

PRODUCT USER GUIDE

IONIC CONSTANT VOLTAGE DIMMING DRIVER



Rev: C2



MODEL COVERED: UFO IONDR-CV-DC-12-25-D

PLEASE READ THIS USER GUIDE BEFORE INSTALLING, OPERATING
OR PERFORMING MAINTENANCE ON THE DRIVER UNIT



INTRODUCTION

Thank you for purchasing this low voltage UFO Constant Voltage Driver.

To ensure that the driver is set up optimally and gives a long service life, please read this user guide before installing, operating or performing any maintenance on the unit.

Please keep this user guide for future reference. This User Guide is laid out in three sections

- **INSTALLATION** – details how to connect your driver.
- **OPERATION** – details how to set up and operate your driver.
- **MAINTENANCE** – Maintenance log, Troubleshooting Guide, Technical Specification

MODELS COVERED BY THIS USER GUIDE: UFO IONDR-CV-DC-12-25-D (DIMMING)

WARNING

This driver is designed to work with Ionic constant voltage LED fittings operating on 12V output only. Connecting this driver to any other LED devices may result in catastrophic failure of the LED device and/or the Ionic Dimming Driver. Always check the total load of the Ionic LED fittings as detailed in Table 1 below, to ensure the total load of the Ionic Dimming Driver does not exceed 25W prior to powering up the system.

WARNING

This driver is designed to work on a DC input voltage of 12-15V ONLY. The DC PSU supplying this driver must have an output capability sufficient to power up the driver and maintain the output load.

This Ionic Dimming Driver is suitable for indoor/dry areas and must not be installed in damp or wet conditions.

IMPORTANT

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT, ITS COMPONENT PARTS AND THE HAZARDS INVOLVED.

ELECTRICAL WIRING AND CONNECTION MUST BE CARRIED OUT BY A SUITABLY QUALIFIED PERSON OBSERVING ALL LOCAL AND STATUTORY ELECTRICAL AND SAFETY REGULATIONS.

Ionic Fitting	Wattage at 12V DC	Max Fittings
SX	1.6W	13
MX	2.8W	7
LX	3.4W	5

TABLE 1

INSTALLATION

The Ionic Dimming Driver has all the control functionality and indication fitted as standard. The following control and indication are available.

1. Global dimming using manual dimming control on driver body (model UFO IONDR-CV-DC-12-25-D)
2. Red power indication LED on driver body
3. Green output voltage/global dimming status indication LED on driver body

CONNECTION FOR MANUAL OPERATION

There are three connections required for an Ionic system– The Ionic LED fittings, the fitting extrusion 12V power in cable and the power supply connections.

- The magnetic Ionic LED fittings must be fitted into the extrusion first. The fitting's magnetic attraction to the track allows them to be freely placed, moved, slid and removed without any interference from wires or cables. The fittings are not polarity conscious which means they can be placed on the track at any point pointing in any direction.
- The 12V power in cable should then be connected before the mains supply. Remove the driver enclosure lid (4 X screws) and connect the power in cable to the screw terminals as detailed in Figure B, observing correct polarity (Red/Yellow +ve, Black/Green -ve). Replace the lid.
- The Ionic Dimming Driver is powered from an external 12V PSU with output jack plug. Connect the jack plug into the socket on the driver, connect the PSU to the mains supply and switch on. The Ionic system is now ready for use. If the Ionic fittings fail to illuminate consult the Troubleshooting Section in this manual.

An Overall schematic of an Ionic system is shown below in Figure A. This system configuration provides for both local and global dimming.

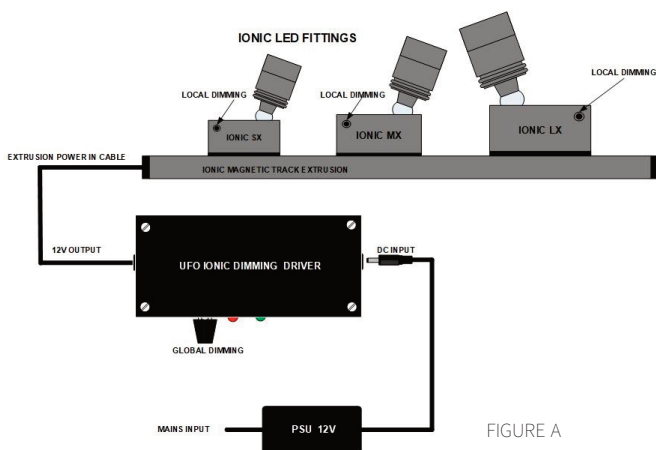


FIGURE A

WARNING

Connecting too many Ionic LED fittings to the Ionic Dimming Driver causing excessive load or using an underrated 12V PSU will result in the system shutting down and may cause damage to the driver circuit.

Always check the maximum output power of the fittings and ensure that based on a maximum 25W load a suitable number of fittings are connected (see Table 1), and a correctly rated PSU for the driver load is selected, prior to powering up the system.

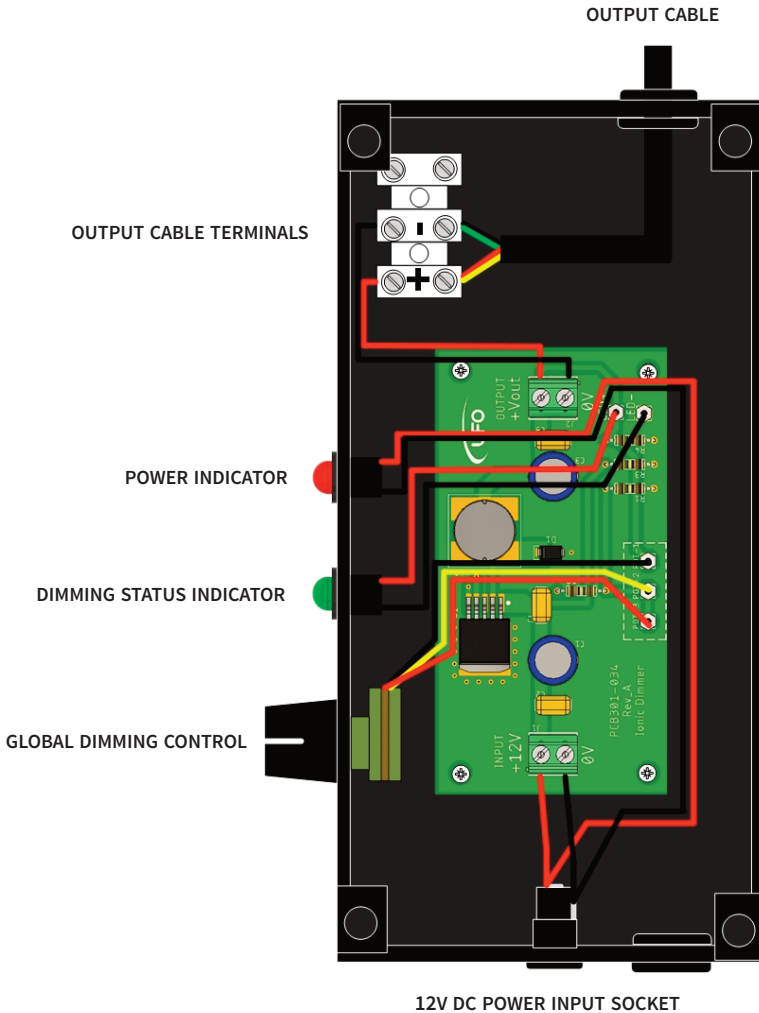


FIGURE B

OPERATION

Once connected and powered up the Ionic system can be dimmed as follows:

1. Local dimming at each Ionic fitting. Using a suitably sized screwdriver (flat blade 2mm screwdriver recommended) set the light output level of each individual fitting using the local dimming control as detailed in Figure C, maximum light output fully clockwise, minimum light output fully counterclockwise.
2. Global dimming at the driver. Using the global dimming control on the body of the driver (see Figure B), all LED fittings can be dimmed simultaneously. The green dimming status LED will also dim to indicate global dimming is active.

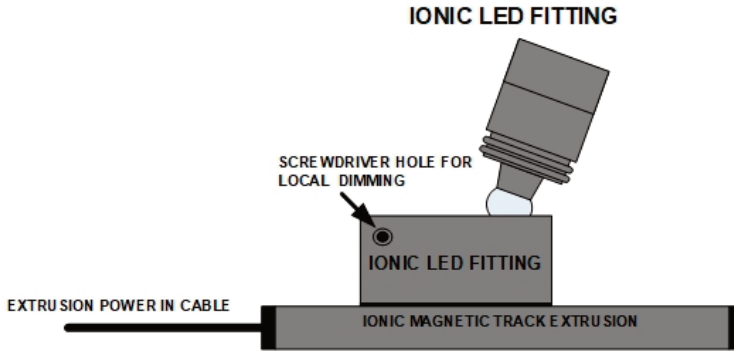


FIGURE C

MAINTENANCE LOG

Date	Maintenance Undertaken

NOTE

A record of all maintenance MUST be kept in the table above, indicating what maintenance was undertaken and when. This MUST be dated for warranty purposes.

Problem	Probable Causes	Remedy
System is dead- power LED on PSU not lit, red power LED on driver not lit– no light output from LED fittings	Mains supply off	Check supply & reinstate
	Loose mains plugs	Check plugs
	PSU failed - check output with DVM	Check all connections Replace PSU
No light output from LED fittings -power LED on PSU lit, red power LED on driver lit – green LED lit	Loose wire or poor connection on power in cable connection in driver	Check all connections
	Ionic fittings local dimming at minimum	Turn local dimmers up
	Dimming driver faulty	Contact UFO for replacement
No light output from LED fittings -power LED on PSU lit, red power LED on driver lit – green LED not lit	Global dimmer on driver body turned to minimum	Turn global dimmer to maximum

TECHNICAL SPECIFICATIONS

Product Name	UFO Ionic Dimming driver
UFO Product Code	DR-CV-DC-12-25-D– driver with single integral dimming potentiometer
Description	25W fully functional dimmable constant voltage driver
Input Power	12-15V DC
Rated Power	25W maximum output
Output Voltage	12V DC
Connection	Power - 2.1mm input jack plug / Output - screw terminals
Protection	SCP / OCP / OTP
Functionality	Global dimming Local dimming support for Ionic LED fittings
Ambient Temp.	Min. -20°C to Max. +45°C
IP Rating	IP20 for indoor use only
Dimensions	196mm (7.7") x 89.5mm (3.5") x 33.5mm (1.3")



DESIGN



SPECIFY



BUILD



INSTALL

United Kingdom • United States • Germany • Europe • UAE