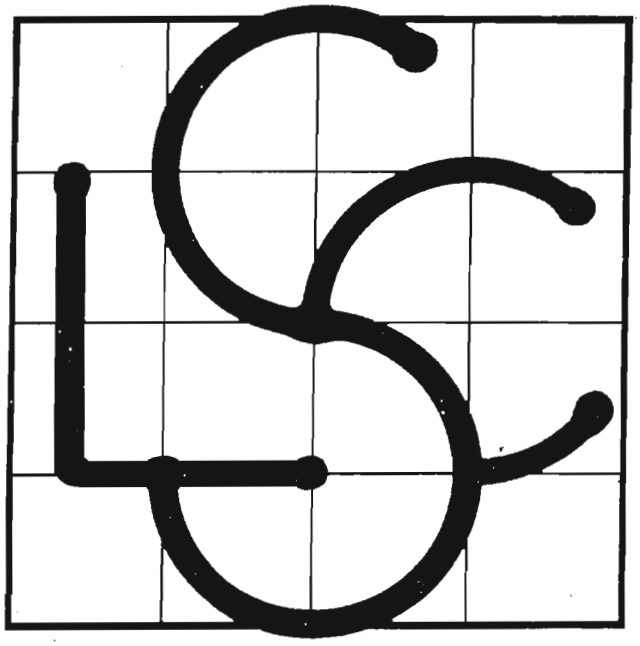
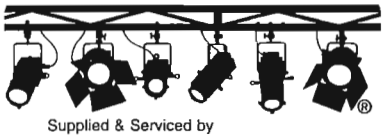


PRECEPT 24 LIGHTING CONTROL DESK

USER MANUAL

2nd Edition

November 1986



Supplied & Serviced by

Clearlight Shows Pty Ltd

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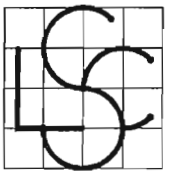
Telephone: (03) 9553 1688

PRECEPT 24 LIGHTING CONTROL DESK

DESIGNED AND MANUFACTURED IN AUSTRALIA BY:-



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AUSTRALIA 3168
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Facsimile +61 3 9561 5277

PRECEPT 24 LIGHTING CONTROL DESK

INDEX

PRECEPT 24 LIGHTING CONTROL DESK

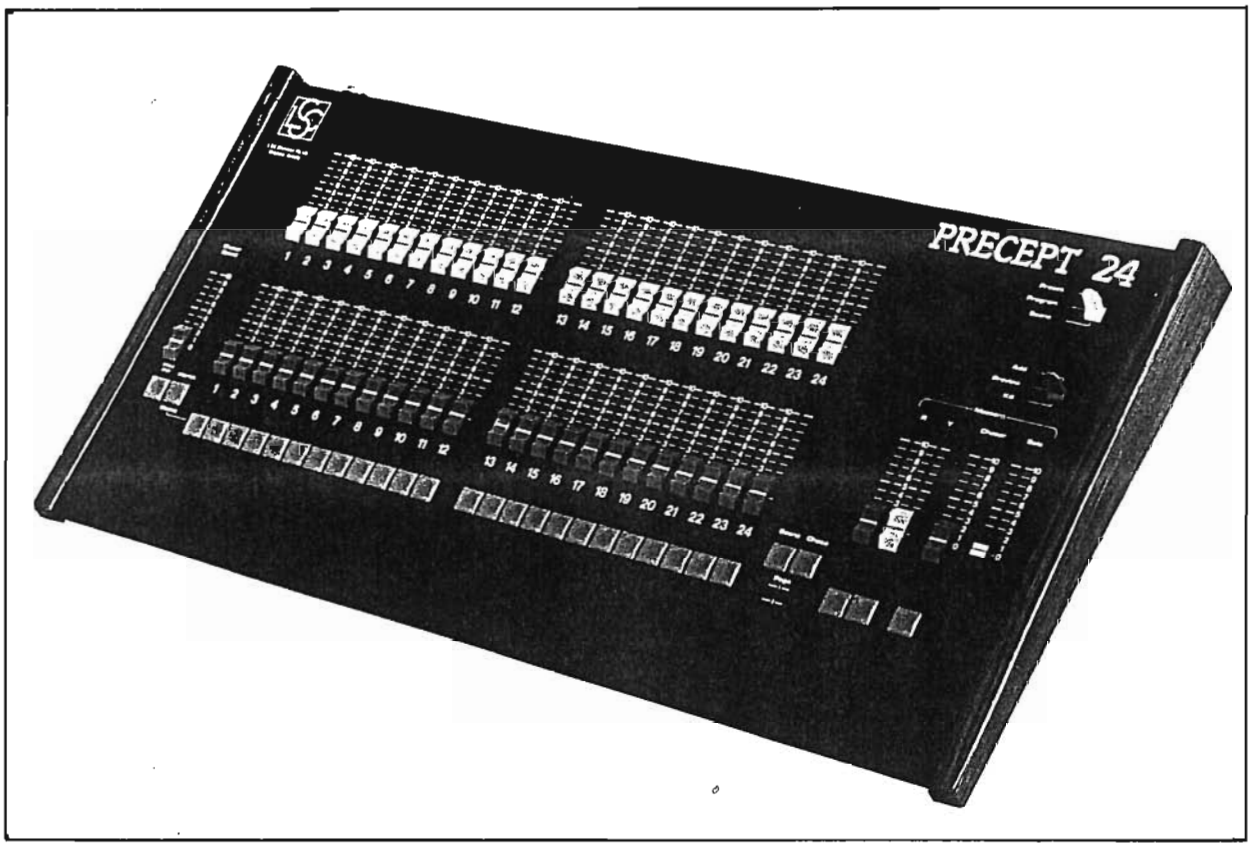
1. GENERAL INFORMATION.

Introduction.

Congratulations on your purchase of a PRECEPT 24 Lighting Control Desk.

The PRECEPT 24 combines a powerful microcomputer and superb ergonomics with the same high quality components and drive circuitry as used in all of L.S.C.'s range of lighting control desks. The PRECEPT 24 offers the user a 24 channel two preset desk with all the quality, simplicity and facilities of a professional manual desk, together with programmable scene and chaser functions that up until now could only be found on desks many times more expensive!

Considerable thought has gone into the positioning and grouping of the PRECEPT's various controls which, together with it's advanced features and modern slimline appearance, make it a pleasure to use.



The PRECEPT 24 has the ability to get the absolute maximum performance from a twenty four channel lighting rig and is thus the ideal desk for bands, theatre groups, schools, discos and audio visual displays.

1. GENERAL INFORMATION

Technical Specification

Functional Details

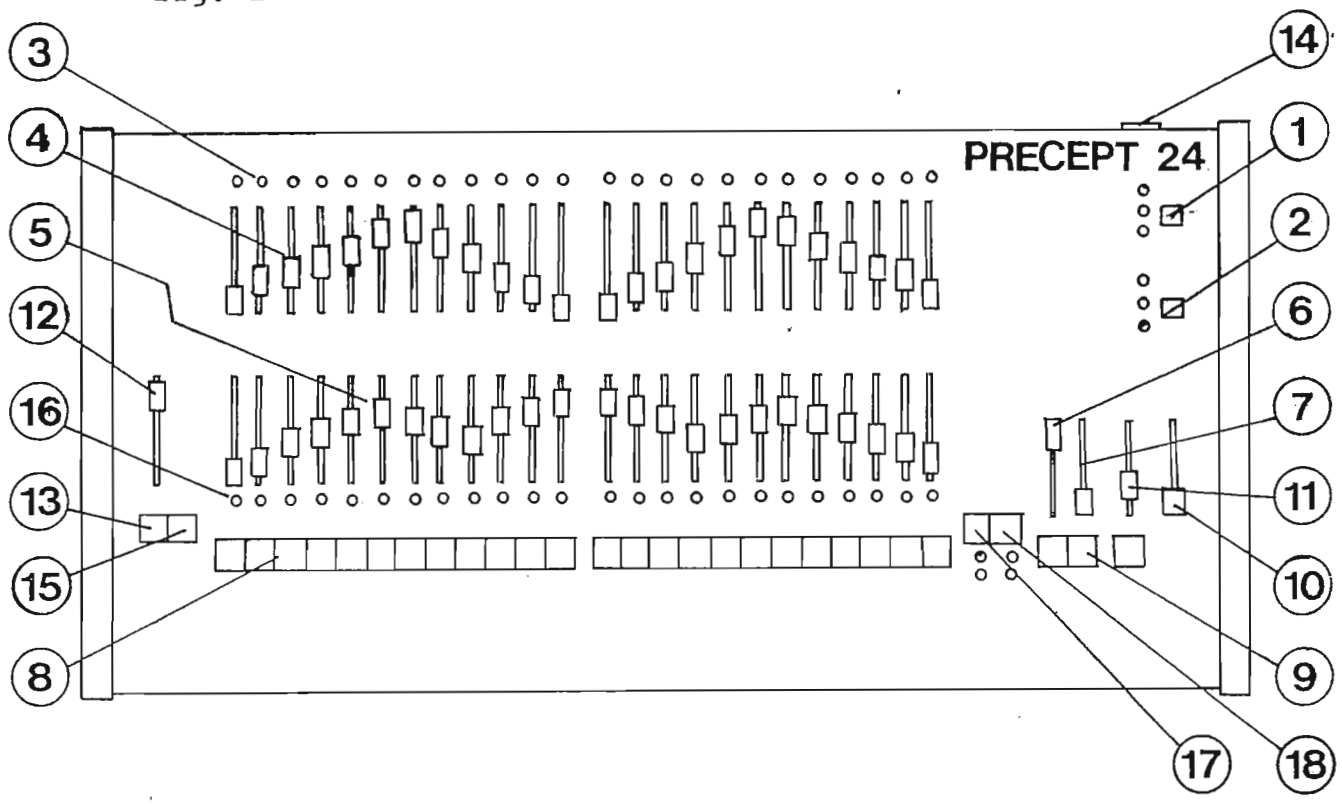
* Output level LED display on each channel.
* 2 banks of presets.
* Independent group master faders for each bank of presets.
* Solo buttons over all faders.
* Add / Kill facilities on all solos.
* Master level fader on solo intensity.
* Bottom preset group can function as Scene masters.
* 96 fully level programmable scenes. (48 scenes associated with scene masters and 48 with the chase function.)
* Dynamic range divided into 256 intensity levels.
* Blind programming of both scenes and chaser.
* Preview facilities to cue the next scene or chaser.
* Battery backed up memory.
* Two 255 step, twenty four scene chasers.
* Master level fader on chaser intensity.
* Chaser direction control.
* Chaser speed control.
* Single Step control on chaser.
* Remote single step input on chaser.
* LED mimic display for chaser.
* Connects directly into the L.S.C. range of dimmers.

Output Level:	Ø to +1Ø volts nominal. Maximum level adjustable between 5 & 11 volts
Output Connection:	Two 2 metre tails with Cannon 31Ø6E 2Ø-27 PB connectors. Pins A to J, M, and N are channel outputs 1 to 12 on connector 1 and channel outputs 13 to 24 on connector 2; Pin K is Common for both connector. Pin L on both connectors is unconnected.
Remote Trigger:	Stereo phono jack.(tip is signal, ring is ØV)
Power Requirements:	The PRECEPT 24 is supplied with an external 24 Volt AC Plug-pak power supply.
Dimensions:	7Ømm x 485mm x 375mm overall
Construction:	Chassis is mild sheet steel finished in black baked enamel. Cover is black anodised aluminium. End pieces are polished hard wood.
Weight:	12 kg.

2. OPERATING INSTRUCTIONS

THE LAYOUT OF THE DESK.

fig. 2



(1) MODE SWITCH
(2) FLASH BUTTON CONTROL SWITCH
(3) OUTPUT DISPLAY
(4) YELLOW FADER BANK
(5) RED BANK/SCENE MASTER FADERs
(6) RED MASTER
(7) YELLOW MASTER
(8) CHANNEL BUTTONs
(9) MASTER BUTTONs
(10) SOLO MASTER
(11) CHASER MASTER
(12) CHASER SPEED CONTROL
(13) SINGLE STEP BUTTON
(14) REMOTE INPUT JACK
(15) DIRECTION/SEQUENCE BUTTON
(16) CHASER MIMIC
(17) SCENE MASTER PAGE SELECT
(18) CHASER PAGE SELECT

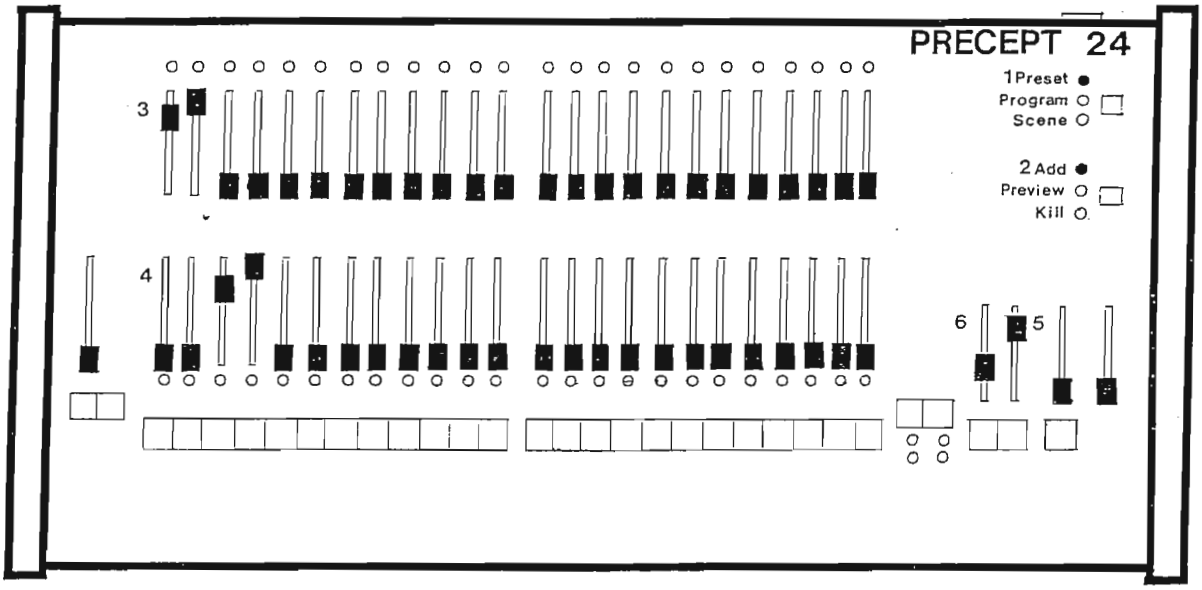
2. OPERATING INSTRUCTIONS

USING THE PRECEPT 24 AS A 2 PRESET MANUAL DESK.

1. Turn the MODE SWITCH to **PRESET.**
2. The SOLO BUTTON CONTROL SWITCH should be in **ADD** or **KILL** but **NOT PREVIEW.**
3. Bring up some channel faders on the YELLOW BANK.
4. Bring up some different channel faders on the RED BANK.
5. Bring up the YELLOW MASTER fader. The channels selected on the YELLOW BANK will fade up on stage. The OUTPUT DISPLAY will mimic this.
6. To cross fade bring down the YELLOW MASTER fader and bring up the RED MASTER fader. The first preset of lights will fade down and the second preset - those channels selected on the RED BANK - will fade up. The OUTPUT DISPLAY will mimic this.

RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

fig. 3



2. OPERATING INSTRUCTIONS

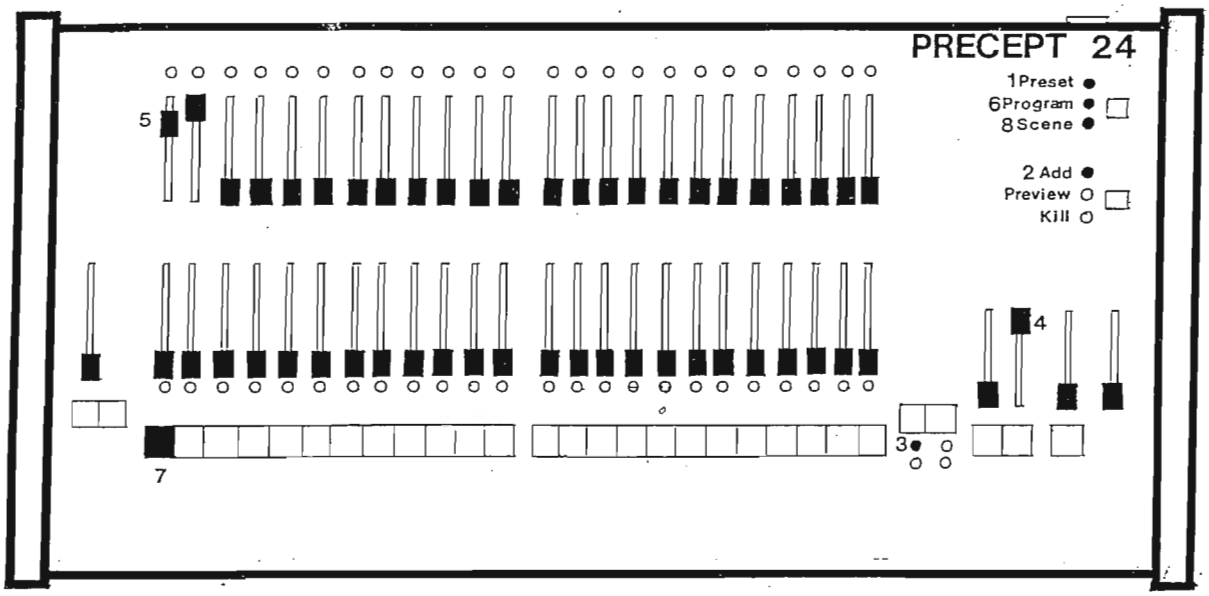
PROGRAMMING A SCENE.

There are several ways of Programming (Recording) a Scene. This first method is the simplest. It requires you to bring up the lights onstage and when you are happy with the results to record them. It can be done by using the YELLOW or RED BANK of faders.

1. Turn the MODE SWITCH to **PRESET.**
2. The SOLO BUTTON CONTROL SWITCH should be in **ADD** or **KILL** but **NOT PREVIEW.**
3. Select Page 1 on the SCENE MASTER PAGE SELECT.
4. Bring up the YELLOW MASTER fader.
5. Bring up some channel faders on the YELLOW BANK until you have light levels set up as required.
6. Select the **PROGRAM** position on the MODE SWITCH. (Note that the PRESET and PROGRAM LEDs flash alternately. This will be explained later.)
7. Press any of the twenty four CHANNEL BUTTONS. For the sake of this exercise let us assume that you press the CHANNEL BUTTON beneath Red Fader number 1. (Notice that the CHASER MIMIC LEDs flash once rapidly). You may now go on to record more scenes if you wish pressing a different CHANNEL BUTTON each time.
8. As soon as you have finished programming scenes **remember to switch the MODE SWITCH out of the PROGRAM position.**

RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

fig. 4



2. OPERATING INSTRUCTIONS

IMPORTANT NOTE.
Once you have programmed 24 scenes with the SCENE MASTER PAGE SELECT at Page 1 you can go on to program another 24 scenes by selecting Page 2. If you record scenes into Page 1 you must be in Page 1 to play them back.

With the exception of the section dealing with recording across pages we will assume, for the sake of simplicity, that all recording and playback will be done on Page 1.

If you have a scene on stage, Scene 1 Page 1 for example, and you change pages that scene will be instantly replaced by Scene 1 Page 2. In order to prevent this being done accidentally it is necessary to hold your finger on the Page Button for a short period of time before the change takes place.

2. OPERATING INSTRUCTIONS

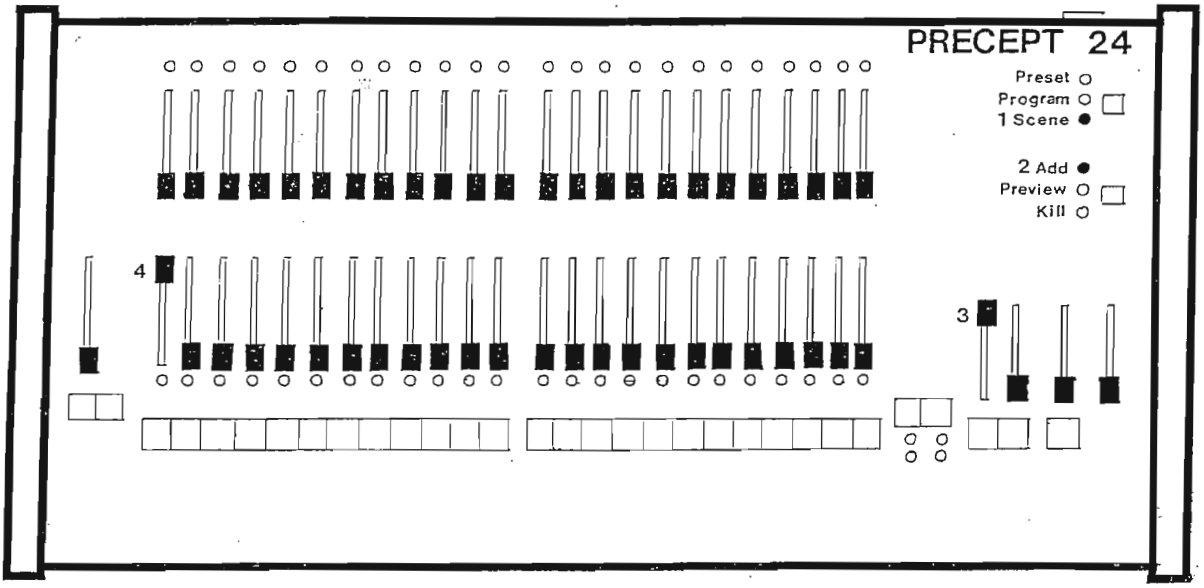
PLAYING BACK A PRE-RECORDED SCENE.

1. Turn the MODE SWITCH to SCENE. The RED BANK will now act as SCENE MASTERS.
2. The SOLO BUTTON CONTROL SWITCH should be in **ADD** or **KILL** but **NOT PREVIEW.**
3. Bring up the RED MASTER fader.
4. Bring up Red Fader number 1. The scene that you previously recorded by pressing the CHANNEL BUTTON beneath that fader will now be reproduced on stage. The OUTPUT DISPLAY will mimic this.

   RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

NOTE.
When you select the SCENE position on the MODE SWITCH as you have seen the RED BANK will become SCENE MASTERS however the YELLOW BANK will continue to respond as it did in PRESET MODE.

fig. 5



8

2. OPERATING INSTRUCTIONS

RECORDING A NEW SCENE FROM A COMBINATION OF TWO OR MORE EXISTING SCENES.

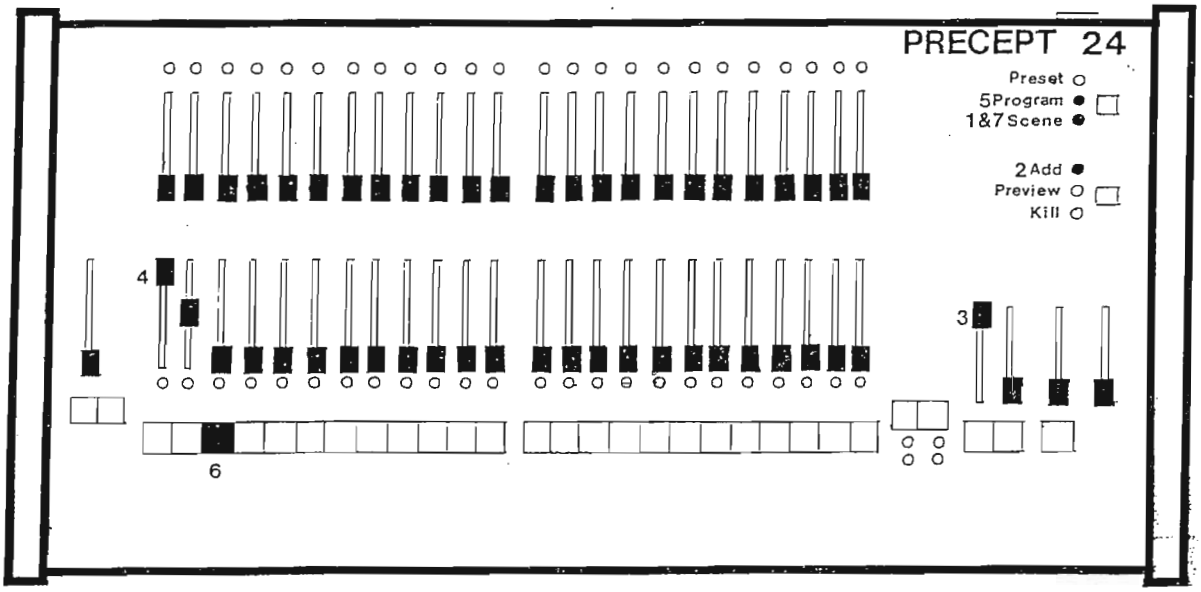
A useful rule to remember is that if you have lights on stage, regardless of how they got there, they can be recorded as a scene. The method outlined below shows how to record a new scene by combining two or more pre-recorded scenes.

1. Turn the MODE SWITCH to **SCENE.**
2. The SOLO BUTTON CONTROL SWITCH should be in **ADD** or **KILL** but **NOT PREVIEW.**
3. Bring up the RED MASTER fader.
4. Bring up two or more faders on the RED BANK which already contain pre-recorded scenes. For the sake of this exercise we will assume that you bring up faders number 1 & 2. The lights now on stage will be a combination of those two scenes.
5. Turn the MODE SWITCH to PROGRAM. (Note that the SCENE and PROGRAM LEDs flash alternately. This will be explained later.)
6. Press a CHANNEL BUTTON to record the new scene. Let us assume you press the CHANNEL BUTTON beneath RED BANK fader number 3. The CHASE MIMIC LEDS will flash once rapidly.
7. Turn the MODE SWITCH from PROGRAM to SCENE. Bring up the RED MASTER and RED BANK fader number 3 to playback the new scene.

NOTE.
Had you wished you could have added extra channels from the YELLOW BANK to help build up the new scene.

RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

fig. 6



2. OPERATING INSTRUCTIONS

'BLIND' PROGRAMMING.

From time to time you may find it necessary to program a scene without having lights come on stage. For example during a performance you may be playing back one scene while programming another. This is called 'blind' programming.

1. TURN THE Mode switch to **PRESET.**
2. The SOLO BUTTON CONTROL SWITCH should be in **ADD** or **KILL** but **NOT PREVIEW.**
3. **Leaving the YELLOW MASTER at Ø** bring up some channels on the YELLOW BANK.
4. Turn the MODE SWITCH to **PROGRAM.**
5. While holding down the YELLOW SOLO MASTER BUTTON ....
6. Press the desired CHANNEL BUTTON. The SCENE MASTER above this button now stores the scene set up on the YELLOW BANK.
7. As soon as you have finished programming scenes **remember to switch the MODE SWITCH out of the PROGRAM position.**

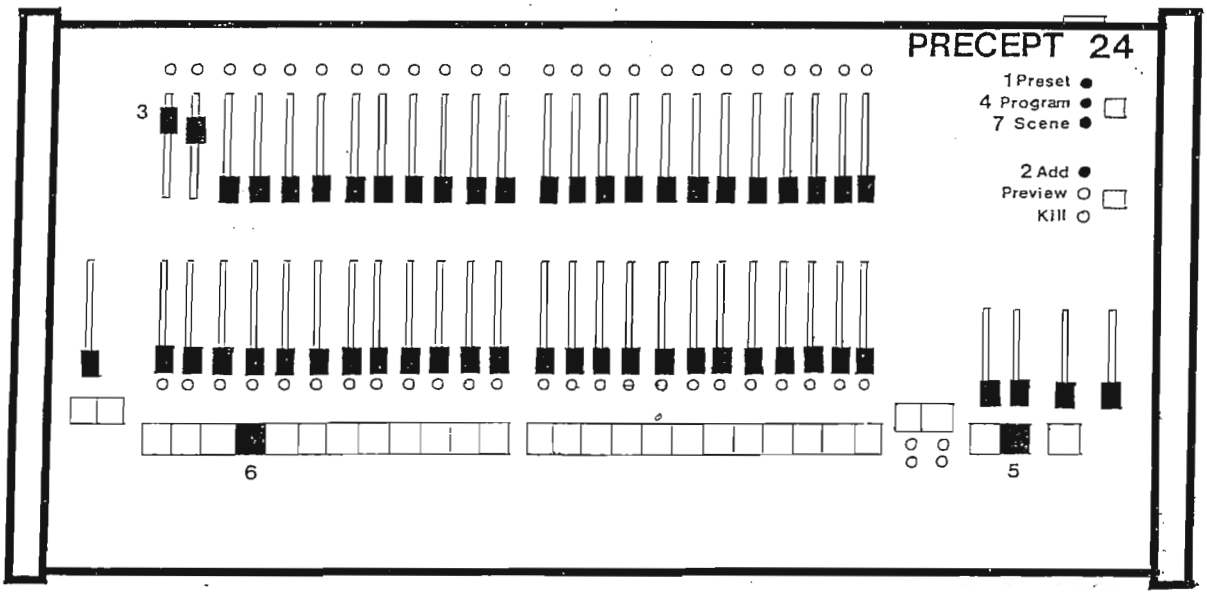
RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

NOTE.

Had you wished this process could have been carried out while a scene was on stage. In this case SCENE MODE would have been selected in step 1.

Blind programming can be carried out from the RED or YELLOW FADER BANK and in PRESET or SCENE MODE.

fig. 7



2. OPERATING INSTRUCTIONS

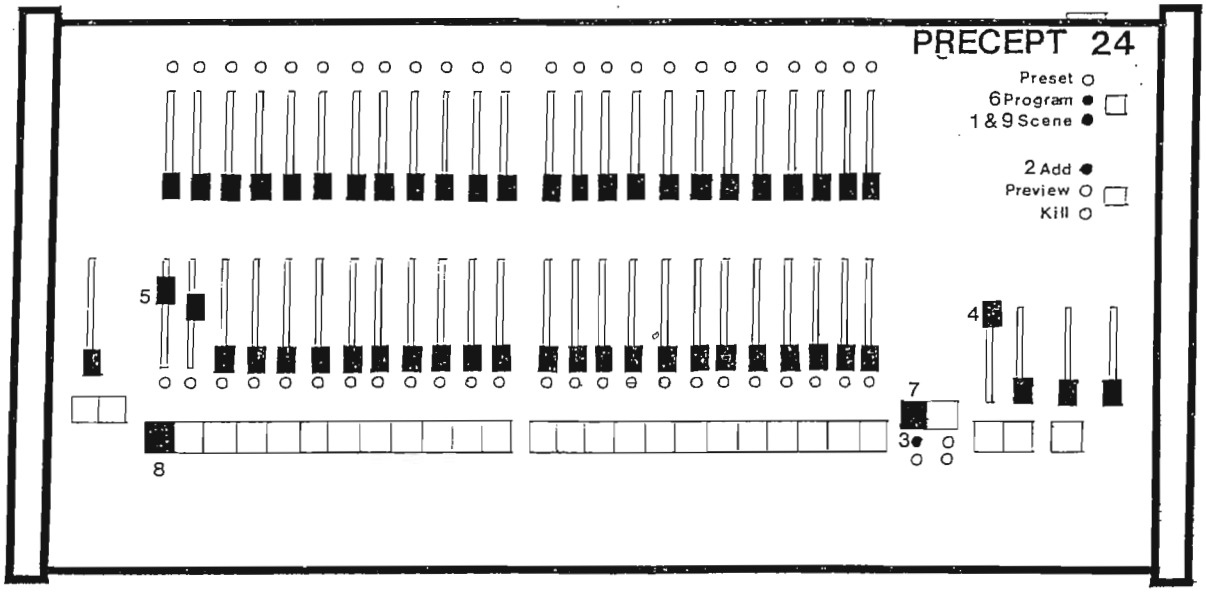
RECORDING ACROSS PAGES.

How to Record a new scene on page 2 from a combination of two or more scenes on Page 1.

1. Turn the MODE SWITCH to **SCENE.**
2. The SOLO BUTTON CONTROL SWITCH should be in **ADD** or **KILL** but **NOT PREVIEW.**
3. Select Page 1 on the SCENE MASTER PAGE SELECT.
4. Bring up the RED MASTER fader.
5. Bring up two or more faders on the RED BANK which already contain pre-recorded scenes. For the sake of this exercise we will assume that you bring up faders number 1 & 2. The lights now on stage will be a combination of those two scenes.
6. Turn the MODE SWITCH to PROGRAM. (Note that the SCENE and PROGRAM LEDs flash alternately. This will be explained later.)
7. Press the SCENE MASTER PAGE SELECT BUTTON. The Page 1 LED will go out and the Page 2 LED will flash on and off.
8. Press a CHANNEL BUTTON to record the new scene. Let us assume you press the CHANNEL BUTTON beneath RED BANK fader number 1. The CHASE MIMIC LEDS will flash once rapidly.
9. Turn the MODE SWITCH from PROGRAM to SCENE. The Page 2 LED will stop flashing and the Page 1 LED will come on.

This new scene can be played back in the normal way but first you must select Page 2 via the SCENE MASTER PAGE SELECT BUTTON. Bringing up the RED MASTER and RED BANK FADER No. 1. will fade the new scene on stage.

fig. 8



2. OPERATING INSTRUCTIONS

SOME NOTES ON PROGRAMMING

We have seen with the 'blind' programming function that it is possible to program the desk and operate it at the same time. **Please Note** that when you have selected the PROGRAM position on the MODE SWITCH the desk is also in either PRESET or SCENE. The aternate flashing LEDs indicate this.

This can take a little getting used to. Try this as an exercise. Record a scene onto Scene Master number 1. Turn the MODE SWITCH to PRESET. Bring up RED BANK FADER number 1 and the RED MASTER the OUTPUT DISPLAY will show you that you only have one channel on stage. Turn to the PROGRAM position. Nothing happens, you still have one channel on stage. Turn to the SCENE position. Now you have Scene 1 on stage. Turn back to the PROGRAM position Scene 1 is still on stage.

* * *

If you have recorded a scene for playback on, for example, RED BANK fader number 1 and it is no longer required you may record another scene on top of it. This will cancel the old scene and replace it with the new.

Before starting a new production some people prefer to clear all previously recorded scenes from the desk. This can easily be done. In effect you program in nothing. Make sure all faders are down and there are no lights on stage. Select the PROGRAM position on the MODE SWITCH. Press all the CHANNEL BUTTONS one after the other. The desk will now be clear. Switch out of PROGRAM MODE before continuing. (If you forget to do this you may accidentally record over a scene!).

* * *

It is also useful to remember that the memory of the desk is backed-up by a battery. If the desk is disconnected from the power supply it will maintain its memory for 2 - 4 weeks. No harm can come to the desk by leaving it plugged in and switched on.

2. OPERATING INSTRUCTIONS

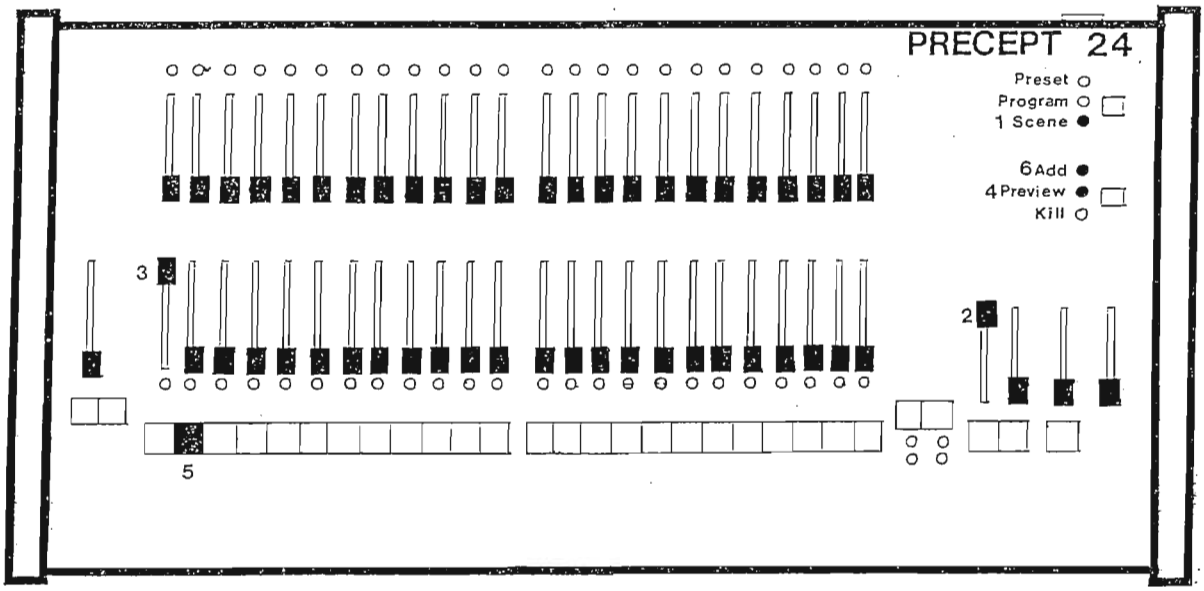
THE PREVIEW FUNCTION.

From time to time you may want to check on the contents of a pre-recorded scene. Obviously this can be done by bringing the lights up on stage. This is not a suitable procedure in the middle of a performance. The PREVIEW function allows you to use the OUTPUT DISPLAY to check on the contents of a scene while you are playing back another scene. In the example below Scene 1 is on stage, Scene 2 will be Previewed.

1. Turn the MODE SWITCH to SCENE.
2. Bring up the RED MASTER.
3. Bring up RED BANK fader number 1. The OUTPUT DISPLAY will mimic the scene on stage.
4. Turn the SOLO BUTTON CONTROL SWITCH to PREVIEW.
5. Press CHANNEL BUTTON number 2. The OUTPUT DISPLAY for Scene 1 will go out and be replaced by the OUTPUT DISPLAY for Scene 2 **but the lights on stage will not change.**
6. When you have finished Previewing it is important to remember to turn the SOLO BUTTON CONTROL SWITCH to ADD or KILL.

RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

fig. 9



2. OPERATING INSTRUCTIONS

THE SOLO BUTTONs.

So far we have used the CHANNEL BUTTONS for two different functions. Firstly in the process of recording a scene, secondly for Previewing recorded scenes. There is a third use of these buttons which relates to the operation of the desk during a performance. The CHANNEL BUTTONS can be used as Solo Buttons (another common name is Flash Buttons). This can be done in Preset or Scene Mode. In Preset Mode they will flash a single channel, in scene mode they will flash the entire scene. The Solo Button function works in two ways known as ADD and KILL. First we will describe the ADD function. For the sake of this exercise record channels 1 and 2 at Full as Scene 1 and channels 3 to 24 at Full as scene 2.

2. OPERATING INSTRUCTIONS

THE 'ADD' SOLO BUTTON FUNCTION.

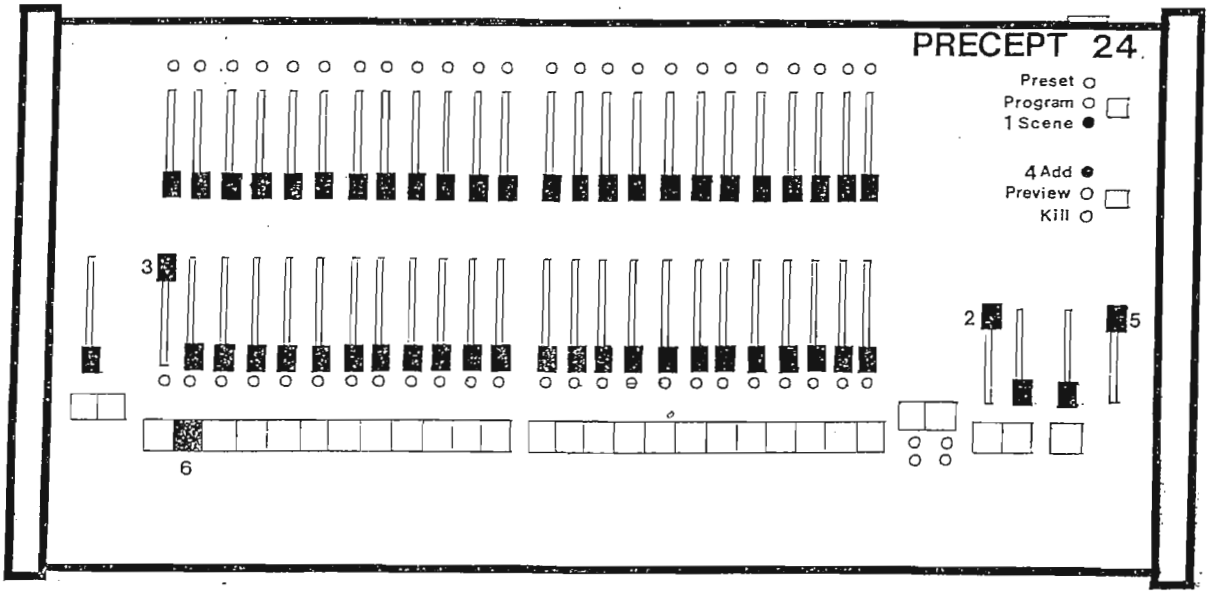
1. Turn the MODE SWITCH to SCENE.
2. Bring up the RED MASTER.
3. Bring up RED BANK fader number 1. The OUTPUT DISPLAY will mimic the scene on stage (channels 1 & 2).
4. Turn the SOLO BUTTON CONTROL SWITCH to ADD.
5. Bring up the SOLO MASTER.
6. Press CHANNEL BUTTON number 2. As long as you hold your finger on this button Scene 2 will come on stage. Scene 1 is not affected.

   RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

NOTE.

The SOLO MASTER allows you to set an overall level for any scene or channel being controlled via a SOLO BUTTON.
It is called the ADD function because it allows you to use the Solo Buttons to add a scene or channel to the output of the desk.
If you wish you may also use the MASTER BUTTONS as Solo Buttons. In this case the contents of the relevant Fader Bank will flash on stage. To see how this works bring up some channels on the YELLOW BANK with the YELLOW MASTER at Ø. Bring up the SOLO MASTER then press the YELLOW MASTER BUTTON. The scene set up on the YELLOW BANK will flash on stage. The same effect would be achieved if you had used the RED BANK but notice the different results when you have the MODE SWITCH in PRESET compared to SCENE.

fig. 1Ø



2. OPERATING INSTRUCTIONS

THE 'KILL' SOLO BUTTON FUNCTION.

Having seen how ADD function works repeat the process but this time select the KILL position of the SOLO BUTTON CONTROL SWITCH. The effect will best be seen if we bring up scene 2 on stage and press CHANNEL BUTTON number 1.

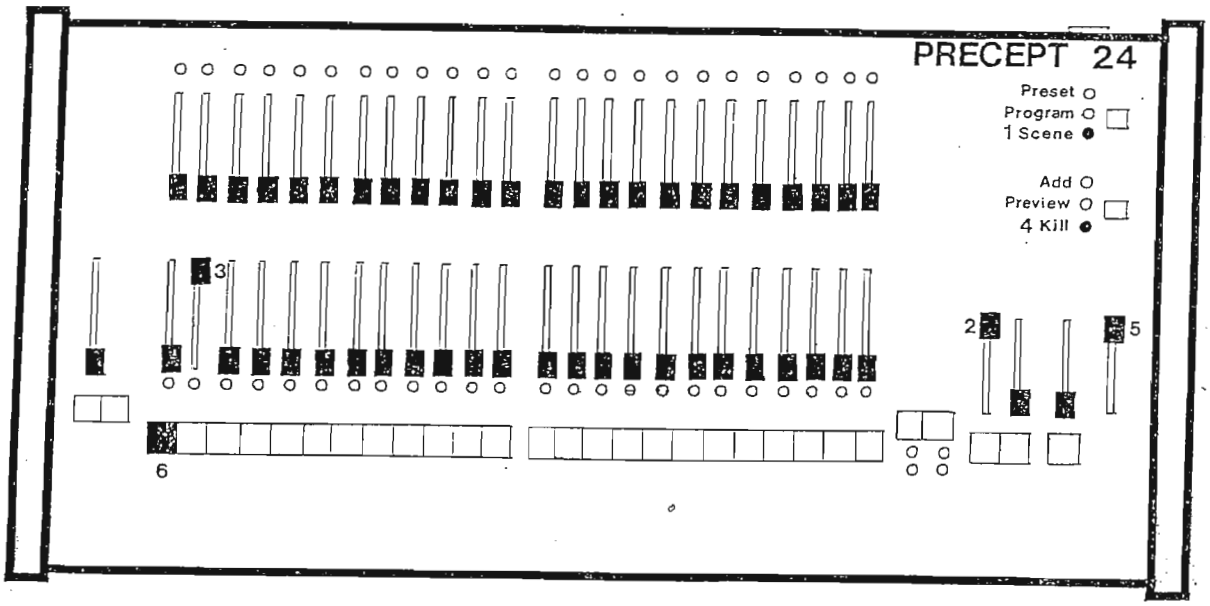
1. Turn the MODE SWITCH to SCENE.
2. Bring up the RED MASTER.
3. Bring up RED BANK fader number 2. The OUTPUT DISPLAY will mimic the scene on stage (channels 3 to 24).
4. Turn the SOLO BUTTON CONTROL SWITCH to KILL.
5. Bring up the SOLO MASTER.
6. Press CHANNEL BUTTON number 1. As long as you hold your finger on this button Scene 1 will come on stage and all other outputs from the desk will be extinguished (killed).

RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

NOTE.

The KILL function can be used to give a **Direct Black Out** (D.B.O.). If the SOLO MASTER is at Ø and the SOLO BUTTON CONTROL SWITCH is in the KILL position any Solo Button can be used to obtain a blackout.

fig. 11



2. OPERATING INSTRUCTIONS

THE CHASE FUNCTION.

The PRECEPT 24 allows you to record 48 scenes to be played back via the Scene Master (the RED BANK). It also allows you to record two Pages of 24 scenes to be used with the Chase Function. Chase Scenes are recorded in the normal way **except** that the CHASE MASTER SOLO BUTTON is held down to indicate that a chase scene is being programmed.

The two Chase Pages enable you to Program **two different Chasers.**

Described overleaf is the simplest method of Programming Chase Scenes but please note that you can use any of the methods of recording a scene described earlier (e.g. 'blind programming') to record a Chase Scene as long as you hold down the CHASE MASTER SOLO BUTTON.

Once you have programmed one chase in Chase Page 1 you can go on to program a different chase in Chase Page 2.

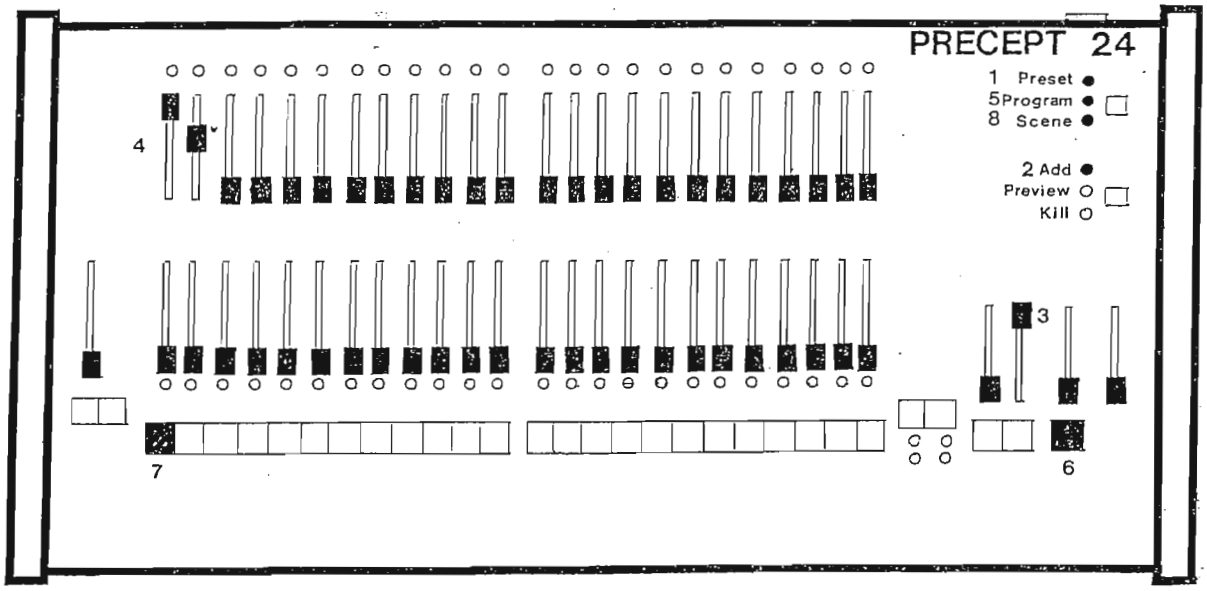
2. OPERATING INSTRUCTIONS

PROGRAMMING THE CHASE SCENES.

1. The MODE SWITCH should be in the PRESET position.
2. The SOLO BUTTON CONTROL SWITCH should be in **ADD** or **KILL** but **NOT PREVIEW.**
3. Bring up the YELLOW MASTER fader.
4. Bring up the required channel faders on the YELLOW BANK until you have light levels set up as required.
5. Select the **PROGRAM** position on the MODE SWITCH.
6. While holding down the CHASE MASTER SOLO BUTTON.....
7. Press any of the twenty four CHANNEL BUTTONS. Repeat the process to record more Chase Scenes.
8. As soon as you have finished programming **remember to switch the MODE SWITCH out of the PROGRAM position.**

RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

fig. 12



2. OPERATING INSTRUCTIONS

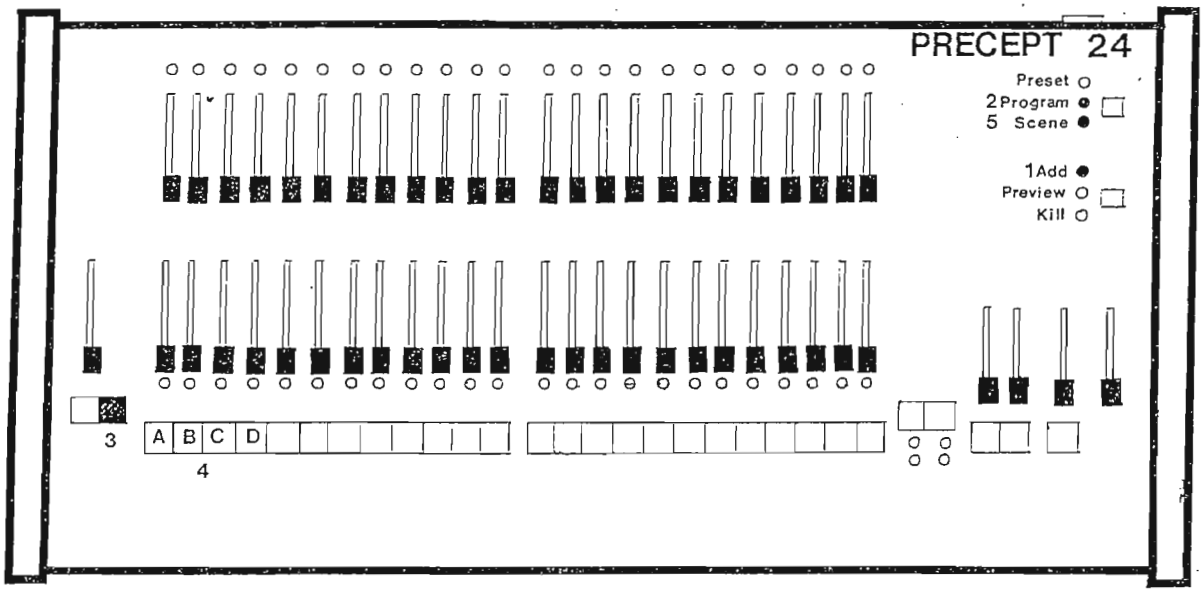
PROGRAMMING THE SEQUENCE.

Having recorded up to 24 Chase Scenes next you need to program the order in which you want them to appear. The order in which the scenes appear is called the Sequence. It is not necessary to use all 24 Chase Scenes and you may, if you wish, use any Chase Scene more than once. A sequence is made up of a number of steps. The maximum number of steps permitted by the PRECEPT 24 is 255. Described below is the method of programming a four step sequence. It will be necessary to record four Chase Scenes.

1. The SOLO BUTTON CONTROL SWITCH should be in **ADD** or **KILL** but **NOT PREVIEW.**
2. Select the **PROGRAM** position on the MODE SWITCH.
3. While holding down the DIRECTION/SEQUENCE BUTTON....
4. Press CHANNEL BUTTON 1, then CHANNEL BUTTON 2, then CHANNEL BUTTON 3, then CHANNEL BUTTON 4.
5. As soon as you have finished programming **remember to switch the MODE SWITCH out of the PROGRAM position.**

RETURN ALL FADERS TO Ø BEFORE CARRYING ON TO THE NEXT STEP.

fig. 13



2. OPERATING INSTRUCTIONS

RUNNING THE CHASER.

Having programmed the chase scenes and the sequence you can now run the chase.

1. Bring up the CHASE MASTER fader

2. Bring up the CHASE SPEED CONTROL.

NOTE

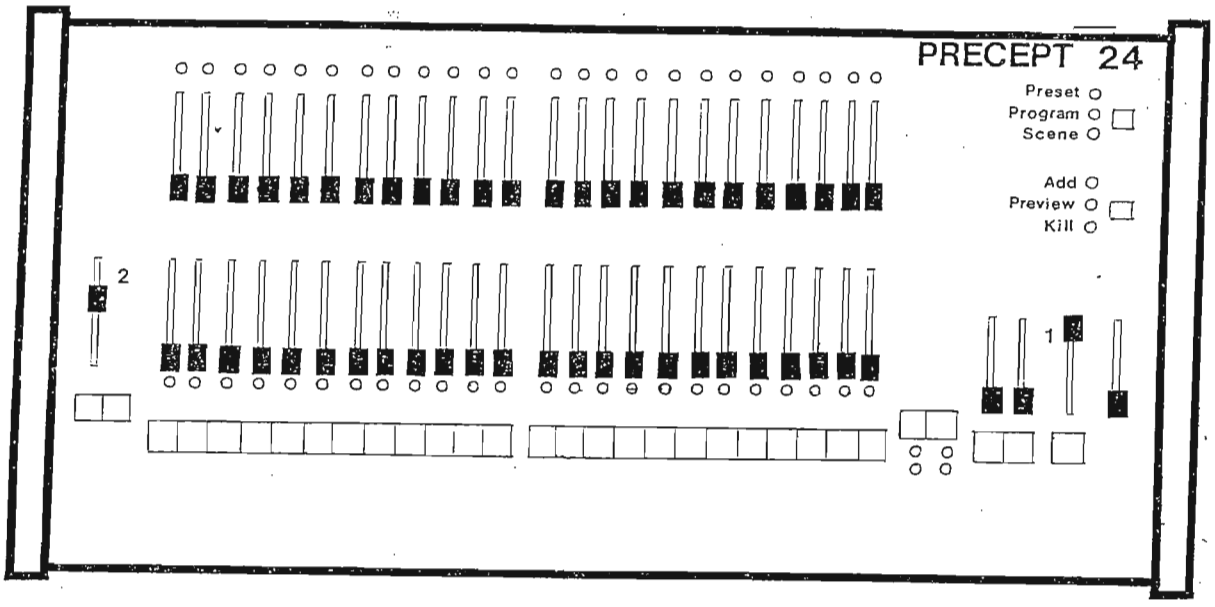
The CHASER MIMIC will tell you which Chase Scene is in use and the OUTPUT DISPLAY which channels are appearing on stage. You may run the Chase while using other functions of the desk.

When the Chase is running you may reverse the order of the sequence by holding down the DIRECTION/SEQUENCE BUTTON.

When the CHASE SPEED CONTROL is at Ø you may use the SINGLE STEP BUTTON. Each time you press it the sequence advances by one step.

An external trigger may also be used to duplicate the functions of the SINGLE STEP BUTTON by connecting into the REMOTE JACK INPUT on the back of the desk.

fig. 14



3. INSTALLATION

How to Connect the Dimmer Rack(s) - L.S.C. DIMMER RACKS.

The PRECEPT provides two 14 pin Cannon plugs each on the end of a 2 metre long tail. These connectors are directly compatible with the input socket of the SERIES A, 2.4kVA per channel dimmer racks and therefore the two may be directly connected.

The pin definitions for the PRECEPTs output connectors are shown below.

PIN DEFINITION OF PRECEPT OUTPUT CONNECTORS

PIN	DESCRIPTION	
	Connector 1.	Connector 2.
A	Channel 1 output.	Channel 13 output.
B	Channel 2 output.	Channel 14 output.
C	Channel 3 output.	Channel 15 output.
D	Channel 4 output.	Channel 16 output.
E	Channel 5 output.	Channel 17 output.
F	Channel 6 output.	Channel 18 output.
G	Channel 7 output.	Channel 19 output.
H	Channel 8 output.	Channel 20 output.
I	Channel 9 output.	Channel 21 output.
J	Channel 10 output.	Channel 22 output.
K	COMMON 0V (earth).	COMMON 0V (earth).
L	Not connected	Not connected
M	Channel 11 output.	Channel 23 output.
N	Channel 12 output.	Channel 24 output.

How to connect the Dimmer Rack(s) -OTHER MANUFACTURERS RACKS

Connecting PRECEPT to most of the currently available dimmer racks on the Australian market is made simple by it's adjustable output and flexible power needs.

Provided that the dimmer can accept the input signals described in section 3.4 then only a linking cable that correctly connects the pins as outlined above will be required.

NOTE: To minimize the effect of long control cables it is recommended that good quality cable containing a heavy earth shield is used and that this and any spare lines be connected to the two 'K' pins to form a low resistance earth path between dimmer and desk.

Power Requirements

The power for the PRECEPT is provided by an external Plug-pak of 24 Volts AC @ 750mA supplied with your PRECEPT.

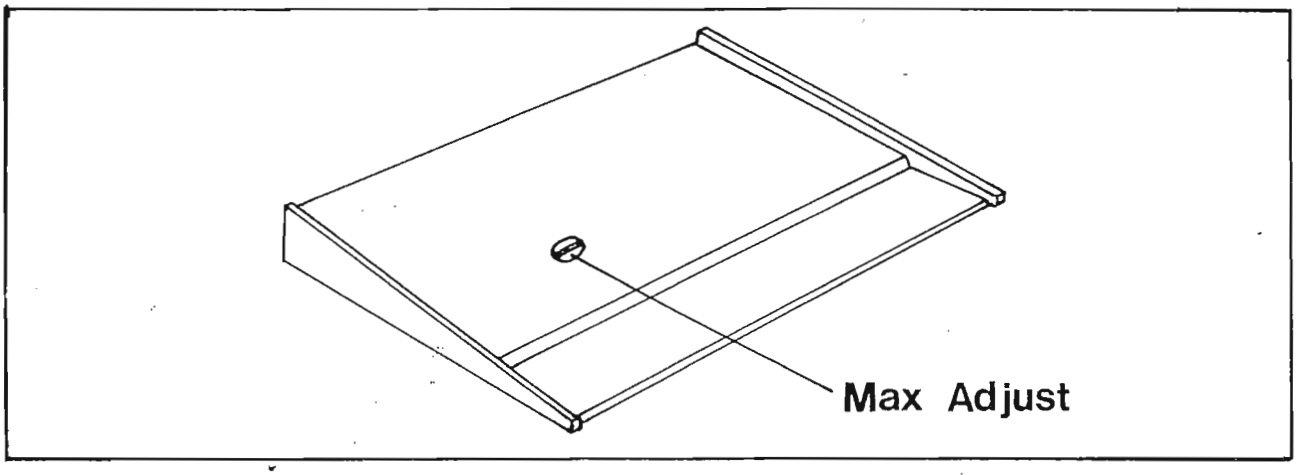
3. INSTALLATION

Control Voltage Adjustment.

The PRECEPT output voltage is factory set for a +1Ø Volt maximum control voltage however, this is adjustable between +5V to +1ØV.

The output voltage range is adjusted by a slotted rotary control accessed from the bottom of the PRECEPT as shown in fig. 4 This adjustment should be done with a small screwdriver (ref. 3.5 Set up Procedure).

fig. 15



Set Up Procedure.

1. Ensure that the dimmer rack accepts the same polarity signals as your PRECEPT and that it is correctly connected (ref. sections 3.1 & 3.2).
   SET ALL FADERS TO THE ZERO (Ø) position, switch the MODE SWITCH to the PRESET position and apply power to the dimmer and the PRECEPT. The LED indicator beside the MODE SWITCH should be glowing.

2. With a suitable lamp connected to one of the dimmer channels, raise the corresponding YELLOW CHANNEL fader and YELLOW MASTER FADER of the PRECEPT to the full on position (1Ø). If the dimmer is the correct polarity and uses a 1Ø volt maximum input signal (as do the L.S.C. racks) then the lamp should correctly light up to full intensity. All PRECEPTs are factory set for a 1Ø Volt maximum.
   Provided that the lamp has come on at full intensity and that by lowering the channel fader the light can be smoothly dimmed then the desk is now ready for use.
   If the lamp fails to glow or cannot be dimmed then check that the correct power, output voltage polarity and levels have been met. If no error can be found then contact qualified personnel.
   If the lamp does not reach its full intensity or does not dim over the full range of the fader then continue on with the adjustment below.

3. With the power still connected, lift the PRECEPT up to gain access to the output level MAX ADJUST slot (ref. fig. 4) and rotate this until the maximum output brightness is just achieved at the maximum fader position.
   The PRECEPT is now ready for use.

3. INSTALLATION

Connecting to the Remote Input Jacks

To single step the Chaser via the REMOTE INPUT the PRECEPT expects the signal line on the tip of the phono plug to be switched to the Ø volt line on the ring of the plug. The PRECEPT detects the **closing action** of any foot or pressure switch connected between these two lines.

For the operator who wishes to connect a control signal directly to the PRECEPT the actual switching voltage level is approximately 2 volts. The control signal must therefore fall cleanly from above 4 volts to below Ø.5 volts to ensure a reliable single step trigger. Such a control signal should not exceed +2Ø volts relative to the ground of the PRECEPT i.e. the ring connector.

Remote Input Specification.

* Stereo phono jack.
  Tip connection - Signal line
  Ring connection - ØV signal ground line.
  Case connection - Shield ground.

* Signal Type.
  Detects falling edge.
  Threshold at 2 volts.
  Maximum signal ±2Ø volts

4. MAINTENANCE

Safety and Protection.

The PRECEPT uses no high voltages and unless the dimmer racks have been grossly misconnected there is no danger of electrocution.

The PRECEPT's internal electronics is protected by a 1 Amp Slow-blow fuse located inside the desk on the PCB. Whilst this fuse should not need replacing under normal circumstances, it is essential that if it is replaced, it is only replaced with a similar one having a 1 Amp rating. For inspection of this fuse only the left timber end need be removed since the fuse is mounted at the top left corner of the PRECEPT.

Looking after the PRECEPT.

The PRECEPT is a rugged piece of electronics designed to cope with a moderate amount of hard living, however it is still vulnerable to constant misuse and neglect. Always observe the following:

* DO NOT DROP FOOD, DRINK OR ANY OTHER LIQUID ONTO THE DESK!

* If a drink or other corrosive liquid is spilt over the desk and into the faders then the the PRECEPT should be internally cleaned and dried AS SOON AS POSSIBLE. Note that only experienced personnel should attempt this type of maintainence.

* Do not apply excess force on any of the controls. Spare parts and service are available, but prevention is better than cure (and cheaper too!).

* If the desk is to be used "on the road" then an appropriate protective road case should be obtained.

* When connecting up dimmers or remote inputs etc. make sure that it has been done correctly BEFORE applying power. If any doubt exists about what is correct then obtain assistance from qualified personnel.

* To clean the metal surfaces and labelling of the desk a little Methylated Spirits can be used.

4. MAINTENANCE

Spare Parts List.

PRODUCT CODE	DESCRIPTION
PC12P	Precept 12 channel computer lighting Desk (pos. O/P)
PC12N	Precept 12 channel computer lighting Desk (neg. O/P)
PC24P	Precept 24 channel computer lighting Desk (pos. O/P)
PC24N	Precept 24 channel computer lighting Desk (neg. O/P)
PCINV	Precept inverter card (converts +ve to -ve.)
PC36	Precept 36 channel computer lighting desk
SP2000	Slide knob - Red
SP2001	Slide knob - Yellow
SP2003	Slide knob - Green
SP2004	Slide knob - Grey
SP2110	Pushbutton switch - Solo buttons
SP2020	Pushbutton cap - grey (Solo buttons)
SP2104	Select switch - White PRESET/SCENE
SP2105	Select switch - Grey ADD/KILL
SP2200	Slide Pot 60mm
SP4010	Plug-pak for PRECEPT control desks
SADP	Series A Dimmer Pack, 12 x 2.4kVA channels
SDDP	Series D Dimmer Pack, 6 x 5kVA channels - std
SDDPS	Series D Dimmer as above with 400uS filter.
TSDP	Tour Series Dimmer Pack, 12 x 2.4k.VA channels
SP1202	Fuse 1 Amp SLO BLO rating
SP1600	Cannon 14 way chassis socket (CA3102E 20-27SB)
SP1601	Cannon 14 way inline plug (CA3106E 20-27PB)
SP1602	Cannon 14 way inline socket (CA3101E 20-27SB)
SP3100	Control Cable for 12 ch. system - 10 mtr.
SP3102	Control Cable for 12 ch. system - 20 mtr.
SP3103	Control Cable for 12 ch. system - 30 mtr.
SP3105	Control Cable for 12 ch. system - 50 mtr.
SP3113	Control Cable for 24 ch. system - 30 mtr.
SP3115	Control Cable for 24 ch. system - 50 mtr.