



REAL SMART HOME

REAL SMART HOME GmbH

**APPMODULE**

# **M8TRIX** App Documentation

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# 1 INTRODUCTION

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Thank you for your trust, and the purchase of the **M8TRIX** - app for the BAB **APP**MODULE. With the **M8trix** - app you receive the most professional integration of the Lightware MX8x8DVI-Pro video matrix switch into building control. 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

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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 This entails the possibility that parts of this documentation might be out-of-date.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](http://www.bab-appmarket.de)

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## 2 M8TRIX – FUNCTIONAL OVERVIEW

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This app opens a TCP socket to a Lightware MX 8x8 DVI Pro and sends commands which are triggered by KNX® telegrams.

### 2.1 HIGHLIGHTS

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- 8 outputs
- Input assignment
- Locking/unlocking
- Mute/unmute
- 32 presets

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

The innovative, modular app concept for building automation. The **APPMODULE** brings the innovative, modular app concept into building automation. You can mix and match any of the diverse applications that are available to integrate third-party solutions. With these apps from the dedicated **BAB APP MARKET**, the **APPMODULE** becomes a tailor-made integration unit for your building automation.

### HOW IT WORKS

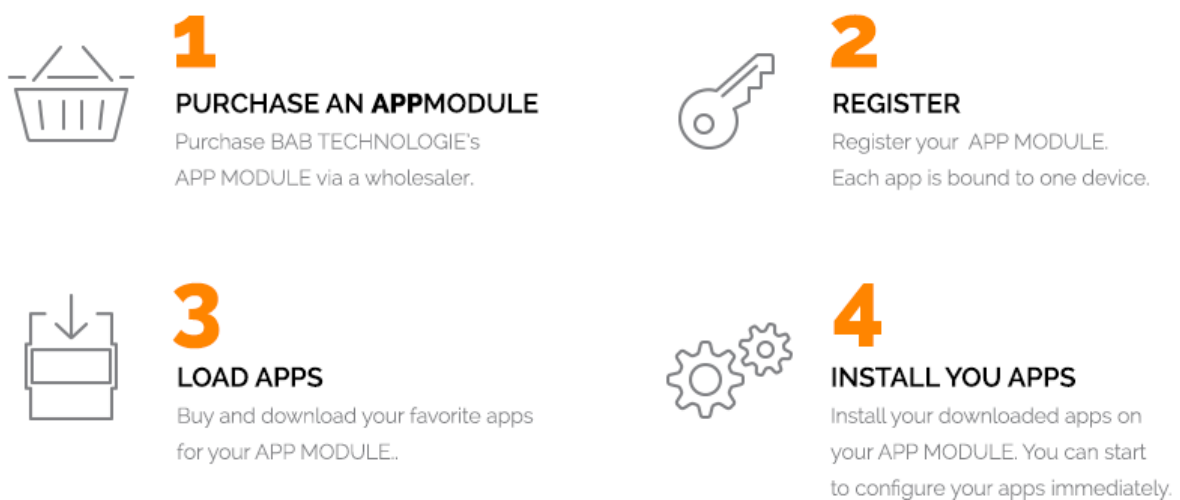


Figure 1: APPMODULE - How it works

Manufacturer of the **APPMODULE**

<http://bab-tec.de/>

Distribution of all apps for the **APPMODULE**

<https://www.bab-appmarket.de/de/>

App developer

<http://www.realsmarthome.de/>

### 3.1 INFORMATION ABOUT THE APPMODULE

Please refer to the separate product documentation of the **APPMODULE** for a detailed product description and setup instructions.

[http://www.bab-tec.de/index.php/download\\_de.html](http://www.bab-tec.de/index.php/download_de.html)

#### Product variants:

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

- **APPMODULE KNX/TP** – for stand-alone use on KNX/TP Bus
- **APPMODULE EnOcean** – for stand-alone use in the EnOcean wireless network
- **APPMODULE Extension** – for use in an IP-based KNX installation (KNXnet/IP) or as extension for an EIBPORT

## 4 APP INSTALLATION / UPDATE

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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 »M8TRIX« and click "OK". The Smart Home App "M8TRIX" must first be downloaded from the BAB APP MARKET ([www.bab-appmarket.de](http://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

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This app opens a TCP socket to a Lightware MX 8x8 DVI Pro and sends commands which are triggered by KNX® telegrams.

### 5.1 INSTANCE

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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".

#### 5.1.1 CONNECTION PARAMETERS

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##### **Lightware IP:**

Insert the IP address of the Lightware MX 8x8 DVI Pro. Please note that the device only allows one concurrent tcp connection. Even just opening the web page of your Lightware device in parallel will cause the app to not be able to send commands. This behaviour is documented in the Lightware manual.

##### **Dest. Port:**

The destination port number (default 10001 for Lightware MX 8x8 DVI Pro). Please note that the device only allows one concurrent tcp connection. Even just opening the web page of your Lightware device in parallel will cause the app to not be able to send commands. This behaviour is documented in the Lightware manual.

##### **Ping Interval (s):**

Defines the interval, in seconds, with which the Lightware MX 8x8 DVI Pro device should be pinged.



## 5.1.2 GROUP ADDRESSES FOR OUTPUTS

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**Output 1 Input Assign (EIS 14u):**

Insert the group address for Output 1 Input assign.

**Output 2 Input Assign (EIS 14u):**

Insert the group address for Output 2 Input assign.

**Output 3 Input Assign (EIS 14u):**

Insert the group address for Output 3 Input assign.

**Output 4 Input Assign (EIS 14u):**

Insert the group address for Output 4 Input assign.

**Output 5 Input Assign (EIS 14u):**

Insert the group address for Output 5 Input assign.

**Output 6 Input Assign (EIS 14u):**

Insert the group address for Output 6 Input assign.

**Output 7 Input Assign (EIS 14u):**

Insert the group address for Output 7 Input assign.

**Output 8 Input Assign (EIS 14u):**

Insert the group address for Output 8 Input assign.

**Output 1 Lock/Unlock (EIS 1):**

Insert the group address for the Output 1 lock switch.

**Output 2 Lock/Unlock (EIS 1):**

Insert the group address for the Output 2 lock switch.

**Output 3 Lock/Unlock (EIS 1):**

Insert the group address for the Output 3 lock switch.

**Output 4 Lock/Unlock (EIS 1):**

Insert the group address for the Output 4 lock switch.

**Output 5 Lock/Unlock (EIS 1):**

Insert the group address for the Output 5 lock switch.

**Output 6 Lock/Unlock (EIS 1):**

Insert the group address for the Output 6 lock switch.

**Output 7 Lock/Unlock (EIS 1):**

Insert the group address for the Output 7 lock switch.

**Output 8 Lock/Unlock (EIS 1):**

Insert the group address for the Output 8 lock switch.

**Output 1 Mute/Unmute (EIS 1):**

Insert the group address for the Output 1 mute switch.

**Output 2 Mute/Unmute (EIS 1):**

Insert the group address for the Output 2 mute switch.

**Output 3 Mute/Unmute (EIS 1):**

Insert the group address for the Output 3 mute switch.

**Output 4 Mute/Unmute (EIS 1):**

Insert the group address for the Output 4 mute switch.

**Output 5 Mute/Unmute (EIS 1):**

Insert the group address for the Output 5 mute switch.

**Output 6 Mute/Unmute (EIS 1):**

Insert the group address for the Output 6 mute switch.

**Output 7 Mute/Unmute (EIS 1):**

Insert the group address for the Output 7 mute switch.

**Output 8 Mute/Unmute (EIS 1):**

Insert the group address for the Output 8 mute switch.

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### 5.1.3 GROUP ADDRESSES FOR PRESETS

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**Preset Load Buttons (EIS 14u):**

Insert the group address for the preset number that is to be loaded.

**Preset Save Buttons (EIS 14u):**

Insert the group address for the preset number that is to be saved.

**Preset 1 Name (EIS 15):**

Insert the group address for the name of preset 1.

**Preset 2 Name (EIS 15):**

Insert the group address for the name of preset 2.

**Preset 3 Name (EIS 15):**

Insert the group address for the name of preset 3.

**Preset 4 Name (EIS 15):**

Insert the group address for the name of preset 4.

**Preset 5 Name (EIS 15):**

Insert the group address for the name of preset 5.

**Preset 6 Name (EIS 15):**

Insert the group address for the name of preset 6.

**Preset 7 Name (EIS 15):**

Insert the group address for the name of preset 7.

**Preset 8 Name (EIS 15):**

Insert the group address for the name of preset 8.

**Preset 9 Name (EIS 15):**

Insert the group address for the name of preset 9.

**Preset 10 Name (EIS 15):**

Insert the group address for the name of preset 10.

**Preset 11 Name (EIS 15):**

Insert the group address for the name of preset 11.

**Preset 12 Name (EIS 15):**

Insert the group address for the name of preset 12.

**Preset 13 Name (EIS 15):**

Insert the group address for the name of preset 13.

**Preset 14 Name (EIS 15):**

Insert the group address for the name of preset 14.

**Preset 15 Name (EIS 15):**

Insert the group address for the name of preset 15.

**Preset 16 Name (EIS 15):**

Insert the group address for the name of preset 16.

**Preset 17 Name (EIS 15):**

Insert the group address for the name of preset 17.

**Preset 18 Name (EIS 15):**

Insert the group address for the name of preset 18.

**Preset 19 Name (EIS 15):**

Insert the group address for the name of preset 19.

**Preset 20 Name (EIS 15):**

Insert the group address for the name of preset 20.

**Preset 21 Name (EIS 15):**

Insert the group address for the name of preset 21.

**Preset 22 Name (EIS 15):**

Insert the group address for the name of preset 22.

**Preset 23 Name (EIS 15):**

Insert the group address for the name of preset 23.

**Preset 24 Name (EIS 15):**

Insert the group address for the name of preset 24.

**Preset 25 Name (EIS 15):**

Insert the group address for the name of preset 25.

**Preset 26 Name (EIS 15):**

Insert the group address for the name of preset 26.

**Preset 27 Name (EIS 15):**

Insert the group address for the name of preset 27.

**Preset 28 Name (EIS 15):**

Insert the group address for the name of preset 28.

**Preset 29 Name (EIS 15):**

Insert the group address for the name of preset 29.

**Preset 30 Name (EIS 15):**

Insert the group address for the name of preset 30.

**Preset 31 Name (EIS 15):**

Insert the group address for the name of preset 31.

**Preset 32 Name (EIS 15):**

Insert the group address for the name of preset 32.

**Load All Preset Names (EIS 1):**

Insert the group address for the trigger to reload all preset names.

## 6 ATTACHMENT

function	EIS type	DPT	typical function	typical values	data	identifier
PriorityPosition	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 xxx=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
PriorityControl	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)