

Feature

- Output current set from App
- 100% non-flicker DC dimming
- Premium low brightness performance
- Current trim fine tuning
- Fading time adjustable
- Dimming curve adjustable
- Single color / CCT in one model
- Cool / Warm swappable



Introduction

This product is a 24V/48V DC powered 15W programmable constant current LED driver fits for A.A.G. Stucchi micro 9619 adaptor. Model TDS15CB-E is for single color and TDS15CB-B can be used for CCT or single color. It is Casambi ready and all features are programmable.

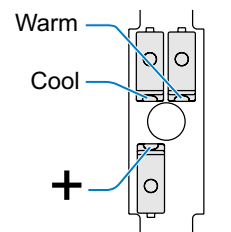
The output channel, rated current, fading time and trim level features are all adjustable from the Casambi app. These features allow customer to apply in various application with multiple options.

With full DC dimming scheme, it's 100% physically flicker free in whole dimming range. It also has very good low brightness performance, to build elegant low brightness environment and on/off dimming experience.

Setting output current and channel

The rated output current of TDS15CB is from 100mA to 500mA, it can be set from the Casambi app. To set the current and output mode, please make sure the driver is unpaired and powered on. On the Casambi app, click on the driver icon and select 'Change profile' option on the pop up manual (Fig.1). The rated current and working mode can be selected in the list (Fig.2).

The TDS15CB-B model can be configured as CCT or single color model, once be configured as single color model, user can connect lighting fixture to both warm white and cool white channel.



Output Wiring

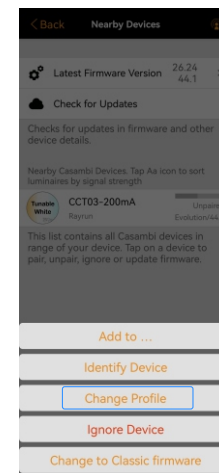


Fig.1

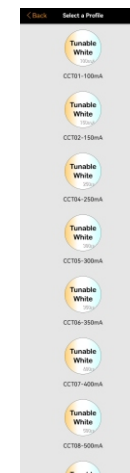


Fig.2

The max output voltage varies with the rated output current. The following table lists the max output voltage and power with different current setting.

Rated current	100mA	200mA	250mA	300mA	350mA	400mA	500mA
Vout-max @24V	22V	22V	22V	22V	22V	22V	22V
Max power @24V	2.2W	4.4W	5.5W	6.6W	7.7W	8.8W	11W
Vout-max @48V	46V	46V	46V	46V	42.9V	37.5V	30V
Max power @48V	4.6W	9.2W	11.5W	13.8W	15W	15W	15W

Automatic LED adaption

This driver verifies the load character on each power on. It will run a load adaption process once the change of load is detected. During the adaption process, the lighting fixture will dim up and down for about 10 seconds. After this process, the driver will match the LED feature and achieve 0-100% full range physical non-flickering DC dimming. Normally this adaption process happens on the power on moment once the lighting fixture is changed with the brightness over 30%.

For TDS15CB-B, the warm white and cool white must have same voltage and current feature for proper adaption and working. If two channels' voltage and current does not match, the CCT adaption will fail and the driver will only work in single color mode with limited function.

CAUTION: The factory default current is set to 200mA. Please do not set the LED current higher than luminaire's rated value, otherwise the luminaire can be damaged permanently.

Advanced feature - Current trimming

To fine tune the LED driving current, please pair the driver first and double click on the driver icon to open the setting page. On the setting page please click on the 'Current trim' item in the PARAMETERS section (Fig.3). The output current can be trimmed from 100% to 50% of the rated current at 5% step (Fig.4).

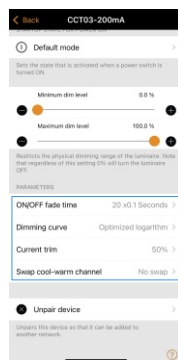


Fig.3



Fig.4

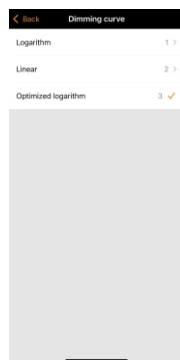


Fig.5

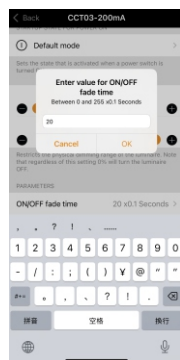


Fig.6

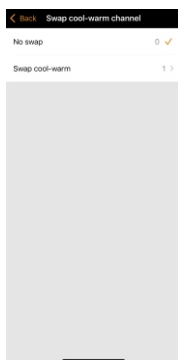


Fig.7

Advanced feature - Change dimming curve

The dimming curve defines the trend of light output strength versus brightness level (0-100%) showing on the app. Please pair the driver first and open the setting page on the app, from the PARAMETERS section, the Dimming curve can be changed from Logarithm, Linear and Optimized logarithm (Fig.5).

The Linear curve will result in even light output power versus the brightness level set on app, but for human eye sensing, the light output change is relatively small at high brightness level.

The Logarithm curve will result in strong brightness change at high brightness level and this will make the brightness adjustment more visible and logical for human eye.

The Optimized logarithm curve is between linear and logarithm, results in an balanced brightness adjustment effect.

Advanced feature - ON/OFF fade time adjust

The on/off fade time can be adjusted on the setting page. Please pair the driver first and open the setting page on the app, from the PARAMETERS section, the ON/OFF fade time can be adjusted from 0-25.5 seconds. User can adjust it by entering value between 0-255 with the step of 0.1 seconds (Fig.6).

Advanced feature - Swap cool-warm channel

For tunable white application, it's possible to switch cool / warm white channel from the app after luminaire installation in case of wrong wiring. User can swap the channel from the PARAMETERS section and change the setting between 'No swap' and 'Swap cool-warm' (Fig.7).

Specification

Model	TDS15CB-B	TDS15CB-E
Function	2-in-1 (CCT/Single Color)	Single Color
Rated max power	15W	
Input power	DC 24/48V	
Efficiency	>85% at full load	
Output voltage	0-22V @ 24V, 0-46V @ 48V	
Rated output current	100, 150, 200, 250, 300, 350, 400, 500	
Fade time	0-25.5 seconds adjustable	
Output current trim	100% to 50% with 5% step	
Dimming method	Full DC dimming	
Standby power consumption	<0.5W	
Working temperature	-20~50°C	
Case temperature	Max 90°C	
Dimension (WHL)	8 x 5 x 113.6mm	

TDS15CB(-B/-E)

特点

- 可通过App设置电流
- 全直流调光，物理无闪烁
- 极佳的低亮度特性
- 输出电流可微调
- 渐变时间可调
- 顺滑调光曲线
- 单色CCT二合一机型
- 冷暖白通道可切换



简介

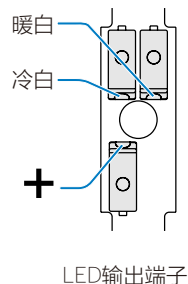
TDS15CB是一款24V/48V直流供电，适配于A.A.G. Stucchi Micro轨道的15W的可编程LED恒流驱动。它有两种机型可供选择，-B机型是单色和CCT二合一机型，-E机型仅支持单色应用。本机的各类配置功能都可以通过Casambi App进行设置。通过Casambi App可以调节本机的输出通道、额定电流、渐变时间、电流微调、通道线序等各项参数。这些特性为LED灯具的配置和应用方式提供了多种选项。

该产品采用先进的全范围DC恒流调光方案，在整个调光范围内可实现完全的物理无闪烁。它还具有非常好的低亮度性能，可以营造非常优雅的低亮度环境和开关灯时的渐变体验。

设置输出电流和通道

本机的额定输出电流范围是100mA至500mA，可以在Casambi app中进行设置。要设置电流和输出通道，请确保驱动处于通电状态且未配置工程。在Casambi App中，单击驱动图标并在弹出的菜单中选择“更改配置文件”选项（图1）。额定电流和输出通道可以在列表中选择（图2）。

TDS15CB-B机型可以在CCT或单色模式中进行切换，当作为单色机型使用时，输出端子的暖白和冷白通道均可以连接灯具。



LED输出端子



图1



图2

本机的最大输出电压随额定输出电流的设置而变化。下表列出了不同电流设置下的最大输出电压和功率。

额定电流	100mA	200mA	250mA	300mA	350mA	400mA	500mA
24V下最高输出电压	22V	22V	22V	22V	22V	22V	22V
24V下最大输出功率	2.2W	4.4W	5.5W	6.6W	7.7W	8.8W	11W
48V下最高输出电压	46V	46V	46V	46V	42.9V	37.5V	30V
48V下最大输出功率	4.6W	9.2W	11.5W	13.8W	15W	15W	15W

LED灯具的自动适配

本机在每次通电时都会检验LED灯具的特性，当检测到灯具参数变化时，本机会自动进行灯具适配以达到最佳的调光效果。在适配过程中，灯具会明暗闪烁约10秒。适配完成后，驱动电源将完全匹配灯具，并实现0-100%DC恒流调光。

对于TDS15CB-B机型，必须确保冷暖白LED通道的电压和电流特性相同，否则灯具自动适配将失败，驱动只能在单色模式下工作。

注意！ 本机默认电流为200mA，更改驱动电流时请不要设定高于灯具额

高级功能 - 电流微调

要微调输出电流，请先在app上添加本机，然后双击驱动图标打开设置页面。在设置页面上，请点击“参数”部分中的“Current trim”项（图3）。输出电流可以按 5%的步长，从额定电流的100%到50%进行微调（图4）。

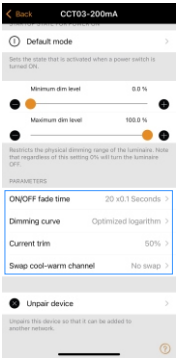


图3



图4

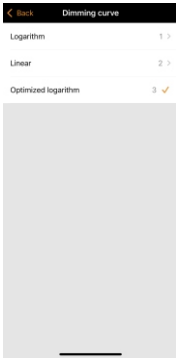


图5

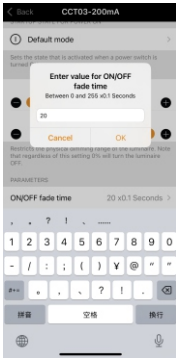


图6

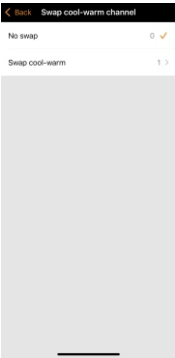


图7

高级功能 - 更改调光曲线

要更改调光曲线，请先在app上添加本机，然后双击驱动图标打开设置页面。在设置页面，请点击参数部分中的“Dimming curve”项（图3）。用户可以选择Logarithm、Linear或者Optimized logarithm调光曲线进行更改（图5）。

Linear为线性调光曲线，可以使灯光的输出功率与app设置的亮度水平相匹配，但在高亮度水平下，人眼能感知的亮度变化不明显。

Logarithm为对数调光曲线，可以在整个亮度范围内产生较明显的亮度变化，使人眼能够明显感知亮度的调整。

Optimized logarithm为优化对数调光曲线，它介于线性与对数之间，亮度调节效果相对均衡。

高级功能 - 开/关机渐变时间调整

要调节开/关机渐变时间，请先在app上添加本机，然后双击驱动图标打开设置页面。在设置页面，请点击参数部分中的“ON/OFF fade time”项（图3）。渐变时间的可调范围是0到25.5秒,用户可以按0.1秒的步长，从0到255的范围内输入数值进行调整（图6）。

高级功能 - 切换冷暖白通道

当本机驱动冷暖白灯具时，如果施工时冷暖白线序接错，可以通过设置项切换冷暖白通道。请点击“参数”部分中的“Swap cool-warm channel”项调整输出通道，“No swap”选项为不切换，“Swap cool-warm”选项即可切换冷暖白通道（图7）。

规格

型号	TDS15CB-B	TDS15CB-E
功能	2合1（冷暖白/单色）	单色
额定最大功率	15W	
输入电源	DC 24-48V	
效率	>85%	
输出电压	24V电源时: 0-22V, 48V电源时: 0-46V	
额定输出电流 (mA)	100, 150, 200, 250, 300, 350, 400, 500	
渐变时间	0-25.5秒可调	
输出电流微调	100%到50%，步长5%	
调光方式	全直流线性调光	
待机功耗	<0.5W	
工作环境温度	-20~50° C	
外壳最高允许温度	90° C	
尺寸	8 x 5 x 113.6mm	