



Glasson Electronics Ltd.
Harbour House,
East Quay,
Glasson Dock,
Lancaster.
LA2 0BU
Tel 01524 752208
info@glassonelectronics.co.uk

DFS3000RGB SYSTEM DESCRIPTION.



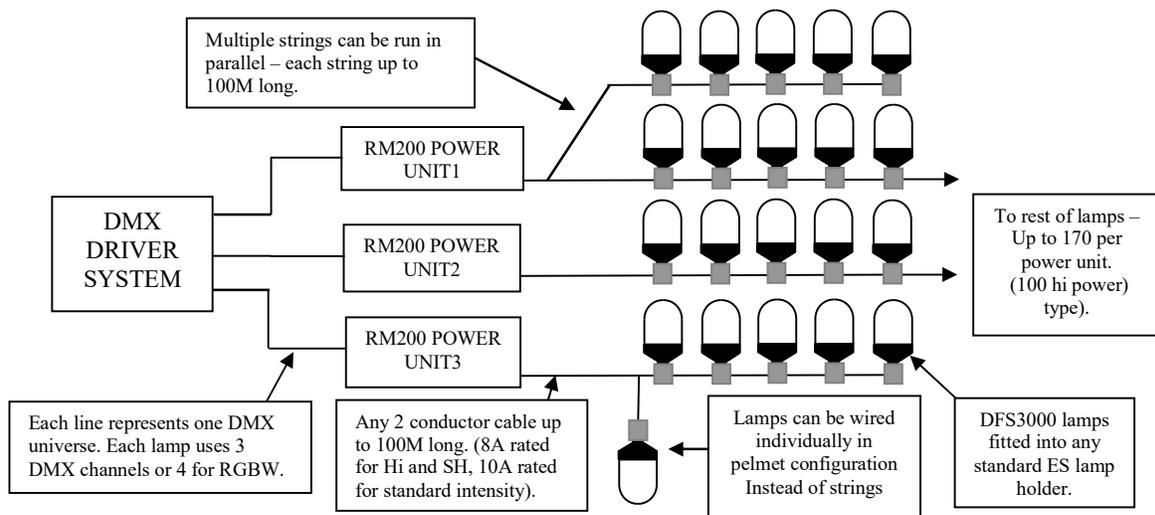
Manufactured in the UK, DFS3000 offers the capacity to create stunning lighting effects with a very simple installation strategy.

Externally DFS3000 LED units are identical to standard ES fitting bulbs. Internally they incorporate special microprocessor controlled circuitry to decode our advanced combined power and data technology and control built in high intensity RGB or RGBW LEDs. Up to 170 LEDs can be connected on a single two conductor cable. Each LED unit is independently controllable despite being on the same cable. The system is not polarity sensitive so LEDs can connect either way around greatly simplifying installation.

The LEDs are driven with true linear variable current, not PWM, making the system ideal for use in studios and situations where cameras are present. There are three intensities each has super smooth dimming. The design has recently been expanded to include an attractive globe diffuser option (pictures below).

The ability to control large numbers of LED units with an incredibly simple wiring strategy realises excellent flexibility and reduced installation costs.

TYPICAL INSTALLATION EXAMPLE



TECHNICAL OVERVIEW

The system comprises the following components-

RM200 POWER SUPPLY



FEATURES

- Control of up to 170 DFS3000 Std LED units (100 Hi or 80SH units).
- Protected from lamp wiring faults.
- DMX data input with standard RGB or RGBW 3 or 4 channels per LED unit.
- Optional DMX control byte to place power unit into low power standby.
- 110 / 230VAC input.
- Power consumption 250W max.
- Comprehensive self diagnostic system.
- Output voltage 24V for Std, 32V for hi and 48V SH.
- 100M max festoon cable length.
- Compact unit measuring just 246 x 200 x 75mm.
- Weight 2.4Kg
- Max operating Temperature 40C.

EP200 POWER UNIT

For outside applications we also offer the EP variant power unit. This is based on an IP66 enclosure and has waterproof cable glands for input and output cables. The unit can be supplied with a white or clear lid. The specification is the same as the RM200 unit except the dimensions which are 26 x 16 x 13cm.



RM500 POWER UNIT

With the same features as RM200 the RM500 offers more output power and can control a full DMX universe of any of the LED unit intensity options.

DFS3000 LED UNIT



Robust and versatile, DFS3000 LED units create stunning lighting effects with a very simple installation strategy.

They are available in three intensities - Std, Hi and SH and RGB or RGBW. For RGBW versions the white LED can be any desired colour temperature. DFS3000 LED units have a range of diffusers including a new round globe detailed in the picture above. Other options are very robust dome and flat caps which can be white diffused, smoked or clear.

DFS3000 LED units interpret the combined power and data signal and control internal 4, 6 or 11 RGB or RGBW LEDs. Using true linear current control to provide flicker free super smooth fading.



DFS 3000 LAMP UNIT FEATURES

- IP66 rating for long term outdoor environmental protection.
- Polarity insensitive – connects to the cable either way around.
- Tri colour LEDS for superior colour mixing.
- Four, six or 11 RGB or RGBW LEDS per unit.
- Linear current control (not PWM) for excellent flicker free colours when viewed with a video camera.
- Each lamp has a unique address which is user programmed using the hand programmer described below. This can be reprogrammed thousands of times.
- Internal fuse resistor to prevent a single LED unit failure compromising the whole system.
- Standard ES E27 lamp fitting.

- Strong shatterproof moulding.
- Dimensions
 - Dome cap – Diameter 50mm, Length 100mm.
 - Globe Cap - Diameter 70mm, Length 108mm
 - Flat Cap - Diameter 50mm, Length 60mm
- Weight 50g.
- Drive voltage – Std 16-28V, Hi 24-36V, SH 40-48V.
- Current 55mA.
- Wattage std = 1.3W Hi = 1.76W Super High = 2.0W



INTENSITY

The figures below represent typical performance figures for DFS3000RGB LED unit standard, Hi and Super Hi versions. The Lumen figure is approximate.

	Red	Green	Blue
Standard (MCD)	1960	3360	1120
Hi (MCD)	2940	5040	1680
Super Hi (MCD)*	5390	9240	3080
Standard (Lumen)	5.8	9.7	2.97
Hi (Lumen)	8.3	14.6	4.4
Super Hi (Lumen)*	15.95	26.6	8.1

* Super high employs current sharing so full white will NOT be the sum of all colours light output.

HAND PROGRAMMER

The hand programmer plugs into the DFS3000 lamp unit through the normal lamp contacts. Once connected, the hand programmer can program or read the lamp address. The hand programmer can also initiate a full test of the lamp unit electronics including the LEDs. A lamp address can be reprogrammed thousands of times.

- Size 23 x 10 x 4.5cm.
- Weight 0.5Kg.



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