



theben

Smart automation  
Intelligently networked  
KNX home and building automation



Building Automation since 1921



More comfort.  
Greater efficiency. More  
Theben KNX

## Control buildings more intelligently with Theben and KNX

Room climate, lighting, blinds, heating, and ventilation: with KNX from Theben, all functions can be controlled flexibly, efficiently, and conveniently.

Thanks to open standards, the system is future-proof and can be expanded at any time. DALI gateways connect KNX with modern lighting control, while KNX Secure reliably protects sensitive data.

Since 1992, Theben has been actively involved in KNX development as a member of the Executive Committee and Technology Committee of the KNX Association. In 2019, Theben was the first manufacturer to launch KNX wireless actuators with KNX Data Secure.

## Whether it's a new build or a modernization project – if you choose KNX, choose Theben.

- ✔ Comprehensive portfolio for wired (KNX-TP) and wireless (KNX-RF) solutions
- ✔ Design-oriented control and sensor elements
- ✔ DALI-2 certified gateways and actuators
- ✔ Over 80 products with KNX Data Secure and KNX IP Secure
- ✔ Presence and motion detectors for every installation situation
- ✔ Decades of experience in switching and dimming LEDs

# Mixing in series

## Everything KNX desires

### This is only available at Theben



Basic module (G)

+ maximum of 2 expansion modules (E)

#### 1. KNX Secure – No chance for data theft

The MIX2 devices are now KNX Secure certified and thus offer maximum protection against data theft and manipulation. Even existing MIX2 devices can be converted to KNX Data Secure in just a few simple steps.

#### 2. Removable bus coupler

The installer mounts the base unit (G), and the system integrator configures the bus coupler — in the office, conveniently and practically. And before commissioning, the module is simply plugged in — done. This is cost-effective because an installer with bus knowledge does not necessarily have to be on site for assembly and wiring.

#### 3. Cost-effective expansion devices

Since only the base unit is equipped with a bus coupler, the cost of the expansion units (E) is reduced by up to a third due to the savings in system units. It pays off. Especially in commercial construction. Do the math!

#### 4. Flexible expandability

Lighting, dimming, heating, climate control, and sun protection are not only no problem with KNX MIX2, they are desirable. This allows you to use MIX2 to create a solution tailored to each room and its specific requirements. This flexibility is unique to Theben.

#### 5. Clear application

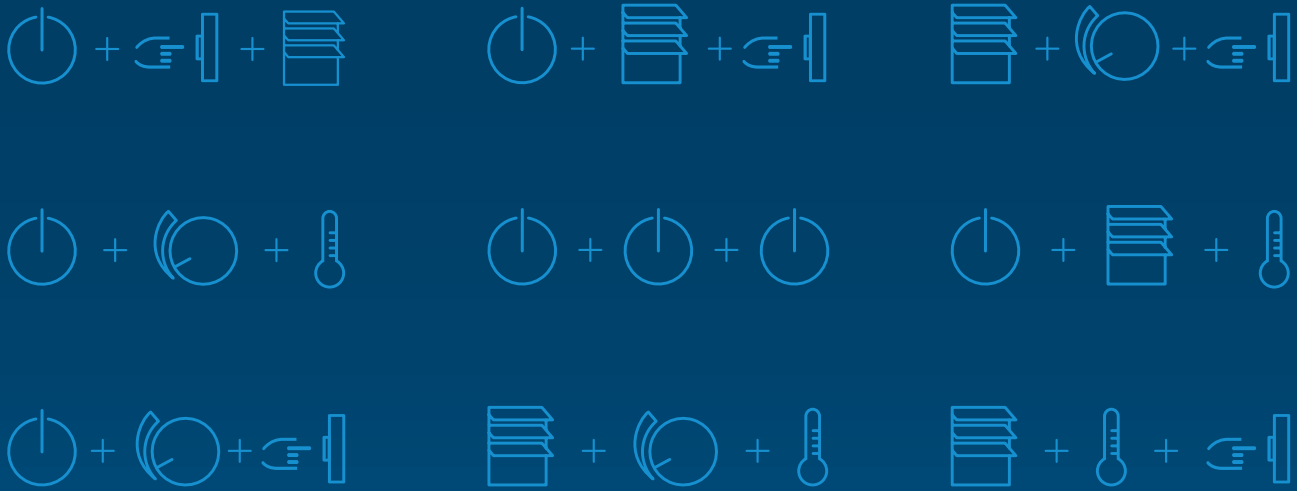
The configuration menus in ETS are not only structured identically across all actuators, but are also very clearly laid out and intuitive to use. Depending on the project and requirements, the desired actuators can be selected from drop-down menus. Even retrospectively, in the event that an expansion module with a different range of functions is required. This is only available at Theben.

MIX2 actuators – the video  
Intelligent, flexible, expandable



[www.youtube.com/TheThebenAG](http://www.youtube.com/TheThebenAG)





A good mix – with 129 functions and up to 729 combinations



### Switching

On/off with or without delay, or staircase lighting with advance warning—the 4-fold C-load switching actuators, for example, open up new possibilities on up to 12 channels. They feature current detection and are designed for higher lamp loads.

#### Switching actuators

MIX2 RMG 4 U KNX  
 MIX2 RME 4 U KNX  
 MIX2 RMG 4 I KNX  
 MIX2 RME 4 I KNX  
 MIX2 RMG 8 S KNX  
 MIX2 RME 8 S KNX

#### Combination actuators

MIX2 RMG 8 T KNX  
 MIX2 RME 8 T KNX



### Dimming

No flickering, beautifully even brightness levels with all currently available LED light sources – Theben's universal dimming actuators have already proven themselves on the market. And they have consistently sparked bright enthusiasm. They are considered to be among the best dimming actuators available.

#### Dimming actuators

MIX2 DMG 2 T KNX  
 MIX2 DME 2 T KNX



### Blinds

With the switch/blind actuators, you can switch and control as you wish. From 4 to 8 or 12 blind channels or 24 switching channels. Or mixed. And all this with just three modules. This gives you more freedom when using the channels. This is also because you can assign them as needed at a later date.

#### Blind actuators

MIX2 JMG 4 T KNX  
 MIX2 JME 4 T KNX  
 MIX2 JMG 4 T 24V KNX  
 MIX2 JME 4 T 24V KNX

#### Combination actuators

MIX2 RMG 8 T KNX  
 MIX2 RME 8 T KNX



### Heating

With its heating actuators, Theben offers you the option of measuring the temperature in individual rooms using inexpensive temperature sensors. The temperature control itself takes place in the actuator, while the setpoint is specified centrally via the KNX visualization theServa, for example.

#### Heating actuators

MIX2 HMG 6 T KNX  
 MIX2 HME 6 T KNX



### Binary inputs

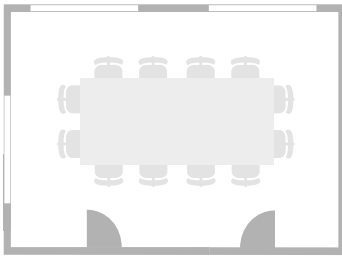
The Theben binary inputs cover the entire range of contacts and voltages—whether potential-free contacts, 24 V, or 230 V. And each of the binary inputs offers six of them. This means greater flexibility and greater investment security. This is also because each channel can be tested manually during maintenance or servicing.

#### Binary inputs

MIX2 BMG 6 T KNX  
 MIX2 BME 6 T KNX

# Room solution with MIX2 actuators

## Meeting room



1. Manual switching/dimming of lighting, blackout blinds, and sun protection
2. "Room occupied" message
3. Scene control (including a scene for switching off, starting up, and room release)

Operation is either via iON touch sensors or conventional buttons with a KNX button interface.



### MIX2 Basic Module RMG 4 U KNX

- LED wall lighting
- Message "Busy"



### Expansion module DME 2 T KNX

- LED ceiling lighting



### Expansion module JME 4 T KNX

- Blackout curtains/curtains
- External blinds

## Hotel room or apartment



1. Manual switching of lighting and dimming
2. Scene control
3. Fan control
4. Central switch-off via hotel card switch
5. Emergency call in the bathroom
6. Monitoring windows for indoor climate control and outdoor monitoring
7. "Do Not Disturb" & "Clean" notifications

Operation via conventional push buttons with KNX push button interface.



### Basic module BMG 6 T KNX

- Card switch (hotel)
- Emergency call in the bathroom
- Window contact



### Expansion module RME 4 I KNX

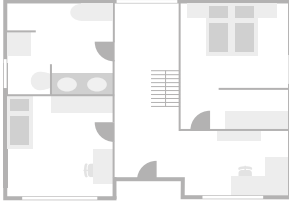
- Sockets left/right of bed
- Socket floor/table lamp
- LED wall lighting



### Expansion module RME 8 T KNX

- Hallway LED lighting
- Bathroom LED lighting
- Bathroom lighting, mirrors
- Bathroom fan
- 2x blackout curtains/drapes
- 2x notifications

## Floor of a single-family home



- 1..Manual switching/dimming of lighting
2. Fan control
3. Room heating control
4. Central shutdown

Operation and temperature measurement via KNX buttons from various manufacturers.



### Basic module HMG 6 T KNX

- 6 heating circuits for radiator or underfloor heating



### MIX2 expansion module RME 8 S KNX

- Bedroom outlets, bed
- Bedroom LED lighting
- Hallway LED lighting
- Bathroom LED lighting, ceiling
- Bathroom LED lighting, mirror
- Toilet lighting
- Toilet fan



### Expansion module DME 2 T KNX

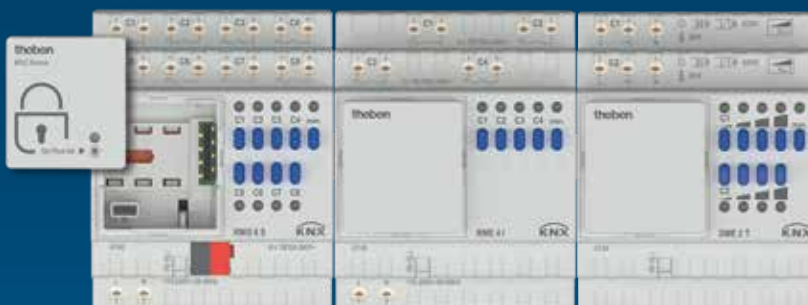
- Children's room 1 LED lighting
- Children's room 2 LED lighting

## White paper "MIX2 Actuators" Download now for free

Find out how flexible MIX2 actuators are in terms of planning and repurposing in our free white paper.

Read about the enormous variety of combinations that MIX2 actuators offer you and the advantages you can enjoy:

[www.theben.de/mix2-actuators/](http://www.theben.de/mix2-actuators/)



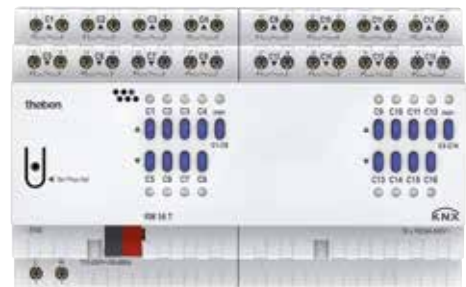
**Removable intelligence:** Only the KNX MIX2 base module has a bus coupler to which the expansion modules can be connected. If necessary, it can be easily removed and replaced.



## Made for bigger things KNX FIX actuators for functional buildings Ready, set, perfect

Whether as a dimming actuator for LED lighting, a blind actuator for glare-free sun protection, or a switching actuator with current detection: The KNX actuators in the FIX series from Theben offer maximum flexibility, a wide range of functions, and impress with their quality and performance.

If you don't need the modularity of Theben MIX2 actuators but are looking for maximum flexibility and a wide range of functions, FIX KNX compact actuators are the perfect alternative. And an inexpensive one at that. For example, the RM 16 T KNX switch/blind actuator with 16 relays can control a combination of lights and blinds and is ideal for use in commercial buildings, such as office buildings, public buildings, educational institutions, or hotels. In other words, wherever lighting and sun protection control are required in a room.



## ⏱ Switch actuators



**4940223**  
RM 4 U KNX, 4-fold  
switch actuator  
16 A, 140 µF



**4940210**  
RM 4 I KNX, 4-fold  
switch actuator  
16 A, C load, 200 µF



**4940212**  
RM 4 H KNX, 4-fold  
switch actuator  
25 A, C load, 200 µF



**4940220**  
RM 8 S KNX, 8-fold  
switch actuator  
16 A, 140 µF



**4940200**  
RM 8 T KNX, 8/4-fold  
combination actuator  
16 A, 140µF



**4940215**  
RM 8 I KNX, 8-fold  
switch actuator  
16 A, C load, 200 µF



**4940217**  
RM 8 H KNX, 8-fold  
switch actuator  
25 A, C-load, 200 µF



**4940225**  
RM 16 S KNX, 16-  
fold switch actuator  
16 A, 140 µF



**4940205**  
RM 16 T KNX, 16/8-  
fold combination  
actuator 16 A, 140 µF

## 🪼 Blind actuators



**4940250**  
JM 4 T KNX,  
4-fold blind actua-  
tor 6 A



**4940260**  
JM 4 T 24V KNX,  
4-fold blind actua-  
tor 24 V 6 A



**4940255**  
JM 8 T KNX, 8-fold  
blind actuator 6 A



**4940265**  
JM 8 T 24V KNX,  
8-fold blind actua-  
tor 24 V 6 A

## 💡 Dimming actuators



**4940270**  
DM 2 T KNX  
2-way universal  
dimming actuator,  
2x400 W/ 1x800 W LED



**4940275**  
DM 4 T KNX  
2-way universal dim-  
ming actuator,  
4x400 W/ 2x800 W LED



**4940280**  
DM 4-2 T KNX  
4-way universal  
dimming actuator,  
4x200 W/2x800 W LED



**4940285**  
DM 8-2 T KNX  
8-fold universal  
dimming actuator,  
8x200 W/4x400W LED

## 🔥 Heating actuators



**4940240**  
HM 6 T KNX, 6-way  
heating actuator, 24-  
240 V with controllers



**4940245**  
HM 12 T KNX  
12-way heating actuator  
24-240 V with controllers

## 🔌 Binary inputs



**4940230**  
BM 6 T KNX  
6-channel binary input  
10-240 V AC/DC



**4940235**  
BM 12 T KNX  
12-channel binary input  
10-240 V AC/DC

## 📡 DALI actuators



**4940300**  
DM 4 DALI KNX  
4 outputs, each with 30  
electronic ballasts Broadcast



## 1-10 V ACTUATORS



**4940310**  
SM 4 KNX  
4-channel switching/  
dimming actuator 10 A 133 µF





## Secure communication with KNX Data Secure The smart flush-mounted solution KNX flush-mounted actuators

The flush-mounted actuators in TP and RF versions support secure communication with encryption according to the "KNX Data Secure" standard. This standard effectively prevents interpretation and manipulation of the transmitted information. Thanks to their compact design, the KNX flush-mounted actuators fit into any switch/distribution box.

With the new wireless actuators according to the KNX standard "KNX RF1. With "R S-Mode," Theben offers a practical way to expand buildings with existing KNX systems without significant effort. This means that subsequent building or functional extensions can also be easily integrated into the system. Thanks to the media coupler, you can easily network wired and

radio-controlled components with each other.

### Wide range of applications

Depending on the device, can be used for dimming, blind/shade control, switching consumers with high inrush currents, heating control, and for integrating push buttons, signal contacts, and temperature sensors.

### Quick assembly

Thanks to their compact design, the KNX flush-mounted wireless actuators fit into any switch/junction box.

### Flexible integration

With 2 external inputs for connecting push buttons, signaling contacts or temperature sensors.



# Flush-mounted actuators

## TP and RF versions

### for secure communication



#### Switch actuators



**4942520**  
SU 1 KNX  
1 output on/off  
16 A, 2 binary  
inputs



**4941621**  
SU 1 S RF KNX  
1 output on/off 16 A,  
2 binary inputs, RF



**4941625\*\***  
PS 1 RF KNX | 1-gang  
or 2-gang rockers as  
separate accessories  
are mandatory, RF

#### Blind actuators



**4942550**  
JU 1 KNX  
1-way flush-  
mounted blind/  
switch actuator,  
2 binary inputs



**4941651**  
JU 1 S RF KNX  
1-gang flush-  
mounted blind/  
switch actuator,  
2 binary inputs, RF



**4941655\*\***  
PJ 1 RF KNX  
1-fold or 2-fold  
rockers as sepa-  
rate accessories  
are mandatory, RF

#### Dimming actuators



**4942570**  
DU 1 KNX  
1-gang flush-moun-  
ted universal dim-  
ming actuator, 250 W,  
2 binary inputs



**4941681**  
DU 1 S RF KNX  
1-gang universal dim-  
ming actuator, 250 W,  
2 binary inputs, RF



**4941675\*\***  
PD 1 RF KNX  
1-fold or 2-fold  
rockers as separate  
accessories are  
mandatory, RF

#### Binary inputs



**4961614** TU 4 RF  
S KNX  
4 binary inputs,  
additional binary  
input for connecting  
a temperature sen-  
sor, RF



**4961615**  
PB 4 RF KNX 1-gang or  
2-gang rocker switches  
are essential as separate  
accessories, RF

#### Heating and air conditioning actuators



**4942542**  
EU 1 KNX  
1-gang flush-mounted  
actuator for electric  
heating 16 A, 2 binary  
inputs, integrated.  
Temperature  
controller



**4941642\*\***  
EU 1 RF S KNX | 1-gang  
flush-mounted heating  
actuator for electric  
heating 16 A, 2 binary  
inputs, integrated. Tempe-  
rature controller, RF



**4942540**  
HU 1 KNX | 1-gang  
flush-mounted  
heating actuator,  
2 binary inputs,  
integrated. Tempe-  
rature controller



**4941641**  
HU 1 RF S KNX  
Flush-mounted  
heating actuator,  
2 binary inputs,  
integrated. Tempe-  
rature controller, RF



**4940320**  
AC IR1 KNX  
Split unit gateway KNX

#### DALI actuators



**4942580**  
DU 1 DALI KNX  
Up to 30 ECGs in  
broadcast mode,  
2 binary inputs



**4941681**  
DU 1 S RF DALI KNX  
Up to 30 ECGs in  
broadcast mode,  
2 binary inputs, RF

#### Media coupler



**9070868**  
Media coupler TP-RF KNX  
supports segment coupling and  
security proxy (from ETS6)

Theben is a member of:



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