

01 07 EIB-Gateway DALI 802003

Use of the application program

Product family: Lighting
Product type: Interface
Manufacturer: Siemens

Name: EIB-Gateway DALI GE 141
Order no.: 5WG1 141-4AB01

Note

In comparison with the application program 01 07 EIB-Gateway DALI 80180_, objects have been added for the direct control of a single DALI ECG and for status feedback while the parameters have been extended accordingly. ETS 3 is required for the parameterisation.

Functional description

DALI = Digital Addressable Lighting Interface
Up to 64 DALI ECGs can be connected to the DALI bus cable of the GE 141. The EIB-Gateway DALI GE 141 can control up to 64 DALI ECGs with the application program 01 07 EIB-Gateway DALI 802002 both individually and in 16 groups (channels) as before.

As before, up to 64 DALI ECGs can be assigned to a maximum of 16 channels (groups) via objects 0 to 79 and switched and dimmed in groups via 5 objects per channel. The switching and dimming status of a channel can also be reported or queried. The reporting of "Lamp error status" and "ECG error status" via a 1-bit object per channel is omitted, as this error is now reported via the new 8-bit object 208 "ECG error status" or the error status of an ECG can be queried individually.

Up to 64 DALI ECGs can be switched individually via objects 80 to 143 and dimmed individually to the transferred 8-bit value via objects 144 and 207. During the individual switching and dimming of a single DALI ECG, the new switching state or the new dimming value is always dimmed on with a fixed dimming interval of 0.7 s which cannot be modified.

The error status of an individual DALI ECG can be both reported and queried via the new 8-bit status object 208 "ECG error status". Bits 0 to 5 contain the number of the DALI ECG as a binary number in the range 0...63, whereby binary number 0 corresponds to ECG number 1 etc. A lamp error is reported via bit 6 = 1 while an ECG error is reported via bit 7 = 1.

The switching state (On or Off) of a single DALI ECG can be both reported and queried via the new 8-bit status object 209 "ECG switching status". Bits 0 to 5 contain the number of the DALI ECG. It is reported via bit 6 = 1 that the ECG or the lamp is switched on. Bit 7 is reserved for future applications.

The dimming status (0...100%) of a single DALI ECG can be both reported and queried via the new 16-bit status object 210 "ECG dimming status". Bits 8 to 13 contain the number of the DALI ECG. It is displayed via bit 14 = 1 that the ECG or the lamp is switched on. Bit 15 is reserved for future applications. Bits 0 to 7 contain the current dimming status as an 8-bit value (0...100%). Via the 1-bit status object 211 "DALI power status", the status of the common power supply for the DALI gateway and the DALI bus cable can be reported. Via the 1-bit status object 212 "DALI short circuit status", it can be reported that a short circuit of the DALI bus cable has been detected.

As before, up to 16 scenes can be recalled and programmed for the ECGs assigned to the 16 channels. These scenes can however now be recalled via objects 213 to 220 and stored via objects 221 to 228.

Channel 1-16, Switching ON / OFF

In the event of an ON telegram, the parameterisation determines whether a set dimming value is selected or the value prior to switching off. If the starting value lies below the set minimum value, the minimum value is set; if it lies above the maximum value, the maximum value is set. It can be set via parameters whether to dim or jump to the new value. OFF telegrams always switch off. Depending on the parameter assignments, ON telegrams activate overshoot periods.

ECG 1-64, Switching ON / OFF

Up to 64 DALI ECGs can be switched individually via objects 80 to 143. The new switching state is always dimmed on with a fixed dimming interval of 0.7 s which cannot be modified.

If an ECG is assigned to a channel, it "inherits" the "Starting value" parameter from this channel. If the "Starting value" parameter for this channel has been set to "last value", the "Maximum dimming value" that has been specified for the channel is used as a starting value on receipt of an ON telegram (via one of the objects 80 to 143) at the ECG that has been assigned to this channel.

If an ECG is not assigned to one of the channels 1-16, the following applies: "Starting value" = "Maximum dimming value" = 100%.

If an attempt is made while a channel is being switched or dimmed to individually switch an ECG that has been assigned to this channel, the ECG is immediately set to the dimming value of the channel again. This does not apply if the current dimming process has been triggered by the retrieval of a scene.

01 07 EIB-Gateway DALI 802003

If the ECG has been assigned to one of the channels 1-16 and the switching or dimming state of the channel is modified after the individual dimming or switching of the ECG, both this ECG and all the other ECGs assigned to the channel are dimmed together to the new value or switched together.

Channel 1-16, Dimming brighter / darker

The "Dimming time" can be adjusted. On receipt of the starting command, the EIB-Gateway DALI GE 141 initiates communication with the ECGs in order to modify the dimming value in the indicated direction at an adjustable speed. If a stop command should be received before the end of the dimming process, the process is interrupted and the achieved dimming value is maintained. The overshoot time is (re)started in time switch mode, if it has not been switched off. It can be selected via parameters whether it is possible to switch on and off via dimming.

ECG 1-64, Dimming brighter / darker

It is **not** possible to manually dim a specific ECG brighter or darker separately. The dimming status of an individual ECG can only be modified by a dimming value telegram via one of the objects 144 to 207.

Channel 1-16, Send dimming value (8 bit)

The communication object with the designation "Dimming value, Channel x" sets the ECG of this channel to a defined value. It can be set whether to jump or dim to this value. If this object receives the value '0', the corresponding channel switches off. Values smaller than the minimum value (with the exception of the value '0') and values greater than the maximum value are limited to the minimum or maximum dimming value. If the ECG is switched off, it is possible to specify via a parameter whether it immediately accepts the received value and switches on or only adopts the received value after an ON command. The set starting value is then invalid. The dimming value telegrams also activate overshoot periods depending on the parameter settings.

ECG 1-64, Send dimming value (8 bit)

Up to 64 DALI ECGs can be individually dimmed to the transmitted 8-bit value via objects 144 to 207. The new dimming value is always dimmed on with a fixed dimming interval of 0.7 s which cannot be modified. If an attempt is made while a channel is being dimmed to individually dim an ECG that has been assigned to this channel to a new value, the ECG is immediately set to the dimming value of the channel again. This does not apply if the current dimming process has been triggered by the retrieval of a scene.

Channel 1-16, Dimming value limits

A maximum and minimum dimming value can be parameterised via the limit. The dimming value can only be modified within the set limits for all switching/dimming processes.

ECG 1-64, Dimming value limits

If an ECG is assigned to a channel, it "inherits" the parameters "Starting value", "Minimum dimming value" and "Maximum dimming value" from this channel.

If the "Starting value" parameter for this channel has been set to "last value", the "Maximum dimming value" that has been specified for the channel is used as a starting value on receipt of an ON telegram (via one of the objects 80 to 143) at a specific ECG that has been assigned to this channel.

If an ECG is not assigned to channels 1-16, the following dimming value limits apply: "Starting value" = "Maximum dimming value" = 100%, "Minimum dimming value" = minimum dimming value of the ECG.

Channel 1-16, Dimming value status

The object "Dimming value status, Channel x" is an 8-bit status object. It contains the current dimming value of the respective channel. It can be read and/or be sent automatically.

ECG 1-64, Dimming value status

The dimming status (0...100%) of a single DALI ECG can be both reported and queried via the 16-bit status object 210 "ECG dimming status". Bits 8 to 13 contain the number of the DALI ECG. It is displayed via bit 14 = 1 that the ECG or the lamp is switched on. Bit 15 is reserved for future applications. Bits 0 to 7 contain the current dimming status as an 8-bit value (0...100%).

A change in the dimming state is only sent automatically via this object if it has been triggered by a switching command to one of the objects 80 to 143 or by a dimming value telegram to one of the objects 144 to 207 and automatic sending has been enabled. If there is a change in the brightness value of the channel, no telegrams are sent via this status object.

If a send request is sent to this object, it must contain the number of the DALI ECG in bits 8 to 13 and bits 14 and 15 must be set to "1". After a send request the dimming status is always transferred, regardless of how it occurred.

Channel 1-16, Switching status

The On / Off status of each channel can be sent via a communication object "Switching status, Channel x" on read request or automatically after a change in the object.

01 07 EIB-Gateway DALI 802003

ECG 1-64, Switching status

The switching state (On or Off) of a single DALI ECG can be both reported and queried via the 8-bit status object 209 "ECG switching status". Bits 0 to 5 contain the number of the DALI ECG. It is reported via bit 6 = 1 that the ECG or the lamp is switched on. Bit 7 is reserved for future applications.

A change in the switching state is only sent automatically via this object if it has been triggered by a switching command to one of the objects 80 to 143 or by a dimming value telegram to one of the objects 144 to 207 and automatic sending has been enabled. If there is a change in the switching status of the channel, no telegrams are sent via this status object.

If a send request is sent to this object, it must contain the number of the ECG in bits 0 to bit 5 and bits 6 and 7 are set to "1". After a send request the switching state is always transferred, regardless of how it occurred.

ECG 1-64, Error status

The error status of an individual DALI ECG can be both reported and queried via the 8-bit status object 208 "ECG error status". Bits 0 to 5 contain the number of the DALI ECG. A lamp error is reported via bit 6 = 1 while an ECG error is reported via bit 7 = 1.

If a read request is sent to this object, it must contain the number of the DALI ECG in bits 0 to 5 and bits 6 and 7 must be set to "1".

DALI, Power supply status

The status of the common power supply for the DALI gateway and the DALI bus cable are reported via the 1-bit status object 211 "DALI power status". If the object value = "0", the power supply is present. If the object value = "1", the DALI power supply has failed. The gateway is then no longer able to function and all the DALI ECGs are set to the dimming state that has been parameterised on failure of the DALI bus voltage.

The status of the DALI power supply can be transferred via the EIB, even when the gateway power supply fails, as the microprocessor of the EIB bus coupling unit is supplied via the EIB.

DALI, Short circuit status

A short circuit of the DALI bus cable can be reported via the 1-bit status object 212 "DALI, Short circuit status". If the object value = "0", there is no short circuit. If the object value = "1", the DALI bus cable has shorted. The gateway is then no longer able to function and all the DALI ECGs are set to the dimming state that has been parameterised on failure of the DALI bus voltage.

Channel 1-16, Scenes

The application program enables 16 scenes to be parameterised, which can contain up to 16 channels. Communication objects for recalling and storing are available for each scene.

Bus voltage failure

On bus voltage failure, the program always stores the current dimming values of all channels and ECGs, so that they are available again on bus voltage recovery. The channels and ECGs can adopt different dimming values on bus voltage failure.

Bus voltage recovery

The dimming value that is selected on bus voltage recovery can be set via parameters.

Commissioning

Using ETS 3, it is possible to determine and display how many DALI ECGs are connected to the EIB-Gateway DALI GE 141. An individual name with up to 30 characters can then be assigned to each ECG. The ECGs can also be assigned to the individual channels and be tested.

If an individual name is assigned to an ECG, this name is automatically adopted as the object name for the corresponding object within communication objects 80 to 207, whereby objects 80 and 144 are always assigned to the ECG with the number "0", objects 81 and 145 are assigned with the number "1" etc. The name and number for each ECG can also be seen by printing out the documentation.

Testing ECGs

Immediately after the commissioning process, the individual ECG can be switched directly for testing purposes or dimmed to an adjustable value, without EIB telegrams needing to be sent via group addresses.

Testing channels

The individual channels can be tested directly immediately after the assignment of the ECGs, without EIB telegrams needing to be sent via group addresses.

Testing scenes

The individual scenes can be tested directly immediately after the assignment of the ECGs, without EIB telegrams needing to be sent via group addresses.

Maximum number of group addresses: 253

Maximum number of associations: 253

01 07 EIB-Gateway DALI 802003**Note**

The application program can only be downloaded with ETS 3. The view of the objects can be arranged individually i.e. this view can vary.

Communication objects

Number	Name	Funktion	Länge
0	Switching, Channel 1	On / Off	1 bit
1	Dimming, Channel 1	Brighter / Darker	4 bit
2	Dimming value, Channel 1	set 8-bit value	1 Byte
3	Dimming value status, Channel 1	8-bit Value	1 Byte
4	Switching status, Channel 1	On / Off	1 bit
80	Switching, "ECG 1"	On / Off	1 bit
144	Dimming Value, "ECG 1"	set 8-bit value	1 Byte
208	ECG error status	Lamp / ECG error	1 Byte
209	ECG switching status	On / Off	1 Byte
210	ECG dimming value status	Report status	2 Byte
211	DALI power supply status	1=mains failure	1 bit
212	DALI short circuit status	1=short circuit	1 bit

Obj	Object name	Function	Type	Flags
0	Switching, Channel 1	On / Off	1 Bit	CW
The ECGs that are assigned to channel 1 are switched via this object. If the read flag is set, the current switching state can be queried via this object. Changes in the switching state can also be considered by "Dimming" or "Dimming value".				
1	Dimming, Channel 1	Brighter / Darker	4 Bit	CW
The dimming telegrams for channel 1 are received via this object.				
2	Dimming value, Channel 1	Set 8-bit Value	1 Byte	CW
A dimming value for channel 1 is received via this object.				
3	Dimming value status, Channel 1	8-bit Value	1 Byte	CRT
This objects acts as the sending object for the current status (dimming value) of channel 1, which can be read out via the bus (e.g. for the visualisation). With the corresponding parameter setting ("Channel 1-16, send dimming value status: on change in dimming value"), this object sends the current dimming value after a change in the value. With the help of the parameter "Minimum disable time for sending the dimming status after a change", it is possible to limit the number of telegrams within a set period.				

Obj	Object name	Function	Type	Flags
4	Switching status, Channel 1	On / Off	1 Bit	CRT
The current switching state of channel 1 can be queried via this object. In the parameter setting "Channel 1-16, send switching status: on change in status", the current switching state is sent automatically via this object after a change.				

This also applies to communication objects 5 to 79 of channels 2 to 16.

Obj	Object name	Function	Type	Flags
80	Switching, "ECG 1"	On / Off	1 Bit	CW
The DALI ECG "ECG 1" is switched via this object. The name "ECG 1" changes according to the name specified in the parameters (rename) for this ECG.				
On receipt of an ON command, the corresponding ECG is set to the parameterised starting value of the channel to which it has been assigned. If the ECG is not assigned to one of the channels or the starting value has been parameterised with "last value", the ECG dims to the parameterised "Maximum dimming value" or 100%. On receipt of the target status (On or Off) at this object, it is always dimmed on with a constant dimming interval of 0.7 seconds.				
The dimming and switching status object of the channel that is assigned to the ECG is not changed as a result.				

This also applies to communication objects 81 to 143 of ECGs 2 to 64.

Obj	Object name	Function	Type	Flags
144	Dimming value, "ECG 1"	Set 8-bit Value	1 Byte	CW
A dimming value for the DALI ECG "ECG 1" is received via this object. The name "ECG 1" changes according to the name specified in the parameters (renaming) for this ECG.				
On receipt of the target value at this object, it is always dimmed on with a constant dimming interval of 0.7 seconds.				
The dimming value and switching status object of the channel that is assigned to the ECG is not changed as a result.				

This also applies to communication objects 145 to 207 of ECGs 2 to 64.

01 07 EIB-Gateway DALI 802003

Obj	Object name	Function	Type	Flags																																
208	ECG error status	Lamp / ECG error	1 Byte	CTW																																
<p>The error status of all the connected ECGs can be queried or sent automatically via this object.</p> <p>In the parameter setting "DALI, send error status: on change in status", the current error status for all the ECGs/lamps (0=OK and 1=Error) is sent automatically via this object after a change. The following bit assignment is used:</p> <table><tr><td>Bit 7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr><tr><td>ECG error</td><td>Lamp error</td><td colspan="6">ECG number</td></tr></table> <p>Bit 0 to bit 5 contain the number of the DALI ECG as a binary number in the range 0...63, whereby the binary number 0 corresponds to ECG number 1 etc. The detection of an error can take up to 90 seconds depending on the number of ECG.</p>					Bit 7	6	5	4	3	2	1	0	ECG error	Lamp error	ECG number																					
Bit 7	6	5	4	3	2	1	0																													
ECG error	Lamp error	ECG number																																		
209	ECG switching status	On / Off	1 Byte	CTW																																
<p>The switching status of all the connected ECGs can be queried or sent automatically via this object.</p> <p>In the parameter setting "ECG 1-64, send switching status: on change in status", the current switching state is sent automatically via this object after a change by "Switch, ECG x" or "Dimming value, ECG x". The following bit assignment is used:</p> <table><tr><td>Bit 7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr><tr><td>Reserved</td><td>Status On/Off</td><td colspan="6">ECG number</td></tr></table>					Bit 7	6	5	4	3	2	1	0	Reserved	Status On/Off	ECG number																					
Bit 7	6	5	4	3	2	1	0																													
Reserved	Status On/Off	ECG number																																		
210	ECG dimming value status	Report status	2 Byte	CTW																																
<p>The switching and dimming status of all the connected ECGs is queried or sent automatically via this object.</p> <p>In the parameter setting "ECG 1-64, send dimming value status: on change in status", the current switching and dimming state is sent automatically via this object after a change by "Switch, ECG x" or "Dimming value, ECG x". The following bit assignment is used:</p> <table><tr><td>Bit 15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td></tr><tr><td>Reserved</td><td>Status On/Off</td><td colspan="6">ECG number</td></tr><tr><td>Bit 7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr><tr><td colspan="8">8-bit value</td></tr></table>					Bit 15	14	13	12	11	10	9	8	Reserved	Status On/Off	ECG number						Bit 7	6	5	4	3	2	1	0	8-bit value							
Bit 15	14	13	12	11	10	9	8																													
Reserved	Status On/Off	ECG number																																		
Bit 7	6	5	4	3	2	1	0																													
8-bit value																																				

Obj	Object name	Function	Type	Flags
211	DALI power supply status	1 = mains failure	1 Bit	CRT
<p>The status of the power supply for the EIB/DALI gateway and the DALI bus is issued via the group address for this object (0=OK; 1=Mains failure).</p> <p>In the parameter setting "DALI, send error status: on change in status", the current status of the power supply is sent automatically via this object after a change.</p>				
212	DALI short circuit status	1 = short circuit	1 Bit	CRT
<p>A short circuit of the DALI bus cable is reported via the group address at this object (0=no short circuit; 1=short circuit).</p> <p>In the parameter setting "DALI, send error status: on change in status", the current status of the DALI bus cable is sent automatically via this object after a change.</p>				
213	Scene 1 / 2	Scene Recall	1 Bit	CW
<p>Scenes 1 and 2 are recalled via the group addresses of this object. On receipt of a '0' telegram, the channels which are assigned to scene 1 are set to the stored dimming values. Scene 2 is recalled accordingly on receipt of a '1' telegram.</p>				

This also applies to communication objects 214 to 220 of scenes 3 to 16.

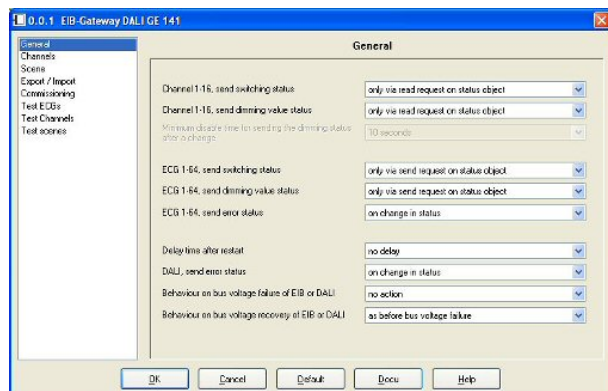
Obj	Object name	Function	Type	Flags
221	Scene 1 / 2	Scene Store	1 Bit	CW
<p>Scenes 1 and 2 are stored via the group addresses of this object. On receipt of a '0' telegram, the current dimming values of the channels which are assigned to scene 1 are stored. Scene 2 is stored accordingly on receipt of a '1' telegram.</p>				

This also applies to communication objects 222 to 228 of scenes 3 to 16.

01 07 EIB-Gateway DALI 802003

Parameters

General



Note:

The functions and parameters apply to channels 1 to 16.

Parameters	Settings
Channel 1-16, send switching status	only via read request on status object on change in status on change in status / bus voltage recovery
<p>In the parameter setting "Channel 1-16, send switching status: only via read request on status object", the object value "Switching status, Channel x" can only be read out after a read request.</p> <p>In the setting "Channel 1-16, send switching status: on change in status", the current switching state is sent automatically after a change via the communication object "Switching status, Channel x". There is <u>no</u> automatic sending of the switching status on bus voltage recovery, even if it changes in accordance with the parameterisation.</p> <p>In the setting "Channel 1-16, send switching status: on change in status / bus recovery", the current switching status is sent automatically via the communication object "Switching status, Channel x" after a change and on bus voltage recovery.</p>	

Parameters	Settings
Channel 1-16, send dimming value status	only via read request on status object on change in dimming value on change in dimming value / bus voltage recovery
<p>In the parameter setting "Channel 1-16, send dimming value status: only via read request on status object", the object value "Dimming value status, Channel x" can only be read out after a read request.</p> <p>In the setting "Channel 1-16, send dimming value status: on change in dimming value", the current dimming value is sent automatically after a change via the communication object "Dimming value status, Channel x". Intermediate values can also be sent when switching on with a longer dimming period. There is <u>no</u> automatic sending of the dimming value on bus voltage recovery, even if it changes in accordance with the parameterisation.</p> <p>In the setting "Channel 1-16, send dimming value status: on change in dimming value / bus recovery", the current dimming value is sent automatically via the communication object "Dimming value status, Channel x" after a change and on bus voltage recovery.</p>	
Minimum disable time for sending the dimming status after a change	2 seconds 3 seconds 4 seconds 5 seconds 7 seconds 10 seconds 15 seconds
<p>The minimum disable time for the dynamic sending of the dimming value status can be set with this parameter.</p> <p>When using brightness controllers or several channels, the highest possible setting should be selected (10 / 15 seconds) as excessive bus loads may otherwise arise. Once the final value has been reached, the status is sent once this interval has elapsed.</p>	
ECG 1-64, send switching status	only via send request on status object on change in status on change in status / bus voltage recovery
<p>In the parameter setting "ECG 1-64, send switching status: only via send request on status object", the object value is only sent after a send request.</p> <p>In the parameter setting "ECG 1-64, send switching status: on change in status", the current switching status of the ECG is sent automatically after the change via communication object 209 "Switching status ECG". There is <u>no</u> automatic sending of the switching status on bus voltage recovery, even if it changes in accordance with the parameterisation.</p> <p>In the setting "ECG 1-64, send switching status: on change in status / bus recovery", the current switching status of the ECGs is sent automatically via the communication object 209 "Switching status ECG" after a change and on bus voltage recovery.</p>	

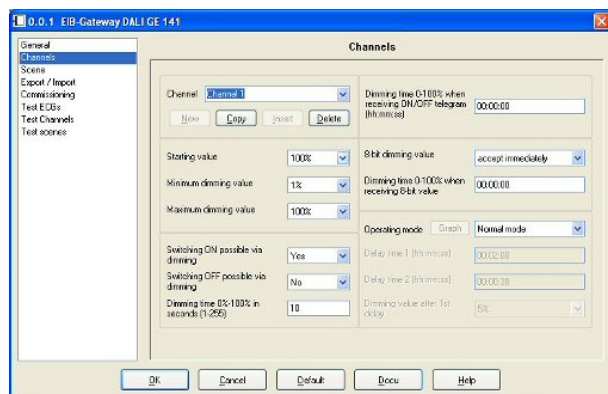
01 07 EIB-Gateway DALI 802003

Parameters	Settings
ECG 1-64, send dimming value status	only via send request on status object on change in status on change in status / bus voltage recovery
<p>In the parameter setting "ECG 1-64, send dimming value status: only via send request on status object", the object value can only be sent after a send request.</p> <p>In the setting "ECG 1-64, send dimming value status: on change in status", the current dimming value status is sent automatically after a change via the communication object 210 "Dimming value status ECG". There is <u>no</u> automatic sending of the dimming value on bus voltage recovery, even if it changes in accordance with the parameterisation.</p> <p>In the setting "ECG 1-64, send dimming value status: on change in status / bus recovery", the current dimming value is sent automatically via the communication object 210 "Dimming value status ECG" after a change and on bus voltage recovery.</p>	
ECG 1-64, send error status	only via send request on status object on change in status on change in status / bus voltage recovery
<p>In the parameter setting "ECG 1-64, send error status: only via send request on status object", the object value is only sent after a send request.</p> <p>In the parameter setting "ECG 1-64, send error status: on change in status", the current error status of an ECG is sent automatically after a change via the communication object 208 "Error status ECG".</p> <p>In the parameter setting "ECG 1-64, send error status: on change in status / bus voltage recovery", the current error status of an ECG is sent automatically after a change and on bus voltage recovery via the communication object 208 "Error status ECG".</p>	
Delay after restart	no delay 2 seconds 3 seconds 4 seconds 5 seconds 10 seconds 20 seconds 30 seconds
<p>If one of the two channel or ECG status parameters is set to "on change in status / bus voltage recovery", the current status signals are sent automatically on the bus after bus voltage recovery.</p> <p>When using several EIB-Gateway DALI GE 141 devices, excessive bus loads may arise. With this parameter, it is possible to delay the automatic sending and to reduce the bus load on bus voltage recovery. If several EIB-Gateway DALI GE 141 devices are installed, they should be set to different delay values.</p>	

Parameters	Settings
DALI, send error status	only via read request on status object on change in status
<p>In the parameter setting "DALI, send error status: only via read request on status object" the current status of the DALI power supply or the DALI bus cable is only sent via the communication objects "DALI, power supply status" and "DALI, short circuit status" after a read request.</p> <p>In the parameter setting "DALI, send error status: on change in status", the current status of the DALI power supply or the DALI bus cable is sent automatically after a change via the communication objects 211 "DALI, power supply status" and 212 "DALI, short circuit status".</p>	
Behaviour on bus voltage failure of EIB or DALI	no action starting value maximum dimming value minimum dimming value switch OFF
<p>With this parameter, it is defined which dimming value the ECGs adopt if communication is no longer possible with the ECGs due to bus voltage failure on the EIB, supply voltage failure for the EIB-Gateway DALI GE 141 or due to a short circuit/disruption of the DALI. It is a prerequisite that the power supply of the ECG is still present. If this parameter is set to "starting value" and the starting value of a channel is parameterised with "last value", the corresponding channel is set to maximum brightness on bus voltage failure.</p>	
Behaviour on bus voltage recovery of EIB or DALI	as before bus voltage failure starting value maximum dimming value minimum dimming value switch OFF
<p>This parameter defines which dimming values the channels and ECGs adopt once both the EIB bus voltage and the supply voltage are present on the EIB-Gateway DALI GE 141 again. A prerequisite is that the power supply for the ECG is already available. If this parameter is set to "starting value" and the starting value of a channel is selected as "last value", the corresponding channel is set on bus voltage recovery to the dimming value prior to bus voltage failure. If the channel was switched off on bus voltage failure, the maximum dimming value is set in this case.</p> <p>If the voltage of an ECG should recover at a later date, the current dimming value of the associated channel is set after a maximum of 30 seconds.</p>	

01 07 EIB-Gateway DALI 802003

Channel-related parameters

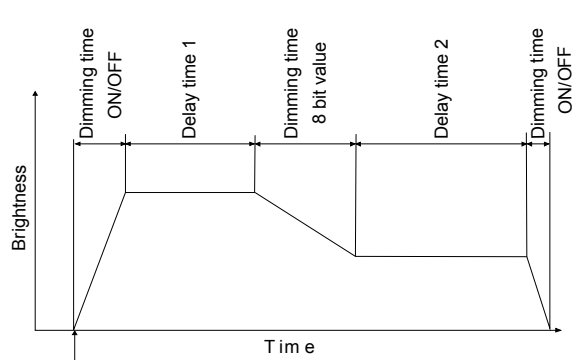
**Note:**

The function and parameters of channels 1 – 16 are identical.

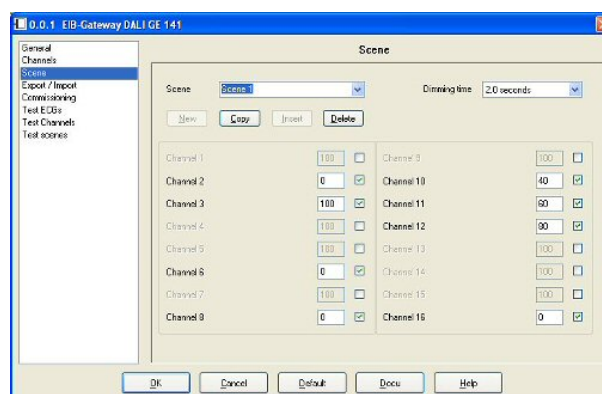
Parameters	Settings
Channel	
The channel name Channel 1 appears in the adjacent channel selection window. This text can be overwritten and then becomes the channel name.	
The selection of the individual channels is carried out by clicking on the ▼ button and then selecting the required channel with the mouse.	
New	
A new channel is created with the default values by clicking on this button (e.g. Channel 2).	
Copy	
By clicking on this button, the currently selected channel is copied together with all the parameters that have already been set and the "Insert" button is activated.	
Insert	
This function creates a new channel with the copied values. The designation is e.g. Channel 5.	
Delete	
If this function is deleted, the channel that is displayed in the channel selection window is deleted.	
Starting value (limited by minimum / maximum dimming value)	100% , 95%, 90%, 85%, 80%, 75%, 70%, 65%, 60%, 55%, 50%, 40%, 30%, 20%, 10%, last value
This parameter indicates the starting value on receipt of an ON switching telegram. The parameterised value is limited by the program to a range between the minimum and maximum dimming value.	

Parameters	Settings
Minimum dimming value	0.5% , 1%, 3%, 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40%, 45%, 50%, 60%, 70%
The minimum dimming value can be defined via this parameter. When dimming darker, it is only possible to dim down to this value.	
Maximum dimming value	100% , 95%, 90%, 85%, 80%, 75%, 70%, 65%, 60%, 55%, 50%, 40%, 30%
The maximum dimming value can be defined via this parameter. When dimming brighter, it is only possible to dim up to this value.	
Switching ON possible via dimming	Yes No
If it should be possible to switch on via dimming when in the OFF state, this setting must be enabled in this parameter.	
Switching OFF possible via dimming	Yes No
If the dimming value is dimmed down below the minimum value while in the ON state, it is possible to define via this parameter whether the channel should be switched off.	
Dimming time 0-100% in seconds (1-255)	1-255 10
This parameter indicates the period in which a dimming process takes place from 0% to 100%. This dimming time only applies on receipt of the 4-bit communication object "Dimming".	
Dimming time 0-100% when receiving ON/OFF telegram (hh:mm:ss)	00:00:00
This parameter defines the dimming period in which the channel dims to the ON/OFF switching value on receipt of an ON/OFF telegram received via the bus. The time is based on a change in the dimming value from 0% to 100%. In the setting "00:00:00", the channel jumps to the ON/OFF value. The maximum value here is 15 hours (15:00:00). hh= for hours; mm= for minutes; ss= for seconds.	
8-bit dimming value	accept immediately only accept on ON
This parameter specifies whether the channel carries out a dimming value telegram received via the bus when it is in the OFF state (accept immediately) or whether it stores the dimming value and selects the value after the next ON telegram. The dimming value is then also accepted immediately if the channel is already switched on.	
Dimming time 0-100% when receiving 8-bit value (hh:mm:ss)	00:00:00
The dimming time indicates the period in which a dimming process from 0% to 100% takes place. It only applies on receipt of an 8-bit dimming value. In the setting "00:00:00", the channel jumps to this value. hh = for hours; mm = for minutes; ss = for seconds.	

01 07 EIB-Gateway DALI 802003

Parameters	Settings
Operating mode	Normal mode 1-level time switch mode 2-level time switch mode
<p>This parameter enables toggling between normal and time switch mode.</p> <p>The channel dims to the OFF value with the ramp defined in the parameter "Dimming time (0-100%) when receiving ON/OFF telegram". In the setting "2-level time switch", the intermediate value is set with the value defined in the parameter "Dimming time (0%-100%) when receiving 8-bit value".</p>	
Delay time 1 (hh:mm:ss)	00:02:00
<p>The period for switching off (for 1-level time switch) or for setting the intermediate dimming value (for 2-level time switch) is set here.</p> <p>The maximum value here is 15 hours (15:00:00).</p> <p>In the event of "ON/Dimming/Value" telegrams, delay period 1 is (re)started when the dimming value is achieved.</p> <p>hh= for hours; mm= for minutes; ss= for seconds.</p>	
Delay time 2 (hh:mm:ss)	00:00:30
<p>The period for switching off (after setting the intermediate dimming value) (for 2-level time switch) is set here.</p> <p>The maximum value here is 15 hours (15:00:00).</p> <p>hh= for hours; mm= for minutes; ss= for seconds.</p>	
Dimming value after 1st delay	5% 10%, 15%, 20%, 25%, 30%, 35%, 40%, 45%, 50%, 55%, 60%, 65%, 70%, 75%, 80%
<p>This parameter specifies the intermediate value which is selected after level 1 has elapsed. The set value is limited by the program to the range between the minimum/maximum dimming value.</p>	
<p>Graph</p> <p>In the settings "1-level time switch" or "2-level time switch", it is possible via the "Graph" button to view the time sequence of the dimming values on receipt of an ON telegram.</p>	
 <p>ON-telegram</p>	

Scene-related parameters



Parameters	Settings
Scene	
<p>The scene name Scene 1 appears in the adjacent scene selection window. This text can be overwritten and then becomes the scene name.</p> <p>The selection of the individual scenes is carried out by clicking on the ▼ button and then selecting the required scene with the mouse.</p>	
New	
<p>A new scene with the default values (e.g. Scene 2) is created by clicking on this button.</p>	
Copy	
<p>The current selected scene together with any parameter settings is copied by clicking on this button. The "Insert" button is activated.</p>	
Insert	
<p>This function inserts a new scene with the copied values. The designation is e.g. Scene 5.</p>	
Delete	
<p>If this function is selected, the scene that is displayed in the scene selection window is deleted.</p>	
Dimming time	<p>jump</p> <p>0.7 seconds</p> <p>1.0 seconds</p> <p>1.4 seconds</p> <p>2.0 seconds</p> <p>2.8 seconds</p> <p>4.0 seconds</p> <p>5.7 seconds</p> <p>8.0 seconds</p> <p>11.3 seconds</p> <p>16.0 seconds</p> <p>22.6 seconds</p> <p>32.0 seconds</p> <p>45.3 seconds</p> <p>64.0 seconds</p> <p>90.5 seconds</p>

01 07 EIB-Gateway DALI 802003

Parameters	Settings
<p>This parameter "Dimming time" is the period for concluding the dimming process for all the lamps together when the corresponding scene is recalled.</p> <p>This means that if the lamps of channel 1 are set at 50% and should be dimmed to 90% in this scene and the lamps of channel 2 should be dimmed from 100% to 20%, the same time is required for the dimming processes. Channel 1 thus indicates a smoother dimming curve than channel 2.</p> <p>This dimming time is not dependent on the dimming times that have been set for the channels.</p>	
Channels <p>The individual channels are listed. The channel name assigned in the channel-related parameter setting is indicated for the configured channels. It is possible to integrate the individual channels into the respective scene whereby the free field behind the parameter is activated for assigning the value. Only the activated channels are set to the selected brightness when the scene is recalled. All the other channels are not taken into consideration when the scene is recalled.</p>	
Dimming value (in percent)	0-100 % 100
<p>This value indicates as a percentage the dimming value which the channel (if activated) adopts when this scene is recalled. The value can be configured for each channel for the first time. The data is overwritten when this scene is stored. The application program limits the input to the values between the minimum and maximum dimming value.</p>	

Remark

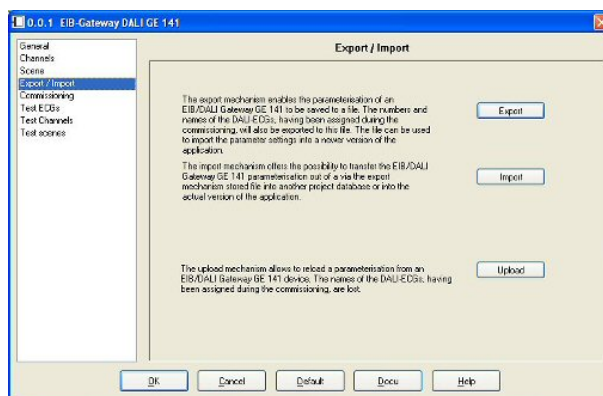
The sending of a dimming value and the recall of a scene with a dimming time different from the last transmitted one (as well when dimming to a new dimming value as when dimming in parallel to different dimming values within a scene) lead to a reprogramming of the internal dimming time of all ECGs connected to the DALI gateway. If dimming times will be changed frequently be recalling scenes in very short intervals (e.g. in case of colour light control by quick following scene sequences) the ECGs of some manufacturers might be damaged. This will not happen when the same dimming time will be used for all scenes and preferred the standard dimming time of 0.7 seconds.

Export / Import

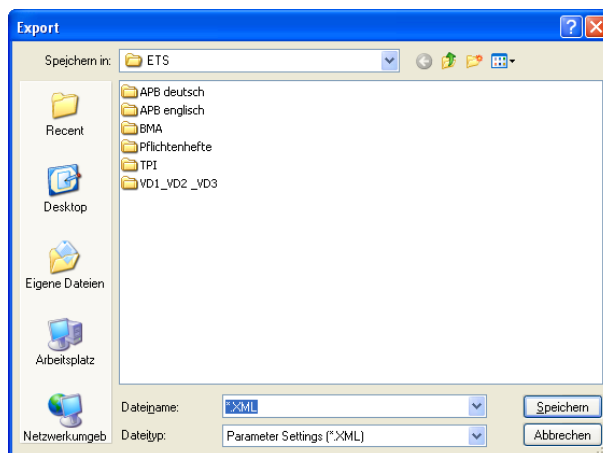
The EIB-Gateway DALI enables all the settings that have been carried out, i.e. all the designations, parameters and group address links to be exported to a file.

An exported configuration can likewise be transferred to the current EIB-Gateway DALI database entry using an import process.

An update of the ETS software or application program can thus be carried out without having to repeat the entire parameterisation.



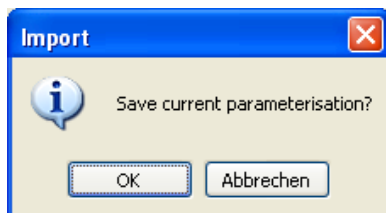
After pressing the **"Export"** button, the standard dialog for saving files is opened:



The file is saved in the so-called XML format which is a standardised file format that enables a simple evaluation of the stored data.

01 07 EIB-Gateway DALI 802003

When importing an XML file, any entries that have been carried out previously are overwritten. A security query prevents unwanted data loss:



Upload:

The download mechanism allows to restore the parameter setting on a EIB Gateway DALI GE 141 over the bus. The names assigned to the DALI-ECGs during the commissioning are lost.

The names of the channels / scenes / ECG cannot be restored since they aren't saved in the Gateway (only in the ETS). If the application program of the Gateway is different to the program 80200_, only the assigned data are restored. Missing data are replaced by the default settings.

Note

To be able to import an exported data set of an EIB-Gateway DALI, all the group addresses which are used in the relevant EIB-Gateway DALI should already have been created in the current project.

If the same group addresses are used differently in the original project and in the current project, this can lead to a malfunction of the installation.

When updating an existing project from ETS2 to ETS3, the following procedure is recommended:

- Export the configuration of the existing EIB-Gateway DALI in this project (use a meaningful name e.g. with reference to the physical address)
- ETS2 "plug-in" from Siemens is necessary for exporting the parameterisation (available at www.siemens.de/gamma)
- Delete the EIB-Gateway DALI in the current project (in ETS2)
- Export the rest of the project
- Import this project into ETS3
- Import the new application program of the EIB-Gateway DALI for ETS3
- Insert the previously deleted EIB-Gateway DALI in the project
- Import the exported configuration into the respective "EIB-Gateway DALI"

Documentation**Parameters****Documentation**

By pressing this button (displayed on following pages: General / Channels / Scene), the documentation of this device together with all the settings can be printed out.

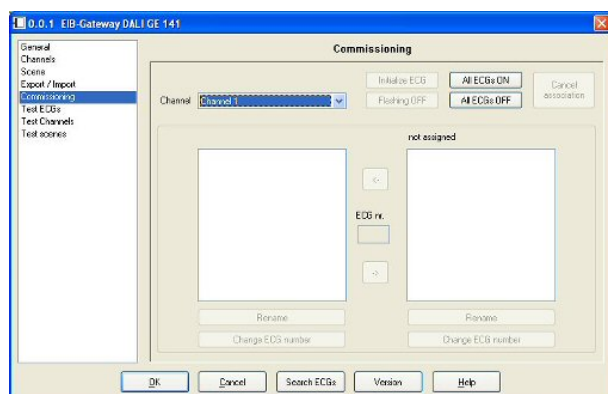
01 07 EIB-Gateway DALI 802003**Commissioning**

The commissioning of the EIB-Gateway DALI GE 141 takes place following the steps described below:

1. The power supply must be present at the DALI ECGs. This also applies to the power supply of the EIB-Gateway DALI GE 141. All DALI devices must be linked to the EIB-Gateway DALI GE 141.
2. The physical address is downloaded to the EIB-Gateway DALI GE 141.
3. The configured application program is downloaded to the EIB-Gateway DALI GE 141.
4. The parameter window for commissioning the EIB-Gateway DALI GE 141 is opened in the "Commissioning/Test" mode of ETS 3 (if bus access is available). This can take up to 1 minute if the configured EIB-Gateway DALI is not connected to the EIB.

Four additional tabs now appear in the parameter window:

- Commissioning
- Test Channels
- Test ECGs
- Test Scenes.

Commissioning the ECGs**Parameters****Search ECGs**

By pressing this button, it is possible to find all the ECGs that are connected to the GE 141 and are ready for operation. A search process starts that can last several minutes. The ECGs that are found first appear in the right-hand field with the title "unassigned". This search must also be carried out if an ECG is replaced or an additional ECG is installed.

Note: Before searching for ECGs, it must be ensured that all the installed DALI ECGs are linked with the EIB-Gateway DALI and that the respective supply voltage (e.g. AC 230 V) is applied at the DALI ECGs.

Assignment of the ECGs to the individual channels

When an ECG that has not yet been assigned is selected with the mouse, its lamp starts to flash.

If an ECG is selected, it is possible to assign a unique name (max. 30 characters) for this ECG by pressing the button "Rename".

The channel must now be selected (as described under "Channel").

Using the button <-, the unassigned ECG is allocated to the required channel. An unlimited number of ECGs (up to 64) can be assigned to a channel. DALI is limited to 64 devices. Each ECG can only be assigned to one channel.

Previously assigned ECGs can be reset to "unassigned" by selecting and pressing the button ->.

Channel

The channel name appears in the adjacent channel selection window.

The selection of the individual channels is carried out by clicking on the ▾ button and then selecting the required channel with the mouse.

Initialise ECG

If two ECGs have been found with the same random number (detected by two lamps flashing when the ECG is selected), this match can be removed by pressing the button "Initialise ECG".

Flashing OFF

The lamp stops flashing when this button is pressed.

This function can also be achieved if another ECG is selected as this device starts to flash.

Cancel associations

With this function, it is possible to change the ECGs that are already assigned to the channels to unassigned channels in the "unassigned" field. When the data is then transferred into the EIB-Gateway DALI GE 141, the ECGs are no longer assigned to the channels. After selecting this function, a dialog window is opened first of all which must be confirmed: "Cancel association / Are you sure?"

All ECGs ON

All the ECGs connected to the EIB-Gateway DALI GE 141 are switched on with maximum brightness.

01 07 EIB-Gateway DALI 802003

Parameters**All ECGs OFF**

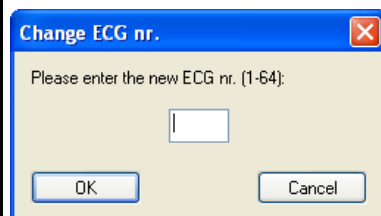
All the ECGs connected to the EIB-Gateway DALI GE 141 are switched off.

Version

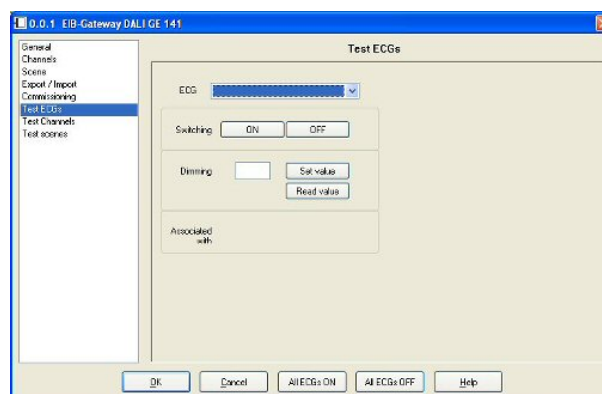
When this function is triggered, the current firmware status is read out from the EIB-Gateway DALI GE 141.

Parameter**Change Electronic Ballast No.**

If one of these buttons is pressed, a dialog window pops up to enter a new electronic ballast (ECG) number in the range 1-64.



When this dialog is closed with „OK“ the selected ballast receives the number entered by the user unless this number is already assigned to another ballast. In this case that ballast receives the original number of the selected ballast.

Test ECGs**Parameters****ECG**

An ECG name can be selected from the list which displays all the ECGs.

ON / OFF

The selected ECG can be switched ON or OFF with the two buttons.

Parameters**Set value**

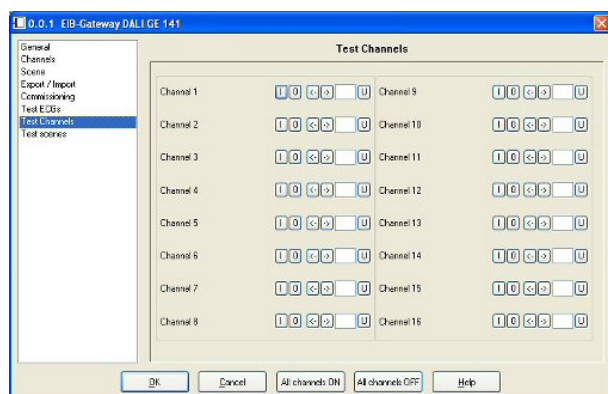
After entering the value, this button must be pressed on the keyboard in order to transfer the value for the ECG.

Read value

The reading of the current switching and dimming status of the ECG is triggered via this button and displayed here.

01 07 EIB-Gateway DALI 802003

Test Channels



Parameters

Channels

The individual channels are listed. The channel name assigned in the channel-related parameter setting is indicated for the configured channels.

The following functions can be tested using the respective button for each channel:

- I Switch channel ON
- O Switch channel OFF
- <- Dim channel darker by 1/16
- > Dim channel brighter by 1/16

100 A value between 0 – 100% can be entered here. The values are however limited by the maximum and minimum dimming values.

After entering the value, the TAB key on the keyboard should be pressed to transfer the value to the channel.

A It is possible to read out the current brightness value of this channel with this button and to display it in the value window.

The behaviour of the channels for the above functions corresponds to a receipt of a telegram at the corresponding communication objects: "Switch On / Off", "Dim brighter / darker", "Set value".

No group addresses need to be assigned for these functions. Only the power supply for the ECGs, DALI and the EIB are required for commissioning as well as the allocation of the physical address. The ECGs must also be assigned to the channels.

Parameters

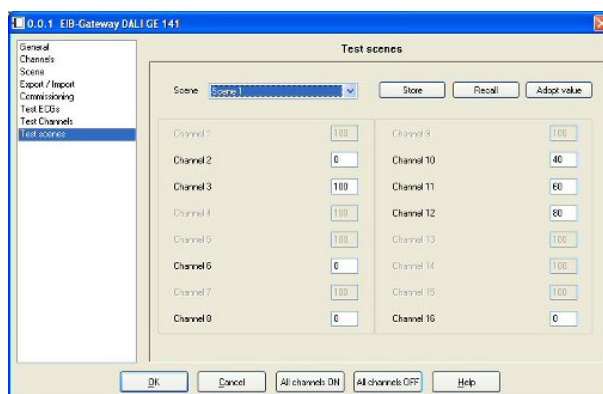
All channels ON

All the channels can be switched ON with this button (Central ON for all channels).

All channels OFF

All the channels can be switched OFF with this button (Central OFF for all channels).

Test Scenes



Parameters

Settings

Scene

The name of the scene appears in the adjacent scene selection window.

The selection of the individual scenes is carried out by clicking on the ▼ button and then selecting the required scene with the mouse.

Channels

The individual channels are listed. The channel name that was previously assigned in the channel-related parameter setting is indicated for the configured channels.

Dimming value (in percent) 0-100 %

The dimming value can be entered for each channel. The application program limits the input to values between the minimum and maximum dimming value.

Store

The values of the channels in the EIB-Gateway DALI GE 141 that are linked to this scene are stored with this button.

Recall


The scene with the set dimming time is recalled with this button. The integrated channels set the dimming values that are stored in the EIB-Gateway DALI GE 141.

Adopt value

The current dimming values of the all the channels are read out and displayed with this button.

Note:

If the parameter dialog is closed after the commissioning

with "Cancel" or , the commissioning data aren't saved in the ETS

The data are loaded into the EIB Gateway DALI, however.

To avoid this inconsistency, exit the dialog with "OK".