



CASAMBI



LENSVECTOR®

## FEATURES

- ◆ CASAMBI® LED DIMMER with LESVECTOR® lens driver
- ◆ Power supply (DC IN): 12-24-48 Vdc
- ◆ Constant Current output (L1) for dimmable Spotlights and LED modules
- ◆ Output (LENSVECTOR) for electronically controllable LensVector® liquid crystal lenses
- ◆ WHITE and MONOCHROME Light Control
- ◆ Output dimming up to 1.6 A
- ◆ Local command: up to N°2 Normally Open (N.O.) pushbuttons
- ◆ Remote control via Bluetooth Low Energy (CASAMBI® mobile app)
- ◆ Device configuration via CASAMBI® mobile application, parameters can be set:
  - Constant Current output level (via Fixture)
  - Transition Parameters (Fade)
- ◆ Soft ON/OFF
- ◆ Soft brightness dimming
- ◆ Extended temperature range
- ◆ 100% Functional test

## PRODUCT DESCRIPTION

SLIM-1CC-CASAMBI-LV is a 1-channel Constant Current (CC) modulated LED dimmer, which can be powered from a SELV constant voltage (12 ÷ 48) Vdc power supply. This dimmer is suitable for driving loads such as Spotlight and white, single-colour, constant current LED modules and LENSVECTOR® electronically controllable lens that allows dynamic shaping of the beam coming from the LED module; it can be controlled remotely via Bluetooth through the CASAMBI® mobile application or locally by means two N.O. pushbuttons. SLIM-1CC-CASAMBI-LV can deliver a maximum output current of 1.6 A and has the following detections and protections: open-circuit and short-circuit internal protection, over-power and under-power protections, reverse polarity protection and input fuse protection.

SLIM-1CC-CASAMBI-LV enables you to make not only simple brightness adjustments but also more dynamic lighting control systems. This is made possible through the creation of multiple scenarios, animations, timers, daylight controls, and more.

Through the CASAMBI® mobile application and smartphones equipped with Bluetooth technology, it is possible to configure multiple parameters, including maximum output current, maximum/minimum brightness levels, and dynamic beam shaping. CASAMBI® mobile application can be downloaded free of charge from the Apple APP Store and Google Play Store.

→ For the most up-to-date manual, please consult our website [www.dalcnet.com](http://www.dalcnet.com) or QR Code.  
→ For the correct functioning of the CASAMBI® mobile app, consult the forum on the Casambi website:  
<https://support.casambi.com/support/home>



## PRODUCT CODE

CODE	POWER SUPPLY	LED OUTPUTS	N° OF CHANNELS	CONTROL	APP CONFIG
SLIM-1CC-CASAMBI-LV	12-24-48 VDC	1 x 1.6 A <sup>1</sup>	1	Bluetooth (CASAMBI®) N°2 N.O. Pushbuttons	CASAMBI®

Table 1: Product Code

## PROTECTION AND DETECTION

The following table shows the types of incoming and outgoing protection/detection present on the device.

CODE	DESCRIPTION	TERMINAL	PRESENT
IFP	Input Fuse Protection <sup>2</sup>	DC IN	✓
OVP	Over Voltage Protection <sup>2</sup>	DC IN	✓
UVP	Under Voltage Protection <sup>2</sup>	DC IN	✓
RVP	Reverse Voltage Polarity <sup>2</sup>	DC-IN	✓
SCP	Short-Circuit Protection <sup>3</sup>	-	✓
OCP	Open-Circuit Protection <sup>3</sup>	-	✓

Table 2: Detection and Protection functionalities

## REFERENCE STANDARDS

SLIM-1CC-CASAMBI-LV follows the regulations shown in the table below.

STANDARD	TITLE
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 61547	Equipment for general lighting purposes – EMC immunity requirement
EN 61347-1	Lamp Controlgear – Part 1: General and safety requirement
EN 61347-2-13	Lamp controlgear - Part 2-13: Particular requirement for d.c. or a.c. supplied electronic Controlgear for LED modules

Table 3: Reference standards

<sup>1</sup> The maximum total output current depends on the operating conditions and ambient temperature of the system. For the correct configuration, check the maximum power that can be delivered in the §[Technical Specifications](#) and in the §[Thermal Characterization](#) sections.

<sup>2</sup> Protections refer to the control logic of the board.

<sup>3</sup> Protections refer to the internal stage of the board.

## TECHNICAL SPECIFICATIONS

Description	Name	Values			Unit of Measure	Note
		Min		Max		
INPUT (Power Supply DC IN)						
Nominal Supply Voltage	V <sub>IN</sub>	12	24	48	Vdc	-
Supply Voltage range	V <sub>IN-RNG</sub>	10.8	÷	52.8	Vdc	-
Efficiency at full load	E <sub>FF</sub>	> 95			%	-
Standby power absorption	P <sub>STBY</sub>	< 0.5			W	-
OUTPUT (Channel L1)						
Output Current	I <sub>OUT</sub>	350, 500, 700, 900, 1050, 1200, 1400, 1600			mA	Choice via CASAMBI® mobile app.
Output Current (max)	-	45≤T <sub>A</sub> <60	35≤T <sub>A</sub> <45	T <sub>A</sub> <35 °C	°C	-
	I <sub>OUT-max</sub>	1200	1600	1600	mA	Output current set to I <sub>OUT</sub> =1600 mA
Output Voltage	-	@12V	@24V	@48V		-
	V <sub>OUT-I≤1.05A</sub>	2÷10	6÷21	12÷43	V	For output current I <sub>OUT</sub> ≤1050 mA
	V <sub>OUT- I&gt;1.05A</sub>	2÷9	6÷20	12÷42	V	For output current I <sub>OUT</sub> >1050 mA
Rated Power Output	P <sub>OUT</sub>	See Table 5			W	Rated @T <sub>A</sub> <35 °C.
Load type	L <sub>TYPE</sub>	LED			-	Defined by design
OUTPUT (Channel LENSVECTOR)						
Supported LensVector® Lens	LV <sub>CODE</sub>	LV-S2F-xxxxx	LV-M2M-xxxxx		-	Refer to <a href="#">LensVector®</a> website.
DIMMING						
Dimming Curve	C <sub>DIM</sub>	Linear			-	-
Dimming Method	M <sub>DIM</sub>	Pulse Width Modulation (PWM)			-	-
Dimming Frequency (PWM) <sup>4</sup>	F <sub>DIM</sub>	3400			Hz	-
Operating Frequencies <sup>4</sup>	F <sub>OP</sub>	2402	÷	2483	MHz	For CASAMBI® BLE SoC
Dimming Resolution <sup>4</sup>	Re <sub>S</sub> <sub>DIM</sub>	1176			Step	Defined by design
Dimming Range <sup>4</sup>	RNG <sub>DIM</sub>	1	÷	100	%	-
ENVIRONMENTAL						
Maximum Emitted Power <sup>4</sup>	P <sub>BT-max</sub>	7			dBmW	Over Bluetooth transmission.
Storage temperature	T <sub>STORE</sub>	-40	÷	+60	°C	Minimum values defined by design
Working Ambient temperature	T <sub>A</sub>	-10	÷	+60	°C	
Max Temperature @T <sub>c</sub> point	T <sub>C</sub>	-	-	+80	°C	-
Wiring Section	WS <sub>SOLID</sub>	0.5	÷	1.5	mm <sup>2</sup>	Defined by design
	WS <sub>STRAND</sub>	20	÷	16	AWG	
Strip length	WS <sub>STRIP</sub>	10			mm	-
Protection class	IP <sub>CODE</sub>	IP20			-	-
Casing Material	MC	plastic			-	-
Packaging units (pieces/units)	PU	1			pcs	-
Mechanical Dimensions	-	L	H	D		-
	MD	136	29	21	mm	
Weight	W	62			g	Including packaging

Table 4: Technical specification

<sup>4</sup> The parameters are derived from the configuration of the Casambi module.

	Current [mA] ± 5%	350	500	700	900	1050	1200	1400	1600
Rated Power Output ( $P_{OUT}$ )	@12 Vdc	3.5 W	5 W	7 W	9 W	10.5 W	10.8 W	12.6 W	14.4 W
	@24 Vdc	7.3 W	10.5 W	14.7 W	18.9 W	22 W	24 W	28 W	32 W
	@48 Vdc	15 W	21.5 W	30.1 W	38.7 W	45.1 W	50.4 W	58.8 W	67.2 W

Note: values rated with working ambient temperature  $T_A < 35^\circ\text{C}$ .

Table 5: Rated Power Output for each current set

## $T_c$ POINT POSITIONING

The figure below shows the positioning of the maximum temperature point ( $T_c$  point, highlighted in red) reached by the electronics inside the enclosure. It is located on the front side (Top) near the LED output connector.



Figure 1:  $T_c$  point position

## INSTALLATION




**ATTENTION!** Installation and maintenance must always be conducted in the absence of voltage.

Before continuing with the connection of the device to the power supply, make sure that the voltage of the power source is disconnected from the system.



The device should only be connected and installed by qualified personnel. All applicable regulations, legislation, standards, and building codes must be adhered to. Incorrect installation of the device may cause irreparable damage to the device and connected loads.

The following paragraphs show the diagrams of the dimmer's wiring to the local control, the load, and the supply voltage. It is recommended to follow these steps to install the product safely:

- Load & Lens wiring:** connect the LED load positive to the "L1" terminal with the "+" symbol, and the LED load negatives to the "L1" terminal with the "-" symbol. Then wire the LensVector lens signals DR-1A, DR-2A, DR-1B, DR-2B to the LENSVECTOR terminal with the 1A, 2A, 1B, 2B symbols respectively.
- Local Control wiring:** connect the Pushbuttons wires to the "INPUT 1" and "INPUT 2" terminals with the  symbols.
- Power Supply wiring:** connect a 12-24-48 Vdc constant voltage SELV power supply (depending on the nameplate data of the LED load) to the "+" and "-" terminals of the DC IN terminal.
- Remote control pairing:** power ON the SLIM-1CC-CASAMBI-LV and follow the pairing instructions provided on CASAMBI® mobile app.

## LOAD & LENS WIRING

SLIM-1CC-CASAMBI-LV has 2 output channel that can be driven e.g. for spotlight LED modules and LensVector® lens.

### DIAGRAM FOR WHITE OR SINGLE-COLOUR LED LOADS WITH LENSVECTOR LENS

The following connection diagram (Figure 2) allows to drive 1 white or single-colour LED load on output terminal L1 and 1 LensVector® lens on LENSVECTOR output terminal.

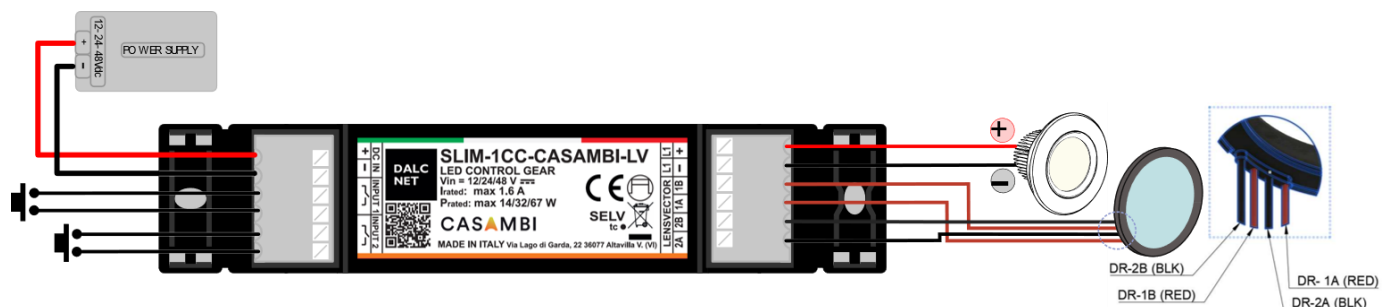


Figure 2: Connection diagram for White or Single-Colour LED load and LensVector® lens

## LOCAL CONTROL WIRING

SLIM-1CC-CASAMBI-LV can be controlled via Local Control with Normally Open (N.O.) pushbuttons or voltage-free dry contact. No other voltage signals shall be applied to these contacts.



 To connect the SLIM-1CC-CASAMBI-LV to local controls, simply connect the pushbuttons to the INPUT1 and INPUT2 terminals. The following image shows the indicated connection diagram for short distances (<10 m).



Figure 3: Local Command connection diagram for Short Distances

 For longer distances (>10 m), it is recommended to use an N.O. dry contact relay module, connected between the "Input" terminal of the SLIM-1CC-CASAMBI-LV and the power source (e.g. mains voltage 230 Vac). Figure 4 shows an example of a Local Command connection recommended for long distances.

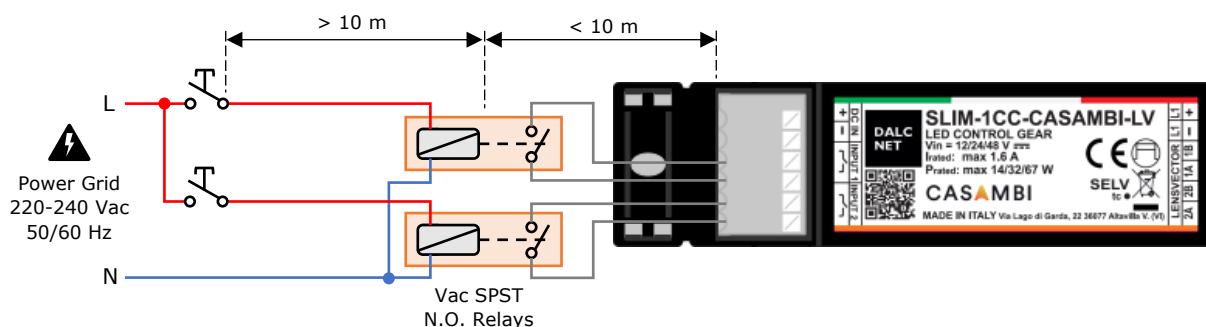


Figure 4: Local Command connection diagram for Long Distances

## POWER SUPPLY WIRING



 SLIM-1CC-CASAMBI-LV can be powered by a 12 Vdc, 24 Vdc or 48 Vdc constant voltage SELV power supply, depending on the operating voltage of the LED load. Once the load and Remote Control are connected, wire the power supply to the "+" and "-" terminals of the DC IN terminal.



Figure 5: Power Supply Connection Diagram

 To avoid overvoltages that can potentially reduce the useful life of the electronic components, the SLIM-1CC-CASAMBI-LV must be switched OFF upstream of the DC Power Supply connected to the dimmer, i.e. by removing voltage from the DC Power Supply.

## LOCAL CONTROL: PUSHBUTTONS

SLIM-1CC-CASAMBI-LV has two dry contacts inputs for N.O. pushbuttons<sup>5</sup>, through which different operating parameters of the LED and Lens modules can be managed. Each action on the pushbuttons activates a specific function for the type of control selected via CASAMBI® mobile app.

For all other functions consult the documentation of the CASAMBI® mobile app at: <https://support.casambi.com/support/home>

### *PUSHBUTTON FUNCTIONALITY FOR "CONTROLS A LUMINAIRE"*

In *Controls a Luminaire* mode, both connected buttons take over ON/OFF control and luminaire brightness functions.



ACTION	INPUT #	FUNCTION
 Quick press	Input 1, 2	ON/OFF of the selected channel (of LED module connected)
 Long press	Input 1, 2	Brightness adjustment (Dimming)

Table 6: Pushbutton functionality for "Controls a Luminaire"

### *PUSHBUTTON FUNCTIONALITY FOR "CONTROLS AN ELEMENT"*

In *Controls an Element* mode, the pushbuttons take over ON/OFF control functions dedicated to a device element inside the CASAMBI® network and to adjust the element value. It is possible to customize the input associated with the LensVector lens adjustment via CASAMBI® mobile app.



ACTION	INPUT #	FUNCTION
 Quick press	Input 1, 2	ON/OFF of the selected device element
 Long press	Input 1, 2	Element value adjustment

Table 7: Pushbutton functionality for "Control an Element"

### *PUSHBUTTON FUNCTIONALITY FOR "CONTROL A GROUP"*

In *Control a Group* mode, the connected buttons take on functions dedicated to control a group of LED modules and their brightness adjustment.



ACTION	INPUT #	FUNCTION
 Quick press	Input 1, 2	ON/OFF of the configured Group of devices
 Long press	Input 1, 2	Brightness adjustment (Dimming)

Table 8: Pushbutton functionality for Control a Group"

<sup>5</sup> By default, the N.O. pushbutton is set as "Control a luminaire" and controls the output of the SLIM-1CC-CASAMBI-LV.

### *PUSHBUTTON FUNCTIONALITY FOR "CONTROL SCENE"*

In *Control scene* mode, the buttons take over brightness adjustment and ON/OFF of the programmed scenario.



ACTION	INPUT #	FUNCTION
 Quick press	Input 1, 2	ON/OFF of the configured Scene
 Long press	Input 1, 2	Brightness adjustment (Dimming)

Table 9: Pushbutton functionality for "Control scene"

### *PUSHBUTTON FUNCTIONALITY FOR "CONTROL ALL LUMINAIRES"*

In *Control all Luminaires* mode, both connected buttons take over ON/OFF control and brightness functions of all luminaires.



ACTION	INPUT #	FUNCTION
 Quick press	Input 1, 2	ON/OFF of all luminaires
 Long press	Input 1, 2	Brightness adjustment (Dimming)

Table 10: Pushbutton functionality for "Controls all Luminaires"

### *PUSHBUTTON FUNCTIONALITY FOR "CONTROL SCENES"*

In *Control scenes* mode, the buttons take over brightness adjustment and selection through the programmed scenario list.



ACTION	INPUT #	FUNCTION
 Quick press	Input 1, 2	Cycle through the list of scenes
 Long press	Input 1, 2	Brightness adjustment of current scene (Dimming)

Table 11: Pushbutton functionality for "Control scenes"

### *PUSHBUTTON FUNCTIONALITY FOR "ACTIVE/STANDBY"*

In *Active/Standby* mode, the buttons take over brightness adjustment and selection between two programmed scenes.



ACTION	INPUT #	FUNCTION
 Quick press	Input 1, 2	Switch between two programmed scenes
 Long press	Input 1, 2	Brightness adjustment of current scene (Dimming)

Table 12: Pushbutton functionality for "Active/Standby"



## REMOTE CONTROL: CASAMBI®

CASAMBI® is a lighting control system based on Bluetooth Low Energy (BLE) technology. This technology allows for the creation of customized and flexible wireless lighting networks that can be easily configured and controlled via Android/iOS smartphones or tablets.

### PROFILE MAPPING: FIXTURES

SLIM-1CC-CASAMBI-LV supports the following fixtures (selectable by CASAMBI® mobile app) which provide adjustment of light intensity and light beam for the single output channel.

Profile Name	Profile ID	Description
<b>SLIM 1xDIM 350mA (Lens Rot)</b>	<b>38310 (default)</b>	N°1 LED output channels, one slider to dim the output, one slider to regulate the focus of LensVector Lens (rotosymmetric beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. Output max Current: 350 mA.
<b>SLIM 1xDIM 500mA (Lens Rot)</b>	38314	N°1 LED output channels, one slider to dim the output, one slider to regulate the focus of LensVector Lens (rotosymmetric beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 500 mA.
<b>SLIM 1xDIM 700mA (Lens Rot)</b>	38315	N°1 LED output channels, one slider to dim the output, one slider to regulate the focus of LensVector Lens (rotosymmetric beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 700 mA.
<b>SLIM 1xDIM 900mA (Lens Rot)</b>	38129	N°1 LED output channels, one slider to dim the output, one slider to regulate the focus of LensVector Lens (rotosymmetric beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 900 mA.
<b>SLIM 1xDIM 1050mA (Lens Rot)</b>	38316	N°1 LED output channels, one slider to dim the output, one slider to regulate the focus of LensVector Lens (rotosymmetric beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 1050 mA.
<b>SLIM 1xDIM 1200mA (Lens Rot)</b>	38331	N°1 LED output channels, one slider to dim the output, one slider to regulate the focus of LensVector Lens (rotosymmetric beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 1200 mA.
<b>SLIM 1xDIM 1400mA (Lens Rot)</b>	38334	N°1 LED output channels, one slider to dim the output, one slider to regulate the focus of LensVector Lens (rotosymmetric beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 1400 mA.
<b>SLIM 1xDIM 1600mA (Lens Rot)</b>	38335	N°1 LED output channels, one slider to dim the output, one slider to regulate the focus of LensVector Lens (rotosymmetric beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve.



		PWM resolution 1176step. Output max Current: 1600 mA.
<b>SLIM 1xDIM 350mA (Lens Ret)</b>	34608	N°1 LED output channels, one slider to dim the output, two sliders to regulate the XY focus of LensVector Lens (rectangular beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. Output max Current: 350 mA.
<b>SLIM 1xDIM 500mA (Lens Ret)</b>	36983	N°1 LED output channels, one slider to dim the output, two sliders to regulate the XY focus of LensVector Lens (rectangular beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 500 mA.
<b>SLIM 1xDIM 700mA (Lens Ret)</b>	38342	N°1 LED output channels, one slider to dim the output, two sliders to regulate the XY focus of LensVector Lens (rectangular beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 700 mA.
<b>SLIM 1xDIM 900mA (Lens Ret)</b>	38343	N°1 LED output channels, one slider to dim the output, two sliders to regulate the XY focus of LensVector Lens (rectangular beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 900 mA.
<b>SLIM 1xDIM 1050mA (Lens Ret)</b>	38344	N°1 LED output channels, one slider to dim the output, two sliders to regulate the XY focus of LensVector Lens (rectangular beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 1050 mA.
<b>SLIM 1xDIM 1200mA (Lens Ret)</b>	38345	N°1 LED output channels, one slider to dim the output, two sliders to regulate the XY focus of LensVector Lens (rectangular beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 1200 mA.
<b>SLIM 1xDIM 1400mA (Lens Ret)</b>	38346	N°1 LED output channels, one slider to dim the output, two sliders to regulate the XY focus of LensVector Lens (rectangular beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 1400 mA.
<b>SLIM 1xDIM 1600mA (Lens Ret)</b>	38347	N°1 LED output channels, one slider to dim the output, two sliders to regulate the XY focus of LensVector Lens (rectangular beam shape). PWM frequency = 3400Hz, PWM resolution 1176 steps. Linear dimming curve. PWM resolution 1176step. Output max Current: 1600 mA.

Table 13: Fixtures for SLIM-1CC-CASAMBI-LV

## FLICKER PERFORMANCE

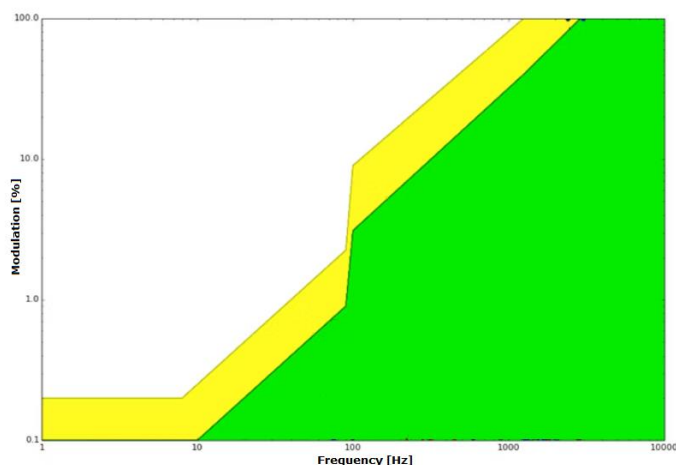


Figure 6: Flickering Perception Threshold

Thanks to its 3,4kHz dimming frequency, the SLIM-1CC-CASAMBI-LV effectively reduces the occurrence of the Flicker phenomenon. Depending on an individual's sensitivity and the nature of their activities, flickering can affect one's well-being, even if the changes in luminance are beyond the threshold detectable by the human eye.

The graph shows the phenomenon of Flickering in function at the frequency, measured throughout the dimming range.

The results show the low-risk zone (yellow) and the no-effect zone (green), defined by IEEE 1789-2015<sup>6</sup>.

## THERMAL CHARACTERIZATION

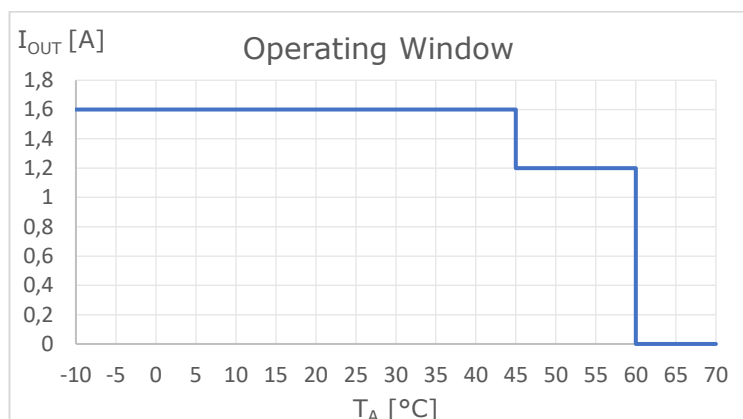


Figure 7: Operating Temperature Window

Figure 7 shows the maximum output current values that can be provided by the SLIM-1CC-CASAMBI-LV as a function of the operating temperature<sup>7</sup> (or ambient temperature,  $T_A$ ) of the operation, summarized below:

- ◆  $T_A = (-10 \div +45) ^\circ\text{C} \rightarrow I_{OUT} \leq 1.6 \text{ A}$
- ◆  $T_A = (+45 \div +60) ^\circ\text{C} \rightarrow I_{OUT} \leq 1.2 \text{ A}$

These maximum current values can only be applied under suitable ventilation conditions.

## DIMMING CURVES

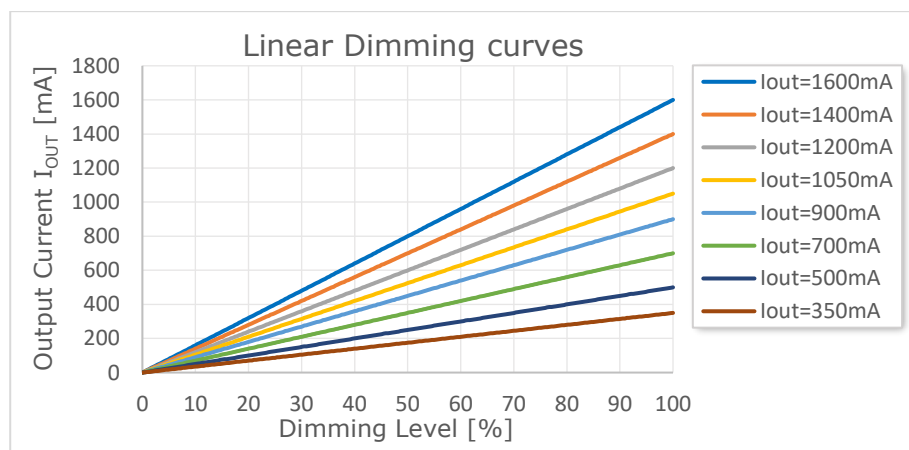


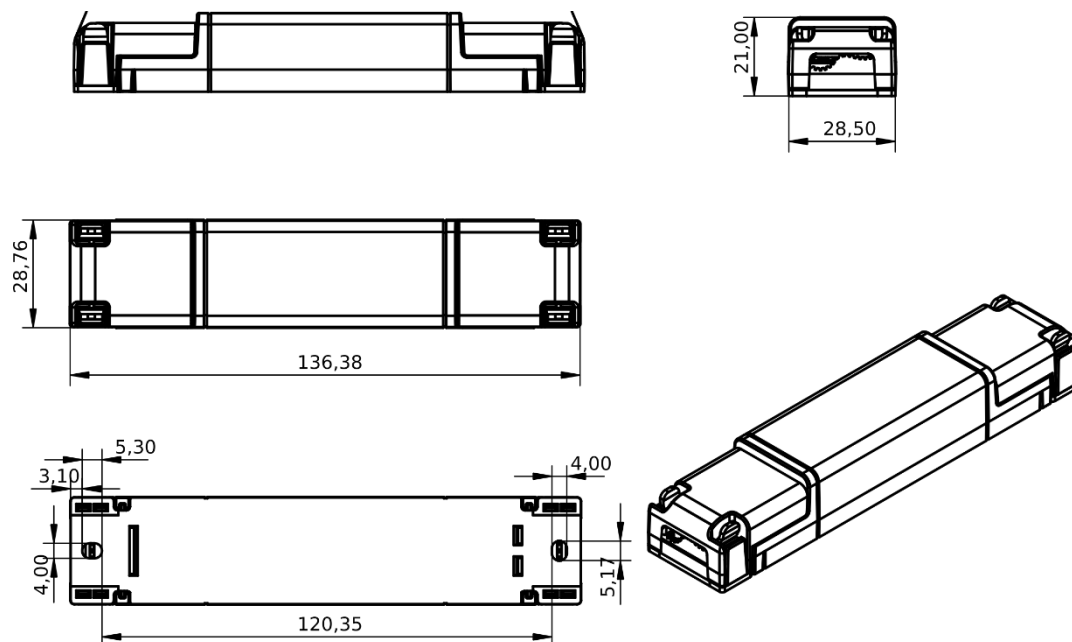
Figure 8: Linear curves according to the Output Current set

Figure 8 shows the dimming curves provided by SLIM-1CC-CASAMBI-LV dimmer, according to the maximum output current set.

Output Current (and corresponding curve) can be selected by fixture settings on CASAMBI<sup>®</sup> mobile app (refer to §Fixture Configuration section).

## MECHANICAL DIMENSIONS

Figure 9 details the mechanical measurements and the overall dimensions [mm] of the outer casing.



## TECHNICAL NOTES

### INSTALLATION



**WARNING!** Installation and maintenance should always be conducted in the absence of DC voltage.

Before continuing with the installation, adjustment, and connection of the device to the power supply, make sure that the voltage is disconnected from the system.



The device should only be connected and installed by qualified personnel. All applicable regulations, legislation, standards, and building codes in force in the respective countries must be adhered to. Incorrect installation of the device may cause irreparable damage to the device and connected loads.

Maintenance must only be conducted by qualified personnel in compliance with current regulations.

The product must be installed inside an electrical panel and/or junction box that is protected against overvoltage.

The external power supply must be protected. The product must be protected by a properly sized circuit breaker with overcurrent protection.

Keep 230 Vac (LV) circuits and non-SELV circuits separate from SELV safety ultra-low voltage circuits and any product connections. It is strictly forbidden to connect, for any reason, directly or indirectly, the 230 Vac mains voltage to the product (control terminals included).

The product must be installed in a vertical or horizontal position, i.e. with the faceplate/label/top cover facing up or vertically. No other positions are allowed. The bottom position, i.e. with the faceplate/label/top cover facing downwards, is not allowed.

During installation, it is recommended to reserve adequate space around the device to facilitate its accessibility in case of future maintenance or updates (e.g. via smartphone).



Use in thermally harsh environments may limit the output power of the product.

For devices embedded within luminaires, the  $T_A$  ambient temperature range is a guideline to be carefully observed for the optimal operating environment. However, the integration of the device within the luminaire must always ensure proper thermal management (e.g. correct mounting of the device, proper ventilation, etc.) so that the temperature at the  $T_C$  point does not exceed its maximum limit under any circumstances. Proper operation and durability are only guaranteed if the maximum temperature of the  $T_C$  point is not exceeded under the conditions of use.

### POWER AND LOAD



The device must be powered only with SELV power supplies with limited current at constant voltage, short-circuit protection and suitably sized power according to the specifications wrote down in the product data sheet. No other types of power supply are allowed.

Size the power of the power supply respect to the load connected to the device. If the power supply is oversized compared to the maximum current drawn, insert an overcurrent protection between the power supply and the device.

Connecting to an unsuitable power supply may cause the device to work outside of the specified design limits, voiding its warranty.

In the case of power supplies equipped with earth terminals, it is mandatory to connect ALL the protection earth points (PE= Protection Earth) to a state-of-the-art and certified earthing system.

The power cables of the device must be correctly sized with reference to the connected load and must be isolated from any wiring or equal to non-SELV voltage. It is recommended not to exceed 10m of connection between the power source and the product. Use double-insulated cables. If you want to use connection cables between the power source and the product longer than 10m, the installer must ensure the correct operation of the system. In any case, the connection between the power supply and the product must not exceed 30m.

To avoid overvoltages that can potentially reduce the useful life of the electronic components the device must be switched OFF upstream of the SELV Power Supply connected to the dimmer, i.e. by removing voltage from the SELV Power Supply.



The device has been designed to work with LED loads only. Connecting and powering unsuitable loads may cause the device to work outside of the specified design limits, voiding its warranty. In general, the operating conditions of the device should never exceed the specifications wrote down in the product data sheet.

Observe the intended polarity between the LED module and the device. Any polarity reversal results in no light emission and can often damage the LED modules.


It is recommended that the connection cables between the product and the LED module be less than 3m long. Cables must be properly sized and should be insulated from any non-SELV wiring or parts. It is recommended to use double-insulated cables. If you want to use connection cables between the product and the LED module longer than 3m, the installer must ensure the correct operation of the system. In any case, the connection between the product and the LED module must not exceed 30m.

It is not allowed to connect diverse types of loads in the same output channel.

### LOCAL CONTROL



The length of the connection cables between the local controls (N.O. buttons or other) and the product must be less than 10m. For longer lengths, we recommend the use of an N.O. Dry Contact Relay module, connected between the "Input" terminal of the device (dry contact side of the relay) and the power source (coil side of the relay) as shown in the connection example in Figure 4. The cables must be sized correctly. Depending on the connection used, they must be isolated from any wiring or non-SELV voltage parts. It is recommended to use double-insulated cables, if deemed appropriate, also shielded.

All devices and control signals connected to local commands with the symbol  , must not supply any type of voltage.

## BLUETOOTH LOW ENERGY (BLE) WARNINGS



The BLE antenna is located inside the device, near the top of case.

BLE typically has a range of about 10 to 50 meters, depending on the environment and obstacles. Ensure your devices are within this range for reliable communication.

Walls, floors, and other physical barriers can significantly reduce the effective range and signal strength of BLE devices. Position devices to minimize these obstacles.

Other electronic devices, especially those operating on the 2.4 GHz frequency (like Wi-Fi routers), can interfere with BLE signals. Keep BLE devices away from such sources of interference.

Ensure that all devices in your BLE network are compatible with each other and support the same BLE version. Incompatibilities can lead to communication issues.

BLE is designed for low power consumption, but the battery life of your control devices (smartphone or tablet) can still be affected by factors like transmission frequency and data volume. Monitor and manage power settings to optimize battery life.

BLE technology works optimally with non-metallic materials. Therefore, it is not recommended to surround the device by metal objects or reflective surfaces when using BLE communication.

For reliable communication, make sure that the top surface is not covered or that it is free of metal objects, wiring, or other electronic devices. Any impediments could affect the quality of communication.

## LEGAL NOTES

### TERMS OF USE






Dalcnet Srl (hereinafter referred to as "the Company") reserves the right to make changes to this device, in whole or in part, without prior notice to the customer. Such changes may affect technical aspects, functionality, design, or any other element of the device. The company is not required to notify you of such changes and that your continued use of the device will constitute your acceptance of the changes.

The company is committed to ensuring that any changes do not compromise the essential functionality of the device and that they comply with applicable laws and regulations. In the event of substantial changes, the company undertakes to provide clear and timely information on the same.

The customer is advised to periodically consult the [www.dalcnet.com](http://www.dalcnet.com) website or other official sources to check for any updates or changes to the device.

## SYMBOLS

	All products are manufactured in compliance with European Regulations, as reported in the Declaration of Conformity.
	Independent Power Supply Unit: Lamp power supply unit, consisting of one or more separate elements, designed so that they can be mounted separately on the outside of a luminaire, with protection in accordance with the marking and without the use of additional enclosures.
<b>SELV</b>	"Very Low Safety Voltage" in a circuit isolated from the mains supply by insulation not less than that between the primary and secondary circuits of a safety isolation transformer according to IEC 61558-2-6.
	At the end of its useful life, the product described in this data sheet is classified as waste from electronic equipment and cannot be disposed of as unsorted municipal solid waste. <b>Warning!</b> Improper disposal of the product may cause serious harm to the environment and human health. For proper disposal, inquire about the collection and treatment methods provided by the local authorities.

## CASAMBI



CASAMBI® is the official application through which it is possible to configure, in addition to the functions of the SLIM-1CC-CASAMBI-LV, also all the different CASAMBI® products equipped with BLE technology.

CASAMBI® mobile app can be downloaded free of charge from the Apple App Store and Google Play Store.



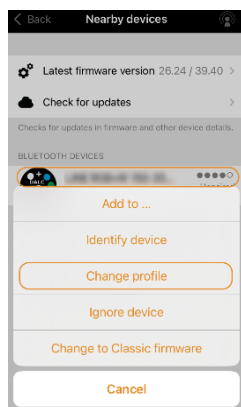
## SETTINGS

### FIXTURE CONFIGURATION

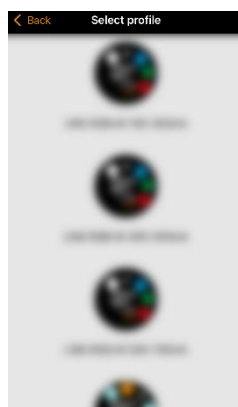
Once the technical data of the load (White or Monochrome LED spotlight/module) to be connected to the device have been verified, it is possible to set the maximum current by loading the Fixture on the driver.  
To load the Fixture with the appropriate current value for the technical characteristics of the load on the SLIM-1CC-CASAMBI, follow these steps.



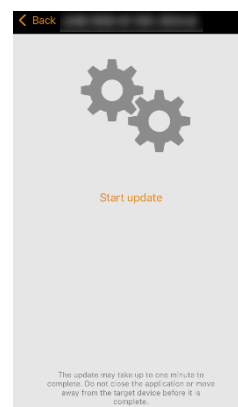
1. Power ON the device and open the CASAMBI® mobile app.
2. Select "Nearby Devices".



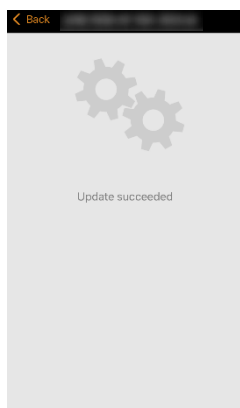
3. Tap on the icon of device, then tap on "Change profile".



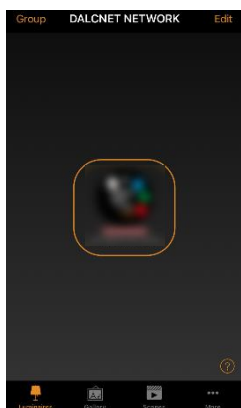
4. Select the desired profile.



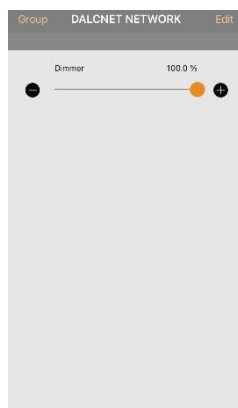
5. Tap "Start Update".



6. Wait for the profile to load correctly.



7. Once the device has been inserted in the Network, double tap on the product icon to show the device configuration.



8. Inside the device configuration, the LED module brightness can be set by provided slider.

## UNPAIR FROM CASAMBI® NETWORK

If SLIM-1CC-CASAMBI-LV is already connected to a network for which you don't have the credentials and you wish to associate it with a new network, please follow the instructions provided in the CASAMBI® mobile app, "Nearby Devices" section.

Once you have selected the unpair function and started the procedure, turn off the main power of the power supply connected to the SLIM-1CC-CASAMBI-LV and turn it on again after 1 - 2 seconds.

If the main power supply is switched off and on again quickly, unpair may not be done properly. Repeat the unpair sequence by allowing 1 or 2 more seconds to elapse between the moment you turn off and re-turn on the main power of the power <sup>8</sup>.

A second method to unpair the product is to connect an N.O. push button to an "INPUT" terminal of the SLIM-1CC-CASAMBI-LV and during the decoupling procedure press the button.

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<sup>8</sup> The discharge time of the power supply secondary depends on the construction characteristics of the power supply used.