ICELED™

ELECTRO STYLING

FLEXIDRIVER

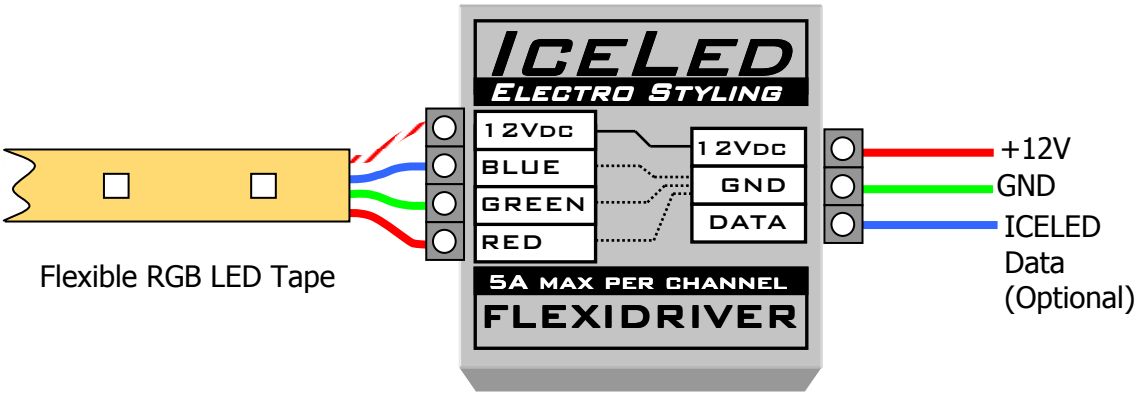
INSTALLATION GUIDE

Features

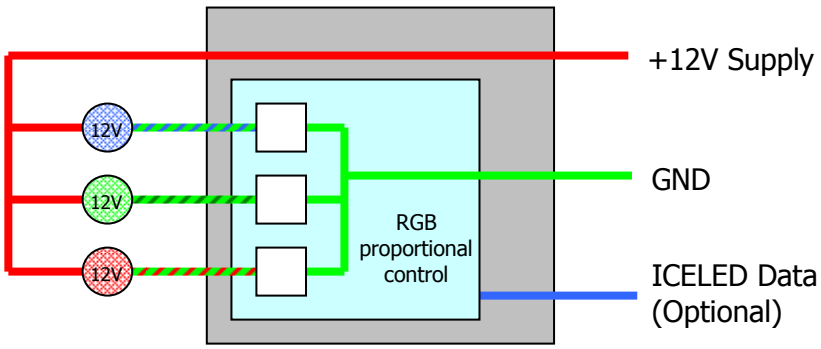
ICELED FLEXIDRIVER provides three channels of proportional power delivery to any 12V DC lighting load up to a total maximum of 180 Watts. Primarily this is to allow ICELED controllers to drive RGB LED Light strips with built-in current control for 12V operation. Typically one FLEXIDRIVER will drive up to 25metres of flexible RGB Tape. Stand-alone operation is also possible for simple colour-changing applications.

Wiring

All connections are made via screw-terminals on the outside of the casing.



Any lamp or LED array with a common positive connection may be connected to driver's outputs (individually switched to ground) as shown in the diagram below:



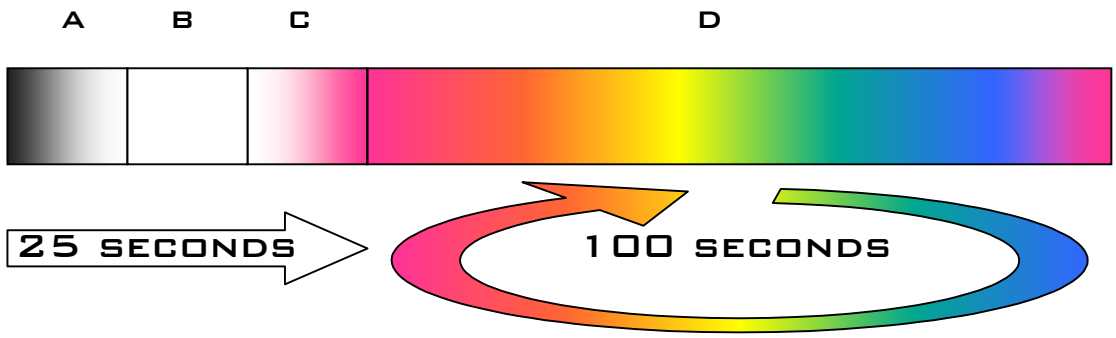
If discrete LED's are to be connected to the outputs they must have suitable current limiting resistors for operation at 12 Volts.

The outputs may be accidentally shorted to ground, but not directly to the positive supply. Because of this, to prevent accidental damage to the driver, a fuse having a current rating just above the maximum expected load should be placed in series with the supply wire.

Operation

If ICELED data is present when power is applied to FLEXIDRIVER it will produce the colours commanded by the controller. If no data is present when power is applied, FLEXIDRIVER will start running an internal programme designed to provide as much functionality as possible by using interruption of the supply voltage as a control system.

The built-in programme runs through the four phases labelled A to D in the following diagrams:



Phase	Description
A	Rapid fade-up to peak intensity white after connection to the power source
B	Hold on peak white
C	Gentle transition from peak white to the colour change phase
D	Colour phasing - cycles seamlessly through the visible spectrum until power disconnected

Freezing the colour At any time, the programme may be halted by briefly switching the power supply off then back on (within less than a second). This simple action allows the light source to be frozen on any particular colour (or white) just by toggling the switch controlling power to the device. A single flash from the LED's provides acknowledgment that this command has been accepted.

Un-freezing The light source will remain frozen on the chosen colour until the next time it is switched off. Once again, if the supply is interrupted for less than a second, the programme will resume from where it left off (acknowledged by two flashes) If switched off for any longer, the programme will resume from the start the next time it is powered up.

Specifications

Nominal supply voltage:	12 Volts DC
Maximum switched current:	5 Amps (per channel)
Maximum "through" current:	15 Amps
Data accepted:	Global ICELED, UFO tube segment 0, pixel 0
Dimensions:	W 50mm H 15mm D 65mm

Resources

To see the full ICELED product range visit http://www.iceled.co.uk the official ICELED website.

For more suggestions and advice visit http://iceled.co.uk/area51/ the official ICELED user forums.

ICELED FLEXIDRIVER Conforms to:
EMC Directive (2004/108/EEC)