ENTTEC

CCC4 – Datasheet

High precision, auto-addressable constant current RGBW LED dimmer supporting PLINK or DMX/RDM.

The ENTTEC CCC4 is a 4-channel, auto-addressable constant current (CC) LED dimmer, delivering up to 1A per channel for compatible fixtures at 12-48V. Its constant current output can be factory-set to your specifications.

The CCC4's regulated current output reduces burnout and thermal runaway, ensuring consistent brightness, particularly for high-power LEDs.

It integrates seamlessly with ENTTEC's PIXELATOR series controllers via the long-range, auto-addressing PLINK protocol. This allows for easy daisy-chaining with Cat6 cable up to 300m, eliminating manual addressing.

For DMX integration, RDM can set the start address (default channel 001). The CCC4 can also convert DMX to PLINK, streamlining addressing for consecutive units.

CCC4 features a user-serviceable blade fuse and two DIP switches for mode selection between RGB/RGBW and 8-bit/16-bit modes.[1]

Features

- **Support constant current output with dimming capacity of up to 1A per channel.**
- **12-48V DC power input by default, OEM available.[2]**
- **1KHz PWM signal refresh rate ensures flicker-free performance.**
- **Enables daisy-chaining using ENTTEC's auto-addressing PLINK protocol supporting data reliability over long distance.**
- **Support daisy chaining using DMX/RDM up to 300m.**
- **RDM identification and addressing functionality.**
- **On board conversion from DMX to PLINK.**
- **Status LED and DIP switch toggle between RGB/RGBW and 8-bit/16-bit operating modes.**
- **User-serviceable blade fuse to protect against short circuits.**
- **Passive cooling with internal overheating protection.**
- **Compact design with surface mount and TS-35 Din Rail mount.**

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[1] CCC4 16-bit mode matches DALI and CVC4 dimming curve.
[2] Consult ENTTEC team for OEM requests within voltage ranges of 5V-48V and up to 1A per channel.
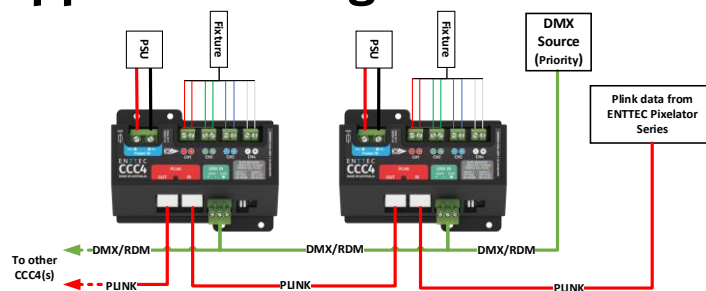
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CCC4 (73927)
Visit the ENTTEC website for the latest version.

Specification

Connectors	1* Power Input (Screw Terminal)
	1* DMX Input (Screw Terminal)
	1* PLINK In (RJ45)
	1* PLINK Out (RJ45)
	4* CC Output (Screw Terminal)
IP Rating	IP20
Data Input Protocols	DMX512a
	PLINK
Data Output Protocol	PLINK
RDM Functionality	Start address configuration
	Temperature monitoring
	Firmware updatable
Start address configuration options	PLINK using PIXELATOR Series Controller
	DMX/RDM (Default channel: 1)
Dimming Resolution	8/16-Bit
Fixture Modes / Channel Footprint/LED Indicator	8-Bit RGB	3ch	
	8-Bit RGBW	4ch	
	16-Bit RGB	6ch	
	16-Bit RGBW	8ch	
Data Input Capability (per chain)	DMX	Up to 1 Universe
	PLINK	Up to 8 Universes
Max. CCC4 Chain Length	DMX	300m per chain
	PLINK	300m between each CCC4
Input Voltage	12-48V DC (default)
Max. Current Rating	Max. 4.5A (in 4ch mode)
Max. Output Power	48 W (@12V)
	96 W (@24V)
	192 W (@48V)
Device Max. Power Draw	1.5W
Max. Current per Channel	1A
Reverse Polarity Protection	Yes (from power port only)
Over Temperature Protection	Yes (Output intensity will dim to black over 3 seconds, dim back to the received value once temperature has dropped)
Pulse Width Modulation (PWM) Frequency	1KHz - Fixed
User Serviceable Fuse:	ATO 5A blade fuse
Cooling Method	Convection
Operating Temperature	0°C to +50°C -4°F to 122°F
Environmental Operating Humidity	5- 95% (non-condensing)
Mounting Options	Surface & TS35 DIN Rail mount
Body Material	ABS plastic
Unit dimensions	88*117.5*31.5mm
Unit Weight	0.13kg / 0.28lbs
Shipping dimensions	140*140*40 mm
Shipping weight	0.19kg / 0.42lbs
Warranty	3 year return to base manufacturer warranty

Certification

Box Contents

- CCC4
- TS35 DIN clip
- 2 * Din clip mounting screws

Application diagram

User Serviceable Fuse

The CCC4 contains a user serviceable 5A blade fuse to protect against overdraw and short circuiting.

Installation

- This product should be installed in accordance with relevant national and local electrical and construction codes by a competent individual who is familiar with the product's operation and associated hazards.

- Failure to adhere to the product's installation guide may lead to severe injury or property damage.

- Please refer to the complete installation guide for this product before undertaking any handling, planning, or specification tasks for your project.

- If you have any doubts, please consult with the local ENTTEC team for guidance.

- **Warning: Avoid undermatching LED Vf (e.g. 24V load on 48V input) — excess voltage is dissipated as heat, risking thermal stress and damage to the CCC4 and fixtures.**

Ordering Information

For further support and to browse ENTTEC's range of products visit the ENTTEC website.

Item	SKU
CCC4	73927

enttec.com

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Due to constant innovation, information within this document is subject to change.