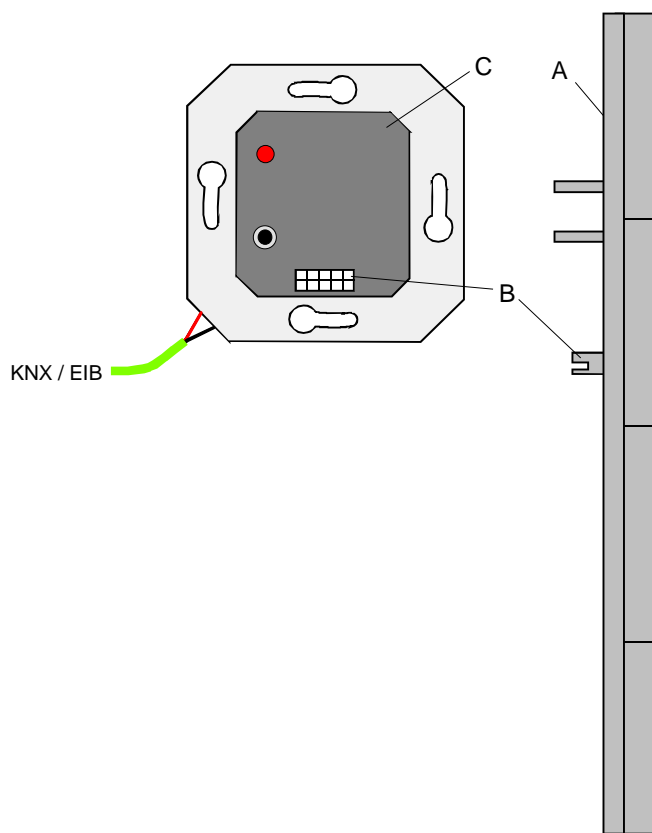


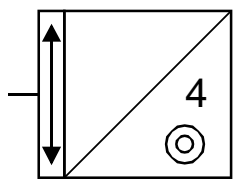
**Light scene push button 8gang
comfort flush-mounted
751688xx**

Technical
Documentation



Product name: Light scene push button 8gang comfort	
Design: flush-mounting type (Up)	
ETS search path: Push button / Push button general / Light scene push button 8gang comfort	
Functional description: When a key is pressed, the light-scene push button 8-gang comfort transmits telegrams via the KNX / EIB causing actuators to perform the corresponding actions. Depending on the loaded application, up to 8 light-scenes can be stored and recalled or 4 telegram sequences with a maximum of 8 outputs generated.	
<p>Layout: e. g. K1</p>	<p>Dimensions: e.g. K1</p> <p>height: 110 mm width: 70 mm depth: 13 mm (without BCU)</p>
Controls:	
<p>A: 4 rockers or 8 push buttons (position: left / right) B: 8 x status LED (red) C: 1 x operation LED (white)</p>	
Technical data	
Type of protection:	IP 20
Safety class:	III
Mark of approval:	KNX / EIB
Ambient temperature:	-5 °C ... +45 °C
Storage / transport temperature:	-25 °C ... +70 °C (storage above +45 °C reduces the service life)
Mounting position:	any
Minimum distances:	none
Type of fastening:	plug-in on flush-mounted bus coupler
instabus EIB supply	
voltage:	21 – 32 V DC (via flush-mounted bus coupling unit)
power consumption:	typically 150 mW
connection:	2 x 5 pole male connector strip
External supply	---

Response to mains failures	
bus voltage only:	no reaction
mains voltage only:	---
bus and mains voltage:	---
Response on return of voltage	
bus voltage only:	no reaction
mains voltage only:	---
bus and mains voltage:	---
Input:	---
Output:	---
Wiring:	Terminal connections:
 <p>A: Light scene push button 8gang comfort B: physical external interface (PEI) C: bus coupling unit (BCU)</p>	
Hardware information	
• ---	

Software description			
ETS search path for light scene push button 8gang comfort:		ETS symbol:	
Push button / Push button general / Light scene push button 8gang comfort			
PEI type	01 _{Hex}	01 _{Dez}	reserved application 106501
	00 _{Hex}	00 _{Dez}	No adapter used application 106401
Applications:			
No.	Summarized description:	Name:	Version:
1	Light scene / dimming	Light scene / dimming 106501	0.1
2	Telegram sequence	Telegram sequence 106401	0.1

**Light scene push button 8gang
comfort flush-mounted
751688xx**

Technical
Documentation



Application:		1. Light scene / dimming 106501			
Executable from mask version:		1.1 onwards			
Number of addresses (max):		22	dynamic table handling	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Number of assignments (max):		22	maximum number of assignments	44	
Communication objects:		20			
Object	Function	Name	Type	Flag	
<input type="checkbox"/> ← 0	Brightness value	Output 1	1 byte	W, C, T	
<input type="checkbox"/> ← 0	Switching	Output 1	1 bit	W, C, T	
<input type="checkbox"/> ← 1	Brightness value	Output 2	1 byte	W, C, T	
<input type="checkbox"/> ← 1	Switching	Output 2	1 bit	W, C, T	
<input type="checkbox"/> ← 2	Brightness value	Output 3	1 byte	W, C, T	
<input type="checkbox"/> ← 2	Switching	Output 3	1 bit	W, C, T	
<input type="checkbox"/> ← 3	Brightness value	Output 4	1 byte	W, C, T	
<input type="checkbox"/> ← 3	Switching	Output 4	1 bit	W, C, T	
<input type="checkbox"/> ← 4	Brightness value	Output 5	1 byte	W, C, T	
<input type="checkbox"/> ← 4	Switching	Output 5	1 bit	W, C, T	
<input type="checkbox"/> ← 5	Brightness value	Output 6	1 byte	W, C, T	
<input type="checkbox"/> ← 5	Switching	Output 6	1 bit	W, C, T	
<input type="checkbox"/> ← 6	Brightness value	Output 7	1 byte	W, C, T	
<input type="checkbox"/> ← 6	Switching	Output 7	1 bit	W, C, T	
<input type="checkbox"/> ← 7	Brightness value	Output 8	1 byte	W, C, T	
<input type="checkbox"/> ← 7	Switching	Output 8	1 bit	W, C, T	
<input type="checkbox"/> 8	Dimming	Output 1	4 bit	C, T	
<input type="checkbox"/> 9	Dimming	Output 2	4 bit	C, T	
<input type="checkbox"/> 10	Dimming	Output 3	4 bit	C, T	
<input type="checkbox"/> 11	Dimming	Output 4	4 bit	C, T	
<input type="checkbox"/> 12	Dimming	Output 5	4 bit	C, T	
<input type="checkbox"/> 13	Dimming	Output 6	4 bit	C, T	
<input type="checkbox"/> 14	Dimming	Output 7	4 bit	C, T	
<input type="checkbox"/> 15	Dimming	Output 8	4 bit	C, T	
<input type="checkbox"/> ← 16	Cascade	Input	1 byte	W, C	
<input type="checkbox"/> ← 17	Extension unit	Input	1 byte	W, C, T	
<input type="checkbox"/> 18	Cascade	Output	1 byte	C, T	
<input type="checkbox"/> ← 19	Lock	In-/Output	1 bit	W, C, T	

Object description

□ 0-7	Brightness value:	1 byte object for setting a defined brightness value between 0 and 255
□ 0-7	Switching:	1 bit object for switching of the load
□ 8-15	Dimming:	4 bit object for relative change of brightness between 0 and 100 %
□ 16	Cascade input:	1 bit input-cascade object for the connection of several light-scene pushbuttons in cascaded operation (Master-Slave).
□ 17	Extension unit:	1 byte object for controlling the light-scene pushbutton from an extension unit
□ 18	Cascading output:	1 bit cascading output object for the connection of several light-scene pushbuttons in cascaded operation (master-slave).
□ 19	Lock:	1 bit object for disableing of the light-scene push button (normal and cascaded operation)

Scope of functions

General

- 2 operating modes: light-scene mode (with and without cascading) and switching/dimming mode
- Operating level switch-over (light-scene mode – switching / dimming mode) by 3-key actuation
- Status indication for each button by means of red LED available
- Operation indication by means of white LED parameterizable
- Disable mode can be activated via object

Light scene

- Recalling and storing of 8 light-scenes with 8 output channels each with keys or from extension (1st operating level)
- Object types 'switching' (1 bit) or 'brightness' (1 byte) parameterizable for each output channel
- Disableing of individual outputs possible
- Transmit delay between two values presettable

Switching / dimming mode

- Switching / dimming mode (single-key operation) for light-scene adjustment (2nd operating level)
- Telegram repetition, transmission of dimming step width and stop telegram parameterizable
- Time after which the long-time operation function is executed presettable
- Change-over time from switching / dimming mode to light-scene functions parameterizable

•Cascading

- Combination of several light-scene push buttons to increase the number of available outputs (cascaded operation)
- Single-run or continuous-run operation in cascade available
- Light scene number can be incremented for continuous operation
- Output delay presettable

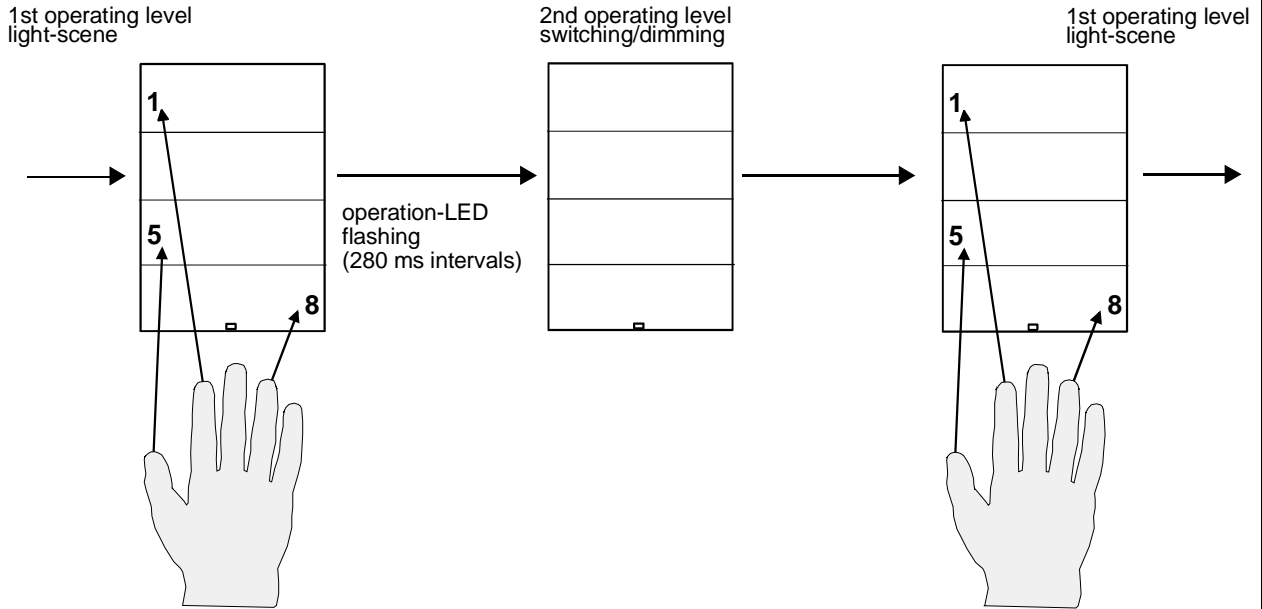
Functional description																	
Operating levels																	
The light-scene push button 8gang comfort has two operating levels offering the following functions depending on parametrization:																	
Operating level 1 (light-scene mode):																	
<u>Light scene without storage function:</u>																	
Key-press	recall light-scene																
<u>Light scene with storage function:</u>																	
Short key-press (< 1 s):	recall light-scene																
Long key-press (> 5 s):	store light-scene																
Key-press (> 1 s - < 5 s):	no function																
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>LSZ 1</td> <td>1</td> <td>2</td> <td>LSZ 2</td> </tr> <tr> <td>LSZ 3</td> <td>3</td> <td>4</td> <td>LSZ 4</td> </tr> <tr> <td>LSZ 5</td> <td>5</td> <td>6</td> <td>LSZ 6</td> </tr> <tr> <td>LSZ 7</td> <td>7</td> <td>8</td> <td>LSZ 8</td> </tr> </table>		LSZ 1	1	2	LSZ 2	LSZ 3	3	4	LSZ 4	LSZ 5	5	6	LSZ 6	LSZ 7	7	8	LSZ 8
LSZ 1	1	2	LSZ 2														
LSZ 3	3	4	LSZ 4														
LSZ 5	5	6	LSZ 6														
LSZ 7	7	8	LSZ 8														
Operating level 2 (Switching / dimming mode):																	
8-channel switching or dimming (single-key operation) for setting or readjusting local light-scenes																	
<u>Object type output = switching (1 bit)</u>																	
Key-press	switching (TOGGLE)																
<u>Object type output = brightness (1 byte) / dimming (4 bits)</u>																	
Short key-press:	switching (TOGGLE)																
Long key-press:	dimming (in opposite direction)																
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Actor 1</td> <td>1</td> <td>2</td> <td>Actor 2</td> </tr> <tr> <td>Actor 3</td> <td>3</td> <td>4</td> <td>Actor 4</td> </tr> <tr> <td>Actor 5</td> <td>5</td> <td>6</td> <td>Actor 6</td> </tr> <tr> <td>Actor 7</td> <td>7</td> <td>8</td> <td>Actor 8</td> </tr> </table>		Actor 1	1	2	Actor 2	Actor 3	3	4	Actor 4	Actor 5	5	6	Actor 6	Actor 7	7	8	Actor 8
Actor 1	1	2	Actor 2														
Actor 3	3	4	Actor 4														
Actor 5	5	6	Actor 6														
Actor 7	7	8	Actor 8														
Setting of local light-scene																	
Prerequisites:																	
<ul style="list-style-type: none"> - "Storage function by local operation" parameter must be set to "enable", - The read flags of the actuator objects to be stored must be set. 																	
For local adjustment of the parametrized light-scenes proceed as follows:																	
<ul style="list-style-type: none"> - switch over to operating level 2: switching / dimming mode ⇒ operation LED flashing, - switch light-scene by pressing the corresponding key, - switch over to operating level 1: light-scene mode ⇒ operation LED permanently lit up, - store local light-scene by long press on the corresponding key (> 5 s), - the status LED of the key pressed lights up during storage. 																	

Operating level switch-over

Changing between operating levels is effected by pressing 3 keys simultaneously (keys 1+5+8). The illustration below explains switching from operating level 1 to level 2 and back.

**switch-over by pressing 3 keys:
press keys 1+5+8 at the same time
for 3 to 8 sec.**

**switch-over by pressing 3 keys:
press keys 1+5+8 at the same time
for 3 to 8 sec.**



Operating level switch-over with automatic switch-back

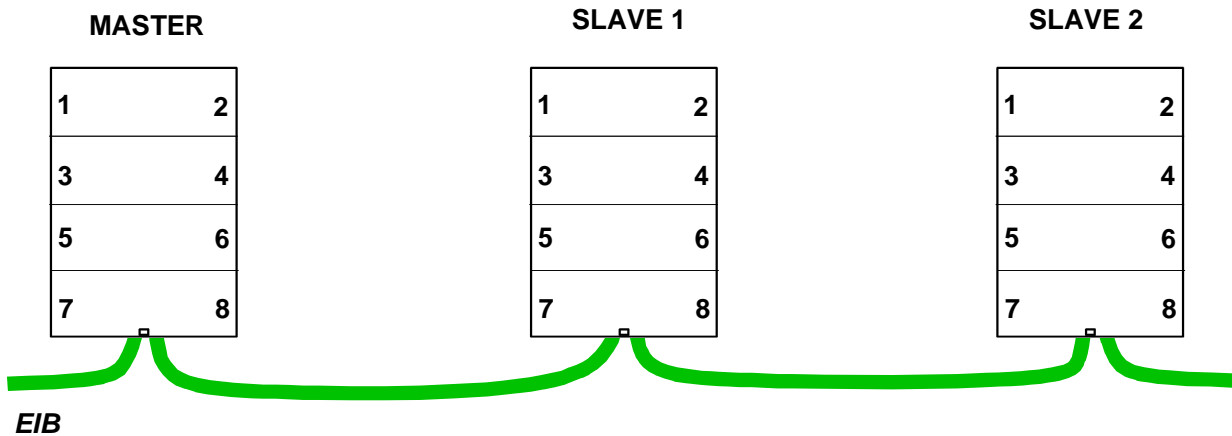
If the "Switch-over time from dimming to light-scene function" parameter is not set to "manual switch-over", operating level 2 (when activated) is automatically switched back to operating level 1 after the preset time.

Cascaded operation

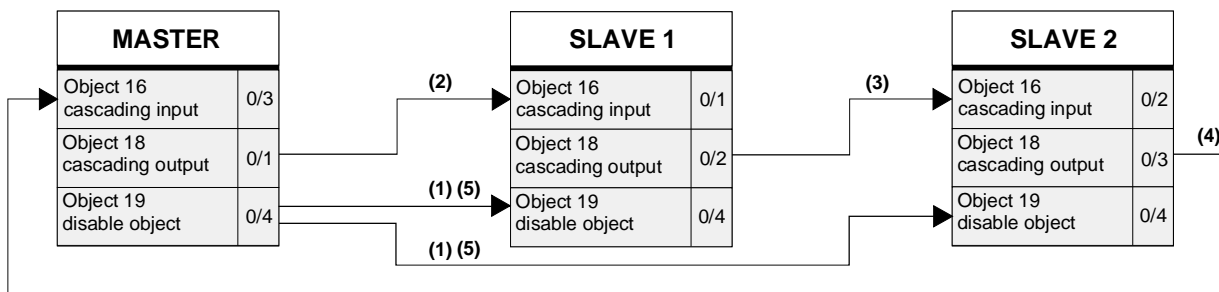
If more than 8 output data channels are required per light-scene, the light-scene push buttons can be cascaded.

This type of operation makes use of the master-slave configuration, i.e. a master unit can be cascaded with several slave units. A device can be parameterized to work as master or as slave.

With local operation of a master, all light-scenes (master and slave) are recalled or stored, if the "Local operation" parameter is not set to "local light-scene". With local operation of a slave, however, only the local light-scenes of the slave are recalled or stored. For storing, the "Storage function with local operation" must be set to "enabled".



For cascading, the units must be connected via the cascading in- and outputs in a ring configuration. Faultless operation of the cascaded units moreover requires that all disable objects are linked with one another by means of the same group address.



Single-loop operation of a cascade (example: 1 master and 2 slaves)

1. Actuation of the master (key-press).
2. The master sends a disable telegram (1) to slave 1 and slave 2.
3. The master transmits the light-scene data.
4. Via the cascading output, the master transmits the corresponding light-scene number (2) to the cascading input of slave 1.
5. Slave 1 transmits the corresponding light-scene data.
6. Via the cascading output, slave 1 transmits the corresponding light-scene number (3) to the cascading input of slave 2.
7. Slave 2 transmits the corresponding light-scene data.
8. Via the cascading output, slave 2 transmits the corresponding light-scene number (4) to the cascading input of the master.
9. Via the disable object, the master transmits an enable telegram (5) to slave 1 and slave 2.

Endless-loop operation


Basically, the endless-loop operation is the same as cascaded operation except that master does not send an enable telegram on receiving the light-scene number from the last slave, but rather his local light-scene data and then the light-scene number on to the next slave.


This cycle repeats itself until a key on the master is pressed or the extension activated (control element must be parameterized for endloss-loop operation). When the master then receives again the light-scene number from the last slave, it will stop its data output as in cascaded operation.


Attention: If the endless-loop operation is to be terminated by a key-press on the master, this can be achieved by pressing any of the keys briefly (< 1 s). If the key is pressed longer, the key-press will be interpreted after the end of an endless-loop operation as a new key-press and thus trigger a new recalling or storing cycle.

In endless-loop operation, the master can be parameterized in such a way that it increments the light-scene number after each loop. In this way, special light effects (e.g. running lights) can be realized with only a few light-sene push buttons which are all assigned to the same groups.

An actuation of the slaves only recalls or stores the local light-scenes.

Parameters		
Description:	Values:	Remarks:
 General		
Function of operating LED	ON OFF	White operation LED lit up when the supply voltage is present (ON) or always off (OFF).
Light duration of the status LEDs at operation indication	0.75 s 2.25 s 3 s	ON-time of a status LED as confirmation of a key-press
Memory function at local operation	disabled enabled	Storage function is disabled for local operation. Light scenes preset on operating level 2 can be stored by a long key-press (> 5 s) on operating level 1.
Operation with cascading	NO YES; master YES; slave	Cascaded operation not activated. Light scene push button working in the cascaded mode as master or slave.
Delay time for light scene transmission (time between two values)	40 ms (instabus recommendation) 60 ms, 80 ms, 100 ms, 200 ms 300 ms (Powerline recommendation) 400 ms, 500 ms, 1 s, 2 s, 4 s	Time between two values of a light-scene.
Switch-over time between dim operation and light-scene operation	Switch-over manually 5 s, 10 s, 15 s, 20s	Time of switching over from operating level 2 (switching / dimming mode) back to operating level 1 (light-scene mode) only manually by pressing 3 keys at the same time. Switching over from operating level 2 (switching / dimming mode) back to level 1 (light-scene mode) is automatic after x seconds.


Parameters		
Description:	Values:	Remarks:
 Object types		
Output 1	Switching (1 bit) Brightness value (1 byte) / Dimming (4 bits)	Setting of data type for output 1.
Output 2		Setting of data type for output 2.
Output 3		Setting of data type for output 3.
Output 4		Setting of data type for output 4.
Output 5	Switching (1 bit) Brightness value (1 byte) / Dimming (4 bits)	Setting of data type for output 5.
Output 6		Setting of data type for output 6.
Output 7		Setting of data type for output 7.
Output 8		Setting of data type for output 8.


Parameters		
Description:	Values:	Remarks:
 Dimming		
Dimming brighter by	100 % 6 % 50 % 3 % 25 % 1.5 % 12.5 %	With a dimming telegram, the brightness can be increased by x % max.
Dimming darker by	100 % 6 % 50 % 3 % 25 % 1.5 % 12.5 %	With a dimming telegram, the brightness can be reduced by x % max.
Telegram repetition	YES NO	Cyclical repetition of dimming telegram during key-press.
Time between two telegrams	200 ms 750 ms 300 ms 1 s 400 ms 1.5 s 500 ms 2 s	Time between two telegrams when telegram repetition is preset. A new dimming telegram is sent whenever this time has elapsed.
Time between switching and dimming base	100 ms 300 ms 500 ms 1 s	Time after which the long key-press function (dimming) is executed. Time = base • factor
Time between switching and dimming Factor (2...127)	2...127, 3	Time after which the long key-press function (dimming) is executed. Default: 130 ms • 3 = 390 ms
Send a stop telegram ?	YES NO	On releasing of the key, a stop telegram is transmitted / no stop telegram is transmitted.

**Light scene push button 8gang
comfort flush-mounted
751688xx**

Technical
Documentation



Parameters			
Description:	Values:	Remarks:	
 Light scene 1	Light scene 3	Light scene 5	Light scene 7
Light scene 2	Light scene 4	Light scene 6	Light scene 8
Output 1	ON	Preset selection for object type parameterization "Switching (1 bit)" for the corresponding output.	
Output 2	OFF		
Output 3	disabled	Preset selection for object type parameterization "Brightness (1 byte) / dimming (4 bits)" for the corresponding output.	
Output 4	disabled		
	OFF		
	Basic brightness		
	10 % brightness		
	20 % brightness		
	25 % brightness		
	30 % brightness		
	40 % brightness		
	50 % brightness		
	60 % brightness		
	70 % brightness		
	75 % brightness		
	80 % brightness		
	90 % brightness		
	100 % brightness		
Output 5	ON	Preset selection for object type parameterization "Switching (1 bit)" for the corresponding output.	
Output 6	OFF		
Output 7	disabled	Preset selection for object type parameterization "Brightness (1 byte) / dimming (4 bits)" for the corresponding output.	
Output 8	disabled		
	OFF		
	Basic brightness		
	10 % brightness		
	20 % brightness		
	25 % brightness		
	30 % brightness		
	40 % brightness		
	50 % brightness		
	60 % brightness		
	70 % brightness		
	75 % brightness		
	80 % brightness		
	90 % brightness		
	100 % brightness		

Parameters		
Description:	Values:	Remarks:
 Cascading		
Local operation	<p>Local light-scene</p> <p>One time cascade cycle</p> <p>Unending cascade cycle</p>	<p>When a recall key is pressed, the light-scene push button only outputs its local light-scene.</p> <p>When a recall key is pressed, the light-scene push button at first only outputs its local light-scene. Thereafter, it transmits the corresponding light-scene number via the cascading output to the next slave (setting possible only if parameterized as "master").</p> <p>When a recall key is pressed and when a light-scene number is received from the last slave, the light-scene push button at first only outputs its local light-scene. Thereafter, it transmits the corresponding light-scene number via the cascading output to the next slave (setting possible only if parameterized as "master").</p>
Operation via extension unit	<p>Local light-scene</p> <p>One time cascade cycle</p> <p>Unending cascade cycle</p>	<p>When an extension unit is operated, the light-scene push button only outputs its local light-scene.</p> <p>On operation of the extension unit, the light-scene push button at first only outputs its local light-scene. Thereafter, it transmits the corresponding light-scene number via the cascading output to the next slave (setting possible only if parameterized as "master").</p> <p>After operation from an extension unit, the light-scene push button at first only outputs its local light-scene when a recall key is pressed or when a light-scene number is being received from the last slave. Thereafter, it transmits the corresponding light-scene number via the cascading output to the next slave (setting possible only if parameterized as "master").</p>
Increment light-scene	<p>NO</p> <p>YES</p>	<p>In unending cascade cycle, the master retains the current light-scene number after each loop.</p> <p>In unending cascade cycle, the master increments the light-scene number after each loop.</p>
Delay time of output signal base	100 ms ; 1 s; 10 s; 1 min; 10 min	Time between output of own light-scene and transmission to cascading output.
Delay time of output signal factor (0...255)	0...255, 2	Output delay = basis • factor Time between output of own light-scene and transmission to cascading output. Default value = 100 ms · 2 ≈ 200 ms
Software remarks		
<ul style="list-style-type: none"> • On return of bus voltage, operating level 2 (if activated) will be switched back to operating level 1. 		

Application:		2. Telegram sequence 106401		
Executable from mask version:		1.1		
Number of addresses (max):		10	dynamic table handling	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Number of assignments (max):		10	maximum length of table	20
Communication objects:		10		
Object	Function	Name	Type	Flag
<input type="checkbox"/> ← 0	Switching	Output 1	1 bit	W, C, T
<input type="checkbox"/> ← 0	Value transmitter 1 byte	Output 1	1 byte	W, C, T
<input type="checkbox"/> ← 0	Value transmitter 2 bytes	Output 1	2 bytes	W, C, T
<input type="checkbox"/> ← 1	Switching	Output 2	1 bit	W, C, T
<input type="checkbox"/> ← 1	Value transmitter 1 byte	Output 2	1 byte	W, C, T
<input type="checkbox"/> ← 1	Value transmitter 2 bytes	Output 2	2 bytes	W, C, T
<input type="checkbox"/> ← 2	Switching	Output 3	1 bit	W, C, T
<input type="checkbox"/> ← 2	Value transmitter 1 byte	Output 3	1 byte	W, C, T
<input type="checkbox"/> ← 2	Value transmitter 2 bytes	Output 3	2 bytes	W, C, T
<input type="checkbox"/> ← 3	Switching	Output 4	1 bit	W, C, T
<input type="checkbox"/> ← 3	Value transmitter 1 byte	Output 4	1 byte	W, C, T
<input type="checkbox"/> ← 3	Value transmitter 2 bytes	Output 4	2 bytes	W, C, T
<input type="checkbox"/> ← 4	Switching	Output 5	1 bit	W, C, T
<input type="checkbox"/> ← 4	Value transmitter 1 byte	Output 5	1 byte	W, C, T
<input type="checkbox"/> ← 4	Value transmitter 2 bytes	Output 5	2 bytes	W, C, T
<input type="checkbox"/> ← 5	Switching	Output 6	1 bit	W, C, T
<input type="checkbox"/> ← 5	Value transmitter 1 byte	Output 6	1 byte	W, C, T
<input type="checkbox"/> ← 5	Value transmitter 2 bytes	Output 6	2 bytes	W, C, T
<input type="checkbox"/> ← 6	Switching	Output 7	1 bit	W, C, T
<input type="checkbox"/> ← 6	Value transmitter 1 byte	Output 7	1 byte	W, C, T
<input type="checkbox"/> ← 6	Value transmitter 2 bytes	Output 7	2 bytes	W, C, T
<input type="checkbox"/> ← 7	Switching	Output 8	1 bit	W, C, T
<input type="checkbox"/> ← 7	Value transmitter 1 byte	Output 8	1 byte	W, C, T
<input type="checkbox"/> ← 7	Value transmitter 2 bytes	Output 8	2 bytes	W, C, T
<input type="checkbox"/> ← 8	Extension unit	Input	1 byte	W, C, T
<input type="checkbox"/> 9	Alarm message	User module	1 bit	C, T

Object description

□ 0-7	Switching:	1-bit object for switching of a load
□ 0-7	Value transmitter 1 byte:	1-byte object for value transmit applications (0-255)
□ 0-7	Value transmitter 2 bytes:	2-byte object for value transmit applications (0-65535)
□ 8	Extension unit:	1-byte object for control of light-scene push button from extension unit
□ 9	Alarm message:	1-bit object for transmission of alarm message

Scope of functions

Telegram sequence

- 4 telegram sequences with up to 8 outputs respectively
- Object types supported: 1 bit, 1 byte, 2 bytes
- Operation from extension unit possible
- Storage function for value selectable by long key-press
- Succession of telegrams and all times between telegrams individually parameterizable
- Multiple repetition of telegram sequences and cascading of telegram sequences possible
- Alarm message after withdrawal of device from flush-mounted bus coupler parameterizable
- Disable function by 4-digit parametrizable key code

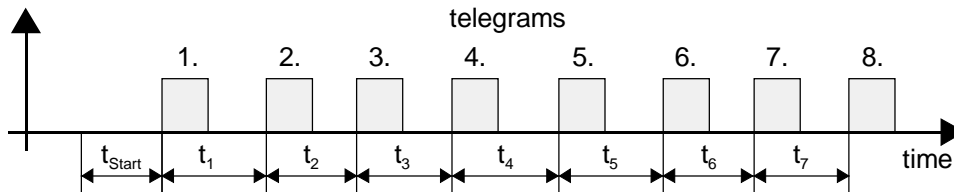
General

- Status indication for each key by red LED
- Operation indication by white LED parameterizable

Functional description

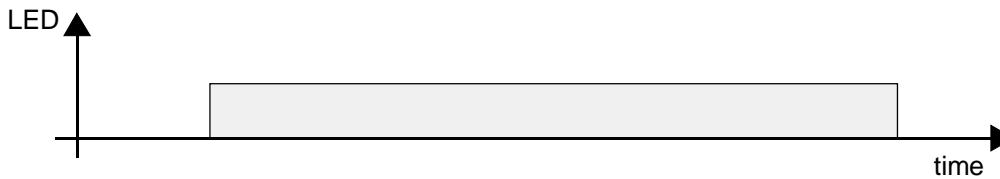
Telegram sequence and function of status LED

The telegram sequence application permits generating a maximum of 4 telegram sequences with up to 8 telegrams each (1 bit, 1 byte or 2 bytes). All times between telegrams can be parameterized. The following illustration shows an example of a sequence consisting of 8 telegrams and the behaviour of the status LED:

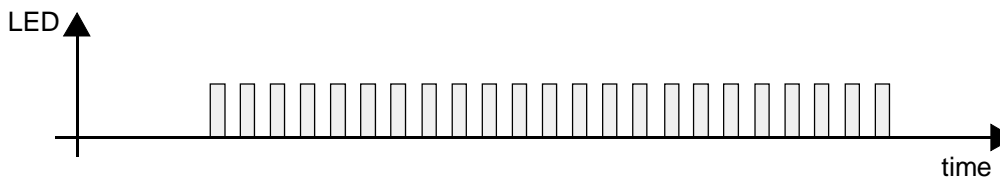


- t_{Start} = time until 1st telegram
- t_1 = time between time 1st and 2nd telegram
- t_2 = time between time 2nd and 3rd telegram
- t_3 = time between time 3rd and 4th telegram
- t_4 = time between 4th and 5th telegram
- t_5 = time between 5th and 6th telegram
- t_6 = time between 6th and 7th telegram
- t_7 = time between 7th and 8th telegram

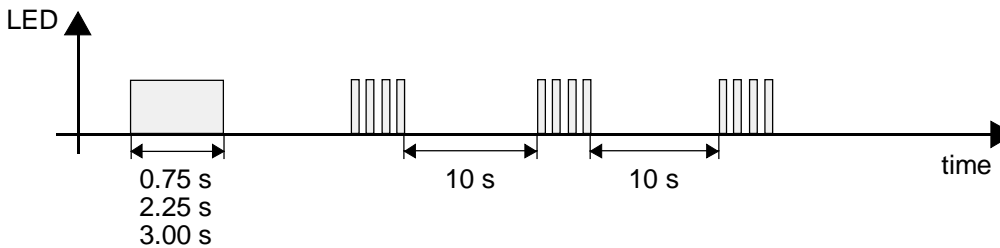
- 1.) Function of status LED: status indication
Status indication flashing: NO



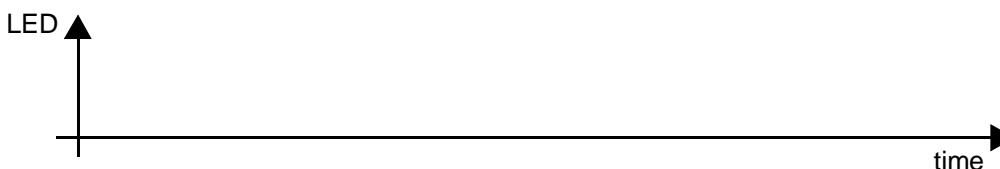
- 2.) Function of status LED: status indication
Status indication flashing: YES



- 3.) Function of status LED: operation indication



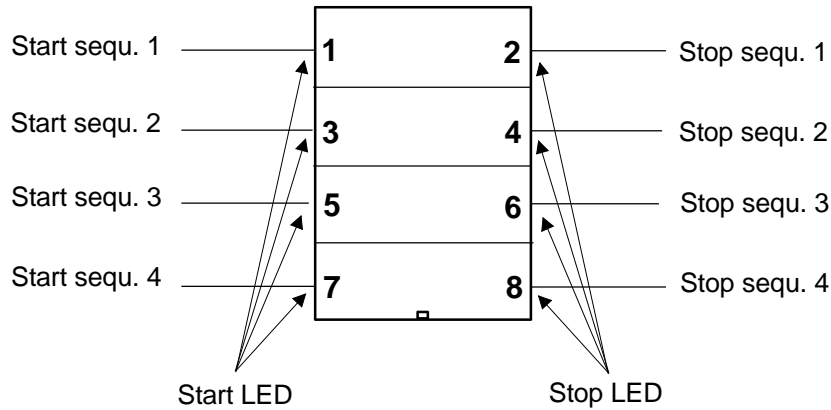
- 4.) Function of status LED: LED always off



Key assignment and status indication with and without stop LED

The 4 telegram sequences are started with a short press on a key (< 1 s) of the left row and stopped with the keys of the right row.

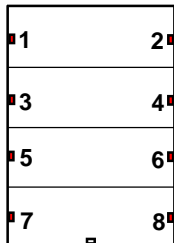
A long press (> 5 s) on any of the keys of the left row permits storing values for the corresponding telegram sequence if the "Storage function in local operation" parameter is set to "enable".



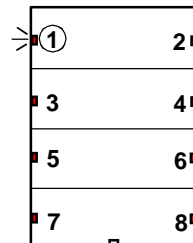
The status LEDs show the following reaction depending on parametrization:

Function of status LED: status indication
Status indication with stop LED: NO

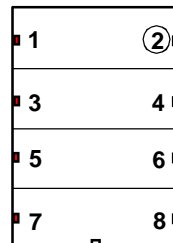
Basic state:
no sequence active



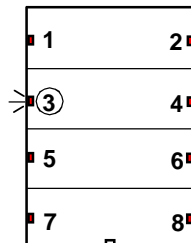
Start of sequence 1:
status LED 1 on



Stop of sequence 1:
status LED 1 off

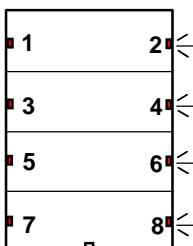


Start of sequence 2:
status LED 2 on

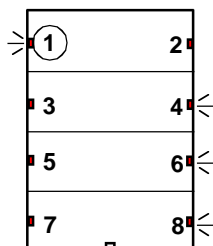


Function of status LED: status indication
Status indication with stop LED: YES

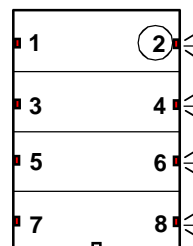
Basic state:
no sequence active,
all stop LEDs on



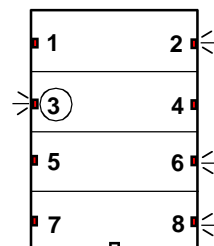
Start of sequence 1:
status LED 1 on,
stop LED 1 off



Stop of sequence 1:
status LED 1 off,
all stop LEDs on



Start of sequence 2:
status LED 2 on,
stop LED 2 off



Cascading

The 4 telegram sequences can be cascaded in any order of succession. In this case, the parameter "Recall of sequence after end of sequence" recalls the next telegram sequence after the preceding one has ended.

The time between sequences is derived from the parameter "Time to 1st telegram".

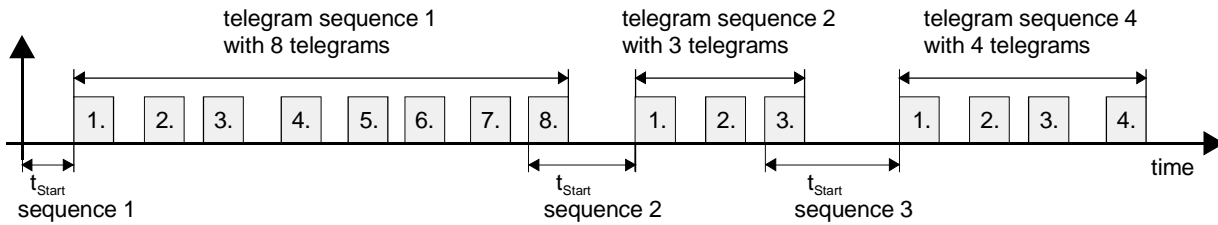


Fig: Cascading of sequences 1, 2 and 4 containing a different number of telegrams

Multiple runs of the same telegram sequence

A telegram sequence can repeat itself several times. The number of repetitions is fixed by the parameter "Number of sequences (0...255)". The "Time between last and 1st telegram" can be parametrized.

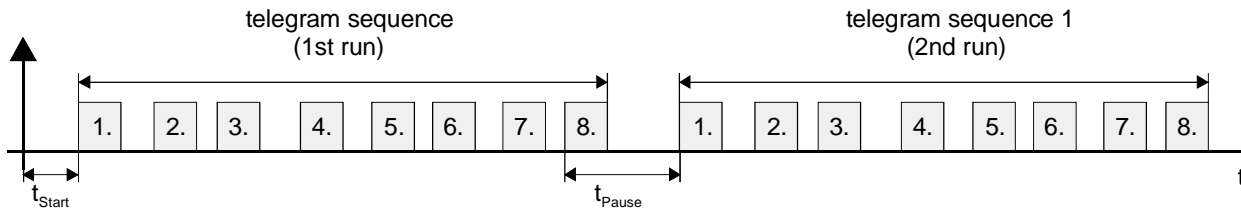


Fig.: 2 Runs of telegram sequence 1

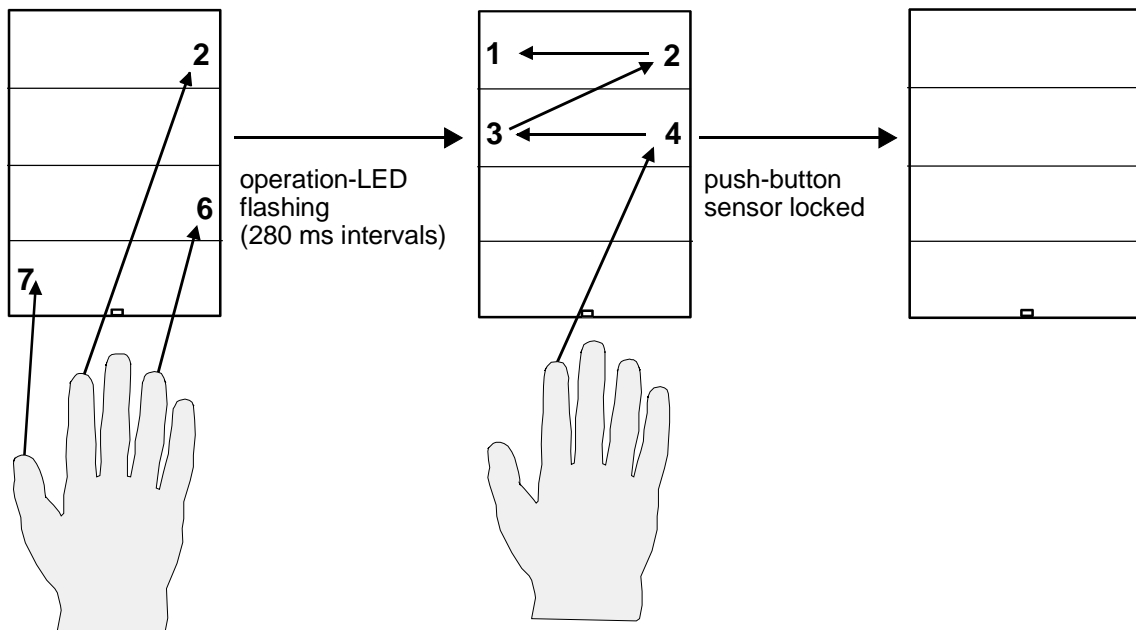
Key-lock by code

Local operation of the light-scene sensor key-lock function must have been software-enabled beforehand in the "Disable function parameter?".

The keys of the sensor are locked by means of the so-called "3-key actuation" (keys 2+6+7 pressed at the same time for approx. 3 s) and by entering a programmed key code. A locked sensor can be unlocked by the same actuation followed by the valid key code. The following illustration shows how to proceed for locking of the sensor keys:

Switch to locking function by pressing keys 2+6+7 at the same time for between 3 and 8s

Enter key code by pressing 4 keys in a row (e.g. 4-3-2-1) within 5 s respectively for each press



Remarks:

- The function of the operation LED with a locked push button is parameterized on the "Disable function" parameter card.

Changing the key code

Key code change by local operation of the push button must have been software-enabled beforehand in the "Push button code adjustment by local operation" parameter.

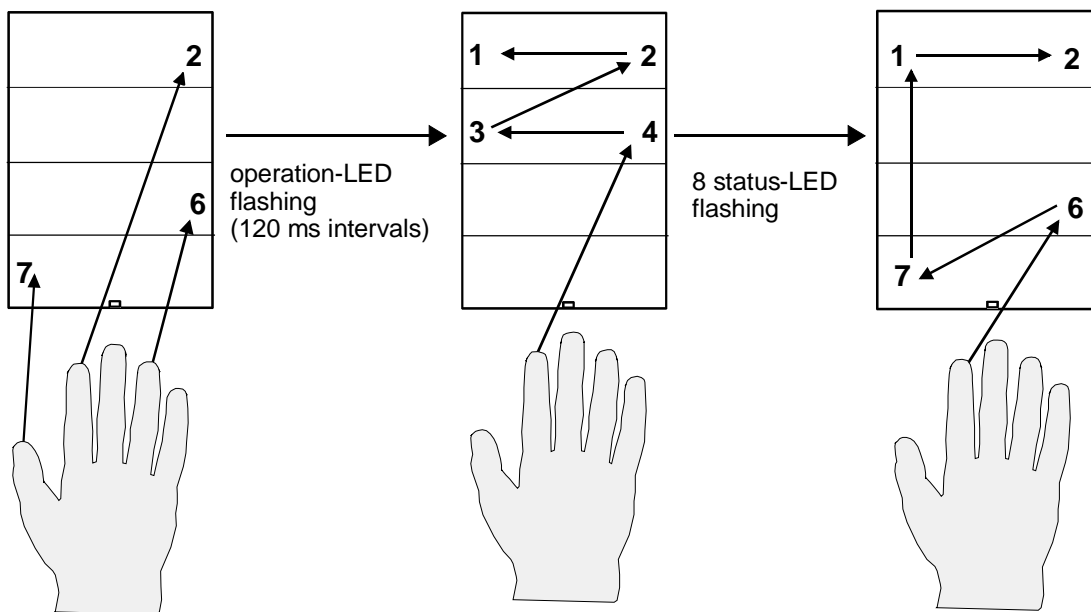
The key code is changed by means of the so-called "3-key actuation, i.e. pressing 2+6+7 for at least 8 s followed by the entry of the old key code. This is confirmed by all 8 status LEDs flashing at the same time. The new code can be entered thereafter.

The following illustration shows how to change the key code:

**Switch to changing the key code
by pressing keys 2+6+7 at the same
time for min. 8 s**

**Enter old key code
(e. g. 4-3-2-1)**

**Enter new key code:
(e. g. 6-7-1-2)
operation-LED switches off briefly**



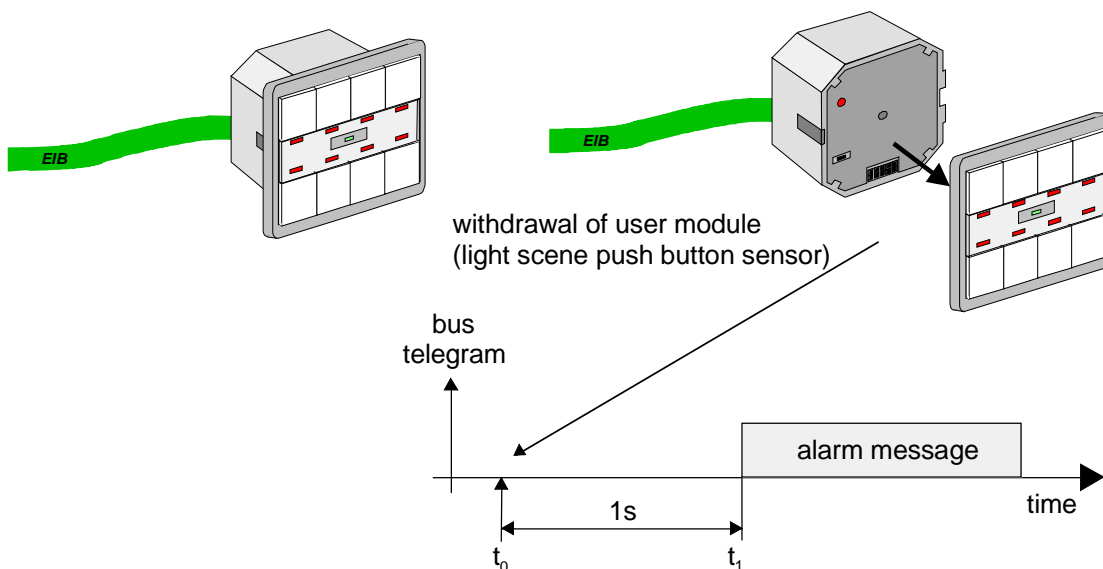
Remarks:


- The key code can also be changed when the light-scene sensor is locked.
- The changed code is valid also after return of the bus voltage.
- A key code that has been forgotten by the user can only be replaced by reprogramming with the ETS.

Detection of withdrawal – removal alarm


On removal of the user module from the bus coupling unit, the device can generate a 1-bit alarm via object 9 "Alarm message". In this case, the "Alarm function?" parameter must be set to "YES".


The time between removal of the module until telegram triggering is 1 second.





Parameters		
Description:	Values:	Remarks:
 General		
Function of operation LED	ON OFF	The white operation LED is lit up after arrival of supply voltage (ON) or always off (OFF).
Function of status LED	key-press confirmation Status indication LED always OFF	When a key is pressed, the corresponding status LED lights up for the time specified under "LED on-time after key-press". If the transmitted telegram sequence lasts longer than 10 seconds, the status LED flashes four times every ten seconds (cf. functional description). During transmission of a telegram sequence, the corresponding status LED of the upper key row is lit up (start sequence 1-4) (cf. functional description). The status LED is always off.
Light duration of status LED at operating indication	0.75 s 2.25 s 3 s	On-time of status LED for confirmation of key-press
Status indication in case of sequence stop ?	YES NO	During each non-active sequence, the corresponding status LED of the lower key row (stop sequence 1-4) is lit up. When a sequence is activated, the corresponding status LED of the upper key row lights up, whereas the corresponding status LED of the lower key row is extinguished. The 4 status LEDs of the lower key row are always off (cf. functional description).
Status LED flashes in case of active telegram sequence?	NO YES	During transmission of a telegram sequence, the corresponding status LED of the upper key row is lit up (start sequence 1-4). During transmission of a telegram sequence, the corresponding status LED of the upper key row flashes (start sequence 1-4) (cf. functional description).
Memory function at local operation	disabled enabled	The storage function is disabled for local operation. A long press (> 5 s) on a key of the upper row permits storing of values for the corresponding telegram sequence. In this case, the read flags of the actuator objects to be stored must be set.
Alarm function?	YES NO	With the alarm function activated, the device transmits a telegram via object 9 when the light-scene push button is withdrawn from the flush-mounted bus coupler. The telegram value can be specified on the "Alarm" parameter card.


Block function?	NO YES	The light-scene push button can be disabled by a 3-key actuation. In this case, none of the keys triggers an action.
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Parameters		
Description:	Values:	Remarks:
 Object types		
Output 1	Switching (1 bit) Value transmitter 1 byte Value transmitter 2 bytes	Setting of data type for output 1.
Output 2		Setting of data type for output 2.
Output 3		Setting of data type for output 3.
Output 4		Setting of data type for output 4.
Output 5		Setting of data type for output 5.
Output 6		Setting of data type for output 6.
Output 7		Setting of data type for output 7.
Output 8		Setting of data type for output 8.
Display the consecutive sequence and time of	Sequence 1 Sequence 2 Sequence 3 Sequence 4	The ETS only displays the parameter cards for the succession and the times of the sequence preset.


Parameters		
Description:	Values:	Remarks:
 Sequence 1 - values Sequence 2 - values		Sequence 3 - values Sequence 4 - values
Value 1 (0...1), (0...255), (0...65535)	0...1, 1 (only for switching 1 bit)	Input of the 8 values of sequence x (x = 1-4) The value ranges result from the parameterized object types as follows: - switching 1 bit 0...1 - value transmitter 1 byte 0...255 - value transmitter 2 bytes 0...65535
Value 2 (0...1), (0...255), (0...65535)	0...255, 255 (only for value transmitter 1 byte)	
Value 3 (0...1), (0...255), (0...65535)	0...65535, 65535 (only for value transmitter 2 bytes)	
Value 4 (0...1), (0...255), (0...65535)		
Value 5 (0...1), (0...255), (0...65535)		
Value 6 (0...1), (0...255), (0...65535)		
Value 7 (0...1), (0...255), (0...65535)		
Value 8 (0...1), (0...255), (0...65535)		

Parameters		
Description:	Values:	Remarks:
 Sequence 1 – application flow Sequence 2 - application flow		Sequence 3 - application flow Sequence 4 - application flow
Application flow of telegrams	parameterizable random	The succession of telegrams in sequence x (x = 1-4) can be programmed with parameter "1 st telegram" to "8 th telegram". The succession of telegrams in sequence x (x = 1-4) is random
Number of telegrams	1...8, 8	Setting the number of telegrams for sequence x (x = 1-4)
1 st telegram	output 1 (default 1 st telegram)	Assignment of the 8 possible telegrams to the 8 outputs. These parameters are relevant only if "Succession of of telegrams" is set to "parameterizable".
2 nd telegram	output 2 (default 2 nd telegram)	
3 rd telegram	output 3 (default 3 rd telegram)	
4 th telegram	output 4 (default 4 th telegram)	
5 th telegram	output 5 (default 5 th telegram)	
6 th telegram	output 6 (default 6 th telegram)	
7 th telegram	output 7 (default 7 th telegram)	
8 th telegram	output 8 (default 8 th telegram)	

Parameters		
Description:	Values:	Remarks:
 Sequence 1 - times 1-4 Sequence 2 - times 1-4		Sequence 3 - times 1-4 Sequence 4 - times 1-4
Number of sequences (0...255) (0 = cyclic)	0...255, 1	Number of runs for sequence x (x = 1-4)
Call up next sequence after the last sequence is expired	No Sequence 1 Sequence 2 Sequence 3 Sequence 4	After the end of sequence x (x = 1-4), either sequence y (y = 1-4) or none can be called up automatically.
Time to 1 st telegram base	40 ms 1 min 100 ms 10 min 1 s 30 min 5 s 1 h	Time to 1 st telegram of sequence x (x = 1-4) time = base • factor
Time to 1 st telegram factor (1...30)	1..30, 10	Time to 1 st telegram of sequence x (x = 1-4) default: 100 ms • 10 ≈ 1 s
Time between - 1 st and 2 nd telegram - 2 nd and 3 rd telegram - 3 rd and 4 th telegram base	40 ms 1 min 100 ms 10 min 1 s 30 min 5 s 1 h	Time between - 1 st and 2 nd telegram of sequence x (x = 1-4) - 2 nd and 3 rd telegram of sequence x (x = 1-4) - 3 rd and 4 th telegram of sequence x (x = 1-4) time = base • factor
Time between - 1 st and 2 nd telegram - 2 nd and 3 rd telegram - 3 rd and 4 th telegram factor (1...30)	1..30, 10	Time between - 1 st and 2 nd telegram of sequence x (x = 1-4) - 2 nd and 3 rd telegram of sequence x (x = 1-4) - 3 rd and 4 th telegram of sequence x (x = 1-4) default: 100 ms • 10 ≈ 1 s

Parameters		
Description:	Values:	Remarks:
 Sequence 1 - times 5-8 Sequence 2 - times 5-8		Sequence 3 - times 5-8 Sequence 4 - times 5-8
Time between - 4 th and 5 th telegram - 5 th and 6 th telegram - 6 th and 7 th telegram - 7 th and 8 th telegram - last and 1 st telegram base	40 ms 1 min 100 ms 10 min 1 s 30 min 5 s 1 h	Time between - 4 th and 5 th telegram of sequence x (x = 1-4) - 5 th and 6 th telegram of sequence x (x = 1-4) - 6 th and 7 th telegram of sequence x (x = 1-4) - 7 th and 8 th telegram of sequence x (x = 1-4) - last and 1 st telegram of sequence x (x = 1-4) time = base • factor
Time between - 4 th and 5 th telegram - 5 th and 6 th telegram - 6 th and 7 th telegram - 7 th and 8 th telegram - last and 1 st telegram factor (1...30)	1..30, 10	Time between - 4 th and 5 th telegram of sequence x (x = 1-4) - 5 th and 6 th telegram of sequence x (x = 1-4) - 6 th and 7 th telegram of sequence x (x = 1-4) - 7 th and 8 th telegram of sequence x (x = 1-4) - last and 1 st telegram of sequence x (x = 1-4) default: 100 ms • 10 ≈ 1 s

Parameters		
Description:	Values:	Remarks:
 Alarm		
Value at alarm	1 0	Defines the value of the telegram issued in the event of an alarm via object 9.

Parameters		
Description:	Values:	Remarks:
 Block function		
Function of operating LED at block function	LED permanently OFF LED permanently ON Flashing	When the light-scene push button is disabled, the operation LED is always OFF, always ON or in a flashing mode.
Extension unit at block operation	enabled disabled	The disabled light-scene push button can still be operated from an extension. In disabled state, light-scene push button cannot be operated from the extension either.
1 st push button	Push button 1 Push button 5 Push button 2 Push button 6 Push button 3 Push button 7 Push button 4 Push button 8	Defines the 1 st key of the key code. The key code is used for activating the disable function of the light-scene push button.
2 nd push button	Push button 1 Push button 5 Push button 2 Push button 6 Push button 3 Push button 7 Push button 4 Push button 8	Defines the 2 nd key of the key code. The key code is used for activating the disable function of the light-scene push button.
3 rd push button	Push button 1 Push button 5 Push button 2 Push button 6 Push button 3 Push button 7 Push button 4 Push button 8	Defines the 3 rd key of the key code. The key code is used for activating the disable function of the light-scene push button.
4 th push button	Push button 1 Push button 5 Push button 2 Push button 6 Push button 3 Push button 7 Push button 4 Push button 8	Defines the 4 th key of the key code. The key code is used for activating the disable function of the light-scene push button.
Local adjustment of push button code	disabled enabled	Local change of the key code is not possible. The key code can be changed by the so-called 3-key actuation (cf. functional description).
Software information		
