REAL SMART HOME

REAL SMART HOME GmbH

**APP**MODULE

# NEATO Robotics

# Smarthome App Documentation

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# 1 INTRODUCTION

Thank you for your trust, and the purchase of the NEATO Robotics-app for the BAB **APP**MODULE. With NEATO Robotics -app you can easily control your robot vacuum cleaner with any KNX® component.

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 This entails the possibility that parts of this documentation might be out-of-date.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 Neato Robotics, Inc.. Neither **BAB** APP MARKET GmbH nor the developer of this app take any claim in the trademarks owned by Neato Robotics, Inc.

# 2 FUNCTIONAL OVERVIEW

Smart home. Clean home. Easily control your robotic vacuum cleaner with any KNX component and let Neato do the work automatically when you leave the house. "Neato Control" works with all devices of the Connected series

HIGHLIGHTS

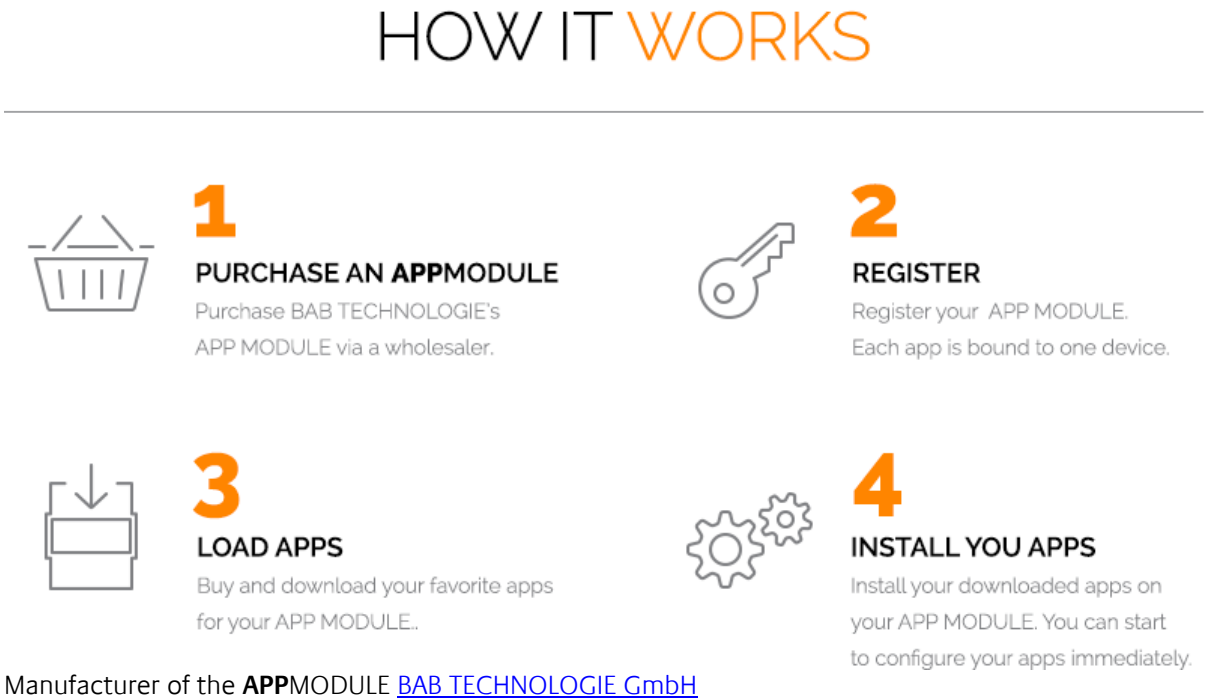
- Neato zones selectable via KNX
- Activate schedule via KNX
- Charging time, battery status and much more can be transferred to KNX
- Up to 2 app instances

Supports:

- Start-pause-stop control of the robot vacuum cleaner
- Reset the robot in the dock charging station
- Selection of cleaning profiles
- Selection of navigation profiles
- Processing of defined time profiles
- Use of the robot vacuum cleaner in different, programmed zones
- Status feedback from the robot, including the state of charge and battery charging time

# 3 THE INNOVATIVE, MODULAR APP-CONEPT FOR THE BUILDING AUTOMATION

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




Manufacturer of the **APP**MODULE BAB TECHNOLOGIE GmbH

Distribution of all Smarthome Apps for the **APP**MODULE BAB APP MARKET GmbH

Smarthome 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 SMARTHOME APP INSTALLATION / UPDATE

Please proceed as follows to install a Smarthome 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 Smarthome Apps are listed. The list will be empty if no Smarthome Apps have been installed. Click "Install App" in order to install a new Smarthome App.

5. Now click on "Select App"; a file selector window will appear. Choose the Smarthome App »**NEATO Robotics**« and click "OK".

The Smarthome App » **NEATO Robotics**« 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 Smarthome App.

To update a Smarthome App manually you have to proceed as follows

1. To update an already installed Smarthome App, click on the App icon in the "App Manager".

2. The detail view of the Smarthome App appears. Click on "Update App" to select the Smarthome 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 Smarthome App has been updated. Your instance configurations will remain unchanged.

The Smarthome App can also be updated directly in the web interface. Without having to download the Smarthome App from the **BAB**APPMARKET first.
In the “App Manager” available Smarthome App updates are reported

**Information**
To configurate the Smarthome App please use Google Chrome.

# 5 APP SETTINGS

With the NEATO Robotics -app you can easily control your robot vacuum cleaner with any KNX® component. In order to be able to control devices of the »Connected« series with KNX®, you have to create a new instance for each device.

## 5.1 NEATO ROBOTICS

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.

**Request an access-Token:**

Click the field to generate a token. Follow the instructions that appear. The link can also be used by entering it into a browser. The registration takes place at NEATO, where you will receive the TOKEN, which must be entered in the TOKEN field.

## 5.2 NETWORK-SETTINGS

**Polling repetition (in seconds)**

Polling of the robot status, which is started every X seconds. The default value is 10. Please note that a maximum of 2 instances can be created.

**Robot selection**

Select your robot here. If only one robot is detected it is automatically added in the field.

# 5.3 NAVIGATION-SETTINGS

**Start / Stop robot (EIS 1)**

Enter a KNX address that sends start or stop command to robot (8=stop/ 1= start).

**Pause / Resume robot (EIS 1)**

Enter a KNX address that sends pause or resume command to robot (0=resume/ 1=pause).

**Robot activity (EIS 14 0–255)**

Enter a group address that shows if the robot is active, inactive or paused:

- 1= idle
- 2= active
- 3= paused

**Dock (EIS 1)**

Enter a KNX address to send robot to clock.

**Docked (EIS 1)**

Enter a group address to display if robot is docked (0= no/ 1= yes).

**Cleaning Profile (EIS 1)**

Enter a group address that sets cleaning profile (0= ECO/ 1= TURBO).

**Status Cleaning Profile (EIS 1)**

Enter a group address to display state of cleaning profile (0= ECO/ 1= TURBO).

**Navigation Profile (EIS 14 0–255)**

Enter a group address that sets navigation profile (1= Normal/ 2= Extra Care/ 3= Deep).

**Status Navigation Profile (EIS 14 0–255)**

Enter a group address to display state of navigation profile (1= Norma/ 2= Extra Care/ 3= Deep).

## 5.4 ROBOT-SETTINGS

**Timetable (EIS 1)**

Enter a group address to receive an integer that is assigned activates (1) / deactivates (0) timetable.

**State of timetable (EIS 1)**

Enter a group address to display the current state of timetable (inactive= 0 / active= 1).

**Zone Trigger**

Enter a group address to receive an integer that is enabling / disabling selected zone.

**Zones**

With this function you can assign zones as integer numbers. Send this number to a special group address and the device will process the zone next.

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

**ID**

Enter an integer as identifier of zone.

**Name of Zone**

Name of zone which is set in mobile app.

**Cleaning Profile**

State of cleaning profile (0= ECO/ 1= TURBO).

**Navigation Profile**

Selection and sets navigation profile (1= Normal/ 2= Extra Care/ 3= Deep).

## 5.5 STATE OF ROBOT

**Battery State (EIS 6 0–100%)**

Enter the group address for state of charge.

**Charge Time (EIS 9 4 Byte FP)**

Enter the group address for information about duration till robot is fully charged.

**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 |
|---|---|---|---|---|---|---|
| PriorityPosi-tion | 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<br>xxxx=relative dimming<br>0-255=absolute dimming | 1Bit<br>4Bit<br>8Bit | 3-bit controlled |
| Time | EIS3 | DPT 10* | Time | Hhh:mm:ss | 3Byte | Time |
| Date | EIS4 | DPT 11* | Date | dd:mm:yyyy | 3Byte | Date |
| Value | EIS5 | DPT 9* | Float Vaue 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;<br>0 or 1 during movement=stop | 1Bit | 1-bit |
| PriorityCont-rol | 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)