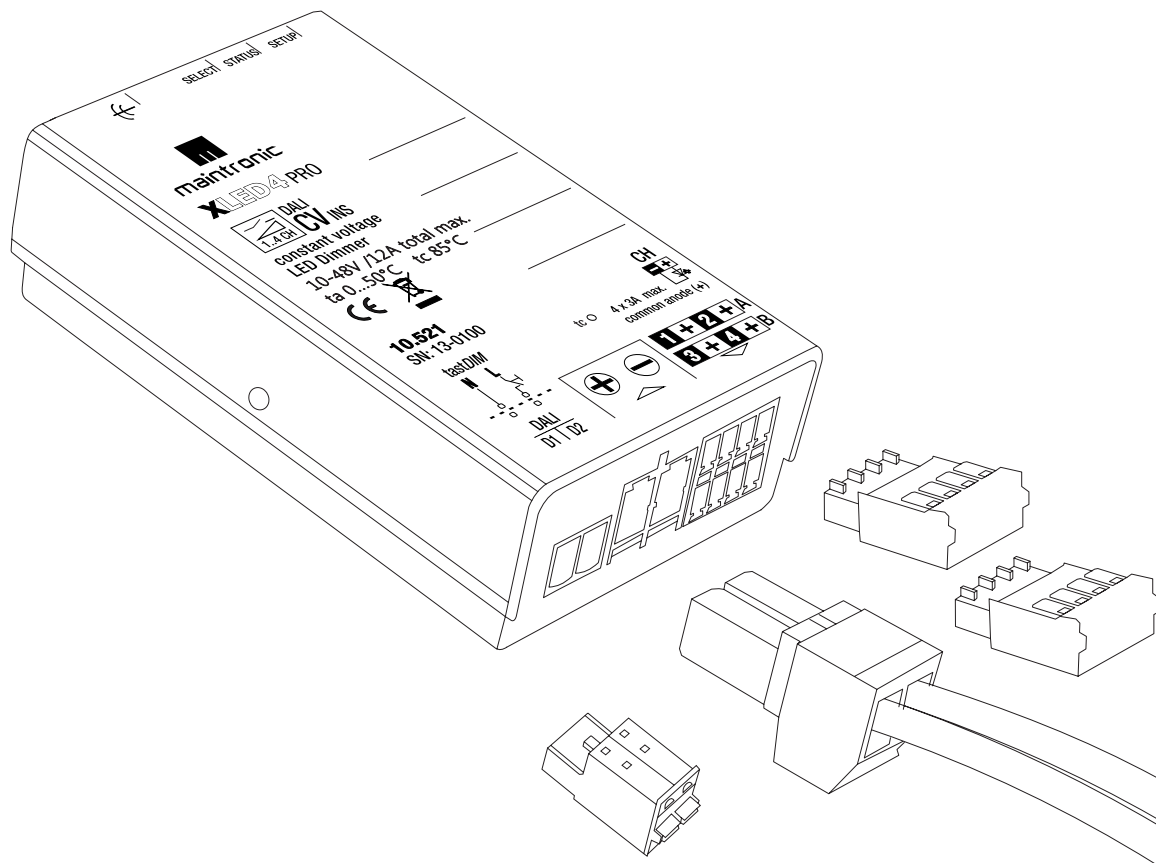# XLED4 CV Casambi

1-4 Casambi+DALI LED-Converter 10-48V

Manual

Valid from the following versions:

(H=Hardware F=Firmware)

10.541 - **XLED4 CV Casambi**   H3e   F1.7

XLED4_PRO_CV_Casambi_manual_EN

Document Date: 14.12.2020

maintronic

1. Safety instructions

⚠️ Important

For your own safety, read all instructions and information in this manual carefully before initial operation. Keep this manual for future reference.

The instructions are an integral part of the product and must be handed to the end customer.

All information and instructions in this manual must be observed completely and in detail. The manufactuer is not responsible for any direct or consequential damage that results from disregarding any information in this manual.

♻️ Waste disposal

In accordance with European Directive 2002/96/EC (it`s) not longer usable electronic devices and defective or used batteries (European Directive 2006/66EG)
must collected separately and disposed by an environmentally sound recycling.
This symbol indicates that electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime. Should these product are no longer be useable, the user is required by law to dispose of old appliances separately from their household waste e. g. at a local authority collection point or recycling center.

⚡ Danger

The interior and the connectors of the amplifier holds hazardous voltages.
The unit must only be installed and serviced by a proven electrican specialist, in accordance of all relevant regulations, safety and accident prevention directives of the country.

Be sure that the existing mains voltage corresponds with the specified operating voltage before operating the device.

Risk of electric shock. Do not operate the device without a cover. Even when switched off, voltage may be present at the outputs. When working on the device or connected loads, always disconnect the upstream fuse from the power supply.

Only install the device in places with a good ventilation and without humidity or high temperatures. Do not expose the unit to rain or snow. Do not operate the unit near heat sources, e.g. radiators.

Do not open the device. Otherwise you will risk a damage and void the warranty.

The unit should be serviced by qualified personnel when the unit:
• objects have fallen or liquid has been spilled into the unit
• does not appear to operate normally
• has been dropped or has a broken housing

For cleaning only use a dry, soft cloth, by no means liquids.

2. Introduction

Thanks a lot

Congratulations and thank you for choosing this *maintronic* product and the trust you have placed in us. We, the team of *maintronic*, wish you a lot of fun with this product.

About this Document

Due to continuous product development, some of the information may not be complete and up-to-date.

The information in this document is subject to change without prior notice. Please check our website www.maintronic.de, if there is a newer version.

Contact maintronic support

You can find downloads, manuals, onlinehelp as well as frequently asked questions (FAQ) on our Website www.maintronic.de. Please contact us, should any problems regarding your product arise.

Legals

The division building automation and all associated products are products of MTC maintronic® GmbH (hereafter maintronic). All rights reserved, as well as mistakes and typing errors.

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Intended use

The device may only be used:
- as a dimmer for switching and dimming lights
- firmly in a dry and clean environment
- approved for indoor use only
- access is only possible with tools
- operate on a powersupply with 10...48V DC
- with a backup fuse of max. 16A

Functions / Features
- 1-4 CH LED-Dimmer Constant Voltage
- Control with CASAMBI, DALI and PushButton
- Tuneable white / RGB+W / 1...4 Channels
- 17,6A max. Output Power | 4,4A / CH
- Plus Features: variable Fade-Time, Soft-Off, Dimmspeed

3. Initial operation

The dimmer can be controlled parallel with DALI and Casambi.

For example, the building lighting management system can take over the general control via DALI. In addition, every user can make individual settings on site via smartphone.

The dimmer keeps track of the hierarchy that the last one wins. This means that the last set brightness remains until the next change.

3.1 Operation with DALI

The dimmer XLED CV DALI works according to the DALI standard. Device type 6 (LED module).

The device search assigns a short address to each of the 4 device channels (or channel groups if channels are linked). Please see for further information the operating instructions for your DALI controller or gateway.

As usual in DALI, each of the four DALI short-addresses of a device can be assigned to any groups and scenes.

Power On Level = MASK (the last stored brightness value is taken over after approx. 90 sec. As last memory level) and will be set at the next power up.

3.2 Operation with 230V PushButton

Alternatively, the DALI input can also be used as a PushButton input.

A voltage of 230V AC is connected to the DALI contacts. (**) Button 230V against N at the DALI input (not SELV)!

⚠ **WARNING - Due to the fact that 230V are applied, no further DALI operating device may be connected in the same circuit when using the DALI input as a PushButton!**

Multiple buttons can be used in parallel, also several PushButton compatible devices can be operated in parallel.

Functions with external PushButton	keystroke
Switch On- / Off	short press
Dimming Up and Down (Start at Min Level)	long press
Switching to Max Level	2x short press
Synchronization of the connected devices	press 10 sec.
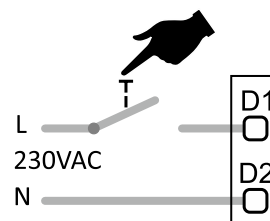
3.3 Operation with DeviceButton

SELECT-Button

| Functions SELECT-Button	keystroke
Channel selection (starting with channel 1) for manual dimming via the SETUP-Button. If channels are linked accordingly selection. Confirmation by flashing the STATUS LED.	1...4 x short press Selection channel 1-4 or channel group
Physical selection via DALI Procedure Physical Selection: 1. Select DALI command "PHYSICAL SELECTION" 2. Press SELECT-Button 1x (select channel 1) 3. When pressed again, the next channel (or linked channel group) is selected, after channel 4 it starts again with channel 1 4. Confirmation by STATUS LED flashing	1...4 x short press Selection channel 1-4 or channel group
Reset factory settings There is a reset of all parameters in the delivery state. A successful reset is signaled by the status LED. ! Reset within 30 minutes after POWER_ON.	press 10 sec.

SETUP-Button

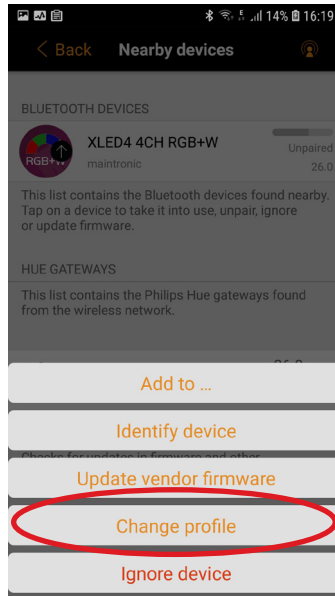| Functions SELECT-Button	keystroke
Switch On- / Off	short press
Dimming Up and Down (Start at Min Level)	long press
Switching to Max Level	2x short press

3.4 Operation with Casambi
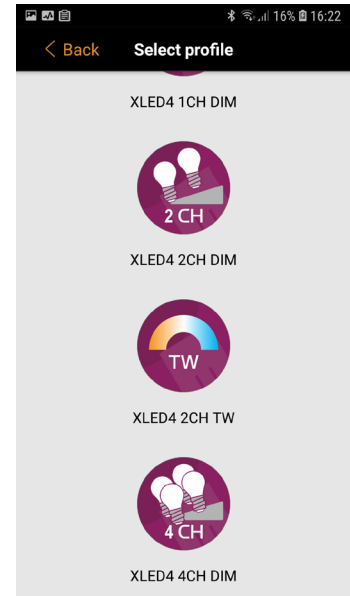
⚠️ Important

In order to select a certain mode of operation, a Casambi profile must be selected with the Casambi APP when learning the device.
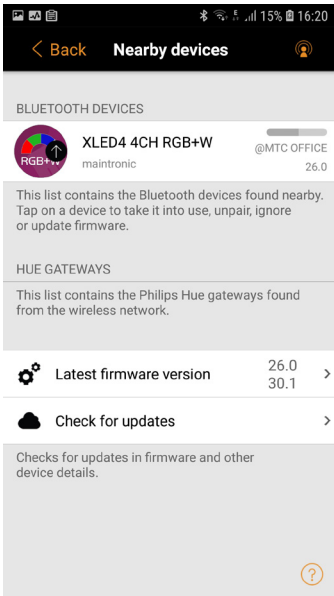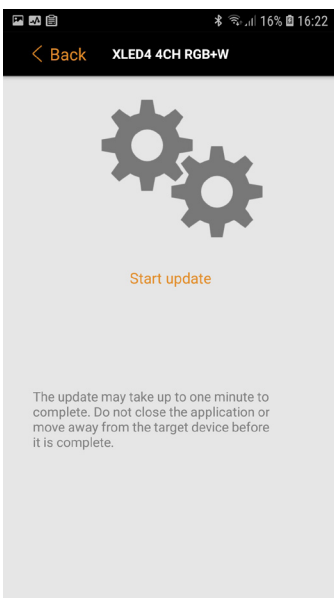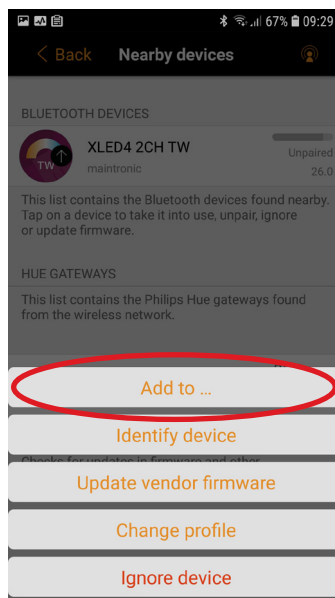

Device must be decoupled
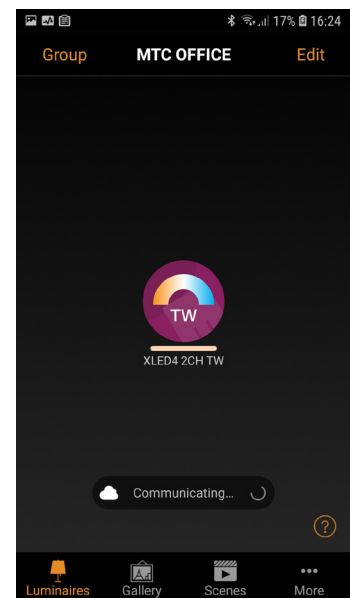

Click on the menu item Change profile.

Select the desired operating mode (profile).

Start the update ...
after selecting the profile

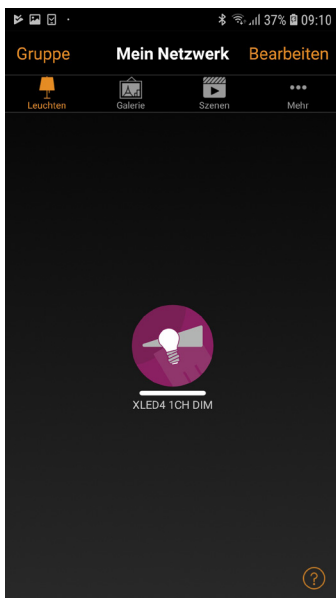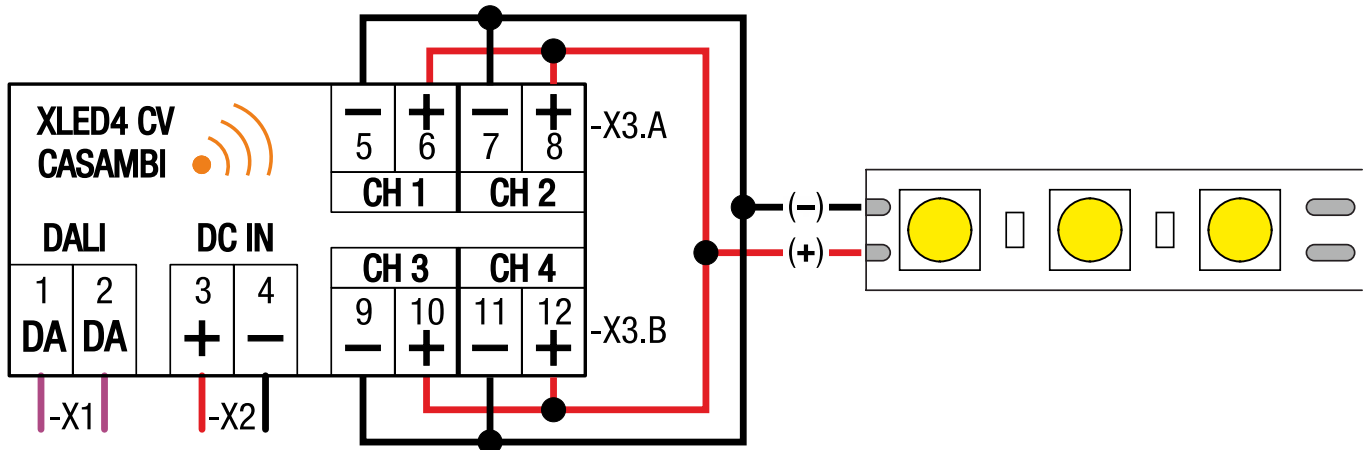

On the menu item „Use in my network".
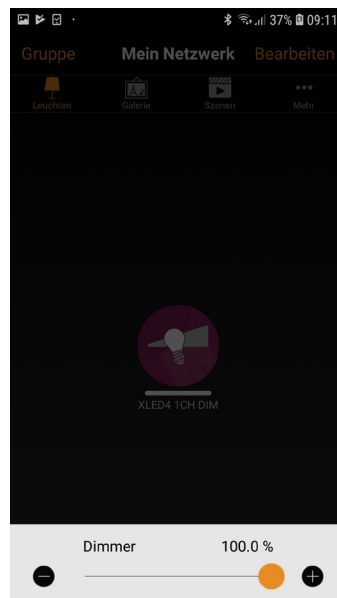

The desired profile is now loaded.

Select a suitable profile for your project on the following pages.

Profile: 1 CH linked

Channel 1+2+3+4 linked together
One single brightness controller
17,6 A Power
DALI DT6
1 DALI short adress

Profile view in the App
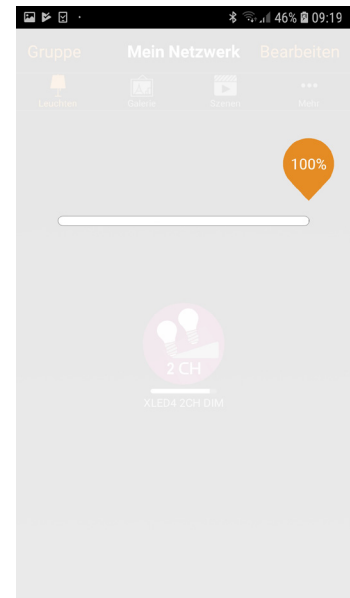
A single brightness slider

Profile: 2 CH linked

Channel 1+2 linked together
Channel 3+4 linked together
8,8 A power each channel
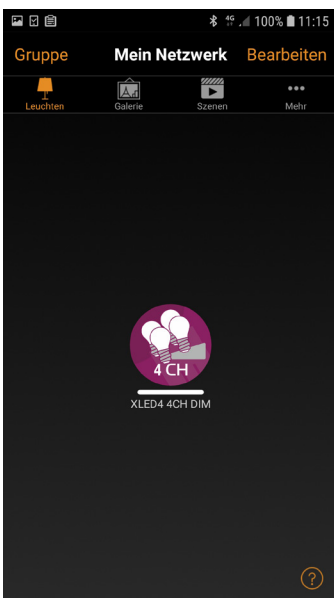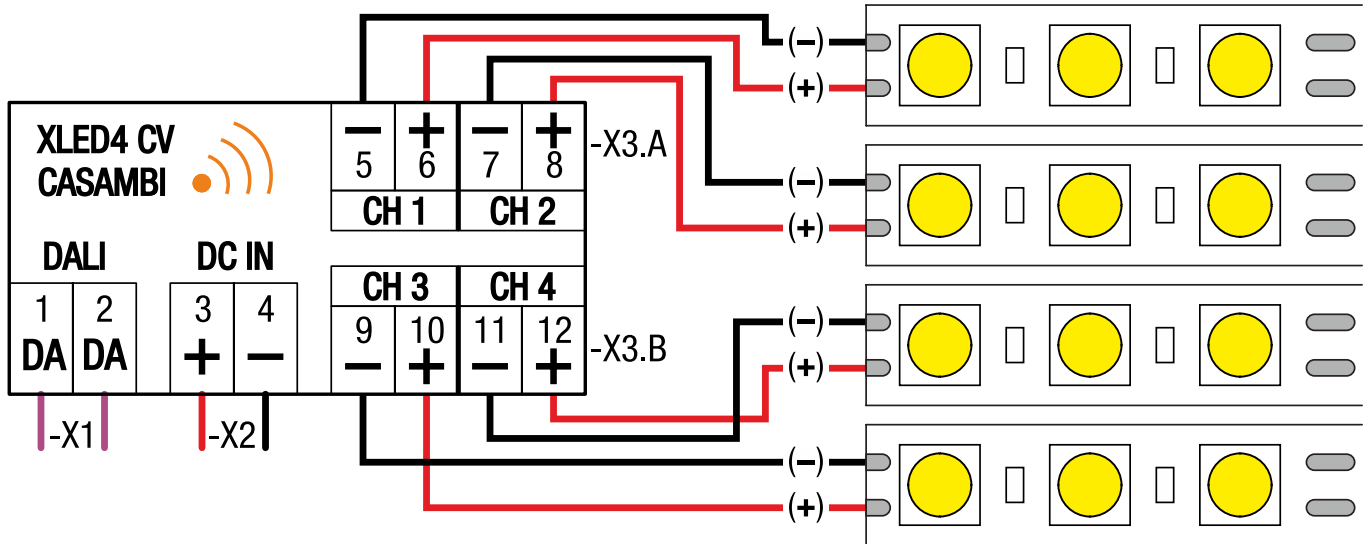DALI DT6
2 DALI short adress
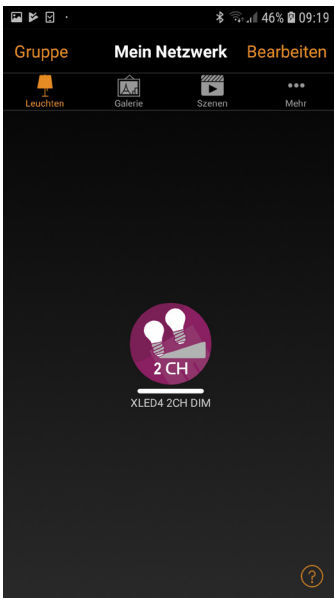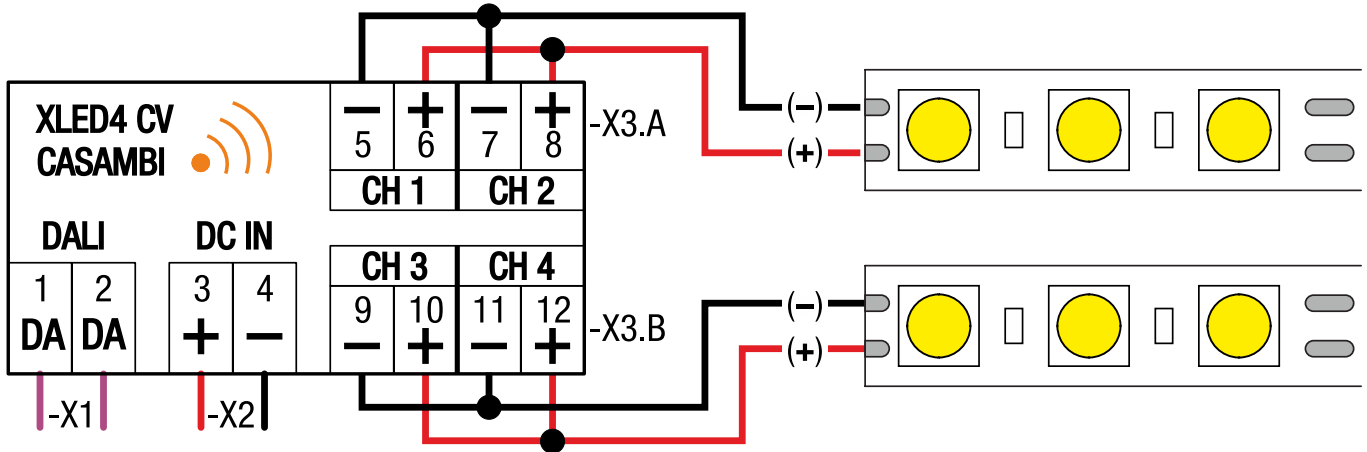
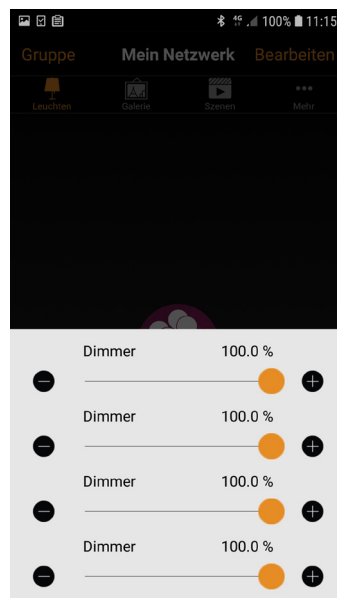Profile view in the App
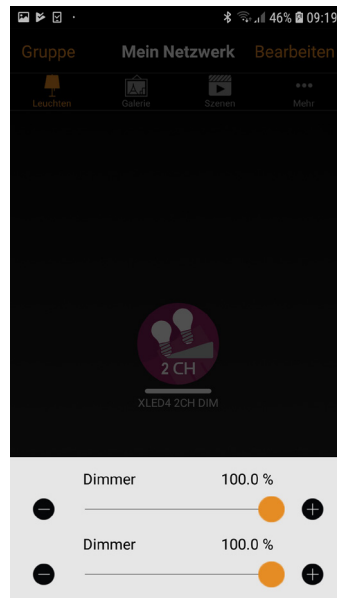
One brightness slider for each linked Channel

Profile: 4 CH Standalone

4 individually controllable channels
4,4 A power each channel
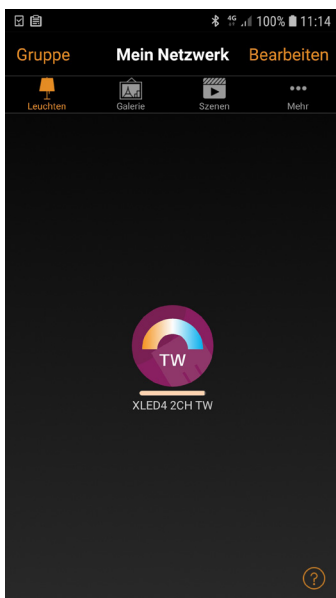DALI DT6
4 DALI short adress
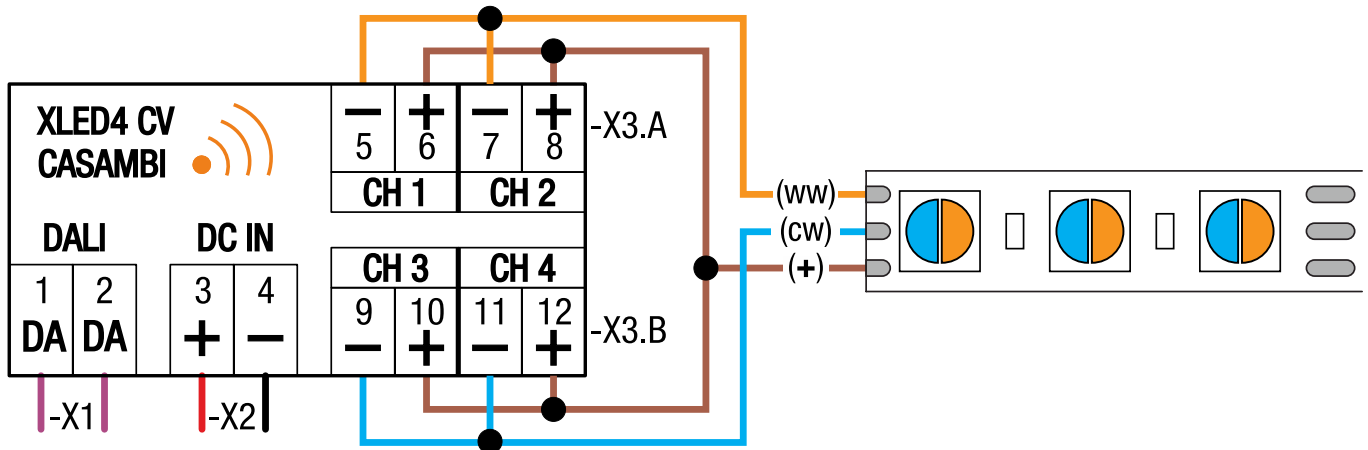

Profile view in the App

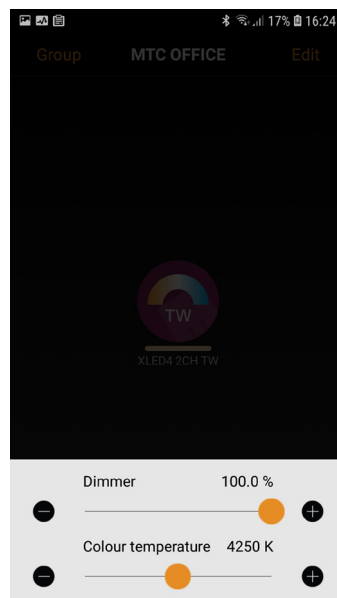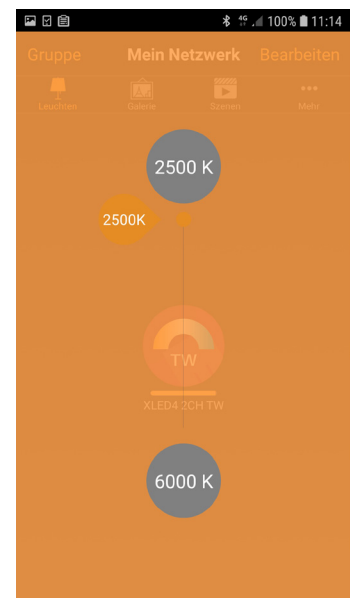One brightness slider for each channel

Profil: TW-Tunable white

Channel 1+2 linked for warmwhite (ww)
Channel 3+4 linked for coldwhite (cw)
8,8 A power each linked channel
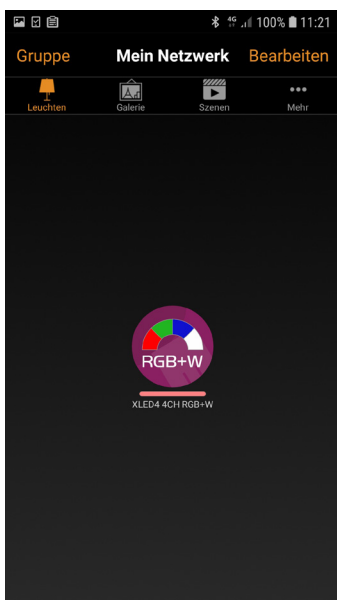DALI DT8
1 DALI Kurzadresse
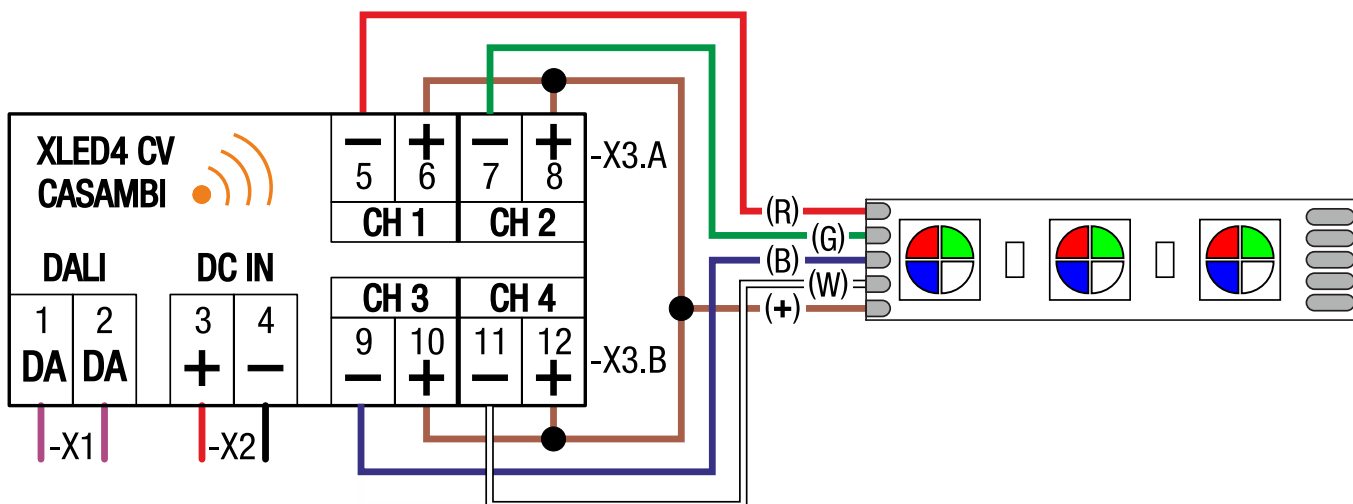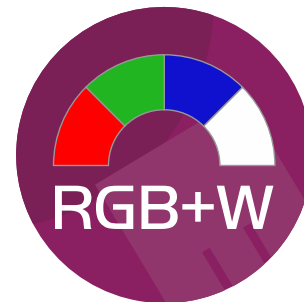

Profile view in the App

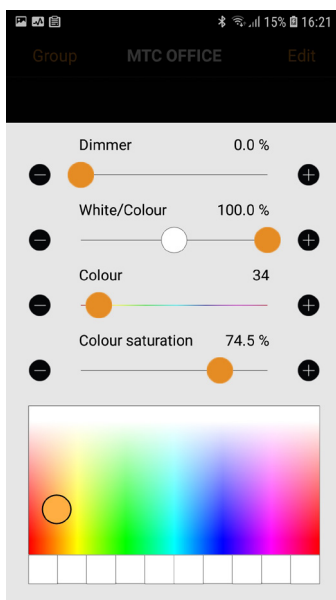Mode Tuneable white
color mixing

Profile: RGB+W

4 Channel LED RGB+W Dimmer
4,4 A Power each channel
DALI DT8
1 DALI short adress

Profile view in the App

RGB+W mode Color mixing

Casambi parameters:

Parameters	RGB+W enable	TW enable	1CH enable	2CH enable	4CH enable	keystroke	Value range
PWM Frequency	X	X	X	X	X	PWM frequency adjustable - default 976Hz	122Hz bis 976Hz
Fade time	X	X	X	X	X	The dimming time to move from a brightness value to another.	0...100 s
Dimming Curve	X	-	X	X	X	Selectable Dimming Curve: logarithmic 1000 logarithmic 100 linear	
Min. Level CH1...CH4	-	-	X	X	X	Min. Level - lowest brightness	0.1...100 %
Max. Level CH1...CH4	-	-	X	X	X	Max. Level - maximum brightness	0.1...100 %
Calibration CH1...CH4	X	X	X	X	X	For calibrating of each channels	0.1...100 %
TW Ratio cw	-	X	-	-	-	Ratio of cold white to warm white	1...1000
TW Ratio ww	-	X	-	-	-	Ratio of warm white to cold white	1...1000
TW Max. Level	-	X	-	-	-	Max. Level - maximum brightness in TW mode	1...1000
TW Ext. Brightness	-	X	-	-	-	Color value remains the same, brightness is changed Color desaturates at brightness 100%	1...1000
PushButton Style	X	X	X	X	X	maintronic - Special functions whitemode and ext. brightness are active. Casambi signals are passed through, behaving like a standard wireless pushbutton. Other Casambi devices can be controlled.	
PushButton Whitemode	X	-	-	-	-	Double-click leaves current color and turns white	
Whitemode Level	X	-	-	-	-	Start brightness for whitemode	
PushButton Ext. Brightness	X	-	-	-	-	Color value remains the same, brightness is changed Color desaturates at brightness 100%	1...1000