

APRIL 2020

# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

Online Learning Session – Competence Center Europe – Smart Buildings

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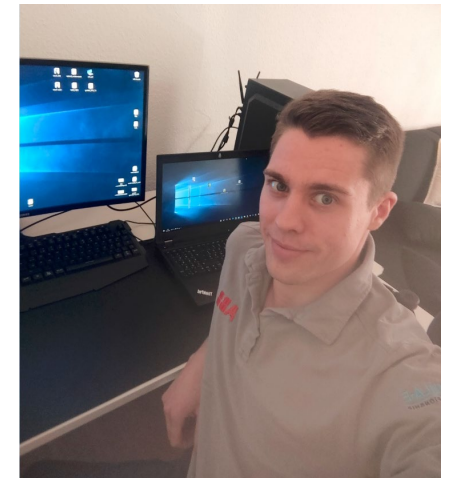
# Online Learning Session – Competence Center Europe - Smart Buildings

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Heidelberg / Germany



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# Agenda

What is “Dim2Warm”?

Commissioning of the Colour function “Dim2Warm”

- ETS parameter

- Group objects

- Assignment of group addresses

Activation/deactivation of the colour function “Dim2Warm”

ABB i-bus® Tool

Practical demonstration

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# **KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm**

Online Learning Session

# KNX DALI Gateway Premium DG/S x.64.5.1

## Online Learning Session

### KNX DALI Gateway Premium DG/S x.64.5.1

#### Hardware

- DG/S 1.64.5.1 (one channel, 64 ballasts)
- DG/S 2.64.5.1 (two independent channels, 2 x 64 ballasts)

The following ballast can be operated on the gateway

- Normal DALI ballasts (device type 0)
- DALI single battery emergency lighting converter (device type 1)
- Colour-controlled DALI ballast (device type 8)

#### – Functions

- Flexible combination of DALI groups or single control
- ABB i-bus® tool support
- Templates
- Tunable white
- **Dim2Warm**
- Human Centric Lighting
- Standby switch-off
- ...



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# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Dim2Warm

The following consideration is behind “Dim2Warm”

- The good old light bulb was never economical, but it could be dimmed so wonderfully: When we turned the dimmer down, the light became weaker and warmer at the same time
- A strongly dimmed light bulb no longer appears warm white, but already clearly orange
- When dimming LEDs, however, the colour temperature usually does not change
- No matter how far down a warm white LED strip is dimmed, it always remains constant - depending on which LED strip is used
- This is where Colour function “Dim2Warm” comes in, which simulate exactly this behavior



# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### What is “Dim2Warm”?

→ A change in colour temperature during dimming

#### Applications

- Quite a few people associate the change in colour temperature when dimming in the direction of warmer colours with cosiness and comfort
  - At home in the bedroom or in the living room like in the glow of candles or by the cozy fireplace
- To give the feeling of the warm and welcoming atmosphere
  - Hotel bar, restaurant, ... in the evening
  - In the morning at breakfast
- ...



# KNX DALI Gateway Premium DG/S x.64.5.1

Colour function “Dim2Warm”



# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### What is “Dim2Warm”?

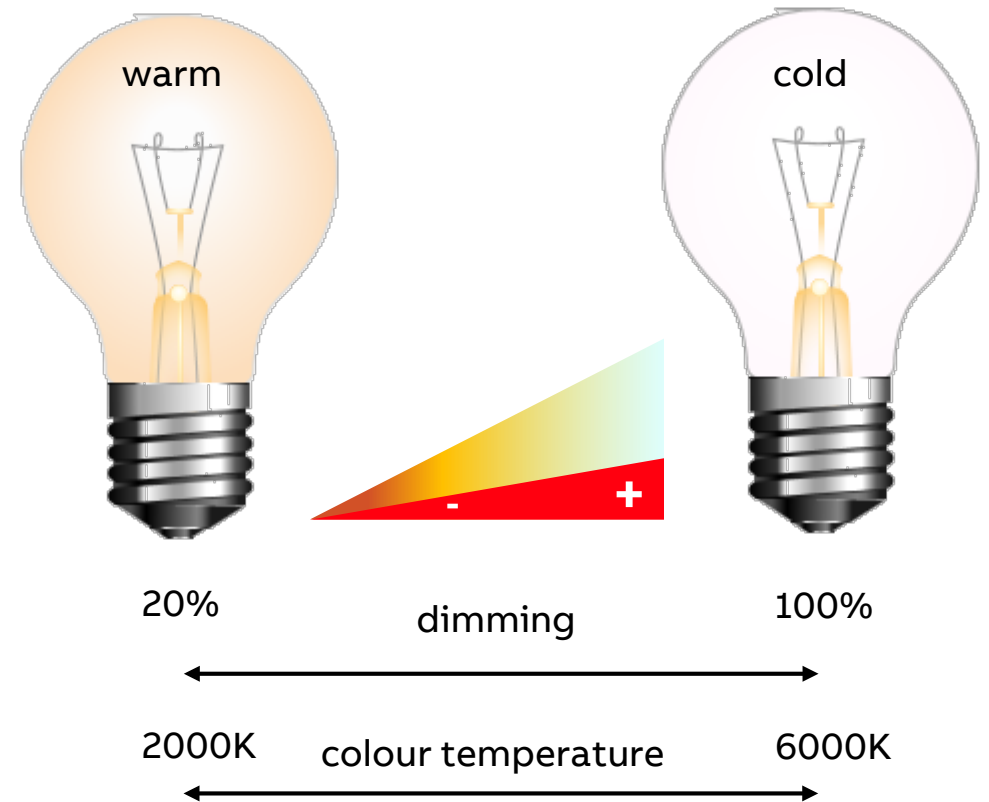
The DALI Gateway has an additional function called “Dim2Warm”, which changes the colour temperature based on the brightness

The colour temperature changes proportionally to brightness

- Dimming up: Increasing of colour temperature  
→ cold white
- Dimming down: Decreasing of colour temperature  
→ warm white

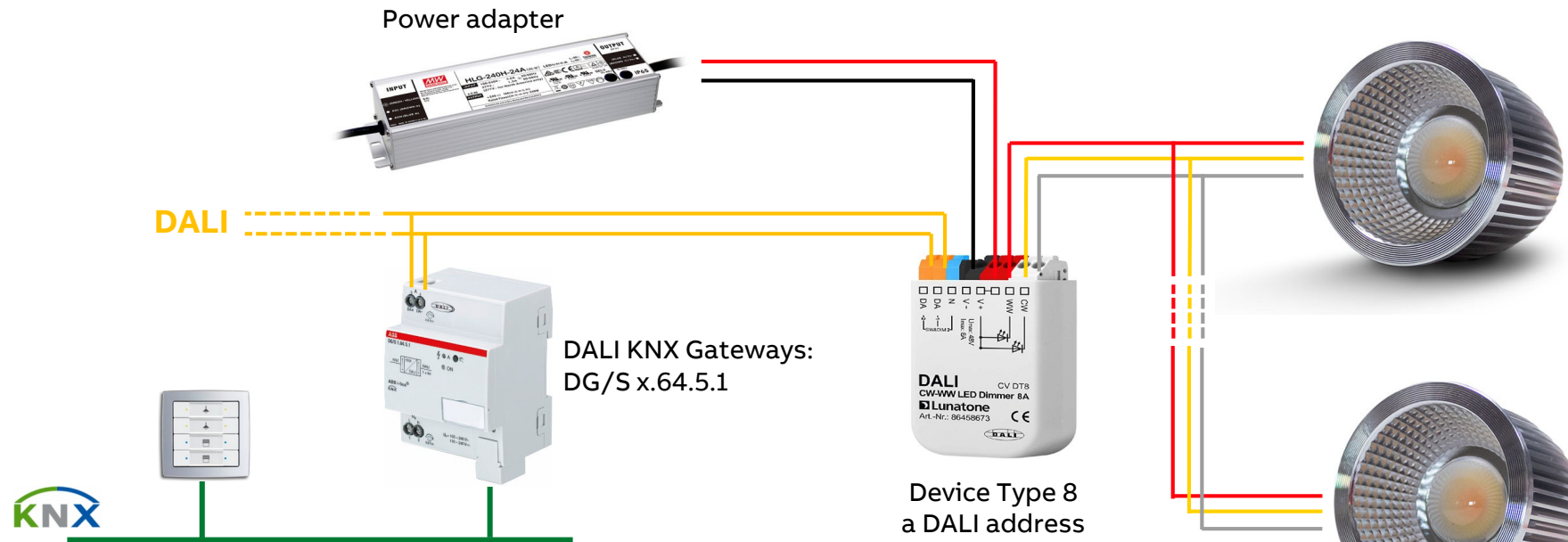
Dim2Warm can be activated on a group or a ballast

This dependency is similar to the dimming behavior of a light bulb (light bulb effect)



# KNX DALI Gateway Premium DG/S x.64.5.1

Colour function “Dim2Warm” – Example: Hardware for Tunable White with DALI and KNX



For example:  
Spot Deep Tunable white CV  
8 W, 750 lm, 2200-6500 K  
Manufacturer: ConstaLED  
Manufacturer number: 31362

For example:  
DALI CW-WW LED-Dimmer CV  
12V DC – 28V DC, 4A, 3000-6500K  
Manufacturer: Lunatone  
Manufacturer number: 89453836



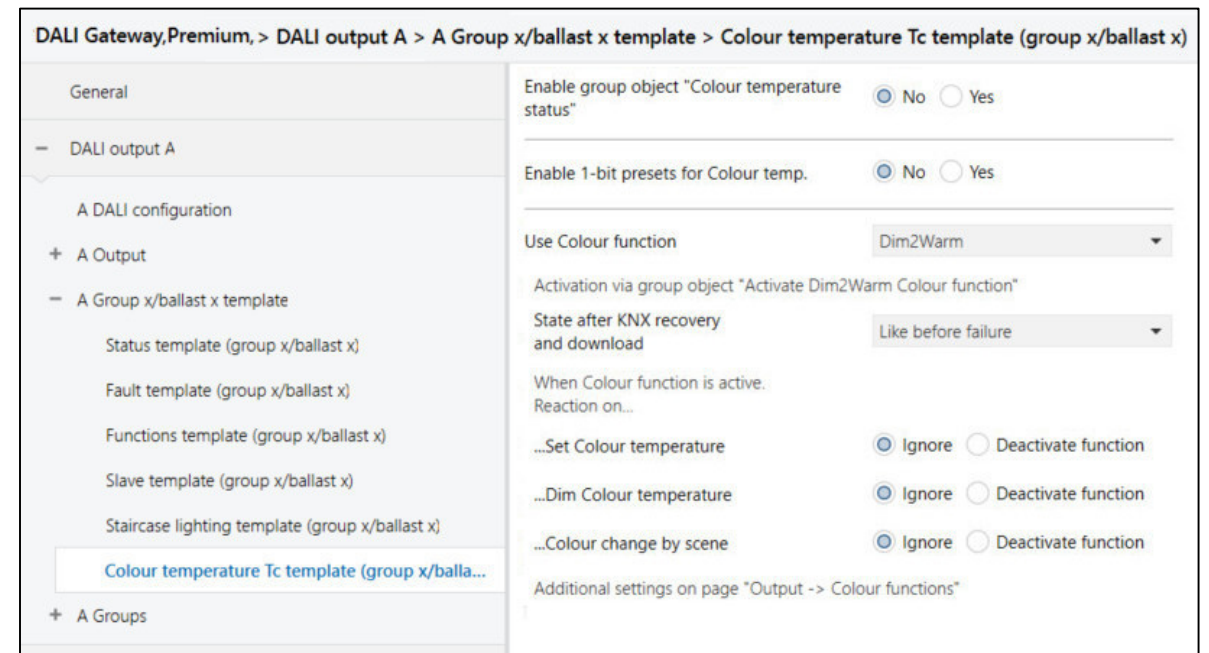
Source: Internet

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Commissioning of the Colour function Dim2Warm

- Set ETS parameter: DALI Output A → Group X or ballast X → Colour functions ... (template or individual)
  - Enable colour function “The Dim2Warm” for the group/ballast
  - “State after KNX recovery and download”
  - Reaction on “Set colour temperature, “Dim colour temperature” and “Colour change by scene” when Colour function is active
- Set ETS parameter: DALI Output A → Output → Colour functions
  - Enable the group object “*Output – Activate Dim2Warm colour function*” (if necessary)
  - Limitation of the proportional and Colour temperature range (if necessary)



# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Group x/ballast x templates

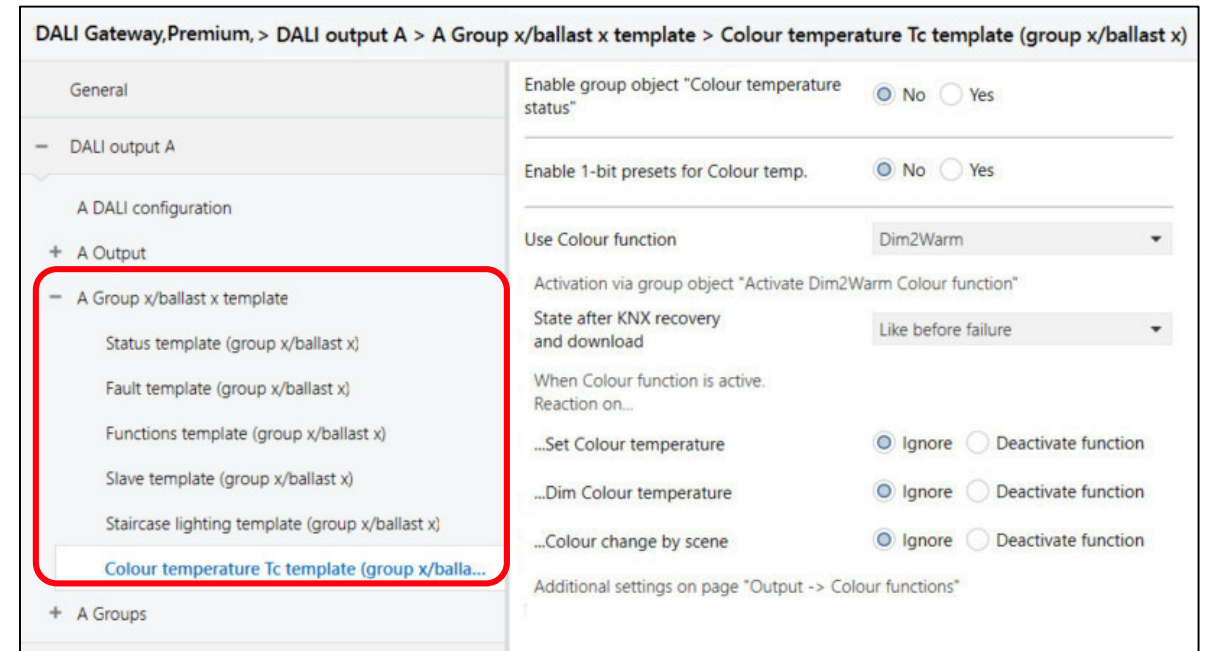
In the ETS application of the gateways, up to 64 individual ballasts or up to 16 DALI groups can be parameterized per channel with different parameter (e.g. status, burn-in, partial failure)

Normally not necessary to make individual parameter settings for each ballast or group

This is very time-intensive so that simplification is useful for identical or slightly different settings

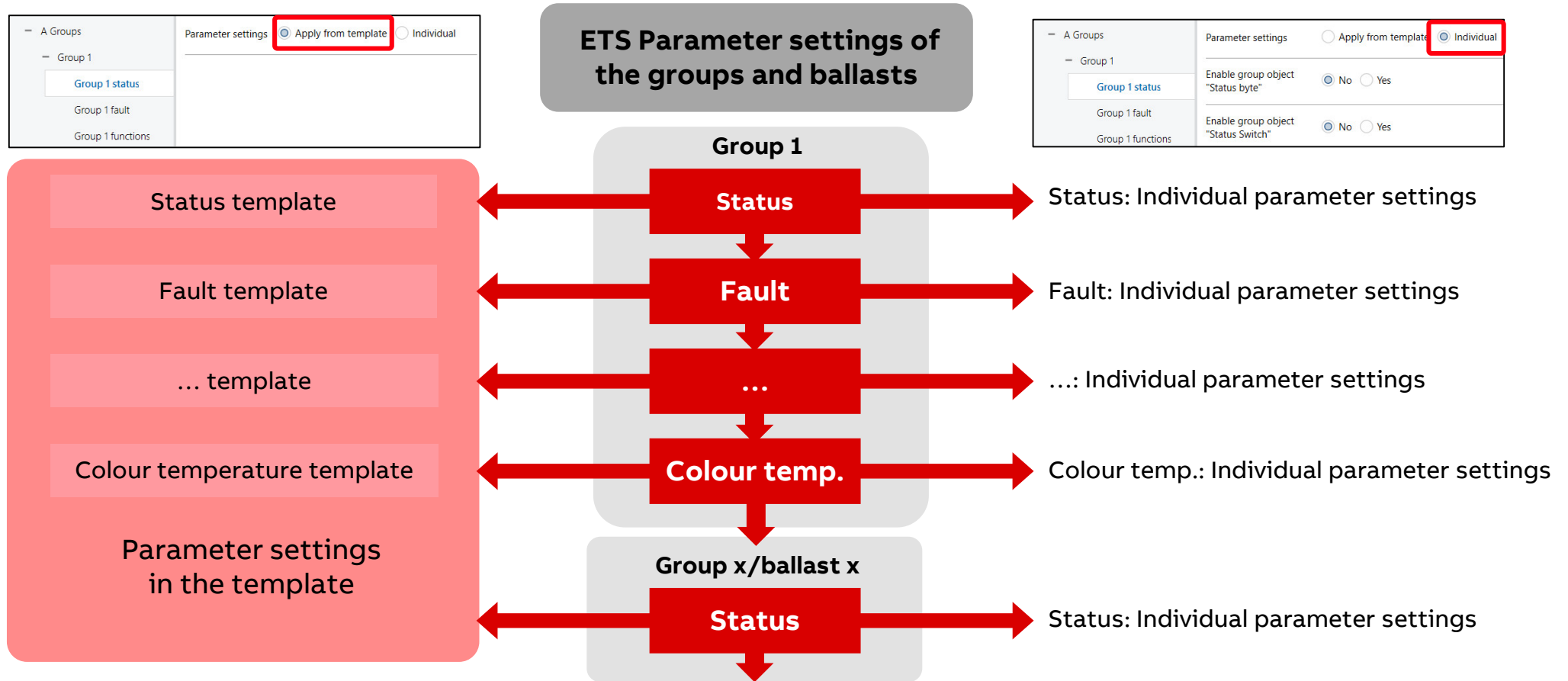
The template is used in the ETS application of the KNX DALI-Gateways divided into the six parameter menus mentioned plus general parameter

For the individual ballasts, DALI groups and for output A or B (Broadcast) you have the choice between using the template or individual parameter settings



# KNX DALI Gateway Premium DG/S x.64.5.1

Colour function “Dim2Warm” – Group x/ballast x templates



# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Use colour function (per group/ballast)

The settings can be made per ballast/group or in the template

This parameter determines whether a colour function is used

Only the Dim2Warm or HCL colour function can be used per group/ballast

- No
  - No colour function is used
- Dim2Warm
  - The Dim2Warm colour function is used
  - All Dim2Warm settings are active
- Central colour temperature (HCL)
  - The central colour temperature (HCL) colour function is used
  - All HCL settings are active

The screenshot shows the configuration interface for the DALI Gateway Premium. The breadcrumb path is: DALI Gateway, Premium, > DALI output A > A Group x/ballast x template > Colour temperature Tc template (group x/ballast x). The left sidebar shows a tree view with 'A Group x/ballast x template' selected, indicated by a red arrow. The right pane shows the configuration for this template. The 'Use Colour function' dropdown is highlighted with a red box and has a red arrow pointing to the 'Dim2Warm' option. Other settings include 'Enable group object "Colour temperature status"' (set to No), 'Enable 1-bit presets for Colour temperature' (set to Central Colour temperature (HCL)), 'State after KNX recovery and download' (set to Like before failure), and three radio button options for 'When Colour function is active' (Set Colour temperature, Dim Colour temperature, Colour change by scene), all set to 'Ignore'.

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### State after KNX recovery and download (per group/ballast)

This parameter defines the state of the Colour function after KNX bus voltage recovery or a download

- Deactivated
  - The Colour function is deactivated after KNX bus voltage recovery
  - The group/ballast reacts like a normal group/ballast without an additional function
- Activated
  - The Colour function is activated after KNX bus voltage recovery or a download
- Like before failure
  - The Colour function retains the operating state (activated or deactivated) that it had before the KNX bus voltage recovery or download

The screenshot shows the configuration interface for the DALI Gateway Premium. The left sidebar displays a tree view of the configuration, with 'A Group x/ballast x template' selected. The main area shows the configuration for the 'Colour temperature Tc template (group x/ballast x)'. The 'State after KNX recovery and download' dropdown menu is highlighted with a red box and set to 'Like before failure'. A red arrow points to the 'Like before failure' option in the dropdown menu.

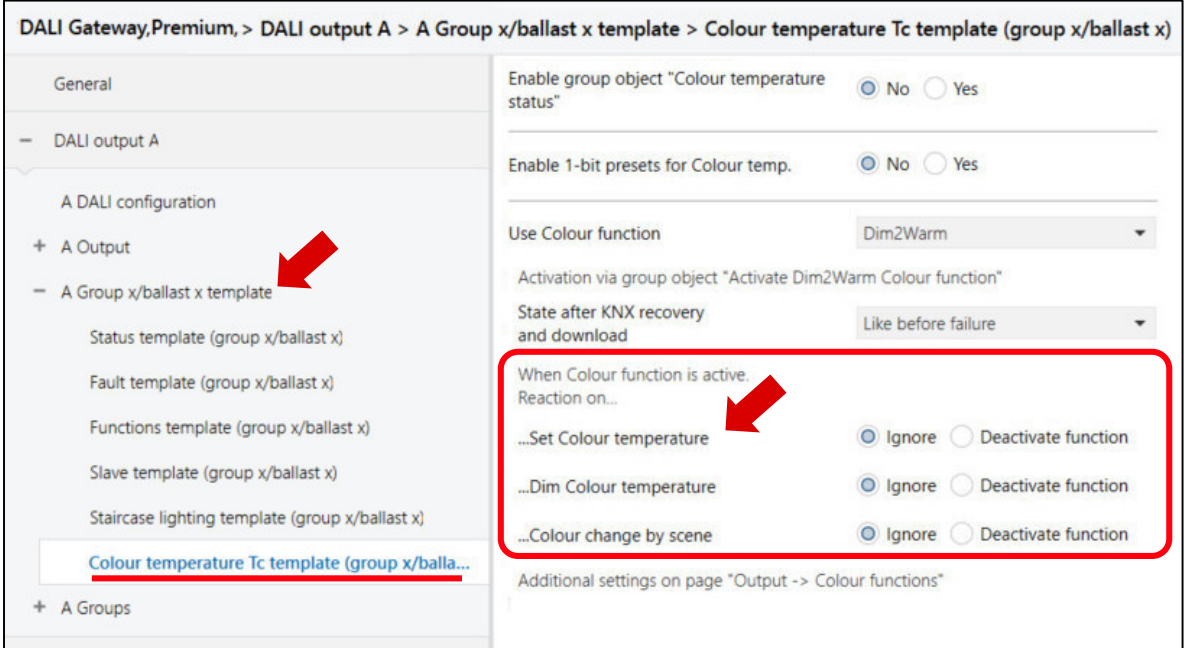
# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Active Colour function: Reaction on “Set colour temperature”

This parameter describes how the group/ballast responds if a colour temperature is set while the colour function Dim2Warm is active

- Ignore
  - The colour temperature setting is ignored
  - The colour function remains active
- Deactivate function
  - Setting a colour temperature deactivates the colour function and the group/ballast adopts the set colour temperature



DALI Gateway,Premium, > DALI output A > A Group x/ballast x template > Colour temperature Tc template (group x/ballast x)

General

Enable group object "Colour temperature status"  No  Yes

Enable 1-bit presets for Colour temp.  No  Yes

Use Colour function Dim2Warm

Activation via group object "Activate Dim2Warm Colour function"

State after KNX recovery and download Like before failure

When Colour function is active. Reaction on...

...Set Colour temperature  Ignore  Deactivate function

...Dim Colour temperature  Ignore  Deactivate function

...Colour change by scene  Ignore  Deactivate function

Additional settings on page "Output -> Colour functions"

Nu	Group Address	Name	Object Function	Length	Data Type
86	1/4/86	Output A - group 1	Set Colour temperature (K)	2 bytes	absolute colour temperature (K)

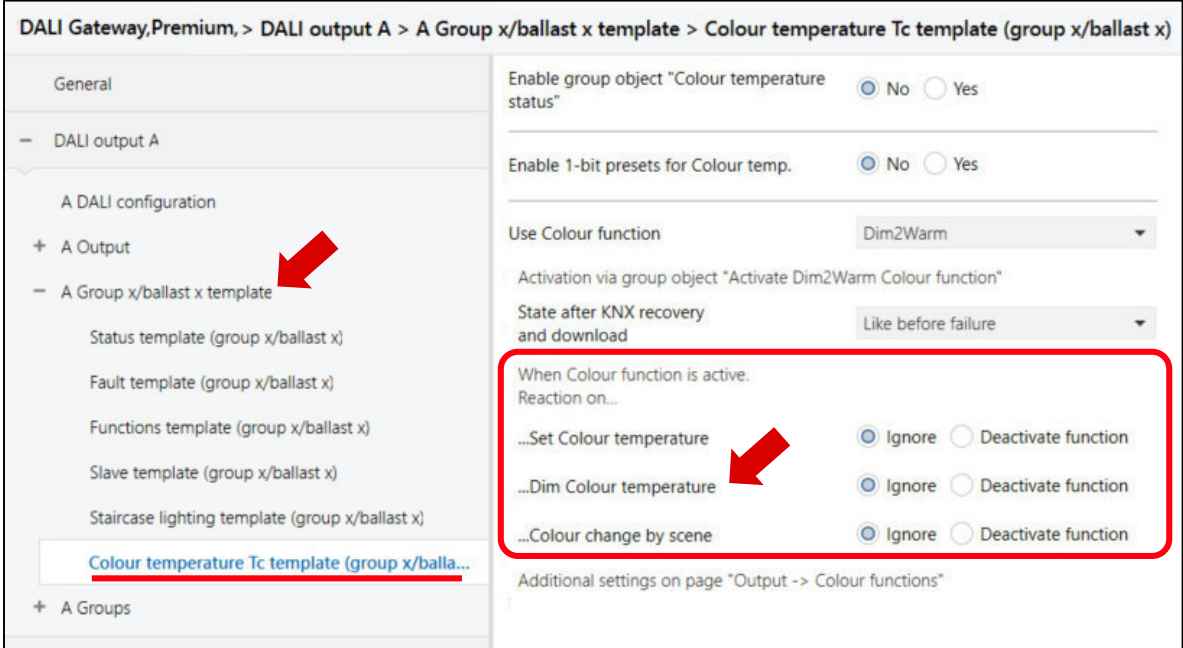
# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Active Colour function: Reaction on “Dim colour temperature”

This parameter describes how the group/ballast responds if the colour temperature is dimmed while the colour function Dim2Warm is active

- Ignore
  - The Colour function remains active and the colour temperature dimming is ignored
- Deactivate function
  - Dimming a colour temperature deactivates the colour function and the group/ballast adopts the dimmed colour temperature



DALI Gateway,Premium, > DALI output A > A Group x/ballast x template > Colour temperature Tc template (group x/ballast x)

General

Enable group object "Colour temperature status"  No  Yes

Enable 1-bit presets for Colour temp.  No  Yes

Use Colour function Dim2Warm

Activation via group object "Activate Dim2Warm Colour function"

State after KNX recovery and download Like before failure

When Colour function is active.  
Reaction on...

...Set Colour temperature  Ignore  Deactivate function

...Dim Colour temperature  Ignore  Deactivate function

...Colour change by scene  Ignore  Deactivate function

Additional settings on page "Output -> Colour functions"

Nu	Group Address	Name	Object Function	Length	Data Type
87	1/4/87	Output A - group 1	Dim Colour temperature	4 bit	dimming control

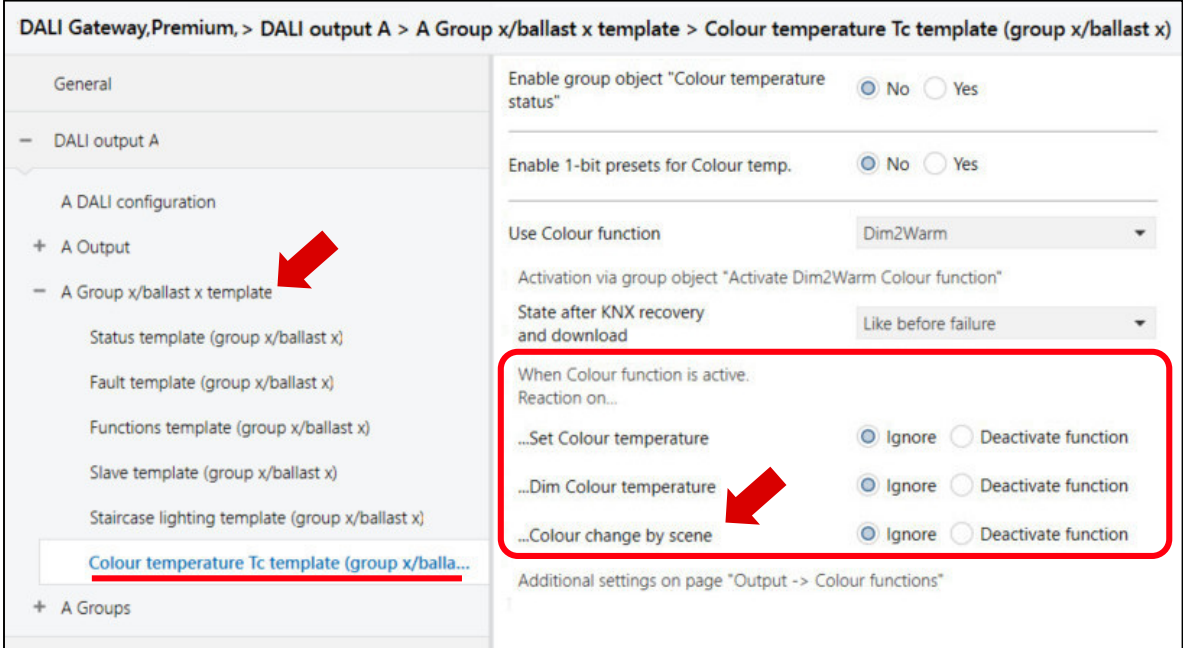
# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Active Colour function: Reaction on “Colour change by scene”

This parameter defines how the group/ballast responds if a colour is recalled by a scene retrieval while the colour function Dim2Warm is active

- Ignore
  - The Colour function remains active and the scene retrieval colour change is ignored
- Deactivate function
  - The Colour function is deactivated as soon as a colour change is recalled by a scene retrieval
  - The group/ballast adopts the colour temperature of the scene



DALI Gateway,Premium, > DALI output A > A Group x/ballast x template > Colour temperature Tc template (group x/ballast x)

General

Enable group object "Colour temperature status"  No  Yes

Enable 1-bit presets for Colour temp.  No  Yes

Use Colour function Dim2Warm

Activation via group object "Activate Dim2Warm Colour function"

State after KNX recovery and download Like before failure

When Colour function is active. Reaction on...

...Set Colour temperature  Ignore  Deactivate function

...Dim Colour temperature  Ignore  Deactivate function

...Colour change by scene  Ignore  Deactivate function

Additional settings on page "Output -> Colour functions"

Nu	Group Address	Name	Object Function	Length	Data Type
35	1/4/35	Output A	KNX scene 1..64	1 byte	scene control

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Group object “Output – Activate Dim2Warm colour function”

This parameter enables the “*Output – Activate Dim2Warm colour function*” group object, which activates/deactivates the Dim2Warm colour function

– No

- The “*Output – Activate Dim2Warm colour function*” group object is not enabled
- The Dim2Warm function is activated/deactivated for each parameterized group/ballast

– Yes

- The “*Output – Activate Dim2Warm colour function*” group object is enabled
- This group object also controls all groups/ballasts per output for which the Dim2Warm function is parameterized, i.e. the function can be activated/deactivated centrally

1.1.10 DG/S2.64.5.1 DALI Gateway, Premium, 2f, MDRC > DALI output A > A Output > Colour functions

General  
Colour function Dim2Warm

DALI output A  
The Colour temperature changes proportionally to the brightness when “Dim2Warm” Colour function is activated  
The following parameters apply to all members with activated “Dim2Warm” Colour function

A DALI configuration

A Output  
Limit proportional range  No  Yes  
Limit Colour temperature range  No  Yes  
**Enable group object “Output - Activate Dim2Warm Colour function”  No  Yes**

Status  
Fault  
Functions  
Colour temperature setting across all channels (broadcast)  
Enable group object “Output - Set Colour temperature (K)”  No  Yes  
Transition time 2 s

Setting across all channels for all Colour status objects in groups and ballasts  
Send group object value After change or on request

	Num	Group Address	Name	Object Function	Length	Data Type
	65	1/4/65	Output A	Activate Dim2Warm Colour function	1 bit	start/stop

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Activation/deactivation of the Dim2Warm colour function

The Dim2Warm colour function is activated and deactivated via a group object

- Individually for each group
- Individually for each ballast
- Centrally for all group/ballasts per output for which the Dim2Warm function is parametrized

Telegram value:

- 1 = Activates the Dim2Warm colour function
- 0 = Deactivates the Dim2Warm colour function

Furthermore, the state after KNX recovery and download can be set (deactivated, activated or like before failure)

Nui	Group Address	Name	Object Function	Length	Data Type
89	1/4/89	Output A - group 1	Activate Dim2Warm Colour function	1 bit	start/stop

Nui	Group Address	Name	Object Function	Length	Data Type
359	1/4/248	Output A - ballast 3	Activate Dim2Warm Colour function	1 bit	start/stop

Nu	Group Address	Name	Object Function	Length	Data Type
65	1/4/65	Output A	Activate Dim2Warm Colour function	1 bit	start/stop

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

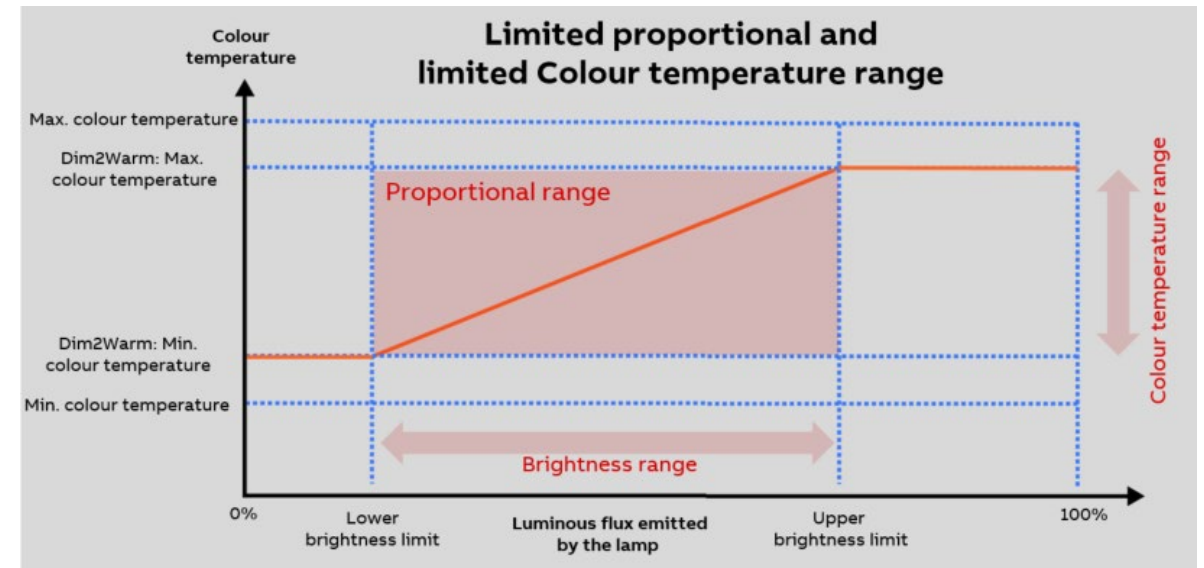
### Limitation of proportional and/or colour temperature range

The proportional range is the range with a linear relationship between colour temperature and brightness and refers to an output

- No limitation of the proportional range
- There are two different factors that can limit this range
  - Reduction of the brightness range by setting an upper and lower brightness limit (limited proportional range)
  - Adjusting the colour temperature range by setting a minimum and maximum colour temperature value

The proportional area always stays within the parametrized limits (limited or not limited)

When the Dim2Warm function is active and a group/ballast is actuated with a brightness value outside the limits, its colour temperature remains at the value of the exceeded limits (Dim2Warm min or max colour temperature)



# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Limitation of proportional and/or colour temperature range

The proportional range is the range with a linear relationship between colour temperature and brightness and refers to an output

- No limitation of the proportional range
- Reduction of the brightness range by setting an upper and lower brightness limit (min/max level)  
→ limited proportional range
- Adjusting the colour temperature range by setting a minimum and maximum colour temperature value (min/max colour temperature)

Colour function Dim2Warm

The Colour temperature changes proportionally to the brightness when “Dim2Warm” Colour function is activated

The following parameters apply to all members with activated “Dim2Warm” Colour function

Limit proportional range  No  Yes

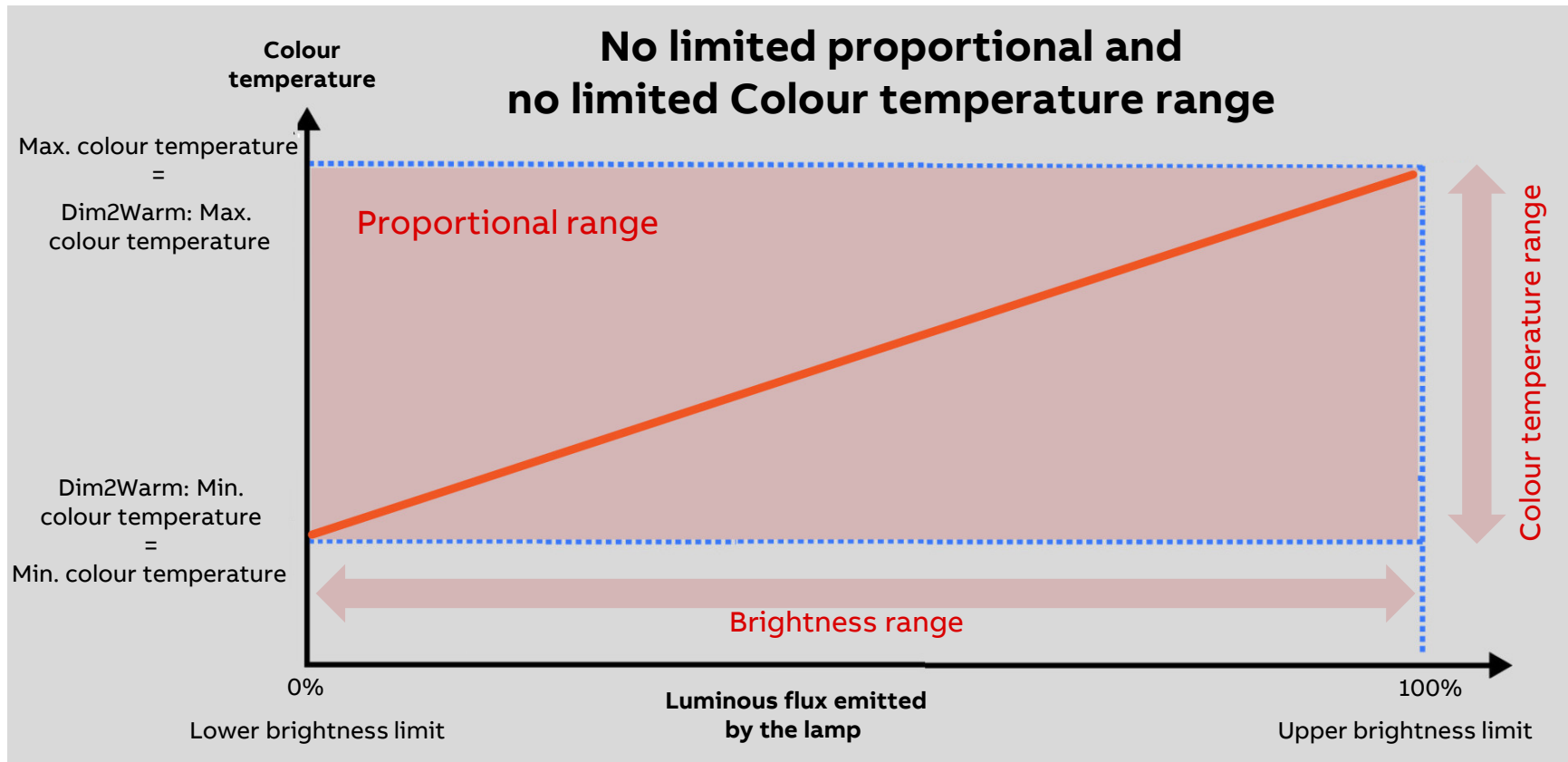
Limit Colour temperature range  No  Yes

#### ETS Parameter:

A Output → Colour functions „Dim2Warm“

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”



# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Limitation of proportional and/or colour temperature range

The proportional range is the range with a linear relationship between colour temperature and brightness and refers to an output

- No limitation of the proportional range
- There are two different factors that can limit this range
  - Reduction of the brightness range by setting an upper and lower brightness limit (min/max level)  
→ limited proportional range
  - Adjusting the colour temperature range by setting a minimum and maximum colour temperature value (min/max colour temperature)

Colour function Dim2Warm

The Colour temperature changes proportionally to the brightness when “Dim2Warm” Colour function is activated

The following parameters apply to all members with activated “Dim2Warm” Colour function

**Limit proportional range**  No  Yes

The Colour temperature changes proportionately to the brightness between the limits  
The minimum Colour temperature is used below the lower limit  
The maximum Colour temperature is used above the upper limit

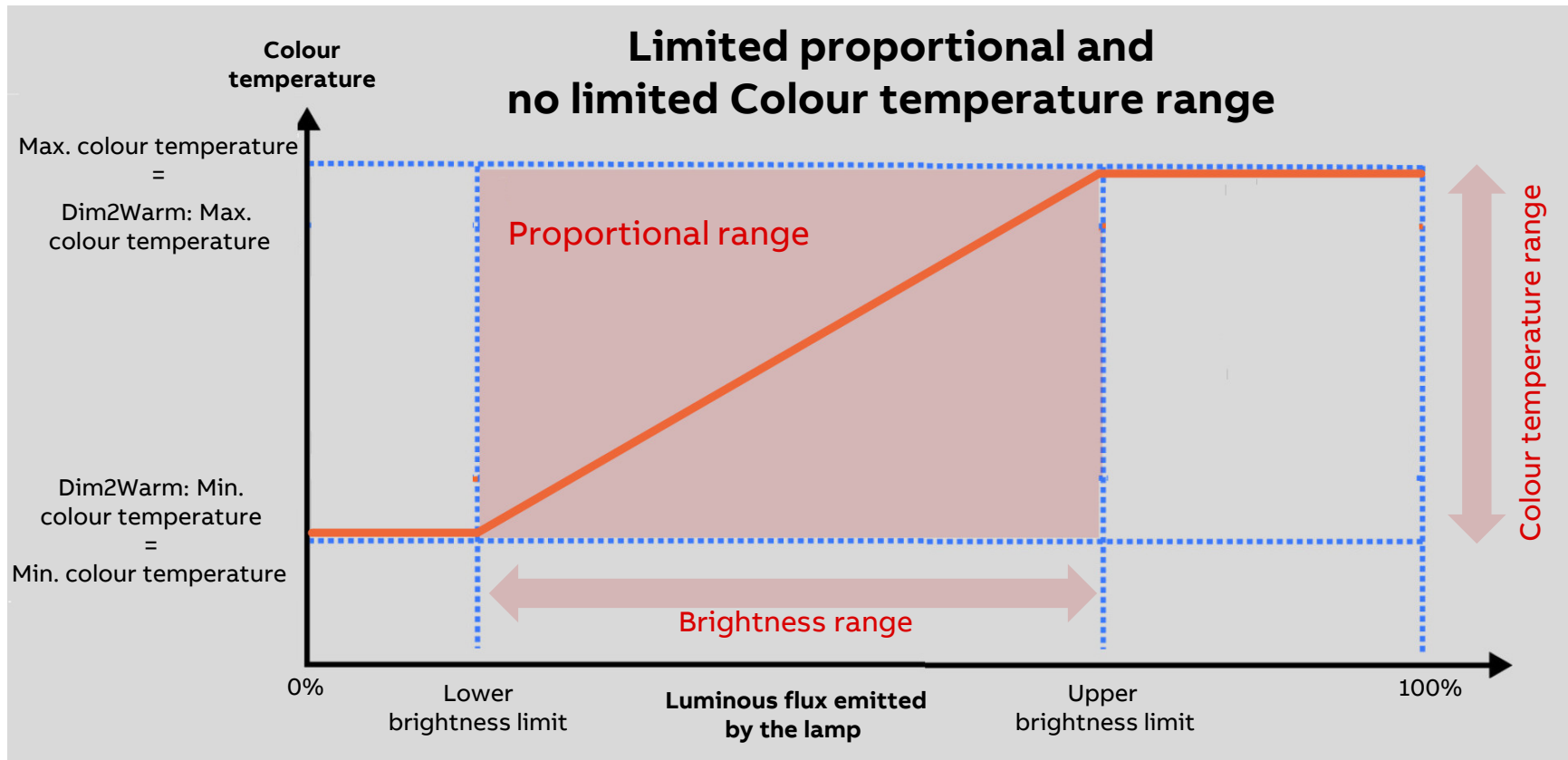
Lower brightness limit

Upper brightness limit

Limit Colour temperature range  No  Yes

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”



# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Limitation of proportional and/or colour temperature range

The proportional range is the range with a linear relationship between colour temperature and brightness and refers to an output

- No limitation of the proportional range
- There are two different factors that can limit this range
  - Reduction of the brightness range by setting an upper and lower brightness limit (min/max level)  
→ limited proportional range
  - Adjusting the colour temperature range by setting a minimum and maximum colour temperature value (min/max colour temperature)

Colour function Dim2Warm

The Colour temperature changes proportionally to the brightness when "Dim2Warm" Colour function is activated

The following parameters apply to all members with activated "Dim2Warm" Colour function

Limit proportional range  No  Yes

Limit Colour temperature range  No  Yes

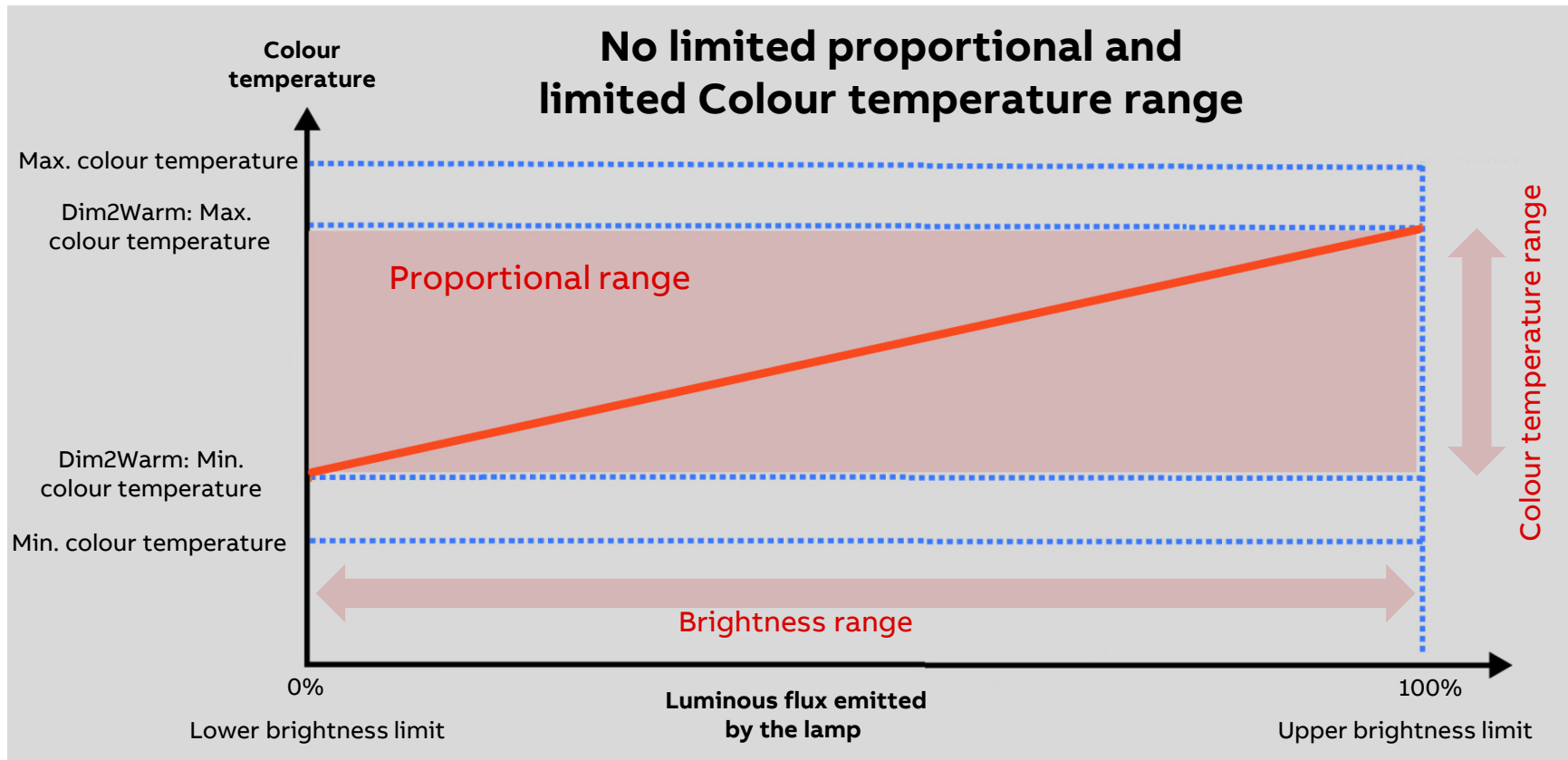
A limited Colour temperature range is used when the "Dim2Warm" Colour function is activated.

Minimum Colour temperature  K

Maximum Colour temperature  K

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”



# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

### Limitation of proportional and/or colour temperature range

The proportional range is the range with a linear relationship between colour temperature and brightness and refers to an output

- No limitation of the proportional range
- There are two different factors that can limit this range
  - Reduction of the brightness range by setting an upper and lower brightness limit (min/max level)  
→ limited proportional range
  - Adjusting the colour temperature range by setting a minimum and maximum colour temperature value (min/max colour temperature)

Colour function Dim2Warm

The Colour temperature changes proportionally to the brightness when “Dim2Warm” Colour function is activated

The following parameters apply to all members with activated “Dim2Warm” Colour function

Limit proportional range  No  Yes

The Colour temperature changes proportionately to the brightness between the limits  
The minimum Colour temperature is used below the lower limit  
The maximum Colour temperature is used above the upper limit

Lower brightness limit 20% (51) ▼

Upper brightness limit 80% (204) ▼

Limit Colour temperature range  No  Yes

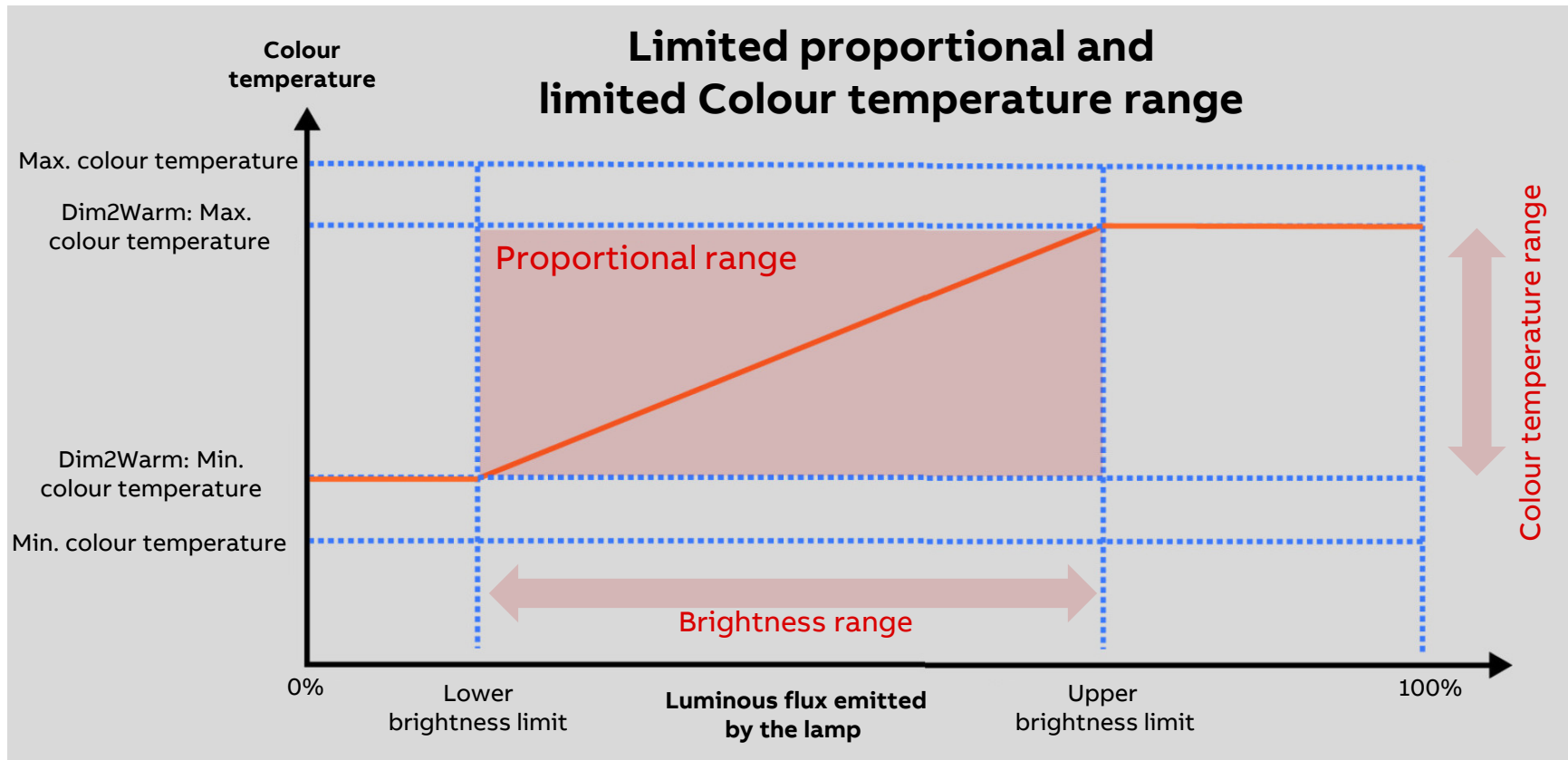
A limited Colour temperature range is used when the “Dim2Warm” Colour function is activated.

Minimum Colour temperature 2700 ▼ K

Maximum Colour temperature 4000 ▼ K

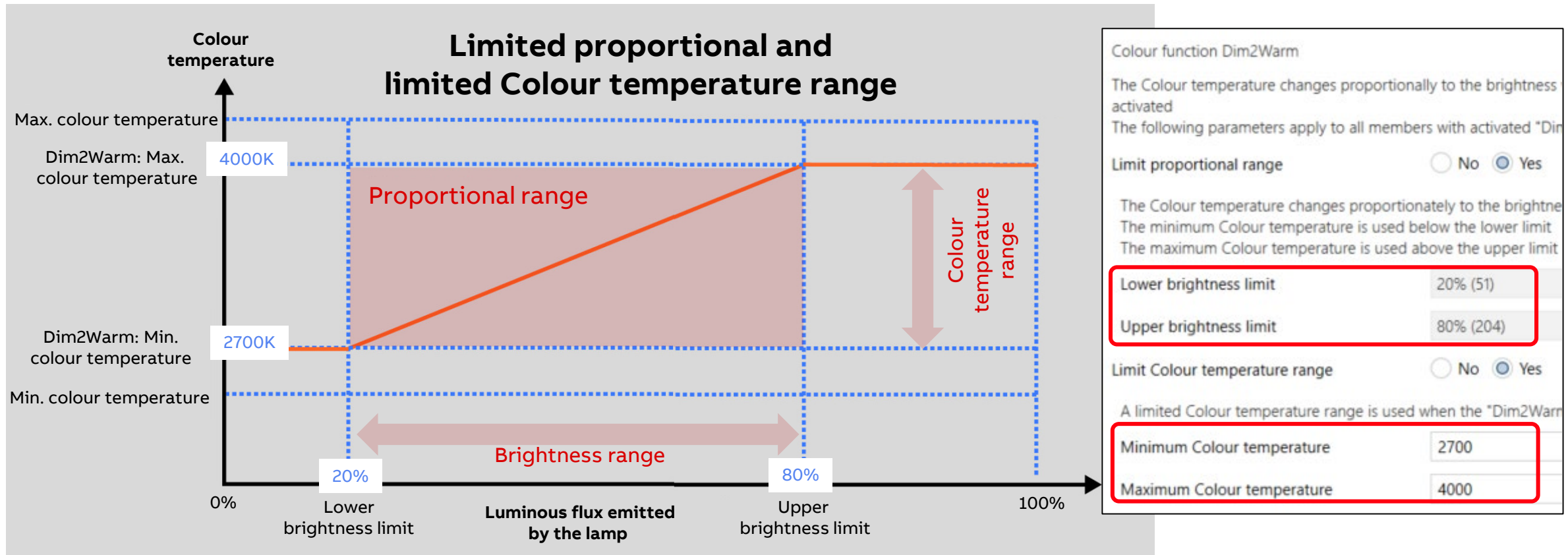
# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”



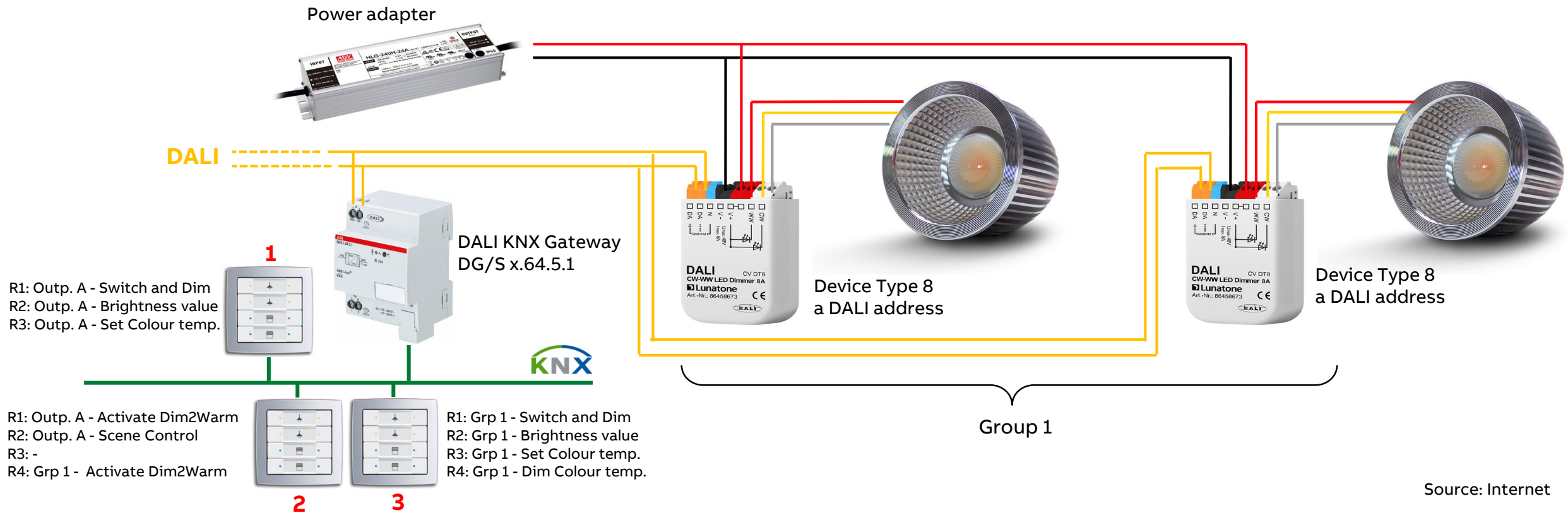
# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”



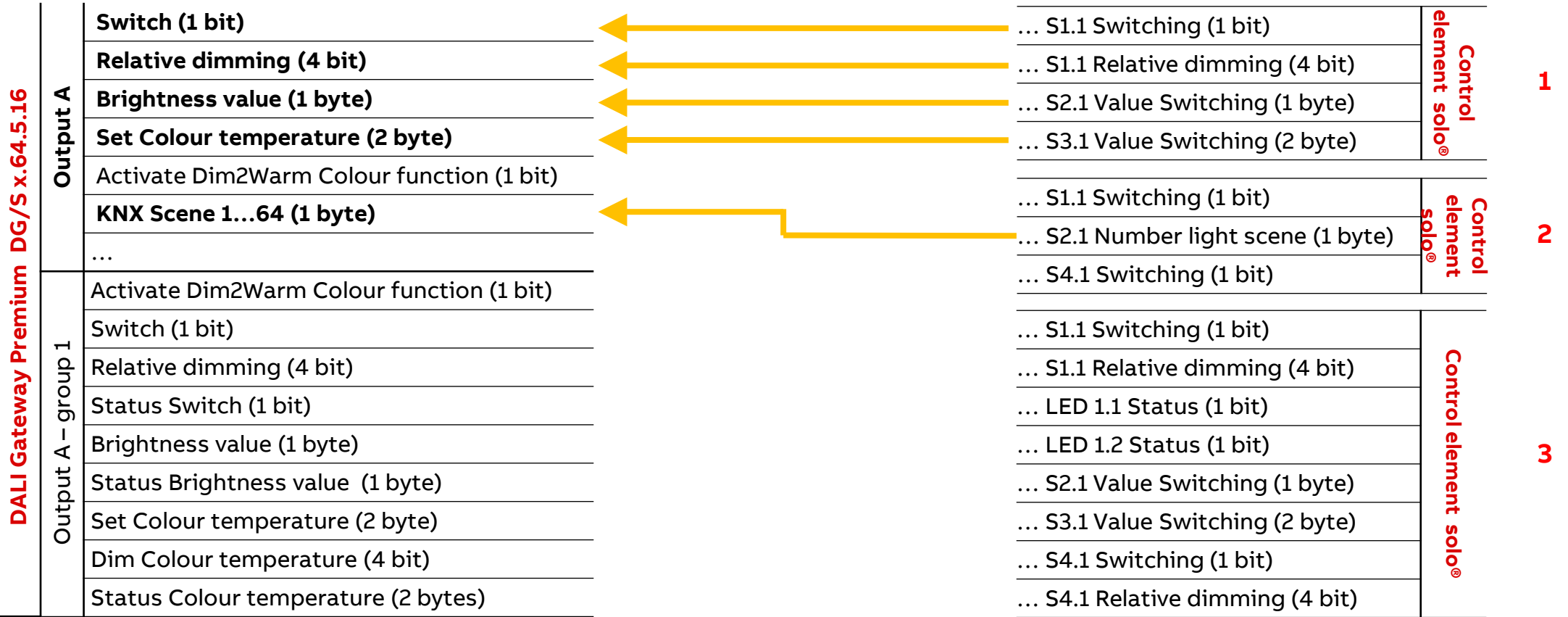
# KNX DALI Gateway Premium DG/S x.64.5.1

Colour function “Dim2Warm” – Example: Hardware for Tunable White with DALI and KNX



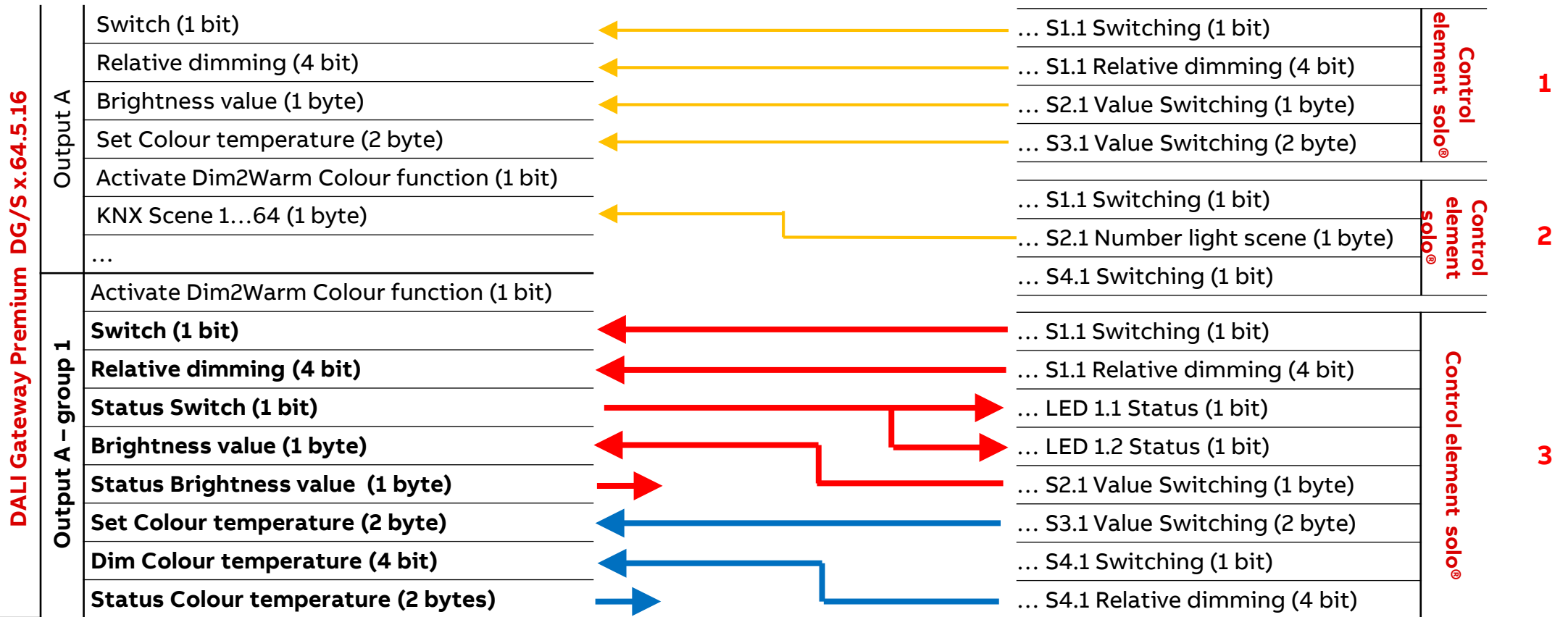
# KNX DALI Gateway Premium DG/S x.64.5.1

Colour function “Dim2Warm” – Example: Assignment of Group Addresses



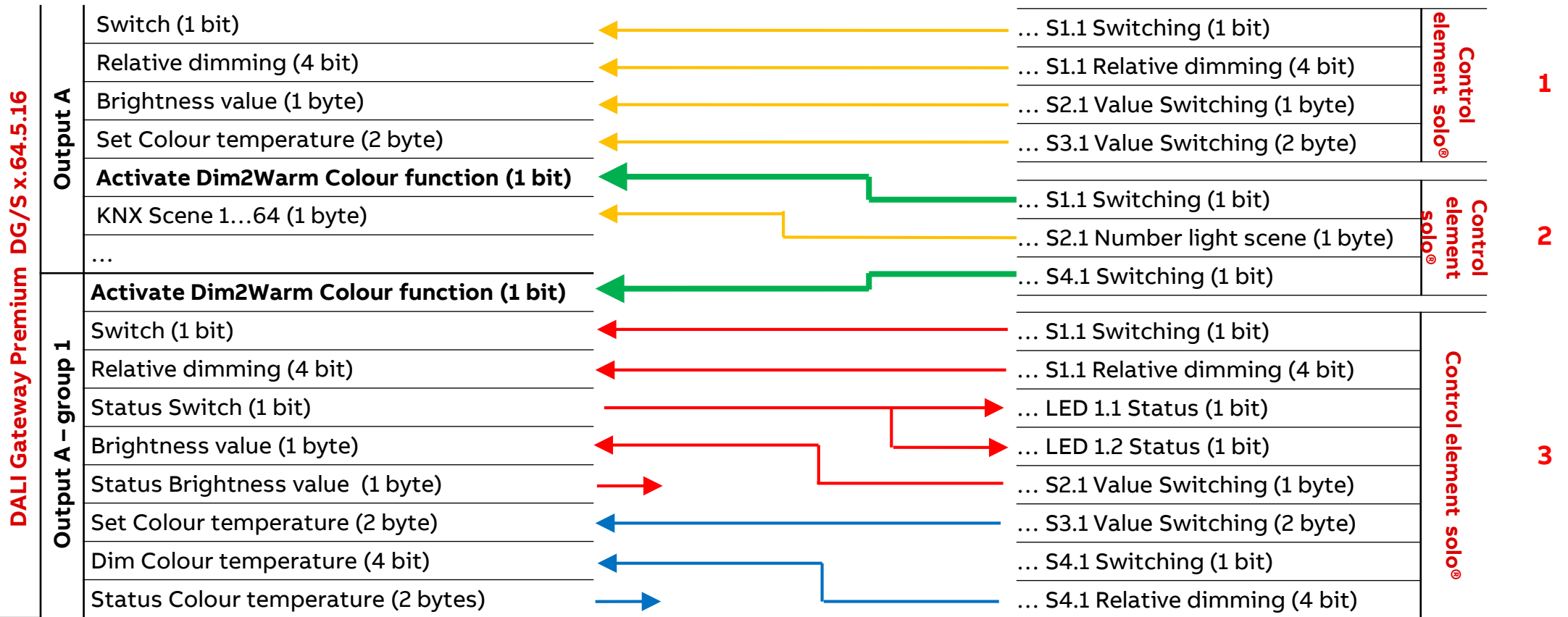
# KNX DALI Gateway Premium DG/S x.64.5.1

Colour function “Dim2Warm” – Example: Assignment of Group Addresses



# KNX DALI Gateway Premium DG/S x.64.5.1

Colour function “Dim2Warm” – Example: Assignment of Group Addresses



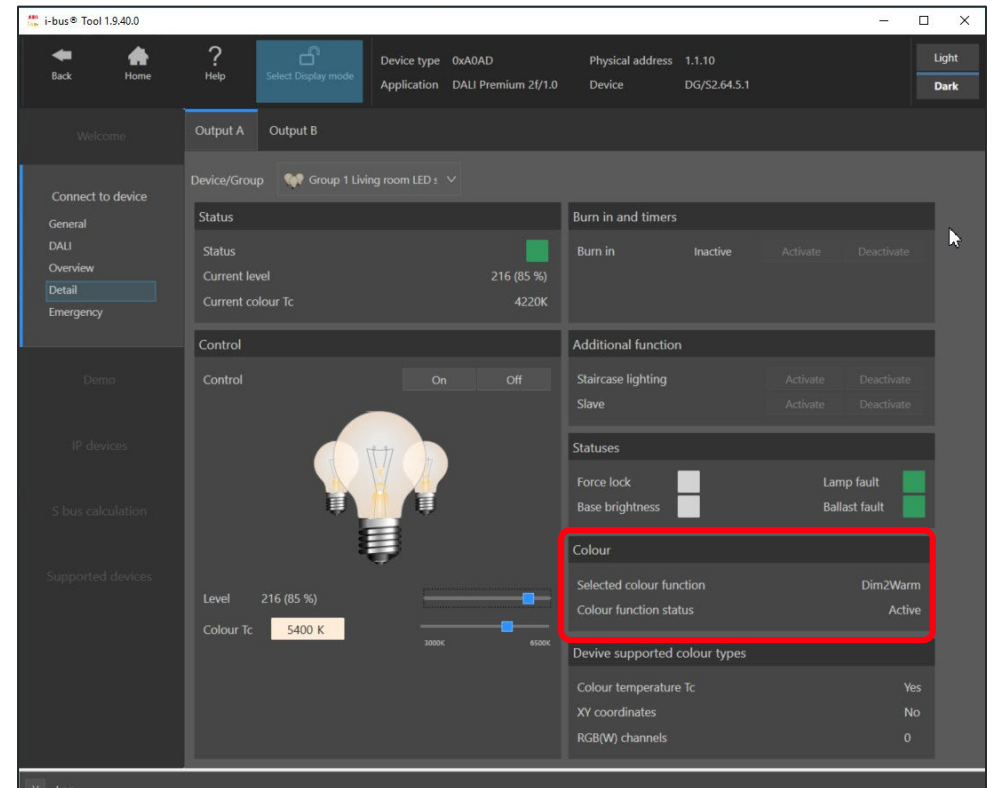
# KNX DALI Gateway Premium DG/S x.64.5.1

Colour function “Dim2Warm”

## ABB i-bus® Tool

The selected and the state of the Colour function “Dim2Warm” is displayed

The prerequisite is that the additional function is parameterized in the ETS



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# **KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm**

Online Learning Session

# KNX DALI Gateway Premium DG/S x.64.5.1

## Colour function “Dim2Warm”

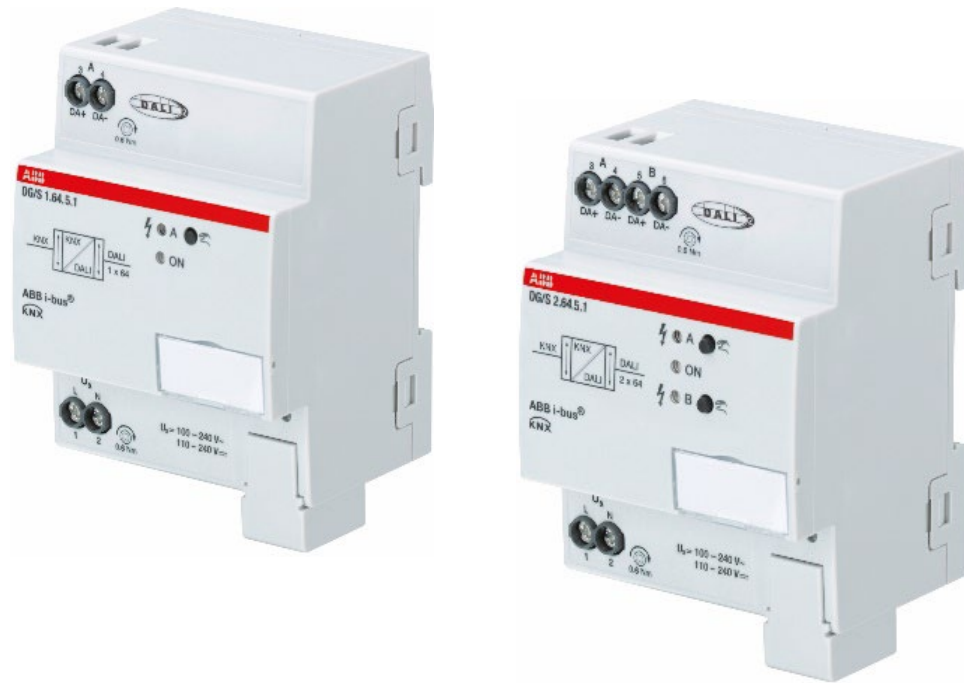
### Summary

- When dimming LEDs the colour temperature does not change
- The “Dim2Warm” Colour function copies the colour temperature behavior of a light bulb or halogen lamp in case of dimming LEDs
- Especially in residential lighting solutions this feature is preferred, as it is known and accepted from traditional light bulbs lamps
- The colour temperature changes proportionally to brightness
  - Dimming up: Increasing of colour temperature → cold white
  - Dimming down: Decreasing of colour temperature → warm white
- Dim2Warm can be activated on a group/ballast or central
- The Colour function Dim2Warm or HCL can be used for a group/ballast
- Ballasts of device Type 8 and tunable white LEDs are required



# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

## Questions



# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

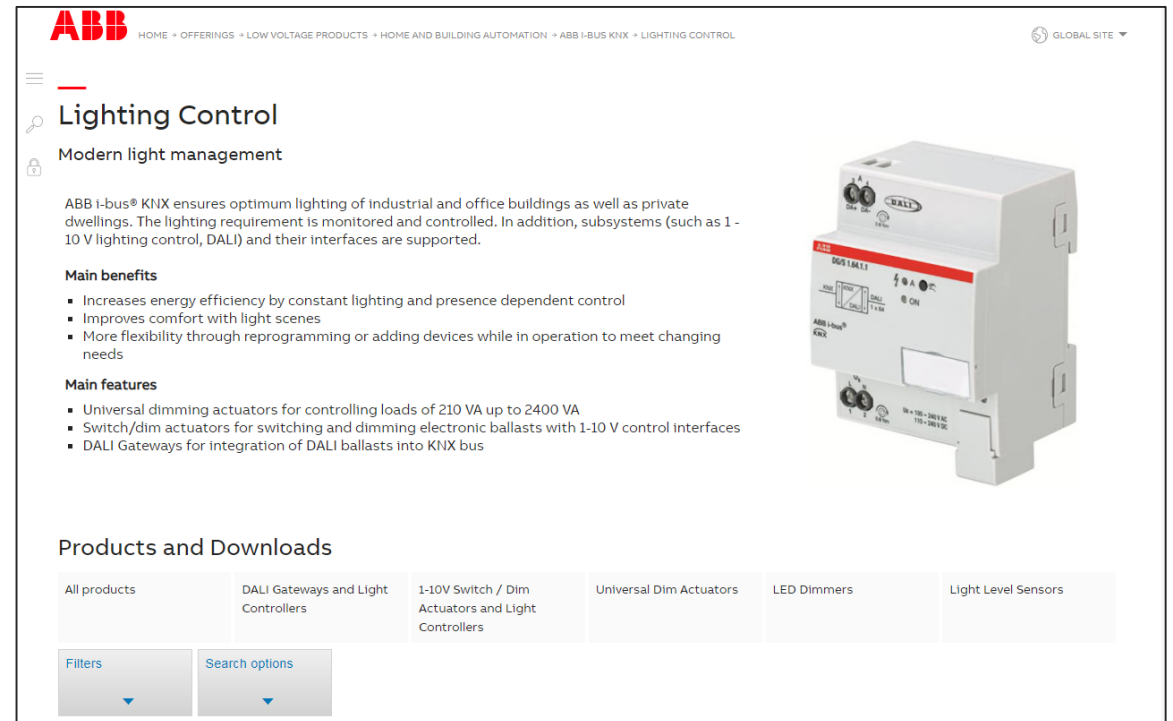
## Online Learning Session

### Homepage

[www.abb.com/KNX](http://www.abb.com/KNX)

→ Products and Downloads  
→ Lighting Control  
→ Search Options DG/S

- Product Manual
- CAD Drawing
- Installation and Operating Instructions
- Specification Text
- ETS Application
- Selection Table
- CE & RoHS Declaration of Conformity
- ...



**ABB** HOME • OFFERINGS • LOW VOLTAGE PRODUCTS • HOME AND BUILDING AUTOMATION • ABB I-BUS KNX • LIGHTING CONTROL GLOBAL SITE

### Lighting Control

Modern light management

ABB I-bus® KNX ensures optimum lighting of industrial and office buildings as well as private dwellings. The lighting requirement is monitored and controlled. In addition, subsystems (such as 1-10 V lighting control, DALI) and their interfaces are supported.

**Main benefits**

- Increases energy efficiency by constant lighting and presence dependent control
- Improves comfort with light scenes
- More flexibility through reprogramming or adding devices while in operation to meet changing needs

**Main features**

- Universal dimming actuators for controlling loads of 210 VA up to 2400 VA
- Switch/dim actuators for switching and dimming electronic ballasts with 1-10 V control interfaces
- DALI Gateways for integration of DALI ballasts into KNX bus

**Products and Downloads**

All products	DALI Gateways and Light Controllers	1-10V Switch / Dim Actuators and Light Controllers	Universal Dim Actuators	LED Dimmers	Light Level Sensors
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Filters Search options

# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

## Online Learning Session

### Product Range Overview

Smarter Solutions for Home and Building Automation

ABB i-bus KNX

Product Range Overview 2019/2020

– Including KNX DALI Gateway Premium DG/S x.64.5.1

[LINK](#)




**Smarter Solutions for Home and Building Automation**  
**ABB i-bus® KNX**  
**Product Range Overview 2019/2020**

Product description, quick and easy selection of product codes


62 PRODUCT RANGE OVERVIEW 2019/2020 BAKK107492A3188 REV. B

### ABB i-bus® KNX Lighting Control – DALI



**DALI Gateway Basic, MDRC**  
The device is used to interface between DALI and KNX installations and incorporates the DALI power supply. One/Two DALI output(s) for up to 64/2x 64 DALI Slaves. Control and status feedback is carried out via KNX per DALI slave (64/2x 64), with lighting groups (16/2x 64), together in broadcast or per scenes (16/2x 16). Extensive fault and error messages are available. Self-contained emergency converter (64/2x 64) acc. EN 62386-202 will be supported. By means of KNX and emergency converter, different emergency tests (e.g. function and duration test) can be triggered. Feedback is sent. Slave-, staircase-, force-, block- and scene-function are integrated. DALI telegram rate can change. For diagnostic use and individual change of the DALI address or group assignment a separate ABB i-bus® Tool is available.

Description	Mod. width	Order details		Price		Pack unit
		Type code	Order code	€	kg	
1-fold	4	DG/S 1.64.1.1	ZCDG10199R0011	0.133	1	
2-fold	4	DG/S 2.64.1.1	ZCDG10199R0011	0.15	1	



**DALI Gateway Colour, MDRC**  
For controlling DALI devices via the ABB i-bus® KNX. One/Two DALI output(s) for up to 64/2x 64 DALI slaves. DALI power supply is integrated. Control and status feedback is carried out via KNX per DALI slave (64/2x 64), with lighting groups (16/2x 16), together in broadcast or per scenes (16/2x 16). DALI devices type DTZ (Self-contained emergency converter acc. EN 62386-202) and type DT8 (colour temperature Tc / tunable white acc. EN 62386-209) will be supported. Extensive fault and error messages are available. By means of KNX and DTZ converter different emergency tests (e.g. function and duration test) can be triggered, test results are transferred back to KNX. With DT8 devices Dim2Warm, HCL, set and dim colour temperature are possible. Slave-, staircase-, force-, block- and scene-function are integrated. Feedback is sent. DALI telegram rate can change. For diagnostic use and individual change of the DALI address or group assignment a separate Software-Tool is available. Available January 2020.

Description	Mod. width	Order details		Price		Pack unit
		Type code	Order code	€	kg	
1-fold	4	DG/S 1.64.5.1	ZCDG10278R0011	0.133	1	
2-fold	4	DG/S 2.64.5.1	ZCDG10278R0011	0.15	1	

# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

## Online Learning Session

### Further information

#### Training & Qualification Database

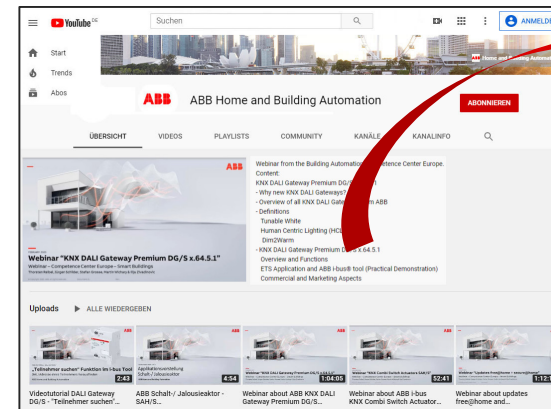
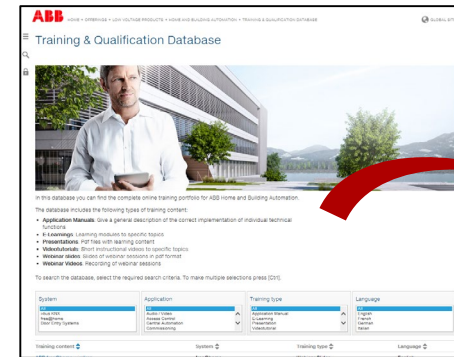
– The database includes the following types of training content:

- Application Manuals
- E-Learnings
- Presentations
- Video tutorials
- Webinar slides and videos
- [www.abb.com/knx](http://www.abb.com/knx) or <https://go.abb/ba-training>

#### Youtube

– Channel “ABB Home and Building Automation”

- <https://www.youtube.com/user/ABBibusKNX>



# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

## Online Learning Session

### Training & Qualification Calendar

In addition to the online modules and the traditional training programs offered by your local ABB sales team, we offer a variety of on-site trainings conducted by our specialists at different ABB training facilities

In this Training & Qualification Calendar you can find the educational events that are taking place during 2020

If you are interested in a training please click the training und you will be forwarded to register in “ABB MyLearning”

[www.abb.com/knx](http://www.abb.com/knx) or <https://go.abb/ba-training>

→ Training and Qualification

→ Training Calendar



**ABB** HOME • OFFERINGS • LOW VOLTAGE PRODUCTS • HOME AND BUILDING AUTOMATION • TRAINING AND QUALIFICATION • TRAINING & QUALIFICATION CALENDAR GLOBAL SITE

### Training & Qualification Calendar

In addition to the online modules and the traditional training programs offered by your local ABB sales team, we offer a variety of webinars and on-site trainings conducted by our specialists at different ABB Competence Centers.

In this Training & Qualification Calendar you can find the educational events that are taking place during 2018.

If you are interested in a training please [REGISTER HERE](#).

To search the Calendar, select the required search criteria. To make multiple selections press [Ctrl].

System	Date	Location
All	All	Webinar
Door Entry Systems	January 2018	Heidelberg, Germany
Free@home	February 2018	Lödenscheid, Germany
Fire Alarm Systems	March 2018	S. Palomba (Rome), Italy
I-bus KNX	April 2018	Virtuone (Milan), Italy

Content	Date	Location	Language
KNX for Commercial Building	05.04.2018 - 06.04.2018	Lödenscheid, Germany	EN
Building Automation Light + Building 2018	10.04.2018	Webinar	EN
KNX in Hotels	19.04.2018 - 20.04.2018	Heidelberg, Germany	EN
HVAC Automation	23.04.2018 - 24.04.2018	Heidelberg, Germany	EN

**ABB MyLearning**

HOME CATALOG PROFILE ADMINISTER REPORTS MY LEARNING

**CERTIFIED KNX BASIC COURSE**  
Code : 9CSC007151-GLB-EN-20190218\_22  
Certified KNX Basic Course at ABB in Heidelberg, Germany, 5 days  
★★★★★ | Share

# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

Online Learning Session

## KNX Certified Trainings 2020

Certified KNX Courses in Heidelberg

- Advanced Course: 13<sup>th</sup> to 17<sup>th</sup> Jul.
- Tutor Course: 19<sup>th</sup> to 23<sup>rd</sup> Oct.
- Basic Course : 16<sup>th</sup> to 20<sup>th</sup> Nov.
- Followed by two day application training

*Safe the date!!!*

And many more training courses in the calendar  
“International Training Dates 2020”

[www.abb.com/knx](http://www.abb.com/knx) or <https://go.abb/ba-training>



# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

## Online Learning Session

### Next Webinar

#### KNX DALI Gateway Premium DG/S x.64.5.1 – Special functions

- Human Centric Lighting (HCL) – Colour temperature curve following daylight
- Dim2Warm – Colour temperature changes proportionally to brightness with the effect like a light bulb
- Standby switch-off – Ballast voltage switch off via additional switching actuator to save energy
- Scenes – 1 bit recall and 1 byte coded scenes
- ABB i-bus® tool – Search menu for a ballast with unknown address, operating hours, ...

#### Wednesday 6<sup>th</sup> May 2020

- Morning 09:00 am Europe Time (Berlin, UTC + 2h)
- Afternoon 03:00 pm Europe Time (Berlin, UTC + 2h)



# KNX DALI Gateway Premium DG/S x.64.5.1 – Dim2Warm

## Online Learning Session

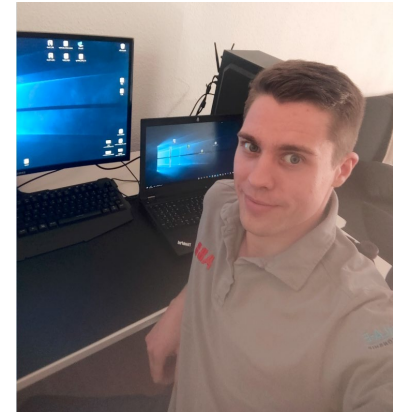
### Next online learning sessions → “MyLearning”

- Thursday 16<sup>th</sup> April: DALI Gateway DG/S x.64.5.1 – Standby switch-off
- Tuesday 21<sup>st</sup> April: DALI Gateway DG/S x.64.5.1 – HCL
- Thursday 23<sup>rd</sup> April: KNX ETS5 and group addresses – free-style address structure, export/import, generate group addresses in EXCEL, ...
- Tuesday 28<sup>th</sup> April: ControlTouch – Basic Commissioning (Wizard)
- Thursday 30<sup>th</sup> April: ControlTouch – Sonos Linking
- Tuesday 5<sup>th</sup> May: ETS: Presence Detector – Zones, Calibration and Constant Light Control
- Thursday 7<sup>th</sup> May: Presence Detector – Master/Slave Concept

... and more will follow



From home office to home office



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# Disclaimer

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