

CHRISTOPHER BOOTS

DIMMING GUIDE

JANUARY 2024



CONTENTS

<u>1</u>	INTRODUCTION	_____	P	2
<u>2</u>	DIMMING OPTIONS	_____	P	3-5
<u>3</u>	LUMINAIRE AND DIMMING INDEX	_____	P	6

1 INTRODUCTION

Christopher Boots offers 3 dimming protocol options as part of our Tech Pack:

- 0-10V
- DALI
- Radio Frequency (RF)

These options are available for selection at the point of sale.

All Christopher Boots luminaires are dimmable as standard and will work with each of the protocol options. Each dimming protocol requires specific dimming components to operate correctly. The choice of dimming protocol is dependent on the specific requirements and infrastructure of the installation.

The aim of this guide is to provide information on the 3 dimming options to aid in selecting the most relevant dimming protocol for your Christopher Boots luminaire.

Please note that Christopher Boots do not supply any dimming components (most commonly a dimming pot) for 110 - 240v luminaires. All dimming components for this voltage range are to be sourced by the end user.

2 DIMMING OPTIONS

0-10V

This 4 Wire protocol uses a variable, analog, dimming control signal ranging from 0V (lowest brightness) to 10V (full brightness) to adjust the overall brightness of the luminaire.

This protocol is widely used as a standalone system in many installation scenarios.

TECH PACK

Dimming Module	<ul style="list-style-type: none"> • eldoLED LINEARdrive 211/D - 0-10V Module
Supplementary Components	<ul style="list-style-type: none"> • Meanwell LED driver • 0-10v Dimming Pot/ Controller (not supplied)

DETAILS

Wiring	<ul style="list-style-type: none"> • Mains voltage supply to Meanwell Driver • 2 x control wires for 0-10V dimming control
Compatibility	<ul style="list-style-type: none"> • Extra Low Voltage luminaires

SPEC SHEET

- [eldoLED LINEARdrive 211/D - 0-10V Module](#)

WIRING DIAGRAMS

- [12v Luminaires -0-10v](#)
- [24v Luminaires - 0-10v](#)

DALI

DALI (Digital Addressable Lighting Interface) is another 4 wire system that works in a similar way to 0-10V. The state of a low voltage dimming signal affects the brightness of the luminaire, the difference is the DALI signal is digital, not analog like the 0-10v protocol.

This digital signal enables 2 way communication between the DALI device (dimming module) and its controller (dimming pot, smart device, automation system etc...), which both controls and monitors the state of the luminaire.

This protocol is commonly used with home automation or smart systems.

TECH PACK

Dimming Module	<ul style="list-style-type: none"> • eldoLED LINEARdrive 210/D - DALI Module
Supplementary Components	<ul style="list-style-type: none"> • Meanwell LED driver • Dimming pot/controller (not supplied)

DETAILS

Wiring	<ul style="list-style-type: none"> • Mains voltage supply to Meanwell Driver • 2 x control wires for DALI dimming control
Compatibility	<ul style="list-style-type: none"> • Extra Low Voltage luminaires

SPEC SHEET

- [eldoLED LINEARdrive 210/D - DALI Module](#)

WIRING DIAGRAMS

- [12v Luminaires - DALI](#)
- [24v Luminaires - DALI](#)

RADIO FREQUENCY (RF)

Radio Frequency dimming works by varying a dimming signal via a remote control operating at radio frequency. In this case the dimming signal is 0-10v, so we can achieve the smoothness of 0-10v dimming without the extra control wiring.

This configuration is a 2 wire system commonly used in instances where it is not possible to install the necessary dimming control wires.

TECH PACK

Dimming Module	<ul style="list-style-type: none"> • Lutron PowPak • eldoLED LINEARdrive 211/D - 0-10V Module
Supplementary Components	<ul style="list-style-type: none"> • Meanwell LED driver • Pico Remote

DETAILS

Wiring Requirements	<ul style="list-style-type: none"> • Mains voltage supply to Lutron PowPak
Compatibility	<ul style="list-style-type: none"> • Extra Low Voltage luminaires

SPEC SHEETS

- [PowPak Dimming Module with 0-10 V- Control](#)

WIRING DIAGRAMS

- [12v Luminaires - RF - AUS/HK](#)
- [12v Luminaires - RF - CAN/MEX/USA](#)
- [12v Luminaires - RF - CHN/SIN](#)
- [12v Luminaires - RF - EUR/UAE/UK](#)
- [12v Luminaires - RF - JAP](#)

- [24v Luminaires - RF - AUS/HK](#)
- [24v Luminaires - RF - CAN/MEX/USA](#)
- [24v Luminaires - RF - CHN/SIN](#)
- [24v Luminaires - RF - EUR/UAE/UK](#)
- [24v Luminaires - RF - JAP](#)

3 LUMINAIRE + DIMMING OPTION INDEX

	FIXTURE FAMILY	DIMMING OPTIONS
12 VOLT DC	Nepenthes Series	<ul style="list-style-type: none"> • 0-10v • DALI • Radio Frequency
24 VOLT DC	Abacus Archimedes - Floor Lamp Asterix Series Bucky Vitrine Diamond Ring Goliath Meteor Oracle Series ORP Series Ouranos Series Petra Series Portal - Pendant, Sconce & Table Lamp Pythagoras Series - Sconce Prometheus Series - Pendant, Sconce & Table Lamp Stalactite	<ul style="list-style-type: none"> • 0-10v • DALI • Radio Frequency
110 - 240 VOLT AC	BCAA BCAA-X Bucky Block Phasmida Simple Series - Pendant & Sconce Sugar Bomb - Pendant & Sconce	<ul style="list-style-type: none"> • Phase Cut (not supplied)