

ICELED®

DIGITAL LIGHTING

FLOOD

INSTALLATION AND OPERATING GUIDE



Features

ICELED Flood is a rugged and powerful digital light source capable of emitting a wide beam in any of over two million different colours. Full colour mixing is obtained using second-generation integrated RGB LEDs which eliminate colour shadowing and deliver superior colour rendering. ICELED Flood has been designed to complement and integrate with other devices in the ICELED range of networked lighting products and can be connected directly to controllers such as UFO, ZEN and ZAP. It can also function in a useful stand-alone mode allowing it to be used with nothing more than a 12 to 24 Volt DC supply. This makes ICELED Flood direct replacement for incandescent lighting in many applications – with the added advantage of being able to produce almost any colour in the visible spectrum. ICELED Flood has been waterproofed to a level that permits outdoor as well as indoor use.

Feature summary

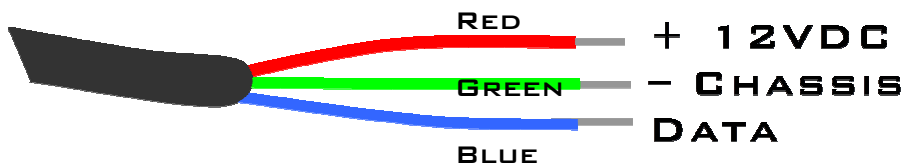
- Wide beam
- Two million colours
- No colour shadowing
- High-power light output
- Compatible with all ICELED controllers
- Suitable for indoor and outdoor applications

Installation

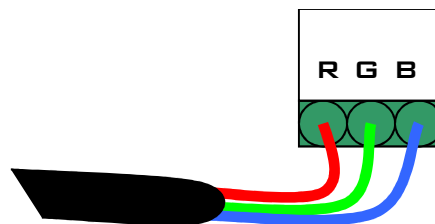
ICELED Flood should be mounted onto a suitable supporting surface using the adjustable bracket attached to the sides of the unit. The bolt heads on either side of the case can then be tightened using a 10mm spanner to lock the angle of the light source.

Wiring to ICELED controller

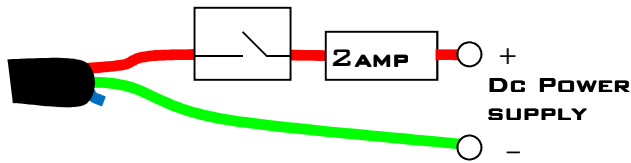
A standard three-core cable connects the device to a power supply and ICELED data source.



If the light source is to be connected to an ICELED controller supplying both power and data, then the colour coded wires simply connect to the corresponding terminals labelled R, G and B on the chosen output.



Wiring for stand-alone use



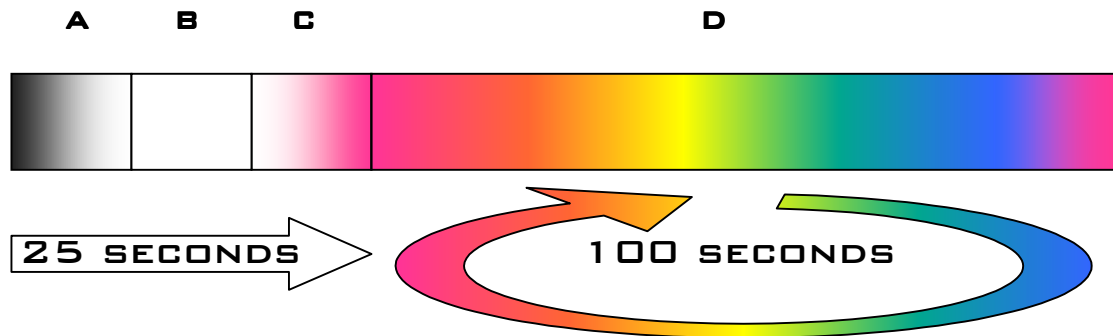
If the light source is to be used without an ICELED controller the red wire must be connected via a switch to a **fused power supply** as shown to the left. The green wire should connect to the negative return for the supply.

In stand-alone mode the unused blue wire must be left unconnected. It is advisable to tape over the end of the wire or cut it back flush with the outer cable sheath.

Stand-alone operation

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

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



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: The stand-alone programme may be halted at any time by briefly switching the power supply **off** and then back **on** again (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 provides acknowledgment that the freeze 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 Flood is powered up.

Specifications

Nominal supply voltage:	12 to 24 Volts DC ⁽¹⁾
Maximum current drain:	1 Amp
Typical current drain:	0.5 Amps
Max. power consumption:	12 Watts
Beam angle:	110 degrees
Data accepted:	Global ICELED or UFO pixel ⁽²⁾
Environment:	IP64
Dimensions:	W 110mm, D 75mm, H 82mm

⁽¹⁾ On-board current regulation guarantees that the light source operates consistently at peak intensity over a wide supply range of between 12 and 24 Volts. Brief surges above this range can also be tolerated. Reverse polarity protection is built in.

⁽²⁾ When used with the UFO controller the Flood data wire can be connected either to the UFO controller I terminal to show the Global ICELED colour complementing the pixel patterns or to any pixel channel directly. In this case, the pixel shown by Flood will be the one appearing at the end of the tube nearest the cable. Flood can also be programmed to display any other pixel. For details see the ICELED website.

Additional resources

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

For interactive help and advice visit <http://iceled.co.uk/area51/> - the official ICELED user forums.

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