

CASAMBI

**FEATURES**

- CONVERTER+CASAMBI+BUS
- REPEATER CASAMBI
- Input: 230Vac
- Command: APP CASAMBI
- Signal converter from Casambi to DALI or 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 (DT6 – DT8)	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
<b>OVP</b>	Over voltage protection <sup>1</sup>	✓	✓
<b>IFP</b>	Input fuse protection <sup>1</sup>	✓	✓

<sup>1</sup> Only control logic protection

## Device Manual

## ➤ TYPE OF PROFILES SELECTABLE FROM CASAMBI APP

Profile DMX	Default Profile	Output channels	Command	
W		1	APP CASAMBI	DIMMER
WWWW	✓	4	APP CASAMBI	DIMMER DIMMER DIMMER DIMMER
TW		2	APP CASAMBI	BIANCO DINAMICO
RGB		3	APP CASAMBI	RGB
RGBW		4	APP CASAMBI	RGB W
MRGBS		5	APP CASAMBI	Master RGB Strobo
MRGBWS		6	APP CASAMBI	Master RGB W Strobo

Profile DALI	Default Profile	Output Addresses	Output Group	Command	
DALI BROADCAST	✓	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
TW AUTOMATIC 2700-6000K NEW		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 2700-6000K			2	APP CASAMBI	BIANCO DINAMICO
RGB GROUP			3	APP CASAMBI	RGB
RGB+W GROUP			4	APP CASAMBI	RGB W
8xW GROUP			8	APP CASAMBI	G0 G1 G2 G3 G4 G5 G6 G7
8xW GROUP SPECIAL			8	APP CASAMBI	G0 G1 G2 G3 G4 G5 G6 G7
DALI BC DT8 TW		BROADCAST TW		APP CASAMBI	BIANCO DINAMICO
DALI DT8 RGB LINEAR		1		APP CASAMBI	RGB
DALI DT8 RGBW LINEAR		1		APP CASAMBI	RGBW
DALI DT8 BC RGB LINEAR		BROADCAST RGB		APP CASAMBI	RGB
DALI DT8 BC RGB+W LINEAR		BROADCAST RGB+W		APP CASAMBI	RGB W

Profile REPEATER	Command
REPEATER	APP CASAMBI



## ➤ TECHNICAL SPECIFICATION

	CBU MASTER & CBU REPEATER
Nominal Voltage	230 Vac
Voltage Range	100...240 Vac
Mains Frequency	50/60 Hz
Nominal Power @230V <sup>2</sup>	3W max
Power loss in standby mode	<500mW
Storage Temperature	min: -40 max: +60 °C
Ambient Temperature <sup>2</sup>	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.**

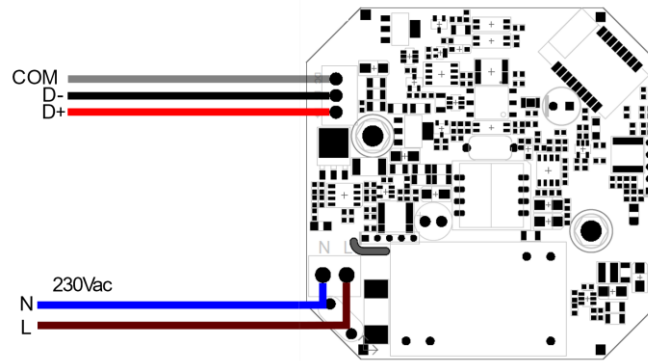
<sup>2</sup>Maximum value, dependent on the ventilation conditions.

## Device Manual

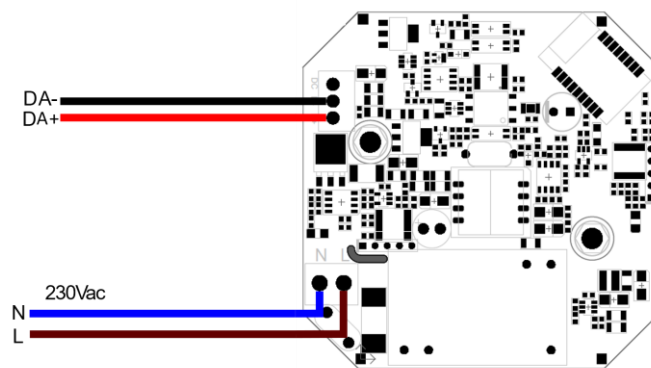
### ➤ INSTALLATION

Install the product following the below scheme

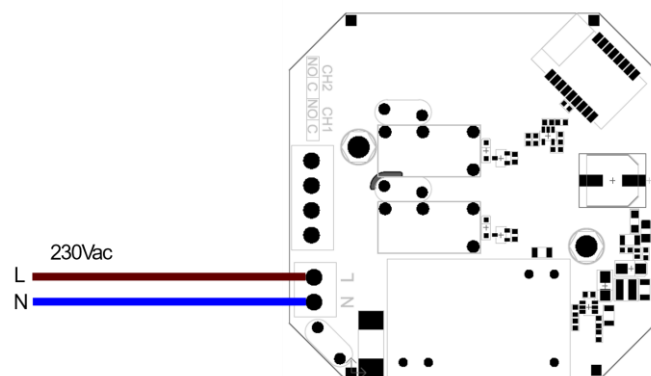
#### DMX BUS CONNECTION



#### DALI BUS CONNECTION

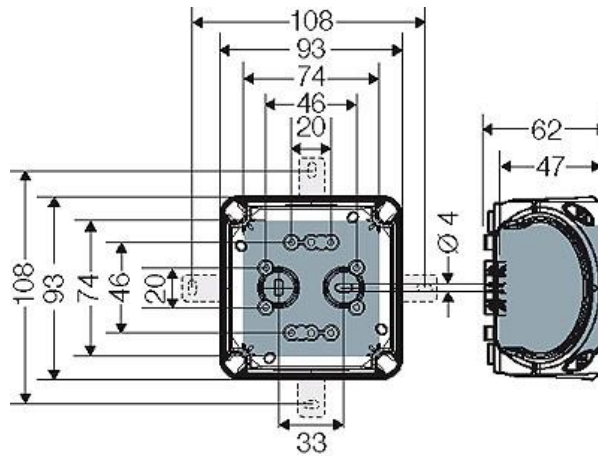


#### REPEATER CONNECTION



## Device Manual

## ➤ MECHANICAL DIMENSIONS

➤ CBU-REPEATER-IP 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.

➤ **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. Send DT6 and DT8 command. See the following table “ADDRESS MAP – DALI” for reference of Casambi-DALI conversion addresses.

**STATUS LED:**

- When the status of the LED is steady on, the Casambi module is configuring and addressing the SLAVE DALI devices connected to the bus.
- 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.
- When the LED status flashes slowly, it means the DALI bus is shorted.
- When the LED status is off there is no communication in 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.

## Device Manual

ADDRESSES MAP – DALI**FIXTURE AUTOMATIC**

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

Profile Type: **BROADCAST**

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

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

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

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

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

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

Addr	Function	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

Profile Type: **WWW AUTOMATIC** – Fixture for 4 DALI address

Addr	Function	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

Profile Type: **TW AUTOMATIC 2700-6000K** – **TW AUTOMATIC 2700-6000K NEW**

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

Profile Type: **RGB AUTOMATIC**

Addr	Function	RGBW
A0	Red	R 0 .. 254
A1	Green	G 0 .. 254
A2	Blue	B 0 .. 254

Profile Type: **RGB+W AUTOMATIC**

Addr	Function	RGBW
A0	Red	R 0 .. 254
A1	Green	G 0 .. 254
A2	Blue	B 0 .. 254
A3	White	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.

Profile Type: **WWWW GROUP**

Group	Function	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

Profile Type: **TW GROUP 2700-6000K**

Group	Function	Tunable white
G0	Warm White	Dimmer (Brightness Value) 0 .. 254
G1	Cool White	Dimmer (Brightness Value) 0 .. 254

Profile Type: **RGB GROUP**

Group	Function	RGB
G0	Red	R 0 .. 254
G1	Green	G 0 .. 254
G2	Blue	B 0 .. 254



Profile Type: **RGB+W GROUP**

Group	Function	RGBW
G0	Red	R 0 .. 254
G1	Green	G 0 .. 254
G2	Blue	B 0 .. 254
G3	White	W 0 .. 254

Profile Type: **8xW GROUP – 8xW GROUP SPECIAL**

Group	Function	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
G4	Dimmer 5	Dimmer (Brightness Value) 0 .. 254
G5	Dimmer 6	Dimmer (Brightness Value) 0 .. 254
G6	Dimmer 7	Dimmer (Brightness Value) 0 .. 254
G7	Dimmer 8	Dimmer (Brightness Value) 0 .. 254

The 8xW GROUP SPECIAL profile send SET POWER ON LEVEL and SET SYSTEM FAILURE LEVEL command at 255 (MASK). These commands are sent at the DALI bus when you change the profile, by Casambi APP. For Control Gear to receive these commands correctly, they must be connected to the DALI bus before changing profile.

Profile Type: **DALI BROADCAST DT8 TW**

Addr	Function	Broadcast - Colour Temperature Tc – DT8
+ALL	Broadcast TW Colour Temperatur Tc	Dimmer (Brightness Value) 0 .. 254

Profile Type: **DALI DT8 RGB LINEAR**

Addr	Function	RGB – DT8
A0	RGB Colour Type	Dimmer (Brightness Value) 0 .. 254

Profile Type: **BROADCAST DT8 TW**

Addr	Function	RGBW – DT8
A0	RGBW Colour Type	Dimmer (Brightness Value) 0 .. 254

Profile Type: **BROADCAST DT8 TW**

Addr	Function	Broadcast RGB – DT8
+ALL	Broadcast RGB Colour Type	Dimmer (Brightness Value) 0 .. 254

Profile Type: **BROADCAST DT8 TW**

Addr	Function	Broadcast RGB+W – DT8
+ALL	Broadcast RGB+W Colour Type	Dimmer (Brightness Value) 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**

Profile Type: **W** – 1 DMX channel

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

Profile Type: **WWWW** – 4 DMX channel

Ch.	Function	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

Profile Type: **TW**

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

Profile Type: **RGB**

Ch.	Function	RGB
1	Red	R 0 .. 255
2	Green	G 0 .. 255
3	Blue	B 0 .. 255

Profile Type: **MRGBS**

Ch.	Function	Master+RGB+Strobe
1	Master Dimmer	Master Dimmer (Brightness Value) 0 .. 255
2	Red	R 0 .. 255
3	Green	G 0 .. 255
4	Blue	B 0 .. 255
5	Strobe Rate (*)	STROBO 0 .. 255

Profile Type: **RGBW**

Ch.	Function	RGBW
1	Red	R 0 .. 255
2	Green	G 0 .. 255
3	Blue	B 0 .. 255
4	White	W 0 .. 255

Profile Type: **MRGBWS**

Ch.	Function	Master+RGBW+Strobe
1	Master Dimmer	Master Dimmer (Brightness Value) 0 .. 255
2	Red	R 0 .. 255
3	Green	G 0 .. 255
4	Blue	B 0 .. 255
5	White	W 0 .. 255
6	Strobe Rate (*)	STROBO 0 .. 255

(\*) Strobe 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 Strobe Rate address has the following characteristics:

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

For other devices check the behaviour of the device at the respective channel 6 of the DMX.

➤ **BLUETOOTH RANGE**

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