



KNX DALI Gateway



DLC-02-KN is a KNX to DALI gateway, used to connect a digital DALI lighting system to the KNX installation. Room-based lighting control is conveniently incorporated into the higher-level KNX system building management system. The device transforms switch and dim commands from the connected KNX system into DALI telegrams and status information from the DALI bus into KNX telegrams.

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1.Safety Guidelines

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- Risk of fatal injury from electrical current, all work carried out on the unit may only be performed by skilled electricians. Observe the regulations valid in the country of use, as well as the valid KNX guidelines.
- Risk of electrical shock and energy hazard, all failure should be examined by a qualified technician. Please do not remove the case form the unit by yourself.
- Please do not install the unit in places with high moisture, high ambient temperature or under direct sunlight.

2. Overview

2.1 Overview Device

The manual refers to the following devices:

- DLC-02-KN: INPUT: 100 305Vac
- Model Encoding



2.2 Information at the ETS-Software

Selection at the product database: Manufacturer: MEANWELL Enterprise Co. Ltd. Product family: Lighting Product type: Gateway Product name: DLC-02-KN Order number: DLC-02-KN

2.3 Features

- Two independent DALI Bus channels with built-in DALI power supply (up to 250mA per bus)
- Connect up to 2 X 64 DALI ECGs
- Max 16 scenes and group setting per channel
- LCD display, LED indicators and button for local operation
- Built-in with 250V/5A X 4 relay
- Easy installation and configuration via LCD interface and Web browser
- Multiple control effect based on the time event and input devices
- Support for DALI-2 devices with Part 202/207/208

2.4 Displays and operating elements



- A : KNX bus terminal
- B : DALI terminal A

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- C : DALI terminal B
- (D) : Ethernet connection (RJ-45 socket)
- E : USB connection
- $(\ensuremath{\overline{F}})$: Mains connection
- G : Connections for the relay output K1
- (H) : Connections for the relay output K2
- ① : Connections for the relay output K3
- (J) : Connections for the relay output K4

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- (\mathbf{K}) : Display
- : Move button for the display
- $({\rm M})$: Set button for the display
- (\mathbb{N}) : Exit button for the display
- () : Programming button
- (P) : Programming LED

2.5 Status LEDs

LED Indicator	Status			
DOWED	Normal working			
POWER	O NOT connected to AC			
	Relay ON (short)			
K1, K2, K3, K4	O Relay OFF (open)			
	Bus voltage normal			
DALI-A, DALI-B	O NO bus voltage provided			
	USB connected			
USB	O NO USB detected			
	Programming mode			
Programming LED	O NOT in programming mode			

2.6 Mechanical specification





3.Installation

3.1 Concept of Commissioning



After the wiring of the DALI segments according to instructions in the following sections, software start-up can begin. To do this, the product database is loaded and the corresponding ETS App installed in the ETS5, see 3.5 ETS App (DCA).

3.2 Mounting

Mount as shown in figure only, with DALI terminals down or else sufficient cooling will not be possible.

Admissible DIN-rail:TS35/7.5 or TS35/15

For rail fastening:

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- (a) Tilt the unit slightly rearwards.
- (b) Fit the unit over top hat rail.
- (c) Slide it downward until it hits the stop.
- (d) Press against the bottom for locking.
- (e) Shake the unit slightly to check the locking action.







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3.3 Electrical Configuration

DALI end

- The maximum number of ECGs connected is 64 per bus.
- The maximum length is 300m (with a cable cross-section of 1.5 mm²)

KNX end

- The maximum number of bus devices connected is 256.
- The maximum length of a line segment is 350 m, measured along the line between the power supply and the furthest bus device.
- The maximum distance between two bus devices cannot exceed 700 m.
- The maximum length of a bus line is 1000 m, keeping into account all segments

Web browser end (optional)

• The maximum length is 100m.



3.4 Wiring

- Use wires with an adequate cross-section.
- Use suitable mounting tools to do the wiring.

Туре	AC and relay terminals L,N,K1,K2,K3,K4	DALI terminals (DALI-A, DALI-B)	KNX bus terminal (KNX)
Solid wire	0.5 ~ 4.0mm	0.5 ~ 1.45mm	0.6~0.8Ф
Stranded wire	0.5 ~ 2.5mm²	0.5 ~ 1.5mm²	
American wire gauge	12 ~ 26AWG	16 ~ 26AWG	20 ~ 22AWG
Wire stripping length	7 ~ 8mm (0.276" ~ 0.315")	7 ~ 8mm (0.276" ~ 0.315")	5mm (0.196")
Screwdriver	3mm Slotted	3mm Slotted	
Recommended tightening torque	5 kgf-cm (4.4 lb-in)	5 kgf-cm (4.4 lb-in)	

3.5 ETS App (DCA)

The application for the gateway is based on the standard surface for the configuration of communication objects and parameters as well as a special surface for configuring the DALI bus system. This special surface is designed as a DCA (Device Control App) for the ETS5.

All required program data are automatically created when the App is imported.

Therefore click on Button "App " in the footer of ETS5 and then the "plus " sign in order to add an ETS App to your ETS5 system:



11 active / 11 installed

NOTE: To install the DCA app, ETS license is needed

A file box will become visible to select the ETS App for the gateway. This etsapp file can be downloaded from the official Mean Well website or link below:

https://building.meanwell.com/Upload/PDF/KNX_Application%20Database.pdf

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The App is displayed in the list of all ETS5 Apps:

App)S	+ ¢	11 active / 11 in		11 installed
		Name	Vendor	Version	License
~	*	Compatibility Mode App	KNX Association	5.7.743.36956	L
~	G.	Device Compare	KNX Association	5.7.743.36956	L
\checkmark	G,	Device Templates	KNX Association	5.7.743.36956	A
	*	DLC-02-KN	MEAN WELL Enterprises Co. Ltd.	1.1.0.0	A
~	-	ElBlib/IP	KNX Association	5.7.743.36956	A
~		Extended Copy	KNX Association	5.7.743.36956	A
\checkmark		Labels	KNX Association	5.7.743.36956	A
\checkmark		Project Tracing	KNX Association	5.7.743.36956	A
~		Replace Device	KNX Association	5.7.743.36956	A
~	нат	SCN-DALI64.03	MDT technologies GmbH	1.1.2.0	A
~		Split and Merge	KNX Association	5.7.743.36956	A
		ETS Version E	TS 5.7.2 (Build 743) 1 License ET	S5 Professional	Apps 11 acti

When the product is selected an additional DCA tab is shown.

Group Objects Channels Parameter DCA

3.6 Parameter Configuration

The parameters and the corresponding group addresses can then be configured as with any other KNX product. The DALI specific configuration is performed in the DCA tab.

The actual DALI commissioning is only possible online, that means a connection to the device is necessary. In this step, all connected ECGs are searched and found and can then be assigned to a certain group. After this assignment has been carried out, this special DALI configuration must be loaded into the device. The "Download" button is available in the DCA tab, see 4. DALI Commissioning.

In the last step, the parameters and the links to the group addresses should be loaded into the device using normal ETS download. The device is now ready for operation.

4.DALI Commissioning

Following the physical installation and wiring of the DALI ECGs and lights and the electronic commissioning, the connected ECGs need to be learnt-in.

To do so, please open the commissioning page in the DCA:

(1) Use the "Scan" button to start searching devices and addressing. During the process, all ECGs are automatically recognized and each ECG is assigned a short address from 0 - 63. Depending on the size of the connected DALI segments, the process can take up to few minutes.

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🗁 Open	💾 Save	R Save as	C Scan	🛞 Reinstall	🛃 Download	(i) About
DALI A						
ECG	5					
Group	os					
Scene	es					
DALI B						
ECG	5					
Group	os					
Scene	es					

NOTE: During the first time installation, "Scan" and "Reinstall" make no difference in searching devices and addressing. After an installation, the "Scan" button carries out a search for previously addressed and unaddressed devices. Addressing for previously addressed devices will remain unchanged. The next available address is then assigned to devices which have been recently added, whereas "Reinstall" deletes all addresses and group memberships in the devices and then readdress. (2) To identify the devices switch the corresponding lamp on and off. If you select an ECG and press the right mouse button, a context menu appears from which you can select the required function.

DLC-02-K	N							
🗗 Ope	n 💾 Save	Save Save	as 🗘	Scan	😨 Reinstall	🛃 Download	(i) About	
DALI A		ECG	Address	Туре		Group	Scene	,
l l	ECGs	A:ECG1	A0	DT6	G1		S1 S2	
	Groups	A:ECG2	A1	DT6			S1 S2 S3 S4 S5 S6	on
	Scenes	A:ECG3	none					
		A:ECG4	none					off
DALI B		A:ECG5	none					group edit
	ECGs	A:ECG6	none					
	Groups	A:ECG7	none					scene edit
	Scenes	A:ECG8	none					

Group assigning and scene editing also can be done in the context menu.

Hit1: Only one group can be assigned for an ECG. After assigned to a group, only group commands can control the ECG.

🔎 Group Edit	×
Group1	Group9
Group2	Group10
Group3	Group11
Group4	Group12
Group5	Group13
Group6	Group14
Group7	Group15
Group8	Group16
Save	Cancel

Hit2: There are 16 scenes available to be used. Check a scene to activate it.



- Hit3: Further DALI parameters, such as Power ON level, System Failure level, Maximum/Minimum level, Fade Rate, Fade Time can be set via the ETS or the display and the web browser.
- ③ The context menu is also available at group level. During the identification process it might be useful to switch certain groups or all connected lamps on or off. You can also send broadcast commands via the context menu, in order to, for example, switch all lights on or off.

DLC-02-KN					
🕞 Open 💾 Save	Rave as	C Scan	🛞 Reinstall	🛃 Download	(j) About
DALI A	Group		ECG		
ECGs	A:Group1 A0				
Groups	A:Group2	on			
Scenes	A:Group3	off			
	A:Group4				
DALI B	A:Group5				
ECGs	A:Group6				
Groups	A:Group7				
Scenes	A:Group8				
	A:Group9				
	A:Group10				
	A:Group11				
	A:Group12				
	A:Group13				
	A:Group14				
	A:Group15				
	A:Group16				
	1				

④ Please remember that at this point all operations that have been performed are only displayed in the work space. They are not immediately loaded onto the DALI gateway. To start the process of downloading the settings onto the gateway and the ECGs, you must press the "Download" button.



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Once the download is complete, all previously planned ECGs are programmed in the system with the DALI configuration.

Attention: Please be aware that the download on the "commissioning page" only programs the DALI configuration data onto the gateway and ECGs. The actual ETS application with parameter settings and group addresses still has to be downloaded onto the device. This is done, as usual, via the normal download process in the ETS.

5.Communication Objects

Communication objects available for communication of the device via the KNX are shown in the table below. The objects are, in parts, displayed or hidden, depending on how the parameters are set.

5.1 Summary and Usage

Num	Object Function	Length	DPT	Flag	Function	Description
1	[Dali A] Broadcast Switch	1 bit	Switch (DPT 1.001)	CW	On/Off	DALI Bus A - broadcast switch. This object is used to switch all connected lights simultaneously on or off.
2	[Dali A] Broadcast Absolute Dimming	1 byte	Percentage (DPT 5.001)	CW	Absolute Dimming	DALI Bus A - broadcast absolute dimming. This object is used to simultaneously set all connected lights to a certain value.
3	[Dali A] Scene Control	1 byte	Scene control (DPT 18.001)	CW	Scene No.	DALI Bus A - scene controlling. This object can be used for calling scenes.
4	[Dali A] Activate Panic mode	1bit	Start/Stop (DPT 1.010)	CW	Activate/Stop	DALI Bus A - Panic mode. Activates or deactivates the panic mode via the bus. Note: This object is only valid when the parameter "Panic mode" is checked.

Num	Object Function	Length	DPT	Flag	Function	Description
5	[Dali A] Active Night Mode	1 bit	Start/Stop (DPT 1.010)	CW	Activate/Stop	DALI Bus A - Night mode. Activates or deactivates the night mode via the bus. Note: This object is only valid when the parameter "Night mode" is checked.
6	[Dali A] Active Test Mode	1 bit	Start/Stop (DPT 1.010)	cw	Activate/Stop	DALI Bus A - Test mode. Activates or deactivates the test mode via the bus. Note: This object is only valid when the parameter "ECG Types" chose Self Contained Battery Lamp.
7	[Dali A] Dali Power Failure	1 bit	Alarm (DPT 1.005)	CRT	0 = No Error; 1 = Error	Reports the presence of DALI bus voltage abnormal in the connected DALI segment.
8	[Dali A] Dali Short Failure	1 bit	Alarm (DPT 1.005)	CRT	0 = No Error; 1 = Error	Reports the presence of a DALI short-circuit in the connected DALI segment.

Num	Object Function	Length	DPT	Flag	Function	Description
9	[Dali A] ECG Presence	1 bit	Alarm (DPT 1.005)	CRT	0 = No Error; 1 = Error	Reports the presence of a ECG disconnect in the connected DALI segment.
10	[Dali A] ECG Diagnostics	1 bytes	Diagnostics value (DPT 238.600)	CRT	ECG Diagnostics	This object is used to send the error status of lamp or ECG errors in the DALI segment when the system is started or when a change has taken place. Bit 0 - 5 refer to the number of the ECG, range from 0 - 63. Bit 6 represents a lamp error, Bit 7 an ECG error, 0 = no error; 1 = error.
11	[Dali A] On/Off (Status Group 1 – Gruop16)	4 bytes	Bit-combined info on/off (DPT 27.001)	CRT	Status	Sends the on/off status for groups 1 - 16. Bit 0 -15 refer to Group 1 to Group 16. For example: Grp.161514131211109876543210 Bit 1514131211109876543210 Group 3on: 00000000000000100

Num	Object Function	Length	DPT	Flag	Function	Description
12	[Dali A] On/Off (Status ECG1-ECG 16)	4 bytes	Bit-combined info on/off (DPT 27.001)		Status	Sends the on/off status for ECG 1 - 16. Bit 0 -15 refer to ECG 1 to ECG 16. For example: ECG 161514131211109876543210 Bit 1514131211109876543210 ECG 3 on: 00000000000000100
13	[Dali A] On/Off (Status ECG17-ECG 32)	4 bytes	Bit-combined info on/off (DPT 27.001)		Status	Sends the on/off status for ECG 17 - 32. Bit 0 -15 refer to ECG 17 to ECG 32.
14	[Dali A] On/Off (Status ECG33-ECG 48)	4 bytes	Bit-combined info on/off (DPT 27.001)	CRT	Status	Sends the on/off status for ECG 33 - 48. Bit 0 -15 refer to ECG 33 to ECG 48.
15	[Dali A] On/Off (Status ECG49-ECG 64)	4 bytes	Bit-combined info on/off (DPT 27.001)		Status	Sends the on/off status for ECG 46 – 64. Bit 0 -15 refer to ECG 49 to ECG 64.
16	[Dali B] Broadcast Switch	1 bit	Switch (DPT1.001)	CW	On/Off	DALI Bus B broadcast switch. This object is used to switch all connected lights simultaneously on or off.

Num	Object Function	Length	DPT	Flag	Function	Description
17	[Dali B] Broadcast Absolute Dimming	1 byte	Percentage (DPT5.001)	CW	Absolute Dimming	DALI Bus B broadcast absolute dimming. This object is used to simultaneously set all connected lights to a certain value.
18	[Dali B] Scene Control	1 byte	Scene control (DPT18.001)	CW	Scene No	DALI Bus A - scene controlling.
19	[Dali B] Activate Panic Mode	1 bit	Start/Stop (DPT1.010)	CW	Activate/Stop	DALI Bus B - Panic mode. Activates or deactivates the panic mode via the bus. Note: This object is only valid when the parameter "Panic mode" is checked.
20	Dali B] Activate Night Mode	1 bit	Start/Stop (DPT1.010)	CW	Activate/Stop	DALI Bus B - Night mode. Activates or deactivates the night mode via the bus. Note: This object is only valid when the parameter "Night mode" is checked.

Num	Object Function	Length	DPT	Flag	Function	Description
21	[Dali B] Activate Test Mode	1 bit	Start/Stop (DPT1.010)	CW	Activate/Stop	DALI Bus B - Test mode. Activates or deactivates the test mode via the bus. Note: This object is only valid when the parameter "ECG Types" chose Self Contained Battery Lamp.
22	[Dali B] Dali Power Failure	1 bit	Alarm (DPT1.005)	CRT	0 = No Error; 1 = Error	Reports the presence of DALI bus voltage abnormal in the connected DALI segment.
23	[Dali B] Dali Short Circuit	1 bit	Alarm (DPT1.005)	CRT	0 = No Error; 1 = Error	Reports the presence of a DALI short-circuit in the connected DALI segment.
24	[Dali B] ECG Presence	1 bit	Alarm (DPT1.005)	CRT	0 = No Error; 1 = Error	Reports the presence of an ECG disconnect in the connected DALI segment.

Num	Object Function	Length	DPT	Flag	Function	Description
25	[Dali B] ECG Diagnostics	1 bytes	Diagnostics value (DPT 238.600)	CRT	ECG Diagnostics	This object is used to send the error status of lamp or ECG errors in the DALI segment when the system is started or when a change has taken place. Bit 0 - 5 refer to the number of the ECG, range from 0 - 63. Bit 6 represents a lamp error, Bit 7 an ECG error, 0 = no error; 1 = error.
26	[Dali B] On/Off (Status Group 1 – Gruop16)	4 bytes	Bit-combined info on/off (DPT 27.001)	CRT	Status	Sends the on/off status for groups 1 - 16. Bit 0 -15 refer to Group 1 to Group 16. For example: Grp.161514131211109876543210 Bit 1514131211109876543210 Group 3 on: 0000000000000100
27	[Dali B] On/Off (Status ECG1-ECG 16)	4 bytes	Bit-combined info on/off (DPT 27.001)	CRT	Status	Sends the on/off status for ECG 1 - 16. Bit 0 -15 refer to ECG 1 to ECG 16. For example: Grp.16151413121110987654321 Bit 1514131211109876543210 Group 3on: 00000000000000000

Num	Object Function	Length	DPT	Flag	Function	Description
28	[Dali B] On/Off (Status ECG17-ECG 32)	4 bytes	Bit-combined info on/off (DPT 27.001)	CRT	Status	Sends the on/off status for ECG 17 - 32. Bit 0 -15 refer to ECG 17 to ECG 32.
29	[Dali B] On/Off (Status ECG33-ECG 48)	4 bytes	Bit-combined info on/off (DPT 27.001)	CRT	Status	Sends the on/off status for ECG 33 - 48. Bit 0 -15 refer to ECG 33 to ECG 48.
30	[Dali B] On/Off (Status ECG49-ECG 64)	4 bytes	Bit-combined info on/off (DPT 27.001)	CRT	Status	Sends the on/off status for ECG 46 – 64. Bit 0 -15 refer to ECG 49 to ECG 64.
31	[Central Function] Operation	1 bit	State (DPT1.011)	CRT	Operation	This object is use to send status of the device to the system at regular intervals when active.
32	Central Function] All Relays On/Off	1 bit	Switch (DPT1.001)	CW	0 = Off; 1 = On	This object is use to switch all relays on/off Note: This object is only valid when the parameter "All Relays On/Off" is checked.
33	[Central Function] All Relays On/Off(Stat us)	1 bit	Switch (DPT1.001)	CRT	0 = Off; 1 = On	Sends the on/off status for the relays 1: all of the relays are off 0: one of the relays is on.

Num	Object Function	Length	DPT	Flag	Function	Description
34	[Central Function] RTC	3 bytes	Time of day (DPT10.001)	CR	Time	This object is used to set the time. The time must be provided by a central timer and updated at least twice a day.
35	[Central Function] RTC	3 bytes	Time of day (DPT10.001)	CR	Data	This object is used to set the date. The date must be provided by a central timer and updated at least twice a day.
36	[A:ECG 1] On/Off	1 bit	Switch (DPT1.001)	CW	0 = Off; 1 = On	Use this object to switch the ECG on or off.
37	[A:ECG 1] Relative Dimming	4 bit	dimming control (DPT3.007)	CW	4-Bit Dimming Control	This object is used for the relative dimming of the ECG
38	A:ECG 1] Absolute Dimming	1 byte	percentage (DPT 5.001)	CW	1-Byte Dimming Control	This object is used for the absolute dimming of the ECG

Num	Object Function	Length	DPT	Flag	Function	Description		Num	Object Function	Length	DPT	Flag	F
39	[A:ECG 1]	1 bit	Switch	CRT	0 = Off;	Sends the on/off	-	40	[A:ECG 1]	1 byte	percentage	CRT	0 - 10
	On/Off		(DPT1.001)		1 = On	status of the ECG.			Dimming		(DPT5.001)		
	(Status)					1.The parameter:			Value (Status)				
						Send On/Off							
						Status is no send,							
						passive stage							
						object \rightarrow update							
						status but no send							
						telegram.							
						2.The parameter:							
						Send On/Off							
						Status is at							
						$change \to send$							
						telegram in every							
						on/off change.							
						3.The parameter:							
						Send On/Off							
						Status is always							
						at input of							
						$\text{telegram} \rightarrow \text{send}$							
						telegram in every							
						on/off command.							
						4.Send Status cyclic							
						is at a certain time							
						$\text{value} \rightarrow \text{send}$							
						telegram at							
						regular intervals.							

Num	Object Function	Length	DPT	Flag	Function	Description
41	[A:ECG 1] Lock	1 bit	Enable (DPT1.003)	CW	0 = Unlock; 1 = Lock	This object is used to lock/unlock the ECG.
42	[A:ECG 1] Auto Off	1 bit	Enable (DPT1.003)	CW	0 = Disable; 1= Enable	This object is used to enable/disable the Auto Off function of the ECG.
43	[A:ECG 1] Operation Hours Rese	1 bit	Reset (DPT1.015)	CW	1 = Reset	Resets the operating hours counter of the ECG.
44	[A:ECG 1] Operation Hours Value (in seconds)	4 bytes	Time lag(s) (DPT13.100)	CRT	4-Bytes Value in Second	The operating hours of the ECG in seconds are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.
	[A:ECG 1] Operation Hours Value (in seconds)	2 bytes	Time lag(h) (DPT7.007)		2-Bytes Value in Hours	The operating hours of the ECG in hours are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.
45	[A:ECG 1] Operation Hours Exeeded	1 bit	Alarm (DPT1.005)	CRT	0 = No Exeeded; 1 = Exeeded	This object is used to report that the operation hours' counter exceeds the set threshold.

Num	Object Function	Length	DPT	Flag	Function	Description
46	[A:ECG 1] Failure (Status)	1 bit	Alarm (DPT1.005)	CRT	0 = No Error; 1 =Error	Reports the presence of an ECG disconnect.
47	[A:ECG 1] Converter Test Control	1 byte	Converter test control (DPT20.611)	CW	Control Test Command	This object is used to controls a test of a DALI converter Furthermore, it allows to stop running test and to reset test flags. These object follows the following coding: Bit 0: Reserved. Bit 1: Start function test. Bit 2: Start duration test. Bit 2: Start duration test. Bit 3: Start partial duration test. Bit 4: Stop test. Bit 5: Reset function test done flag. Bit 6: Reset duration test done flag . Bit 7 – 255: Reserved.

Num Object Function	DPT	Flag	Function	Description		cts of ECG 2 to objects in EC		n DALI Bus A se	egmen	t, please refe	er to descriptions of
				SF, SD, SP: Start method of last	Num	Object Function	Length	DPT	Flag	Function	Description
				Functional / Duration / Partial test. Indicates the	932	[A:Group1] On/Off	1 bit	Switch (DPT1.001)	CW	0 = Off; 1 = On	This object is used to switch the group on or off.
				method by which the last test started. Updated when a test is finish. Bit 0: Unknown.	933	[A:Group1] Relative Dimming	4 bit	4 bit Dimming control (DPT 3.007)	CW	4-Bit Dimming Control	This object is used for the relative dimming of the group.
				Bit 1: Started automatically. Bit 2: Started by Gateway.	934	[A:Group1] Absolute Dimming	1 byte	Percentage (DPT5.001)	CW	1-Byte Dimming Control	This object is used for the absolute dimming of the group.
				Bit 3: Reserved. LDTR: Last Duration Test Result. Contains the battery discharge time as the result of the last successful duration test indicated in minutes. LPDTR: Last Partial Duration Test Result. Provides the remaining battery charge level after the last partial duration test. 0: Deep discharge point. Bit 1 - 253: Battery level. Bit 254: Fully charged. Bit 255: Unknown.	935	[A:Group1] On/Off(Stat us)	1 bit	Switch (DPT1.001)	CRT	0 = Off; 1 = On	 This object is used to send the switch status of the group 1. The parameter: Send On/Off Status is no sen passive stage object → updat status but no se telegram. 2. The parameter: Send On/Off Status is at change → send telegram in ever on/off change. 3. The parameter: Send On/Off Status is always at input of telegram in ever on/off command 4. Send Status cyc is at a certain tin value → send telegram at regular intervals

Num	Object Function	Length	DPT	Flag	Function	Description		Num	Object Function
936	[A:Group1]	1 byte	Percentage	CRT	0 - 100%	Sends the dimming	-	937	[A:Group1]
	Dimming		(DPT5.001)			value of the group.			Lock
	Value					1.The parameter:			
	(Status)					Send dimming			
						value status is no			
						send, passive			
						stage object			
						update value			
						status but no send			
						telegram.			
						2.The parameter:		938	[A:Group1]
						Send dimming			Auto Off
						value status is at			
						change send			
						telegram in every			
						dimming value			
						change.			
						3.The parameter:			
						Send dimming			
						value status is			
						always at input of		939	[A:Group1]
						telegram send			Operation
						telegram in every			Hours
						dimming			Reset
						command.		940	[A:Group1]
						4.Send Status cyclic			Operation
						is at a certain time			Hours Value
						value send			
						telegram at			
						regular intervals.			
						rogular intervalo.			

Num	Object Function	Length	DPT	Flag	Function	Description
937	[A:Group1] Lock	1 bit	Enable (DPT1.003)	CW	0 = Unlock; 1 = Lock	This object is used to lock/unlock the group.
					0 =Lock; 1 = Unlock	This object only appears when the parameter "Lock object polarity" chose "0 = lock; 1 = unlock".
938	[A:Group1] Auto Off	1 bit	Enable (DPT1.003)	CW	0 = Disable; 1 = Enable	This object is used to enable/disable the Auto Off function of the group.
					0 = Enable; 1 = Disable	This object only appears when the parameter "Auto-off disable/enable object" chose "0 = enable;1 = disable".
939	[A:Group1] Operation Hours Reset	1 bit	Reset (DPT1.015)	CW	1 = Reset	Resets the operating hours counter of the group.
940	[A:Group1] Operation Hours Value	4 bytes	Time lag(s) (DPT13.100)	CRT	4-Bytes Value in Second	The operating hours of the group in seconds are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.
		2 bytes	Time (h) (DPT7.007)		2-Bytes Value in Hours	The operating hours of the group in hours are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.

Num	Object	Length	DPT	Flag	Function	Description
	Function	_				
941	[A:Group1]	1 bit	Alarm	CRT	0 = No Exeeded;	,
	Operation		(DPT1.005)		1 = Exeeded	to report that the
	Hours					operation hours'
	Exeeded					counter exceeds the
						set threshold.
942	[A:Group1]	1 bit	Alarm	CRT	0 = No Error;	Reports the
	Failure		(DPT1.005)		1 = Error	presence of a group
	(Status)					disconnect.
-	ts of group 2 to objects in grou	•	6 in DALI Bus A	segme	ent, please refe	er to descriptions of
	ts of groups ar objects in DAL		in DALI Bus B s	egmer	nt, please refer	to descriptions of
2180	[Relay 1]	1 bit	Switch	CW	0 = Off;	This object is used
	On/Off		(DPT1.001)		1 = On	to switch the relay
						on or off.
2181	[Relay 1]	1 bit	Enable	CW	0 = Unlock;	This object is used
	Lock		(DPT1.003)		1 = Lock	to lock/unlock the
						relay.
2182	[Relay 1]	1 bit	Switch	CRT	1 = On;	This object is used
	On/Off		(DPT1.001)		0 = Off	to send the status of
	(Status)					the relay.
2183	[Relay 1]	1 bit	Switch	CRT	1 = On;	This object is used
	On/Off		(DPT1.001)		0 = Off	to send the inverted
	(Inverted					status of the relay.
	Status)					Note: This object is
						only valid when the
						parameter
						"Additional inverted
						•

Num	Object Function	Length	DPT	Flag	Function	Description
2184	[Relay 1] Forced Control	2 bit	Switch control (DPT2.001)	CW	2-Bit Forced Control	Forced control function: 00 and 01: Deactivates Forced control. 10: Sets to Forced control active with relay Off (open). 11: Sets to Forced control active with relay On (short).
2184	[Relay 1] Priority	1 bit	switch (DPT 1.001)	CW	1-Bit Priority ON	Activates or deactivates forced On function. Relay On (short) when activated.
					1-Bit Priority OFF	Activates or deactivates forced Off function. Relay Off (open) when activated.
Objec	ts of Relay 2 to	Relay 4	, please refer to	o descr	iptions of those	e objects in relay 1
2200	[Timer 1] Switch	1 bit	switch (DPT1.001)	CRT	0 = Off; 1 = On	This object is used to send on/off signals of the timer when it is triggered. This object only available when the object Addition object is set at

Num	Object Function	Length	DPT	Flag	Function	Description
2201	[Timer 1] Percentage	1 byte	percentage (DPT5.001)	CRT	0 - 100%	This object is used to send dimming value signals of the timer when it is triggered. This object only available when the object Addition object is set at percentage.
Objec	ts of Timer 2 to	Timer 8,	please refer to	descr	ptions of those	objects in Timer 1
2216	[Effect 1] Start/Stop	1 bit	start/stop (DPT1.010)	CW	0 = Stop; 1 = Start	Activate or deactivates the Effect. Note: This object is only valid when the parameter "Effect function" is checked

6.ETS Parameters

The ETS parameters of the device are distributed across different parameter pages. To simplify the overview, only the parameter pages of the device selected in the function tree are displayed.

6.1 General

Seven parameter pages are available under the heading "General ", General setting, A:ECGs enable, A:Groups enable, B:ECGs enable, B:Groups enable, Timer enable and Effects enable. The parameters are described below.

- General	
General setting	
A:ECGs enable	
A:Groups enable	
B:ECGs enable	
B:Groups enable	
Timers enable	
Effects enable	

6.1.1 General setting

There are SYSTEM, KNX FAILURE, AFTER MODE, BROADCAST, RELAY CONTROL and RCT in the page

General	Please install DLC-02 ETS DCA APP to configure DALI devices, refer to				
General setting	the manual how to install this APP.				
A:ECGs enable	SYSTEM				
A:Groups enable	Startup timeout	2	Seconds		
B:ECGs enable	Send "operation" cyclic (0=not active)	0	# Minutes		
B:Groups enable	(0-not active)				
Timers enable	KNX FAILURE				
Effects enable	Behavior after KNX Bus power down	r no action 👻			
A:Groups	Behavior after KNX Bus power		-		
A:Group 1	up	no action	•		
Effects	AFTER MODE				
	Behavior after Panic mode	last value	-		
Effect 1	Behavior after Emergency mode	switch-off value			
	BROADCAST				
	Dali A Broadcast				
	Dali B Broadcast				
	RELAY CONTROL				
	Relay 1 control				
	Relay 2 control				
	Relay 3 control				
	Relay 4 control				
	All Relays On/Off				
	RTC				
	RTC Send status cyclic	no active	•		

6.1.1.1 General setting - SYSTEM

SYSTEM

Startup timeout	2	\$ Seconds
Send "operation" cyclic (0=not active)	0	# Minutes

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Startup timeout	2 – 60s [2s]	All functions run after startup timeout finished. NOTE: The timeout starts counting when power-on initialization is done. So it always takes longer than you expected.
Send "operation" cyclic (0 = not active)	0 – 65535mins [0mins]	Sends status signals from the object Operation at intervals you desire.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
31	[Central Function]	1 bit	This object is use to
	Operation		send status of the
			device to the system at
			regular intervals when
			active.

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6.1.1.2 General setting - KNX FAILURE

KNX FAILURE

Behavior after KNX Bus power down	defined value	•
Value	0	\$ %
Behavior after KNX Bus power up	defined value	•
Value	100	\$ %

ETS-text	Dynamic range [default value]	Comment
Behavior after KNX Bus power down value	 broadcast off broadcast on no action defined value 	Uses this parameter to set the behaviors of the connected ECGs/lamps in DALI Bus A and B when KNX bus voltage falls down. Actions are all off, all on, no action or all set to a certain value.
Value	0-100% [0%]	Use this parameter to set a desired value [This option only exists when "defined value " in "Behavior after KNX Bus power down value " is chosen]
Behavior after KNX Bus power up	 switch-off value switch-on value no action defined value last value 	Uses this parameter to set the behaviors of the connected ECGs/lamps in DALI Bus A and B when KNX bus is on/ return. Actions are all off, all on, no action, all set to a certain value or all stay at last value.
Value	0-100% [0%]	Use this parameter to set a desired value [This option only exists when "defined value" in "Behavior after KNX Bus power up" is chosen]

The chart shows the dynamic range for this parameter:

6.1.1.3 General setting - AFTER MODE

AFTER MODE

Behavior after Par	nic mode
Behavior after Em mode	ergency

last value	•
switch-off value	•

6

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
Behavior after	• switch-off value	Uses this parameter to set
Panic mode	• switch-on value	the behaviors of the
	• last value	ECGs/lamps after the panio mode has finished. If you choose "last value ", the value prior to the panic mode is saved and the lamp returns to this value afterwards.
Behavior after	• switch-off value	
Emergency mode	• switch-on value	Uses this parameter to set the behaviors of the
	• last value	ECGs/lamps after the emergency mode has finished. If you choose "last value ", the value prior to the panic mode is saved and the lamp returns to this value afterwards.

6.1.1.4 General setting - BROADCAST

BROADCAST

Dali A Broadcast	✓
Dimming curve	🔘 log 🔵 linear
Dali B Broadcast	\checkmark
Dimming curve	🔘 log 🔘 linear

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Dali n Broadcast n=A or B	 Unchecked Checked 	Use this parameter to enable the broadcast function.
Dimming curve	• log • linear	Sets the dimming curve for broadcast dimming. NOTE: This parameter only sends diming telegrams according to your setting and will not transfer the values to match the dimming curve of the ECGs/lamps. Please select the same curve as the ECGs/lamps to get the best dimming performance. [This option only exists when "Dali n Broadcast " is checked].

6.1.1.5 General setting - RELAY CONTROL

RELAY CONTROL

Relay 1 control	
Relay 2 control	
Relay 3 control	
Relay 4 control	
All Relays On/Off	\checkmark
Output mode	normally openednormally closed
Send status	at change 👻
Send status cyclic(0=not active)	0 [‡] Seconds

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
Relay n control	 Unchecked 	Use this parameter to
n = [1, 4]	 Checked 	enable the function.
		For detailed information,
		please refer to 4.1.1.5.1.
All Relays On/Off	 Unchecked 	Use this parameter to
	 Checked 	enable the function.
Output mode ★	 normally opened 	Defines the default
	 normally closed 	behavior of the relays.
Send status ★	 no send, passive 	Sends status signals from
	status object	the object All Relays
	 at change 	On/Off with the option you
	 always at input 	selected.
	of telegram	
Send status cyclic	0 – 65535s	Sends status signals from
(0= not active) \star	[0s]	the object All Relays
		On/Off at intervals you
		desire.

6

★: Only appears when "Checked" in "All Relays On/Off" is chosen

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
32	[Central Function] All Relays On/Off	1 bit	This object is use to switch all relays on/off. Note: This object is only valid when the parameter "All Relays On/Off" is checked.
33	[Central Function] All Relays On/Off (Status)	1 bit	Sends the on/off status for the relays. 1: all of the relays are off. 0: one of the relays is on.

6.1.1.5.1 General setting - RELAY CONTROL – Relay

Once a relay is activated, a new page of Relays will appear. At this subpage, the further parameterization can be done. The following illustration shows the setting options at the submenu for a relay.

Output mode	 normally opened normally closed 	
On delay	0 Seconds	
Off delay	0 🗘 Seconds	
Central function		
Send status	at change 🔹	
Send status cyclic(0=not active)	0 ‡ Seconds	
Additional inverted status	✓	
Behavior at locking	no change 🔻	
Behavior at unlocking	no change 🔹	
Priority/Forced control	not active 🔻	
Behavior after KNX Bus power up	no change 🔻	

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Output mode	normally opened normally closed	Defines the default behavior of the relay.
On delay	0 – 65535s [0s]	Adjustment of the time at which the switch-on process shall be delayed.
Off delay	0 – 65535s [0s]	Adjustment of the time at which the switch-off process shall be delayed.
Central function	 Unchecked Checked 	Whether it is controllable via the object [Central Function] All Relays On/Off.
Send status	 no send, passive status object at change always at input of telegram 	Sends status signals from the object All Relays On/Off with the option you selected.
Send status cyclic (0= not active)	0 – 65535s [0s]	Sends status signals from the object All Relays On/Off at intervals you desire.
Additional inverted status	 Unchecked Checked 	If actives, inverter signals received from the object On/Off(Inverted Status), that is $1 \rightarrow 0$; $0 \rightarrow 1$.
Behavior at locking	 off on no change 	Sets the action to be performed when a lock order is received.
Behavior at unlocking	 off on no change previous status 	Sets the action to be performed when an unlock order is received.

ETS-text	Dynamic range	Comment
	[default value]	
Priority/ Force control	 no change 2Bit forced control 1Bit priority ON 1Bit priority OFF 	Activates or deactivates the function.
Behavior after KNX Bus power up	 off on no change 	Uses this parameter to set the behaviors of the relay when KNX bus is on/ return.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
2180	[Relay 1] On/Off	1 bit	This object is used to switch the relay on or off.
2181	[Relay 1] Lock	1 bit	This object is used to lock/unlock the relay.
2182	[Relay 1]On/Off (Status)	1 bit	This object is used to send the status of the relay.
2183	[Relay 1] On/Off (Inverted Status)	1 bit	This object is used to send the inverted status of the relay. Note: This object is only valid when the parameter "Additional inverted state" is checked.
2184	[Relay 1] Forced Control	2 bit	Forced control function: 00 and 01: Deactivates Forced control 10: Sets to Forced control active with relay Off (open) 11: Sets to Forced control active with relay On (short)

6.1.1.6 General setting - RTC

RTC

RTC Send status cyclic

no active

•

6

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
RTC Send status	not active, 10s,	Sends status signals from
cyclic	20s,50s, 60s	the objects "RTC Time"
	[not active]	and "RTC date" at
		intervals you desire.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
34	[Central Function] RTC	3 bytes	This object is used to set the time. The time must be provided by a central timer and updated at least twice a day.
35	[Central Function] RTC	3 bytes	This object is used to set the date. The date must be provided by a central timer and updated at least twice a day.

6.2 ECGs enable

A: ECGs enable and B:ECGs enable pages are used to display ECGs status and cannot be parameterized. It is the DCA that can be used to parameterize group assignment and new ECG installation.

no use: There is no ECG found or connected. out group: The ECG has been found and NOT assigned to a group. in group: The ECG has been found and assigned to a group.

him bee ve kink bhei datewa	y Concrar & Aleccis chable	
- General	ENABLE A:ECGS	
	A:ECG 1	in group
General setting	A:ECG 2	out group
A:ECGs enable	A:ECG 3	no use
A:Groups enable	A:ECG 4	no use
	A:ECG 5	no use
B:ECGs enable	A:ECG 6	no use
B:Groups enable	A:ECG 7	no use
Timers enable	A:ECG 8	no use
Effects enable	A:ECG 9	no use
Ellects enable	A:ECG 10	no use
+ A:ECGs	A:ECG 11	no use
	A:ECG 12	no use
+ A:Groups	A:ECG 13	no use
+ Relays	A:ECG 14	no use
	A:ECG 15	no use
	A:ECG 16	no use
Group Objects / Channels /	Parameter DCA	

1.1.1 DLC-02 KNX DALI Gateway > General > A:ECGs enable

6.2.1 ECG (out group)

This page only appears when the ECG is not assigned to a group. There are NAME&TYPE, FAILURE&RECOVERY, DIMMING CURVE, SWITCH, DIMMING, STATUS, LOCK and FUNCTIONS in the page.

NAME & TYPE					
ECG Name	ECG 1				
ECG Type	LED Module(D	F6)			•
FAILURE & RECOVERY					
Value on DALI Power Fail	no action				•
Value on ECG Power Recovery	last value				•
DIMMING CURVE					
Dimming curve	🔘 log 🔵 lin	lear			
SWITCH					
Switch-On value	O last on valu	ue 🔘	defined value		
Value	100			÷. T	9
Switch-Off value	0			*	9
Switch-On fade time	2.0s				-
Switch-Off fade time	2.0s				•
					_
DIMMING					
Relative dimming fade time	4.0s				•
Absolute dimming fade time	4.0s				•
Allow switch off via relative dimming					
Minimum dimming value	0			\$	9
Maximum dimming value	100			÷	9
STATUS					
Send On/Off status	at change				•
Send status cyclic(0=no active)	0	÷	Seconds		
Send dimming value status	at change				•
Send status cyclic(0=no active)	0	¢	Seconds		
LOCK					
Lock object polarity	0 = unlock;	1 = loc	c 🔿 0 = lock;1	= unlock	
Behavior at locking	no action				•
Behavior at unlocking	no action				•
FUNCTIONS					_
Auto off					
Night mode					
Panic mode					
Operation hours calculation	~				
Select data type	 4 Byte valu 2 Byte valu 		ond(DTP 13.100) ir(DTP 7.007)		
Operation hours limit	10000	*	Hours		

6.2.1.1 ECG (out group) - NAME&TYPE

NAME & TYPE

ECG Name	ECG 1	
ECG Type	Self Contained Battery Lamp(DT1)	•
Value in emergency mode	50	\$ %
Prolong time on recovery	0 🗍 Minutes	
Function test interval	2	‡ Days
Duration test interval	2	Weeks
Test execution time	7	Days

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
ECG Name		You can enter a user-
		friendly name in the ECG.
		There are 30 bytes allowed
		for name setting.
ECG Type	• Fluorescent	Use this parameter to set
	Lamp	the type of ECG used.
	 Self Contained 	
	Battery Lamp	
	• Discharge Lamp	
	 Low Voltage 	
	Halogen Lamp	
	 Incandescent 	
	Lamp	
	• 010V Converter	
	• LED Module	
	 Relay Module 	
Value in emergency	0-100%	Sets the brightness level of
mode ★	[50%]	the lamp in emergency
		mode.

ETS-text	Dynamic range [default value]	Comment
Prolong time on recovery ★	0 – 20 min [0min]	Sets the time to remain in the extended emergency mode after main voltage recovery.
Function test interval ★	0 - 255days [2days]	Sets the periodic time for automatic execution of the test which checks the proper function of the converter.
Duration test interval ★	0 – 52 weeks [2weeks]	Sets the periodic time for automatic execution of the test which checks converter is working properly in case of power failure.
Test execution time ★	0 - 255days [7days]	Sets the maximum time after which the function test or duration test must be executed. If a test has not ended within this time the result will indicate max delay exceeded.

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★: Only appears when "Self Contained Battery Lamp" in "ECG Type" is chosen The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
47	[A:ECG 1]	1 byte	This object is used to
	Converter Test		controls a test of a DALI
	Control		converter. Furthermore,
			it allows to stop running
			test and to reset test
			flags. These object
			follows the following
			coding:
			Bit 0: Reserved.
			Bit 1: Start function test.
			Bit 2: Start duration test.
			Bit 3: Start partial
			duration test.
			Bit 4: Stop test.
			Bit 5: Reset function test
			done flag.
			Bit 6: Reset duration
			test done flag
			Bit 7 – 255: Reserved.

Number	Name	Length	Usage
48	[A:ECG 1] Converter Status	1 bit	Converter Mode. This object is used to send the status of a converter with the following coding: Bit 0: Unknown. Bit 1: Normal mode active. Bit 2: Inhibit mode active: for 15 minutes the converter will not switch the emergency lighting on when a power failure occurring. Bit 3: Hardwired inhibit mode active: digital input that the converter can have to activate the inhibit mode. Bit 4: Rest mode active: forced off emergency lighting during emergency mode active. Bit 5: Emergency mode active. Bit 6: Extended emergency mode active. Bit 7: FT in progress. Bit 8: DT in progress. Bit 9: PDT in progress. Bit 10 - 15: Reserved.

Number	Name	Length	Usage		Number	Number Name	Number Name Length
	[A:ECG 1]	6 bytes	LTRF LTRD LTRP 0000SF SD SP 00				
	Converter						
	Test Result		LDTR LPDTR UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU				
			This object is used to				
			send the result of the				
			last converter test with				
			the following coding:				
			LTRF, LTRD, LTRP: Last				
			Test Result Functional /				
			Duration / Partial				
			duration: Indicates the				
			test result of each type:				
			Bit 0: Unknown.				
			Bit 1: Passed in time.				
			Bit 2: Passed max delay				
			exceeded.				
			Bit 3: Failed, test				
			executed in time.				
			Bit 4: Failed, max delay				
			exceeded.				
			Bit 5: Test manually	6.2.1.2 ECG	i (out group) - F	out group) - FAILURE&RECC
			stopped.		15 514		
			Bit 6 - 15: Reserved.	FAILURE & RECOV			r Fail defined value
			SF, SD, SP: Start method		LI Power	Fail	
			of last Functional /	Value			100
			Duration / Partial test.	Value on ECG	Power R	lecovery	defined value
			Indicates the method	Value			0
			by which the last test				
			started. Updated when				
			a test is finish.				
			Bit 0: Unknown.				
			Bit 1: Started				
			automatically.				

ETS-text	Dynamic range [default value]	Comment
Value on DALI Power Fail	 switch-off value switch-on value no action defined value 	
Valuel	0-100% [100%]	Use this parameter to set a desired value [This option only exists when "defined value" in "Value on DALI Power Fail" is chosen].
Value on ECG Power Recovery	 switch-off value switch-on value last value defined value 	
Value	0-100% [0%]	Use this parameter to set a desired value [This option only exists when "defined value " in "Value on DALI Power Fail " is chosen].

The chart shows the dynamic range for this parameter:

6.2.1.3 ECG (out group) – DIMMING CURVE

DIMMING CURVE Dimming curve log log linear The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Dimming curve	● log ● linear	Sets the dimming curve for the ECG.

6.2.1.4 ECG (out group) – SWITCH

SWITCH		
Switch-On value	🔵 last on value 🔘 de	fined value
Value	100	÷ %
Switch-Off value	0	÷ %
Switch-On fade time	2.0s	•
Switch-Off fade time	2.0s	•

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Switch-On value	 last on value defined value 	Use this parameter to set the switch-on value. If you select "last on value", the value is set to the dim value prior to the lamp being switched off.
Valuel	0-100% [100%]	Use this parameter to set a desired value [This option only exists when "defined value" in "Switch-On value" is chosen].
Switch-Off value	0-100% [0%]	Use this parameter to set the switch-off value.
Switch-On fade time	Immediately, 0.7s, 1.0s,64s, 90.5s [2s]	Defines the time needed to achieve the required setting after switch-on.
Switch-Off fade time	Immediately, 0.7s, 1.0s,64s, 90.5s [2s]	Defines the time needed to turn off or achieve the required setting after switch-off

The following chart shows the objects that belong to general setting:

Ν	lumber	Name	Length	Usage
3	6	[A:ECG 1]	1 bit	Use this object to switch
		On/Off		the ECG on or off.

6.2.1.5 ECG (out group) – DIMMING

DIMMING

Relative dimming fade time	4.0s		•
Absolute dimming fade time	4.0s		•
Allow switch off via relative dimming			
Minimum dimming value	0	*	%
Maximum dimming value	100		%

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
Relative dimming	Immediately, 0.7s,	Defines the time needed to
fadetime	1.0s,64s, 90.5s	achieve the required
	[4s]	setting by relative
		dimming.
Absolute dimming	Immediately, 0.7s,	Defines the time needed to
fadetime	1.0s,64s, 90.5s	achieve the required
	[4s]	setting by absolute
		dimming.
Allow switch off via	 Unchecked 	Allows switch off via
relative dimming	 Checked 	relative dimming or not.
Minimum dimming	0-100%	Lowest, minimum allowed
value	[0%]	light value for relative and
		absolute dimming.
Maximum dimming	0-100%	Highest, maximum
value	[100%]	allowed light value for
		relative and absolute
		dimming.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
37	[A:ECG 1]	4 bit	This object is used for
	Relative		the relative dimming of
	Dimming		the ECG .
38	A:ECG 1]	1 byte	This object is used for
	Absolute		the absolute dimming
	Dimming		of the ECG.

at change

6.2.1.6 ECG (out group) – STATUS

STATUS

Send On/Off status

Send status cyclic(0=no active)

Send dimming value status Send status cyclic(0=no active)

\$ Seconds 0 at change Seconds 0

•

•

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The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Send On/Off status	 no send, passive status object at change always at input of telegram 	Sends status signals from the object On/Off(Status) with the option you selected.
Send status cyclic (0=no active)	0 – 65535s [0s]	Sends status signals from the objects On/Off(Status) at intervals you desire.
Send dimming value status	 no send, passive status object at change always at input of telegram 	Sends status signals from the object Dimming Value(Status) with the option you selected.
Send status cyclic (0=no active)	0 – 65535s [0s]	Sends status signals from the objects Dimming Value(Status) at intervals you desire.

The following chart shows the objects that belong to general setting:

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							g
				40	[A:ECG 1]	1 byte	Sends the dimming
Na	me	Length	Usage		Dimming		value of the ECG.
[A:ECC	51]	1 bit	Sends the on/off status		Value (Status)		1.The parameter: Sen
On/Of	f		of the ECG.				dimming value state
(Sta	atus)		1.The parameter: Send				is no send, passive
			On/Off Status is no				stage object upda
			send, passive stage				value status but no
			object update status				send telegram.
			but no send telegram				2.The parameter: Se
			2.The parameter: Send				dimming value sta
			On/Off Status is at				is at change send
			change send				telegram in every
			telegram in every				dimming value
			on/off change				change.
			3.The parameter: Send				3.The parameter: S
			On/Off Status is				dimming value sta
			always at input of				is always at input
			telegram send				telegram send
			telegram in every				telegram in every
			on/off command				dimming commar
			Send Status cyclic is at a				Send Status cyclic i
			certain time value send				certain time value
			telegram at regular				telegram at regular
			intervals.				intervals.
				46	[A:ECG 1]	1 bit	Reports the presence
					Failure (Status)		an ECG disconnect.

Number Name

Usage

Length

6.2.1.7 ECG (out group) – LOCK

LOCK

Lock object polarity	0 = unlock;1 = lock 0 = lock;1 = unlock		
Behavior at locking	defined value	•	
Value	100	÷ %	
Behavior at unlocking	defined value	•	
Value	0	÷ %	

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Lock object polarity	• 0 = unlock; 1 = lock • 0 = lock; 1 = unlock	Sets which value will be interpreted as a lock order and which one as an unlock order.
Behavior at locking	 Switch-off value Switch-on value no action defined value 	Sets the action to be performed when a lock order is received.
Value	0-100% [100%]	Use this parameter to set a desired value. [This option only exists when "defined value" in "Behavior at locking" is chosen].
Behavior at unlocking	 Switch-off value Switch-on value no action defined value last value 	Sets the action to be performed when an unlock order is received. If you choose "last value", the ECG back to the previous value before the lock order.
Value	0-100% [0%]	Use this parameter to set a desired value. [This option only exists when "defined value" in "Behavior at unlocking" is chosen].

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
41	[A:ECG 1]	1 bit	This object is used to
	Lock		lock/unlock the ECG.

6.2.1.8 ECG (out group) – FUNCTIONS

FUNCTIONS			
Auto off	✓		
Auto-off threshold value	100	÷	%
Auto-off after	10 🗘 Seconds		
Auto-off disable/enable object	no object		•
Night mode	~		
Value	0	* *	%
Delay time	10 * Minutes		
Panic mode	~		
Value	50	÷	%
Lock enable	v		
Operation hours calculation	✓		
Select data type	 4 Byte value in second(DTP 13.100) 2 Byte value in hour(DTP 7.007) 		
Operation hours limit	10000 4 Hours		
Send status every(0=no active)	0 4 Hours		

Auto off

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Auto off	 Unchecked Checked 	Use this parameter to activate the mode.
Auto-off threshold value ★	1-100% [100%]	Dimming value beneath which the Auto Off will be triggered in case the ECG remains steady at that value for more than the threshold time.
Auto-off after ★	1–65535s [10s]	Time count before triggering the Auto Off mode.

ETS-text	Dynamic range	Comment
	[default value]	
Auto-off disable/	 no object 	Utilizes an object to
enable object ★	 0=disable; 	enable/disable Auto-off
	1 = enable	mode externally or
	● 0= enable;	remains enabled.
	1 = disable	continuously

★: Only appears when "Auto off" is checked

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
42	[A:ECG 1]	1 bit	This object is used to
	Auto Off		enable/disable the
			Auto Off function of the
			ECG.

• Night mode

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Night mode	 Unchecked Checked 	Use this parameter to activate the mode.
Value ★	0 - 100% [0%]	Use this parameter to set the value of the ECG in a group in "Night mode".
Delay time ★	0 – 65535mins [10mins]	Time count before setting to the dimming value in the group after the mode is triggered.

★: Only appears when "Night mode" is checked

• Panic mode

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Panic mode	• Unchecked • Checked	Use this parameter to activate the mode.
Value *	0-100% [50%]	Use this parameter to select the value for this operating mode.
Lock enable ★	• Checked	Activates Lock mode when the mode is activated.

★: Only appears when "Panic mode" is checked

• Operation hours calculation

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Operation hours calculation	 Unchecked Checked 	Determines whether an individual operating hour calculation is required for the ECG.
Select data type	 4 Byte value in second 2 Byte value in hour 	Sends status signals from the object in seconds or in hours.
Operation hours limit	1–65535hrs [10000hrs]	Sets the life span (operating hours limit) of the ECG after which an individual alarm is sent.
Send status every (0=no active)	0 – 255hrs [0hr]	Sends status signals from the object Operation Value at intervals you desire.
The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
43	[A:ECG 1] Operation Hours Reset	1 bit	Resets the operating hours counter of the ECG
44	[A:ECG 1] Operation Hours Value (in seconds) [A:ECG 1] Operation Hours	4 bytes	The operating hours of the ECG in seconds are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.
	Value (in seconds)	2 bytes	The operating hours of the ECG in hours are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.
45	[A:ECG 1] Operation Hours Exeeded	1 bit	This object is used to report that the operation hours' counter exceeds the set threshold.

6.2.2 ECG (in group)

This page only appears when the ECG is in a group. There are NAME&TYPE and OPERATION HOURS in the page.

NAME & TYPE				
ECG Name	ECG 1			
ECG Type	LED Module(DT6) 🔹			
OPERATION HOURS				
Operation hours calculation	\checkmark			
Select data type	 4 Byte value in second(DTP 13.100) 2 Byte value in hour(DTP 7.007) 			
Operation hours limit	10000 ‡ Hours			
Send status every(0=no active)	0 + Hours			

6.2.2.1 ECG (in group) - NAME&TYPE

NAME & TYPE	
ECG Name	
ECG Type	
Value in emergency mode	
Prolong time on recovery	
Function test interval	
Duration test interval	
Test execution time	

Self Contain	ed Battery	Lamp(DT1)		٠
50				\$ 96
0	\$	Minutes		
2			\$	Days
2			:	Weeks
				Days

ETS-text	Dynamic range [default value]	Comment
ECG Name		You can enter a user- friendly name in the ECG. There are 30 bytes allowed for name setting.
ECG Type	 Fluorescent Lamp Self Contained Battery Lamp Discharge Lamp Low Voltage Halogen Lamp Incandescent Lamp 010V Converter LED Module Relay Module 	Use this parameter to set the type of ECG used.
Value in emergency mode ★	0 – 100% [50%]	Sets the brightness level of the lamp in emergency mode.
Prolong time on recovery ★	0 – 20 min [0min]	Sets the time to remain in the extended emergency mode after main voltage recovery.
Function test interval ★	0 - 255days [2days]	Sets the periodic time for automatic execution of the test which checks the proper function of the converter.

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Duration test interval ★	0 – 52 weeks [2weeks]	Sets the periodic time for automatic execution of the test which checks converter is working properly in case of power failure.
Test execution time ★	0 - 255days [7days]	Sets the maximum time after which the function test or duration test must be executed. If a test has not ended within this time the result will indicate max delay exceeded.

★: Only appears when "Self Contained Battery Lamp" in "ECG Type" is chosen 6

6.2.2.2 ECG (in group) – OPERATION HOURS

OPERATION HOURS

Operation hours calculation	✓
Select data type	 4 Byte value in second(DTP 13.100) 2 Byte value in hour(DTP 7.007)
Operation hours limit	10000 🗘 Hours
Send status every(0=no active)	0 + Hours

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
Operation hours calculation	 Unchecked Checked 	Determines whether an individual operating hour calculation is required for the ECG.

ETS-text	Dynamic range	Comment
	[default value]	
Select data type	• 4 Byte value in	Sends status signals from
	second	the object in seconds or in
	● 2 Byte value in	hours.
	hour	
Operation hours	1 – 65535hrs	Sets the life span
limit	[10000hrs]	(operating hours limit) of
		the ECG after which an
		individual alarm is sent.
Send status every	0 – 255hrs	Sends status signals from
(0=no active)	[0hr]	the object Operation Value
		at intervals you desire.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
43	[A:ECG 1] Operation Hours Reset	1 bit	Resets the operating hours counter of the ECG.
44	[A:ECG 1] Operation Hours Value (in seconds) [A:ECG 1] Operation Hours Value (in seconds)	4 bytes	The operating hours of the ECG in seconds are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.
		2 bytes	The operating hours of the ECG in hours are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.

Number	Name	Length	Usage
45	[A:ECG 1]	1 bit	This object is used to
	Operation		report that the operation
	Hours Exeeded		hours' counter exceeds
			the set threshold.

6.3 Groups enable

A:Groups enable and B:Groups enable pages are used to activates group functions.

6

– General	ENABLE A:GROUP	
General setting	A:Group 1	~
A:ECGs enable	A:Group 2	
A:Groups enable	A:Group 3	
B:ECGs enable	A:Group 4	
	A:Group 5	
B:Groups enable	A:Group 6	
Timers enable	A:Group 7	
Effects enable	A:Group 8	
+ A:Groups	A:Group 9	
	A:Group 10	
	A:Group 11	
	A:Group 12	
	A:Group 13	
	A:Group 14	
	A:Group 15	
	A:Group 16	

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
X:Group n	 Unchecked 	Use this parameter to
X = A or B n = [1, 16]	 Checked 	activate the function.

Once a group is activated, a new page of A:Groups or B:Groups will appear. At this subpage, the further parameterization can be done. Detailed information is described in the following sections of NAME, FAILURE&COVERY, DIMMING CURVE, SWITCH, DIMMING, STATUS, LOCK and FUNCTIONS.



6.3.1 Group – NAME

NAME

Group Name

Group 1

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
ECG Name	Group n n=[1, 16]	You can enter a user- friendly name in the group. There are 30 bytes allowed for name setting

6.1.2.5 Group – FAILURE&RECOVERY

FAILURE & RECOVERY

Value on DALI Power Fail	defined value	•
Value	100	÷ %
Value on ECG Power Recovery	defined value	•
Value	0	\$%

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Value on DALI Power Fail	 Switch-off value Switch-on value no action defined value 	Uses this parameter to set the behaviors of the connected ECGs/lamps in the group when DALI bus voltage falls down. Actions are all off, all on, no action or all set to a certain value.

ETS-text	Dynamic range	Comment
	[default value]	
Value	0-100%	Use this parameter to set a
	[100%]	desired value.
		[This option only exists
		when "defined value " in
		"Value on DALI Power
		Fail "is chosen].
Value on ECG	• Switch-off value	Uses this parameter to set
Power Recovery	• Switch-on value	the behaviors of the
	• no action	connected ECGs in the
	 defined value 	group when power
		recovery. Actions are all off,
		all on, no action or all set
		to a certain value.
Value	0 -100%	Use this parameter to set a
	[0%]	desired value.
		[This option only exists
		when "defined value " in
		"Value on ECG Power
		Recovery "is chosen].

6.3.2 Group – DIMMING CURVE

DIMMING CURVE

Dimming curve

🔘 log 🔵 linear

ETS-text	Dynamic range	Comment
	[default value]	
Dimming curve	● log ● linear	Sets the dimming curve for the group.

6.3.3 Group – SWITCH

SWITCH

Switch-On value	○ last on value ◎ defined value		
Value	100	÷ %	
Switch-Off value	0	÷ %	
Switch-On fade time	2.0s	•	
Switch-Off fade time	2.0s	•	

The chart shows the dynamic range for this parameter:

FTS-text	Dynamic range	Comment
EIS-lext	, ,	Comment
	[default value]	
Switch-On	 last on value 	Use this parameter to set
value	 defined value 	the switch-on value. If you
		select "last on value",
		the value is set to the dim
		value prior to the lamp
		being switched off.
Value	0-100%	Use this parameter to set a
	[100%]	desired value.
		[This option only exists
		when "defined value " in
		"Switch-On value " is
		chosen].
Switch-Off	0-100%	Use this parameter to set
value	[0%]	the switch-off value.
Switch-On	Immediately, 0.7s,	Defines the time needed to
fadetime	1.0s,64s, 90.5s	achieve the required
	[2.0s]	setting after switch-on.
Switch-Off	Immediately, 0.7s,	Defines the time needed to
fade time	1.0s,64s, 90.5s	turn off or achieve the
	[2.0s]	required setting after
	_	switch-off.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
932	[A:Group1]	1 bit	This object is used to
	On/Off		switch the group on or
			off.

6.3.4 Group – DIMMING

DIMMING			
Relative dimming fade time	4.0s		•
Absolute dimming fade time	4.0s		•
Allow switch off via relative dimming			
Minimum dimming value	0	* *	%
Maximum dimming value	100	* *	%

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Relative dimming fade time	Immediately, 0.7s, 1.0s,64s, 90.5s [4.0s]	Defines the time needed to achieve the required setting by relative dimming.
Absolute dimming fade time	Immediately, 0.7s, 1.0s,64s, 90.5s [4.0s]	Defines the time needed to achieve the required setting by absolute dimming.
Allow switch off via relative dimming	• Unchecked • Checked	Allows switch off via relative dimming or not.
Minimum dimming value	0-100% [0%]	Lowest, minimum allowed light value for relative and absolute dimming.
Maximum dimming value	0-100% [100%]	Highest, maximum allowed light value for relative and absolute dimming.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
933	[A:Group1]	4 bit	This object is used for
	Relative		the relative dimming of
	Dimming		the group.
934	[A:Group1]	1 byte	This object is used for
	Absolute		the absolute dimming of
	Dimming		the group.

6.3.5 Group – STATUS

STATUS			
Send On/Off status	at change		•
Send status cyclic(0=no active)	0	\$ Seconds	
Send dimming value status	at change		•
Send status cyclic(0=no active)	0	‡ Seconds	

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Send On/Off status	 no send, passive status object at change always at input of telegram 	Sends status signals from the object On/Off(Status) with the option you selected.
Send status cyclic (0=no active)	0 – 65535s [0s]	Sends status signals from the objects On/Off(Status) at intervals you desire.
Send dimming value status	 no send, passive status object at change always at input of telegram 	Sends status signals from the object Dimming Value(Status) with the option you selected.
Send status cyclic (0=no active)	0 – 65535s [0s]	Sends status signals from the objects Dimming Value(Status) at intervals you desire.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
935	[A:Group1] On/Off(Status)	1 bit	This object is used to send the switch status of the group. 1.The parameter: Send On/Off Status is no send, passive stage object update status but no send telegram 2.The parameter: Send On/Off Status is at change send telegram in every on/off change 3.The parameter: Send On/Off Status is always at input of telegram send telegram in every on/off command Send Status cyclic is at a certain time value send telegram at regular intervals.
936	[A:Group1] Dimming Value (Status)	1 byte	Sends the dimming value of the group. 1.The parameter: Send dimming value status is no send, passive stage object update value status but no send telegram. 2.The parameter: Send dimming value status is at change send telegram in every dimming value change.

Number	Name	Length	Usage
			3.The parameter: Send
			dimming value status
			is always at input of
			telegram send
			telegram in every
			dimming command.
			4.Send Status cyclic is at
			a certain time value
			send telegram at
			regular intervals.

6.3.6 Group – LOCK

LOCK

Lock object polarity	 0 = unlock;1 = lock 0 = lock;1 = unlock 	
Behavior at locking	defined value	•
Value	100	÷ %
Behavior at unlocking	defined value	-
Value	0	÷ %

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
Lock object	• 0 = unlock;	Sets which value will be
polarity	1 = lock	interpreted as a lock order
	• 0 = lock;	and which one as an
	1 = unlock	unlock order.
Behavior at	• Switch-off value	Sets the action to be
locking	• Switch-on value	performed when a lock
	• no action	order is received.
	• defined value	

ETS-text	Dynamic range	Comment
	[default value]	
Value	0-100%	Use this parameter to set a
	[100%]	desired value.
		[This option only exists
		when "defined value " in
		"Behavior at locking " is
		chosen].
Behavior at	 Switch-off value 	Sets the action to be
unlocking	 Switch-on value 	performed when an unlock
	 no action 	order is received. If you
	 defined value 	choose "last value", the
	 last value 	group back to the previous
		value before the lock
		order.
Value	0-100%	Use this parameter to set a
	[0%]	desired value
		[This option only exists
		when "defined value " in
		"Behavior at unlocking "
		is chosen]

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
937	[A:Group1]	1 bit	This object is used to
	Lock		lock/unlock the group.

6.3.7 Group – FUNCTIONS

FUNCTIONS	
Auto off	×
Auto-off threshold value	100 \$ %
Auto-off after	10 ‡ Seconds
Auto-off disable/enable object	no object 👻
Night mode	V
Value	0 * %
Delay time	10 C Minutes
Panic mode	 Image: A start of the start of
Value	50 \$ %
Lock enable	~
Operation hours calculation	✓
Select data type	 4 Byte value in second(DTP 13.1 2 Byte value in hour(DTP 7.007)
Operation hours limit	10000 ‡ Hours
Send status every(0=no active)	0 ‡ Hours

• Auto off

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Auto off	• Unchecked • Checked	Use this parameter to activate the mode.
Auto-off threshold value ★	1-100% [100%]	Dimming value beneath which the Auto Off will be triggered in case the group remains steady at that value for more than the threshold time.
Auto-off after ★	1–65535s [10s]	Time count before triggering the Auto Off mode.
Auto-off disable/ enable object ★	 no object 0=disable; 1 = enable 0= enable; 1 = disable 	Utilizes an object to enable/disable Auto-off mode externally or remains enabled continuously.

★: Only appears when "Auto off" is checked

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
938	[A:Group1]	1 bit	This object is used to
	Auto Off		enable/disable the
			Auto Off function of the
			group.

Night mode

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Night mode	 Unchecked Checked 	Use this parameter to activate the mode.
Value *	0 - 100% [0%]	Use this parameter to set the value of all lamps in a group in "Night mode".
Delay time ★	0 – 65535mins [10mins]	Time count before setting to the dimming value in the group after the mode is triggered.

6

 \star : Only appears when "Night mode" is checked

• Panic mode

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
Panic mode	• Unchecked • Checked	Use this parameter to activate the mode.
Value ★	0-100% [50%]	Use this parameter to select the value for this operating mode.
Lock enable ★	• Checked	Activates Lock mode when the mode is activated.

★: Only appears when "Panic mode" is checked

• Operation hours calculation The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Operation hours calculation	 Unchecked Checked 	Determines whether an individual operating hour calculation is required for the group.
Select data type	 4 Byte value in second 2 Byte value in hour 	Sends status signals from the object in seconds or in hours.
Operation hours limit	1 – 65535hrs [10000hrs]	Sets the life span (operating hours limit) of the group after which an individual alarm is sent.
Send status every (0=no active)	0 – 255hrs [0hr]	Sends status signals from the object Operation Value at intervals you desire.

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
939	[A:Group1]	1 bit	Resets the operating
	Operation Hours		hours counter of the
	Reset		group.

Number	Name	Length	Usage
940	[A:Group1] Operation Hours Value	4 bytes	The operating hours of the group in seconds are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.
		2 bytes	The operating hours of the group in hours are sent via this object. The internal counter can be set to 0 (Reset) or another value via this object.
941	[A:Group1] Operation Hours Exeeded	4 bytes	This object is used to report that the operation hours' counter exceeds the set threshold.

6

6.4 Timers enable

Timer enable page is used to activate timer functions.

- General	ENABLE TIMER	
General setting	Timer 1 function	~
A:ECGs enable	Timer 2 function	
	Timer 3 function	
A:Groups enable	Timer 4 function	
B:ECGs enable	Timer 5 function	
B:Groups enable	Timer 6 function	
Timers enable	Timer 7 function	
Effects enable	Timer 8 function	
+ Timers		

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment
Timer n function n = [1, 8]	• Unchecked • Checked	Use this parameter to activate the function.

Once a timer is activated, a new page Timers will appear. At this subpage, the further parameterization can be done. Detailed information is described in the following section.

-	Timers		
	Timer 1		
	Timer 2		
	Timer 3		
	Timer 2		

6.4.1 Timer

Timer function allows the lights to switch on at particular times of a day. Take an office application for example, lamps in group 1 of DALI bus A is used for the lobby, we can set a timer to switch on the lights in the lobby at a certain time on weekday morning before staff coming into work.

Control type Dali A group ÷. Group NO. 1 Timer dimming 1 ~ 0 * Hours 0 ÷ Minutes Monday Tuesday Wednesday Thursday Friday Saturday Sunday Dimming value 0 \$ % Addition object percentage(DPT5.001) • 0 \$ % Percentage value Timer dimming 2 Timer dimming 3 Timer dimming 4 Timer dimming 5 Timer dimming 6 Timer dimming 7 Timer dimming 8

• Control type

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
Control type	• Dali A ECG	Select which DALI bus
	 Dali A group 	segment, group or ECG to
	• Dali A broadcast	work with the timer.
	• Dali B ECG	
	• Dali B group	
	• Dali B broadcast	
ECG No.	1-64	Select which ECG to work
	[1]	with [This option only exists
		when "Dali X ECG " in
		"Control type " is chosen]
		X=A or B
Group No.	1-16	Select which group to work
	[1]	with [This option only exists
		when "Dali X group " in
		"Control type " is chosen]
		X=A or B

6

• Timer dimming

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range	Comment
	[default value]	
Timer dimming n	 Unchecked 	Use this parameter to
n=[1, 8]	 Checked 	activate the function.
Hours	0 – 23hrs	Set a desired time to
	[0hr]	trigger the timer.
Minutes	0 – 59mins	Set a desired time to
	[0min]	trigger the timer.
Monday	Unchecked	Whether to trigger the
	 Checked 	timer on Monday.
Tuesday ★	Unchecked	Whether to trigger the
	 Checked 	timer on Tuesday.

ETS-text	Dynamic range [default value]	Comment
Wednesday ★	• Unchecked • Checked	Whether to trigger the timer on Wednesday.
Tuesday ★	• Unchecked • Checked	Whether to trigger the timer on Tuesday.
Friday ★	 Unchecked Checked 	Whether to trigger the timer on Friday.
Saturday ★	 Unchecked Checked 	Whether to trigger the timer on Saturday.
Sunday ★	 Unchecked Checked 	Whether to trigger the timer on Sunday.
Dimming value ★	 Unchecked Checked 	Use this parameter to set a desired value when the timer is triggered.
Addition object ★	 no use switch percentage 	Uses an additional object to send status signals when the timer is triggered.
Switch value	● off ● on	Send on/off signals when the timer is triggered [This option only exists when "switch " in "Addition object " is chosen].
Percentage value	Percentage value 0 – 100% [0%]	Send dimming value signals when the timer is triggered [This option only exists when "percentage " in "Addition object " is chosen].

★: Only appears when "Timer dimming" is checked

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
2200	[Timer 1] Switch	1 bit	This object is used to send on/off signals of the timer when it is triggered. This object only available when the object Addition object is set at switch.
2201	[Timer 1] Percentage	1 byte	This object is used to send dimming value signals of the timer when it is triggered. This object only available when the object Addition object is set at percentage.

6.5 Effects enable

Effects enable page is used to activate effect functions. There are 16 independent effects available.

General	Effect Repeating	
General setting	ENABLE EFFECT	
A:ECGs enable	Effect 1 function	
A:Groups enable	Effect 2 function	
B:ECGs enable	Effect 3 function	
B:Groups enable	Effect 4 function	
Timers enable	Effect 5 function	
Effects enable	Effect 6 function	
	Effect 7 function	
	Effect 8 function	
	Effect 9 function	
	Effect 10 function	
	Effect 11 function	
	Effect 12 function	
	Effect 13 function	
	Effect 14 function	
	Effect 15 function	
	Effect 16 function	

ETS-text	Dynamic range	Comment
	[default value]	
Effect Repeating	Unchecked	Decide whether to repeat
	 Checked 	the effect functions or not.
Effect n function	Unchecked	Use this parameter to
n = [1, 16]	 Checked 	activate the function.

Once an effect function is activated, a new page Effects will appear. At this subpage, the further parameterization can be done. Detailed information is described in the following section.

-	Effects	
	Effect 1	
	Effect 2	
	Effect 3	

6

6.5.1 Effect

In addition to light scenes the gateway also enables the use of effects. An effect is essentially the process control of light values of different groups and individual ECGs. The individual light values can either be directly controlled or dimmed via a dim value. 64 effect steps can be programmed by an effect function. An effect step can also be programmed as a delay.

Number	Channel		ECG/ Group	Val	ue	Fade time		Dela	y
1	no use	÷	none	0	; %	2.0s	•	0	, s
2	no use	٠	none	0	; %	2.0s	•	0	÷ 5
3	no use	٠	none	0	\$ %	2.0s	٠	0	, s
4	no use	•	none	0	; %	2.0s	•	0	: s
5	no use	٠	none	0	\$%	2.0s	•	0	ţ,
6	no use	٠	none	0	: %	2.0s	•	0	÷ s
7	no use	*	none	0	: %	2.0s	•	0	: :
8	no use	•	none	0	; %	2.0s	•	0	÷ s
9	no use	•	none	0	: %	2.0s	•	0	: :
10	no use	•	none	0	; %	2.0s	•	0	÷ s
11	no use	÷	none	0	; %	2.0s	*	0	÷ 5
12	no use	•	none	0	; %	2.0s	•	0	, s
13	no use	•	none	0	: %	2.0s	•	0	ļ, s
14	no use	•	none	0	: %	2.0s	•	0	t s
15	no use	•	none	0	: %	2.0s	•	0	. s

The chart shows the dynamic range for this parameter:

ETS-text	Dynamic range [default value]	Comment		
Channel	 no use Dali A ECG Dali A group Dali B ECG Dali B group 	Choose which segment, group or ECG to work with this effect.		
ECG/Group	● 1 – 64 (ECG) ● 1 – 16 (group)	Choose which ECG or group to work with this		
Value	0 -100% [0%]	Use this parameter to set a desired value.		
Fade time	Immediately, 0.7s 1.0s,64s, 90.5s [2.0s]	Defines the time needed to achieve the required setting.		
Delay	0 – 255s [0s]	Time count before setting to the dimming value after the effect is triggered.		

The following chart shows the objects that belong to general setting:

Number	Name	Length	Usage
2216	[Effect 1]	1 bit	Activate or deactivates
	Start/Stop		the Effect.
			Note: This object is only
			valid when the
			parameter "Effect
			function" is checked.

7.Warranty

This product provides five years warranty under normal usage. Do not replace parts or any form of modification to the product in order to keep the warranty effectively.

※ MEAN WELL possesses the right to adjust the content of this manual. Please refer to the latest version of our manual on our website. https://www.meanwell.com



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