

## FD2G14 V7.1 CONTROLLER DOCUMENTATION

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Pre condition: BR14 Device address already assigned to FD2G14

### Controller: Teach-in:

- 1) Turn upper rotary switch to desired position representing affected DALI Group (0..8)
- 2) Turn lower rotary switch to position "CTRL". Red LED starts flashing.
- 3) Send 4BS Teach-in telegram, red LED turns off
- 4) Controller receives Teach-in response
- 5) Turn lower rotary switch to position "AUTO", green LED turns on
- 6) Wait until green LED turns off

### **EnOcean 4BS Teach-in telegram:**

4BS Data: E0 40 0D 80

ID: [ID3] [ID2] [ID1] [ID0]

Destination: FF FF FF FF

### **EnOcean 4BS Teach-in response, rotary button pos 0...8**

4BS Data: [ID2] [ID1] [ID0] [08]

ID: [BASE-ID3] [BASE-ID2] [BASE-ID1] [BASE-ID0] + BR14ADDR + DALIGROUP

Destination: FF FF FF FF

BR14ADDR: address of BR14 bus

DALIGROUP: related DALI group number (0..8)

### **Deletion of Controller**

A Controller can be deleted according to instruction manual.

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### Controller: Device control:

Switch on / off actuator, block or release buttons.

### “Dimming” 0 ...100%, 4BS data

DATA_BYTE3:	0x02		
DATA_BYTE2:	0x00 ... 0x64	0 ... 100	dimming value, 100 ^= MAX
DATA_BYTE1:	0x00		don't care
DATA_BYTE0:	0x08		off
	0x09		on
	0x0C		off – block buttons
	0x0D		on – block buttons

Examples:

02 64 00 09 - on, dimming value 100  
 02 64 00 0D - on, dimming value 100, block buttons  
 02 00 00 08 - off  
 02 00 00 0C - off, block buttons

Response:

DATA_BYTE3:	0x02		
DATA_BYTE2:	0x00 ... 0x64	0 ... 100	dimming value, 100 ^= MAX
DATA_BYTE1:	0x00 ... 0x64	0 ... 100	last color value set (CW, WW), don't care
DATA_BYTE0:	0x08		off
	0x09		on
	0x0C		off – buttons blocked
	0x0D		on – buttons blocked

Response ID: [BASE-ID3] [BASE-ID2] [BASE-ID1] [BASE-ID0] + BR14ADDR + DALIGROUP

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### “Tunable White”

Switch on / off actuator, block or release buttons and set color temperature.

DATA_BYTE3:	0x12		
DATA_BYTE2:	0x00 ... 0x64	0 ... 100	dimming value, 100 ^= MAX
DATA_BYTE1:	0x00 ... 0x64	0 ... 100	color value set, 0^=cold (CW) ... 100^=warm (WW) / don't care
DATA_BYTE0:	0x08		off
	0x09		on
	0x0C		off – block buttons
	0x0D		on – block buttons

Examples:

12 64 64 09 - on, dimming value 100, color warm

12 64 00 09 - on, dimming value 100, color cold

12 00 00 08 - off

Response:

DATA_BYTE3:	0x02		
DATA_BYTE2:	0x00 ... 0x64	0 ... 100	dimming value, 100 ^= MAX
DATA_BYTE1:	0x00 ... 0x64	0 ... 100	last color value set (CW, WW) / don't care
DATA_BYTE0:	0x08		off
	0x09		on
	0x0C		off – buttons blocked
	0x0D		on – buttons blocked

Response ID: [BASE-ID3] [BASE-ID2] [BASE-ID1] [BASE-ID0] + BR14ADDR + DALIGROUP

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## “RGBW”

Set Color values using two separate telegrams. Color values will be set after second telegram has been sent to actuator. Send both telegrams using short time delay of 100msec.  
These telegrams do not switch on / off actuator. Use separate “Dimming” telegram to switch on / off.

### RGBW – First telegram (colors red, green)

DATA\_BYTE3: 0x13

DATA\_BYTE2: 0x00 ... 0x64    0 ... 100    intensity red    100 ^= MAX

DATA\_BYTE1: 0x00 ... 0x64    0 ... 100    intensity green    100 ^= MAX

DATA\_BYTE0: 0x08

Response: none

### RGBW – Second telegram (colors blue, white)

DATA\_BYTE3: 0x14

DATA\_BYTE2: 0x00 ... 0x64    0 ... 100    intensity blue    100 ^= MAX

DATA\_BYTE1: 0x00 ... 0x64    0 ... 100    intensity white    100 ^= MAX

DATA\_BYTE0: 0x08

OR

### RGBW – Second telegram (color blue)

DATA\_BYTE3: 0x15

DATA\_BYTE2: 0x00 ... 0x64    0 ... 100    intensity blue    100 ^= MAX

DATA\_BYTE1: 0x00    don't care

DATA\_BYTE0: 0x08

Response: none (nothing is switched on / off)

## “Trigger response”

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Trigger actuator response.

DATA\_BYTE3: 0x00  
 DATA\_BYTE2: 0x00 don't care  
 DATA\_BYTE1: 0x00 don't care  
 DATA\_BYTE0: 0x08

Response:

DATA\_BYTE3: 0x02  
 DATA\_BYTE2: 0x00 ... 0x64 0 ... 100 dimming value, 100 ^= MAX  
 DATA\_BYTE1: 0x00 ... 0x64 0 ... 100 last color value set (CW, WW) / don't care  
 DATA\_BYTE0: 0x08 off  
                   0x09 on  
                   0x0C off – buttons blocked  
                   0x0D on – buttons blocked

Response ID: [BASE-ID3] [BASE-ID2] [BASE-ID1] [BASE-ID0] + BR14ADDR + DALIGROUP

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## Controller: Manual Teach-In / Deletion using PCT14

PCT14: ID mapping range, Function 32 “dimming value from controller / rotary button”

If DALI Group 9 to 15 shall be affected, ID mapping range needs to be edited manually using PCT14. Therefore, there is no teach-in response for these groups.

A Controller can be added or deleted.

Example:

No.	ID (Hex)	ID (Dec)	Function	Key	DALI group	Value	Dimming value	Source	Description
1	01 87 42 29		32	0	15	0	0%	dimming value from controller / rotary button	