

HD30/50 HDC30/50 Series

Feature

- Full features set from App
- 100% physical flicker free
- Current trim fine tuning
- Fading speed adjustable
- Very low standby power
- Single color / CCT compatible
- Wide range LED type adaption
- Premium low brightness performance



Introduction

There are 30/50W single color / CCT constant current LED driver models in the HD/HDC driver series. They are Casambi ready and all features are fully software configurable with the advanced features of Casambi platform.

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

The advanced full DC dimming scheme is implemented, and 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.

Models

Model	HDC50-CB	HDC30-CB	HD50-CB	HD30-CB
Function	CCT / Single	CCT / Single	Single Color	Single Color
Rated Max Power	50W	30W	50W	30W

HDC50/HD50 output spec. vs rated current:

Rated current	200mA	350mA	500mA	700mA	1050mA	1400mA
Max output Volt.	50V	50V	50V	50V	47.5V	35.5V
Max output power	10W	17.5W	25W	35W	50W	50W

HDC30/HD30 output spec. vs rated current:

Rated current	200mA	350mA	500mA	700mA	1050mA	1400mA
Max output Volt.	50V	50V	50V	43V	29V	22V
Max output power	10W	17.5W	25W	30W	30W	30W

Setting output current and channel

The working mode and output current is adjustable from Casambi App and the CCT model can also be set to single color mode. The rated current range is from 200mA to 1400mA with 6 options, and the factory default value is 350mA.

To set the current and working mode, please keep the driver unpaired and powered on. From 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). Once the CCT model be configured as single color mode, the warm white channel will have no function and the cool white channel will be the active output.

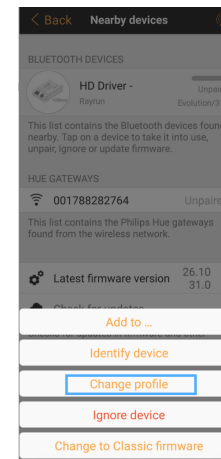


Fig.1



Fig.2

Automatic load adaption

The 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 maintain a 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 of higher than 30%.

For CCT application, the voltage and current feature for each LED channel must be same for proper adaption and working. If two channel's voltage and current dose not match, the adaption will fail and the driver will only work in single color mode with limited function.

CAUTION: The adaption process CAN NOT detect the value of LED rated current, so the rated current MUST be set correctly before connecting the driver to lighting fixture. Otherwise the lighting fixture can be permanently damaged.

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).

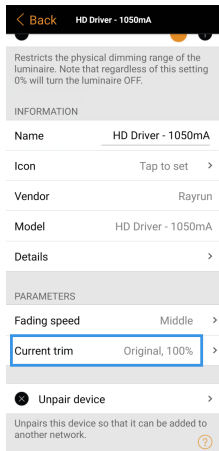


Fig.3

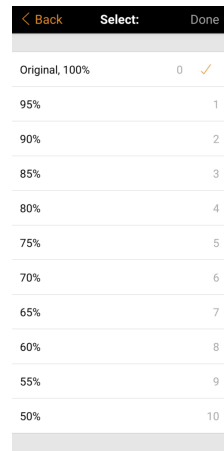


Fig.4

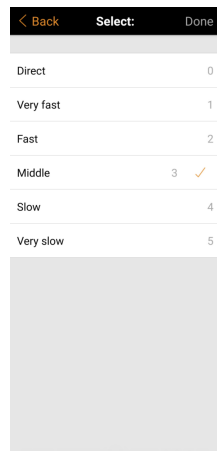


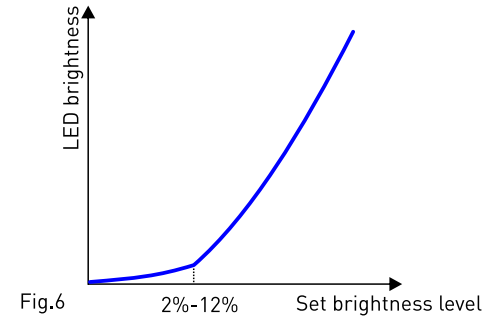
Fig.5

Advanced feature - Fading speed adjust

The on/off fading speed can be adjusted on the setting page. 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 'Fading speed' item in the PARAMETERS section (Fig.3). The fading speed can be adjusted in 6 levels from direct to very slow(Fig.5).

Advanced feature - Working at low brightness

To extend the application at low brightness, the output brightness is designed to rather lower at low brightness levels. The output brightness will be nonlinear to the relevant brightness level below a certain point. This point will be around 2% to 12%, related to rated current and trim value (Fig.6).



Specification

Model	HDC50-CB	HDC30-CB	HD50-CB	HD30-CB
Function	CCT / Single	CCT / Single	Single Color	Single Color
Rated max power	50W	30W	50W	30W
Input power	200-240V ac 50/60Hz			
Max input current	0.28A	0.17A	0.28A	0.17A
Max power factor	0.94			
Typical Efficiency	87.5%			
Output voltage	0-50V DC			
Rated output current (mA)	200, 350, 500, 700, 1050, 1400			
Output current trim	100% to 50% with 5% step			
Dimming method	Full range linear DC			
Standby power consumption	<0.5W			
Working temperature	-20~50°C			
Case temperature	Max 90°C			
Dimension	130x67x30mm			
Gross weight	170 grams			