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LIGHTPALETTE 90 OPERATION.

LIGHTPALETTE OPERATION TRAINING COURSE NOTES.

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Section 1. System interconnections.

This section should be used in conjunction with the Lightpalette 90 specification document supplied with this course.

1.1 The electronics tower.

A dual electronics tower has 2 mains power inputs on the back. A single electronics tower only has one mains input.

The serial transfer panel contains the data connectors for each of the consoles or other devices which are connected.

The Dimmer transfer A panel contains the output connectors for 2 dimmer processor (DPR) cards. Each card can output the information for 512 dimmers in DMX format or 576 dimmers in AMX192 format (AMX requires one cable per 192 dimmers).

Connect the main console to port 1. If this port is broken then the main console may be connected to port 2 or 3. (Please note that the record facility of designers desks may only be disabled by a desk plugged into port 1)

There are no changes to the connections to the tower for a dual electronics tower.

1.2 The double tiered console.

The tower cable should be connected to the "TOWER CONN - SYSTEM A" on the back of the console.

The two monitors should be connected to "VIDEO 1 & VIDEO 2 - SYSTEM A" on the back of the console.

The "REMOTE SUBMASTER CONN - SYSTEM A" on the panel which contains the "TOWER CONN" can be connected to one of three places.

a. Do not connect to anything. The submaster in the top tier will not work.

b. Link to "REMOTE SUBMASTER CONN - SYSTEM A" on the other panel on the back of the console. The submaster in the top tier of the desk can now be used.

c. Link to a remote submaster outrigger. The submaster in the top tier will not work.

The remote video can be used to control two additional monitors. The video outputs will mimic the two main videos.

The O.T. connector is "Over Temperature" and is an input from a CD80 or CD90 dimmer rack.

1.3 The single tiered console and submasters outrigger.

The tower cable should be connected to the "TOWER CONN - SYSTEM A" on the back of the console.

The two monitors should be connected to "VIDEO 1 & VIDEO 2 - SYSTEM A" on the back of the console.

The "REMOTE SUBMASTER CONN - SYSTEM A" is connected to the "REMOTE SUBMASTERS CONN - SYSTEM A" on the submaster outrigger.

The remote video can be used to control two additional monitors. The video outputs will mimic the two main videos.

The O.T. connector is "Over Temperature" and is an input from a CD80 or CD90 dimmer rack.

1.4 Dual electronic console.

The console, unlike the tower, can not be used as a fully tracking backup. System A or System B must be selected using the keyswitch.

With a dual electronic console there are two rows of connectors on the back panel.

VIDEO 1, VIDEO 2, REMOTE VIDEO and TOWER CONN are linked internally and there is no need to change connector positions when changing between systems.

The REMOTE SUBMASTER CONN cable must be moved at both ends when changing between systems.

In a double tiered console the link between the two REMOTE SUBMASTER connectors for system A and the link between the two REMOTE SUBMASTER connectors for system B can both be fitted.

A dual electronic console has two disc drives. One drive is for system A and the other is for system B. Both drives can not be used at the same time. Disc to disc copies can not be made.

1.5 Procedure for switching on.

If a remote submaster outrigger is being used this must be switched on before the main console. It is not important the order in which the main console and the tower are switched on.

If the hand held remote control does not operate when using a long length of cable to the tower then the remote should be switched on before the tower.

Section 2. Clearing the system.

2.1 The clear option in the SETUP menu.

Option 7 on the setup screen is the setup menu.

2.1.1 Clear Cues :- Deletes all cues and nothing else.

2.1.2 Clear Patch Names :- Clears the user name assigned to each dimmer but not the patch.

2.1.3 Clear Memory :- Clears cues, groups, effects and profiles. Does not clear patch, macro's or system configuration.

2.2 DPR Cold Start.

The only way to clear everything from the Lightpalette 90 is to perform a DPR Cold Start.

a. Hold down the left hand clear button on the alpha numeric keyboard.

b. Keep the clear button pressed down and switch off the Lightpalette 90 using the key in the console.

c. Keep the clear button pressed down and wait for the message "Attempting to establish communication with the tower".

d. Keep the clear button pressed down and switch the lightpalette back on using the key.

e. Keep the clear button pressed down and wait for the message "DPR 0: Cold Start".

Everything in the lightpalette 90 has now returned to the factory default settings.

Section 3. System configuration.

3.1 System Parameters.

Option 1 of the setup screen is system parameters. Use this option to set the number of channels and dimmers.

The number of channels must not exceed the number of dimmers.

The number of dimmers must not exceed the maximum output of the DPR cards.

Default is 100 dimmers and 100 channels.

3.2 Dimmer output configuration.

Option 3 of the setup screen is "Dimmer output configuration". Use this option to select the dimmer protocol.

Select F1 * for all DMX
Select F2 * for all AMX

To enter other options press F3 to F6 then enter the channels "Start No" > "End number" *. These dimmers are now controlled by the selected output and protocol.

To delete the selection press F3 to F6 then * to clear the selected output.

A dimmer can not be assigned to more that one output.

The output can be a combination of AMX and DMX.

3.3 Console definitions and status.

Option 2 of the setup screen is "Console definitions and status". The option sets the configuration of each serial communication port on the tower.

Each console can be have the operation restricted to one of the following levels.

a. Enabled
b. Record facility locked.
c. Record and Playback facility locked.
d. Displays only.
e. Disabled.

Only the console connected to port 1 can change these settings.

3.4 Defaults.

Option 5 of the setup screen is "Defaults".

3.4.1 Default Q only - (ON / OFF)

Q only when recording live is described in section 6.2 and section 9.

3.4.2 Set level __ __ %

The SET level gives the level that a channel will switch to when the SET button is pressed on the channel control.

3.4.3 Profile __

A default profile can be selected. Profile 0 is always a linear profile and is usually selected. The profile selected will be used for every cue unless that cue has another profile recorded.

3.4.4 Time __

If a cue is recorded without the operator specifying a time then this default time is used.

3.4.5 Channel Format (ON / OFF)

If the channel format is ON then only channels which have been used are displayed on the screen. More channels appear as they are used.

If the channel format is OFF all the channels appear.

Section 4. Channel control.

4.1 Selection of channels

For example :- 1, 1 + 3, 1 > 12, 1 > 12 - 5,

4.2 Setting channel levels.

@ FULL *	To Full.	@ 75 *	To 75%.
@ 5 *	To 50%.	@ 50 *	To 50%.
@ 0 *	To 0%.	@ *	To OFF.

4.3 The = command.

The above command will set all the selected channels to the same level. The = command will allow several groups at different levels to be entered on one line.

eg. 1 + 3 + 5 = FL + 7 + 9 + 11 = 50 + 20 > 30 = 84 @ Fl *

Channels 1,3 and 5 will go to Full. Channels 7, 9 and 11 will go to 50% and 20 through 30 will go to 84%.

This whole line is grand mastered using the @ command on the end of the line. @ FL means the channels go to 100% of the level specified by the = command.

eg. 1 + 3 + 5 = FL + 7 + 9 + 11 = 50 + 20 > 30 = 84 @ 50 *

Channels 1,3 and 5 will go to 50%. Channels 7,9 and 11 will go to 25%. Channels 20 through 30 will go to 42%.

4.4 Channel control :-

Any of the commands above will put the selected channels under channel control. The channel level will be white on a red background.

To take control of a channel without changing the level enter the channel number then *.

4.5 The Wheel :-

When a channel is under control the wheel can be used to change the levels. The wheel is velocity controlled therefore the faster the wheel is turned the greater the change in level.

The change of level when using the wheel is proportional to the start level of each channel.

For example. Two channels are moved together using the wheel one channel starts at 10% the other at 20%. When the channel at 10% has reached 20% the channel at 20% has reached 40%.

A channel starting at OFF will move at the same speed as a channel which starts at full.

4.6 +10% and -10% :-

When these buttons are pressed the level of the channels under control will increase or decrease by 10%.

4.7 OUT.

When this button is pressed all channels which are under control are switched to OFF however the channels remain under control.

4.8 SET.

When this button is pressed all channels which are under control will switch to the level specified in the SETUP menu. (See section 3.4.2)

The NEXT and LAST keys will move this level to other channels however other commands (eg. OUT) will still operate on the original selected channels.

4.9 RETURN.

When the RETURN * is entered all channels which are currently under channel control will return to the level it started at. If a channel started off it will be returned to a level 0.

4.10 FLASH - F2.

A group of channels or a group of dimmers may be set to FLASH. They will flash between 15% and Full. Channel flash is half the speed of dimmer flash.

(channel number or group of channels) F2 *
DIMMER (dimmer number or group of dimmers) F2 *

If a single channel or dimmer is selected then NEXT and LAST will move the flashing dimmer or channel providing the command line is still displayed.

To switch off a flashing channel clear the command line.

To switch of a flashing dimmer enter :- DIMMER RETURN *

While a dimmer is flashing a message appears on the playback screen saying "Unpatched Dimmer"

4.11 TAKE CONTROL.

This button will take control of selected channels on the wheel. It will allow the main desk to take control of channels which are under control of a remote desk. **(Channel number or group of channels) TAKE CONTROL**

4.12 REMAINDER DIM.

Select a channel or a group of channels then press REMAINDER DIM *. The selected channels are put under channel control and all other channels are taken down to off.

Section 5. VDU displays.

5.1 LIVE.

The LIVE display shows the current channel levels from all parts of the desk. (Channel control, playbacks, submasters and effects).

5.2 PREVIEW.

Allows the operator to view the contents of an existing cue or create a new cue whilst in blind mode. (The channels do not appear on stage)

5.3 SETUP.

This screen gives a menu of setup and configuration options for the Lightpalette 90.

5.4 CONTROL.

This screen shows the part of the lightpalette 90 which was last controlling each channel.

W (Aqua) - Channel control or wheel.
Q (Red) - Under control of a Cue.
Number (Yellow) - Control from a submaster (The number shown is the submaster number)
Effects on a cue are not shown.

5.5 NOTES.

This screen can be used as a note pad. Any text may be written on these pages. There are a maximum of 57 pages available and these pages may be printed from the PRINTER option of the SETUP menu. (Maximum 1000 characters can be entered onto the notes)

5.6 CUE SHEET.

The cue sheet shows all the cues in the Lightpalette 90. The list can be moved to show different pages using the PAGE + and PAGE - keys. The number of the cue which was last played back will appear in Yellow on the cue sheet. The cue which was last previewed will have a ">" symbol next to it. Function keys 1 and 2 will allow the cue sheet to move to either of these cues.

5.7 PROFILE.

This screen will allow 64 profiles to be written. Profile 0 is always linear. To use a profile on a fade the cue should be modified to add the profile. To use a profile on a dimmer the profile must be added on the PATCH screen.

5.8 EFFECT.

This screen is used to create new effects or edit existing effects. 999 different effects may be written. Effects can be played back using a cue or using a submaster.

5.9 CHANNEL PATH.

This screen will show a list of every cue in which the selected channel appears at a level. Only one channel may be selected at a time.

5.10 PATCH.

This screen will show a list of Dimmers, Dimmer names, Channels and Profiles. The list may be ordered by Dimmer, Name or Channel. All changes are made on this screen.

5.11 CHANNELS IN USE.

This screen shows the number of cues in which a channel appears at a level. (Including 0).

5.12 EXPAND RECORD.

This button will replace the PLAYBACK screen with page 2 of the RECORD screen when ever page 2 exists. The RECORD screen is the screen with the command line.

5.13 UNPATCHED DIMMERS.

This screen lists all the dimmers which have been unpatched through use of the DIMMER command on the LIVE screen. A dimmer will still use an assigned dimmer profile even when it is unpatched.

5.14 MACRO.

The macro screen is used to create or edit macro's. Only 8 macro's are available on software versions under version 2.

5.15 GROUP.

The group screen will allow the operator to edit or create a group in blind mode. (Without any channels appearing on the stage)

5.16 SUBS.

The subs screen will allow the operator to edit the contents of a submaster blind (providing that the submaster fader is down).

5.17 PLAYBACK CUES.

The playback screen will show the cue sheet. The sheet will scroll so that the cue on stage is always displayed.

5.18 PLAYBACK SUBS.

The playback screen always shows submaster information.

Section 6. Recording philosophy.

6.1 Channel level colours in cues.

Magenta = Channels increasing in level.
Green = Channels decreasing in level.
Aqua = Channels at the same level as the previous cue.
White = Channels at the same level as the previous cue.
(Blocked cue - Channel levels can not be tracked)

Prior to software version 1.8.0 - January 1992.

Dark Blue = Channels increasing in level.
Green = Channels decreasing in level.
Magenta = Channels at the same level as the previous cue.
White = Channels at the same level as the previous cue. (Blocked cue - Channel levels can not be tracked)

Colours on the LIVE VDU screen.

White = Channel has been under channel control.
White on Red = Channel is under channel control.
Yellow = A submaster output.

6.2 Q only (ON/OFF).

Setup the lighting state that you wish to record live and record into a new cue number.

a. "Q only" is OFF.

When a cue is recorded and a channel level is changed the new channel level will track to the levels in the following cues providing these levels are aqua. When a different colour is found the tracking will stop.

b. "Q only" is ON.

When a cue is recorded and a channel level is changed the new channel level will not affect any levels in the following cues.

6.3 Q ONLY / TRACK button.

This button only works when the level of a channel has been changed from the previous cue.

If Q only is ON this button will select the TRACK mode of recording that cue.

If Q only is OFF the button will select the Q ONLY mode of recording that cue.

Enter RECORD CUE xxx "TRACK/Q ONLY" *

6.4 Tracking channels at 0 or OFF.

With "Q only" set to OFF, or the TRACK button in use, a cue is recorded with a channel level at 0 or OFF.

If the channel level was 0 or OFF in the previous cue the new cue is recorded with the channel OFF and all following cues are tracked OFF.

If the previous cue has that channel at a level the cue is recorded with that channel at 0 (in green) and all the following cues are tracked OFF.

6.5 Using BLOCK CUE.

If a channel is recorded using BLOCK CUE then every channel, which has the same level as that channel in the previous cue, will be recorded in white.

To record a Block Cue enter RECORD CUE xxx "F4" *

There will be no difference to the output screen when this cue is recorded.

A cue earlier in the cue sheet is changed and the levels track through the cues. The level on this cue will not change even though it is the same level ad the previous cue.

On the channel path screen a single channel can be blocked in a cue.

Section 7. Recording cues.

7.1 Recording the live lighting state.

The most basic record command is :- RECORD CUE xxx *
Where xxx is any number between 0.1 and 999.9.

The cue will contain the levels of all the channels live on stage. The cue is recorded with the default fade time.

7.2 Recording without submasters.

When recording live all channels on stage will be recorded. If there is an output from a submaster then this will also be recorded. To record without the submaster output replace the RECORD button with F1.

RECORD W/O SUBS xxx *

7.3 Recording different fade times.

RECORD CUE xxx TIME yy *
(Where yy is a time between 0 and 999 seconds).
(Times between 0 and 10 s can be entered in 10ths)

RECORD CUE xxx TIME yy / zz
(yy is the time for channels which are going up in level and zz is the time for channels going down)
Cross fading is always dipless.

RECORD CUE xxx TIME *
(To record a cue as MANUAL)

To change the fade time on an existing cue.

CUE xxx TIME yy *
CUE xxx TIME yy / zz *
CUE xxx TIME *

7.4 To copy a cue.

To copy from the LIVE screen enter the command :-

Cue nn @ CUE mm * Will copy cue nn into cue mm. This option is not available prior to software 1.8.0.

To copy from the PREVIEW screen use the two options COPY TO CUE or COPY FROM CUE.

Section 8. Playback.

8.1 Playback of cues on the channel control.

The CUE LEVEL button will allow a cue to be added to the current stage output. Several cues can be added on top of each other.

CUE LEVEL nn * Will take control of all channels which are in the cue however they remain at their current levels.

CUE LEVEL nn @ xx * Will add the contents of cue nn to the stage output. The levels of cue nn will be grand mastered by the percentage xx.

CUE LEVEL nn + CUE LEVEL mm + ... @ xx *

Will add several cues to the output using highest takes precedence.

8.2 Playback using the playback faders

The Lightpalette 90 has 8 playback fader on the board however it can run up to 128 fades at the same time. The board is designed so that the latest fade always stays in the faders on the board.

If an effect contains fades these fades will make use of some of the 128 fades. These fades will never be allocated to the 8 front panel faders.

If a fade is started before the previous fade has finished the display will show both fades in progress at the same time. Although the first fade appears to continue only the second fade is controlling the lights.

The Lightpalette 90 will perform move fades. The channels which must still be moving after the next cue has started must be recorded into the second cue at the same final level as they are recorded into the first cue.

8.2.1 GO TO CUE.

GO TO CUE xxx - Will fade cue number xxx onto stage in approximately 3 seconds.

LOAD CUE xxx - Will load cue number xxx into the playback. The cue will not run until the GO button is pressed. The cue will then use the recorded time.

The selection of the playback that is to be used is made by the Lightpalette 90. If a fade has a different up and down time each half of the fade will be on a different playback.

When you jump to a cue that is not at the start of the cue list a "ghost" cue will also appear and run at the same time as the cue you selected.

For example if you GO TO CUE 10 then cue 9 will appear in the first playback and will fade at the same time as 10.

Cue 9 contains all the lighting changes in the cue sheet prior to cue 10. Cue 9 does not have to exist in the cue sheet.

8.2.2 GO and STOP/BACK buttons.

A cue that has been loaded into the playback will wait, prior to fading, in the top box of the playback display. When GO is pressed it moves to the bottom box and the fade time starts to count down to 0.

The playback is always working in sequence therefore the next cue in sequence is loaded into the next available playback as soon as the GO button is pressed.

The show can be run by only pressing the GO button.

If STOP/BACK is pressed in the middle of a fade the cue will stop. If Go is pressed the fade will continue.

If STOP/BACK is pressed again when the fade is stopped, the cue will fade back to it's previous lighting state taking 2 seconds.

Each time STOP/BACK is pressed again the Lightpalette 90 will fade back to the previous cue in the cue sheet until cue 0 is reached. This will occur even if the first cue loaded was not cue 1.

8.2.3 Manual Fades.

8.2.3.1 A recorded manual fade.

If a cue is recorded as a manual fade then the fade is started by pressing the GO button. Move the selected playback fader to the bottom to collect the fade then move it to the top to fade the cue.

The fade will not be released when the fader reaches the top position. It can be reversed at any time by moving the fader down. Pressing GO to fade the next cue will not release the manual fade.

To release the manual fade press the playback button above the fader controlling the manual fade.

8.2.3.2 Taking manual control.

If you wish to take manual control of a timed fade press the button above the selected fader. You can only take control of the fade once it has started. Move the fader to the bottom to collect the fade and manually complete the fade.

The percentage of fade complete display in the fade box will stop and be highlighted in red. The fade will manually move from the percentage at which the fade was stopped to 100%.

You can not reverse the fade by taking manual control.

When the fade is complete press the button above the fader to release the fade. If the fade is not at 100% the fade will not continue as a timed fade. The lighting state will be fixed at the levels that were on stage when manual was released.

If the next cue contains channels which were recorded in magenta (The level of a channel was recorded at the same level as the previous cue) these channels will not fade to their correct levels when GO is pressed. They will stay at the level set when the manual fade was not completed.

8.2.3.3 ALL MANUAL

If the ALL MANUAL button is pressed every cue in the playback becomes manual. Using this button a cue can be made manual before the GO button is pressed.

The rate percentage on the right of the playback screen changes to MAN. The rate wheel is now used to fade the cues.

Each fade may be released individually by pressing the button above each playback, or all fades may be released by pressing the ALL MANUAL button again.

The ALL MANUAL button takes control of all 128 fades however it does not stop the fades used in an effect.

8.2.4 Changing the fade rate.

The fade rate can be changed live.

Press RATE then the button over the fader which needs to be changes then *. The RATE wheel will now change the fade rate.

RATE 0 * will release control from the wheel

If an effect is running as a cue then the RATE wheel can change the step times.

If an effect is running on a submaster then press RATE followed by the button under the submaster then *. The step rate of the effect can now be changed.

RATE * will take control of all the fades which are running, including the step time of effects in the submasters panel.

Section 9. Modifying a cue / Recording blind.

9.1 The PREVIEW screen.

9.1.1 Q ONLY and TRACK mode.

When the PREVIEW screen select is pressed the screen shows the contents of the cue which has been recorded most recently. To view the contents of another cue type the cue number then press *.

If this number already exists the contents of the cue will be displayed.

If the cue does not exist the display will start with the contents of the lighting state in the previous cue. (All channels in Aqua).

When a channel level is changed the channel becomes a fixed channel move. Channels going up are magenta and channels going down are green.

The channels which appear in aqua are tracked from the last cue. If they are moved by the channel control then returned to their original positions they will now appear white. This means that the channel is now blocking the track.

To return a channel to the level in the previous cue enter @ *.

9.1.2 TRACK mode.

To prevent a change to a channel being tracked the Q ONLY button must be pressed.

Enter the channel or channels at the required levels then press Q ONLY then * at the end of the line. These levels do not track to the next cue.

9.1.3 Q ONLY mode.

If you wish to track the change to one or more channels then enter the list of channels and the change of level then press TRACK then press *.

Using Q ONLY in preview mode has one disadvantage :- Change a channel in a cue which is being tracked by the same channel in the following cue. When the channel is moved the following cue is modified from aqua to Magenta or Green so that the channel will return to the level in the next cue. When the channel is returned to aqua in the first cue the channel in the following cue is not returned to aqua, it becomes white.

If you move in preview to the next cue and restore the white level to aqua the next cue will change to white. This will happen until the channel finds a real move command. The only way to remove this problem is to use :- (Channels) @ TRACK *

9.2 SEARCH.

On the live screen select a channel then press SEARCH * and the Lightpalette will change to the PREVIEW screen. The Lightpalette will find the cue in which the channel last changed level. The channel is put under channels control so that it can now be changed and will track forwards through the cues.

Section 10. Groups.

A group has two uses.

a. To allow the selection of a given group of channels by the channel control. For this use the recorded levels are not important.

b. To allow a selection of channels and levels to be transferred to a submaster. For this use the recorded levels are important.

10.1 Recording a group live.

Set up a stage state containing all the channels that you wish to put into the group. Channels must be recorded at a level greater than 0.

RECORD GROUP nn *

If the group already exists it will ask "ARE YOU SURE ?" Press * to confirm.

10.2 Recording a group blind.

Select the group screen on the VDU. Enter the number of the group. Enter channels directly into the group.

10.3 Using the group on the channel control.

Do not forget that moving a channel using the channel control will steal control of that channel.

10.3.1 GROUP nn *

Takes control of the channels in the group. The channels move under control of the wheel at a speed which is proportional to the level that the channel is recorded at in the group.

eg. Group nn contains a channel 1 @ 20% and 2 @ 40%.

Enter GROUP nn * and wheel up channel. When channel 1 reaches 40%, channel 2 equals 80%.

10.3.2 GROUP nn @ xx *

All the channels recorded in the group come under channel control at a level which is xx% of the recorded level.

eg. GROUP nn @ FL * Will load the group onto stage at it's recorded level.

10.4 Loading a group into a submaster.

LOAD SUB nn GROUP xx *

The group is loaded into the submaster with all channels at xx% of the level recorded in the group.

10.5 Comments.

A comment can be added to a group when in the group screen. Press COMMENT then enter text and finish with *. The text must have a maximum of 24 characters.

Section 11. Additions to a cue.

All the following additions may be used together.

In all the following examples the entry "TIME ww / xx" may be left out of the command line and the cue time will remain the same as currently recorded.

A cue part may be added after the cue number in all of the following examples.

11.1 DELAY

A delay can be allocated to the up or the down fade of a cue. Always specify an up and a down because a single time will be allocated to both.

RECORD CUE nn TIME ww / xx DELAY yy / zz *

Or to modify an existing cue. If the time is left blank then the time remains the same.

CUE nn TIME ww / xx DELAY yy / zz *

To delete the delay leave the number yy / zz blank.

11.2 WAIT

The wait time is put on a cue in order to start the following cue. The time when the following cue starts is taken from the time when the current cue starts. A wait can not be added at the time of recording.

CUE nn TIME ww / xx WAIT yy *

To delete the wait leave the number yy blank.

11.3 LINK TO CUE.

A link will allow the Lightpalette to break it's sequence. A link can not be added at the time of recording the cue. To link forwards to a cue.

CUE nn TIME ww / xx LINK TO CUE mm *

To link backwards to a previous cue.

CUE nn TIME ww / xx LINK TO CUE mm / zz *

"mm" is the target cue and "zz" is the number of times this loop is to be repeated before the original sequence can continue.

Loops can be nested inside one another.

11.4 COMMENT

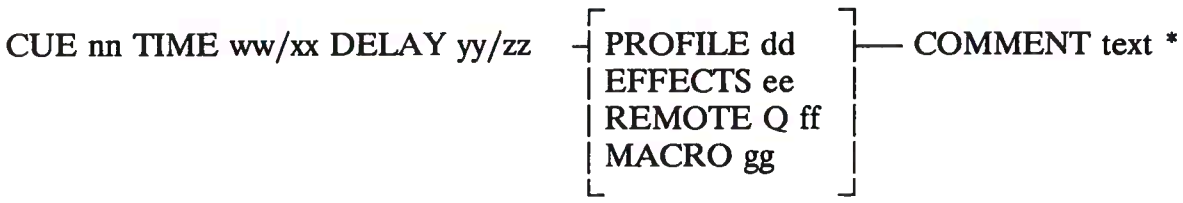
The comment must be the last entry on a command line before the * is pressed. The comment will only use the first 24 characters entered. This comment will be displayed on the cue sheet screen and at the bottom of the preview screen.

CUE nn TIME ww / xx ..... COMMENT text text text *

Press COMMENT on the main menu of the SETUP screen then enter text for the title of the show. This title will appear on the top of the cue sheet.

11.5 PROFILE / EFFECT / REMOTE Q / MACRO.

Only one of these attributes is allowed on a cue at any time. It must be positioned on the command line after the TIME and DELAY.



Note. WAIT and LINK must be added individually.

11.5.1 PROFILE.

This is a fade profile which can be assigned to a cue, or part of a cue. Any one of 64 profiles can be selected. If no profile is selected the cue will use the profile selected in the default setup.

11.5.2 EFFECTS.

Any effect can be started from a cue providing the cue does not contain any channels which are moving. ie. All channel levels must be AQUA.

There are up to 999 effects available.

11.5.3 REMOTE Q.

This command sends a GO signal to an IBM PC which is being used to control PALS luminaries.

11.5.4 MACRO

This command will allow a macro to be executed when the cue is faded. The macro could be used for any purpose, eg. To load submasters or load part 2 of the show during the interval.

There are 8 macro's available.

For more details see section 13.

Section 12. Part cues.

A cue can be split into a maximum of 8 parts.
There are many reasons for using this facility.

a. Each part of the cue can have a different up and down fade time.

b. Each part can have a delay. If the delay is shorter than the fade time of the previous part the cues will behave like a move fade.

c. To start an effect. An effect can only start on a cue which does not contain any changes in channel level. Part 1 will contain the changes in level. Part 2 will start the effect.

No channel may appear in more than one part. If a channel which has already been used is added to a later part it will disappear from the earlier part.

12.1 Recording each part individually.

Set up the lighting state for part 1 and record part 1 of the cue.

RECORD nn PART 1 *

Add the changes for part 2 to the lighting on stage. DO NOT change any channels which are moving in part 1. Now record part 2.

RECORD nn PART 2 *

Repeat this process for every part. If part 2 is recorded first then part 1 will be created with no change to the channels in the previous cue.

12.2 Recording each part with the full lighting state on stage.

Set up the final lighting state which will appear on stage after all parts of the cue have finished.

Select the channels which are to be entered into the first part then record the first part of the cue.

CHANNEL (list) RECORD nn PART xx *

Only channels which are listed will be recorded into the part.

Repeat the process with other parts of the cue. List different channels and record each part.

12.3 Recording in PREVIEW.

Select the cue and part on the preview screen.

PREVIEW CUE xx PART 1 *

Set up the lighting state for part 1 then move to the next part in preview.

CUE xx PART 2 *

Add the changes for part 2 to the lighting on stage. DO NOT change any channels which are moving in part 1.

When you select each part of the cue and enter the required level the change in level will appear GREEN, MAGENTA or WHITE.

When you preview any part of the cue all channels appearing in every other part of the cue will appear in aqua.

Section 13. MACRO

A macro is a pre-recorded sequence of commands which can be played back by pressing the MACRO button or from a cue.

There is a maximum of 8 macro's. Up to 32 command entries can be programmed into each macro.

To create a macro select the MACRO screen. Page+ and Page- will move between screens to view all macro's.

Type the command onto the bottom line then press the macro key to save the line into the macro.

To edit press the macro button of the selected macro. The macro line will appear on the bottom of the screen. Press HOME to turn on the cursor then use → and ← to move along the line while you edit. Press the macro key to record the new macro or press F8 to abort the edit without any change.

Press the command keys in the order they are to be played back. To delete the macro use F1.

The CODE command is used when a button on the palette has broken. Program into a macro CODE xxx. The number xxx is the code number of a specific button on the Lightpalette (See the operation handbook for a list of number). The macro button will now have the same operation the broken button. There are 2 CODE functions in case one of the function keys breaks.

The M* key is designed for calling macro numbers over 8 however the current software only supports 8 macro's.

Section 14 Effects

There can be up to 999 effects and each effect can have up to 99 steps.

14.1 Effects cue sheet.

There is no effects cue sheet. To find out which effects exist press the effects mimic and use NEXT and LAST.

14.2 To select the effect.

To edit an effect or create a new effect press the mimic then enter the effect number then *.

14.3 Setup the effect.

First select the required attributes.

Edit the defaults if necessary. The defaults are only for that one effect. If you record a step using the default then the STEP TIME, HI and LO levels will appear in Aqua in that step. If you change a default at any time all the levels which are aqua will also change to show the new default.

14.3.1 HI level.

The HI level is the % of the record level that a channel will go to when the step is on.

14.3.2 LO Level.

The low level is the % of the recorded level that a channel will return to at the end of a step.

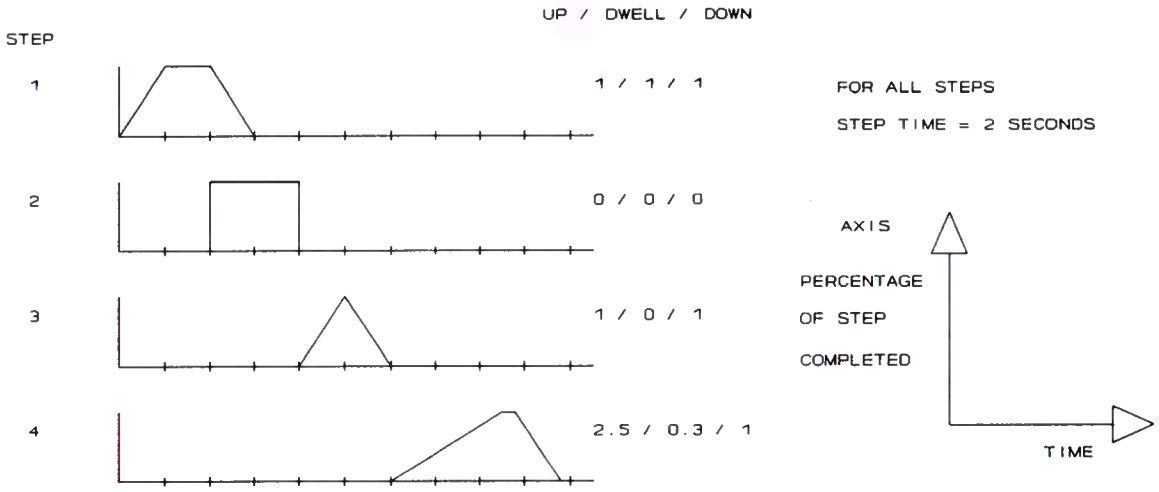
14.3.3 STEP TIME.

The time between the start of each step.

14.3.4 UP/DWELL/DOWN.

The total time for the UP, DWELL and DOWN does not have to equal the step time. Steps may overlap or be cut short.

The time 0/0/0 is a special case. The step will fade up instantly, dwell for the full step time, then fade down instantly.



14.4 Entering data into a step.

Select the step to edit as a 2 digit number. eg for step 1 enter 01.

Enter a single command line with the channels which are to be used in the step. This command line can contain :-

Channels -	1 + 2 + 5 > 10 - 6
Channel levels -	1 = FL + 2 > 5 = 70 + 12 = 30
Groups -	GROUP 1 + GROUP 3
Cues -	CUE LEVEL 1 + CUE LEVEL 4

Or a combination of all the above.

To delete a step select the channel the press * then confirm.

01 * [ARE YOU SURE] *

14.5 TEST

TEST will load the effect into the next available submaster. This will allow it to be viewed live. Enter TEST again to clear the submaster. If an effect is modified the TEST must be switched off then back on to see the change.

14.6 Running an effect on a submaster.

To use an effect it can be loaded into a submaster by entering :- LOAD SUB xx EFFECT nn *

If you run an effect over existing channel levels on the stage then the effect and the original levels work as highest takes precedence (HTP).

If a channel on an effect is moved using a channel control then the channel is stolen from the effect. To restart the effect the submaster fader must be faded down then back up. The channel returns to HTP.

If the submaster is examined the effect can be seen running continuously.

An effect running on a submaster will have channels stolen if the channel control uses these same channels. If the bump is set to Independent then the channels can not be stolen.

14.7 Running an effect from a cue.

To start an effect from a cue:-

CUE xx EFFECT nn *

The effect can be added to a new cue or to an existing cue providing the existing cue has no change to any channel levels (All levels are aqua).

An effect on a cue will not fade in or fade out. The effect will run as long as the cue is running. To make an effect run forever give the cue a time of 999 seconds. If the cue has any other recorded time the effect will stop when the cue is complete.

If you wish to fade an effect out record the next cue with all the channels used in the effect at a level of 0. The next cue has a wait so that the next cue starts before the effect has finished. The effect will stop as it starts to fade out.

If the cue is examined in preview every channel which is being used by the effect will appear as a white 0.

To stop an effect manually press the button above the playback fader which contains the effect.

Section 15. Submasters

15.1 Loading a submaster from the LIVE screen.

A submaster may be loaded with channels, effects or groups but not cues.

To load a group :- LOAD SUB xx GROUP nn *

To load an effect :- LOAD SUB xx EFFECT nn *

15.2 Loading a submaster from the SUB screen.

To edit channels press the Submaster mimic then enter the submaster number. Enter channels using the channel control in the same way as you would modify channels live.

To load a group or an effect into the submaster enter the same command as you would enter on the live screen.

The UPDATE SUB option will load the submaster with the current live output levels.

If the submaster contains a group then the UPDATE SUB + GROUP option will load the live stage state into the submaster. It will also load the live stage state into the group which is used in the submaster.

15.3 Using the submaster live.

Fade the lighting state or effect onto stage by raising the submaster fader. The levels will appear Yellow on the live screen.

15.4 The submaster setup menu.

100% or 150%.

Pile on (Highest takes precedence) or Inhibitive.

Bump buttons :-

Bump disabled - White -
Bump up - Blue ▲
Bump down - Green ▼
Dependent - Yellow D
Independent - Flashing yellow I
Quick load -

On software versions prior to 1.8.0 January 1992

Level - Red L
Rate - Flashing red R

Rate / Level only available on wheel submasters.

Dependent Highest takes precedence. Channel control can steal channels.

Independent. Highest takes precedence. Channel control can not steal channels.

150% can not be used with inhibitive.

Advice - Disable bump when using inhibitive.

Quick load.

A command line of channel levels and/or groups is entered on the live display. With the command line still on the screen the bump button can be pressed and the same command will load channels or groups into the submaster.

Section 16. Patch.

16.1 Patch displays.

The patch screen may be ordered by Dimmer number, Dimmer name or Channel number. If it is ordered by Channel number then any dimmer which is patched to channel 0 (ie off) will appear as the first entry on the patch screen.
The Dimmer name, Dimmer number and/or Dimmer profile information may be hidden on the patch screen.

16.2 Changing the patch.

The first number entered is always the dimmer number. A group of dimmers can be selected together using the > or + keys. This dimmer number or group is followed by the @ key. **1 > 5 + 10 @**

If * is pressed the Lightpalette 90 will assume the dimmer is to be patched to channel 0. The effect is to turn the dimmer off. The channel which used to control the dimmer which is off, will still appear on the LIVE screen even through it has no effect on stage.
1 > 5 + 10 @ *

If a number is entered then the dimmer or group of dimmers will all be controlled from the selected channel number. Pressing * will confirm the change of patch.
1 > 5 + 10 @ 20 *

If the @ key is pressed instead of the * then a profile number can also be entered (1 to 64) followed by * to finish. **1 > 5 + 10 @ 20 @ 3 ***

To change the profile and not the patch enter the dimmer number or group followed by @ @ then the profile number followed by *. **1 > 5 + 10 @ @ 3 ***

16.3 Repatch 1 to 1.

To repatch all the dimmers back to 1 to 1 press F3 *.

To repatch a group of dimmers back to 1 to 1 select the group of dimmers then press F3 *.

1 > 5 + 10 F3 *

16.4 Create name.

Each dimmer may have it's own unique name. Enter the dimmer number then press F1. Next type the name followed by *.

The name may not be longer than 5 characters. The first character must be a letter. Two dimmers may not have the same name.

1 F1 FRED *

16.5 Select 6K / 12K

6K or 12K assignments are only used on American CD80 dimmer racks. This option should not be used on any UK dimmer rack.

Select the dimmer or group then press F2 *. When the assignment is selected the dimmer number will appear with a red background.

A single dimmer is given an assignment and a UK dimmer rack is in use. When the channel which controls this dimmer is faded onto stage two dimmers will fade up instead of one. The correct dimmer will fade and the next dimmer will also fade to the same level. The levels of every dimmer, after the dimmer with the assignment, will be one dimmer out.

Section 17. Profiles.

There are 64 profiles available. To edit a profile first select the profile screen. PAGE + and PAGE - move between pages. There are 16 profiles displayed per page. NEXT and LAST move the cursor between profiles.

Each profile can be used as a dimmer profile or a fade profile. A dimmer profile can start at any level and finish at any level. A fade profile should always start at a level of 0 and end at a level of 100.

Separate profiles can be assigned to the up fade and the down fade of a cue.

17.1 To EDIT a profile.

Select the profile you wish to edit.

My advice is to first clear the existing profile using F3 "Blank to end of line". All levels will disappear except for 0 and FL. These can be changed if required.

Enter specific points on the profile. Type the profile level first then @ then the output level.

50 @ 75 *

Next fill in the gaps between these entered levels with F2 "Fill in blanks".

To return to a linear profile press F1 *.

Section 18. Disc functions and diagnostics.

The following options are found on the SETUP screen under the heading DISC AND RESERVE.

18.1 Option 5 Initialize disk.

The disc must be initialised, "FORMATTED" before it can be used to save information from the Lightpalette 90. The disk uses the same format as the Apple Macintosh computer.

18.2 Option 4 Record disk.

Everything recorded or setup in the Lightpalette 90 is recorded into the disc. The disc can only contain one show. It is not possible to store part of the Lightpalette onto disc.

18.3 Option 1 Load system.

This option loads everything from the disc into the Lightpalette 90.

18.4 Option 2 Load show.

This option will load everything from disc except for a few of the SETUP options.

The system parameters are not loaded.
The Console definitions and status is loaded.
The Dimmer output configuration is loaded.
The Submaster setup is loaded.
The Defaults screen - only Default Q-only is loaded.

18.5 Option 3 Load part show.

This option allows the operator to load :-

The patch only.
One or a range of cues.
One or a range of groups.
One or a range of effects.
One or a range of submasters.
One or a range of profiles.

An offset number may be used when loaded to change the recorded numbers.

18.6 Option 6 Load reserve system.

This option can only be used with a dual electronics tower. If the selector key is in the A or B position the tower will not copy information from one system to the other automatically. This option will allow the contents of the system being worked on to be copied to the other system.

18.7 Option 7. Force switch to reserve.

When AUTO is selected the system will switch to reserve if a fault is found. This option will force the switch.

Section 19. Printer.

The print option will allow almost any information in the Lightpalette 90 to be printed.

On almost every print option a single item or a group of items can be selected and printed. Select the option number then specify the item or group of items to be printed then press *.

The following can be printed.

The cue sheet.
The contents of a cue.
The contents of a group.
The contents of an effect.
The contents of a submaster.
The whole patch.
The contents of a profile.
The text in NOTES.

Halt printer will stop the output from the Lightpalette 90. However the printer may not stop at once if it contains a printer buffer. The printer buffer may be emptied by switching the printer off.

Section 20. Notes.

Select any page between 1 and 57 using PAGE + and PAGE -keys.

Move the cursor using NEXT and LAST to move up and down and → and ←to move right and left. HOME moves the cursor to the top left of the page.

Use F1 to insert a line, F2 to delete a line, and F3 to delete the current character. CLEAR will delete the previous character. Text editing is always in insert mode.

When a page is full the text will automatically scroll onto the start of the next page.

Table 14. Key Codes for Reassignment

Code	Key	Code	Key	Code	Key
1	EFFECT (Level keypad)	61	REM DIM	121	EXPAND RECORD
2	+10%	62	@ (Record keypad)	122	
3	+	63	Q ONLY/TRACK	123	
4	>	64	LIVE	124	E
5	@ (Level keypad)	65	PREVIEW	125	D
6	@ FULL	66	F4	126	C
7	* (Level keypad)	67	F8	127	
8		68	P	128	CONTROL
9	SUB	69	:	129	CHANNELS IN USE
10	-10%	70		130	
11	-	71	* (Alpha keypad)	131	
12	9	72	PLAYBACK CUES	132	W
13	6	73	PLAYBACK SUBS	133	S
14	3	74	F3	134	X
15		75	F7	135	
16		76	O	136	SETUP
17	GROUP (Level keypad)	77	L	137	PATCH
18	/	78	. (Alpha keypad)	138	
19	. (Level keypad)	79		139	
20	8	80	CHANNEL PATH	140	CUE
21	5	81	SUBS (Display keypad)	141	A
22	2	82	F2	142	Z
23	0	83	F6	143	CLEAR (Alpha keypad)
24		84	I	144	FADER 1 MANUAL
25	CUE LEVEL	85	K	145	FADER 2 MANUAL
26	CUT	86	.	146	FADER 3 MANUAL
27	SET	87		147	FADER 4 MANUAL
28	7	88	EFFECT (Display keypad)	148	FADER 5 MANUAL
29	4	89	GROUP (Display keypad)	149	FADER 6 MANUAL
30	1	90	F1	150	FADER 7 MANUAL
31	CLEAR (Level keypad)	91	F5	151	FADER 8 MANUAL
32	RIGHT_ARROW	92	U	152	RATE
33	PAGE+	93	J	153	STOP/BACK
34	TAKE CONTROL	94	M	154	GO
35	RETURN	95			
36	RECORD	96	PROFILE (Display keypad)		
37	CUE	97	FUNCTION		
18	TIME	98			
39	* (Record keypad)	88			
40	HOME	100	Y		
41	PAGE-	101	H		
42	M*	102	N		
43	LOAD SUB	103			
44	WAIT	104			
45	PART	105			
46	DELAY	106			
47		107			
48	LEFT ARROW	108	T		
49	NEXT	109	G		
50	DIMMER	110	B		
51	LOAD CUE	111	SPACEBAR		
52	PROFILE	112	CUE SHEET		
53	LINK TO Q	113	UNPATCH DIMMERS		
54	=	114			
55		115			
56	SWAP	116	R		
57	LAST	117	F		
58	RATE/MANUAL	118	V		
59	GO TO Q	119			
60	COMMENT	120	NOTES		