DIN RAIL 1 CHANNEL DIMMER MODULE

DM01D01KNX

Product Handbook

Product:
DM01D01KNX

Description:
DIN RAIL DIMMER MODULE

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INDEX

Any information inside this manual can be changed without advice.

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Exclusion of liability:
Despite checking that the contents of this document match the hardware and software, deviations cannot be completely excluded. We therefore cannot accept any liability for this.
Any necessary corrections will be incorporated into newer versions of this manual.

Symbol for relevant information

Symbol for warning

1. General Introduction

This manual is intended to be used by installers and describes functions and parameters of the device DM01D01KNX and how is possible to change settings and configurations using ETS software tool.

2. Product Overview

DM01D01KNX module is designed to be installed in Home and Building installations (i.e. offices, hotels, private houses, etc...).
DM01D01KNX power dimmer 1-channel acting as a Master Dimmer to which you can connect up to two Slave Module (cod. DM01D01ACC) with identical characteristics to the Master power dimmer and connected to it by a local two wires bus.
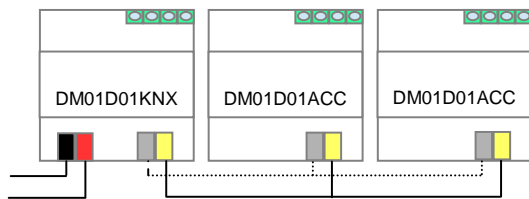
The three channels are independent and can therefore operate on different phases of the same three phase systems respecting the limit of 230Vac between phase and neutral.
The product is intended for installation on DIN rail in electrical distribution cabinets.

⚠ Slave address setting

The address setting is only for slave modules and it must be done before ETS download.
If you want change the slave address *local buttons* must be set as "enabled".

The module DM01D01KNX (Master) can work with a maximum of two additional modules DM01D01ACC (Slave); an address is assigned to each slave: 1 (slave 1) or 2 (slave 2). The procedure described here should be performed only on module DM01D01ACC (Slave).

To assign the address, press simultaneously buttons P1 and P2 for at least 10s: the module enters the address setting mode (PROG ADDR) and LEDs L1 and L2 show the current setting: L1 ON means slave 1, L2 ON means slave 2. Each press of P2 (SET ADDR) changes the slave address and light up alternately L1 and L2, corresponding to the address 1 and 2. After 5s from the last button is pressed, the module leaves the assignment mode and saves the address.

⚠ • Set a different address for the 2 slave modules in order to avoid undesired behavior at the outputs.

Allowed Loads

LOAD TYPE	MAX POWER / VOLTAGE
Incandescent or halogen lamps	20÷700 W, 230V~ 50/60Hz,
Ferromagnetic transformer suitable for dimming with secondary winding closed on resistive load (Halogen lamps 12/24V)	20÷700 VA, 230V~ 50/60Hz,
Electronic transformers with secondary winding closed on resistive load (Halogen lamps 12/24V)	20÷700 VA, 230V~ 50/60Hz,
Dimmable LED lamps	230V~ max. 160W
Compact Fluorescent Lamps (ESL/CFL)	230V~ max. 160W

For LED lamps or ESL, the correct operation strictly depends from the lamp used, so there is no guarantee in advance the proper operation of this kind of lamps, even if they are declared as dimmable.

3. General Parameter Configuration

KNX PARAMETER	SETTINGS
Delay to send telegram on power-up	5 ÷ 15 seconds

Through this parameter is possible to set the delay of transmission of telegrams after a power on by selecting the time by which the device is allowed to send telegrams.
In large systems after a power failure or shutdown this delay avoids to generate excessive traffic on the bus, causing slow performance or a transmission block.
If there are different devices requiring sending telegrams on the bus after a reset, these delays must be programmed to prevent traffic congestion during the initialization phase.
The input detection and the values of objects are updated at the end of the transmission delay time
At the end of ETS programming the device behaves like after a power on.

Enable temperature object	false true

If this parameter is set "true", it's possible to enable a communication object, *<Ch. x> Actual Temperature*, for each channel to know what's the temperature measured inside the box.

Sending interval	no sending 5 min 15 min 1 hr

It's possible to enable the periodic sending of measured temperature value, if this parameter is set "no sending", reading can be done only on read request.

Send temperature if variation >= 5°C	false true

If this parameter is set "true", it's possible to enable the sending of measured temperature value, only if the actual temperature value is different from the previous temperature value of at least 5°C or higher.

Enable additional channel 2	false true

If this parameter is set "true", it's possible to enable the second channel. The parameters and configurations of this channel are related to the slave 1.

Enable additional channel 3	false true

If this parameter is set "true", it's possible to enable the third channel. The parameters and configurations of this channel are related to the slave 2.

Dynamic scene object	false true

If this parameter is set "true", it's possible to enable a communication object *Dynamic Scene*, one for the whole device. Concerning Dynamic Scene function see paragraph: 13.1 Dynamic Scene Function.

4. Channel <X> General Configuration

It's possible to configure two inputs to work together by selecting the value "combined" in "Channel Configuration" page.

KNX PARAMETER	SETTINGS
Type of load	manual local setting capacitive / resistive inductive

With this parameter is possible to set the type of load for related channel.

Manual local setting
The load type settings can be done by ETS parameter or manually with the procedure here described. It is also possible to perform an automatic recognition of the load type on the device. To perform the manual/automatic load type settings on the device, ETS parameter "m*anual local setting*" must be selected.
Press button P1 for at least 5sec to enter load programming mode: (PROG LOAD); LED L1 and L2 show actual setting: L1 ON means resistive and capacitive loads, L2 ON means inductive loads.
On every press on P1 (SET LOAD) LED L1 and L2 changes as follows:
L1 ON (Resistive and capacitive) → L2 ON (Inductive) →L1 ON + L2 ON (Automatic load recognition)
After 5sec from the last button press, device exit this manual setting mode and the last set mode is saved in memory. If the selected mode is "Automatic load recognition" the recognition procedure start immediately, during this procedure it is possible to see the load switched ON and OFF; after this, the identified mode is saved in memory and can be changed manually by repeating the procedure

Capacitive / resistive
Trailing Edge: The dimmer turns off part of the final part of the waveform of the input voltage resulting in reduced lamp output. This load regulation is used for resistive or capacitive loads (typically halogen lamps with electronic transformer or incandescent lamps)

Inductive
Leading Edge: The dimmer turns off part of the initial part of the waveform of the input voltage, resulting in reduced lamp output. This load regulation is used for inductive loads (typically ferromagnetic transformers or toroidal)

Maximum dimming value	50 - 100%

It's possible to set a maximum percentage value; any percentage command higher than the set value is intended as a command of: 100% ON.

Minimum dimming value	0 – 45 %

It's possible to set a minimum percentage value; any percentage command lower than the set value is intended as a command of: 0% OFF.

Dimming time from 0% to 100%	0 ÷ 255 seconds

With this parameter it's possible to set the ramp time, that the channel takes to go from 0% to 100%.

Local buttons	disabled enabled

Here is possible to enable / disable local buttons on the device.
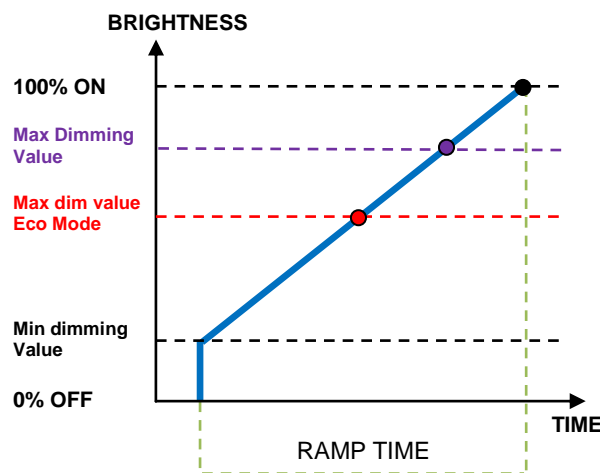
● 100% on

● Max value ON set by parameter "Maximum Dimming Value"

● Max value ON set by object or param. "Economical Mode"

5. Channel <X>

KNX PARAMETER	SETTINGS
Behaviour on KNX bus power down	0 - 100% 101 = no action

When bus voltage fall down under approximately 18V device enters the power down routine and it's possible to set the channel status.

⚠️ • Concerning channels 2 and 3 this behaviour will be adopt also in case of local bus failure.

Behaviour on KNX bus power up	0 - 100% 101 = previous state

On power up it is possible to set the status of each channel with this parameter.

Brightness at switch on	0 - 100% 101 = previous state

With this parameter it's possible to set a value for the channel when the output is activated with 1 bit switching object:
➢ *<Ch. x> Switching (at once)*
➢ *<Ch. x> Switching (smooth)*
➢ *<Ch. x> Switching (timing)*

⚠️ • When a switch ON command is executed, the actual brightness value of the output channel must be 0% OFF otherwise this command is ignored.

⚠️ • If this parameter is set to "*previous state",* with a switch ON command, the output channel will go to the value that it had before to go to 0% OFF. With a switch OFF command, the output channel will go to 0% OFF.

⚠️ • If this parameter is set to "*previous state",* after download with a switch ON command, the output channel will go to 100% ON.
After that, if a new brightness value, with percentage object *<Ch. x> Dimming Value,* is set, with a switch ON command, the output channel will go at the new percentage set value.

Absolute value object [0…100%]	disabled enabled

It is possible enable two different communication object:
• *<Ch. x> Dimming Value*
• *<Ch. x> Dimming Status*
Communication object *<Ch. x> Dimming Value,* is used to set a brightness value for the output channel.
Communication object *<Ch. x> Dimming Status* is used to inform what is the actual brightness value of the output channel.

Additional function	no function logic function lock function

It is possible enable two different additional function.
Logic function, see paragraph: 11 Logic Function.
Lock function, see paragraph: 12 Lock Function.

Activation telegram	telegram "0" telegram "1"

It's possible to determine if the output channel is activated with a telegram "0" (and then off with "1") or is activated with telegram "1" (and then off with "0").

⚠️ • When *logic function* is enabled, *Activation telegram* parameter is not visible and is set as telegram "1" by default.

Timing Function	timing function disabled on / off with delay on with delay / timing off

on / off with delay
it is possible to set a delay between the reception of a telegram and the switch of the output channel; for both telegrams: activation and deactivation.

on with delay / timing off
it is possible to set a delay between the reception of a telegram of activation and the switch of the output channel; the OFF switch is automatic after a configurable time (staircase timer).

Scene	disabled enabled

It is possible enable scene function.
Scene function, see paragraph: 13 Scene Function.

Enable ramp time object	false true

It is possible enable a communication object:
- *<Ch. x> Ramp Time*

Communication object *<Ch. x> Ramp Time,* is used to set a new value of the ramp time, that the channel takes to go from 0% to 100%.

Economical mode	disabled enabled

It's possible to enable economical mode function.
If this function is enabled a communication object is visible.
- *<Ch. x> Economical Mode*

When the value of this communication object is "1", economical mode is activated otherwise it is deactivated.
economical mode is used for energy saving. It's possible to set a maximum value of brightness for the output channel, when economical mode is enabled.

Maximum dimming value in economical mode	20 - 90%

It's possible to set the maximum brightness value for the output channel, when economical mode is enabled.

⚠️ • If the actual brightness value of the output channel is higher than the value set by *"maximum dimming value in economical mode"* parameter*,* when economical mode is activated the output channel goes to the value set by "*maximum dimming value in economical mode"* parameter.

⚠️ • The value set by the parameter *"Maximum dimming value in economical mode"* must be equal or lower than the value set by the parameter *"Maximum dimming value".*

Timing economical object	0 – 24 hr

Economical mode can be set also with timing: after a time set by this parameter, economical mode is deactivated.

⚠️ • The value of object *<Ch. x> Economical Mode* is stored in memory only if it is not set with timing: *Timing economical object = 0 (time unlimited).*

6. Timing Functions

It's always possible to manage, for each output channel, on/off commands and timing commands in order to select if switch it on/off for indefinite time or with timing function.
Timing function is activated by receiving a command on the communication object *<Ch. x> Switching (timing).*
Two possible timing functions:

- **on / off with delay**
- **on with delay / timing off**

KNX PARAMETER	**SETTINGS**
Dimming time from 0% to 100% for timing function	0 – 255 seconds

With this parameter it's possible to set a different ramp time, that is used from the timing functions.

7. Function ON/OFF with delay

In this configuration it is possible to set a time delay on the output channel activation (TON) and also a delay time for the output channel deactivation (TOFF).
Switching ON and OFF of the output channel, when the parameters are different from zero, occurs later than the receipt of the telegram. Activation and deactivation delays are set separately.

KNX PARAMETER	**SETTINGS**
Delay on activation	true false
Delay on deactivation	true false
Delay on activation (base Time)	1 sec. 1 minute 1 hour
Delay on activation (factor)	1.. 255

The delay time between the receipt of a telegram and the execution of the command is given by:
Delay of activation time = Delay on activation (base time) x Delay on activation (factor)

	1 sec. 1 minute 1 hour
Delay on deactivation (base time)	
Delay on deactivation (factor)	1.. 255

The delay time between the receipt of a telegram and the execution of the command is given by :
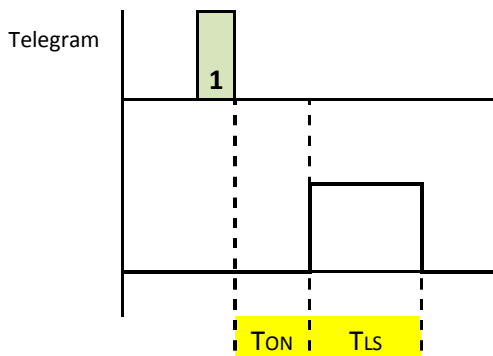*Delay of activation time = Delay on deactivation (base time) x Delay on deactivation (factor).*
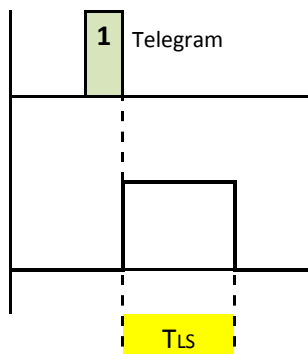
8. Function ON with delay / timing OFF

After receiving a telegram on the communication object *<Ch. x> Switching (timing)*, the output channel is active for a time (TLS) that can be set by parameters: *Timing (base time) and Timing (factor)*; when TLS expires, it turns off automatically.
It is also possible to set a delay on activation time (TON) (see "ON with delay" function).

"Duration of the output channel activation" (TLS) and "ON delay time" (TON) are programmable by ETS.

"ON delay time" (TON) can be disable by ETS.

KNX PARAMETER	SETTINGS
Timing (base Time)	1 sec. 1 minute 1 hour
Timing (factor)	1.. 255
Timing can be stopped	true false

This allows you to set the behaviour of the device when it receives a OFF command:

True
On receiving a OFF command, the device immediately executes the command and switch off the output channel without waiting the end of the timing phase.

False
On receiving a OFF command, the device ignores the command and continues the timing phase; the load is deactivated at the end of the set time and it is not possible to deactivate it using a bus command.

Warning function	true false
Warning time (seconds before time ends)	15 sec 30 sec 1 min 2 min
Switch off time	1,0 sec 1,5 sec 2,0 sec

Here you can set the warning time before the deactivation of the stairway light function, upon which the device will consequently signal the imminent termination of the stairway light function by switching off, for a brief time, the light.

![Eelectron logo]

Duration of the output channel timing can be stopped with an OFF command:

Warning Function:

Switch off time

Warning Time
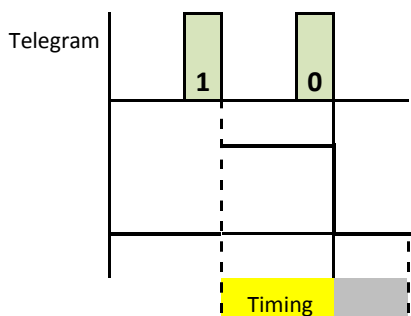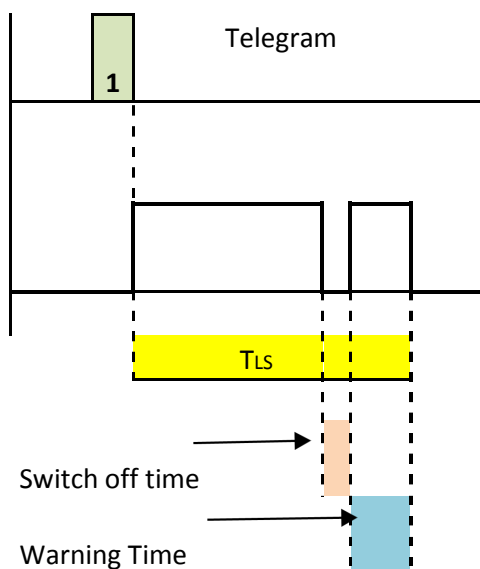
KNX PARAMETER	SETTINGS
Receiving on when timing is active	ignore trigger mode extension mode

This allows you to set the behaviour of the device when it receives a ON command while the staircase timing is running:

ignore
On receiving a ON command, the device ignores it and goes on executing the timing.

trigger mode
On receiving a ON command, the device restart the stairs light time execuiting the whole time again.

extension mode
On receiving the command the device extends the stairs light time, increasing it by the time of the standard stairs light time. Note that the extension option does not reset the timing but it changes its duration and becomes a multiple of the set stairs light time. The maximum number of extension is allowed by the parameter *"Maximum number of time extension"*.

Duration of the output channel timing is re-triggerable:

Extension mode:

$3 \times T_{LS}$
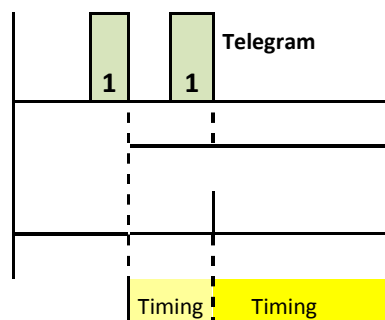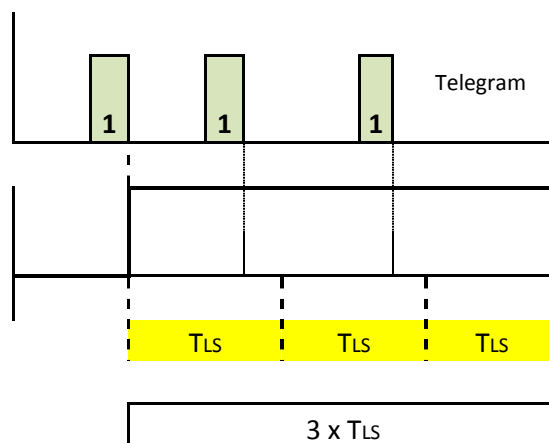
9. ON/FF vs Timing Functions

ON / OFF Commands have higher priorities respect timing command: here some examples:

Timing, of the output channel, is active and receives activation command (ON)

- If received on CO: "*<Ch. x> Switching (timing)"* communication object, then it follows the parameter settings (ignore / trigger /extension mode).
- If received on CO: "*<Ch. x> Switching (at once) or (smooth)*, then the output channel stay activated without timing.

Timing, of the output channel, is active and receives deactivation command (OFF)

- If received on CO : "*<Ch. x> Switching (timing)*" then it follows the parameter settings ("*Timer can be stopped"*: true/false)
- If received on CO : "*<Ch. x> Switching (at once) or (smooth)*" then the output channel switch off and all the timings are reset.

10. Output Channel Additional Functions

In DM01D01KNX 3 additional functions can be enabled:

- **LOCK FUNCTION** : this function according to the command received from the bus, blocks the output channel in a specific condition when a "lock on" command arrives, this state is kept until a "lock off" command is received; any command received during the period in which the block is activated is not executed.
- **LOGIC FUNCTION**: This function allows you to control the load, not only using the relay *Switching Command Object*, but using the result of a logic operation; the logic function consists in two logic ports: the operation is performed between the logic input and the output switching object.
- **SCENE FUNCTION**: The scene function manage two possible commands to the device: **perform scene**, that is a command to create a specific condition; **learn scene**, that is a command to memorize the current status of the output at the moment the command is received, and then reproduce it once the perform command is received.

LOCK and LOGIC function are alternative functions and only one of them can be enabled at a time.

11. Logic Function

Enabling logical operation allow to submit the command for the output channel to a result of a logical operation between the communication object *<Ch. x> Logic Function* and the communication object *<Ch. x> Switching (at once)* or *<Ch. x> Switching (smooth)* or *<Ch. x> Switching (timing).*

1 – Update on *<Ch x> Switching (at once)* command: result of the logic operation between this object and the *<Ch x> Logic Function* object is applied to the object ***<Ch. x> Switching (at once)* (no timing function).** In this case the ramp time is 0 seconds.

2 – Update on *<Ch x> Switching (smooth)* command: result of the logic operation between this object and the *<Ch x> Logic Function* object is applied to the object ***<Ch. x> Switching (smooth) (no timing function).** In this case the ramp time is that set by parameter *"Dimming time from 0% to 100%".*

3 -- Update on *<Ch. x> Switching (timing)* command: result of the logic operation between this object and the *<Ch. x> Logic Function* object is applied to the object *<***Ch. x> Switching (timing) (timing function performed)**. In this case the ramp time is that set by parameter *"Dimming time from 0% to 100%" for timing function".*

4 -- Update on *<Ch. x> Logic Function*: result of the logic operation between this object and the *<Ch. x> Switching (x)* objects is applied to the objects *<**Ch. x> Switching (x).** In this case the ramp time depends from Switching object is used.

By ETS is possible to select the logical operation to use: every time a telegram is received on the logical object or on the switching object then the logical operation is calculated again and the result is taken as a command for the output channel.

KNX PARAMETER	SETTINGS
Logic function	AND OR XOR NAND NOR NXOR
With this parameter it's possible to select the logical operation.	

![eelectron logo]

Initial value for logic object	value 0 value 1 Last value received

This parameter selects the value the logical object must have on power up .
"Last value received" setting is intended to be the last value received before power down.

- The value assumed by the logic communication object set by the parameter *"Initial value for logic object"* does not switch automatically the output channel because this behaviour is determined by the parameter *"Behaviour on KNX bus power up".*

12. Lock Function

When lock function is enabled it allows, as a result of receiving a telegram on the *<Ch. x> Lock Function;* to set the output channel in a defined state and force it to maintain this state even if the object switching value changes.

KNX PARAMETER	SETTINGS
Initial value for lock object	value 0 value 1 Last value received

This parameter selects the value the lock object must have on power up. *"Last value received"* is intended to be the last value received before power down.

Telegram for lock activation	telegram "0" telegram "1"

This parameter selects the values associated to the "lock" or "unlock" condition.

Brightness value % when lock is active	0 - 100% 101 = no action

This parameter selects the value that the output channel must assume when the lock function becomes active".

Position when lock ends	fixed value Keep previous state and ignore telegrams Keep previous state and don't ignore telegrams

Keep previous state and ignore telegrams
Output channel returns in the state it was before lock function became active.

Keep previous state and don't ignore telegrams
the output channel returns to its condition prior to the activation of the block unless you have received a telegram on the switching object (1 bit or 1 byte) or scenario; in this case, the last command received is executed.

Brightness value % when lock is ends	0 - 100% 101 = no action

This parameter allow to set a predefined value that the output channel assumes when lock ends.
This parameter is visible only if the parameter *"Position when lock ends"* is set by *"fixed value".*

- If the parameter *"Initial value for lock object"* has the same value of *"Telegram for lock activation"* happens that, on power up, the output channel starts in lock mode, waiting for a "unlock" telegram in order to become active. Note that, even if the output channel starts with lock function already active it does not go automatically in the position defined by the parameter "Brightness value % when lock is active"; because this behaviour is determined only by the parameter *"Behaviour on KNX bus power up".*

13. Scene Function

When the scene function is enabled a communication object named "*<Ch. x> Scene"* becomes visible.

It is possible to send to the device two possible commands:

- **recall scene**: is a command to create a specific condition.
- **store scene:** is a command to learn and store the current status (at the moment the command is

received) of the output channel, and then reproduce it once the recall command is received.

For every channel it is possible to store a maximum of 8 output scene.

KNX PARAMETER	SETTINGS
Scene <x>	0 – 63 64 = not active
For the 8 possible scenes, this number is the unique identifier for the scene: valid numbers are from 0 to 63; 64 means scene is not active.	
Initial value scene <x>	0 – 100%
For the 8 possible scene this number allow to initialize the status associated to previously selected scene number avoiding to execute the store scene procedure. If the store scene is done, this value is overwritten.	
Dimming time scene <x> from 0% to 100%	0 – 255 seconds
With this parameter it's possible to set the ramp time, that the channel takes to go from 0% to 100% when a recall scene command is executed.	
Learn scene	disabled enabled
This parameter enable / disable the output channel from storing value received from the bus; if this parameter is set to disable the value associated are set only by the parameters *"Initial value Scene <x>"* and cannot be modified without a ETS download.	

- When a scene is recalled the output channel behaves in the same way as it would have received a telegram on the *<Ch. x> Dimming Value* communication objects; this means that if the scene always triggers a **NOT TIMED** command.

- After a ETS download the device assumes the value of parameter: *"Initial value Scene <x>"* as a value in memory for the corresponding scene and

overwrites previous memorized scene positions.

13.1. Dynamic Scene Function

Dynamic scene function is compatible with the standard scene and dimmer actuators can use both at the same time.

Dynamic scene function use the same 1 byte communication object (DPT 18.001) as the standard scenes keeping the same structure and meaning.

To activate the dynamic scene function is necessary that the parameter "*Dynamic scene object*" is set by "*true*", in this way the object "*Dynamic Scene*" is visible. This 1 bit communication object, one for every dimmer actuators, is used to enable / disable learning of dynamic scene communication object runtime.

How it works
When the value of the object "*Dynamic Scene*" is 0 Dynamic scene function is disabled, it's possible to learn and execute the standard KNX scene as set in ETS parameter.

When the value of the object "*Dynamic Scene*" is 1 Dynamic scene function is enabled, during this condition a command over the 1 byte object "*<Ch. x> Dimming Value*" is not executed (output channel does not change) but the value is temporary stored in memory. When a learning command is sent over the 1 byte object "*<Ch. x> Scene*" the device stores in non-volatile memory the command previously received over the "*<Ch. x> Dimming Value*" object and associate it to the scene number just receive.

If a learning command is sent over the 1 byte object "*<Ch. x> Scene*" without having previously updated "*<Ch. x> Dimming Value*" object the dimmer actuators consider this as a command to "unlink" this channel to scene number "n" and from this point after receiving a "execute scene command" for scene number "n" the channels doesn't reacts.

During this phase it's possible to associate until 64 scene numbers on every dimmer actuator channel.

When the object "*Dynamic Scene*" returns to 0 the learning of dynamic scene is completed.

"Recall scene" operation works as in the standard scene function.

KNX PARAMETER	SETTINGS
Submit to dynamic scene function	false true
With this parameter it's possible to submit the output channel to the dynamic scene function.	

![eelectron logo]

Keep scenes value after download	disabled enabled

If enabled, after download, is possible to keep the previous scene value stored.

14. Alarm Function

It's possible to enable a communication object *"<Ch. x> Alarm Function"* that is used to report some particular alarm.

It's possible to enable *"<Ch. x> Alarm Function"* object as 1 bit object or 1 byte object.

1 bit object
If the *"<Ch. x> Alarm Function"* object is enabled as 1 bit object, if its value is "1", this mean that an alarm is active otherwise if its value is "0" no alarm is active.

1 byte object
If the *"<Ch. x> Alarm Function"* object is enabled as 1 byte object, if its value is "0", this mean that no alarm is active otherwise if its value is different from "0" an alarm is active, in particular:

- If its value is 1, this means that the over current alarm is active.
- If its value is 2, this means that the over voltage alarm is active.
- If its value is 4, this means that the over temperature alarm is active.
- If its value is 128, this means that there is a supply voltage or communication problem. In this case, if the alarm is active on the master is necessary to verify if the 230V voltage is present, on the slave is necessary verify if 230V voltage is present and if the local bus is present and there is continuity on it.

KNX PARAMETER	SETTINGS
Sending interval	no cyclic sending 5 min 10 min 30 min

It's possible to enable the periodic sending of alarm state, if this parameter is set "no sending", reading can be done only on read request.

15. Priority table for Output Channel

Priority	Description
high	Parameter*: Behaviour on KNX or local bus power down*
	Parameter*: Behaviour on KNX bus power up*
PRIORITY	*Lock Object* *Economical Object*
	Switching object (at once) or (smooth) *Scene object* *Logic object*
low	*Switching object (timing)*

16. Behavior of output channel on voltage failure, recovery and commissioning.

Behavior on bus voltage failure

On failure of bus voltage behavior of output channel is driven by the parameter: ***Behaviour on KNX or local bus power down.***

Behavior on bus voltage recovery

On bus voltage recovery behavior of output channel is driven by the parameter: ***Behaviour on KNX bus power up.***

Behaviour on commissioning (ETS Download)

After download, output channel does not react, it maintains the previous state.

Wrong application download

If the wrong ETS application is downloaded then KNX/EIB led starts blinking and device is not operative on the bus. A power reset must be done and the correct ETS application must be downloaded.

17. Communication Objects

<Ch. x> Switching (at once)
Allows to immediately switch on/off the output channel without ramp time.

<Ch. x> Switching (smooth)
Allows to switch on/off the output channel with ramp time.

<Ch. x> Switching (timing)
Switching on/off of the output channel with timing function.

<Ch. x> Dimming
4 bit communication object to manage the output channel.

<Ch. x> Dimming Value
Allows to position the output channel to predefined value.

<Ch. x> Dimming Status
Reports the status of the output channel in percent value.

<Ch. x> Status
Reports the status of the output channel with 1 bit value.

<Ch. x> Logic Function
Allows to manage the corresponding logic function.

<Ch. x> Lock Function
Allows to manage lock function.

<Ch. x> Scene
Allows to manage output channel scenes.

Dynamic Scene
Enable / disable dynamic scene function.

<Ch. x> Alarm Function
Reports if an alarm is active or no.

<Ch. x> Economical Mode
Enable / disable Economical Mode.

<Ch. x> Ramp Time
Allows to change the ramp time at runtime.

<Ch. x> Actual Temperature
Reports the actual temperature.