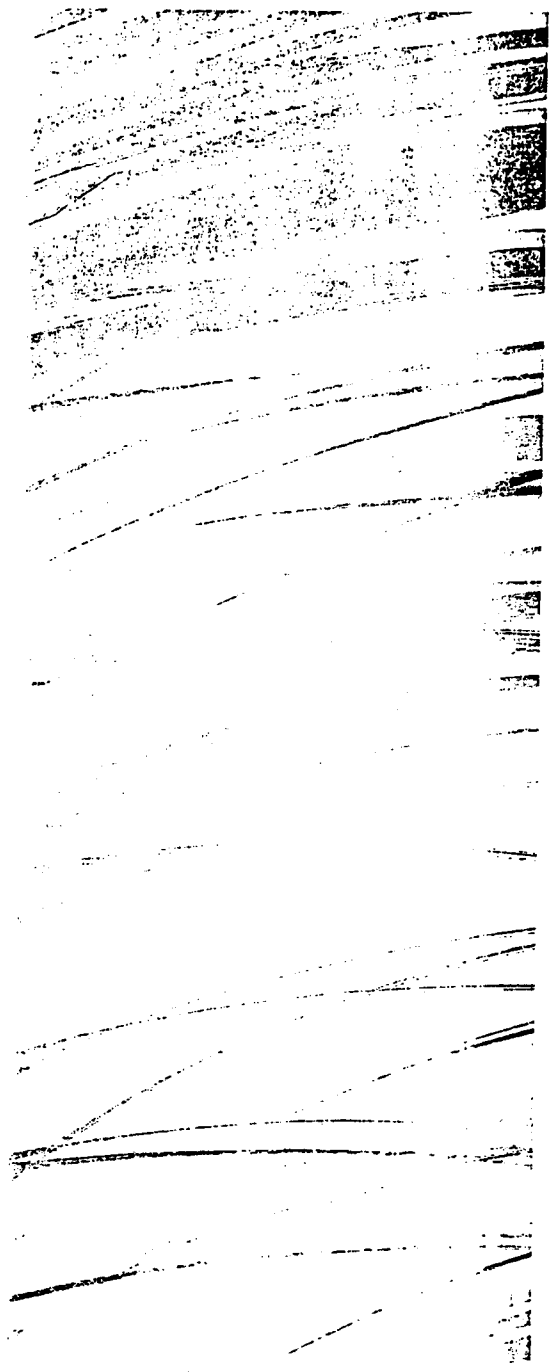


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INFORMATION

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**SIRIUS OPERATOR
MANUAL**

**PRIVATE AND
CONFIDENTIAL**
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CONFIDENTIAL*

zero 88
A touch of Brilliance

SIRIUS OPERATOR MANUAL

FIRST EDITION - JUNE 1988

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

This equipment is designed for use as a lighting control desk only and is unsuitable for any other purpose.

Stock No 6641

Zero 88 Lighting Ltd
46 Hart Road, St Albans, AL1 1NA, UK.
Tel (0727) 33271
Fax (0727) 43676
Telex 22521 ZLIGHT G

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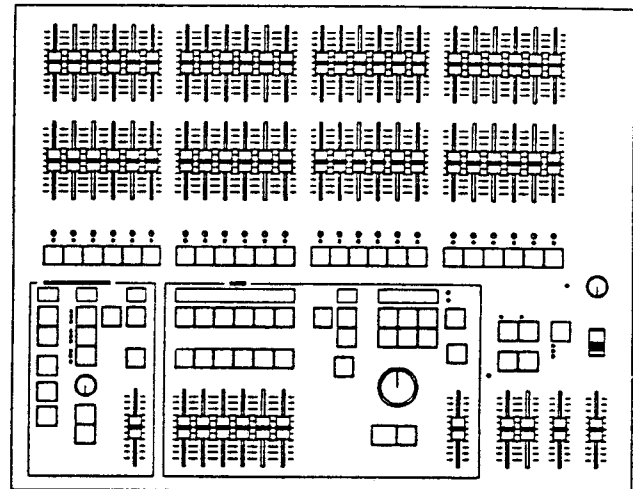
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INTRODUCTION & MASTER CONTROLS

Introduction

The Sirius lighting desk combines the familiar two preset desk with the best of computer based desk technology, to produce a very powerful but simple lighting control desk. This makes Sirius suitable for a wide range of applications such as schools, colleges, theatre, hire, conferences and rock and roll.

This manual describes the operation and programming of Sirius, beginning with simple two preset operation, and progressing in easy stages to running complete complex shows. Each section begins with a basic description of controls and functions, followed by a step by step, diagrammatic guide, provided to give the first time user a "hands-on" approach. Notes are included in each explanatory section to provide more detailed information on some of the desk's features, together with Hints giving suggestions as to possible applications.



The Desk

The desk is divided into four distinct sections, Master controls, Presets, a Memory section and a Programmable Chaser. These sections can be used to control the 24 output channels in a variety of ways.

- The Master controls provide overall control of the entire desk.
- The Presets offer manual control of individual channels.
- The Memory section allows storage and retrieval of lighting scenes.
- The Chaser section allows storage and retrieval of chase effects.

All sections can be used together to create an extremely versatile system. The keyswitch can be used to determine access to the desk functions. The Master controls and Preset controls are always available to the user. Turning the keyswitch from Preset Only to Program will additionally allow programming and operation of memories and chases. Turning the keyswitch to Run will only allow operation of memories and chases. Therefore the keyswitch can be very useful in restricting access to the desk functions according to the requirements, and level of learning of the user. Note the key cannot be removed when the desk is in Program.

MASTER CONTROLS

These controls set the general operating conditions for the entire desk. The Master functions determine the mode of operation, the functions of buttons throughout the desk, and the maximum output level for any channel.

ON/OFF SWITCH:

Supplies power to the desk. (Back panel)

KEYSWITCH:

Selects preset, run, or program mode.

GRAND MASTER :

Sets maximum level for all outputs.

FLASH MASTER:

Sets maximum flash level for channel and memory buttons in flash mode.

D.B.O.:

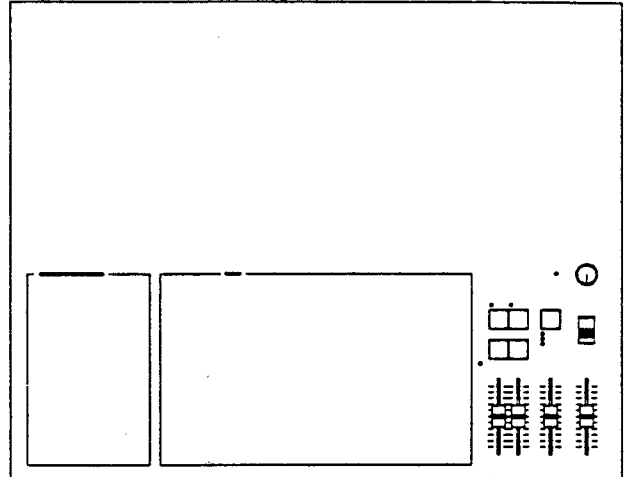
Dead Black-Out, kills all desk outputs.

FLASH FUNCTION:

Determines the function of flash buttons.

TOP SET Enables individual channel inhibit control.

BLIND Allows programming/editing without affecting outputs.



NOTES

Turn On Delay

After the desk is switched on there may be a delay of up to ten seconds before the desk is fully operational, this is normal.

Keyswitch

The key is removable, except in the Program position. This stops the desk being tampered with whilst the operator is away.

Flash Function

When set to Flash, pressing a flash button will cause the channel, memory or chase to be mixed in to the current outputs, at a level determined by the Flash Master setting. When set to Solo, pressing a flash button will cause the channel, memory or chase to be output at the level of the Flash Master, with all other outputs suppressed. Note, when Edit mode is selected, Flash Function, and all Master Flash buttons are disabled.

PRESETS ONLY OPERATION

In Presets Only, all chaser and memory functions are disabled, offering a completely manual system. A scene can be set up on Preset A or B using the individual channel faders. The A and B master faders can then be used to manually crossfade between scenes, while still under overall control of the Grand Master. The green channel lights always show the actual output of each channel (i.e. the signal sent to the dimmers, and hence to the lanterns).

Preset Controls

PRESET A/B:

Two sets of 24 faders controlling individual channels.

MASTER A/B:

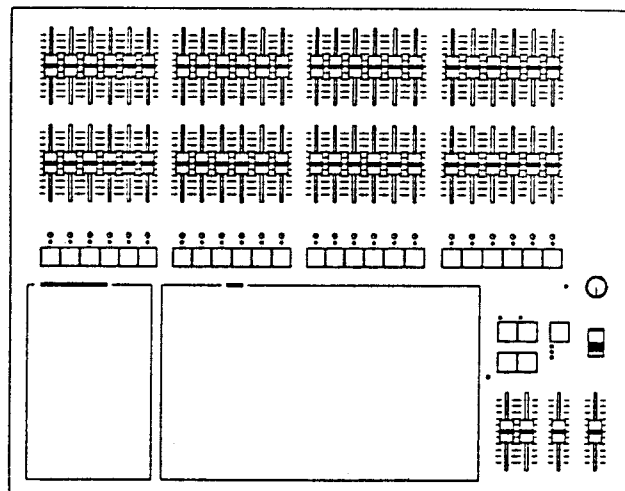
Sets the maximum level of Preset A/B.

MASTER A/B FLASH:

Flashes Preset A/B to the level of the Flash and Grand Masters (see Note below).

CHANNEL FLASH: While pressed, individual channels are flashed. The buttons may be disabled by an internal switch.

OUTPUT LIGHTS: Brightness indicates current channel output.



NOTES

Master A Inversion (Split Dipless Crossfade)

Internal D.I.L. switches offer the option of inverting the action of the Master A fader. Full on is at the bottom of the scale, crossfades are now achieved by moving the A and B faders in tandem. A red light next to the Master A fader indicates whether this inversion has been selected (see Owners Manual).

Master Fader Levels

For each channel the level of the output is determined by the channel fader, and the Master A (or B) fader, and the Grand Master. i.e. with all three set to 50%, the total effect is $0.5 \times 0.5 \times 0.5$, so that the channel will be output at 12.5%.

Master A/B Faders

With Master A/B faders up, the levels on Presets A/B will be output from the desk directly. This applies whatever the function of the desk.

USING PRESETS ONLY

Turning on the Desk

- 1 Switch on the desk using the mains switch on the back panel.
- 2 Ensure the **D.B.O.** switch is also on.
- 3 Set the **Grand Master** fader full on (UP).
- 4 Set the **Flash Master**, **Master A** and **Master B** faders to zero (DOWN).

Setting Up Presets Only

- 1 Turn the keyswitch to select **Presets Only**. The *Memory Display* shows 'Presets Only'.
 - NOTE: Turning on the desk and selecting 'Presets Only' is referred to later in this manual as 'Setting up the desk'.
- 2 Set up one scene, by setting the required levels for each channel on the 24 **Preset A** faders, and a different scene on **Preset B**.

Fading Between Scenes

- 1 Slowly fade up **Master A**. Note that the green output lights correspond to the desk output.
- 2 To manually fade into the next scene, simultaneously push **Master B** up to full, and pull **Master A** down to off. You have direct control over the speed of the scene change.

Flashing a Channel

- 1 Press **Flash Function** to select **Flash**.
- 2 Set **Flash Master** to full.
- 3 Press and HOLD an individual channel **Flash** button. This channel has been added into the scene at the level set by the **Flash Master**.
- 4 Vary the level set by the **Flash Master** to see the effect.

Soloing to a Channel

- 1 Change the **Flash Function** to **Solo**.
- 2 Press and HOLD an individual channel **Flash** button. This time the channel has come on to the level set by the **Flash Master**, with all other outputs killed.
- 3 Release the **Flash** button to return the desk to its previous state.

Flash/Solo For Whole Presets

- 1 Press **Flash Function** to select **Flash**.
- 2 Set **Flash Master** to full.
- 3 Set **Master A** down to off and push **Master B** up to full.
- 4 Press the **Master A Flash** button to see the effect of flashing a complete preset/scene.
- 5 Change the **Flash Function** to **Solo**.
- 6 Press and HOLD the **Master A Flash** button. This time the complete preset/scene has come on to the level set by the **Flash Master**, with all other outputs killed.

HINTS

Grand Master Fader

The Grand Master fader is usually set to full on during normal desk operation.

Solo

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

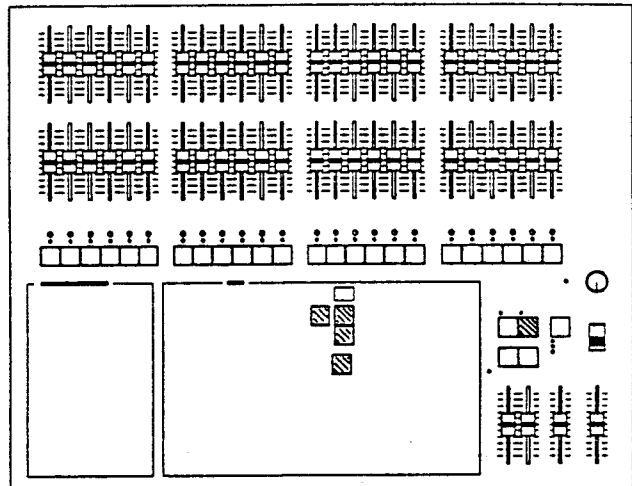
PROGRAMMING THE MEMORY

The Memory Store

The memory store is a cue list for 99 programmed memories, which may be given individually specified fade up and down times. It provides an easy way of recording 99 scenes, which would otherwise have to be set up manually on Presets A/B. The Store may contain scenes, and/or chases (see Advanced Chaser Section), and acts as the core of the Memory desk. A scene may be previewed (*indicated by the display flashing*), before it is transferred to the outputs.

Programming

The scene to be recorded is set up on the B Presets. Any number of channels at any level may be assigned to each memory. Pressing the Program Memory button, assigns the Preset B levels to the chosen memory. The preview lights will come on to verify the data has been recorded. An empty memory in the Store is indicated by a dot shown in the bottom right corner of the "Next Memory" display. Previewing is locked on when in Program, and the action of Preview buttons is to determine whether the Memory Store or Chaser patterns are displayed on the yellow preview lights, and hence which can be programmed.



Programming Controls

+ / - : Selects memory to be programmed

MEMORY PROGRAM: Transfers Preset B levels to memory

PREVIEW: Enables Memory Store previewing and programming

MASTER B: Sets maximum channel level within memory

PRESET B: Sets individual channel levels for programming

BLIND: Disconnects B Presets from desk outputs

NOTES

The Blank Memory

The blank memory "-.-" cannot be programmed. This memory is selected automatically at turn-on, or by pressing both + and - buttons together.

Error Message -??-

An error concerning the Memory Section is indicated by "Er" appearing in the Next Memory display. -??- in the Autofade display indicates a general button push error. Hint: Check that the Memory Section of the desk is being previewed before programming a memory

Note For Users New To Memory Desks

Allow plenty of room to make additions and changes to memories. Program every other memory during a scene/act and allow 5-10 empty memories between each scene/act. This allows the Director to change his/her mind without the lighting operator getting involved in a massive memory shuffling exercise. In Run Mode, the desk will skip over empty memories, so your show will still be in the correct running order. If the show has lots of cues, leave less empty memories between each act.

MEMORY PROGRAMMING

Setting Up the Desk for Programming

- 1 Set up presets only with ALL faders at zero (except **Grand Master**).
- 2 Turn the keyswitch to **Program**
- 3 Push the **Master B** fader to full, and ensure **Blind** is off.
- 4 Check the memory store is currently being previewed (*i.e. the Next Memory display is flashing*), if not press preview.

Programming a Memory

- 1 Select memory (Next Memory) to be programmed using the '+' and '-' controls.
- 2 Set up a scene on preset B.
- 3 Briefly press **Program Memory** button to transfer the **Preset B** levels to memory. *Note: the new memory is immediately displayed on the preview leds, to verify this information has been recorded.*
- 4 Repeat steps 1 to 3 to program additional memories.

Clearing a Memory

- 1 Ensure **Blind** is off and set **Master B** down to zero.
- 2 Briefly press **Program Memory** to create a blank memory (*note that preview lights are on*).
- 3 Press and hold **Program Memory** for 1 second to clear the memory from the store, and create an empty memory (*a dot appears in the display*).

HINTS

Programming Appears Not To Work

Check that **Master B** is up to full, since with **Master B** at zero, a blank memory will be programmed. This will result in the dot disappearing from the corner of the **Next Memory** display, but nothing appearing on the preview lights. Simply fade up **Master B** and reprogram the memory.

Blind Programming

Selecting **Blind** disconnects the B Presets from the outputs (see **Advanced Memory Section**).

Reprogramming a Memory

If the memory chosen is not empty, pressing the **Program** button, will overwrite any previous information with the current settings of **Preset B**.

MANUAL MEMORY OPERATION

Memories from the Memory Store may be run manually, using the the Manual Masters. Memories may be assigned to Manual Masters in both Run and Program. Each Manual Master then controls the output level of a complete memory, which can be faded in and out, flashed or solo'd.

Operating the Manual Memories

In both Run and Program, the Manual Master faders offer direct manual control over the memory output level. The Manual Master Flash buttons will Flash or Solo complete memories (Run only). In Program, the Flash/Solo functions are disabled; the Channel Flash buttons are now used for editing individual channels within memories (see Advanced Memory Section).

Manual Master Controls

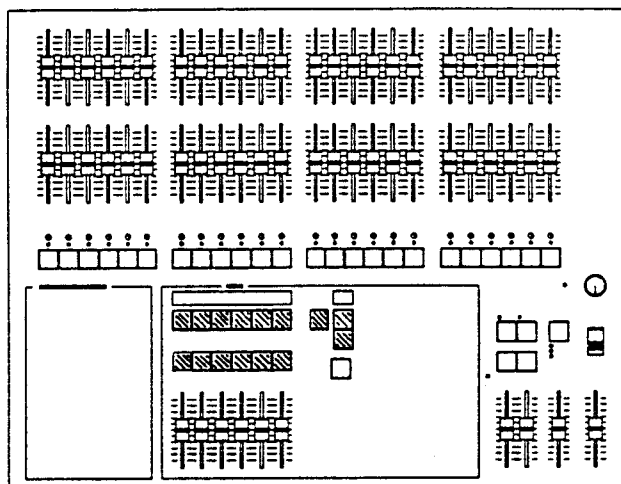
+ / -: Selects Next Memory. Both pressed selects " - - "

TRANSFER: Allocates Next Memory to the Manual Master

MANUAL MASTERS: Set the maximum channel level for each memory

FLASH: Run only. Flashes/solos the Manual Master memory

PREVIEW: Memory displayed on preview lights (see note below)



NOTES

Previewing In Run

Preview may be locked on by holding the Preview button for 2 seconds. To turn off, press again briefly.

Error Er -NP-

If an attempt is made whilst in program to transfer an unprogrammed memory to a Manual Master, Er will appear in the Memory No display, with -NP- (Not Programmed) in the Autofade display.

USING MANUAL MASTERS

Transferring a Memory to a Manual Master

- 1 Set up presets only.
- 2 Select Run.
- 3 Select a programmed memory number to be assigned to the manual master using the '+' and '-' buttons.
- 4 Press the Transfer button. *Note that the Next Memory has been advanced to the next programmed memory in the store (does not occur in Program).*

Outputting a Manual Master

- 1 Repeat steps 3 and 4 above to program further **Manual Masters**.
- 2 Output a **Manual Master**, either by fading up the **Manual Master** fader, or by using the **Flash** button (Run mode only, ensure the **Flash Master** is up!).

Previewing a Manual Master

- 1 Press and hold the Preview button, while holding it press the transfer button of the **Manual Master** to be previewed (*the display of the previewed Manual Master will flash*). Alternatively preview the memory direct from the Memory Store.

HINTS

Cancelling Manual Master Output

A manual master may be temporarily cleared from the outputs by pulling the Manual Master down to off. Setting the Flash Master to zero and pressing Flash will also work if the desk is set up for Flash Override (see page 24).

Emptying a Manual Master

To permanently empty a Manual Master, simply select the blank pattern " - - " in the Memory Store (by pressing + and - together), and transfer it to the Manual Master.

Auto-Increment

In Run mode (but not Program), when transferring a memory to a Manual Master, the next memory selected is automatically advanced. Hence pressing each transfer button in turn will automatically assign consecutive memories to the Manual Masters. In this way the entire cue list may be run through manually, in sequence, via the Manual Masters.

AUTOFADE PROGRAMMING

Memories from the Memory Store may be output automatically through the GO button. GO provides automatic sequencing of memories in a single action. Scenes are automatically faded in and out at speeds determined by their pre-programmed fade times.

Autofade Times

Separate up and down fade times can be programmed for any memory in Memory Store. Times can vary from instantaneous, up to a maximum of ten minutes, in tenth of a second intervals.

Autofade Controls

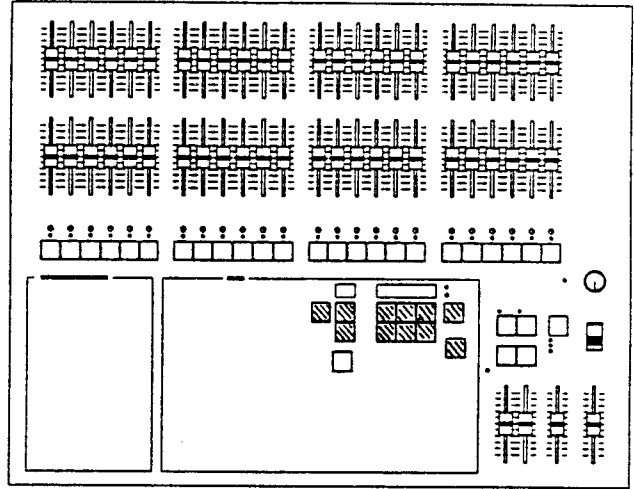
PREVIEW: Enables Memory Store previewing and programming

+ / - : Next Memory select

FADE TIME: Enables programming of up / down fade times

MINS/SECONDS/TENTHS: Used to select required fade times

PROGRAM TIME: Enters fade time into memory store data



NOTES

Blank Memories

A memory with all channel levels programmed to be zero, is a blank memory. Such a memory may be assigned up/down fade times as normal.

PROGRAMMING AUTOFADE TIMES

Setting Up theDesk

- 1 Set up presets only.
- 2 Turn the keyswitch to **Program**.
- 3 Check that the Memory Section is being previewed (*i.e. Next Memory display flashing*), if not, press memory **Preview**.

Programming Fade Up Times

- 1 Select the memory to which fade times are to be assigned.
- 2 *The up light is on*, so fade up time programming is selected using the '+' and '-' buttons.
- 3 Adjust the minutes, seconds, and tenths until the required fade up time is shown on the **Autofade** display.
- 4 Press **Program Time**, to record this time into the memory store data. *The up light will stop flashing to verify that the time has been recorded. The down light will automatically come on.*

Programming Fade Down Time

- 1 Adjust the minutes, seconds, and tenths until the required fade down time is shown on the **Autofade** display.
- 2 Press **Program Time**, to record this time into the memory store data. *The down light will stop flashing to verify that the time has been recorded, the up light will come on automatically and the Autofade display will show the up time.*

Note: Pressing the **Fade Time** button changes from up to down time programming and vice versa.

HINTS

Default Fade Times

A memory which has no fade time programmed will automatically be assigned a zero fade up, and down time. Hence Go can be used without programming any times, but in this case, each scene change will be instantaneous.

AUTOFADE OPERATION

The action of GO is to advance the desk outputs to the Next Memory, in the specified fade times, and to automatically select the next programmed memory in the store as the Next Memory. Provision is made for direct override of both memory order and fade times. Throughout a crossfade, times displayed represent the time remaining before the outputs reach their recorded level.

Operating Controls

+ / - : Next Memory select. Both pressed selects " - - "

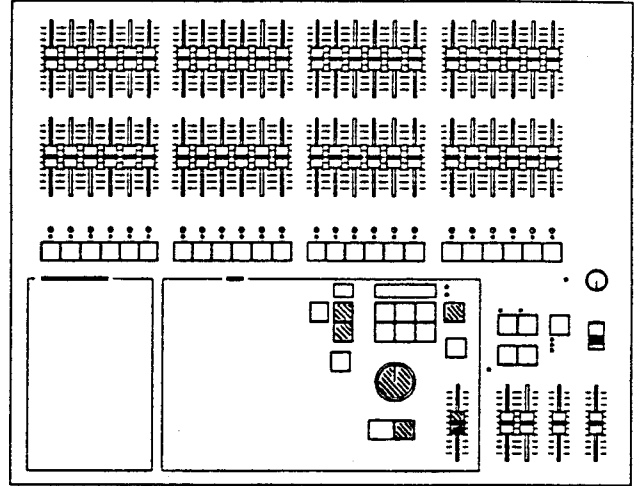
GO: Initiates transfer of next memory to outputs

FADE TIME: Displays residual fade up / down times

OVERRIDE: Modifies speed of current fades

AUTOFADE MASTER: Sets maximum channel output level

PREVIEW: Previews Next Memory channel levels and fade times



NOTES

Fade Time Display

The Autofade display will automatically show the fade up time when a new memory is transferred to the outputs through Go.

Previewing Fade Times

Fade Times associated with the Next Memory are flashed while preview is held.

Override - Instantaneous to Static

Turning the override fully anticlockwise, will temporarily freeze any fades in progress. Turning fully clockwise will cause an instantaneous change over.

USING AUTOFADE

Setting Up Memory Store

- 1 Set up presets only.
- 2 Fade the **Autofade Master** up to full.
- 3 Program two consecutive memories to have fade up and down times of a few seconds (see **Autofade Programming**, pp 12 & 13)
- 4 Ensure that the first of these is displayed in the **Next Memory** window.
- 5 Turn keyswitch to **Run**.
- 6 Press and hold the memory **Preview** button to lock preview on. The memory fade time will be shown on the **Autofade** display.
- 7 Press **Fade Time** to select up or down fade times.

Using the 'Go' Button

- 1 Press the **GO** button.
- 2 Use **Fade Time** if necessary to select up. The **Autofade** display shows time remaining until the outputs reach their recorded level.
- 3 Press **GO** again to initiate the crossfade to the next memory. (There are now two fades in progress, select **up** to watch the fade up time of the second memory, select **down**, to watch the time remaining until the previous memory has faded to zero).

Overriding Fade Times

- 1 Turn the **Override** anticlockwise. The fade is slowed, and the time remaining increases. Fully anticlockwise stops the fades.
- 2 Turn the **Override** clockwise to speed up the fades, fully clockwise gives an instantaneous change over.

HINTS

Cancelling Outputs

The memory store output may be cancelled, either by pulling the memory master to zero, or selecting "-" as Next Pattern, and pressing GO.

Fading in one cue on top of another

In order to fade in a memory, and leave it set while further scenes are faded in and out, simply fade in the first memory using Autofade as normal. Then transfer this memory to a Manual Master before fading in any other scenes.

ADVANCED MEMORY FEATURES

Edit

Edit mode is automatically selected when the desk is in Program mode. Channel flash buttons are now used to edit individual channels within a memory, or chase step.

Level Topset

Level Topset is only available when in Run. The purpose of Level Topset is to enable the 24 faders on Preset A to be used to set the maximum output level for each channel. This level will not be exceeded by any other desk function. This is particularly useful for adjusting the output of a channel, without affecting the programmed information, e.g. when a lamp is knocked during a show, it can easily be turned off until it has been repositioned. **IMPORTANT:** Always ensure that the Master A fader is at zero before Topset is turned on or off.

Blind

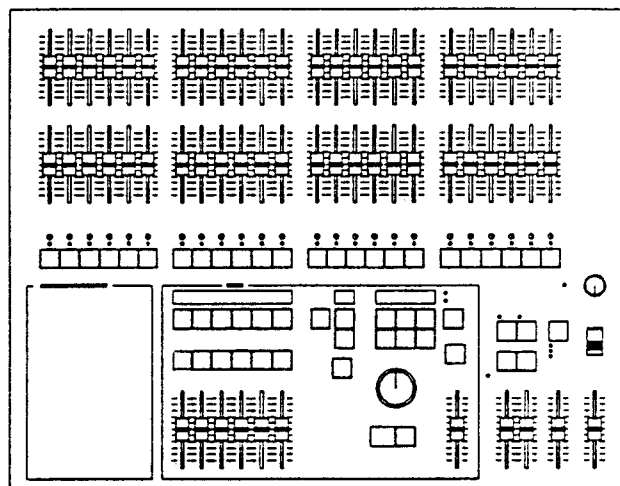
Memories may be programmed either "live" or "blind". In "blind" mode the B Preset levels do not affect the desk outputs, allowing for memories to be updated during use. When programming blind, B Master is effectively set to full up, and hence does not affect the overall level of the memory being programmed.

Level Match

Level Match enables a programmed memory to be recreated on the B Presets exactly as it was recorded. It operates in Run only and makes editing the memory very easy.

Manual Master to Memory Store

Any combination of Manual Master memories (not including chases) can be added together into a single memory in the Memory Store (Program only). Thus two or more memories can be added together to create a new memory.



NOTES

Error LS

In the unlikely event of memory being corrupted at turn-on, any chase previously inserted in the Memory Store will have been lost, and all fade times will have been reset to zero. To restore the "--" display select Program, and with LS in the Next Memory display, hold Program on the Memory Section for 1 second.

USING ADVANCED FEATURES

Edit a channel in memory

- 1 Set up presets only.
- 2 Fade **Master B** full up.
- 3 Select **Program** and the memory to be edited for live editing.
- 4 Transfer the memory to a **Manual Master** and fade it to full.
- 5 To edit an individual channel, move the **Preset B** fader to the required level and press the channel **Flash** button to record the new channel level into memory.

Using Level Topset

- 1 Turn keyswitch to **Run**.
- 2 Set **Master A** to zero and all **Preset A** faders up to full.
- 3 Press and hold the **Top Set** button until the light comes on.
- 4 Set the level of the **Preset A** faders to represent the maximum output level for each channel.

Note: When **Top Set** is pressed and held so that the associated light goes out, the A preset reverts to normal operation.

Blind Programming

- 1 Turn the keyswitch to **Program**.
- 2 Turn **Blind** on.
- 3 Select memory (**Next Memory**) to be programmed.
- 4 Set up a scene on **Preset B**. Note that the **Master B** fader has no effect on the desk outputs.
- 5 Press the **Program Memory** button to transfer the preset B levels to the memory as before.

Using Level Match

- 1 Turn the keyswitch to **Run**.
- 2 Press and hold memory **Preview** to lock preview on. Press the **Blind** button once. The channel **Preview** lights will flash quickly if the channel level needs to be reduced, slowly if it needs to be increased.
- 3 Adjust each **Preset B** fader, until all of the lights have stopped flashing, in order to recreate the scene.

Transferring Manual Masters to Memory Store

- 1 Set keyswitch to **Program**.
- 2 Set the **Manual Masters** to the required levels.
- 3 Select the memory to be programmed.
- 4 Press and hold **Program Memory**. While holding **Program Memory**, press the transfer buttons of all the **Manual Masters** to be added together into the memory.

Note: **Master B** must be at zero if it is not required to add the settings of preset B to memory also.

HINTS

Channel level information

Level Match provides an easy way of determining the recorded level of an individual channel in memory, without transferring the memory to the outputs.

Use Preset A as Level Topset all the time

If the whole show can be run from memory, this allows the operator to instantly adjust the maximum output level of any channel.

CHASER PROGRAMMING

Introduction

The chaser can hold nine patterns, each having up to 99 steps (subject to a combined total of 200 steps). Three chase effects are available: Bass, Varispeed, and Autochase. In addition the speed, direction and attack of the chase is user selected, and the chase can be stopped and started on any step, or stepped through manually.

Chaser programming

The chaser is a level memory. Any number of channels, at any level, may be recorded as one step of a chase. Steps are usually programmed through the B Presets. Alternatively, complete memories may be transferred into a chase step from the Manual Masters (see Advanced Chaser Section).

Programming controls

+ / - : Chase select. Both pressed selects chase --".

PRESET B: Sets individual channel levels for programming.

PROGRAM STEP: Records all Preset B levels at once as a chase step.

ADD STEP: Advances step number for programming.

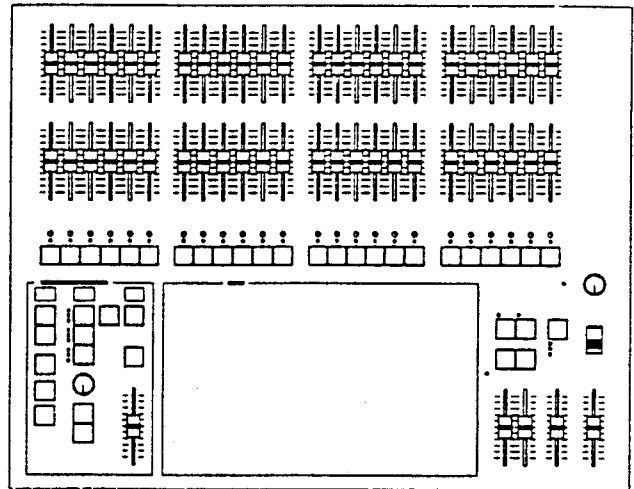
DELETE STEP: Deletes displayed step number from chase.

PREVIEW: Enables previewing and programming of chaser.

START/STOP: Starts/stops the chase running.

STEP: Steps through a stopped chase sequence.

CHANNEL FLASH: Edits an individual channel within a step.



NOTES

Errors -FU- -NF- -NS-

An error concerning chaser operation is indicated by an "E" appearing in the Chase Number display. If an attempt is made to add a hundredth step to a chase, -FU- (Full) appearing in the Autofade display, means the chase is full. -NF- (No Frames) indicates that the overall number of chase steps exceeds the maximum of 250. -NS- (Not Stopped) appears if a chase has not been stopped before an attempt is made to edit, or program it.

Error LP

LP (Lost Pattern) in the Step No. display, indicates that the chase has been lost, and will have to be reprogrammed.

BASIC CHASER PROGRAMMING

Programming a Chase

- 1 Set up presets only with **Master B** set to full.
- 2 Turn the keyswitch to **Program**.
- 3 Press chaser **Preview** to enable chaser programming.
- 4 Select chase (**Next Pattern**) to be programmed.
- 5 Set up channel levels to be recorded into step on preset B.
- 6 Press **Program Step** to record the first chase step.
- 7 Continue adding steps (99 maximum), by pressing **Add Step**, and then repeating steps 5 and 6 above.

An Alternative Programming Method

A quick method of programming a chase can be used if all channel levels are to be full on or off. This uses the edit mode of the chaser.

- 1 Repeat steps 1 to 4 above.
- 2 Set all **Preset B** faders to full.
- 3 Press the channel **Flash** buttons of those channels which are required in the chase step.
- 4 Press **Add Step** ONLY if another step is required.

Note: Do not press **Program Step**!

Previewing a Chase

- 1 Press the **Start/Stop** button. *The word GO appears in the Step No display to indicate the chase is running and the chase can be seen running on the preview lights.*
- 2 Press **Start/Stop** again to stop the chase.
- 3 Press **Step** to step through the chase manually.

Editing a Step

- 1 Check that the chaser is being previewed.
- 2 Select the pattern, and step to be edited.
- 3 Move the **Preset B** fader to the required position.
- 4 Press the channel **Flash** button to edit the channel level.

Deleting a Step

- 1 Check that the chaser is being previewed.
- 2 Select the pattern and step to be deleted.
- 3 Press **Delete Step** to remove the step from the pattern.

Deleting an entire Chase

- 1 Check that the chaser is being previewed.
- 2 Select the pattern and step to be deleted.
- 3 Press and HOLD **Delete Step** to remove all the steps from the pattern.

HINTS

Add Step

Pressing **Add Step** immediately inserts a blank step into the chase. To enter channel level information into this step, either **Program**, or a **Channel Flash** button must be pressed.

Manual Step Selection

When manually stepping through a chase sequence, use **Direction** to step forwards or backwards as required.

CHASER OPERATION

Introduction

A chase sequence may be output directly via the chaser controls, or transferred to the memory store, and output through a Manual Master or the GO button (see Advanced Chaser Section). The speed, direction, and attack of a pattern may be decided before the chase sequence is transferred to the outputs, or modified directly in "live" mode.

Operating Controls

+ / - : Chase select. Both pressed selects pattern " _ _ _ "

EFFECT : Selects autochase, varispeed, or bass chase.

DIRECTION : Modifies direction of step sequence within chase

ATTACK : Determines type of crossfade between steps

SPEED: Sets the speed of the chase sequence

CHASE MASTER: Sets maximum output level for chase sequence

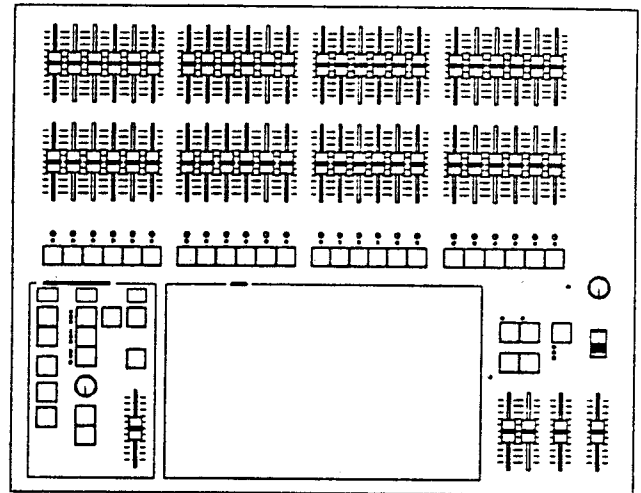
PREVIEW : Displays chase on preview leds

TRANSFER: Transfers chase sequence to outputs

STEP: Outputs next step of stopped chase sequence

START/STOP: Starts/stops automatic chase sequence output

FLASH: Flashes/solos the chase sequence



NOTES

Autochase/Varispeed/Bass Chase

Autochase requires no sound input, with chase speed determined directly by the speed control. Varispeed speeds up and slows 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 will step through the pattern on a bass beat, providing a Sound to Light effect (see page 24 for details of the required audio input).

Attack

Three types of crossfade are available, switch on/off, fade on/off, and switch on/fade off. Switch on/fade off is particularly useful for PAR cans.

Direction

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

OPERATING THE CHASER

Selecting and modifying a chase

- 1 Set up presets only with **Chaser Master** set to full.
- 2 Select the chase to be output.
- 3 Select the type of chase by pressing the **Effects** button (bass chase requires an audio input).
- 4 Modify the **Speed, Direction, and Attack** if required.
- 5 Press the chaser **Preview** button to display the chase on the channel **Preview** lights.
- 6 Press **Start/Stop** to run or stop the chase.

Transferring to Outputs

- 2 Press the chaser **Transfer** button to transfer the chase to the outputs.

Note: With this chase running, another can be chosen, modified, and previewed by following steps 1 to 6. This will not affect the output until **Transfer** is pressed.

Operating Live

- 1 Press and hold the chaser **Transfer** button for one second to lock on live operation. An L is shown in the **This Pattern** display. This allows direct, automatic transfer of selected patterns and modifications.
- 2 Repeating steps 2, 3, 4 and 6 above modifies the chase as it is running on the outputs.
- 3 To exit Live mode, press chaser **Transfer** again briefly.

HINTS

Chase as part of the memory store

A chase containing any number of steps can be inserted between memories in the Memory Store. Hence a chase with a single step can be used as an extra static memory (see **Advanced Chaser Section**).

Manual Masters to Chase Steps

Manual Master memories can be copied into chase steps directly (see **Advanced Chaser Section**).

Cancelling Chaser

Chaser output can be cancelled, either by pulling the **Chaser Master** to zero, or selecting the blank pattern and pressing **transfer**.

ADVANCED CHASER OPERATION

Chase to Memory Store

An entire chase sequence may be inserted between memories in the memory store as an extra cue.

The chase modifiers (speed, direction, attack) are recorded, in addition to channel and level data.

Fade times may then be assigned to the chase, as for any other memory in the store, pressing Go will then fade in the chase sequence as it is running.

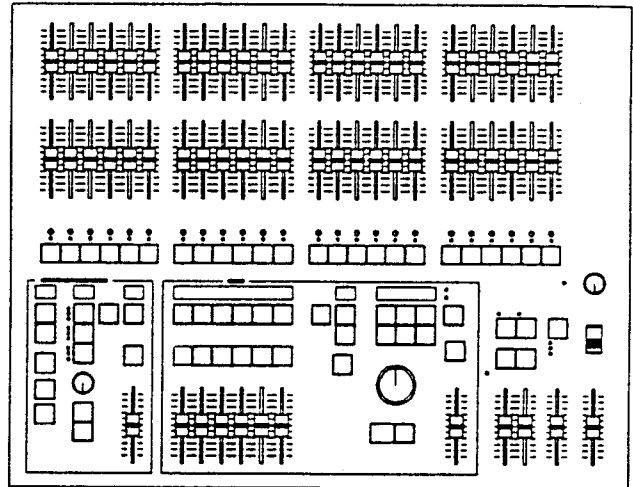
Chase 1 in the Memory Store is indicated by C1 in the Next memory display, chase 2 by C2,.....chase 9 by C9.

Manual Master to Chaser

Any combination of Manual Master memories may be added together into one step of a chase sequence (Program only). If the chase step had already been programmed, the original data is overwritten.

Chase to Manual Master (via Memory Store)

An entire chase sequence may be assigned to a Manual Master by first transferring it from the Chaser to the Memory Store (in Program mode only), and from there to the Manual Master (Run and Program). A chase on a Manual Master will be running permanently, and can be flashed/solo'd and faded in and out as for a static memory.



NOTES

Previewing a Chase in the Memory Store

Selecting a chase in the Store as Next Memory, and Pressing Transfer (in the Memory Store Section), will display the chase on the preview lights, with the Next Memory display flashing. In addition, GO will be flashing in the Step No. display, along with the effect, attack and direction lights, as they were recorded into the store.

Transferring Memories Blind

It is not possible to transfer memories blind.

Warning: B Preset

Turning Blind on when transferring memories will cause the levels set on Preset B to be copied into the memory during transfer.

USING ADVANCED CHASER FEATURES

Inserting a Chase into the Store

- 1 Set up presets only.
- 2 Select **Program**.
- 3 Select the pattern for transfer, and set the chase modifiers as required.
- 4 Select the memory in the store, after which the chase is to be inserted.
- 5 Press and hold: memory Preview, then **Program Memory**, and then briefly press chase **Transfer** to insert the chase into the Store.

Transferring a Manual Master to a Chase Step

- 1 Press chaser **Preview**.
- 2 Select pattern and step into which data is to be transferred.
- 3 Set the **Manual Master** fader levels.
- 4 Set **Master B** to zero (stops transfer of preset B levels into the step).
- 5 Press and hold **Program Step** and press the **Transfer** buttons of the **Manual Masters** to be added into the chase step.

Using Level Match with the Chaser

- 1 Turn the keyswitch to **Run**.
- 2 Stop the chaser use the manual **Step** button to advance it to the required chase step
- 3 Press and hold chaser **Preview** to lock preview on. Press the **Blind** button once. The channel **Preview** lights will flash quickly if the channel level needs to be reduced, slowly if it needs to be increased.
- 4 Adjust each **Preset B** fader, until all of the lights have stopped flashing, in order to recreate the step.
- 5 .

HINTS

Chases as extra Static Memories

A single step chase can be inserted into the store as an extra memory. Ensure the attack is switch on/off for this, as using a faded attack produces a pulsed effect.

TECHNICAL SPECIFICATION

Standard Outputs:

0 to +5, +10V, or +12V (Internally selectable)

Mains Input:

200 to 260V, or 100 to 130V (internally selectable)
50 or 60Hz

Internally Selectable (using the DIL switch):

Split dipless crossfade for Preset A and B masters.

Flash to level or override - Flash to level flashes each channel/memory output to the level set by the Flash Master; if any output is already higher than this new level, it will be unaffected. Override takes the affected channel outputs to the level set by the Flash Master *even if this is lower than an existing level.*

Channel Flash buttons on or off.

For details of the Internal D.I.L. switch options, please refer to the Sirius Owner's Manual.

Audio Input:

Stereo, greater than 30mV. Input impedance 22K Ohms

WARNING - Mains Supplies:

High voltages applied to the desk outputs will seriously damage the desk. A Zero 88 Output Protection Kit (Part No 291) will prevent this.

High voltage spikes on the mains supply can also cause damage; a Zero 88 Mains Conditioning Unit (Part No 140) will prevent this.

To change the Mains Fuse

The position of the mains fuse in one of two fuse clips in the Sirius is used to select 110V or 240V operation. To change the fuse or its position, SWITCH THE DESK OFF AND REMOVE THE MAINS PLUG, remove the key, and carefully turn the desk upside down. Unscrew the base panel (ten screws), and remove by lifting the rear edge, and gently pulling back from the front mounting. Remove the four screws in the side panel of the Sirius, and lift off the smaller back base panel. The fuse is situated in the back corner of the desk. Simply pull out and replace. Reassemble the desk in the reverse order.

IMPORTANT:

The desk must have only ONE fuse fitted, in EITHER the 110V OR the 240V position.

Mains Conditioning

If the Sirius' memory is frequently being corrupted, it is probably due to a "dirty" mains supply. Zero 88 have designed a Mains Conditioning Unit, which can be installed to solve this problem (see Options above).

OPTIONS AND ACCESSORIES

291 -10V output with output protection

293 Gooseneck Light

294 Socapex Output Kit

295 4 x XLR7 Output Kit

296 QM Output Kit

297 4 x Bleecon Output Kit

298 2 metre 8-way DIN Cable for linking desks

299 Flight Case for Sirius and MCU

140 Mains Conditioning Unit (MCU)

Complementary Products

Rackmaster 660 - Rack/Wall mounting dimmer pack with 6 channels x 10A

Rackmaster 260 - 6 channel x 10A high density dimmer pack

Eclipse - The modular 2 preset Memory Board 24 - 120 channels

Lightmaster 1200 - 12 channel 2 preset desk with 15 step memory

SIRIUS OWNERS MANUAL

REMOTE OPERATION & SUPER USER

Remote Operation

The GO button may be duplicated by a remote switch which connects Pin 1 to Pin 8 (+5v) on the External Control DIN. This will operate in addition to Clic Trac if this is set up.

Super User Description

In Super User, the desk may be set up for Clic Trac operation, or totally cleared of all programmed memories, chases and fade times. In addition the software version number is displayed. Presets A and B work normally; the memory is disabled.

Operating controls whilst in Super User

MEMORY +/-: Select Super User function.

MEMORY PROGRAM: Performs the required change.

Clic Trac

When set to On, every tone in the band 100 to 150 Hz received at the audio input will simulate one press of the GO button. In this way, a completely automatic set of scene changes including chases may be programmed.

Note: If spurious steps occur for any reason, mix in a constant 2kHz tone to keep the desk's AGC gain down.

Selecting Super User

- 1 Switch on the desk.
- 2 Select Presets Only.
- 3 Press and hold down chaser + and - buttons, then turn the keyswitch to Program. The Memory No display shows Super User.

Note that the Autofade display shows the number of the software version that is installed.

Selecting Functions

- Press memory + once to select Clic Trac. The Memory No display shows Clic Trac On or No Clic Trac.

Press memory Program to change from on to off and vice versa.

- Press memory + again to select Clear All. The memory display shows Clear All?

Press memory Program to clear all the memories and all the chasers. The Memory No display will show Clearing for a few seconds and then return to Super User.

Leaving Super User

Turn the keyswitch to Presets Only. The desk will now revert to normal operation.

CONNECTING TWO DESKS TOGETHER

Introduction

All that is needed to link two desks together is an 8 way DIN cable, Zero 88 Stock No 298.

Designating a desk as Slave

Any desk may be made a Slave simply by plugging into the External Control DIN the end of the link cable that is marked Slave, then switching the mains off and on again. The Memory No display of the Slave will show Slave Lost until the Master is connected. When successfully communicating with the Master, the Slave displays Slave Only. If the communication link is broken at any time, the display reverts to Slave Lost.

All the controls on the Slave desk except the channel Preset and Flash buttons are disabled, and the memories are unaffected until they are reprogrammed or cleared by the Master.

Designating a desk as Master

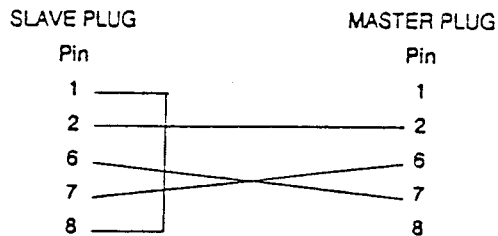
The Master desk will receive data from the desk designated Slave as soon as the link cable is plugged in. This puts the desk into Master mode, so no further action is needed.

WARNING the Slave desk memories may now be cleared by the Master desk, so ensure that there are no vital scenes in the Slave!

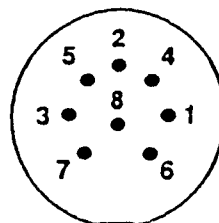
Operation

Treat the two desks as one, using the Master desk controls for all functions. Super User and remote operation will now operate on both desks from the Master.

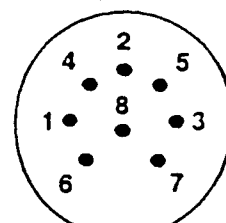
Link Cable Connections using 8 Pin DIN Plugs



DIN Pin Connections



8 pin DIN plug
View of PINS



External
Control Socket

INTERNAL SWITCHES AND LINKS

WARNING

DO NOT REMOVE ANY COVER WITHOUT FIRST COMPLETELY DISCONNECTING THE DESK FROM THE MAINS SUPPLY

There are five internal adjustments and/or additions that may be made to the desk:

- Addition of an Output connector.
- Change of Mains Supply Voltage
- Change of Output Voltage
- Addition of a second Printed Circuit Board.
- Change of DIL switch settings

All of these require the bottom cover assembly to be removed. Four of these require access to the Main pcb. A layout of this is shown opposite highlighting the components involved.

To remove the bottom covers:

- 1 Switch off the desk.
- 2 Remove the mains lead.
- 3 Remove the key.
- 4 Carefully turn the desk over with the outputs away from you.
- 5 Remove the four screws in the large bottom panel that are nearest you.
- 6 Remove the four screws (two in each side plate) that secure the wide rear plate containing the rubber foot.
- 7 Remove the bottom panel assembly.

REASSEMBLE IN THE REVERSE ORDER.

Fitting an Output Connector Kit

- 1 Remove the appropriate plastic plug(s) from the rear panel.
- 2 Fit the connector(s) in the holes using the screws and nuts supplied.
- 3 Wire the leads from each connector to the terminal block following the instructions supplied with the kit, or to your own requirements.

NOTE that the additional connector may be wired in addition to the Cannon 25D already fitted.

Changing the Mains Fuse and Supply Voltage

The fuse is located on the power supply pcb at the top left corner of the desk, next to the mains input connector. The position of the mains fuse in one of two fuse clips is used to select 110V or 240V operation. The desk will work on 50 or 60 Hz without adjustment.

IMPORTANT:

The desk must have only ONE fuse fitted, in EITHER the 110V OR the 240V position.

Selecting different Output Voltages

The desk is supplied as standard with the Output Voltage Select links set to 0 to +10volt. There are three link positions:

0 to +5v

0 to +10v

0 to +15v

Repositioning these links changes the output voltage. ENSURE THAT THE LINK IS HORIZONTAL or the desk will not have any output voltage!

Fitting a second Printed Circuit Board

Follow the instructions enclosed with the circuit board.

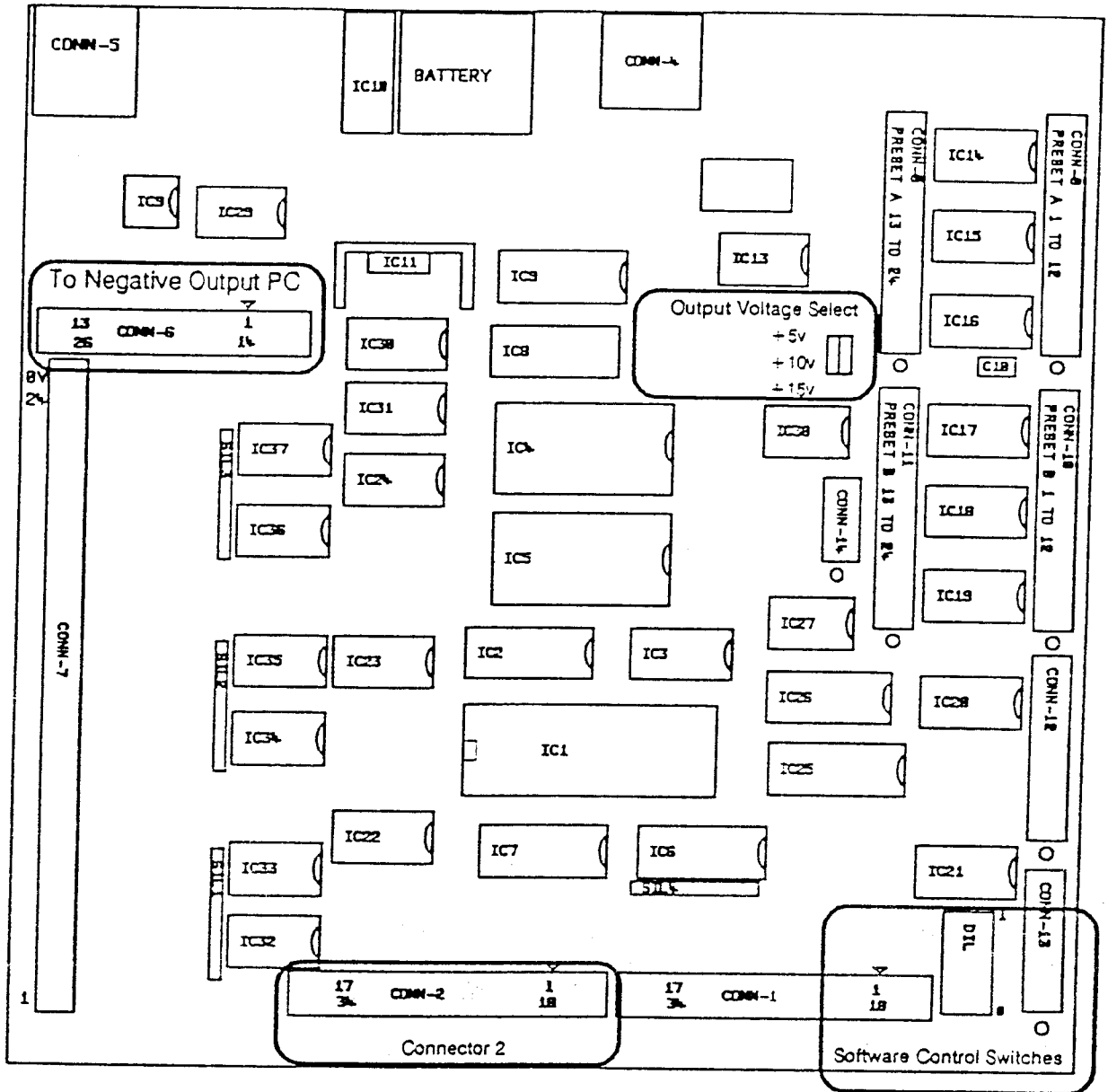
Dual in line (DIL) switch operation

The eight position switch on the main printed circuit board marked **Software Control Switches** allow the owner to set up three variations of desk operation:

- Channel Flash buttons may be changed so that their Flash and Solo functions are disabled. Some users prefer this.
- Flash to level or override: Flash to level flashes each channel/memory output to the level set by the Flash Master; if any output is already higher than this new level, it will be unaffected. Override takes the affected channel outputs to the level set by the Flash Master even if this is lower than an existing level.
- Split dipless crossfade. This reverses the operation of preset Master A so that full on is when the fader is down. Crossfades are now achieved by moving preset Masters A and B in tandem. The red Split Dipless light next to Master A is lit when this option is selected.

INTERNAL SWITCHES AND LINKS

SDPLAT2 - (1-4-82 13) PII C HPGLP.PXY



PC - MAIN EM5772

Normal Setting	1		Factory Use Only
Normal Setting	2		Factory Use Only
Normal Setting	3		Factory Use Only
Normal Setting	4		Factory Use Only
Channel Flash buttons ON	5		Channel Flash buttons OFF
Flash override OFF	6		Flash override ON
Preset A Master Normal	7		Split dipless crossfade - Preset A Master inverted
Normal Setting	8		Factory Use Only

Software Control Switches