

DALI integration

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The Ampio system allows integration with the DALI lighting bus, via the M-CON-DL-s module. Up to 64 lamps (controllers) can be connected and grouped according to the DALI standard.

In order to control the lamps on the DALI bus, the M-CON-DL-s module must be connected to the CAN network, the lamps must be powered and the DALI connector must be connected to the M-CON-DL-s module.

Configuration in Ampio Designer

Search for lamps

To search for and name individual luminaires, enter the settings of the M-CON-DL-s module (cog icon). In the *Functions* tab, select the *DALI lamp* sub-tab. Search for lamps by clicking on the arrow icon in the upper right corner.

	×							
Functionalities	DALI lamp	DALI group	DALI broadcast	DALI motion sensor	DALI presence sensor	DALI lux sensor	Flag	8-bit flag
Conditions	16-bit flag	Diagnostics						
Parameters					Q Search		@ (?)	
DALI		DESCRIPTIO	i LC	DCATION	VISUAL	1	DALI :	
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In the *DALI Group* sub-tab, several lamps can be assigned to one lighting group. In the *DALI* column, select the corresponding lamps by their addresses. The recording is done automatically.

MAIN	×						
Functionalities	DALI lamp	DALI group	DALI broadcast	DALI motion sensor	DALI presence sensor	DALI lux sensor	Flag 8-bit flag
Conditions	16-bit flag	Diagnostics					
Parameters					Q Search	(∂ () () () () ()
DALI		DESCRIPTIO	I LC		VISUAL	D	ALI
	1				0	9823ae(1)	×

The settings of the luminaires together with their short addresses or groups are also available in the DALI tab.

Conditions	ID :		EDIT DALI	RANDOM	SHORT ADDRESS	DEVICE TYPE	GROUPS
Parameters		1	C	9823ae	1	8	1
DALI		2	C	988806	2	8	١
		3	C	98f971	3	8	

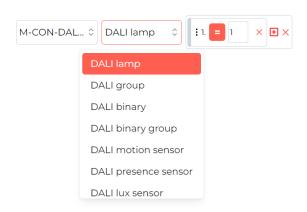
Search for sensors

Motion sensors or LUX lighting sensors based on the DALI standard are searched for in a similar way to lamps in the corresponding tabs.

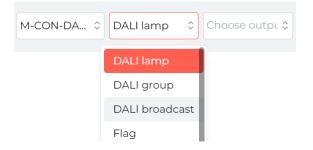
â main ∠ (0_28)	×						
Functionalities	DALI lamp	DALI group	DALI broadcast	DALI motion sensor	DALI presence sensor	DALI lux sensor	Flag 8-bit flag
Conditions	16-bit flag	Diagnostics					
Parameters					Q Search	(∂ () () () ()
DALI	NUMBER	DESCRIPTIO	: .	OCATION	VISUAL	D	ALI
	1			۰ .	OFF	2a060d	(1) : 🗘

Creating conditions

Conditions on the LOGIC tab can be created either from individual lamps, sensors or groups of luminaires.



Single luminaires, groups of luminaires or all luminaires at once can be controlled via the Broadcast dali option.



Configuration in Smart Home Configurator

Available for the Ampio Smart Home configurator version 3.5

Ampio system is able to integrate with the DALI system through the M-CON-DL-s module.

A user can connect up to 64 lamps and link them in groups.

To control DALI lamps, an installer has to connect M-CON-DL-s to the CAN network, power on DALI lamps, and connect the DALI connector to M-CON-DL-s.

In the Ampio configurator, after opening the Device Monitor from the menu on the right, a user can enter device names for each of the lamps in the installation.

			-	jurator devices ver. 3.5.0.									- 🗆 X
		edit Sort	Connection	Device Project To	ols				Your s	oftware	a is un t	o date	Remote support - download
		arch text:						Search by:	Name of the devic				Q Search desc.
	lo N	IAC	Туре	Name	PCB	Soft	Conditions	1		Vcc	Prod. da		
1				Enter device name (us				the message buffer 512	В	N/A			۲
2	0	0005FC2	51-MDOT-M4+	mdot	6	10241	The size of	the message buffer 102	4B	12,2V	2021-08	3-09	Device Monitor
													Device Configurator
													CAN Network monitor
													Q
													Search for devices
													Debugger:
													Ampio SmartHome Configurator devices ver. 3.5.0.6519 All update files have been analyzed The problem with getting pe ³ 1 device information: 7,14s, MAC: 0000B378
R	USB	3 Interface	connected					10:5	i8:53				

Monitor-MAC: 0000CBE	B/LOC: 0000CBEB ver	r: 5.0.0.7134					×
🙃 Luminaires 📘 Fla	ags Bin						
Binary Linear							
0-47 48-63	21		SIC	31			
0 lampOne	1 lampTwo	2 Desc.	3 Desc.	4 Desc.	5 Desc.		
6 Desc.	7 Desc.	8 Desc.	9 Desc.	10 Desc.	11 Desc.		
12 Desc.	13 Desc.	14 Desc.	15 Desc.	16 Desc.	17 Desc.		
Le Desc.			La Desc.				
18 Desc.	19 Desc.	20 Desc.	21 Desc.	22 Desc.	23 Desc.		
24 Desc.	25 Desc.	26 Desc.	27 Desc.	28 Desc.	29 Desc.		
30 Desc.	31 Desc.	32 Desc.	33 Desc.	34 Desc.	35 Desc.		
36 Desc.	37 Desc.	38 Desc.	39 Desc.	40 Desc.	41 Desc.		
42 Desc.	43 Desc.	44 Desc.	45 Desc.	46 Desc.	47 Desc.		
42 Desc.	43 Desc.	44 Desc.	43 Desc.	40 Desc.	47 Desc.		
						🔁 Get names	
							×
LL						🔀 Save names	Close

As it is the case with every module in the Ampio system, a user can create control conditions for the device in the Device configurator.

In the Device Parameters, a user can group lamps, check if they are working correctly, set group numbers, and search for new lamps.

In the first tab – Basic – user can tick or untick the box to check the status of each lamp regularly, as shown below.

It is important that the module is not asked to check the status of lamps that are not present in the network.

Device parameters-MAC: 0000CBEB/LOC: 0000CBEB ver: 5.0.0.7134	_	×
2 Basic FLAGS Bin Luminaires		
State calibration		
Calibrate outputs Load output range at the start of device		
Querying the luminaires for the status:		_
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64		~
🕹 Load 🕞 Set default		

In the third tab, a user can search for new lamps with 3 methods as listed in the drop-down list under Luminaires Search, shown in the picture below.

A full search will delete all numbers that have been already set up.

	Devi	ce para	meters-M	AC: 0000CBEB/LOC: 0000CBEE	3 ver:	5.0.0.7134		_		×
	🔍 Bas	ic 📘	FLAGS Bin	C Luminaires						
	Lumin	aires	Groups							
	Lamp	list								
	On	Addr	Long	Туре	Ver	Desc.		P	arameters	
	1	0	7AED70	Moduł LED	8				On	
										- 1
									Power off	- 1
				Address change through	doub	le click I				
				Address change anodyn		IC CITCK				
	_	searc		short addresses		~	Search			
	rasi	searc	n through	short addresses		~	Search			
r		•			1					
L	2	Loa	d	○ Set default			📩 Send			

By accessing the Parameters in the configurator's main menu, a user can check which functions are supported by the specific lamp. It is here, where you can set up parameters, such as fade time, or max/min level of brightness, etc. If a function is described as *Err*, it means that this function is not supported.

	Devi	ce para	meters-	MAC: 0000CBEB/LOC: 00000	BEB ver	: 5.0.0.7134				— (×
(🔍 Bas	ic 📘	FLAGS I	Bin 🔓 Luminaires								
	Lumin	aires	Group	s								
	Lamp	list										
	On	Addr	Long	Туре	Ver	Desc.				Param	eters	
	1	0	7AED7	ModullED	8							
				Lamp parameter						0	n	
				STATUS:	0	ACTU	AL LEVEL:	0		Powe	er off	11
				CONTROL GEAR:	255] M/	AX LEVEL:	254 >:	>			
				LAMP FAILURE:	Err	м	IN LEVEL:	85 >:	>			
				LAMP POWER ON:	Err	POWER	ON LEVEL:	254 >:	>			
				LIMIT ERROR:	Err	SYSTEM FAILU	RE LEVEL:	254 >:	>			
				RESET STATE:	Err	FA	DE TIME:	0 >:	>			
				PHYSICAL MINIMUM:	85	FA	DE RATE:	7 >:	>			
				POWER FAILURE:	Err							
						1			_			
	Lamp	searc	h					Close				
	Fast	searc	h throu	gh short addresses		~	Sea	arch				
L												
	4	<u>L</u> oa	d	○ Set default				📥 <u>S</u> er	nd]		

The second tab of Luminaires part is used to connect lamps to a specific group. You can select groups numbered from 0 to 15 and name the groups.

Devi	ce para	meters-MA	AC: 0000CBEB/LOG	: 000	0CB	EB v	/er: !	5.0.0).713	34										_	>	<
🔍 Bas	ic 📘	FLAGS Bin	2 Luminaires																			
Lumin	aires	Groups																				
Group	oing list	t																				
On	Addr	Long	Desc.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
1	00	7AED70																				
2	Loa	d	💽 Set g	efaul	t											2	5	Send				
																				_		

Ampio Smart Home Manager

In order to enable control of the DALI lamps via the Ampio mobile application, an installer needs to add specific objects in the Smart Home Manager.

The first step is to open the Ampio Smart Home Manager with M-CON-DL-s connected to the local network and log in.

Then, enter Objects from the side menu on the left and Add a new object.

🔎 Devices	+ Add	Remove	Сору	By All			Filter
Users	Id	Device	Description	Turn on time[Number	Component type	Settings
P Locations	68	1:	strefa 18	0	18	Regulator	Settings
	69	1:	strefa 19	0	19	Regulator	Settings
📃 Groups	70	1:	strefa 20	0	20	Regulator	Settings
Objects	71	1:	strefa 21	0	21	Regulator	Settings
Objects	72	1:	strefa 22	0	22	Regulator	Settings
Scenes	73	1:	strefa 23	0	23	Regulator	Settings
	74	1:	strefa 24	0	24	Regulator	Settings
Grouping	75	1:	strefa 25	0	25	Regulator	Settings
Relations	76	1:	strefa 26	0	26	Regulator	Settings
• Relations	77	1:	strefa 27	0	27	Regulator	Settings
Actions	78	1:	strefa 28	0	28	Regulator	Settings
	79	1:	strefa 29	0	29	Regulator	Settings
Integrations	80	1:	strefa 30	0	30	Regulator	Settings
~	81	1:	strefa 31	0	31	Regulator	Settings
_⊖ Icons	82	1:	strefa 32	0	32	Regulator	Settings
Resources	83	10f5c50:dali_control	dali1	0	1	Slider	Settings
	84	1:	Symulacja	0	1	Presence simulation	Settings
	85	1:	Detekcja	0	1	Presence detection	Settings
	86	1 - 6338 / 10f5c50:d 🔺	New object	0	1	Flag	Settings
		0 - b378 / 1:					

Select the DALI module from the list in the Device column, add a Description and click on the Settings button.

🙈 New object		-	
File			
Icon ON Select		Icon OFF Select	
• PIN	Object type:	Flag 🔺	Advanced
Log every: 60 seconds (0 - data	logged when changed) 🛛 🗹 Show in active d	Relay	
Block when local connect Block when	cloud connect 🔲 Hide value on sketch icon (Slider	
Interpretation 1 🗆 Read or	ly 🗌 Home entrance 🗌 Sho	Blind	dots)
		RGBW	
Access rights		Sensor	ile All
Id	Name	Regulator	
0	admin	Alarm	
		Input	
Object is deleted		Save	Cancel

From the Object Type drop-down menu, select the Slider option and click on Advanced.

In order to check the status of a specific group, a user needs to select exactly which lamps will be queried for data. It can be set in the Interpretation field shown in the picture above.

In the Advanced tab, a user can choose if one lamp is controlled or the whole, selected group. Own value range can also be specified.

8	-		×
 Ampio Object DALI Group DALI Draw ON/OFF switch for slider objects) Obje	ect OWA	
 ✓ Own value range (min,max) 0 Hide loader in time based object Send value on release only 		255	
LED V			
Dictionary i Save Cancel			

After setting up the parameters, the object needs to be ticked on the list in the Grouping option of the menu on the left, to be visible in the mobile app.

 Users Locations Groups Objects Scenes Grouping 	Belongs	Main Menu ID 70 71 72 73 74	Object name strefa 20 strefa 21 strefa 22 strefa 22 strefa 24	Device name	Settings Settings Settings Settings Settings	LP
Groups Objects Scenes		70 71 72 73	strefa 20 strefa 21 strefa 22 strefa 23	1: 1: 1: 1: 1:	Settings Settings Settings	Ľ
Objects Scenes		71 72 73	strefa 21 strefa 22 strefa 23	1: 1: 1:	Settings Settings	
Objects Scenes		72 73	strefa 22 strefa 23	1:	Settings	
Scenes		73	strefa 23	1:		
Scenes					Settings	
		74	strofa 24			1
Grouping	-		Sucia 24	1:	Settings	
orouping	U	75	strefa 25	1:	Settings	
		76	strefa 26	1:	Settings	
- Relations		77	strefa 27	1:	Settings	
		78	strefa 28	1:	Settings	
Actions		79	strefa 29	1:	Settings	
Lintegrations		80	strefa 30	1:	Settings	
- integrations		81	strefa 31	1:	Settings	
- Icons		82	strefa 32	1:	Settings	
-	Ø	83	dali1	10f5c50:dali_control	Settings	
Resources		84	Symulacja	1:	Settings	
		85	Detekcja	1:	Settings	