the Announcement Mode.
- "Play nothing"
- "Revert to previous state": includes source, playback status, volume and in case of playlists, track and time stamp

Save / Save and Slose

That the changes become effective they have to be saved into the device.

6 BLUESOUND CONNECT – INSTANCES FUNCTIONS

You can use additional functions via the main menu of your **Bluesound Connect** instances:

▶ Start instance and ⏸ stop instance.

✏ Edit the instance and its parameters

🕘 Display and export the log file of the instance

🗐 Copy your created instances (as a template)

🗑 Delete instance
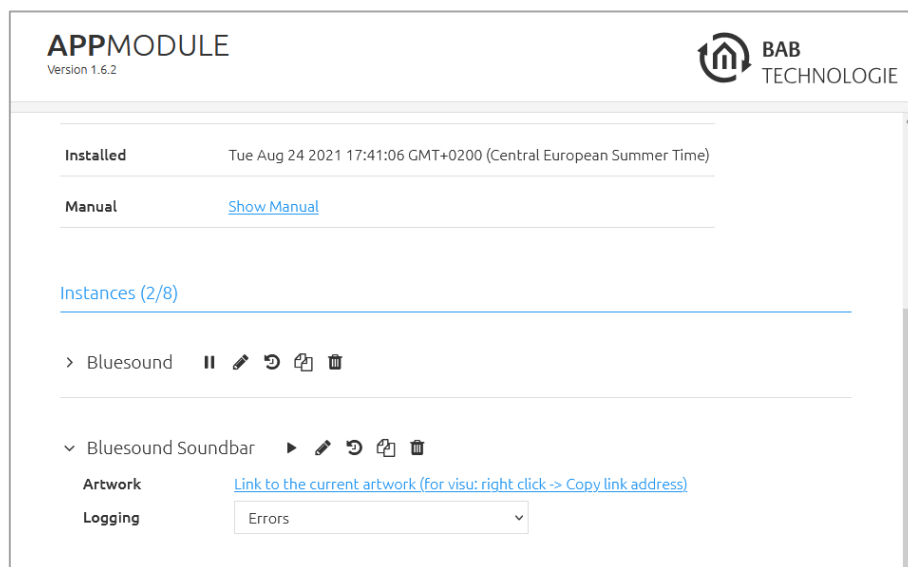
Artwork

You can use the link listed here to insert it into your visualization. You can copy the link by right-clicking on it.

Logging

For the log data can be activated a filter (errors, warnings, debug) via the selection menu.

7 ATTACHMENT

7.1 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)