User Manual

document version 2.1 for firmware version 4.8 and above

DALI4SW
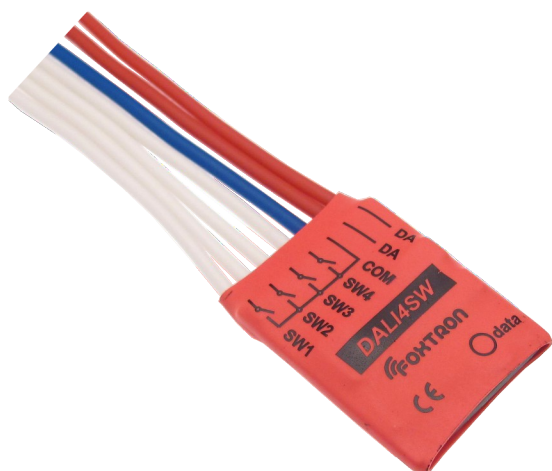
|	
	Universal DALI control button
	4 independently adjustable inputs
	Powered from DALI bus
	LED indication
	Installation into KU68 box
	10 pre-set basic functions
	Any user function

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DALI4SW is universal DALI control button for DALI bus including 4 independently adjustable inputs. Every single input is configurable via program DALIconfig, which is free to download on website www.foxtron.eu.

Technical Specifications		
bus	DALI / DALI2	
Number of inputs	4	
Power supply (from DALI bus)	4	mA
maximum length of leads to buttons	1	m
cross section of wires	0,5	mm^2
Degree of coverage	IP20	
Ambient working temperature	0 ÷ 50	°C
Storage temperature	-10 ÷ 70	°C
Weight	25	g

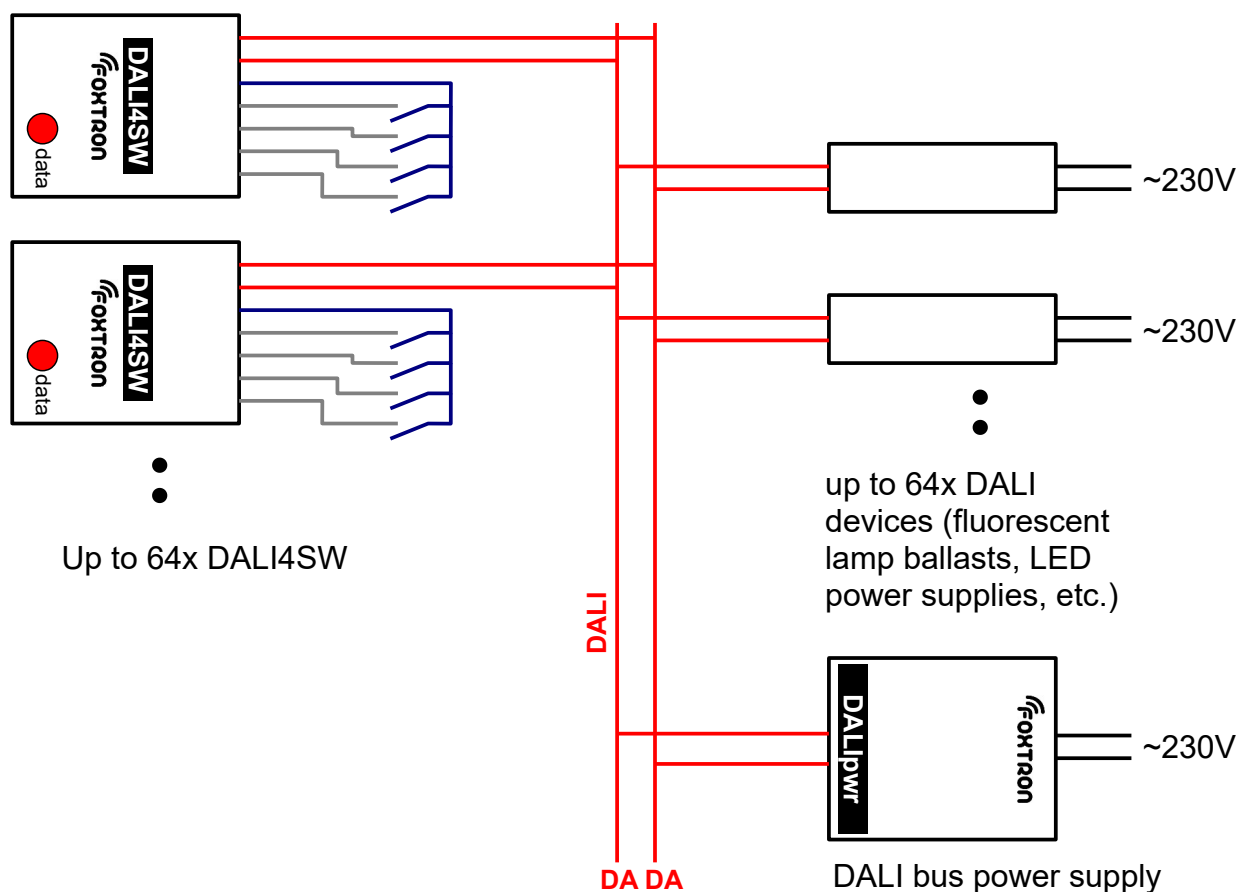| Signalization	
Rx/Tx	The flashing of the LED indicates the receipt or sending of a message on the DALI bus,that are addressed to the DALI4sw
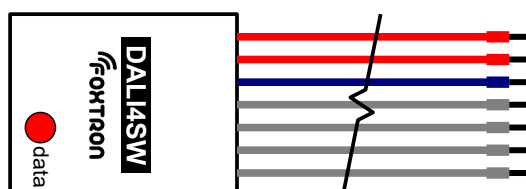
Clamps connection
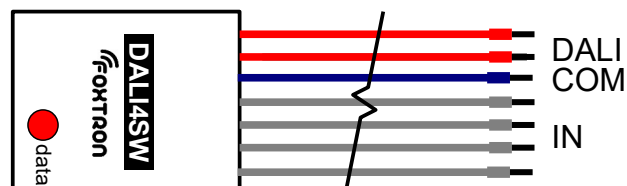
marking	color	description
DA/DA	red	DALI bus, two wires interchangeable
IN	white	inputs of individual buttons
COM	blue	common wire for switching buttons

Up to 64x DALI4SW

up to 64x DALI devices (fluorescent lamp ballasts, LED power supplies, etc.)

DALI bus power supply

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Digital input functions - DALI2

The buttons have functions according to the DALI2 specification.
They can therefore send information about the following events to the bus.

Button pressed	Button pressed
Button released	Button released
Short press	The button is pressed and released in close succession. The maximum press time is determined by the "Short timer" parameter
Double press	Double click (if the "Double timer" parameter is not equal to 0)
Long press start	The button is pressed for a longer period of time. The minimum press time is determined by the "Short timer" parameter
Long press repeat	When the button is held permanently, this event is sent every 200ms
Long press stop	Releasing the button after a long hold.
Button stuck/free	Button jam/release. The button has been pressed for a very long time as defined by the "Stuck timer" parameter. From this time on, the "Long press repeat" event will no longer be sent.

Advanced digital input functions - DALI2+

All 4 buttons (inputs) are independent of each other and can be set to any function. The settings are made by the DALIconfig program, which is available for free download at www.foxtron.eu and via DALI232, DALInet or DALI2net converter.

Pre-set functions

The DALIconfig program has preset the most commonly used functions to facilitate configuration.

0 - No function
No function   A button without a function does not send commands. DALI2 events can be sent.

1 - Push-button OFF
Turn off   The lights are switched off when the button is pressed.

2 - Push-button ON
Light up   When the button is pressed, the lights are switche on to maximum.

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3 - Dimming DOWN

Dimming down
When you press it briefly, the lights are switched off. With a long hold, the lights are continously dimmed to the minimum and when released, dimming is stopped at the current level.

4 - Dimming UP

Dimming up
When pressed briefly, the lights are switched on to maximum.
With a long hold, the lights are continuously dimmed to maximum and when released, dimming is stopped at the current level.

5 - Toggle OFF/ON

Toggle OFF/ON
When pressed briefly, the lights are alternately switched off or on at maximum.

6 - Dimming single button

Single button dimming
When pressed briefly, the lights are alternately switched off and on at maximum. With a long hold, the lights are alternately dimmend continously to maximum or minimum. When released, dimming is stopped at the current level.

7 - Switch

Switch
When the button is pressed, the lights are switched on to maximum. When the button is released, the lights are switched off.

8 - Staircase

Staircase switch
When the button is pressed or released, the lights are alternately switched off and on to maximum. It is possible to control the lights from multiple buttons set in the same way.

9 - Timer

Timer
Lights up for a set time (pulse). When pressed briefly, the lights are illuminated to the maximum. After a set time from the short press, the liughts are switched off.

10 - Blinds

Blinds
Blinds: press=ON, short=OFF after timer reach

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User-defined functions

Each button can perform an action on the selected event.

List of events on which actions can be performed.

After start	When DALI bus power is restored
Button pressed	Button pressed
Button released	Released Button
Short press	The button is pressed and released in close succession. The maximum press time is determined by the "Short timer" parameter
Long press start	The button is pressed for a longer period of time. The minimum press time is determined by the "Short timer" parameter
Long press repeat	When the button is held permanently, this event is sent every 200ms
Long press stop	Button release after long-press
Double press	Double click
Button stuck start	Button jam. The button has been pressed for a very long time as defined by the "Stuck timer" parameter. From this time on, the "Long press repeat" event will no longer be sent.
Button stuck stop	Releasing the button when it is stuck.
Timer reached	The set time has elapsed.
Counter	The button press counter has reached the "Max counter" set limit. The counter is reset.

A sequence of commands can be invoked on an event. Several command sequences can be defined and it is possible to select which one will be sent.

DALI command	Sending a command to the DALI bus, which can for example control the lights. Multiple commands can be sent.
Selecting a sequence of commands	Selects the sequence of commands that will be executed when the event is subsequently fired. If the "Lighting based" function is set and a command to the set address is detected on the DALI bus, then: (a) if it is a command to switch on the lights, the the first sequence is executed. b) if it is a command to turn off the lights, the first sequence will be followed by the second sequence is executed.
Starting the counter	The counter is running. When the "Timer" time is reached, an

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event is triggered „Timer reached". By setting the time to 0s, the counter is stopped.

For every input there is an option of up to 32 user functions.

input	function
SW1	**Dimming Up** - preset function 4 When pressed briefly, the addressed lights are illuminated to the maximum. With a long hold, the lights are continuously dimmed to maximum and when released, dimming is stopped at the current level.
SW2	**Dimming down** – preset function 3 When pressed briefly, the addressed lights are switched off. When long held, the lights are continuously dimmed to minimum and when released, dimming is stopped at the current level.
SW3	**Dimming single button** – preset function 6 When pressed briefly, the lights are alternately switched off and on at maximum. With a long hold, the lights are alternately dimmed continuously to maximum or minimum. When released, dimming is stopped at the current level.
SW4	**Minimum value** The lights turn on to their minimum illumination value

Dimensions [mm]

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