

SFC 1

Features of the SFC 1

- Full control over colour and brightness
- Controls up to 32 Spectres
- Four channel chase
- Four channel cross-fade chase
- Random colour change to sound
- Needs no separate power supply
- Built in microphone for sound activation
- Will also operate Mirage.

Installation

Connect the SFC1 to the left hand side DMX/remote socket of the first Spectre using an RJ45 lead. 2m, 5m and 10m RJ45 leads are available from your supplier, or from computer stores.

If operating more than one Spectre, connect an RJ45 lead from the DMXout socket on the first Spectre to the DMXin socket on the second, and from the DMXout socket on the second to the DMXin socket on the third, and so on. Ensure that the plug is pushed into the socket until a "click" is heard.

When running several Spectres, connections between the Spectres may be made by either RJ45 leads or 3-pin XLR/XLR leads.

Power to run the remote controller is supplied by the Spectre, so no power supply connection is required.

Setting up

The SFC1 produces four channel chasing patterns, in the same way as a four channel lighting controller.

- Set both the MODE switches OFF.
- Set the DIL switches on all Spectres that are required to operate as channel 1 to DMX address 1 (all switches off)



- Set the DIL switches on all Spectres that are required to operate as channel 2 to DMX address 9 (switch 8 on)



- Set the DIL switches on all Spectres that are required to operate as channel 3 to DMX address 17 (switch 16 on)



- Set the DIL switches on all Spectres that are required to operate as channel 4 to DMX address 25 (switches 16 and 8 on)



If you have a set of four Spectres, set one to each channel, to obtain the best effect.

POWER	
50%	
25%	75%
0%	100%
COLOUR	
Cyan	
Green	Blue
Yellow	Purple
Orange	Magenta
Red	Red
SHADE	
50%	
75%	25%
100%	White
PROGRAM	
Colour Chase	Colour Fade
Fade	Random
Chase	Blend
Manual	Scroll
SPEED	
2sec	1sec
5sec	0.5sec
10sec	0.25sec
Sound	



Operation

The **POWER** control operates at all times regardless of the setting of any other controls. At 0% all lamps will be off. At 100% the power supplied to the lamps will be 500W. The effects on lamp life and brightness are shown in the table on the next page.

During chases, the **POWER** control sets the brightness of the channels that are switched on by the chaser; during cross-fades, it sets the maximum brightness achieved during the fade.



Two controls operate the **COLOUR** selection labelled COLOUR and SHADE. The upper control sets the base colour (known technically as the "hue" and the lower control sets the shade of the colour set on the upper control (known technically as the "saturation")

For example: if the upper control is set to "RED", then by varying the saturation control, every shade of red can be selected from deep red with the saturation control set to 100% all the way through pink and all possible pastel shades of red to white when the control is set to 0%.

Two controls operate the **PROGRAM** selection. The upper control selects the program, and the lower control selects the speed.

At the furthest anticlockwise position (of the upper control) labelled "MANUAL" all lanterns will be illuminated at the level set on the **POWER** control, and the colour set on the COLOUR and SHADE controls

The **CHASE** position selects a four channel chase program with one lantern on at a time.

Setting	Power	Brightness	Lamp Life	
				
0%	0W	0%	*	*
25%	62.5W	1.5%	*	*
50%	150W	12.5%	204000	*
75%	320W	42%	1500	11000
100%	500W	100%	50	350

*At power settings this low, the lamp life will be determined by other factors than the power consumed by the lamp, such as switching on and off repeatedly, or mechanical damage. The settings shown above have been chosen after extensive research and testing to produce a control that appears linear to the eye.

The next position "FADE" select the same chase pattern but this time operated in "soft-fade". Each lantern fades up from zero to the brightness set on the **POWER** control, and back down to zero.

The COLOUR CHASE position is the same as the CHASE position except that the COLOUR control is overridden, and a random colour is selected, which changes every sixteen steps of the Chaser.

The COLOUR FADE position is the same as the FADE position, except that the COLOUR control is overridden, and a random colour is selected, which changes every sixteen steps of the Chaser.

The RANDOM position overrides the COLOUR control and selects a colour which changes at random, the same colour is selected on all four channels.

BLEND selects a colour at random, and blends from the present colour to the new colour, and then pauses on the new colour.

The lower of the two **PROGRAM** controls sets the chase speed, the times labelled are the time taken for each chase step.

If the PROGRAM speed control is turned fully anticlockwise, to the position labelled SOUND, the chaser will operate to the bass

beat of the music, changing to the next step in the pattern on the beat.

The final position (SCROLL) selects a slow colour scroll, which changes gradually from red through orange, yellow, green, cyan, blue, purple, magenta and back to red.

The soft-fade programs (FADE, COLOUR FADE and BLEND) are not available sound-activated. If SOUND is chosen when a soft-fade program is selected, then the SFC1 will produce normal ON-OFF chase patterns with no cross fading.

Standards

The SFC1 is a CLASS III product (Protection by Safety Extra Low Voltage) and is exempt from electrical safety standards, and complies with Electromagnetic Compatibility Standard EN55103.

Fault Finding

- | | |
|----------------|--|
| No operation: | <ul style="list-style-type: none">• Plugs not fully pushed into sockets• Remote connected to the wrong DMX socket - should be connected to the LEFT DMX/remote socket• DIL switches set to wrong address, must be 1, 9, 17 or 25.• Power control set to ZERO. |
| No soft fade: | <ul style="list-style-type: none">• SPEED control set to SOUND - soft fade only operates at fixed speeds |
| No sound chase | <ul style="list-style-type: none">• Music contains no bass beat, or is not loud enough |

Technical Specification.

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|---------------|---|
| Dimensions: | 182mm x 65mm x 37mm |
| Weight: | 0.3kg |
| Power Supply: | 5V DC @ 15mA (from Spectre) |
| Output: | DMX512 (conforms to electrical and data specifications) |
| Connections: | RJ45 |
| | Pin 1 = 0V (white/orange) |
| | Pin 2 = +5V (orange/white) |
| | Pin 3 = no connection (white/green) |
| | Pin 4 = no connection (green/white) |
| | Pin 5 = no connection (white/blue) |
| | Pin 6 = no connection (blue/white) |
| | Pin 7 = Data - (white/brown) |
| | Pin 8 = Data + (brown/white) |

Connecting the SFC1 to the Mirage PSM or Mirage PS300

Setting Up:

Set the DMX address on the Mirage PSM or PS300 to 001, 009, 017 or 025.

Set the function to F1.

Set the lamp brightness as required.

Operation:

All other operation instructions are then relevant to the Mirage as well as the Spectre.

On the Mirage PSM, the chase function will operate over the four zones of the power pack.

Connecting lead:

The Mirage PSM or PS300 outputs a +12V supply on pin 5 of the male 5-pin XLR, the SFC1 requires a 5V supply. Connecting leads are available from NJD (part number **RJ45/5/5XLR**). To make your own conversion lead, proceed as follows:

You will require a 330Ω $\frac{1}{4}W$ resistor and a BZX55C 5V1 zener diode.

Connect the zener between pins 4 and 1 on the 5-pin XLR, with the anode to pin 4. Connect the 330Ω resistor between pins 4 and 5.

Connect the RJ45 cables to the XLR connector as follows:

White/orange Pin 1

Orange/white Pin 4

White/Brown Pin 2

Brown/White Pin 3

Green and Blue leads are not connected.

Guarantee

This product is guaranteed for a period of 12 months against faulty components or manufacture from the date of purchase. Upon proof of purchase, NJD shall, at its own option, repair or replace the defective item at no cost to the purchaser.

This guarantee is contingent upon the proper use of the product in the application for which it is intended and does not cover products that have been modified, subjected to unusual physical conditions, or electrical conditions outside its specification, or damaged in any way.

This guarantee is limited to the product only and does not cover carriage costs, installation costs or travel expenses. Your statutory rights are not affected.

In the event of any problems with this product contact the retailer from which it was purchased for technical assistance, or e-mail technical@njd-electronics.demon.co.uk

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