Technical Handbook *EIB-KNX*

This handbook shall assist in the planning, specifying and commencement of Altenburger EIB-KNX components and programmable dimming control systems. It specifies the hardware as well as the software.

The specifications are classified as follows:

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<td><strong>NEW</strong></td>
<td>Phase-interval-controlled push-dimmer</td>
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<td><strong>NEW</strong></td>
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<td><strong>NEW</strong></td>
<td>Phase controlled push-dimmer</td>
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<td><strong>NEW</strong></td>
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<td><strong>NEW</strong></td>
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ALTENBURGER EIB-KNX – PRODUCT DATABASE

**Description:** The EIB-KNX – Product Database includes Altenburger EIB – Products and application programs. The Information refers to the current state of production and the devices. Technical data subject to change. New Products in the Product Database are marked with **NEW**

The current Product Databases could also be downloaded via internet at the address [http://www.altenburger.de](http://www.altenburger.de)

**Importing the Altenburger EIB-KNX – product database into the ETS 3**

The EIB-KNX – Product Database must be imported into the EIB Tool Software (ETS). The following overview indicates how to import the product database into the ETS database.

1. Starting the **ETS 3**
2. Select on the **File** menu
3. Select the icon **Import**
4. Select your file and import the data as follows:
   - Select database for ETS3 (**Altenxxx.vd3**) and click **Open**.
5. Click **Import all**
6. The following Altenburger EIB - products are available.

### Product overview

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<td>X IBD24/50 80.14.600</td>
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<tr>
<td><strong>Lighting</strong></td>
<td>Dimmer</td>
<td>Dim-actuator 0..10/20V (IBDAS) Alloquick AQ 1,3kW, Altoquick AQ 2kW, Dimmers up to 8kW, Altoquick AQ-0 700W, Altoquick AQ-0 1,4kW, Dimmer 2kW-0</td>
<td>X IBDAS 80.14.120</td>
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<tr>
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<td>Lighting</td>
<td>Dimmer</td>
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<td>Dimmer</td>
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<td>1-key dimmer with feedback</td>
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<td>Dimmer</td>
<td>Phase-interval-control dimmer ALTODIM 1400-0</td>
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<td>Programmer selector panel FIB</td>
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<td>Lighting</td>
<td>Special device</td>
<td>Light sensors for IBLWS3: Wall-mounted IP40 (LF/a/D)</td>
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<td>51.21.007</td>
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<td>Wall-mounted IP55 (LF/b/D)</td>
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<td>Wall-recessed IP40 (LF/c/D)</td>
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<td>Infrared</td>
<td>IR-sensor</td>
<td>IR-sensor IR-E/S</td>
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<td>Room Divider-control (Assigner) 5x1bit, 1x4bit, 1x1byte</td>
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<td>IBAS 80.14.550</td>
<td>Assigner 7-fold 5x1bit, 1x4bit, 1x1byte</td>
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<td>Room-partition</td>
<td>Room Divider-control (Assigner) 4x1bit, 3x4bit</td>
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<td>IBAS 80.14.550</td>
<td>Assigner 7-fold 4x1bit, 3x4bit</td>
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1.1.3
### A

Characterization:

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<td>Order-No.:</td>
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Accessories:

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</tr>
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<td>Order-No.: 80.14.600</td>
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</table>

### B

**Functional description:**

The switch dim-actuator is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would be able to switch its relay and to control its 1-10 V interface in combination with an electronic ballast or transformer with the same interface. The relay has a voltage free normally-open contact or a normally-closed contact with a possible contact load capacity of 8 A (ohmique load). If at the 1-10V interface a current of more than 20 mA would be required, an additional DC – supply has to be connected to the switch dim actuator. This DC supply must have a voltage between 12 and 24 V and a current supply of min. 10 mA. Through the different parameters the functions of the IBDAN can be varied in a manyfold way.

### C

**Technical data:**

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<td>Voltage: 24V DC (+6V / -4V)</td>
</tr>
<tr>
<td>Input: max. 100mW</td>
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</table>

**External supply (only required at an interface current > 20 mA):**

| Voltage: between 12 and 24 V DC |
| Current: min. 10mA              |

**Input:**

| Voltage: 1-10V DC |
| Current: max. 100mA |

**Output:**

| Relay: 1 voltage-free normally closed contact |
| 1 voltage-free normally open contact |

| Rated voltage: 250V AC |
| Rated current: 8A (ohmique load) |

| Wire length: max. 100 m for control wires 0,5 mm², load wires 1,5 mm² |
| Terminals: EIB-via pressure contacts at the data rail |
| Screw contacts max. -solid wire 2 x 2,5 mm² -litz wire with sleeve 2 x 1,5 mm² |

| Dimensions: WxHxD = 36x90x61mm |
| Weight: approx. 200 gr |
| Mounting: snap-on on DIN rails |
| Ambient temperature: 0°C to +45°C |
| Protective class: II (Protective isolation) |
| Protective type: IP 20 |
| Test mark: EIB |
D

Wiring diagram:

Maximal interface current 100 mA

External voltage-supply 12-24 V DC min. 10 mA (required at an interface current >20 mA)

Switch dim-actuator 1-10V

Maximal interface current 100 mA

External voltage-supply 12-24 V DC min. 10 mA (required at an interface current >20 mA)

Control components:

1) LED: Programming LED
2) Pushbutton: Programming Pushbutton

E

ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: Dim-actuator version 1.4

Number of addresses: 7
Number of assignments: 7

Object description:

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<tr>
<th>Number</th>
<th>Name</th>
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<th>Function</th>
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<td>ON/OFF</td>
<td>1 bit</td>
<td>ON/OFF</td>
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<tr>
<td>Object 1</td>
<td>dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 2</td>
<td>absolute value</td>
<td>1 byte</td>
<td>absolute value</td>
</tr>
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</table>

Description of the component functions as they are pre-adjusted in the data base:

After receipt of a 1 telegram (object 0) the relay switches ON and the brightness jumps to 100 %. A status back indication would not be sent.

At a bus voltage failure the switch dim actuator switches OFF. The brightness can be dimmed via the object 1 within a range of 0,5 % and 100%. This procedure requires 4 secs. If the switch dim actuator is switched OFF it can be switched ON with a value of object 2. It dims into the brightness of object 2. The range in which the switch dim actuator can be dimmed with this value is between OFF and 100%.
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<th>Parametername</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
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<td><strong>ON/OFF</strong></td>
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<td></td>
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<tr>
<td>Switch-on value</td>
<td>0, 1, 2, ..., 253, 254, <strong>255</strong></td>
<td>Determines the switch-ON value at the receipt of an ON-telegram. Switch ON value in % = (parameter adjustment/255) x 100. If the switch ON value is set to 0 the component is switched ON with that value which had been adjusted before the switch off operation.</td>
</tr>
<tr>
<td>Status indication</td>
<td><strong>disable status message</strong></td>
<td>Determines if the value of the “ON/OFF” object shall be sent at the switch on of the module or not.</td>
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<td></td>
<td><strong>enable status message</strong></td>
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<tr>
<td>Reaction at power fail</td>
<td><strong>switch off</strong></td>
<td>This allows the definition of the state of the relay of the dim-actuator at a power fail.</td>
</tr>
<tr>
<td></td>
<td><strong>switch on</strong></td>
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</tr>
<tr>
<td></td>
<td><strong>relay unchanged</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dimming</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brightness minimum (0-254)</td>
<td>0, 1, 2, ..., 252, 253, 254</td>
<td>This allows the adjustment of the brightness minimum which shall be achieved in the dimming project with object 1.</td>
</tr>
<tr>
<td>Brightness maximum (1-255)</td>
<td>1, 2, 3, ..., 253, 254, <strong>255</strong></td>
<td>This allows the adjustment of the brightness maximum which shall be achieved in the dimming project with object 1.</td>
</tr>
<tr>
<td>Dim-ramp (0-100%) timebase</td>
<td><strong>Base 130 ms</strong>, <strong>2,1 s</strong>, 34 s, 9 min, 140 min</td>
<td>The set time basis multiplied with the set time factor results in the time range in which the switch dim actuator controls the light transfer from dark (0%) to bright (100%).</td>
</tr>
<tr>
<td>Dim-ramp timefactor (3-255)</td>
<td>3, 4, 5, ..., 30, <strong>31</strong>, 32, ..., 253, 254, 255</td>
<td>The set time factor multiplied with the set time basis results in the time range in which the switch dim actuator controls the light transfer from dark (0%) to bright (100%).</td>
</tr>
<tr>
<td>At dimming bright /set value</td>
<td><strong>automatic switch-on</strong></td>
<td>If from the OFF-state the light level shall be dimmed brighter or a value shall be set this can be adjusted by this parameter, independent if the switch ON shall be made automatically or not.</td>
</tr>
<tr>
<td></td>
<td><strong>not switch on</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Set value</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set value (parameterpart 1)</td>
<td><strong>jump to value</strong></td>
<td>Determines if a brightness shall be achieved immediately (jumped on) or if it shall be dimmed. All 3 parameter parts have to be adjusted to the same level.</td>
</tr>
<tr>
<td>Set value (parameterpart 2)</td>
<td><strong>dim to value</strong></td>
<td></td>
</tr>
<tr>
<td>Set value (parameterpart 3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimming between</td>
<td><strong>“0” to max. possible</strong></td>
<td>Determines within which limits the brightness may move. Condition: the absolute value parameters must be adjusted to the dimming level.</td>
</tr>
<tr>
<td></td>
<td><strong>min. to max. possible</strong></td>
<td></td>
</tr>
</tbody>
</table>
Personal notes:
SWICH DIM ACTUATOR 0-10 V

A  Characterization:
Type: Switch dim-actuator 0-10 V
Order-No.: IBDAS 80.14.120

Combination with the following:
Phase-control dimmers:
- Altoquick 1,3kW Type: AQ-1,3kW 50.13.010
- Altoquick 2kW Type: AQ-2kW 50.13.210
- different dimmers up to 8 kW

Interval control dimmers:
- Altoquick AQ-0 700W Type: AQ-0 700W 50.13.110
- Altoquick AQ-0 1,4kW Type: AQ-0 1,4kW 50.13.111
- different dimmers 2 kW-0

B  Functional description:
The switch dim-actuator is suitable for DIN rail cabinets. It is a snap-on device. If it receives EIB-telegrams it can switch relay or control its 0-10 V output voltage. At its 0-10 V outlet Altenburger Altoquick phase-control or phase-interval control dimmers can be connected.
The relay has a voltage free normally-open or a normally closed contact with a possible contact load capacity of up to 8 A (ohmique load).

C  Technical data:
EIB supply
  Voltage: 24V DC (+6V / -4V)
  Input: max. 100mW
External supply
  Voltage: between 12 and 24V DC
  The voltage normally will be supplied from the Altoquick dimmers
  Current: max. 0,5mA + exit current
Exit:
  Voltage: 0-10V DC
  Current: max. 10mA
  Relay: 1 voltage-free normally closed contact
  1 voltage-free normally open contact
Rated voltage:
  250V AC
Rated current: 8A (ohmique load)
Wire length:
  max. 100 m for control wires 0,5 mm², load wires 1,5 mm²
Terminals:
  EIB-via pressure contacts at the data rail
  Screw contacts max. - solid wire 2x2,5mm²
  - litz wire with sleeve 2x1,5mm²

Dimensions: WxHxD = 36x90x61mm
Weight: approx. 200gr
Mounting: snap-on on DIN rails
Ambient temperature: 0°C to +45°C
Protective class: II (Protective isolation)
Protective type: IP 20
Test mark: EIB
Wiring diagram:

Terminals from Altoquick

External voltage-supply
12-24 V DC
The voltage normally will be supplied from the Altoquick dimmers

Control components:

1) LED: Programming LED
2) Pushbutton: Programming Pushbutton

ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: Dim-actuator version 1.4

Number of addresses: 7
Number of assignments: 7

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>ON/OFF</td>
<td>1 bit</td>
<td>ON/OFF</td>
</tr>
<tr>
<td>Object 1</td>
<td>dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 2</td>
<td>absolute-value</td>
<td>1 byte</td>
<td>absolute-value</td>
</tr>
</tbody>
</table>

Description of the component functions as they are pre-adjusted in the data base.

After receipt of a 1 telegram (object 0) the relay switches ON and the brightness jumps to 100 %. A status back indication would not be sent.

At a bus voltage failure the switch dim actuator switches OFF. The brightness can be dimmed via the object 1 within a range of 0,5 % and 100%. This procedure requires 4 secs. If the switch dim actuator is switched OFF it can be switched ON with a value of object 2. It dims into the brightness of object 2. The range in which the switch dim actuator can be dimmed with this value is between OFF and 100%.
### Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ON/OFF</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switch-on value (0=value before OFF)</td>
<td>0, 1, 2, ..., 253, 254, 255</td>
<td>Determines the switch-ON value at the receipt of an ON-telegram. Switch ON value in % = (parameter adjustment/255) x 100. If the switch ON value is set to 0 the component is switched ON with that value which had been adjusted before the switch off operation.</td>
</tr>
<tr>
<td>Status indication</td>
<td>disable status message, enable status message</td>
<td>Determines if the value of the &quot;ON/OFF&quot; object shall be sent at the switch on of the module or not.</td>
</tr>
<tr>
<td>Reaction at power fail</td>
<td>switch OFF, switch ON, relay unchanged</td>
<td>This allows the definition of the state of the relay of the dim-actuator at a power fail.</td>
</tr>
<tr>
<td><strong>Dimming</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brightness minimum (0-254)</td>
<td>0, 1, 2, ..., 252, 253, 254</td>
<td>This allows the adjustment of the brightness minimum which shall be achieved in the dimming project with object 1.</td>
</tr>
<tr>
<td>Brightness maximum (1-255)</td>
<td>1, 2, 3, ..., 253, 254, 255</td>
<td>This allows the adjustment of the brightness maximum which shall be achieved in the dimming project with object 1.</td>
</tr>
<tr>
<td>Dim-ramp (0-100%) timebase</td>
<td>Base 130 ms, 2,1 s, 34 s, 9 min, 140 min</td>
<td>The set time basis multiplied with the set time factor results in the time range in which the switch dim actuator controls the light transfer from dark (0%) to bright (100%).</td>
</tr>
<tr>
<td>Dim-ramp timefactor (3-255)</td>
<td>3, 4, 5, ..., 30, 31, 32, ..., 253, 254, 255</td>
<td>The set time factor multiplied with the set time basis results in the time range in which the switch dim actuator controls the light transfer from dark (0%) to bright (100%).</td>
</tr>
<tr>
<td>At dimming brigh/set value</td>
<td>automatic switch-on, not switch on</td>
<td>If from the OFF-state the light level shall be dimmed brighter or a value shall be set this can be adjusted by this parameter, independent if the switch ON shall be made automatically or not.</td>
</tr>
<tr>
<td><strong>Set value</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set value (parameterpart 1)</td>
<td>jump to value</td>
<td>Determines if a brightness shall be achieved immediately (jumped on) or if it shall be dimmed. All 3 parameter parts have to be adjusted to the same level.</td>
</tr>
<tr>
<td>Set value (parameterpart 2)</td>
<td>dim to value</td>
<td></td>
</tr>
<tr>
<td>Set value (parameterpart 3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimming between</td>
<td>&quot;0&quot; and max. possible min. to max. possible</td>
<td>Determines within which limits the brightness may move. Condition: the absolute value parameters must be adjusted to the dimming level.</td>
</tr>
</tbody>
</table>
Personal notes:
**A**

Characterization:  
Universal-push dimmer ALTODIM 1500-U  
IBDA1500-U  
80.13.070

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**B**

The ALTODIM 1500-U is a Universal-push dimmer for the control of inductive and capacitive loads, e.g. for incandescent lamps or low-voltage halogen lamps with wire-wound transformers as well as for electronic transformers. With the received switch and dim-commands the connected loads can be processed (e.g. dimmed between minimum and maximum). The operation of inductive and capacitive loads in one circuit is not permitted. The load output has an electronic current limiting, a light level reduction in case of an exceeding of a limit temperature and a switch-OFF function at inadmissible high temperatures. As soon as the temperature is cooled down the ALTODIM switches ON again after the functional switch-OFF mode. The ALTODIM 1500-U also can be controlled with EIB-control modules as well as with a suitable visualisation. The dimmer however can also directly be operated via the pushbutton input with a customary pushbutton (230V~ / 1-pushbutton function) through parametrizing a separate usage of pushbutton input (sensor) and dimmer (actuator) would be possible (see application description).

---

**C**

**Technical data:**

| EIB supply | 24V DC (+6V / -4V)  
| Input: max. 230mW at 29VDC |
| External supply | 230V~ / 50-60Hz, DC not permitted |
| Own consumption: | <2% of the connected load |
| Pushbutton input T |  |
| Voltage: | max. 250V~ (pushbutton for power supply) |
| Load exit: | 1500W/VA, 6,5A~ |
| - electronic current limiting (starting current, overload/short-circuit current) |
| - dimming to a lower level in case of the exceeding of a maximum temperature |
| - switch-OFF function at a non-permissible high temperature |
| - switching-ON again after the cooling down (functional switch OFF) |
| 60W |
| Minimum Load: | |
| Noise: | <25dB(A) at nominal load in a distance of 1 m |
| Wire length: | max. 100m for load and supply wires 1,5 mm² |
| Terminals: | Screw contacts - wire |
| - litz wire with sleeve |
| 0,2mm² - 2,5mm² |
| 0,2mm² - 1,5mm² |
| Dimensions: | WxHxD = 175x83,5x58mm |
| Weight: | approx. 520g |
| Mounting: | snap-on on DIN rails, natural cooling at vertical mounting |
| Ambient temperature: | 0°C to +45°C |
| Protective class: | II (Protective isolation) |
| Protective type: | IP 20 |
| Test mark: | EIB, KNX, CE |
Wiring diagram:

Control Components:

1) LED: Programming LED
2) Pushbutton: Programming Pushbutton

ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: 1-Key-Universal-Dimmer, version 1.2

Number of addresses: 20
Number of assignments: 20

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>actuator on/off</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 1</td>
<td>actuator dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 2</td>
<td>actuator value setting</td>
<td>1 byte</td>
<td>setting value</td>
</tr>
<tr>
<td>Object 3</td>
<td>sensor on/off</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 4</td>
<td>sensor dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 5</td>
<td>sensor value setting</td>
<td>1 byte</td>
<td>setting value</td>
</tr>
<tr>
<td>Object 6</td>
<td>switch status</td>
<td>1 bit</td>
<td>sending</td>
</tr>
<tr>
<td>Object 7</td>
<td>value feedback</td>
<td>1 byte</td>
<td>sending</td>
</tr>
</tbody>
</table>

The objects of the sensors are handled in a dynamic mode, this means the objects are being faded ON or OUT according to the respective parameter adjustment.
E

Description of the component functions as they are pre-adjusted in the data base.

After receipt of a 1-telegram (object 0) the brightness jumps to that value which was set before the switch OFF function. A Status back indication would not be set. The brightness can be dimmed via object 1 and 2 within a range of 20% and 100%. For this procedure the dimmer requires approx. 3.2 secs. If the dimmer is switched OFF the switch ON function applies if the command dimming brighter of object 1 as well as with a value of object 2 is switched ON. The pushbutton input of the dimmer is pre-adjusted for the 1-push-switch/dim function. At a short touch of the pushbutton (< 400 ms) switch commands are being send (object 3), while at a longer pressing of the pushbutton (> 400 ms) dimmer commands (object 4) are being sent. At a voltage return the brightness goes to the same level as before the voltage failure and the pushbutton input is kept synchronous to this value.

F

Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td>switch on with</td>
<td>value before switching off 10%, 20%,……80%, 90%, 100% off, value before voltage break down, 10%, 20%,……80%, 90%, 100%</td>
<td>Determines the switch-ON value at the receipt of an ON-telegram. Determines how the dimmer shall work after power-on or bus power recurrence.</td>
</tr>
<tr>
<td>after power-on / bus power recurrence</td>
<td>at bus-voltage failure off, conserve current value, 10%, 20%,……80%, 90%, 100%</td>
<td>Determines how the dimmer shall work at a bus-voltage failure. Determines if the internal key-sensor shall be synchronized after power-on with the on/off state of the actuator.</td>
</tr>
<tr>
<td>internal key-sensor with internal dimmer</td>
<td>synchronize, not synchronize</td>
<td></td>
</tr>
<tr>
<td>Dimming</td>
<td>output maximum [20…..100%]</td>
<td>Adjustment of the maximum brightness (limitation of the original value).</td>
</tr>
<tr>
<td></td>
<td>output minimum [0….80%]</td>
<td>Adjustment of the minimum brightness (increasing the original value).</td>
</tr>
<tr>
<td></td>
<td>speed of the dimmer process (0…..100%) [in seconds]</td>
<td>Time range which shall be required for the total dimming process (0…100%). Time range at value setting which shall be required for the total dimming process (0…100%). Determines if the dimmer shall be switched OFF after it has achieved the set brightness minimum level.</td>
</tr>
<tr>
<td></td>
<td>fade time at value setting 0-100% (input value x 4 [in seconds]), at minimum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>switching off, not switching off</td>
<td></td>
</tr>
</tbody>
</table>
Key input

key input function:
no function,
1-key switch/dim function,
short press: on,
long press: brighter
short press: off,
long press: darker
press: on, release: on
press: off, release: off
press: toggle
press: on release: off
press: off-release: on
press: send value (8 bit)

value [0...255]:
0, 1, 2, ..., 253, 254, 255

This allows the selection of the function of the pushbutton input. The pushbutton input is free disposable, this means it can be used as an EIB-sensor operating independent of the dimmer.

This is the adjustment of the 8 bit-value which shall be set. This parameter appears only if the function of the pushbutton input is set ON “pressing: send value (8bit)”. 
ALTODIM 600-0

A  Characterization: Phase-interval controlled pushdimmer ALTODIM 600-0
Type: IBDA600-0
Order-No.: 80.13.061

B  The ALTODIM 600-0 is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control the connected load in a phase-interval control mode from 0 to maximum in its brightness. The device is suitable for incandescent lamps as well as low-voltage halogen lamps with electronic transformers with the load capacities between 40 and 600 W/VA. Conventional, wire-wound transformers or inductive loads may not be connected. The load output has an electronic current limiting, a light level reduction in case of an exceeding of a limit temperature and a switch-OFF function at inadmissible high temperatures. As soon as the temperature is cooled down the ALTODIM switches ON again after the functional switch-OFF mode.

Additionally the component has a pushbutton input for pushbuttons (230 V ~). The input also can be used as an independent EIB-push-sensor. Several pushbuttons can be operated in parallel.

C  Technical data:

EIB supply
Voltage: 24 V DC (+6V / -4V)
Input: max. 230mW at 29VDC

External supply
Voltage: 230V~ 50Hz, DC not permitted
Own consumption: <2% of the connected load

Pushbutton input T
Voltage: max. 250V~ (pushbutton for power supply)

Output
Load exit: 600W/VA, 2,6A~
-electronic current limiting (starting current, overload/short-circuit current)
-dimming to a lower level in case of the exceeding of a maximum temperature
-switch-OFF function at a non-permissible high temperature
-switching-ON again after the cooling down (functional switch OFF)

Minimum load: 40W

Noise: <25dB(A) at nominal load in a distance of 1 m

Wire length: max. 100m for load and supply wires 1,5 mm²

Terminals:
EIB via pressure contacts
Screw contacts - solid wire 0,2mm² - 2,5mm²
- litz wire with sleeve 0,2mm² - 1,5mm²

Dimensions: WxHxD = 72x90x64mm

Weight: approx. 220g

Mounting: snap-on on DIN rails, natural cooling at vertical mounting

Ambient temperature: 0°C to +45°C

Protective class: II (Protective isolation)

Protective type: IP 20

Test mark: EIB / KNX, CE
### Control components:

1) **LED:** Programming LED
2) **Pushbutton:** Programming Pushbutton

### ETS-Search path:

- **Product family:** Lighting
- **Product type:** Dimmer

**Characterization:** 1-pushbutton-dimmer with feedback, version 2.0

- **Number of addresses:** 20
- **Number of assignments:** 20

**Object description:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>Actuator ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 1</td>
<td>Actuator dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 2</td>
<td>Actuator value setting</td>
<td>1 byte</td>
<td>setting</td>
</tr>
<tr>
<td>Object 3</td>
<td>Sensor ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 4</td>
<td>Sensor dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 5</td>
<td>Sensor value setting</td>
<td>1 byte</td>
<td>setting</td>
</tr>
</tbody>
</table>

The objects of the sensors are handled in a dynamic mode, this means the objects are being faded ON or OUT according to the respective parameter adjustment.
Description of the component functions as they are pre-adjusted in the data base.

After receipt of a 1-telegram (object 0) the brightness jumps to that value which was set before the switch OFF function. A Status back indication would not be set. The brightness can be dimmed via object 1 and 2 within a range of 20% and 100%. For this procedure the dimmer requires approx. 3.2 secs. If the dimmer is switched OFF the switch ON function applies if the command dimming brighter of object 1 as well as with a value of object 2 is switched ON. The pushbutton input of the dimmer is pre-adjusted for the 1-push-switch/dim function. At a short touch of the pushbutton (< 400 ms) switch commands are being send (object 3), while at a longer pressing of the pushbutton (> 400 ms) dimmer commands (object 4) are being sent. At a voltage return the brightness goes to the same level as before the voltage failure and the pushbutton input is kept synchronous to this value.

---

**Parametrizing:**

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment:</th>
<th>Parameter description:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ON/OFF</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switch ON value</td>
<td>value before switching off</td>
<td>Determines the switch-ON value at the receipt of an ON-telegram.</td>
</tr>
<tr>
<td>Status indication</td>
<td>no sending of status indication</td>
<td>Determines if the value of the ON/OFF object during the switching operation shall be sent or not.</td>
</tr>
<tr>
<td>Output Actual Dimming Value</td>
<td>no feedback</td>
<td>Determines if Output Actual Dimming Value to object 2 shall be sent or not.</td>
</tr>
<tr>
<td>Reaction when bus power returns</td>
<td>illumination stays dark maximum brightness maximum brightness (key input synchronous) brightness as before bus power fail.</td>
<td>In this case the dimmer state at a bus voltage return can be determined.</td>
</tr>
</tbody>
</table>

**Dimming and set value**

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment:</th>
<th>Parameter description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brightness-minimum\ (dim down to minimum)</td>
<td>0%(OFF), 10%, 15%, 20%, ..., 70%, 75%, 80%</td>
<td>With the brightness minimum the minimum brightness which shall be achieved during the dimming procedure is adjusted.</td>
</tr>
<tr>
<td>Brightness-maximum\ (dim up to maximum)</td>
<td>20%, 25%, 30%, ..., 90%, 95%, 100%</td>
<td>With the brightness maximum the maximum brightness which shall be achieved during the dimming procedure is adjusted.</td>
</tr>
<tr>
<td>Dim-ramp 0-100% (1-255 seconds)</td>
<td>1,2,3,4,5, , 253, 254, 255</td>
<td>The dimmer controls the brightness from 0% to 100% and reverse within the set time range.</td>
</tr>
<tr>
<td>At dimming bright/ set value</td>
<td>automatic switch on</td>
<td>If from the OFF state the light level shall be dimmed brighter or a value shall be set, it can be determined if the dimmer shall be switched ON automatically or not.</td>
</tr>
<tr>
<td>After set value</td>
<td>jump to value between “min.” and 100% dim to value between “min” and “max”.</td>
<td>Determines if a brightness value shall be achieved immediately (jumped ON) or if it shall be achieved by dimming</td>
</tr>
</tbody>
</table>
**F**

**Key input**

Key input function:

- no function,
- **1-key switch/dim function,**
  - short press: on,
  - long press: brighter
  - short press: off,
  - long press: darker
- press: on, release: on
- press: off, release: off
- press: toggle
- press: on release: off
- press: off-release: on
- press: send value (8 bit)

This allows the selection of the function of the pushbutton input. The pushbutton input is free disposable, this means it can be used as an EIB-sensor operating independent of the dimmer.

Value [0...255]:

- 0, 1, 2, ..., 253, 254, **255**

This is the adjustment of the 8 bit-value which shall be set. This parameter appears only if the function of the pushbutton input is set ON “pressing: send value (8bit)”.

---

3.1.4
ALTODIM 1400-0

A  Characterization: Phase-interval controlled pushdimmer ALTODIM 1400-0
Type: IBDA1400-0
Order-No.: 80.13.064

B  The ALTODIM 1400-0 is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control the connected load in a phase-interval control mode from 0 to maximum in its brightness. The device is suitable for incandescent lamps as well as low-voltage halogen lamps with electronic transformers with the load capacities between 60 and 1400 W/VA. Conventional, wire-wound transformers or inductive loads may not be connected. The load output has an electronic current limiting, a light level reduction in case of an exceeding of a limit temperature and a switch-OFF function at inadmissible high temperatures. As soon as the temperature is cooled down the ALTODIM switches ON again after the functional switch-OFF mode.
Additionally the component has a pushbutton input for pushbuttons (230 V ∼ ). The input also can be used as an independent EIB-push-sensor. Several pushbuttons can be operated in parallel.

C  Technical data:

EIB supply
   Voltage: 24V DC (+6V / -4V)
   Input: max. 230mW at 29VDC

External supply
   Voltage: 230V~ / 50Hz, DC not permitted
   Own consumption: <2% of the connected load

Pushbutton input T
   Voltage: max. 250V~ (pushbutton for power supply)

Output
   Load exit: 1400W/VA, 6,1A~
   - electronic current limiting (starting current, overload/short-circuit current)
   - dimming to a lower level in case of the exceeding of a maximum temperature
   - switch-OFF function at a non-permissible high temperature
   - switching-ON again after the cooling down (functional switch OFF)

   Minimum Load: 60W
   Noise: <25dB(A) at nominal load in a distance of 1 m
   Wire length: max. 100m for load and supply wires 1,5 mm²
   Terminals: Screw contacts - wire 0,2mm² - 2,5mm²
   - litz wire with sleeve 0,2mm² - 2,5mm²

   Dimensions: WxHxD = 175x83,5x58mm
   Weight: approx. 450g
   Mounting: snap-on on DIN rails, natural cooling at vertical mounting
   Ambient temperature: 0°C to +45°C
   Protective class: II (Protective isolation)
   Protective type: IP 20
   Test mark: EIB / KNX, CE
D  Wiring diagram:

Control Components:
1) LED: Programming LED
2) Pushbutton: Programming Pushbutton

E  ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: 1-pushbutton-dimmer with feedback, version 2.0

The devices ALTODIM 600-0, 1400-0, 600, 1300, 2000 are working with the application 1-pushbutton-dimmer with feedback, version 2.0. See ALTODIM 600-0 (chapter 3.1.2)

F  Parameter description

The devices ALTODIM 600-0, 1400-0, 600, 1300, 2000 are working with the application 1-pushbutton-dimmer with feedback, version 2.0. See ALTODIM 600-0 (chapter 3.1.2)
ALTODIM 600

A  Characterization:  
Type:  
Order-No.:  

Phase-controlled pushdimmer ALTODIM 600  
IBDA600  
80.13.065

B  Functional description:  
The ALTODIM 600 is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control the connected load in a phase-control mode from 0 to maximum in its brightness. The device is suitable for the control of incandescent lamps, wire-wound transformers and electrical motors between 40 and 600 W/VA. The total load of the connected devices may not exceed the maximum load of the dimmer. In any case also the power dissipation of the transformers (approximately 15-20%) and of motors as well as their power factor has to be considered. The load output has an electronic current limiting in case of an exceeding of the maximal temperature. Additionally the control has an input for normal pushbuttons component has a pushbutton input for pushbuttons (230 V ∼). This input can be used as an independent EIB-push-sensor. Several pushbuttons can be operated in parallel.

C  Technical data:  
EIB supply  
Voltage: 24V DC (+6V / -4V)  
Input: max. 230mW at 29VDC  

External supply  
Voltage: 230V∼ 50Hz, DC not permitted  
Own consumption: <1,5% of the connected load  

Pushbutton input T  
Voltage: max. 250V∼ (pushbutton for power supply)  

Output  
Load exit: 600W/VA, 2,6A~  
electronic current limiting when exceeding the maximum permissible temperature  

Minimum load: 40W  
Noise: <30dB(A) at nominal load in a distance of 1 m  
Wire length: max. 100m for load and supply wires 1,5 mm²  
Terminals: EIB via pressure contacts  
Screw contacts - wire 0,2mm² - 2,5mm²  
- litz wire with sleeve 0,2mm² - 1,5mm²  

Dimensions: WxHxD = 72x90x64mm  
Weight: approx. 250g  
Mounting: snap-on on DIN rails, natural cooling at vertical mounting  
Ambient temperature: 0°C to +45°C  
Protective class: II (Protective isolation)  
Protective type: IP 20  
Test mark: EIB / KNX, CE

D  Wiring diagram:
Control components:

1) LED: Programming LED
2) Pushbutton: Programming Pushbutton

ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: 1-pushbutton-dimmer with feedback, version 2.0

The devices ALTODIM 600-0, 1400-0, 600, 1300, 2000 are working with the application 1-pushbutton-dimmer with feedback, version 2.0. See ALTODIM 600-0 (chapter 3.1.2)

Parameter description

The devices ALTODIM 600-0, 1400-0, 600, 1300, 2000 are working with the application 1-pushbutton-dimmer with feedback, version 2.0. See ALTODIM 600-0 (chapter 3.1.2)
ALTODIM 1300

A

Characterization:
Phase-controlled pushdimmer ALTODIM 1300
Type:
IBDA1300
Order-No:
80.13.062

B

Functional description:

The ALTODIM 1300 is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control the connected load in a phase-control mode from 0 to maximum of the brightness. The device is suitable for the control of incandescent lamps, wire-wound transformers and electrical motors between 60 and 1300 W/VA. The total load of the connected devices may not exceed the maximum load of the dimmer. In any case also the power dissipation of the transformers (approximately 15-20%) and of motors as well as their power factor has to be considered. The load output has an electronic current limiting in case of an exceeding of the maximal temperature. Additionally the control has an input for common pushbuttons (230 V~). This input can be used as an independent EIB-push-sensor. Several pushbuttons can be operated in parallel.

C

Technical data:

EIB supply
Voltage: 24V DC (+6V / -4V)
Input: max. 230mW at 29VDC

External supply
Voltage: 230V~ / 50Hz, DC not permitted
Own consumption: <1,5% of the connected load

Pushbutton input T
Voltage: max. 250V~ (pushbutton for power supply)

Output
Load exit: max. 1300W/VA 5,65A~
electronic current limiting when exceeding the maximum permissible temperature
Minimum load: 60W
Noise: <30dB(A) at nominal load in a distance of 1 m
Cross section of a line
load and supply wires minimum 1,5mm²
Wire length: max. 100 m for load and supply wires (1,5 mm²)

Terminals: Screw contacts - wire 0,5mm² - 2,5mm²
- litz wire with sleeve 0,5mm² - 2,5mm²

Dimensions: WxHxD = 105x83,5x58mm
Weight: approx. 380g
Mounting: snap-on on DIN rails, natural cooling at vertical mounting
Ambient temperature: 0°C to +45°C
Protective class: II (Protective isolation)
Protective type: IP 20
Test mark: EIB / KNX, CE
D Wiring diagram:

Control components:

1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton

E ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: 1-pushbutton-dimmer with feedback, version 2.0

The devices ALTODIM 600-0, 1400-0, 600, 1300, 2000 are working with the application 1-pushbutton-dimmer with feedback, version 2.0. See ALTODIM 600-0 (chapter 3.1.2)

F Parameter description

The devices ALTODIM 600-0, 1400-0, 600, 1300, 2000 are working with the application 1-pushbutton-dimmer with feedback, version 2.0. See ALTODIM 600-0 (chapter 3.1.2)
ALTODIM 2000

A
Characterization: Phase-controlled pushdimmer ALTODIM 2000
Type: IBDA2000
Order-No.: 80.13.063

B
Functional description:
The ALTODIM 2000 is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control
the connected load in a phase-control mode from 0 to maximum of the brightness. The device is suitable
for the control of incandescent lamps, wire-wound transformers and electrical motors between 60 and
2000 W/VA. The total load of the connected devices may not exceed the maximum load of the dimmer. In any case also the power dissipation of the transformers
(approximately 15-20%) and of motors as well as their power factor has to be considered. The load output
has an electronic current limiting in case of an exceeding of the maximal temperature.
Additionally the control has an input for common pushbuttons (230 V ~). This input can be used as an
independent EIB-push-sensor. Several pushbuttons can be operated in parallel.

C
Technical data:

EIB supply
Voltage: 24V DC (+6V / -4V)
Input: max. 230mW at 29VDC

External supply
Voltage: 230V~ / 50Hz, DC not permitted
Own consumption: <1,5% of the connected load
Pushbutton input T
Voltage: max. 250V~ (pushbutton for power supply)

Output
Load exit: max. 2000W/VA, 8,7A~
-electronic current limiting when exceeding the maximum permissible temperature

Minimum load: 60W
Noise: <30dB(A) at nominal load in a distance of 1 m
Cross Section of a line: load and supply wires minimum 1,5mm²
Wire length: max. 100m for load and supply wires (1,5 mm²)
Terminals: Screw contacts - wire
-litz wire with sleeve

Dimensions: WxHxD = 175x83,5x58mm
Weight: approx. 500g
Mounting: snap-on on DIN rails, natural cooling at vertical mounting
Ambient temperature: 0°C to +45°C
Protective class: II (Protective isolation)
Protective type: IP 20
Test mark: EIB / KNX, CE
Control components:

1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton

ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: 1-pushbutton-dimmer with feedback, version 2.0

The devices ALTODIM 600-0, 1400-0, 600, 1300, 2000 are working with the application 1-pushbutton-dimmer with feedback, version 2.0. See ALTODIM 600-0 (chapter 3.1.2)
**A**

Characterization: Dim-Jalousie-Sensor
Type: IBDIMJAL
Order-No.: 80.14.230

---

**B**

Functional description:

The Dim-Jalousie-Sensor is a plug-in module for DIN rail cabinets. It realizes different sensor functions. Through the loading of different applications this device is suitable for the acquisition of analogue voltages (0-10V/0-20V), of 2-pushbutton-/3-pushbutton- or potentiometer-dim-sensor, and finally it can be used as jalousie- or scene selection sensor (for ALTENBURGER ELECTRONICS Programmable lighting control systems).

---

**C**

Technical data:

- **EIB supply**
  - Voltage: 24V DC (+6V / -4V)
  - Load capacity: max. 100mW

- **Input**
  - Voltage free pushbutton
  - Potentiometer 22kΩ
  - Voltage: 0-10V; 0-20V / just protective extra low-voltage
  - Current: max 100µA

- **Output**
  - LED: for low-power LED max. 1,5mA
  - Wire length: max. 100m for control wire 0,5mm²
  - Terminals: EIB via pressure contacts at the data rail
  - Screw terminals max. - wire 2x2,5mm²
  - litz wire with sleeve 2x1,5mm²

- **Dimensions:** WxHxD = 36x90x61mm
- **Weight:** approx. 190gr
- **Mounting:** snap-on on DIN rails
- **Ambient temperature:** 0°C to +45°C
- **Protective class:** II (Protective isolation)
- **Protective type:** IP 20
- **Test mark:** EIB

---

1 When wiring together with other wires or cables the wires and cables must have an insulation voltage of minimum 4000 V (protective extra low-voltage).
Wiring diagram 2-pushbutton dim-sensor:

2 pushbutton dim-sensor
switch position 0

Control components:
1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton
3) Switch: Selector switch

ETS-Search path:
Product family: Lighting
Product type: Dimmer
Characterization: 2-pushbutton-dim (from 8.93 on), version 1.2
Number of addresses: 9
Number of assignments: 9

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>ON/OFF</td>
<td>1 bit</td>
<td>ON/OFF</td>
</tr>
<tr>
<td>Object 1</td>
<td>dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
</tbody>
</table>

Description of the component functions as they are pre-adjusted in the data base:

The dim-jalousie sensor, loaded with the application of the 2-push-dim sensor operates in combination with 2 pushbuttons. With the 2 connected pushbuttons the following functions can be realized. The selector switch at the control must be set into the position 0 for the following applications.

Pushbutton ON/BRIGHTER: through a short pressing of the button (<400ms) an ON telegram (object 0) is being sent. At a longer push (>400 ms) a BRIGHTER telegram (object 1) is sent. When releasing the button a STOP telegram is sent (object 1). This means that the respective lighting level is maintained when the button is released.

Pushbutton OFF/DARKER: through a short pressing of the button (<400ms) an OFF telegram (object 0) is being sent. At a longer push (>400 ms) a DARKER telegram (object 1) is sent. When releasing the button a STOP telegram is sent (object 1).

LED-Output: Through a short pressing of the respective pushbutton the LED can be switched ON or OFF. The output also can be switched with telegrams of object 0.
**F**

**Parametrizing:**

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telegramrate</td>
<td>30 Telegrams per 17 secs.</td>
<td>Limited through the number of telegrams being sent within 17 secs.</td>
</tr>
<tr>
<td>Telegram rate limitation (only at “full access” this parameter can be adjusted)</td>
<td>60 Telegrams per 17 secs.</td>
<td></td>
</tr>
<tr>
<td>Telegram rate limitation (only at “full access” this parameter can be adjusted)</td>
<td>100 Telegrams per 17 secs.</td>
<td></td>
</tr>
<tr>
<td>Telegram rate limitation (only at “full access” this parameter can be adjusted)</td>
<td>127 Telegrams per 17 secs.</td>
<td></td>
</tr>
</tbody>
</table>

**D**

**Wiring diagram 3-pushbutton dim-sensor:**

3-pushbutton dim-sensor switch position 0

Control components:
1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton
3) Switch: Selector switch

**E**

**ETS-Search path:**

Product family: Lighting
Product type: Dimmer

Characterization: 3-push-dim (from 8.93 on), version 1.2

Number of addresses: 10
Number of assignments: 10

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>ON/OFF</td>
<td>1 bit</td>
<td>ON/OFF</td>
</tr>
<tr>
<td>Object 1</td>
<td>dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
</tbody>
</table>
E

Description of the component functions as they are pre-adjusted in the data base:

The dim-jalousie sensor, loaded with the application of the 3-push-dim sensor operates in combination with 3 pushbuttons. With the 3 connected pushbuttons the following functions can be realized. The selector switch at the control must be placed into the position 0 for the following applications.

Pushbutton ON/OFF: through pressing the button an ON telegram (object 0) is being sent. At repeated pressing the button an OFF telegram (object 0) is sent.
Pushbutton BRIGHTER: through pressing the button a BRIGHTER telegram (object 1) is being sent. When releasing the button a STOP telegram is sent (object 1).
Pushbutton DARKER: through pressing the button a DARKER telegram is sent (object 1). When releasing the button a STOP telegram is sent (object 1).
LED-Output: Through pressing the ON/OFF button the LED can be switched ON or OFF. The output also can be switched with telegrams of object 0.

F

Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment:</th>
<th>Parameter description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telegramrate</td>
<td>30 Telegrams per 17 secs.</td>
<td>Limited through the number of telegrams being sent within 17 secs.</td>
</tr>
<tr>
<td></td>
<td>60 Telegrams per 17 secs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 Telegrams per 17 secs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>127 Telegrams per 17 secs.</td>
<td></td>
</tr>
</tbody>
</table>
### Wiring diagram potentiometer dim-sensor:

**Poti-dim-sensor**

- **Switch-position 1**
  - ON/OFF
  - Sensor-module
  - IBDIMJAL
  - Low power LED (max. 1.5mA)

**0-10V-dim-sensor**

- **Switch-position 2**
  - ON/OFF
  - Sensor-module
  - IBDIMJAL
  - Low power LED (max. 1.5mA)
  - Analogue-input control voltage
  - 0 - max. 10V

**0-20V dim-sensor**

- **Switch-position 3**
  - ON/OFF
  - Sensor-module
  - IBDIMJAL
  - Low power LED (max. 1.5mA)
  - Analogue-input control voltage
  - 0 - max. 20V

**Control components:**
- 1) LED: Programming LED
- 2) Pushbutton: Programming Pushbutton
- 3) Switch: Selector switch

### ETS-Search path:

- **Product family:** Lighting
- **Product type:** Dimmer

**Characterization:** potentiometer-dim-sensor, version 1.3

- **Number of addresses:** 4
- **Number of assignments:** 4

**Object description:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>ON/OFF</td>
<td>1 bit</td>
<td>ON/OFF</td>
</tr>
<tr>
<td>Object 1</td>
<td>dimming (absolute value)</td>
<td>1 byte</td>
<td>dimming (absolute value)</td>
</tr>
</tbody>
</table>
Description of the component functions as they are pre-adjusted in the data base:

The dim-jalousie sensor, loaded with the application of the poti-dim-sensor operates in combination with 1 pushbutton and 1 potentiometer or in combination with a voltage of 0-10V or 0-20V. With this application the following functions can be realized. The selector switch in the control must be adjusted according to the functions.

Pushbutton ON/OFF: through pressing the button an ON telegram (object 0) is being sent. At repeated pressing the button an OFF telegram (object 0) is sent. In the switch-ON state the input for the potentiometer or the voltage is released.

Potentiometer: through turning or sliding of the potentiometer respective value telegrams (object 1) are being sent. The selector switch has to be placed into position 1 for this application.

Voltage 0-10V: Through the control of the voltage corresponding value telegrams (object 1) are being sent. The selector switch for this application must be placed into position 2.

Voltage 0-20V: Through the control of the voltage corresponding value telegrams (object 1) are being sent. The selector switch for this application must be placed into position 3.

LED-Output: Through pressing the ON/OFF button the LED can be switched ON or OFF. The output also can be switched through telegrams of object 0.

**Parametrizing:**

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment:</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON/OFF (enable analog-input)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimm enable at Poweron</td>
<td>Object 0 = 1 (value send enabled)</td>
<td>About this Parameter can be fixed if after Poweron a Telegram of the Objekt 0 to dimm enable of the analog input will be send shall or not. It can however immediately after the bus-power-fail only after a delay time of 17 seconds with the potentiometer or ext. input voltages dimmed are.</td>
</tr>
<tr>
<td></td>
<td>Object 0 = 0 (value send not enabled)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>enable as befor bus-power-fail</td>
<td></td>
</tr>
<tr>
<td>Analog Input (absolute value)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potentiometer-sensitivity</td>
<td>level 1 (min.-sensitivity) level 2, level 3, level 4, level 5 level 6, level 7 (max.-sensitivity)</td>
<td>Adjusts the sensitivity of the potentiometer changing or the voltage changing. If telegrams already at small changings shall be sent to the bus, step 7 has to be adjusted.</td>
</tr>
</tbody>
</table>
**Wiring diagram jalousie-sensor:**

![Diagram of jalousie-sensor wiring](image)

**Control components:**

1) **LED:** Programming-LED
2) **Pushbutton:** Programming Pushbutton
3) **Switch:** Selector switch

---

**ETS-Search path:**

- **Product family:** Jalousie
- **Product type:** Sensors

**Characterization: jalousie-sensor, version 1.0**

- **Number of addresses:** 8
- **Number of assignments:** 8

**Object description:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>Jalousie UP/DOWN (ON/OFF)</td>
<td>1 bit</td>
<td>Jalousie UP/DOWN (ON/OFF)</td>
</tr>
<tr>
<td>Object 1</td>
<td>venetian blind UP/DOWN (ON/OFF)</td>
<td>1 bit</td>
<td>venetian blind UP/DOWN (ON/OFF)</td>
</tr>
</tbody>
</table>

Description of the component functions as they are pre-adjusted in the data base:

The dim-jalousie sensor, loaded with the application of jalousie-sensors operates in combination with 2 pushbuttons. With this application the following functions can be realized. The selector switch at the control must be placed for this application into position 0.

**Pushbutton UP:** through a short pressing of the button (<400 ms) a venetian blind ON telegram (object 1) is sent. When pressing the button longer (>400ms) a jalousie UP telegram (object 0) is sent.

**Pushbutton DOWN:** through a short pressing of the button (<400 ms) a venetian blind OFF telegram (object 1) is sent. When pressing the button longer (>400 ms) a jalousie DOWN (object 0) is sent.
**Parametrizing:**

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment:</th>
<th>Parameter description:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lamination open/close</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short PB-press timefactor (2-127)</td>
<td>2; 3; 4; ...; 126; 127</td>
<td>The pushbutton short time factor multiplied with the time basis results in the time at which the pressure on the pushbutton is evaluated as a long range actuation.</td>
</tr>
<tr>
<td>* Timebase</td>
<td>130ms; 260ms; 520ms; 1s; 2,1s; 4,2s; 8,4s; 17s; 34s; 1,1min; 2,2min; 4,5min; 9min; 18min; 35min; 1,2std</td>
<td>The time basis multiplied with the pushbutton short time factor results in the time at which a pressure on the pushbutton is evaluated as short actuation.</td>
</tr>
<tr>
<td><strong>Jalousie up/down</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sendrepetition up/down</td>
<td>disable; enable</td>
<td>A cyclic transmission of the UP or DOWN command can be released or locked.</td>
</tr>
<tr>
<td>Sendrepetition timefactor (2-127)</td>
<td>2; 3; 4; ...; 9; 10; 11; ...; 126; 127</td>
<td>The transmission retry factor multiplied with the time basis results in the time between 2 telegrams in case of a transmission retry.</td>
</tr>
<tr>
<td>* Timebase</td>
<td>130 ms; 260 ms; 520 ms; 1 seconds; 2,1 seconds; 4,2 seconds; 8,4 seconds; 17 seconds; 34 seconds; 1,1 minutes; 2,2 minutes; 4,5 minutes; 9 minutes; 18 minutes; 35 minutes; 1,2 hours</td>
<td>The transmission retry factor multiplied with the time basis results in the time between 2 telegrams in case of a transmission retry.</td>
</tr>
</tbody>
</table>
Wiring diagram of a scene memory sensor:

Control components:
1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton
3) Switch: Selector switch

ETS-Search path:
Product family: Lighting
Product type: Dimmer

Characterization: Scene memory (AE), version 1.0
Number of addresses: 9
Number of assignments: 9

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>fade time/memory</td>
<td>2 byte</td>
<td>fade time/memory</td>
</tr>
</tbody>
</table>
Description of the component functions as they are pre-adjusted in the data base:

The dim-jalousie sensor, loaded with the application of the scene-memory-sensor operates in combination with 1 pushbutton and 1 potentiometer (optional). With this application different scenes within the AL TENBURGER ELECTRONIC’s Programmable Dimming control system can be stored.

Pushbutton storage: through pressing this button the storage telegram (2 byte) including the fade time 16 secs. is sent to the bus. The parametrized maximum fade time can be adjusted with the selector switch at the dim-jalousie-sensor and with the connected potentiometer.

- Selector switch-position 1: fade time \( \times \frac{1}{1} \) ⇒ 16s
- Selector switch-position 2: fade time \( \times \frac{1}{2} \) ⇒ 8s
- Selector switch-position 3: fade time \( \times \frac{1}{4} \) ⇒ 4s

Potentiometer (optional): the fade time, pre-selected with the selector switch can be reduced with the potentiometer down to 0 secs. If no potentiometer is connected a bridge between terminals 5 and 6 has to be provided for.

LED-Output: if the sent telegram is acknowledged by a minimum of 1 bus device the LED blinks for 2.5 secs.

---

**Parametrizing:**

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment:</th>
<th>Parameter description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fadetime/Store</td>
<td>0; 1; ...; 16; ...;9998; 9999</td>
<td>Determines the maximum fade time to be adjusted with the selector switch. It can be further reduced through the connected potentiometer (optional). The fade time is included in the telegram storage.</td>
</tr>
</tbody>
</table>

**Telegramrate**

<table>
<thead>
<tr>
<th>Telegram rate limitation</th>
<th>30 Telegrams within 17 secs.</th>
<th>Limits the number of telegrams which can be sent within 17 secs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(this parameter can be adjusted only at “full access”)</td>
<td>60 Telegrams within 17 secs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 Telegrams within 17 secs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>127 Telegrams within 17 secs.</td>
<td></td>
</tr>
</tbody>
</table>
SENSOR FOR 3-CHANNEL-LIGHT VALUE CONTROL SWITCH

A

**Characterization:**

Sensor for 3-channel-light value control switch

**Type:** IBLWS3

**Order-No.:** 80.14.016

**Applicable light sensors:**

- Wall-mounted type/IP 40
- Wall-mounted type, water tight/IP55
- Wall-recessed type for wall-recessed DIN-box (55mm)/IP 40
- Wall-mounted type, water tight with swiveling angle/IP55
- Wall-recessed type for 1-hole mounting/IP 40

**Type:**

- LF/a/D 51.21.007
- LF/b/D 51.21.008
- LF/c/D 51.21.009
- LF/w/D 51.21.010
- LF/d/D 51.21.011

B

**Functional description:**

The sensor for 3-channel light value control switches is a plug-in module for DIN rail cabinets. It is in a position to send switch telegrams in dependence of the daylight to the EIB.

The switch values can be adjusted for each channel separately at each device. With the parameters it is possible to decide if the switch telegram shall be sent once or cyclic, or after an exceeding or the remaining under the adjusted threshold value.

Interference effects can be limited through a delay time setting which is possible for each individual channel.

C

**Technical data:**

**EIB supply**

- Voltage: 24V DC (+6V / -4V)
- Load capacity: max. 100mW

**Input**

- Light sensor: applicable types; please refer to A
- Operational range: 20-2000lux, 200-20000 lux
- Wire length: max. 100m for the control wire 0.5mm²
- Terminals: EIB via pressure contacts on data rail
- Screw contacts max.
  - solid wire 2x2.5mm²
  - litz wire with sleeve 2x1.5mm²

**Dimensions:** WxHxD = 90x90x61mm

**Weight:** approx. 330gr

**Mounting:** snap-on on DIN rails

**Ambient temperature:** 0°C to +45°C

**Protective class:** II (Protective isolation)

**Protective type:** IP 20

**Test mark:** EIB

---

1 When wiring together with other wires or cables the wires and cables must have an insulation voltage of minimum 4000 V (protective extra low-voltage).
Sensor for 3-channel light value control switch

**IBLWS3**

Through the removal of the bridge 25-26 the set value for the lux range can be reduced:

- without bridge 25-26: 20lux - 20000lux
- with bridge 25-26: 200lux - 2000lux

Control components:

1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton
3) 3 LED: Display of the switch state
4) 3 Potentiometer: Light value switch adjustment

ETS-Search path:

Product family: Lighting
Product type: Special devices

Characterization: 3-light value control switch, version 1.1

Number of addresses: 3
Number of assignments: 3

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>Channel 1</td>
<td>1 bit</td>
<td>Channel 1</td>
</tr>
<tr>
<td>Object 1</td>
<td>Channel 2</td>
<td>1 bit</td>
<td>Channel 2</td>
</tr>
<tr>
<td>Object 2</td>
<td>Channel 3</td>
<td>1 bit</td>
<td>Channel 3</td>
</tr>
</tbody>
</table>
Description of the component functions as they are pre-adjusted in the data base:

As soon as the daylight value falls below a switch value 1 which is adjusted with a potentiometer the respective LED (ascending slope) lights up. After the adjusted delay time of 10 min. the light value sensor transmits on channel 1 (object 0) an ON-value.

If the daylight value exceeds the adjusted switch value 1 the corresponding LED goes out (falling slope). After the adjusted delay time of 10 min. the sensor sends on channel 1 (object 0) and OFF value. Channel 2 and channel 3 have the same behaviour as described for channel 1.

Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td>All channels concerning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common delay-time-base</td>
<td>0.1 seconds</td>
<td>Determines the delay time of all 3 channels.</td>
</tr>
<tr>
<td></td>
<td>1 second</td>
<td>Delay time = delay time basis x delay time factor.</td>
</tr>
<tr>
<td></td>
<td>10 seconds</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>1 minute</strong></td>
<td>Limits the number of telegrams which are being sent within 17 secs.</td>
</tr>
<tr>
<td>Telegram rate</td>
<td>30 Telegrams per 17 secs.</td>
<td></td>
</tr>
<tr>
<td>(this parameter can be adjusted only at “full access”)</td>
<td>60 Telegrams per 17 secs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 Telegrams per 17 secs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>127 telegrams per 17 secs.</strong></td>
<td></td>
</tr>
</tbody>
</table>

Channel X

the following parameters are individually adjustable for all 3 channels

Switching mode channel X

- LED lights up: on, Ascending slope: daylight falls below the switch value, LED lights up
- LED lights up: off, Falling slope: daylight exceeds the switch value, LED goes out
- LED lights off: on, no function
- LED lights off: off

Delay time-factor  

| Channel X | 3, 4, 5, 6, 7, 8, 9, 10, 11, ... | Determines the delay time of channel X |
|           | 253, 254, 255                   | Delay time channel x = delay time basis x delay time factor channel X |

Cyclic sending of channel X

- single-trip action after LED changes     
- cyclic sending                           

Determines if the switch command is sent once or cyclic after the switch threshold has been exceeded or fallen short. If a cyclical sending occurs the cycle time is identical with the delay time.
Personal notes:
**MULTI-SENSOR-DIMMER EIB-KNX**

A

Characterization:  
Multi-sensor-dimmer EIB-KNX  
IBMSD  
80.14.800

B

**Functional description:**

The Multi-sensor dimmer EIB-KNX is a motion detector, combined with constant light control, adjusting the artificial light smoothly to the daylight portion. As soon as motion is detected lighting goes into the preset light level to be kept constant. Only so much artificial light is added to the daylight portion as it is necessary for the achievement of the set light level. As soon as no motion is detected lighting is reduced within a presettable time range of 1-30min. to a level of 1% of maximum light and finally is switched off. With integrated 1..10V control outlet dimmable electronic ballasts for fluorescent lamps or electronic transformers, both with an interface of 1-10V can be controlled. The EIB-KNX is wired to power supply (phase for the switch contact), and its interface of 1-10V to the EIB-bus. The switch contact can directly be used for the load (electronic ballast or transformer) up to 6A.

C

**Technical data:**

EIB supply
- Voltage: 24V DC (+6V / -4V)
- Input: < 250mW at 29VDC
- Adjustable light level range: approx. 25...750 Lux
  (directly at the EIB-KNX, equivalent to approx. 50..1500 lux at the workplace)
- Acquisition angle: approx. 100° (light and motion sensor)
- Mounting height: 2.5 – 3m
- Load connections: switch contact input (↑), switch contact output (↓)
- Control exits: +, - (1...10V of the electronic ballasts or the transformers)

Base isolation according to IEC664 (10/92), no protective low voltage
- Capacity of the control exit: 50mA (passive coming from the electronic ballasts), equivalent approx. 50 electronical ballasts or transformers
  - please refer to manufacturer’s data
- Load contact: function switching ON/OFF, no mechanical disconnection  
  (μ-contact opening)
- Minimum loads:
  - 5A ohmic load ⇒ 30 single dimmable ballasts* 18W, 20 twin ballasts* for 2 x 18W
  - 30 single dimmable ballasts* 36W, 20 twin ballasts* for 2 x 36W
  - 20 single dimmable ballasts* 58W, 10 twin ballasts* for 2 x 58W
- MCB:
  - external 6A
- Wire lengths:
  - max. 100m for control wires (0,5mm²), load and supply wires (1,5mm²)
- Terminals:
  - Screw contacts - solid wire 0,3mm² - 1,5mm²
  - litz wire with sleeve 0,3mm² - 1,5mm²
- Dimensions: WxHxD = 58,5 x 70,5 x 42mm
- Weight: approx. 100g
- Mounting: plastic housing for mounting on ceilings or into louvres of lamp fixtures
- Ambient temperature: 0°C to +45°C
- Protective class: II (Productive isolation)
- Protective type: IP 20
- Test mark: EIB / KNX, CE

* Number of electronic ballasts with 15m and 1,5mm² wiring from the distribution to the EIB-KNX and further 20m to the midst of the lamp circuit (impedance approx. 800mΩ). Wiring with higher cross sections for shorter distances would reduce the permissible load (e.g. at an impedance of 400mΩ by 20%).
**D**

### Wiring diagram:

![Wiring diagram](image)

**Control components:**

1) Programmable pushbutton
2) Programming-LED
3) Light sensing
4) Potentiometer for the delay time setting
5) Pushbutton for the setting of the required constant light level

---

**E**

### ETS-Search path:

<table>
<thead>
<tr>
<th>Product family:</th>
<th>Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product type:</td>
<td>Special components</td>
</tr>
</tbody>
</table>

**Characterization: IBMSD, Version 1.1**

<table>
<thead>
<tr>
<th>Number of addresses:</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of assignments:</td>
<td>30</td>
</tr>
</tbody>
</table>

**Object description:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>Lighting ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 1</td>
<td>Lighting dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 2</td>
<td>Lighting value setting</td>
<td>1 byte</td>
<td>set value</td>
</tr>
<tr>
<td>Object 3</td>
<td>Setpoint room brightness</td>
<td>1 byte</td>
<td>setpoint pretend</td>
</tr>
<tr>
<td>Object 4</td>
<td>Setpoint storage</td>
<td>1 bit</td>
<td>setpoint storage</td>
</tr>
<tr>
<td>Object 5</td>
<td>Control active</td>
<td>1 bit</td>
<td>activate/deactivate of control</td>
</tr>
<tr>
<td>Object 6</td>
<td>Movement</td>
<td>1 bit</td>
<td>triggering movement</td>
</tr>
<tr>
<td>Object 7</td>
<td>Movement lighting</td>
<td>1 bit</td>
<td>motion dependence ON/OFF</td>
</tr>
<tr>
<td>Object 8</td>
<td>HVAC ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 9</td>
<td>Movement HVAC</td>
<td>1 bit</td>
<td>motion dependence HVAC</td>
</tr>
</tbody>
</table>
Descriptions of the component functions as they are pre-adjusted in the database:

After receipt of a ON/OFF-telegram (Object 0) the lighting directly can be switched ON or OFF. The brightness can be dimmed via the objects 1 and 2. The light level for the constant light control can be set directly via the object 3. It can be adjusted within a range of 1…255 (approx. 3…765 lux).

According to the status of object 5 the set light level for the constant light control or the switch ON value can be memorized (Object 4). For the extension of the range of detection several EIB-KNX can be combined via the trigger object (Object 6) to one group.

Via the object 7 the lighting control can be switched with motion detection or without motion detection.

---

**Parameterizing:**

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment:</th>
<th>Parameter description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON/OFF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switch ON value</td>
<td>setting to the ETS switch ON value</td>
<td>Determines if the possibly manually stored switch ON value at the downloading is kept or if it shall be replaced by the ETS-value</td>
</tr>
<tr>
<td>ETS switch ON value</td>
<td>10%, 15%, 20%……90%, 95%, <strong>100%</strong></td>
<td>Enables the adjustment of the IBMSD / IBMSC-NV after bus-voltage failure or return.</td>
</tr>
<tr>
<td>Reaction if bus-voltage fails or returns</td>
<td>switches OFF / remains OFF relay unchanged / switches ON switches OFF / switches ON</td>
<td>Determines if during the switching status back indication shall be sent to the bus.</td>
</tr>
<tr>
<td>Status indication</td>
<td>no sending of status indication sending of status indication</td>
<td></td>
</tr>
</tbody>
</table>

**Dimming and set value**

| Maximum output [5...255] | 5,6,7,........253,254,255 | Adjustment of the maximum brightness which shall be achieved.                         |
| Minimum output [0...250] | 0,1,2,........248,249,250 | Adjustment of the minimum brightness which shall be achieved.                         |
| Speed of the dimmer process (0..100%) [in seconds] | 1,2,3,4,5,6,7,8,9,...253, 254, 255 | Speed of the dimmer process during the dimming with object no.1 for the complete dimming range. |
| fade time with value setting 0-100% (input value x 4 [in seconds]) | 0,1,2,3,........253,254,255 | Speed of the fade time to a value with object no.2 for the complete dimmer range.     |
| read out value to the bus | no sending of status indication sending of status indication | To be adjusted if the control shall be switched OFF after the achievement during the dimming process. |
| at minimum               | switching OFF not switching OFF                        | To be adjusted if the module shall switch OFF after the achievement of the brightness minimum during the dimming process. |
## Lighting control

<table>
<thead>
<tr>
<th>Feature</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>After bus-voltage return</td>
<td>lighting status as before the bus-voltage failure</td>
<td>To be adjusted if the module after a bus-voltage failure or after no movement was recognized shall work in the automatic mode or in the ON/OFF mode.</td>
</tr>
<tr>
<td>Light dependent switch off delay time</td>
<td>1,2,3,...8,9,10,11,...253,254,255</td>
<td>Time unless switch off after the lighting control has achieved the minimum.</td>
</tr>
<tr>
<td>Speed of control (0-100%)</td>
<td>10,11,12,...21,22,23,...253,254,255</td>
<td>Speed at which daylight changings shall be compensated by the artificial lighting.</td>
</tr>
<tr>
<td>Room brightness in the control mode</td>
<td>to be set on ETS-room brightness not to be changed during the download</td>
<td>Determines if the possibly manually stored set value shall be maintained during the downloading or if it shall be changed through the ETS value.</td>
</tr>
<tr>
<td>ETS setpoint [1…254]</td>
<td>1,2,3,4,5,6,7,………251,252,253,254</td>
<td></td>
</tr>
</tbody>
</table>

### Pusbutton at the module

<table>
<thead>
<tr>
<th>Function set button</th>
<th>enable</th>
<th>disable</th>
<th>To set button at the module can be set out of function.</th>
</tr>
</thead>
</table>

### Lighting & movement

| Switch OFF delay time [minutes]              | 1,2,3,4,...8,9,10,11,...253,254,255          | Time unless final switch OFF after the lighting has been dimmed down within a set delay time to minimum.                                      |
| Presence dependence after bus-voltage recovery | as before bus-voltage failure active inactive | Determines if the lighting control after a bus-voltage failure shall work in dependence of motion detection or not. |

### Heating, ventilation, air conditioning & Movement

<p>| Presence dependence after bus-voltage recovery | as before bus-voltage failure active | Determines if aircon, heating, ventilation control shall work after a bus-voltage failure in dependence of motion or not. |
| HVAC ON delay time                             | in seconds in minutes               | Determines if the adjustable switch ON delay time shall be in seconds or in minutes. |</p>
<table>
<thead>
<tr>
<th>Specification</th>
<th>Values</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC ON delay time [0-255 seconds]</td>
<td>0,1,2,3,…..9,10,11,……..253,254,255</td>
<td>Determines how long motion shall be detected unless aircon, heating or ventilation shall be switch on.</td>
</tr>
<tr>
<td>[0-30 minutes]</td>
<td>0,1,2,3,…..8,9,10,11,12,……..28,29,30</td>
<td></td>
</tr>
<tr>
<td>HVAC recovery time [2-220 minutes]</td>
<td>2,3,4,…..8,9,10,11,……..253,254,255</td>
<td>Determines the time unless an OFF telegram shall be sent after no motion is recognized.</td>
</tr>
</tbody>
</table>

**Sensitivity presence sensor**

<table>
<thead>
<tr>
<th>Sensitivity presence detection</th>
<th>high sensitivity</th>
<th>The sensitivity of the motion sensoric can be adjusted in 3 steps.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean sensitivity (standard)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>reduced sensitivity</td>
<td></td>
</tr>
<tr>
<td>Motion impulse range during retriggering [minimum x times 12ms]</td>
<td>1,2,3,…..5,6,……..253,254,255</td>
<td>Determines the minimum time range for a moving impulse before a following movement shall activate the detection (lighting is already switched ON).</td>
</tr>
<tr>
<td>Motion impulse time range at new movement [minimum x times 12ms]</td>
<td>1,2,3,…..13,14,15,…..253,254,255</td>
<td>Determines the minimum time range for a moving impulse before a following movement shall activate the detection. (follow-up time was already running down).</td>
</tr>
<tr>
<td>Fade out of disturbance after relais switch OFF [x 12ms]</td>
<td>1,2,3,…..40,41,…..253,254,255</td>
<td>During the set time range no movement will be recognized by the sensor after the internal relay switched OFF.</td>
</tr>
</tbody>
</table>
Personal notes:
**INPUT-/OUTPUT-MODULE 1-CHANNEL**

### A

**Characterization:**
- **Input-/Output-Module 1-channel**
- **Type:** IB1DEDA
- **Order-No.:** 80.14.021

### B

**Functional description:**

The input-/output-module is a plug-in module for DIN rail cabinets. It realizes a binary input and output in one module. Input and output are connected to each other (not individually addressable). The slope of the input can be configured. It is switched with a voltage-free pushbutton.

As an output a relay with voltage free normally open and normally closed contact as well as an LED control is available.

The output can be linkaged with two logic channels. If a linkage was selected, the output of the device can only be switched if also the logic linkage was made. If a push-operation at the input was made, the command goes in dependence of the slope direct to the bus.

### C

**Technical data:**

- **EIB supply**
  - **Voltage:** 24V DC (+6V / -4V)
  - **Load capacity:** max. 100mW
- **Input**
  - Voltage-free pushbutton, switch, contact
- **Output**
  - **Relay:**
    - 1 voltage-free normally closed contact
    - 1 voltage-free normally open contact
  - **Nominal voltage:** 250V AC
  - **Nominal current:** 8A (ohmique load)
  - **LED:** for low-power LED max. 1.5mA
  - **Wire length:** max. 100m for control wire 0.5mm², load wire 1.5mm²
  - **Terminals:**
    - EIB via pressure contacts on data rail
    - Screw contacts max.
      - solid wire 2x2.5mm²
      - litz wire with sleeve 2x1.5mm²
- **Dimensions:** WxHxD = 36x90x61mm
- **Weight:** approx. 190gr
- **Mounting:** snap-on on DIN rails
- **Ambient temperature:** 0°C to +45°C
- **Protective class:** II (Protective isolation)
- **Protective type:** IP 20
- **Test mark:** EIB

---

1 When wiring together with other wires or cables the wires and cables must have an insulation voltage of minimum 4000 V (protective extra low-voltage).
**Control components:**

1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton

**ETS-Search path:**

**Product family:** ON/OFF modules
**Product type:** binary/binary

**Characterization:** ON/OFF+ Log. 1-channel, version 1.2

**Number of addresses:** 9
**Number of assignments:** 9

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>channel-/input behaviour</td>
<td>1 bit</td>
<td>channel-/input behaviour</td>
</tr>
<tr>
<td>Object 1</td>
<td>logic channel A</td>
<td>1 bit</td>
<td>logic channel A</td>
</tr>
<tr>
<td>Object 2</td>
<td>logic channel B</td>
<td>1 bit</td>
<td>logic channel B</td>
</tr>
</tbody>
</table>

Description of the component functions as they are pre-adjusted in the data base:

The input-/output module 1-channel operates in its base adjustment in the toggle mode. Through short
circuiting of the input (e.g. through pressing of a pushbutton or closing of a contact) an ascending slope
occurs. If during the adjusted debounce time of 10 ms the state of the input is not changed a telegram is
sent, and the output relay as well as the LED output is activated. When opening the input (e.g. through
releasing of the pushbutton or opening of the contact) a falling slope occurs. This slope is not considered
at this parameter adjustment.

Through a repeated short circuiting of the input again an ascending slope occurs. If during the
debouncing time the state of the input is not changed, in this case an OFF-telegram would be sent. The
output relay opens and the LED output is no longer controlled.

At the respective short circuiting of the input consequently the output always is changed over. The logic
channel has no influence on the output. At a power fail the channel remains unchanged.
### Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment:</th>
<th>Parameter description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debounce time = value x 0,5 ms</td>
<td>0, 1, 2, ..., 19, <strong>20</strong>, 21, ..., 253, 254, 255</td>
<td>In order to be able to evaluate a slope alteration the input in the adjusted debounce time may not be changed. Debounce time = adjustment x 0,5 ms.</td>
</tr>
<tr>
<td>Switching mode channel</td>
<td>rising: on, falling: on or off, rising: toggle, falling: toggle</td>
<td>Determines at which slope an ON or OFF telegram shall be sent. At the adjustment TOGGLE alternating an ON-and OFF telegram would be sent at the adjusted slope.</td>
</tr>
<tr>
<td>Logic connection</td>
<td>no logic connection</td>
<td>Determines if and how the output shall be linked with the logic channels</td>
</tr>
<tr>
<td>Logic channel A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At power fail</td>
<td>Channel switches off</td>
<td>With this parameter the reaction of the component output at a power fail will be adjusted.</td>
</tr>
<tr>
<td>Logic channel B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At power fail</td>
<td>Logic channel B switches off</td>
<td>Adjustment of the reaction of the logic channel B at a power fail.</td>
</tr>
</tbody>
</table>

### Logic channel A switches off

- Logic channel A switches on
- Logic channel A does not change

### Logic channel B switches off

- Logic channel B switches on
- Logic channel B does not change
Personal notes:
INPUT-/OUTPUT-MODULE 2-CHANNELS

A  Characterization:  Input-/Output-Module 2-channels
Type:  IB2DEDA
Order-No. :  80.14.022

B  Functional description:

The input-/output-module is a plug-in module for DIN rail cabinets. It realizes 2 channels with one binary input and output respectively in one module. Input and output of the different channels are connected to each other (not individually addressable). The slope configured inputs are switched with voltage-free pushbuttons.

As an output one relay with voltage free normally open and normally closed contact as well as an LED control is available for each channel.

Each channel can be linked with a joint logic channel. If a linkage was selected, the output can only be switched if also the logic linkage is performed. If a push-operation at the input was made, the command goes in dependence of the slope direct to the bus.

C  Technical data:

EIB supply
Voltage:  24V DC (+6V / -4V)
Load capacity:  max. 100mW
Input per channel
Voltage-free pushbutton, switch, contact 1)

Output per channel
Relay:
  1 voltage-free normally closed contact
  1 voltage-free normally open contact
Nominal voltage:  250V AC
Nominal current:  8A (ohmique load)
LED:  for low-power LED max. 1,5mA 1)
Wire length:  max. 100m for control wire 0,5mm², load wire 1,5mm²
Terminals:  EIB via pressure contacts on data rail
  - solid wire 2x2,5mm²
  - litz wire with sleeve 2x1,5mm²
Dimensions:  WxHxD = 54x90x61mm
Weight:  approx. 250gr
Mounting:  snap-on on DIN rails
Ambient temperature:  0°C to +45°C
Protective class:  II (Protective isolation)
Protective type:  IP 20
Test mark:  EIB

1 When wiring together with other wires or cables the wires and cables must have an insulation voltage of minimum 4000 V (protective extra low-voltage).
Control components:

1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton

ETS-Search path:

Product family: ON/OFF modules
Product type: binary/binary
Characterization: ON/OFF+ Log. 2-channel, version 8.1

Number of addresses: 13
Number of assignments: 13

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>channel 1</td>
<td>1 bit</td>
<td>channel 1</td>
</tr>
<tr>
<td>Object 1</td>
<td>channel 2</td>
<td>1 bit</td>
<td>channel 2</td>
</tr>
<tr>
<td>Object 2</td>
<td>logic channel</td>
<td>1 bit</td>
<td>logic channel</td>
</tr>
</tbody>
</table>

Description of the component functions as they are pre-adjusted in the data base:

The input-/output module for 2-channels operates in its base adjustment in the toggle mode. Through short circuiting of the inputs (e.g. through pressing of a pushbutton or closing of a contact) an ascending slope occurs. If during the adjusted debounce time of 10 ms the state of the input is not changed a telegram is sent, and the output relay as well as the LED output is activated. When opening the input (e.g. through releasing of the pushbutton or opening of the contact) a falling slope occurs. This slope is not considered at this parameter adjustment.

Through a repeated short circuiting of the input again an ascending slope occurs. If during the de-bouncing time the state of the input is not changed, in this case an OFF-telegram would be sent. The output relay opens and the LED output is no longer controlled.

At the respective short circuiting of the input consequently the output always is changed over. The logic channel has no influence on the output. At a power fail the channel remains unchanged.

The parameters of channels 1 and 2 are adjusted identically.
## Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For all inputs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debounce time = value x 0,5 ms</td>
<td>0, 1, 2, ..., 19, 20, 21, ..., 253, 254, 255</td>
<td>In order to be able to evaluate a slope alteration the input in the adjusted debounce time may not be changed. Debounce time = adjustment x 0,5 ms.</td>
</tr>
<tr>
<td><strong>Channel 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switching-Mode Channel 1</td>
<td>rising: on rising: off rising: toggle falling: on falling: off falling: toggle rising: on, falling: off rising: off, falling: on rising: toggle, falling: toggle no function</td>
<td>Determines at which slope an ON or OFF telegram shall be sent. At the adjustment toggle alternating an ON-and OFF telegram would be sent at the adjusted slope.</td>
</tr>
<tr>
<td>Logic connection</td>
<td><strong>no logic connection</strong> Channel 1.OR.logic-channel Channel 1.AND.logic-channel</td>
<td>Determines if and how the output shall be linked with the logic channels</td>
</tr>
<tr>
<td>At power fail</td>
<td>Channel 1 switches OFF Channel 1 switches ON <strong>Channel 1 does not change</strong></td>
<td>With this parameter the reaction of the component output at a power fail will be adjusted.</td>
</tr>
<tr>
<td><strong>Channel 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switching mode channel 2</td>
<td>rising: ON rising: OFF rising: toggle falling: ON Falling: OFF Falling: toggle Rising: ON, falling: OFF Rising: OFF, falling: ON Rising: toggle, falling: toggle No function</td>
<td>Determines at which slope an ON or OFF telegram shall be sent. At the adjustment toggle alternating an ON-and OFF telegram would be sent at the adjusted slope.</td>
</tr>
<tr>
<td>Logic connection</td>
<td><strong>no logic connection</strong> Channel 2.OR.logic-channel Channel 2.AND.logic-channel</td>
<td>Determines if and how the output shall be linked with the logic channels</td>
</tr>
<tr>
<td>At power fail</td>
<td>Channel 2 switches off Channel 2 switches on <strong>Channel 2 does not change</strong></td>
<td>With this parameter the reaction of the component output at a power fail will be adjusted.</td>
</tr>
<tr>
<td><strong>Logic channel</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At power fail</td>
<td><strong>Logic-channel switches off</strong> Logic-channel switches on Logic-channel does not change</td>
<td>Adjustment of the reaction of the logic channel at a power fail.</td>
</tr>
</tbody>
</table>
A  Characterization:  
Type:  
Order-No.:  

B  Functional description:  

The input-/output-module is a plug-in module for DIN rail cabinets. It realizes 4 channels with respectively one binary input and output in one module. Inputs and outputs of the individual channels are connected to each other (not individually addressable). The slopes of the inputs can be configured via voltage-free pushbuttons.

As an output one relay per channel with voltage free normally open and normally closed contact as well as an LED control is available.

C  Technical data:  

EIB supply  
Voltage: 24V DC (+6V / -4V)  
Load capacity: max. 100mW  
Input per channel  
Voltage-free pushbutton, switch, contact

Output per channel  
Relay: 1 voltage-free normally open contact  
1 voltage-free normally closed contact  
Nominal voltage: 250V AC  
Nominal current: 8A (ohmic load)  
LED: for low-power LED max. 1.5mA  
Wire length: max. 100m for control wire 0.5mm², load wire 1.5mm²  
Terminals: EIB via pressure contacts on data rail  
Screw contacts max. - solid wire 2x2.5mm² - litz wire with sleeve 2x1.5mm²

Dimensions: WxHxD = 90x90x61mm  
Weight: approx. 360gr  
Mounting: snap-on on DIN rails  
Ambient temperature: 0°C to +45°C  
Protective class: II (Protective isolation)  
Protective type: IP 20  
Test mark: EIB

1 When wiring together with other wires or cables the wires and cables must have an insulation voltage of minimum 4000 V (protective extra low-voltage).
D

Wiring diagram:

Protective extra low voltage

V1-V4: low power LED (max. 1.5mA)

Input-/Output module 4-channel

IB4DEDA

Voltage-free contacts max. 230V/8A

Control components:
1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton

E

ETS-Search path:

Product - family: ON/OFF modules
Product - type: binary/binary

Characterization: ON/OFF+ Log. 4-channel, version 1.0

Number of addresses: 13
Number of assignments: 13

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>channel 1</td>
<td>1 bit</td>
<td>channel 1</td>
</tr>
<tr>
<td>Object 1</td>
<td>channel 2</td>
<td>1 bit</td>
<td>channel 2</td>
</tr>
<tr>
<td>Object 2</td>
<td>channel 3</td>
<td>1 bit</td>
<td>channel 3</td>
</tr>
<tr>
<td>Object 3</td>
<td>channel 4</td>
<td>1 bit</td>
<td>channel 4</td>
</tr>
</tbody>
</table>
Description of the component functions as they are pre-adjusted in the data base:

The input-/output module with 4-channels operates in its base adjustment in the toggle mode. Through short circuiting of the inputs (e.g. through pressing of a pushbutton or closing of a contact) an ascending slope occurs. If during the adjusted debounce time of 10 ms the state of the input is not changed a telegram is sent, and the output relay as well as the LED output is activated. When opening the input (e.g. through releasing of the pushbutton or opening of the contact) a falling slope occurs. This slope is not considered at this parameter adjustment.

Through a repeated short circuiting of the input again an ascending slope occurs. If during the de-bouncing time the state of the input is not changed, an OFF-telegram would be sent, the output relay opens and the LED output is no longer controlled.

At the respective short circuiting of the input consequently the output always is changed over. At a power fail the channel remains unchanged. The parameters of channels 1 to 4 are adjusted identically.

### Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name:</th>
<th>Parameter adjustment</th>
<th>Parameter description:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For all channels</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debounce time=(\text{value} \times 0,5) ms</td>
<td>0, 1, 2, ..., 19, 20, 21, ..., 253, 254, 255</td>
<td>In order to be able to evaluate a slope alteration the input in the adjusted debounce time may not be changed. Debounce time = adjustment (\times 0,5) ms</td>
</tr>
<tr>
<td><strong>Channel X</strong></td>
<td>The following parameters are individually adjustable for all 4 channels</td>
<td></td>
</tr>
<tr>
<td>Switching-Mode Channel X</td>
<td>rising: on</td>
<td>Determines at which slope an ON or OFF telegram shall be sent.</td>
</tr>
<tr>
<td></td>
<td>rising: off</td>
<td>At the adjustment</td>
</tr>
<tr>
<td></td>
<td><strong>rising: toggle</strong></td>
<td>TOGGLE alternating an ON-and OFF telegram would be sent at the adjusted slope.</td>
</tr>
<tr>
<td></td>
<td>falling: on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>falling: off</td>
<td></td>
</tr>
<tr>
<td></td>
<td>falling: toggle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>rising: on, Falling: off</td>
<td></td>
</tr>
<tr>
<td></td>
<td>rising: off, Falling: on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>rising: toggle, falling: toggle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>no function</td>
<td></td>
</tr>
<tr>
<td><strong>At power fail</strong></td>
<td>Channel X switches off</td>
<td>With this parameter the reaction of the component output at a power fail will be adjusted.</td>
</tr>
<tr>
<td></td>
<td>Channel X switches on</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Channel X does not change</strong></td>
<td></td>
</tr>
</tbody>
</table>
ASSIGNER (ROOM DIVIDER CONTROL)

A  Characterization:  Assigner (Room Divider-control)
    Type:  IBAS
    Order-No.:  80.14.550

B  Functional description:

The Assigner (room divider control) is a plug-in module for DIN rail cabinets. It allows the joint or individual control of rooms which can be separated by room dividers. A voltage free wall contact or a master switch indicates if the room divider is open or closed.

If a room divider is closed the actuators in the individual rooms are controlled by the respective local sensors. If the room divider is opened the sensors would control additionally to the individual room also the actuators in other rooms. The sensors and actuators on the left and right of each room divider consequently are in operation in a parallel mode.

Via a low-power LED the switch condition of the assigner can be indicated. With a voltage-free normally open and normally closed contact of a relay other back indications can be made.

C  Technical data:

EIB supply

| Voltage:       | 24V DC (+6V / -4V) |
| Load capacity: | max. 100mW         |

Input

Voltage-free contact, switch ¹)

Output

Relay:

1 voltage-free normally contact
1 voltage-free normally closed contact

Nominal voltage:

250V AC

Nominal current:

8A (ohmique load)

LED:

for low-power LED max. 1,5mA ¹)

Wire length:

max. 100m for the control wire 0,5mm², load wire 1,5mm²

Terminals:

EIB via pressure contacts on data rail

Screw contacts max. - solid wire 2x2,5mm²
- litz wire with sleeve 2x1,5mm²

Dimensions:

WxHxD = 36x90x61mm

Weight:

approx. 190gr

Mounting:

snap-on on DIN rails

Ambient temperature:

0°C to +45°C

Protective class:

II (Protective isolation)

Protective type:

IP 20

Test mark:

EIB

¹ When wiring together with other wires or cables the wires and cables must have an insulation voltage of minimum 4000 V. (protective extra low-voltage)
D  

Wiring diagram:

Assigner (Room Divider Control)
Typ.: IBAS
Order-No.: 80.14.550

Control components:
1.) LED: Programming-LED
2.) Pushbutton: Programming Pushbutton
ETS-Search path

Product family: Control components
Product type: Assigner

Characterization: Assigner 7-fold 5x 1bit, 1x4bit, 1x1byte Vers.1.3

Number of addresses: 15
Number of assignments: 15

Object description 1:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>ON/OFF side A (1)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 1</td>
<td>ON/OFF side B (1)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 2</td>
<td>ON/OFF side A (2)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 3</td>
<td>ON/OFF side B (2)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 4</td>
<td>ON/OFF side A (3)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 5</td>
<td>ON/OFF side B (3)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 6</td>
<td>ON/OFF side A (4)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 7</td>
<td>ON/OFF side B (4)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 8</td>
<td>ON/OFF side A (5)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 9</td>
<td>ON/OFF side B (5)</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 10</td>
<td>Dimming side A (6)</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 11</td>
<td>Dimming side B (6)</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 12</td>
<td>Scene side A (7)</td>
<td>1 byte</td>
<td>fading</td>
</tr>
<tr>
<td>Object 13</td>
<td>Scene side B (7)</td>
<td>1 byte</td>
<td>fading</td>
</tr>
<tr>
<td>Object 14</td>
<td>Room divider open/closed</td>
<td>1 bit</td>
<td>switching</td>
</tr>
</tbody>
</table>

Description of the component functions as they are pre-adjusted in the data base:

Through the opening of the room divider contact (normally open type) the LED is switched ON and the relay picks up. This means that the room divider is open. The two side by side rooms now are operating in a master mode. For each individual room maximal the values of 7 objects are transmitted. In the standard adjustment of the parameters the objects are "not used" always two objects of one function are assigned, one for side A of the room divider and the other for side B of the room divider. The 7 objects are including 5 objects with the size of 1 bit, 1 object with the size of 4 bits and 1 object with a size of 1 byte. At the 1 bit objects different functions can be selected (ON/OFF; jalousie; dark roller blind; curtain; screen; venetian blind). At the 4 bit object the dimming function can be selected. The 1 byte object can be used for the function of the light level or for the scene control within the Altenburger programmable dimming control system.

The object 14 transmits a telegram at the opening or closure of the room divider. At the opening an ON telegram is sent, at the closing an OFF telegram is sent. This object is suitable for the parallel control of several devices or for the monitoring of the room dividers e.g. in combination with the visualization.

1 The objects are managed in a dynamic mode. Maximal 15 objects and minimal 1 object are available.
2 The objects 0-13 can be selected via the parameters. It is possible to adjust always 2 objects jointly, object 0+1, object 2+3, object 4+5, object 6+7, object 8+9, object 10+11 and object 12+13.
### Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assigner-settings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transmission from side A to side B</td>
<td>disabled</td>
<td>This adjustment indicates if telegrams from side A to side B may be transferred.</td>
</tr>
<tr>
<td></td>
<td>enabled</td>
<td>This adjustment indicates if telegrams from side B to side A may be transferred.</td>
</tr>
<tr>
<td>transmission from side B to side A</td>
<td>disabled</td>
<td>This allows the adjustment of the type of the room divider contact.</td>
</tr>
<tr>
<td></td>
<td>enabled</td>
<td>Open means a closure through a normally closed contact. Closed means closed through a normally open type.</td>
</tr>
<tr>
<td>partition wall contact</td>
<td>open means wall closed close means wall closed</td>
<td></td>
</tr>
<tr>
<td><strong>Object usage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objects 0 and 1 (1 bit) are used for</td>
<td>not used, on/off,</td>
<td>In this case the use of the objects 0 and 1 can be adjusted.</td>
</tr>
<tr>
<td></td>
<td>jalousie, darkening, curtain screen, lamella</td>
<td></td>
</tr>
<tr>
<td>Objects 2 and 3 (1 bit) are used for</td>
<td>not used, on/off,</td>
<td>In this case the use of the objects 2 and 3 can be adjusted.</td>
</tr>
<tr>
<td></td>
<td>Jalousie, darkening, curtain screen, lamella</td>
<td></td>
</tr>
<tr>
<td>Objects 4 and 5 (1 bit) are used for</td>
<td>not used, on/off,</td>
<td>In this case the use of the objects 4 and 5 can be adjusted.</td>
</tr>
<tr>
<td></td>
<td>jalousie, darkening, curtain screen, lamella</td>
<td></td>
</tr>
<tr>
<td>Objects 6 and 7 (1 bit) are used for</td>
<td>not used, on/off,</td>
<td>In this case the use of the objects 6 and 7 can be adjusted.</td>
</tr>
<tr>
<td></td>
<td>jalousie, darkening, curtain screen, lamella</td>
<td></td>
</tr>
<tr>
<td>Object 8 and 9 (1 bit) are used for</td>
<td>not used, on/off,</td>
<td>In this case the use of the objects 8 and 9 can be adjusted.</td>
</tr>
<tr>
<td></td>
<td>jalousie, darkening, curtain screen, lamella</td>
<td></td>
</tr>
<tr>
<td>Object 10 and 11 (4bit) are used for</td>
<td>not used,</td>
<td>In this case the use of the objects 10 and 11 can be adjusted.</td>
</tr>
<tr>
<td></td>
<td>dimming</td>
<td></td>
</tr>
<tr>
<td>Objekt 12 and 13 (1byte) are used for</td>
<td>not used,</td>
<td>In this case the use of the objects 12 and 13 can be adjusted.</td>
</tr>
<tr>
<td></td>
<td>lighting scene (1byte) set value (1byte)</td>
<td></td>
</tr>
</tbody>
</table>
ETS-Search path

Product family: Control components
Product type: Assigner

Characterization: Assigner 7-fold 4x1bit, 3x4bit Vers.1.5

Number of addresses: 15
Number of assignments: 15

Object description 1:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Name Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>ON/OFF side A (1)</td>
<td>1 bit switching</td>
</tr>
<tr>
<td>Object 1</td>
<td>ON/OFF side B (1)</td>
<td>1 bit switching</td>
</tr>
<tr>
<td>Object 2</td>
<td>ON/OFF side A (2)</td>
<td>1 bit switching</td>
</tr>
<tr>
<td>Object 3</td>
<td>ON/OFF side B (2)</td>
<td>1 bit switching</td>
</tr>
<tr>
<td>Object 4</td>
<td>ON/OFF side A (3)</td>
<td>1 bit switching</td>
</tr>
<tr>
<td>Object 5</td>
<td>ON/OFF side B (3)</td>
<td>1 bit switching</td>
</tr>
<tr>
<td>Object 6</td>
<td>ON/OFF side A (4)</td>
<td>1 bit switching</td>
</tr>
<tr>
<td>Object 7</td>
<td>ON/OFF side B (4)</td>
<td>1 bit switching</td>
</tr>
<tr>
<td>Object 8</td>
<td>Dimming side (5)</td>
<td>4 bit dimming</td>
</tr>
<tr>
<td>Object 9</td>
<td>Dimming side B (5)</td>
<td>4 bit dimming</td>
</tr>
<tr>
<td>Object 10</td>
<td>Dimming side A (6)</td>
<td>4 bit dimming</td>
</tr>
<tr>
<td>Object 11</td>
<td>Dimming side B (6)</td>
<td>4 bit dimming</td>
</tr>
<tr>
<td>Object 12</td>
<td>Dimming side A (7)</td>
<td>4 bit dimming</td>
</tr>
<tr>
<td>Object 13</td>
<td>Dimming side B (7)</td>
<td>4 bit dimming</td>
</tr>
<tr>
<td>Object 14</td>
<td>room divider open/closed</td>
<td>1 bit switching</td>
</tr>
</tbody>
</table>

Description of the component functions as they are pre-adjusted in the data base:

Through the opening of the room divider contact (normally open type) the LED is switched ON and the relay picks up. This means that the room divider is open. The two side by side rooms now are operating in a master mode. For each individual room maximal the values of 7 objects are transmitted. In the standard adjustment of the parameters the objects are “not used”. Always two objects of one function are assigned, one for side A of the room divider and the other for side B of the room divider. The 7 objects are including 4 objects with the size of 1 bit and 3 objects with the size of 4 bits. At the 1 bit objects different functions can be selected (ON/OFF; jalousie; dark roller blind; curtain; screen; venetian blind). At the 4 bit object the dimming function can be selected.

The object 14 transmits a telegram at the opening or closure of the room divider. At the opening an ON telegram is sent, at the closing an OFF telegram is sent. This object is suitable for the parallel control of several devices or for the monitoring of the room dividers e.g. in combination with the visualization.

1 The objects are managed in a dynamic mode. Maximal 15 objects and minimal 1 object are available.
2 The objects 0-13 can be selected via the parameters. It is possible to adjust always 2 objects jointly, object 0+1, object 2+3, object 4+5, object 6+7, object 8+9, object 10+11 and object 12+13.
### Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parametereinstellungen:</th>
<th>Parameterbeschreibung:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assigner settings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transmission from side A to side B</td>
<td>disabled</td>
<td>This adjustment indicates if telegrams from side A to side B may be transferred. This adjustment indicates if telegrams from side B to side A may be transferred. Open means a closure through a normally closed contact. Closed means closed through a normally open type.</td>
</tr>
<tr>
<td></td>
<td>enabled</td>
<td></td>
</tr>
<tr>
<td>transmission from side B to side A</td>
<td>disabled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>enabled</td>
<td></td>
</tr>
<tr>
<td>partition wall contact</td>
<td>open means wall closed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>close means wall closed</td>
<td></td>
</tr>
<tr>
<td><strong>Object usage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objects 0 and 1 (1bit) are used for</td>
<td>not used, on/off; jalousie, darkening, curtain, screen, lamella</td>
<td>In this case the use of the objects 0 and 1 can be adjusted.</td>
</tr>
<tr>
<td>Objects 2 and 3 (1bit) are used for</td>
<td>not used, on/off; jalousie, darkening, curtain, screen, lamella</td>
<td>In this case the use of the objects 2 and 3 can be adjusted.</td>
</tr>
<tr>
<td>Objects 4 and 5 (1bit) are used for</td>
<td>not used, on/off; jalousie, darkening, curtain, screen, lamella</td>
<td>In this case the use of the objects 4 and 5 can be adjusted.</td>
</tr>
<tr>
<td>Objects 6 and 7 (1bit) are used for</td>
<td>not used, on/off; jalousie, darkening, curtain, screen, lamella</td>
<td>In this case the use of the objects 6 and 7 can be adjusted.</td>
</tr>
<tr>
<td>Objects 8 and 9 (4bit) are used for</td>
<td>not used</td>
<td>In this case the use of the objects 8 and 9 can be adjusted.</td>
</tr>
<tr>
<td>Objects 10 and 11 (4bit) are used for</td>
<td>not used</td>
<td>In this case the use of the objects 10 and 11 can be adjusted.</td>
</tr>
<tr>
<td>Objects 12 and 13 (4 bit) are used for</td>
<td>not used</td>
<td>In this case the use of the objects 12 and 13 can be adjusted.</td>
</tr>
</tbody>
</table>
ALTENBURGER
PROGRAMMABLE DIMMING CONTROL SYSTEMS

The programmable dimming control systems allows the programming and selection of up to 12 lighting scenes.

The individual circuits can be programmed independently of each other with regard to the brightness, the fade times and the switch conditions on the spot – inside the room where the lighting shall be programmed. The programming normally is made with a handheld infrared programmer. It can however also be made with a visualization at a PC or with special sensors. The lighting scenes can be selected at a programmable scene selector panel (FIB) which also is required for the programming with a handheld IR- or FU-programmer. The scene selection however also can be made with the handheld IR- or FU-transmitter or with any sensors with suitable application. A transit or cleaning light function is already integrated within the programmable system. Both functions can be programmed like a scene selection. The programmable lighting control with the handheld IR or FU-programmer is suitable for the programming of up to 1134 circuits. With the other types of programming the number of actuators is nearly unlimited. The programmable dimming control can be integrated in any complex EIB-system. Thus it can use the advantages of the EIB.

Programmable dimming controls are particularly suitable for hotels, theatres, conference rooms, churches, public buildings and in all other cases where comfortable lighting atmospheres shall be programmed and selected in a quick and uncomplicated mode.

The standard programmable dimming control system comprises the following components:

1. Programmer-switch-dim-actuator IBDA-KP with the device function programmer switch dim actuator:
   The Switch-dim-Actuator is suitable for the control of a lighting group. It comprises the programmable 12 scene memory and a programmable transit/cleaning light function.

2. Programmer-switch-dim-actuator IBDA-kP with the device function programmer switch actuator:
   The IBDA-KP is suitable for the switching of a lighting group. It comprises the programmable 12 scene memory and a programmable transit/cleaning light function. It is suitable for the switching of lighting circuits, jalousies, screens, curtains etc. in dependence of related scenes or they are suitable for the transfer of aforementioned components into their end position.

3. Programmable scene selector panel FIB:
The FIB allows the switching and dimming of the brightness within the programmable dimming system. Up to 12 scenes can be selected. The FIB gives a release for the programming of lighting scenes and transit/cleaning lights. At the programming with a handheld IR-/FU-programmer the FIB is suitable for the control of 18 IBDA-KP. If more than 18 IBDA-KP are to be used additional FIB or extensions of the programmer-panels IBTE-P have to be considered.

4. IR-decoder/programmer unit IBIR-P:

The IBIR-P is suitable for the ON/OFF switching, dimming and scene selection of a programmable dimming control with a handheld IR/FU-transmitter. The programming can be made with a handheld IR/FU-programmer. It programs the 12 scenes of the individual IBDA-KP’s with regard to the brightness, the fade time and the switch positions.
Functions:

System ON/OFF:

Through the system ON/OFF object all IBDA-KP’s with an individual parametrizable “ON-value” are switched ON. The “switch ON value” is a fixed value, a previous value before a switch OFF operation was made or a scene value. This object is responsible for the interlock of the transit/cleaning light function. The operation of the system ON/OFF object is made with the pushbutton “ON/OFF” and the programmable scene selector panel or with the “ON/OFF” keys at the handheld IR- or FU-transmitter.

Dimming:

If in the switched OFF state the pushbutton BRIGHTER “∧” is pressed (independent if at the scene selector panel or at the handheld IR-transmitter) the selected circuits are being switched ON. They are going from the brightness minimum into a brighter light level. The back indication LED within the “ON/OFF” pushbutton of the panel indicates that the system is in operation. By pressing the pushbutton DARKER “∨” the addressed IBDA-KP’s are dimmed down. They can go into their brightness minimum, this means also into the dark position. The system however remains switched ON and the LED within the “ON/OFF” pushbutton of the panel indicates that the system is ON. The fade time for each IBDA-KP can individually be adjusted, independent of the fade times and the scene controls.

Scene-Selection:

Through pressing of the scene selector pushbuttons “1...12” independent if at the control panel or with the handheld IR- or FU-transmitter the different scenes can be selected. The LED’s within the scene pushbuttons at the control panel are indicating the scene being selected. During the selection of a scene the IBDA-KP’s are dimming with the function programmer-switch-dim-actuator within the respective fade time into the adjusted brightness level. If the IBDA-KP’s are used as programmer-switch actuators the selected switch state appears immediately.

Transit-/Cleaning Light:

The transit/cleaning light can be switched in the switched OFF state via EIB-sensors. The addressed IBDA-KP’s are directly jumping to the adjusted transit/cleaning light level. They would not distinguish between the loaded applications. If the system is switched ON the transit/cleaning lights are interlocked. This means the output of the IBDA-P cannot be influenced with these pushbuttons. If after the switch OFF state of the system the previously adjusted state shall be reactivated, the parameter “transit/cleaning state” must be adjusted at an IBDA-KP to “non-changeable”. The transit/cleaning light level can be programmed like a scene for each IBDA-KP individually, however without fade time because the value shall be directly achieved.

Circuit ON/OFF:

Via the circuit object an IBDA-KP can be switched ON with another parametrized “ON value”, as via the system object. The “ON-value” can be a fixed value, the previous value before the switch OFF operation or a scene value. The circuit function is sub-ordinated to the system function. If the value of a system object changes the value of the circuit object always goes with it. In case of changings of a circuit the system however remains unchanged. This allows a quick changing of scenes without a changing of the scene programming.
Programming functions

Through pressing of the “PRO” pushbutton at the programmable scene selector panel the handheld IR-/FU-programmer is released and the panel goes into the programming mode. The LED at the “PRO” pushbutton indicates the function. If further panels or IBTE-P are in operation they also are transferred into the programmer mode.

Circuit Selection:

With this function the different IBDA-KP one after the other can be brought into the programming mode. The handheld IR-/FU-programmer activates the circuits being organized by the programmable panels in an upwards or downwards sequence, depending if the pushbutton circuit selection upwards “∧” or downwards “∨” is pressed. If an IBDA-P is activated the activation is indicated through the blinking of its LED. With the parameter ‘signalizing during programming’ the user additionally can adjust how the output of the IBDA-KP during the signalizing operates. After the signalizing the circuit again goes into the previous value.

The circuit remains so long ready for programming unless a new circuit selection is made and the next circuit is made ready for programming. After the last IBDA-KP has been made ready for programming through the circuit selection upwards “∧” and if such that the last IBDA-KP was made ready for programming the first circuit again signalizes its readiness for programming provided the parameters at the control panel are properly adjusted. The same applies if the pushbutton circuit selection operates downwards “∨”.

In bigger systems the programming through a notebook or touch panel PC is recommended. The programming of scenes in this case can be made without signalizing of circuits.

Programmer dimming:

If a circuit is ready for programming its state can be changed with this function. IBDA-KP with the function programming-switch-dim-actuator can be dimmed BRIGHTER or DARKER. Those with the application programming-switch actuator can be switched ON and OFF.

Fade time:

The fade time is the time being required by a circuit to change from one light level to another one within a scene. For the programming of the fade time the handheld IR/FU-programmer has a numeric row of keys for the programming of fade times between 0 and 9999 seconds. At actuators with the function programming switch actuator the fade time automatically is set to 0 seconds. If the fade time in all scenes and circuits shall be the same it is sufficient if this one fade time is programmed just once at the beginning of the programming. Unless a new fade time is programmed always the same time is stored for each circuit and scene. With a pushbutton “CL” (clear) on the handheld IR-/FU-programmer the fade time can be set to 0 seconds. Wrong storages such can easily be cancelled.

Store:

Through pressing the pushbutton “STORE” on the handheld IR-/FU-programmer the immediate light level with the programmed fade time within the respective scene can be stored. A storage is however only possible for the circuit which is ready for programming.
Programming of lighting scenes with a handheld IR/FU-programmer:

The following example is based on a programmable dimming control system, comprising a programmable scene selector panel (FIB), three dimmable light circuits (circuits 1, 2, 3), one switchable light circuit (circuit 3) and 1 IR-decoder/programmer unit with handheld IR-/FU-programmer and IR-/FU-transmitter.

Programming of Scene 1

1. Pressing of the “PRO” pushbutton at the programmable scene selector panel (FIB) in order to enter the programmer mode (indicated through the LED within the “PRO” pushbutton).
2. Selection of scene 1 at the control panel or the handheld programmer.
3. At the handheld IR/FU-programmer pressing the pushbutton “scene selection upwards”.
   The first circuit signalizes through blinking its readiness for programming.
4. With the keys “BRIGHTER/DARKER” at the IR-/FU-programmer the brightness of the respective circuit within scene 1 can be adjusted.
5. With a pushbutton “CL” (clear) at the IR-/FU-programmer the fade time is set to 0 seconds.
6. With the numeric key row at the IR-/FU-programmer the fade time in seconds is stored. Through pressing of key 5 the fade time is set to 5 seconds. If e.g. the fade time of 15 seconds is required key 1 and then key 5 has to be pressed.
7. The adjusted brightness and the fade time are stored through pressing the key “store” as the value of circuit 1 in scene 1.

8. For the programming of the second circuit the key “circuit selection upwards” is pressed at the IR-/FU-programmer. A blinking indicates that the circuit is ready for programming.
9. With the keys “BRIGHTER/DARKER” the required brightness for the circuit within scene 1 can be adjusted.
10. If the fade time for circuit 2 shall be the same as for circuit 1 the “STORE” key shall be pressed. The fade time for circuit 1 within scene 1 is now stored also for circuit 2. If for circuit 2 another fade time is required, it can be programmed with the numeric key row into the required fade time.

11. For the programming of the third circuit the key “circuit selection upwards” is brought into program readiness. It is signalized through blinking.
12. With the keys “BRIGHTER/DARKER” the switching mode of circuit 3 within scene 1 can be adjusted.
13. With the key “STORE” the required switching state for circuit 3 in scene 1 can be stored.

Programming of further lighting scenes

1. Selection of the scene at the programmable scene selector panel or with the handheld IR-/FU-programmer.
2. All further steps are identical with those under item 1-16.

Finalizing of the programming of lighting scenes

1. After the programming of the last circuit the programming mode is left through pressing the key “PRO” (the LED goes out).
Programming of the transit/cleaning light

1. Switch OFF the programmable dimming control at the control panel or the IR-/FU-programmer.
2. Switch ON the transit/cleaning light.
3. Pressing the “PRO” pushbutton at the control panel in order to enter the program mode (LED indication within the “PRO” pushbutton).
4. Press the key “circuit selection upwards” at the IR-/FU-handheld programmer.
   The first circuit signals its readiness for programming through blinking.
5. With the keys “BRIGHTER/DARKER” the brightness being required for the transit/cleaning light of the respective circuit can be adjusted.
6. Pressing the key “STORE”. The adjusted brightness for transit/cleaning light in circuit 1 is stored.
   A fade time is not stored because the light level for the transit/cleaning light is achieved immediately.
7. For the programming of the second circuit press the key “circuit selection upwards”.
   The readiness for programming is indicated through blinking.
8. With the keys “BRIGHTER/DARKER” the required brightness of the circuit for the transit/cleaning light can be adjusted.
9. Through pressing the “STORE” key the light level for the transit/cleaning light in circuit 2 is stored.
10. For the programming of the third circuit the key “circuit selection upwards” is brought into program readiness.
    It is signalized through blinking.
11. With the keys “BRIGHTER/DARKER” the brightness being required for the transit/cleaning light of the respective circuit can be adjusted.
12. Through pressing the “STORE” key the light level for the transit/cleaning light in circuit 3 is stored.
13. For the programming of the fourth circuit the key “circuit selection upwards” is pressed.
    The readiness for programming is signalized through blinking.
14. With the keys “BRIGHTER/DARKER” the required brightness of the circuit for the transit/cleaning light can be adjusted.
15. Through pressing the “STORE” key the light level for the transit/cleaning light in circuit 4 is stored.

Finalizing of the programming for transit/cleaning light

1. After the programming of the last circuit press the “PRO” key in order to leave the program mode (the LED goes out).
2. Switching the dimming system at the control panel or at the IR/FU-programming ON and then again OFF.
3. The transit/cleaning light now can be switched OFF.
Personal notes:
ALTODIM 600-0/P (Scene)

A  Characterization:  Phase-interval controlled pushdimmer ALTODIM 600-0/P
                     Type:  IBDA600-0/P
                     Order-No.:  80.13.161

B  Functional description:

The ALTODIM 600-0/P is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control the connected load in a phase-interval control mode from 0 to maximum in its brightness. The device is suitable for incandescent lamps as well as low-voltage halogen lamps with electronic transformers with the load capacities between 40 and 600 W/VA. Conventional, wire-wound transformers or inductive loads may not be connected. The load output has an electronic current limiting, a light level reduction in case of an exceeding of a limit temperature and a switch-OFF function at inadmissible high temperatures. As soon as the temperature is cooled down the ALTODIM switches ON again after the functional switch-OFF mode.

The ALTODIM 600-0/P provides additionally to the standard dim functions approximately 25 internal scene memories with fade control from scene to scene and with cleaning light control. The dimmer can be controlled with EIB-pushbutton or touch panels as well as with suitable visualization. It can be controlled as well however with customary pushbutton (230V~) with the functions BRIGHTER-DARKER-ON/OFF.

Internal scenes can be combined for an automatic control to a sequence. This includes for instance a certain order, stop points, repeating etc. The program is made with the ETS software or it can be made in a live operation (real time mode). Two sequences can be stored and selected with the module. When using one sequence up to 10 stop points can be defined and with two sequences 5 stop points for each sequence.

C  Technical data:

EIB supply
  Voltage:  24V DC (+6V / -4V)
  Input:  max. 290mW at 29VDC
External supply
  Voltage:  230V~ 50Hz, DC not permitted
  Own consumption:  <2% of the connected load
Pushbutton input T
  Voltage:  max. 250V~ (pushbutton for power supply)
Output
  Load exit:  600W/VA, 2,6A~
  - electronic current limiting (starting current, overload/short-circuit current)
  - dimming to a lower level in case of the exceeding of a maximum temperature
  - switch-OFF function at a non-permissible high temperature,
    switching-ON again after the cooling down (functional switch OFF)
Minimum load:  40W
Noise:  <25dB(A) at nominal load in a distance of 1 m
Wire length:  max. 100m for load and supply wires 1,5 mm²
Terminals:  EIB via pressure contacts
  Screw contacts  - solid wire  0,2mm² - 2,5mm²
  - litz wire with sleeve  0,2mm² - 1,5mm²
Dimensions:  WxHxD = 72x90x64mm
Weight:  approx. 230g
Mounting:  snap-on on DIN rails, natural cooling at vertical mounting
Ambient temperature:  0°C to +45°C
Protective class:  II (Protective isolation)
Protective type:  IP 20
Test mark:  EIB / KNX, CE
Wiring diagram:

Control components:

1) LED: Programming LED
2) Pushbutton: Programming Pushbutton
ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: 1-Key-Dimmer-Scene RGB, Vers. 2.2

Number of addresses: 51
Number of assignments: 51

Object description:

<table>
<thead>
<tr>
<th>Obj. no.</th>
<th>Object name</th>
<th>Function</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>circuit on/off</td>
<td>switching</td>
<td>1 bit</td>
</tr>
<tr>
<td>1</td>
<td>circuit dimming</td>
<td>dimming</td>
<td>4 bit</td>
</tr>
<tr>
<td>2</td>
<td>circuit set value</td>
<td>set value</td>
<td>1 byte</td>
</tr>
<tr>
<td>3</td>
<td>circuit feedback</td>
<td>sending</td>
<td>1 bit</td>
</tr>
<tr>
<td>4</td>
<td>circuit value feedback</td>
<td>sending</td>
<td>1 bit</td>
</tr>
<tr>
<td>5</td>
<td>system on/off</td>
<td>switching</td>
<td>1 bit</td>
</tr>
<tr>
<td>6</td>
<td>system dimming</td>
<td>dimming</td>
<td>4 bit</td>
</tr>
<tr>
<td>7</td>
<td>system feedback</td>
<td>sending</td>
<td>1 bit</td>
</tr>
<tr>
<td>8</td>
<td>status request</td>
<td>request</td>
<td>1 bit</td>
</tr>
<tr>
<td>10</td>
<td>repeat RGB Sequence 1</td>
<td>repeat sequence</td>
<td>1 bit</td>
</tr>
<tr>
<td>11</td>
<td>repeat RGB Sequence 2</td>
<td>repeat sequence</td>
<td>1 bit</td>
</tr>
<tr>
<td>12</td>
<td>scene A, B</td>
<td>fading</td>
<td>1 bit</td>
</tr>
<tr>
<td>12</td>
<td>RGB player Sequence 1</td>
<td>start sequence</td>
<td>1 bit</td>
</tr>
<tr>
<td>13</td>
<td>scene C, D</td>
<td>fading</td>
<td>1 bit</td>
</tr>
<tr>
<td>13</td>
<td>RGB recorder Sequence 1</td>
<td>learn sequence</td>
<td>1 bit</td>
</tr>
<tr>
<td>14</td>
<td>scene E, F</td>
<td>fading</td>
<td>1 bit</td>
</tr>
<tr>
<td>14</td>
<td>RGB player Sequence 2</td>
<td>start sequence</td>
<td>1 bit</td>
</tr>
<tr>
<td>15</td>
<td>scene G, H</td>
<td>fading</td>
<td>1 bit</td>
</tr>
<tr>
<td>15</td>
<td>RGB recorder Sequence 2</td>
<td>learn sequence</td>
<td>1 bit</td>
</tr>
<tr>
<td>16</td>
<td>store scene</td>
<td>storing / fading</td>
<td>1 byte</td>
</tr>
<tr>
<td>17</td>
<td>scene info</td>
<td>storing</td>
<td>1 byte</td>
</tr>
<tr>
<td>18</td>
<td>store scene</td>
<td>storing</td>
<td>1 bit</td>
</tr>
<tr>
<td>19</td>
<td>transit / cleaning light</td>
<td>switching</td>
<td>1 bit</td>
</tr>
<tr>
<td>20</td>
<td>cleaning light switch status</td>
<td>sending</td>
<td>1 bit</td>
</tr>
<tr>
<td>21</td>
<td>fade time / circuit selection / store scene</td>
<td>fade time / programming</td>
<td>2 byte</td>
</tr>
</tbody>
</table>

General

The application ‘1-key-dimmer-scene RGB’ includes the aforementioned objects and the following parameters, individually to be adjusted (see ‘parametrizing’). Not used objects / parameters are not shown.

The integration of the application into the respective modules, as for instance the ‘EIB push dimmer’ of the ALTODIM/P series allows an easy and low cost lighting control via the EIB-control panels or suitable visualizations.

The great number of possible settings not only standard applications however also individual, specific EIB-projects can be performed.

Scene memory/Scene sequence control

All 25 internal scene memories can be stored and selected with 1-byte-commands. 8 of the 25 scenes can be stored and selected with 1-bit-commands. Through the fading from scene to scene all circuits achieve their final position at the same time such providing for a smooth transition from scene to scene. Internal scenes can be combined for an automatic control to a sequence.
### Parametrizing:

<table>
<thead>
<tr>
<th><strong>Parameter name</strong></th>
<th><strong>Parameter adjustment:</strong> Default values are bold</th>
<th><strong>Parameter description:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Device function</strong>&lt;br&gt;     Device function</td>
<td>Schwitch-dim actuator, Switch actuator</td>
<td>Choose the desired function</td>
</tr>
<tr>
<td><strong>On/Off</strong>&lt;br&gt;     Continuous actuator number</td>
<td>1, 2, 3,……253, 254, 255</td>
<td>Individual circuit- and value back indications are being set to the bus by this delay factor. Through the selection of different actuator numbers it can be avoided that several telegrams are being sent at the same time. 1=+80ms, 2=+160ms, etc.</td>
</tr>
<tr>
<td><strong>Switch on value</strong>&lt;br&gt;     “system on” is</td>
<td>value before switching off 1, 5, 10,……245, 250, 255% Scene 0, 1, 2,……22, 23, 24</td>
<td>At the command system ON the dimmer switches with this value or selects the respective scene ON (object 5).</td>
</tr>
<tr>
<td><strong>Switch on value</strong>&lt;br&gt;     “circuit on” is</td>
<td>Value before switching off 1, 5, 10,……100%...245, 250, 255% Scene 0, 1, 2,……22, 23, 24</td>
<td>At a command individual circuit ON the dimmer switches with this value ON or selects this scene ON (object 0).</td>
</tr>
<tr>
<td><strong>Dimming</strong>&lt;br&gt;     Output maximum [20...100%]</td>
<td>20, 25, 30,……90, 95, 100%</td>
<td>Adjustment of the maximum brightness (limitation of the original value).</td>
</tr>
<tr>
<td><strong>Dimming</strong>&lt;br&gt;     Output minimum [0...80%]</td>
<td>0% (off), 10, 15……70, 75, 80%</td>
<td>Adjustment of the minimum brightness (increasing the original value).</td>
</tr>
<tr>
<td><strong>Dimming</strong>&lt;br&gt;     Speed of the dimmer process (0...100%) [1...255 seconds]</td>
<td>1, 2, 3,……10...253, 254, 255 sec.</td>
<td>Time range which shall be required for the total dimming process (objects 1, 11).</td>
</tr>
<tr>
<td><strong>Dimming</strong>&lt;br&gt;     Fade time “set value” [0...255 seconds]</td>
<td>0, 1, 2,……4...253, 254, 255 sec.</td>
<td>Fade time at value setting from an actual value to a new value (object 2). With the same parameter all circuits independent of their original light levels arrive their new light level at the same time.</td>
</tr>
<tr>
<td><strong>Dimming</strong>&lt;br&gt;     “System dimming” enabled for all dim circuits</td>
<td>switched on dim circuits</td>
<td>Determines if during the dimming of the system only the switched ON circuits shall be operated (object 6).</td>
</tr>
<tr>
<td><strong>Dimming</strong>&lt;br&gt;     At minimum</td>
<td>switch off, not switch off</td>
<td>Determines if the dimmer shall be switched OFF after it has achieved the set brightness minimum level.</td>
</tr>
<tr>
<td><strong>Bus power recurrence</strong>&lt;br&gt;     After bus power recurrence like before bus power, switched off, switched on with config. max-brightness</td>
<td>Determines how the dimmer shall work after the bus-voltage return.</td>
<td></td>
</tr>
</tbody>
</table>
Transit-/Cleaning light status

With this function a pushbutton at a door realizes a passage or a cleaning light level to be selected with an EIB-pushbutton. With the 1 bit object (19) this fixed light level only can be switched ON or OFF if the system is switched OFF. This prevents a disturbance of a regular event.

Transit-/Cleaning light value

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0, 1, 5, 10,...</td>
<td>80%...90, 95, 100%</td>
</tr>
<tr>
<td>not overwrite,</td>
<td>Value at which the dimmer shall switch ON if cleaning light button is pressed (object 19).</td>
</tr>
<tr>
<td>overwrite</td>
<td>Determines that cleaning light value during the download my not be overwritten.</td>
</tr>
</tbody>
</table>

Overwrite cleaning/transit light value with ETS value

<table>
<thead>
<tr>
<th>Presettings scene 0-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brightness scene 0</td>
</tr>
<tr>
<td>0, 1, 5, 10,...20%...90, 95, 100%</td>
</tr>
<tr>
<td>Determines which value appears after scene 0 is selected.</td>
</tr>
</tbody>
</table>

Brightness of scene 1 25%, scene 2 30%, etc. scene 12 100%

Brightness scenes 13-24 100%

Fade time into scene 0 (0-9999 sec.)

0, 1, 2,...4...9998, 9999 sec.

Fade time at scene selection from the actual value into the selected scene value. With the same fade time parameters all circuits arrive their final value at the same time.

Scenes general

Via the 1 byte object (16) all 25 scenes (0-24) directly can be stored and selected. Via the 1 bit object (4) the actual value on the previously adjusted scene (0-24) can be stored.

Erase scene info

standard reset, reset to scene 0

At 'report' the scene number is reported after the scene selection. Via the parameter 'standard reset/reset to scene 0' it now can be decided what has to be set and what has to be selected if via system commands the respective scene is left.

Overwrite scene values with ETS values

not overwrite, overwrite

Determines that the scene values during the download my not be overwritten.

Confirmation of scene storing, cleaning light and circuit selection

light circuit flashes bright / dark

no feedback

Decides, if during programming the light circuit flashes or not.

Scenes A to H

Via the 1 bit objects (12 to 15) 8 free selectable out of the 25 stored scenes or the percentages of 8 output values can be selected. Each scene gets its set fade time range. In this way it is possible to select 8 out of the 25 scenes or additional values via 1 bit commands. Following the scenes A/B (object 12) are described the scenes C/D, E/F, G/H (objects 13, 14, 15) are similar.

Scene A

( object 12 = 0)

call up scene 0, 1, 2..., 23, 24

determine which scene or which value is adjusted after this scene selection.
### Scene B

(ToObject 12 = 1)

**call up scene 1, 0, 1, 2...,23, 24 fade to 0, 1, 5,...90, 95, 100%**

Determines which scene or which value is adjusted after this scene selection.

### Scene filter

**Scene C selection scene 2, scene D selection scene 3, etc.**

Following the scene 0 is explained. Scenes 1-24 are programmed similarly. Enable access to Scene 0. Following the Sequence 1 is explained. Sequence 2 is programmed similarly. Number of color sequences Decides, if the values are saved before download or not..

### Color Control (RGB)

**Access to Scene 0 enable, disable**

Enable access to Scene 0.

**Number of color sequences none, 1 sequence, 2 sequences overwrite, not overwrite**

Decides, if the values are saved before download or not.

### Sequence 1

**Sequence cycles endless, number**

If chosen number, select a number in the field below.

**Number of sequence cycles 1, 2, 3,...254, 255**

Select the number of sequence cycles.

**RGB data type light scene, absolute value**

Call up scenes or absolute values

**Sequence 1 residence time is scene fading time, residence time is time between scene call ups**

This is shown only, if RGB data type is “light scene”.

### Sequence 1

**Residence point 1 value [0...255] 0, 1, 2, 3, ...,253, 254, 255**

Depending on RGB data type, a scene or a absolute value can be chosen.

**Residence point 1 residence time [1-65535 s] 1, 2, 3, ...10...65534, 65535**

Residence time in seconds

### Status request

**Circuit switch status request via object 8 enable, disable**

Enables circuit switch status request via object 8.
ALTODIM 1400-0/P (Scene)

A

Characterization:

Phase-interval controlled pushdimmer ALTODIM 1400-0/P
IBDA1400-0/P
80.13.164

B

The ALTODIM 1400-0/P is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control the connected load in a phase-interval control mode from 0 to maximum in its brightness. The device is suitable for incandescent lamps as well as low-voltage halogen lamps with electronic transformers with the load capacities between 60 and 1400 W/VA. Conventional, wire-wound transformers or inductive loads may not be connected. The load output has an electronic current limiting, a light level reduction in case of an exceeding of a limit temperature and a switch-OFF function at inadmissible high temperatures. As soon as the temperature is cooled down the ALTODIM switches ON again after the functional switch-OFF mode.
The ALTODIM 1400-0/P provides additionally to the standard dim functions approximately 25 internal scene memories with fade control from scene to scene and with cleaning light control. The dimmer can be controlled with EIB-pushbutton or touch panels as well as with suitable visualization. It can be controlled as well however with customary pushbutton (230V~) with the functions BRIGHTER-DARKER-ON/OFF.

Internal scenes can be combined for an automatic control to a sequence. This includes for instance a certain order, stop points, repeatings etc. The program is made with the ETS software or it can be made in a live operation (real time mode). Two sequences can be stored and selected with the module. When using one sequence up to 10 stop points can be defined and with two sequences 5 stop points for each sequence.

C

Technical data:

EIB supply
- Voltage: 24V DC (+6V / -4V)
- Input: max. 290mW at 29VDC

External supply
- Voltage: 230V~ / 50Hz, DC not permitted
- Own consumption: <2% of the connected load

Pushbutton input T
- Voltage: max. 250V~ (pushbutton for power supply)

Output
- Load exit: max. 1400W/VA, 6,1A~
  - electronic current limiting (starting current, overload/short-circuit current)
  - dimming to a lower level in case of the exceeding of a maximum temperature
  - switch-OFF function at a non-permissible high temperature, switching-ON again after the cooling down (functional switch OFF)
- Minimum load: 60W
- Noise: <25dB(A) at nominal load in a distance of 1 m
- Wire length: max. 100m for load and supply wires 1,5 mm²
- Terminals: EIB via pressure contacts
  - Screw contacts - solid wire 0,5mm² - 2,5mm²
  - - litz wire with sleeve 0,5mm² - 2,5mm²
- Dimensions: WxHxD = 175x83,5x58mm
- Weight: approx. 460g
- Mounting: snap-on on DIN rails, natural cooling at vertical mounting
- Ambient temperature: 0°C to +45°C
- Protective class: II (Protective isolation)
- Protective type: IP 20
- Test mark: EIB / KNX, CE

7.2.1.7
Wiring diagram:

Control components:
1) LED: Programming LED
2) Pushbutton: Programming Pushbutton

ETS-Search path:
Product family: Lighting
Product type: Dimmer
Characterization: 1-Key-Dimmer-Scene RGB, Vers. 2.2

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2. See ALTODIM 600-0/P (chapter 7.2.1.3)

Parameter description
The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2. See ALTODIM 600-0/P (chapter 7.2.1.3)
ALTODIM 600/P (Scene)

**A**
Characterization: Phase-controlled pushdimmer ALTODIM 600/P  
Type: IBDA600/P  
Order-No.: 80.13.165

**B**
Functional description:

The ALTODIM 600 is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control the connected load in a phase-control mode from 0 to maximum in its brightness. The device is suitable for the control of incandescent lamps, wire-wound transformers and electrical motors between 40 and 600 W/VA. The total load of the connected devices may not exceed the maximum load of the dimmer. In any case also the power dissipation of the transformers (approximately 15-20%) and of motors as well as their power factor has to be considered. The load output has an electronic current limiting in case of an exceeding of the maximal temperature.

The ALTODIM 600/P provides additionally to the standard dim functions approximately 25 internal scene memories with fade control from scene to scene and with cleaning light control. The dimmer can be controlled with EIB-pushbutton or touch panels as well as with suitable visualization. It can be controlled as well however with customary pushbutton (230V~) with the functions BRIGHTER-DARKER-ON/OFF.

Internal scenes can be combined for an automatic control to a sequence. This includes for instance a certain order, stop points, repeatings etc. The program is made with the ETS software or it can be made in a live operation (real time mode). Two sequences can be stored and selected with the module. When using one sequence up to 10 stop points can be defined and with two sequences 5 stop points for each sequence.

**C**
Technical data:

EIB supply  
Voltage: 24V DC (+6V / -4V)  
Input: max. 290mW at 29VDC

External supply  
Voltage: 230V~ 50Hz, DC not permitted  
Own consumption: <1,5% of the connected load

Pushbutton input T  
Voltage: max. 250V~ (pushbutton for power supply)

Output  
Load exit: 600W/VA, 2,6A~  
electronic current limiting when exceeding the maximum permissible temperature  
Minimum load: 40W/VA

Noise: <30dB(A) at nominal load in a distance of 1 m

Wire length: max. 100m for load and supply wires 1,5 mm²

Terminals: EIB via pressure contacts  
- Screw contacts  
- wire 0,2mm² - 2,5mm²  
- litz wire with sleeve 0,2mm² - 1,5mm²

Dimensions: WxHxD = 72x90x64mm

Weight: approx. 260g

Mounting: snap-on on DIN rails, natural cooling at vertical mounting

Ambient temperature: 0°C to +45°C

Protective class: II (Protective isolation)

Protective type: IP 20

Test mark: EIB / KNX, CE
D Wiring diagram:

Control components:
1) LED: Programming LED
2) Pushbutton: Programming Pushbutton

E ETS-Search path:
Product family: Lighting
Product type: Dimmer
Characterization: 1-Key-Dimmer-Scene RGB, Vers. 2.2

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2. See ALTODIM 600-0/P (chapter 7.2.1.3)

F Parameter description

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2. See ALTODIM 600-0/P (chapter 7.2.1.3)
ALTODIM 1300/P (Scene)

Characterization:
Type: Phase-controlled pushdimmer ALTODIM 1300/P
Order-No.: IBDA1300/P
80.13.162

The ALTODIM 1300 is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control
the connected load in a phase-control mode from 0 to maximum in its brightness. The device is suitable
for the control of incandescent lamps, wire-wound transformers and electrical motors between 60 and
1300 W/VA. The total load of the connected devices may not exceed the maximum load of the dimmer. In
any case also the power dissipation of the transformers (approximately 15-20%) and of motors as well as
their power factor has to be considered. The load output has an electronic current limiting in case of an
exceeding of the maximal temperature.
The ALTODIM 1300/P provides additionally to the standard dim functions approximately 25 internal scene
memories with fade control from scene to scene and with cleaning light control. The dimmer can be
controlled with EIB-pushbutton or touch panels as well as with suitable visualization. It can be controlled
as well however with customary pushbutton (230V~) with the functions BRIGHTER-DARKER-ON/OFF.

Internal scenes can be combined for an automatic control to a sequence. This includes for instance a
certain order, stop points, repeatings etc. The program is made with the ETS software or it can be made
in a live operation (real time mode). Two sequences can be stored and selected with the module. When
using one sequence up to 10 stop points can be defined and with two sequences 5 stop points for each
sequence.

Technical data:
EIB supply
Voltage: 24V DC (+6V / -4V)
Input: max. 290mW at 29VDC

External supply
Voltage: 230V~ / 50Hz, DC not permitted
Own consumption: <1,5% of the connected load

Pushbutton input T
Voltage: max. 250V~ (pushbutton for power supply)

Output
Load exit: max. 1300W/VA, 5,65A~
-electronic current limiting when exceeding the maximum permissible
temperature

Minimum load: 60W

Noise: <30dB(A) at nominal load in a distance of 1 m

Wire length: max. 100m for load and supply wires 1,5 mm²

Terminals: EIB via pressure contacts
Screw contacts - wire 0,5mm² - 2,5mm²
-litz wire with sleeve 0,5mm² - 2,5mm²

Dimensions: WxHxD = 105x83,5x58mm
Weight: approx. 390g
Mounting: snap-on on DIN rails, natural cooling at vertical mounting

Ambient temperature: 0°C to +45°C

Protective class: II (Protective isolation)

Protective type: IP 20

Test mark: EIB / KNX, CE
D  Wiring diagram:

![Wiring Diagram]

Control components:
1) LED: Programmier-LED
2) Pushbutton: Programming Pushbutton

E  ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: 1-Key-Dimmer-Scene RGB, Vers. 2.2

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2 See ALTODIM 600-0/P (chapter 7.2.1.3)

F  Parameter description

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2 See ALTODIM 600-0/P (chapter 7.2.1.3)
A

Characterization: Phase-controlled pushdimmer ALTODIM 2000/P
Type: IBDA2000/P
Order-No.: 80.13.163

B

The ALTODIM 2000 is a plug-in module for DIN rail cabinets. If it receives EIB-telegrams it would control the connected load in a phase-control mode from 0 to maximum in its brightness. The device is suitable for the control of incandescent lamps, wire-wound transformers and electrical motors between 60 and 2000 W/VA. The total load of the connected devices may not exceed the maximum load of the dimmer. In any case also the power dissipation of the transformers (approximately 15-20%) and of motors as well as their power factor has to be considered. The load output has an electronic current limiting in case of an exceeding of the maximal temperature.

The ALTODIM 2000/P provides additionally to the standard dim functions approximately 25 internal scene memories with fade control from scene to scene and with cleaning light control. The dimmer can be controlled with EIB-pushbutton or touch panels as well as with suitable visualization. It can be controlled as well however with customary pushbutton (230V~) with the functions BRIGHTER-DARKER-ON/OFF.

Internal scenes can be combined for an automatic control to a sequence. This includes for instance a certain order, stop points, repetitions etc. The program is made with the ETS software or it can be made in a live operation (real time mode). Two sequences can be stored and selected with the module. When using one sequence up to 10 stop points can be defined and with two sequences 5 stop points for each sequence.

C

Technical data:

EIB supply
Voltage: 24V DC (+6V / -4V)
Input: max. 290mW at 29VDC

External supply
Voltage: 230V~ / 50Hz, DC not permitted
Own consumption: <1,5% of the connected load

Pushbutton input T
Voltage: max. 250V~ (pushbutton for power supply)

Output
Load exit: max. 2000W/VA, 8,7A~
electronic current limiting when exceeding the maximum permissible temperature
Minimum load: 60W
Noise: <30dB(A) at nominal load in a distance of 1 m
Wire length: max. 100m for load and supply wires 1,5 mm²
Terminals: EIB via pressure contacts
Screw contacts - wire 0,5mm² - 2,5mm²
- litz wire with sleeve 0,5mm² - 2,5mm²

Dimensions: WxHxD = 175x83,5x58mm
Weight: approx. 510g
Mounting: snap-on on DIN rails, natural cooling at vertical mounting
Ambient temperature: 0°C to +45°C
Protective class: II (Protective isolation)
Protective type: IP 20
Test mark: EIB / KNX, CE
D: Wiring diagram:

![Wiring Diagram]

Control components:
1) LED: Programming LED
2) Pushbutton: Programming Pushbutton

E: ETS-Search path:

Product family: Lighting
Product type: Dimmer

Characterization: 1-Key-Dimmer-Scene RGB, Vers. 2.2

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application
1-Key-Dimmer Scene RGB, version 2.2 See ALTODIM 600-0/P (chapter 7.2.1.3)

F: Parameter description

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application
1-Key-Dimmer Scene RGB, version 2.2 See ALTODIM 600-0/P (chapter 7.2.1.3)
The KNX Programmer Switch-dim-actuator is suitable for the control of a max. of 100 EVGs with 1...10V interface. With KNX-switch and dim commands the connected ballasts can be switched ON and OFF as well as dimmed. Additionally the dim-actuator stores 25 scenes with fade control from scene to scene and a corridor and cleaning light control. Finally an automatic scene sequence can be programmed and selected (scene sequence control). With the combination of 3 programmable switch—dim-actuators for instance a color sequence control (RGB) can be realized.

---

**C Technical data:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designation</td>
<td>KNX Programmer Switch-Dim-Actuator</td>
</tr>
<tr>
<td>Type</td>
<td>IBDA-KP</td>
</tr>
<tr>
<td>Order-No.</td>
<td>80.14.132</td>
</tr>
<tr>
<td>Power supply</td>
<td>230V AC 50/60Hz</td>
</tr>
<tr>
<td>Own consumption</td>
<td>approx. 2W according to type</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>0° C...45° C</td>
</tr>
<tr>
<td>Relay switching output</td>
<td>Voltage-free relay contact (normally open contact)</td>
</tr>
<tr>
<td>µ contact gap; function switching, no reliable isolation</td>
<td></td>
</tr>
<tr>
<td>Load capacity</td>
<td>Lamp load: max. 250V~/16A~</td>
</tr>
<tr>
<td>Condenser load</td>
<td>max. 200µF</td>
</tr>
<tr>
<td>⇒</td>
<td>43 pcs.* elec. bal. 1 lamp 18W, 35 pcs.* elec. bal. 2 lamp 18W</td>
</tr>
<tr>
<td></td>
<td>35 pcs.* elec. bal. 1 lamp 36W, 25 pcs.* elec. bal. 2 lamp 36W</td>
</tr>
<tr>
<td></td>
<td>25 pcs.* elec. bal. 1 lamp 58W, 17 pcs.* elec. bal. 2 lamp 58W,</td>
</tr>
<tr>
<td>protection</td>
<td>external max. 16A MCB</td>
</tr>
<tr>
<td>Control output</td>
<td>0...10V, 5mA max (active) for altenburger dimmers</td>
</tr>
<tr>
<td></td>
<td>1...10V, 100mA max for EVG</td>
</tr>
<tr>
<td>Pushbutton inlet T</td>
<td>max. 250V (pushbutton for mains)</td>
</tr>
<tr>
<td>Protective class</td>
<td>II (protective isolation)</td>
</tr>
<tr>
<td>Protective type</td>
<td>IP20</td>
</tr>
<tr>
<td>Contamination grade</td>
<td>2 (dry non-conductive)</td>
</tr>
<tr>
<td>Internal display</td>
<td>1xKNX-Programming LED</td>
</tr>
<tr>
<td>Control</td>
<td>1xKNX-Programming pushbutton</td>
</tr>
<tr>
<td>Terminals</td>
<td>screw terminals: solid wire/litz wire with sleeve 0.25-2.5mm²</td>
</tr>
<tr>
<td>Load In- Output</td>
<td>terminals No. (1, 2)</td>
</tr>
<tr>
<td>Power supply</td>
<td>N, L terminals No. (3, 4)</td>
</tr>
<tr>
<td>control input</td>
<td>L, T terminals No. (5, 6)</td>
</tr>
<tr>
<td>control output</td>
<td>+ / - terminals No. (7, 8)</td>
</tr>
<tr>
<td>Max. wire length</td>
<td>100m</td>
</tr>
<tr>
<td>Wire installation</td>
<td>accord. to the general rules of installation, isolation, protection and</td>
</tr>
<tr>
<td></td>
<td>minimum sections to be observed</td>
</tr>
<tr>
<td>Housing</td>
<td>isolated housing (for the mounting on DIN-rail systems)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>WxHxD=72x90x64mm</td>
</tr>
<tr>
<td>Weight</td>
<td>approx.. 210g</td>
</tr>
<tr>
<td>KNX</td>
<td>Contact via WAGO-plug</td>
</tr>
<tr>
<td>Wires</td>
<td>KNX-cable</td>
</tr>
<tr>
<td>KNX-supply</td>
<td>24VDC (+6V/-3V) KNX-power supply</td>
</tr>
<tr>
<td>Own consumption</td>
<td>max 290mW at 29VDC</td>
</tr>
<tr>
<td>Designation</td>
<td>EIB / KNX, CE</td>
</tr>
</tbody>
</table>
**D**

Wiring diagram:

![Wiring Diagram](image-url)

**E**

ETS-Search path:

- **Product family:** Lighting
- **Product type:** Dimmer

**Characterization:** 1-Key-Dimmer-Scene RGB, Vers. 2.2

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2. See ALTODIM 600-0/P (chapter 7.2.1.3)

**F**

Parameter description

The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2. See ALTODIM 600-0/P (chapter 7.2.1.3)
EIB/KNX DALI Switch-Dim-Actuator

A

Characterization: EIB/KNX DALI Switch-Dim-Actuator
Type: IBDA-DP
Order-No.: 80.14.170

B

The EIB/KNX-DALI Switch-dim-actuator is suitable for the control of a max. of 100 DALI-ballasts. The DALI-circuits can be integrated into EIB/KNX-systems. An assignment to groups is not necessary. Each DALI can directly be assigned. The dim-actuator includes already the power supply for the interfaces of the 100 DALI-ballasts.

With EIB/KNX-switch and dim commands the connected ballasts can be switched ON and OFF as well as dimmed. Additionally the dim-actuator stores 25 scenes with fade control from scene to scene and a corridor and cleaning light control. Additionally several scenes can be programmed and selected in a sequence (scene sequence control) with the combination of 3 EIB-KNX DALI-switch-dim-actuators for instance a colour sequence control (RGB) can be realized.

C

Technical data:

<table>
<thead>
<tr>
<th>Designation</th>
<th>: EIB/KNX DALI Switch-Dim-Actuator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>: IBDA-DP</td>
</tr>
<tr>
<td>Order-No.</td>
<td>: 80.14.170</td>
</tr>
<tr>
<td>Power supply</td>
<td>: 110V-240V AC 50/60Hz, 110V-240V DC</td>
</tr>
<tr>
<td>Own consumption</td>
<td>: approx. 0.7 - 5.8W according to type</td>
</tr>
<tr>
<td>protection</td>
<td>: external 16A MCB</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>: 0°C...45°C</td>
</tr>
<tr>
<td>Protective class</td>
<td>: II (protective isolation)</td>
</tr>
<tr>
<td>Protective type</td>
<td>: IP20</td>
</tr>
<tr>
<td>Contamination grade</td>
<td>: 2 (dry non-conductive)</td>
</tr>
<tr>
<td>DALI-interface</td>
<td>: interface accord. to DALI-specification, interface poled.</td>
</tr>
<tr>
<td></td>
<td>Current supply for a max of 100 DALI-ballasts</td>
</tr>
<tr>
<td></td>
<td>approx. 200mA/13V DC (Uo approx. 15V DC)</td>
</tr>
<tr>
<td></td>
<td>- I&lt;250mA DC, max. 22.5V DC</td>
</tr>
<tr>
<td></td>
<td>- electronic current limitation</td>
</tr>
<tr>
<td></td>
<td>- DALI-Interface with basic isolation, no protective low-voltage</td>
</tr>
<tr>
<td>Pushbutton inlet T</td>
<td>: max. 240V (pushbutton for mains)</td>
</tr>
<tr>
<td>internal display-</td>
<td>: 3x LED: display for module states, 1xEIB/KNX-Programmer LED</td>
</tr>
<tr>
<td>Control</td>
<td>: 1xEIB/KNX-Programmer pushbutton</td>
</tr>
<tr>
<td>Terminals</td>
<td>: screw terminals: solid wire/litz wire with sleeve 0,25-2,5mm²</td>
</tr>
<tr>
<td></td>
<td>Power supply : L, N terminals No. (1, 2)</td>
</tr>
<tr>
<td></td>
<td>control input : T terminals No. (3)</td>
</tr>
<tr>
<td></td>
<td>NC : NC terminals No. (4) (may not be used)</td>
</tr>
<tr>
<td></td>
<td>DALI-interface : DA+ DA- terminals No. (7/8, 5/6)</td>
</tr>
<tr>
<td></td>
<td>terminal 7 and 8 are internal connected</td>
</tr>
<tr>
<td></td>
<td>terminal 5 and 6 are internal connected</td>
</tr>
<tr>
<td>Max. wire length</td>
<td>: 100m</td>
</tr>
<tr>
<td></td>
<td>DALI-wires: max. 300m with 1,5mm² or accord. to the following table (distance between IBDA-DP and DALI-ballasts)</td>
</tr>
<tr>
<td>Wire installation</td>
<td>: accord. to the general rules of installation, isolation, protection and minimum sections to be observed</td>
</tr>
<tr>
<td>Housing</td>
<td>: isolated housing (for the mounting on DIN-rail systems)</td>
</tr>
</tbody>
</table>
Dimensions: WxHxD=72x90x64mm (4TE)
Weight: approx.. 200gr
EIB/KNX: Contact via WAGO-plug
Wires: EIB/KNX-cable
EIB/KNX-supply: 24VDC (+6V/-3V) EIB/KNX-power supply
Own consumption: max 290mW at 29VDC
Designation: EIB / KNX, CE, DALI

Expect to mains terminals and the pushbutton input no mains potentials may be connected to the module
All DALI-modules are requiring as minimum a basic isolation

---

D

Wiring diagram:

---

E

ETS-Search path:
Product family: Lighting
Product type: Dimmer

Characterization: 1-Key-Dimmer-Scene RGB, Vers. 2.2
The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2 See ALTODIM 600-0/P (chapter 7.2.1.3)

---

F

Parameter description
The devices ALTODIM 600-0/P, 1400-0/P, 600/P, 1300/P, 2000/P are working with the application 1-Key-Dimmer Scene RGB, version 2.2 See ALTODIM 600-0/P (chapter 7.2.1.3)
**IR-DECODER-/PROGRAMMER UNIT**

**A**

**Characterization:**

**IR-Decoder-/Programmer unit**

**Type:** IBIR-P

**Orde-No.:** 80.14.402

**Accessories:**

- **FU-sensor**
  - Order-No. 52.10.000
- **Handheld FU-transmitter FU12**
  - Order-No. 50.13.550
- **Handheld FU-transmitter FU/PRO**
  - Order-No. 50.13.547
- **IR-sensor**
  - Order-No. 50.13.041
- **Handheld IR-transmitter IR-12**
  - Order-No. 50.13.548
- **Handheld IR-transmitter IR/PRO**
  - Order-No. 50.13.545

**B**

**Functional description:**

The IR-decoder-/programmer unit is a plug-in module for DIN rail cabinets. It converts the electrical signals of the respective IR/FU-sensors into bus-telegrams. With handheld IR/FU-transmitters e.g. ON/OFF switchings, jalousie controls, dimming controls, scene selections, scenes and cleaning light programs etc. can be executed.

Up to 6 IR-pre-amplifier or one FU-pre-amplifier can be connected to one IBIR-P. Also several handheld IR/FU-transmitters can be assigned to one IBIR-P. The required functions of the individual keys as well as the assignment of levels can be adjusted via the EIB-tool software. Via the assignment of levels several IR/FU-transmitters with identical key functions can send different commands to one IBIR-P. With one IBIR-P up to 3 programmable dimming controls as well as additional functions like ON/OFF and jalousies can be operated. For the extension of the functions up to 3 IBIR-P can be connected in parallel to the IR/FU-sensors.

The IR-decoder-/programmer unit has 2 service LED’s. The LED “receipt” indicates the receipt of signals of the IR/FU-sensor. The LED “evaluation” signals the sending of bus-telegrams: the handheld IR/FU-transmitter corresponds with the parametrizing and the respective object is interconnected.

The module additionally has a 12V DC outlet. This outlet can be used for the supply of other modules, e.g. switch-dim actuators 1-10V.

**C**

**Technical data:**

**EIB supply**

- **Voltage:** 24V DC (+6V / -4V)
- **Load capacity:** max. 100mW

**External supply**

- **Voltage:** 230V AC 50/60Hz
- **Power consumption:** approx. 1W

**Input**

- **max. 1 FU-sensor**
- **max. 3 IR-sensors**
- **Basic isolation according to IEC 664 (10/92) no protective extra-low voltage**

**Output**

- **Voltage:** 12V DC
- **Current:** max. 20mA

If several IR-sensors are connected the current is reduced as follows: \[ I = \frac{20 \text{mA}}{3} \times (\text{number of IR-sensors} - 3 \text{mA}) \]
IR-DECODER-/PROGRAMMER UNIT Order-No.: 80.14.402

C

Wire length: max. 100m for control wire 0,5mm², load wire 1,5mm²
Terminals: EIB via pressure contacts
- Screw contacts - solid wire 0,2mm² - 4mm²
- litz wire with sleeve 0,2mm² - 2,5mm²
Dimensions: WxHxD = 72x90x64,5mm
Weight: approx. 200gr
Mounting: snap-on on DIN rails, natural convection at vertical placement of the components
Ambient temperature: 0°C to +45°C
Protective class: II (Protective isolation)
Protective type: IP 20
Test mark: EIB

D

Wiring diagram

Control components:

1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton
3) LED: Input-LED (green)
4) LED: Evaluation -LED (green)
ETS-Search-path:

<table>
<thead>
<tr>
<th>Product family:</th>
<th>Infrared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product type:</td>
<td>Decoder</td>
</tr>
</tbody>
</table>

Characterization: IR-decoder-/programmer unit 3, Vers.3.0

<table>
<thead>
<tr>
<th>Number of addresses:</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of assignments:</td>
<td>22</td>
</tr>
</tbody>
</table>

Object description ¹:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>ON/OFF area 1</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 1</td>
<td>dimming area 1</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 2</td>
<td>ON/OFF area 2</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 3</td>
<td>dimming area 2</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 4</td>
<td>ON/OFF area 3</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 5</td>
<td>dimming area 3</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 6</td>
<td>ON/OFF area 4</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 7</td>
<td>dimming area 4</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 8</td>
<td>ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 9</td>
<td>programming/dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 10</td>
<td>jalousie 1 up/down</td>
<td>1 bit</td>
<td>up/down</td>
</tr>
<tr>
<td>Object 10</td>
<td>circuit 1.1 ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 11</td>
<td>venetian blind 1 open/closed</td>
<td>1 bit</td>
<td>venetian blind/stop</td>
</tr>
<tr>
<td>Object 11</td>
<td>circuit 1.2 ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 12</td>
<td>jalousie 2 up/down</td>
<td>1 bit</td>
<td>up/down</td>
</tr>
<tr>
<td>Object 12</td>
<td>circuit 2.1 ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 13</td>
<td>venetian blind 2 open/closed</td>
<td>1 bit</td>
<td>venetian blind/stop</td>
</tr>
<tr>
<td>Object 13</td>
<td>circuit 2.2 ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 14</td>
<td>jalousie 3 up/down</td>
<td>1 bit</td>
<td>up/down</td>
</tr>
<tr>
<td>Object 14</td>
<td>circuit 3.1 ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 15</td>
<td>venetian blind 3 open/closed</td>
<td>1 bit</td>
<td>venetian blind/stop</td>
</tr>
<tr>
<td>Object 15</td>
<td>circuit 3.2 ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 16</td>
<td>scene area 1</td>
<td>1 byte</td>
<td>fade procedure</td>
</tr>
<tr>
<td>Object 17</td>
<td>scene area 2</td>
<td>1 byte</td>
<td>fade procedure</td>
</tr>
<tr>
<td>Object 18</td>
<td>scene area 3</td>
<td>1 byte</td>
<td>fade procedure</td>
</tr>
<tr>
<td>Object 19</td>
<td>programming / fading /</td>
<td>2 byte</td>
<td>fade time/programming</td>
</tr>
<tr>
<td></td>
<td>circuit/ storage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Object 20</td>
<td>jalousie 4 up/down</td>
<td>1 bit</td>
<td>up/down</td>
</tr>
<tr>
<td>Object 20</td>
<td>circuit 4.1 ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 21</td>
<td>venetian blind 4 open/closed</td>
<td>1 bit</td>
<td>venetian blind/stop</td>
</tr>
<tr>
<td>Object 21</td>
<td>circuit 4.2 ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
</tbody>
</table>

¹ The objects are managed in a dynamic mode. A maximum of 22 objects are available.

² The functions “UP/DOWN” or “venetian blind/stop” of objects 10-15 and 20,21 can be changed to the functions “switching” through respective parameter adjustments. Consequently up to 13 “switching” functions (ON/OFF) are available.
Description of the module functions as they are pre-adjusted in the data base:

The standard adjustment of the parameters corresponds with the operation and programming of a programmable dimming control system. These are the functions: ON/OFF, dimming, scene selection, program dimming and fade time/programming. The codes for the IR-transmitter are parametrized on the standard level 3 while the positions of the keys are parametrized on the Altenburger standard (please refer to our IR/FU-selection and the IR/FU-programmer). The other parameters are not adjusted to any function. Consequently the objects are not displayed.

The FU-transmitter and programmer looks alike the IR parts!
Parametrizing:

Parameter name: Parameter adjustment: Parameter description:

The following 3 parameters must individually be adjusted for any function:

...-keys position at transmitter
(1) Handheld transmitter
Row 1, column 1
Row 1, column 2...5
Row 2, column 1...5
Row 3...7, column 1...5
This determines the position of the key. If the function is to be performed with several keys in this case the position of the keys in the upper left corner of the key board is defined.

...-keys order
(2) Keys vertical
Keys horizontal
For functions with 1-key-operation this parameter can not be adjusted. On functions with 2 keys it can be adjusted how the keys shall be arranged.

...-keys-IR-handheld transmitter-codes
(3) Level 1 (D15) (D14)
Level 2 (D13)
Level 3 (D12)
Level 4 (D11)
Level 5 (D10)
To be adjusted on which level the respective IR-transmitter shall operate.

The areas 1-4 and their parameters are identical. In area 4 an ON/OFF function replaces the function scene.

switching-dimming area 1

selection

combined switch/dim-functions
separate switch/dim function
The required operation of the objects “switching” and “dimming” can be selected.

At combined switch-dim-function

Function of key/keys
1-Key: Brighter-darker-On/Off
(1T)
2-keys: Brighter/On-Darker/Off (2T)
If the objects ’switching’ and “dimming” shall jointly be controlled it has to be adjusted if a 1-pushbutton control or a 2-pushbutton control shall be performed.

At separate switch-dim-functions

Function On/Off
no function
1 key >switching:
On/Off toggle
1 key>press:On
release: Off
2 keys> On-Off
If a separate switch-dim-function shall be obtained it has to be adjusted if and how the ON/OFF function shall be operated.

Function dimming
no function
2 keys brighter-darker
If a separate switch-dim-function shall be obtained it has to be adjusted if and how the dimmer function shall be operated.
### Scene area 1

**Function**
- no function
- **lighting scene**

**Order of keys**
- 1 vertical, 1 horizontal (1 Scene)
- 1 vertical, 2 horizontal (2 Scenes)
- 2 vertical, 1 horizontal (2 Scenes)
- ...
- 6 vertical, 2 horizontal (12 Scenes)

Setting if the scene function shall be activated or not.
With the functions scene through the arrangement of the keys the number of selectable scenes can be selected.
The selector keys are arranged in one field. The shape of this field determines the number of scenes.

### Jalousie area 1/2xOn-Off

**selection**
- no function
- jalousie
- 2 x switch-circuits On/Off

This allows the selection of the required functions for 2 objects. If they are operating as “up/down” and “venetian blind/stop” or as 2x “switching” can be decided.

### For 2 switch circuits On/Off

**Function switch circuit 1.1**
- No function
- 1 key:press:On/-release: off
- **2 keys On/Off**

At the selection of 2 switch circuits ON/OFF it can be adjusted if and how the 1. switch function shall be operated.

**Function switch circuit 1.2**
- no function
- 1 key:press:On/-release: off
- 2 keys On/Off
- 2 keys Off/On

At the selection of 2 switch circuits ON/OFF it can be adjusted if and how the 2. switch function shall be operated.

### On/Off

**Function**
- no function
- **1 key>switching On/Off Toggle**
- 1 key>press:On
- release: Off
- 2 keys > On-Off
- 2 keys > Off-On

It can be adjusted if and how this switch function shall be operated.

### Programmer-dimming

**Function**
- no function
- **2 keys: brighter-darker**

This is to adjust if the dimming function shall be operated.

### Fadetime/circuit selection/storage

**Function**
- no function
- **fade time/circuit selection store**

This is to adjust if this function shall be operated.

**Keys order**
- standard order

This parameter can not be adjusted.
PROGRAMMABLE SCENE SELECTOR PANEL

A
Characterization: Programmable scene selector panel
Type: FIB
Order-No.: 80.14.500

Additional order details:
- Number of required scenes /4,6,8,10,12
- Key switch /S
- Pushbutton “Programming” /Pro
- Wall-recessed housing /UP
- Wall-mounted housing /AP
- Panel faces (materials and colours):
  - Aluminium, natural colour anodized colour code:A
  - Brass colour code:M
  - Other materials and colours on request

Example for an order:
Programmable scene selector panel with 12 scenes and pushbutton “PROGRAMMING” with wall-recessed housing and aluminium anodized panel face:
  FIB /12 /Pro /UP colour code:A

B
Functional description:
The programmable scene selector panel is an integrated component for Altenburger programmable dimming controls to be programmed with handheld IR-programmers.
The FIB is suitable for the selection of 12 scenes, switching ON/OFF as well as BRIGHTER/DARKER. It also releases the possibility to program the individual circuits with the handheld IR-programmer. With the key switch all pushbuttons can be locked. The pushbuttons have an integrated LED back indication (except the pushbuttons for BRIGHTER/DARKER). A back indication of a scene goes out as soon as a scene is changed in its brightness through the pushbuttons BRIGHTER/DARKER.
During the programming of scenes with a handheld IR-programmer the FIB manages the individual circuits. One FIB can manage up to 18 circuits. If in one programmable dimming control system to be programmed with handheld IR-programmer more than 18 shall be integrated either additional FIB’s or an extension of the panel can be considered. It is possible to combine up to 63 FIB’s and IBTE-P with each other.
C

Technical data:

EIB supply
Voltage: 24V DC (+6V / -4V)
Power consumption: max. 150mW

Input
Key switch: Voltage-free contact

Terminals: EIB via plug-connectors

Dimensions
Wall-recessed housing: WxHxD = 200x100x80mm
Weight: approx. 1,1kg
Wall mounted housing: WxHxD = 225x125x80mm
Weight: approx. 1,4kg
Panel face: WxHxD = 220x120x2mm
Mounting: snap-on on DIN rails

Ambient temperature: 0°C to +45°C
Protective class: II (Protective isolation)
Protective type: IP 20
Test mark: EIB

D

Wiring diagram:

Control components:

1) LED: Programming-LED
2) Pushbutton: Programming-Pushbutton
3) On/Off pushbutton with status LED
4) 12 scene pushbuttons with LED back indication
5) Brighter/Darker pushbuttons
6) Programmer pushbutton with LED back indication
7) Optional: key switch
ETS-Search path:

Product family: Lighting
Product type: Dimming

Characterization: Programmable scene selector panel FIB, Vers.3.0

Number of addresses: 46
Number of assignments: 46

Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>programming mode</td>
<td>1 byte</td>
<td>transition of programming mode</td>
</tr>
<tr>
<td>Object 1</td>
<td>system ON/OFF</td>
<td>1 bit</td>
<td>switching</td>
</tr>
<tr>
<td>Object 2</td>
<td>scene</td>
<td>1 byte</td>
<td>fade</td>
</tr>
<tr>
<td>Object 3</td>
<td>master dimming</td>
<td>4 bit</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 4</td>
<td>programming/dimming</td>
<td>4 bit</td>
<td>linkage/IR-decoder</td>
</tr>
<tr>
<td>Object 5</td>
<td>programming/fading/circuit/storage</td>
<td>2 byte</td>
<td>linkage/IR-decoder</td>
</tr>
<tr>
<td>Object 6</td>
<td>ind.circuit/switching/jalousie</td>
<td>1 bit</td>
<td>linkage/ind. circuits</td>
</tr>
<tr>
<td>Object 7</td>
<td>ind.circuit/dimming</td>
<td>4 bit</td>
<td>linkage/ind. circuits</td>
</tr>
<tr>
<td>Object 8</td>
<td>ind. Circuit/fading/circuit/storage</td>
<td>2 byte</td>
<td>linkage/ind. circuits</td>
</tr>
</tbody>
</table>

Object 0 Programming mode: This object is suitable for the communication with parallel operating programmable scene selector panels or panel extensions. As soon as at one of the panels (FIB) the pushbutton “PRO” is pressed the addressed FIB and IBTE-P modules are ready for programming. The transfer of the circuit selection is made via this object.

Object 1 System ON/OFF: This object switches the system ON/OFF

Object 2 Scene: with this objects the scenes 1-12 in the circuits are selected.

Object 3 Master dimming: the switch-dim actuators with the application programmer switch dim-actuator are being controlled with this object into brighter and darker.

Object 4 programming/dimming: this object receives the brighter/darker commands from the handheld IR-programmer. The incoming commands are again transferred during the programming procedure via the object 6 or 7, depending of the parameter adjustment.

Object 5 programming/fading/circuit/storage: this object receives the commands from the handheld IR-programmer with regard to the circuit selection, the fade time and the storage. The incoming commands are being transferred during the programming procedure via the object 8.

Object 6 individual circuit/switching/jalousie: this object would be required for the programming of the scenes and the cleaning light. All objects 0 of the actuators in one system with the application programmer-switch actuator must be linked with this object.

Object 7 individual circuits/dimming: this object is required for the programming of scenes and the cleaning light. All objects 1 of the actuators in one system with the application programmer switch dim-actuator must be linked with this object.

Object 8 individual circuit/fading/circuit/storage: this object is required for the programming of scenes and the cleaning light. All objects 3 of the actuators in one system must be linked with this object.
### Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td>panel settings</td>
<td>1, 2, ..., 62, 63</td>
<td>With this parameter it is adjusted from which FIB or IBTE-P the circuit selection shall be taken. If for instance a programmable dimming control system includes ( \leq 18 ) circuits the “own panel no.” has to be noted. If it consists of more than 18 circuits the number of the following FIB and IBTE-P have to be noted.</td>
</tr>
<tr>
<td>Hands over channel selection to panel-no.</td>
<td>1, 2, ..., 62, 63</td>
<td>With this parameter it is adjusted to which FIB or IBTE-P the circuit selection shall be handed. If for instance a programmable dimming control system includes ( \leq 18 ) circuits the “own panel no.” has to be noted. If it consists of more than 18 circuits the number of the following FIB and IBTE-P have to be noted.</td>
</tr>
<tr>
<td>Number of addressed single circuits (0-18)</td>
<td>0, 1, 2, ..., 17, 18</td>
<td>In this case the number of circuits are noted which shall be managed in this FIB. If the FIB has one programmer pushbutton a minimum of one circuit must be managed.</td>
</tr>
<tr>
<td>Own panel no.</td>
<td>1, 2, ..., 62, 63</td>
<td>The “own panel number” is used for the transfer of the circuit selection during the programming procedure.</td>
</tr>
<tr>
<td>circuit 1-9 (type setting)</td>
<td></td>
<td>The application of the individual actuators which are managed in this FIB has to be noted.</td>
</tr>
<tr>
<td>circuits 10 –18 (type setting)</td>
<td></td>
<td>The programming course of the circuits is determined through the sequence of the group addresses in object 8 of the FIB.</td>
</tr>
<tr>
<td>individual circuit...is used as (applicable for individual circuits 1-9)</td>
<td>switch-dim circuit</td>
<td>switch circuit</td>
</tr>
<tr>
<td>individual circuit...is used as (applicable for individual circuits 10-18)</td>
<td>jalousie circuit</td>
<td>jalousie circuit</td>
</tr>
</tbody>
</table>
EXTENSION OF THE PROGRAMMABLE SCENE SELECTOR PANEL

A  Characterization: Extension of the Programmable scene selector panel 
Type: IBTE-P 
Order-No.: 80.14.161

B  Function description: 
The extension of the programmable scene selector panel IBTE-P is a DIN-rail system which can be integrated into the programmable dimming control system with more than 18 circuits. It is able (as well as the control panel FIB) to program 18 circuits with a handheld IR-programmer.

C  Technical data: 
EIB supply
  Voltage: 24V DC (+6V / -4V) 
  Power consumption: max. 150mW

Terminals: EIB via plug-connectors
Dimensions: WxHxD = 72x90x64,5mm
Weight: approx. 200gr
Mounting: snap-on on DIN rails, air-convection required at vertical placement of the components
Ambient temperature: 0°C to +45°C
Protective class: II (Protective isolation)
Protective type: IP 20
Test mark: EIB
Wiring diagram:

Control components:
1) LED: Programming-LED
2) Pushbutton: Programming Pushbutton
3) LED: Status LED indicating the readiness for programming (green)

ETS-Search-path:
Product family: Lighting
Product type: Dimming
Characterization: programmable scene selector panel FIB, Vers.3.0
Number of addresses: 46
Number of assignments: 46
Object description:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Size</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 0</td>
<td>mode of programming</td>
<td>1 byte</td>
<td>transition of programming mode switching</td>
</tr>
<tr>
<td>Object 1</td>
<td>system ON/OFF</td>
<td>1 bit</td>
<td>fadeing</td>
</tr>
<tr>
<td>Object 2</td>
<td>scene</td>
<td>1 byte</td>
<td>dimming</td>
</tr>
<tr>
<td>Object 3</td>
<td>master dimming control</td>
<td>4 bit</td>
<td>linkage IR-decoder</td>
</tr>
<tr>
<td>Object 4</td>
<td>programming/dimming</td>
<td>4 bit</td>
<td></td>
</tr>
<tr>
<td>Object 5</td>
<td>programming/fade time/ circuit/store</td>
<td>2 byte</td>
<td>linkage IR-decoder</td>
</tr>
<tr>
<td>Object 6</td>
<td>individual circuits/switching/jalousie</td>
<td>1 bit</td>
<td>linkage individual circuit</td>
</tr>
<tr>
<td>Object 7</td>
<td>individual circuit/dimming</td>
<td>4 bit</td>
<td>linkage individual circuit</td>
</tr>
<tr>
<td>Object 8</td>
<td>individual circuit/ fade time/circuit/store</td>
<td>2 byte</td>
<td>linkage individual circuit</td>
</tr>
</tbody>
</table>
Object 0 Programming-Mode: This object is suitable for the communication between parallel operating programmable scene selector panels or panel extensions. If at an FIB-Panel the pushbutton "PRO" is pressed the IBTE-P can be programmed. The circuit selection is made with this object.

Object 1 System ON/OFF: This object is of no importance within this panel.

Object 2 Scene: This object is of no importance within this panel.

Object 3 Master control: This object is of no importance within this panel.

Object 4 Programming/Dimming: this object receives its brighter/darker commands from the handheld IR-programmer. The commands are being sent again via the objects 6 or 7 during the programming procedure depending on the parametrizing.

Object 5 Programming/Fade time/Circuit/Storage: this object receives from the handheld IR-programmer the commands for the circuit selection, the fade time and the storage. The received commands are being sent via the object 8 again during the programming procedure.

Object 6 individual circuits/switching/jalousie control: this object is required for the programming of the scenes and the cleaning light. All objects 0 of the actuators in one system with the application programmer-switch actuator must be interlinked with this object.

Object 7 Individual circuits/dimming: this object is required for the programming of the scenes and the cleaning light. All objects 1 of the actuators in one system with the application programmer-switch actuator must be interlinked with this object.

Object 8 Individual circuits/fade time/circuits/storage: this object is required for the programming of the scenes and the cleaning light. All objects 3 of the actuators in one system with the application programmer-switch actuator must be interlinked with this object.

Parametrizing:

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter adjustment</th>
<th>Parameter description</th>
</tr>
</thead>
<tbody>
<tr>
<td>panel-settings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes over channel selection from panel no.:</td>
<td>1, 2, ..., 62, 63</td>
<td>With this parameter it is adjusted from which FIB or IBTE-P the circuit selection shall be taken. If for instance a programmable dimming control system includes ≤ 18 circuits the &quot;own panel no.&quot; has to be noted. If it consists of more than 18 circuits the number of the following FIB and IBTE-P have to be noted.</td>
</tr>
<tr>
<td>Hands over channel selection to panel-no.:</td>
<td>1, 2, ..., 62, 63</td>
<td>With this parameter it is adjusted to which FIB or IBTE-P the circuit selection shall be handed. If for instance a programmable dimming control system includes ≤ 18 circuits the &quot;own panel no.&quot; has to be noted. If it consists of more than 18 circuits the number of the following FIB and IBTE-P have to be noted.</td>
</tr>
<tr>
<td>Number of addressed single circuits (0-18)</td>
<td>0, 1, 2, ..., 17, 18</td>
<td>In this case the number of circuits are noted which shall be managed in this FIB. If the FIB has one programmer pushbutton a minimum of one circuit must be managed.</td>
</tr>
<tr>
<td>Own panel number</td>
<td>1, 2, ..., 62, 63</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The “own panel number” is used for the transfer of the circuit selection during the programming procedure.

- circuit 1-9 (type setting)
- circuits 10–18 (type setting)

The application of the individual actuators which are managed in this FIB has to be noted.

- individual circuit...is used as (applicable for individual circuits 1-9 / 10-18)
- switch-dim-circuit
- switch circuit
- jalousie circuit

The programming course of the circuits is determined through the sequence of the group addresses in object 8 of the FIB.
VERSIONS OF
ALTENBURGER
PROGRAMMABLE DIMMING CONTROL SYSTEMS

The Altenburger Programmable Dimming Control System allows different control versions. These can be combined in a multi-fold way by each other and can be extended with additional EIB-components.

The following versions are just a selection. For more applications please refer to ALTENBURGER ELECTRONICS.

• Version 1
  Programmable Dimming Control System with individual circuit control and scene selection via a time switch
  • Programmer-switch-dim-actuators and programmer switch actuators
  • IR-decoder/programmer unit
  • Programmable panel and – if required – panel extensions
  • Dim-jalousie sensor for individual circuit controls (ON/OFF, BRIGHTER/DARKER)
  • 1-/2-/4-channel time switches for the time dependent selection of lighting scenes.

• Version 2
  Programmable Dimming Control System with visualization and programming via infrared
  • Programmer-switch-dim-actuators and programmer switch actuators
  • IR-decoder/programmer unit
  • Programmer-control panel extensions
  • Visualization with a PC, a notebook or touch panel PC

• Version 3
  Programmable Dimming Control System with selection and programming via visualization
  • Programmer-switch-dim-actuators and programmer switch actuators
  • Visualization with a PC, a notebook or touch panel PC

• Version 4
  Programmable Dimming Control System with selection via EIB-sensors and programming via scene-storage sensors
  • Programmer-switch-dim-actuators and programmer switch actuators
  • EIB-sensors for ON/OFF, scene selection and master dimming
  • EIB-sensors for individual circuit controls
  • Dim-jalousie sensor as a scene storage sensor

Visualization

With the visualization software layouts with the actual states of the lighting circuits can be displayed. It is possible to visualize control components (pushbuttons, switches, sliding potentiometers) with which the different functions can be operated. Furthermore it is possible to program the lighting system with the visualization and to control the circuits and scenes in a time depending mode. Further functions on request.
Personal notes:
The following description of a smaller project shall indicate how a programmable dimming control is planned.

The project includes the following components:

- 1 IR-Decoder/programmer unit
- 3 Programmer switch-dim-actuators with the device function switch-dim-actuator
- 1 Programmer-switch-dim-actuator with the device function switch actuator
- 1 Programmable scene selector panel
- 1 Extension of the programmable scene selector panel

Functions of the programmable scene selection:

- System ON/OFF with back indication
- Selection of 12 scenes
- Master control (dimming)
- Programming of the scenes
- Transit/cleaning light
- Color Control (RGB)

The addressing should be made exactly according to the enclosed ETS-sample.

During the addressing the following has to be observed:

- The addresses for the dimming objects of all switch dim actuators must be entered in an ascending complete sequence into the address table. If the programmable lighting control includes also switch actuators the addresses for the ON/OFF circuits have to be incorporated into the sequence of the addresses of the dimming objects. The sequence of the addresses determines later in which sequence the circuits can be programmed with the handheld IR-programmer.

- In a following step a number of reserve addresses should be entered in order to reduce the project efforts at possible extensions as far as possible (dimmer-or circuit ON/OFF objects must be entered in an ascending complete mode into the address table).

- Following the addresses for the fade time objects of all actuators also in an ascending complete mode must be entered into the address table. It is important that the addresses being determined for a dimming – or circuit ON/OFF object and fade time object always are placed at the same spot of the sequence of the addresses.

- Following on these addresses again a number of reserve addresses should be entered in order to reduce the project efforts during a possible extension (fade time objects again must be entered in an ascending complete sequence into the address table).

- The addresses of all other objects would not require a defined sequence. On organization reasons we would suggest however to set up the address table always at the same sequence.
Address-Table:

1/1  Dimming switch-dim-actuator 1
1/2  Dimming switch-dim-actuator 2
1/3  Switching switch-actuator 1
1/4  Dimming switch-dim-actuator 3
1/5-1/100  Switching switch-actuator
1/101  Fade time switch-dim-actuator 1
1/102  Fade time switch-dim-actuator 2
1/103  Fade time switch-actuator 1
1/104  Fade time switch-dim-actuator 3
1/105-1/200 Reserve for extensions
1/201  Value-setting switch-dim actuator 1 (prepared for a possible later usage)
1/202  Value-setting switch-dim actuator 2 (prepared for a possible later usage)
1/203  (should not be used on reasons of a better distinctness)
1/204  Value setting switch-dim-actuator 3 (prepared for possible later usage)
1/205  Switching switch-dim-actuator1
1/206  Switching switch-dim-actuator2
1/207  Switching switch-dim-actuator3
1/208-1/300 Reserve for extensions
1/301  Programming mode
1/302  System ON/OFF
1/303  ON/OFF state of the system
1/304  Master dimming
1/305  Scene selection
1/306  Programmer dimming
1/307  Programmer fade time
1/308  Transit/cleaning light
1/309  RGB player 1 start
1/310  RGB player 2 start (prepared for a possible later usage)
1/311  RGB recorder 1 start
1/312  RGB recorder 2 start (prepared for a possible later usage)
1/313  Status request
The objects of the different components are interconnected to each other as follows:

<table>
<thead>
<tr>
<th>Addresses</th>
<th>Switch-dim-actuator 1</th>
<th>Switch-dim-actuator 2</th>
<th>Switch-dim-actuator 3</th>
<th>IR-decoder/programmer unit</th>
<th>Programmable Scene selector panel</th>
<th>Extension of the progr. scene selector panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1</td>
<td>Object 1</td>
<td></td>
<td></td>
<td></td>
<td>Object 7</td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>Object 1</td>
<td></td>
<td></td>
<td></td>
<td>Object 7</td>
<td></td>
</tr>
<tr>
<td>1/3</td>
<td>Object 0</td>
<td></td>
<td></td>
<td></td>
<td>Object 6</td>
<td>Object 7</td>
</tr>
<tr>
<td>1/4</td>
<td></td>
<td>Object 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/5-1/100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/101</td>
<td>Object 3</td>
<td></td>
<td></td>
<td></td>
<td>Object 8</td>
<td></td>
</tr>
<tr>
<td>1/102</td>
<td>Object 3</td>
<td></td>
<td></td>
<td></td>
<td>Object 8</td>
<td></td>
</tr>
<tr>
<td>1/103</td>
<td>Object 3</td>
<td></td>
<td></td>
<td></td>
<td>Object 8</td>
<td></td>
</tr>
<tr>
<td>1/104</td>
<td>Object 3</td>
<td></td>
<td></td>
<td></td>
<td>Object 8</td>
<td></td>
</tr>
<tr>
<td>1/105-1/200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/201</td>
<td>Object 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/202</td>
<td>Object 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/203</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/204</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Object 2</td>
<td></td>
</tr>
<tr>
<td>1/205</td>
<td>Object 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/206</td>
<td>Object 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/207</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Object 0</td>
<td></td>
</tr>
<tr>
<td>1/208-1/300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/301</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Object 0</td>
<td>Object 0</td>
</tr>
<tr>
<td>1/302</td>
<td>Object 6</td>
<td>Object 6</td>
<td>Object 6</td>
<td>Object 0</td>
<td>Object 1</td>
<td>Object 1</td>
</tr>
<tr>
<td>1/303</td>
<td>Object 6</td>
<td></td>
<td></td>
<td>Object 1</td>
<td>Object 1</td>
<td></td>
</tr>
<tr>
<td>1/304</td>
<td>Object 1</td>
<td>Object 1</td>
<td></td>
<td>Object 1</td>
<td>Object 3</td>
<td>Object 3</td>
</tr>
<tr>
<td>1/305</td>
<td>Object 4</td>
<td>Object 4</td>
<td>Object 4</td>
<td>Object 4</td>
<td>Object 16</td>
<td>Object 2</td>
</tr>
<tr>
<td>1/306</td>
<td></td>
<td></td>
<td></td>
<td>Object 16</td>
<td>Object 2</td>
<td>Object 2</td>
</tr>
<tr>
<td>1/307</td>
<td></td>
<td></td>
<td></td>
<td>Object 19</td>
<td>Object 5</td>
<td>Object 5</td>
</tr>
<tr>
<td>1/308</td>
<td>Object 5</td>
<td>Object 5</td>
<td>Object 5</td>
<td>Object 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/309</td>
<td>Object 10+12</td>
<td>Object 10+12</td>
<td></td>
<td>Object 10+12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/310</td>
<td>Object 11+14</td>
<td>Object 11+14</td>
<td></td>
<td>Object 11+14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/311</td>
<td>Object 13</td>
<td>Object 13</td>
<td></td>
<td>Object 13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/312</td>
<td>Object 15</td>
<td>Object 15</td>
<td></td>
<td>Object 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/313</td>
<td>Object 8</td>
<td>Object 8</td>
<td></td>
<td>Object 8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Details for the interlinking of a switch-dim-actuator:

**Object 0**  
**Circuit ON/OFF:**  
- The value of the object can be sent as a status back indication  
- Can be linked to suitable objects of different sensors

**Object 1**  
**Dimming:**  
- to be interlinked with object 7 of the programmable scene selector panel for the adjustment of the brightness of a lighting scene during the programming procedure.  
- Can be linked to suitable objects of different sensors.

**Object 2**  
**Setting of values:**  
- To be interlinked with object 1 of the programmable scene selector panel  
- Can be linked to suitable objects of different sensors.

**Object 5**  
**System ON/OFF:**  
- To be interlinked with object 0 of the programmable scene selector panel  
- Value of the object can be sent as a status back indication  
- Can be linked to suitable objects of different sensors.

**Object 6**  
**System dimming:**  
- To be interlinked for the function of the system dimming with object 3 of the programmable scene selector panel

**Object 8**  
**Status request:**  
- With this object several feedbacks can be requested. The selection of feedbacks which are send, can be selected by parameter.

**Object 10**  
**repeat RGB Sequence start:**  
- To be interlinked with object RGB Player start to repeat a sequenz

**Object 12**  
**RGB Player start:**  
- Can be linked to suitable objects of a pushbutton

**Object 16**  
**Scene store/fading:**  
- To be interlinked with object 2 of the programmable scene selector panel  
- Can be linked to suitable objects of different sensors

**Object 19**  
**Transit-Cleaning light:**  
- To be interlinked with the switch object of the transit/cleaning light pushbutton  
- Can be linked to suitable objects of different sensors

**Object 21**  
**Fade time/Circuit selection:**  
- To be interlinked with object 8 of the programmable scene selector panel  
- For the programming of a lighting scene

**Interlinking of a switch-actuator:**

**Object 0**  
**Circuit ON/OFF:**  
- To be interlinked with object 6 of the programmable scene selector panel for the adjustment of the switching states of a lighting scene during the programming procedure  
- Value of the object can be sent as a status back indication  
- Can be linked to suitable objects of different sensors

**Object 5**  
**Transit-/Cleaning light:**  
- To be interlinked with the switch object of the transit/cleaning light pushbutton  
- Can be linked to suitable object of different sensors

**Object 6**  
**System ON/OFF:**  
- To be interlinked with object 1 of the programmable scene selector panel  
- Value of the object can be sent as a status back indication  
- Can be linked to suitable objects of different sensors

**Object 16**  
**Scene storing/fading:**  
- To be interlinked with object 2 of the programmable scene selector panel  
- Can be linked to suitable objects of different sensors

**Object 21**  
**Fade time/Circuit selection/storage:**  
- To be interlinked with object 8 of the programmable scene selector panel  
- For the programming of a lighting scene
Interlinking of an IR-decoder/Programmer unit:

- **Object 0** ON/OFF Area 1:
  - to be interlinked with object 5 of the switch-dim-actuators and the switch-actuators as system ON/OFF
  - to be interlinked with object 1 of the programmable scene selector panel as system ON/OFF
  - can be interlinked with suitable objects of different actuators

- **Object 1** Dimming Area 1:
  - to be interlinked with object 6 of the switch-dim-actuators for the function of a master dimming control
  - can be interlinked with a suitable object of different actuators

- **Object 9** Programming/dimming:
  - to be interlinked with object 4 of the programmable scene selector panel for the programming via a handheld IR-programmer
  - can be interlinked with suitable objects of different actuators

- **Object 16** Scene Area 1:
  - to be interlinked with object 16 of switch dim actuators and switch actuators

- **Object 19** Programming/Store/Fading/Circuit:
  - to be interlinked with object 5 of the programmable scene selector panel for the programming with the handheld IR-programmer

Interlinking of a programmable scene selector panel and a panel extension:

- **Object 0** Programming-Mode:
  - to be interconnected with object 0 from parallel programmable scene selector panels or panel extensions

- **Object 1** System ON/OFF:
  - to be interlinked with object 5 of the switch dim actuators and the switch actuators

- **Object 2** Scene:
  - to be interlinked with object 16 of the switch dim actuators and switch actuators
  - must not be interlinked at a panel extension

- **Object 3** Master-dimming control:
  - can be interlinked with object 6 of the switch dim-actuator for the functioning “Master dimming control”
  - may not be interlinked for a panel extension

- **Object 4** Programming/dimming:
  - to be interlinked with object 9 of the IR-decoder/programmer unit

- **Object 5** Programming/Fade Time/Circuit/Store:
  - to be interlinked with object 19 of the IR-decoder/programmer unit

- **Object 6** Individual circuit/ Switching/jalousie:
  - to be interlinked with all objects 0 of the switch-actuators within the system

- **Object 7** Individual circuit/dimming:
  - to be interlinked with all objects 1 of all switch dim-actuators within the system

- **Object 8** Individual circuit/Fade Time/circuit/Store:
  - to be interlinked with all objects 21 of the switch dim actuators and switch actuators within the system
Important parameters which have to be observed during the planning of a programmable dimming control system:

- **Device Typ ALTODIM XXXX/P and IBDA-KP and IBDA-DP**

  In connection with this devices within a system, independent of the device function, particularly the following points have to be observed.
  - Altenburger programm option: Only if this parameter is set to „enable“, the object no. 21 is shown.
  - Not used objects / parameters are not shown.
  - System, Szene and Transit-/ Cleaning light feedbacks should only send by one actuator. The feedbacks of the other devices should not interlinked or disabled in the parameter “status request”.

- **IR-Decoder/programmer unit IBIR-P**

  At the IBIR-P it has to be observed that the pushbuttons which are arranged at the same level are not overlapping to another one. Otherwise malfunctions would be possible.

- **Programmable scene selector panels FIB and Panel extensions IBTE-P**

  If a system of a maximum of 18 individual circuits (IBDA-XXX/P) have to be planned the parameters “TAKE” as well as “Assignment circuit selection …” must be adjusted identical with a parameter “own panel number”. In systems with more than 18 IBDA-P additional FIB or IBTE-P are require. In this case all FIB and IBTE-P are being numbered in a sequence at the parameter “own panel number”. The parameter “TAKE” as well “Assignment circuit selection” must be adjusted such that they form with all parameters “own panel number” a kind of circle.

  At “number of addressed individual circuits” it has to be adjusted how many circles in the panel or the panel extension shall be handled. This adjustment is identical with the number of group addresses in object 8.

  The parameter adjustments at a programmable lighting control with for instance 50 IBDA-KP could be as follows:

<table>
<thead>
<tr>
<th>Panel (FIB) no. 1</th>
<th>Panel (FIB or IBTE-P) no. 2</th>
<th>Panel (FIB or IBTE-P) no. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take of circuit selection from panel no. 3</td>
<td>Take of circuit selection from panel no. 1</td>
<td>Take of circuit selection from panel no. 2</td>
</tr>
<tr>
<td>Handing over of panel selection at panel no. 2</td>
<td>Handing over of panel selection at panel no. 3</td>
<td>Handing over of panel selection at panel no. 1</td>
</tr>
<tr>
<td>Number of addressed individual circuits: 18</td>
<td>Number of addressed individual circuits: 18</td>
<td>Number of addressed individual circuits: 14</td>
</tr>
<tr>
<td>Own panel no.: 1</td>
<td>Own panel no.: 2</td>
<td>Own panel no.: 3</td>
</tr>
</tbody>
</table>

7.4.2
Personal notes:
Personal notes:
PLANNING OF AN ALTENBURGER PROGRAMMABLE LIGHTING CONTROL

Personal notes: