

Avolites
Diamond 99 release notes
November 2000

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1. INTRODUCTION

This document provides a list of the new features and enhancements in the Diamond 99 as well as detailed instructions on how to load the new software. It should be read in conjunction with the Diamond 98 manual. You can download the zipped manual from <http://www.avolites.btinternet.co.uk/software/doc/d98man.exe>

The following program disk is required to carry out the Software upgrade. Please use a 1.4Mb Disk. If you already have the program disks then proceed to Section 2, otherwise click on the following hyperlinks to download the program disk file 'd2000.exe'. To make the program disk, double click on the file and choose Unzip to drive A, on a windows PC.

1. Program Disk A, Click <http://www.avolites.btinternet.co.uk/software/prog/d2000.exe> to download the program disk file.

The Program disk contains the files:

Flash.bin Main program file for the Diamond 99 November 2000 software.

Ram.d2 AVOS January 2000

D2000.doc The release notes in Microsoft Word Format

D2per.cmp The Personality cache file

2. System Requirements

The Diamond may be fitted with one of 2 MAP processing PCBs. These are MAP 5000A or MAP5000C

The 'A' type uses single in line plug in memory whilst the 'C' type uses dual in line memory and has a surface mount 68340 processor fitted.

For MAP 1201-5000A the AVOS December 09 98 should be used.

For MAP 1201-5000C the AVOS January 2000 should be used

Only the January 2000 AVOS is supplied on the program disk, The Dec 98 AVOS must be downloaded separately.

The Diamond 99 software is designed for a Diamond desk, which meets the following specification:

1. OPX, DMX processor card installed, see section 2.1
2. Extended memory fitted, see section 2.2
3. 1.4 MB capable disk drive fitted, see section 5.8.2
4. Midi and sound to light upgrade implemented (This is Optional), see section 5.9

2.1 OPX detection

In SYSTEM Mode press [A] SERVICE, [C] OPX DIAGNOSTICS.

If the OPX is available then on the Blue LCD screen you will see the message 'OPX Found'.

Hit RESET on the back of the desk to continue.

2.2 Extended memory detection

In SYSTEM Mode press [A] SERVICE, [E] MEMORY TEST

The desk will first check STANDARD Memory and then the EXTENDED Memory. There will be no errors on the EXTENDED memory if it is detected. Wait about 2 minutes for this test to complete.

Hit [A] ABORT to continue.

You will also need to physically examine the extended memory to check the type. The Diamond 99 software will not work if the extended memory type is Mitsubishi.

3. HOW TO UPGRADE

Before installing check that your desk meets the System Requirement, see section 2 and make sure that you have backed up your show, because you will be required to carry out a WIPEALL after upgrading. To carry out an upgrade follow the instructions from section 3.1 to section 3.5

3.1 How to ENTER the AVOS SYSTEM

You will need to ENTER the AVOS menu in order to install new software. To do this, in SYSTEM mode press [A] SERVICE, [A] RUN AVOS2, then type 68340 followed by [ENTER]. Alternatively if the desk will not respond then Power OFF the desk and open the Back door by undoing the three screws, and place a jumper on the end link of the MAP card. The MAP card is the left most card in the card cage. Switch ON and the AVOS menu will appear on the BLUE LCD display.

3.2 INSTALL the January 2000 AVOS – for MAP5000C motherboards

1. ENTER the AVOS menu (see Section 3.1).
2. Insert Disk1 and press [F] AVOS EXTENDER
3. Hit [ENTER] when prompted and wait about 10 seconds
4. After loading the new AVOS the top line will “** AVOS Jan 12 2000 **”

3.3 INSTALL the Diamond 99 Software

1. ENTER the AVOS menu, see section 3.1
2. Insert a blank Disk and press [E] Save Program. Keep this disk safe and use it to reload your original program should there a problem with the upgrade.
3. Insert Disk1 and press [B] Burn a New Program
4. Hit [ENTER] when prompted and wait until the message “100% Completed” appears. If for some reason the System stops at less than 100% then you will need to obtain a new disk, in this instance re-format the disk and re-copy the disk 1 files.
5. Hit [EXIT], then hit [A] Start the System. At this point the desk might lock up, if this happens then you will need to carry out a Hard WIPEALL, see below.
6. Otherwise carry out a WIPEALL.
7. Configure the Factory settings. See section 3.5

3.4 How to carry out a Hard WIPEALL

You will need to do this if the desk does not respond after loading the Diamond 99 software.

1. Switch OFF the desk
2. Open the Back door of the desk by undoing the three screws.

3. Identify the MAP card, this is the left-most card, and place a jumper on the link nearest to you.
4. Switch ON the desk and hit Softkey [A] Start the System
5. Wait until the desk has properly initialised (about 10 seconds max) and then switch OFF the desk.
6. Replace the jumper onto one leg of the link and close the back door.
7. Power ON the desk and reload your show from your backup disks, then initialise the factory settings, see below

3.5 FACTORY SETTINGS

The Factory settings will have to be set after installing the Diamond 99 software. After this one time the Factory settings do not have to be changed.

To Enter Factory settings, in SYSTEM Mode type 184 followed by Softkey [B] FACTORY SETTINGS. If this does not work first time then try again.

Press Softkey [B] to set the DISK DRIVE NUMBER to 0, press again for DISK DRIVE NUMBER 1.

Press Softkey [C] to set 'DISK DRIVE SUPPORTS BOTH 720k & 1.4MB DISKS', press again for 720k DISK.

Now carry out the 720k and 1.4 MB Disk test, see section 5.8

4. What's NEW in the D99 November 2000 Software

4.1 This is a complete list of the differences between the current software and the August 1999 software.

1. The Stop Step function now works for a chase irrespective of the speed of the chase. Previously it was not possible to stop or to single step a chase programmed with a speed less than 150mS per step.
2. It is now possible to reliably and consistently playback a step from an unfolded chase.
3. The Auto repeat delay on the program keys has been increased to 800mS. This used to cause a problem with the Next page key, for example, where several pages would be advanced if the Next Page key was briefly held.
4. If the chase speed is set to less than 150mS then the cross fade is automatically set to 0, since the cross fade is not really perceptible at this speed. This results in a faster and smoother chase.
5. The script file system now works correctly when loading a script file after the tape has been either rewound or fast-forwarded.
6. A chase GO will now occur reliably and consistently for all values of the LTP Fade time. Previously there was a problem if the LTP Fade time was set to 0.
7. A new Chase parameter has been created called TAKEOVER AFTER GO. This is in the second CHASE PARAMETER MENU and it must be enabled so that fixture control is transferred to the playback for which the GO button is pressed.
8. It is now possible to input a group number and press Softkey [A] from the main Program menu to recall a group. The group is recalled in an exclusive manner, which means that all fixtures in the editor are first deselected.
9. The Built in calculator has been improved.

10. A circle shape produces a slight jerk at 0 and 90 degrees. While this problem has been fixed for new shows, you must load the shape generator data file to fix the problem in existing shows. To do this
 1. Press [Disk] followed by [D] Disk Utilities.
 2. Insert the program disk in the disk drive
 3. Press [A] Load Shape Generator Data File, then press [E] followed by [ENTER].
 4. Press [EXIT] when prompted and save show to disk.
11. It is now possible to specify a Dimmer curve in the fixture personality file.
12. Preset focus memory management improved. This results in a better preset focus response.
13. Occasional intensity flicker would occur on the stage when recording a memory. This has now been fixed.
14. Sometimes the fixtures would jump to the start position at the end of a fade. This problem has now been fixed.
15. A new function to allow a memory to be updated on the stage, after Record, is now available in the Memory record menu.
16. A chase will stop momentarily when a focus is applied. This problem has been fixed.
17. The MIDI method of connecting the Diamond to the Visualiser is now supported. DMX lines A to D are supported, as is a means to view the selected fixtures.
18. The ML Menu can now be accessed from Run Mode. This was requested by a number of clients and can be used to apply the Moving light functions in Run mode takeover, for example MACRO and Locate Fixture.
19. Improved the Add button and playback fader response time. The delay between pressing a key and seeing lights on the stage has been measured to be in the range of 55 to 85 Millie Seconds.
20. Occasionally a zero divide bus error is produced when using tracking. This has now been fixed.
21. The Visualiser CSV file can now be imported. This can be used to quickly patch and to calibrate the fixtures so that X, Y tracking control is made possible.

5. What's NEW in the Diamond 99

5.1 Theatre Stack Programming

This is a brand new section devoted to those users who prefer the Theatre Style of Programming. See section 8

5.2 Built-in Personality files

Up to 350 files can be stored in the cache. The cache file, called 'd2per.cmp' is supplied on the program disk.

To load the cache 'built-in personality' file.

In SYSTEM MODE, press

[G] UTILITES

[E] Cache Personality Files

Wait about 2 minutes then hit [EXIT] when prompted.

To use the cache 'built-in personality' files.

In PROGRAM MODE, press

[PATCH]

[C] CHOOSE AN INSTRUMENT FROM THE CACHE

5.3 SCRIPTFILE ENHANCEMENTS

It is now possible to program several script files and let the desk choose which script file to execute based on the input timecode. This function is called Auto-run and can be used to program a script file per song for example, such that when a song is played the desk automatically loads the matching Scriptfile.

A mechanism for continuously looping a Scriptfile has been added, this is called Loop mode.

5.3.1 Script file Parameters

This menu has been extended as follows

[A] TOGGLE AUTORUN: Enables or Disables Auto-run for individual script files.

[B] TOGGLE LOOP MODE: Enables or Disables Loop mode for individual Scriptfiles

[C] INPUT LEGEND: Enter a name for the script file

[D] TOGGLE THE GLOBAL AUTORUN: Enables or Disables the Global switch for Auto-run. This must be enabled together with the Auto-run for individual script files for Auto-run to work.

[E] SET END-TIME FROM INPUT: The end time for a script file can be set by inputting the time in Hours:Minutes:Seconds:Frames and pressing Softkey [E]. This sets the valid timecode range for the script file and allows the desk to reject erroneous timecode.

[F] SET END-TIME from the Scriptfile: The end-time for the script file is computed for the selected script file. The end time is set automatically when the script file is first created. If later the script file is extended then the end time must be set manually, by using this option or the one above.

5.3.2 AUTO SELECT

Sometimes it is desirable to let the desk automatically load and run a Scriptfile by matching the Script file Time with the current Timecode. If Global Auto-run AND the Scriptfile Auto-run has been enabled then this will occur automatically. A function is provided which can force this to happen, it is accessed from the SELECT A TIMER SOURCE menu, option [B] Press to AUTO-SELECT

5.3.3 SORT BY TIMECODE

This function puts the Scriptfile steps in timecode order, it then becomes a simple task to change the order of the Scriptfile steps. This function can be found on Softkey [G] in the Assign TIMECODE menu.

5.4 SNAPSHOT

The look on the stage can be instantly stored as a SNAPSHOT memory for later use. Each SNAPSHOT memory is date and time stamped for easy identification and up to 50 can be saved. Three functions are provided to manage snapshots

[A] Load a SNAPSHOT - A box will appear on the screen. Use the cursor keys to select a snapshot then hit [ENTER]. The look will be loaded into the programmer

[B] Delete a SNAPSHOT – A box will appear on the screen. Use the cursor keys to make a selection then hit [ENTER] to delete.

[C] Take a SNAPSHOT of the STAGE – The look on the stage will be stored in the SNAPSHOT memory. Up to 50 SNAPSHOT memories are allowed.

5.5 BAND LOOKS

It is possible to build a compound **focus** by storing several different **pan** and **tilt focuses** over several different **fixtures**. You can now store many combinations of **pan** and **tilt** looks that will be updated from the basic **pan** and **tilt preset focuses**. These compound **pan** and **tilt focuses** are called **band looks**. These **band look focuses** will be automatically updated from the basic **pan** and **tilt preset focuses**.

5.5.1 HOW TO RECORD A BAND LOOK

- Turn keyswitch to PROGRAM
- Select fixtures
- Apply pan and tilt preset focus from preset ADD button
- Select more fixtures
- Apply more pan and tilt preset focuses as required
- Repeat as required
- Press [STORE FOCUS] button
- Press [G] (BAND LOOK)
- Press a preset ADD button
- Press CLEAR button twice.

5.6 SHAPE PARAMETERS (*New shape function*)

Using the shape parameters size and speed it is now possible to gracefully bring in and take out shapes in a shape memory. The memory Mode must be set to 2 and the rate is set by the LTP FADE time. NOTE that if the LTP FADE time is set to 0 then the shape size/speed can be controlled manually. To use, first create a memory with a shape then follow these instructions:

1. In the SHAPE menu hit [G] PLAYBACK PARAMETERS
2. Hit the [Playback SWOP] for the memory
3. Hit Softkey [A] and [B] to control the size and speed
4. Hit [EXIT]
5. Program an LTP FADE time of 5 seconds for the memory.

As you bring in the memory, the shape will grow from a size of 0 to the programmed size and the speed will increase from 0 to the programmed speed. When you take out the memory the shape will decay at the same rate.

5.7 IMPORT the Visualiser Patch

The Visualiser is a PC based moving lights & dimmers simulation tool. It provides invaluable assistance in the creation of a show and we highly recommend it.

This function allows the desk to be automatically patched to the same selection of Instruments and Dimmers as on the Visualiser.

On the Visualiser select [File] followed by [Create Report] and save the file to a floppy disk.

Plug the disk into the Diamond and execute [WIPEALL] then in PROGRAM Mode select [DISK], [DISK UTILITES], [LOAD, THE VISUALISER, CSV FILE].

5.8 SUPPORT for 1.4 MB disks

After installing the new software, the Factory settings will have to be initialised in order to use the disk drive. See section 3.5.

To test the disk drive you will need a 720k Disk and a 1.4MB disk.

5.8.1 720k Disk Test

1. In SYSTEM Mode, Select WIPEALL
2. Insert a 720k Disk in the drive and in PROGRAM Mode select [DISK], [E] FORMAT, [B] FORMAT A 720k DISK, [ENTER] to start formatting.
3. Wait until the Format has finished, then press [EXIT].
4. Press [B] SAVE SHOW followed by [ENTER], then wait until the show has been saved and press [EXIT].
5. In PROGRAM Mode Press [DISK] followed by [G] CATALOGUE. On the screen check that FREE SPACE is 656384 byte.

5.8.2 1.4MB Disk Test

1. In SYSTEM Mode, Select WIPEALL.
2. Insert a 1.4MB Disk in the drive and in PROGRAM Mode select [DISK], [E] FORMAT, [E] FORMAT A 1.4MB DISK, [ENTER] to start formatting.
3. Wait until the Format has finished, then press [EXIT].
4. Press [B] SAVE SHOW followed by [ENTER], then wait until the show has been saved and press [EXIT].
5. In PROGRAM Mode Press [DISK] followed by [G] CATALOGUE. On the screen check that FREE SPACE is 1388032 byte.

5.9 Sound to Light

To use MIDI and Sound to light it is necessary to upgrade the desk. The upgrade is supplied as a kit and it is priced at £149.64, Part number 8002-0900. For further information refer to the document entitled 'Engineering Change note 2', this document can be downloaded from <http://www.avolites.demon.co.uk/software/ecn/ECN-0101.doc>

To Enable or Disable Sound to Light, in SYSTEM Mode press Softkey [E]. The current setting is shown first.

To use Sound to light you must program a chase on playback 1,2 & 3 with Links set to OFF. Playbacks 1, 2 & 3 respond to Bass, Mid & Treble in that order. When a Bass, Mid or Treble frequency is sensed a chase GO is issued to the corresponding playback. This method can be used to synchronise chase steps with Sound.

5.10 MIDI control

In order to use MIDI the 'MIDI & Sound to light kit' must be fitted, see section 5.9

The Diamond can respond to or source Midi commands depending on whether it is set to Midi-Slave or Midi-Master Mode (refer to User setting 6). The Midi channel can be set from 0-15 by altering User setting 7. A full list of MIDI commands are presented in the Diamond 98 Manual.

5.11 MIDI TIMECODE

In order to use MIDI the 'MIDI & Sound to light kit' must be fitted, see section 5.9

Script files can be run from MIDI time code.

Quarter-frame message types are fully supported and these follow the standard format, which can be found in most MIDI handbooks.

A suitable 'EBU/LTC Timecode' to 'Midi Timecode' converter is manufactured by JC Cooper Electronics whose address is 12500 Beatrice Street, Los Angeles CA 90066 USA, or through Avolites UK.

5.11.1 Midi Problems

The desk supports a full data rate burst for 2 seconds, after that data may be lost since it cannot be processed. Midi Timecode is transmitted at a slower rate and so does not present a problem.

A MIDI debug Terminal is available. To activate, in SYSTEM Mode Press [A] SERVICE, [D] TESTS, [D] OPEN/CLOSE MIDI TERMINAL. Press the same key to close the Window.

Transmitted characters are shown in YELLOW

Received characters are shown in WHITE

Errors are shown in RED

5.11.2 Further reading

MIDI Systems and Control by Francis Rumsey

Published by Focal Press, ISBN 0-240-513000-2.

MIDI Detailed Specification

Published by the International MIDI Association as document 213/649-6434.

Contact them at

5316 W.57th Street,

Los Angeles,

CA 90056 USA

5.11.3 LTC (Time Code) to MTC (Midi Time Code)

Avolites can supply a converter to do this. The Avolites part number is 33-65-3000

5.12 New Moving Light functions

5.12.1 Align INSTRUMENTS

A group of Instruments can be set to the same look as the first with this function.

5.12.2 LOAD INTO PROGRAMMER

This is used to load the channel levels for selected fixtures into the programmer. The function is accessed from Softkey [C] in the second Moving Light menu.

5.13 Easy Colour GEL selection

For those Instruments, which have a GEL Colour table on the attribute wheels, for example the LEE colour table, it is now possible to make a GEL selection by:

Inputting the GEL number and hitting the Blue 'ON/OFF' Wheel button.

Example to select the Gel LEE 126, type 126 then hit the Blue 'ON/OFF' button.

5.14 Support for non-consecutive 16-bit DMX channels

This solves the patching problem for the following Instruments for which the Pan & Tilt is 16 bits and the high-byte and low-byte are non-consecutive.

American DJ Patend Light

Clay Paky Stage Zoom

5.15 INSERT Step

The Insert menu has been extended to include a means to insert chase steps without having to unfold. Hit [INSERT], then Input the step number and hit [ENTER] to set the times, Hit [ENTER] in the Times menu to save the step.

NOTE: A chase must be connected to SEQUENCE CONTROL 1 and it must be active, otherwise the Insert step menu will not appear, otherwise the Playback Insert option will be presented.

5.16 OPX health check

The OPX (DMX output processor) health is continually monitored. If it fails then a Red window will appear on the display. The user is prompted to press [EXIT] otherwise the desk resets in 5 seconds, in an attempt to restart the DMX.

5.17 Battery status indicator

On power up the condition of the Battery is checked. If the battery has failed then a message will appear on the display. If this happens then you will have to WIPEALL and reload the show from a backup disk each time you switch ON the desk. Please also renew the battery as soon as possible.

6. CHANGES

1. User Settings moved to Softkey [C] in SYSTEM mode. NOTE: the user options have been renumbered. The new user settings are:
 - [D] Press for LEGENDS (Press for NUMBERS). The SEQUENCE CONTROL Display can show step Numbers or Legends, this option sets one or the other.
 - [E] FREEZE VDU – Use this option to improve the response of the desk to ADD/SWOP buttons. The VDU screen will not update while it is frozen. Press the same key to resume normal operation.
 - 6. Midi – (Disabled/Master/Slave), see section 5.10
 - 7. Midi Channel – (0 to 15), see section 5.10
 - 9. NORMAL FADER RESPONSE (FAST FADER RESPONSE). When set to Fast, the Playback Faders will be updated more frequently at the expense of the Preset Faders.
2. Record programmer is the default. If you wish to record the output on the stage you must use Record Stage. In particular if you have a scene which was set up when in RUN mode and wish to record it make sure you press RECORD STAGE.
3. Record stage is always Record by Fixture, this overrides the User setting which may be Record by Channel.
4. Record by Fixture has been more clearly defined and now it is only used when adding a fixture not previously used within the memory, or when creating a new memory. If a fixture already exists in a memory, (any channel is on) then Record by Channel is used. *Whilst this may seem complicated it is probably what you would expect to happen!*
5. New [CHANNEL] Menu. It is now the same as the PLOT menu in Theatre Stack programming (without the Record option).
6. Reduction Mode can only be activated while the [SHIFT] key is held. This is to protect against accidental usage.
7. Highlight button introduced. If Highlight is ON and Next Device or Last Device is used then Instruments in the Editor will take on a brighter state than the ones in the programmer, all other Instruments will be unaffected. The Highlight button is the one just above [SAVE SPEED]. The LED will be lit when Highlight is ON.

8. A dedicated button for setting the Instruments or Dimmers in [PROGRAM] mode has been provided. It is the button just above [MEM MODE]. When the LED is lit the Intensity Level is on the Mimic LEDs and when this LED is off, the Instruments in the programmer are indicated.
9. Quick Blind Edit, followed by [ENTER] or [EXIT] does not now force blind mode to be exited. Instead the [BLIND] key must be hit to exit Blind mode.
10. The Compressed screen now includes a window for the Chase Progress.
11. [RESTORE CHASE OUTPUT] disabled.
12. It is possible to extend a chase by pressing [CHASE], followed by the [SWOP] for an existing chase. Hit [SWOP] again to append a step to the chase. Hit [CHASE] to close this session.

7. Bugs fixed

1. It is now possible to enter point steps after step 99.9 during step insert
2. Re-patch is now possible on Instrument bank 2 and onwards
3. The Preset Faders now reliably load into the programmer when the fader is moved, irrespective of whether [CLEAR] was first pressed or not.
4. Slow fades no longer appear coarse
5. Highlight and Lowlight in Store Focus now work properly
6. The moving lights now maintain their position after a [CLEAR]

8. Theatre Stack

A totally new theatre programming and playback section has been incorporated into the Diamond. This is referred to as Theatre Stack Programming or Theatre Mode. See section 8.2 on how to ENTER Theatre Stack Programming.

NOTE: When in Theatre Mode you should be aware that:

1. There is no access to any memories programmed on the last 4 playbacks (on any page).
2. Auto-Connect on SEQUENCE CONTROL 1 is disabled, instead SEQUENCE CONTROL 2 is used for Auto-Connect.

8.1 Theatre stack playback Faders.

The Theatre stack takes over the last 4 playback Faders. In the Diamond 2 these are Faders 27-30 and in the Diamond 3 these are Faders 17-20. From here on I will refer to these Faders as 1-4

Fader 1 is the Intensity master.

Fader 2 is the manual control for the Fade In timer when it is stopped.

Fader 3 is the manual control for the Fade Out timer when it is stopped.

Fader 4 is the manual control for the LTP Fade timer when it is stopped.

Note: Faders 2-4 are provided with a separate GO (ADD), STOP (SWOP) and REVERSE (GRAB) button.

8.2 Entering and Exiting Theatre Mode

To activate and Edit the Theatre stack:

In PROGRAM Mode press Softkey [B] followed by [ENTER].

To Cancel Theatre Mode and restore the last 4 Playback Faders:

In PROGRAM Mode press Softkey [B] followed by Softkey [D].

8.3 Step numbers

There are a total of 60000 steps reserved for the Theatre stack. Step numbers can range from 0.1 to 6000.0. It is generally good practice to use whole numbers for steps and to keep the point step numbers in reserve for any unforeseen extension to the Theatre Stack.

8.4 Theatre Stack Programming menu

This section provides a description of the Softkeys used in the Theatre stack menus. In the top menu the prompt line indicates the INPUT Step and the CURRENT Step. The CURRENT step is the one that functions like Set Time, Record and Set Legend work on. Always make sure that you have set the CURRENT step before activating these or any other functions. To set the CURRENT step, simply input a step number and hit [ENTER].

8.4.1 [A] ADVANCED

Do not attempt these functions until the basic concepts of the Theatre Stack are well understood.

8.4.1.1 [A] RENUMBER

Choose this option to renumber the stack. Point steps will be renumbered to whole numbers and the in between step number will change to accommodate these. Please use with this function with care.

8.4.1.2 [B] CREATE AN AUTOLOAD

An Autoload is a Memory or a Chase, which is automatically executed (without having to push up the playback fader). One Autoload command per step is allowed. The Autoload is triggered when the FADE In time starts for the step.

[GRAB] Press to choose a Memory or a Chase from any page (as long as it is not on the last 4 Playback Faders).

[A] Set Fade Time, Set the rate at which the Autoload is loaded or taken out

[B] Press to FADE IN, Press this to Bring In the Chase or Memory

[C] Press to FADE OUT, Press this to Take out the Chase or Memory

[NUMERIC 0-9] Type in the step number followed by [ENTER] to save the Autoload together with the Step.

8.4.1.3 [C] DELETE AN AUTOLOAD

Press to Delete an Autoload for the Current Step. Note that no confirmation is required.

8.4.1.4 [D] COPY TO STEP ...

Copy the Current step to the given step. If the step already exists then it will be overwritten.

8.4.1.5 [E] UNDO STEP RECORD

This option appears after a step is recorded. Press to undo record.

8.4.2 [B] PLOT

Use the options in this menu to create a look. Use the numeric keypad to select Instruments. For example to select Instruments 1,5 & 8, press 1[ENTER], 5[ENTER], 8[ENTER].

The prompt indicates how the Input will be translated to Instrument numbers.

Fixture = Desk Channel – This means that the input numbers relates directly to Instrument handle numbers on the Desk.

Fixture = Dimmer or other Instrument – The input is translated to a Desk channel by searching from Desk channel 1 for all occurrences of the selected Fixture Type.

For Example, IF the Fixture Type is set to Dimmer, and the Input is 8[ENTER], then the 8th dimmer found starting from Desk Channel 1 is selected.

8.4.2.1 [A] Select ALL

All Instruments in the programmer are loaded into the Editor.

8.4.2.2 [B] Select a new Fixture type

The default is Desk Channel. Set how the input is translated to an Instrument number.

Example, If 1 Through 10 [ENTER] is selected and:-

- Fixture Type=Desk Channel. The desk will select the Instruments on Desk handles 1 through 10.
- Fixture Type=Dimmer. The desk will select the first 10 dimmers that it finds starting the search from desk handle 1.
- Fixture Type=Mac500. The desk will select the first 10 Mac500s that it finds starting the search from desk handle 1.

8.4.2.3 [C] ODD or EVEN

When first used, a list is created made up of the Instruments in the EDITOR.

Thereafter: -

- When ODD is selected the ODD numbered Instruments are loaded into the Editor from the remembered list.
- When EVEN is selected the EVEN numbered Instruments are loaded into the Editor from the remembered list.

8.4.2.4 [D] RECORD

8.4.2.4.1 [A] CHANNEL OR INSTRUMENT RECORD

Toggles the Record Option, the current setting is shown on the prompt line

8.4.2.4.2 [B] RECORD STAGE

All Instruments, which are in the programmer together with all Instruments that are ON on the stage, are recorded into the Current step.

8.4.2.4.3 [C] SET TIMES

The times are presented for the current step. Press ENTER to save the times or EXIT to Cancel the changes. If the Current step does not exist then the previously entered times will be presented.

8.4.2.4.4 [D] RECORD PROGRAMMER

All Instruments, which are in the are recorded into the Current step. If a step number is entered then this will be assigned to the Current step before recording.

8.4.2.5 GROUP

Input a Group or a Focus in the range 1-180

8.4.2.6 THROUGH

Select a range of Instruments, for example 1 THROUGH 10 to select all Instruments from 1 To 10.

8.4.2.7 AT %

Set the intensity for the Instruments in the Editor. To set the intensity to 46% press 4 followed by point(.) followed by 6

8.4.2.7.1 [A] LOCATE FIXTURE

Switch ON the Fixtures in the Editor without actually placing the Instrument attributes into the programmer

8.4.2.7.2 [B] BLACKOUT

All Instruments, which are ON on the stage, are first loaded into the Editor and then set to zero intensity, the result is that the stage is blacked out.

8.4.2.7.3 [E] +5%

Increase the intensity by 5% for all of the Instruments in the Editor, clamp at 100%.

8.4.2.7.4 [F] -5%

Reduce the intensity by 5% for all of the Instruments in the Editor, clamp at 0%.

8.4.2.7.5 [G] 100%

Set the intensity to 100% for all of the Instruments in the Editor,

8.4.2.7.6 [NUMERIC]

Set the Intensity to 10 x the input number for all of the Instruments in the Editor, for example if 5 is input then the intensity is set to 50%

8.4.3 [C] SET TIMES

Set the Times for the Current step. If the step exists then its times are presented otherwise the previous times.

8.4.4 [D] RECORD

See Section 8.4.2.4

8.4.5 [E] SET LEGEND

Set the legend for the Current Step

8.4.6 Cut To Live

Input a Step number then hit this key to make the step live on the stage

8.4.7 QUIT

Use this option to EXIT the Theatre Stack menus, you can also turn the keyswitch.

8.4.8 Hidden actions

Input a step number followed by [SEQUENCE CONTROL 1 CONNECT] to load the step as the next step for the Stack.

8.5 Playback Options

In playback mode the following functions are available

- ➔ Press to snap to the next step
- ← Press to snap to the previous step
- ↔ Press to undo a fade

STOP Press to stop the Theatre stack

GO Press to launch the step

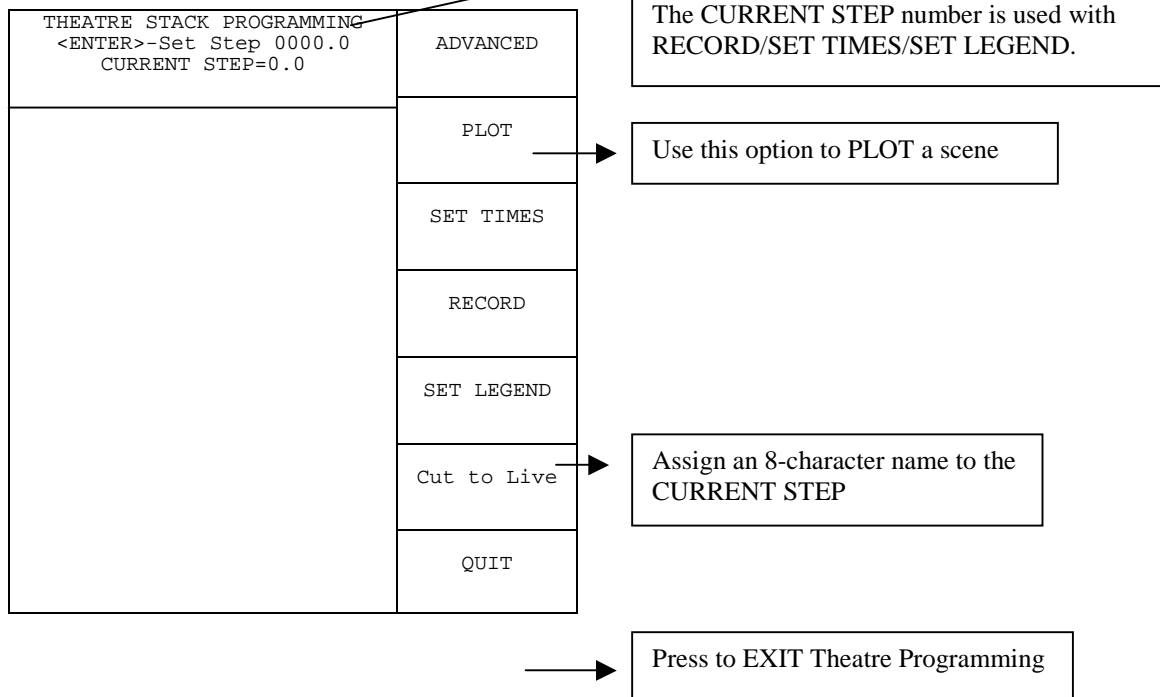
ADD Press to individually launch the time fader for the HTP-IN, HTP-OUT, and LTP receptively

SWOP Press to individually stop the time fader for the HTP-IN, HTP-OUT, and LTP receptively

Use the theatre stack Faders to manually control the Times fader.

Use the Sequence Control Wheel to slow down or speed up the running fade.

8.6 THEATRE PROGRAMMING MENU



9. TIPS

1. The CHASE PARAMETERS & INSERT STEP functions operate on the Chase, which is connected to Sequence Control 1.
2. When a chase is loaded it is normally Auto-connected to Sequence Control 1, if Theatre Mode is ON then the chase is instead Auto-connected to Sequence Control 2.
3. You can Hit [View] followed by [CONNECT] to view the contents of a chase or stack.
4. In the Theatre Stack Programming Menu, it is possible to use Reverse-Polish-Notation for the main functions.

Example: To Record Step 3.0, Type 3 then Press [D] RECORD.

Example: To Set Times for Step 4.5, Type 4.5 then Press [C] SET TIMES.

Example: To load step 9.0 as the Live step, Type 9 then Press [F] Cut to Live.