Also available from LightProcessor

QCommander automated lighting control system

QCommander 256 (standard and extended models)

QCommander 512 (standard and extended models)

Input Extender fader panel

Replica memory store and playback unit

•DMX Tools

DMuX demultiplexer Store memory store and playback unit Merge DMX merge and multiplexer Buffer DMX splitter, isolator and booster

- •Paradime digital dimmer range
- •Dimension installation dimming range
- •Analogue and DMX 2-preset desks

Q12

Q24

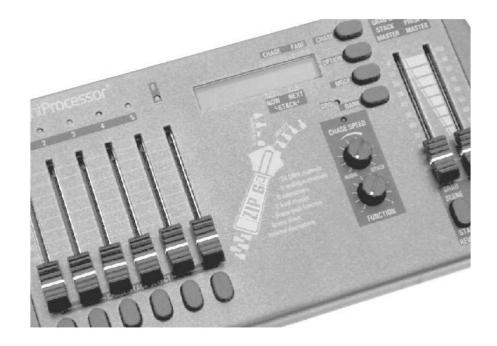


www.lightprocessor.co.uk info@lightprocessor.co.uk

Note the serial numbers of the products in this installation and quote them when seeking help.

ZIP SERIES DESKS

INSTALLATION AND OPERATING MANUAL





Thank you for buying a LightProcessor product. To obtain the best results, please read this instruction manual carefully.



Nous vous remercions d'avoir acheté un produit LightProcessor. Pour obtenir les meilleurs résultats, nous vous prions de bien vouloir lire attentivement ce manuel.



Wir bedanken uns für die Wahl eines LightProcessor-Produktes. Für eine reibungslose Bedienung lesen Sie sorgfältig dieses Handbuch.



Le damos las gracias que Ud. ha comprado un producto de LightProcessor. Para los mejores resultados lea cuidadosamente este manual.



Please be aware of the following warning notices and their meaning! Veuillez faire attention aux avertissements suivants! Beachten Sie bitte die folgenden Warnungen! Dese cuenta de los siguientes avisos importantes!



CAUTION! RISK OF ELECTRIC SHOCK ATTENTION! RISQUE DE CHOC ELECTRIQUE ACHTUNG! GEFAHR EINES STROMSCHLAGES ¡ATENCION! PELIGRO DE SHOCK ELECTRICO



CAUTION! REFER TO INSTRUCTION MANUAL ATTENTION! REFEREZ-VOUS AU MODE D'EMPLOI ACHTUNG! BEACHTEN SIE BITTE DIE BEDIENUNGSANLEITUNG ¡ATENCION! REFERIRSE AL MANUAL DE INSTRUCCIONES



IT IS ESSENTIAL THAT YOU MAKE AN EARTH CONNECTION BEFORE CONNECTING THE EQUIPMENT TO THE MAINS SUPPLY .
IL EST INDISPENSABLE DE RACCORDER L'APPAREIL A LA TERRE AVANT D'ETABLIR LA CONNECTION AU SECTEUR.
VOR ANSCHLUSS DES APPARATS BITTE UNBEDINGT EINE ERDUNG DURCHFÜHREN.

ALTA VOLTAJE. NECESITA ABSOLUTAMENTE UNA CONEXION CON TIERRA ANTES DE HACER LA CONEXION A LA RED.

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Le contenu de cette documentation n'est donné qu'à titre indicatif et peut changer sans avis préalable. LightProcessor Limited n'accepte pas de responsabilité pour n'importe quelle erreur ni omission.

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El contenido de este documento es dado para su información solamente y está sujeto a cambios sin previo aviso. LightProcessor Limited aceptan ininguna responsabilidad para errores y omisiones.

WARRANTY STATEMENT

LightProcessor provides a warranty against manufacturing defects for all Products for a period of eighteen months from date of shipping to the Customer provided that the Products have not been subjected to any unauthorised modification or repair.

LightProcessor shall not be liable to the Customer by reason of any representation or any implied warranty, condition or other term or any duty at common law for any indirect, special or consequential loss or damage, costs, expenses, or other claims for compensation whatsoever which arise out of or in connection with the sale or supply of the Products or their use or resale by the Customer.

All items added to the Product by the Customer, its agents or customers, must be removed from the Product prior to return to LightProcessor. The return of the Product shall authorise LightProcessor to remove any such items. LightProcessor shall not be obliged to reconnect any such items before returning the Product. LightProcessor will not be under any liability in respect of such items.

The liability of LightProcessor to its Customers for death or personal injury resulting from our negligence is unlimited. Apart from that, LightProcessor will not in any event be liable to its Customers for indirect or consequential loss, and any liability on behalf of Lightprocessor for any loss or expense shall be limited to the contract price of the defective goods.

The cost of shipping defective Product back to LightProcessor is borne by the Customer. The cost of shipping back to the Customer is borne by LightProcessor.

LightProcessor reserves the right either to repair or replace any defective Product.

WARRANTY REPAIRS PROCEDURE

Prior to any Product being shipped for warranty repair or replacement the Customer must have applied for a "Warranty Authorisation Number". These can be obtained from the Sales Administration Manager at LightProcessor's Head Office.

LightProcessor will then issue a 'Warranty Fault Report' that must be completed in all respects by the Customer. Failure to complete the 'Warranty Fault Report' may cause delays in processing the repair of the Product.

The completed 'Warranty Fault Report' may either be Faxed, E-Mailed, Mailed or accompany the Product when it is returned

LightProcessor will advise the Customer within 1 working day of the receipt of the Product or the Warranty Fault Report, whichever is the later, whether or not its accepts that the Product is covered under Warranty.

Warranty Repairs will be completed within 2 working days, subject to spare parts being available, and will be returned to the Customer without delay.

Should a Product be returned for repair in damaged packaging or other than its original, LightProcessor reserves the right to re-package the Product in its correct packaging and to charge £20.

NON-WARRANTY REPAIRS PROCEDURE

Prior to any Product being shipped for repair the Customer must have applied for a "Repair Authorisation Number". These can be obtained from the Sales Administration Manager at LightProcessor's Head Office.

LightProcessor will then issue a 'Repair Fault Report' that must be completed in all respects by the Customer. Failure to complete the 'Repair Fault Report' may cause delays in processing the repair of the Product.

The completed 'Repair Fault Report' may either be Faxed, E-Mailed, Mailed or accompany the Product when it is returned

LightProcessor will advise the Customer within 5 working days of the receipt of the Product or the Repair Fault Report, whichever is the later, the Estimated Cost of Repair excluding labour and carriage.

Non-Warranty Repairs will be completed within 10 working days of receipt by the Customer of the Repair Cost Estimate, subject to spare parts being available, and will be returned to the Customer without delay.

Should a Product be returned for repair in damaged packaging or other than its original, LightProcessor reserves the right to re-package the Product in its correct packaging and to charge £20.

LightProcessor Zip Desks, version 2.0, September, 2003

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ACCESSORIES PACKED WITH THE PRODUCT

Instruction Manual Mains Adaptor

GENERAL INSTRUCTIONS

Read the instructions in this handbook carefully, as they give important information regarding safety during installation and use.

Be sure to keep this manual with the product for ease of future reference. If the product is sold or given to another operator, make certain that they also receive the manual. Further copies may be obtained from our website www.lightprocessor.co.uk

- •This product is not intended for home use.
- •After removing the packaging, check that the product is not damaged in any way. If in doubt, do not use it. Contact an authorised LightProcessor distributor.
- •Packaging material (plastic bags, foam, nails etc.) must not be left within the reach of children, as it can be dangerous.
- •The product must only be operated by adults. Do not allow children to tamper or play with it unsupervised.
- •Any electrical work necessary for installing the product must be carried out by a qualified electrician.

NEVER USE THE PRODUCT UNDER THE FOLLOWING CONDITIONS:-

- •In places subject to excessive humidity
- •In places subject to vibrations or bumps
- •In places with an ambient temperature in excess of 30°C or less than 0°C
- •Protect the product from excessive dryness or humidity (ideal conditions are between 35% and 80%)
- •Do not dismantle or modify the product
- •Ensure that no liquids or metal objects enter the product
- •Should any liquid be spilled on the product, disconnect the power supply immediately
- •In the event of serious operating problems stop using the product immediately and either contact the nearest LightProcessor distributor for assistance or contact the manufacturer directly
- •Never try to repair the product yourself. Repairs by unqualified people could cause damage or faulty operation and may invalidate the warranty. Contact your nearest LightProcessor dealer
- •When carrying out any work, always comply (particularly regarding safety) with all regulations in force in the country in which the product is being used

ALWAYS INSIST ON ORIGINAL SPARE PARTS BEING FITTED

SPECIFICATIONS

All Zip desks:

Low voltage control desk outputting 0 to +10V analogue and USITT DMX (1990). DMX start address selectable.

PSU input 9-12V AC or 15-18V DC.

Preset master, grab master, channel slider and flash button to each channel. Blackout switch.

Three operating modes - channels, sub-masters, sub-go's.

Level chase function, internal microphone.

Zip 6

6 analogue control channels

24 DMX channels

6 scene memories

6 chase memories of 40 steps each

Weight: 2Kg.

Dimensions: 280 x 145 x 45mm.

Zip 12

12 analogue control channels

36 DMX channels

12 scene memories

6 chase memories of 40 steps each

Weight: 2.5Kg.

Dimensions: 370 x 145 x 45mm.

Zip 18

18 analogue control channels

36 DMX channels

18 scene memories

6 chase memories of 40 steps each

Weight: 3Kg.

Dimensions: 460 x 145 x 45mm.

SPARE PARTS

Item	Reference
PSU	ZIPPSU
Switch Cap	LED-4
Switch	PS-1012-D2
Slider Cap	SLIDE/KNOB
Slider	P10KLINSLI
Chase/Function pot.	918-866
End Cheeks (pr.)	ZIP/CHEEK

ALWAYS INSIST ON ORIGINAL SPARE PARTS BEING FITTED

QUICK SET-UP AND INSTALL

- 1. Unpack the Product. (Ensure you do not throw away any accessories packed separately in the box.)
- 2. Set the product on a horizontal surface.
- 3. Connect control cables.
- 4. Apply power via the mains adaptor provided.

INTRODUCTION

The convention used in this manual is to refer specifically to values appropriate to the Zip 6 six-channel desk with the corresponding values for the Zip 12 and Zip 18 appearing in brackets.

Part I refers to desk operation when using the analogue output(s). Additional features and the extended range of channels available to the user, made possible by the use of DMX, are described in Part II.

To fully appreciate all the features offered by the Zip range of desks, you are advised to read this manual before using your desk.

Although the desks are primarily suited to use on a horizontal surface, they may be hand-held during use or wall-mounted. Keyhole slots are provided for wall mounting. The slots are centred on 180 (270, 360) mm.

LightProcessor Zip desks are multi-function lighting controllers that can operate as simple, single-preset channel controllers, as scene controllers or as chase generators. They output 0 to +10V analogue and USITT DMX (1990) signals simultaneously.

LightProcessor Zip desks connect to the mains via a power supply fitted with a Euro DC Jack connector, 9-12V AC or 15-18V DC. Electrical connection is indicated by illumination of the display. When power is applied, the desk boots up in the last mode used before the power was removed. To change modes, press MODE, rotate the FUNCTION control until the desired mode appears in the display. Press MODE.

RESET TO DEFAULT VALUES

HOLDING DOWN FLASH BUTTON 2 WHILE POWERING UP THE DESK DELETES ALL SCENES AND CHASES FROM MEMORY, ENABLES BLACKOUT, SETS THE CHASE STEP-TIME SCALE TO SHORT, SETS FLASH BUTTONS TO FLASH CHANNELS, DELETES ANY FADE TIME, SETS THE MODE TO CHANNELS MODE AND THE DMX ADDRESS TO 001.

Holding down flash button 3 while powering up the desk displays the software version number.



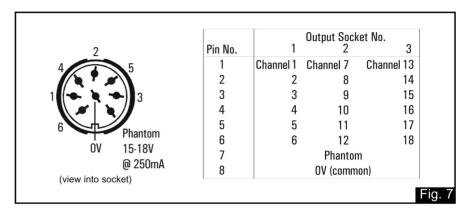
WARNING

THE KNOBS USED ON THE SLIDERS ON ZIP DESKS ARE A ONE-TIME-ONLY PUSH FIT. DO NOT REMOVE THEM! WE WILL NOT ENTERTAIN CLAIMS FOR WARRANTY REPLACEMENT.

CONTROL CONNECTIONS

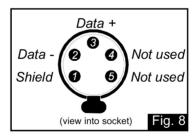
ANALOGUE

Control connections are made via 8-pin locking DINs with pin-outs as shown in Fig. 7 below. The table shows the corresponding socket/pin assignments for the Zip 12 and Zip 18 where there are two (three) output connectors.



DMX

The DMX control connection is made via a 5-pin XLR connector, as shown in Fig. 8 below.



PART II, DMX OUTPUT

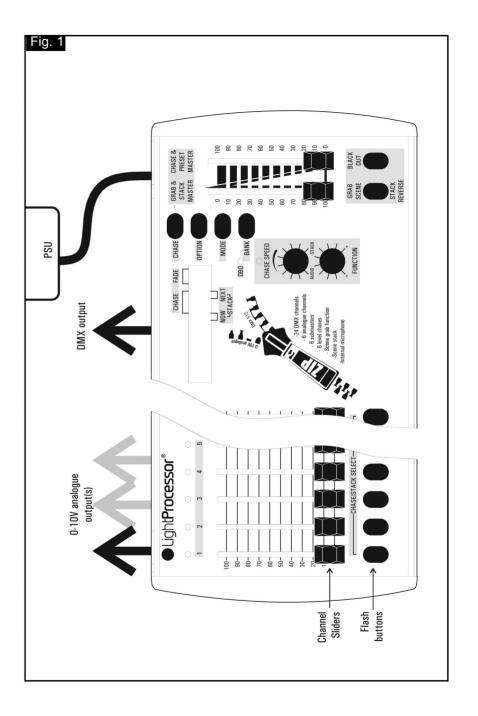
THE BANK CONTROL

The BANK control allows the Zip desk in DMX mode to control 24 (36, 36) channels.

Note that in CHANNELS mode the display shows CH1-6 (CH1-12, CH1-18) by default. Pressing the BANK control once changes the display so that it shows CH 7-12 (13-24, 19-36). Subsequent slider movements now control channels 7-12 (CH13-24, CH19-36), as they relate to the desk's DMX start address. Subsequent presses of BANK allow you to access further groups of six (12, 18) channels up to 24 (36, 36).

Make a scene of 24 (36, 36) channels as follows: in channels mode with the display showing CH1-6 (CH1-12, CH1-18) set up the six (12, 18) sliders to the desired levels and observe the output in the channel LEDs. Press BANK to pass to channels 7-12 (13-24, 19-36). Although you have not moved the sliders, all the LEDs have gone out. Slider movement has no affect on the output until the slider is moved through the current channel level; it may then be used to set a level for its relative channel with the range 7-12 (13-24, 19-36). Subsequent presses of the BANK button allow you to set up levels for further groups of channels before you are returned to the first bank. Press GRAB SCENE and then one of the flash buttons to allocate the scene to one of the six (12, 18) memories. If no memory is selected the 'grab' will time out.

LightProcessor Zip Desks, version 2.0, September, 2003



CHANNELS MODE

If you are unfamiliar with any of the terms used to describe the controls, please refer to the Fig. 1.

Although the BANK control is accessible at all times and functions whether or not a control connection is made, it has no relevance and has no effect on analogue output.

Apply the power and the desk boots up in the last mode used before the power was disconnected. If not in channels mode press MODE, rotate the FUNCTION control anti-clockwise until CHANNELS MODE appears in the display. Press MODE. The display shows CH 1-6 (CH1-12, CH1-18). Set the PRESET MASTER to 100% and the GRAB MASTER to 0. Moving the channel sliders 1-6 (1-12, 1-18) will vary the output levels of those channels between 0 and 100% and pressing the associated channel flash button beneath a slider will take the channel immediately to 100%. Note that the preset master controls the overall level of the channel sliders and the flash buttons. All channels may be taken instantly to 0 by pressing the BLACKOUT button and restored by a second press of the BLACKOUT button. The DBO LED blinks to indicate that a blackout is in force.

FADE

You may wish to apply a fade time to provide a smooth transition from one lighting state to the next. A fade time may be set via the OPTIONS menu, see page 11. The fade time applies to the PRESET MASTER and to the GRAB MASTER, not to the individual channel sliders.

MAKING A SCENE

Move the channel sliders to achieve the desired output. The overall level of the scene may be changed using the PRESET MASTER.

MOVING FROM ONE SCENE TO THE NEXT

Press GRAB SCENE. The current outputs are now the 'grabbed scene'.

Move the PRESET MASTER and the GRAB MASTER towards you simultaneously and note that the grabbed scene is still in the outputs and that the channel sliders are no longer required, in order to output the scene.

Set the next scene, moving the channel sliders to achieve the desired output but note that there will be no output from this new scene because the preset master is at zero.

SETTING THE START ADDRESS

ALL THE FUNCTIONS PREVIOUSLY DESCRIBED UNDER ANALOGUE OPERATION ARE ALSO AVAILABLE WHEN THE DESK IS USED WITH DMX OUTPUTS. ZIP DESKS OUTPUT 24 (36, 36) CONSECUTIVE CHANNELS OF DMX, USING THE BANK CONTROL DESCRIBED ON PAGE 14 TO ACCESS THE FULL RANGE OF CHANNELS.

The DMX start address may be any valid address, i.e. 1-489 for the Zip 6 (1-477 for the Zip 12 and Zip 18) and is set using the following procedure.

- 1. Disconnect the power to the desk.
- Hold flash buttons 1 and 5 pressed and apply power to the desk. The display shows DMX START [nnn]O, the O being a prompt to press OPTION after the desired address has been set.
- 3. Use sliders 1 and 2 to set the DMX start channel.
- Press OPTION to store the start address. The display confirms STORED OK.

When you perform a "button 2 reset", as described on page three, the DMX address is reset to its default value, 001.

OPTIONS cont'd

If no change was made to FLASH [CHANNEL], the display now says BLKOUT DISABLED/ENABLED. Use the FUNCTION control to change the selection. Press OPTION. If a change was made to the BLKOUT value, the display shows STORED OK and you exit the options, returning to the bank you were in prior to the first press of OPTION.

If no change was made to BLKOUT, the display now shows CHASE [SHORT]/[LONG]. Use the function control to change the selection. Press OPTION. If a change was made to the CHASE [SHORT]/[LONG] value, the display shows STORED OK and you exit the options and return to the bank you were in prior to the first press of OPTION.

If no change was made to CHASE [SHORT]/[LONG], the display now says DEL SCENES? [N]O. The default is NO and may be changed to YES by means of the FUNCTION control, rotating it clockwise. Press OPTION. If YES was selected, the display will prompt ARE YOU SURE? Press OPTION to confirm that you wish to delete all the scenes in memory. Where the answer to 'Are you sure?' is 'No', simply allow the desk to time out and leave the options menu automatically. The display will show STORED OK and you will return to the last bank you were in prior to the first press of OPTION.

If no change was made to DEL SCENES, the display now says DEL CHASES? [N]O. The default is NO and may be changed to YES by means of the FUNCTION control rotating it clockwise. Press OPTION. If YES was selected, the display will prompt ARE YOU SURE? Press OPTION to confirm that you wish to delete all the chases in memory. The display will show STORED OK and you will return to the last bank you were in prior to the first press of OPTION. Where the answer to 'Are you sure?' is 'No', simply allow the desk to time out and leave the options menu automatically.

If no change was made to DEL CHASES, the display now says DEL ALL? [N]O. The default is NO and may be changed to YES by means of the FUNCTION control rotating it clockwise. Press OPTION. If YES was selected, the display will prompt ARE YOU SURE? Press OPTION to confirm that you wish to delete all the scenes and all the chases in memory. The display will show STORED OK and you will return to the last bank you were in prior to the first press of OPTION. Where the answer to 'Are you sure?' is 'No', simply allow the desk to time out and leave the options menu automatically. Making no change and pressing OPTION again loops you back to the first option.

In all cases the letter O at the right hand end of the display for each option is to prompt you to press OPTION to confirm your selection.

CHANNELS MODE cont'd

Move the PRESET MASTER and the GRAB MASTER together fully away from you, taking the PRESET MASTER towards 100% and the GRAB MASTER towards 0. This produces a crossfade at the speed at which you move the masters or at a speed governed by any programmed fade time.

RECORDING SCENES TO MEMORY

The Zip desk can store six (12, 18) scenes of six (12, 18) channels.

In channels mode with the display showing CH 1-6, (CH 1-12, CH1-18) set up the six (12, 18) sliders to the desired levels. Press GRAB SCENE and then one of the flash buttons to allocate the scene to one of the memories, e.g. pressing flash button four will record the scene to memory number four. If no memory is selected the 'grab' will time out.

To play back a recorded scene, see the section "Sub-Mast Mode" on page 6 and/or "Sub-Go's Mode" on page 7.

BLACKOUT

All outputs may be brought instantly to 0 by pressing the BLACKOUT button. An active blackout is indicated by a flashing DBO LED. The blackout function may be disabled, if required; see the Options section on page 11.

SUB-MAST MODE

SUB-MAST is a playback mode for scenes that have been recorded in CHANNELS MODE.

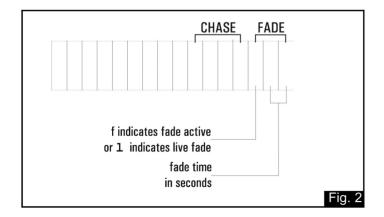
Enter SUB-MAST mode as follows:-

- 1. Press MODE.
- 2. Rotate the FUNCTION control until SUB-MAST appears in the display.
- 3. Press MODE. STORED OK appears in the display.

A scene is replayed by moving the appropriate slider 1-6 (1-12, 1-18) relating to the memory used to store the scene, e.g. if you pressed flash button 4 to store the scene to memory, use channel slider 4 now to recall the scene. Remember that the PRESET MASTER has overall control and cannot be set to 0 for there to be visible output. Several scenes may be output at the same time by moving their corresponding sliders

Flash buttons bring individual channels to full brightness but may be set to bring entire scenes to full (see the Options section on page 11).

Note the fade time status information given in the display. You might see, for example 'f11'. The 'f' indicates that a fade is active and the '11' signifies that the duration of the fade is 11 seconds, see Fig. 2 below. Where FLASH [SCENE] is active, fade times are ignored and pressing a flash button brings the corresponding scene to its full programmed level instantly but with reference to the PRESET MASTER, which has overall level control.



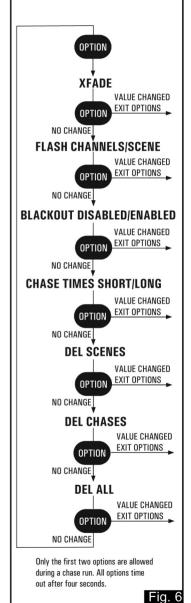
OPTIONS

The options may be set in channels mode only.

There are several options available to enhance the performance of the Zip desks: their selection makes use of the FUNCTION control. Note that where the FUNCTION control is active and sitting in any position other than fully anti-clockwise, it must be rotated past the position of the current setting in order to become active. Fig. 6 shows the layout of the options.

Press OPTION. The display shows XFADE [00]sO. Use the function control to select a fade time between 0 and 24 seconds. Turn the control fully clockwise to engage the LIVE position, indicated by [LV] in the display: selecting LIVE means that you can adjust the fade time at any time in any of the output modes, simply by turning the FUNCTION control, even while a programmed fade is in progress. Changes made using the 'Live' function are not stored to memory. Press OPTION. If a change was made to the XFADE value, the display shows STORED OK and you exit the options, returning to the bank you were in prior to the first press of OPTION.

If no change was made to XFADE, the display now says FLASH [CHANNEL]O or FLASH [SCENE]O. By default pressing a flash button brings the associated channel to full brightness FLASH [CHANNEL]. This option allows you to set the flash buttons to bring to full brightness the scene that occupies the corresponding memory FLASH [SCENE]. The values may be changed using the FUNCTION control, [CHANNEL] being at the lower end of the range and [SCENE] at the higher end. Press OPTION. If a change was made to the FLASH value, the display shows STORED OK and you exit the options and return to the bank you were in prior to the first press of OPTION.



PART I, ANALOGUE OUTPUT

STACKS

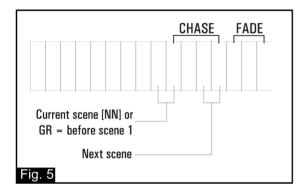
A stack is a series of scenes that you store as a chase and then recall in the order that they occur in chase. For the control of stacks the GRAB MASTER functions as the STACK MASTER and the GRAB SCENE button as STACK REVERSE.

A chase is saved as a stack by turning the CHASE SPEED control fully clockwise during programming or a prior chase run.

Running a stack:-

- 1. Press CHASE once. The display shows START CHASE \1-6.
- 2. Press a flash button to start one of the six chases. If it has been previously saved as a stack, step 1 will be output if the STACK MASTER is at 0. If the STACK MASTER is at 100%, the desk enters a wait-state, indicated by 'GR 01' in the display: this allows you to manually fade in the first scene by moving the stack master towards 0, see Fig. 5 below. Note that, until you reach 0%, you may reverse the fader back towards 100% and consequently re-establish the previous scene (or the wait-state) as the output step. However, once you reach 0, any movement back towards 100% will advance you towards step 2 but until you hit 100%, you may reverse back into step 1.
- 3. If you hold the STACK REVERSE button pressed, you will move backwards through the stack.

The stacks form a continuous loop of scenes. After the last scene in memory 1 you move forward to the first scene in memory 2 if memory 2 is empty, you move to memory 3. If you are holding the STACK REVERSE button pressed, you move backwards through the stack.



SUB-GO'S MODE

Sub-Go's is a further mode for scene playback but differs from Sub-Mast mode in that the scenes are accessed by use of the flash buttons.

Enter SUB-GO'S mode as follows:-

- 1. Press MODE.
- 2. Rotate the FUNCTION control until SUB-GO'S appears in the display.
- 3. Press MODE. STORED OK appears in the display.

The flash buttons act as GO buttons (triggers) for each scene. Any active fade time applies. The buttons operate on a swap priority, i.e. pressing a second button turns the first one off. The display indicates, e.g. SUB GO'S G001, to show which memory is active. Sliders also recall scenes but they work on an add priority, i.e. more than one slider may be active: where a channel receives several level instructions from different sliders, it is the highest level for that channel that is output.

Remember that the PRESET MASTER has overall control and cannot be set to 0 for there to be visible output.

PART I, ANALOGUE OUTPUT

CHASES

A chase is a sequence that, once triggered, continues to run until it is switched off. You can run a chase from channels mode and from sub-masters mode.

The Zip desks have six level chase memories, meaning that the level of each channel, as well as the channel(s) selected for output, is stored for each step. Each step of the chase can comprise up to 6 (12, 18) channels. Each chase may have up to 40 steps.

Chase run speed is adjusted by means of the CHASE SPEED control and speed is indicated by the speed at which the red LED flashes. At the bottom of the range (anti-clockwise) there is an AUDIO setting which makes use of the internal microphone for playing back the chase following a bass beat. When you are in the audio part of the range, a letter 'a' is displayed instead of the 'r' that indicates a chase is running. The chase may also be stepped forward manually in this setting by tapping on the enclosure of the desk but see the section on stacks on page 10.

You can set the chase run speed at any point during programming and it will be saved as you exit the programming procedure detailed below. Where a slower chase speed range is required for particular applications, this may be selected in the options menu, as described on page 11.

Chase output may be set to switch or crossfade between steps. The FUNCTION control is used for this purpose, with 'switch' being in the lower (anti-clockwise) part of the range and 'crossfade' in the upper (clockwise) part. Note that the crossfade does not represent a timed fade but rather a softening of the transition between steps and any selection made during programming will be saved as part of the chase. An 's' for switch or 'f' for fade is displayed immediately after the step number to assist you during programming. When a chase runs in response to an audio signal, crossfade is disabled and the chase will always switch between steps.

The fade time shown in the display during chase run continues to indicate the fade time that currently applies to the PRESET MASTER. The chase will run at the levels at which it was programmed and is subject to the PRESET MASTER.

To program a chase:-

- 1. Press the CHASE button twice. The display shows START CHASE \setminus 1-6 after the first press and then PROG CHASE \setminus 1-6 after the second press.
- 2. Press a flash button to access one of the six chase memories. Note that the display will indicate p = (programming) 1 = (chase number chosen) and 01 = (chase step being programmed). See Fig. 3 on page 9.
- 3. Move the sliders to the desired levels and press GRAB SCENE to

CHASES cont'd

- record a chase step: alternatively, hold down flash buttons and press GRAB SCENE to record channels at 100%.
- 4. Repeat no. 3. for each step in the chase. Note that the display advances to show the number of the step being programmed.
- 5. Set the chase to switch or fade, using the FUNCTION control.
- 6. Press CHASE twice to end the programming. After the first press you will see END CHASE? in the display. If you do not confirm with a second press, the display times out and you remain in chase programming but if you confirm, STORED OK appears in the display.

To replay a chase:-

- 1. Press CHASE once. The display shows START CHASE \1-6.
- 2. Press a flash button to start one of the six chases. It will run at the programmed CHASE SPEED setting.
- 3. Adjust the run speed using the CHASE SPEED control, if desired. The last run speed selected during the chase run will be saved. You may also change between a switching and a fading chase; the last selection made during the chase run will be saved.
- 4. Press CHASE twice to stop the chase.

Note that data on the active chase is shown in the display. 'r' indicates chase run, '1' that chase 1 is running and '01' that it is step 1 that is currently active, see Fig. 3 below. As previously stated, a previously-programmed fade time applying to the PRESET MASTER will also be displayed; 'f' denotes that there is a fade and '01' that its duration is 1 second. See Fig. 2 on page 6.

During chase run the OPTIONS button remains active but the 'delete' options are not available, see pages 11-12.

