

# Mirage CC2

## **Features of the Mirage CC2**

- Full control over colour and brightness
- Controls up to 32 Mirage power packs
- Four control zones
- Variable speed colour scroll
- Random colour change to sound
- Needs no separate power supply
- Built in microphone for sound activation
- Will also operate Spectre.

## IMPORTANT

### Installer and Users please note:

**These instructions should be read carefully and left with the user of the product for future reference.**

### Installation

The Mirage CC2 is designed to fit a 145 × 85 mm flush- or surface-mounting box of the type normally used for a double 13Amp socket or a 4-way light switch. Use a 35mm deep box.

Connect the Mirage CC2 to the Mirage power pack using either two-pair telephone cable, CAT5 cable, or a screened two-pair data cable. DO NOT use individually screened or overall screened four core audio cable, as this may degrade the data signals and prevent the system from working.

Connect a lead from the 4-way terminal block on the Mirage CC2 to the MALE 5-pin XLR connector labelled "DMX IN" on the Mirage power pack. You will require a female cable mounted 5-pin XLR connector.

Connect the **Data+** terminal to pin **3** of the 5-pin XLR

Connect the **Data-** terminal to pin **2** of the 5-pin XLR

Connect the **+12V** terminal to pin **5** of the 5-pin XLR

Connect the **0V** terminal to pin **1** of the 5-pin XLR

Pin 4 of the 5-pin XLR connector is not used.

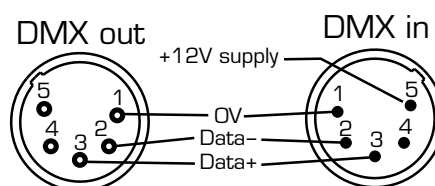
If using CAT5 or telephone cable it is recommended that the cores are connected as follows:

**WHITE-blue** for **0V**

**BLUE-white** for **+12V**

**WHITE-orange** for **Data-**

**ORANGE-white** for **Data+**



Only four of the eight cores of a CAT 5 cable are required.

The data cable may be up to 100m long. Unscreened cable will work better for longer cable runs, but it is advisable not to run the cable adjacent to sensitive audio cables, such as microphone cables.

Turn the DMX line terminator switch ON on the last power pack (the one with no plug in the DMX OUT socket) and OFF on all the others. For short cable runs, it may work satisfactorily with all the line terminators switched off, but if more than one terminator is switched ON data errors will result.

### Setting up

Normally, the Mirage CC2 requires no setting up. In some cases it may be necessary to adjust the sensitivity of the touch pads. A preset control is located between the fascia panel and the printed circuit board, at the top right of the unit. Using a small screwdriver, rotate the control clockwise to increase sensitivity or anticlockwise to decrease.

If using the mains voltage power pack (Mirage PSM) set the DMX address to 001 and the function to F2 on the power pack.

If using low voltage power packs (Mirage PS300), zones 1 and 2 will be obtained by setting the address to 001; zones 3 and 4 will be obtained by setting the address to 009. In both cases set the function to F2

The lamp brightness may be set to any value as desired. A lower setting of lamp brightness will increase lamp life.

### Operation

#### Manual operation:

The Mirage CC2 can individually control four zones of lighting.

Select the zone to be controlled by touching the one of the **ZONE** pads. More than one zone may be selected, allowing several zones to be controlled simultaneously. The LED in the zone pad will illuminate to indicate which zones are to be controlled.

The brightness of that zone may be increased by touching the **Dimmer+** pad, or decreased by touching the **Dimmer-** pad. The zone LED will flash whilst the brightness is changing and will stop flashing and remain on permanently when the minimum or maximum brightness has been reached.

The colour may be changed by touching the **Colour** pad. The colour will change gradually from red through yellow to green, cyan, blue and magenta, then back to red. If the pad is released and touched again, the colour will change in the opposite

direction. This is useful if the **Colour** pad has been held for slightly too long, and the CC2 has gone past the desired colour.

The shade of the colour may be adjusted by pressing the **Shade+** or **Shade-** pads. The **Shade-** pad makes the colour deeper or more saturated, the **Shade+** pad makes the colour paler, until it becomes white.

When the desired colour and brightness has been set, touch the zone pad again, its LED will extinguish, and the Mirage CC2 will remember the settings.

To copy the settings from one zone to another, select the zone to be copied by touching the relevant zone pad, then touch the zone pads for the zones to which the settings are to be copied.

To avoid copying settings when controlling zones individually, ensure that all the zone LEDs are off before selecting a zone to be adjusted.

#### **Colour scrolling:**

First, select the zone to be controlled by touching the ZONE pad, and then touch either the **Scroll+** or **Scroll-** pad. The colour in the zone will then scroll smoothly from red, through yellow, green, cyan, blue and magenta back to red again, and repeat. The speed may be adjusted by touching the **Scroll+** pad to make the effect proceed more quickly, or the **Scroll-** pad to make it proceed more slowly. Whilst the speed is being adjusted, the LEDs for the zone(s) being controlled will flash, and will stop flashing and remain permanently on, when the maximum or minimum speed has been reached.

During scrolling, the **Shade+** and **Shade-** pads can be used to set the saturation of the colour, although the scrolling effect looks more dramatic using fully saturated colour; and the brightness may be adjusted using the **Dimmer+** and **Dimmer-** pads as above.

To stop colour scrolling and return to manual operation, touch the **Colour** pad.

#### **Random colour:**

First, select the zone to be controlled by touching the ZONE pad, and then touch either the **Random+** or **Random-** pad. The

colour in the zone will change to a randomly selected colour at a preset time interval. The time between changes may be adjusted by touching the **Random+** pad to make the effect proceed more quickly, or the **Random-** pad to make it proceed more slowly. Whilst the speed is being adjusted, the LEDs for the zone(s) being controlled will flash, and will stop flashing and remain permanently on, when the maximum or minimum speed has been reached.

The **Shade+** and **Shade-** pads can be used to set the saturation of the colour, although the random effect looks more dramatic using fully saturated colour; and the brightness may be adjusted using the **Dimmer+** and **Dimmer-** pads as above.

To stop the random effect and return to manual operation, touch the **Colour** pad.

#### **Sound activation:**

Touch the **Sound ON** pad to select colour change animated to sound, and if music is being played, the colour will change on the bass beat of the music.

To stop the sound activation effect, touch the **Sound OFF** pad.

To return to manual operation, touch the **Colour** pad.

## **Notes**

### **Operating Spectre from the Mirage CC2:**

If your Spectre has a 3-digit 7-segment LED display, and 5-pin XLR connectors, then connections are exactly the same as for the Mirage power pack. Set the display as follows:

DMX address 001 for zone 1

DMX address 005 for zone 2

DMX address 009 for zone 3

DMX address 013 for zone 4

Set function to "F2".

Set lamp brightness as required - a lower setting will increase lamp life.

If your Spectre has 3-pin XLRs, RJ45 connectors and DIL switches:

Set the DIL switches as follows:

Mode switches - OFF-ON (DMX mode)

Address switches -

DMX address 1 (all off) for zone 1

DMX address 5 (switch "4" on) for zone 2

DMX address 9 (switch "8" on) for zone 3

DMX address 13 (switches "8" and "4" on) for zone 4

The power supply from the Spectre is only +5V, an external +12V supply will be required to operate the CC2. Connection to the Spectre can be made on either the RJ45 connector or the 3-pin XLR.

### **Technical Specification.**

Dimensions:	145mm x 85mm x 20mm
Weight:	0.2kg
Power Supply:	12V DC @ 40mA (from power pack)
Output:	DMX512 (conforms to electrical and data specifications)
Connections:	Terminal block Data+, Data-, +12V and 0V

### **Standards**

The Mirage CC2 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: Power pack data LED remains RED	<ul style="list-style-type: none"><li>• Plugs not fully pushed into sockets</li><li>• Data cable wired incorrectly</li><li>• Too many DMX line termination switches ON</li></ul>
No operation: Power pack data LED shown GREEN	<ul style="list-style-type: none"><li>• Power pack set to wrong address, must be 001, or 009.</li><li>• Power pack not set to function F2</li><li>• Brightness set to minimum</li></ul>
No scrolling:	<ul style="list-style-type: none"><li>• shade is set to maximum setting (fully white)</li></ul>
Random colour is always white	<ul style="list-style-type: none"><li>• shade is set to maximum setting (fully white)</li></ul>
No sound chase	<ul style="list-style-type: none"><li>• Music contains no bass beat, or is not loud enough</li></ul>
Touch pads do not operate	<ul style="list-style-type: none"><li>• Touch pad sensitivity needs to be adjusted</li></ul>

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