DALC NET

CASAMBI

FEATURES

- CONVERTER+CASAMBI+BUS
- REPEATER CASAMBI
- Input: 230Vac
- Command: APP CASAMBI
- Signal converter from Casambi to DALI o DMX, in MASTER Variant
- Signal repeater, in REPEATER Variant
- Possibility to control DALI or DMX device, by Casambi APP
- Extended temperature range
- 100% Functional test – 5 Years warranty

➢ PRODUCT CODE

CODE	Input Voltage	Input Command	Output Command	
CBU-MASTER-DALI-IP	230Vac	APP CASAMBI	DALI	CONVERTER
CBU-MASTER-DMX-IP	230Vac	APP CASAMBI	DMX	CONVERTER
CBU-REPEATER-IP	230Vac	APP CASAMBI	REPEATER	REPEATER

The management of Addresses (DALI Variant) or Channels (DMX Variant) depends on the Casambi module configuration.

➢ PROTECTION

		CBU-MASTER-DALI/DMX	REPEATER
OVP	Over voltage protection[1]	✓	✓
IFP	Input fuse protection [1]	✓	✓

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[1] Only control logic protection

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➢ **TYPE OF PROFILES SELECTABLE FROM CASAMBI APP**

Profile DMX	Default Profile	Output channels	Command	
DGD W		1	APP CASAMBI	DIMMER
DGD WWWW	✓ Ver DMX	4	APP CASAMBI	DIMMER DIMMER DIMMER DIMMER
DGD TW		2	APP CASAMBI	BIANCO DINAMICO
DGD RGB		3	APP CASAMBI	RGB
DGD RGBW		4	APP CASAMBI	RGB W
DGD MRGB+S		5	APP CASAMBI	Master RGB Strobo
DGD MRGBW+S		6	APP CASAMBI	Master RGB W Strobo

Profile DALI	Default Profile	Output Addresses	Command	
DALI BROADCAST	✓ Ver DALI	BROADCAST	APP CASAMBI	DIMMER
W AUTOMATIC		1	APP CASAMBI	DIMMER
WW AUTOMATIC		2	APP CASAMBI	DIMMER DIMMER
WWW AUTOMATIC		3	APP CASAMBI	DIMMER DIMMER DIMMER
WWWW AUTOMATIC		4	APP CASAMBI	DIMMER DIMMER DIMMER DIMMER
TW AUTOMATIC 2700-6000K		2	APP CASAMBI	BIANCO DINAMICO
RGB AUTOMATIC		3	APP CASAMBI	RGB
RGB+W AUTOMATIC		4	APP CASAMBI	RGB W
WWWW GROUP		4	APP CASAMBI	DIMMER DIMMER DIMMER DIMMER
TW GROUP		2	APP CASAMBI	BIANCO DINAMICO
TW GROUP 2700-6000K		3	APP CASAMBI	RGB
RGB+W GROUP		4	APP CASAMBI	RGB W

Profile REPEATER	Command
REPEATER	APP CASAMBI

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➢ **TECHNICAL SPECIFICATION**

	CBU MASTER & CBU REPEATER
Nominal Voltage	230 Vac
Voltage Range	100…240 Vac
Mains Frequency	50/60 Hz
Nominal Power @230V^2	3W max
Power loss in standby mode	<500mW
Storage Temperature	min: -40 max: +60 °C
Ambient Temperature^2	min: -25 max: +60 °C
Protection grade	IP66
Mechanical dimensions	90 x 90 x 65 mm
Casing material	Plastic
Weight	88g
Only for BUS DALI	
I out (only for DALI)	150mA
V out (only for DALI)	15V

➢ **TECHNICAL NOTE**

Installation:
- Isolate the mains supply before the installation or adjusting the switches. Installation and maintenance must be performed in the absence of   AC Voltage.
- Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- The product must be installed inside an electrical cabinet protected against overvoltages.
- The external supply must be protected. The product must be protected from Fuse and/or Circuit Breaker with overcurrent protection correctly dimensioned
- The product must be installed only in a vertical or horizontal position with the cover / label pointing upwards or vertically; No other positions are allowed. Button-up positive is not permitted (downward label).
- The use of the product in harsh environments could limit the output power.
- Keep 230V circuits (LV) and non-SELV circuits separate from safety extra low voltage (SELV) circuits and from all connections of this product. It's absolutely forbidden to connect for any reason, directly or indirectly, the 230V mains voltage to the bus or to other parts of the SELV circuit.

Command
- The length and type of the connection cables at the BUS (DMX512, DALI or other) must comply with the specification of the respective protocols and regulations and they should be isolated from every wiring or parts at voltage not SELV. It is suggested to use double insulated shielded and twisted cables.
- All the product and the control signal connect at the bus (DMX512, DALI, or other) must be SELV (the devices connected must be SELV or supply a SELV signal)

WARNING: Do not compromise the correct functioning of the device, the product must not be in any way shielded and/or installed inside metal and aluminium boxes.
As any other Casambi product, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.
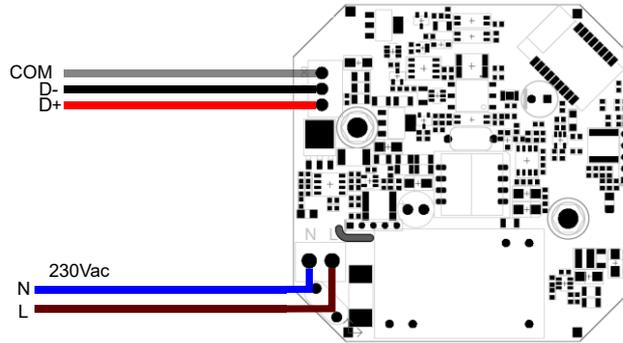

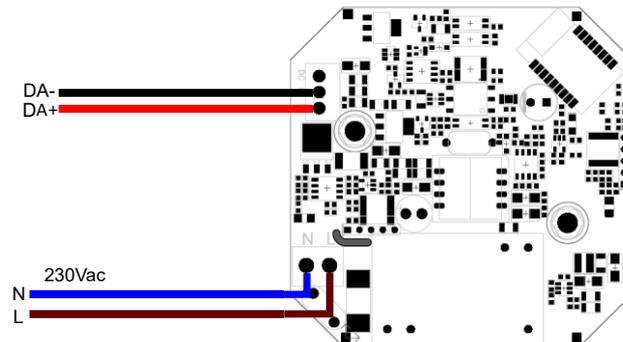^{2}Maximum value, dependent on the ventilation conditions.

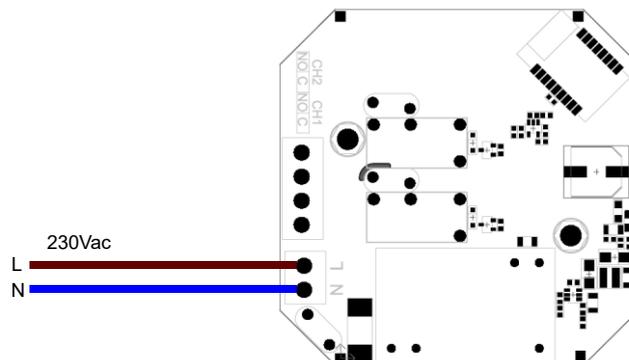➢ **INSTALLATION**

Install the product following the below scheme

DMX BUS CONNECTION

COM
D-
D+

230Vac
N
L

DALI BUS CONNECTION

DA-
DA+

230Vac
N
L

REPEATER

230Vac
L
N

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➢ **MECHANICAL DIMENSIONS**
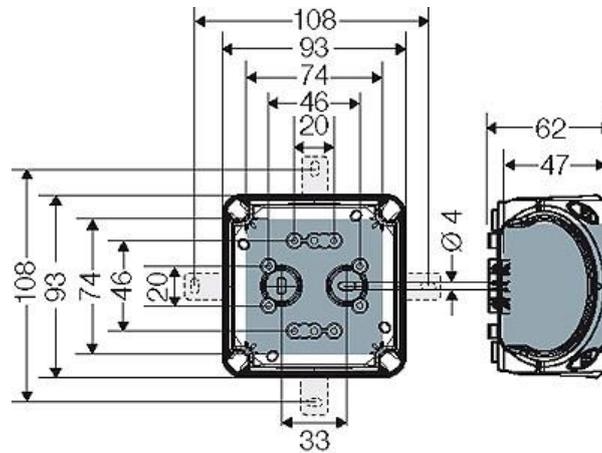
➢ **CBU-REPEATER-IPP SETUP**
CASAMBI SIGNAL REPEATER

Characteristics:

The CBU-REPEATER-IP is a Casambi Repeater.
The device receives a Casambi Bluetooth signal and repeats it.

Status Led:

The status of LED is fixed on to indicate the correct power connection to the device.

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➢ **CBU-MASTER-DALI-IP SETUP**
  CASAMBI SIGNAL CONVERSION INTO DALI PROTOCOL

CHARACTERISTICS:

The CBU-MASTER-DALI-IP is a Casambi to DALI Converter.
The device receives a command signal from Casambi APP and converts the signal into a DALI command.
See the following table "ADDRESS MAP – DALI" for reference of Casambi-DALI conversion addresses.

STATUS LED:

o When the status of the LED is steady on, the Casambi module is configuring and addressing the SLAVE DALI devices connected to the bus.
o When the LED status flashes quickly, the Casambi module is sending the command set via the Casambi APP to the SLAVE DALI devices connected to the bus.
o When the LED status flashes slowly, it means the DALI bus is shorted.
o When the LED status is off there is no communication on the DALI bus.

AUTOMATIC DETECTION OF SHORT CIRCUITS IN THE DALI BUS:

When the device detects a short circuit on the DALI bus, it automatically switches off the power of bus and the LED signal flashes slowly.
At 15 seconds after the detection of the short circuit, CBU-MASTER-DALI tries to reactivate the power supply of the bus. If the short circuit has been solved, the system returns to work correctly, otherwise the bus remains unpowered and cyclically, every 15 seconds, the device tries again to reactivate the power supply of bus.

NOTE: CBU-MASTER-DALI-IP do not need a DALI Bus power Supply.
At switching on, all channels are set at same value 254.

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ADDRESSES MAP – DALI

FIXTURE AUTOMATIC

The Fixture "AUTOMATIC" of the CBU-MASTER-DALI-IP addressing automatically the devices connected to the DALI BUS.

Type of Load: **BROADCAST**

Addr	Function	Map: Broadcast
+ALL	Broadcast	Dimmer (Brightness Value) 0 .. 254

Load Type: **W AUTOMATIC** – Fixture for only 1 DALI address

Addr	Function	Map: Dimmer
A0	Dimmer 1	Dimmer (Brightness Value) 0 .. 254

Load Type: **WW AUTOMATIC** – Fixture for 2 DALI address

Addr	Function	Map: Dimmer
A0	Dimmer 1	Dimmer (Brightness Value) 0 .. 254
A1	Dimmer 2	Dimmer (Brightness Value) 0 .. 254

Load Type: **WWW AUTOMATIC** – Fixture for 3 DALI address

Addr	Function	Map: Dimmer
A0	Dimmer 1	Dimmer (Brightness Value) 0 .. 254
A1	Dimmer 2	Dimmer (Brightness Value) 0 .. 254
A2	Dimmer 3	Dimmer (Brightness Value) 0 .. 254

Load Type: **WWWW AUTOMATIC** – Fixture for 4 DALI address

Addr	Function	Map: Dimmer
A0	Dimmer 1	Dimmer (Brightness Value) 0 .. 254
A1	Dimmer 2	Dimmer (Brightness Value) 0 .. 254
A2	Dimmer 3	Dimmer (Brightness Value) 0 .. 254
A3	Dimmer 4	Dimmer (Brightness Value) 0 .. 254

Load Type: **TW AUTOMATIC**

Addr	Function	Map: Dimmer
A0	Warm White	Dimmer (Brightness Value) 0 .. 254
A1	Cool White	Dimmer (Brightness Value) 0 .. 254

Load Type: **RGB AUTOMATIC**

Addr	Function	Map: RGBW
A0	R	R 0 .. 254
A1	G	G 0 .. 254
A2	B	B 0 .. 254

Load Type: **RGB+W AUTOMATIC**

Addr	Function	Map: RGBW
A0	R	R 0 .. 254
A1	G	G 0 .. 254
A2	B	B 0 .. 254
A3	W	W 0 .. 254

FIXTURE GROUP

With "Group" Fixture the CBU-MASTER-DALI-IP sends group commands. The SLAVE devices to be controlled correctly by these Fixture must be previously addressed and assigned to the desired group through a Master DALI.

Load Type: **WWWW GROUP**

Group	Function	Map: Dimmer
G0	Dimmer 1	Dimmer (Brightness Value) 0 .. 254
G1	Dimmer 2	Dimmer (Brightness Value) 0 .. 254
G2	Dimmer 3	Dimmer (Brightness Value) 0 .. 254
G3	Dimmer 4	Dimmer (Brightness Value) 0 .. 254

Load Type: **TW GROUP**

Group	Function	Map: Dimmer
G0	Warm White	Dimmer (Brightness Value) 0 .. 254
G1	Cool White	Dimmer (Brightness Value) 0 .. 254

Load Type: **RGB GROUP**

Group	Function	Map: RGBW
G0	R	R 0 .. 254
G1	G	G 0 .. 254
G2	B	B 0 .. 254

Load Type: **RGB+W GROUP**

Group	Function	Map: RGBW
G0	R	R 0 .. 254
G1	G	G 0 .. 254
G2	B	B 0 .. 254
G3	W	W 0 .. 254

➤ **CBU-MASTER-DMX-IP SETUP**
   CASAMBI SIGNAL CONVERSION INTO DMX PROTOCOL

Characteristics:

   The CBU-MASTER-DMX-IP is a Casambi to DMX Converter.
   The device receives the command signal from Casambi APP and convert it into a DMX command.
   See the following "CHANNELS MAP – DMX" table for the reference of the Casambi-DMX conversion addresses.

Status Led:

   Status LED is fixed on when the Casambi command is right transmitted.
   Status LED slowly flashes (1 flash per second), when the device is powered.

CHANNEL MAP – DMX

Load Type: White – 1 DMX channel

Ch.	Function	Map: Dimmer
1	Dimmer 1	Dimmer (Brightness Value) 0 .. 255

Load Type: White – 4 DMX channel

Ch.	Function	Map: Dimmer
1	Dimmer 1	Dimmer (Brightness Value) 0 .. 255
2	Dimmer 2	Dimmer (Brightness Value) 0 .. 255
3	Dimmer 3	Dimmer (Brightness Value) 0 .. 255
4	Dimmer 4	Dimmer (Brightness Value) 0 .. 255

Load Type: Tunable White

Ch.	Function	Map: Dimmer
1	Warm White	Dimmer (Brightness Value) 0 .. 255
2	Cool White	Dimmer (Brightness Value) 0 .. 255

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Load Type: RGB

Ch.	Function	Map: RGBW
A0	R	R 0 .. 255
A1	G	G 0 .. 255
A2	B	B 0 .. 255

Load Type: Master+RGB+Strobe

Ch.	Function	Map: RGBW
1	Master Dimmer	Master Dimmer (Brightness Value) 0 .. 255
2	R	R 0 .. 255
3	G	G 0 .. 255
4	B	B 0 .. 255
5	Strobo Rate (*)	STROBO 0 .. 255

Load Type: RGBW

Ch.	Function	Map: RGBW
1	R	R 0 .. 255
2	G	G 0 .. 255
3	B	B 0 .. 255
4	W	W 0 .. 255

Load Type: Master+RGBW+Strobe

Ch.	Function	Map: RGBW
1	Master Dimmer	Master Dimmer (Brightness Value) 0 .. 255
2	R	R 0 .. 255
3	G	G 0 .. 255
4	B	B 0 .. 255
5	W	W 0 .. 255
6	Strobo Rate (*)	STROBO 0 .. 255

(*) Strobo Rate execute the functions of the strobe address of the control unit connected to the CBU-MASTER-DMX-IP. For example, if you connect the CBU-MASTER-DMX-IP to the DLD1248-4CV-DMX control unit, which is also set with the MRGB+ or MRGBW+ map, the Strobo Rate address has the following characteristics:

6	Strobo Rate	fix 0..15	blackout 16..31	1fps 32..47	2fps 48..63	3fps 64..79	4fps 80..95	5fps 96..111	6fps 112..127	7fps 128..143	8fps 144..159	9fps 160..175	10fps 176..191	12fps 192..207	14fps 208..223	16fps 224..239	fix 240..254

For other devices, if present the Strobo address, check the behaviour of the Strobe address.

➢ **BLUETOOTH RANGE**

The range depends a lot on the surroundings and materials or building obstacles, see the technical notes on page 3.