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DFS200 SYSTEM DESCRIPTION

The DFS200 low voltage baton lamp driver system from Glasson Electronics has recently been redesigned to improve reliability, reduce size and weight and offer improved functionality.

The new system uses the advanced combined power and data structure employed successfully on the DFS3000RGB product.

DFS200 represents a revolution in traditional lamp control. Combining power and data down a single two conductor cable, up to 100 standard filament lamps can be individually controlled from one RM500-48 Driver.

DFS200 lamp units accept a single 48V lamp and attach to standard festoon cable with no tools required. Once connected, each lamp can be independently controlled from the power unit.

The system can operate from a user programmable built in memory or can interface to DMX or ART-NET based systems.



When operated from internal memory, large scale coordinated lighting displays involving possibly hundreds of thousands of lights are easily achievable using the unique synchronizing system.

Each system is supplied with a copy of our easy to use ADFS PC software which facilitates the easy creation of custom lighting effects.

TECHNICAL DESCRIPTION

A full description of the system components follows overleaf.

LAMP UNIT

The DFS200 lamp unit is a compact robust and water resistant unit which connects to standard PVC 2.5mm two conductor flat festoon cable. No tools are required for connection. Each lamp unit can control one BC fitting 48V 5-10W lamp. If required the lamps can be supplied with a length of cable emanating from the back allowing the system to be used for pelmet type applications (see picture below).

To facilitate individual control each lamp must be assigned a unique address on the

system. This is easily achieved using the DFS200 hand programmer described below. The hand programmer temporarily plugs into the lamp unit instead of the lamp. Once set the address defines each lamp on the system and enables its individual control.



DFS200 lamp unit with surface mounting clip attached.

Lamp units have the following main features-

- IP66 rating for long term outdoor environmental protection.
- Drives standard 5-10W 48V Baton lamp (max 500W per system).
- Full linear intensity control.
- Includes lamp filament pre-heater to extend bulb life by typically 3-5 times.
- Easy connection to festoon cable with no assembly tools required.
- Damage to cable minimized through unique cable piercing pins.
- Easy to fit surface mount or through panel mounting clip.
- Protected against lamp contacts short circuit.
- Temperature range -10 to + 40C.
- Lamp unit + lamp weight 80g.
- Cable weight 110g/M
- Full CE approval.



Lamp unit with optional mounting clip fitted to front for through panel mounting



Lamp unit with alternative cable attachment for Pelmet / suspended

RM500-48 DRIVER



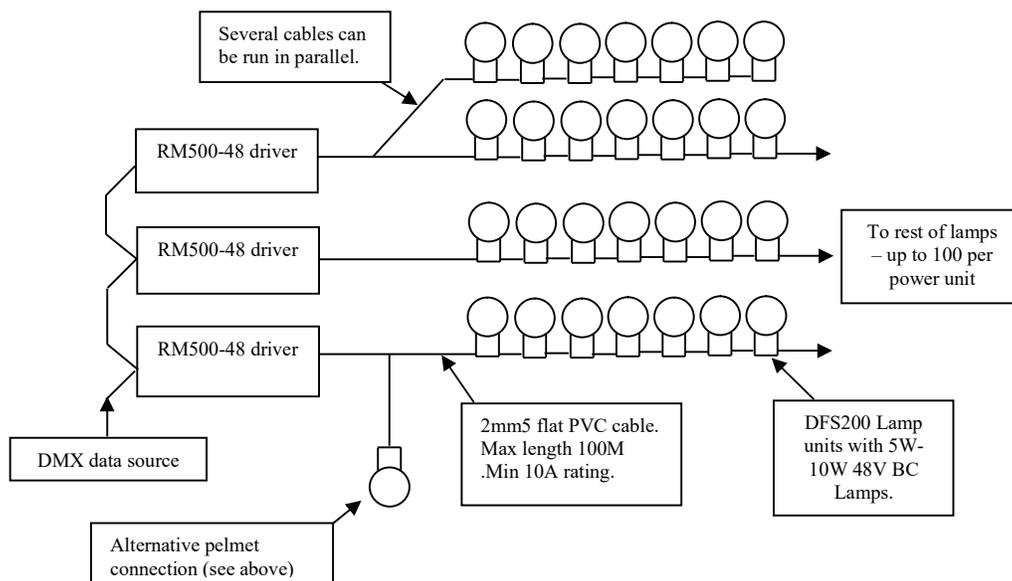
The RM500-48 driver outputs the combined power and data protocol over a standard two conductor cable. The new unit is a fraction of the weight of the original power unit and features improved functionality and protection from external faults with an LCD display for easy setup and diagnostics. The new system provides full intensity control to replace the original fade up / down technique.

Each RM500-48 driver can control up to 100 lamp units or up to 130 in applications where the number of lamps on simultaneously is low (less than 60). The output is 48V and therefore falls within the extra low voltage classification simplifying installation.

The power unit can play lighting sequences from built in memory or can interface to DMX or ART NET (cost option) systems. When running from DMX each lamp uses 1 DMX channel which simply operates like a normal fader. The system can also record DMX with a play time of 25 minutes.

When operating from built in memory, larger installations can be synchronized with a simple two conductor cable between power units. The power unit features an address range of 130 so the maximum number of lamps can be increased to over 100 providing the number of lamps switched on at a given time is kept low.

TYPICAL DMX INSTALLATION



Main features of the RM500 driver are listed below-

- Control of up to 100 lamp units (500W – 10A @ 50VDC).
- Maximum festoon harness length 100M.
- Built in memory for permanent non volatile storage of custom lighting control sequences.
- LCD display for easy setup and diagnostics.
- DMX interface.
- DMX record facility with 25 minute play time.
- ART-NET interface (cost option).
- Protection from lamp wiring faults.
- Lamp data updated every 0.02 seconds (50 times per second!).
- USB port for upload of user generated lighting sequences from PC or notebook.
- Any number of power supplies can be easily synchronized using a simple master slave system via a two core cable between supplies.
- Strong steel enclosure.
- 110 - 230VAC universal mains supply 650W max.
- Temperature range -10 to + 40C.
- Full CE approved.
- Dimensions 285 x 230 x 78mm.
- Weight 3Kg.

HAND PROGRAMMER

The hand programmer is a robust battery operated unit used to set each lamp units address. The programmer simply plugs into the lamp unit in place of the lamp. Once inserted the programmer can be used to set or read the lamps address. A lamp unit's address can be reprogrammed thousands of times. The hand programmer also verifies correct lamp unit operation.



SOFTWARE

The DFS200 editor is a simple to use basic software package to create dynamic lighting displays standalone.