the

INFORMATION *pack*

SIRIUS
500 & 250

OPERATOR'S
MANUAL
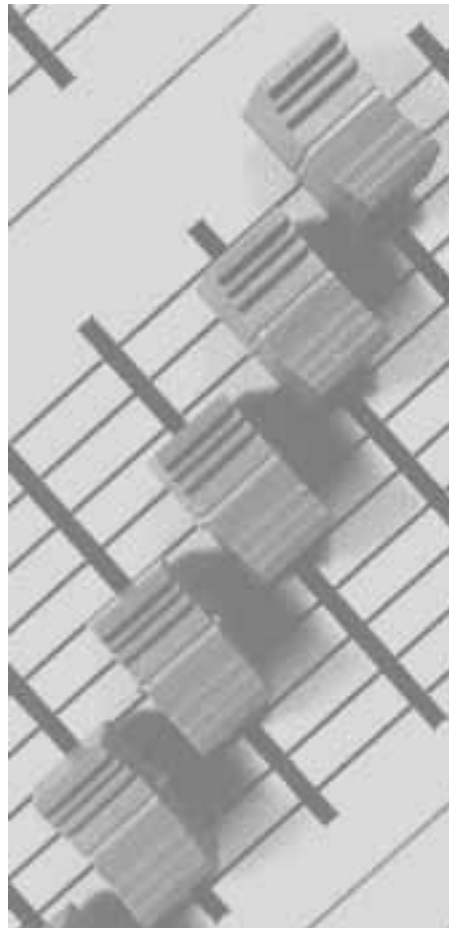
zero88

A touch of Brilliance

SIRIUS
500 & 250

OPERATOR'S MANUAL

Warnings and Disclaimers

Boring but Necessary

Temporary Three Phase Supplies

When using a Sirius on portable or temporary three phase supplies, **ALWAYS** unplug the desk before connecting or disconnecting the portable or temporary supply.

Cleaning the Sirius 500 / 250

Cleaning the paint finish on the surround of the desk: DISCONNECT THE MAINS SUPPLY. For best results use a soft brush or **moist** sponge or cloth, and concentrated or lightly thinned detergent. Before cleaning **moisten** the surface evenly. Afterwards wipe **carefully and sparingly** with water or solvents to avoid a build-up of remainders of detergent, which may in time prove difficult to remove. Anti-static foam cleaner may also be used.
APPLY WITH EXTREME CARE. WATER/LIQUID CAUSES IRREPARABLE DAMAGE IF IT PENETRATES THE PAINTED SURFACE OF THE LIGHTING CONTROL DESK, AND IS HARMFUL TO THE ELECTRONICS. ALWAYS FOLLOW THE MANUFACTURER'S INSTRUCTIONS ON DETERGENTS AND OTHER CLEANERS.

Floppy disk backups

Make two disks of all important data.

Maintenance

Never allow the weight of the desk to rest on the front panel controls. Place supports under the surrounding edges.

Use

This equipment is designed for use as a lighting control desk only, and is unsuitable for any other purpose. It should only be used by, or under the supervision of, an appropriately qualified or trained person.

Fixture Data

Zero 88 Lighting Ltd. cannot be held responsible for the accuracy of the fixture data supplied with this desk, although every effort has been made to verify the information. Where possible manufacturers' fixture data has been used.

For US Government Users

Embedded BIOS Version 3.1: U.S. Government Restricted Rights Legend: This Software is furnished with Restricted Rights. Use, duplication, or disclosure of the Software by the U.S. Government is subject to restrictions as set forth in subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at 48 C.F.R. Sec. 252.227-7013 or in subparagraphs (c) (1) and (2) of the Commercial Computer Software-Restricted Rights clause at 48 C.F.R. Sec. 52-227-19, as applicable.

Changes and Updates

Zero 88 Lighting Ltd. reserves the right to make changes to the equipment described in this manual without prior notice. E & OE.

Operators Take Care!

Ergonomic instructions are detailed on page 1-2. It is important to follow them.

Trademarks

Trademarks that are the property of other organisations are hereby acknowledged.

Section Six

Section Seven

Appendix Section

■ Figure 1-1:
Sirius 500 Lighting Desk

This Manual

This chapter gives an explanation of
fixtures and how they are used with the
desk, as well as an overview of the
desk, its controls and functions. The
glossary at the end defines some of the
more technical terms used in the
manual. Once the basics have been
mastered, the manual describes in
easy stages how the desk can be used
to run complete, complex shows.

Within the main text of the manual
references to controls and buttons on
the front panel appear in capital letters;
references to wording appearing in the
memory display and wheel display, or
on the monitor screen, is shown in the
text in italics.

This manual may be available in other
language options, however, the English
version remains the definitive version.

The floppy disk supplied with the desk
is NOT for general use. It is supplied
in the unlikely even of operating
system problems. Please store it
carefully as your dealer or Zero 88 may
ask you do use it in the extreme
circumstances of the desk not
operating correctly.

■ Figure 1-2: Sirius 500 desk set-up

Ergonomic Instructions

Research suggests that carrying out repetitive tasks, possibly associated with an unfriendly working environment, can lead to physical discomfort and even injury, such as various forms of Repetitive Strain Injury.

Please read these instructions carefully.

The Sirius 500 & 250 are designed to be used in a seated position. The operator must ensure that all pieces of equipment in the operator's position, including the chair, lighting desk, and any accessories such as a monitor, external keyboard and mouse, are correctly positioned, both individually and in relation to one another.

Compliance with all local Health and Safety Regulations must be ensured.

Take sufficient breaks to stop the body becoming stiff and tense, and to rest the eyes. Walk around and gently exercise the muscles particularly in the hands and shoulders.

N.B. If any pain is felt while using the equipment, consult a medical practitioner.

We recommend the following to improve both comfort and efficiency.

Adjust the chair to the correct height, and ensure that it provides adequate support to the lower back. The working surface must also be at the correct height in relation both to the chair and to the equipment. Forearms should be at right angles to upper arms. Feet should rest flat on the floor. If not, use a footrest of suitable height for thighs to be parallel to the floor.

The lighting control desk must be placed in a comfortable position, as should the external keyboard and mouse. Ensure that all are positioned at the same height. Forearms should be approximately parallel to the floor.

Consciously relax the hand regularly when using the wheels and mouse. Do not grip the mouse too hard. If using a mouse pad, ensure that the arm still remains at the correct height.

If using a monitor, ensure that it is placed at a comfortable viewing distance, with the top of the display no higher than eye level when seated. Glare and bright reflections on the screen and in the Memory and Wheel Displays on the front panel of the desk must be avoided. Frequently focus on an object in the distance to move the eyes away from the screen.

Now relax and have fun using the Sirius Desk!

■ Figure 1-3: Ensure the correct desk set-up

1
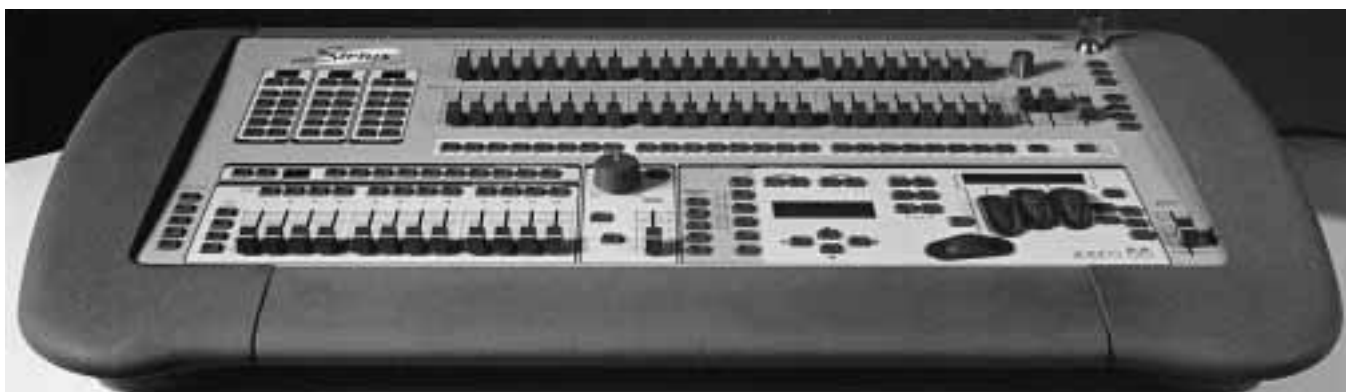
■ Figure 1-4: The Sirius 250 Lighting Control Desk

Overview

The Sirius 500 is a 512 channel, and the Sirius 250 is a 256 channel lighting desk, incorporating many of the flexible, friendly and robust features of the original Sirius 24 and 48 models, but also introducing new techniques and the latest technology.

The traditional Sirius hallmarks are all there: Key Switch for changing between operating modes, two Presets, Submasters, GO button, Memory Effects, etc., together with new features, such as two built-in liquid crystal displays for operator feedback, an optional external monitor, external keyboard and mouse, 4 Wheel Drive® for easy control of fixture parameters, floppy disk backup, and much much more.

The Sirius 500 & 250 can control all types of fixture: a single channel fixture (often referred to as a generic or conventional), consisting solely of a lamp; a multichannel fixture, such as a generic with either a colour scroller or a gobo rotator; or an intelligent multichannel fixture, which covers many types of fixture, such as a moving mirror fixture (Cyberlight) or a moving yoke fixture (VL5).

The Sirius 500 & 250 use two types of control channels to regulate fixtures. Firstly, Brightness channels control lamps or dimmers, by means of the channel Preset faders. The green output lights on the desk mimic the DMX Brightness output for that fixture.

The second type of channel controls all non-Brightness attributes (i.e. Colour, Beamshape, and Position) of multichannel fixtures, using 4 Wheel Drive®. This makes programming even the most complex multichannel fixtures simple and fast. The fixture may have more than one channel controlling Colour, Beamshape or Position attributes. For example, the Colour attribute could comprise four separate channels - one each for cyan, magenta, yellow and a colour wheel. The Beamshape attribute could have a gobo wheel, an iris and a shutter. The individual channels comprising a Colour, Beamshape or Position attribute are referred to as parameters.

All fixtures must have a Brightness channel, which is controlled by the channel Preset faders. The Desk uses the Brightness channel numbers as fixture numbers. Thus the flash buttons below the Preset faders have two functions; they can be used both to flash the Brightness channel, and also to select fixtures for programming non-Brightness attributes.

Brightness, Colour, Beamshape and Position memories are stored in four separate areas, one for each attribute. A single memory can record information about one particular attribute for all fixtures connected to the desk.

The desk operating system handles Brightness and non-Brightness memories in different ways. Brightness memories are mixed on the DMX output on a Highest Takes Precedence (HTP) basis. This is the traditional way Two Preset desks mix their outputs to be interpreted by dimmers. The highest (or brightest) value is the most important, and controls the channel. In HTP a channel value of zero turns the dimmer 'off'.

Non-Brightness memories are mixed on the DMX channel on a Latest Takes Precedence (LTP) basis. This means that the latest value on a channel is the most important and controls the parameter's action. In contrast to HTP, zero is NOT 'off' in LTP, as it is not possible, for example, to turn a mirror to an 'off' position. In HTP the highest (or brightest) value is the most important, but in LTP all values have the same importance. Although the desk manages this for the operator, it is nevertheless important to understand this distinction when running a show.

WARNING

Maintenance
A dimmer or fixture must always be isolated from the mains supply before proceeding with any maintenance, even if the channel is set to zero.

1

The Desk

The Sirius 500 can control up to 48 individual multichannel fixtures. The Sirius 250 can control up to 24 Multichannel fixtures. Throughout this introduction the figures for the Sirius 250 are shown in brackets after the figures for the Sirius 500.

The desk controls the intensity of the Brightness of the fixtures via the PRESET faders. Over 400 (over 200 on the Sirius 250) other channels are available to control the additional attributes of multichannel fixtures. These channels are allocated to fixtures as required.

In addition to using the two traditional 48/24 channel presets, Brightness memories can be accessed sequentially by using the GO button, or randomly via the four pages of twenty (four pages of twelve on the Sirius 250) submasters. The GO button and the submasters can run either scene or chase memories.

The Sirius 500 & 250 both have Ninety-nine pages of ten memory selection buttons for each of the attributes (Colour, Beamshape and Position); each memory can record a scene or chase memory.

Ninety-nine pages of ten Focus Submaster buttons provide combined, instant access to Colour, Beamshape and Position memories. Each Focus Submaster can hold one of each of the above. All can be scene or chase memories.

Five MACRO buttons can be used to record and replay a series of button pushes.

Eight AUXILIARY buttons (four on the Sirius 250) can be used to switch outputs on and off, for example, house lights or DMX smoke machines.

Both desks can operate in TWO PRESET or WIDE mode. WIDE mode can only be activated when the desk is in PROGRAM or RUN mode, not in PRESETS ONLY mode.

When in WIDE mode the Sirius 500 can control 96 fixtures and the Sirius 250 can control 48 fixtures. Only the first 48 (24) fixtures can be multichannel; the second 48 (24) are conventional (generic) only.

Displays

Programming information and the help facility (where available) can be viewed in the larger of the two liquid crystal displays (called the Memory Display) on the front panel.

The smaller of the two liquid crystal displays (the Wheel Display) guides the operator by indicating which parameter can be adjusted on which wheel. The function of the wheels is dependent on the operating mode of the desk and fixture data. When the wheels are not in use, the display is blank.

The desk has an SVGA output for use with a standard colour computer monitor. This enables the operator to view the output levels and programming information to better effect. This speeds up the programming and use of the desk, and provides the operator with instant feedback. The majority of functions are useable without the monitor but some become a lot easier and quicker with it.

Throughout this manual the procedure for operating the desk using only the Memory and Wheel Displays is described separately from using the desk with a monitor, which is referred to in the *MONITOR NOTES*.

The arrow keys below the Memory Display enable the operator to gain access to a screen, select options and scroll through the menus.

An external keyboard can be used for text entry, memory selection and time entry as well as duplicating the arrow keys on the desk..
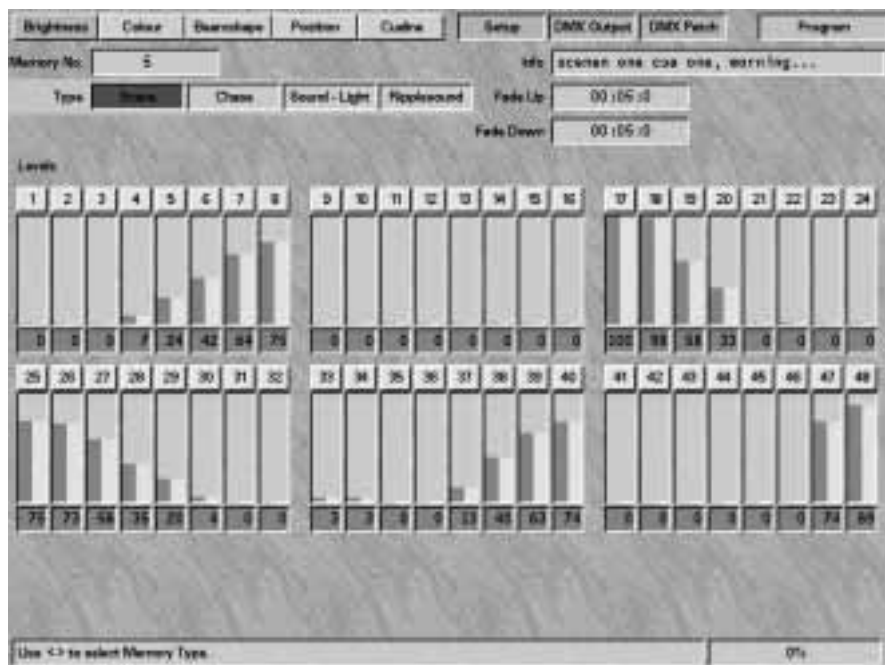
■ Figure 1-5: Sample Brightness screen

1

Running a Show

Generally shows are one of two types. That is either a theater style show where most things are repeatable and run in a fixed order - or a live band type show, where the lighting is selected live from a set of Pre-defined memories.

The Sirius 500 & 250 can cater for either type of show; CueLine® is ideal for running a wholly Pre-defined show. Whereas the Submasters, Go Button and Focus Submasters are ideal for a live band type show.

Submasters and Focus Submasters can be used simultaneously with CueLine®.

Getting Started

When the desk is delivered, it is set up for 48 (or 24) single channel fixtures. Before it can be used with multichannel fixtures, the operator must tell the desk the fixture types that are to be used. This is a simple procedure as the desk is supplied with data on a range of fixture types. The operator can also generate new fixture files for new fixture types or modify existing fixture files.

■ Figure 1-6: Desk connections

The data for each fixture type is held in a fixture file. This allows the allocation of the fixtures various parameters to the Brightness, Colour, Beamshape or Position attributes and parameter channel numbering. New fixture files will be released as new fixtures types become available.

Desk Set-Up

On delivery the desk defaults to all fixtures being single channel (generic) fixtures, with fixture 1 at DMX channel 1, fixture 2 at DMX channel 2, etc. With this set-up the desk operates as a traditional 48 (24) channel memory desk.

To modify the set-up, it is necessary for the operator to know what fixtures are to be controlled by the desk.

Assigning Fixtures

Select an appropriate desk channel(s) and allocate the fixture type from a list (see the section on Assigning Fixtures on page 5-7). The DMX start address can then be allocated to each fixture.

Once the fixtures have been allocated to desk channels and a DMX start address, a certain amount of modification can be done.

For example, it is possible to invert Pan and/or Tilt on individual fixtures.

Customising Fixtures

Fixture data files can be customised allowing for example the grouping of parameters of 4 Wheel Drive® to be modified. Therefore, if the operator never wants to use the thumb wheel, this can be achieved. Or parameter may be grouped in different orders. Once customised the new fixture data file may be allocated to a fixture. For detailed information please see the section on Wheel Assignment in Fixture Set-Up on page 5-25.

CueLine®

CueLine, is a graphical method of building and running a complete show, allowing precise linking of differing memory types and graphical editing of all timing information. CueLine works in either real time or SMPTE time (where available), or waits for external triggers to prompt it. The operator is in total control, with the CueLine display giving detailed feedback.

The beauty of this method is that it allows a show with complex timings to be programmed and edited easily and quickly.

A monitor and mouse are required to program and operate CueLine.

■ Figure 1-7: Part of the desk layout

External Connections

The desk has various external connections (see Figure 1-6), some of which are mandatory, others optional. Connections must not be made after the power is switched on.

Mandatory Connections

DMX Output: Twin 5 pin XLRs carrying the same DMX data. They are fully and independently isolated. It is suggested that one is used for output to dimmers and the other for output to intelligent fixtures.

Power In: Switch selectable for working voltage range. (See the Technical Specification on page A-2.)

Optional Connections

Power Out: Outputs the same voltage as received at Power In. For use only with a computer monitor.

Video: Control cable for optional SVGA computer monitor. 15 pin 'D' type.

Keyboard: For an external keyboard (US/UK 101/105 key). 5 pin DIN to enter memory information.

Serial Mouse: Takes a Microsoft compatible mouse. Only used in CueLine®.

Parallel Printer: Allows connection of a parallel printer to produce a hard copy of memory and desk information.

Lamps: Two 'Litlites'. Dimmable from the desk. *NOTE Unplug the litlite before replacing a blown bulb.*

MIDI IN/THRU: MIDI connections.

SMPTE: Synchronises CueLine® to external equipment.

Audio Input: For sound to light.

Note

Connecting Up the Desk
Ensure that all external connections are made to the desk before turning the desk on. Failure to do so may result in the mouse, external keyboard or monitor not operating correctly. If this occurs, turn the desk off, wait 20 seconds and turn the desk on again.

The Desk Controls

The desk is divided into the following sections:

MASTER CONTROLS

MEMORY CONTROL FEATURES

 4 WHEEL DRIVE®

EFFECTS CONTROL

CHANNEL PRESETS

CHANNEL FLASH BUTTONS

PLAYBACK

BRIGHTNESS SUBMASTERS

ATTRIBUTE MEMORY BUTTONS

FOCUS SUBMASTERS

MACRO BUTTONS

AUXILIARY CONTROL BUTTONS

■ The Master Controls provide control over the desk's basic operating functions and over Master Brightness.

■ The MEMORY CONTROLS and 4 Wheel Drive® allow programming of all Brightness, Colour, Beamshape and Position memories. The Memory Display and Wheel Display provide operator feedback.

■ The EFFECTS CONTROL section allows the use of chase and audio effects.

■ The channel PRESETS and flash buttons allow setting of Brightness levels. The channel flash buttons are also used to select fixtures for programming.

■ Playback operates on a cue list by means of the GO button, including crossfade OVERRIDE, STOP and GO PREVIOUS buttons. The GO button allows playback of the memories in sequential order.

■ BRIGHTNESS SUBMASTER faders allow random access to memories, i.e. to mix and playback multiple memories under operator control. Memories may be transferred with fade times.

■ Attribute memory buttons, comprising COLOUR, BEAMSHAPE and POSITION, control moving light attributes, again allowing random access to memories.

■ The FOCUS SUBMASTERS allow single button access to combinations of Colour, Beamshape and Position memories.

■ The MACRO buttons provide a fast way of doing repetitive button pushes by programming a sequence of button pushes into one button.

■ AUXILIARY CONTROL buttons can be used to switch outputs on and off, for example, smoke machines, house lights, etc.

Master Controls

- MAINS SWITCH

Controls the supply of power to the desk and to the monitor connected to the desk; situated at the rear of the desk, its location is indicated by 'POWER' at the back of the front panel near the Key Switch.

- KEY SWITCH

Selects PRESETS ONLY, PROGRAM or RUN mode.

- GRAND MASTER

Sets the maximum level for Brightness (HTP). It has no effect on other fixture parameters (LTP).

- FLASH FUNCTION

Defines the use of the channel flash and BRIGHTNESS SUBMASTER FLASH buttons.

- FLASH MASTER

Sets the maximum level for Brightness channels when flashed using channel or BRIGHTNESS SUBMASTER FLASH buttons. If set lower than the channel output, channels will flash down.

- BLIND MODE

Allows programming and editing without affecting outputs. BLIND only operates in PROGRAM.

- TOPSET

Allows the operator to force the maximum output level for a Brightness channel. TOPSET only operates in RUN and cannot be used in WIDE mode.

- DBO

Dead Black Out. Kills all desk Brightness outputs. It has no effect on other fixture parameters (LTP). When activated, a warning appears on the Monitor and the Memory Display.

Power On/Power Off

It is inadvisable to turn the desk off immediately after programming a memory. Turning off the power immediately after pressing the PROGRAM button may cause some of the data to be lost. Instead, wait a few seconds, then turn off the mains switch. The desk should not be re-powered for at least 20 seconds. This ensures a complete reboot of the system.

After it is switched on, there is a short delay before the desk is fully operational. Once ready, the 'Please Wait' warning disappears from the Memory Display, and the monitor shows the screen appropriate to the mode indicated by the Key Switch.

Mains Switch

The mains switch is located on the rear panel, adjacent to the Key Switch, just above the connector for the litlite. The switch was deliberately positioned above the litlite connector so that a 90º litlite will protect the desk from accidentally being turned off, which could happen when trying to eject the floppy disk.

Key Switch

To enhance the security of the memory data in the desk, the Key Switch key can only be removed in PRESETS ONLY and RUN mode, thus enabling the operator to leave the desk knowing that no-one can change the memories.

Wide Mode

The desk can be used in WIDE mode which turns the Sirius 500 into a single preset 96 channel desk, and the Sirius 250 into a single preset 48 channel desk, with channel flash buttons, .

Selection of either WIDE or TWO PRESET operation is made in PROGRAM mode, Set-Up: Desk Set-Up.

In TWO PRESET mode the Sirius 500 has 48 Brightness channels (24 on the Sirius 250) and can control 48 (24) multichannel fixtures.

In WIDE mode the desk has 96 Brightness channels (48 on the Sirius 250), of which up to 48 (24 on the Sirius 250) may be allocated to multichannel fixtures, and the remaining 48 (24 on the Sirius 250) to simple, single channel 'generic' fixtures.

If WIDE mode is selected, turning the Key Switch to PRESETS ONLY temporarily overrides the desk set-up and the desk returns to TWO PRESET operation.

For more details please see the references to WIDE mode in the chapters on Setting Up the Desk (see pages 5-6).

Connecting Up the Desk

Ensure that all external connections are made to the desk before turning the desk on. Failure to do so may result in the mouse, external keyboard or monitor not operating correctly. If this occurs, turn the desk off, wait 20 seconds and turn the desk on again.

DBO

Pressing the DEAD BLACK OUT button instantly takes all Brightness outputs to zero, without affecting any other outputs. Therefore all mirrors, gel strings, wheels, etc., do not return to zero or home positions when the DBO button is pressed.

Introduction

In PRESETS ONLY all effect and memory functions are disabled, offering a completely manual two preset system. The Presets are patched to the outputs as determined by the fixture data (see the section on Assigning Fixtures in Desk Set-Up on page 5-7). The Brightness channels are active, each controlling an individual fixture 48 on the Sirius 500 (or 24 on the Sirius 250).

At turn-on the latest takes precedence (LTP) channels are static at their home (default) values, as defined in the Fixture Data Files. If these fixture attributes have been changed in RUN mode, on returning to PRESETS ONLY the new value is retained.

The desk must have fixtures allocated to the desk channels. The default is 48 (or 24) single channel generic lamps. If any other fixture types are to be used, the Desk Set-Up procedure must be followed, see the section on Modifying the Set-Up on page 5-9.

A scene can be set up on PRESET A or B using the individual channel faders. The MASTER A and B faders can then be used to manually crossfade between scenes whilst still under the overall control of the GRAND MASTER, or a timed crossfade can be made using the PRESET CROSSFADE.

The green channel lights always show the actual output of each of the 48 (24) Brightness channels. WIDE mode is not available.

Preset Controls

● PRESET A AND B

Two sets of faders controlling individual Brightness channels.

● MASTER A AND B

Set the maximum output level of PRESET A and B.

● PRESET CROSSFADE

Sets the speed of a crossfade between PRESETS, when the crossfade is made by moving the MASTER A and B faders.
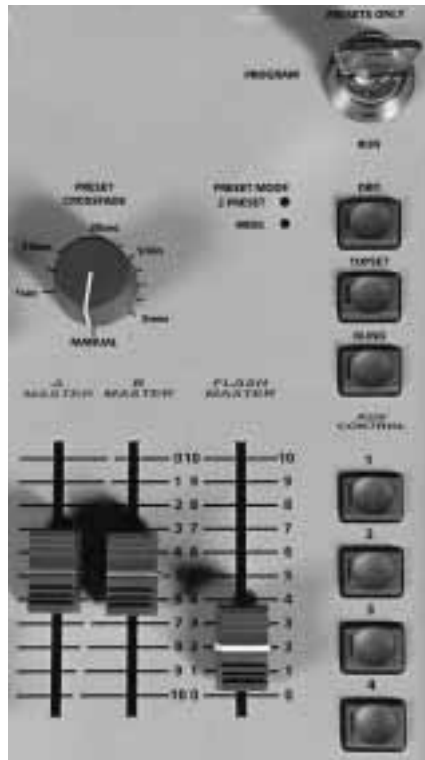
■ Figure 2-1: Master Controls

● FLASH MASTER

Sets the channel output level of the channel flash buttons.

● FLASH FUNCTION BUTTON

Modifies the function of the channel flash buttons, enabling flashing or soloing of a channel, as indicated by the adjacent light. In PRESETS ONLY mode the TEXT and SELECT functions are disabled.

● CHANNEL FLASH BUTTONS

While pressed, individual channels go to the level set by the FLASH MASTER.

● GREEN OUTPUT LIGHT

Mimics the output level for that Brightness channel.

● VIEW DATA

Press and hold the VIEW DATA button and select a fixture using channel flash button, to see it's current Patch and output data.

● INFO

Press and hold the INFO button and select a channel flash button to view the TEXT INFO for that fixture.

Preset Mode

NOTE

MASTER A and B inverted/split dipless crossfade
The MASTER B fader is permanently inverted thus allowing easy split dipless crossfading in PRESETS ONLY mode by pushing MASTER A and MASTER B faders up or down in tandem.

Turning on the Desk

1 Connect the DMX cable.

2 Switch on the desk using the mains switch at the rear.

3 Ensure that the DBO button is off, i.e. that the red light in the button is off.

4 Set the GRAND MASTER fader to zero (down).

5 Set the Master Faders to zero by moving the MASTER A down and the MASTER B up, the FLASH MASTER to full by moving it up, and set the PRESET CROSSFADE to the off position (fully anti clockwise).

6 Set the GRAND MASTER fader full on (up).

Entering Presets Only Mode

1 Turn the Key Switch to PRESETS ONLY.

Changing the Screen Display

When the Key Switch is turned to PRESETS ONLY, the Memory Display normally shows:

```
    Presets Only
   ‹   DESK OUTPUT   ›
```
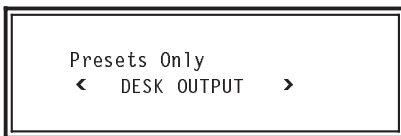
If this is not shown, use the ‹ and › keys to move to it, as prompted in the Memory Display.
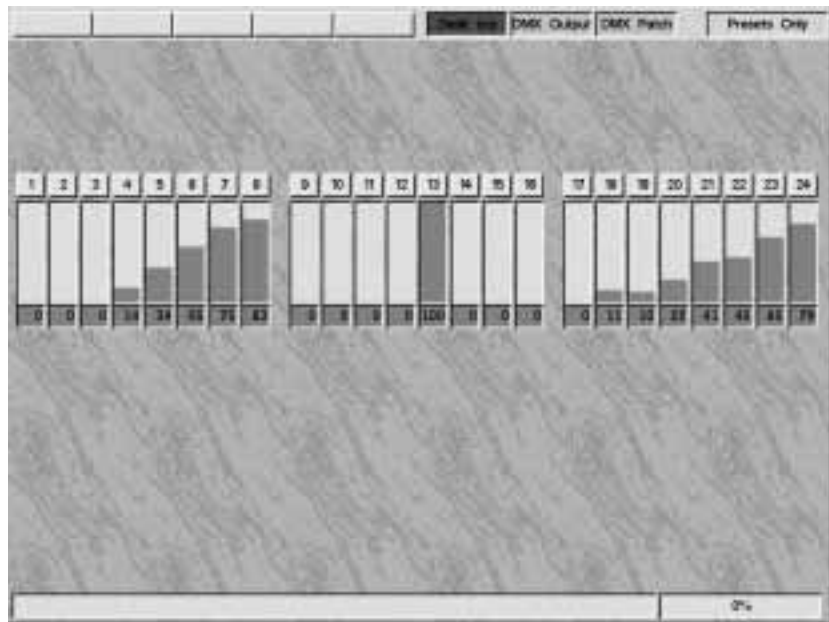
Figure 2-2: Desk Output screen
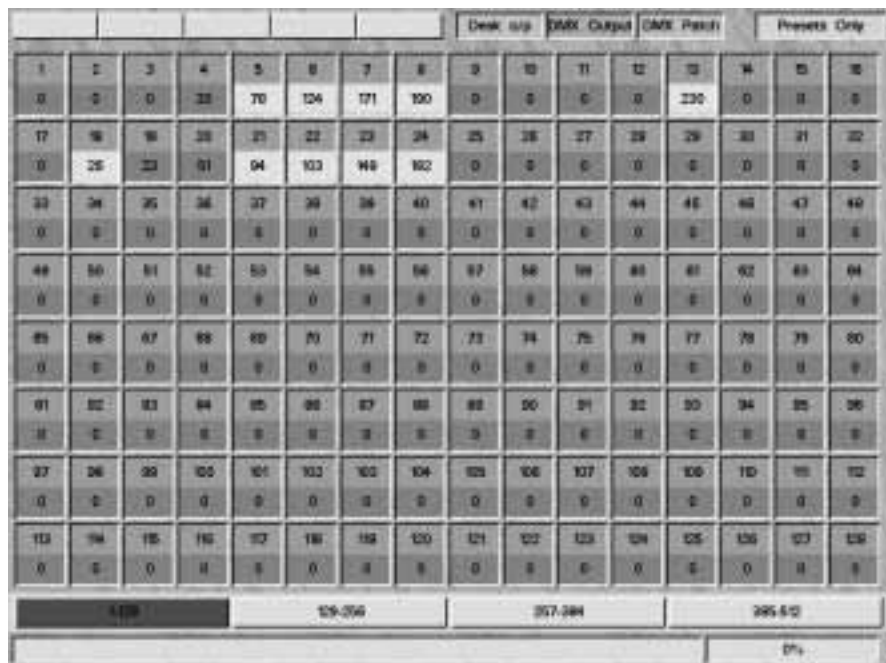
Figure 2-3: DMX Output screen

MONITOR NOTES

▣ *PRESETS ONLY*

Three types of information can be accessed in this mode: desk output, DMX output or DMX patch. The current option is shown in the Memory Display. Other options are selected using the arrow keys. Information on available options is given in the Memory Display and the bottom line on the monitor.

▣ *The Key Switch Position*

Is indicated in the top right-hand corner of the screen. The three boxes to the left show desk output, DMX output and DMX patch.

▣ *Current screen*

The current screen (as indicated in the top line of the monitor) is highlighted in red while that area of the screen is active, and changes to green when the selected screen becomes active.

▣ *The Desk Output (Desk O/P) Screen*

Shows a bar graph representing the output of the Preset section of the desk, together with the numeric value (See Figure 2-2).

▣ *The DMX Output Screen*

Shows each DMX address with the DMX output value that is currently being transmitted. (See Figure 2- 3.)

▣ *The DMX Patch Screen*

Shows each DMX address and the fixture it is patched to (See Figure 2-4).

The information in the DMX Output and DMX Patch screens has been subdivided for clarity. Use the ⌄ key to move to the selection range bar. Use the ‹ and › keys to move between the following ranges: 1 — 128, 129 — 256, 257 — 384, or 385 — 512.

In both DMX screens DMX data that is changing is shown in green.

2

Outputting a Scene

1 Set up one scene by setting the required levels for each channel on the PRESET A faders, and a different scene on PRESET B.

2 Move the MASTER A to full and MASTER B to off, i.e. both to the top. The effect is live on the DMX outputs. The green output lights above the channel flash buttons correspond to the desk's Brightness output.

Fading Between Scenes

1 Ensure that the PRESET CROSSFADE is switched off.

2 To crossfade to PRESET B, simultaneously move the MASTER A and MASTER B to the opposite ends of their travel.

3 The operator has direct control over the speed of the scene change.

4 As the faders are moved, the scene on PRESET B fades in whilst the scene on PRESET A fades out. The crossfade is dipless.

Timed Crossfades between Scenes

1 Set the PRESET CROSSFADE to, say 10 seconds.

2 To initiate the crossfade, move MASTER A and B to the opposite ends of their travel quickly. The outputs crossfade between the two scenes in the selected time, independent of the speed at which the faders are moved. The crossfade is dipless.

Flashing a Channel

1 Ensure that the FLASH FUNCTION is set to FLASH. (If it is not on, press the FLASH FUNCTION button until it is selected.)

2 Set the FLASH MASTER to full.

3 Press and hold an individual channel flash button. This channel is now added into the scene at the level set by the FLASH MASTER until the button is released.

4 Vary the level set by the FLASH MASTER to see the effect.

Soloing Channels

1 Change the FLASH FUNCTION to SOLO by pressing the FLASH FUNCTION button until the red SOLO light comes on.

2 Press and hold an individual channel flash button. This time the channel comes on to the level set by the FLASH MASTER, with all other outputs reduced to zero.

3 Release the channel flash button to return the desk to its previous state.

NOTE

Master Fader Levels
For each channel the level of the output is determined by the channel fader, the MASTER A or B fader, and the GRAND MASTER, i.e. with all three set to 50%, the total effect is 0.5 x 0.5 x 0.5, so that the channel is output at 12.5%.

Flash Buttons
The flash buttons flash individual channels to the level set by the FLASH MASTER. Channels can either be flashed high or low. Pressing more than one channel flash button causes those channels to act simultaneously.

Solo
Solo can be particularly useful for creating a sudden dramatic change, such as a lightning flash or explosion effect.

Macros
The MACRO button will not operate flash buttons as the Macro 'button push' action is very fast.

MONITOR NOTES

🖥 *Brightness Display*

The Brightness channel outputs are displayed in bar graph and numerical format (as shown in Figure 2-2, Desk Output screen).
The numerical format of the DMX channel output can either be shown as percent (0-100) or as a decimal (0-255). This is selected from within Desk Set-Up (see the section on Brightness Defaults on page 5-17).

🖥 *DMX patch and Output screen*

Each channel is highlighted in yellow when static, and turns green when the output changes.

Introduction

This chapter encompasses all aspects of programming Brightness, Colour, Beamshape and Position attributes, detailing step by step with how to record memories for individual fixture parameters.

The desk needs to know what fixtures are being used and at which DMX addresses. This must be carried out following the Desk Set-Up procedure (Assigning Fixtures) on page 5-7, prior to commencing programming, otherwise the desk will only control 48 (or 24 on Sirius 250) single channel (generic) fixtures or 96 (or 48) in WIDE mode.

The attribute selection buttons situated to the right of the wheels (see Figure 3-4) provide easy access to the five most frequently used programming options - Brightness, Colour, Beamshape and Position attributes, and CueLine®. Set-Up, DMX Output and DMX Patch are selected using the arrow keys.

The memories for Brightness, Colour, Beamshape and Position are independent of each other. The desk holds approximately 1,000 memories of each type. Each memory can be a chase holding up to 99 steps. The number of chase memories recorded may cause the total number of memories held to be less than 1,000.

Some Brightness channels should be programmed first as this allows other attribute changes to be seen.

The Brightness memories can be programmed from PRESET A or B, or an existing memory on a submaster. Any memory programmed is a combination of current Brightness outputs.

When an attribute is selected, those fixtures that have the attribute are indicated by a yellow light in the channel flash buttons, and on the monitor. Adjusting parameters is then simply a matter of selecting a fixture, or group of fixtures, and adjusting the appropriate parameter value using the correct wheel, as indicated in the Wheel Display and on the monitor.

■ Figure 3-1: Wheel Group button

Up to four parameters can be adjusted at the same time using the 4 Wheel Drive®. The actual parameter being controlled by a wheel depends on the fixture set-up data. The Wheel Display indicates the name of the parameter being controlled.

Having selected an attribute (Colour, Beamshape or Position) and then selected a fixture (or group of fixtures), the first four parameters that can be adjusted are shown on the Wheel Display. If there are more than four parameters available, pressing the WHEEL GROUP button (see Figure 3-1) will display the next group of parameters.

Each memory has several pieces of information associated with it: the memory number, information text typed in by the operator, fade up and down times, channel data and levels etc.

Program Mode

3 ▲

Memory Controls

● WHEELS

Use to adjust fixture parameter levels.

● WHEEL DISPLAY

Tells the operator what parameter each wheel controls.

● WHEEL GROUP BUTTON

Selects the parameter groups for fixtures that have more than four parameters.

● BRIGHTNESS, COLOUR, BEAMSHAPE AND POSITION BUTTONS

Select the attribute required.

● CUELINE® BUTTON

Enters CueLine® where available – a graphical method of creating a show.

● PROGRAM BUTTON

Commits changes made to previous lighting states to electronic memory.

● MEMORY DISPLAY

Guides the operator step by step through the menus.

● ARROW KEYS

Use to scroll through the menus. Shown as ‹ › ⌃ ⌄ keys throughout the manual.

● MEMORY COPY BUTTON

Allows memories to be duplicated, or chases to be built from existing memories.

● MEMORY INSERT BUTTON

Adds extra memories between Brightness memories.

● TRANSFER WITH TIME AND TRANSFER NO TIME BUTTONS

Transfers a memory to a selected submaster with or without a fade time, for later replay.

● ADD BUTTON

Allows more than one memory to be associated with the same submaster fader.
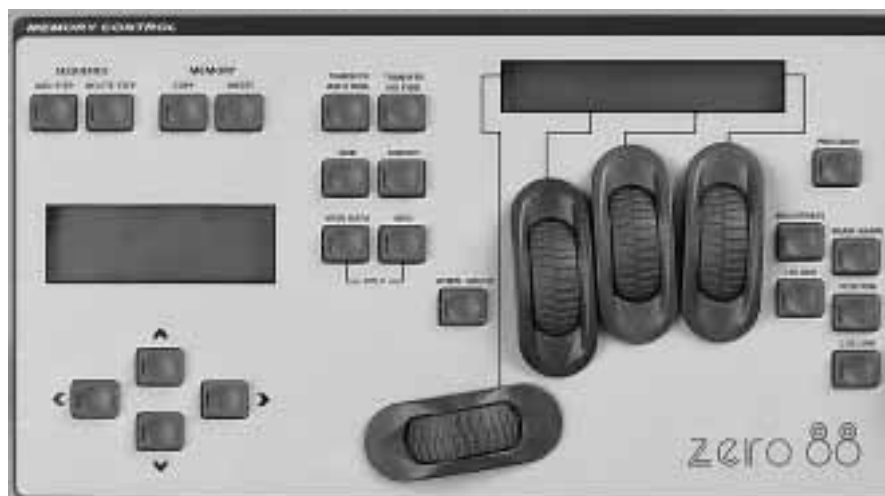
■ Figure 3-2: Memory Controls

■ Figure 3-3: Shift and Flash Function

● MODIFY BUTTON

Used in RUN mode to allow live editing of some parameters.

● VIEW DATA BUTTON

Shows associated lighting data.

● INFO BUTTON

Shows information text typed in by the operator.

● HELP FACILITY

When available press the VIEW and INFO buttons together to access help screens.

● FLASH FUNCTION BUTTON

Modifies the function of the channel flash buttons, enabling text entry and fixture selection, see Figure 3-3.

● CHANNEL FLASH BUTTONS

Have two functions in PROGRAM: selecting fixtures for programming; entering text labels to memories etc.

● SHIFT BUTTON

Accesses the second row of the channel flash buttons, see Figure 3-3.

● GREEN OUTPUT LIGHTS

Show the current level of the associated channel.

● PRESET A AND B FADERS

Set the individual channel levels for programming.

● SEQUENCE ADD STEP BUTTON

Adds a step to a chase memory.

● SEQUENCE DELETE STEP BUTTON

Deletes a selected step from a chase memory.

Memory Storage

Brightness, Colour, Beamshape and Position memories are stored in separate areas allowing up to 990 memories per attribute.

Brightness memories are stored in a cue list which may be accessed in sequence or in random fashion.

Colour, Beamshape and Position memories are accessed via 99 pages consisting of 10 directly accessible memories per page.

Memory Types

There are several types of memory described below.

Full Memory

A full memory records a value for an attribute for all fixtures, even if the fixture is inactive in that memory. Outputting a full memory sets that attribute for the whole rig.

Partial Memory

A partial memory only records values for those parameters that have been adjusted on the selected fixtures. The only exceptions to this are Pan and Tilt, which are both recorded if one is adjusted.

Example:
Memory 1 is a full colour memory with all three fixtures in red.
Memory 2 is a full colour memory with all three fixtures in green.
Memory 3 is a partial colour memory with fixture 2 in blue.
When Memory 1 is output, fixtures 1, 2 and 3 turn red.
If Memory 3 is then output, fixture 2 turns blue, and the others remain unaffected, i.e. red.
If Memory 2 is then output, all fixtures turn green.
If Memory 3 is then output, fixture 2 turns blue, and the others remain unaffected, i.e. green.

Scene Memory

A scene memory contains channel level information for a fixture or group of fixtures, together with associated fade times.

Brightness memories are always full scene memories.
Colour, Beamshape and Position memories can be either full or partial scene memories.

Chase Memory

A chase memory contains multiple steps of channel level data for a single fixture or group of fixtures. Effectively each step of a chase can be regarded as a scene memory.

Brightness chase memories are always full chase memories.
Colour, Beamshape and Position memories can be either full or partial chase memories.

Sound To Light

Four bands (steps) are programmed, when replayed, the audio level out from of each of the four sound filters (bass, tenor, alto, treble) determines the Audio memory output for each band.

Ripple Sound

Four bands are programmed when replayed the volume of the audio input determines how many of the bands are output. With no volume Band one is always output

NOTE

Memory Usage
Use a full memory at the beginning of a new scene (or when a major change of state is required).
Use partial memories to build on from there.
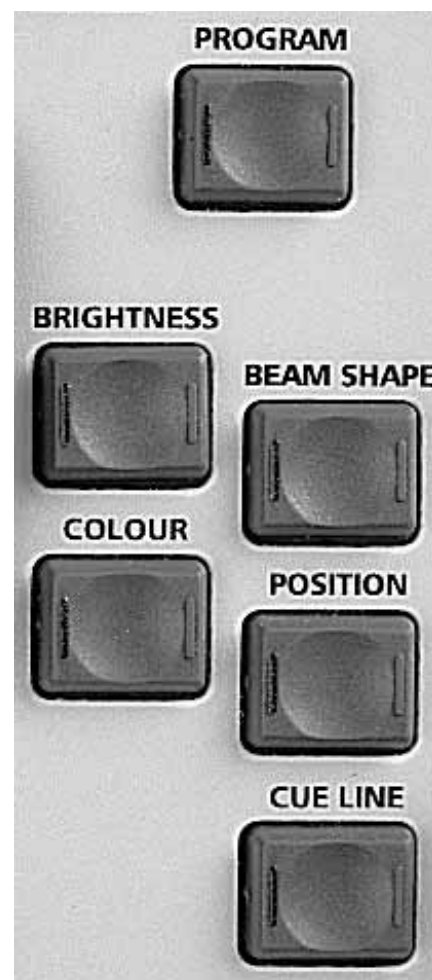
■ Figure 3-4: Attribute selection buttons

3

Attribute Selection

The previously selected attribute is automatically selected when PROGRAM mode is entered. The Memory Display shows (for example):

```
Program Mode.
Attribute Type:
BRIGHTNESS        < >
Select type & press ⌄
```
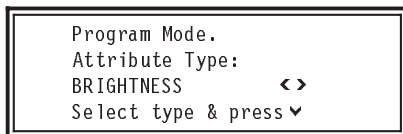
To continue programming Brightness, press the ⌄ key.

```
Memory No 1        < >
User Info/Text

Select Mem & Press  ⌄
```

Press the ⌃ key to return to attribute selection.

```
Program Mode.
Attribute Type:
BRIGHTNESS        < >
Select type & press ⌄
```
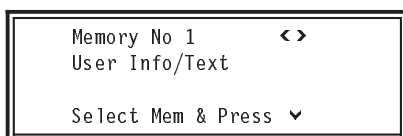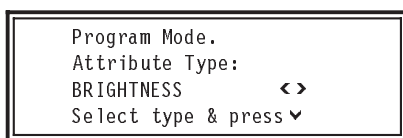
Press and ‹ or › key to select Brightness, Colour, Beamshape, Position, CueLine, SetUp, DMX Output or DMX Patch.

Press the ⌄ key to enter once selected.

```
Memory No 1        < >
User Info/Text

Select Mem & Press  ⌄
```
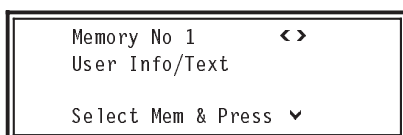
It is also possible to jump directly into programming Brightness, Colour, Beamshape, Position or CueLine® by pressing the associated attribute selection button situated to the right of the wheels (see Figure 3-4.) The Memory Display shows:

```
Memory No 1        < >

Select Mem & Press  ⌄
```
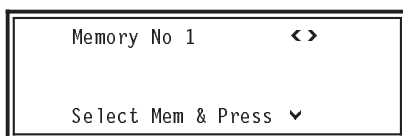
Press the ⌃ key to return to attribute selection.

Selecting Memories

In PROGRAM mode, once a programmed memory has been selected for a short time, that memory becomes live on the DMX output. When the memory number is changed, the old memory is immediately removed from the DMX output. However, the new memory is not added to the DMX output until the memory number has been selected for a short time. This allows the operator to step through memories slowly and see them fade in, or to step through quickly, and not transmit them on the DMX output until the memory number has not been changed for a short time. In Brightness, this effect is easily seen in the output lights and on the monitor.

The same fading in of memories results when using the ‹ and › keys to move between memories for any of the four attributes.

This feature is very useful for latest takes precedence (LTP) memories (Colour, Beamshape and Position). Whilst the memories are stepped through quickly, the memory data is not sent to the DMX outputs.

■ Figure 3-5: Memory Display and Arrow buttons

■ Figure 3-6: Attribute Memory Selection buttons

This stops the fixtures continually moving whilst the operator tries to find the correct memory. Due to the nature of LTP parameters, a different result may be seen on the stage depending on whether the memories are stepped through quickly or slowly. Consistent results can only be achieved by either stepping slowly through all memories, or stepping quickly to the previous full memory and then continuing slowly to the desired memory.

If the memory number is changed before all modifications have been saved by pressing the PROGRAM button, a warning appears prompting the operator either to save the changes, to abandon them, or to continue without saving the changes.

All the programming instructions assume that memories are empty when starting, i.e. that a memory number has a star next to it. However once programmed the star disappears and either it may have a a capitol 'M' next to it or nothing.

The star (∗) indicates the memory is completely empty and has not been programmed.

The 'M' next to the memory number indicates that the memory has been saved but the controls have been moved (thus changing the DMX output) since the program button was last pushed. Hence the desks DMX output is not the same as the values held in the memory (for that attribute).

A memory number with no star or 'M' implies that the DMX output is the same as the values held in memory (for that attribute).

Selecting Memory Numbers

Memory numbers can be selected in a variety of ways. Initially the memory number needs selecting using the arrow keys, once selected the memory numbers can be selected using the ‹ › keys. (For colour, beamshape and position memories the attribute memory selection buttons can also be used see figure Figure 3-6: Attribute Memory Selection buttons), or memory numbers can be entered via the external keyboard.

For a Brightness Memory, with the memory number selected, simply type in the required number using the keyboard (ensure that number lock is on if using a numeric keypad). Press return or enter to select the memory.

For a colour, beamshape and position memory you simply type in the page number followed by a full stop, and the memory number. Press enter or return to select memory. Between page number and memory number, a minus sign or decimal point may be used instead of a full stop.

Editing Times

All fade and transition times have defaults as set in Desk Set-Up, see Page 5-17.

When a memory is saved, times are saved as well, default times are stored, unless the operator has altered the time.

Times can be edited by using the arrow key to select the appropriate window, and then adjusting the time using the appropriate wheel – or the time may be directly entered by using the external keyboard.

Times can be entered in seconds. e.g. Type in "200" and press the Enter key – a time of 200 seconds is entered and displayed as 03:20:0. Alternatively, type in "3.20.0" (followed by the Enter key or PROGRAM), and this would have the same effect. Type in "2.5" and press enter, to enter 2.5 seconds shown as 00:02:5.

Group Buttons

Available only on the Sirius 500 in Program Mode.

The Sirius 500 has 9 pages of 10 memories to record and replay groups of fixtures. This allows for example intricate chase patterns to be programmed without having to keep selecting individual fixtures.

To record a group of fixtures, select them using the channel flash buttons, then select a group page and press and hold a group button. While still pressing the group button, press and release the PROGRAM button, then release the group button.

NOTE

Replaying Group Buttons
Replaying group buttons is exactly like pressing each channel select button. However, If fixtures are selected and channels edited and then programmed into a memory, the next individual fixture or group button that is pressed will clear the previous selection before selecting the new fixtures. So if (for example) Fixture 4 is selected using a channel button and then a group button is pressed containing Fixture 4, the group will be selected but Fixture 4 will be de-selected, (as it was previously selected).

3

■ Figure 3-7: Fixture Data

View Fixture Data

The operator can easily display a fixture's details, with DMX patch and current DMX values, on the monitor.

To display current information about any fixture, press and hold down the VIEW DATA button, and press the channel flash button for the relevant fixture. A Fixture data windows appears (See Figure3-7) until the buttons are released.

Find Function

Occasionally when using intelligent fixtures it becomes difficult to "get light out". This is normally due to a shutter, iris, or some other parameter not being at the expected values. If the default values set in the fixture data file move the fixture to bright white open, 50% pan and 50% tilt, or some other values that allow the fixture's beam to be visible, the Sirius can transmit those default values to the fixture directly from PROGRAM mode.

To send default values to a fixture, hold the VIEW DATA and MODIFY buttons, and press the channel flash button for the required fixture. Then release all three buttons. The fixture will now return to its default settings, and the fixture's beam becomes visible. Programming can now continue from the defaults.

3

Moving Between Brightness Memories

1   Press the attribute selection button for BRIGHTNESS. The Memory Display shows:

```
Memory No 10    < >
User Info/Text

Select Mem & Press  ⌄
```
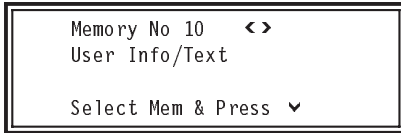
Use the ‹ and › keys to select a memory number, or use the external keyboard.

Moving Between Colour, Beamshape and Position Memories

1   Press the attribute selection button for COLOUR, BEAMSHAPE or POSITION. The Memory Display shows:

```
Memory No 1-1    < >
User Info/Text

Select Mem & Press  ⌄
```
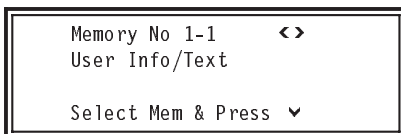
Use the ‹ and › keys to select memory number or the memory selection buttons to select the correct page and then the memory of external keyboard.

Setting Up the Desk for Programming Brightness

1   Set ALL faders to zero (except the GRAND MASTER). This applies to submaster faders, as their output will be included in the new memory if the fader is not at zero.

2   Turn the Key Switch to PROGRAM mode Use the ‹ and › keys to enter Brightness. The Memory Display shows:

```
Program Mode.
Attribute Type:
BRIGHTNESS      < >
Select type & press ⌄
```
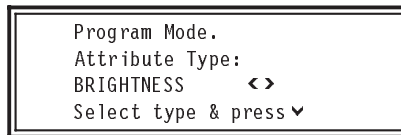
Press ⌄ to enter Brightness

3   Push the MASTER B fader to full, and ensure that BLIND is off, i.e. the red light in the button is off.

Programming a Brightness Memory (Scene) Using Presets

Ensure that the desk is set up for programming Brightness.

1   Use the ⌄ key to move to the *Memory Number*. The Memory Display shows:

```
Memory No 1*     < >
User Info/Text

Select Mem & Press  ⌄
```

Use the ‹ and › keys to select a memory number. A star by the memory number indicates that it is unprogrammed.

2   Press the ⌄ key to select a suitable memory type (see the section on Memory Types on page 3-3).

3   Use the ‹ and › keys to select *Scene*.

4   Press the ⌄ key once.

```
Memory Data (Levels)

Set Channel Levels
and Press  ⌄
```
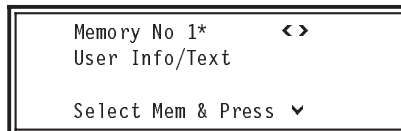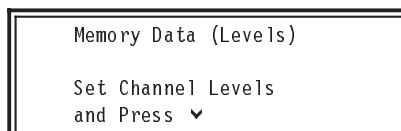
Move MASTER B to full. Set up a scene using PRESET B. The green output lights come on.

5   Press the ⌄ key once. The FLASH FUNCTION automatically changes to TEXT. Enter a description of the memory using the channel flash buttons, or using the external keyboard.

6   Press the ⌄ key again to alter the *Fade In Time* from its default.

7   Press the ⌄ key once to alter the *Fade Out Time* from its default.

Use the wheels to adjust the fade times. The Wheel Display prompts the operator as to which wheel to use.

8   Press the ⌄ key.

```
Memory Data

Press Program to
Save Memory
```
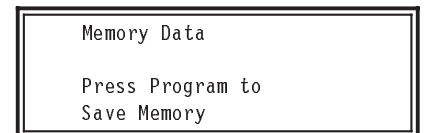
9   Press the PROGRAM button to save the memory. The star by the memory number disappears and the lights in the channel flash buttons turn yellow, indicating that the data has been stored in memory.

NOTE

Current Memory
As programmed memories are selected, desk outputs will change.

Quick Programming
Not all programming steps need to be completed. If no Info/Text is to be entered and fade times are to be left at defaults, press the PROGRAM button after setting the channel levels - the desk returns to the memory number.

Text entry
On the Sirius 250 when using the Channel flash buttons for text entry the second row of characters can be accessed by means of the SHIFT button,

Programming Brightness
The above example uses the B preset, in normal mode the A preset could be used instead. In wide mode all presets are used.

3

Programming a Brightness Memory (Scene) Using 4 Wheel Drive®

Ensure that the desk is set up for programming Brightness.

1 Use the ⌄ key to move to the *Memory Number*. The Memory Display shows:

```
Memory No 1*        < >
User Info/Text


Select Mem & Press  ⌄
```

Use the ‹ and › keys to select a memory number. A star by the memory number indicates that it is unprogrammed.

2 Press the ⌄ key to select a suitable memory type (see the section on Memory Types on page 3-3).

3 Use the ‹ and › keys to select *Scene*.

4 Press the ⌄ key once.

```
Memory Data (Levels)


Set Channel Levels
and Press  ⌄
```
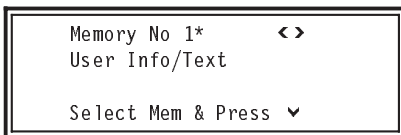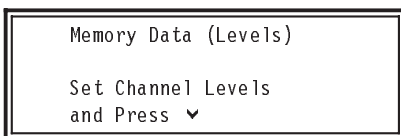
Press the channel flash buttons for the fixtures required, at which point the red lights in the buttons come on. Multiple fixtures can be selected until the channel level wheel is moved.

Use the channel level wheel to adjust the level of those fixtures. Once these have been adjusted, press a channel flash button to start a new selection of fixtures.

5 Continue selecting fixtures and editing until the scene is correct.

6 Press the ⌄ key once. The FLASH FUNCTION automatically changes to TEXT. Enter a description of the memory using the channel flash buttons, or using the external keyboard.
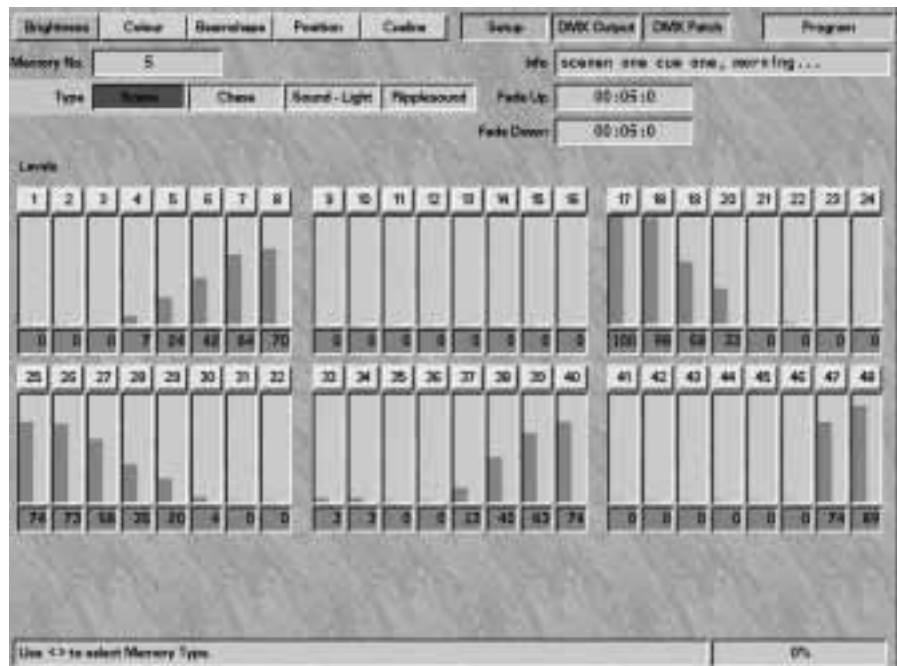
■ Figure 3-8: Brightness screen (modified - not saved)

7 Press the ⌄ key again to alter the *Fade In Time* from its default.

8 Press the ⌄ key once to alter the *Fade Out Time* from its default.

Use the wheels to adjust the fade times. The Wheel Display prompts the operator as to which wheel to use.

9 Press the ⌄ key.

```
Memory Data


Press Program to
Save Memory
```
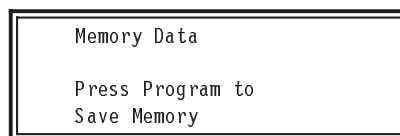
Press the PROGRAM button to save the memory. The star by the memory number disappears and the lights in the channel flash buttons turn yellow, indicating that the data has been stored in memory.

NOTE

Fade Times
Times all have defaults which are set in Desk Set-Up. Fade times for individual memories can be adjusted to suit the memory.

Memory Output
To stop the current memory being output, turn on BLIND.

BLIND Mode
In BLIND mode DO NOT use attribute memory buttons to select memories for programming, as this causes the memory to be output.

Programming Order
It is advisable to program Brightness first, as it is difficult to program the other parameters with the lamps off.

Quick Programming
Not all programming steps need to be completed. If no Info/Text is to be entered and fade times are to be left at defaults, press the PROGRAM button after setting the channel levels - the desk returns to the memory number.

Times
Can also be entered using the External Keyboard.

3

MONITOR NOTES

🖳 **Top row on the monitor**

the key switch position (Program) is indicated in the top right-hand corner of the screen. The boxes to the left showing Brightness, Colour, Beamshape, Position, CueLine, Setup, DMX Output and DMX Patch. Indicating which screen is active by highlighting it in red as screens are changed, and in green when active. Normally Set-Up, DMX Output and DMX Patch are shown in a different green as they are only accessible via the arrow keys, The other have selection buttons by the wheels

🖳 **Setting Up a Scene**

The results of the preceding instructions to set up a scene are shown on the bar graph. Selected fixtures are highlighted in red.

🖳 **Programming**

The PROGRAM button can be pressed at any time to save the current memory settings.

🖳 **Channel Output**

The bar graph showing channel output is split vertically in two. The green left half shows actual output (see Figure 3-8), the yellow right half shows levels programmed into the current memory (see Figure 3-9). Channels programmed with PRESET faders cannot be edited below the current fader level.

🖳 **Inputting Text**

Press the FLASH FUNCTION button until TEXT is selected. The active bar moves to Info. Input the text using the channel flash buttons or the external keyboard. Press the FLASH FUNCTION button when finished to return the active bar to the memory number.

🖳 **Level Adjustments**

Level adjustments can be made at any time.

🖳 **Fade Times**

Fade times can be adjusted at any time and are displayed on the monitor.
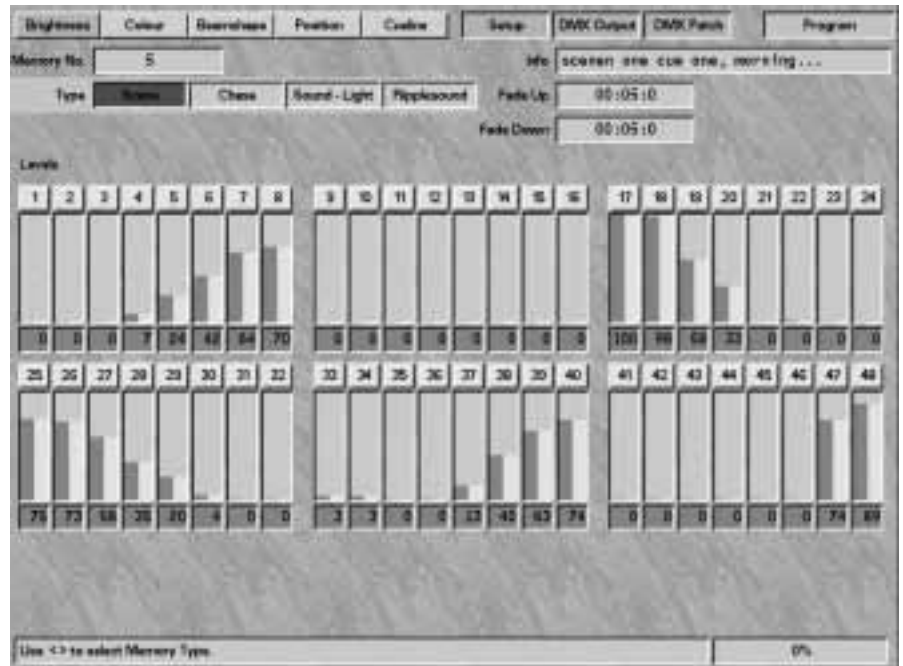
■ Figure 3-9: Brightness screen (after saving)

🖳 **Output Level**

Below each fader bar a small box shows the current output level in figures. This Box is yellow when the output is the same as the stored memory and changes to green if the output is different to the stored memory

🖳 **Information**

The bottom of the monitor screen shows information and limited help text.

🖳 **Unlatched Channels**

Brightness channels that are not patched to the DMX outputs produce a dark green bar graph display, and the fixture number is gray not yellow. Unpatched Brightness channels are not recorded into memories, therefore the yellow bars do not appear when the PROGRAM button is pressed.

Reviewing a Brightness Memory

1 Lower all submasters and MASTER A and B to zero. Any resulting DMX output (for Brightness) emanates from the current memory.

2 Use the ‹ and › keys to change the memory number to review memory outputs.

3 Use the BLIND feature to remove the current memory and Presets from the DMX outputs, see the section on Activating BLIND on page 3-21. Any remaining Brightness DMX signals are from memories transferred to the submasters.

■ Figure 3-10: Transfer to submaster

Submasters

It is possible to transfer any programmed Brightness memory to any of the four pages of submaster faders for later use. A memory can be transferred to a submaster with its fade in and fade out times, or with no time. If transferred with time, the actual fader movement does not directly control the output level. The fader movement initiates the fade time, which controls the output level.

Viewing the Content of any Submaster

1 To see which memory has been transferred to a submaster, press and hold the INFO button and press the relevant SUBMASTER FLASH button.

```
    Submaster Info:

    User Info/Text

```
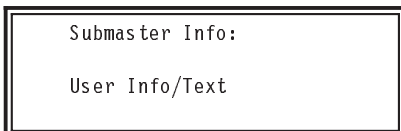
2 Release both buttons.

Transferring to a Submaster Fader

1 Decide whether the memory needs to be transferred with time or without time.

2 Press and hold the TRANSFER WITH TIME or TRANSFER NO TIME button, as appropriate. When transferring with time, the Memory Display shows:

```
    Trans Mem 9   T  ‹ ›
    User Info/Text

    Push Submaster Flash
```
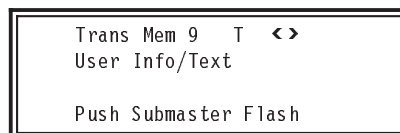
Or when transferring without time:

```
    Trans Mem 9      ‹ ›
    User Info/Text

    Push Submaster Flash
```
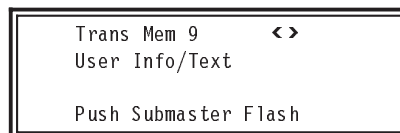
Use the ‹ and › keys to select the correct memory (see Figure 3-10).

3 Once the correct memory is displayed, press PAGE button 1, 2, 3 or 4 to select the correct submaster page, and press and release the SUBMASTER fader FLASH button.

4 Release the TRANSFER button.

NOTE

Edited Memories
Memories that are edited after transferring to a submaster must be re-transferred for the changes to take effect.

Fade Times
Are generally accurate to XXX percent

WARNING

Overwriting a Submaster
Care must be taken as if a memory is already assigned to the selected SUBMASTER, it will be overwritten permanently. No warning is given.

3
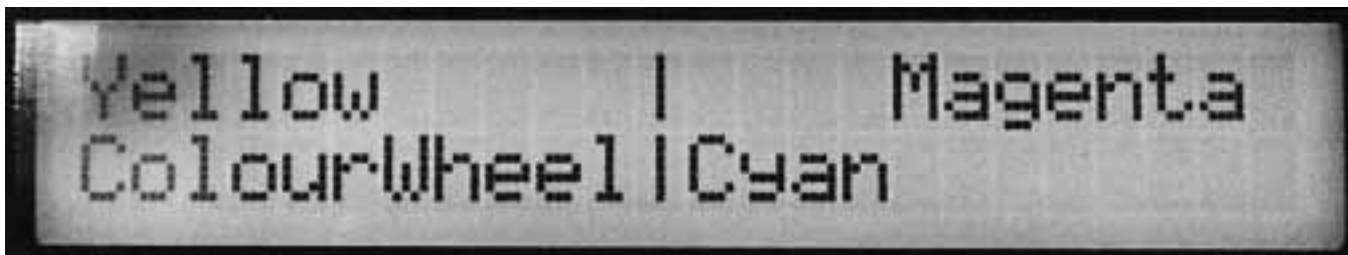
■ Figure 3-11: Wheel Display
example

Programming a Colour Memory (Full Scene)

1   Press the attribute selection button for COLOUR. The Memory Display shows:

```
Memory No 1-1      ‹ ›
User Info/Text

Select Mem & Press  ⌄
```
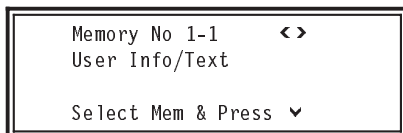
(See Figure 3-12 for monitor display.)

The *Memory Number* is displayed as page number - memory number, and corresponds to the COLOUR memory buttons.

Select the *Memory Number* by using either the ‹ and › keys, the attribute memory buttons, or directly from an external keyboard. A star by the memory number indicates that it is unprogrammed.

2   Press the ⌄ key.

```
Memory Type.
Full scene          ‹ ›

Select Type & Press ⌄
```

Use ‹ and › to select *Full scene*.

3   Press the ⌄ key.

```
Memory Data(Colours)
Select Fixtures and
Adjust Colours on
Wheels and Press  ⌄
```

To set the parameters, press the channel flash buttons to select individual or multiple fixtures to be edited. Those available to be modified have a yellow light in the button, which turns red once selected. The Wheel Display indicates how the various fixture parameters have been mapped onto the 4 Wheel Drive[®], see Figure 3-11.

If the selected fixtures have more than four Colour parameters, use the WHEEL GROUP button to move between the groups. Adjust the settings of the parameters by moving the wheels. Changes are seen live on the outputs.

4   Continue selecting fixtures and adjusting Colours until the whole scene has been set.
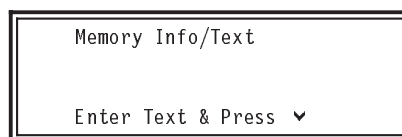
5   Press the ⌄ key.

```
Memory Info/Text


Enter Text & Press  ⌄
```

Enter a description of the memory using the channel flash buttons, or using the external keyboard.

6   Press the ⌄ key.

```
Memory Data (Trans)
TRANSITION xx:xx:x
Set Tran. Time on
Wheels and Press  ⌄
```

Alter the transition time using the wheel indicated in the Wheel Display.

7   Press the ⌄ key.

```
Memory Data

Press Program
to Save Memory
```

Press the PROGRAM button to save the memory and return to the *Memory Number* window.
Or press ⌃ to revert to *Transition*.

3
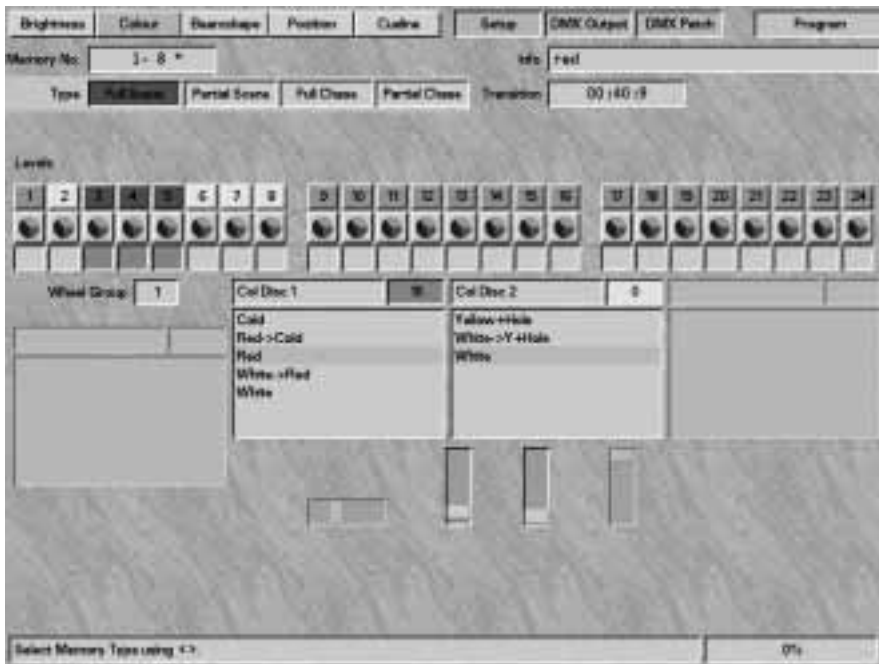
■ Figure 3-12: Colour screen

NOTE

Brightness
It is much easier to set up Colour parameters when the lamp is on. If it is off, use the PRESETS to turn it on, or transfer a Brightness memory to a submaster using the TRANSFER buttons (see the section on Transferring a Brightness Memory to a Submaster on page 3-10). Brightness transfer operates in any mode.

Memory Numbers
Memory numbers are displayed as page number - memory number, e.g. 2-4, which is Page 2, button 4, and can be selected by using either the ‹ and › keys, the PAGE and the memory buttons or by an external keyboard. If the memory number shows 1-1*, the star indicates that it is unprogrammed. If the memory number shows 1-1M, this indicates that the data has been modified for 1-1 but not saved. Each of the ten buttons on page 00 contains the same thing: the default value for all parameters for all fixtures. These 0-0 memories can be selected when recording FOCUS SUBMASTERS, if a programmed memory for a particular attribute is not required.

Quick Programming
Not all programming steps need to be completed. If no Info/Text is to be entered and transition times are to be left at defaults, press the PROGRAM button after setting the channel levels - the desk returns to the memory number.

Transition Time
The time it takes to move from the current state to the new state. Can be set per memory (by using wheels or an external keyboard) or left at a default value.

Default Times
Times all have defaults which are set in Desk Set-Up.

Skipping the Required Point
If the ⌄ key is pressed too many times and the point aimed for is passed, press the ⌃ key to move back.

Programming
Before saving the memory, all parameters on all wheel groups should be set up. The memory records all parameters, not just those displayed on the screen.

Group Selection
MACRO buttons can be used to pick up groups of fixtures (see the section on Programming Macros on page 3-37). Or on a Sirius 500 the Group buttons may be used (see Group buttons on page 3-5)

MONITOR NOTES

🖳 *Fixtures Available*

The fixture bar displays the 48 (or 24) fixtures with those highlighted in yellow having Colour parameters available for programming.

🖳 *Programming*

Changing the data for a fixture causes the box below the fixture number to turn green. When the PROGRAM button is pressed, that data is saved and the box turns yellow, indicating that the stored data is now the same as the screen data.

Fixtures with saved data have a yellow box below the fixture number, and a green box if the fixture has data different to that in the memory.

🖳 *Fixtures Selected*

Individual or multiple fixtures selected for editing by pressing the channel flash buttons are highlighted in red.

🖳 *Wheel Mapping*

The screen indicates how the various fixture parameters have been mapped onto the 4 Wheel Drive®.

3

Programming a Beamshape Memory (Full Scene)

1   Press the attribute selection button for BEAMSHAPE. The Memory Display shows:

```
Memory No 1-1*      <>
User Info/Text

Select Mem & Press  v
```
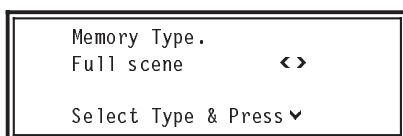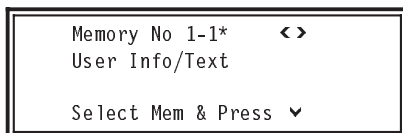
(See Figure 3-13 for monitor display.)

The *Memory Number* is displayed as *page number - memory number*, and corresponds to the BEAMSHAPE memory buttons.
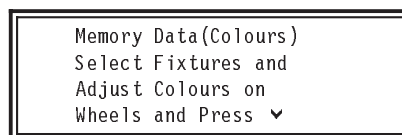
Select the *Memory Number* by using either the < and > keys, the attribute memory buttons, or directly from an external keyboard. A star by the memory number indicates that it is unprogrammed.

2   Press the v key.

```
Memory Type.
Full scene          <>

Select Type & Press  v
```

Use < and > to select *Full scene*.

3   Press the v key.

```
Memory Data (Beams)
Select Fixtures and
Adjust Beam on
Wheels and Press  v
```

To set the parameters, press the channel flash buttons to select individual or multiple fixtures to be edited. Those available to be modified have a yellow light in the button, which turns red once selected. The Wheel Display indicates how the various fixture parameters have been mapped onto the 4 Wheel Drive®.
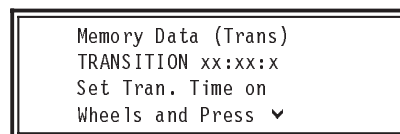
If the selected fixtures have more than four Beamshape parameters, use the WHEEL GROUP button to move between the groups. Adjust the settings of the parameters by moving the wheels. This can be seen live on the outputs.

4   Continue selecting fixtures and adjusting Beamshape parameters until the whole scene has been set.
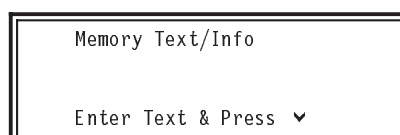
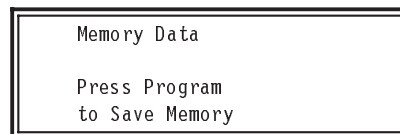5   Press the v key.

```
Memory Text/Info


Enter Text & Press  v
```

Enter a description of the memory using the channel flash buttons, or using the external keyboard.

6   Press the v key.

```
Memory Data (Trans)
TRANSITION xx:xx:x
Set Trans. Time on
Wheels and Press  v
```

Alter the transition time using the wheel indicated in the Wheel Display.

7   Press the v key.

```
Memory Data

Press Program
to Save Memory
```
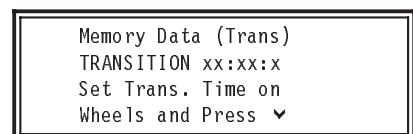
Press the PROGRAM button to save the memory and return to the *Memory Number* window.
Or press ^ to revert to *Transition*.
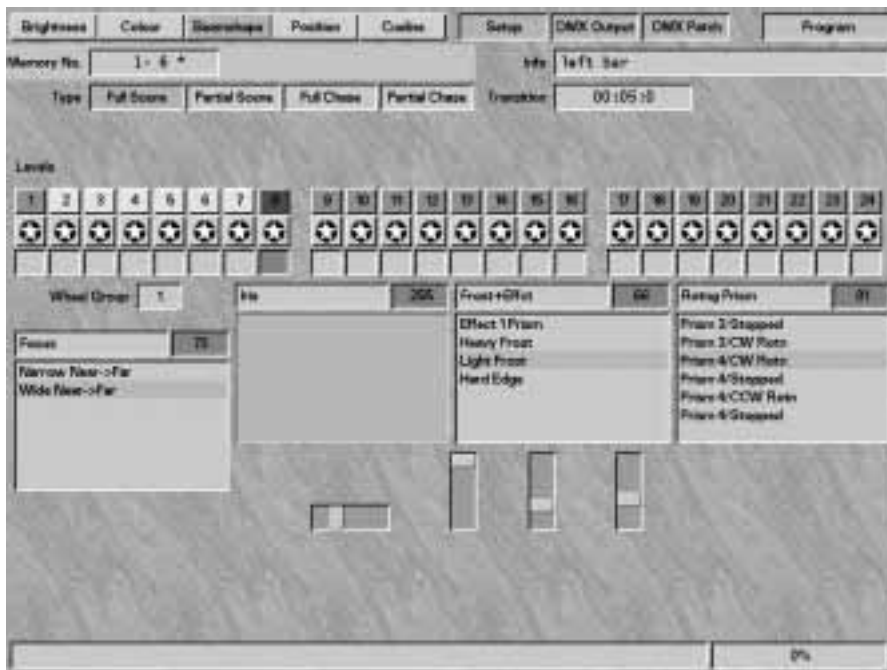
NOTE

Brightness
It is much easier to set up Beamshape parameters when the lamp is on. If it is off, use the PRESETS to turn it on, or transfer a Brightness memory to a submaster using the TRANSFER buttons, see the section on Transferring a Brightness Memory to a Submaster on page 3-10. Brightness transfer operates in any mode.

Memory Numbers
Memory numbers are displayed as page number - memory number, e.g. 2-4, which is Page 2, button 4, and can be selected by using either the ‹ and › keys,the PAGE and the memory buttons or by an external keyboard. If the memory number shows 1-1*, the star indicates that it is unprogrammed. If the memory number shows 1-1M, this indicates that the data has been modified for 1-1 but not saved. Each of the ten buttons on page 00 contains the same thing: the default value for all parameters for all fixtures. These 0-0 memories can be selected when recording FOCUS SUBMASTERS, if a programmed memory for a particular attribute is not required.

Quick Programming
Not all programming steps need to be completed. If no Info/Text is to be entered and transition times are to be left at defaults, press the PROGRAM button after setting the channel levels - the desk returns to the memory number.

Transition Time
The time it takes to move from the current state to the new state. Can be set per memory (by using wheels or an external keyboard) or left at a default value.

Default Times
Times all have defaults which are set in Desk Set-Up.

Skipping the Required Point
If the ⌄ key is pressed too many times and the point aimed for is passed, press the ⌃ key to move back.

Programming
Before saving the memory, all parameters on all wheel groups must be set up. The memory records all parameters, not just those displayed on the screen.

Group Selection
MACRO buttons can be used to pick up groups of fixtures (see the section on Programming Macros on page 3-37). Or on a Sirius 500 the Group buttons may be used (see Group buttons on page 3-5)

MONITOR NOTES

🖵 **Fixtures Available**

The fixture bar displays the 48 (or 24) fixtures with those highlighted in yellow having Beamshape parameters available for programming.

🖵 **Programming**

Changing the data for a fixture causes the box below the fixture number to turn green. When the PROGRAM button is pressed, that data is saved and the box turns yellow, indicating that the stored data is now the same as the screen data.

Fixtures with saved data have a yellow box below the fixture number, and a green box if the fixture has data different to that in the memory.

🖵 **Fixtures Selected**

Individual or multiple fixtures selected for editing by pressing the channel flash buttons are highlighted in red.

🖵 **Wheel Mapping**

The screen indicates how the various fixture parameters have been mapped onto the 4 Wheel Drive®.

3

■ Figure 3-14: The 4 Wheel Drive®

Thumb   Index   Middle   Third
         finger   finger   finger
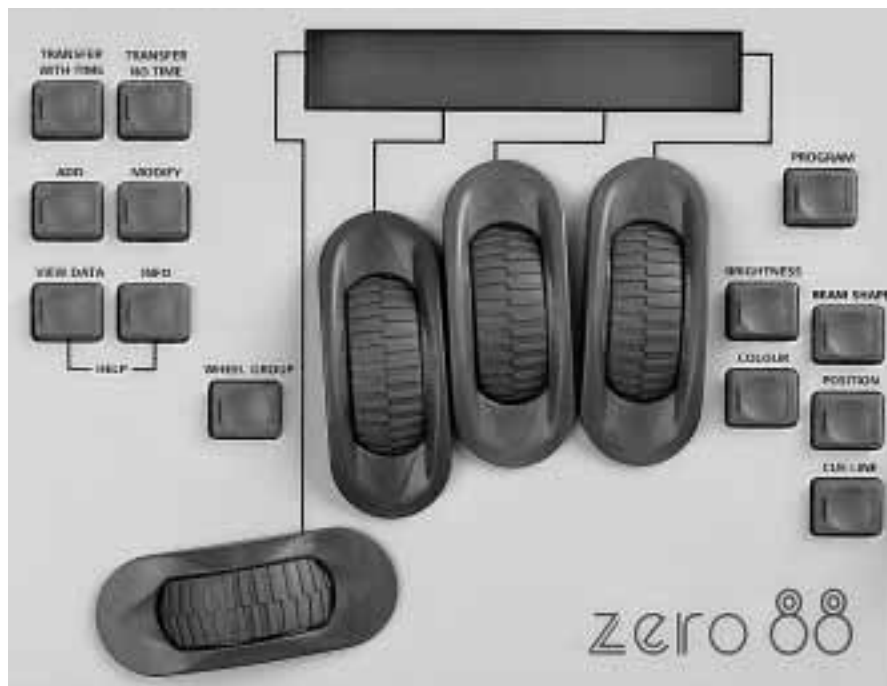
Programming a Position Memory (Full Scene)

1   Press the attribute selection button for POSITION. The Memory Display shows:

```
Memory No 1-1*      ‹ ›
User Info/Text

Select Mem & Press  ⌄
```
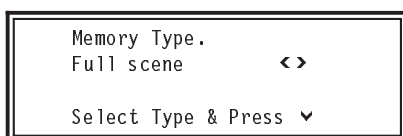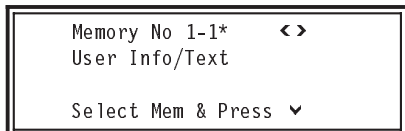
(See Figure 3-15 for monitor display.)

The *Memory Number* is displayed as *page number - memory number*, and corresponds to the POSITION memory buttons.
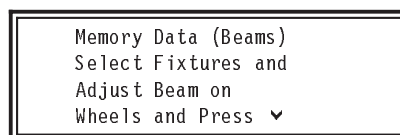
Select the *Memory Number* by using either the ‹ and › keys, the attribute memory buttons, or directly from an external keyboard. A star by the memory number indicates that it is unprogrammed.

2   Press the ⌄ key.

```
Memory Type.
Full scene          ‹ ›

Select Type & Press ⌄
```

Use ‹ and › to select *Full scene*.

3   Press the ⌄ key.

```
Memory Data(Position)
Select Fixtures and
Set Pos. with Wheels
and Press  ⌄
```
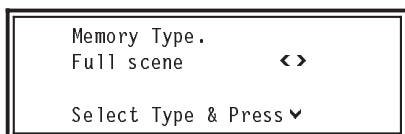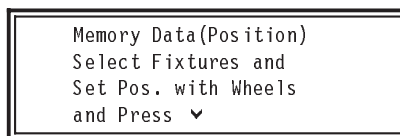
To set the parameters, press the channel flash buttons to select individual or multiple fixtures to be edited. Those available to be modified have a yellow light in the button, which turns red once selected.

Use the wheels to adjust the Position on the selected fixture or fixtures. The thumb wheel is mapped to control Pan and the index finger wheel to control Tilt, see Figure 3-14.

Movement Effects can now be selected (see the relevant section on page 3-17).

Other Position parameters (if the fixture has any, such as motor speed) are accessed by pressing the WHEEL GROUP button. Use the wheels to adjust these parameters.

4   Continue selecting fixtures and adjusting Positions until the whole scene has been set.
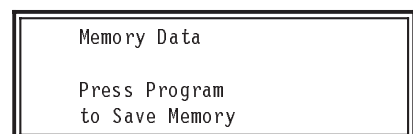
5   Press the ⌄ key.

Enter a description of the memory using the channel flash buttons, or using the external keyboard.

6   Press the ⌄ key.

Alter the transition time using the wheel indicated in the Wheel Display.

7   Press the ⌄ key.

```
Memory Data

Press Program
to Save Memory
```
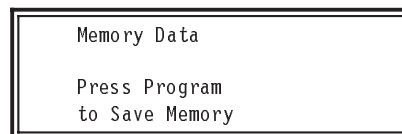
Press the PROGRAM button to save the memory and return to the *Memory Number* window. Pressing ⌃ reverts to *Transition*.
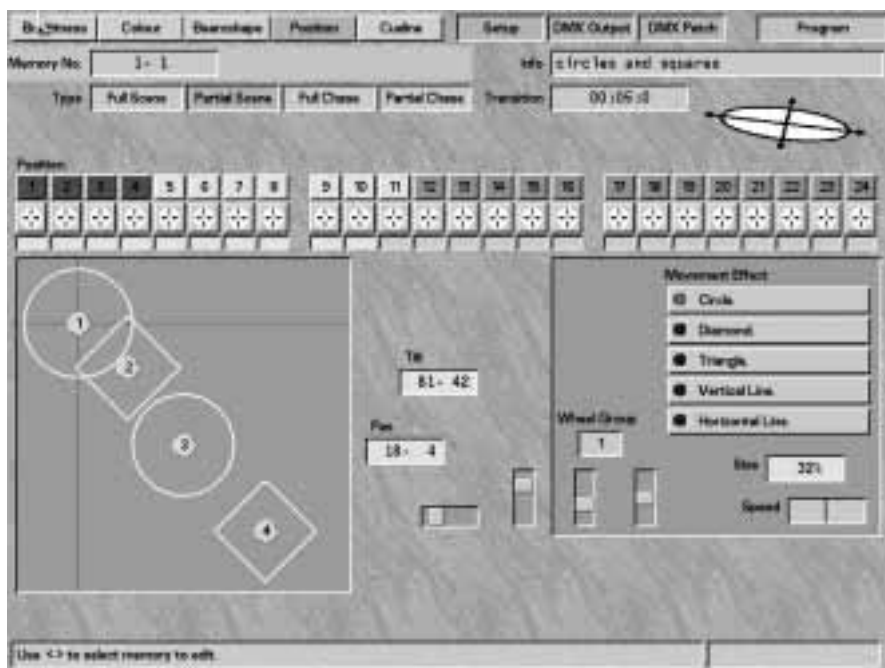
■ Figure 3-15: Position screen

Movement Effects

Movement effects offer complete movement patterns, in a single memory, with one single button push, saving the operator much time and programming effort.

When the fixture has been selected, press one of the MOVEMENT EFFECT buttons (see Figure 3-18) to put an automatic movement effect on the fixture.

Several effects are available, such as a circle, diamond or triangle. (These are displayed on the monitor.) Try each button to view the different results.

More than one movement effect may be running at the same time (see Figure 3-15)

Use the wheels indicated in the Wheel Display to adjust the size of the effect and speed of rotation. Speed also incorporates direction. If the speed is too fast for the fixture, the correct effect may not be achieved. In that case, slow down the effect using the wheel.

These effects can be seen live on the outputs, and are also clearly shown on the monitor (see Figure 3-15).

MONITOR NOTES

🖥 *Fixtures Available*

The fixture bar displays the 48 (or 24) fixtures with those highlighted in yellow having Position parameters available for programming.

🖥 *Programming*

Changing the data for a fixture causes the box below the fixture number to turn green. When the PROGRAM button is pressed, that data is saved and the box turns yellow, indicating that the stored data is now the same as the screen data.

Fixtures with saved data have a yellow box below the fixture number, and a green box if the fixture has data different to that in the memory.

🖥 *Fixtures Selected*

Individual or multiple fixtures selected for editing by pressing the channel flash buttons are highlighted in red.

🖥 *Wheel Mapping*

The screen indicates how the various fixture parameters have been mapped onto the 4 Wheel Drive®.

3

Editing a Brightness Memory

Adjustments to a memory can prove necessary after it has been programmed. This can be done in two ways. Channels can be adjusted using a wheel or if every channel has changed substantially, record the memory with all channels at zero by lowering the GRAND MASTER and pressing the PROGRAM button (see the section on Programming a Zero Memory on page 3-20). Then raise the GRAND MASTER, set up the memory on the PRESETS, and record as detailed in the section on Programming a Brightness Memory (Scene) Using PRESETS on page 3-7.

If using the wheels, the operator can easily and quickly either add an extra channel, move levels up or down, or increase the whole memory by a few extra percent (or decrease it).

Setting up for Editing Brightness Memories

Ensure that the desk holds at least one programmed scene memory.

1   Set ALL faders to zero except the GRAND MASTER, which should be left at full.
2   Turn the Key Switch to PROGRAM mode.
3   Press the Brightness attribute button, to the Right of the wheels

Adding a Channel to a Brightness Memory

1   Use the ‹ and › keys to select a memory number, or enter it directly form the external keyboard.
2   Press the ⌄ key twice. The Memory Display shows:

```
    Memory Data (Levels)

    Set Channel Levels
    and Press  ⌄
```

The current scene is live on the outputs.

3   To add an extra channel, raise the appropriate PRESET fader and its MASTER, and adjust the level until the desired effect is seen on the stage. The yellow light in the

channel flash buttons indicates those channels that are currently programmed. The extra channel does not have a yellow light in the channel flash button.

4   Press the PROGRAM button to add the extra channel to the memory, at which point the yellow light comes on.
5   When the PRESET fader is lowered, the stage lighting remains the same.
6   Once all the correct levels have been set, press the PROGRAM button to save the changes to memory.

Editing or Removing a Channel in a Brightness Memory

1   Follow points 1 and 2 in the previous section on Adding a Channel to a Brightness Memory.
2   Press the flash button of the appropriate channel. The yellow light in the channel flash button turns red. Ensure that the PRESET fader is at zero.
3   Use the channel level wheel (indicated in the Wheel Display) to control the DMX output of the selected channel. The channel level can be increased or decreased, and the effect seen directly in the green output lights and on the output.
4   Once all the correct levels have been set, press the PROGRAM button to save the changes to memory. Channel levels set to zero are removed from the memory.

MONITOR NOTES

⌨ *DMX Output*

   Live Brightness DMX outputs are shown as green bars with the numeric value displayed below the bar.

⌨ *Channel Selection*

   Selected channels have red lights in the channel flash buttons and are highlighted in red on the monitor.

   Selected channels can have the DMX output directly modified by the channel level wheel.

⌨ *Programmed Brightness*

   When all the green bars have corresponding yellow bars of the same height, The saved memory is the same as the DMX output.

⌨ *Saving a Memory*

   The PROGRAM button can be pressed at any time to save the current memory settings.

Editing a Group of Channels in a Brightness Memory

1   Use the ⌄ key to move to the *Memory Number*. Use the ‹ and › keys to select a memory number or by using an external keyboard.

2   Press the ⌄ key twice. The Memory Display shows:

```
Memory Data (Levels)

Set Channel Levels
and Press  ⌄
```
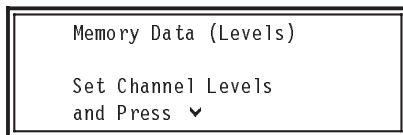
The current scene is live on the outputs.

3   Use the channel flash buttons to select a group of channels. The red light in the channel flash button comes on once selected. Ensure the PRESET faders are at zero.

4   Use the channel level wheel (indicated in the Wheel Display) to move all the levels of the group up and down together, without changing the difference between individual channels. This is live on the outputs.

5   Once all the correct levels have been set, press the PROGRAM button to save the changes to memory.

Editing an LTP Memory

The procedure for editing an LTP memory (Colour, Beamshape or Position) is the same as that for an HTP (Brightness) memory with a few minor exceptions.

Changing a channel level is done in the same way as for an HTP memory, by selecting the fixture and adjusting parameter values using the wheels.

Bringing a channel value to zero is easy. However, it must be borne in mind that in HTP bringing a channel to zero turns the lamp off completely, whereas in LTP 'zero' does not equal 'off'. For example, zero in a mirror position cannot be off. The same principle applies to colour parameters in that 'off' in colour is 'black' (the lamp would normally be turned off to achieve this). Therefore removing parameter from a memory by bringing the channel to zero does not work.

In full scene or full chase all channels are recorded in any case, therefore only the level in the memory can be edited.

A partial scene or partial chase memory must be used if a memory is required without a fixture in it. Once a fixture has been added to a partial memory, it is not possible to 'edit it out'. The only way to achieve this is to delete the memory, see the section on Deleting a Memory on page 3-20, and to reprogram the memory without the fixture.

NOTE

Editing More than One Fixture
The difference in levels between channels is not changed even if a channel reaches full or zero. The original difference can be preserved until program is pressed.

Transferred Memories
If a brightness memory has been transferred to a submaster, and that memory is edited, it needs re-transferring to the submaster for that change to take effect.

3

Memory Removal

This section is based on a Brightness memory. It is not possible to program a Zero Memory in Colour, Beamshape or Position, however, a memory can be deleted. A zero memory does not work for LTP parameters as there is no 'off' or 'zero'.

Programming a Zero Memory

A zero memory is one which has all channel levels set to zero (zero = off). This can be used in a show as a blackout without using the DBO feature, or as an intermediate stage when completely changing channel levels in an existing memory, but keeping all other memory information.

1   Press the BRIGHTNESS button. The Memory Display shows:

```
    Memory No 10      ‹ ›
    User Info/Text

    Select Mem & Press  ⌄
```
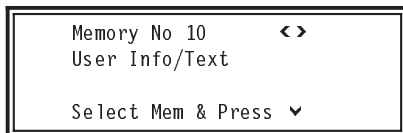
Use the ‹ and › keys to select a memory number or use the external keyboard.

2   Lower the GRAND MASTER to zero.

3   Press the PROGRAM button. The memory now has level data at zero. The rest of the memory is unaffected.

Making a Chase Step Zero

1   Press the BRIGHTNESS button. The Memory Display shows:

```
    Memory No 10      ‹ ›
    User Info/Text

    Select Mem & Press  ⌄
```
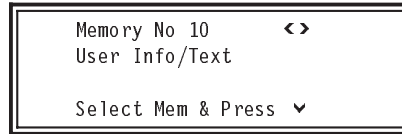
Use the ‹ and › keys to select a memory number.

2   Press the ⌄ key twice.

```
    Memory Data (Step)
    STEP 1           ‹ ›
    Press Add Step
    or  ⌄ if last step
```
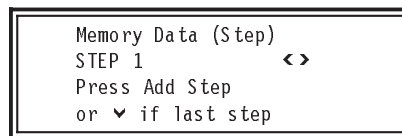
Use the ‹ and › keys to select the step to be zeroed.

3   Lower the GRAND MASTER to zero.

4   Press the PROGRAM button. The step now has level data at zero. The rest of the memory is unaffected.

Deleting a Memory

1   Use the arrow keys to select the memory to be deleted.

2   Bring the GRAND MASTER to zero. Press the PROGRAM button and keep it pressed for one second, then release it.

A prompt appears in the Memory Display and on the monitor:

```
       **WARNING**
     Delete Memory 1?
     Press Prog to Delete
     or  ‹ to Abort
```
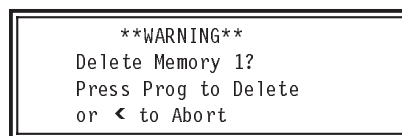
3   Press the PROGRAM button. A star by the memory number appears indicating that the memory has been deleted.
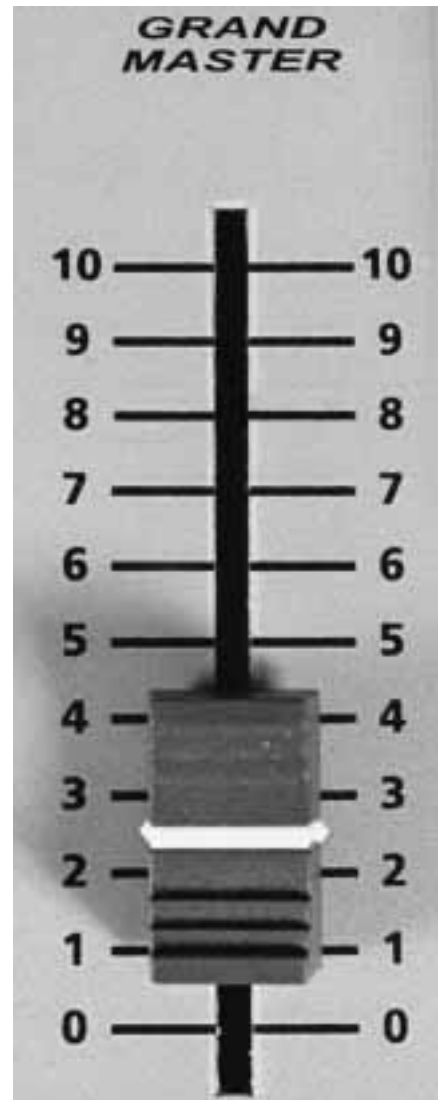
■ Figure 3-16: Grand Master fader

MONITOR NOTES

▭ *Deleted memories*

The output level display returns to zero and a star by the memory number appears, indicating that the memory has been deleted.

3

Blind

The BLIND feature only has effect in PROGRAM mode where memories may be programmed either 'live' or 'blind'. In BLIND the PRESET levels and the current memory do not affect the desk outputs, allowing memories to be updated during desk use. Memories on submasters do affect the desk outputs. Active chases also run.

Activating Blind

1   Press the BLIND button. The red light in the button comes on.
2   The outputs from PRESETS A and B and the current memory are no longer connected to the DMX output, and any associated green output lights go out. The operator can now run a show using memories on submasters, whilst programming other memories blind using the PRESETS, and editing by means of the wheels.

Blind Programming of a Brightness Memory (Scene) Using Presets

The following example uses Brightness, however, the same principles apply in Colour, Beamshape and Position.

Follow the procedure for setting up the desk for programming Brightness (see page 3-7), and ensure that the BLIND button is on.

1   Press the BRIGHTNESS button. The Memory Display shows:

```
Memory No 1*      < >
User Info/Text

Select Mem & Press  ⌄
```

Use the ‹ and › keys to select a memory number. A star by the memory number indicates that it is unprogrammed.

2   Press the ⌄ key to select a suitable memory type (see the section on Memory Types on page 3-3).

```
Memory Type.
Scene            < >

Select Type & Press ⌄
```

Use the ‹ and › keys to select *Scene.*
3   Press the ⌄ key once.

```
Memory Data (Levels)

Set Channel Levels
and Press  ⌄
```

Move MASTER B to full. Set up a scene using PRESET B. .

NOTE
These levels are not live on the outputs and the green output lights DO NOT come on.

4   Press the ⌄ key once. The FLASH FUNCTION automatically changes to TEXT. Enter a description of the memory using the channel flash buttons, or using the external keyboard.
5   Press the ⌄ key again to alter the *Fade In Time* from its default.
6   Press the ⌄ key once to alter the *Fade Out Time* from its default.
    Use the wheels to adjust the time. The Wheel Display prompts the operator as to which wheel to use.
7   Press the ⌄ key.

```
Memory Data

Press Program to
Save Memory
```

Press the PROGRAM button to save the memory. The star by the memory number disappears and the lights in the channel flash buttons turn yellow, indicating that the data has been stored in memory.

8   To transfer the memory to a submaster so that it can be seen live on the outputs, press and hold the TRANSFER NO TIME button, and press and release the SUBMASTER required button. Release the TRANSFER NO TIME button.
9   Raise the submaster to see the memory live on the outputs and in the green output lights.

MONITOR NOTES

⌨ *BLIND Mode*

   When in BLIND mode the monitor shows live DMX output from the submasters in the green, left-hand bar of the bar graph. The yellow, right-hand bar gives levels in the current memory. If the right-hand bar is blue instead of yellow, the current level is different to that held in the memory.

⌨ *Programming*

   Pressing the PROGRAM button updates the current memory, at which point all blue bars turn yellow as confirmation.

⌨ *DMX Value*

   In BLIND the current DMX value is highlighted in blue.

⌨ *Selecting a Channel*

   When a channel is selected using the channel flash button, the fixture number square turns from yellow to red. The channel level wheel can then be used to adjust the level.

⌨ *Editing a Level*

   A level cannot be adjusted to below the current fader level with a wheel. So lower the fader to zero and then adjust the level.

NOTE

Chaser Memories
Do not normally run in program mode, as this would make programming difficult. With Blind Mode on selected chases will run.

3

Copying a Memory

The MEMORY COPY button has two separate functions, depending on whether the current memory is programmed or not. If the current memory is programmed, MEMORY COPY prompts the operator to save that memory as another memory. This can be used when the operator wants to base the next memory to be programmed on the current one.

If the current memory is not programmed, MEMORY COPY prompts the operator to select an existing memory to copy into the current memory. The memory that has been copied can then be edited as required. This can also be used to build a chase based on existing memories.

NOTE

Examples
Whilst examples are given using Brightness memories, the procedure is the same for Colour, Beamshape and Position memories.

Setting Up the Desk for Copying

Ensure that the desk holds two programmed Brightness memories, one of which must be a chase.

1   Set up the PRESETS with ALL faders at zero (except the GRAND MASTER).
2   Turn the Key Switch to PROGRAM mode.
3   Push the MASTER B fader to full, and ensure that BLIND is off, i.e. that the red light in the button is off.
4   Press the Brightness button. The Memory Display shows:

```
 Memory No 27        ‹ ›
 User Info/Text

 Select Mem & Press  ⌄
```

Use the ‹ and › keys to select a memory (or use an external keyboard) that has already been programmed.

Copying a Memory (Save As)

1   Set up the desk for copying as described left.
2   Press the MEMORY COPY button. The Memory Display and the monitor show:

```
 Save As Mem 24     ‹ ›
 User Info/Text

 Press Prog to Save
```

Use the ‹ and › keys to select a memory.
3   Press the PROGRAM button. The current memory is now duplicated in the selected memory.
4   Review the newly copied memory to double check that the action has been effected.

Copying a Memory into the Current Memory (Copy From)

1   Set up the desk for copying as described left.
2   Use the ‹ and › keys to select an empty memory. A star by the memory number indicates that it is unprogrammed.
3   Press the MEMORY COPY button. The Memory Display and the monitor show:

```
 Copy Frm Mem 10     ‹ ›
 User Info/Text

 Press Prog to Copy
```

Use the ‹ and › keys to select a memory. (Only programmed memories are shown.)
4   Press the PROGRAM button. The current memory is now a duplicate of the selected memory.

Copying Part of a Chase Memory (Save As)

1   Set up the desk for copying as described above.
2   Use the ‹ and › keys to select a chase memory that has already been programmed.
3   Use the ⌃ and ⌄ keys to move to the *Step Number*. The Memory Display shows:

```
 Memory Data (Step)
 STEP             ‹ ›
 Set Levels
 and Press Program
```

Note from ND check above text
4
Use the ‹ and › keys to select the step to be copied.
5   Press the MEMORY COPY button. The Memory Display and the monitor show:

```
 Save As Mem 25      ‹ ›
 User Info/Text

 Press Prog to Save
```

Use the ‹ and › keys to select a memory.
6   Press the PROGRAM button.
7   If a programmed memory is selected, the following warning is displayed:

```
      **WARNING**
 Memory No 3
 Already Programmed
 Program to Overwrite
```

Pressing the PROGRAM button overwrites the memory selected. To abandon the copying operation, press the ‹ key and return to point 4.
8   The current memory step is now duplicated in the selected memory as a scene memory.
9   Review the newly copied memory to double check that the action has been effected.

**Creating a Chase Memory from
Other Memories (Copy From)**

1   Set up the desk for copying as
    described above.

2   Use the ‹ and › keys to select an
    empty memory. A star by the
    memory number indicates that it is
    empty.

3   Use the ⌄ key to move to the
    Memory Type.

4   Use the ‹ and › keys to select
    Chase.

5   Use the ⌄ key to move to the *Step
    Number*. *Step 1* is shown.
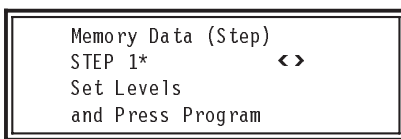
```
┌──────────────────────────────┐
│  Memory Data (Step)          │
│  STEP 1*           ‹ ›       │
│  Set Levels                  │
│  and Press Program           │
└──────────────────────────────┘
```

6   Press the MEMORY COPY button.
    The Memory Display and the
    monitor show:

```
┌──────────────────────────────┐
│  Copy Frm Mem 12    ‹ ›      │
│  User Info/Text              │
│                              │
│  Press Prog to Copy          │
└──────────────────────────────┘
```
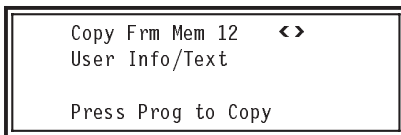
Use the ‹ and › keys to select a
memory. (Only programmed
memories are shown.)

7   If a scene memory is selected,
    when the PROGRAM button is
    pressed that scene memory is
    copied into the current step, but all
    timing data associated with the
    memory being copied is ignored.
    If a chase memory is selected, a
    warning appears: 'Unable to copy,
    scene memories only', indicating a
    chase memory cannot be copied.

```
┌──────────────────────────────┐
│  Copy Frm Mem 9     ‹ ›      │
│  User Info/Text              │
│                              │
│  Press Prog to Copy          │
└──────────────────────────────┘
```
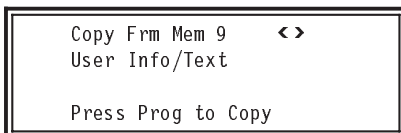
8   Press the PROGRAM button to
    save the step.

9   Either press the SEQUENCE ADD
    STEP button to create another
    step and repeat points 6 to 8, or
    press the PROGRAM button to
    save the memory.

Insert

The Insert feature allows the addition
of nine extra memories after the
currently viewed memory. This feature
only works for Brightness memories.

Example:
If the current memory is No. 5, the new
memories added (between No. 5 and
No. 6) will be numbered 5.1, 5.2 and so
on, up to 5.9.

You can only add Insert memories
between whole number memories.

Inserting a Memory

1   Press the attribute selection button
    for BRIGHTNESS. The Memory
    Display shows:

```
┌──────────────────────────────┐
│  Memory No 3        ‹ ›      │
│  User Info/Text              │
│                              │
│  Select Mem & Press  ⌄       │
└──────────────────────────────┘
```
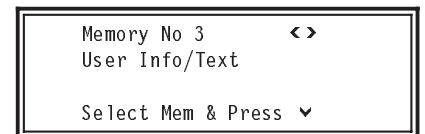
Use the ‹ and › keys to select the
memory.

2   Press the MEMORY INSERT
    button.

3   Use the ‹ and › keys to view the
    new memories.

4   Program the Insert memories as
    normal Brightness Memories.
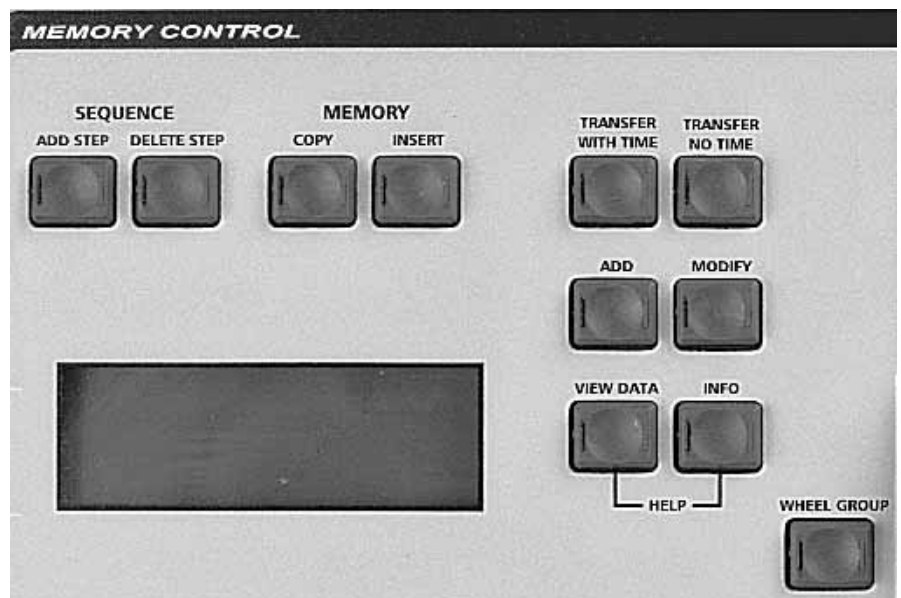
■ Figure 3-17: Memory Control

3

■ Figure 3-18: Effects Control panel
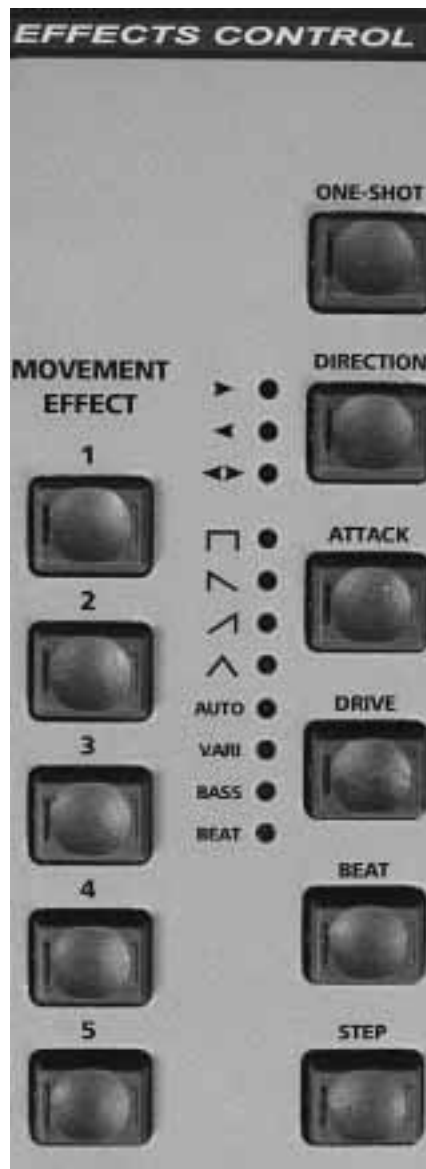
Introduction

In the Sirius 500 & 250 a chase memory can hold up to 99 steps. Each step is programmed as if it was a memory in its own right.

The following sections describe how to program chases in Brightness, Colour, Beamshape and Position. The procedures for Colour, Beamshape and Position refer to full chase memories. 'Full' relates to the memory type, see the section on Memory Types on page 3-3. A full memory records the state of all fixtures.

It is also possible to program a partial chase for Colour, Beamshape and Position (but not Brightness), where only the state of those fixtures that have been edited is recorded. Programming a partial chase is performed in the same manner as a full chase except that the memory type must be set to *Partial Chase* - see the section on Programming a Partial Chase on page 3-29.

Chase Controls

● SEQUENCE ADD STEP BUTTON

Adds a step to a chase memory.

● SEQUENCE DELETE STEP BUTTON

Deletes the selected step from a chase memory.

● ONESHOT BUTTON

When selected , when the chase is run it will run once through all its steps and stop on the last step. Re-selecting the chase will start it again from step one.

● DIRECTION BUTTON

Modifies the direction of the step sequence within the chase.

● ATTACK BUTTON

Determines the type of crossfade that occurs between steps of a chase or Audio Effect.

● DRIVE BUTTON

Selects how the chase sequences through its steps.

● BEAT BUTTON

Repeated pressing allows a chase speed to be 'tapped in', so that it runs with the same beat as the music. DRIVE must be set to BEAT.

NOTE

It is recommended that the Beat button and crossfade modifier are not used together, as strange results can occur. the snap on / snap off attack is recommended

● STEP BUTTON

Steps through a stopped chase.

● MOVEMENT EFFECT BUTTONS

Allow preprogrammed movement effects to be added to a position memory by pressing a single button.

● CHASE MODIFIERS

DIRECTION

A chase sequence may be run in sequential step order > , reverse step order <, or repeatedly forwards, then backwards < >.

ATTACK

Four types of crossfade are available:

⊓ Snap on/snap off

⊼ Snap on/fade off

⊿ Fade on/snap off

⋀ Crossfade

DRIVE

Auto chase requires no sound input, with the chase speed determined directly by the speed control.

Varispeed speeds up and slows down the chase according to the tempo of the music on the audio input, with the speed control used to set a basic speed.

Bass chase steps through the pattern on a bass beat.

Beat allows the beat rate to be input, using the BEAT button, which the effect will follow.

Programming a Brightness Memory Chase.

1 Press the attribute selection button for BRIGHTNESS. The Memory Display shows:

```
Memory No xx        ‹ ›
User Info/Text

Select Mem & Press  ⌄
```

Select the memory number using the ‹ and › keys.

2 Press the ⌄ key to move to the *Memory Type*.

3 Use the ‹ and › keys to select Chase. See Figure 3-19.

4 Press the ⌄ key once to enter *Step 1*.

```
Memory Data (Step)
STEP 1*             ‹ ›
Set Levels
and Press Program
```

Set the levels for the step, using the PRESETS, wheels or submasters, following the techniques described in the sections on Programming a Brightness Memory (Scene) Using PRESETS, see page 3-7, and Programming a Brightness Memory (Scene) using 4 Wheel Drive®, see page 3-8.

5 Once all the levels have been set, press the PROGRAM button to save that step.

6 Press the SEQUENCE ADD STEP button to insert Step 2.

```
Memory Data (Step)
STEP 2*             ‹ ›
Set levels
& press Program
```

Program the fixture levels for Step 2 as described for Step 1 above, and press the PROGRAM button to save.

Continue adding steps and programming until the end of the chase. Do not add an extra step at the end unless an empty step is required.

7 Press the ⌄ key to finish adding steps.

```
Memory Data (Drives)
Speed xxx:xx      BPM
START ON Transfer ‹ ›
Set Modifiers Press ⌄
```

The chase will now run live on the outputs. Use the wheel indicated in the Wheel Display to adjust the chase speed from its default setting. The live output will change.

Use the ONE-SHOT, DIRECTION, ATTACK, DRIVE and BEAT buttons to set other modifiers, see Figure 3-18. These can also be seen live. If ONE-SHOT is set, the chase still runs continuously so that adjustments can be made.

8 Use the ‹ and › keys to set the Start Stop option (see the Note on Start Stop Options later in this section).

9 Press the ⌄ key.

```
Memory Text/Info


Enter Text & Press  ⌄
```

Enter text using the channel flash buttons, or using the external keyboard.

10 Press the ⌄ key.

```
Memory Data  (XFade)
Fade-In  xx:xx:x
Set Fade-In Time on
Wheel and Press  ⌄
```

Alter the *Fade In Time* from its default using the wheel to adjust the time. The Wheel Display prompts the operator as to which wheel to use.

■ Figure 3-19: Brightness screen

11 Press the ⌄ key.

```
Memory Data  (XFade)
Fade-Out  xx:xx:x
Set Fade-Out Time on
Wheel and Press ⌄
```

Alter the *Fade Out Time* from its default using the wheel to adjust the time. The Wheel Display prompts the operator as to which wheel to use.

12 Press the ⌄ key.

```
Memory Data

Press Program to
Save Memory
```

Press the PROGRAM button to save the whole memory. The star by the memory number disappears indicating that the data has been stored in memory.

Previewing a Brightness Chase

1 Press the attribute selection button for BRIGHTNESS.

```
Memory No 1        ‹ ›
User Info/Text

Select Mem & Press ⌄
```

Select the *Memory Number,* using the ‹ and › keys to select the Chase Memory to be previewed.

2 Press the ⌄ key.

```
Memory Type.
Chase             ‹ ›

Select Type & Press ⌄
```

3 Press the ⌄ key twice.

```
Memory Data (Drives)
SPEED xx.xx          BPM
START ON Transfer ‹ ›
Set Modifiers Press ⌄
```

The chase now runs live. (Press the BLIND button to stop the live output if required.)
Modifiers (e.g. direction, speed, etc.) can now be adjusted if required.

4 Press the ⌄ key four times.

```
Memory Data

Press Program to
Save Memory
```

Press the PROGRAM button to save the memory. Press ⌃ to return to Fade out..

Adding or Deleting Steps in a Brightness Chase
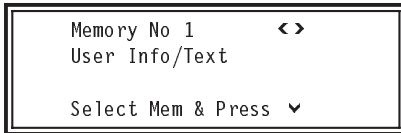
1   Press the attribute selection button for BRIGHTNESS.

```
Memory No 1         ‹ ›
User Info/Text

Select Mem & Press  ⌄
```

Select the *Memory Number,* using the ‹ and › keys to select the Chase Memory to be previewed.

2   Press the ⌄ key twice.

```
Memory Data (Step)
STEP 2              ‹ ›
Press Add Step
or ⌄ if last step
```
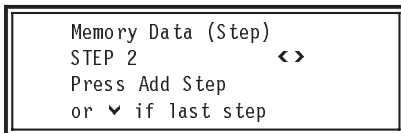
3   To add a step, use the ‹ and › keys to work through the steps until the one prior to the new step is reached.

Press the SEQUENCE ADD STEP button and the new step number is displayed.

Example:
To add a step after No. 4, work through to step 4, press the SEQUENCE ADD STEP button, and the step number display now shows Step 5.

4   Select and edit fixture levels as required.

5   Press the PROGRAM button to save the new step.

6   To delete a step, work through the steps until the one to be deleted is reached, and press the SEQUENCE DELETE STEP button.

7   Press the PROGRAM button to save the changes.

8   Use the ‹ and › keys to step through the chase to ensure that modifications have been made correctly.

9   Press the ⌄ key five times.

```
Memory Data

Press Program to
Save Memory
```
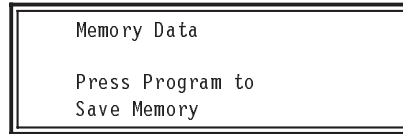
Press the PROGRAM button to save the memory. Press ⌃ to return to Fade out.

NOTE

START STOP OPTIONS
When a Brightness chase memory is transferred to a submaster fader, it is possible to define when the chase starts to run. There are three options: FLASH Button, Fader Level and Transfer.

FLASH Button:
A chase on a submaster is always at Step 1 until the associated submaster FLASH button is pressed. Subsequent button presses stop and start the chase.

Fader Level:
The chase starts when the fader reaches the default trigger level. The level, Start Effects @, is changed in Desk Set-Up, see the section on Brightness Defaults on page 5-17. If the memory has been transferred with time, the fade time is taken into account in the fader level.

Transfer:
As soon as the chase is transferred, it starts to step. It is not possible to tell which step is current.

Focus Submaster
If a memory chase is transferred to a FOCUS SUBMASTER, the chase starts when the FOCUS SUBMASTER button is pressed. Subsequent button presses restart the chase.

GO Button
If a memory chase is transferred to the GO button, the chase starts when the GO button is pressed.

MONITOR NOTES

🖳 *Fixtures Available*
Those fixtures highlighted in yellow in the fixture bar are available for modification.

🖳 *Programming*
The PROGRAM button can be pressed at any time to save the current memory settings.

The bar graph shows the levels programmed into each step (see Figure 3-19).

🖳 *Output Level*
The box showing the output level changes to yellow, indicating that the data has been stored in memory (see Figure 3-19).

Programming a Colour Memory (Full Chase)

1   Press the attribute selection button for COLOUR.

```
Memory No 1-1      < >
User Info/Text

Select Mem & Press  ⌄
```

Select the *Memory Number,* using the ‹ and › keys or the attribute memory buttons, to select the Chase Memory to be programmed. A star by the memory number indicates that it is unprogrammed.

2   Press the ⌄ key to select the *Memory Type*.

```
Memory Type.
Full Scene         < >

Select Type & Press ⌄
```

Use the ‹ and › keys to select *Full Chase,* see Figure 3-19.

3   Press the ⌄ key once to enter *Step 1*.

```
Memory Data (Step)
STEP 1*
Set Colour on Wheels
and Press Program
```

Press the channel flash buttons to select the fixtures required. Those available to be modified have a yellow light in the flash button, which turns red once selected.

Edit the parameter levels using the wheels indicated in the Wheel Display. If a fixture has more than four parameters for Colour, press the WHEEL GROUP button to show them, and edit with the wheels as normal.
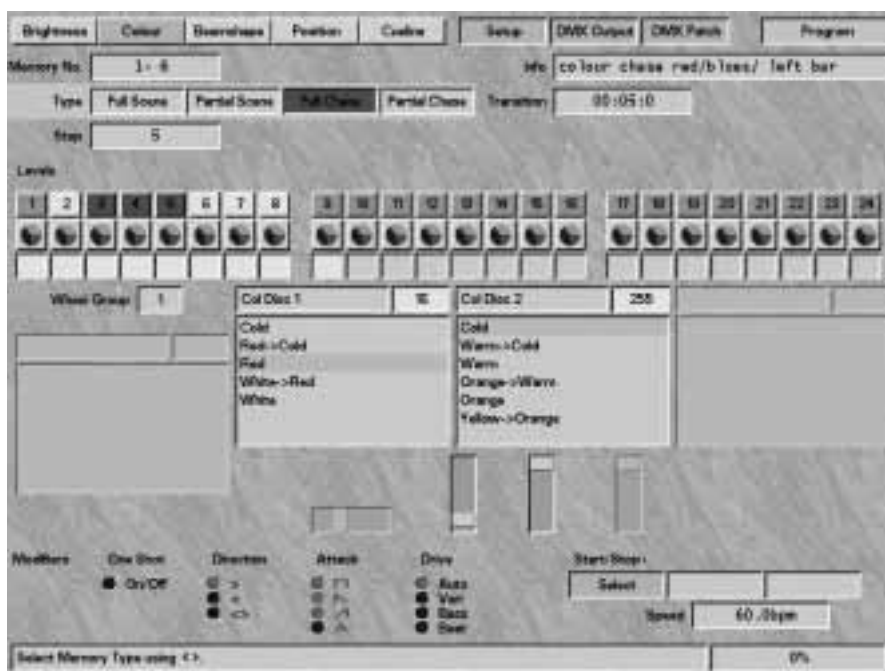
■ Figure 3-20: Colour Memory screen (Full Chase)

4   Press the PROGRAM button to save the step.

```
Memory Data (Step)
STEP 1          < >
Press Add Step
or ⌄ if Last Step
```

5   To create another step, press the SEQUENCE ADD STEP button.

```
Memory Data (Step)
STEP 2*
Set Colour on Wheels
and Press Program
```

6   Select fixtures using the channel flash buttons.

7   Edit the parameter levels using the wheels indicated in the Wheel Display.

8   Continue adding steps and programming until the end of the chase. Do not add an extra step at the end unless an empty step is required.

9   Press the ⌄ key to finish adding steps.

```
Memory Data (Drives)
SPEED xxx:xx     BPM
Set Speed & Select
Modifiers etc Press ⌄
```

The chase now runs to enable the speed to be set up using the wheel, together with the other modifiers: ONE-SHOT, DIRECTION, ATTACK, DRIVE and BEAT.

10 Once the desired effect has been achieved, press the ⌄ key.

```
Memory Info/Text

Enter Text & Press  ⌄
```

Enter a description of the memory using the channel flash buttons, or using the external keyboard.

11 Press the ⌄ key.

```
   Memory Data (Trans)
   TRANSITION xx:xx:x
   Set Tran. Time on
   Wheels and Press  ⌄
```

Alter the transition time using the wheel indicated in the Wheel Display.

12 Press the ⌄ key.

```
   Memory Data

   Press Program
   to Save Memory
```

Press the PROGRAM button to save the whole memory. The star by the memory number disappears indicating that the data has been stored in memory.

Programming a Colour Memory (Partial Chase)

Colour, Beamshape and Position chase memories can be either full or partial chases. The procedure for programming a partial chase is exactly the same as described for a full chase section with the addition of one step as follows.

Press the ⌄ key to select the *Memory Type*. The Memory Display shows:

```
   Memory Type.
   FULL SCENE        ‹ ›

   Select Type & Press ⌄
```

Use the ‹ and › keys to select *Partial Chase.*

```
   Memory Type.
   PARTIAL CHASE     ‹ ›

   Select Type & Press ⌄
```

Programming the rest of the chase is identical.

3

Programming a Beamshape Memory (Full Chase)

1   Press the attribute selection button for BEAMSHAPE.

```
Memory No 1-1      < >
User Info/Text

Select Mem & Press  ˅
```

Select the *Memory Number,* using the ‹ and › keys or the attribute memory buttons to select the Chase Memory to be programmed. A star by the memory number indicates that it is unprogrammed.

2   Press the ˅ key to select the *Memory Type.*

```
Memory Type.
Full Scene         < >

Select Type & Press ˅
```

Use the ‹ and › keys to select *Full Chase,* see Figure 3-21.

3   Press the ˅ key once to enter *Step 1.*
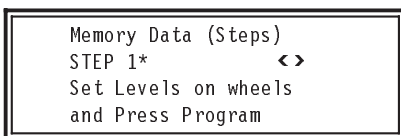
```
Memory Data (Steps)
STEP 1*            < >
Set Levels on wheels
and Press Program
```

Press the channel flash buttons to select the fixtures required. Those available to be modified have a yellow light in the button, which turns red once selected.

Edit the parameter levels using the wheels indicated in the Wheel Display. If a fixture has more than four parameters for Beamshape, press the WHEEL GROUP button to show them, and edit with the wheels as normal.
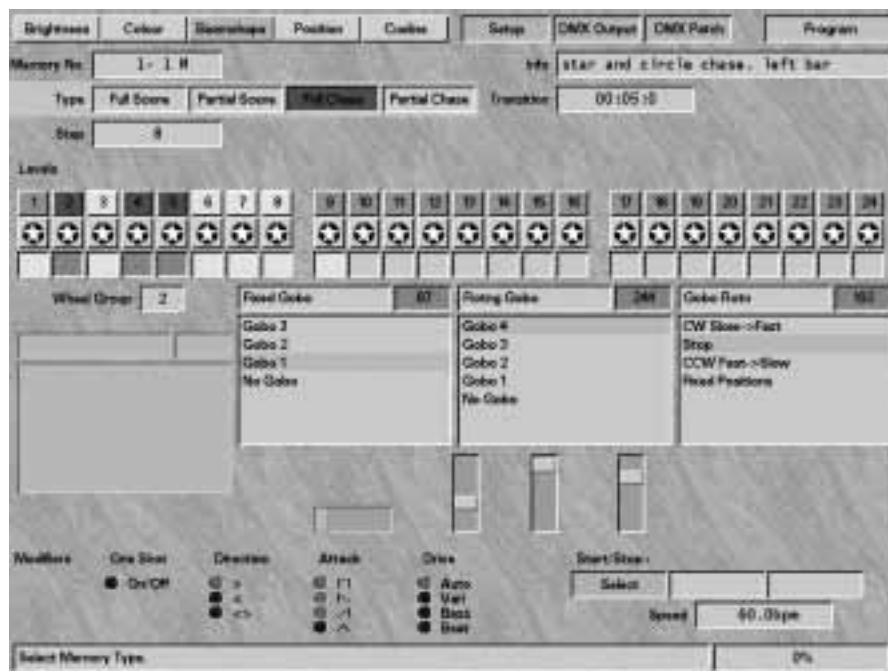
■ Figure 3-21: Beamshape Memory screen (Full Chase)

4   Press the PROGRAM button to save the step.

```
Memory Data (Steps)
STEP 1             < >
Press Add Step
or ˅ if Last Step
```

5   To create another step, press the SEQUENCE ADD STEP button.

```
Memory Data (Steps)
STEP 2*            < >
Set Levels on wheels
and Press Program
```

6   Select fixtures using the channel flash buttons.

7   Edit the parameter levels using the wheels indicated in the Wheel Display.

8   Continue adding steps and programming until the end of the chase. Do not add an extra step at the end unless an empty step is required.

9   Press the ˅ key to finish adding steps.

```
Defaults.
SPEED xxx:xx      BPM
Set speed, select
Modifiers & Press ˅
```

The chase now runs to enable the speed to be set up using the wheel, together with the other modifiers: ONE-SHOT, DIRECTION, ATTACK, DRIVE and BEAT.

10 Once the desired effect has been achieved, press the ˅ key.

```
Memory Text/Info


Enter Text & Press  ˅
```

Enter a description of the memory using the channel flash buttons, or using the external keyboard.

11 Press the ∨ key.

```
   Memory Data (Trans)
   TRANSITION xx:xx:x
   Set Trans. Time on
   Wheels and Press  ∨
```

Alter the transition time using the wheel indicated in the Wheel Display.

12 Press the ∨ key.

```
   Memory Data

   Press Program
   to Save Memory
```

Press the PROGRAM button to save the whole memory. The star by the memory number disappears indicating that the data has been stored in memory.

Programming a Beamshape Memory (Partial Chase)

Colour, Beamshape and Position chase memories can be either full or partial chases. The procedure for programming a partial chase is exactly the same as described for a full chase section with the addition of one step as follows.

Press the ∨ key to select the *Memory Type*. The Memory Display shows:

```
   Memory Type.
   FULL SCENE         < >

   Select Type & Press ∨
```

Use the < and > keys to select *Partial Chase.*

```
   Memory Type.
   PARTIAL CHASE      < >

   Select Type & Press ∨
```

Programming the rest of the chase is identical.

3

Programming a Position Memory (Full Chase)

1 Press the attribute selection button for POSITION.

```
Memory No 1-1*     < >
User Info/Text

Select Mem & Press  ⌄
```

Select the *Memory Number* using the ‹ and › keys or the attribute memory buttons. A star by the memory number indicates that it is unprogrammed.

2 Press the ⌄ key.

```
Memory Type.
Full Scene         < >

Select Type & Press ⌄
```

Use the ‹ and › keys to select *Full Chase,* see Figure 3-22.

3 Press the ⌄ key once to enter *Step 1.*

```
Memory Data (Step)
STEP 1*
Set levels with Wheels
and Press Program
```

Press the channel flash buttons to select the fixtures required. Those available to be modified have a yellow light in the button, which turns red once selected.
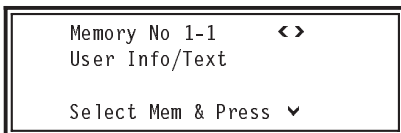
Edit the parameter level using the wheels indicated in the Wheel Display.

4 Press the PROGRAM button to save the step.

```
Memory Data (Step)
STEP 1             < >
Press Add Step
or ⌄ if Last Step
```

To create another step, press the SEQUENCE ADD STEP button and select fixtures by using the channel flash buttons. Use the wheels indicated in the Wheel Display to adjust the parameters.
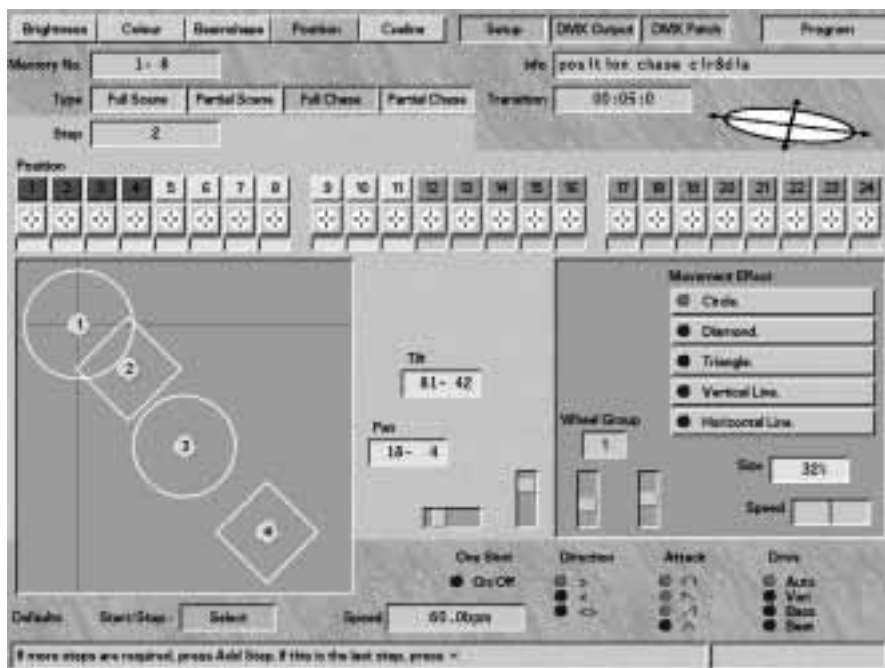
■ Figure 3-22: Position Memory screen (Full Chase)

5 Press the PROGRAM button to save the step.

6 Continue adding steps using the SEQUENCE ADD STEP button and programming until the end of the chase. Do not add an extra step at the end unless an empty step is required.

7 Press the ⌄ key to finish adding steps.

```
Memory Data (Drives)
SPEED xxx:xx      BPM
Start/Stop on Select
Set Modifiers Press ⌄
```

The chase now runs to enable the speed to be set up using the wheel, together with the other modifiers: ONE-SHOT, DIRECTION, ATTACK, DRIVE and BEAT.

8 Once the desired effect has been achieved, press the ⌄ key.

```
Memory Info/Text

Enter Text & Press  ⌄
```

Enter a description of the memory using the channel flash buttons, or using the external keyboard.

9 Press the ⌄ key.

```
Memory Data (Trans)
TRANSITION xx:xx:x
Set Tran. Time on
Wheels and Press  ⌄
```

Alter the transition time using the wheel indicated in the Wheel Display.

10 Press the ⌄ key.

```
Memory Data

Press Program
to Save Memory
```

Press the PROGRAM button to save the whole memory. The star by the memory number disappears indicating that the data has been stored in memory.

**Programming a Position Memory
(Partial Chase)**

Colour, Beamshape and Position
chase memories can be either full or
partial chases. The procedure for
programming a partial chase is exactly
the same as described for a full chase
section with the addition of one step as
follows.

Press the ⌄ key to select the *Memory
Type*. The Memory Display shows:

```
    Memory Type.
    FULL SCENE        ‹ ›


    Select Type & Press ⌄
```

Use the ‹ and › keys to select *Partial
Chase.*

```
    Memory Type.
    PARTIAL CHASE     ‹ ›


    Select Type & Press ⌄
```
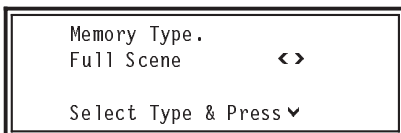
Programming the rest of the chase is
identical.

3

■ Figure 3-23: Effects
Controls
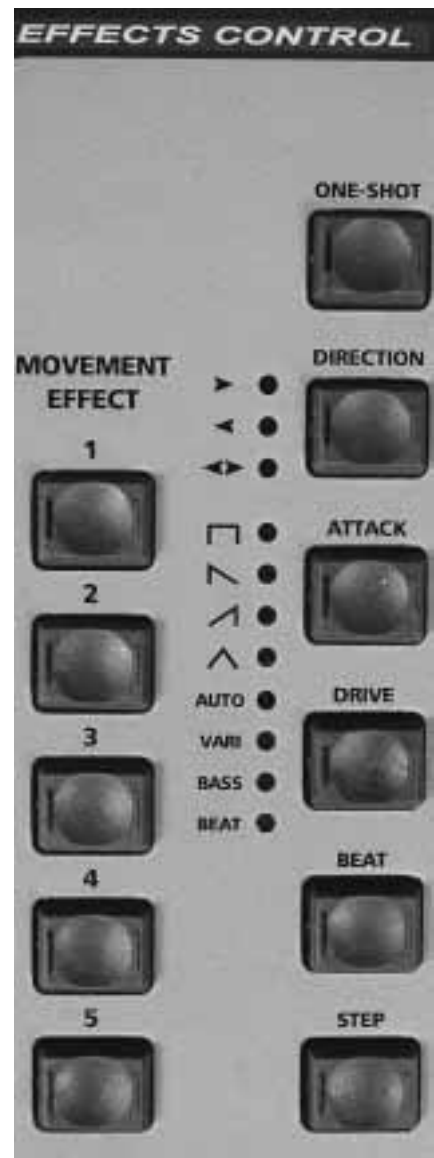
Audio Effects Programming

The Audio Effects Section of the desk comprises sound to light and ripple sound effects. Each of these can accept various modifiers, including DIRECTION, ATTACK, DRIVE. Audio Effects are only available in Brightness.

The sound to light effect is generated by four filters on the sound input. The outputs of the four filters (bass, tenor, alto, treble) effectively each drive an internal submaster fader which are all combined to generate the sound to light effect output. So in programming the sound to light effect, four virtual submasters are programmed within one single memory. When this is played back, the output of the desk is determined by the level of the filters. Ripple sound is programmed in a similar way, except that the output is governed by the intensity and the speed control, and not by the frequency of the music.

Effects Controls

● ONE-SHOT BUTTON

Allows a chase to run through all its steps once and stop.

● DIRECTION BUTTON

Modifies the direction of the step sequence within the chase.

● ATTACK BUTTON

Determines the type of crossfade between steps of a chase or Audio Effect.

● DRIVE BUTTON

Determines the method of incrementing to the next chase step.

● BEAT BUTTON

Allows manual inputting of chase speed.

● STEP BUTTON

Steps through a stopped chase sequence or Audio Effect.

● MOVEMENT EFFECT BUTTONS

Allow preprogrammed movement effects to be added to a position memory by pressing a single button.

Programming an Audio Effect Brightness Memory

1 Press the attribute selection button for BRIGHTNESS.
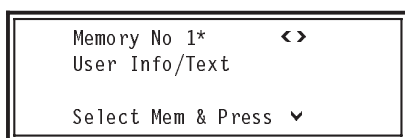
```
Memory No 1*        < >
User Info/Text

Select Mem & Press  ⌄
```

Use the ‹ and › keys to select a memory number. A star by the memory number indicates that it is unprogrammed.

2 Press the ⌄ key.

```
Memory Type.
Scene             < >

Select Type & Press ⌄
```
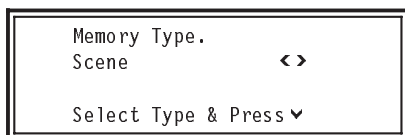
Use the ‹ and › keys to select *sound to light*.

```
Memory Type.
SOUND TO LIGHT    < >

Select Type & Press ⌄
```

3 Press the ⌄ key once.

```
Memory Data (Step)
FREQ BAND        BASS
Select Band < > Set
Levels.Press Program
```
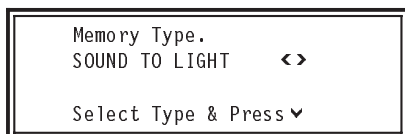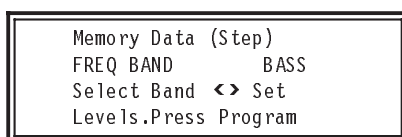
Select those fixtures to be activated by the bass filter and edit the level using the wheel, as indicated in the Wheel Display, or the PRESETS. Press the PROGRAM button to save those levels into the bass filter.

Press the › key. The tenor filter is now selected. Select and edit fixture levels and press the PROGRAM button to save.

Press the › key. The alto filter is now selected. Select and edit fixture levels and press the PROGRAM button to save.

Press the › key. The treble filter is now selected. Select and edit fixture levels and press the PROGRAM button to save.

4 Press the ⌄ key.

```
Memory Data (Drives)
RESPONCE xx

Set Attack & Press  ⌄
```
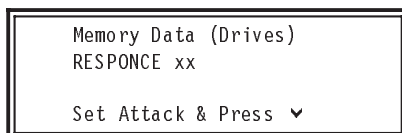
The Audio Effect can now be seen live on the outputs (if a sound source is plugged in)

5 Set the *responce* using the wheel indicated in the WHEEL DISPLAY

Select the Attack drive using the ATTACK button in the EFFECTS CONTROL section. .

6 Press the ⌄ key. Enter a description of the memory using

the channel flash buttons, or using the external keyboard.

7 Press the ⌄ key again to alter the *Fade In Time* from its default.

8 Press the ⌄ key once to alter the *Fade Out Time* from its default.

Use the wheels to adjust the times. The Wheel Display prompts the operator as to which wheel to use.

9 Press the ⌄ key.

10 Press the PROGRAM button to save the whole memory. The star by the memory number disappears indicating that the data has been stored in memory.

Note

Responce
The level may be set to 1 to 16.......?????

Ripple Sound
Is programmed the same as Sound to Light except the four frequencies band are replaced with 4 levels, band 1, band 2, band 3 and band 4. When run these bands are incrementally added to the output depending on input volume.

MONITOR NOTES

▭ *Filter Outputs*

The screen shows the full outputs on the bar graph as the effect is stepped through.

▭ *Running*

When in Memory Data (Drives), the Audio Effect runs live. The actual output can be seen in the bar graph display.
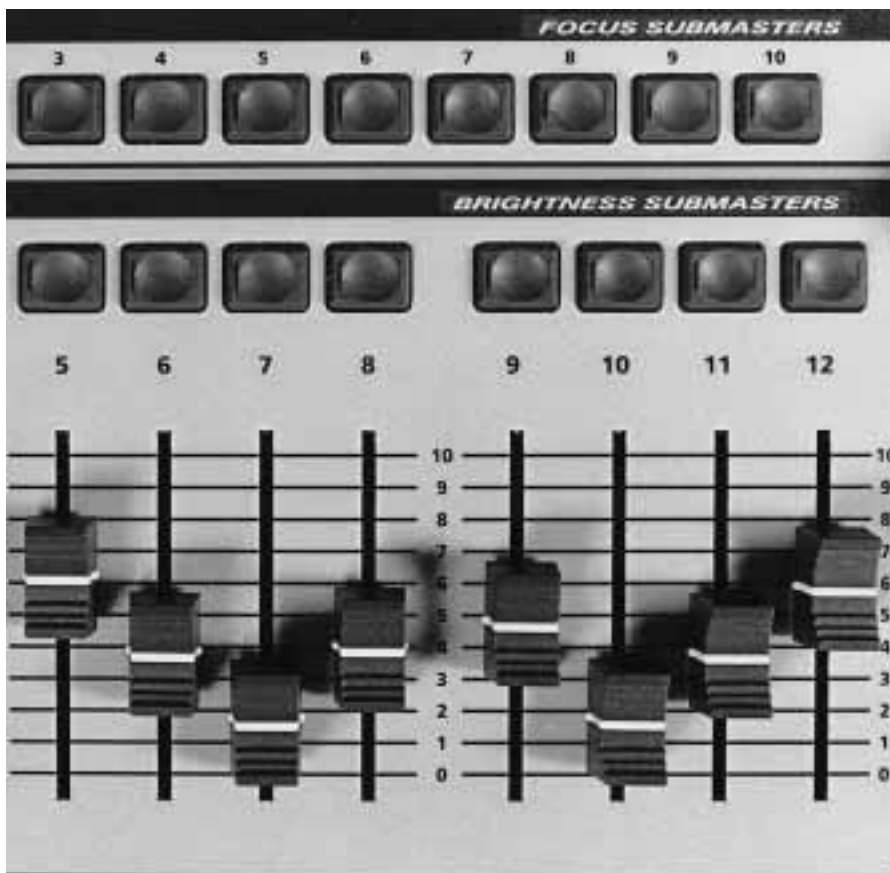
■ Figure 3-24: Focus & Brightness Submasters

Focus Submasters

FOCUS SUBMASTERS can contain a Colour, Beamshape and Position memory allowing single button access to a complex predefined lighting state. The desk has 99 pages of 10 buttons, only one of which may be active at any given time.

Programming Focus Submasters

1   Select COLOUR, BEAMSHAPE and POSITION memories:- to build the required outputs.
2   Select the appropriate FOCUS SUBMASTER PAGE.
3   Press and hold the FOCUS SUBMASTER button to be programmed.
4   Press and release the PROGRAM button.
5   Release the FOCUS SUBMASTER button.

Note

Preview Contents
Focus Submasters can be interrogated to see which memories are programmed into them , without activating them by, holding the INFO button while pressing the Focus Submaster.

Hotlinks

A BRIGHTNESS SUBMASTER fader can be hotlinked to a FOCUS SUBMASTER button.

As the fader is moved above the effect level, the Hotlink is activated. The software then activates the operator defined FOCUS SUBMASTER.

This allows the operator to activate a complete scene comprising Brightness, Colour, Beamshape and Position memories with one action.

Programming a Hotlink

1   The Hotlink is set up in PROGRAM mode.
2   The FOCUS SUBMASTERS must be programmed and memories transferred to the BRIGHTNESS SUBMASTER faders.
3   Press and hold the ADD Button.
4   The Memory Display shows:

```
Hotlinks
Submaster
Focus Submaster
select Sub to Hotlink
```

5   Press the FLASH button above the BRIGHTNESS SUBMASTER fader. Any current Hotlink is displayed.
6   To create a Hotlink, press the FOCUS SUBMASTER button.
7   Any previous Hotlink will be replaced Also Transferring a new memory to a Submaster will removes any Hotlink.

MONITOR NOTES

▭   *Focus Submaster Section*

    This shows the current memories copied into the Focus Submasters, see Figure 6-11. The Focus Submaster currently selected is highlighted in red and flashes if it is not on the current page.

▭   *Page Overlay*

    In the Replay screen the number of a BRIGHTNESS SUBMASTER that is outputting a memory that is not on the current page is highlighted in red.
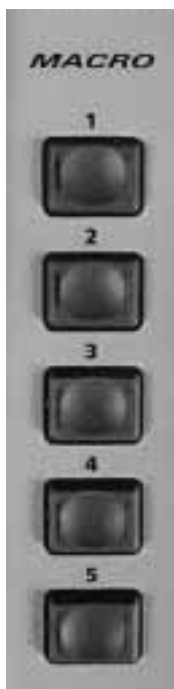
■ Figure 3-25: Macro buttons

Programming Macros

The five MACRO buttons can record a sequence of button pushes from anywhere in the desk, thus providing the operator with a way of consistently performing the series of button pushes. Macros are replayed instantaneously as there is no timing element stored within a macro.

1   Press and hold the MACRO button until the red light in the button flashes .
2   Press those buttons to be recorded (except a MACRO button) in the correct sequence. (A MACRO button cannot record a MACRO button push.)
3   Once finished, press and hold the MACRO button until the light goes out. The macro is now recorded.
4   If the macro has been incorrectly recorded or requires reprogramming, follow points 1 to 3.

Playing a Macro

Once recorded macros can be played back at any time and in any mode. However, care must be exercised.

For example, a macro that achieves the desired effect using submaster FLASH buttons in RUN will not generate the same result in PRESETS ONLY as the submasters are not active in PRESETS ONLY mode.

NOTE

Wheel Movements
The internal electronics treat wheel movements as button pushes, hence wheel movement is recorded into a macro. However, replay may seem erratic, and this method is therefore not recommended as a means of control.

Saving Macros
MACRO buttons are primarily programming aides, and hence are not saved onto floppy disk during backup. Consequently they are not reloaded from the floppy disk. Macros are retained after the power has been switched off and back on.

■ Figure 3-26: Auxiliary Control buttons

Programming Auxiliary Control Buttons

Each of the eight buttons on the Sirius 500 and four buttons on the Sirius 250 may be programmed to flash or toggle one or more DMX channels to a programmed level.

For more details please refer to the section on setting the Auxiliary controls in Desk Set-Up, see page 5-15. The buttons may also be remotely activated from within CueLine·

3
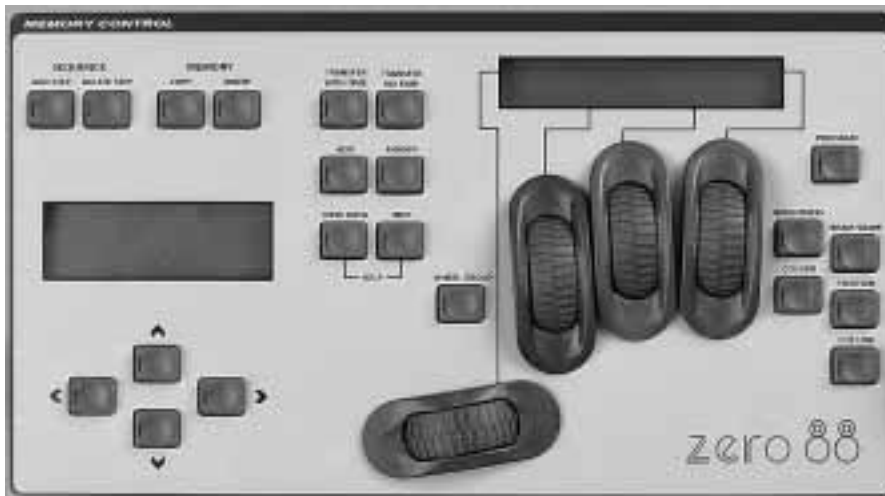
■ Figure 4-1: Memory Control

What is CueLine®?

CueLine® is a powerful graphical programming tool that allows memories to be linked together in a time related way to make a show. A show is made up of a series of cues. Each cue may contain any number of linked memories of any type. Cues may be triggered in a number of ways, although the most common is by the operator pressing the GO button.

Crossfades can be inserted between any two memories. Editing of crossfade times and memory sequences, accurate to a fraction of a second, is quickly and easily achieved using a mouse.

Once programmed, running a show will produce exactly the same result every time. However, should it be necessary, any crossfade can be stopped and restarted again when required, or cues skipped over.

As well as being a series of cues, a show also has tracks. Tracks contain the memory and crossfading information for a particular attribute: Brightness, Colour etc. These are shown as a series of events. A show has a minimum of three tracks and a maximum of eight. Two of these tracks are fixed tracks and the rest are programmable. The two fixed tracks show Cue information (Cue name and trigger), and Time.
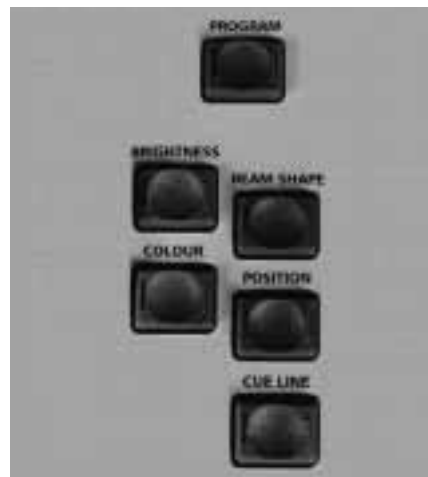
■ Figure 4-2: Attribute Buttons

The six remaining tracks can be allocated to BRIGHTNESS, COLOUR, BEAMSHAPE, POSITION, or AUXILIARY CONTROL buttons. It is not possible to have more than two Brightness tracks, or more than four of the other types.

There must be at least one memory on each track, otherwise CueLine® will not run, and a warning will be displayed.

Each track must also start at time = 0 in the first cue, otherwise CueLine® will not run, and a warning will be displayed.

Note

Saving CueLine
Remember NOT to turn the desk off before saving CueLine. CueLine automatically saves when coming out of CueLine Mode.

4

CueLine Overview

The *CueLine* screen on the monitor is split into a number of sections, as follows: (see Figure 4-3)

● Menu Bar (PROGRAM mode only)

Common to all PROGRAM mode screens and shows which section is currently active.

● Toolbar (PROGRAM mode only)

Contains buttons that are selected using the mouse, which define the mouse action when clicked in the event and track name areas of the screen.

● Track Name Area

Shows those tracks currently being used and what memory type they contain.
Cue information and time tracks are always present.

● Zoom Buttons

Allow the operator to zoom in and out, to see more details.

● Scroll Bar

After zooming in, this is used to move to view a different section of the show.

● Event Area

The area where actions and memories are shown and edited.

● THE CueLine (RUN mode only)

A vertical red line across the event area of the screen. As an event passes *THE CueLine*, the event is triggered.

● Info Bar (PROGRAM mode only)

Provides hints on those actions available.

Toolbar
Track Name Area
THE CueLine *(Run Mode only)*
Zoom Buttons
Info Bar
Scroll Bar
Menu Bar
Selected Tool
Event Area
Edit Info
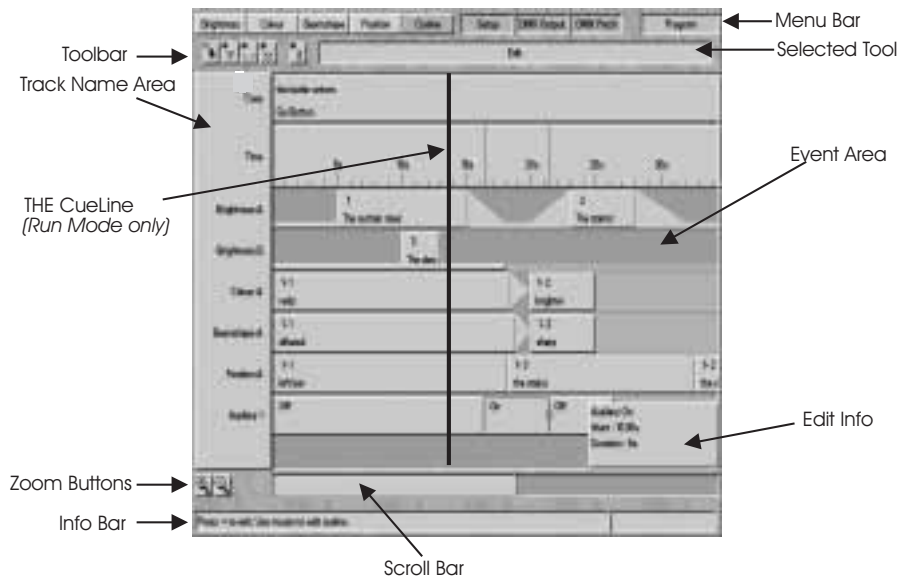
■ Figure 4-3: CueLine screen

Toolbar Buttons

Edit

This allows the timing of memories, blackouts and crossfades to be modified in the event area.

Insert Memory/Cue

Another cue or memory may be inserted in the event area by placing the cursor in a track and clicking. Clicking in the cue track inserts a cue; clicking in another track inserts the appropriate type of memory. Cues and memories are initially inserted as boxes with a default duration which may be subsequently edited if necessary. Memories may be added anywhere in the sequence along the track. Clicking in the second half of a memory box will add a memory after that memory; clicking in the first half of a memory box will add another memory before that memory.

Insert Blackout

Allows a blackout to be inserted in a Brightness track, thus eliminating the need to program blackout memories.

Insert Fade/Transition

A crossfade may be inserted by clicking in the Brightness track between two memories, e.g. fade Memory 1 out, whilst Memory 2 fades up (fades are inserted with default times for subsequent editing).
Clicking in any other track will insert a transition time (with default times).

Remove

With this button active, any crossfade, memory or cue may be removed from CueLine by clicking on it. This does not delete the memory, but removes that particular occurrence of the memory from CueLine.

■ Figure 4-4: Edit Track Types

Setting up to Programming CueLine

To use CueLine, Sirius 250/500 must have a monitor and mouse connected, and preferably a keyboard.

It is necessary to have already programmed all the required Brightness, Colour, Beamshape and Position memories before starting to program CueLine.

1 Turn the Key Switch to PROGRAM mode.

2 Press the CUELINE button or use the arrow keys to select CueLine.

3 On first entering the *CueLine* screen in PROGRAM mode, or after a Super User Clear All, or Clear CueLine, the CueLine system needs to be set up.

Defining Tracks

1 When CueLine is entered for the first time, press the ⌄ key to open the *Edit Track Types* window, with the active bar on Track 1. (See Figure 4-4.)

2 Click on the track description box to scroll through the list of track types available, which are:

Not Defined
Brightness A
Colour A
Beamshape A
Position A
Auxiliary 1
Auxiliary 2
Auxiliary 3
Auxiliary 4
Auxiliary 5
Auxiliary 6
Auxiliary 7
Auxiliary 8
 (only 4 Auxiliary on Sirius 250)

Once a track type has been defined, that track can only control the associated memory type (or AUXILIARY CONTROL button).

3 Select Brightness A for Track 1.

4 Click on Track 2. Brightness B appears.

5 Continue down the list defining those tracks required to complete the show, and click on *Confirm*.

Redefining a Track

1 If a track needs to be redefined once cues and memories have been inserted select the *Insert Memory/Cue* button.

2 Click in the 'track name' area to bring up the *Edit Track Types* window.

3 Click on the appropriate track description box to change type. If necessary, use *'Not defined'* to remove the track from use.

NOTE

Track Notes
A maximum of two Brightness tracks are available (A and B), and a maximum of six tracks for Colour, Beamshape and Position (A, B, C, D, E and F).

Redefining a track removes all inserted memories and crossfades.

Some tracks may be left not defined.

If no memories are inserted in a defined track, CueLine will not run, therefore only define those tracks to be used.

The ‹ and › keys can also be used to cycle through the track types available.

4
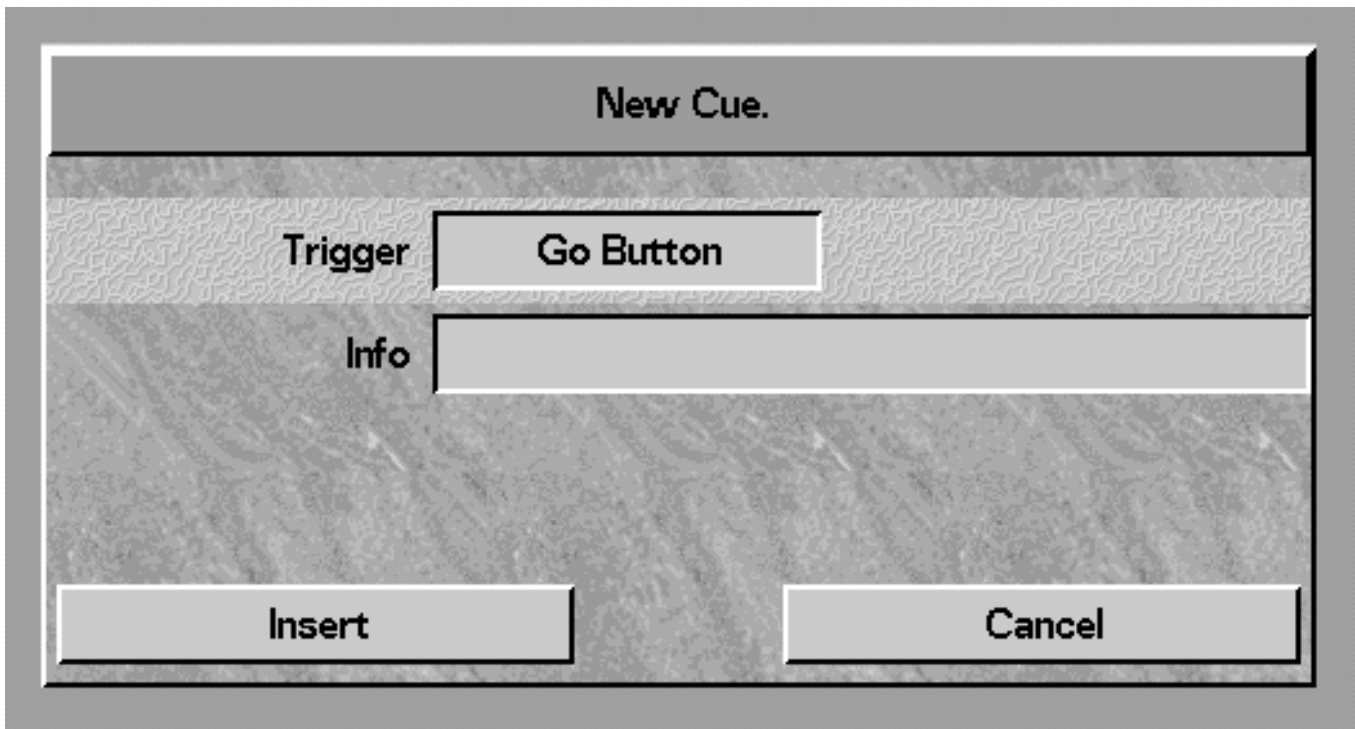
■ Figure 4-5: New Cue window

Setting Up Cues

1   On confirming track descriptions for the first time, the *New Cue* window opens (see Figure 4-5). Click on the trigger window. The choice is '*Go button*', or '*Automatic*'. Click on '*Go button*'.

2   Click in the *Info* line and type in the cue information.

3   Click on *Insert*. The first cue is displayed on the screen.

Adding Cues

1   Select the *Insert Memory/Cue* button.

2   To add further cues, click in the cue track on the dark gray background to the right of the last cue.

3   To add a new cue between existing ones, click near the join of the two cues. Clicking on the left-hand side of a cue inserts a cue before it, and on the right-hand side inserts a cue after it.

Once the CueLine tracks have been defined and at least one cue inserted, memories can be added. This is demonstrated next, but first insert three more cues following the instructions in the section on Adding Cues above.
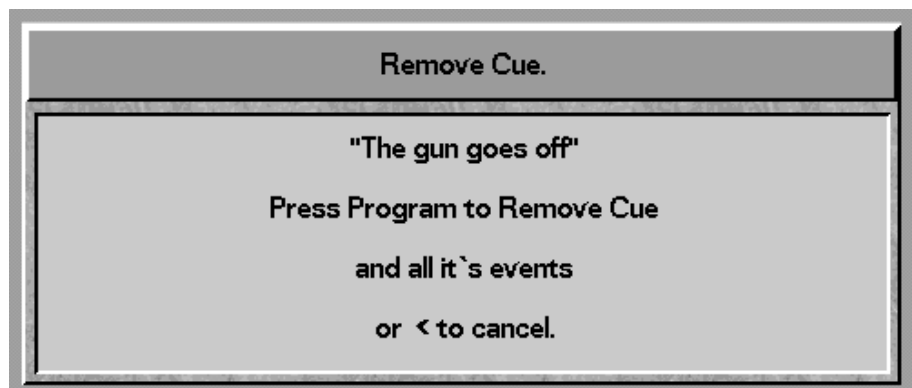
■ Figure 4-6: Remove Cue window

Removing a Cue

WARNING
Removing a cue removes all memories and events from the associated tracks.

1   Select the *Remove* button and click on the cue. A warning is displayed. (See Figure 4-6).

2   Press the PROGRAM button to delete a cue, or the ‹ key to cancel.

Inserting Memories

1   Select the *Insert Memory/Cue* buttons.

2   Click on the Brightness track (Track 1) in Cue 1.

3   Select a memory to add onto the track from the list in the *Select Brightness Memory* window, and click on *Insert*.

    The memory is added to the Brightness track for a default duration of 5 seconds. The time track shows real time in seconds.

4   Now add a second memory in Cue 3 (Memory 2). (Click on the brightness track in Cue 3 and select a memory.) See Figure 4-7.

    The first and second memories are joined by a gray bar, indicating that the output from the first memory will be held, even through cues, until the second memory is triggered. *'THE CueLine'* will trigger a memory, and its output is then held until another memory/event is triggered.

5   Extra memories can now be added in the same cue, or in different cues. To add an extra memory before an existing memory, click on the left-hand side, or on the right-hand side for a memory after.

Removing a Memory

1   Select the *Remove* button and click on the memory.
    The memory is removed without any warning being displayed.

NOTE

Turning Off
To turn off a Brightness Track (stop all brightness output), insert a blackout.
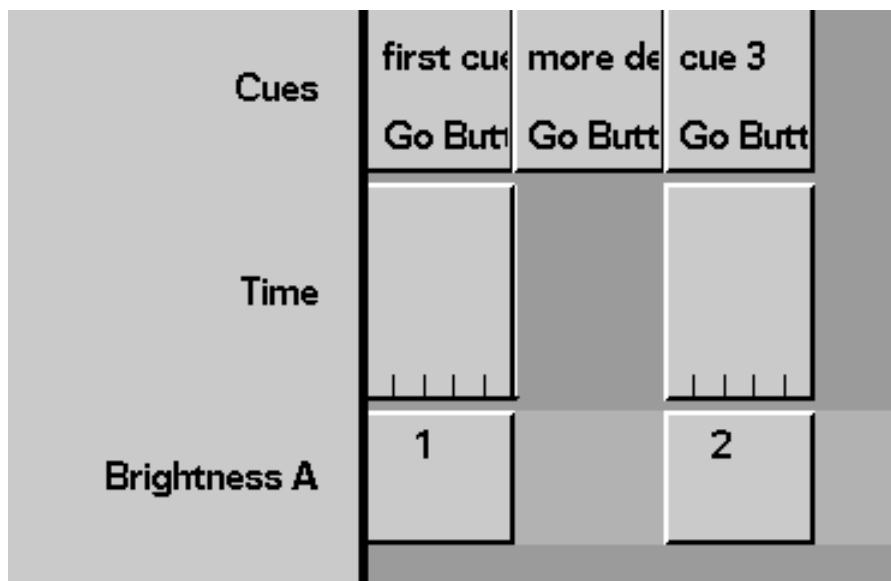
■ Figure 4-7: Inserting Brightness Memories
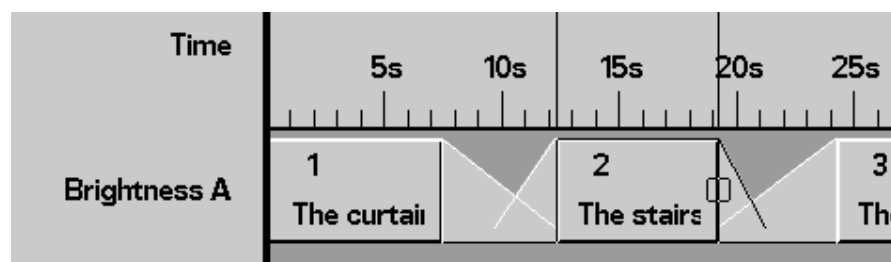
■ Figure 4-8: Selected Brightness Memory
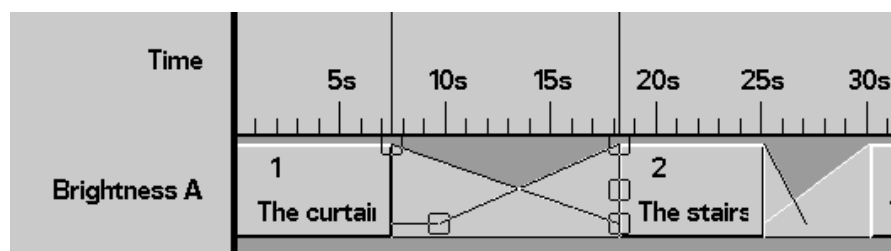
■ Figure 4-9: Selected Cross Fade

4

Inserting Fades/Transitions

1   To insert a fade between memories, select the *Insert Fade/Transition* button.
2   Click on the left-hand side of a memory to add a fade/transition before the memory, and on the right-hand side for one after.

    Crossfades with a default time of 5 seconds are added to the Brightness track (i.e. fading the current memory down in 5 seconds, whilst fading the next memory to full in the 5 seconds).

    Simple transition fades are added to any other track (i.e. going from the current memory to the next memory in 5 seconds).

Editing CueLine Memory Dwell Times

Once a memory has been inserted into a cue, its default duration and start time can be changed.

1   Select the *Edit* button.
2   Click on the memory to be edited. A red border appears. See Figure 4-8.
3   To change the duration of the memory, click and drag the small red square in the border.

    To alter the memory's start time without affecting the duration, whilst maintaining the same running order, click inside the memory (but not on the small red square), and drag the whole memory.

Editing Fades

1   Select the *Edit* button.
2   Click on the fade to be edited. For a brightness crossfade, a red border appears with five red squares, each of which may be dragged using the mouse - See Figure 4-9.

    The fade in and out attacks can be changed to slow or fast, And a blackout between if required. The fade up and down times are indicated during editing in the bottom corner.

    Transition fades only have one red square, therefore only their duration can be changed.

    A fade can also be moved relative to other events by clicking inside the fade (but not on a small red square) and dragging the whole fade.

    A fade added before the first memory on a Brightness track is a fade up. A fade added between a memory and a blackout is a fade down or fade up (whichever is appropriate).

Inserting a Blackout

Blackouts can only be added to Brightness tracks.

1   To insert a blackout between memories, select the *Insert Blackout* button.
2   Click on the left-hand side of a memory to insert a blackout before the memory, and on the right-hand side for one after.

Editing Blackouts

1   Select the *Edit* button.
2   Click on the blackout to be edited. A red border appears.
3   Click on the small red square and drag the duration of the blackout to the desired length. Or to move the blackout relative to other events, click within the border, and drag the whole blackout.

NOTE

Canceling an Option
Cancel is always available alongside the Insert and Confirm options.

Mouse Use
'Click on' always refers to a single click on the left-hand mouse button.

Info Bar
This contains hints on other ways of completing an operation using the arrow keys.

Auxiliary Track

CueLine can also action the front panel AUXILIARY CONTROL buttons. A track must be inserted for each button to be controlled.

Once that has been done, the button on the front panel automatically becomes a momentary button, irrespective of its programming.

1 Select *Insert Memory/Cue* button.
2 Click in the appropriate Auxiliary track. The *Select Auxiliary Memory* window opens (see Figure4 -10).
3 Select ' Auxiliary off and click on *Insert* (see Figure 4-10.) The track now has a default off state of 5 seconds.

Adding an On State

1 Select *Insert Memory/Cue* button, and click on the appropriate Auxiliary track. The *Select Auxiliary Memory* window opens. Select ' Auxiliary on' and click on *Insert*.
A 5 second 'on' state appears, the timing of which can be adjusted.

Changing the Default Time

1 Select the *Edit* button.
2 To change a state's duration, click in the state and click and drag the small red square in the border.

To alter the start time of the state without affecting the duration, whilst maintaining the same running order, click inside the state (but not on the small red square), and drag the whole square.

■ Figure 4-10: Select Auxiliary Memory Window

■ Figure 4-11: Example 'Auxiliary on' for ever
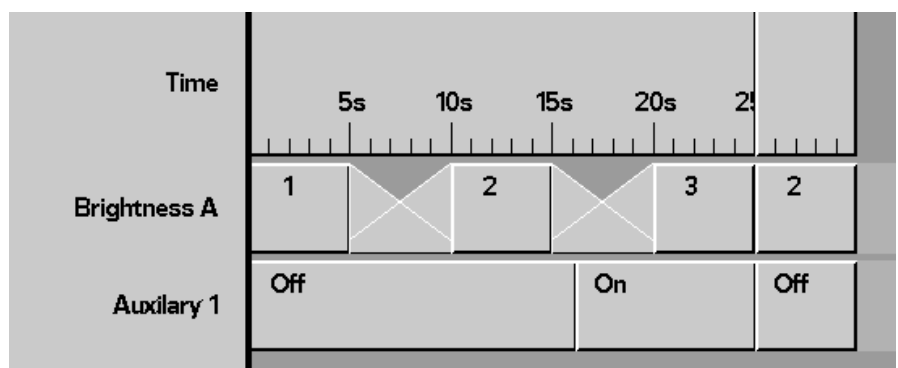
■ Figure 4-12: Example 'Auxiliary on' for 9 seconds

NOTE

In the example shown in Figure 4-11 when Memory 3 changes to Memory 2, the AUXILIARY CONTROL button will stay on, as the 'on' was the last event.

For the Auxiliary to be 'on' for a fixed time, add an 'off' state as in Figure 4-12.
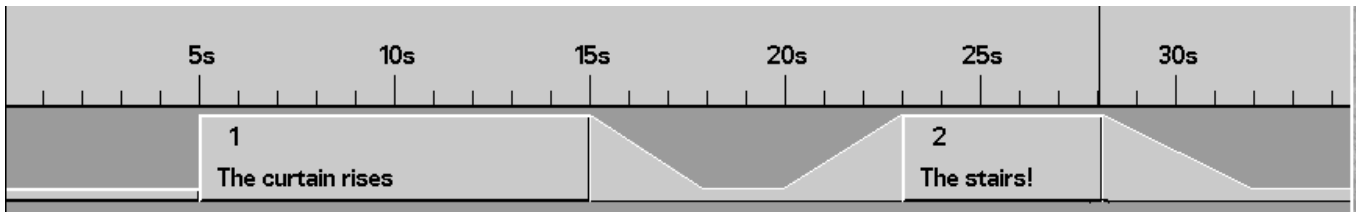
■ Figure 4-13: Original Track
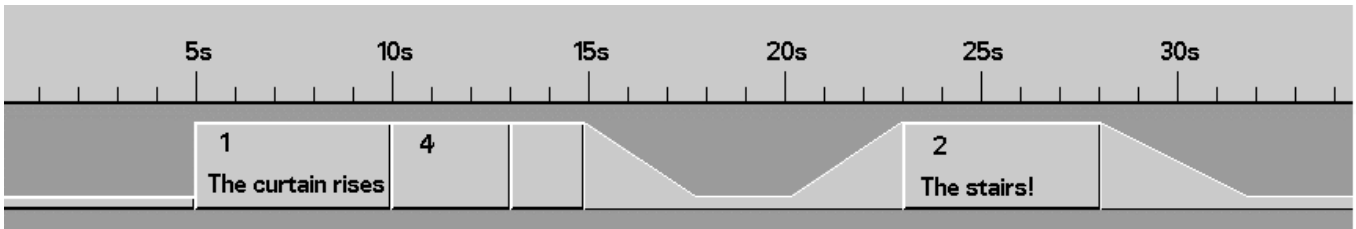
■ Figure 4-14: Original with extra memory
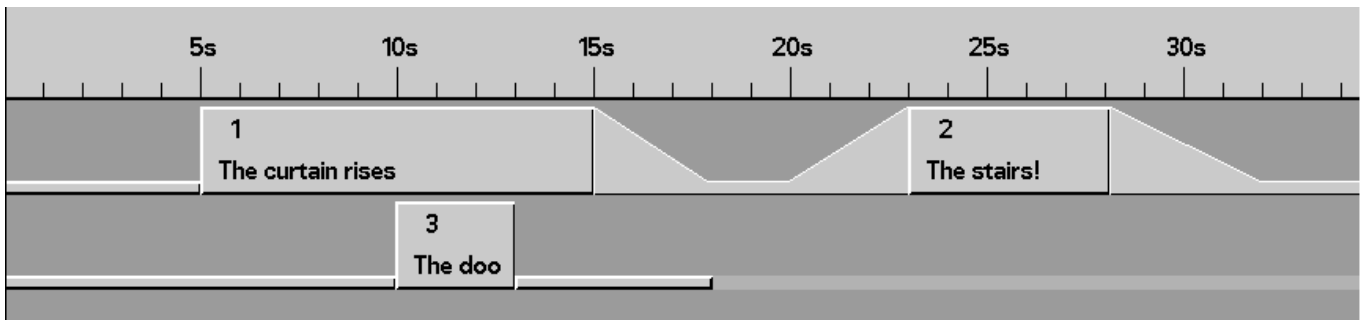
■ Figure 4-15: Using Two Tracks

Saving CueLine Programs

Programmed information is automatically saved when moving out of CueLine. DO NOT turn the desk off before CueLine is saved otherwise data may be lost

Why Multiple Tracks?

A track holds a sequential list of events.

For example, a track may contain the following:

Start
Blackout for 5 seconds.
Snap to the first memory for 10 seconds.
Fade to blackout in 3 seconds.
Blackout for 2 seconds.
Fade the second memory in over 3 seconds.
Hold the second memory for 5 seconds.
Fade to blackout in 4 seconds.

Figure 4-13 shows how this is displayed.

It is apparent from Figure 4-13 that only one action can occur at a time

Therefore if 5 seconds into the first memory, the third memory needs to be added to the output of the first memory (for 3 seconds), the problem posed can be resolved in two ways. Either create a fourth memory, which is a combination of the first and third memories, and reprogram CueLine as shown in Figure 4-14, or use two tracks as shown in Figure 4-15.

But remember that although extra tracks can be defined after CueLine has been programmed, changing the definition of a track will remove all memories from that track.
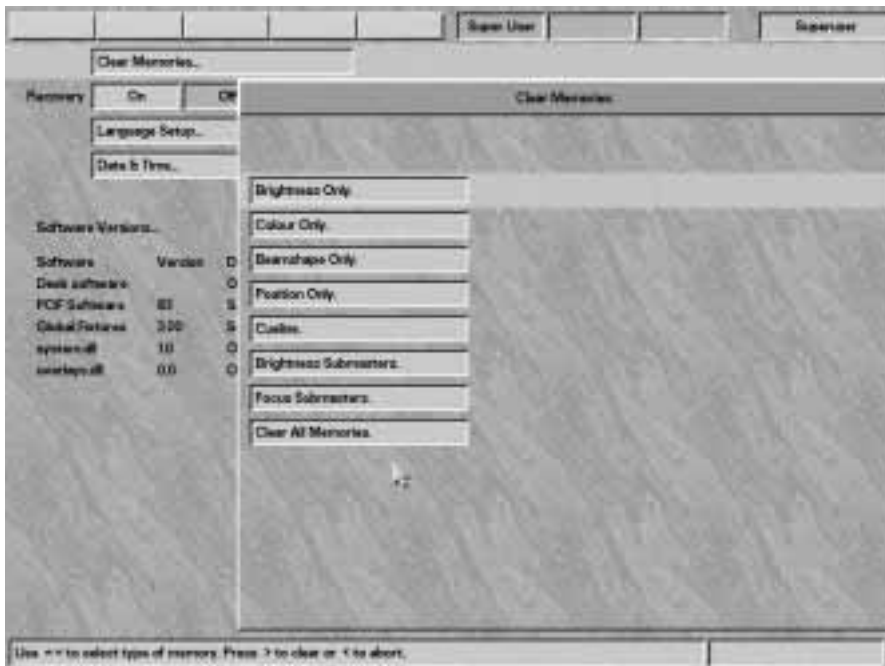
Accessing Super User

Press the ‹ and › keys together, whilst simultaneously turning the Key Switch to PROGRAM mode.

The following options are available:

Clear Memories
Recovery
Language SetUp
Date & Time

Use the ⌃ and ⌄ keys to select the option.

Once selected, use the › key either to enter the option or to change it.

To exit Super User turn the keyswitch out of Program Mode.

MONITOR NOTES

💻 *Software Versions*

The software versions are continuously shown and therefore there is no option to select.

Resetting CueLine

The *CLEAR MEMORIES* feature, allows the resetting of all memories or one type of memory to factory defaults.

1 Use the ⌃ and ⌄ keys to Select CLEAR MEMORIES

```
  Super User:
  CLEAR MEMORIES     ›
  Press › to select
  or ⌄ for next Option
```
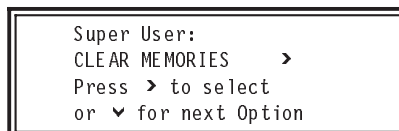
2 Press the › key to enter *Clear Memory*. The Memory Display shows:

```
  Clear Memories
  BRIGHTNESS ONLY    ⌃⌄
  Press › to Clear
  Or ‹ to Abort
```
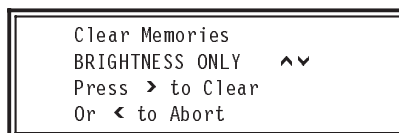
3 Use the ⌃ and ⌄ keys to select *CueLine* from the following options:

Brightness only
Colour only
Beamshape only
Position only
CueLine
Brightness Submasters
Focus Submasters
Clear All Memories

4 Once selected, press the › key to clear.

The Memory Display shows:

```
  **WARNING**
  CUELINE MEMORIES
  Press Prog to Clear
  Or ‹ to Abort
```
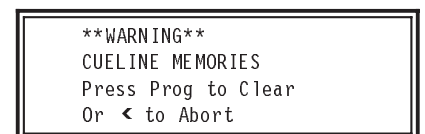
5 Press the PROGRAM button to clear or the ‹ key to abort the operation.

WARNING
Clearing Memories
Care must be exercised as this operation clears all memories of the type selected.

4
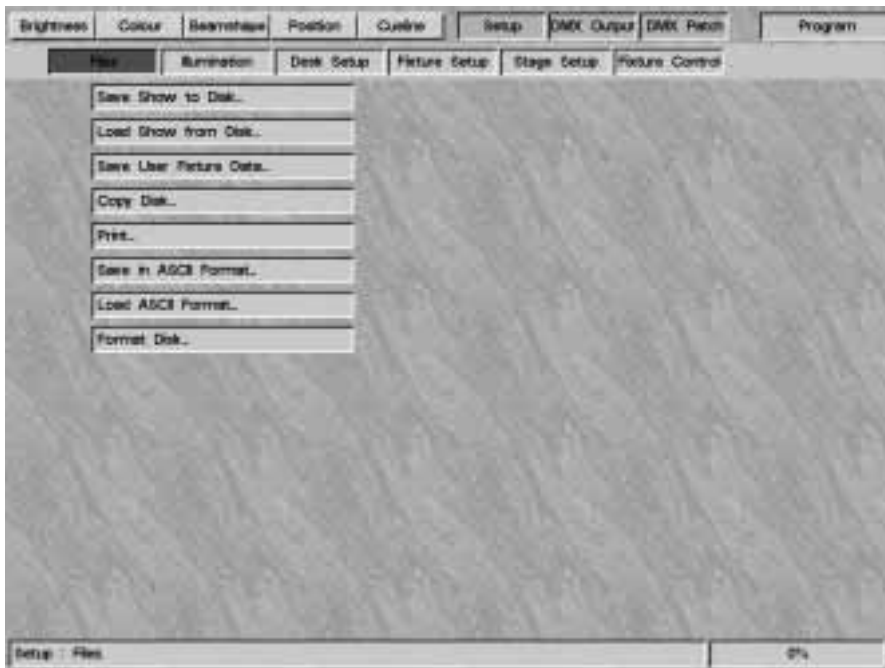
Planning

It is virtually impossible to 'busk' a show with moving lights in the same way that can be done with conventional luminaires - they are just too complicated. Planning is essential. 'Busking' it with moving lights means selecting from preprogrammed effects to create something, rather than making it all up in an impromptu fashion.

Any show has to be designed to create the lighting effects required. Work out what fixtures, intelligent or generic, are required, where they have to be positioned in the rig, and how they are to be grouped. This can be entirely to suit the operator - the desk does not care. What is important is how the operator best likes to work.

Some fixtures have technical limitations, for example, the start address may have a specific address or range of addresses, rather than being able to be patched to any of the available 512 channels. Some dimmers have channels grouped, rather than patched individually.

Therefore work out what the technical limitations of the equipment are in terms of control. All the dimmers usually have to be grouped together as they have to be addressed consecutively, as a block. Some fixtures only work on particular DMX addresses. Allocate DMX addresses to make sure there are no conflicts.

HINT
Make it logical in some way; group fixtures either by type or by position within the rig, or both.

The desk can also deal with composite fixtures, where one fixture consists of two separate parts and requires two DMX addresses, e.g. a Par Can and a scroller, VL5s - head and dimmer.

Duplicate fixtures are also easily accommodated. This is where multiple fixtures on multiple DMX addresses are controlled from one desk channel, and is useful for cyc lights and light curtains, etc.

Optimise cable runs, particularly control cables. Check the DMX loading. Ensure that there are enough DMX splitters, isolators and terminators to hand. Set up fixture switches, etc., whilst they are still on the ground.

Setting Up the Desk

5 ▲

Internal Memory Structure

During the course of normal operation, there is no need for the operator to be aware of the different types of memory and data in the desk. Nor does anything need to be done to protect data, apart from the operator making normal backups to floppy disk as a precaution against the desk being stolen, for example.

However, for information, there follows an overview of how the data is handled and stored by the desk.

The desk holds several types of data: desk operating system software, fixture data files (Zero 88 fixture and user fixture files), desk set-up data, lighting data (memories) and CueLine data.

The above types of data are stored in four areas: volatile dynamic RAM, battery backed static RAM, flash RAM and floppy disk.

A floppy disk is only used to back up existing data or to introduce new data to the desk.

Volatile dynamic RAM is only used by the desk operating system to speed up the desk operation, not to store lighting data.

Battery backed static RAM is very quick to write to and read back from, but it is not large.

Flash RAM is a very safe electronic medium for storing data, with very little chance of any data that is written to it being lost. However, although it is quick to read from, it has the disadvantage of being fairly slow to write to.

All desk operating software and fixture data files are held in flash RAM. Desk set-up data comprises the current show name, the fixture data files for those fixture types currently used, the allocation of fixtures to desk channels and DMX start address, and other information, and is also stored in flash RAM. Memories are stored initially in battery backed static RAM. If a show is large enough, it is moved to flash RAM. Further memories programmed are then periodically updated to flash RAM automatically.

When the show is saved to floppy disk, all desk set-up and lighting data is saved, together with the fixture data files used in the show.

If the desk is in an installation where the rig does not change very much, but many different shows are performed, it is advisable to create a show called 'Basic Rig' with all fixtures and start addresses allocated and a few basic memories recorded, and to save it to a floppy disk. This can then be reloaded before creating a new show both to allow rig testing and to provide a known starting point.

Controls

- **WHEELS**

Used to adjust fixture parameter levels.

- **WHEEL DISPLAY**

Guides the operator on which wheel to use for which parameter.

- **PROGRAM BUTTON**

Commits the current settings to electronic memory.

- **MEMORY DISPLAY**

Guides the operator step by step through the menus.

- **ARROW KEYS**

Use to scroll through the menus. Shown as ‹ › ∧ ∨ keys throughout the manual. If an external keyboard is used, the cursor keys have the same function.

- **FLASH FUNCTION BUTTON**

Modifies the function of the channel flash buttons, enabling text entry and fixture selection, as indicated by the adjacent light. When setting up the desk, the FLASH and SOLO functions are disabled.

- **CHANNEL FLASH BUTTONS**

Have two functions in PROGRAM mode: selecting fixtures; entering text.

- **SHIFT BUTTON**

Accesses the second row of text characters on the channel flash buttons and accessing Fixture 48 to 96 (25 to 48) in Wide Mode.

- **AUXILIARY (AUX CONTROL) BUTTONS**

Can be programmed to activate/deactivate predefined DMX channels.

Navigating SetUp

The SetUp section of the desk is split into six areas, as follows:

FILES
Controls saving of data and loading to floppy disk.

ILLUMINATION
Allows the setting of litlite levels, desk light (LED) brightness, LCD backlight brightness and contrast.

DESK SETUP
Sets up the desk default values and assigns fixtures to channels and DMX start addresses.

FIXTURE SETUP
Allows the operator to create or modify fixture files.

STAGE SETUP
(Not yet implemented.)

FIXTURE CONTROL
(Not yet implemented.)
Allows remote lamp on/lamp off and reset for intelligent fixtures, assuming the fixture has those functions.

Selecting SetUp Options

1   Turn the Key Switch to PROGRAM mode.

2   Use the ‹ and › keys to select *Set-Up*.

3   Press the ⌄ key.

Use the ‹ and › keys to select an option from the list below.

Files
Illumination
Desk SetUp
Fixture SetUp
Stage SetUp
Fixture Control

4   Once selected press the ⌄ key.

Saving a Show

1   Press the ⌄ key. The Memory Display shows:

```
    Set-Up
    FILES             ‹ ›
    Select Option &
    Press  ⌄
```

2   Press the ⌄ key the Memory Display shows.

```
    Files
    Save Show to Floppy
    Press  ›  to Select or
      ⌄  for More
```
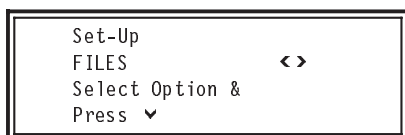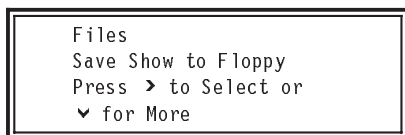
3   Press the ⌄ key

4   The first line displays the previously entered *Show Name*.

```
    Save: YOUR SHOWNAME
    FILE:
    Name & Press Program
    Press  ⌄  to Abort
```
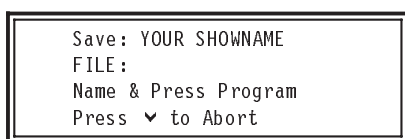
Enter a file name which must be a maximum of 8 characters with no spaces, using the channel flash buttons, or using the external keyboard.

5   Insert a DOS formatted 3.5" 1.44 MB floppy disk and press the PROGRAM button. If there is another show with the same file name already on the disk, a warning appears asking if the file should be overwritten (where available).

6   Press the PROGRAM button again to confirm, or any other key to abort. Modify the file name if required. The show is now saved to disk, during save a message appears on the Display.

7   When completed the Memory Display shows:

```
    Files
    Save Show to Floppy
    Press  ›  to Select or
      ⌄  for More
```
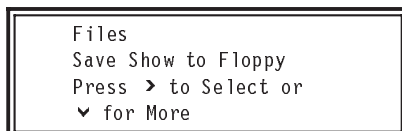
8   Press the ⌄ key to move to *Load Show*.

Loading a Show

1   Move to *Load Show*. The Memory Display shows:

```
    Files
    LOAD SHOW FRM FLOPPY
    Press  ›  to Select or
      ⌄  for More
```

2   Insert a floppy disk containing previously saved shows into the disk drive.

3   Press the › key to open the *Load Show* dialogue box, there may be a short delay while the disk is read.

```
    Shows to Load      ⌃⌄
    Show Name
    Press Prog to Load
    or  ‹  to Abort
```
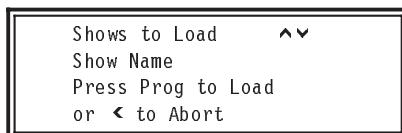
The first show name is displayed in the Memory Display use the ⌃ and ⌄ keys to select a show.

4   Press the PROGRAM button to load the show.

If the desk is empty, the show loads immediately. If there is a show currently in the desk, a warning appears asking for confirmation before overwriting the existing show (where available).

5   Press the PROGRAM button again to confirm, or the ‹ key to return to *Load Show*.

6   Press the ⌄ key to move to *Save Operator Fixture Data*

NOTE

HINT
Backups
Follow the safe option and make two copies of all-important shows on separate disks.

Show Disk Compatibility
A show created and saved on a Sirius 250 can be loaded into a Sirius 500. A show created on a 500 can NOT be loaded on to a Sirius 250.

Disk Errors
If the desk encounters any disk error while reading from a floppy disk, the show held on internal memory will be rebuilt and checked to ensure that it is not corrupt.

Date and Time
When the show is saved to a floppy disk, the current time and date are saved to disk.

Monitor Note

🖳 *Load Shows*

When Loading Shows from Floppy the monitor displays a list of available shows to choose from..

5

Saving Operator Fixture Data

1 The next option is *Save User Fixture Data*. The ˃ key opens the *Save User Fixture Data* dialogue box. The *Save User Fixture Data* window appears. Enter a file name using a maximum of eight characters (any combination of letters or numbers can be used).

2 Ensure that a formatted disk is in the floppy drive. Press the PROGRAM button to continue, or the ˅ key to abort if required.

All fixture data files created by the operator are saved to the floppy disk in a single file,

Loading Operator Fixture Data

1 The next option is *Load User Fixture Data*. Ensure that a formatted disk is in the floppy drive and press the ˃ key to open the dialogue box. After a short delay a list of the operator fixture data files on the disk is displayed.

2 Use the ˄ and ˅ keys to select which file to load.

3 Press the PROGRAM button to load the new file, or ˂ key to abort.

Copying a Disk

Not yet implemented.

1 The next option is *Copy* disk. Press the ˃ key to open the *Copy* dialogue box. The box contains a list of files on the disk. *All Files* is an option (default).

2 Use ˄ and ˅ keys to select which file(s) to copy.

3 Press the PROGRAM button. The desk reads the file and requests the operator to remove the read (source) disk and insert another (destination) disk on which to copy the file(s).

4 Two option boxes appear: *Copy* and *Cancel*. *Copy* is highlighted. Press the PROGRAM button to copy the file data to the disk. The desk then checks data integrity and puts up a message if correct. The box closes automatically on successful completion after a short delay.

5 Use the ˃ key to select *Cancel* if required.

.

Printing, Saving in ASCII Format, and Loading in ASCII Format

Print, *Save in ASCII Format*, and *Load in ASCII Format* not yet implemented.

Formatting the Disk

Not yet implemented.

1 The final choice in this section is *Format* disk. Press the ˃ key to open the dialogue box with instructions for formatting the disk. The box closes on successful completion.

SetUp: Illumination

The next stage is to adjust the setting of the desk lamp brightness, LED Brightness, LCD backlight brightness and contrast.

Move to *Set-Up: Illumination*, as described in the section on Selecting Set-Up Options on page 5-3, the Memory display shows

```
    Set-Up
    ILLUMINATION        ‹ ›
    Select Option &
    Press  ⌄
```
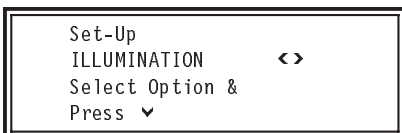
1   Use the ⌄ key to move to *Desk Lamp Brightness*. The index finger wheel now controls the Brightness of the desk lamps. The level of the lamps is shown in the window.

2   Use the ⌄ key to move to *LED Brightness*. The index finger wheel now controls the Brightness of the lights (LEDS) on the desk. The level of the lights is shown in the window (NOT Output Lights).

3   Use the ⌄ key to move to *Memory LCD*. The index finger wheel controls the Brightness of the backlighting on the Memory Display, and the middle finger wheel controls the contrast of the LCD. These should be adjusted to give the clearest image in the Display in the prevailing conditions.

4   Use the ⌄ key to move to *Wheel LCD* (Wheel Display). These should be adjusted in the same way as for the Memory Display.

5   Press the ⌄ key once to return to *Desk Lamp Brightness*.

6   Press the ⌃ key to exit to *Set-Up*.

```
    Set-Up
    ILLUMINATION        ‹ ›
    Select Option &
    Press  ⌄
```
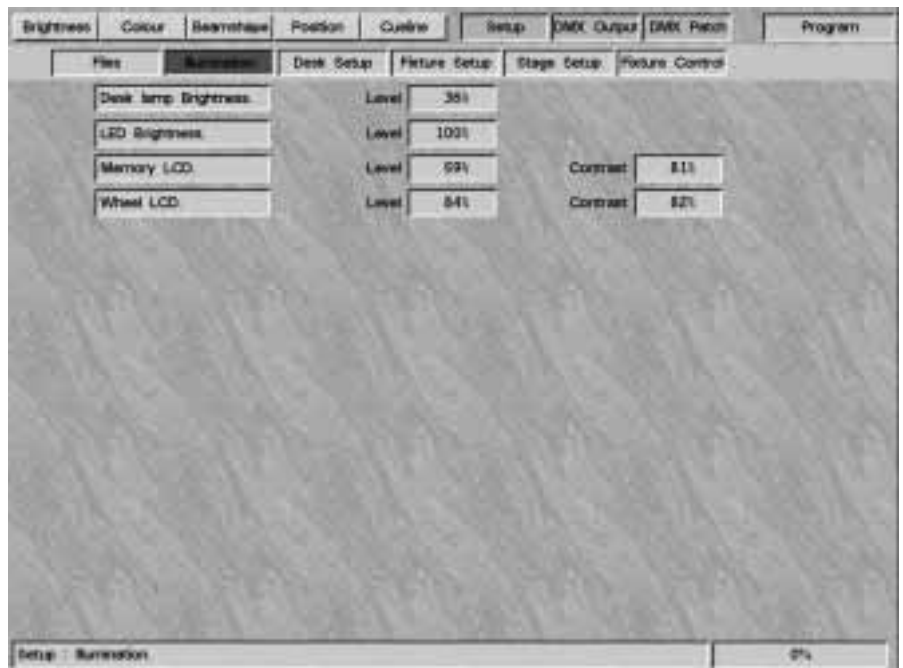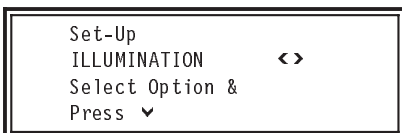

■ Figure 5-2: Set-Up: Illumination screen

| Thumb | Index finger | Middle finger | Third finger |
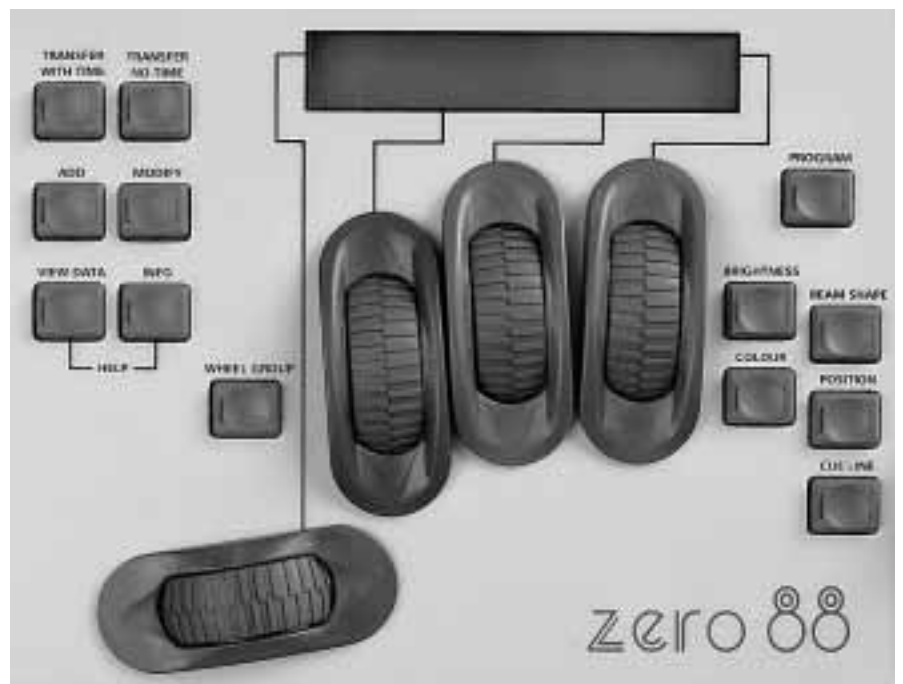
■ Figure 5-3: Control Wheel Layout

SetUp: Desk Set-Up

Having planned the Rig, the next stage is to set up the desk with fixtures as required. Most of this can be done without a monitor, however, it is much easier with one.

1   Press the ⌄ key to enter *Desk Set-Up.*

```
Set Up: Show Name
Your Show Name Here
Enter Name & Press  ⌄
To Cont      ⌃ to Exit
```

Enter the show name using the channel flash buttons, or using the external keyboard.

2   Press the ⌄ key.

```
Set Up: Wide/Normal
Set to: Normal
Use  <> to Select
Normal/Wide. Press  ⌄
```

Use the ⟨ and ⟩ keys to select *Normal* or *Wide* mode.

3   Press the ⌄ key.

```
Set Up: Warning
Set to: Beep off
Use  <> to Select
Beep On/Off & Press  ⌄
```

Use the ⟨ and ⟩ keys to select whether or not the desk gives an audible warning if the operator attempts to do something inappropriate.

4   Press the ⌄ key.

```
Set-Up: Remote Go
Set to: ENABLED
Use  <> to Select
And Press  ⌄
```

Use the ⟨ ⟩ keys to select whether or not the desk responds to the GO button remoted via the MIDI connectors see Figure 5-5 for wiring. The Remote Go will only accept approx one press per second.
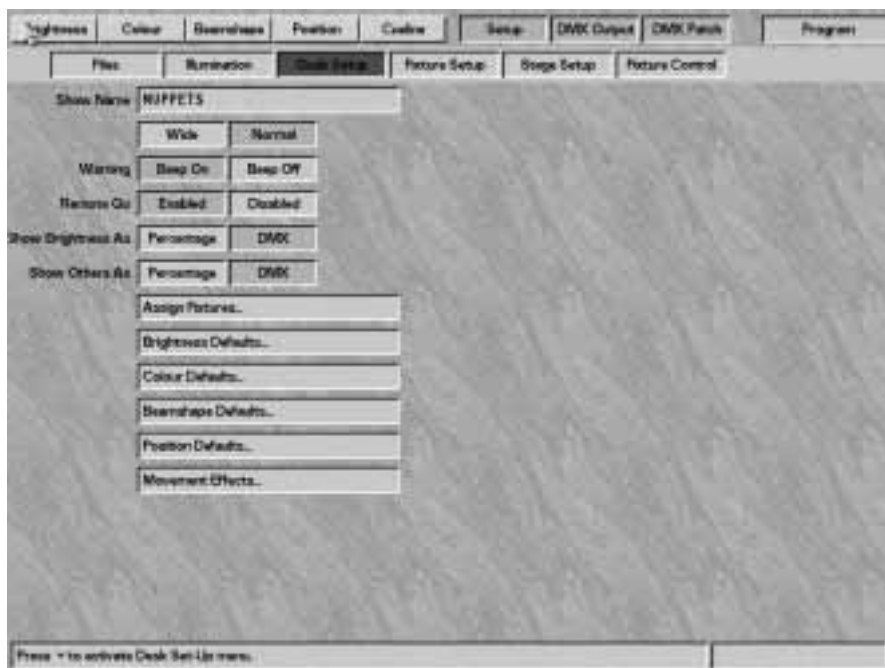
■ Figure 5-4: Desk Set-Up menu
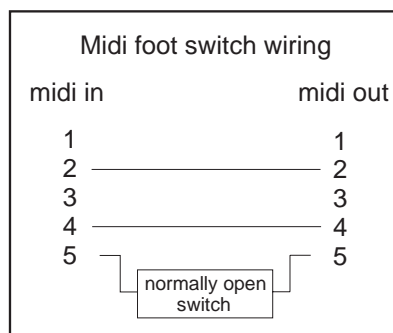
■ Figure 5-5 Midi Remote Go

5   Press the ⌄ key.

```
Set-up: Brightness
SHOW AS DMX VALUE  <>
Select DMX or %
Press  ⌄ to Continue
```

Use the ⟨ and ⟩ keys to choose between percentage (shown as 0-100) or DMX value (shown as 0-255).

6   Press the ⌄ key.

```
Set-up: Other
SHOW AS DMX VALUE  <>
Select DMX or %
Press  ⌄ to Continue
```

Use the ⟨ and ⟩ keys to choose between percentage (shown as 0-100) or DMX value (shown as 0-255).

7   Press the ⌄ key to move through the following areas. (The number in brackets cites the relevant page for the section.)

Assign Fixtures (5-7)
Brightness Defaults (5-17)
Colour Defaults (5-18)
Beamshape Defaults (5-18)
Position Defaults (5-18)
Movement Effects (3-17)

Once one of the above has been selected, press the ⟩ key to move to the section. On entering the section, follow the instructions on the relevant page.

Use the ⌃ key to move up the list.

NOTE

WIDE Mode
If WIDE mode is enabled, the extra fixtures can only be used to control the Brightness of single channel conventional luminaires (generics).

Sirius 250 fixtures 24 - 48 generic conventionals only, and Sirius 500 fixtures 49 - 96 generic conventionals.
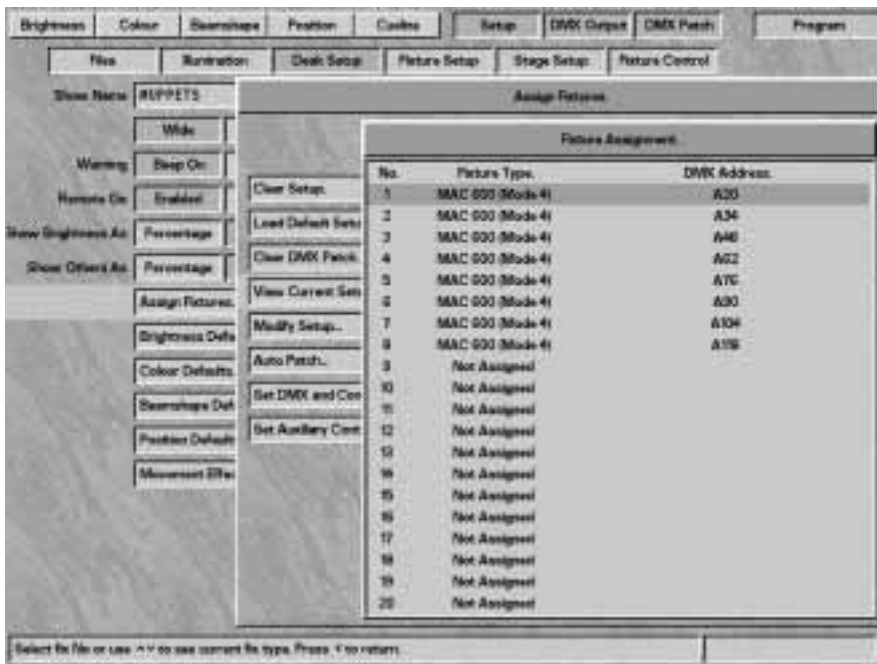
■ Figure 5-6: Viewing Current

Assigning Fixtures

1   Move down to *Assign Fixtures* to View and edit fixture, channel and DMX assignments .

2   Press the ❯ key to open a large dialogue box with several function selection windows. The *View Current Set-Up* window is highlighted active.

The options available are:

Clear Set-Up
Load Default Set-Up
Clear DMX Patch
View Current Set-Up
Modify Set-Up
Auto Patch Fixtures
Set DMX & Controls
Auxiliary Control

Use the ⌃ and ⌄ keys to move around the list, and press the ❯ key to make a selection active.

Viewing the Current Set-Up

1   Use the ⌃ and ⌄ keys to move to *View Current Set-Up* (if not already selected), and press the ❯ key. The *Fixture Assignment* window is displayed, showing what type of fixture has been allocated to which desk channel, and its DMX start address if assigned (*NA* means not assigned). See Figure 5-6:

2   Use the ⌃ and ⌄ keys to scroll up and down the list, or the channel flash buttons to jump to a fixture. The data is shown in the Memory Display and on the monitor. The Memory Display shows:

```
Current Fix 48     ⌃⌄
Cyberlight Mode 1
DMX Address: 100
  ‹ to Return
```
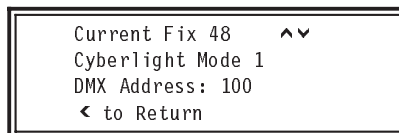
The currently selected channel/fixture is indicated by a red light in the channel flash button.

3   Press the ‹ key to return to the *View Current Set-Up* window.

Clear DMX Patch

> **WARNING**
> **This option can change the whole desk set-up. Read instructions before use.**
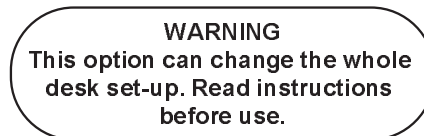
The *Clear DMX Patch* option removes all the start addresses from any fixture already assigned. The start addresses are replaced with NA (not assigned).

1   Press the ⌃ key.

```
Assign Fixtures
CLEAR DMX PATCH
Press  ❯ to Clear
Or  ⌄ to Modify
```

2   To continue press the ❯ key.

```
Press Program to
Clear DMX Patch
Or  ‹ to Abort
```
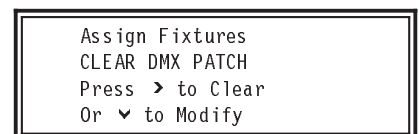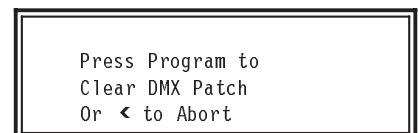
Either press the ‹ key to abort, or the PROGRAM button to clear the DMX patch.

After pressing either the ‹ key or the PROGRAM button, the screen returns to the *Clear DMX Patch* display.

Returning to *View Current Set-Up* would show the operator the same list of fixtures with all DMX addresses set to *NA*.

5

■ Figure 5-7: Fixture Assignments
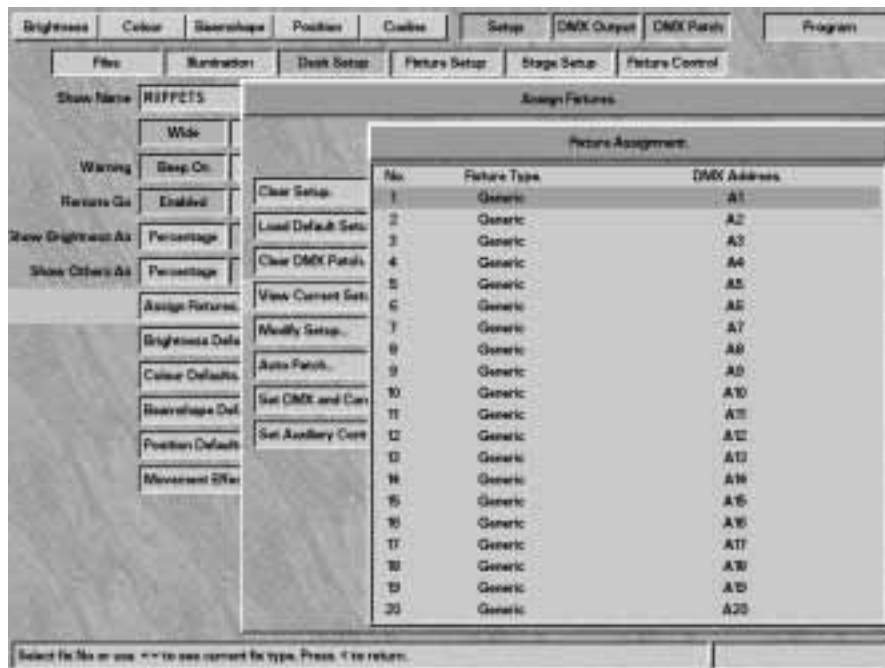
Load Default Set-Up

> **WARNING**
> This option can change the whole desk set-up. Read instructions before use.

The *Load Default Set-Up* option replaces all existing fixtures with a generic (single Brightness channel fixture), and patches Fixture 1 to DMX Channel 1, Fixture 2 to DMX Channel 2, Fixture 3 to DMX Channel 3, etc., up to and including the last fixture. This is the default setting when the desk is new.

1   Press the ⌃ key.

```
    Assign Fixtures
    LOAD DEFAULT SET-UP
    Press  ⟩ to Load
    Or  ⌄ to Modify
```

2   Press the ⟩ key to enter *Load Default Set-Up*. A warning is displayed:

```
    *This operation may*
    *Damage Memory Data*
    Press Program to
    Proceed or ⟨ to Abort
```

See Figure 5-7.

3   Press PROGRAM to continue with *Load Default Set-Up*, or the ⟨ key to abort. Either option returns to the *Load Default Setup* window.

The result can be seen by Viewing current setup.
(see section on page 5-7.)

Clear Set-Up

> **WARNING**
> This option can change the whole desk set-up. Read instructions before use.

The *Clear Set-Up* option changes all fixtures and all start addresses to Not Assigned.

1   Press the ⌃ key.

```
    Assign Fixtures
    CLEAR SET-UP
    Press  ⟩ to Clear
    Or  ⌄ to Abort
```

2   Press the ⟩ key to enter *Clear setup*.

```
    *This operation may*
    *Damage Memory Data*
    Press Program to
    Clear or ⟨ to Abort
```

Press PROGRAM to confirm the request to clear, or the ⟨ key to abort. Either option returns to the *Clear Setup* window.

The result can be seen by Viewing current setup.
(see section on page 5-7.)

HINTS

If the desk is about to be used with a new complex, full rig, it is sometimes easier to clear the set-up before starting.
If a new rig is substantially or wholly generic, use Load Default Set-Up to make the whole desk generic, and use Modify Set-Up to modify individual fixtures.

NOTE

Default Set-Up
The default set-up is all channels set to Brightness only (generic), the DMX channel is set to the desk fixture number 1 to 1, 2 to 2, etc.

5
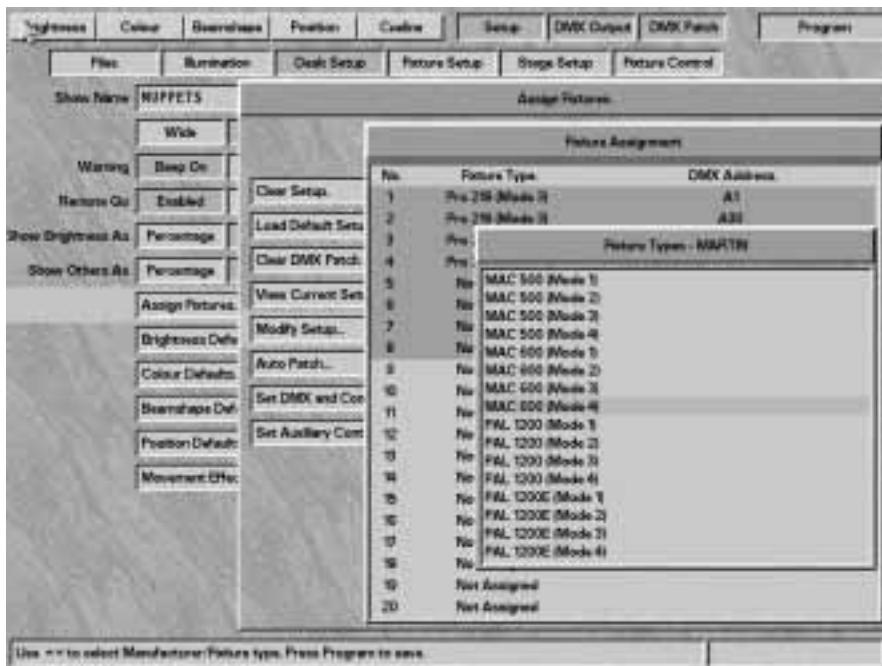
Modifying the Set-Up

1   Move down to *Modify Set-Up* and press the **>** key. A warning appears to the effect that memory data may be lost, damaged or become unusable if fixture data is changed.

```
    *THIS OPERATION MAY*
    *DAMAGE MEMORY DATA*
    Press  > to continue
    or  < to abort
```

Press the **<** key to abort or the **>** key to continue. The *Fixture Assignment* window is opened.

2   Press the channel flash buttons to select all desk channels to be used to control a particular type of fixture. These are highlighted in the list as the buttons are pressed. The red light in the buttons also come on.

3   Press the **>** key to open a window containing a list of fixture manufacturers.

4   Use the **^** and **v** keys to select the required manufacturer.

```
    Mod Set-Up: Select  ^v
    HIGH END SYSTEM
    Press Program to
    View Fixture Types
```

Once selected, press the PROGRAM button or the **>** key to open a window showing the available fixture types for that manufacturer. (See Figure 5-8 for monitor display.)

```
    Mod Set-Up: Select  ^v
    HIGH END SYSTEMS
    Cyberlight Mode 3
    Program to SAVE
```

Use the **^** and **v** keys to select the required fixture type, and press the PROGRAM button to assign the fixture type to the desk channel(s).

The fixture type on the list changes to the type just selected, and all the DMX addresses change to *NA* (not assigned).

```
    Modify Set-Up:
    Select Fixture No
    Press  > to Allocate
    Or  < to Return
```

5   Repeat this process until all the right fixtures have been allocated to the right desk channels, and press the **<** key to return to the *Modify Set-Up* window.

NOTE

Unassiging Fixtures
Follow steps 1 to 3 opposite then select <Clear> from the fixture manufactures list and press Program. The selected desk channels will be cleared and displayed as Not Assigned in the Fixture Assignment Window

5

■ Figure 5-9: Auto Patch screen
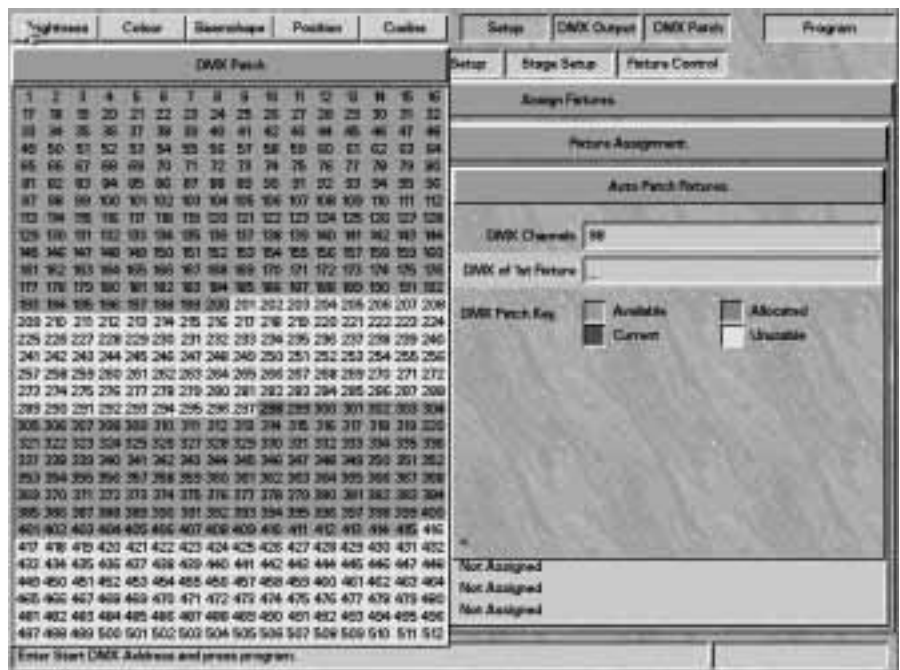
Auto Patch DMX

Auto Patch allows more than one fixture to be patched to the DMX address at a time.

1   Move down to *Auto Patch* and press the ➤ key.

```
    Auto Patch
    ALL FIXTURES
    Press  ➤ for All
    Or  ➤ for Selected
```

If all fixtures are required press the ➤ key and go to point 4.

2   If selected fixtures are to be patched, press the ➤ key.

```
    Auto Patch
    SELECTED FIXTURES
    Press  ➤ to Select
    Or  ➤ for All
```

Press the ➤ key the *Fixture Assignment* screen is displayed

Use the CHANNEL FLASH buttons to select those fixtures to be auto patched. The red lights in the flash buttons come on indicating which fixtures are selected. Press the ➤ key once selection is complete

3   The Monitor shows the auto patch screen (see figure 5-9.) The Memory display shows

```
    Auto Patch
    DMX START:
    Enter DMX to Patch &
    Press Program
```

Enter the DMX start address and press the PROGRAM button.

```
    Auto Patch
    Press Prog to SAVE
    ➤ to Abandon
    ➤ to Edit
```

When the PROGRAM button is pressed, the desk works through the list of fixtures to be patched and allocates all the generic/conventional (dimmer channels) fixtures and subfixtures first. Once all the generic fixtures have been allocated, the desk works through the list again allocating any other subfixtures, followed by all other fixtures.

After the patch has occurred, the *Assign Fixtures* window is returned to at *Auto Patch*.
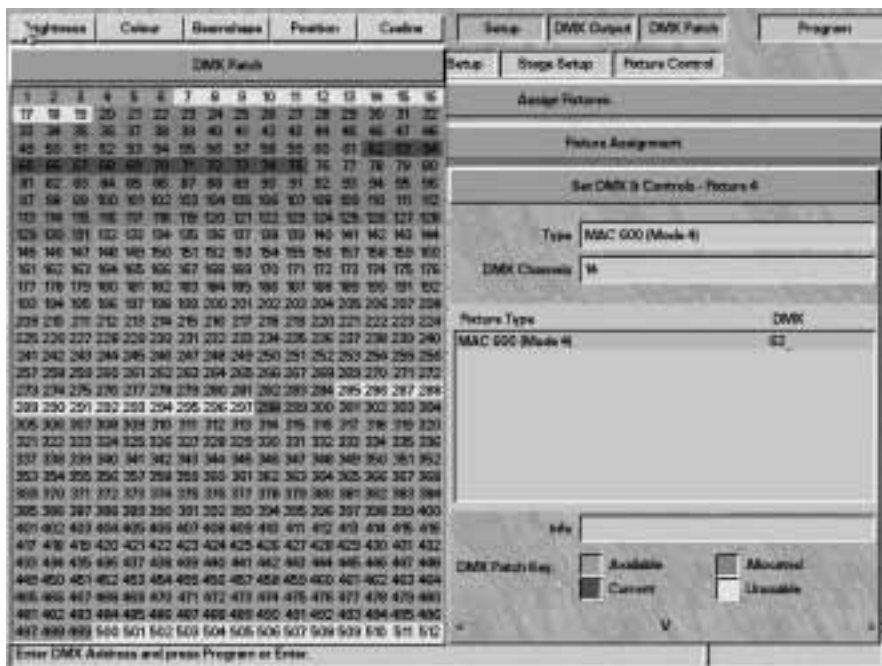
Setting the DMX Address and Controls

1   Move down to *Set DMX and Controls*. The Memory Display shows:

```
    Assign Fixtures
    Set DMX & Controls
    Press  ➤ to setup DMX
    or  ❯ for Auxiliary
```

Press the ➤ key to open the *Fixture Assignment* window again. *Desk channel 1* is highlighted.

2   Use the ︿ and ﹀ keys or channel flash buttons to select a fixture to view the current fixture type and DMX start address.

```
    Set DMX: Fixt: 1       ︿﹀
    Cyberlight Mode 1
    DMX Address: 200
    Press  ➤ to assign
```

3   Press the ➤ key to modify the current settings and set the DMX address.

```
    Set-Up Fix 1 DMX
    Start Address = 200
    Enter DMX Address
    and Press Program
```

See Figure 5-10.

Enter the new DMX Start Address using the channel flash buttons, or the external keyboard. Any current value will be overtyped automatically.

Press Program to save the DMX address.

If the DMX address entered cannot be used or overlaps with that of another fixture, a warning appears:

```
    **ERROR WARNING**
       DMX Address
    DMX Channels Overlap
    Press  ◄ to Continue
```

4   Press the ◄ key and enter a Valid DMX address and press Program.

Having successfully entered a valid DMX address the Enter *Info* window is displayed

5   Enter a description using the channel flash buttons or the external keyboard.

6   Press the ﹀ key.

```
    Set-Up Fix: 1
    Use  ◄ to Finish
     ﹀ to Set Controls
     ➤ to Add Duplicates
```

7   Press the ◄ key to finish, the ﹀ key to set the controls (see the following section on Setting Fixture Controls), or the ➤ key to add duplicates (see the section on Duplicates on page 5-13).

NOTE

DMX Address
If a DMX address is entered that causes a conflict with another fixture, the desk warns the operator. Either the one being worked on can be changed, or the one conflicted with de-allocated and a different DMX address allocated to that fixture.

MONITOR NOTES

💻 *DMX Address*

When setting the DMX address, a 'map' is shown giving the current status of all the 512 DMX channels.

■ Figure 5-11: Setting Fixture
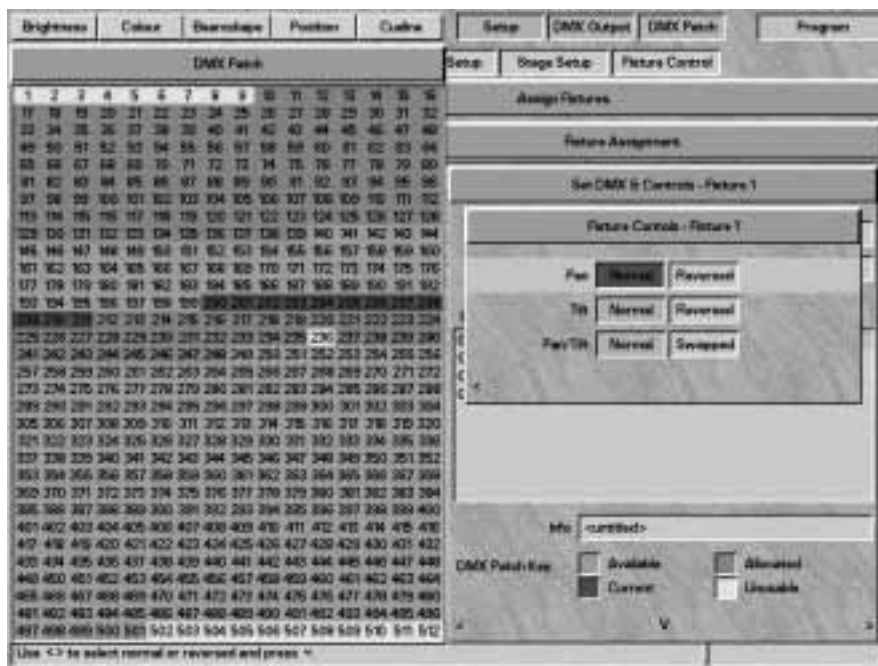
Setting Fixture Controls

See Figure 5-11 for monitor display.

Pan Reverse

1   This allows the control wheels to work backwards so that if the fixture is facing forwards in the rig, the beam still moves to the left when the control wheel is moved to the left. The ‹ and › keys toggle between normal and reverse operation.

2   Press the ⌄ key to move to *Tilt Reverse*.

Tilt Reverse

3   This allows the control wheels to work backwards so that if the fixture is facing forwards in the rig, the beam still moves upwards when the control wheel is moved upwards. The ‹ and › keys toggle between normal and reverse operation.

4   Press the ⌄ key to move to *Pan Tilt Swap*.

Pan Tilt Swap

5   This maintains normal operation, even when the fixtures are mounted on the sides of the rig. The ‹ and › keys to toggles between pan and tilt swapped and normal operation.

6   Press the ⌄ key followed by the ‹ key to finish setting the controls and return to:

```
Set-Up Fix: 1
Use  ‹ to Finish
     ⌄ to Set Controls
     › to Add Duplicates
```

NOTE

Movement Effects
Swopping Pan & Tilt does not affect the orientation of the movement effects.

Duplicates

It is possible to add duplicates to fixtures and auxiliary controls. Duplicate fixtures are one or more occurrences of the original fixture located at a different DMX start address. Duplicate fixtures act in exactly the same way as the original, by outputting the same data on different DMX addresses.

Adding Duplicate Fixtures

1   Move down to *Set DMX and Controls.* The Memory Display shows:

```
Assign Fixtures
Set DMX & Controls
Press  ❯ to setup DMX
or  ❯ for Auxiliary
```

Press the ❯ key to open *Fixture Assignment* window again. *Desk channel 1* is highlighted.

2   Use the ❮ and ❯ keys or channel flash buttons to select a fixture to view the current fixture type and DMX start address, see Figure 5-12.

```
Set DMX:  Fixt: 1  ❮❯
Cyberlight Mode 1
DMX Address: 200
Press  ❯ to assign
```

3   Press the ❯ key.

```
Set-Up Fix 1 DMX
Start Address = 200
Enter DMX Address
and Press Program
```

4   Press the ❯ key twice.

```
Set-Up Fix: 1
Use  ❮ to Finish
 ❯ to Set Controls
 ❯ to Add Duplicates
```
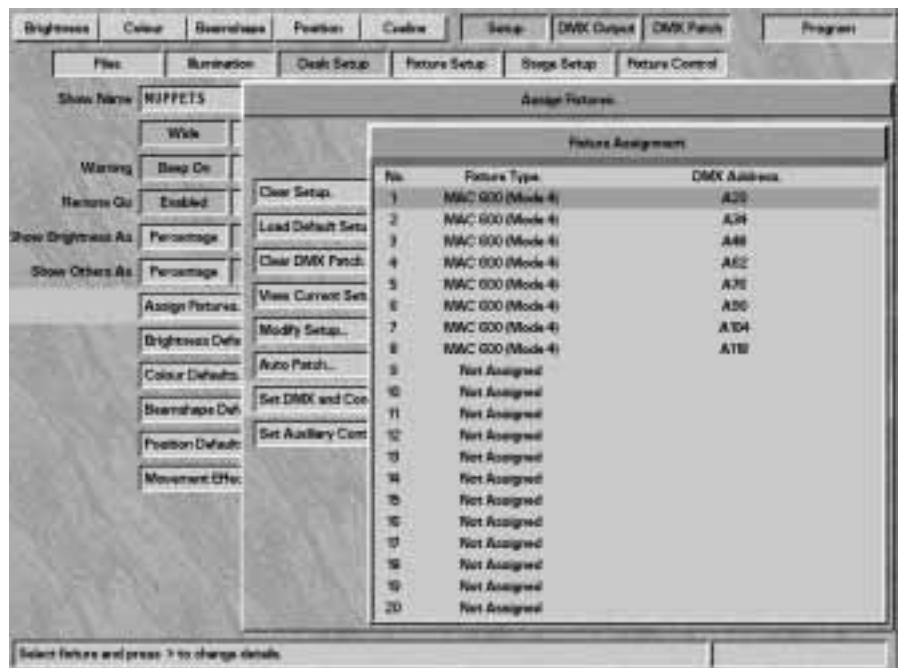

■ Figure 5-12: Fixture Type and DMX Start address

Press the ❯ key to add duplicates.

```
Duplicate Fixt 1
No. of Duplicates 0
Enter No Duplicates
and Press Program
```

See Figure 5-13 for monitor display. Use the channel flash buttons or the external keyboard to enter the number of duplicates required (for example 3).

5   Press the PROGRAM button.

```
Set-up Fix: 1 Pri Out
Mac 600 Mod DMX 20
Enter DMX Address
& Press Program
```

6   Press the PROGRAM button to confirm the original fixture's DMX channel.

The top line changes to Duplicate 1 of the fixture.

```
Set-up Fix: 1 Dup 1
Mac 600 Mod DMX _
Enter DMX Address
& Press Program
```

Enter the DMX address using the channel flash buttons, or using the external keyboard.

7   Press the PROGRAM button. If the DMX address is accepted, the Memory Display shows:

```
Set-up Fix: 1 Dup 1
Mac 600 Mod DMX _
Enter DMX Address
& Press Program
```

The top line changes to the next duplicate of the fixture.

5

If the DMX address is not accepted, a warning appears.

```
 **ERROR WARNING**
DMX Address Already
Allocated
Press ‹ to Continue
```

Press the ‹ key to continue. The Memory Display reverts to:

```
Set-up Fix: 1 Dup 1
Mac 600 Mod DMX _
Enter DMX Address
& Press Program
```

Enter the correct DMX address.

8   Enter the DMX address for the second duplicate. Press the PROGRAM button.

Continue entering DMX addresses for any remaining duplicates of the fixture.

9   When the PROGRAM button is pressed for the last duplicate, the Memory Display shows:

```
Finished Adding
Duplicates?
Press ‹ to Return
or ⌃ to Edit
```

Press the ‹ key to return to:

```
Set-Up Fix: 1
Use ‹ to Finish
  ⌄ to Set Controls
  › to Add Duplicates
```

10   Press the ‹ key to select another fixture.
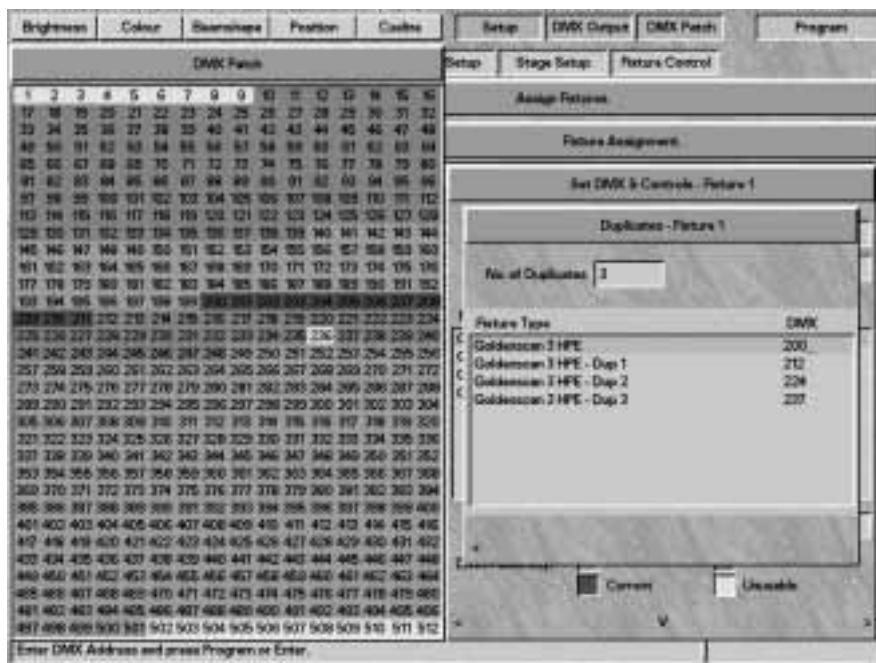
■ Figure 5-13: Duplicate Fixtures screen

Continuing After Setting the DMX Address

1   When all fixtures have their DMX addresses set up and their pan and tilt controls the right way round, press the ‹ key to return to the *Assign Fixtures* menu.

2   Press the ⌄ key to move to *Auxiliary Control*.

NOTE

Duplicates
Duplicates can be set up at the same time as the primary instance of a fixture. The instructions are detailed separately for ease of reference.

MONITOR NOTES

🖳 Fixtures

A list of fixtures together with their start addresses is shown on the monitor.

🖳 Duplicates

Where duplicates have been defined the Monitor displays show the DMX address for the original and duplicate fixtures.
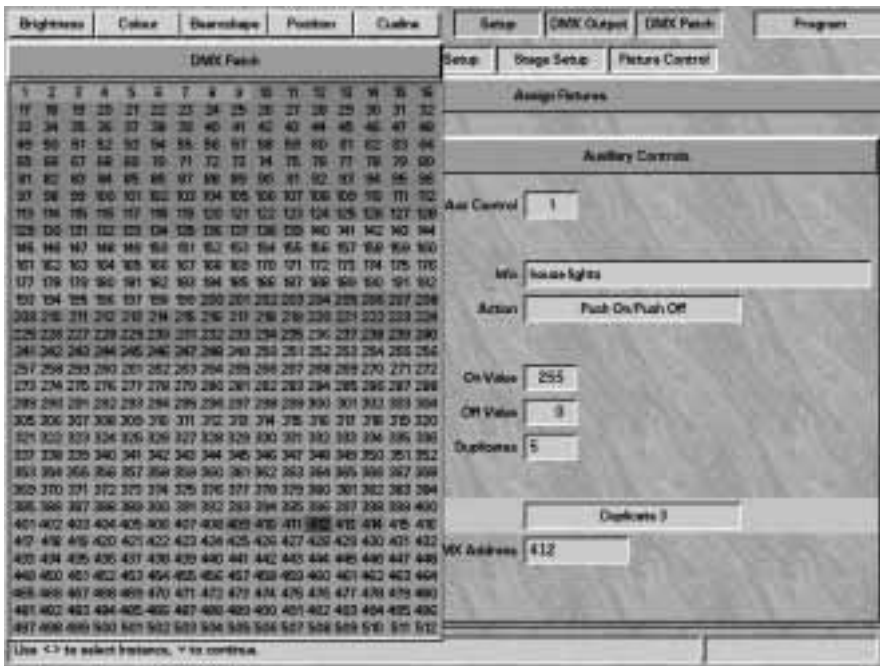
■ Figure 5-14: Adding Duplicates

Setting the Auxiliary Controls

1   The final part of *Assig Fixtures* is programming the auxiliary controls. Move to *Auxiliary control*. The Memory Display shows:

```
Assign Fixtures
AUXILIARY CONTROL
Press  ˃ to Setup Aux
or Press  ˂ to Return
```

2   Press the ˃ key to open the *Auxiliary Control* dialogue box.

```
Auxiliary Control
AUX CONTROL 1      ˂˃
Select Aux Control &
Press  ˅ to Continue
```

See Figure 5-14 for monitor display. Use the ˂ and ˃ keys to select the auxiliary control to be programmed, or use the AUX CONTROL buttons on the desk.

3   Press the ˅ key to move to *Info*, an optional text field to describe what is being controlled.

Enter a description using the channel flash buttons, or using the external keyboard.

4   Press the ˅ key.

```
Aux Control 1 Action
Set To: MOMENTARY
Set using  ˂˃ and
Press  ˅ to Continue
```

Use the ˂ and ˃ keys to toggle between *Momentary* and *Push On/Push Off*.

5   Press the ˅ key.

```
Aux Control 1: On
On Level = 100%
Set Level on Wheel
Press  ˅ to Continue
```

The *On Value* is highlighted. The default value when the AUX CONTROL button is selected is 100%, or 255. If a different value is required, use the index finger wheel to set the new value.

6   Press the ˅ key to highlight the *Off Value* box, and adjust as necessary. The default value for off is 0%.

7   Press the ˅ key twice.

```
Aux Cntrl  1 DMX
DMX Address 512
Enter Address and
Press Prog for More
```

Enter the DMX address of the device to be controlled and press the PROGRAM button.

8   Press the ˂ key to return to *Assign Fixtures*.

5

Adding Duplicate Auxiliary Controls

1   Follow points 1 to 6 from the
    section on Setting the Auxiliary
    Controls.

2   Press the ⌄ key once.

```
Aux Control 1:
Duplicates= 0
Enter No Duplicates
Press  ⌄ to Continue
```

Enter the required number of
duplicates (maximum nine).

3   Press the ⌄ key once.

```
Aux Cntrl 1 DMX 500
Primary Output     ⟩
Select Instance
Press  ⌄ to Continue
```

Use the ⟨ and ⟩ keys to review
the settings of the Primary Output
and Duplicates.

Return to first duplicate using
the ⟨ and ⟩ keys.

4   Press the ⌄ key once.

```
Aux Cntrl 1 Dup: 1
DMX Address _
Enter Address and
Press Prog for More
```

Enter the DMX address using the
channel flash buttons, or using the
external keyboard.

5   Press the PROGRAM button to
    confirm the above DMX address.

The top line of the Memory display
changes to the next Duplicate of
the *Auxiliary Control*.

```
Aux Cntrl 1 DMX 2
DMX Address _
Enter Address and
Press Prog for More
```

6   Enter the DMX address using the
    channel flash buttons, or using the
    external keyboard.

7   Press the PROGRAM button to
    confirm the DMX address.

8   Repeat points 6 and 7 until all
    instances have been programmed.

9   When the PROGRAM button is
    pressed to confirm the last DMX
    address, the Memory Display
    shows:

```
Auxiliary Control
Finished
Press  ⟨ to Return
or  ⌄ to Continue
```

10 Press the ⟨ key twice to return to
    the *Assign Fixtures* screen.

NOTE

Auxiliary Controls
*Duplicate Auxiliary Controls can be set up at
the same time as the primary instance an
Auxiliary Control. The instructions are
detailed separately for ease of reference.*

5

Brightness Defaults

1   Move down to *Brightness Defaults*.

```
    Set-Up:
    BRIGHTNESS DEFAULTS
    Press  > to Select or
     ˅ to Continue
```

2   Press the ˃ key to bring up the *Brightness Defaults* dialogue box, see Figure 5-15.

```
    Brightness Defaults
    START EFFECTS @ 13

    Set Level & Press  ˅
```

To alter the *Start Effects @* level, use the wheel indicated in the Wheel Display to set the fader level, at which point a chase effect starts if that is the selected way of starting it. The value is displayed in either percentage or DMX value.

See the section on Start Stop Options in Programming a Brightness Memory Chase Using 4 Wheel Drive®, on page 3-26.

3   Press the ˅ key. Use the wheel to adjust the *Chase Speed* which is shown in beats per minute. The factory default is 60.

4   Press the ˅ key. Use the wheel to adjust the *Fade In Time* shown in mins:secs:tenths.

5   Press the ˅ key. Use the wheel to Adjust the *Fade Out Time* in the same way.

Fade times can also be entered via the external keyboard. See Editing Times on page 3-5.

6   Press the ˅ key, followed by the ˂ key to return to *Brightness Defaults*.

7   Press the ˅ key to move to *Colour Defaults*.

NOTE

Times Entered via the Keyboard
415 Return = 415 seconds displayed as 06:55:0, i.e. 6 minutes 55 seconds.
6:55:0 is the same.
6.5 = 6.5 seconds = 00:06:5.
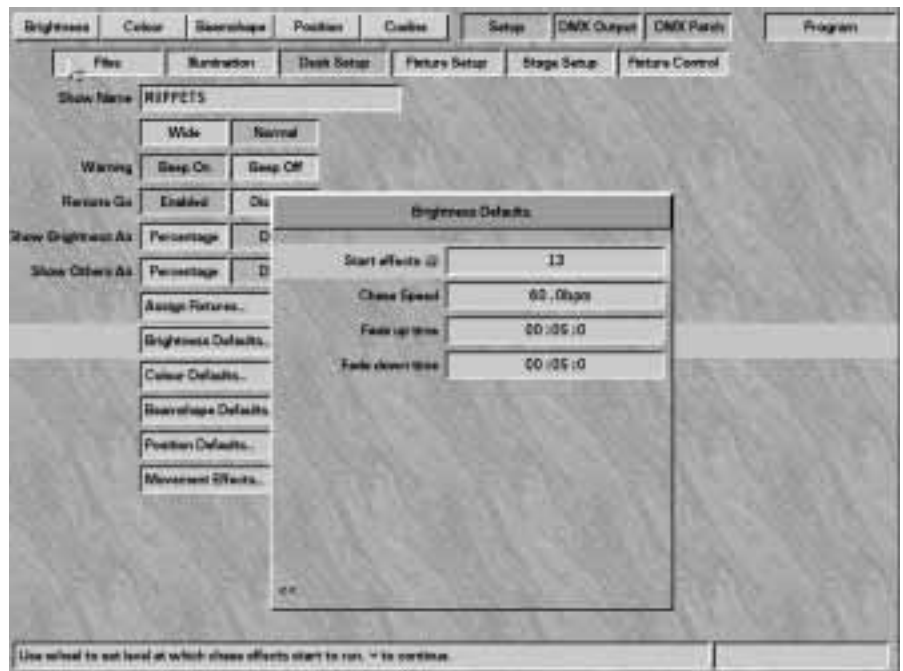
■ Figure 5-15: Brightness Defaults screen
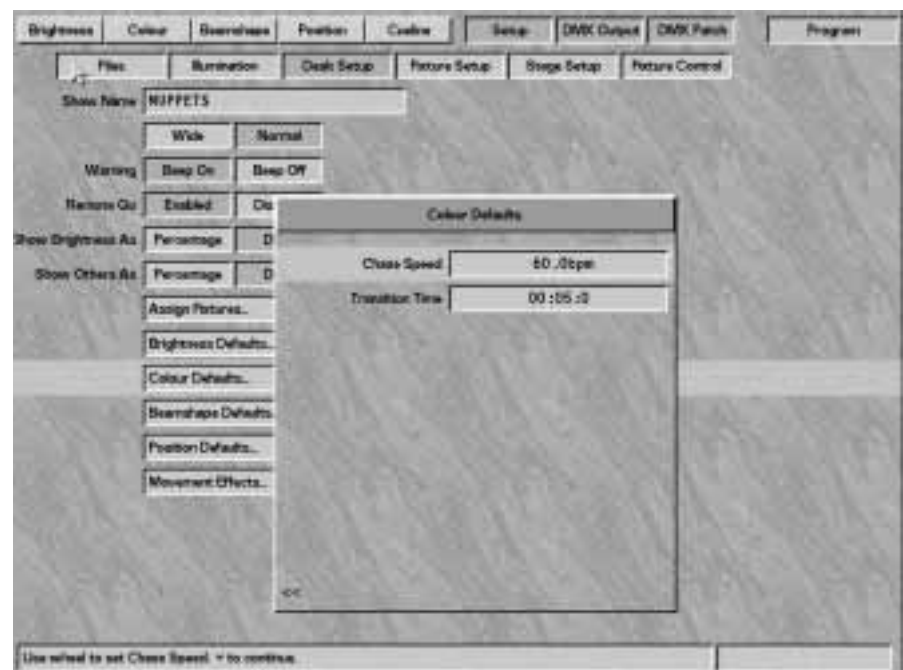
■ Figure 5-16: Colour Defaults screen

5

Figure 5-17:
Warning shown when exiting Desk
Set-Up
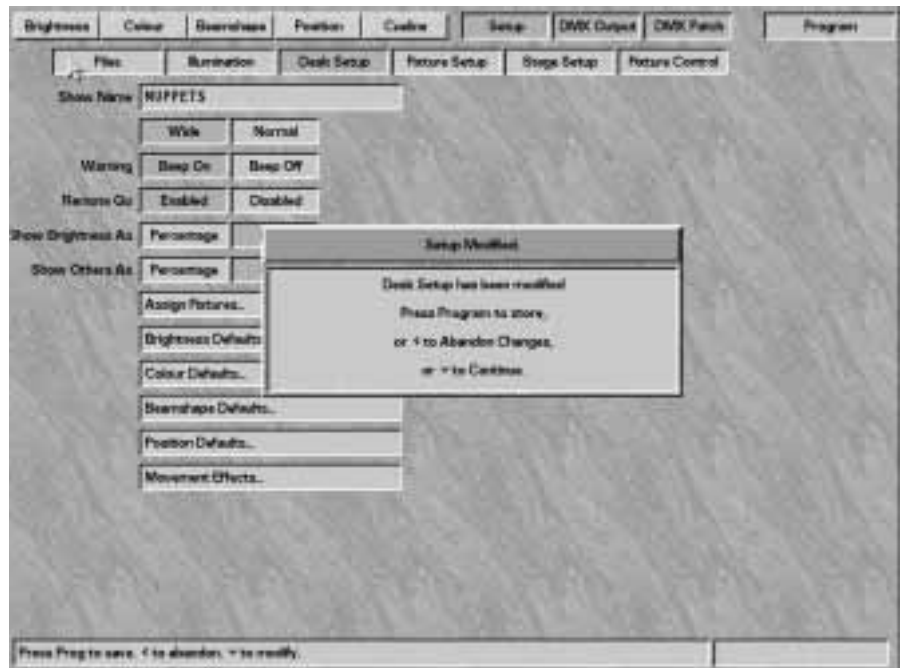
Colour Defaults

1   Move down to *Colour Defaults*.

```
Set-Up:
COLOUR DEFAULTS
Press  ❯ to Select or
   ❭ to Continue
```
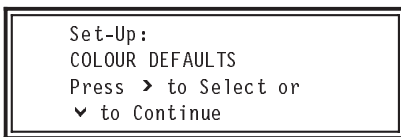
Press the ❯ key to bring up the
Colour Defaults dialogue box, see
Figure 5-16.

2   Use the wheel indicated in the
Wheel Display to set the *Chase
Speed*. The factory default is 60
beats per minute.

3   Press the ❭ key to move to
Transition Time. This is the time
taken to move from one memory to
the next. The factory default is
0:05:0. Use the wheel to adjust
time if required.

Transition times can also be
entered via the external keyboard.
See Editing Times on page 3-5.

4   Press the ❭ key, followed by the ❮
key to return to *Colour Defaults*.

5   Press the ❭ key to move to
Beamshape Defaults.

Beamshape Defaults

1   Move down to *Beamshape
Defaults*. Press the ❯ key to bring
up the *Beamshape Defaults*
dialogue box.

2   Use the wheel indicated in the
Wheel Display to set the *Chase
Speed*. The factory default is 60
beats per minute.

3   Press the ❭ key to move to
Transition Time. This is the time
taken to move from one memory to
the next. The factory default is
0:05:0. Use the wheel to adjust
time if required.

Transition times can also be
entered via the external keyboard.
See Editing Times on page 3-5.

4   Press the ❭ key, followed by the ❮
key to return to *Beamshape
Defaults*.

5   Press the ❭ key to move to
Position Defaults.

Position Defaults

1   Move down to *Position Defaults*.
Press the ❯ key to bring up the
Position Defaults dialogue box.

2   Use the wheel indicated in the
Wheel Display to set the *Chase
Speed*. The factory default is 60
beats per minute.

3   Press the ❭ key to move to
Transition Time. This is the time
taken to move from one memory to
the next. The factory default is
0:05:0. Use the wheel to adjust
time if required.

Transition times can also be
entered via the external keyboard.
See Editing Times on page 3-5.

4   Press the ❭ key, followed by the ❮
key to return to *Position Defaults*.

5   Press the ❭ key to move to
Movement Effects.

NOTE

Times Entered via the Keyboard
*415 Return = 415 seconds displayed as
06:55:0, i.e. 6 minutes 55 seconds.
6:55:0 is the same.
6.5 = 6.5 seconds = 00:06:5.*

Movement Effects

The editing of *Movement Effects* is not yet implemented.

Saving the Desk Set-Up

Data can be saved either after the whole desk has been set up, or when a small part of the set-up has been modified.

1   From *Movement Effects,* press the ⌄ key once or alternatively the ⌃ key 11 times to return to *Show Name.*

```
  Set Up: Show Name
  Your Show Name Here
  Enter Name & Press  ⌄
  To Cont      ⌃ to Exit
```

2   If the ⌃ key is pressed once from *Show Name*, the Memory Display shows:

```
  Set-up has been
  modified.
  Press Prog to Save
   ‹=Abandoned  ⌄=Modify
```

Press the PROGRAM button to save all changes to memory.

or

Press the ‹ key to abandon changes.

or

Press the ⌄ key to continue editing, see Figure 5 -17.

Pressing the ⌄ key reverts to *Show Name* for editing to continue.

After pressing the PROGRAM button or the ‹ key, there is a short delay whilst the desk reconstitutes the data. The *Desk Set-Up* option then appears.

5

Overview

Fixture setup can only be done using a monitor.

This section describes how the fixture data files control fixtures, and explains how to create new files or modify existing ones.

The desk is designed to control all fixture types. The way in which the desk handles individual fixtures is defined by the data file for that fixture.

If a fixture has several modes of operation with different numbers of channels, etc. Each mode is defined in a separate fixture type data file.

Each desk is supplied with a range of fixture data files, see the Fixture List in Appendix B. Every effort has been made to verify the information contained in the fixture data files, and where possible manufacturers' fixture data has been used. However, Zero 88 Lighting Ltd. cannot be held responsible for the accuracy of the fixture data supplied with this desk.

If the need arises, the operator can create a completely new fixture data file, modify an existing one, or customise an existing data file.

Create a New Fixture

This option would most commonly be used when controlling a New or obscure fixture type. The operator will have to provide and enter all the information on the fixture, including parameter names, channels address, channel data types, level and parameter data. This information should be available in the manual supplied with the fixture, or from the fixture supplier or manufacturer.

Edit an Existing Fixture

A existing fixture's file could be selected, modified, and saved as a new fixture type if, for example, a new version of a fixture was available with extra facilities, such as rotating gobos, or a simpler version of a fixture using less channels. The existing data could be modified, without the need to re-enter the data for every channel.

■ Figure 5-18: Fixture Set-Up screen

Create a Variant of Existing fixture.

A customised data file (called a variant) based on an existing fixture can only be modified in limited ways.

For example, changing the names of the gobos in a gobo wheel would be permitted as only the parameter detail name has changed, no data values have changed. Changing the number of gobos in a fixture would not be permitted as a variant as the data values would have to change. All variants of a particular fixture have the same Manufacturers name and fixture type but a different variant number is allocated. (The variant number is an internal mechanism allowing the control and programming of different variants of the same fixture at the same time.)

The desk differentiates between the fixture data files supplied with the desk, and those defined by the operator. When assigning a fixture to a desk channel, operator defined files are shown in white, and those supplied with the desk are shown in black. Operator fixture data files should be backed up onto to a floppy disk (see the sections on Saving and Loading Operator Fixture Data on page 5-4).

New fixture data files will be released as data is supplied to Zero 88 by fixture manufacturers. The files will be available either from the local Zero 88 dealer (from whom the desk was purchased), or from the Zero 88 World Wide Web site at http://www.zero88.com.

All files retrieved from the Internet, should be virus checked before use.

The information contained in the fixture data files is detailed below.

MANUFACTURER'S NAME
This text field is used to sort and group fixtures when the desk is allocating them to channels.

FIXTURE TYPE

This field serves three purposes. Firstly, it allows the operator to select the correct fixture and operating mode for that fixture.

Secondly, the desk compares this field and Manufacturers Name for multiple fixtures to check whether fixtures can be selected and therefore programmed together.

Thirdly, the way in which the name is typed in indicates to the desk the control mechanism required. For example, if the fixture is a Par Can with a colour scroller, which is a composite type, it must be entered in the format of 'ParCan + scroller'. The '+' symbol in this field enables the control mechanism to recognize that the fixture requires two DMX start addresses, and to allocate one to the Par Can and a different one to the scroller. (The Par Can and scroller are both subfixtures.)

VARIANT NUMBER
Currently unused, but will in the future allow variants of a fixture to be programmed together.

COMPOSITE FIXTURE
This is a fixture that needs more than one DMX start address, which is indicated by the '+' symbol in the Fixture Type field. When a fixture type containing at least one '+' is entered, the components of the composite fixture are set up as subfixtures.

SUBFIXTURE
This is a component part of a composite fixture.

PARAMETERS
Each parameter in the fixture type has to be classified under one of the following attributes:
Brightness, Colour, Beamshape, Position, Other

It is up to the operator to ensure that the parameters are sensibly allocated to the respective attributes, so that they can be programmed together.

PARAMETER NAME
This text field is used to identify the parameter (maximum 11 characters). The text appears in the wheel display when programming memories.

DATA TYPE
Parameters are usually controlled by either one or two DMX channels. A parameter controlled by a single DMX channel is an eight bit or *Byte* parameter (having a value range of 0 to 255). A parameter controlled by two DMX channels is a 16 bit or *Word* parameter (having a value range of 0 to 65535). Word parameters are normally described as having a coarse (MSB) and a fine (LSB) control. It is
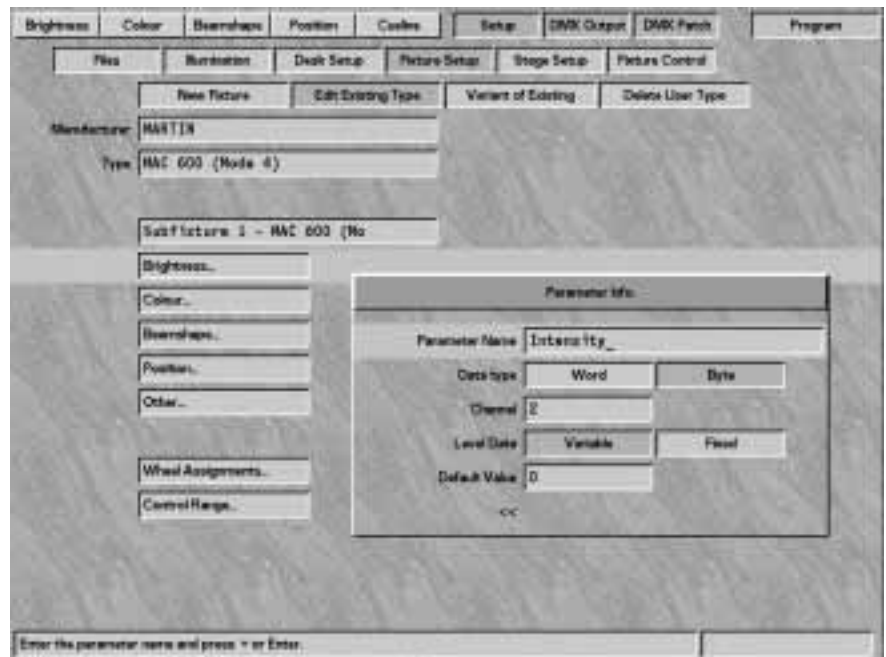
■ Figure 5-19: Brightness Parameter Data

important not to reverse these as this makes control of the fixture very confusing.

CHANNEL
This numeric field specifies the DMX channel which controls the specific parameter if the DMX start address for the fixture is one. If the parameter is a word parameter two channels (MSB and LSB) must be supplied.

LEVEL DATA
A parameter can be set to either *Variable* or *Fixed* to take account of the fact that different types of parameters are controlled in different ways.
The full range of DMX data values, from 0 to 255 (or 0 to 65535 for a word parameter) are used, if the parameter is defined as variable.
With a *Fixed* parameter, only discrete steps within the range are transmitted to the output. For example, a colour wheel with eight different positions can be set to transmit only the eight DMX values that select the eight colours. Or it could be set to 16 positions so that all whole and half colours are selected (assuming that the fixture can stop between colours).

If a parameter's level data has been set to *Fixed*, the Parameter Details can be entered.

PARAMETER DETAILS
When a parameter is set to *Fixed* Level Data the operator is able to enter a detailed breakdown of the DMX range for the parameter.
Taking a Colour wheel parameter as an example, if a wheel has ten colours, the first colour may be visible in a DMX range of 0 to 25, the second 26 to 51, the third 52 to 78, and so on to the last colour and 255. Each range can be given a separate name and a fixed point (DMX value).
If the fixed point is defined that DMX value will be transmitted on the DMX output if the control input is within the range, allowing the wheel only to snap between the fixed points. If the fixed point value is left empty then that section of the range becomes variable, allowing the wheel to stop at any position within the range.

DEFAULT VALUE
A default value can be set for any parameter. The default level is normally set so that when Brightness is turned up, the beam can be seen on stage (i.e. iris open; colour to white; pan and tilt to center position, etc.). However, the defaults can be set to any desired value. The Default values for a fixture can be sent out on the DMX while programming See find function on page 3-6

Setting Up Fixtures

Move to *Set-Up: Fixture Set-Up*, as described in the section on Selecting Set-Up Options on page 5-3.

1   Press the ⌄ key to move to the four options available.
2   Use the ‹ and › keys to select an option from the following list: *New Fixture*, *Edit Existing Type*, *Variant of Existing* and *Delete User types*, and press the ⌄ key. (See the relevant sections below.)

Creating a New Fixture

Follow the instructions in the previous section on Setting Up Fixtures to select a *New Fixture*.

1   Press the ⌄ key. Enter the manufacturer's name.
2   Press the ⌄ key. Enter the fixture type (see the paragraph on Fixture Types page 5-20).
3   Press the ⌄ key. If the *Fixture Type* is a composite, the subfixture line becomes active (See previous section on Composite fixtures on page 5-21).
     If the fixture type is not a composite the Active line jumps to *Brightness*.
4   Enter the parameter data for each of the subfixtures as described in the Entering / Modifying Parameter Data section
5   Modify the Wheel assignments if required see page 5-25

Editing an Existing Fixture

Follow the instructions in the section on Setting Up Fixtures above to select *Edit Existing Type*.

1   Press the ⌄ key. A list of fixture manufacturers appears on the monitor. Use the ⌃ and ⌄ keys to select a manufacturer and press PROGRAM.
2   A list of available fixture types from that manufacturer appears. Use the ⌃ and ⌄ keys to select a fixture and press PROGRAM.
3   The manufacturer and type selected are displayed on the monitor.
4   Press the ⌄ key. If the fixture type is a composite, the subfixture line becomes active. If not, the *active* bar jumps to Brightness.
5   Modify the parameter data as required.
6   Modify wheel assignment as required.

Creating a Variant

This feature is not yet available.

Deleting a User Fixture Type

Follow the instructions in the section on Setting Up Fixtures to select *Delete User Type*.

1   Press the ⌄ key. A list of fixture manufacturers appears on the monitor. Use the ⌃ and ⌄ keys to select a manufacturer and press the PROGRAM button.
2   A list of User fixture types from that manufacture appears. Use the ⌃ and ⌄ keys to select a fixture. To delete the fixture press the PROGRAM button.
3   A warning is displayed. Press the PROGRAM button to continue or ‹ to abandon the operation.

Subfixtures

It is only possible to enter the subfixtures section if the fixture type is a composite (with '+' appearing in the fixture type).

1   Use the ⌃ and ⌄ keys to move to the subfixtures line. Then use the ‹ and › keys to move between subfixtures.
2   Once the subfixture has been selected press ⌄ key to enter or modify parameter data.
3   When the all the parameter data for that subfixture is complete, return to subfixtures and select the next sub fixture using the ‹ and › keys.
     Press the ⌄ key and enter or modify parameters for the next subfixture.
4   Repeat sections 1 to 3 until all data for all subfixtures is complete.

Entering / Modifying Parameter Data

The Method for entering and modifying parameter data is the same for each attribute.

1   Use the ⌃ and ⌄ keys to select the required attribute (Brightness, Colour, Beamshape, Position or Other)
2   Press the › key to open the parameter info window see figure 5-20
3   Enter or modify the parameter data as described in the following section Entering Parameter Information on the following page
4   Repeat steps 1 to 3 for each parameter to be entered or modified.

■ Figure 5-20:
   Parameter Information Window

Parameter Info.

Parameter Name	Intensity_	
Data type	Word	Byte
Channel	2	
Level Data	Variable	Fixed
Default Value	0	

<<

Entering Parameter Information

1   Having decided which parameter to enter or modify decide which attribute it falls in.(Brightness, Colour, Beamshape, Position, or Other). Select the attribute and press the ＞ key to activate the *Parameter Info* box to enter the parameters. *Parameter Name* is highlighted if there are no parameters already entered the field shows *<new>*.

2   Press the ＜ and ＞ keys to select any other parameter name previously entered. If none are available, enter the chosen parameter name using the channel flash buttons or the external keyboard.

3   Press either the ＞ key or the Enter key on the keyboard. *Data Type* is entered and is set to *Byte* by default. Use the ＜ and ＞ keys to change the option.

4   Press the ＞ key to continue. *Channel* is selected. If the data type is set to *Byte*, enter a single channel number for this parameter.

   If the data type is set to *Word*, two channel numbers are required. Ensure that they are entered correctly. Placing the MSB channel number in the LSB box can give strange results.

5   Press the ＞ key, the PROGRAM button, or the Enter key on the keyboard to continue. *Level Data* is selected.

6   Press the ＜ and ＞ keys to select *Variable* or *Fixed*. If *Fixed* is selected, press the PROGRAM button to enter *Parameter Details* (see the section on Parameter Details on page 5-24.)

7   Press the ＞ key to continue. *Default Value* is selected. Enter the appropriate value.

8   Press the ＞ key, the highlighted *active* bar moves down.

9   Press the ＜ key. The store current new parameter window appears. Press PROGRAM to store or ＜ to abandon.

10   If more parameters need entering or modifying then repeat steps 1 to 9.

NOTE

Parameter Name Chosen by the Operator
Make the choice of name logical and relative to the parameter being controlled, e.g. colour wheel.

Brightness Channel in a Fixture
A fixture can only have one single Brightness channel, The data type can only be set to Byte. If this is defined in subfixture one, Brightness is not available in any other subfixture.

Correct Set-Up
Editing and creating fixture data files is a very complex procedure, and even minor errors can cause substantial difficulties when programming a fixture. Ensure that data files are thoroughly checked, and modifications made if required, prior to actually using them. It may be advisable to make a list of parameters first and note their attribute, Channel No, data type etc.

Position Pan and Tilt
With the fixture facing forwards towards the stage area, the Pan control moves the fixture beam from left to right. The Tilt control moves it from front to back. Ideally, when the beam is fully left, the fixture's DMX value of pan should be zero; when it is fully forward, its DMX value of tilt should be zero. The desk can be set up to compensate for these being the opposite way round, but if fixtures are not set up this way they will work backwards by default.

Position
If the fixture has movement parameters, these must be called Pan and Tilt. Further parameters may also be added, such as motor speed, etc.

Other
Ensure that the defaults are set for normal operation (lamp on, not reset, etc.)

5

■ Figure 5-21: Parameter Details

Parameter Details

When *Level Data* is changed from *Variable* to *Fixed* (using the ➤ key), the *Parameter Details* dialogue box opens if the PROGRAM button is pressed.

1   Enter the DMX range (e.g. 0–40) for the first parameter detail in the *DMX Range* column and press the ➤ key. If required whilst within the range, the desk can output a selected value from within the range. (This can be used, for example, to ensure that the entire gobo or colour is visible on the stage.)

2   If this is required, enter the selected value in the second column. If this is not required, leave the second column empty.

3   Use the ➤ key to move to the third column. Type the detail name for this range in the *Details* column and press the PROGRAM button.

4   The highlighted bar moves to the second line. Enter details of the second range as before and continue until all the details about the Parameter are in place.

5   When the last value of the data is 255 (or 65535 if the parameter data type is word), the system checks for integrity. For the data to be OK, it must cover the complete DMX range from 0 to 255 (or 0 to 65535) with no omissions or overlaps. Any errors are highlighted for correction.

6   Press the ◄ key to return to the *Parameter Information* window.

NOTE

Fixed Point
If a Fixed Point value is specified, this value will be output to DMX when moving through the range. If a Fixed Point is NOT specified the actual value from the range will be output on DMX.

5

■ Figure 5-22:
Wheel Assignments Screen

Wheel Assignment

When all the parameter data has been entered, it is necessary to check the wheel assignment. The system does this automatically by parameter type and in the order in which they are entered. The first one entered is in the first wheel group and on the first wheel (index finger). The second one entered is in the first wheel group and on the second wheel. The third is on the third wheel and the fourth on the thumb wheel. The fifth is in the second wheel group and on the first wheel, and so on.

The exception to this is Position. In this instance, the Pan control is on the thumb wheel and the Tilt control is on the index finger wheel. This is repeated on all position wheel groups. Also the second and third wheels on the first wheel group are assigned to the control of movement effects. Any other Position parameters are assigned as normal to the second and third wheels of subsequent wheel groups.

1   Press the ➤ key to open the *Wheel Assignment*s screen. This shows a list of all the parameters, grouped by type, with all names and channel numbers shown, together with the default values. It is not possible to change any of this information in this screen.

2   The fifth column on the screen is *Group* and the current parameter is highlighted. Use the ⌃ and ⌄ keys to select the parameter to edit. It is possible to change the wheel group by overtyping the number.

3   If the Group number is OK press PROGRAM. To highlight the *Wheel* column and the *Assigned Wheel. Press the* ➤ *key to cycle the assignment of the wheels.*

4   When the parameter is assigned to the correct wheel, Press the ⌄ key to move the next parameter.

5   When all the data is correct use the ⌄ key to move the active line to the bottom of the window and press ◂ to return to the main menu.

NOTE

Wheel Assignment
If all the wheels in a group are assigned, moving any one of them will affect the assignment of all of them.

Wheel Groups
It is not possible to put more than four parameters in a group - the system will not permit this and a warning appears. One of the others must first be moved to create an empty slot in that group.

5

Control Range

Not yet implemented

Saving Fixture Data Changes

Once the fixture data has been entered or all the required changes have been made, use the ⌃ key to return to *New Fixture*, *Edit Existing Type* or *Variant of Existing*. The operator is prompted to save the new fixture data. The manufacturer and fixture type must be unique. If an attempt is made to save an operator fixture data file with the same manufacturer and fixture type as an existing fixture type, an error message appears prompting the operator to use a unique name. If an attempt is made to save it over an existing operator file, a message appears giving the option of renaming the fixture type or overwriting the existing file.

Operator fixture data files appear on the fixture lists on the monitor as white text, as opposed to black text.

SetUp: Stage SetUp

Not yet implemented.

SetUp: Fixture Control

Not yet implemented.
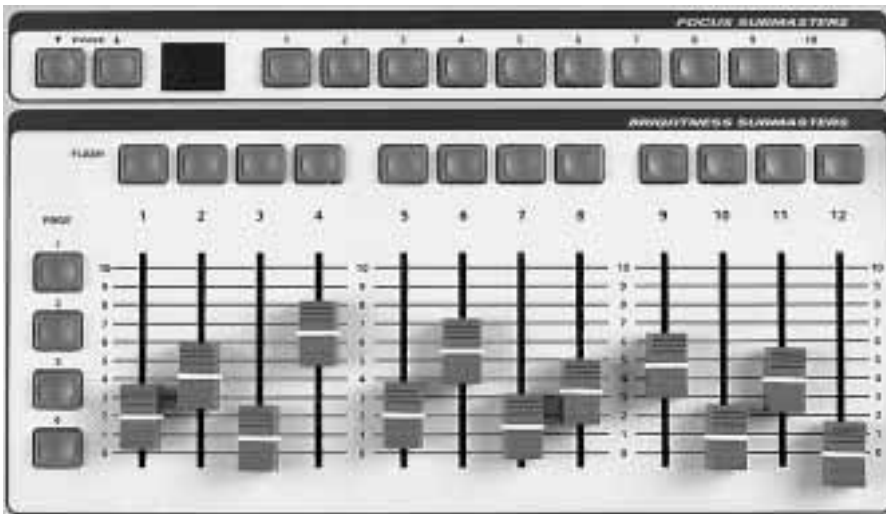
Introduction

At first glance the desk appears to do little more in RUN mode than in PROGRAM mode. However, an element of careful planning is required to run a complex show smoothly and features have been specifically designed to facilitate this process.

RUN mode is split into five areas - Brightness, CueLine®, Replay, DMX output and DMX patch - each of which has a separate monitor screen display.

Brightness

The *Brightness* screen shows the state of the Brightness outputs in bar graph and numerical format, together with information about the Next Memory, current Brightness, Colour, Beamshape and Position memories. Switch between Replay and Brightness screens by using the Brightness Selection button to the right of the wheels.

Replay

Replay is the operational function incorporating use of the PLAYBACK GO button. It provides Playback control data, and if a monitor is used, the status of each submaster can be seen.

CueLine®

The *CueLine* screen shows the previously programmed CueLine, and when running shows the progress through the CueLine events

DMX Output and DMX Patch

The *DMX Output* and *DMX Patch* screens show live DMX output values and current DMX patch data.

In RUN mode all programming functions are disabled.

Shows are replayed using a combination of four basic sets of memory controls: the PLAYBACK controls (including the GO button), BRIGHTNESS SUBMASTER faders, attribute memory buttons (COLOUR, BEAMSHAPE and POSITION), and FOCUS SUBMASTER buttons.

The controls can be operated in any combination. The choice of controls used depends on the technicalities of the show's running order and operator preference. For example, if the show has a fixed running order, the PLAYBACK controls, including the GO button, are likely to be the most frequently used. However, if the operator wishes to run the show on a 'hands-on' manual basis, the FOCUS and BRIGHTNESS SUBMASTERS can be used.

The Memory Display and monitor screens are tailored to running a show, as opposed to programming one, for example, empty Brightness memories are not shown in the cue stack. Any monitor screen can be viewed, irrespective of which set of controls is in use at the time. Again, the choice of monitor screen viewed largely depends on operator preference.

Run Mode Controls

● MEMORY MASTER

Sets the maximum channel level for each memories in the playback controls.

● STOP BUTTON

Halts a Brightness crossfades on the playback and CueLine.

● GO BUTTON

Initiates the transfer of the next Brightness memory from the cue stack to the outputs.

● GO PREVIOUS BUTTON

Transfers the previous memory to the outputs, and used to initiate CueLine events

● OVERRIDE CONTROL

Modifies the speed of the current fades.

● MEMORY DISPLAY

Guides the operator step by step through the menus.

● ARROW KEYS

Use to scroll through the menus. Shown as ‹ › ∧ ∨ keys throughout the manual. If an external keyboard is used, the cursor keys have the same function.

● TRANSFER WITH TIME AND TRANSFER NO TIME BUTTON

Associates a memory to a selected submaster with or without an associated fade time.

● ADD BUTTON

Allows more than one memory to be allocated to the same submaster fader.

● MODIFY BUTTON

Allows live editing of some parameters.

● VIEW DATA & INFO BUTTON

Shows associated lighting data.

● HELP FACILITY

When available press the VIEW DATA and INFO buttons together to access help screens.
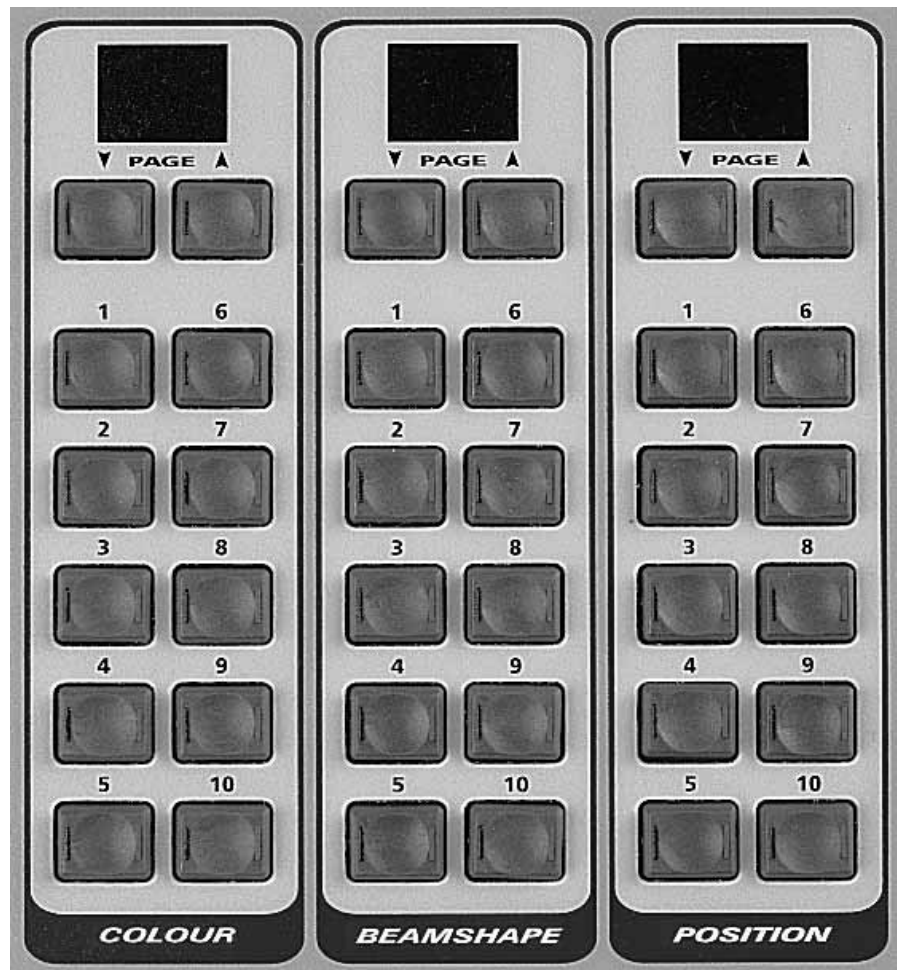
■ Figure 6-2: Attribute Memory selection buttons

● FLASH FUNCTION BUTTON

Modifies the function of the channel flash buttons, enabling flashing or soloing of a channel, as indicated by the adjacent light. In RUN mode the TEXT and SELECT functions are disabled.

● CHANNEL FLASH BUTTONS

While pressed, individual channels go to the level set by the FLASH MASTER.

● SHIFT BUTTON

Alters the use of the channel flash buttons. Used in WIDE mode to select wide fixtures or when entering text on a Sirius 250..

● GREEN OUTPUT LIGHT

Mimics the output level for that Brightness channel.

● SELECTION BUTTONS

Move between attributes.

NOTE

Blind
Selecting Blind before returning to Program Mode allows chases to continue running in Program Mode.
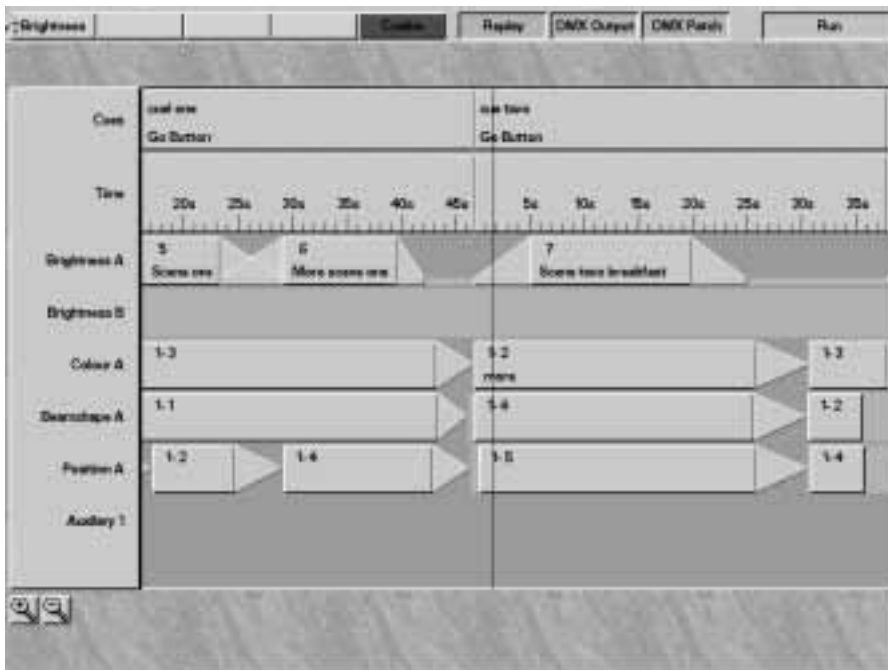
■ Figure 6-3: Running CueLine

Running CueLine

A Monitor is required to Run CueLine.

1   Turn the keyswitch to Run Mode.
2   Press the CUELINE button, or use the arrow keys to select CueLine.
3   Press the Go button and THE CUELINE appears to the left of the event area and begins running across the screen left to right.

As each event is passed the DMX outputs are updated.
4   Pressing the STOP button stops the the event area moving. All DMX outputs are frozen. To RESTART press the GO button.
5   In the middle of a cue press the GO button to 'Jump' to the start of the next cue.

NOTE

GO Button
While in CueLine mode the GO button only works the CueLine and does not have the same effect as it would in Replay and Brightness mode.

Zoom Buttons

To get a more detailed view of the CueLine event area us the mouse and click on the zoom in button.

To view more Cue's zoom out by clicking the zoom out button with the mouse.

NOTE

Current Limitations
The current revision of software does not allow the use of the Time Override control or the Go Previous button with CueLine.

Jumping Cues
Pressing the GO button to 'Jump Cue's' does not accommodate changes to LTP outputs. To overcome this regularly use Full Scene memories.

Monitor Note

💻 *THE CUELINE*
When THE CUELINE reaches the middle of the event area the line stops and the events moves, behind THE CUELINE.

■ Figure 6-4: Playback
Controls

4   The *Next Memory* is
auto-incremented. To transfer it to
the output, press the GO button,
and the current and next memory
are crossfaded at their associated
fade times.

5   Use the OVERRIDE control to
slow down or speed up the
crossfade. The SLOW or FAST
light flashes to indicate that the
crossfade time has been altered
from real time.

6   Pressing the STOP button halts a
crossfade completely. Pressing the
GO button restarts the crossfade
from the place where it stopped.

If the GO button is pressed a
second time by accident, thus
jumping a memory, pressing the
GO PREVIOUS button reverts to
the missed memory. (Pressing the
 ‹ key twice to decrement the next
memory by two and then pressing
the GO button has the same effect,
but the GO PREVIOUS button
does it in one single button push.)

7   Use the ‹ and › keys to scroll
through the Brightness Memories
to select the next memory to be
output via the GO button. (Only
programmed memories are
shown.)

Entering Run Mode

1   Turn the Key Switch to RUN mode.

2   Use the ‹ and › keys to select
one of the five options:

Brightness
CueLine
Replay
DMX Output
DMX Patch

3   Ensure the GRANDMASTER
Fader is at full.

**Playing Back Brightness Memories
Using the Playback Controls**

Only Brightness memories can be
played back using this method.

Brightness memories can be selected
and transferred to the MEMORY
MASTER fader with the associated
crossfade times.

Once transferred, the crossfade can be
overridden either to increase the fade
rate up to instantaneous or to decrease
it completely until it has stopped, thus
enabling the operator to make
allowances for when an actor might
miss a cue or enter too early.

Move to the *Replay* option as
described in Entering Run Mode earlier
on this page.

1   The *Current Memory* is shown
as - - in the Memory Display. Use
the ‹ and › keys to select the
Next Memory to be transferred.

2   Set the MEMORY MASTER fader
to the desired level. (If it is at zero,
there is no output.)

3   Press the GO button to transfer the
Next Memory to Current *Memory*.
The current memory crossfades
live onto the DMX output.

NOTE

Brightness Memories
*Only programmed memories appear in the
Next Memory.*

Returning to the Previous Memory
*It is possible to reverse the action of the GO
button by using the GO PREVIOUS button
to move back through the memories.*

Viewing the Next Memory
*This can only be viewed in the Brightness or
Replay screen on both the Memory Display
and the monitor. Therefore one of these
options must be selected in order to be able
to scroll through cues and jump memories. If
the desk is not in the Brightness or Replay
screen, the GO button sequentially transfers
the next memory. If in CueLine the Go
button Jumps to the next Cue.*

GO Button
*While in Replay or Brightness the GO button
only works Brightness memories, and does
not have the same effect it would have if
used in CueLine.*

■ Figure 6-5: Replay screen

MONITOR NOTES

🖥 Run

Run is indicated in the top right-hand corner of the screen. The boxes to the left show the five types of information that can be accessed in this mode: Brightness (desk output), CueLine®, Replay (Playback control data), DMX Output and DMX Patch. The current screen (as indicated in the top line of the monitor) is highlighted in red while that area of the screen is active, and changes to green when the selected screen becomes active.

🖥 The GO Button (Replay Mode)

When the GO button is pressed, the current memory is faded out and the next memory faded in. Cross fade progress is shown in red.

🖥 Playback

The Playback section of the Replay screen shows the current memory on the MEMORY MASTER fader and allows selection of the next memory. The rest of the Replay screen shows which memories are allocated to which submasters.

🖥 View Fixture Data

A fixtures details can be displayed, including DMX output values. To display current data about any fixture, press and hold down the 'VIEW DATA' button, and press the Channel Flash button for the relevant fixture.

🖥 The Brightness Screen

The Brightness screen shows a bar graph representing the DMX output and a list of current memories.

🖥 The DMX Output and DMX Patch Screens

The DMX Output screen shows each DMX address with the current DMX output value.

The DMX Patch screen shows each DMX address and the fixture or Auxiliary which is patched to it.

The information in the DMX Output and DMX Patch screens has been subdivided for clarity. Use the ˅ key to move to the selection range bar. Use the ‹ and › keys to move between the following ranges: 1 — 128, 129 — 256, 257 — 384, or 385 — 512.

In both DMX screens channels that are changing are shown in green.

Replay Screen

The Replay screen gives access to all programmed memory information for all submasters and provides feedback on the status of the PLAYBACK controls, see Figure 6-6.

This screen is divided into six sections, one per control area of the desk: Playback, Brightness Submasters, Focus Submasters, and attribute memory buttons (Colour, Beamshape and Position).

The Playback and Brightness Submaster sections, with their distinctive blue title bars, are permanently displayed.

The Focus Submasters, Colour, Beamshape and Position sections overlay one another in the bottom half of the screen. Use the ⌄ key to access these sections. The title bar turns from gray to blue indicating which section is being accessed.

Playback Section

Whilst in the Replay screen (see Figure 6-5), the Next Memory in the Playback section (see Figure 6-6) is highlighted in green. When it is highlighted in green, it is possible to change the next memory number using the ‹ and › keys.

When the GO button is pressed, the Next Memory is transferred to the Current Memory and crossfaded to the outputs in the displayed times. The Fade Out time is highlighted in red and the red light in the GO button flashes whilst the fade is in progress.

Brightness Submaster Section

This section shows which memories are on the current page together with the associated information text, and indicates whether a memory was transferred with time or is Hot Linked see Figure 6-7. To view memories on another page, simply change pages.

If the transferred memory is a chase, how to start the chase running is indicated in the Start column by F, L or T. For further details please refer to the section on Running Chases on BRIGHTNESS SUBMASTERS later in this chapter on page 6-10.
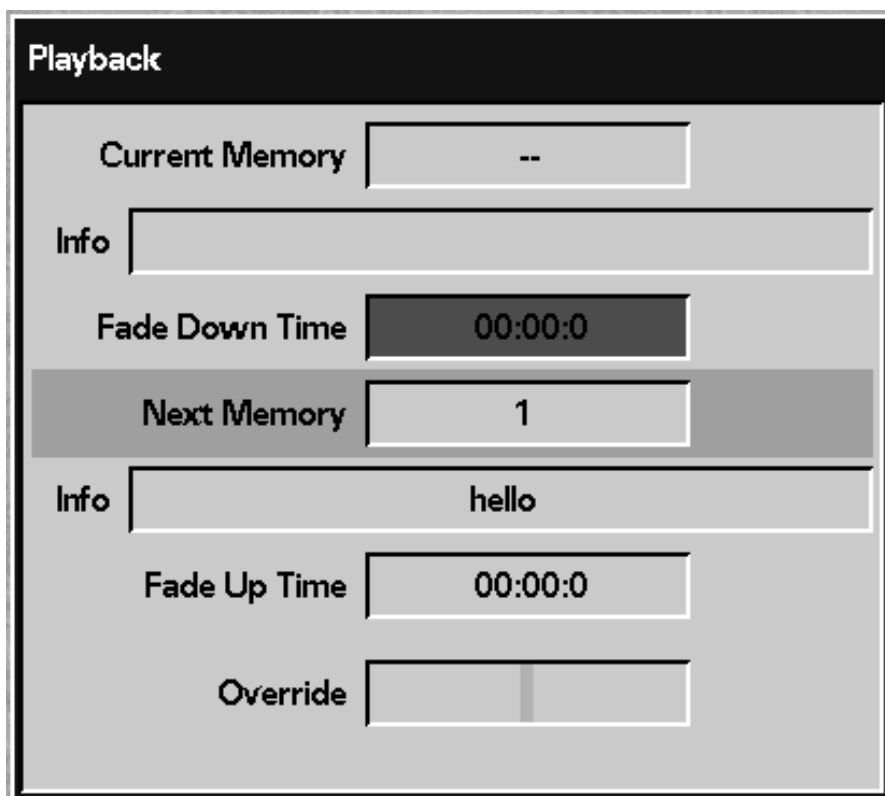
■ Figure 6-6: Playback section

■ Figure 6-7: Brightness Submasters section

NOTE

Transferred Memories
If a Brightness memory has been transferred to a Submaster, if that memory is edited it needs re-transferring to the Submaster for the change to take effect.

Colour, Beamshape and Position Sections

These show the memories on the current page together with the associated information text, see Figure 6-8. The current active memory is highlighted with a yellow bar which flashes if the current memory is not on the current page, and stops flashing once the page number is the same as that of the current memory. (This is similar to the Page Overlay feature for Brightness Submasters, see page 6-9.)

Unprogrammed memories cannot be selected and the numbers are grayed out on the monitor, the full stop appears in the page display on the desk, if the button is pressed. When released the previous memory remains selected.

Focus Submaster Section

This shows the current memories copied into the Focus Submasters, see Figure 6-9. The Focus Submaster currently selected is highlighted in red and flashes if it is not on the current page.

■ Figure 6-8: Colour and Beamshape section

■ Figure 6-9: Focus Submasters section

Brightness Screen

The Brightness screen displays
Brightness outputs in bar graph and
numerical format.
The monitor displays a box stating
what is being monitored. The Default
is *Desk Output.* When showing *Desk
Output* the Levels in the bargraph are
the current DMX outputs from the
brightness sections (presets,
submasters, Playback and CueLine) of
the desk.

Pre-viewing a Submasters Output

Press and hold the VIEW DATA button,
and press and release the
BRIGHTNESS SUBMASTER FLASH
button. Release the VIEW DATA
button.
The monitor changes to show the
Submaster x.
The display changes to show a
bargraph previewing the output on the
BRIGHTNESS SUBMASTER
highlighted in green. The display
assumes the fader is at full, the data is
not live on the DMX outputs.

To return the display to *Desk Outputs*
press the BRIGHTNESS button twice.
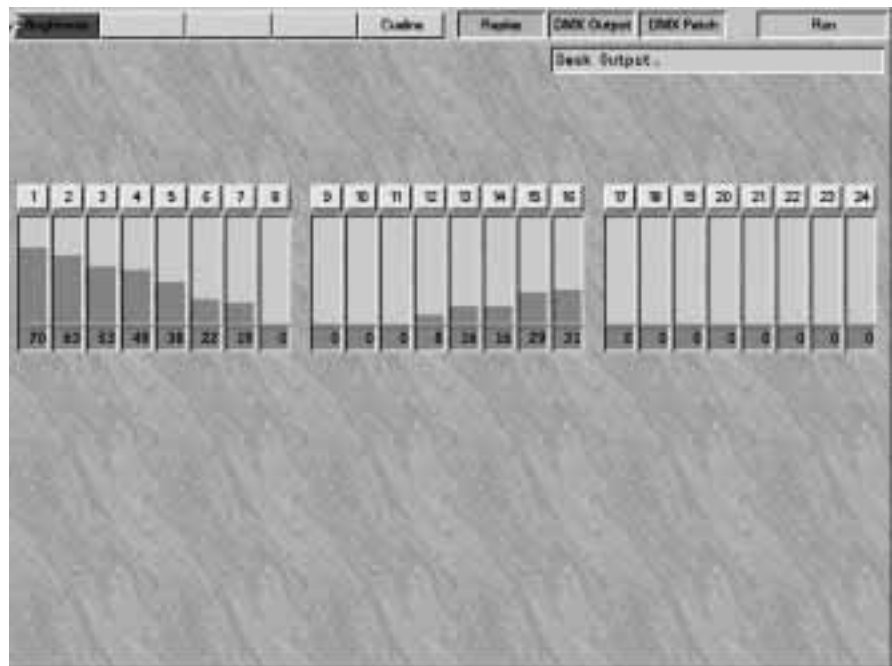
■ Figure 6-10: Brightness Screen (Outputs Mimic)
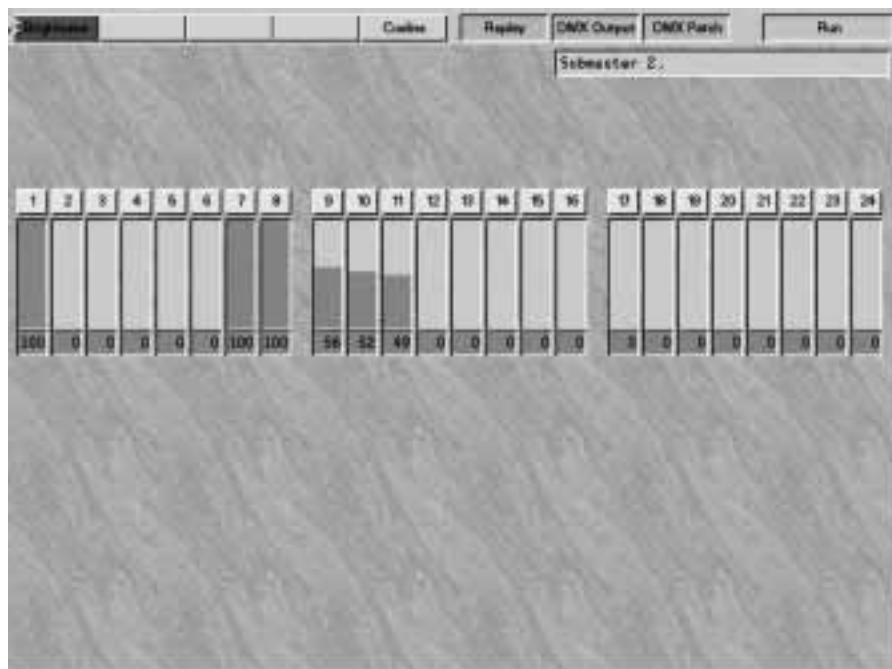
■ Figure 6-11: Brightness Screen (Submaster Preview)

6

Running the Show Manually

Brightness memories that have already been recorded can now be transferred out to BRIGHTNESS SUBMASTERS, with or without their fade times. This must be done in PROGRAM mode, see the sections on Transferring a Brightness Memory to a Submaster on page 3-10.

The show can be run purely by operating the BRIGHTNESS and FOCUS SUBMASTERS.

Using a Brightness Submaster Fader

Ensure that different memories are transferred with time to PAGE 1 and 2, SUBMASTER 1, and without time to PAGE 1 and 2, SUBMASTER 2.

1   Ensure that all BRIGHTNESS SUBMASTER faders are set to zero.
2   Select page one by pressing the PAGE 1 button. The red light in the button comes on.
3   Move submaster fader 1 from zero to full.
4   The red light in BRIGHTNESS SUBMASTER 1 FLASH button comes on if the memory was transferred with time.
5   The outputs fade up, and once at 100% the red light in the FLASH button goes out.
6   Move submaster fader 2 from zero to full.
7   The light in the SUBMASTER 2 FLASH button remains off indicating that the memory was transferred with 'no time' associated.
8   The memory on BRIGHTNESS SUBMASTER 2 is now live on the outputs, and is mixed in with the memory on SUBMASTER 1 on an HTP basis.
9   Lower fader 1 to zero. The red light in the FLASH button comes on indicating that the fade is taking place and goes out when the fade has completed.
10   The memory on BRIGHTNESS SUBMASTER 2 is now the only memory that is live.

Accessing a Memory on a Different Page (Page Overlay)

This feature is called Page Overlay and operates on all four pages of each of the BRIGHTNESS SUBMASTERS. The following example illustrates how Page Overlay works.

1   Ensure that all BRIGHTNESS SUBMASTER faders are set to zero.
2   Press the PAGE 1 button.
3   Move submaster fader 1 from zero to full.
     The PAGE 1 SUBMASTER 1 memory is now output live.
4   Press the PAGE 2 button.
5   The light in BRIGHTNESS SUBMASTER 1 FLASH button flashes indicating that the fader is outputting a memory that is not on the current page.
6   Move submaster fader 2 from zero to full.
     PAGE 2 SUBMASTER 2 is now also output live.
7   Press the PAGE 3 button.
8   The lights in both BRIGHTNESS SUBMASTER 1 and 2 FLASH buttons flash indicating that the faders are outputting memories that are not on the current page.
9   Press the PAGE 1 button.
10   The red light in the BRIGHTNESS SUBMASTER 1 FLASH button goes out indicating that the memory is now on the current page, whilst the light in the SUBMASTER 2 FLASH button still flashes.
11   Move fader 2 to zero.
12   When the output of Page 2, BRIGHTNESS SUBMASTER 2 reaches zero, the submaster content changes to the current page (i.e. Page 1) and is output when the fader is moved from zero.

NOTE

Hotlinks
Submaster Faders can be programmed so that when they are moved in Run mode they action a Focus Submaster. For programming details see the section on Hotlinks 6-11.
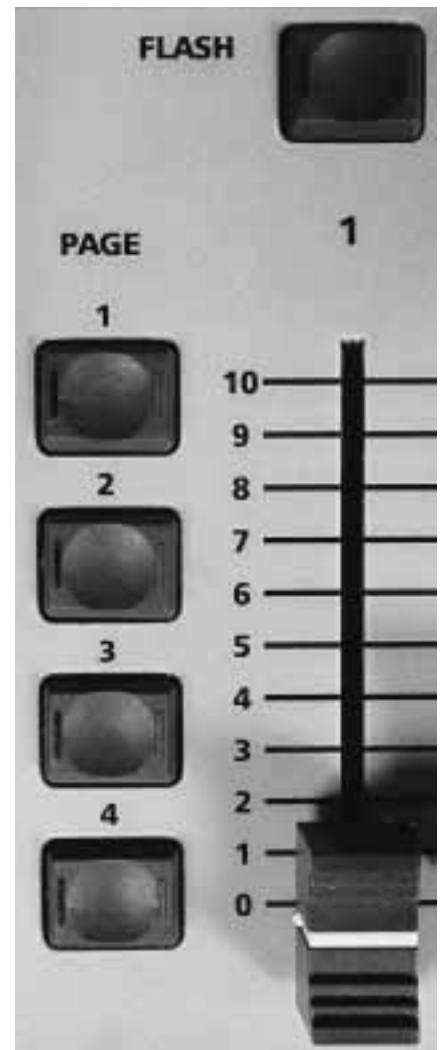
■ Figure 6-12: Brightness Submaster pages

Adding a Brightness Memory to a Brightness Submaster

In RUN mode it is possible on a temporary basis either to transfer a memory to a SUBMASTER fader or to add extra memories to a SUBMASTER that already has a memory on it. This can be useful when gradually building up lighting scenes until the desired effect is finally captured on stage.

Memories that have been temporarily transferred are lost when the pages are changed.

1   Press and hold the ADD button.
2   Use the ‹ and › keys to select the memory to be transferred. The memory number and text information appear in the Memory Display. Any type of memory can be transferred.
3   Select the page number on the SUBMASTER.
4   Press and release the appropriate SUBMASTER fader FLASH button.
5   Release the ADD button.
6   The memory is now added to the fader. If the fader is empty, it becomes the only memory on that fader. If there is already a memory on the fader, the new one is added on an HTP basis.

Running Chases on Brightness Submasters

When a Brightness chase is programmed, the chase can either be set to run when transferred, or to start when the FLASH button is pressed. The third option is to set a trigger level, see the section on Brightness Defaults in Desk Set-Up on page 5-17.

The *Brightness Submaster* section of the *Replay* screen on the monitor shows which option has been programmed into the chase by indicating either **F**lash button, **F**ader level, or **T**ransfer.

Running from the FLASH Button:
A submaster with a chase on it programmed to start with the FLASH button cannot be flashed. Raising the submaster shows Step 1 on the outputs until the associated FLASH button is pressed, at which time the chase commences using its programmed modifiers. Pressing the FLASH button again stops the chase, pressing it again re-starts the chase from step one.

Running from the Fader Level:
The chase stays at Step 1 until the fader exceeds the level set in *Start Effects* @ which is altered in Desk Set-Up, (see the section on Brightness Defaults on page 5-17.) If the memory has been transferred with time, the crossfading time to reach the trigger level is used, and not the physical position of the fader. Returning the fader to zero stops the chase and returns it to Step 1 until the fader is moved again.

Running from Transfer:
Chases programmed to run on transfer run continuously. So when the fader is raised after transfer, it is not possible to predict which step will be seen on the outputs.

One-Shot Chases:
Chases programmed as one-shot, do not run until the Submaster FLASH button is pressed. Once pressed it will run through all its steps once and stop at the last step. The chase will re-run from step one if the FLASH button is pressed again.

MONITOR NOTES

🖥 *Replay*

The top half of the screen continually shows the Playback section and the Brightness Submaster section, see Figure 6-5.

🖥 *Submasters*

The submaster fader list shows information text for the current page.

🖥 *Attribute Submaster*

The attribute submaster sections show information text for the current page and highlight the selected memories.

🖥 *Selection*

Use the ⌄ key to scroll through the attribute submaster sections, i.e. to bring them to the fore.

🖥 *Start Chase*

*Chases on the BRIGHTNESS SUBMASTERS are represented in the Start column by **F**lash button, **F**ader level, or **T**ransfer.*

🖥 *Added Brightness Memories*

The Brightness Submaster section of the Replay screen indicates those submasters with ADDED memories with a plus "+" sign

NOTE

Editing
Chases do not normally run whole in Program Mode, as this would make programming difficult. While in Blind Mode selected chases will run.

Focus Submasters.										Page 1
	1	2	3	4	5	6	7	8	9	10
Colour	1-1	1-2	1-3	1-3	1-2	1-1	1-1			
Beamshape	1-1	1-2	1-3	1-3	1-1	1-2	1-1			
Position	1-1	1-2	1-2	1-3	1-1	1-1	1-2			

■ Figure 6-13: Focus Submasters section

Focus Submasters

FOCUS SUBMASTERS replay any combination of any or all of the three attributes (Colour, Beamshape and Position), allowing single button access to a complex predefined lighting state. Memories are transferred to these submasters in PROGRAM mode, see the section on Programming FOCUS SUBMASTERS on page 3-36.

The Colour, Beamshape and Position page and memory numbers change to reflect the current selection. The selection can be altered either by pressing another FOCUS SUBMASTER or by selecting another Colour, Beamshape or Position memory using the attribute memory selection buttons See fig 6 -13.

Hotlinks

A BRIGHTNESS SUBMASTER fader can be hotlinked to a FOCUS SUBMASTER button.

As the fader is moved above the effect level, the Hotlink is activated. The software then activates the operator defined FOCUS SUBMASTER.

This allows the operator to activate a complete scene comprising Brightness, Colour, Beamshape and Position memories with one action.

The Hotlink is set up in PROGRAM mode.
See hot links section on page 3-36

MONITOR NOTES

⌨ *Focus Submaster Section*

This shows the current memories copied into the Focus Submasters, see Figure 6-11. The Focus Submaster currently selected is highlighted in red and flashes if it is not on the current page.

⌨ *Page Overlay*

In the Replay screen the number of a BRIGHTNESS SUBMASTER that is outputting a memory that is not on the current page is highlighted in red.

NOTE

FOCUS SUBMASTER
Only one FOCUS SUBMASTER can be active at any given time.
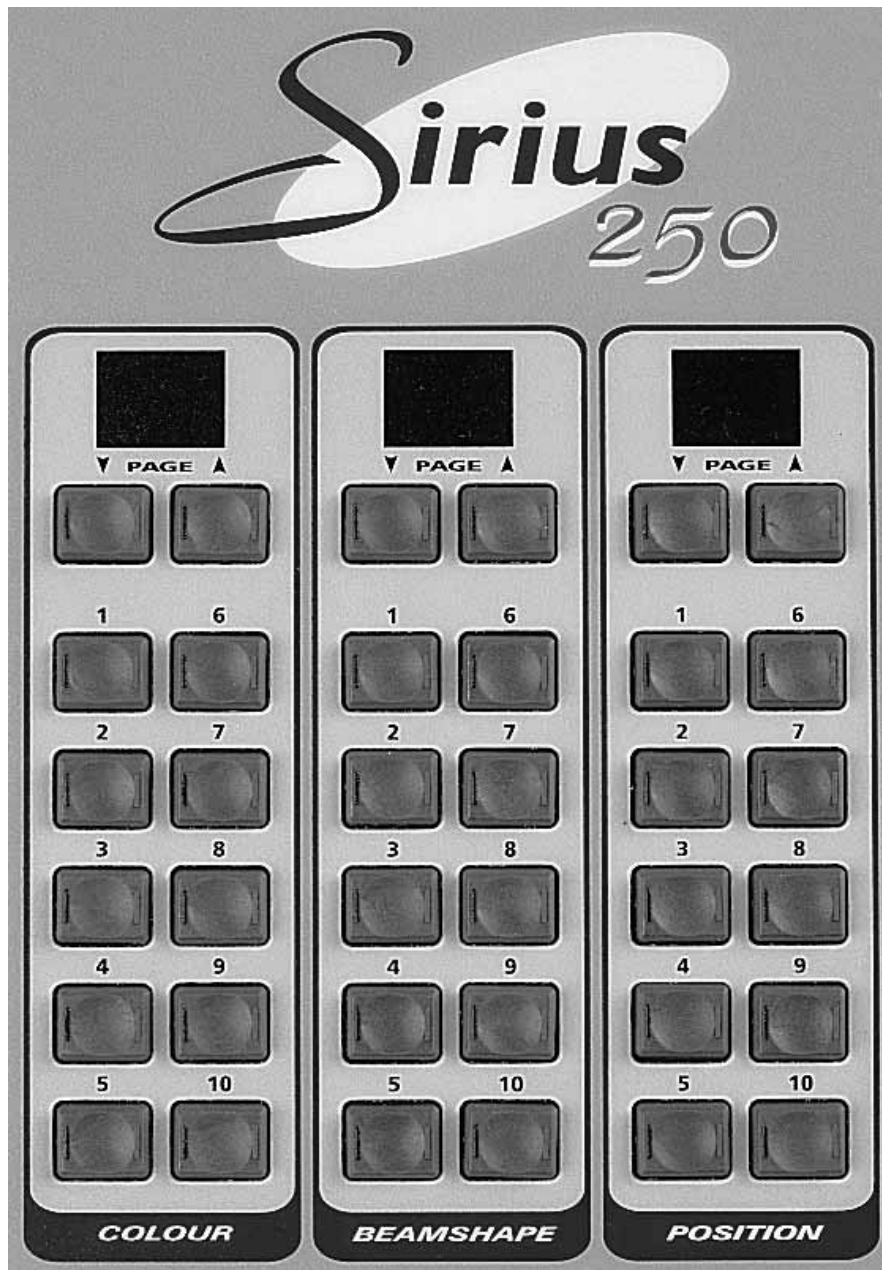
■ Figure 6-14: Attribute Memory selection buttons

If the memory has not been programmed, the full stop in the page display appears whilst the button is held down. The previous memory remains current.

On page *00* and all ten memories contain the default values from the fixture data files.

Attribute memory buttons can contain several types of memory: full or partial, scene or chase.

Full scene or full chase memories affect all fixtures. Partial scene or partial chase memories only affect those fixtures that have been specifically selected and programmed.

By selectively using full and partial memories, many varied and exciting effects can be generated. It is possible to have several chases of any attribute running together, however, it must be remembered that they work on a Latest Takes Precedence basis. Therefore if Memory 1-1 runs a chase on fixtures 1 to 5 and Memory 1-2 runs a chase on fixtures 4 to 7, Memory 1-2 stops part of Memory 1-1 from achieving the original chase.

Consideration must also be given to how to stop a chase. As the memories for the fixtures are LTP, each fixture must be instructed to go to a static state, which can be done in several ways. For example, a full scene memory can be activated, thus stopping all chases. Alternatively, for any chase another memory can be created that takes the fixtures to a 'stop' position. The easy way to do this is using the MEMORY COPY facility.

If there is a step in a chase that represents the 'stop' position to be achieved, that single chase step can be copied into a separate memory, see the section on Copying Part of a Chase Memory (SAVE AS) in the chapter on PROGRAM mode on page 3-22.

Pressing the attribute memory selection button again starts the chase from Step 1.

Introduction

The Colour, Beamshape and Position memories are recorded directly into the buttons/pages during programming and are therefore ready to use. To select a new attribute memory, simply access the correct page using the PAGE up and down buttons and press the appropriate attribute memory button.

Modifing Brightness Chase Attributes

1   To modify Brightness chase attributes (chase speed, direction, attack, etc) while running on a submaster, press the MODIFY button then press the FLASH button for the appropriate submaster and then release the MODIFY button.

2   Use the Wheeel to modify the chaser speed and the attribute buttons to change other attributes.

3   Once adjusted press the MODIFY button to remove the pop up screen, from the monitor.

Overriding a Transition Time

While in Run Mode, the wheel display shows Col Time, Beam Time, and Pos Time over three of the wheels. These wheels allow transitions to be speeded up or slowed down, made instant or stopped - depending on how far the wheel was moved and in which direction.

Transitions generated using the Attribute Memory Selection buttons are overridable.

Transitions in CueLine® are not affected.

The transition must be happening before moving the wheel will have any effect. The affect is permanent. Any future transitions will occur at the programmed times.

NOTE

Crossfade Time
The crossfade time has been changed temporarily. A permanent change can only be made in PROGRAM mode, see the section on Editing a Brightness Memory on page 3-18.

Modifying Position Live

Where available

1   To modify the Position parameters of a fixture whilst in RUN, press the MODIFY button followed by the POSITION button.

2   Use the channel flash buttons to select the fixtures to be modified. Those available to be modified have a yellow light in the button, which turns red once selected.

3   Use the wheels indicated in the Wheel Display or the mouse to modify the current X and Y position for the selected fixtures.

4   Press the MODIFY button again to revert to normal.

Activating Topset

Ensure that the keyswitch is in RUN MODE and in TWO PRESET and not WIDE, as indicated by the TWO PRESET light adjacent to the Key Switch. (If the red WIDE light is on, follow the procedure outlined in the section on Desk Set-Up on page 5-6 to revert to normal, non WIDE.)

1   Bring the MASTER A fader to zero.

2   Raise all the PRESET A faders to full. Press and hold the TOPSET button until the red light in the button comes on.

3   To show the effect of TOPSET, use a submaster to bring up a memory live on the output.

4   Pick a channel that is on, as indicated by the green channel output light.

5   Move PRESET A to zero.

The luminaire is now off. It is not possible to output any light on that channel unless PRESET A is moved.

■ Figure 7-1: Super User screen

Introduction

The Sirius 500 and the 250 have a range of options which are accessed in Super User mode. PRESETS A and B work normally; programming functions are disabled. The principal Super User options are:

- Clear memories

- Setting Recovery to On or Off

- Changing the language of the desk

- Setting the date and time

- Reviewing the software versions

Super User is not listed amongst the options in the normal entry screens.

Accessing Super User

Press the ‹ and › keys together, whilst simultaneously turning the Key Switch to PROGRAM mode.

The following options are available:

Clear Memories
Recovery
Language Set-Up
Date and Time

Use the ⌃ and ⌄ keys to select the option.

Once selected, use the › key either to enter the option or to change it.

MONITOR NOTES

▤ *Software Versions*

The software versions are continuously shown and therefore there is no option to select.

■ Figure 7-2: Clear Memory screen
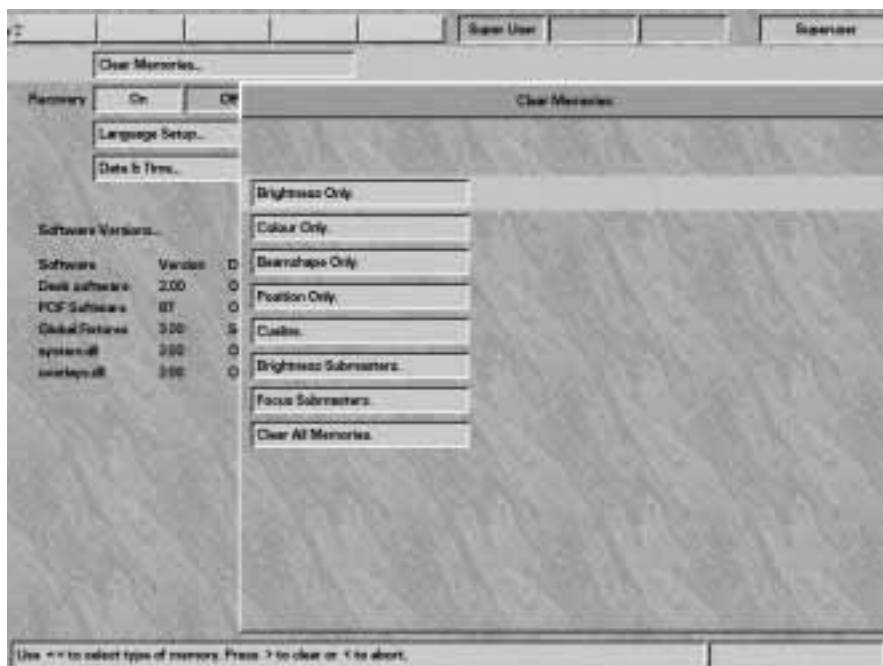
Clear Memories

This feature allows the selection of a memory type to clear. *Clear Memory* resets ALL the selected memories, fade times and effects of the type selected to blank or zero.

1   Use the ⌃ and ⌄ keys to select *Clear Memories*.

```
     Super User:
     CLEAR MEMORIES     >
     Press  > to select
     or  ∨ for next Option
```

2   Press the > key to enter *Clear Memories*. The Memory Display shows:

```
     Clear Memories
     BRIGHTNESS ONLY     ⌃∨
     Press  > to Clear
     Or  < to Abort
```

Use the ⌃ and ⌄ keys to select the type of memories to clear from the following options:

Brightness only
Colour only
Beamshape only
Position only
CueLine
Brightness Submasters
Focus Submasters
Clear All Memories

3   Once selected, press the > key to clear.

The Memory Display shows:

```
     **WARNING**
     COLOUR MEMORIES
     Press Prog to Clear
     Or  < to Abort
```

4   Press the PROGRAM button to clear the memories or the < key to abort the operation.

WARNING

Clearing Memories
Care must be exercised as this operation clears all memories of the type selected.
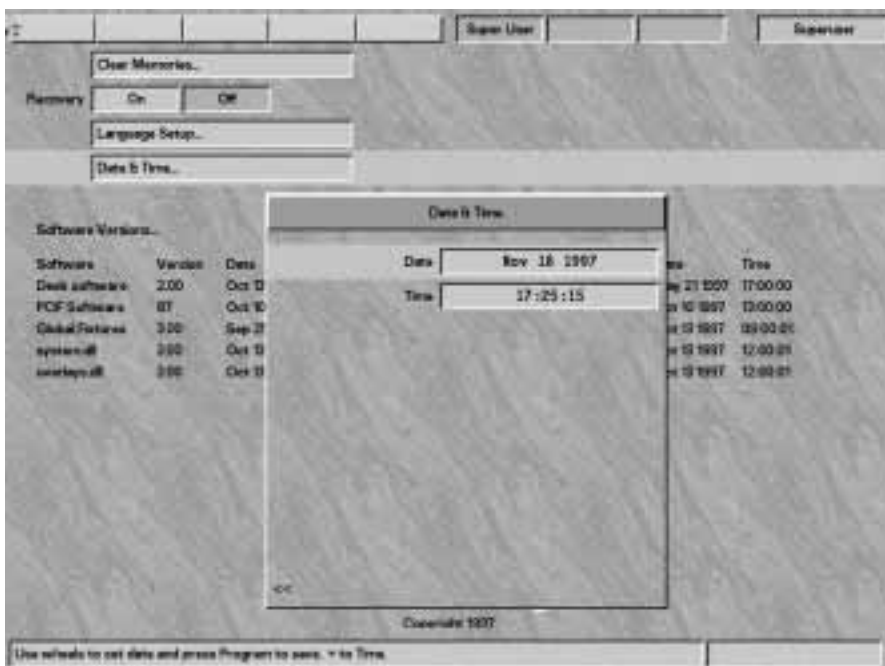
Recovery

Recovery can either be set to 'on' or 'off' and only affects Run Mode. If set to 'off', when the desk is powered up, the desk set-up data and memories are intact. All pages are set back to No. 1. Any Brightness Submaster fader that is up outputs the memory on page 1. Chases run unless they need triggering.

If recovery is set to 'on', when the power is turned off and then on again, the desk does not reset, but returns as closely as possible to the same screens and pages that were in use when the power was lost. DMX output is only restored when the previous outputs are recovered If a Zero 88 Linebacker unit was in the DMX output line then the DMX output to the dimmer would have been preserved during the desk reset.

If power was lost in PROGRAM mode during the programming cycle, it is possible that the last data saved may need to be reprogrammed.

Setting Recovery

Use the ⌃ and ⌄ keys to enter *Recovery*. The Memory Display shows:

```
Super User:
RECOVERY IS OFF    ‹ ›
Select On or Off
Press  ⌄ for next
```
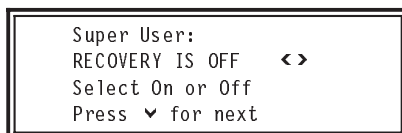
Use the ‹ or › key to select on or off and press the ⌄ key.

Language Set-Up

Where available, this feature allows a different language to be loaded into the desk

Date and Time

1 Use the ⌃ and ⌄ keys to select *Date and Time*.
2 Press the › key. The Memory Display shows the current date.
3 Use the wheels to change the day, month and year.
4 When the date is correctly displayed, press the PROGRAM button to record the new date.
5 To adjust the time, press the ⌄ key. Or press the ‹ key to exit *Date and Time*.

6 The Memory Display now shows the current time.
7 Use the wheels to set the correct time.
8 When the time is correctly displayed, press the PROGRAM button to record the new time.
9 Press the ‹ key to exit *Date and Time*.

Exiting Super User

Turn the Key Switch from PROGRAM mode to either PRESETS ONLY or RUN.

**Sirius 250 & Sirius 500
Technical Specifications**

General Features

☺ Control Channels

Sirius 250 controls 24 luminaires (48 in Wide mode). Up to 24 of these may be moving fixtures of any type. Has 256 outputs with automatic channel assignment of fixture attributes including an auto patch facility.

Sirius 500 controls 48 luminaires (96 in Wide mode). Up to 48 of these may be moving fixtures of any type. Has 512 outputs with automatic channel assignment of fixture attributes including an auto patch facility.

☺ Fixtures

Regularly updated fixture library containing over 240 different types. Graphical interface to easily input new types or modify/customise existing ones.

☺ Memories

Stores up to 4,000 memories or chase steps in any combination.

☺ Text Description

Text description fields available for memories, fixtures, etc.

☺ Effects

Comprehensive range of fully programmable chases and sound driven effects with up to 99 steps per chase, and up to 1,000 chases. Maximum number of chase steps available: 1,000.
Each chase step used decrements the total number of memories available.
Automatically generated movement effects with single button selection.

☺ Brightness Submasters

Four pages of 20 (12 on Sirius 250) submasters providing instant access to 80 (48) memories. Memories may be scenes, chases or effects.

☺ Attribute Memories - Colour, Beamshape and Position

Up to 99 pages of ten memories of each type with instant button access. Memories may be full or partial; scenes, chases or effects.

☺ Focus Submasters

Up to 99 pages of ten. A Focus Submaster is a set of the three attribute memories (Colour Beamshape and Position). It may be hotlinked to a Brightness Submaster to provide single fader action.

☺ Playback

Go button with time override control. Also stop and Go Previous buttons.

☺ 4 Wheel Drive®

Provides fingertip control of parameters and levels. (Patent Application No. 9617125.1.)

☺ Other Controls

Five Macro Buttons.
Four, or Eight Auxiliary Control buttons giving separate on/off or momentary control channels.
Sirius 500 only - 9 pages of 10 Group Buttons.

☺ Displays

Two LCDs with controlled backlight and contrast. Front panel LEDs, dimmable under desk control.
Video output for optional SVGA monitor.

Control Outputs

☺ DMX512 (USITT 1991)

Sirius 250 - 2 x 5 pin XLRs, both transmitting the same data. Each is separately isolated and has its own indicating LED.

☺ Data Storage

Non volatile flash RAM for program and data storage.

☺ **Backup**

Floppy disk drive 3.5" PC compatible formatted to 1.44Mb (HD DS).

☺ **Printer**

PC compatible parallel port. Only ASCII data is output, therefore most printers are suitable.

☺ **Serial Mouse**

Optional Microsoft compatible mouse. Only used in CueLine.

Connections

☺ **MIDI**

2 x 5 pin DIN - MIDI Input and MIDI Thru.

☺ **SMPTE**

1 x 3 pin XLR Input and Output. Output 0dBm; Input 0dBm +/-10dBm; 47kOhm input impedance; maximum 50V RMS.

☺ **Audio**

Stereo jack socket input for sound driven effects. Sensitivity into 10kOhms, minimum 100mV, maximum 100V RMS.

☺ **Desk Lights**

Two 3 pin XLR sockets for 12V desk lights (dimmable). Maximum load 5 Watts each.

Mains Supply

☺ **Input**

CEE22 appliance inlet, single phase, 200 to 240V @ 3.5 Amps max. or 100 to 127V @ 6 Amps max. (externally selectable); 50 - 60 Hz.

☺ **Output**

Switched CEE22 fixed socket outlet for optional monitor only. Maximum current 1 Amp @ 200 to 240V or 2 Amps @ 100 to 127V.

Physical Details

Sirius 250
Desk only:
Length:	1005mm	(39.6 inches)
Depth:	575mm	(22.6 inches)
Height:	155mm	(6.2 inches)
Weight:	18.8kg	(41.4lbs)

Packed by factory for shipping:
Length:	1085mm	(42.75 inches)
Depth:	717mm	(28.25 inches)
Height:	250mm	(9.85 inches)
Weight:	22.2kg	(49lbs)

Sirius 500
Desk only:
Length:	1370mm	(53.97 inches)
Depth:	575mm	(22.6 inches)
Height:	155mm	(6.2 inches)
Weight:	23.5kg	(51.8lbs)

Packed by factory for shipping:
Length:	1450mm	(57.12 inches)
Depth:	717mm	(28.25 inches)
Height:	250mm	(9.85 inches)
Weight:	26.9kg	(59.4lbs)

Optional Peripherals

☺ Connections for:

PC Keyboard	5 pin DIN.
SVGA Monitor	15 pin 'D'.
Parallel Printer	25 pin 'D'.
Serial Mouse	9 pin 'D'

☺ Specification For:

PC Keyboard	US/UK 101/105 key
Monitor	SVGA computer monitor. 1024 x 768 Non-Interlaced 60 Hz Refresh.

Warning

Under no circumstances connect more than 5V to any of these connectors or use connection leads longer than 3 meters.

Specification For:

☺ PC Keyboard

US/UK 101/105 key

☺ SVGA Monitor

SVGA computer monitor.

☺ Parallel Printer

The port is a parallel port. Only ASCII data is output, therefore most printers are compatible.

☺ Serial Mouse

Takes a Microsoft compatible mouse. Only used in CueLine®.

Warranty and Returns

The Sirius and the Sirius 250 carry a one year parts and labour warranty as set out in   Zero 88's Terms and Conditions of Sale. Certain additional items such as Monitors, Keyboards and Mice are supplied as a service to our customers only and carry their manufacturers' warranty only.

If it is necessary to return the desk to the factory, the desk MUST be sent in the original packaging supplied by Zero 88 or in a purpose built flight case. This is to minimise the possibility of mechanical damage in transit.

AVAILABLE FIXTURES

CONVENTIONALS
Ellipsoidal
Flood
Fresnel
Generic
Parcan
Pebble Convex
Profile
Softlight

SCROLLERS
Lamp and 1 ch colour scroller
Lamp and 2 ch colour scroller
Lamp and 3 ch colour scroller

ADLITE
Intellite 1
Intellite 2
Intellite Professional
Litebounce II

AMPTOWN LICHTTECHNIK GMBH
ACC Posi Spot
ControlLite PML
ControlLite PML (12 bit)
Washlight

B+K LIGHTING
Varytec
Varytec 575 Pro

CAMELEON SARL
Telescan Mk I
Telescan Mk III
Telescan Mk IV
Telescan Mk V

CLAY PAKY SPA
Atlas
Bazooka 4C
Bazooka 6C
Goldenscan 2
Goldenscan 3 (Normal)
Goldenscan 3 (Expanded)
Goldenscan HPE
Miniscan
Miniscan HPE

Pinscan
Polycolor
Stagescan
Superscan
Superscan Zoom (12 channel)
Superscan Zoom (16 channel)
Tiger Multicolor
Tiger MRG
Tiger Scan MRG
Tiger Scan

COEF
Color Disco
Color Show 200
Performance 200 Disco
Performance 1200 Disco
Performance 200 Show

COEMAR SPA
Microscan 400
Microscan 400 MSR
Microscan 575
Microscan II 575 MSR
Microscan 650 AL
Microscan II 1000 AL
Mini Ultra Scan 250 AL
NAT MM 1200 DX
NAT MM 1200/2500
NAT MM 1200/2500 DBL
NAT TM 1200
NAT TM 1200 DX
NAT TM 2500
NAT PC 1000
NAT PC 1200
Samurai

FAL SRL
DMX Colour Changer
FAL 1000
FAL 2000
Gyro 2
Nebula 575/1200 (MODE OFF)
Nebula 575/1200 (MODE ON)
Primoscan
Promo 2
Proscan 2

Fixture Types

B

FAL SRL   (Continued)

Proscan X
Roulette 575
Roulette 1200
Scan 575
Scan 1200
Starlight
Supercleverscan

FLY SRL

FOS 1/2/3/4
FOS AF

FUTURELIGHT

Duke 1200
Genesis
Miracle
Promotion Scan PS/D-200PR (8 bit)
Promotion Scan PS/D-200PR (16 bit)
Scan MSD/H-250 MKS
Voyager

GENIUS

Nexus
Nexus 2
Quasar

GERMAN LIGHT PRODUCTS(GLP)

MAX
Mini Start Tec II
Patend Light 575 HMI
Patend Light 1200 HMI
Startec 2000 Extended
Startec 2000 Extended II

GRIVEN SRL

Scanvision
Scanvision 2

HIGH END SYSTEMS

Cyberlight (mode 1)
Cyberlight (mode 2)
Cyberlight (mode 3)
Intellabeam Version 1
Intellabeam V2 (Set 000)
Intellabeam V2 (Set 010)
Studio Color
Trackspot

JB SOUND & LIGHTING PRODUCTIONS

Varyscan 3
Varyscan System 2
Varyscan System 3
Varyscan DMX 17

LAMPO

Columbus MSR 400RG
Columbus 650
Domingo
Gemini
Ghost
Sintesi
Vortex

LED

Scarabeo 575

LIGHTING TECHNOLOGY GROUP LTD

Caterpillar

LITEBEAM

Swing II

MAD LIGHTING LTD

Mad Colour 211 HP
Mad Colour 211 AP
Mad Scan 411 HP
Mad Scan 411 AP
Mad Scan 611 ARP
Mad Star 311 HP
Mad Star 311 AP
Mad Star 511 ARP

MARTIN PROFESSIONAL

Destroyer X250 (Single Channel mode)
Destroyer X250 (Multichannel mode)
Imagescan (Mode 1)
Imagescan (Mode 2)
MAC 500 (Mode 1)
MAC 500 (Mode 2)
MAC 500 (Mode 3)
MAC 500 (Mode 4)
MAC 600 (Mode 1)
MAC 600 (Mode 2)
MAC 600 (Mode 3)
MAC 600 (Mode 4)
MAC 1200 (Mode 1)
MAC 1200 (Mode 2)
MAC 1200 (Mode 3)
MAC 1200 (Mode 4)
PAL 1200 (Mode 1)
PAL 1200 (Mode 2)
PAL 1200 (Mode 3)
PAL 1200 (Mode 4)
PAL 1200 (E) (Mode 1)
PAL 1200 (E) (Mode 2)
PAL 1200 (E) (Mode 3)
PAL 1200 (E) (Mode 4)
Punisher X250 (Single channel mode)
Punisher X250 (Multichannel mode)
Robocolour II (Mode 1)
Robocolour II (Mode 2)
Robocolour III (Mode 1)
Robocolour III (Mode 2)
Robocolor Pro 400 (Mode1)
Robocolor Pro 400 (Mode2)
Robocolor Pro 400 (Mode3)
Roboscan Pro 218 (Mode 1)
Roboscan Pro 218 (Mode 2)
Roboscan Pro 218 (Mode 3)
Roboscan Pro 518 (Mode 1)
Roboscan Pro 518 (Mode 2)
Roboscan Pro 518 (Mode 3)
Roboscan 812 (Normal)
Roboscan 812 (Extended)
Roboscan 1020
Roboscan Pro 1220 CMYR (Mode 1)
Roboscan Pro 1220 CMYR (Mode 2)
Roboscan Pro 1220 CMYR (Mode 3)
Roboscan Pro 1220 CMYR (Mode 4)
Roboscan Pro 1220 XR (Mode 1)
Roboscan Pro 1220 XR (Mode 2)
Roboscan Pro 1220 XR (Mode 3)
Roboscan Pro 1220 XR (Mode 4)
Roboscan Pro 1220 RPR (Mode 1)
Roboscan Pro 1220 RPR (Mode 2)
Roboscan Pro 1220 RPR (Mode 3)
Roboscan Pro 1220 RPR (Mode 4)

B

A

NJD ELECTRONICS LTD

Chroma HX

Datamoon

JL 10 (Mode 1)

JL 10 (Mode 2)

Microbeam 100

Predator HX

Predator MX

Super Blitzer

PAN COMMAND SYSTEMS INC

Colorfader DMX Mode D

SAGITTER SRL

Infinity Live 1200

Infinity Multi Step Zoom 1200 (10)

Infinity Multi Step Zoom 1200 (12)

Infinity Multi Step Zoom 1200 (14)

Mask Colour Zoom

Prince

Super Prince 575 (10 DMX)

Super Prince 575 (6 DMX)

SGM ELETTRONICA SRL

Colorlab 250

Colorlab 575

Colorlab HP 575

Colorlab HP 1200

Galileo II HP (STD)

Galileo II HP (SGM)

Galileo III (STD)

Galileo III (SGM)

Galileo IV (STD)

Galileo IV (SGM)

Newton 1200

Victory 250 (Lo Res)

Victory 250 (Hi Res)

Victory II 250 (Lo Res)

Victory II 250 (Hi Res)

SHOW-PRO

Accubeam 400 AB-400

Accubeam 500 AB-500

Accucolor Power AB-60

Accustar Power AB-20

Cyberscan (Mode 1)

Cyberscan (Mode 2)

/pB-3/3

STRONG INTL INC

Multicolor 1200

Scan 150

STUDIO DUE LIGHT DIVISION SRL

Giant (Option A)

Giant (Option B)

Live 1200

Live Pro 1200

Mini Beam

Predator

Stratos Hi-Res (12 channel)

Stratos Hi-Res (14 channel)

Stratos Color (12 channel)

Stratos Color (14 channel)

SUMMA

Summa HTI

SYNCHROLITE SYSTEMS INC

Synchrolite Version A

TAS SRL

Symbol 700

Ultra Scan 700

VARI*LITE

VL1

VL5 Wash (8 bit mode)

VL5 Wash (16 bit mode)

VL5 Arc Wash (8 bit mode)

VL5 Arc Wash (16 bit mode)

VL6 Spot (8 bit mode)

VL6 Spot (16 bit mode)

VLM Moving Mirror (8 bit)

VLM Moving Mirror (16 bit)

WORD LIST

🕮 **Attribute**

One of the four programmable elements comprising a fixture - Brightness, Colour, Beamshape, Position.

🕮 **Binary word**

A 16 bit number in Binary (decimal 0-65535).

🕮 **BPM**

Beats per minute.

🕮 **Byte**

An 8 bit number in Binary (decimal 0-255).

🕮 **Composite fixture**

Fixture which has more than one part and therefore more than one DMX address, e.g. a Par Can and a scroller, VL5s - head and dimmer. Each part is a subfixture.

🕮 **Cue**

The signal to select a change.

🕮 **CueLine**®

A friendly, graphical interface developed by Zero 88 Lighting to program and run performances.

🕮 **Cue stack**

A sequential list of Brightness memories.

🕮 **DBO**

Dead Black Out - when all desk Brightness outputs are killed.

🕮 **DMX**

DMX512, USITT Digital Multiplex Specification. 512 channels for data down a single twisted pair screened cable.

🕮 **Duplicate fixture**

one or More fixtures on different DMX addresses controlled from one desk channel, e.g. cyc lights and light curtains, etc.

🕮 **Fixture Data File**

Contains data on what parameters a fixture has and how the parameters are addressed and controlled.

🕮 **Generic / Conventional**

A single channel fixture consisting solely of a lamp.

🕮 **HTP**

Highest Takes Precedence - The traditional way Two Preset desks mix their outputs to be interpreted by dimmers. The highest (or brightest) value is the most important and controls the channel. In HTP '0' is off.

🕮 **Intelligent multichannel fixture**

This covers many types of fixture, such as a moving mirror fixture (Cyberlight) or a moving yoke fixture (VL5).

🕮 **LSB**

Least Significant Byte. The lower 8 bits of a 16 bit word. (Used for fine control.)

🕮 **LTP**

Latest Takes Precedence, as opposed to *Highest* Takes Precedence. The way data is sent to intelligent fixtures whereby the latest value sent concerning a parameter is the most important and controls the channel. In LTP '0' is not interpreted as 'off', but as a specific colour, position, or gobo.

 MIDI

MIDI (Musical Instrument Digital Interface) was originally designed as a means of communication between electronic musical instruments, and enables the exchange of data between MIDI instruments and the lighting control desk.

 MSB

Most Significant Byte. The upper 8 bits of a 16 bit word. (Used for coarse control.)

 Multichannel fixture

For example, a single channel (generic) fixture with either a colour scroller or a gobo rotator.

 Pan

Direction of the beam, moving between left and right.

 Pan reverse

Allows the control wheels to work backwards so that if the fixture is facing forwards in the rig, the beam still moves to the left when the control wheel is moved to the left.

 Pan tilt swap

Maintains normal operation, even when the fixtures are mounted on the sides of the rig.

 Parameter

Each individual effect within a fixture, e.g. gobo wheel, colour wheel, pan and tilt are normally controlled by a single DMX channel. These are known as parameters.

 Real time

1 second = 1 second.

 Ripple sound

The level of the audio memory changes as the sound level alters.

 SMPTE time-code

The SMPTE (Society of Motion Picture and Television Engineers) time-code originally referred to the system used in the motion picture industry for synchronising pictures and speech, so that when films were edited the voice and the pictures matched perfectly. The SMPTE time-code is now also used with other types of equipment to help synchronise events in real time. Therefore in this case it allows synchronisation between CueLine® and an external SMPTE time-code source.

 Sound to light

The overall output level of each audio memory in the set is modulated according to the sound level in four harmonic bands (bass, tenor, alto, treble).

 Subfixture

The parts that comprise a composite fixture. Taking a Par Can with scroller as an example, both the Par Can and scroller are subfixtures.

 Tilt

Direction of the beam, moving between front and back.

 Tilt reverse

Allows the control wheels to work backwards so that if the fixture is facing forwards in the rig, the beam still moves to the front when the control wheel is moved to the front.

 Time-code time

Allows synchronisation between CueLine® and an external MIDI time-code source.

 Trigger

An event that causes (triggers) another event to start.

 Variant

A fixture which is the same as another fixture, only varying in very limited ways. Changes CANNOT be made to the data in the fixture file.

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