KNX Programmable Dimming Control Systems

- Auditorium Dimming Controls -

ALTENBURGER

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KNX
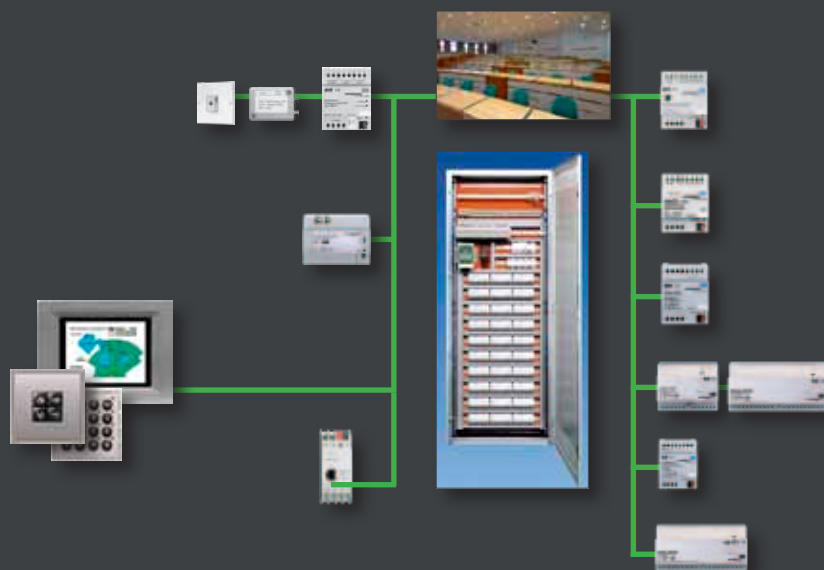
The KNX Programmable Dimming Control System features a variety of functions, compact design and simple programming and handling.

It is of highest quality and reliability. The most important components are suitable for DIN rail systems. All dimmers are comprising two parts: a baseplate with terminal blocks which can be prewired after the mounting and a function part just to be plugged onto the baseplate just before bringing the system into service.

The system operates with all dimmable lighting, with electronic ballasts or transformers with 1-10 V interface, load dimmers operating in the phase-controlled (leading edge) mode or in the phase-interval controlled (lagging or trailing edge) mode ,with DALI-ballasts etc. All load dimmers are thyristor controlled (not with triacs).

The programming of scenes, fade times (1-9999 secs) as well as special functions (e.g. cleaning or passage lighting) and their selection is quite easily to be made with radio or IR-programmers and transmitters, or push-button or touch panels. The number of programmable lighting circuits is not limited. Combinations with Multi-Sensor-Dimmers, operating in dependence of the daylight and presence detection can be integrated into the system.

The combination of KNX-components, dimmers and control panels
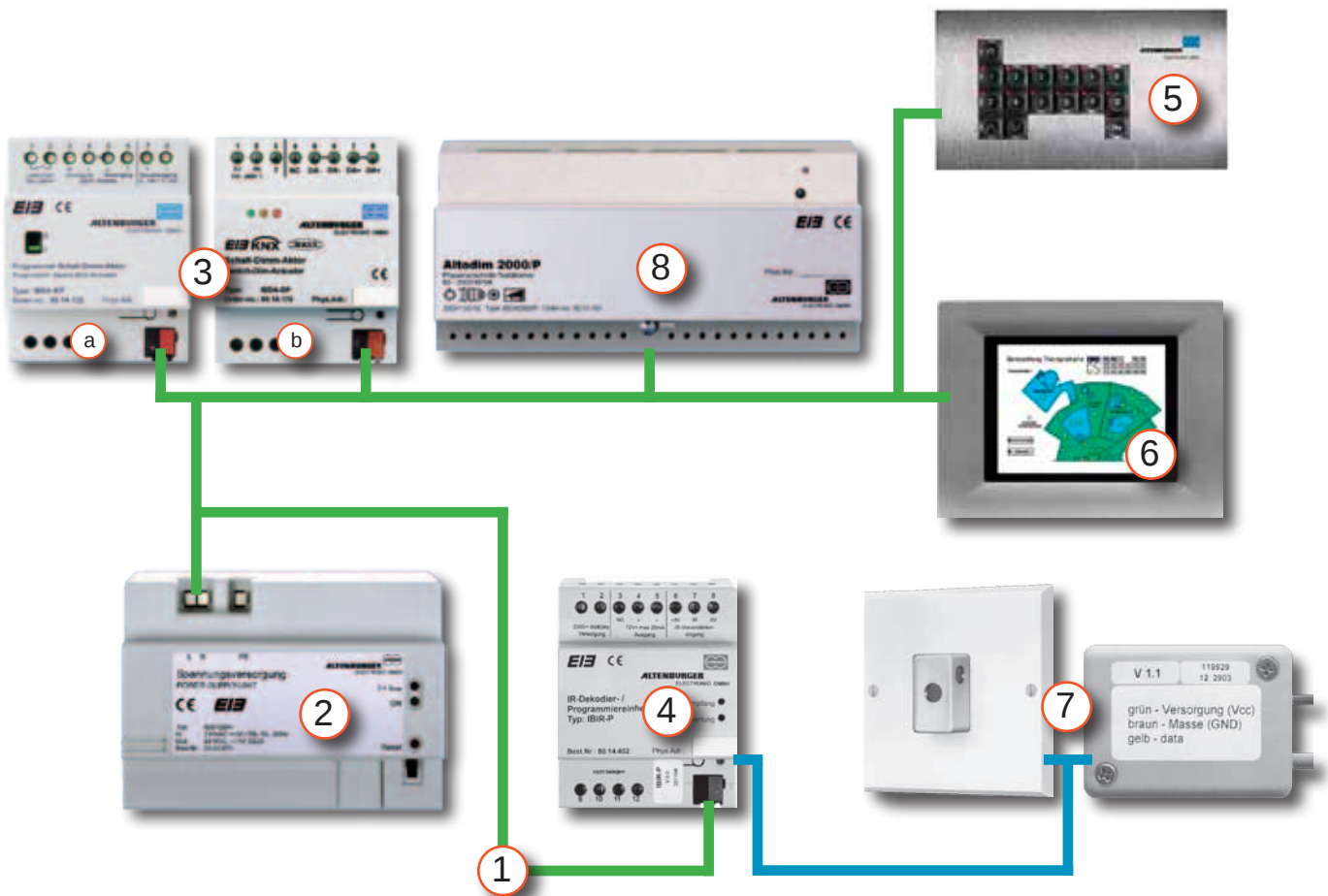
1. Bus wiring (PYCY M 2x2x0,8mm²) or (JY [ST] Y 2x2x0,8 mm²) or (SYT 1 PE 2x2x0,8 mm²)

2. Bus-power supply

3. Actuators with programmable bus-coupling units:
    a) the dim-switch actuator, type IBDA-KP is suitable for the control of up to 100 electronic ballasts with 1-10V interface or 5 ALTENBURGER dimmers (0-10V interface). It has 25 internal scene memories (see page 6)
    b) The switch dim-actuator, type IBDA-DP is the KNX DALI-switch dim-actuator for the control of up to 100 DALI-ballasts. It has 25 internal scene memories as well (see page 6).

4. IR-decoder/programming unit

5. Scene selector pushbutton panels

6. Touch panels

7. Radio or IR-receiver

8. programmable load dimmers

Bus-voltage supply
Bus-voltage supply (230V primary 24 V secondary), maximal 320 mA.

Suitable for a maximum of 64 dim-actuators or sensors

Bus-voltage supply as above, however with a maximum of 640 mA

Connector
For all transfers or voltage-supplies a pair of wires (2x2x0,8mm²) is applicable on which the bus components are snapped on. One pair has the actual tasks the other one is reserve, e.g. if one pair of wires is damaged.

For the supply and distribution of the bus wires connectors are to be used.

Radio or IR-programming and selector units

Illustration	Description	Type	Order-No.:
	Handheld IR-programmer or	**IR/PRO**	50.13.552
	radio-programmer	**FU/PRO**	50.13.547
	Remote Controls **with the same pushbuttons as control panels** **(see page 9)**		
	Handheld-IR-transmitters for the selection of 12 x lighting scenes 6 x Lighting scenes	**IR 12** **IR 6**	50.13.548 50.13.549
	The transmitters can be operated in parallel to pushbutton or Touch Panels.		
	Radio-transmitter Functions identical with the IR-transmitter. The Handheld IR- or Radio transmitters can be extended through switch and other functions <u>Standard design:</u> Housing: black Plate: aluminium anodized, natural colour Pushbuttons: black	**FU 12** **FU 6**	50.13.550 50.13.551
	Control for divided rooms (Assigner)	**IBAS**	80.14.550
	IR-sensor (like illustration)	**IR-ES/R**	50.13.143
	IR-sensor with plastic cover **without frame**	**IR-E/S**	50.13.041
	Radio receiver	**FU-E/S**	52.10.000
	IR- and radio decoder	**IBIR-P**	80.14.402

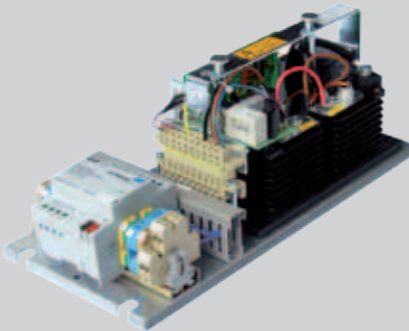# KNX switch dim-actuators with memory for 25 scenes and sequence control with 0-10V, 1-10V and DALI-interfaces

Illustration	Description	Type	Order-No.
Programmable KNX Switch-Dim-Actuator with internal scene memory for 25 scenes with 1-10V and 0-10 V interface	The IBDA-KP is suitable for the control of up to 100 dimmable ballasts with 1-10V interface or 5 ALTENBURGER dimmers (with 0-10V interface). Via received KNX-Switch- and Dim-commands the connected load can be switched ON/OFF or dimmed between minimum and maximum. The module has a memory for 25 scenes with fade time and corridor / cleaning light control. Additionally an automatic scene sequence can be programmed and selected. With the combination of 3 IBDA-KP modules e.g. a colour sequence control (RGB) can be realized The dim-actuator can be controlled with KNX buttons or a suitable (touch screen) visualization. The actuator however also can be controlled through its pushbutton inlet with a customary pushbutton (1-pushbutton dim-function). For details of parametrizing and objects see application description in the ALTENBURGER KNX handbook.	**IBDA-KP**	80.14.132
Programmable KNX DALI-Switch-Dim-Actuator with internal scene memory for up to 25 scenes	**Application and function:** The KNX DALI switch-dim-actuator is suitable for the control of max. 100 DALI ballasts or transformers and digital -> analog converters. It performs the following functions: • The integration of DALI ballasts or transformers into KNX-Lighting systems. DALI ballasts are being switched and dimmed with KNX DALI switchdim-actuators. • The module has 25 internal scene memories with fade time settings from scene to scene, cleaning and corridor lighting controls. Additionally scenes can be programmed to a sequence and selected accordingly (scene sequence control). With the combination of 3 KNX DALI switch-dim-actuators e.g. a colour sequence (RGB) can be programmed.Additionally the KNX DALI switch-dim- actuator is one of the components for a complete KNX-programmable dimming control system (see survey pages 10/11). If the number of DALI-ballasts or of converters exceeds the number of 100, additional KNX DALI switch-dim-actuators can be integrated.	**IBDA-DP**	80.14.170

• The KNX DALI switch-dim-actuator can be operated with customary KNX-controls or with a suitable visualization. The module however also can be controlled directly with a pushbutton input and a customary pushbutton (1-push-button-dim-function). Details for the parametrizing and to objects: see application description.

• The actuator includes already the current supply for the interfaces of 100 DALI ballasts. All connected electronic ballasts have the same address (broadcast).
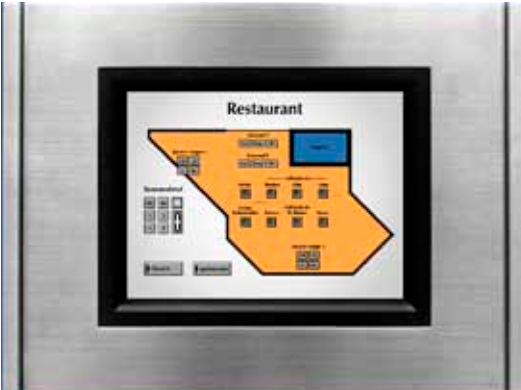
ALTODIM/P KNX dimmers
up to a load capacity of 2 KW with internal scene memory

Illustration	Description	Type	Order-No.:
	Phase-interval (lagging edge) controlled dimmer for electronic transformers 600 W/VA **ALTODIM 600-0/P**	**IBDA 600-0/P**	80.13.161
	Phase-interval (lagging edge) controlled dimmer for electronic transformers 1400 W/VA **ALTODIM 1400-0/P**	**IBDA 1400-0/P**	80.13.164
	Phase-controlled (leading edge) dimmer for incandescent lamps, high-voltage halogen lamps, low-voltage halogen lamps with wire-wound transformers, neon lamps, 600W/VA **ALTODIM 600/P**	**IBDA 600/P**	80.13.165
	Phase-controlled (leading edge) dimmer for incandescent lamps, high-voltage halogen lamps, low-voltage halogen lamps with wire-wound transformers, neon lamps, 1300W/VA **ALTODIM 1300/P**	**IBDA 1300/P**	80.13.162
	Phase-controlled (leading edge) dimmer for incandescent lamps, high-voltage halogen lamps, low-voltage halogen lamps with wire-wound transformers, neon lamps, 2000W/VA **ALTODIM 2000/P**	**IBDA 2000/P**	80.13.163

KNX Load dimmers with integrated scene memory for 25 scenes and sequency controls

Illustration	Description	Type	Order-No.:
	Programmable KNX-Dimmers operating in the phase-control (leading edge) mode with integrated KNX Dim-actuator for the backplate mounting in cabinets, being suitable for incandescent lamps, high-voltage halogen lamps, low-voltage halogen lamps with wire-wound transformers and neon lamps with mounting plate and terminal blocks, plug-in load and control components. Functions: see page 7		

| Illustration	Description	Type	Order-No.:
1-phase TH-plug-in module	up to 2 KW/KVA up to 3 KW/KVA up to 5 KW/KVA up to 8 KW/KVA up to 3 x 2 KW/KVA up to 3 x 3 KW/KVA up to 3 x 5 KW/KVA up to 3 x 8 KW/KVA	**TH-P 2KW** **TH-P 3KW** **TH-P 5KW** **TH-P 8KW** **TH-P 3x2KW** **TH-P 3x3KW** **TH-P 3x5KW** **TH-P 3x8KW**	80.02.000 80.02.001 80.02.002 80.02.003 80.11.000 80.11.001 80.11.002 80.11.003
3-phase TH-Plug-in module	**Programmable KNX Dimmers operating in the phase-interval (lagging edge) control mode with integrated KNX dim-actuator** for the backplate mounting in cabinets, for low-voltage halogen lamps with electronic transformers, incandescent lamps and high-voltage halogen lamps		
	up to 2 KW/KVA up to 3 x 2 KW/KVA	**TH-P 2KW-0** **TH-P 3x2KW-0**	80.02.100 80.11.100

Programmable and selector panels
(pushbutton or touch panels)

Illustration	Descripton	Type	Order-No.:
	KNX Programmable scene selector panel, 81 x 81 mm For 1-gang boxes DIN 55 mmØ flat design (h=12mm) Pushbutton functions: 12 x Scene selection with LED-indication 1 x BRIGHTER 1 x DARKER 1 x ON/OFF with LED- indication 1 x Programming with LED-indication	**Mini FIB12/PRO**	80.14.520
	KNX Programmable scene selector panel With the functions: 12 x Scenes with LED-indication 1 x BRIGHTER 1 x DARKER 1 x ON/OFF with LED-indication 1 x Programming with LED-indication Optional: with interlock key switch. Dimensions (WxHxD): Wall-recessed housing:200 x 100 x80 mm Panel plate: 120x220 mm	**FIB12w**	80.14.531

Programmable touch panels for up to 25 scenes and additional functions according to requirements.

System survey KNX PROGRAMMABLE Dimming controls

The system survey indicates the combination of different KNX-components:

- **KNX Switch-Dim-Actuators for 1-10V / 0-10V**
  for the direct control of electronic ballasts for fluorescent lamps and electronic transformers with 1-10V interface for low-voltage halogen lamps as well as for ALTENBURGER dimmers from 3 KW onwards.

- **KNX Switch-Dim-Actuators for DALI**
  for the direct control of electronic ballasts for fluorescent lamps and electronic transformers with DALI-interface.

- **KNX-Dimmers with integrated dim-actuators**
  Phase-controlled or phase-interval controlled dimmers for incandescent lamps, high voltage halogen lamps or low-voltage halogen lamps with wire-wound or electronic transformers.

- **IR- or radio transmitters and decoders**
  for the programming and scene selection.

- **Pushbutton or touch panels for the programming and scene selection**
  If specified with layouts and integrated lamps and control functions.

IR- or radio-receiver
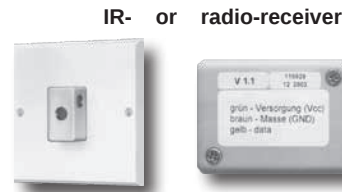
IR- / radio-decoder

KNX power supply

Touch Panels

pushbutton panels

KNX - BUS

KNX - Gateway

Comfortable KNX-lighting controls with Touch Panels, Visualization, pushbutton panels with the functions:

- **Switching, Dimming, light-level and fade time setting**

- **25 integrated scene memories**

- **Scene sequences**
  Scenes to be combined to sequences
  e.g. RGB colour controls (3 devices required)

- **Cleaning and corridor light**

- **Shutters**

optional:

- **communication with KNX, e.g. via Ethernet, ISDN**

- **combination with other systems, e.g. PLC, DALI ...**

- **remote maintenance ...**

dimmer rack cabinet

**Programmable
KNX Switch-Dim-Actuators for 1...10V/0...10V**

Type: IBDA-KP

- 1...10V Electronic ballasts
- electronic transformers with 1...10V interface
- ALTENBURGER dimmers with load capacities of 3-8 KW

**Programmable
KNX Switch-Dim-Actuators for DALI**

Type: IBDA-DP

- DALI-ballasts
- electronic transformers with DALI-interface

Programmable KNX dimmer with integrated dim-actuators operating in the phase-controlled (leading edge) mode

ALTODIM /P dimmer with load capacities of 600/1300/2000W VA

- incandescent or high-voltage halogen lamps
- low-voltage halogen lamps with wire-wound transformers
- neon lamps

Type: IBDA600/P

Type: IBDA1300/P   **Type: IBDA2000/P**

Programmable KNX dimmer with integrated dim-actuators operating in the phase-interval controlled (lagging edge) mode

ALTODIM /P dimmer with load capacities of 600/1400W VA

- incandescent or high-voltage halogen lamps
- low-voltage halogen lamps with electronic transformers

Type: IBDA600-0/P

Type: IBDA1400-0/P

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