

25 A8 DALI switch/dimming actuator 980801

Use of the application program

Product family: Illumination
 Product type: Dimmer
 Manufacturer: Siemens

Name: Switch/dimming actuator
 N 525E, 8x DALI
 Order no.: 5WG1 525-1EB01

Functional description

The switch/dimming actuator N 525E, 8x DALI is a KNX EIB device with 8 DALI outputs (= channels). A group of up to 8 DALI devices can be connected per channel.

DALI (Digital Addressable Lighting Interface) is a bidirectional communications interface in accordance with IEC 60929, whose specification has been defined by manufacturers of electronic ballasts. It not only enables the receipt of e.g. switching and dimming commands but also the sending of status information such as the failure of a lamp or the report of a detected error in the electronic ballast. Up to 64 DALI devices can be connected to a DALI bus line and can each be assigned an individual device address. Each device can thus be controlled individually while status and error signals can be clearly assigned to a specific electronic ballast and thus to a specific lamp. The EIB/DALI-Gateway GE 141 can be used for example to control DALI devices individually.

If individual communication with each individual DALI device is not required and you wish for example to simply connect a group of dimmable fluorescent lamps in parallel and control them in the same way as you would previously have connected and controlled dimmable electronic control gear (ECG) with a 1...10 V interface, this is also possible with the DALI switch/dimming actuator N 525E. Status and error signals are also detected by the N 525E and transmitted, whereby these signals are assigned to the respective group and not to an individual DALI device.

Bus mode / direct mode

The N 525E has an integrated power supply unit for AC 230 V to supply the actuator electronics and to generate the DALI bus voltage per channel, as in the DALI system (in a similar way to EIB) the electronics of the DALI devices is supplied via the DALI bus cable.

The power supply unit integrated in the N 525E enables the actuator and the ECGs connected to its channels to be operated even if the N 525E has not yet been commissioned with the ETS (Engineering Tool Software) or if the communication via the EIB has been interrupted. For this purpose, the N 525E has a push button located

bottom left on its front plate for switching on the "Direct mode" as well as for selecting a group of 4 channels. When the button is pressed for the first time, the LED lights up permanently to indicate direct mode. Channels A to D can then be operated directly. If the "Direct mode" button is pressed for the second time, the LED flashes to display direct mode. Channels E to H can then be operated directly. If the "Direct mode" button is pressed for a third time, the LED to indicate direct mode is extinguished and the N 525E is back in bus mode.

In direct mode, a channel can be operated via the relevant push buttons on the front plate of the actuator as via bus push buttons: pressing the upper push button briefly switches the channel on while a long push button action is used for dimming brighter; pressing the lower push button briefly switches the channel off while a long push button action is used for dimming darker. The switching state of channels A-D is indicated by LEDs integrated in the lower push buttons while the switching state of channels E-H is indicated via LEDs integrated in the upper push buttons.

It can be set via a parameter whether direct mode is switched on permanently or for a limited time period. The factory setting for the operating time of direct mode is 15 minutes. Each push button action in direct mode leads to the extension of direct mode by a further 15 minutes. Once the operating time has elapsed without any further push button actions, "Direct mode" is switched off automatically and "Bus mode" is reactivated (provided that communication is possible via the EIB). In bus mode, pressing the push buttons on the front plate of the actuator to switch a channel on or off has no effect. When direct mode is switched on, any switching, value and scene retrieval commands received via the bus are stored temporarily and carried out automatically once the device is switched back to bus mode.

Parameter page "Functions, Objects"

In the supplied state, the communication object "Status direct mode" is available as well as the objects "Switching On/Off", "Dimming Brighter/Darker" and "Dimming value" which are available for each channel. The commissioning engineer can set via the parameter page "Functions, Objects" which functions and objects he would like to use in addition to the default objects.

Night mode: It can be selected whether the object "Night mode On/Off" and the associated function should be added per channel. When night mode is switched on, a channel can no longer be switched on permanently and can only be switched on for a limited period (e.g. lighting for cleaners). The required operating time in night mode can then be set via a further parameter.

8-bit scene control: It can be selected whether a communication object for 8-bit scene control should be

25 A8 DALI switch/dimming actuator 980801

added and an additional parameter page for assigning the 8-bit scenes per channel should be displayed. Each actuator channel can be integrated into up to 16 scenes.

Switching status objects: It can be selected whether a communication object "Status switching" should be added per channel and when these objects should be sent (only on request or after each change in the status).

Dimming status objects: It can be selected whether a communication object "Status dimming value" should be added per channel and when these objects should be sent (only on request or after each change in the status). To prevent an unnecessarily high bus load when dimming brighter/darker due to status telegrams being sent in succession, it is possible to set a blocking time. Only once this period has elapsed can the next dimming value status telegram be sent.

Lamp failure status objects: It can be selected whether a 1-bit communication object "Status lamp failure" should be added per channel for reporting a lamp failure and when these objects should be sent (only on request or after each change in the status).

DALI status objects: It can be selected whether an 8-bit communication object "Status DALI" should be added per channel and when these objects should be sent (only on request or after each change in the status).

Several errors can be reported together via the 8-bit object "Status DALI". If bit 0 is set, a "Lamp failure" is reported. If bit 1 is set, a "Short circuit" of the DALI output is reported. If bit 2 is set, a "Communication failure" is reported i.e. communication is not possible via DALI as none of the connected ECGs are responding because either the DALI bus cable is interrupted or the power supply for all the DALI ECGs of this group has failed (i.e. no AC 230 V at the ECGs).

Parameter page "General"

Via this parameter page, it is possible to set all the functions and properties which affect all the channels or apply to all the channels in general. It is set via a parameter on this page for example whether all the channels are configured identically or individually. If identical configuration is selected, only one parameter page is shown to set the parameters for all the channels. This helps to save time and costs during commissioning.

On time during direct mode: It is set via this parameter whether direct mode is switched on permanently or only for a limited period as well as the time after which the device switches back automatically to bus mode.

Warning before switching Off: This parameter specifies whether a channel should signal by reducing the brightness (dimming to 50% of the previous dimming value) in night and time switch mode that it will be switched off automatically. This is carried out approx. 30 seconds before switching off.

Configuration: It is set via this parameter whether channels A to H should be parameterised together (i.e.

identical) or individually (i.e. differently). If "identical for all channels" is selected, only one parameter page is visible for the common configuration of channels A to H while one page per channel is shown when "individual for each channel" is selected.

Minimum dimming value: This parameter defines the minimum dimming value which it is not possible to fall below. If however the parameter "Switching via dimming brighter/darker" or the parameter "Switching via dimming value" are set to "switching Off possible", dimming darker below the minimum dimming value or the receipt of a telegram with a dimming value below the minimum dimming value leads to the respective channel being switched off.

Maximum dimming value: The maximum dimming value which cannot be exceeded when dimming brighter is defined via this parameter. If a dimming value is received which lies above the maximum dimming value, the device only dims or jumps to the maximum dimming value.

Behaviour on bus voltage / mains voltage failure: The behaviour of the actuator on failure of the EIB bus voltage or the mains voltage is set via this parameter (no action, switch all channels Off, set all channels to starting value).

On bus voltage failure, the actuator channels can no longer be switched via the EIB but can still be operated in direct mode.

On mains voltage failure, the current switching states and dimming values of all the channels are stored permanently so that they can be recreated if required on mains voltage recovery. In case of a mains voltage failure an activated night mode is automatically finished.

Behaviour on bus voltage / mains voltage recovery: The behaviour of the actuator on recovery of the EIB bus voltage or mains voltage is set via this parameter (as before voltage failure, switch all channels Off, set all channels to starting value).

Parameter page "8-bit scene control"

For "8-bit scene control", the storing or retrieval of a scene is triggered by a telegram with an 8-bit object. The highest value bit 7 indicates whether the scene should be stored or retrieved. Bit 6 has no meaning in this case. Bit 0 to bit 5 contain (in binary coding) the number of the desired scene as a decimal number in the range 1 to 64 (whereby the decimal number 1 corresponds to the binary number 0, the decimal number 2 corresponds to the binary number 1, etc.).

Each actuator channel can be integrated into up to 16 scenes.

Dimming time for scene control (in seconds): This parameter sets a common time period for all channels. Once this period has elapsed (on retrieval of a scene), the dimming process from the previous dimming value to

25 A8 DALI switch/dimming actuator 980801

the new dimming value is concluded simultaneously for all the channels involved in the scene.

Scene assignments for channel: This parameter determines for which channel the first eight (1-8) or second eight (9-16) scene assignments should be displayed so that they can be modified if necessary.

Channel A: Assignment 1 with scene [1..64] (0=disabled): Channel A can be linked with a scene number in the range 1 to 64 via this parameter. 0 means "no scene assigned" (assignment unused).

Note: If a scene is retrieved before a dimming value has been stored for this scene, there is no reaction to the retrieval of this scene.

Assignments 2 to 16 for channel A and the respective 16 assignments for channels B to H are carried out in the same way as assignment 1 for channel A.

Parameter page "Channels A-H", "Channel X"

Depending on whether channels A to H should be configured together (i.e. identically) or individually (i.e. differently), only one parameter page is visible for the common configuration of channels A to H or one parameter page is displayed per channel.

Operating mode: It is set via this parameter whether the channel should operate as a "normal" switch/dimming channel or as a 1-level time switch which is switched on via a switching, dimming, dimming value or scene retrieval command and is switched off automatically once the parameterised period has elapsed or whether it should operate as a 2-level time switch. A 2-level time switch mode is used for staircase and hallway lighting if a complete disconnection of the fluorescent lamps should be avoided once the ON period has elapsed in order to increase the life time of the lamps. Furthermore, a 2-level time switch is used to control colour lighting.

If "1-level time switch mode" is selected, the parameter "ON period (in minutes)" is also displayed. If a switching, dimming, dimming value or scene retrieval command is received in 1-level time switch mode during ON period 1, the timer is reset to its initial value and the ON period is extended accordingly. Approximately 30 s before the ON period has elapsed, if the warning function has been activated (via the parameter "Warning before switching Off"), the output is dimmed down to half the previous dimming value in order to warn the room occupant that the lighting will switch off and to give him sufficient time to press the light switch again so that the lighting is switched on again for the parameterised period.

If "2-level time switch mode" is selected, the three parameters "ON period 1 (in minutes)", "ON period 2 (in minutes)" and "Dimming value during ON period 2" are also displayed. While the device is dimmed to 0% at the end of the 1-level time switch mode, it is dimmed in 2-level time switch mode at the end of the first ON period to the "Dimming value during ON period 2", which can lie

above or below the previous dimming value. At the end of the ON period 2 it is then dimmed to 0%.

Dimming time for switching On/Off (in seconds): It is set via this parameter whether it will be jumped to the parameterised ON value or the OFF value (dimming time = 0) or if it will be dimmed to these values within the set dimming time.

Dimming time for dimming darker/brighter (in seconds): The period for dimming manually from 0% to 100% (or from 100% to 0%) is set via this parameter.

Dimming time for setting the dimming value from 0 to 100% (in seconds): It is set via this parameter whether to jump to a new dimming value (dimming time = 0) or the period required for dimming from the value 0% to the value 100%.

Switching On to: This parameter indicates the starting value (maximum dimming value, dimming value at switching Off, last received dimming value) on receipt of a telegram with an ON command.

Switching via dimming brighter/darker: It is defined via this parameter whether it should be possible to switch the channel on or off via "Dimming brighter/darker" telegrams (not possible, switching On possible, switching Off possible, switching On and switching Off possible).

Switching via dimming value: It is defined via this parameter whether it should be possible to switch the channel on or off via "Set dimming value" telegrams (not possible, On if dimming value \geq min. dimming value, Off if dimming value $<$ min. dimming value, Switching On and switching Off possible, On if dimming value $>$ 0% / Off if dimming value = 0%).

ON period 1 (in minutes): This parameter sets the desired ON period 1 when "time switch mode" has been selected. If a new switching, dimming, dimming value or scene retrieval command is received during the ON period, the new command is executed, the timer is reset to its initial value and the ON period starts to run again.

ON period 2 (in minutes): This parameter sets the desired ON period 2 when the "2-level time switch mode" has been selected. If a new switching, dimming, dimming value or scene retrieval command is received during ON period 2, this command is executed, the timer is loaded with ON period 1 and the 2-level time switch mode restarts.

Dimming value during ON period 2 (in percent): The dimming value during ON period 2 in the 2-level time switch mode is set via this parameter.

Maximum number of group addresses: 108
Maximum number of associations: 107

Application program description

February 2005

25 A8 DALI switch/dimming actuator 980801

Note

The application program can be loaded from ETS 2 V1.3 onwards.

An "Unload" of the application program via the ETS will stop the microprocessor! In this case even in direct mode the device is "dead". It can be restarted only by a new download of the application program.

Communication objects

The following view of the objects can be created individually i.e. this view can vary.

no.	Object name	Function	Type
01.01.001	25 A8 DALI Switch/dim actuator	980801 5WG1 525-1EB01	
0	Status direct mode	On / Off	1 Bit
1	8-bit scene	recall / program	1 Byte
2	Night mode, Channel A	On / Off	1 Bit
3	Switching, Channel A	On / Off	1 Bit
4	Dimming, Channel A	Brighter / Darker	4 Bit
5	Dimming value, Channel A	8-bit Value	1 Byte
6	Status switching, Channel A	On / Off	1 Bit
7	Status dimming value, Channel A	8-bit Value	1 Byte
8	Status lamp failure, Channel A	1=Fault, 0=ok	1 Bit
9	Status DALI, Channel A	Status	1 Byte

Obj	Object name	Function	Type	Flags
0	Status direct mode	On / Off	1 Bit	CRT
<p>It is reported via this object whether the actuator has been switched from bus mode to direct mode via the "Direct mode" button on the front of the device (Direct mode = On) or has been switched from direct mode back to bus mode (Direct mode = Off).</p> <p>When direct mode is switched on (the relevant yellow LED on the front of the actuator lights up or flashes), the direct switching and dimming of the actuator channels via the corresponding push buttons on the front of the actuator is enabled. The actuator does not carry out any switching, dimming or scene commands which are received via the bus but saves them as the desired setpoint state.</p> <p>After switching back to bus mode (the yellow LED on the front of the actuator for displaying direct mode is switched off), the actuator compares the actual states of the channels with the stored setpoint states and automatically corrects any deviations.</p>				

Obj	Object name	Function	Type	Flags
1	8-bit scene	recall / program	1 Byte	CW
<p>The 8-bit scene with the number x is recalled (i.e. retrieved) or programmed (i.e. saved) via this object. Bits 0...5 contain the number x of the scene. If bit 7 = log. 1, the scene is programmed. If bit 7 = log. 0, it is recalled. Bit 6 has no meaning in this case and must be set to log. 0.</p>				
2	Night mode, Channel A	On / Off	1 Bit	CW
<p>The operating mode "Night mode" can be activated or deactivated for channel A via the bus with this object. The object can be sent e.g. by a push button, a time switch or a building automation system. If a logic 1 is received, the channel switches to night mode.</p> <p>In the operating mode "Night mode", the channel can no longer be switched on permanently and may only be switched on for a limited time period (e.g. for 30 minutes to provide lighting for cleaning purposes). If the parameter "Warning before switching Off" (see "General" parameter page) is set to "Yes", once the set operating time has elapsed, the dimming value of the channel is first set to 50% of the previous value for safety reasons and then dimmed down fully within approx. 30 s and then the channel is switched off. The end of the operating time can thus be detected and the lighting can be switched on e.g. for a further 30 minutes by pressing the light switch again.</p> <p>If the object "Night mode" is not used for a channel, this channel can be switched on permanently.</p>				
3	Switching, Channel A	On / Off	1 Bit	CW
<p>The telegrams for switching the ECGs connected to channel A on or off are received via this object.</p>				
4	Dimming, Channel A	Brighter / Darker	4 Bit	CW
<p>The dimming telegrams for channel A are received via this object.</p>				
5	Dimming value, Channel A	8-bit Value	1 Byte	CW
<p>A dimming value for channel A is received via this object.</p>				
6	Status switching, Channel A	On / Off	1 Bit	CRT
<p>Depending on the selected parameter setting, the current switching state of channel A can be queried via this object and also sent automatically if required when there is a change in the status.</p>				
7	Status dimming value, Channel A	8-bit Value	1 Byte	CRT
<p>Depending on the selected parameter setting, the current dimming status (dimming value) of channel A can be queried via this object and also sent automatically if there is a change in the status. With the help of the parameter "Blocking time after change of state of dimming value", the sending of dimming value status telegrams can be restricted.</p>				

25 A8 DALI switch/dimming actuator 980801

Obj	Object name	Function	Type	Flags			
8	Status lamp failure, Channel A	1 = failure, 0 = OK	1 Bit	CRT			
Depending on the selected parameter setting, a lamp failure at channel A can be queried via this object and also sent automatically if required.							
9	Status DALI, Channel A	Status	1 Byte	CRT			
Depending on the selected parameter setting, the status of the DALI bus of channel A can be queried via this object and also sent automatically if required. The following bit assignment is used to report the bus status:							
7	6	5	4	3	2	1	Bit 0
					DALI comm. failure	DALI short circuit	Lamp failure
If bit 0 is set, a lamp failure at this channel is reported. If bit 1 is set, a short circuit of the DALI output is reported. If bit 2 is set, none of the DALI devices that are connected to the channel are responding (the DALI bus cable is then either interrupted or the power supply has failed for all the DALI ECGs of this group i.e. there is no AC 230 V present at the ECGs).							

The explanations above apply to communication objects 10 to 65 of channels B to H accordingly.

Parameters

Functions, Objects

Functions, Objects	General	Scenes	Channels A-H
Night mode	Yes		
ON period during night mode	30 minutes		
8-bit scene control	Yes		
Switching status objects	send on change or read request		
Dimming status objects	send on change or read request		
Blocking time after change of state of dimming value (in seconds)	15		
Lamp failure status objects	send on change or read request		
DALI status objects	send on change or read request		

Parameters	Settings
Night mode	No Yes
It is set via this parameter whether the lighting should only be switched on with a time limit at night (e.g. for cleaning purposes) or whether it should remain switched on permanently (Night mode = No). If "Night mode = Yes" is selected, a "Night mode On/Off" object is added per channel and the following parameter is shown for setting the "ON period during night mode" which applies to all the channels.	
ON period during night mode	5 minutes 10 minutes 15 minutes 20 minutes 30 minutes 45 minutes 60 minutes
This parameter defines how long the channel should remain switched on in night mode. If a switching, dimming, dimming value or scene retrieval command is received before this period has elapsed, the ON period is restarted i.e. it is extended by the parameterised time. If the parameter "Warning before switching Off" is activated, the relevant channel is dimmed down to half the previous dimming value approx. 30 s before the end of the ON period in order to signal to the room occupant that the lighting will soon be switched off. By pressing the ON button again, the channel is immediately dimmed again to the starting value and the timer is restarted.	
8-bit scene control	No Yes
If this parameter is set to "Yes", a communication object "8-bit scene" is added. In addition, a "Scenes" parameter page is displayed which enables each channel to be integrated individually into up to 16 scenes.	

25 A8 DALI switch/dimming actuator 980801

Parameters	Settings
Switching status objects	not present send using read request only send on change or on read request
This parameter defines whether a communication object "Status switching" should be added per channel and when these objects must be sent. If "send on change or on read request" is selected, each change in status is sent. If the setting "send using read request only" is set, there is no automatic sending of the switching state.	
Dimming status objects	not present send using read request only send on change or on read request
This parameter defines whether a communication object "Status dimming value" should be added per channel and when these objects must be sent. If "send on change or on read request" is selected, each change in status is sent. If the setting "send using read request only" is set, there is no automatic sending of the dimming value status.	
Blocking time after change of state of dimming value (in seconds)	15 (1...60)
The parameter "Blocking time after change in state of dimming value" ensures that an unnecessary bus load is not generated due to status telegrams being sent in quick succession when dimming darker/brighter. Once a status telegram is sent, the next telegram is only sent once the blocking time set here has elapsed.	
Lamp failure status objects	not present send using read request only send on change or on read request
It is set via this parameter whether a 1-bit communication object "Status lamp failure" should be added per channel which is used to report a lamp failure on the respective channel and when these objects must be sent. If "send on change or on read request" is selected, each change in status is sent. If "send on read request only" is selected, there is no automatic sending of the lamp failure status.	

Parameters	Settings
DALI status objects	not present send using read request only send on change or on read request
It is set via this parameter whether an 8-bit communication object "Status DALI" should be added per channel and when these objects should be sent. Several faults can be reported via the 8-bit object "Status DALI". If bit 0 is set, a "Lamp failure" is reported. If bit 1 is set, a "Short circuit" of the DALI output is reported. If bit 2 is set, a "Communications failure" is reported i.e. no communication is possible via DALI because none of the DALI devices that are connected to the channel are responding (the DALI bus cable is then either interrupted or the power supply has failed for all the DALI ECGs of this group i.e. there is no AC 230 V present at the ECGs). If "send on change or on read request" is selected, each change in the status is sent. If "send on read request only" is selected, there is no automatic sending of the DALI failure status.	

25 A8 DALI switch/dimming actuator 980801

General

Functions, Objects	General	Scenes	Channels A-H
On-time during direct mode	15 minutes		
Warning before switching Off	Yes		
Configuration	identical for all channels		
Minimum dimming value	0.5%		
Maximum dimming value	100%		
Behaviour on bus voltage or mains voltage failure	no action		
Behaviour on bus voltage or mains voltage recovery	as before voltage failure		

Parameters	Settings
ON time during direct mode	unlimited 5 minutes 10 minutes 15 minutes 20 minutes 30 minutes 45 minutes 60 minutes
It is set via this parameter whether direct mode is switched on permanently or only for a limited period as well as the time after which the device switches back automatically to bus mode.	
Warning before switching Off	Yes No
This parameter specifies whether a channel should signal by reducing the brightness (dimming to 50% of the previous dimming value) in night mode and time switch mode that it will be switched off automatically. This is carried out approx. 30 seconds before switching off. If this parameter is set to "Yes" the parameter "Switching On to" must be set either to "maximum dimming value" or to "last received dimming value".	
Configuration	identical for all channels individual for each channel
It is set via this parameter whether channels A to H should be parameterised together (i.e. identical) or individually (i.e. differently). If "identical for all channels" is selected, only one parameter page is visible for the common configuration of channels A to H while one page per channel is shown when "individual for each channel" is selected.	

Parameters	Settings
Minimum dimming value	0.5%, 1%, 2%, 3%, 4%, 5%, 7%, 10%, 15%, 20%, 30%, 40%, 50%
This parameter defines the minimum dimming value which it is not possible to fall below (i.e. when dimming brighter/darker below the minimum dimming value or on receipt of a dimming value smaller than the minimum dimming value, the channel jumps or dims to the minimum dimming value). If the parameter "Switching via dimming brighter/darker" is set to "switching Off possible" or to "switching On and switching Off possible", dimming darker below the minimum dimming value leads to the respective channel being switched off. If the parameter "Switching via dimming value" is set to "Off if dimming value < min. dimming value", a dimming value below the minimum dimming value leads to the respective channel being switched off.	
Maximum dimming value	20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%
The maximum dimming value which cannot be exceeded when dimming brighter is defined via this parameter. If a dimming value is received which lies above the maximum dimming value, the device only dims or jumps to the maximum dimming value.	
Behaviour on bus voltage or mains voltage failure	no action switch all channels Off set all channels to starting value
The behaviour of the actuator on failure of the EIB bus voltage or the mains voltage is set via this parameter (no action, switch all channels Off, set all channels to starting value). The actuator channels can no longer be switched via the EIB on bus voltage failure but can still be operated in direct mode. On mains voltage failure, the current switching states and dimming values of all the channels are stored permanently so that they can be recreated if required on mains voltage recovery.	
Behaviour on bus voltage or mains voltage recovery	as before voltage failure switch all channels Off set all channels to starting value
The behaviour of the actuator on recovery of the EIB bus voltage or mains voltage is set via this parameter.	

25 A8 DALI switch/dimming actuator 980801

8-bit Scenes

Functions, Objects	General	Scenes	Channels A-H
Dimming time for scene control (in seconds)			2
Scene assignments for channel			A (Assignments 1-8)
Channel A: Assignment 1 with scene [1...64] (0 = disabled)			0
Channel A: Assignment 2			0
Channel A: Assignment 3			0
Channel A: Assignment 4			0
Channel A: Assignment 5			0
Channel A: Assignment 6			0
Channel A: Assignment 7			0
Channel A: Assignment 8			0

Parameters	Settings
Dimming time for scene control (in seconds)	0-255, 2
This parameter "Dimming time for scene control" sets a common time period for all channels. Once this period has elapsed (on retrieval of a scene), the dimming process from the previous dimming value to the new dimming value is concluded for all the channels involved in the scene.	
Scene assignments for channel	A (Assignments 1-8) A (Assignments 9-16) B (Assignments 1-8) B (Assignments 9-16) C (Assignments 1-8) C (Assignments 9-16) D (Assignments 1-8) D (Assignments 9-16) E (Assignments 1-8) E (Assignments 9-16) F (Assignments 1-8) F (Assignments 9-16) G (Assignments 1-8) G (Assignments 9-16) H (Assignments 1-8) H (Assignments 9-16)
This parameter determines for which channel the first eight (1-8) or second eight (9-16) scene assignments should be displayed so that they can be modified if necessary.	
Channel A: Assignment 1 with scene [1...64] (0=disabled)	0-64, 0
Channel A can be linked with a scene number in the range 1 to 64 via this parameter. 0 means "no scene assigned" (assignment unused). <u>Note:</u> If a scene is retrieved before a dimming value has been stored for this scene, there is no reaction to the retrieval of this scene.	

Parameters	Settings
Channel A: Assignment 2 with scene [1...64] (0=disabled)	0-64, 0
Channel A can be linked with a further scene number in the range 1 to 64 via this parameter. 0 means "no scene assigned" (assignment unused). <u>Note:</u> If a scene is retrieved before a dimming value has been stored for this scene, there is no reaction to the retrieval of this scene.	

and so on until

Parameters	Settings
Channel H: Assignment 16 with scene [1...64] (0=disabled)	0-64, 0
Channel H can be linked with a further scene number in the range 1 to 64 via this parameter. 0 means "no scene assigned" (assignment unused). <u>Note:</u> If a scene is retrieved before a dimming value has been stored for this scene, there is no reaction to the retrieval of this scene.	

25 A8 DALI switch/dimming actuator 980801

Channels A-H or Channel X

Functions, Objects	General	Scenes	Channels A-H
Operating mode			
		2-level time switch mode	
Dimming time for switching On/Off (in seconds)			
		0	
Dimming time for dimming darker/brighter from 0% to 100% (in seconds)			
		5	
Dimming time for setting dimming value from 0% to 100% (in seconds)			
		0	
Switching On to			
		maximum dimming value	
Switching via dimming brighter/darker			
		switching On possible	
Switching via dimming value			
		On if dimming value >=min. dimming value	
ON period 1 (in minutes)			
		15	
ON period 2 (in minutes)			
		15	
Dimming value during ON period 2 (in percent)			
		50	

Parameters	Settings
Operating mode	Normal mode 1-level time switch mode 2-level time switch mode
<p>It is set via this parameter whether the channel should operate as a "normal" switch/dimming channel or as a 1-level time switch which is switched on via a switching, dimming, dimming value or scene retrieval command and is switched off automatically once the parameterised period has elapsed or whether it should operate as a 2-level time switch. A 2-level time switch mode is used for staircase and hallway lighting if a complete disconnection of the fluorescent lamps should be avoided once the period has elapsed in order to increase the life time of the lamps. Furthermore, a 2-level time switch is used to control colour lighting.</p> <p>If "1-level time switch mode" is selected, the parameter "ON period (in minutes)" is also displayed. If a switching, dimming, dimming value or scene retrieval command is received in 1-level time switch mode during ON period 1, the timing element is reset to its initial value and the ON period is extended accordingly.</p> <p>If "2-level time switch mode" is selected, the three parameters "ON period 1 (in minutes)", "ON period 2 (in minutes)" and "Dimming value during ON period 2" are also displayed. While the device is dimmed to 0% at the end of the 1-level time switch mode, it is dimmed in 2-level time switch mode at the end of the first ON period to the "Dimming value during ON period 2", which can lie above or below the previous dimming value. At the end of the 2-level time switch mode, it is then dimmed to 0%.</p> <p>If the warning function has been activated (via the parameter "Warning before switching Off"), approximately 30 s before the ON period has elapsed, the output is dimmed down to half the previous dimming value in order to warn the room occupant that the lighting will switch off and to give him sufficient time to press the light switch again so that the lighting is switched on again for the parameterised period.</p>	

Parameters	Settings
Dimming time for switching On/Off (in seconds)	255, 0
<p>It is set via this parameter whether it should be jumped (dimming time = 0) to the parameterised ON value or to the OFF value 0% or dimmed to these values according to the set time.</p>	
Dimming time for dimming darker/brighter from 0%-100% (in seconds)	1-255, 5
<p>The period for dimming manually from 0% to 100% (or from 100% to 0%) is set via this parameter.</p>	
Dimming time for setting the dimming value from 0%-100% (in seconds)	0-255, 0
<p>It is set via this parameter whether to jump (dimming time = 0) to a new dimming value or to dim to a new value within the set time.</p>	
Switching On to	maximum dimming value dimming value at switching Off last received dimming value
<p>This parameter indicates the starting value on receipt of a telegram with an ON command.</p> <p>The setting "dimming value at switching Off" is beneficial e.g. in a children's room or bedroom. A brief operation of the ON button leads to the device being switched on at the dimming value that was present before switching off. Pressing the On button again then leads to dimming or jumping to the maximum dimming value.</p> <p>The setting "last received dimming value" is necessary for constant lighting control if the lighting should not be switched off by dimming values that are sent by a constant lighting controller which lie below the minimum dimming value or switched on by dimming values that lie above this value. The parameter "Switching via dimming value" must therefore be set to "not possible" additionally.</p>	
Switching via dimming brighter/darker	not possible switching On possible switching Off possible switching On and switching Off possible
<p>If it should be possible in the OFF state to switch on the channel on receipt of a relative dimming value "Brighter", this parameter must be set to "switching On possible". In this case, the channel is always switched on first, the minimum dimming value is selected and then dimmed brighter by the received relative dimming value "Brighter" for the parameterised dimming time for dimming brighter/darker. Switching off via dimming brighter/darker is not possible in this setting.</p> <p>If it should be possible in the ON state to switch off the channel when the brightness is dimmed to a value below the minimum dimming value, this parameter must be set to "switching Off possible". Switching on via dimming brighter/darker is not possible in this setting.</p> <p>If it should be possible to switch the channel on and off under the conditions described above, this parameter must be set to "switching On and switching Off possible".</p>	

25 A8 DALI switch/dimming actuator 980801

Parameters	Settings
Switching via dimming value	not possible On if dimming value >= min. dimming value Off if dimming value < min. dimming value switching On and switching Off possible On if dimming value > 0% / Off if dimming value = 0%
<p>If it should be possible in the OFF state to switch on the channel on receipt of a dimming value which is identical to or greater than the minimum dimming value, this parameter must be set to "On if dimming value >= min. dimming value". The channel is then switched on and either jumps or dims to the dimming value in accordance with the parameterised dimming time for setting dimming values. If the received dimming value lies below the minimum dimming value, the channel remains switched off. Switching off by setting the dimming value is not possible in this case.</p> <p>If the channel is switched on and this parameter is set to "Off if dimming value < min. dimming value", the receipt of a telegram with a dimming value lower than the minimum dimming value leads to dimming down (with the parameterised dimming time for setting dimming values) to the minimum dimming value and then to the channel being switched off. Switching on by setting the dimming value is not possible in this case.</p> <p>If this parameter is set to "Switching On and switching Off possible", the channel is switched on if the received dimming value is greater than or equal to the minimum dimming value and is switched off if the received dimming value lies below the minimum dimming value.</p> <p>If this parameter is set to "On if dimming value > 0% / Off if dimming value = 0%", each dimming value > 0% leads to the channel being switched on. If the dimming value lies below the minimum dimming value, the channel is set to the minimum dimming value. The channel is only switched off on receipt of 0% dimming value.</p>	
ON period 1 (in minutes)	1-255, 15
<p>This parameter sets the desired ON period 1 when "time switch mode" has been selected.</p> <p>If a new switching, dimming, dimming value or scene retrieval command is received during the ON period, the new command is executed, the timer is reset to its initial value and the ON period starts to run again.</p>	
ON period 2 (in minutes)	1-255, 15
<p>This parameter sets the desired ON period 2 when the "2-level time switch mode" has been selected. If a new switching, dimming, dimming value or scene retrieval command is received during ON period 2, this command is executed, the timer is loaded with ON period 1 and the 2-level time switch mode restarts.</p>	
Dimming value during ON period 2 (in percent)	1-100, 50
<p>The dimming value during ON period 2 in the 2-level time switch mode is set via this parameter.</p>	

Space for notes