



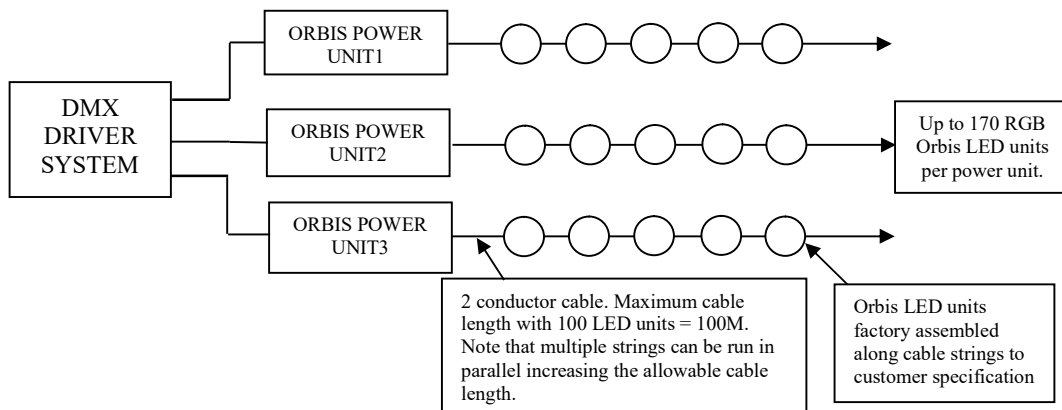
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ORBIS.



Evolutionary from the renowned DFS3000RGB system, Orbis forms strings of full individually colour controllable LED globes with a thin support cable passing through the centre. The system has recently been improved to offer a new Super Hi intensity version which is available in single colour, RGB or RGBW. Each globe provides near full uniform 360 degree illumination. The system is ideal for vertical or shaped strings or for the creation of 3 dimensional dynamic optical forms. The system employs our true constant current rate driven linear current control system (not PWM) for super smooth dimming.

TYPICAL INSTALLATION EXAMPLE



TECHNICAL OVERVIEW

The system comprises the following components-

RM200 POWER SUPPLY



FEATURES

- Control of up to 100 Orbis RGB LED units*.
- Protected from lamp wiring faults.
- Lamp data updated every 0.03 seconds.
- DMX data input with standard RGB three channels per LED unit interface.
- Optional DMX control byte to place power unit into low power standby.
- DMX Record facility for standalone operate. Play time 25 minutes.
- 110 / 230VAC universal mains input.
- Power consumption 250W max.
- Comprehensive self diagnostic system with fault indication.
- Compact unit measuring just 285 x 175 x 65mm.
- Weight 1.8Kg

*Number of LED unit can be increased using the RM500 power unit. This will drive 200 off single colour, 170 off RGB or 120 off RGBW LED units.

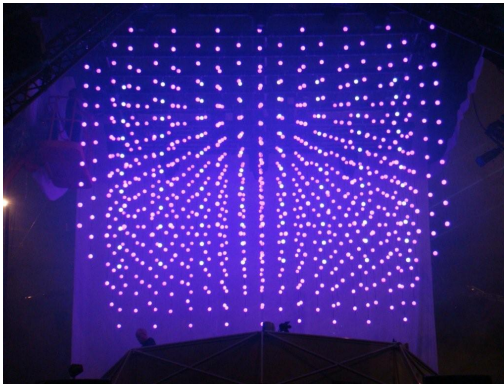
ORBIS LED UNIT

Orbis LED units comprise a circuit assembly suspended within two plastic moulded semi circles. The mouldings are bonded together using a special process producing a globe with a cable passing through the centre. Versions with cable glands for waterproofing or connectors are available. The PCB assembly has single colour, RGB or RGBW LEDs

(RGBW SH Version only). The LEDs are located to achieve near uniform illumination of the entire globe and excellent colour mixing. The circuit assembly also incorporates an infra red receiver for communication with the hand programmer described below. When the number of globes in a given string is low the cable can be very thin (1mm) giving the impression of light sources floating in space.



The semi circles are bonded together at Glasson Electronics and finished to reduce



visibility of the seam. The whole assembly forms a 70mm diameter white globe with cables or connectors across the diameter. LED units can be shipped at any customer specified spacing. Cable glands can be fitted if required for outdoor applications.

Note that although the seam between the globes is processed to reduce its optical impact it is visible when viewed at short range.

Orbis LED units interpret the combined power and data signal and control single colour, RGB or RGBW LEDs accordingly. Up to 170 RGB LED units can be assembled in a single string with a maximum string length of 100M. The total cable length can be increased by running parallel strings.



Orbis LED unit with connector option.



Orbis LED unit with connector option fitted to inline connector.

FEATURES

- Strong white 70mm diameter plastic globe,
- Available in single colour, RGB or RGBW.
- Maximum cable length of 100M. Cable length can be increased by the use of parallel connected strings.
- Small cable diameter for excellent installation transparency.
- Polarity insensitive – connects to the cable either way around.
- Tri colour LEDs for superior colour mixing.
- Linear current control (not PWM) for excellent flicker free colours when viewed with a video camera.
- Each LED unit 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.
- Version with connectors available.
- Waterproof cable gland version available.
- Weight 60g.

HAND PROGRAMMER

The hand programmer is a commissioning and maintenance tool used to set the address of each LED unit. This may be performed as part of system commissioning or can be completed during manufacture of Orbis LED strings at Glasson Electronics. The hand programmer communicates to each globe using a short range infra red link. Simply point the programmer at the LED unit and press PROG. LED unit's address can be read or programmed thousands of times.



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