REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

PJLink App Documentation

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1 INTRODUCTION

Thank you for your trust, and the purchase of the **PJLink** - app for the BAB **APP**MODULE. With **PJLINK** you obtain an app that allows you to easily integrate the most popular video beamers. 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 This entails the possibility that parts of this documentation might be out-of-date.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 PJLink®. Neither **BAB** APP MARKET GmbH nor the developer of this app take any claim in the trademarks owned by PJLink®.

2 PJLINK – FUNCTIONAL OVERVIEW

You can use this app to control PJLink-supported devices – for example from Sony®, Sharp® or Hitachi® via KNX®. Projectors can be connected very easily in this manner. Alongside the usual control commands, the range of functions also includes reporting regarding troubleshooting. The manufacturer-independent protocol ensures a steadily growing number of compatible devices.

2.1 HIGHLIGHTS

- On/off
- Switch input
- Mute
- Read out status from the 3 above
- Read out troubleshooting (coverage, fan, lamp, temperature, filter, case, other)

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

The innovative, modular app concept for building automation. The **APP**MODULE brings the innovative, modular 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 apps from the dedicated **BAB** APP MARKET, the **APP**MODULE becomes a tailor-made integration unit for your building automation.

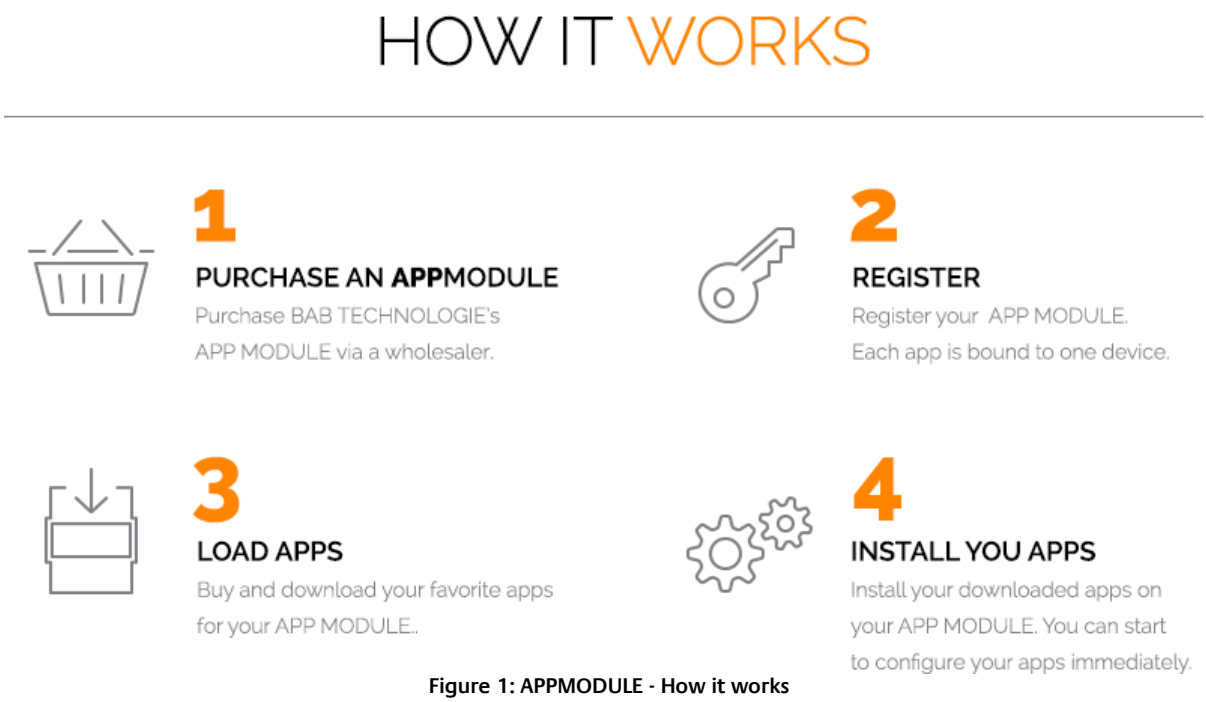

Figure 1: APPMODULE - How it works

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

Distribution of all apps for the **APP**MODULE BAB APP MARKET GmbH

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 Extension – for use in an IP-based KNX installation (KNXnet/IP) or as extension for an EIB**PORT**

4 APP INSTALLATION

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

5. Now click on "Select App"; a file selector window will appear. Choose the app »PJLink« and click "OK". The Smart Home App "PJLink" must first be downloaded from the BAB APP MARKET (www.bab-appmarket.de).

6. After the message "Installation successful" appears, click "OK". You are ready to configure the App.

7. To update an already installed app, click on the App icon in the "App Manager".

8. The detail view of the App appears. Click on "Update App" to select the app package and start the update. The update version must be downloaded from the BAB APP MARKET.

After the message "Installation successful" appears, click "OK". The app has been updated. Your instance configurations will remain unchanged.

Information
To configurate the App please use Google Chrome.

5 APP SETTINGS

You can use this app to control PJLink-supported devices – for example from Sony®, Sharp® or Hitachi® via KNX®. Projectors can be connected very easily in this manner. Alongside the usual control commands, the range of functions also includes reporting regarding troubleshooting. The manufacturer-independent protocol ensures a steadily growing number of compatible devices.

5.1 INSTANCE

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

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 following symbol "Create Instance".

Instance Name:
Choose a name for this new instance.

Comment:
Insert a description what this instance does.

5.1.1 CONNECTION PARAMETERS

PJLink Device IP:

Insert the IP address of the PJLink device (it must have a static IP for the app to work reliably).

Dest. Port:

The port number of the PJLink device (default is 10000, Epson EP4950-WU: 43052).

Password:

The password for controlling the PJLink device.

5.1.2 COMMANDS

Power On/Off (EIS 1):

Insert the group address for switching the PJLink device on and off.

Input (EIS 14):

Insert the group address for selecting the PJLink input.
Panasonic PT-RZ330E:

- 11: Computer
- 12: DVI-I IN (Analog)
- 21: Video
- 31: HDMI
- 32: DVI-I IN (Digital)
- 33: Digital LinkEpson

EP4950-WU:

- 32: HDMI

Mute (EIS 1):

Insert the group address for muting the device.

5.1.3 STATUS

Status Query Interval:

The app will query the PJLink device for the status in this interval (seconds).

Status Power (EIS 1):

Insert the group address for power on / off status.

Status Input (EIS 14):

Insert the group address for input status. For the PT-RZ330E this means:

- 11: Computer
- 12: DVI-I IN (Analog)
- 21: Video
- 31: HDMI
- 32: DVI-I IN (Digital)
- 33: Digital Link

Status Mute (EIS 1):

Insert the group address for mute status.

5.1.4 FAILURES

Device Available (EIS 1):

A telegram with the value 1 will be sent on this group address if the projector is available on the network.
A 0 indicates that the projector is not available on the network.

Fan Status (EIS 14):

The projector's fan status will be sent on this group address:

- 0: OK
- 1: Warning
- 2: Failure

Lamp Status (EIS 14):

The projector's lamp status will be sent on this group address:

- 0: OK
- 1: Warning
- 2: Failure

Temperature Status (EIS 14):

The projector's temperature status will be sent on this group address:

- 0: OK
- 1: Warning
- 2: Failure

Cover Status (EIS 14):

The projector's cover status will be sent on this group address:

- 0: Closed
- 2: Opened

Filter Status (EIS 14):

The projector's filter status will be sent on this group address:

- 0: Closed
- 2: OpenedThis feature is not available for the Panasonic PT-RZ330E

Other Errors (EIS 14):

Other projector errors will be sent on this group address:

- 0: OK
- 1: Warning
- 2: Failure

Command Error Number (EIS 14):

The following error numbers will be sent:

- 0: Command Successful
- 1: Undefined command
- 2: Parameter error
- 3: Unavailable Time. The processor is busy and cannot execute the command at the moment.
- 4: Projector failure.

Command Error Text (EIS 15):

If a command cannot be executed successfully, a error text will be sent on this object:

- "": Command Successful
- "Undef. Command": Undefined command
- "Param. Error": Parameter error
- "Unavailable": Unavailable Time. The processor is busy and cannot execute the command at the moment.
- "Proj. Failure": Projector failure.

6 ATTACHMENT

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 xxxx=relative dimming 0-255=absolute dimming	1Bit 4Bit 8Bit	3-bit controlled
Time	EIS3	DPT 10*	Time	Hhh:mm:ss	3 Byte	Time
Date	EIS4	DPT 11*	Date	dd:mm:yyyy	3 Byte	Date
Value	EIS5	DPT 9*	Value	[-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*	Position 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 blind	0=up; 1= down; 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	4 Byte	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 with sign	-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 with sign	0 - 4.294.967.295	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 with sign	-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)