

## K-bus KNX 24-Fold Multi-function Actuator

# K-BUS KNX 24-Fold Multi-function Actuator Instruction Manual

Model: KNX 24-Fold Multi-function Actuator



## 1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the K-BUS KNX 24-Fold Multi-function Actuator. This device is designed for integration into KNX building automation systems, enabling control over various electrical loads such as lighting, shutters, and fan coil units.

## 2. SAFETY INFORMATION

**WARNING: Electrical shock hazard. Installation and maintenance must be performed by qualified personnel only.**

- Always disconnect power before installing, servicing, or removing the device.
- Observe all local and national electrical codes and regulations.
- Do not operate the device if it appears damaged.
- Ensure proper grounding.
- The device is designed for indoor use only.

## 3. PACKAGE CONTENTS

Verify that all items are present upon unpacking:

- K-BUS KNX 24-Fold Multi-function Actuator
- Instruction Manual (this document)

## 4. PRODUCT OVERVIEW

The K-BUS KNX 24-Fold Multi-function Actuator is a DIN-rail mounted device featuring 24 independent output channels. Each channel is equipped with a 10A high-current magnetic relay, allowing for robust control of various loads. The front panel includes LED indicators for each channel, displaying its status, and manual override buttons

This image displays the K-BUS KNX 24-Fold Multi-function Actuator. It features 24 output channels with corresponding LED indicators and manual control buttons. The device is designed for DIN-rail mounting and includes clearly labeled terminals for power, KNX bus, and load connections.

## 5.1 Mounting

1. The actuator is designed for DIN-rail mounting. Securely attach it to a standard 35mm DIN rail within an electrical enclosure.
2. Ensure adequate ventilation around the device to prevent overheating.

All wiring must comply with local electrical codes. Use appropriate wire gauges for the rated current.

1. **Power Supply:** Connect the main power supply (230/400V AC, 50-60Hz) to the designated power terminals.
2. **KNX Bus Connection:** Connect the KNX bus cable to the KNX bus terminal. Ensure correct polarity.
3. **Load Connections:** Connect the loads (e.g., lights, motors for shutters, fan coil units) to the respective output channels (1-24). Each channel supports up to 10A. Ensure that the total current does not exceed the device's maximum rating.
4. Verify all connections are secure and properly insulated.



### Figure 2: Typical KNX System Diagram

This diagram illustrates a comprehensive smart home system utilizing KNX technology. It shows various components such as power supplies, actuators, LED dimmers, IP gateways, and sensors (e.g., air quality, brightness, motion, smoke, gas) all interconnected. The K-BUS KNX 24-Fold Multi-function Actuator integrates into such a system to control lighting, shutters, and other electrical loads.

## 6. OPERATION

### 6.1 KNX Programming

The K-BUS KNX 24-Fold Multi-function Actuator requires configuration using the KNX Engineering Tool Software (ETS). This software allows for:

- Assigning physical addresses to the device.
- Defining the function of each output channel (e.g., switching, dimming, shutter control, fan coil control).
- Linking communication objects to group addresses for interaction with other KNX devices (sensors, control panels).
- Setting parameters such as switching delays, scene functions, and shutter travel times.

### 6.2 Manual Override

Each output channel has a corresponding manual button on the front panel. Pressing this button allows for local control of the connected load, overriding KNX commands. This feature is useful for testing or temporary control during system commissioning or in case of KNX bus issues. The LED indicator for each channel will show its current status (ON/OFF).

## 7. MAINTENANCE

The K-BUS KNX 24-Fold Multi-function Actuator is designed for long-term, maintenance-free operation. No user-serviceable parts are inside the device.

- Keep the device clean and free from dust. Use a dry, soft cloth for cleaning.
- Do not use liquid cleaners or solvents.
- Ensure that the ventilation openings are not obstructed.

## 8. TROUBLESHOOTING

If the device is not functioning as expected, refer to the following common issues and solutions:

Problem	Possible Cause	Solution
Device not powering on.	No main power supply.	Check power connections and circuit breaker.
No KNX communication.	Incorrect KNX bus wiring or bus power issue.	Verify KNX bus cable connections and polarity. Ensure KNX bus power supply is active. Check ETS programming.
Load not responding to KNX commands.	Incorrect ETS programming, faulty load connection, or manual override active.	Verify ETS programming (group addresses, parameters). Check load wiring. Ensure manual override button is not engaged. Test load directly if possible.
LED indicator not working.	Device fault or no power.	Check power supply. If power is present and other functions work, contact support.

## 9. SPECIFICATIONS

- **Model:** KNX 24-Fold Multi-function Actuator
- **Brand:** K-bus
- **Mounting Type:** DIN Rail
- **Rated Voltage:** 230/400V AC, 50-60Hz
- **Relay Current:** 10A per channel (internal high-current magnetic relay)
- **Number of Channels:** 24
- **Functions:** Switch, Shutter, Fan Coil Actuator
- **Manufacturer:** Guangzhou Video-star Intelligent Corp. Ltd
- **ASIN:** B093GLLHCY
- **Date First Available:** April 26, 2021

## 10. WARRANTY AND SUPPORT

The K-BUS KNX 24-Fold Multi-function Actuator comes with a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation provided at the time of purchase or contact your vendor.

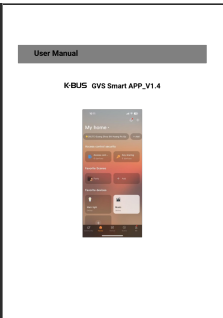
For technical support, troubleshooting assistance beyond this manual, or warranty claims, please contact your authorized K-BUS dealer or the manufacturer directly. Please have your product model and purchase information ready when contacting support.



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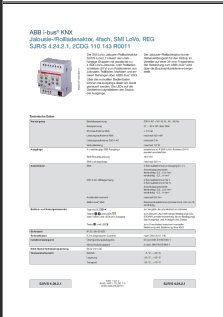
### Related Documents - KNX 24-Fold Multi-function Actuator

<div><div>User Manual</div><div><div>K-BUS® KNX Gateway for RS485/RS232, V1.7</div><div>BTPG-04/03.1</div><div></div><div>KNX/EIB Home and Building Control System</div></div></div>	<div><div><a href="#">K-BUS KNX Gateway for RS485/RS232 V1.7 User Manual</a></div><div>User manual for the GVS K-BUS KNX Gateway for RS485/RS232 (Model BTPG-04/03.1, V1.7). Covers technical data, installation, parameter configuration via ETS, and communication object descriptions for home and building automation.</div></div>
<div><div>User manual</div><div><div>K-BUS® Multi series</div><div>KNX Smart Touch with push button/Secure 3-gang, V1.3</div><div>CHTFB-3.0/6.S.0x (Push)</div><div>CHTFB-3.0/6.S.2x (Secure)</div><div>(3-gang: 30W/6, 1-gang: 30W/6, 1-gang: 30W/6, 1-gang: 30W/6)</div><div></div><div>KNX/EIB Home and Building Control System</div></div></div>	<div><div><a href="#">K-BUS Waltz Series KNX Smart Touch User Manual</a></div><div>User manual for the K-BUS Waltz series KNX Smart Touch with push button &amp; Secure (3-gang) devices (models CHTFB-3.0/6.S.0x and CHTFB-3.0/6.S.2x), detailing features, technical specifications, and configuration for KNX/EIB home and building automation systems.</div></div>



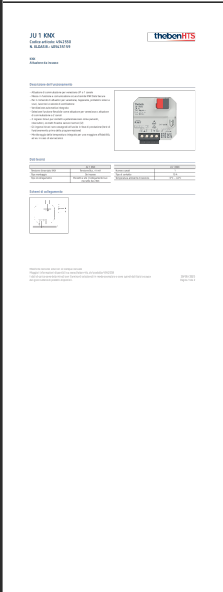
## GVS Smart APP V1.4 User Manual

User manual for the GVS Smart APP V1.4, detailing how to control and manage KNX and third-party smart home devices, set up scenes, integrate voice assistants, and authorize third-party services like SONOS.



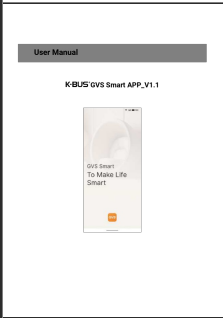
## ABB i-bus KNX 4-Channel SMI LoVo Shutter/Blind Actuator REG SJR/S 4.24.2.1

Technical data and connection diagram for the ABB i-bus KNX 4-channel SMI LoVo Shutter/Blind Actuator, model SJR/S 4.24.2.1. This device controls up to four SMI LoVo shutter or blind drives (24V) for positioning blinds, shutters, awnings, and other coverings via ABB i-bus KNX. It features manual operation buttons and status LEDs.



## Theben JU 1 KNX Flush-Mounted Actuator: Technical Specifications and Features

Detailed technical specifications and functional description for the Theben JU 1 KNX flush-mounted actuator. Learn about its features, connection diagrams, and compatible accessories for KNX smart home systems.



# GVS Smart APP User Manual: Control and Manage Your Smart Home

Explore the GVS Smart APP V1.1 user manual to learn how to manage KNX devices, create custom scenes, control your smart home remotely, and integrate with voice assistants like Google Assistant and Amazon Alexa.