

Obsession

Lighting control system

Version 2.4

User Manual

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4052M1001 Revised 6/97

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Chapter 1

Introduction

This chapter includes information to orient you to your console and the manual.

It includes the following sections:

- Using this manual
- Output level conventions
- Using the command line
- System Shutdown
- Battery maintenance
- Customer service

Using this manual

Refer to *Appendix E, Reference*, or the console's Help function for answers to your questions. Direct additional questions to ETC Technical Services at 800/775-4382.

*Note: The Setup menu's **New Features** option provides information about newly-added features and options. Press [Setup*][1][3] [Enter] to display **New Features**. Use the Level wheel or [↑] and [↓] to scroll through the text.*

Help screens are available for all Obsession keys, including soft-keys. To display help, press [Help], then press any console key.

Text conventions

See chart below for examples of manual text conventions:

Manual symbol:	Meaning:
[Enter]	Console key labeled "Enter".
[#]	Any number entered on the numeric keypad. Can be one or more digits.
Please confirm	Text that appears on screen, usually on command line.
<i>Getting help</i>	Section of User Manual titled "Getting help".
[Group*]	Display key labeled "Group". Selects Group mode. (See note below.)
[Group]	Function key labeled "Group". Enters Group command on the command line.

Note: Use the row of gray display keys across the top of the console to select the display mode. To distinguish these keys from the rest of the console keys, display keys are identified with an asterisk in the manual. These keys are [Group List], [Cue List*], [Sub List*], [Memo*], [Live*], [Blind*], [Patch*] [Setup*], [Group*], [Sub*], [Effect*], and [Park*].*

Output level conventions

Obsession consoles use a last-action convention rather than a highest level convention to determine levels for channels affected by several outputs. Obsession reads and outputs the most recent output level it receives for a specific channel.

Obsession's submasters, however, generally operate on a highest level basis. A channel remains at the level set by a submaster unless another output sets it at a *higher* level. A level setting entered on the keypad, however, does affect submaster levels on a last-action basis.

For example, if a channel is included in a submaster and a cue that has played back and is in a fader, Obsession sets the channel at the level set by the submaster, if that level is the greater of the two settings.

In the following table, the first output affects the second output on either a highest-level or last-action basis, as noted.

Subs → Cues Highest-level

Cues → Subs Highest-level

Subs → Keypad Highest-level

Keypad → Subs Last-action

Keypad → Cues Last-action

Cues → Keypad Last-action

Using the command line

The command line runs above the softkeys at the bottom of the Command display. As you enter commands, they appear on the command line.

For example, in Live, enter [9] [Full] [Enter] to set channel 9 to full intensity. The command line reads:

Live: CHAN 9 FULL ■

Tips

- The command line prefix indicates your current console display mode.
- The command line reads **<<< Invalid Input** if you type an illegal entry. Press [Clear] to continue.
- Press [Enter] to conclude an entry. A ■ indicates a concluded entry. ([Out] and [Level] also conclude the entry.)
- You may enter multiple instructions in one command. For example:

Live: CUE 6 WAIT 5 TIME 3 LABEL Joe enters ■

- To enter a split attribute, separate the parts on the command line with the [/] key. For example, a cue with split fade times: **TIME 4/6** (A four second upfade and six second downfade).
- To assign a default setting to an attribute, select the attribute, then press [Enter].
- Use the [←] and [→] keys to edit the command line.

For example, in Live, press [1] [Thru] [5] [Full]. Press [←]. **Full** is highlighted in red. Continue to press [←] until **1** is highlighted. Press [Clear] [3] to replace the **1** with **3**. Press [Enter].

Note: While you edit the command line, Obsession doesn't check to see if the command is legal. Error messages won't appear until you move the highlight off the command line (by pressing [→]), or press [Enter].

More Softkeys

When additional softkeys are available, Obsession displays the ↓ character above the [S8] softkey. Press [More Softkeys] to display additional softkeys.



System Shutdown

The System Shutdown procedure protects your show data by preventing you from turning off your system while modifying show data or storing a show. Always run System Shutdown before turning off the console.

If you forget to do a System Shutdown before turning off power, Obsession displays a warning next time the console is turned on.

Keystrokes:

1. Press [Setup].
2. Press [S8], **System Shutdown**.
3. Press [Enter].
4. Press [Enter].

Actions/Command line:

Advisory:

Do you wish to shut the system down now? Press Enter to proceed with shutting the system down. Otherwise, press Clear

Command line:

Setup: SHUT SYSTEM DOWN?

Setup: SHUT SYSTEM DOWN? ■ Please confirm

System shuts down

Battery maintenance

Caution: The Obsession console must be on for at least seven hours every 28 days to maintain its battery's charge. If the console is off for longer than 28 days, show information stored in the console's memory may be lost. Always back up your show on a diskette or the hard drive.

Customer service

If you have problems with your console, please follow these steps:

1. Refer to the manual or the Help function.
2. If you do not find the answer in the manual, call your local dealer or ETC Technical Services. Please have the following information available before you call:
 - Console model and serial number (located on back panel)
 - Software version (displayed on Setup menu)
 - Options installed
 - Dimmer installation type
 - Dimmer manufacturer

To reach Electronic Theatre Controls' US technical services department, call 800/775-4382 Monday through Friday, from 8:00 AM to 6:00 PM Central Standard Time. If you call for emergency service after hours and weekends, your call will be answered electronically and forwarded to a service representative who will contact you as soon as possible.

Address all correspondence about Obsession to:

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Internet

Email address: mail@etconnect.com

World Wide Web Home Page: <http://www.etconnect.com>

Chapter 2

Monitor displays

Obsession supports two color monitors called the Command and Playback displays. Use [Swap] to switch the monitor displays.

This chapter includes the following sections:

- Command display
- Flexichannel
- Playback display

Command display

The Command display is the display on which you create and modify the various elements that make up a show. Different Command display modes allow you to work on cues, submasters, groups, effects, and so forth. The **Displays** keys choose the Command display mode.

Softkeys

A line of white boxes, known as softkeys, runs across the bottom of the Command display. These correspond to the keys labeled [S1] through [S8]. Their contents indicate the current function of the associated key. If a softkey is blank, that key has no function.

Command line

The command line runs above the softkeys in all Command display modes. The command line prefix tells you which display you are in, followed by the keystrokes you enter and messages from Obsession.

Channel colors

The colors in which channel numbers and levels appear provide information about the channels' most recent moves and current status. The following chart shows the meaning of colors in Live, Blind, Group, and Sub display modes. Information on the colors in Effect, Park and Patch displays are included in their sections of this chapter.

Channel numbers

Gray Unselected channel.

Yellow Selected channel. Channels are selected when you press [At] and controlled by the fader wheel.

White Parked channel.

Channel output levels

White on Red .. Selected channel. Controlled by the keypad or the fader wheel.

Red..... Channel has been de-selected, but its current level was established using the keypad.

After you press [Go], or override the channel's level with a submaster, the channel level changes to one of the following:

Blue..... Channel level is higher than in the previous cue.

Green..... Channel level is lower than in the previous cue.

Magenta Channel level is unchanged (tracking) from the previous cue.

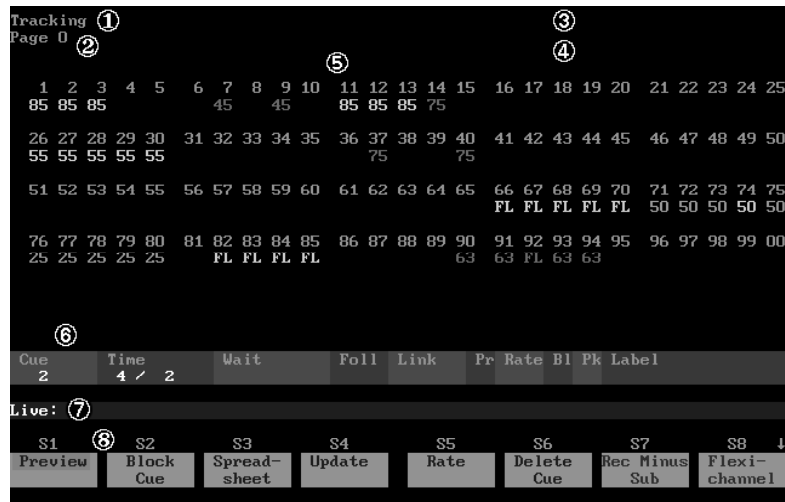
Yellow Channel level was set by a submaster.

White Channel level represents a blocked channel or is set by an effect.

If you select a channel but don't change its level, it returns to the control of whatever set its level originally (fader, submaster, etc.) when you release it.

Live

The Live display shows you the current levels of all active channels.



1 Tracking/Cue Only

Console operating mode.

2 Page

Channel page. Use [Go To Page], [Page+] or [Page-] to switch pages.

3 Parked Dimmers and/or Channels

Indicates that dimmers and/or channels are parked on stage.

4 Flexichannel mode

Current Flexichannel mode, if enabled.

5 Channel level display

Current level of all channels.

6 Cue

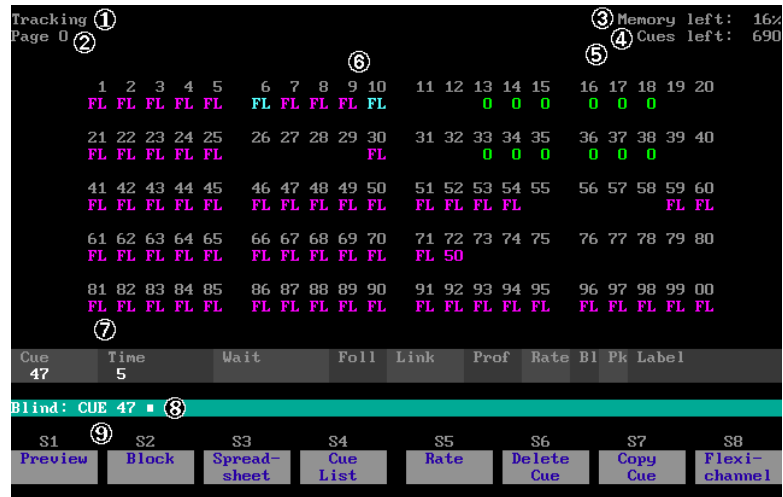
Attributes for current cue.

7 Command line

8 Softkeys

Blind

Blind lets you work on cues without affecting the look on stage.



1 Tracking/Cue Only

Console operating mode.

2 Page

Channel page. Use [Go To Page], [Page+] or [Page-] to switch pages.

3 Memory left

Memory remaining for storing cues. Large cues use more memory.

4 Cues left

Additional cues (out of 1,000) you can create, as memory allows.

5 Flexichannel mode

Current Flexichannel mode, if enabled.

6 Channel level display

Level of all channels in selected cue.

7 Cue

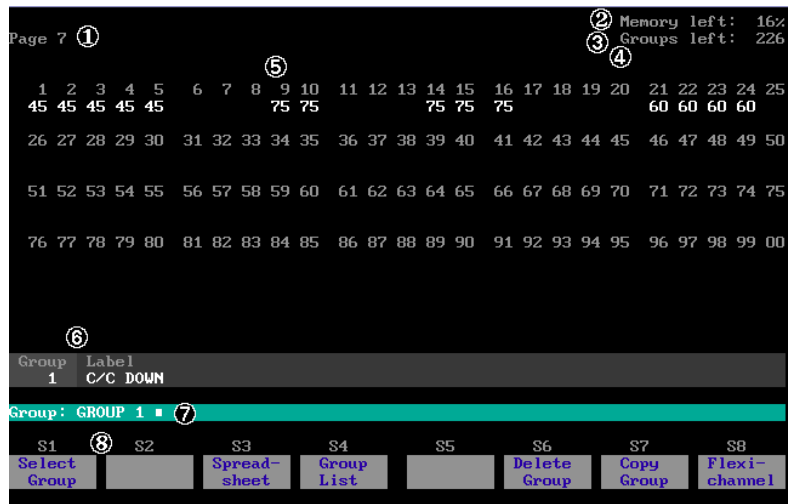
Attributes for selected cue.

8 Command line

9 Softkeys

Group

Group lets you work on groups without affecting the look on stage.



1 Page

Channel page. Use [Go To Page], [Page+] or [Page-] to switch pages.

2 Memory left

Memory remaining for storing groups. Large groups use more memory.

3 Groups left

Additional groups (out of 250) you can create, if memory allows.

4 Flexichannel mode

Current Flexichannel mode, if enabled.

5 Channel level display

Level of all channels recorded in selected group.

6 Group

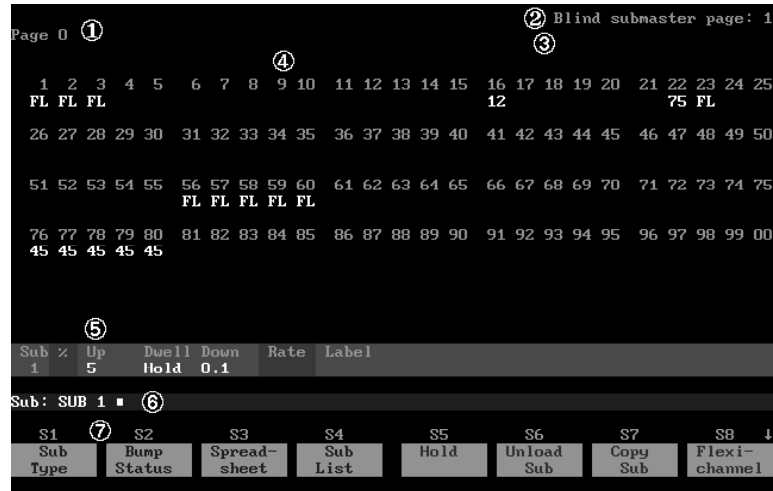
Label of selected group.

7 Command line

8 Softkeys

Submaster

Submaster allows you to modify and create submasters.



① Page

Channel page. Use [Go To Page], [Page+] or [Page-] to switch pages.

② Submaster page

Submaster page. Use [Sub Page] to switch pages.

③ Channel level display

Levels of all channels in selected submaster.

④ Flexichannel mode

Current Flexichannel mode, if enabled.

⑤ Sub

Attributes for selected submaster.

⑥ Command line

⑦ Softkeys

Park

Park lets you work with and view parked channels and dimmers.



① **Parked dimmers**

All parked dimmers and their levels.

② **Parked channels**

All parked channels and their levels.

③ **Command line**

④ **Softkeys**

Park colors

Channel and dimmer numbers and levels display in Park mode in these colors.

GrayDimmer or channel level.

WhiteUnselected dimmer or channel number

YellowSelected dimmer or channel number.

Effect

Effect lets you work on effects without affecting the look on stage.



Effect colors

Steps display in Effect mode in the following colors.

Steps

GrayUnselected step.

WhiteSelected step.

Black on Gray .Item being edited.

❶ Memory left

Memory remaining for storing effects.

❷ Effects left

Additional effects (out of 100) you can create, if memory allows.

❸ Attributes

Attributes applied to effect.

❹ Label

Current effect's label, if any.

❺ Fade times

Current effect's fade times.

❻ Random Rate

Indicates if current effect has a random rate and what its range is.

❼ Step

Steps in effect.

❽ Elements

Channels or groups in each step.

❾ Time

Time between the beginning of a step and the beginning of the following step.

❿ In

Time it takes the step to fade from its current level to its high level.

① Dwell

Time the step holds levels between the In fade and the Out fade.

② Out

Time it takes the step to fade from its current level to its low level.

③ Lo

The lowest level channels or groups in the step are allowed to reach.

④ Hi

The highest level channels or groups in the step are allowed to reach.

⑤ Command line**⑥ Softkeys**

Patch

Patch allows you to create and modify your patch. You may work in any of three displays, By Dimmer, By Patch or By Label.

By Dimmer

Dimmer Chan Level	1 1	2 2	3 3	4 4 97	5 5	6 6	7 7	8 8	9 9	10 10 PB
Dimmer Chan Level	11 11	12 12	13 13	14 14	15 15	16 16	17 17	18 18	19 19	20 20
Dimmer Chan Level	21 21	22 22	23 23	24 24 75	25 25	26 26	27 27	28 28	29 29	30 30
Dimmer Chan Level	31 1	32 32	33 33	34 34	35 35	36 36	37 37	38 85	39 39	40 40
Dimmer Chan Level	41 41	42 42	43 43	44 44	45 45	46 46	47 47	48 48	49 49	50 50

Patch By Dimmer : 5

S1 By Label	S2 By Channel	S3 Unpatch	S4 Display Labels	S5 A	S6 B	S7 Multi-plex	S8 Channel
----------------	------------------	---------------	----------------------	---------	---------	------------------	---------------

1 Dimmer

Dimmers available for patching.

2 Label

Labels of dimmers available for patching. Use **Display Labels** softkey to reveal.

3 Chan

Channel to which dimmer is patched.

4 Level

Level at which dimmer is patched or profile assigned to dimmer. If patched at Full, level is not displayed.

5 Command line

6 Softkeys

Patch colors

Dimmer or channel numbers and levels display in all three Patch modes in these colors.

White/Gray Unselected dimmer/channel number

Yellow Selected dimmer number

Magenta Dimmer level

Blue Dimmer profile

Live channel levels on the Patch by Channel display appear in the same colors as in Live. See *Channel output levels* on page 23.

By Label

Label Chan Level	② 0001 ③ 1	0002 2	0003 3	0004 4 97	0005 5	0006 6	0007 7	0008 8	0009 9	0010 10 P8
Label Chan Level	0011 11	0012 12	0013 13	0014 14	0015 15	0016 16	0017 17	0018 18	0019 19	0020 20
Label Chan Level	0021 21	0022 22	0023 23	0024 24 ④ 75	0025 25	0026 26	0027 27	0028 28	0029 29	0030 30
Label Chan Level	0031 1	0032 32	0033 33	0034 34	0035 35	0036 36	0037 37	0038 85	0039 39	0040 40
Label Chan Level	0041 41	0042 42	0043 43	0044 44	0045 45	0046 46	0047 47	0048 48	0049 49	0050 50
Patch By Label: ⑤										
S1 By Dimmer	⑥ S2 By Channel	S3 Unpatch	S4 ① Display Dimmers	S5 A	S6 B	S7 Multi- plex	S8 Channel			

① Dimmer

Dimmers available for patching. Use **Display Dimmers** softkey to reveal.

② Label

Labels of dimmers available for patching.

③ Chan

Channel to which dimmer is patched.

④ Level

Level at which dimmer is patched or profile assigned to dimmer.

⑤ Command line

⑥ Softkeys

By channel

Chan ①	Live Chn% ②	Ind ③	Dimmers ④
1		Ind	129 ⑤ P11
2	70		130
3	70	Ind	132 P11
4	70		131
5	70	Ind	128 P11
6	70		127
7			93
8			161
9	70		160

Patch By Channel: ⑥

S1	S2	S3	S4	S5	S6	S7	S8
By Dinner	By Label	Unpatch	Display Labels ⑦	A	B	Multi- plex	Inde- pendent

① Chan

Channels available for patching.

② Live Chn%

Current live level of the channel. You may set live levels from this display.

③ Ind

Indicates whether channel is independent.

④ Dimmer/Label

Dimmer number(s) or label(s) patched to channel.

⑤ Level/Profile

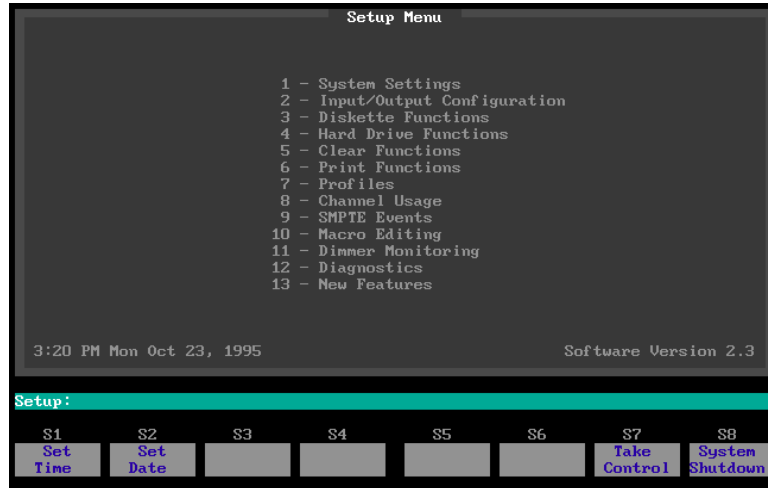
Level at which dimmer is patched or the profile assigned to dimmer. If Full, level not shown.

⑥ Command line

⑦ Softkeys

Setup menu

The Setup menu allows you to access system setting information, print and disk functions, diagnostics, and profile and macro editing, as well as control information for options such as MIDI and SMPTE. It also indicates your current software version.



New Features

New Features provides information about newly-added features and options. Press [Setup*] [1][3] [Enter] to display the **New Features** text. Use the Level wheel or [↑] and [↓] to scroll through.

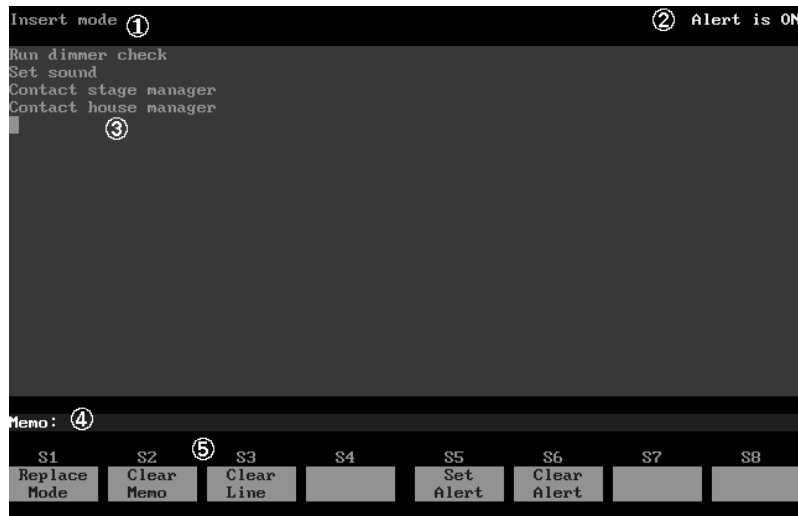
Diagnostics

The **Diagnostics** option provides access to three useful screens for troubleshooting system problems.

- The Diagnostics display monitors and displays all system activity.
- The Message Log keeps a record of all events and activity messages.
- The ETCNet Self-Tests display lets you run diagnostic tests on most devices attached to your ETCNet network.

Memo

The Memo display provides a screen of text to view or print. The console can also be configured to advise you to check the Memo display automatically any time you turn the console on.



1 Editing mode

The current editing mode appears in the upper left corner. When you type a memo in Insert mode, text to the right of the cursor moves to the right. In Replace mode, text to the right of the cursor is replaced by the new text. Press [S1], **Insert/Replace Mode**, to switch between modes.

2 Alert

If Alert is on, the Memo advisory appears when the console turns on. Press [S5], **Set Alert**, to activate Alert. Press [S6], **Clear Alert**, to deactivate Alert.

3 Text

Use the alphanumeric keyboard to enter text. The arrow keys move the cursor on the screen. Press [S2], **Clear Memo**, to erase the Memo screen. Press [S3], **Clear Line**, to erase only the line you are currently entering or editing.

4 Command line

5 Softkeys

To enter a memo, follow these instructions:

Keystrokes:

1. Press [Memo*].
2. Type **Shut down console following show** on the alphanumeric keyboard.
3. Press [S5], **Set Alert**.

Action:

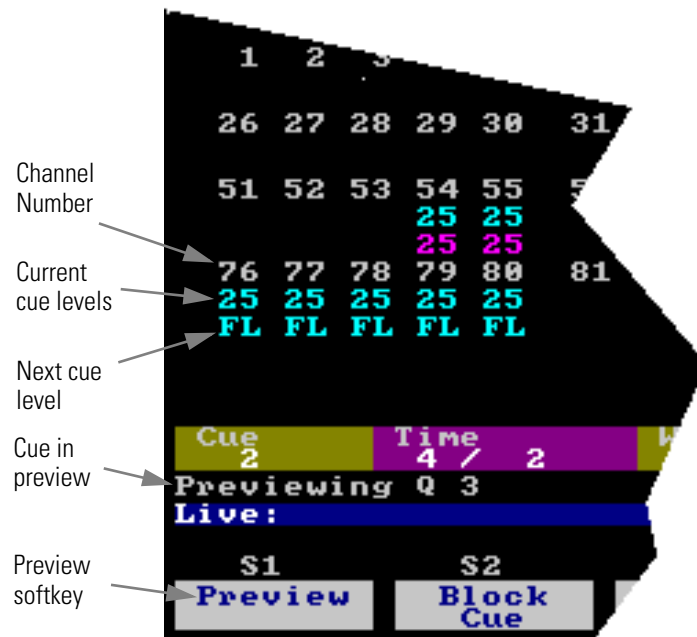
- Selects Memo display mode
- Enters your memo on the Memo screen
- Activates the alert; when console is turned on, memo advisory will automatically appear

Preview

Preview allows you to see levels in the next cue in the cue list. You may also use Preview in Live or Blind to check the levels in any submaster, group or cue.

To activate Preview mode in Live, press [Live*] [S1], **Preview**, [Enter]. Levels currently on stage appear immediately under the channel numbers. The levels for the next cue appear under the current level.

Above the command line, the display indicates what is being previewed.



- Press [S1], **Preview**, in Live or Blind, enter the desired number and press [Enter] to preview a specific cue.
- Press [S1], **Preview**, [Sub], enter the submaster number and press [Enter] to preview a specific submaster.
- Press [S1], **Preview**, [Group], enter the group number and press [Enter] to preview a specific group.

Use [Next] and [Last] to page through the function you are previewing.

Flexichannel

The Flexichannel feature allows you to control which channels are shown in the Live, Blind, Group, and Submaster displays and spreadsheet screens. Flexichannel has three modes: Show Channels, Current Channels and View Channels.



The channels may be in cues, effects or submasters, or may be channels you have selected recently. You may also display any specific range of channels. Gaps in the channel list are marked by a vertical grey line. All other screen elements are unchanged.

When you select a Flexichannel mode in Live, it applies also to Blind, Group, and Submaster.

When you select a Flexichannel mode in Blind, Group, or Submaster, the selection applies only to that display.

In order to use Flexichannel, press [S8], **Flexichannel**, then select the mode you want by pressing [S1], [S2], [S3], or [S4].

All Channels

Press [S1], **All Channels**, [Enter] to turn off Flexichannel and return to normal display mode. All Channels displays all channels, whether or not they are used in the show.

Selecting channels with Flexichannel active

Working with Flexichannel active differs from working without Flexichannel in only one respect, selecting channels with [Thru].

When Flexichannel is enabled, the [Thru] key functions slightly differently.

- In All Channels mode, pressing [1] [Thru] [5] [Enter] selects all channels from 1 to 5.
- In Show Channels, Current Channels or View Channels mode, pressing [1] [Thru] [5] [Enter] selects all visible channels from 1 to 5.

To select all channels from 1 to 5, visible or hidden, press [1] [Thru] [Thru] [5] [Enter].

Note: If the first channel in the selected range is unused, you do not need to use [Thru] [Thru].

Show Channels

Press [S2], **Show Channels**, [Enter]. Show Channels mode displays only the channels used in the cues, effects and submasters in the show. Note the grey lines that replace channels 97 through 124 and 126 through 499. These channels are not used in the show.



Show Channels does not show channels used only in a group. This makes it possible for you to create a library of frequently used groups without adding their channels to the display. This also means that Show Channels is not available in the Group display.

Current Channels

Press [S3], **Current Channels**, [Enter]. In Blind, Submaster or Group, Current Channels mode displays only the channels recorded in the currently viewed object.

The display below only shows the channels used in cue 1.

```

Tracking
Page 0
Memory left: 94%
Cues left: 988
Flexichannel: Current

  1  2  3 |  7  9 | 11 12 13 14 | 26 27 28 29 30 | 37 | 40 | 71 72
 75 75 75 | 45 45 | 75 75 75 75 |                |    |    |
73 | 75 76 77 78 79 80 | 90 91 92 93 94
FL | FL 45 45 45 45 45 | 63 63 FL 6

Cue 1 | Time 2 | Wait | Foll | Link | Prof | Rate | Bl | Pk | Label
-----|-----|-----|-----|-----|-----|-----|----|----|-----
Blind: CUE 1 ■

S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8
Preview | Block | Spread- | Cue | Rate | Delete | Copy | Flexi-
sheet | List | sheet | List | Cue | Cue | Cue | channel

```

Note: In Live, Current Channels displays all channels used in the show.

Note: When [Current Channels] is used with the [Preview] command, the channels shown are always the channels for the primary item, not the previewed item. If, as a result, channels are missing from the previewed item, this is indicated by a ■ character where the missing channels would have appeared.

View Channels

Press [S4], **View Channels**, to make a range of channels visible. If Show Channels or Current Channels are active, View Channels selects only channels that are already visible in the current Flexi-channel mode.

The spreadsheet below displays all channels 1 through 5 and 21 through 25. The View Channels option allows you to compare two sets of channels side by side that might normally not appear on the same screen. Note that a grey █ appears between the two sets of channels. This indicates channels that have levels but aren't being shown.

Tracking		Channels										Memory left: 94%
												Cues left: 988
												Flexichannel: View
Cue		1	2	3	4	5	21	22	23	24	25	
1		75	75	75								
2		85	85	85								
2.5		85	85	85			95		95	95	95	
2.9		0	0	0			0		0	0	0	
3	P1	90	90	90	90	90	Ef	Ef	Ef	Ef	Ef	
	P2	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	
	P3	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	
	P8	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	Ef	
4												
5		0	0	0	90	90	0	0	0	0	0	
5.2					0	0						
5.3		78	78	78		78						
6	P1	78	78	78		78						
	P2	78	78	78		78						
7		65	65	65	75	78						
8		65	65	65	0	78						

Spreadsheet: VIEW CHANNELS 1 > 5 + 21 > 25 █

S1	S2	S3	S4	S5	S6	S7	S8
Replace With	Block	Cue List	Return	Move Cue	Delete Cue	Copy Cue	Flexi-channel

Note: View Channels may also be used when Flexichannel is off (All Channels selected).

Note: As well as entering ranges of channels to view, such as [View Channels] [1] [Thru] [5] [0] [Enter], you may enter commands like [View channels] [Group] [1] [Enter] to view only the channels in group 1 or [View Channels] [Group] [Cue] [6] to view the channels in cue 6.

Playback display

Playback is the display on which you run and monitor your show. Press the [Sub List], [Cue List], [Group List] keys in the row marked **Displays** to choose a Playback display mode. Press [Live] [More Softkeys] [S3], **SMPTE List**, to choose the SMPTE Events List mode.

The gray and blue boxes labeled **F1** through **F8** correspond with the eight faders. The information displayed in these boxes indicates current activity on each fader. If a box is empty, that fader is inactive. A cue shown in the gray box is pending and will run when [Go] is pressed. A cue shown in the blue box is running.

Expand

[Expand] extends the information appearing on the Command display onto the Playback display. For example, if you have a channel screen on the Command display, [Expand] adds up to an additional 100 channels on the Playback display.

Cue List

Cue List displays a list of recorded cues. Cue List is the default Playback display mode.

It also provides information on cue attributes, including fade and wait times, Follow, Link, Profile, Rate, Block, Park, and Label.

Cue	Time	Wait	Follow	Link	Profile	Rate	Block	Park	Label
29.5	10								
29.7	8								
30	10								
31	18								WICKY DANCE
	P7 3	15 / 15							
	P8 15								
32	10								
33	5								
> 34	12								RESTORE AFT. D<
35	10								
36	13								CORPS DE BALLET
	P7 3	10 / 10							
	P8 10								
37	6								Houghton enters
38	5								ALL DANCE
39	9								
	P7 3	6 / 6							

❶ Grandmaster/Blackout

Current Grandmaster setting; indicates when [Black-out] is active.

❷ Show info and time

Name and comments assigned to show, current time, and SMPTE time if enabled.

❸ Submaster page

Indicates which page of submasters is active.

Cue attributes

❹ Cue number

Number (and parts) of cue.

❺ Fade times

Cue's upfade and downfade.

❻ Wait times

Cue's wait time(s).

❼ Follow

Delay after this cue runs before the next cue runs automatically.

❽ Link

Cue or macro linked to this cue.

❾ Profile

Cue's assigned profile.

❿ Rate

Cue's assigned rate.

⓫ Block

Cue's block status; * if fully blocked, – if partially blocked.

⓬ Park

Fader to which cue is parked.

⓭ Label

Cue's label.

⓮ Fader Status display

Current state of all pending and fading cues.

Cue List colors

Cue numbers appear in these colors.

Gray Cue not selected or running

White Cue is selected for editing in Live or Blind. ►
appears by cue

Red..... Cue running on physical fader (faders 1-8)

Yellow Cue finished running, on stage; if ► appears by
cue, cue is selected for editing in Live or Blind

Magenta Cue running on virtual fader (faders 9-126). To
learn more about a cue on a virtual fader, press
[About] [Cue], enter the cue number, then
press[Enter]

Submaster List

Submaster List displays information about the submasters in the active submaster page. Submaster List shows the current setting of each submaster slider, as well as submasters' labels and fade and dwell times.

Press [Sub List] to switch to Submaster List display mode. Submaster List displays submasters 1 through 24. Press [Sub List] again to display submasters 25 through 48.

Sub	%	Up	Dwell	Down	Label	Sub	%	Up	Dwell	Down	Label
1	5	Hold	0.1			13	0	Man	0		
2	5	Hold	0.1			14	0	Man	0		
3	5	Hold	0.1			15	0	Man	0		Finale
4	5	Hold	0.1			16	0	Man	0		
5	5	Hold	0.1			17	5	Hold	5		E2
6	5	Hold	0.1			18	0	Man	0		
7	5	Hold	0.1		Fire scene	19	0	Man	0		
8	5	Hold	0.1			20	0	Man	0		
9	0	Man	0			21	0	Man	0		
10	0	Man	0			22	0	Man	0		
11	0	Man	0			23	0	Man	0		
12	0	Man	0			24	5	25	1		E1

① Submaster page

Current submaster page.
Use [Sub Page] to switch pages.

② Sub

Submaster.

③ %

Overall level of submaster.

④ Up

Time it takes to rise to full.

⑤ Dwell

Time submaster holds at full.

⑥ Down

Time submaster takes to fade out.

⑦ Label

Submaster's label.

Submaster list colors

Submasters are displayed in the following colors.

Gray Unrecorded submaster.

White Selected submaster.

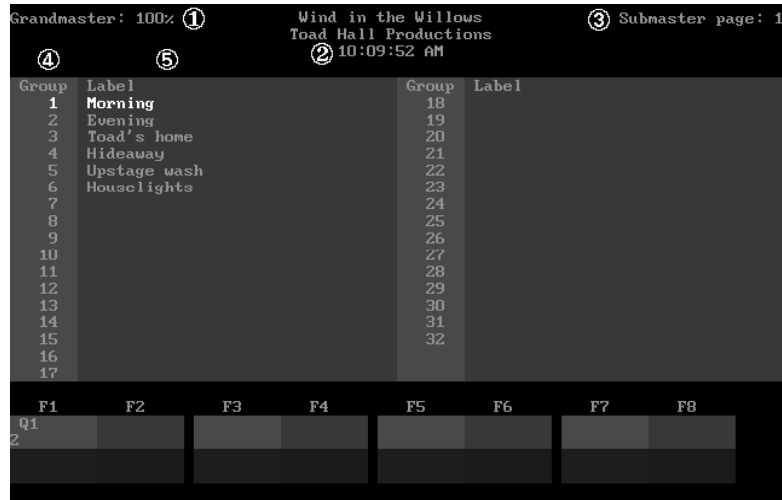
Green Additive sub number (brightens when selected).

Red Inhibitive sub number (brightens when selected).

Group List

The Group List displays the group number and label of all recorded groups. Press [Group List] to page through the list if you have recorded more than 34 groups.

The selected group is displayed in yellow and its label is displayed in white; other groups are displayed in gray.



❶ **Grandmaster/Blackout**

Current Grandmaster level; indicates when [Blackout] is active.

❷ **Show info and time**

Name and comments assigned to show, current time, and SMPTE time if enabled.

❸ **Submaster page #**

Current submaster page. Use [Sub Page] to switch pages.

❹ **Group #**

Number of group.

❺ **Label**

Group's label, if any.

SMPTE Event List

The SMPTE Events List displays a list of recorded SMPTE events. The list displays the event number, time, element, rate, and label for all recorded events. Up to 20 events may be displayed at a time.

The running event is displayed in yellow and the selected event is displayed in gray; other events are displayed in white.

Event	Time (30 fps)	Element	Rate	Label
1	00:00:01:00	Cue 1	75	C1 PRESET
2	00:00:02:00	Bump 2 On		Sub 2 bumps on
3	00:00:05:00	Bump 2 Off		Sub 2 bumps off
4	00:00:10:00	Macro 3		Run Macro 3
5	00:00:15:00	Go		Press Go/Run pending
6	00:00:30:00	Bump 24		Sub 24:Press/release
7	00:00:31:00	Cue 31		C31 Dream Ballet
8	00:01:00:00	Cue 32		Houghton exits

① Grandmaster/Blackout

Current Grandmaster level setting; indicates when [Blackout] is active.

② Show info and time

Name and comments assigned to show (if any), current time, and SMPTE time if enabled.

③ Submaster page

Current submaster page. Use [Sub Page] to switch pages.

④ Event

Number of the SMPTE event.

⑤ Time

The SMPTE time when the event executes.

⑥ Element

The cue, submaster, macro, or Go command that the event executes.

⑦ Rate

The rate at which an event that executes a cue runs.

⑧ Label

The event's label, if any.

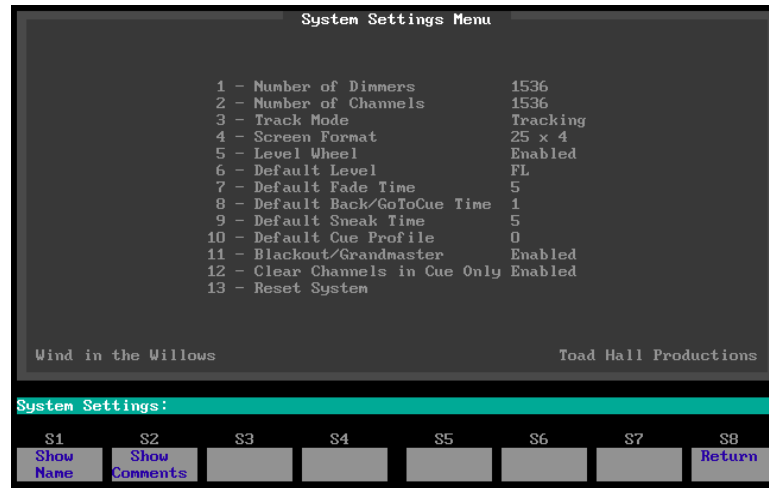
⑨ Fader Status display

Current state of all pending and fading cues.

Chapter 3

System settings

System settings allow you to customize the number of dimmers and channels in your system, set system modes and screen formats, and choose default settings for a variety of console functions.



Current settings are listed in the System Settings menu. The illustration shows default settings.

This chapter includes the following sections:

- Setting number of dimmers
- Setting number of channels
- Selecting Cue Only or Tracking mode
- Selecting screen format
- Enable or disable Level Wheel
- Setting default Level
- Setting default fade times
- Setting default Back and Go To Cue times
- Setting default Sneak time
- Setting default cue profile
- Enable or disable Blackout and Grandmaster
- Enable or disable clearing channels in Cue Only
- Resetting your system
- Setting system date and time

Setting number of dimmers

You should set your console for the number of dimmers in your system. Obsession 600 defaults to 1,024 dimmers, Obsession defaults to 1,536 dimmers and Obsession 3000 defaults to 3,072 dimmers.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [1], Number of Dimmers , and press [Enter].	System Settings: ENTER NUMBER OF DIMMERS:
4. Use the keypad to enter the desired number of dimmers.	System Settings: ENTER NUMBER OF DIMMERS: 800
5. Press [Enter].	System Settings: ENTER NUMBER OF DIMMERS: 800 ■ Please Confirm
6. Press [Enter] to confirm the number of dimmers, or press [Clear] to cancel the operation.	System Settings: ENTER NUMBER OF DIMMERS: 800 ■ Please Confirm ■

Note: If you use this setting to increase the number of dimmers, the new dimmers are automatically patched to channel zero.

Setting number of channels

Obsession 600 lets you control your dimmers through up to 608 control channels, Obsession allows up to 1,536 control channels and Obsession 3000 allows up to 3,072 control channels.

To set the number of channels the system can address, follow the steps above, but select [2], **Number of Channels**, in step 3.

Selecting Cue Only or Tracking mode

Obsession functions in Tracking or Cue Only operating mode. It defaults to Tracking mode when reset.

In Tracking mode, if a cue sets a channel at a level, the channel remains at that level until it receives a specific instruction to change levels. The channel's level *tracks* through subsequent cues.

In Cue Only mode, if a cue sets a channel at a level, the channel remains at that level only until the next cue starts, then fades out.

See *Chapter 7*, on page 113 for information about recording channels as tracking or cue only.

Keystrokes:

1. Press [Setup*].
2. Select [1], **System Settings**, and press [Enter].
3. Select [3], **Track Mode**, and press [Enter].
4. Press [Enter] to confirm the change of modes, or press [Clear] to leave as currently set.

Action/Command line:

Selects System Settings menu

System Settings: CUE ONLY?
or...
System Settings: TRACKING?

System Settings: CUE ONLY? ■
or...
System Settings: TRACKING? ■

Selecting screen format

The Command display operates in one of two display screen formats, four lines of 25 channels or five lines of 20 channels.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [4], Screen Format , and press [Enter].	System Settings: 25 x 4 FORMAT? or... System Settings: 20 x 5 FORMAT?
4. Press [Enter] to confirm the change of formats, or press [Clear] to leave as currently set.	System Settings: 25 x 4 FORMAT? ■ or... System Settings: 20 x 5 FORMAT? ■

Enable/disable Level Wheel

You may enable or disable the level wheel. Use this to protect against changing levels by bumping the wheel.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [5], Level Wheel , and press [Enter].	System Settings: ENABLE LEVEL WHEEL? or... System Settings: DISABLE LEVEL WHEEL?
4. Press [Enter] to disable the wheel if enabled or to enable it if disabled, or press [Clear] to cancel the operation.	System Settings: ENABLE LEVEL WHEEL? ■ or... System Settings: DISABLE LEVEL WHEEL? ■

Setting default Level

You may assign a value between zero and 100 to the [Level] key. The default value is 100 percent.

Keystrokes:

1. Press [Setup*].
2. Select [1], **System Settings**, and press [Enter].
3. Select [6], **Default Level**, and press [Enter].
4. Use the keypad to enter the value (0-100) to assign.
5. Press [Enter] to assign the value to [Level], or press [Clear] to cancel the operation.

Action/Command line:

Selects System Settings menu

**System Settings: ENTER
DEFAULT LEVEL (0-100):**

**System Settings: ENTER
DEFAULT LEVEL (0-100): 75**

**System Settings: ENTER
DEFAULT LEVEL (0-100): 75 ■**

Setting default fade times

You may assign default upfade and downfade times of .1 second to 99:59 minutes to cues or control fade times manually. Default fade times are five seconds.

Fade times may be expressed in minutes and seconds, or as fractions of seconds (in decimal format).

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [7], Default Fade Time , and press [Enter].	System Settings: ENTER DEFAULT FADE TIME:
4. Enter the time you wish to assign to both the upfade and downfade.	System Settings: ENTER DEFAULT FADE TIME: 5
or...	
for a different upfade and downfade, enter upfade time, press [/], and enter downfade time.	System Settings: ENTER DEFAULT FADE TIME: 3 / 6
or...	
to enter an upfade only, enter upfade time and press [/].	System Settings: ENTER DEFAULT FADE TIME: 3 /
or...	
to enter a downfade only, press [/] and enter downfade time.	System Settings: ENTER DEFAULT FADE TIME: / 6
or...	
for a manual fade, don't enter anything.	System Settings: ENTER DEFAULT FADE TIME:
5. Press [Enter] to set the time(s), or press [Clear] to cancel the operation.	System Settings: ENTER DEFAULT FADE TIME: 5 ■

Setting default Back and Go To Cue times

You may assign a default fade time to [Go To Cue] and [Back]. When you use these functions to play back a cue, its fade time overrides the fade time assigned to the cue. Default time is one second for both.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [8], Default Back/GoToCue Time , and press [Enter].	System Settings: ENTER DEFAULT BACK TIME:
4. Enter the value to assign.	System Settings: ENTER DEFAULT BACK TIME: 2
5. Press [Enter], or press [Clear] to cancel.	System Settings: ENTER DEFAULT BACK TIME: 2 ■

Setting default Sneak time

[Sneak] allows you to fade or restore channel levels on stage in a specified time. Default time is five seconds for a Sneak.

For more information, see *Sneak* on page 80.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [9], Default Sneak Time , and press [Enter].	System Settings: ENTER DEFAULT SNEAK TIME:
4. Enter the time you wish to assign for Sneak.	System Settings: ENTER DEFAULT SNEAK TIME: 4
5. Press [Enter], or press [Clear] to cancel .	System Settings: ENTER DEFAULT SNEAK TIME: 4 ■

Setting default cue profile

A profile describes the relationship between the length of a fade, and the level of a cue or dimmer at each point throughout that fade. By adjusting the profile's shape you can create a variety of effects, accommodate for variations and deficiencies in your fixtures, and protect equipment from stress.

You may assign profiles to dimmers in place of a patch level, or to cues and cue parts. Obsession provides 32 profiles, including nine preset profiles and 23 user-definable profiles.

Any profile that starts at **0** and ends at **Full** may be used as the default profile for cue playback. Profile zero, a linear profile, is the default.

Preset profiles include:

- 0 - Linear (not editable)
- 1 - IES square
- 2 - Slow bottom
- 3 - Fast bottom
- 4 - Fast top
- 5 - Full at 1%
- 6 - Out at 100%
- 7 - Preheat at 5%
- 8 - Preheat at 10%
- 9 - Hot patch

For information about defining profiles, see page 212.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [1][0], Default Cue Profile , and press [Enter].	System Settings: ENTER DEFAULT PROFILE (0-32):
4. Enter the profile you wish to assign as the default profile.	System Settings: ENTER DEFAULT PROFILE (0-32): 5
5. Press [Enter], or press [Clear] to cancel the operation.	System Settings: ENTER DEFAULT PROFILE (0-32): 5 ■

Enable/disable Blackout and Grandmaster

To disable or enable Blackout and the Grandmaster, follow these steps:

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [1][1], Blackout/Grandmaster , and press [Enter].	System Settings: ENABLE BLACKOUT BUTTON? or... System Settings: DISABLE BLACKOUT BUTTON?
4. Press [Enter] to disable these features if enabled or to enable them if disabled, or press [Clear] to cancel the operation.	System Settings: ENABLE BLACKOUT BUTTON? ■ or... System Settings: DISABLE BLACKOUT BUTTON? ■

Enable/disable Clear Channels in Cue Only

By default, when you create a new cue in Blind, any channels set to a level in the previous cue track into the new cue. Their levels appear in magenta. When Clear Channels in Cue Only is enabled and you create a new cue in Cue Only mode, any channels set to a level in the previous cue are set to zero in the new cue.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [1][2], Clear Channels in Cue Only , and press [Enter].	System Settings: Toggle Clear Channel Levels in Cue Only Mode?
4. Press [Enter] to disable these features if enabled or to enable them if disabled, or press [Clear] to cancel the operation.	System Settings: Toggle Clear Channel Levels in Cue Only Mode? ■

System reset

If your system is malfunctioning, try resetting it. Resetting deletes all show, system setting and I/O configuration information in the console's memory and restores all settings to their factory defaults. You may then restore your show and configuration from diskette or the hard drive.

Warning: If you do not wish to lose all show, system setting and I/O configuration information, be certain to back up the show and the I/O configuration to a diskette or the hard drive.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select [1], System Settings , and press [Enter].	Selects System Settings menu
3. Select [1][2], Reset System , and press [Enter].	System Settings: RESET SYSTEM?
4. Press [Enter]	System Settings: RESET SYSTEM? ■ Please Confirm
5. Press [Enter], or press [Clear] to cancel.	System Settings: RESET SYSTEM? ■ Please Confirm ■

If your console malfunctions before it reaches the Live display, there are two ways to force it to reset as it starts.

- As you turn the system on, hold down [7], [8] and [9] simultaneously until the Live display appears,
or...
- After you turn the system on, hold down both [Shift] keys on an alphanumeric keyboard plugged directly into the console or Processor Unit until the Live display appears.

Setting the date

Keystrokes:

1. Press [Setup*].
2. Press [S2], **Set Date**.
3. Enter the current date in MM-DD-YY format. (i.e., press [1][2][-][3][1][-][9][9] to enter December 31, 1999)
4. Press [Enter]

Action/Command line:**Setup: SET DATE****Setup: SET DATE 12 – 31 – 99****Setup: SET DATE 12 – 31 – 99 ■**

Setting the time

Keystrokes:

1. Press [Setup*].
2. Press [S1], **Set Time**.
3. Enter the current time in 24-hour format. (i.e., press [9][3][0] to enter 9:30 AM; press [1][6][2][5] to enter 4:25 PM.)
4. Press [Enter]

Action/Command line:**Setup: SET TIME****Setup: SET TIME 16:25****Setup: SET TIME 16:25 ■**

Chapter 4

Patch

Obsession 600's Patch display allows you to assign up to 1,024 DMX512 dimmers to up to 608 control channels. Obsession accommodates up to 1,536 dimmers on 1,536 channels. Obsession 3000 accommodates up to 3,072 dimmers on 3,072 channels.

You can use Obsession's default one-to-one patch, or you may create a custom patch. In addition, Obsession's proportional patching capability allows you to set dimmer output levels or assign one of 32 output profiles to dimmers.

This chapter includes the following sections:

- Selecting one-to-one patch
- Creating custom patch
- Proportional patching
- Labeling dimmers
- Assigning profiles to dimmers
- Dimmer check
- Flash dimmer
- About dimmer
- Multiplexed dimmers
- Independent channels
- Setting Live channel levels

One-to-one patch

The one-to-one patch assigns dimmer 1 to channel 1, dimmer 2 to channel 2 and so on. If there are more dimmers than channels, excess dimmers are automatically patched to channel zero. See *Unpatching individual dimmers* on page 67 for more information on channel zero.

Follow these steps to select a default one-to-one patch:

Keystrokes:	Action/Command line:
1. Press [Setup*] to display the Setup menu.	
2. Press [5], Clear Functions [Enter].	Clear functions:
3. Press [9], Reset Patch 1-to-1 [Enter].	Clear functions: RESET PATCH? Please confirm
4. Press [Enter] to confirm your selection of one-to-one default patch, or press [Clear] to cancel.	Sets patch to default one-to-one patch.

Creating custom patch

You may create virtually any dimmer-to-channel configuration. (Multiple dimmers may be assigned to single channels, but only one channel may be patched to a dimmer.)

There are three patch display modes: By Dimmer, By Label and By Channel. Press [S1] or [S2] to select the mode.

Patching by dimmer

In the By Dimmer patch display, you may view labels assigned to dimmers. Press [S4], **Suppress Labels**, to hide or reveal the labels. The keypad defaults to dimmer selection.

Follow these steps to patch a dimmer(s) to a control channel:

Keystrokes:	Action/Command line:
1. Press [Patch*].	
2. If patch is displayed in By Channel or By Label mode, press [S1], By Dimmer .	Selects By Dimmer patch display
3. Use the keypad to enter the numbers of the dimmers you want to patch. Use [+], [-] and [Thru] if you want to select more than one dimmer.	Patch: DIMMER 4 > 8
4. Press [At], then enter the channel number to which you want to patch the selected dimmers. (You may press [S8], Channel , in place of [At].)	Patch: DIMMER 4 > 8 @ CHAN 2
5. Press [Enter].	Patch: DIMMER 4 > 8 @ CHAN 2 ■

Note: As long as the selected dimmer number is on the command line, the channel assignment may be changed or a proportional level assigned without reselecting the dimmer.

Note: As long as the selected dimmer is on the command line, press [Next] to put the next dimmer on the command line.

Patching by channel

Press [S4] in By Channel mode to choose between **Display Labels** and **Display Dimmers**. The keypad defaults to channel selection.

Follow these steps to patch a dimmer or dimmers to a control channel:

Keystrokes:

Actions:

1. Press [Patch*].
2. If patch is displayed in By Dimmer or By Label mode, press [S2] , **By Channel**.
3. Use keypad to enter the number of the channel to which you want to patch. **Patch: CHAN 18**
4. Press [Dim], then enter the numbers of the dimmer(s) you want to patch. **Patch: CHAN 18 DIMMER 10 > 20**
5. Press [Enter]. **Patch: CHAN 18 DIMMER 10 > 20 ■**

Note: As long as the selected channel number is on the command line, add an additional dimmer by pressing [Dim] [#] [Enter].

Note: As long as the selected channel number is on the command line, press [Next] to post the next channel on the command line.

Patching by dimmer label

In By Label patch display you may view dimmer numbers. Press [S4], **Suppress Dimmers**, to hide or reveal dimmer numbers. The keypad defaults to dimmer selection. For information on assigning labels to dimmers, see *Labeling dimmers* on page 68.

Follow these steps to patch a dimmer to a control channel:

Keystrokes:	Action/Command line:
1. Press [Patch*].	
2. To select By Label mode, press [S2] in By Channel mode, or [S1] in By Dimmer mode.	Selects By Label patch display
3. Use the alphanumeric keyboard to type the label of the dimmer to patch.	Patch: DIMMER Bax
4. Press [S8], Channel , then enter the channel number to which to patch the selected dimmer.	Patch: DIMMER Bax CHAN 5
5. Press [Enter].	Patch: DIMMER Bax CHAN 5 ■

Proportional patching

You may proportionally inhibit the output of individual dimmer levels from any Patch display. Dimmers output at 100 percent unless you patch them at a lower level. The following example uses By Dimmer mode.

Keystrokes:

1. Press [Patch*].
2. If patch is displayed in By Channel or By Label mode, press [S1], **By Dimmer**.
3. Use the keypad to enter the desired dimmer number(s). Use [+], [-] and [Thru] if you want to select more than one dimmer.
4. Press [At] [At].
5. Use the keypad to enter the desired maximum output level for the dimmer(s).
6. Press [Enter].

Action/Command line:

Selects By Dimmer patch display

Patch: DIMMER 5 + 8

**Patch: DIMMER 5 + 8 @
CHAN @**

**Patch: DIMMER 5 + 8 @
CHAN @ 80**

**Patch: DIMMER 5 + 8 @
CHAN @ 80 ■**

Note: You may assign a patch level and a channel assignment at the same time. For example, [Dim] [2] [At] [4] [At] [5][0] [Enter] patches Dimmer 2 to Channel 4 and assigns it a proportional level of 50 percent.

Unpatching individual dimmers

Unpatch dimmers by assigning them to channel zero. Channel zero is not an actual control channel. It functions as a holding area for storing dimmers not included in your patch.

Hint: Before you begin creating a patch, assign all dimmers to channel zero. Then, as you patch, select dimmers from channel zero and patch them to channels.

If you select default one-to-one patch and you have more dimmers than channels, Obsession automatically assigns excess dimmers to channel zero.

Follow these steps to assign dimmers to channel zero in By Dimmer mode:

Keystrokes:	Action/Command line:
1. Press [Patch*].	
2. If patch is displayed in By Channel or By Label mode, press [S1], By Dimmer .	Selects By Dimmer patch display
3. Press [S3], Unpatch .	Patch: UNPATCH
4. Use the keypad to enter the dimmer(s) you want to patch to channel zero. Use [+], [-] and [Thru] if you want to select more than one dimmer.	Patch: UNPATCH DIMMER 1 > 10
5. Press [Enter].	Patch: UNPATCH DIMMER 1 > 10 ■

Note: When a dimmer is unpatched, its proportion and profile automatically return to their default state.

Labeling dimmers

You may assign alphanumeric labels to your dimmers. Dimmer labels may be up to five characters long.

Obsession assigns the dimmer number as a default label to each dimmer. For example, dimmer 237 is assigned the label number **0237**.

Dimmers may be labeled in all three modes. The following instructions do it in By Dimmer mode.

Keystrokes:

1. Press [Patch*].
2. If patch is displayed in By Channel or By Label mode, press [S1], **By Dimmer**.
3. Use the keypad to enter the number of the dimmer to which you want to assign a label.
4. Press [Label], then use the alphanumeric keyboard to type the desired label.
5. Press [Enter] on the keypad.

Action/Command line:

Selects By Dimmer mode

Patch: DIMMER 5

**Patch: DIMMER 5 LABEL
Stage**

**Patch: DIMMER 5 LABEL
Stage ■**

Assigning a profile to a dimmer

You may select one of 32 output curves (profiles) and assign it to a dimmer instead of a proportional patch level. These profiles allow you to compensate for non-linear light outputs from certain types of fixtures or incorporate a preferred response in a fade.

If you do not select a profile, all dimmers use profile zero (a linear fade). By Dimmer mode is used in the following example.

Keystrokes:	Action/Command line:
1. Press [Patch*].	
2. If necessary, press [S1], By Dimmer .	Selects By Dimmer mode
3. Enter the dimmer(s) to which you want to assign a profile.	Patch: DIMMER 5 > 7
4. Press [Profile], then enter the number of the desired profile.	Patch: DIMMER 5 > 7 PROFILE 2
5. Press [Enter].	Patch: DIMMER 5 > 7 PROFILE 2 ■

Note: To reset profile to a linear fade, assign the dimmer a proportional level of Full, or press [Dim] [5] [Profile] [Enter].

Note: You may set an output profile for all dimmers patched to a channel or a list of channels. For example, to set all dimmers patched to channels 1 through 5 to profile 2, enter: [1] [Thru] [5] [Profile] [2] [Enter].

Dimmer check

You may check dimmers by selecting a single dimmer and setting it at a level. Once you select a dimmer, advance sequentially through the dimmers checking one at a time.

Keystrokes:

1. Press [Live*].
2. Press [Dim] then use the keypad to enter the number of the first dimmer.
3. Press [At] then use the keypad to enter an output level (1-99 percent), or press [Full]

Actions:

Live: DIMMER 1

Live: DIMMER 1 @ 50

Note: You can also set the output level by pressing [Level]. If you use [Level], you do not need to press [Enter].

4. Press [Enter]
5. Press [Next] or [Last] to select the next or previous dimmer. Press any other key to end dimmer check.

Live: DIMMER 1 @ 50 ■

Note: A sample macro to automate a dimmer check is on page 201.

Flash dimmer

You may use the Flash softkey in Live to flash dimmers. To flash dimmer 1, press:

[More Softkeys] [S6], **Flash**, [Dim] [1] [Enter]

or

[Dim] [1] [More Softkeys] [S6], **Flash**, [Enter]

As long as the Flash Dimmer command is on the command line, use [Next] and [Last] to step through the dimmers in sequence.

About dimmer

The [About] key provides you with information about your dimmers.



- **Label:** The dimmer's label.
- **Channel:** The channel to which the dimmer is assigned.
- **Proportion:** The dimmer's assigned proportional level.
- **Profile:** The dimmer's assigned profile.
- **Park status:** The level at which the dimmer is parked, if any. If Multiuser is installed, the User that parked the dimmer is noted.

Keystrokes:

1. Press [About] [Dimmer].
2. Enter the number of the desired dimmer.
3. Press [Enter].
4. Press [Clear].

Action/Command line:

ABOUT DIMMER

ABOUT DIMMER 6

About Dimmer screen displayed.

ABOUT DIMMER 6 ■

Screen is cleared

Finding unused dimmers

Press [About] [Dimmer] [Enter] to display the About screen for the first unused dimmer. In Live, after doing so, use [Next] and [Last] to page through all unused dimmers. If all dimmers are used, this will take you to dimmer 1.

If your system uses ETCLink to monitor dimmers through an ETC Sensor dimming system, additional dimmer monitoring information is displayed. The following window appears only if dimmer monitoring is enabled.



- **Rack/Slot number:** The rack and slot in which this dimmer is located.
- **Console dimmer level:** The dimmer output level the console is sending to the dimmer.
- **Rack dimmer level:** The actual output level at which the dimmer is set.
- **Dimmer level source:** The source of the control signal which set the dimmer's level. Possible sources include:
 - DMX A**
 - DMX B**
 - Rack #**
- **Recorded lamp load:** The load at which the selected dimmer was recorded.
- **Load at full:** The load on the dimmer when the level is at Full.
- **Actual load:** The actual load currently on the dimmer.
- **Dimmer error:** Current dimmer errors, if any.

Multiplexed dimmers

ETC's new Multiplex Dimming Technology can increase the capacity of your dimming system. The ETC Multiplexer converts the output of a single ETC Sensor or L86 dimmer into two separate signals. Both signals then provide discrete levels for two ETC Source Four lighting fixtures.

Note: The DMX512 port that serves the dimmer must be in Multiplex mode. To set the port's mode, see page 315.

Before you create your patch, you must identify any dimmers whose signals are multiplexed. Obsession indicates the split by adding an **A** or **B** to the dimmer number.

Follow these steps to multiplex a dimmer:

Keystrokes:	Action/Command line:
1. Press [Patch*].	
2. Enter the numbers of the dimmers to multiplex. (Press [Dim] first if you are in By channel mode. Use [+], [-] or [Thru] to select multiple dimmers.)	Patch: DIMMER 5 > 9
3. Press [S7], Multiplex .	Patch: DIMMER 5 > 9 MULTI- PLEX
4. Press [Enter].	Patch: DIMMER 5 > 9 MULTI- PLEX ■ Please confirm
5. Press [Enter] to confirm.	Patch: DIMMER 5 > 9 MULTI- PLEX ■ Please confirm ■

*Note: Use [S5], **A**, and [S6], **B**, along with the numeric keypad, to enter dimmer numbers as you create your patch. If you select a multiplexed dimmer without specifying **A** or **B**, the system defaults to **A**.*

Note: Multiplexing is only available for use with dimming systems operating at 115V, 60Hz.

Note: Multiplexing is now known as Dimmer Doubling.

Independent channels

An independent channel is not affected by the Grandmaster, [Blackout], [Rem Dim], [Flash], Channel Check, or solo submaster bump buttons.

Keystrokes:	Actions:
1. Press [Patch*].	
2. If patch is in By Dimmer or By Label mode, press [S2], By Channel .	Selects By Channel mode
3. Use keypad to enter the number(s) of the channel(s) to make independent.	Patch: CHAN 18
4. Press [S8], Independent .	Patch: CHAN 18 INDEPENDENT
5. Press [Enter].	Patch: CHAN 18 INDEPENDENT ■

Note: Press [Go To Cue] [0] [Enter] to take all channels other than independent channels to zero. Press [Go To Cue] [Out] [Enter] to take all channels including independent channels to zero.

Setting Live channel levels in Patch

In Patch by Channel mode, you may set channels to levels on stage.

Keystrokes:	Actions:
1. Press [Patch*].	
2. If patch is in By Dimmer or By Label mode, press [S2], By Channel .	Selects By Channel mode
3. Use keypad to enter the number(s) of the channel(s) that you want to set to a level.	Patch: CHAN 8
4. Press [At].	Patch: CHAN 8 @
5. Enter the desired level.	Patch: CHAN 8 @ 40
6. Press [Enter].	Patch: CHAN 8 @ 40 ■

Chapter 5

Setting channel levels

Setting channel levels is the first step in recording cues, submasters and groups. Setting channel levels in Live mode brings light levels up on stage. Setting channel levels in other modes does not affect stage lights.

In most cases, channel output changes do not take effect until you press [Enter]. If you use the fader wheel or press [+10], [-10], [Out], or [Level], channel levels are set immediately.

This chapter includes the following sections:

- Selecting channels
- Setting channel levels
- Channel check
- About channel
- Channel Usage display

Selecting channels

Using the keypad to set channel levels involves two steps: selecting the channels, then entering output levels.

- To select a single channel, enter the channel number.
Press: [1]
- To select two channels, enter the first channel, then press [+] and enter the second channel.
Press: [1] [+] [7]
- To select a group of consecutively numbered channels, enter the number of the first channel, then press [Thru] and enter the last number.
Press: [1] [Thru] [9]
- To select all but one of a group of consecutively numbered channels, enter the first channel, press [Thru], enter the last channel, then press [-] and enter the channel to leave out.
Press: [1] [Thru] [9] [-] [5]

Once you have entered your channel selections, you are ready to set channel levels.

Selecting channels with Flexichannel active

Working with Flexichannel active differs from working without Flexichannel in only one respect, selecting channels with [Thru].

In All Channels mode, pressing [1] [Thru] [5] [Enter] selects all channels from 1 to 5. When Flexichannel is enabled, the [Thru] key functions slightly differently. In Show Channels, Current Channels or View Channels mode, pressing [1] [Thru] [5] [Enter] selects all visible channels from 1 to 5.

To select all channels from 1 to 5, visible or hidden, press [1] [Thru] [Thru] [5] [Enter].

Note: If the first channel in the selected range is unused, you don't need to use [Thru] [Thru].

Setting channel levels

Assign output levels to channels using the basic format [#] [At] [#] [Enter] where the first number is the channel and the second is the level. If you enter a single digit for the level, Obsession multiplies it by ten. In other words, [4] [At] [1] sets channel 4 to 10 percent. To set channel 4 to 1 percent, enter [4] [At] [0][1].

Fader wheel

To set channels levels with the fader wheel, select the channels, then use the wheel to set the desired output level. You can also use the fader wheel to proportionally adjust output levels for all active channels.

To set selected channel levels, enter [1] [Thru] [5] [Enter] then move the fader wheel to set levels.

To set all active channels, press [Enter] then move the fader wheel to set levels.

Full

To use [Full] to set selected channel levels to 100 percent, press [1] [Thru] [5] [Full] [Enter].

+10/−10

Press [1] [Thru] [5] [+10] to raise levels by 10.

Press [1] [Thru] [5] [−10] [−10] to lower levels by 20.

Note: You do not need to press [Enter] to complete the operation.

Out

Press [1] [Thru] [5] [Out] to set selected channels to zero.

Note: You do not need to press [Enter] to complete the operation.

[At] [Enter]

Press [1] [Thru] [5] [At] [Enter] in Live to set selected channels to zero.

Flash channel

Use [More Softkeys] [S6], **Flash**, to alter the level of a selected channel between 15 percent and Full. The channel flashes as long as the instruction remains on the command line. You may only flash one channel at a time.

Example

To flash channel 1, press:

[More Softkeys] [S6], **Flash**, [1] [Enter]

or...

[1] [More Softkeys] [S6], **Flash**, [Enter]

As long as the Flash command remains on the command line, use [Next] and [Last] to step through the channels.

Sneak

Sneak lets you fade channels on stage to a level you choose, in a specific time. You may also restore channels to the last level at which they were set by a fader or submaster. If you do not indicate otherwise, the sneak occurs in the default sneak time.

Keystrokes:

1. Press [Live].
2. Select the channel(s) to sneak and the level to fade it to. For example press [5] [At] [5] [Sneak].
3. Press [Time] and enter the time for the sneak. For example, press [Time] [1][0].
4. Press [Enter].

Action/Command line:

Selects channel 5. Sets level at 50 percent
Live: CHAN 5 @ 50% SNEAK

Selects Sneak time of ten seconds
Live: CHAN 5 @ 50% SNEAK TIME 10

Fades channel 5 to 50 percent over ten seconds
Live: CHAN 5 @ 50% SNEAK TIME 10 ■

Follow these steps to restore a channel to its last fader or submaster level.

Keystrokes:

1. Select the channel(s) you want to restore. For example, press [5].
2. Press [Sneak] [Enter].

Action/Command line:

Selects channel 5
Live: CHAN 5

Fades channel 5 back to its most recent cue or submaster level
Live: CHAN 5 SNEAK ■

Press [Sneak] [Enter] to restore all channels to their last fader or submaster levels.

Undo

Undo lets you switch from a selected channel's current level to its previous level and back. You may continue to do so until you enter a new command.

Keystrokes:

1. Press [Live].
2. Select channel(s) and set their levels. For example press [1] [Thru] [5] [Full] [Enter].
3. Change levels of the same channel(s). For example press [1] [Thru] [5] [At] [5] [Enter].
4. Press [Undo] [Enter].
5. Press [Undo] [Enter].

Action/Command line:

Sets channels 1 through 5 at Full
Live: CHAN 1 > 5 FULL ■

Sets channels 1 through 5 at 50 percent
Live: CHAN 1 > 5 @ 50% ■

Sets channels 1 through 5 back to Full
Live: UNDO

Sets channels 1 through 5 back to 50 percent
Live: UNDO

Note: Undo also lets you clear other commands. If you have not yet pressed [Enter], [Undo] clears the command line.

Channel check

You may check channels by selecting a single channel and setting it at a level. Once you select it, you can advance sequentially through the channels.

Note: Independent channels are ignored during a channel check.

Keystrokes:

1. Press [Live*].
2. Use the keypad to enter the number of the first channel to check.
3. Press [At] then use the keypad to enter a level (1-99 percent), or press [Full]

Actions:

Live: CHAN 1

Live: CHAN 1 @ 50

Note: You can also set the output level by pressing [Level].

4. Press [Enter]
5. Press [Next] or [Last] to select the next or previous channel. Press any other key to end channel check.

Live: CHAN 1 @ 50 ■

Note: Entering a new command ends the channel check and returns channels to their previous levels.

About channel

Press [About] and enter a channel to display a window containing attribute and status information.

Keystrokes:

1. Press [About].
2. Enter the number of the desired channel.
3. Press [Enter].
4. Press [Clear].

Action/Command line:**ABOUT****ABOUT CHANNEL 6**

About Channel window appears

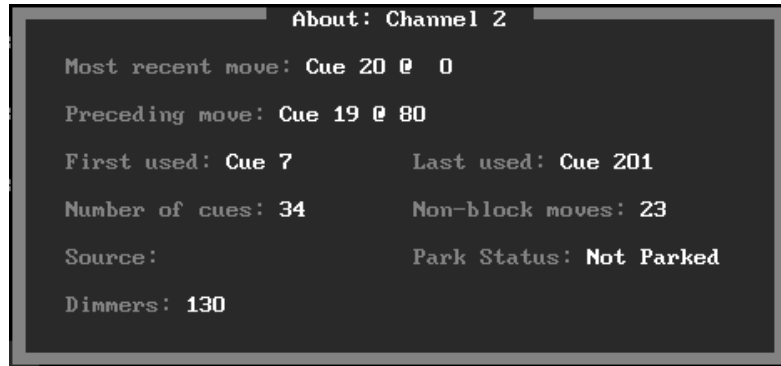
ABOUT CHANNEL 6 ■

About Channel window is cleared

Note: Press [Next] or [Last] to page through channels.

Finding unused channels

Press [About] [Enter] to display the About window for the first unused channel. In Live, after doing so, use [Next] and [Last] to page through all unused channels.



- **Most recent move:** The most recent cue in which this channel changed levels.
- **Preceding move:** The second most recent cue in which this channel changed levels.
- **First used:** The first cue in which this channel appears.
- **Last used:** The highest numbered cue in which this channel appeared.
- **Number of cues:** The total number of cues in which this channel appears.
- **Non-block moves:** The total number of cues in which this channel moves, not counting blocked cues or blocking channels.
- **Source:** The control device setting the channel's current level. Possible sources include:
 - Keypad**
 - Fader #**
 - Sub #**
- **Park status:** The level at which the channel is parked. If Multiuser is installed, the User that parked the channel.
- **Dimmers:** Lists the dimmers assigned to the channel, as space permits.

Channel Usage display

Select the Channel Usage display from the Setup Menu.

Sorted by channel number														
Chan	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cues	3	3	3	3	3	2	2	2	2	2	2	2	2	2
Moves ↑	2	2	2	2	2	1	1	1	1	1	1	1	1	1
Max Lvl	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL
Chan	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Cues	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Moves ↑	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Max Lvl	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL
Chan	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Cues	2	2	1	2	1	1	1	1	1	1	1	1	2	1
Moves ↑	1	1	1	2	1	1	1	1	1	1	1	1	1	1
Max Lvl	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL
Chan	43	44	45	46	47	48	49	50	51	52	53	54	55	56
Cues	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Moves ↑	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Max Lvl	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL

Channel Usage:							
S1	S2	S3	S4	S5	S6	S7	S8
Select Range	Cues	Cue Moves /Levels	Groups	Effects	Subs	Used / Unused	Sort

The Channel Usage display shows you the number of times each channel is used in a cue, group, effect, or submaster.

Customize the information that appears on the display by pressing the softkeys described on the following page.

Channel Usage softkeys

Sorted by channel number														
Chan	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cues	3	3	3	3	3	2	2	2	2	2	2	2	2	2
Groups														
Effects														
Subs														
Chan	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Cues	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Groups														
Effects														
Subs														
Chan	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Cues	2	2	1	2	1	1	1	1	1	1	1	1	2	1
Groups														
Effects													1	1
Subs														

Channel Usage:							
S1	S2	S3	S4	S5	S6	S7	S8
Select Range	Cues	Cue Moves / Levels	Groups	Effects	Subs	Used / Unused	Sort

[S1], Select Range

Shows a range of channels or cues. Press [S1], enter the cues or channels to show, then press [Enter].

[S2], Cues

Shows channels used in cues.

[S3], Cue moves/levels

Shows the number of times the channel level rises and its highest level in the show.

[S4], Groups

Shows channels used in groups.

[S5], Effects

Shows channels used in effects.

[S6], Subs

Shows channels used in submasters.

[S7], Used/Unused

Allows you to choose whether to show used or unused channels, within the currently selected categories and ranges.

[S8], Sort

Allows you to sort the channel list by channel number or by frequency of use, ascending or descending.

Chapter 6

Cues

This chapter includes instructions on recording, modifying and deleting cues. You may record up to 1,000 cues per show.

This chapter is divided into three sections:

- About cue
- Working with cues in Live mode
- Working with cues in Blind mode

About cue

The [About] key provides you with cue attribute and status information.

Keystrokes:

1. Press [About].
2. Press [Cue].
3. Enter the number of the desired cue or default to the current cue.
4. Press [Enter].
5. Press [Clear].

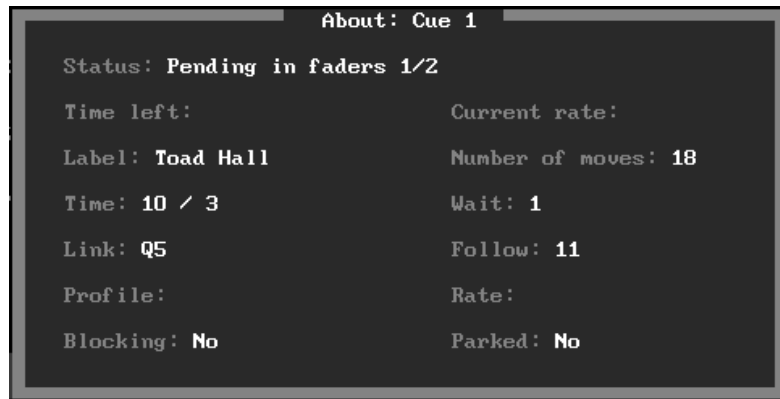
Action/Command line:**ABOUT****ABOUT CUE****ABOUT CUE 6**

About Cue screen is displayed

ABOUT CUE 6 ■

About Cue screen is cleared

Note: Press [Next] or [Last] to page through cues.



- **Status:** The current status of the cue:
Not recorded
Not active
Pending in fader #
Running in fader #
Complete
- **Time Left:** The remaining time until cue completion if it is running in a fader.
- **Current rate:** The rate at which the cue is running, if not 100 percent.
- **Label:** The cue's label.
- **Number of moves:** The number of channel level changes.
- **Time:** The recorded length of the cue from start of fade to completion. May be split.
- **Wait:** The time between when you press [Go] and when the fade begins. Wait time may be split.
- **Link:** The cue to which this cue is linked.
- **Follow:** The time before the following cue runs automatically.
- **Profile:** The profile(s) assigned to the cue.
- **Rate:** The cue's recorded rate, if not 100 percent.
- **Blocking:** Whether cue is blocked.
- **Parked:** Whether cue is parked on a fader.

Working with cues in Live mode

Live mode display appears on the Command display monitor.

Cue	Time	Wait	Foll	Link	Prof	Rate	B1	Pk	Label
47	5								
Live:									
S1	S2	S3	S4	S5	S6	S7	S8		
Preview	Block Cue	Spread-sheet	Update	Rate	Delete Cue	Rec Minus Sub	Flexi-channel		

Cues consist of channel levels and cue attributes. Each example in this chapter illustrates a different single attribute. However, multiple attributes can be set in one command.

The examples assume there are no cues stored in the console. To erase all cues from memory, press [Setup] [5] [Enter] [2] [Enter] [Enter].

Warning: Before you erase cues, make sure the show is saved on disk.

Note: Examples also assume the console is in tracking mode.

Recording a cue with default fade times

In cue 1 you only set channel levels. Default settings from the System Settings menu determine all other attributes of the cue.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Select channels and set channel levels.	Channel levels appear on the Command display
3. Press [Record] [1] [Enter].	Records the selected channels as cue 1 Live: RECORD CUE 1 ■

Note: The keypad defaults to cue mode when you press [Record]. Use of [Cue] is optional in step 3.

When you record the cue, it appears in yellow on the Cue Spreadsheet. At the same time, channel levels change from red to colors based on the channels' level movements from cue to cue. For more information on channel level colors, see page 23.

Recording a cue with a single fade time

You may program cues with fade times different from the default.

Fade times from .1 second to 99:59 minutes may be expressed in minutes and seconds, or as fractions of seconds (in decimal format).

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Select desired channels and set channel levels.	
3. Press [Record] [2].	Selects cue 2 Live: RECORD CUE 2
4. Press [Time] [1][0].	Enters a fade time of ten seconds Live: RECORD CUE 2 TIME 10
5. Press [Enter].	Records cue 2 with a fade time of ten seconds Live: RECORD CUE 2 TIME 10 ■

Recording a cue with split fade times

You may program cues with different upfade and downfade times. When entering split times, the time to the left of the / refers to the upfade; the number to the right refers to the downfade.

Keystrokes:

1. Press [Live*].
2. Select desired channels and set channel levels.
3. Press [Record] [3].
4. Press [Time] [1][0].
5. Press [/] [1][5].
6. Press [Enter].

Action/Command line:

Selects cue 3

Live: RECORD CUE 3

Enters an upfade of ten seconds

Live: RECORD CUE 3 TIME 10

Enters a downfade of 15 seconds

Live: RECORD CUE 3 TIME 10 / 15

Records cue 3 with an upfade of ten seconds and downfade of 15 seconds

Live: RECORD CUE 3 TIME 10 / 15 ■

Recording a cue without a submaster

You may program cues containing the current levels on stage except for those contributed by specific submasters.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Select desired channels and set channel levels.	
3. Press [S7], Rec Minus Sub.	Live: RECORD – SUB 5
4. Press [5].	Instructs that levels raised by submaster 5 be ignored Live: RECORD – SUB 5
5. Press [Cue] [3].	Selects cue to be recorded Live: RECORD – SUB 5 CUE 3
6. Press [Enter].	Records cue 3 minus submaster 5 Live: RECORD – SUB 5 CUE 3 ■

Note: If you do not enter a submaster number in step 4, you record the cue without including levels contributed by any submaster.

Recording a manual cue

Manual cues must be controlled using one of the fader sliders. For information on playing back manual cues, see page 132.

Keystrokes:	Action/Command line:
1. Press [Live*].	Selects Live display mode
2. Select desired channels and set channel levels.	
3. Press [Record] [4].	Selects cue 4 Live: RECORD CUE 4
4. Press [Time] [Enter].	Enters manual up and down fade times Live: RECORD CUE 4 TIME ■

Recording a cue with wait times

Wait time is the time between when you press [Go] and when the actual fade begins. You may program separate wait times of up to 99:59 minutes for the up and downfades.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Select desired channels and set channel levels.	
3. Press [Record] [5].	Selects cue 5 Live: RECORD CUE 5
4. Press [Wait] [/] [3].	Enters a downfade wait of three seconds Live: RECORD CUE 5 WAIT / 3
5. Press [Enter].	Records cue 5 with an upfade wait of zero seconds and downfade wait of three seconds Live: RECORD CUE 5 WAIT / 3 ■

Recording cues with Link and Follow

When you record a cue, it automatically appears in the Cue List. Cues normally play back in the order in which they appear. [Link] allows you to modify the cue playback sequence. [Follow] allows you to play back multiple cues automatically.

Link

[Link] allows you to play back cues out of sequence by linking them together.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Select desired channels and set channel levels.	
3. Press [Record] [6].	Selects cue 6 Live: RECORD CUE 6
4. Press [Link] [2] [Enter].	Records cue 6 linked to cue 2. After you play back cue 6, press [Go] to play back cue 2 Live: RECORD CUE 6 LINK 2 ■

Note: If an effect is running and a link takes you from one cue to another, the effect continues to run. Of the channels addressed by the effect, only the channels used in the second cue change.

Follow

[Follow] allows you to play cues automatically. The [Follow] time indicates how long the console waits after the current cue starts before the next cue runs. [Follow] plays back the next cue on the Cue List unless you use [Link] to specify a different sequence.

Keystrokes:

1. Press [Live*].
2. Select desired channels and set channel levels.
3. Press [Record] [7].
4. Press [Follow] [5] [Enter].

Action/Command line:

Selects cue 7

Live: RECORD CUE 7

Records cue 7 with a Follow time of five seconds. After you start cue 7, the next cue in the Cue List plays automatically five seconds later

**Live: RECORD CUE 7
FOLLOW 5 ■**

Combining Link and Follow to create playback loops

You may use Link and Follow to create cue playback sequences in which a group of cues plays back automatically and repeats.

Follow these steps to create a five cue sequence:

Keystrokes:	Action/Command line:
1. Create five cues numbered 1, 2, 3, 4, and 5.	Cue list displays cues 1 through 5
2. Press [Cue], then enter [1], the number of the first cue you want to include in the playback loop.	Selects the first cue
3. Press [Follow] [5] [Enter].	Assigns a follow time of five seconds to the first cue
4. Repeat steps 2 and 3 for cues 2 through 5.	Assigns a follow time of five seconds to the remaining cues
5. Press [Cue], then enter [5], the last cue in the playback loop.	Selects the last cue in the playback loop Live: CUE 5
6. Press [Link], then enter [1], the first cue in the playback loop.	Creates a loop by linking the last cue to the first cue Live: CUE 5 LINK 1
7. Press [/] and enter the number of times you want the link to execute (1-9), then press [Enter].	Live: CUE 5 LINK 1 / 4 ■

*Note: The number to the right of the slash indicates the number of times you want the loop to repeat after it runs the first time. Enter **4** to the right of the slash to play the loop five times. If you do not enter a repeat number, the loop will run indefinitely. To break out of an infinite loop, press [Go]. Obsession runs the next cue after the loop.*

Using Link to link a macro to a cue

[Link] allows you to automatically run a macro when a cue runs. If you want the macro to delay before running, start the macro with a Macro Wait. See *Chapter 13, Working with macros*, for information about creating macros.

Keystrokes:

1. Press [Live*].
2. Select desired channels and set channel levels.
3. Press [Record] [6].
4. Press [Link] [Macro] [2] [Enter].

Action/Command line:

Selects cue 6

Live: RECORD CUE 6

Records cue 6 linked to macro 2. When you press [Go] to play cue 6, macro 2 will run at the same time

Live: RECORD CUE 6

LINK MACRO 2 ■

Recording a cue with non-default output profiles

You may record cues with one of 32 output profiles. You may assign different profiles to a cue's upfade and downfade. Select from nine preset profiles, or create custom profiles to suit your needs.

Keystrokes:

1. Press [Live*].
2. Select desired channels and set channel levels.
3. Press [Record] [8].
4. Press [Profile] [5] [/] [1] [Enter].

Action/Command line:

Selects cue 8

Live: RECORD CUE 8

Records cue 8. Assigns profile 5 to its upfade and profile 1 to its downfade

Live: RECORD CUE 8

PROFILE 5 / 1 ■

Recording a cue with a modified fade rate

Rate allows you to record cues that play back faster or slower than their recorded fade time. This can be especially helpful when you are calculating complex timing information for multipart cues or effects. Fade rate is expressed as a percentage of the cue's recorded fade time. A cue with a fade rate of 100 percent plays back at its recorded fade time. A rate of 300 plays the cue back three times faster, and a rate of 50 plays the cue back half as fast as its recorded fade time.

For example, a cue with a ten second fade time, at a rate of 200, plays back in five seconds. At 50, it plays back in 20 seconds.

Note: If you adjust the rate on a cue containing an effect, the adjustments affect step times and step In/Dwell/Out times. They do not affect the overall In/Dwell/Out time.

Keystrokes:

1. Press [Live*].
2. Select desired channels and set channel levels.
3. Press [Record] [9].
4. Press [S5], **Rate**, then enter [2][0][0] on the keypad. Press [Enter].

Action/Command line:

Selects cue 9

Live: RECORD CUE 9

Records cue 9 with a fade rate of 200 percent. Fade runs in half the recorded fade time

**Live: RECORD CUE 9 RATE
200 ■**

Recording a block cue

In a tracking console, channel levels track from cue to cue. Thus, changes made in one cue may affect subsequent cues. One way to keep channel level changes from tracking is to record a block cue. A block cue sets tracked channels at specific levels, rather than letting levels track through from previous cues, and sets all unused channels to zero.

Often a block cue is used for blackout cues and at the beginning or end of an act. This ensures that when you modify a cue, the changes don't track into the blackout or the following act.

A cue may be completely blocked, or individual channels may be blocked.

Keystrokes:

1. Press [Live*].
2. Select desired channels and set channel levels.
3. Press [Record] [1][0] [Enter].
4. Press [Cue] [1][0] [S2], **Block**, [Enter].

Action/Command line:

Records cue 10

Live: RECORD CUE 10 ■

Re-records cue 10 as a block cue. All channels not assigned levels in step 2 are set to zero

Live: CUE 10 BLOCK ■

*Note: A block cue (all channels blocked) is marked on the cue list under **BI** with a *. If only specific channels are blocked, the cue is marked with a –.*

Recording a parked cue

When you play back a cue, Obsession normally assigns it to the first available fader. If you prefer, you can use Park to specify the fader in which a cue plays.

A parked cue always plays in the specified fader. It cannot be bumped to a virtual fader. The only exception is when two cues are parked to the same fader. When this happens, the second cue displaces the first; the first cue moves to a virtual fader.

Note: You may park a cue on a virtual fader.

A parked cue does not reside permanently in its fader. Once the cue plays back, the fader is available for other cues.

Keystrokes:

1. Press [Live*].
2. Set channel levels.
3. Press [Record] [1][1] [Park] [8] [Enter].

Action/Command line:

Records cue 11 parked to fader 8
**Live: RECORD CUE 11
 PARK 8 ■**

If you park a cue, but do not specify the fader to park the cue to, Obsession will choose any physical fader to run the cue on and will not allow it to be transferred to a virtual fader.

Labeling cues

You may use the alphanumeric keyboard to assign labels to cues. Labels may be up to 15 characters long.

Keystrokes:

1. Press [Live*].
2. Select desired channels and set channel levels.
3. Press [Record] [1][2] [Label].
4. Use the alphanumeric keyboard to type the desired label. For example, call cue 12 "Toad exits".
5. Press [Enter].

Action/Command line:

Records Cue 12
Live: RECORD CUE 12 LABEL

Enters cue label
**Live: RECORD CUE 12 LABEL
 Toad exits**

Records Cue 12 with label "Toad exits"
**Live: RECORD CUE 12 LABEL
 Toad exits ■**

Modifying a recorded cue live

In Live, if you want to add, remove or modify channel levels, you must play back the cue, make your changes, then re-record the cue.

Modifying channels in a cue

If you are not familiar with procedures for playing back cues, see *Chapter 9, Playing back cues*.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Press [Go To Cue], enter cue number and press [Enter].	Plays back selected cue
3. Select channels and set channel levels to make the desired changes to the cue.	Modifies cue channel levels
4. Press [Record] [Enter] [Enter]. (Second [Enter] confirms.)	Re-records cue with desired modifications

Note: If the console is in tracking mode, press [Cue Only/Track] after you press [Record] to keep modifications from tracking into subsequent cues. If in Cue Only mode, [Cue Only/Track] will force changes to track. For further information about Cue Only/Track, see pages 117-118.

Modifying cue attributes

Follow these steps to modify cue attributes:

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Press [Cue] then enter the desired cue.	Selects the cue
3. Press the key or softkey that corresponds to the attribute to modify.	
4. Enter the new setting for the attribute.	Modifies cue attribute
5. Press [Enter].	Re-records cue with modifications

Using Update to modify a cue

Update is a selective record function that allows you to modify any cue's channel levels in Live mode, then re-record the cue without recording the entire stage look. Only channel levels set on the keypad are recorded.

Keystrokes:

1. Use the keypad to select the channels whose levels you want to modify.
2. Modify channel levels as desired, then press [Enter].
3. Press [S4] **Update**, [Enter].

Action/Command line:

Selects desired channels
Live: CHAN 1 > 10

Sets modified channel levels
Live: CHAN 1 > 10 @ 75 ■

Updates and re-records the active cue
Live: UPDATE

*Note: If the console is in tracking mode, press [Cue Only/Track] after you press [S4], **Update**, to keep modifications from tracking into subsequent cues. If in Cue Only mode, [Cue Only/Track] will force changes to track. For further information about Cue Only/Track, see pages 117-118.*

Deleting a cue

[S6], **Delete Cue**, allows you to delete a cue in Live or Blind.

Keystrokes:

1. Press [S6], **Delete Cue**.
2. Enter number of cue to delete. This is optional if you wish to delete the current cue. Press [Enter].
3. Press [Enter].

Action/Command line:

Live: DELETE CUE

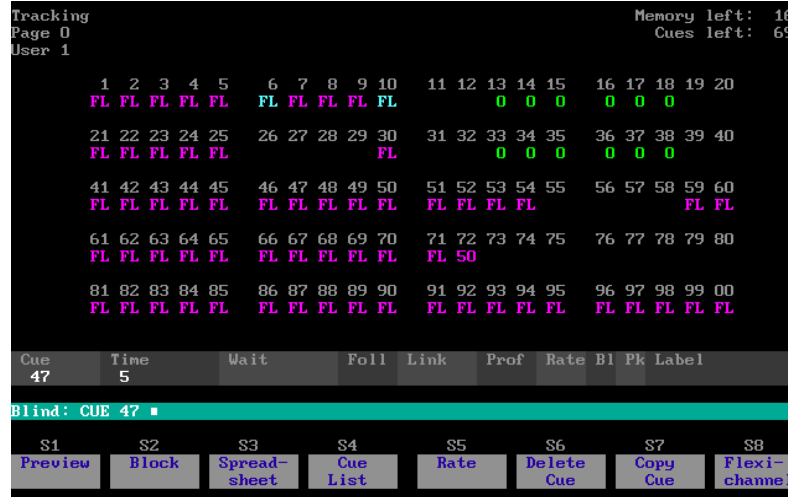
Selects cue to delete
Live: DELETE CUE 5 ■
Please confirm

Deletes cue
Live: DELETE CUE 5 ■ Please confirm ■

Note: If the console is in tracking mode, press [Cue Only/Track] after you enter the cue number to keep modifications from tracking into subsequent cues. If in Cue Only mode, [Cue Only/Track] will force changes to track. For further information about how Cue Only/Track affects deleting cues, see pages 117-118.

Working with cues in Blind mode

Blind mode allows you to create, preview or modify cues without affecting the current look on stage. When you work with a cue in Blind, changes are automatically recorded.



From Blind, you can also display the Cue Spreadsheet and Cue List. See *Cue Spreadsheet* on page 106 and *Cue List* on page 110.

Recording or modifying single cues

In Blind mode, select the cue to record or modify, then make the desired changes. You do not need to record the cue. The cue is automatically recorded when you make the changes. If it doesn't already exist, entering a new cue number creates it.

Note: If you create a new cue, any channels set to a level in the previous cue track into the new cue. Their levels appear in magenta. If you create a new cue, and Clear Channels in Cue Only is enabled, any channels set to a level in the previous cue are set to zero in the new cue. See Enable/disable Clear Channels in Cue Only on page 57.

Keystrokes:

1. Press [Blind*].
2. Press [Cue] [1][3] [Enter].
3. Select desired channels and set channel levels.
4. Press [Time] [1][0]. Other cue attributes can also be added here.
5. Press [Enter].

Action/Command line:

Selects cue 13

Blind: CUE 13 ■

Enters a fade time of ten seconds

Blind: CUE 13 ■ TIME 10

Records cue 13 with a fade time of ten seconds

Blind: CUE 13 ■ TIME 10 ■

Note: If the console is in tracking mode, press [Cue Only/Track] after you set any level or give any instruction that affects levels before pressing [Enter]. This will keep modifications from tracking into subsequent cues. If in Cue Only mode, [Cue Only/Track] will force changes to track.

Caution: If you need to use [Cue Only/Track] in your command, do not use [Out], [Level], [+10], or [-10] to modify channel levels. These keys automatically enter the command when you press them without waiting for you to press [Enter].

Copying cues

You may copy a look from one cue and use it as the foundation for a new cue. You must be in Blind to copy a cue.

Keystrokes:

1. Press [Blind*].
2. Press [S7], **Copy Cue**.
3. Enter the number of the cue to copy.
4. Press [At].
5. Enter the number of the new cue.
6. Press [Enter]. Cue copy is complete. You can now modify the new cue.

Actions:**Blind: COPY CUE****Blind: COPY CUE 1****Blind: COPY CUE 1 @****Blind: COPY CUE 1 @ 5****Blind: COPY CUE 1 @ 5 ■**

Note: The Copy Cue softkey saves block and move instructions for channels.

Cue Spreadsheet

Cue Spreadsheet displays recorded cues and their channel levels. The spreadsheet is ideal for modifying levels, copying and deleting cues, and viewing the effect on subsequent cues.

The Spreadsheet's range editing feature allows you to modify multiple cues at the same time.

Press [S3], **Spreadsheet**, in Blind to display the cue spreadsheet.

Tracking		Channels																				
Cue		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
36	P7					0																
	P8					0																
37							70	70	70	70	70											
38		FL	FL	FL	FL	FL	70	70	70	70	70											FL
39	P7	FL	FL	FL	FL	FL	0	FL	FL	FL	0	0	0	70	70	70	70	70	70	0	0	FL
	P8	FL	FL	FL	FL	FL	0	FL	FL	FL	0	0	0	70	70	70	70	70	70	0	0	FL
47		FL	FL	FL	FL	FL	0	FL	FL	FL	0	0	0	70	70	70	70	70	70	0	0	FL
48		FL	FL	FL	FL	FL	FL	FL	FL	FL	FL											FL
49	P7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50																						
51		50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FL
52		0																				0
53																						
54																						
55	P7																					

Memory left: 16
Cues left: 65

Spreadsheet: CUE 38

S1 Replace With S2 Block S3 Cue List S4 Return S5 Move Cue S6 Delete Cue S7 Copy Cue S8 Flexi-channel

Range editing in Cue Spreadsheet

The cue spreadsheet allows you to use [+], [-] and [Thru] to select and modify groups of channels and cues.

Keystrokes:

1. Press [Blind*].
2. Press [S3], **Spreadsheet**.
3. Press [Cue] and enter the cues to modify; in this case, [1] [Thru] [5].
4. Press [Enter].
5. Press [Time].
6. Enter the new times for the cues.
7. Press [Enter]

Action/Command line:

Displays Cue Spreadsheet

Spreadsheet:
CUE 1 > 5

Spreadsheet:
CUE 1 > 5 ■

Spreadsheet:
CUE 1 > 5 ■ TIME

Spreadsheet:
CUE 1 > 5 ■ TIME 4 / 6

Spreadsheet:
CUE 1 > 5 ■ TIME 4 / 6 ■

Replace With

Replace With allows you to find channels at a specific level and change only those channels to a different level. You may combine this with range editing.

Keystrokes:

1. Press [Blind*].
2. Press [S3], **Spreadsheet**.
3. Press [Cue] and enter the cues to modify, in this case, [1] [Thru] [5].
4. Press [Enter].
5. Enter the channels through which to search for the selected level.
6. Press [At] and enter the level to search for.
7. Press [S8], **Replace With**.
8. Enter new level for all channels in the range currently set at 55 percent.
9. Press [Enter].

Action/Command line:

Displays Cue Spreadsheet

Spreadsheet: CUE 1 > 5

Spreadsheet: CUE 1 > 5 ■

**Spreadsheet: CUE 1 > 5 ■
CHAN 8 >12**

**Spreadsheet: CUE 1 > 5 ■
CHAN 8 >12 @ 55**

**Spreadsheet: CUE 1 > 5 ■
CHAN 8 >12 @ 55 REPLACE
WITH**

**Spreadsheet: CUE 1 > 5 ■
CHAN 8 >12 @ 55 REPLACE
WITH FULL**

All levels in cues 1 through 5 and channels 8 through 12 that were at 55 percent are now set to full

**Spreadsheet: CUE 1 > 5 ■
CHAN 8 >12 @ 55 REPLACE
WITH FULL ■**

You may also use **Replace With** to replace the levels in a channel or channels with the levels in another channel across a range of cues. This allows you to shuffle channel levels around easily or copy one channel's level into several channels.

Keystrokes:	Action/Command line:
1. Press [Blind*].	
2. Press [S3], Spreadsheet .	Displays Cue Spreadsheet
3. Press [Cue] and enter the cues to modify, in this case, [1] [Thru] [2][0].	Spreadsheet: CUE 1 > 20
4. Press [Enter].	Spreadsheet: CUE 1 > 20 ■
5. Press [1] [Thru] [3], the channels to replace.	Spreadsheet: CUE 1 > 20 ■ CHAN 1 > 3
6. Press [S8], Replace With .	Spreadsheet: CUE 1 > 20 ■ CHAN 1 > 3 REPLACE WITH
7. Press [7], the channel to copy levels from.	Spreadsheet: CUE 1 > 20 ■ CHAN 1 > 3 REPLACE WITH 7
8. Press [Enter].	Spreadsheet: CUE 1 > 20 ■ CHAN 1 > 3 REPLACE WITH 7 ■ Please confirm
9. Press [Enter].	Spreadsheet: CUE 1 > 20 ■ CHAN 1 > 3 REPLACE WITH 7 ■ Please confirm ■

Moving cues

You may move a cue to a different position in the cue list.

Keystrokes:	Actions:
1. Press [Blind*].	
2. Press [S3], Spreadsheet .	Selects Cue Spreadsheet
3. Press [S5], Move Cue .	Spreadsheet: MOVE CUE
4. Enter the number of the cue you wish to move.	Spreadsheet: MOVE CUE 1
5. Press [At].	Spreadsheet: MOVE CUE 1 @
6. Enter the new cue number.	Spreadsheet: MOVE CUE 1 @ 5
7. Press [Enter]. Cue is now located in a new position in the cue list.	Spreadsheet: MOVE CUE 1 @ 5 ■

Moving and copying ranges

When you move or copy a range of cues, the spacing between items in the new range is either identical to the original range, or it is renumbered to consecutive whole numbers or consecutive tenths.

For example, suppose you copy a cue range including cues 1, 1.2, and 1.7 to a new range starting with cue 5. The cues in the new range can be numbered three ways.

To a matching range

To match the original range, specify only the starting cue number of the new range. In this case, your command line would read:

Spreadsheet: COPY CUE 1 > 1.7 @ 5 ■. The cues in the new range are numbered 5, 5.2 and 5.7.

To whole numbers

To number by whole numbers, specify a whole number range. Both the old and new ranges must contain the same number of items. In this case, your command line would read: **Spreadsheet: COPY CUE 1 > 1.7 @ 5 > 7 ■**. The cues in the new range are numbered 5, 6 and 7.

To tenths

To number by tenths, specify a range of tenths. Both the old and new ranges must contain the same number of items. In this case, your command line would read: **Spreadsheet: COPY CUE 1 > 1.7 @ 5.0 > 5.2 ■**. The cues in the new range are numbered 5, 5.1 and 5.2.

Note: If a cue is copied to a number where a cue already exists, the new cue replaces the existing cue.

Cue List

The Cue List displays cues and their attributes and allows range editing of attributes.

Cue	Time	Wait	Foll	Link	Prof	Rate	BI	Pk	Label
31	P8 15								
32	10								
33	5								
34	12						*		RESTORE AFT. I
35	10								
36	-- 13								CORPS DE BALL
	P7 3	10 / 10							
	P8 10								
> 37	6								Houghton enter
38	5								ALL DANCE
39	-- 9						*		
	P7 3	6 / 6							
	P8 6								
47	5								
48	0			495					MUSIC CUT OFF
49	-- 9		5				*		TRANSITION
	P7 5	4 / 4							

Cue List: CUE 37 ■

S1	S2	S3	S4	S5	S6	S7	S8
	Block Cue	Spreadsheet	Return	Rate	Delete Cue	Copy Cue	

Follow this example to modify a cue in Cue List display:

Keystrokes:

1. Press [Blind*].
2. Press [S4], **Cue List**.
3. Use the keypad to enter the cue to modify. Use [+], [-] and [Thru] to select multiple cues.
4. Enter the attribute to change. For example, press [Time].
5. Enter the new setting for the attribute and press [Enter].

Action/Command line:

Displays Cue List

Selects desired cue(s)

Cue List: CUE

Cue List: CUE 4 TIME

Cue List: CUE 4 TIME 2 ■

Note: Use the level wheel to scroll through the Cue List and to select cues.

Renumbering a cue

You may renumber a cue to a different spot on the Cue List in Blind. If you renumber the cue to a spot not adjacent to its current location, the cue will be copied to the new spot without deleting the old cue. Renumbering to an adjacent spot deletes the old cue.

For example, suppose your cue list starts with cues 1, 5 and 9. If you renumber cue 1 to cue 4, cue 1 is deleted and your list now consists of cues 4, 5 and 9. On the other hand, if you renumber cue 1 to cue 6, cue 1 is copied to cue 6 and your list consists of cues 1, 5, 6, and 9.

Keystrokes:

1. Press [Blind*].

2. Press [Cue] and use the keypad to enter the current number of the cue to renumber.

3. Press [At] [Cue] and enter the new number for the cue.

4. Press [Enter].

Action/Command line:

Selects the desired cue
Blind: CUE 3

Blind: CUE 3 @ CUE 13

Moves the cue to its new spot on the Cue List. Deletes cue 3 if there were no cues between cue 3 and 13

Blind: CUE 3 @ CUE 13 ■

Note: If the new cue number belongs to an existing cue, you must confirm that you wish to replace the existing cue.

Chapter 7

Tracking/Cue only

You may use Obsession as a Tracking console or as a Cue Only console. When you configure the console, you may designate its operating mode. If you do not, Obsession defaults to Tracking mode.

The following options are described:

- Tracking
- Cue Only
- Cue Only/Track key

Tracking

In Tracking mode, if you modify a channel level, the new level *tracks* forward into subsequent cues, until it encounters a specific instruction to change levels.

In the following case, five cues are recorded in Tracking mode. Their levels track forward until changed by a new cue. The bold characters indicate levels set by that cue. The regular characters indicate a tracked level.

	Channel 1	Channel 2	Channel 3	Channel 4
Cue 1	FF			
Cue 2	FF	FF		
Cue 3	FF	FF	FF	
Cue 4	25	FF	FF	FF
Cue 5	50	00	00	00

Cue Only

In Cue Only mode, if you modify a channel level, the new level only affects the current cue, leaving the next cue unchanged. Levels do not affect subsequent cues unless you use the [Cue Only/Track] key.

In the following case, five cues are recorded in Cue Only mode in Blind to create the same sequence. Since levels do not track forward, each cue must set all its own levels. The bold characters indicate levels set by that cue. In each new cue, levels from the previous cue are set to zero. Thus, in cue 5, there is no need to set levels to zero since they fade out automatically when the cue starts.

	Channel 1	Channel 2	Channel 3	Channel 4
Cue 1	FF			
Cue 2	FF	FF		
Cue 3	FF	FF	FF	
Cue 4	25	FF	FF	FF
Cue 5	50	0	0	0

Cue Only/Track key

The [Cue Only/Track] key allows you to momentarily treat the console as if it were in the opposite mode from its current setting.

Each of the following examples shows the keystroke sequence required to set the levels of channels 1 through 5 to full, and the results of that action.

Live

In Live, use the [Cue Only/Track] key only when recording or updating cues.

In Tracking mode

Recording/updating without [Cue Only/Track]

[1] [Thru] [5] [Full] [Enter] [Record or Update] [Cue] [1] [Enter]

Cue 1 sets channels 1 through 5 to full. They remain at full until a subsequent cue sets them to a different level.

Recording/updating with [Cue Only/Track]

[1] [Thru] [5] [Full] [Enter] [Record or Update] [Cue] [1] [Cue Only/Track] [Enter]

Cue 1 sets channels 1 through 5 to full. They are set to zero in the next cue, unless that cue has another setting for them.

In Cue Only mode

Recording/updating without [Cue Only/Track]

[1] [Thru] [5] [Full] [Enter] [Record or Update] [Cue] [1] [Enter]

Cue 1 sets channels 1 through 5 to full. They are set to zero in the next cue, unless that cue has another setting for those channels.

Recording/updating with [Cue Only/Track]

[1] [Thru] [5] [Full] [Enter] [Record or Update] [Cue] [1] [Cue Only/Track] [Enter]

Cue 1 sets channels 1 through 5 to full. They remain at full until a subsequent cue sets them to a different level.

Blind

In Blind, use the [Cue Only/Track] key only when adding or modifying channel levels. Changes in channel levels are automatically recorded into the selected cue as you make them.

In Tracking mode

Changing levels without [Cue Only/Track]

[1] [Thru] [5] [Full] [Enter]

Cue 1 sets channels 1 through 5 to full. They remain at full until a subsequent cue sets them to a different level.

Changing levels with [Cue Only/Track]

[1] [Thru] [5] [Full] [Cue Only/Track] [Enter]

Cue 1 sets channels 1 through 5 to full. They are set to zero in the next cue, unless that cue has another setting for those channels.

Deleting cues without [Cue Only/Track]

[S6], **Delete Cue**, [1] [Enter] [Enter]

When you delete a cue, any levels that tracked from that cue into subsequent cues are removed from those cues.

Deleting cues with [Cue Only/Track]

[S6], **Delete Cue**, [1] [Cue Only/Track] [Enter] [Enter]

When you delete a cue, any levels that tracked from that cue into subsequent cues are placed into the next cue as move instructions. They will track forward from that cue.

Copying cues without [Cue Only/Track]

[S1], **Select Cue**, [1] [S6], Copy to Cue, [6] [Enter]

When you copy a cue, levels track into it from the cue before its new location, and levels in the copied cue track forward into the next cue.

Copying cues with [Cue Only/Track]

[S1], **Select Cue**, [1] [S6], Copy to Cue, [6] [Cue Only/Track] [Enter]

When you copy a cue, levels that tracked from the cue before its new location to the cue that follows its new location are placed into the next cue as move instructions. They will track forward from that cue. Levels in the copied cue don't track.

In Cue Only mode

Changing levels without [Cue Only/Track]

[1] [Thru] [5] [Full] [Enter]

Cue 1 sets channels 1 through 5 to full. They are set to zero in the next cue, unless that cue has another setting for those channels.

Changing levels with [Cue Only/Track]

[1] [Thru] [5] [Full] [Cue Only/Track] [Enter]

Cue 1 sets channels 1 through 5 to full. They remain at full until a subsequent cue sets them to a different level.

Deleting cues without [Cue Only/Track]

[S6], Delete Cue, [1] [Enter] [Enter]

When you delete a cue, any levels that tracked from that cue into subsequent cues are placed into the next cue as move instructions. They will track forward from that cue.

Deleting cues with [Cue Only/Track]

[S6], Delete Cue, [1] [Cue Only/Track] [Enter] [Enter]

When you delete a cue, any levels that tracked from that cue into subsequent cues are removed from those cues.

Copying cues without [Cue Only/Track]

[S1], Select Cue [1] [S6], Copy to Cue, [6] [Cue Only/Track] [Enter]

When you copy a cue, any levels that tracked from the cue before its new location to the cue that follows its new location are placed into the next cue as move instructions. They will track forward from that cue. Levels in the copied cue don't track.

Copying cues with [Cue Only/Track]

[S1], Select Cue [1] [S6], Copy to Cue, [6] [Enter]

When you copy a cue, levels track into it from the cue before its new location, and levels in the copied cue track forward into the next cue.

Note: If you create a new cue, any channels set to a level in the previous cue track into the new cue. Their levels appear in magenta. If you create a new cue, and Clear Channels in Cue Only is enabled, any channels set to a level in the previous cue are set to zero in the new cue. See Enable/disable Clear Channels in Cue Only on page 57.

Chapter 8

Multipart cues

A multipart cue consists of up to eight parts, each of which is essentially an independent cue with its own channel levels and timing information. Parts accept most standard cue attributes, with the exception of Link, Follow and Label.

Each part may contain any number of channels, but a channel may only be included in one part.

Upfade and downfade wait times in multipart cues allow you to program fades that do not start immediately when you play the multipart cue. When you press [Go] to start a multipart cue, some parts may start immediately and others may start up to 99:59 minutes later. The total duration of a multipart cue is equal to the combined wait and fade times of the longest part.

This chapter includes the following sections:

- Recording a multipart cue in Live
- Recording a multipart cue in Blind

Recording a multipart cue in Live

You may record or selectively record to cue parts in any cue, not only the active cue. If you record to a cue other than the active cue, the cue sheet does not move to the recorded cue.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Select channels and enter channel levels, then press [Enter]. For example, [1] [Thru] [5] [Full] [Enter].	Live: CHAN 1 > 5 FULL ■
3. Press [Record], then enter the cue you want to record. For example, [1][2].	Indicates that you want to record a cue Live: RECORD CUE 12
4. Press [Part], then use the keypad to enter the number (1-8) of the part you want to record.	Enters the number of the first part of the cue Live: RECORD CUE 12 PART 1
5. Enter cue attributes, including; Time, Wait, Profile, Park, or Rate. Follow, Link and Label can only be assigned to the overall cue. For example, press [Time] [1][0] to enter a ten second fade.	Assigns cue attributes to the part Live: RECORD CUE 12 PART 1 TIME 10
6. When you have selected the desired attributes, press [Enter] to record the part.	Records the part Live: RECORD CUE 12 PART 1 TIME 10 ■
7. Repeat steps 2 through 6, adding channels for each part to include in the multipart cue.	Records subsequent parts.

Note: You do not need to re-enter the cue number for additional parts. Set channel levels, press [Record] [Part], enter the part number, and press [Enter].

Converting a standard cue to a multipart cue in Live

The following example divides a cue into four parts, numbered 1, 2, 3, and 8, each containing five of the channels in the original cue.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Press [1] [Thru] [2][0] [Full] [Enter] [Record] [Cue] [1] [Enter].	Creates a standard cue containing channels 1 through 20 at Full
3. Press [1] [Thru] [5] [Record] [Part] [1] [Enter].	Creates part 1. Places channels 1 through 5 in part 1. Remaining channels are placed in part 8 Live: CHAN 1 > 5 RECORD CUE 1 PART 1 ■
4. Press [6] [Thru] [1][0] [Record] [Part] [2] [Enter].	Creates part 2. Moves channels 6 through 10 from part 8 to part 2 Live: CHAN 6 > 10 RECORD CUE 1 PART 2 ■
5. Press [1][1] [Thru] [1][5] [Record] [Part] [3] [Enter].	Creates part 3. Moves channels 11 through 15 from part 8 to part 3 Live: CHAN 11 > 15 RECORD CUE 1 PART 3 ■

Note: When a normal cue is split into a multipart cue, all of the channels in that cue are placed in part 8. From part 8, you may move them to any one of the other seven parts.

Setting attributes for multipart cues

Time, Wait, Profile, Park, or Rate attributes can be assigned to a part. Attributes are assigned, and function, exactly as they do for whole cues. In the following example, Time, Profile, Part, or Rate could also be entered in step 3.

Follow these steps to add a wait time to a part:

Keystrokes:	Action/Command line:
1. Press [Cue], then enter the cue number.	Selects cue number Live: CUE 1
2. Press [Part], then enter the part number.	Selects part number Live: CUE 1 PART 2
3. Press [Wait], then enter the time you want the part to wait before running. If using split wait times, enter times separated by [/].	Selects part number Live: CUE 1 PART 2 WAIT 4
4. Press [Enter].	Live: CUE 1 PART 2 WAIT 4 ■

Moving channels to another part of a multipart cue

[Update] in Live allows you to move channels to another part of a multipart cue.

Keystrokes:	Actions:
1. Press [Live*].	
2. Press [Cue] [5] [Enter].	Selects cue 5 Live: CUE 5 ■
3. Press [4] [Thru] [7].	Selects channels 4 through 7 Live: CHAN 4 > 7
4. Press [S4], Update , [Part] [2] [Enter].	Moves channels 4 through 7 from their current part into part 2 Live: CHAN 4 > 7 UPDATE CUE 5 PART 2 ■

If you do not enter channels in step 3, the update command acts the way it always has.

Recording a multipart cue in Blind

Keystrokes:

1. Press [Blind*].
2. Press [Cue], then enter the number to assign to the new cue.
3. Press [Part], then enter the number to assign to the new part.
4. Press [Enter].
5. Select desired channels and set levels, then press [Enter].
6. Repeat steps 3 through 5 until you have created all the parts.

Action/Command line:

Selects cue number
Blind: CUE 2

Selects part number
Blind: CUE 2 PART 1

Blind: CUE 2 PART 1 ■

Blind: CUE 2 PART 1 ■
CHAN 1 > 5 @ 50% ■

Note: If you create a new cue, any channels set to a level in the previous cue track into the new cue. Their levels appear in magenta. If you create a new cue, and Clear Channels in Cue Only is enabled, any channels set to a level in the previous cue are set to zero in the new cue.

Converting a standard cue to a multipart cue in Blind

When you create the first part, all channels in the cue that you don't assign to the first part are placed in part 8 (even if part 8 is the first part you create). From part 8, you can assign them to other parts as you create them.

In this example, cue 4 contains channels 1 through 20.

Keystrokes:	Action/Command line:
1. Press [Blind*].	
2. Press [Cue] [4] [Enter].	Blind: CUE 4 ■
3. Press [1] [Thru] [2][0] [Full] [Enter].	Adds channels 1 through 20 at Full to cue 4 Blind: CUE 4 ■ CHAN 1 > 20 FULL ■
4. Press [Part] [1] [Enter]. Enter [1] [Thru] [5]. Press [Enter].	Creates part 1. Places channels 1 through 5 in part 1. Remaining channels are placed in part 8 Blind: CUE 4 PART 1 ■ CHAN 1 > 5 ■
5. Press [Part] [2] [Enter]. Enter [6] [Thru] [1][0]. Press [Enter].	Creates part 2. Moves channels 6 through 10 from part 8 to part 2 Blind: CUE 4 PART 2 ■ CHAN 6 > 10 ■
6. Press [Part] [3] [Enter]. Enter [1][1] [Thru] [1][5]. Press [Enter].	Creates part 3. Moves channels 11 through 15 from part 8 to part 3 Blind: CUE 4 PART 3 ■ CHAN 11 > 15 ■

Note: If the console is in tracking mode, press [Cue Only/Track] after you enter channel levels before pressing [Enter]. This keeps modifications from tracking into subsequent cues. If in Cue Only mode, [Cue Only/Track] will force changes to track.

Converting a multipart cue to a standard cue

To convert a multipart cue into a standard cue, group all the channels in the cue into one part, then copy that part over the entire cue.

In this example, cue 4 contains channels 1 through 20 in several parts.

Keystrokes:	Action/Command line:
1. Press [Blind*].	
2. Press [Cue] [4] [Enter].	Blind: CUE 4 PART 1 ■
3. Press [Group] [Cue] [4] [Enter].	Groups channels 1 through 20 into part 1 Blind: CUE 4 PART 1 ■ GROUP CUE 4 ■
4. Press [S7], Copy Cue , and enter the cue number.	Blind: COPY CUE 4
5. Press [Part] and enter the part number in which the channels are grouped.	Blind: COPY CUE 4 PART 1
6. Press [At], enter the cue number, and press [Enter]. Press [Enter].	Blind: COPY CUE 4 PART 1 @ 4 ■ Please confirm ■

Note: Channels with zero levels (blocking channels) are lost in this process. A group cannot contain blocking channels.

Deleting a part from a multipart cue

Keystrokes:	Action/Command line:
1. Press [Blind*].	
2. Press [Cue] [4] [Part] [1] [Enter].	Blind: CUE 4 PART 1 ■
3. Press [S6], Delete Cue , [Enter] [Enter].	Deletes part 1 from cue 4 Blind: DELETE CUE 4 PART 1 ■ Please confirm ■

Note: If the console is in tracking mode, removing a part may affect subsequent cues. Press [Cue Only/Track] after you enter channel levels and before pressing [Enter] to avoid this.

Chapter 9

Playing back cues

Obsession's eight physical faders and 118 virtual faders allow you to play back up to 126 cues simultaneously. You may play back a cue automatically, using the timing information programmed into it, or you may take manual control.

This chapter contains the following sections:

- Faders
- Cue list
- Fader status display
- Loading and playing cues
- Controlling fades manually

Faders

Obsession has physical and virtual faders. A physical fader allows you to control the fade manually and modify the fade rate. A virtual fader only allows you to control the fade rate.

When you run a cue, Obsession places it in the lowest numbered physical fader available. It puts cues with split upfade and downfade times in the first available pair of faders.

If all eight physical faders are in use, the oldest running cue transfers to a virtual fader and is replaced with the new cue.

Physical faders

Obsession has eight physical faders labeled **F1-F8**. A physical fader includes a slider and a fader key. Status information for each physical fader appears at the bottom of the Playback display.

Virtual faders

Obsession has 118 virtual faders numbered 9-126. Virtual faders have no slider or fader key, so you cannot take manual control of the fade. You can use [Rate] and the rate wheel to take control of a cue running on a virtual fader.

Cue List

The Cue List is the default display on the Playback display. The Cue List provides a list of cues for the show, including all programmed attributes.

Cue colors

The color in which a cue is displayed provides information about its current status.

Gray Not selected or running

White Selected for editing in Live or Blind. > appears by cue

Red Running on physical fader (1-8)

Yellow Finished running, on stage; if > appears by cue, cue is selected for editing in Live or Blind

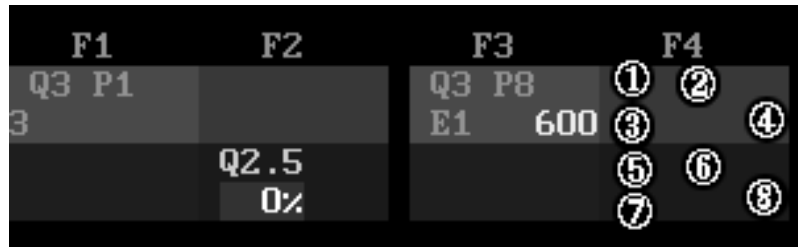
Magenta Running on virtual fader (9-126). To learn more about cues on virtual faders, press [About] [Cue], enter the cue number, then [Enter]

Fader status display

The fader status display is a series of fields across the bottom of the Playback monitor. It provides information about the cues loaded to physical faders, including times and rates. Each fader has two fields, one gray and one blue.

The gray field provides information about pending cues, including cue number, fade time and rate.

The blue field provides information about currently running cues.



- ❶ Pending cue number
- ❷ Pending part number
- ❸ Pending cue fade time
- ❹ Pending cue rate
- ❺ Running cue number
- ❻ Running part number
- ❼ Running cue fade time, in red; wait time, in magenta
- ❽ Running cue rate

At the right end of the fader status display are four lines of information, giving current follow and rate status.

Loading and playing cues

Load cue

[Load cue] places a cue in a fader in the pending position. It will not run until you press [Go].

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Press [Load cue].	Live: LOAD CUE
3. Enter the number of the cue to run next.	Selects cue Live: LOAD CUE 2
4. Press [Enter].	Cue pending Live: LOAD CUE 2 ■

Go

When you press [Go], the highlighted (pending) cue on the cue list plays back in its fader in. Also press [Go] to resume a stopped cue's fade.

Stop/Back

If a cue is running, [Stop/Back] pauses playback. Press [Go] to resume the fade.

If a cue is not running, [Stop/Back] replays the most recently played cue. If you press [Stop/Back] again, it plays the cue before it on the cue list. Cues play back using the default Back time. If an effect was loaded into the previous cue, pressing [Stop/Back] won't run the effect.

Keystrokes:	Action/Command line:
1. Press [Load Cue] [2] [Enter].	Selected cue is loaded and pending Live: LOAD CUE 2 ■
2. Press [Go].	Selected cue runs
3. While cue is running, press [Stop/Back].	Running cue pauses
4. Press [Go].	Cue resumes
5. Once cue finishes, press [Stop/Back].	Previous cue fades up on stage in default Back time

Go to cue

[Go To Cue] lets you jump quickly to a cue out of sequence and bring it up on stage. If you do not specify a time, the fade uses the System Settings menu default Back/Go To Cue time. You cannot use [Go To Cue] to play back an effect cue.

[Go To Cue] runs the cue using the first available fader. You can take manual control of the fade, just as you do with cues run with the [Go] button.

Keystrokes:

1. Press [Live*].
2. Press [Go To Cue].
3. Enter the number of the cue to bring up on stage. For example, press [2].
4. To fade the cue up in a time other than the default, press [Time] and enter the time.
5. Press [Enter].

Action/Command line:

Live: GO TO CUE

Selects cue

Live: GO TO CUE 2

Enters manual fade time

Live: GO TO CUE 2 TIME 4

Cue comes up on stage

Live: GO TO CUE 2 TIME 4 ■

Note: Press [Go To Cue] [0] [Enter] or [Go To Cue] [Enter] to take all channels other than independent channels to zero.

Note: Press [Go To Cue] [Out] [Enter] to take all channels including independent channels to zero.

Cue check

Press [Go To Cue] [Next] [Enter] to bring up the next cue. The cue's levels come up on stage in the default Go To Cue time rather than fading up normally as they would if you pressed [Go].

Controlling fades manually

There are two ways to override automatic cue playback; manual override and rate override.

Manual override

When you take manual control, the fader slider controls the fade.

Once the fade starts, press the fader key over the cue's fader to transfer control of the fade to the slider. The slider controls the fade from the point at which you press the fader key until the fade completes. Once the fade is complete, the cue is cleared from the fader.

To clear the cue from the fader immediately, press the fader key again. This releases the channel levels at their current levels. You must return the slider to zero before you take control of another cue on that fader.

Note: Cues recorded with manual fade times are under slider control as soon as you press [Go].

Rate override

Rate override allows you to play back a cue faster or slower than its recorded rate. The rate wheel adjusts the fade rate.

Fade rate is expressed as a percentage. A cue with a fade rate of 100 percent plays back at its recorded fade time. A fade rate of 300 plays the cue back three times faster, and 50 plays the cue back half as fast.

You may take control of a cue's fade rate while the cue is running, or while the cue is pending. Press multiple fader keys to control multiple fades.

Follow this example to place a cue running on a physical fader under rate control:

Keystrokes:

1. Press [Rate].
2. Press the fader key for the fader in which the cue is running or pending.
3. Move rate wheel.

Action/Command line:

Activates rate control

Live: RATE

Selects faders to control

Live: RATE F2

Fades are controlled by the rate wheel. Move the wheel to adjust fade rates

Live: RATE F2 ■

Follow this example to control the fade rate of a cue running on a virtual fader:

Keystrokes:	Action/Command line:
1. Press [Go] to start cue.	
2. Press [Rate].	Activates rate control Live: RATE
3. Press [Cue] and enter the number of the cue.	Selects fader to control Live: RATE CUE 2
4. Press [Enter].	Fades are controlled by the rate wheel. Live: RATE CUE 2 ■

Note: Press [About] [Cue] and enter the cue number to view timing information for a cue on a virtual fader.

You may place all active faders under control of the rate wheel.

Keystrokes:	Action/Command line:
1. Press [Rate].	Activates rate control Live: RATE
2. Move rate wheel.	All faders are controlled by the rate wheel. Live: RATE ■

All Man (All Manual)

The All Man (All Manual) function allows you to place all active faders, physical or virtual, under manual control. When you press [All Man], all cues currently running freeze and are placed under the control of the Rate wheel.

Once the faders are on the Rate wheel, the fader display shows the percentage of completion of each cue on a physical fader. Use the Rate wheel to increase or decrease the percentage of completion of all running cues. Once a cue is complete, it leaves its fader and the rate wheel.

Cues captured by [All Man] cannot be controlled by the fader sliders. Press the appropriate fader key to release a cue captured by [All Man] on a physical fader.

Note: [All Man] does not control effect cues. Effects loaded to cues will run normally.

Chapter 10

Groups

You may record frequently used combinations of channels as groups (up to 250).

A group consists of channels, recorded at proportional levels, with no fades, times, profiles, or other attributes.

You may create or modify groups in Live or Group display mode. Group is not a live mode.

This chapter includes the following sections

- Creating groups
- Recalling groups on stage
- Modifying groups
- Labeling groups
- Deleting groups
- Copying groups
- Using cues or submasters as groups
- Using Group to modify cues, groups or submasters
- Group Spreadsheet
- Group List

Creating groups

Groups may be numbered 1 through 999.

Keystrokes:	Action/Command line
1. Press [Live*].	
2. Select channels and set channel levels.	Creates look
3. Press [Record].	Live: RECORD
4. Press [Group].	Live: RECORD GROUP
5. Enter the group to record.	Live: RECORD GROUP 1
6. Press [Enter].	Live: RECORD GROUP 1 ■

Note: You may press [Record] [Group] [Next] [Enter] to record the next group number after the last group recorded.

Creating a selective group

To create a group using some of the channels on stage, but not all, do a selective record. You can either specify the channels to add to the group, or specify the channels to exclude. Follow these steps to create a group containing channels 1 through 10 when channels 1 through 20 are active on stage:

Keystrokes:	Action/Command line
1. Press [Live*].	
2. Enter [1] [Thru] [1][0] or... Enter [-] [1][1] [Thru] [2][0].	Live: CHAN 1 > 10 or Live: - CHAN 11 > 20
3. Press [Record].	Live: - CHAN 11 > 20 RECORD
4. Press [Group].	Live: - CHAN 11 > 20 RECORD GROUP
5. Enter the group to record.	Live: - CHAN 11 > 20 RECORD GROUP 1
6. Press [Enter].	Live: - CHAN 11 > 20 RECORD GROUP 1 ■

Recording a group without a submaster

You may record groups containing the current levels on stage except for those contributed by specific submasters.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Select channels and set levels.	
3. Press [S7], Rec Minus Sub.	Live: RECORD– SUB
4. Press [5].	Instructs that levels raised by submaster 5 be ignored Live: RECORD – SUB 5
5. Press [Group] [3].	Selects group to be recorded. Live: RECORD – SUB 5 GROUP 3
6. Press [Enter].	Records group 3 minus submaster 5 Live: RECORD – SUB 5 GROUP 3 ■

Note: If you do not enter a submaster number in step 4, you record the submaster without including levels contributed by any submaster.

Recalling groups on stage

Follow these steps to view a group on stage.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Press [Group], and enter the group.	Live: GROUP 1
3. Press [Full] (or press [At] and use the keypad to set a level).	Live: GROUP 1 FULL
4. Press [Enter].	Live: GROUP 1 FULL ■
5. Move fader wheel to adjust levels.	

Modifying groups

You may modify groups in Group or Live modes.

In Group

Follow these steps to modify a group in Group display mode:

Keystrokes:	Action/Command line:
1. Press [Group*].	Selects Group display mode
2. Press [S1], Select Group .	Group: GROUP
3. Enter the group to modify.	Group: GROUP 1
4. Press [Enter].	Group: GROUP 1 ■
5. Select channels and set levels.	Creates look; new levels are recorded into group automatically

Note: You can use this process to create a new group in Group display mode. If the group number you enter to modify doesn't exist, it is created as a new group.

*Note: You must use [S1], **Select Group**, to view or edit a group. Pressing [Group] brings up another group's levels in the current group.*

In Live

Follow these steps to modify a group in Live display mode:

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Press [Group] and enter the group to modify.	Live: GROUP 1
3. Press [Full] [Enter].	Live: GROUP 1 FULL ■
4. Select channels and set levels.	Alters look
5. Press [Enter].	
6. Press [Record] [Group].	Live: RECORD GROUP
7. Enter the group you are modifying and press [Enter].	Live: RECORD GROUP 1 ■ Please confirm
8. Press [Enter].	Live: RECORD GROUP 1 ■ Please confirm ■

Using Update to modify groups

Update allows you to modify groups without recording the entire stage look. Updating a group takes the channels on stage that are also in the group and modifies the group's levels to match the stage.

Update ignores channels on stage unless they are already part of the group or you specify new channels to add.

Using Update to change levels in a group

Keystrokes:	Actions:
1. Press [Live*].	
2. Press [Group], enter the group, and press [Full] [Enter].	Puts group's current look on stage
3. Change the channel levels. This process won't add new channels.	Selects channels and sets levels
4. Press [S4], Update .	Live: UPDATE
5. Press [Group], enter the group to modify and press [Enter].	Live: UPDATE GROUP 1 ■

Using Update to add new channels to a group

If you specify the channels in your command line, you may use Update to add new channels to an existing group.

Keystrokes:	Actions:
1. Press [Live*].	
2. Press [Group], enter the group, and press [Full] [Enter].	Puts group's current look on stage
3. Select channels to add to the group and set their levels.	Alters look
4. Specify the channels to add; e.g., press [5] [Thru] [1][0].	Live: 5 > 10
5. Press [S4], Update .	Live: 5 > 10 UPDATE
6. Press [Group], enter the group to update and press [Enter].	New channels are added to group Live: 5 > 10 UPDATE GROUP 1 ■

Labeling groups

You may use the alphanumeric keyboard to label groups.

Keystrokes:	Action/Command line:
1. Press [Group*].	Selects Group display mode
2. Press [S1], Select Group , and enter the group to label.	Group: GROUP 1
3. Press [Label].	Group: GROUP 1 LABEL
4. Use the alphanumeric keyboard to enter a label (up to 20 characters).	Group: GROUP 1 LABEL Fire
5. On the Obsession keypad, press [Enter].	Group: GROUP 1 LABEL Fire ■

Deleting groups

You must be in Group display mode to delete individual groups. To delete all groups, use Clear Groups from the Clear Functions menu (see page 245).

Keystrokes:	Actions:
1. Press [Group*]	Selects group display
2. Press [S6], Delete Group .	Group: DELETE GROUP
3. Enter group to delete.	Group: DELETE GROUP 1
4. Press [Enter].	Group: DELETE GROUP 1 ■ Please confirm
5. Press [Enter] to delete the group or [Clear] to cancel.	Group: DELETE GROUP 1 ■ Please confirm ■

Copying groups

You may copy a look from a group and use it as the foundation for a new group.

Keystrokes:

1. Press [Group*].
2. Press [S7], **Copy Group**.
3. Enter the group to copy.
4. Press [At].
5. Enter the group to copy to.
6. Press [Enter]. Group copy is complete. You can now modify the new group.

Actions:

Selects Group display mode

Group: COPY GROUP

Group: COPY GROUP 1

Group: COPY GROUP 1 @

Group: COPY GROUP 1 @ 5

Group: COPY GROUP 1 @ 5 ■

Using cues or submasters as groups

Like groups, cues and submasters are collections of channels, but with more extensive information included. You can treat the channels in a cue or a submaster as if they were groups, bringing them up on stage or including them in other level settings.

Keystrokes:

1. Press [Live*].
2. Press [Group].
3. Press [Cue] and enter the number of the cue to bring up.
4. Press [At] and enter the level at which to bring the cue up. (Or press [Full].)
5. Press [Enter].

Actions:

Tells Obsession to treat the next entry as a group

Live: GROUP

Live: GROUP CUE 1

Live: GROUP CUE 1 @ 50

The cue's channels are brought up on stage at the specified level

Live: GROUP CUE 1 @ 50 ■

Note: If a cue contains one or more channels whose levels drop to zero, and the cue is used in a [Group] [Cue] command, the channels that drop to zero are not included in the group.

To use a submaster as a group, follow the same procedure, but press [Sub] instead of [Cue] in step 3.

Using Group to modify cues, groups or submasters

You can use groups to modify cues, submasters or other groups. For example, say you create a group containing channels 1-10 at 75 percent. To add those channels to submaster 2, follow these steps:

Keystrokes:	Action/Command line:
1. Press [Sub*].	
2. Press [Sub] and enter the submaster.	Sub: SUB 2
3. Press [Enter].	Sub: SUB 2 ■
4. Press [Group] to indicate that the next number entered will be a group.	Sub: SUB 2 ■ GROUP
5. Enter the group.	Sub: SUB 2 ■ GROUP 1
6. Press [Full] to set group channels to full recorded levels. (Or, press [At] and use the keypad to set levels at a percentage of the group's levels.)	Sub: SUB 2 ■ GROUP 1 FULL
7. Press [Enter] to re-record the modified submaster.	Sub: SUB 2 ■ GROUP 1 FULL ■

Use the same procedure with cues and other groups. Groups can be used as elements in effects. Anywhere you set channel levels, you can use a group to select those channels and levels.

Group Spreadsheet

The Group Spreadsheet lists all recorded groups and allows you to view groups and channel levels. It lists groups down the left side of the screen; channels across the top. Use [Page +], [Page -], [Next], [Last], and the arrow keys to move around the display. As you scroll through the groups, the currently selected group is highlighted in white.

Press [Group*] [S3], **Spreadsheet**, to display the Group Spreadsheet.

		Channels																						
Grp	341	42	43	44	45	346	47	48	49	50	351	52	53	54	55	356	57	58	59	60	361	62	63	
14																								
15																								
16																								
18																						FL	FL	FL
19																								
20																								
21																								
22																								
23																								
24																								
25		FL	FL			FL	FL			FL	FL													
26		FL				FL				FL														
27			FL			FL				FL														

Memory left: 16%
Groups left: 226

Group Sheet: GROUP 1

S1	S2	S3	S4	S5	S6	S7	S8
Select Group		Group List	Return		Delete Group	Copy Group	Flexi-channel

Range editing in Group Spreadsheet

Group Spreadsheet allows range editing of all attributes visible on the screen.

Keystrokes:	Actions/Command line
1. Press [Group*] [S3], Spreadsheet.	
2. Press [Group] [1] [Thru] [5].	Group Sheet: GROUP 1 > 5
3. Press [Enter].	Selects groups 1 through 5 Group Sheet: GROUP 1 > 5 ■
4. Press [1] [Thru] [5].	Group Sheet: GROUP 1 > 5 ■ CHAN 1 > 5
5. Press [Full].	Group Sheet: GROUP 1 > 5 ■ CHAN 1 > 5 FULL
6. Press [Enter].	Sets channels 1 through 5 to full in groups 1 through 5 Group Sheet: GROUP 1 > 5 ■ CHAN 1 > 5 FULL ■

Copying ranges

When you copy a range of groups, the spacing between items in the new range is either identical to the original range, or renumbered to consecutive numbers.

For example, suppose you copy groups 1, 3, and 5 to a new range starting with group 6. The groups in the new range can be numbered two ways.

To a matching range

To match the original range, specify only the starting group number of the new range. In this case, your command line would read: **Group Sheet: COPY GROUP 1 > 5 @ 6 ■**. The groups in the new range are numbered 6, 8 and 10.

To consecutive numbers

To number by consecutive numbers, specify a number range. Both the old and new ranges must contain the same number of items. In this case, your command line would read: **Group Sheet: COPY GROUP 1 > 5 @ 6 > 8 ■**. The groups in the new range will be numbered 6, 7 and 8.

Note: If a group is copied to a number where a group already exists, the new group replaces the existing group.

Group List

The Group List displays the group number and label of all recorded groups. Use [Page +], [Page -], [Next], and [Last] to scroll through the groups. The selected group appears in white.

Press [Group*] [S4], **Group List**, to display the Group List.

Group	Label	Group	Label
1	Morning	18	
2	Evening	19	
3	Toad's home	20	
4	Hideaway	21	
5	Upstage wash	22	
6	Houselights	23	
7	BPS worklights	24	
8		25	
9		26	
10		27	
11		28	
12		29	
13		30	
14		31	
15		32	
16			
17			

Memory left: 94%
Groups left: 218

Group List: GROUP 1 ■

S1	S2	S3	S4	S5	S6	S7	S8
Select Group		Spread-sheet	Return		Delete Group	Copy Group	

Range editing in Group List

Group List allows range editing of all attributes visible on the screen. For example, to label groups 1 through 5 to **Act One**, follow these steps.

Keystrokes:

1. Press [Group*] [S4], **Group List**.
2. Press [Group] [1] [Thru] [5].
3. Press [Label] and use the alphanumeric keyboard to enter "Act One."
4. Press [Enter].

Actions:

Displays Group List

Group List: GROUP 1 > 5

**Group List: GROUP 1 > 5
LABEL Act One**

Sets label for groups 1 through 5 to **Act One**

**Group List: GROUP 1 > 5
LABEL Act One ■**

Chapter 11

Submasters

Each submaster consists of a slider, a bump button and an LED. The slider lets you bring the submaster look up manually. The bump button lets you flash the submaster to its full recorded level or begin its programmed fade, if it has one. The LEDs show you which submasters are recorded and whether they are additive or inhibitive.

This chapter includes the following sections:

- Submaster types
- Submaster pages
- Submaster LEDs
- Submaster bump buttons
- Recording a submaster
- Controlling submaster fades manually
- Modifying submasters in Sub display
- Modifying submasters in Live display
- Using Update to modify submasters
- Using Update to add selected channels
- Creating inhibitive submasters
- Loading cues, groups or effects into submasters
- Copying submasters
- Clearing submasters
- Submaster Spreadsheet
- Submaster List

Submaster types

Submasters can be additive or inhibitive. A green submaster bump button LED indicates an additive submaster, red indicates an inhibitive submaster.

Additive submasters

An additive submaster contains a set of channels, recorded at proportional levels. Additive submasters interact with established channel levels on a highest level basis. The home position for an additive submaster's slider is zero.

Inhibitive submasters

An inhibitive submaster contains channels whose output is held below a specified level. An inhibitive submaster doesn't actually set channel levels, it prevents channel outputs from exceeding a specified level. The home position for an inhibitive submaster's slider is Full.

Changing type

When you change a submaster from one type to the other, the change does not become effective until you move its slider to the home position for its old type, then to the home position for its new type. Changing type does not affect levels recorded in a submaster.

Keystrokes:

1. Press [Sub*].
2. Press [Sub] [#].
3. Press [S1], **Sub Type**, [Enter].

Action/Command line:

Sub: SUB 1

Sub: SUB 1 ADDITIVE or
Sub: SUB 1 INHIBITIVE ■

Submaster pages

Obsession's two submaster pages double the number of possible submasters to 96 for Obsession and Obsession 3000 and 48 for Obsession 600.

Obsession displays the message **Submaster page: 1** (or **Submaster page: 2**) in the upper right corner of the Playback display. To switch the page, press [Sub Page], enter [1] or [2], and press [Enter].

When you load a new page, any submasters set at a level above zero remain at their current settings until you move them to their home position. The new submasters then load. This prevents the stage from going black or changing levels when you switch pages. Previous page submasters' LEDs flash slowly.

Note: When you read a new show from a disk, the console loads the same page that was loaded from the previous show. Any submasters on stage when you read a new show remain on stage until you move their sliders to the home position. Move sliders to home to load new submasters.

Submaster LEDs

Each submaster slider has an LED below it. The LED's color and state indicates the current state of that submaster.

Color	State	Meaning
Off	Off	Submaster not loaded in this page.
Green	Solid	Additive submaster loaded in this page.
Green	Slow Blink	Additive submaster loading into this page, Loads when slider reaches home position(s).
Green	Fast Blink	Additive submaster on timed hold. Press bump button to begin downfade.
Red	Solid	Inhibitive submaster loaded in this page.
Red	Slow Blink	Inhibitive submaster loading into this page, Loads when slider reaches home position(s).
Red	Fast Blink	Inhibitive submaster on timed hold. Press bump button to begin downfade.

Submaster bump buttons

Press and hold the bump button located below each submaster slider to hold the submaster contents on stage at its recorded level. The look turns off as soon as you release the button. If the submaster has a programmed fade, press the bump button to start the fade.

A bump button is in one of three modes; enabled, disabled or solo. If it's disabled, pressing it has no effect. If it's enabled, pressing it brings the submaster's channels up on stage or starts its upfade or downfade. In solo mode, pressing it brings the submaster's channels up on stage or starts its upfade or downfade, and all channel outputs not included in the submaster are reduced to zero until you release the button or the downfade finishes.

Keystrokes:

1. Press [Sub*].
2. Press [Sub] and enter the submaster you wish to change. Press [Enter].
3. Press [S2], **Bump Status**, until the mode you desire appears.
4. Press [Enter].

Action/Command line:

Selects the submaster
Sub: SUB 2

Toggles through modes
**Sub: SUB 2 ■ BUMP
DISABLED?**

Selects mode. If submaster bump button is disabled, a **D** appears in front of its number on the Sub List display. If in solo, an **S** appears
**Sub: SUB 2 ■ BUMP
DISABLED? ■**

Note: Bump status can be changed for a range of (or all) submasters in the Sub List display.

Recording submasters

You can create submasters in Live or Submaster mode.

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Select channels and set levels.	Creates look
3. Press [Record].	Live: RECORD
4. Press [Sub] [#] [Enter] or... Press [Sub Bump #]	The current stage look is recorded into submaster Live: RECORD SUB 3 ■

Note: Press [Record] [Sub] [Next] [Enter] to record the next submaster number after the last submaster recorded.

Adding fade and dwell times to a submaster

Upfade time is how long it takes a submaster's channels to fade to their recorded levels when you press the submaster bump button.

Dwell time is how long the submaster's look holds before the downfade starts. The Dwell time may also be **Hold**. (See page 155.)

Downfade time is how long it takes a submaster's channels to fade from their recorded levels.

When you record fade times for a submaster, you can play the recorded fade with the bump button or control it manually with the slider.

Note: You can use the slider to manually override the fade.

Adding fade times

You can add fade times to a submaster from Live or Submaster.

Keystrokes:	Action/Command line:
1. Press [Sub].	Live: SUB
2. Enter submaster to which to add fade times.	Live: SUB 4
3. Press [Time].	Live: SUB 4 TIME
4. Enter upfade time and press [/].	Live: SUB 4 TIME 6 /
5. Enter dwell time and press [/]. (See next page for information about Hold dwell.)	Live: SUB 4 TIME 6 / 3 /
6. Enter downfade time and press [Enter].	Live: SUB 4 TIME 6 / 3 / 6 ■

Note: Once a timed submaster is running, pressing the bump button changes the direction of the fade. For example, if half of the upfade is complete, pressing the bump button starts the downfade from 50 percent.

Note: If you do not enter a dwell time for a submaster, the submaster defaults to a manual dwell.

Hold

If you record a submaster with a dwell time of **Hold**, the submaster fades up when you press the bump button, then holds until you press it again. You may assign a **Hold** dwell only from Submaster display mode.

Keystrokes:	Action/Command line:
1. Press [Sub*].	
2. Press [Sub].	Sub: SUB
3. Enter submaster to which to add fade times.	Sub: SUB 5
4. Press [Time] [/].	Sub: SUB 5 TIME /
5. Press [S5], Hold , and press [Enter].	Sub: SUB 5 TIME / HOLD ■

Manual

If you record a submaster with a manual dwell, the upfade starts when you press and hold the bump button. It runs until channels reach full recorded levels, then holds at full while you hold the bump button; the downfade begins when you release it.

Keystrokes:	Action/Command line:
1. Press [Sub].	Live: SUB
2. Enter submaster number.	Live: SUB 6
3. Press [Time] [/].	Live: SUB 6 TIME /
4. Press [Enter].	Live: SUB 6 TIME / ■

Adding a rate to a submaster

Rate lets you record submasters that play back faster or slower than their recorded fade times. This can be especially helpful when you are calculating complex timing information for effects loaded to a submaster.

Note: If you adjust the rate on an effect submaster, the adjustments affect step times and step In/Dwell/Out times. Rate adjustments don't change the overall effect In/Dwell/Out time.

Fade rate is expressed as a percentage. A submaster with a fade rate of 100 plays back at its recorded fade time. A rate of 300 plays back three times faster. A rate of 50 plays back half as fast. Rate may be 0-999 percent.

Keystrokes:

1. Press [Sub*].
2. Press [Sub].
3. Press [7].
4. Press [More Softkeys] [S5], **Rate**.
5. Press [2][0][0] to enter a rate of 200 percent.
6. Press [Enter].

Action/Command line:

Sub: SUB

Sub: SUB 7

Sub: SUB 7 RATE

Sub: SUB 7 RATE 200

Sub: SUB 7 RATE 200 ■

Press the bump button to start submaster upfade.

Live control of a submaster's rate

You may change the rate of a running submaster in Live. (This also works if the submaster is not running. In either case, the new rate is automatically recorded.)

Keystrokes:	Action/Command line:
1. Press [Live*].	
2. Press [Rate].	Activates rate control Live: RATE
3. Press [Sub Bump #].	Selects submaster Live: RATE SUB 8 ■
4. Move [Rate Wheel].	Sets and records fade rate. If submaster is running, fade proceeds at new rate

Recording submaster to the other page

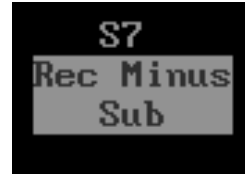
You may specify the page to which you record submasters.

Keystrokes:	Action/Command line:
1. Create the look in Live.	
2. Press [Record].	Live: RECORD
3. Press [Sub] and enter the sub number.	Live: RECORD SUB 9
4. Press [Sub Page] and enter the page on which you want to record submaster.	Live: RECORD SUB 9 SUB PAGE 2
5. Press [Enter].	Live: RECORD SUB 9 SUB PAGE 2 ■

Recording a submaster minus a submaster

Obsession lets you program a submaster with the current levels on stage except for those contributed by another submaster.

[S7] in Live automatically enters the keystroke sequence [Record] [-] [Sub] on the command line.



Keystrokes:

1. Press [Live*].
2. Select desired channels and set channel levels.
3. Press [S7], **Rec Minus Sub**.
4. Press [5].
5. Press [Sub] [3].
6. Press [Enter].

Action/Command line:

Live: RECORD – SUB

Instructs that levels raised by submaster 5 be ignored

Live: RECORD – SUB 5

Selects submaster to record

Live: RECORD – SUB 5 SUB 3

Records submaster 3 minus submaster 5's levels

Live: RECORD – SUB 5 SUB 3

■

Note: If you don't enter a sub number in step 4, you record the submaster without including levels contributed by any submaster.

Labeling submasters

Use the alphanumeric keyboard to assign labels (up to 25 characters) to submasters.

Keystrokes:

1. Press [Live*].
2. Press [Sub] and enter the submaster to label.
3. Press [Label].
4. Use the alphanumeric keyboard to enter the label.
5. On the Obsession keypad, press [Enter].

Action/Command line:

Live: SUB 4

Live: SUB 4 LABEL

**Live: SUB 4 LABEL
Bedroom wash**

**Live: SUB 4 LABEL
Bedroom wash ■**

Controlling submaster fades manually

When you press the bump button on a timed additive submaster, recorded fade times play back as you recorded them. You may take manual control of submasters recorded with fade times.

Capture the fade by pushing the slider ahead of the programmed fade. Once the slider passes the level of the programmed fade, control transfers to the slider and you have full manual control of the submaster.

Modifying submasters in Sub display

Keystrokes:

1. Press [Sub*].
2. Press [Sub] and enter the submaster to modify.
3. Press [Enter].
4. Enter channel numbers and set desired new levels.

Note: To set a channel to zero, press [Out] and skip step 5.

5. Press [Enter].

Action/Command line:

Sub: SUB 6

Brings up current level settings for the submaster

Sub: SUB 6 ■

Sets new levels

Sub: SUB 6 ■ CHAN 3 @ 50

Changes to the submaster are automatically recorded

Sub: SUB 6 ■ CHAN 3 @ 50 ■

Note: If the submaster is active, as you make changes they appear on stage.

Modifying submasters in Live display

Keystrokes:

1. Press [Live*].
2. Use its slider to raise the submaster you want to modify to Full.
3. Enter channel numbers and set new levels. To remove a channel, press [Out].
4. Press [Record], then press the bump button for the submaster you are modifying.

Action/Command line:

Brings up current level settings for the submaster

Sets new levels

Live: CHAN 7 @ 85 ■

Records submaster with new levels

Live: RECORD SUB 7 ■

Using Update to modify submasters

Update lets you modify an individual submaster's channel levels live, then re-record the submaster without including the entire stage look. Update only adds currently selected channels to the individual submaster.

Note: If you update a range of submasters, new channels aren't added to the submasters.

Note: In addition to updating a single submaster, you may also enter a range of submasters ([Sub] [1] [Thru] [5]) or you may update all active submasters by omitting the submaster number ([Sub] [Enter]). (Step 5, below.)

Keystrokes:

1. Press [Live*].
2. Set submaster slider to **10**.[†]
3. Select and set desired levels for the channels to update.
4. Press [S4], **Update**.
5. Press [Sub], enter the submaster to update and press [Enter],
or...
Press the submaster's bump button.

Action/Command line:

- Puts submaster's current look on stage
- Selects channels and sets levels
- Live: UPDATE**
- Live: UPDATE SUB 8 ■**

Shortcut: The easiest way to update a single submaster is to enter new channel levels, press [Update], then press the submaster's bump button.

Note: When you use Update to modify a submaster, control of stage levels reverts from the keypad to the modified submaster.

[†]*Warning: If you don't set the slider to **10**, Obsession updates the submaster proportionally. This means that the outputs on stage will match their current level only when the slider is at its current position.*

Obsession adjusts channel levels to match slider level to accommodate this. When this happens, levels on stage drop to the new levels. The console warns you before this happens.

Using Update to add selected channels to submasters

In Live, Update lets you add channel levels to a recorded submaster without recording the entire stage look. Using Update to add channels to a submaster records only the levels of the specified channels.

Keystrokes:

1. Press [Live*].
2. Set submaster slider to **10**.
3. Select and set desired channel levels to add to the submaster.
4. Enter the channels to add.
5. Press [S4], **Update**.
6. Press [Sub], enter the submaster to update and press [Enter],
or...
Press the submaster's bump button.

Action/Command line:

Puts submaster's current look on stage

Selects channels and sets levels

Live: 5 > 9

Live: 5 > 9 UPDATE

Live: 5 > 9 UPDATE SUB 8 ■

Creating inhibitive submasters

Inhibitive submasters let you limit the intensity level for a group of channels. When an inhibitive submaster is set at **10** (100 percent), channel output is not inhibited. As you pull the slider down, channel outputs are limited to the slider's level setting. An inhibitive submaster controls the levels of its assigned channels in the same way the Grandmaster controls all channels. If a channel is fully inhibited by a submaster, its level appears as a yellow zero.

A red bump button LED indicates an inhibitive submaster.

Keystrokes:

Action/Command line:

- | | |
|--|---|
| 1. Press [Sub*]. | |
| 2. Press [Sub] and enter the submaster to make inhibitive. | Selects submaster to change
Sub: SUB 9 |
| 3. Press [S1], Sub Type . | Sub: SUB 9 INHIBITIVE? |
| 4. Press [Enter]. The LED flashes green. | Channel levels change to IN and the submaster number is red
Sub: SUB 9 INHIBITIVE? ■ |
| 5. Move slider to zero. LED flashes red. | Additive levels are unloaded |
| 6. Move slider to 10 . | Inhibitive control is loaded |

Follow the same procedure to convert back to additive.

Loading cues into submasters

Submasters may contain channels, or may be loaded with groups, cues or effects, or some combination of the four.

Keystrokes:	Action/Command line:
1. Press [Load Sub].	Live: LOAD SUB
2. Enter submaster number.	Live: LOAD SUB 10
3. Press [Cue].	Live: LOAD SUB 10 CUE
4. Enter the cue to load.	Live: LOAD SUB 10 CUE 1
5. Press [Enter].	Live: LOAD SUB 10 CUE 1 ■

Hint: To save time, enter a range of cues into a matching range of submasters. Use the [+], [-] and [Thru] keys to enter ranges. This also works for groups and effects.

Loading groups or effects into submasters

Submasters may contain channels, or may be loaded with groups, cues or effects, or some combination of the four.

If you load a group into a submaster as described below, the console links the group and the submaster. While they are linked, changes to the group's levels automatically appear in the submaster. Also, the group number is displayed in the submaster's label field. The link is maintained as long as the submaster levels are not otherwise changed.

If an effect plays back from a submaster, it interacts with other cues and submasters on a highest level basis. When an effect is loaded to a submaster, it fades proportionally between zero and the effect's high level. The slider acts as a master.

Keystrokes:	Action/Command line:
1. Press [Load Sub].	Live: LOAD SUB
2. Enter submaster number.	Live: LOAD SUB 10
3. Press [Group] (or [Effect]).	Live: LOAD SUB 10 GROUP
4. Enter the group or effect you wish to load.	Live: LOAD SUB 10 GROUP 1
5. Press [Enter].	Live: LOAD SUB 10 GROUP 1 ■

Note: Due to limited memory, you may not be able to load all your effects to submasters. The actual number depends on effect size.

Copying submasters

You may copy a look from a submaster or use a submaster as a building block for a new submaster.

Keystrokes:	Action/Command line:
1. Press [Sub*].	
2. Press [S7], Copy Sub.	Sub: COPY SUB
3. Enter the submaster to copy.	Sub: COPY SUB 1
4. Press [At].	Sub: COPY SUB 1 @
5. Enter the new submaster.	Sub: COPY SUB 1 @ SUB 9
6. Press [Enter]. Submaster copy is complete.	Sub: COPY SUB 1 @ SUB 9 ■

Hint: To save time, you can copy a range of submasters in the Sub List or Spreadsheet display.

Clearing submasters

You must be in Submaster display mode to clear the contents of individual submasters.

Keystrokes:	Action/Command line:
1. Press [Sub*].	
2. Press [S6], Unload sub.	Sub: UNLOAD SUB
3. Enter submaster to clear.	Sub: UNLOAD SUB 2
4. Press [Enter].	Sub: UNLOAD SUB 2 ■ Please confirm
5. Press [Enter] to delete the submaster or [Clear] to cancel.	Sub: UNLOAD SUB 2 ■ Please confirm ■

Hint: To save time, clear a range of submasters in the Sub List or Spreadsheet displays. Use the [+], [-] and [Thru] keys to enter ranges. To clear all submasters, use the Clear Functions menu.

Submaster Spreadsheet

The Submaster Spreadsheet display shows the channels in all submasters, and their levels, on the Command display. Pages 1 and 2 are displayed separately.

Blind submaster page: 1

Sub											Channels													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1	FL	FL	FL													12						75	FL	
2		70	70	70			70	70	70			90	90	90	90									
3											94	94	94	94	94	94								
4							60																	
5			45	45	45	45	45															60	60	60
6				FL					45			90	90	90	90	90	FL				60	60	60	
7					93	93				85	93				90									
8			FL	FL	FL	FL							45	45	45									
9		FL	FL	FL												12					75	FL		
10			70	70	70			70	70	70				65	65	90					75			
11											45					94	94							
12							60																	
13		45	45	45	45	45	45															60	60	60
14				FL						45					90	90	90	90	FL					
15					93	93					90				90						60	60	60	
16			FL	FL	FL	FL					45	45	45											

Sub Sheet : SUB 1

S1	S2	S3	S4	S5	S6	S7	S8
		Sub List	Return		Unload Sub	Copy Sub	Flexi-channel

Use [Page +] and [Page -] and the arrow keys to move around within each page. As you scroll through the submasters, the one you are currently on is highlighted in yellow, and its channels are white.

Keystrokes:

1. Press [Sub*] [S3], **Spread-sheet.**
2. Press [Sub Page] [2] [Enter].
3. Press [Sub Page] [1] [Enter].

Action/Command line:

- Enters Submaster mode and displays the spreadsheet for submaster page 1
- Switch from Blind submaster page 1 to page 2
- Switch from Blind submaster page 2 to page 1

Range editing in Submaster Spreadsheet

The Submaster Spreadsheet allows range editing of all attributes visible on the screen. For example, if you wanted channels 1 through 5 to be at full in submasters 1 through 5, you could set the levels in one command.

Keystrokes:

1. Press [Sub*] [S3], **Spreadsheet.**
2. Press [Sub] [1] [Thru] [5].
3. Press [Enter].
4. Press [1] [Thru] [5].
5. Press [Full].
6. Press [Enter]

Action/Command line:

Sub Sheet: SUB 1 > 5

Sub Sheet: SUB 1 > 5 ■

Sub Sheet: SUB 1 > 5 ■
CHAN 1 > 5

Sub Sheet: SUB 1 > 5 ■
CHAN 1 > 5 FULL

Sets channels 1 through 5 to full in submasters 1 through 5

Sub Sheet: SUB 1 > 5 ■

CHAN 1 > 5 FULL ■

Copying ranges

When you copy a range of submasters, all submasters in the range are copied, whether or not anything is recorded in the submaster memory.

For example, suppose you copy a submaster range including recorded submasters 1, 3, and 5 to a new range starting with submaster 6.

To copy a range of submasters, specify the starting submaster number of the new range. In this case, your command line would read: **Sub Sheet: COPY SUB 1 > 5 @ 6 ■**. The recorded submasters are numbered 6, 8 and 10. Unrecorded submasters 2 and 4 are copied to submasters 7 and 9.

Note: A new submaster will replace the existing submaster, even if the new submaster is unrecorded.

Submaster List

The Submaster List shows all the submasters on the Command display. Pages 1 and 2 are displayed separately, with 24 submasters shown at a time.

Submasters with recorded levels (additive submasters) are displayed in green, inhibitive submasters in red. Submasters with no recorded levels are gray. The currently selected submaster is highlighted. Use [Page +] and [Page -] to move back and forth within each page.

Blind submaster page: 1

Sub	%	Up	Dwell	Down	Label	Sub	%	Up	Dwell	Down	Label
1	5	Hold	0.1			13	0	Man	0		
2	5	Hold	0.1			14	0	Man	0		
3	5	Hold	0.1			15	0	Man	0		Finale
4	5	Hold	0.1			16	0	Man	0		
5	5	Hold	0.1			17	5	Hold	5		E2
6	5	Hold	0.1			18	0	Man	0		
7	5	Hold	0.1		Fire scene	19	0	Man	0		
8	5	Hold	0.1			20	0	Man	0		
9	0	Man	0			21	0	Man	0		
10	0	Man	0			22	0	Man	0		
11	0	Man	0			23	0	Man	0		
12	0	Man	0			24	5	25	1		E1

Sub List: SUB 1 ■

S1	S2	S3	S4	S5	S6	S7	S8
Sub Type	Bump Status	Spread-sheet	Return	Rate	Unload Sub	Copy Sub	Hold

Keystrokes:

1. Press [Sub*] [S4], **Sub List**.
2. Press [Sub Page] [2] [Enter].
3. Press [Sub Page] [1] [Enter].

Action/Command line:

- Displays Submaster List, page 1
- Switch from Blind submaster page 1 to page 2
- Switch from Blind submaster page 2 to page 1

Range editing in Submaster List

Submaster List allows range editing of all attributes visible on the screen. For example, you can assign a five second wait time to submasters 1 through 5 in one command. Follow these steps to do so:

Keystrokes:

1. Press [Sub*] [S4], **Sub List.**
2. Press [Sub] [1] [Thru] [5].
3. Press [Time] [5].
4. Press [Enter].

Action/Command line:

Displays Submaster List

Sub List: SUB 1 > 5

Sub List: SUB 1 > 5 TIME 5

Sets upfade for submasters 1 - 5 to five seconds

Sub List: SUB 1 > 5 TIME 5 ■

Chapter 12

Effects

You may create up to 100 effects, each with up to 99 steps, and record them into cues or load them to submasters. Each effect includes level and timing controls for the steps in the effect, and overall timing controls for the effect itself.

This chapter includes the following sections:

- Steps
- Creating effects and steps
- Assigning effect characteristics
- Modifying effects
- Testing effects and steps
- Recording an effect to a cue
- Loading an effect to a submaster
- Labeling effects
- Deleting effects
- Copying effects
- The Effect List

Steps

A step contains channels, groups and/or submasters, also known as elements.

*Hint: The number of elements in a step is limited by the number of characters (up to 42) used to type in the elements used. For example, use **1 > 10** rather than **1 2 3 4 5 6 7 8 9 10** to indicate channels 1 through 10.*

Each step in an effect is assigned a High and Low level, a Step time, and an In, Dwell, and Out time.

Note: If an effect step includes groups, its high and low values are proportional levels.

Step time

Step time is the time between the beginning of a step and the beginning of the next step. Default is one second.

In time

In a positive effect, In time is how long it takes the step to fade from its starting level to its high level to start the step. In a negative effect, it is the time it takes to fade from its high level to its low level. Default is zero seconds.

Dwell time

Dwell time is how long the step holds levels between the In fade and the Out fade. Default is zero.

Out time

In a positive effect, Out time is how long it takes the step to fade from its high level to its low level to end the step. In a negative effect, it is the time it takes the step to fade from its low level to its high level. Default Out time is zero seconds.

Note: If the In/Dwell/Out times are 0/0/0, the step snaps to its High level and remain there until the Step time has elapsed. Then it snaps to its Low level.

High and Low levels

The High and Low levels represent the range of levels channels in the step are allowed to reach. Default High level is Full, default low level is zero.

Creating effects and steps

As you create a series of steps in Effect display mode, you create an effect. When you create a new step, it defaults to the previous step's attributes. You may then edit the step settings.

To edit a step, use the arrow keys to select an attribute field and enter the new setting. Press [Enter] or any arrow key to make the change. You can also use softkeys to move from field to field.

Keystrokes:

1. Press [Effect*].
2. Press [Effect], enter the effect to create (1-999), and press [Enter].
3. Press [1] [Enter].
4. Enter the channels, groups and submasters you want in the step. Submasters must be from the first submaster page.
5. Press [→]. Enter step time (0 to 99.9 seconds).
6. Press [→]. Enter the **In** time.
7. Press [→]. Enter **Dwell** time.
8. Press [→]. Enter **Out** time.
9. Press [→]. Enter the low level.
10. Press [→]. Enter high level.
11. Press [→].
12. Press [↓].

Action/Command line:

- Last modified effect is displayed.
- Selects a new effect; empty step 1 is automatically created, with the elements field highlighted.
- Effect 1 ■**
- Effect 1 ■ STEP 1 ■ ELEMENTS**
- Effect 1 ■ STEP 1 ■ ELEMENTS ■ 5 > 10 + 17**
- Effect 1 ■ STEP 1 ■ STEP TIME 5**
- Effect 1 ■ STEP 1 ■ IN TIME 2**
- Effect 1 ■ STEP 1 ■ DWELL TIME 3**
- Effect 1 ■ STEP 1 ■ OUT TIME 2**
- Effect 1 ■ STEP 1 ■ LOW LEVEL 20**
- Effect 1 ■ STEP 1 ■ HIGH LEVEL 80**
- Effect 1 ■ STEP 1 ■ ELEMENTS**
- Moves to the next step
- Effect 1 ■ STEP 2 ■ ELEMENTS**

Repeat steps 4 through 12 until you have entered as many steps as desired.

One-to-one channel assignment

To spread channels evenly across a range of steps, assign the channels to the steps on a one-to-one basis. You may enter the numbers of steps and channels you want, and create all the steps at once.

To create multiple steps simultaneously, enter step numbers using [Thru], [+] and [-]. Then select all the channels you want in the effect using [Thru], [+] and [-].

Obsession assigns channels to each step in turn. If there are more channels than steps, it assigns a channel to each step, then returns to the first step and continues assigning channels one per step until all channels are assigned.

The example on the next page demonstrates a one-to-one assignment. In the example, channels 1 through 22 are assigned to steps 1 through 10 automatically.

Channels are assigned as shown.

Step	Channels		
1	1	11	21
2	2	12	22
3	3	13	
4	4	14	
5	5	15	
6	6	16	
7	7	17	
8	8	18	
9	9	19	
10	10	20	

Follow these steps to create a ten-step effect using a one-to-one channel assignment:

Keystrokes:	Action/Command line:
1. Press [Effect*].	
2. Press [Effect]. Enter the effect, and press [Enter].	EFFECT 2 ■
3. Enter the range of steps to create.	Effect 2 ■ STEP 1 > 10
4. Press [Enter].	Effect 2 ■ STEP 1 > 10 ■ ELEMENTS
5. Enter the range of channels to assign to the steps.	Effect 2 ■ STEP 1 > 10 ■ ELEMENTS 1 > 22
6. Press [Enter].	Effect 2 ■ STEP 1 > 10 ■ ELEMENTS 1 > 22 ■

Assigning effect characteristics

Each step in an effect is assigned its own attributes and time values. The effect is also assigned attributes and time values that apply to the effect overall.

Attributes control how the effect plays its steps. All effects are either positive or negative. When you initially create the effect, it defaults to a positive chase.

Attributes

In the following, On means setting elements to their high level, Off means setting them to their low level.

Alternate, Reverse, Bounce, and Build can be combined with any other pattern except Random.

[S1] Positive

All elements start Off. Each step turns its assigned elements On and the previous step's elements Off

[S1] Negative

All elements start On. Each step turns its assigned elements Off and the previous step's elements On. [S1], **Positive/Negative**, toggles back and forth between positive and negative.

[S2] Alternate

If the effect is positive, the first pass through the effect is positive, the second pass is negative. Subsequent passes alternate between positive and negative.

If the effect is negative, the first pass through the effect is negative, the second pass is positive. Subsequent passes alternate between negative and positive.

[S3] Reverse

Steps run in reverse numerical order.

[S4] Bounce

Steps run first in forward, then in reverse order. Subsequent passes alternate between forward and reverse.

[S5] Build

All elements are off at the beginning of the chase. Each step turns its assigned elements on and leaves the previous step on. At the end of the chase, all steps are on; they all turn off to start the next pass.

In a negative effect, all steps are on at the beginning of the chase. Each step turns its assigned elements off, and leaves previous step elements off. At the end of the chase, all elements are off.

[S6] Random

Plays steps back in random order. Random creates lightning, flashing, or strobe effects. Random can't be combined with Alternate, Reverse, Bounce, or Build.

Assigning attributes to an effect

Follow these steps to assign attributes to the effect you created in the previous example.

Keystrokes:

1. Press [S5], **Attribute**.
2. Decide whether effect is positive or negative. Press [S1], **Positive/Negative**, to change, if necessary.
3. Select additional attributes from the softkeys.

Action/Command line:

Displays attribute softkeys

Selected patterns are displayed at the top of the effects display

Note: To remove an attribute, select it again.

Overall fade times

Each effect has an overall upfade, dwell and downfade time. When you create an effect, the times default to **5/Hold/5**, (upfade of five seconds, dwell of **hold**, downfade of five seconds).

*Note: Dwell is how long the effect runs between the initial upfade and the final downfade. **Hold** assigns an infinite dwell, meaning the effect runs until the associated fader button is pressed, starting the downfade.*

Note: Upfade, dwell and downfade times are applied to the bump time assignment if the effect is loaded to a submaster.

Change upfade, dwell and downfade

Keystrokes:	Action/Command line
1. Press [Effect*].	
2. Press [Effect], enter effect number and press [Enter].	Effect 3 ■
3. Press [Time], enter the upfade and press [/].	Effect 3 ■ TIME 5 /
4. Enter the dwell and press [/].	Effect 3 ■ TIME 5 / 2 /
5. Enter the downfade.	Effect 3 ■ TIME 5 / 2 / 5
6. Press [Enter].	Effect 3 ■ TIME 5 / 2 / 5 ■

Change upfade only

Keystrokes:	Action/Command line
1. Press [Time].	Effect 3 ■ TIME
2. Enter the upfade and press [/].	Effect 3 ■ TIME 4 /
3. Press [Enter].	Effect 3 ■ TIME 4 / ■

Change downfade only

Keystrokes:

1. Press [Time].
2. Press [/] [/].
3. Enter the downfade.
4. Press [#] [Enter].

Action/Command line

Effect 3 ■ TIME
Effect 3 ■ TIME / /
Effect 3 ■ TIME / / 4
Effect 3 ■ TIME / / 4 ■

Change up- and downfade to the same time

Keystrokes:

1. Press [Time].
2. Enter the fade time.
3. Press [Enter].

Action/Command line

Effect 3 ■ TIME
Effect 3 ■ TIME 3
Effect 3 ■ TIME 3 ■

Change dwell only

Keystrokes:

1. Press [Time].
2. Press [/].
3. Enter the dwell. (Press [S6], **Hold**, to set a held dwell time.)
4. Press [Enter].

Action/Command line

Effect 3 ■ TIME
Effect 3 ■ TIME /
Effect 3 ■ TIME / HOLD
Effect 3 ■ TIME / HOLD ■

Reset Hold dwell time

Keystrokes:

1. Press [Time] [/] [Enter].

Action/Command line

Current effect's dwell time set to
Hold
Effect 3 ■ TIME / ■

Random rate

When you select a random rate for an effect, Obsession applies a random rate to the assigned step time and a separate random rate to the step fade times. This causes the effect to run at varying speeds, changing at random, within a range that you select.

Keystroke:	Action/Command line:
1. Press [S5], Attribute .	Displays attribute softkeys
2. Press [S7], Random Rate .	Effect 4 ■ LO RANDOM RATE
3. Enter the slowest desired effect rate.	Effect 4 ■ LO RANDOM RATE 20
4. Press [/] and enter the highest desired effect rate.	Effect 4 ■ LO RANDOM RATE 20 HI RANDOM RATE 80
5. Press [Enter].	Effect 4 ■ LO RANDOM RATE 20 HI RANDOM RATE 80 ■

You can manually control effect rates by modifying the rate of the submaster or cue the effect is loaded into. Rate adjustments affect step times and step In/Dwell/Out times. They do not change the effect's In/Dwell/Out times. See *Live control of a submaster's rate* on page 157 and *Rate override* on page 133.

Modifying effects

You may modify recorded effects by adding or deleting effect steps, changing step attributes, and adding or deleting step elements.

Inserting steps

You can insert a step at any point in an effect. This example inserts a new step between steps 4 and 5.

Keystrokes:	Action
1. Press [Effect*].	
2. Press [S7], Edit Features .	Effect 5 ■
3. Use the [↑] and [↓] keys to highlight the step to insert and press [S1], Insert Step or... Press [S1], Insert Step , and enter the number of the step.	Effect 5 ■ INSERT STEP 5
4. Press [Enter].	Effect 5 ■ INSERT STEP 5 ■ Please confirm
5. Press [Enter].	Effect 5 ■ INSERT STEP 5 ■ Please confirm ■

The new step is inserted in place of the old one. The old step 5 becomes step 6; step 6 becomes step 7 and so on. The timing and level attributes from step 4 are set as initial defaults in step 5.

Deleting steps

You may delete steps from an effect.

Keystrokes:	Action
1. Press [Effect*].	
2. Press [S7], Edit Features .	Effect 6 ■
3. Use the [↑] and [↓] keys to highlight the step to delete and press [S2], Delete Step or... Press [S2], Delete Step , and enter the number of the step.	Effect 6 ■ DELETE STEP 5
4. Press [Enter].	Effect 6 ■ DELETE STEP 5 ■ Please confirm
5. Press [Enter], or press [Clear] to cancel.	Effect 6 ■ DELETE STEP 5 ■ Please confirm ■

Step 5 is deleted from its position. Step 6 becomes step 5; step 7 becomes step 6 and so on.

Editing step characteristics

You may edit step characteristics.

Keystrokes:	Action/Command line:
1. Press [Effect*]	
2. Press [Effect] and enter the effect to edit. Press [Enter].	Selects the effect Effect 7 ■
3. Use [↓] to select the step to edit, for example step 2. or... Press [S1], Step , [2] [Enter].	Effect 7 ■ STEP 2 ■ ELEMENTS
4. Use [→] to highlight the In time field in step 2. or... Press [S3], In Dwell Out .	Effect 7 ■ STEP 2 ■ IN TIME
5. Enter [8], the new In time.	Effect 7 ■ STEP 2 ■ IN TIME 8
6. Press [Enter].	In time reset to eight seconds Effect 7 ■ STEP 2 ■ IN TIME

Adding elements

You may add a channel or group to a step.

Keystrokes:

1. Select the step to modify using [↓] and [↑], or press [Step] [1] [Enter].
2. Press [+].
3. Enter the channel or group to add.
4. Press [Enter].

Action/Command line:

Effect 1 ■ Step 4 ■ Elements

Effect 1 ■ Step 4 ■ Elements +

Effect 1 ■ Step 4 ■ Elements + 7

Channel 7 is added to element list
Effect 1 ■ Step 4 ■ Elements

Note: If you enter elements without using [+] or [-], the channels or groups replace the current element list.

Deleting elements

You may remove a channel or group from a step.

Keystrokes:

1. Select the step to modify using [↓] and [↑], or press [Step] [1] [Enter].
2. Press [-].
3. Enter the channel or group to remove.
4. Press [Enter].

Action/Command line:

Effect 1 ■ Step 4 ■ Elements

Effect 1 ■ Step 4 ■ Elements –

Effect 1 ■ Step 4 ■ Elements – 7

Effect 1 ■ Step 4 ■ Elements

Testing effects and steps

Once you create an effect, you can test it before you add it to a cue or submaster. During the test, the effect plays back on stage and you can modify it in the effect display.

Keystrokes:	Action/Command line:
1. From the Effect display, press [S7], Edit Features .	Selects Edit mode.
2. Press [S7], Test Effect , and press [Enter].	Display switches to Live mode. Currently selected effect fades in on fader 8
3. To change effect rate, press [Rate] [F8] and adjust the rate wheel.	Rate changes
4. Press [F8].	Test fades out in downfade time
5. Press [F8] again to end effect immediately.	Test ends

*Note: Only one effect can be tested at a time. If you test a second effect, it replaces the first test. During the test, the display for fader 8 displays the effect number and flashes **Test** in yellow.*

During the step test, the effect plays back on stage one step at a time. Press [Next] to move from step to step. During the test, you can modify it in the effect display.

Keystrokes:	Action/Command line:
1. From the Effect display, press [S7], Edit Features .	Selects Edit mode
2. Press [S6], Test Steps , [Enter].	Display switches to Live
3. Press [Next].	Puts step 1 on stage. Repeat to advance through each step
4. Press [F8].	Effect is cleared from fader 8

Recording an effect to a cue

An effect cue interacts with other cues and the keypad in a last action manner.

An effect loaded to a fader activates the low level when the effect step first runs. The low level stays active until the effect is canceled, ends, or control of a channel is taken by a subsequently activated cue.

You may give an effect a manual upfade or downfade time, allowing you to fade it up and down with the playback slider. If the effect has a manual upfade, it must have a manual downfade and the dwell time is **Hold**. Effects with a **Hold** dwell time automatically park to a fader.

An effect with a **Hold** dwell time runs on the fader until you press the fader button to begin the downfade. Press the fader button once to fade out an effect loaded to a playback fader in the recorded downfade time.

Note: Press the fader button twice to cancel an effect from the fader immediately.

Keystrokes:

1. Press [Live*].
2. Press [Record] and enter the cue in which to record the effect.
3. Press [Effect] and enter the effect to record to the cue.
4. Press [Enter].

Action/Command line:

Live: RECORD CUE 9

Live: RECORD CUE 9 EFFECT 1

Live: RECORD CUE 9 EFFECT 1 ■

The cue that follows an effect cue will run channels taken from the effect in its own downfade time. So, if cue 1 contains an effect, cue 2 will run channels it takes from cue 1 in cue 2's down time.

Deleting an effect from a cue

Remove an effect from a cue by entering the cue number and pressing [Effect] [Enter] without entering an effect number.

Keystrokes:

1. Press [Live*].
2. Press [Cue] and enter the cue from which to remove the effect.
3. Press [Effect].
4. Press [Enter].

Action/Command line:

Live: CUE 9

Live: CUE 9 EFFECT

Live: CUE 9 EFFECT ■

Loading an effect to a submaster

An effect played back from within a submaster interacts with cues and other submasters on a highest level basis.

An effect loaded to a submaster fades proportionally between zero and the effect's high level. The slider acts as a master. If the effect's low level is normally 10 percent, moving the slider to 50 percent will reduce the effect's low level to 5 percent.

Note: If you load an effect to a submaster, and then change the effect, the new version of the effect is automatically loaded to the submaster when you leave effect mode or select a different effect to edit.

These steps load effect 1 to submaster 2.

Keystrokes:**Action/Command line:**

- | | |
|--------------------------|------------------------------------|
| 1. Create an effect. | |
| 2. Press [Live*]. | |
| 3. Press [Load Sub] [2]. | Live: LOAD SUB 2 |
| 4. Press [Effect] [1]. | Live: LOAD SUB 2 EFFECT 1 |
| 5. Press [Enter]. | Live: LOAD SUB 2 EFFECT 1 ■ |

Note: Due to limited memory, you may not be able to load all your effects to submasters.

Note: Channel levels are not affected by an effect until a step runs that specifically addresses the channel.

Labeling effects

Use the alphanumeric keyboard to label effects (up to 20 characters). When you load an effect to a cue or a submaster, the effect's label is assigned to that cue or submaster.

These steps add the label **Disco Scene** to an effect.

Keystrokes:

1. Press [Effect*].
2. Press [Effect]. Enter the effect to label.
3. Press [Label].
4. Use the alphanumeric keyboard to enter **Disco Scene**.
5. On the Obsession keypad, press [Enter].

Action/Command line:

Effect 1 ■ EFFECT 2

Effect 2 ■ LABEL

Effect 2 ■ LABEL Disco Scene

Effect 2 ■ LABEL Disco Scene ■

Deleting effects

You must be in the Effect display to delete individual effects. Delete all effects from the Clear Functions menu.

Keystrokes:

1. Press [Effect*].
2. Press [S7], **Edit Features**.
3. Press [S3], **Delete Effect**.
4. Enter effect to delete, unless the effect is already selected.
5. Press [Enter].
6. Press [Enter], or press [Clear] to cancel.

Action/Command line:

Effect 2 ■ DELETE EFFECT

Effect 2 ■ DELETE EFFECT 5

**Effect 2 ■ DELETE EFFECT 5 ■
Please confirm**

**Effect 5 ■ DELETE EFFECT 5 ■
Please confirm ■**

Copying effects

You may copy an effect or use effects as building blocks for new effects.

Keystrokes:

1. Press [Effect*].
2. Press [S7], **Edit Features**.
3. Press [S4], **Copy Effect**.
4. Enter the effect to copy.
5. Press [At].
6. Enter the new effect.
7. Press [Enter]. Effect copy is complete.

Action/Command line:**Effect 2 ■****Effect 2 ■ COPY EFFECT****Effect 2 ■ COPY EFFECT 2****Effect 2 ■ COPY EFFECT 2 @****Effect 2 ■ COPY EFFECT 2 @
12 ■****Effect 2 ■ COPY EFFECT 2 @
12 ■**

If the effect to which you are copying is already recorded, you must confirm that you wish to replace that effect with the new one.

The Effect List

From the Effect display, press [S8], **Effect List**, to enter the Effect List. A list of recorded effects and their labels is displayed. The most recently modified effect is highlighted.

The Effect List shows all recorded effects, including their numbers and labels. Use [Page +], [Page -], [Next] and [Last] to move forward and backward within the list.



Note: If you read effects from a different show with more channels in it than the current show, effects that use channels above the current show's maximum channel count are displayed in red.

Chapter 13

Macros

A macro lets you store a series of keystrokes and later replay it with one or two keystrokes. Macros simplify complex tasks that you perform often. You can program up to 2,000 macros, depending on available memory.

Press the [M1] through [M7] to record or play back macros 1 through 7. Record or play back macros 8 through 2,000 by pressing [M*] and entering the number of the macro.

This chapter includes the following sections

- Creating macros
- Playing macros
- Modifying macros
- Clearing macros
- Copying macros
- Sample macros

Creating macros

You can create a macro in Macro display mode, or you can use the Learn function to record a sequence of keystrokes as you actually enter them in any other mode.

You can include any key or button on the console except [Store Macro] in a macro. You cannot enter slider settings, or fader or rate wheel movements. Each macro can contain as many keystrokes as memory allows. In addition, you can put a macro keystroke at the end of a macro sequence to link it to another macro.

Using Learn

The Learn function lets you create a macro by performing an actual sequence of keystrokes. Rerun the recorded keystroke sequence by pressing the appropriate macro key. Once you record a macro in Learn mode you can edit the sequence in Macro mode.

Keystrokes:

1. Press [Live*].
2. Press [Learn].
3. Press [Macro] [7] [Enter].
4. Enter [1] [Thru] [5] [At] [5] [Enter].
5. Press [More Softkeys] [S7], **Macro Wait**, [5].
6. Press [Enter].
7. Enter [1] [Thru] [1][0] [Full] [Enter].
8. Press [More Softkeys] [S7], **Macro Wait**, [5].
9. Press [Enter].
10. Enter [1] [Thru] [1][0] [Out].
11. Press [Store Macro].
12. Press [M7].

Action/Command line:

Live: LEARN

Learning Macro 7 flashes above the command line
Live: LEARN MACRO 7 ■

Sets channels 1 through 5 at 50 percent
Live: CHAN 1 > 5 @ 50 ■

Inserts a five second wait into the macro
Live: CHAN 1 > 5 @ 50 ■
MACRO WAIT 5

Live: CHAN 1 > 5 @ 50 ■

Sets channels 1 through 10 at Full
Live: CHAN 1 > 10 FULL ■

Inserts a five second wait into the macro
Live: CHAN 1 > 10 FULL ■
MACRO WAIT 5

Live: CHAN 1 > 10 FULL ■

Sets channels 1 through 10 at zero
Live: CHAN 1 > 10 OUT ■

Concludes macro recording

Macro 7 runs. Channels 1 through 5 rise to 50 percent. After five seconds, channels 1 through 10 rise to Full. After five seconds, levels drop to zero

Note: Learn works in any display mode.

Using Macro display mode

Macro display mode allows you to create or edit macros blind. You can enter any keystroke sequence of into a macro. [Store Macro], [←], [→], [↑], and [↓] may not be entered in a macro in Macro display mode.

Hint: Plan your macro by determining exactly what keystrokes you want to include. You might want to do this by running through the task and writing down each keystroke.

These steps create a macro to record a show to diskette.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select 10, Macro Editing , and press [Enter].	Selects Macro display screen
3. Press [Macro] [8] [Enter].	Blank macro created Macros: MACRO 8 ■
4. Press [Setup] [3] [Enter].	Enters setup display Macro contents line reads: SETUP-DISPLAY 3 ■
5. Press [1] [Enter].	Selects Store Show Macro contents line reads: SETUP-DISPLAY 3 ■ 1 ■
6. Press [Enter] [Enter].	Confirms selection Macro contents line reads: SETUP-DISPLAY 3 ■ 1 ■ ■ ■
7. Press [Store Macro].	Stores macro

Next macro

When you press [Store Macro], the command line selects the next macro. Press [Enter] to begin recording the next macro.

Macro wait

To add a pause in the macro, press [S7], **Macro wait**, at the point in the macro where you want the pause to occur. Enter the time for the macro to hold, then press [Enter].

Hold for input

You may create macros that stop at a given point and wait for you to enter instructions. As you record the macro in Macro display mode, when you reach the point at which you want the macro to hold, press [S8], **Hold For Input**.

Note: This function does not work in Learn Macro mode.

When the macro runs, it stops at the point where **Hold for Input** was entered and flashes **Macro # holding for input**. Enter the instructions needed, then press [Cont Macro] to continue the macro.

Keystrokes:	Action/Command line:
1. Press [Setup*] [1][0] [Enter].	Selects Macro editing mode
2. Press [Macro] [3] [Enter].	Selects macro 3 to create Macros: MACRO 3 ■
3. Press [Setup] [6] [Enter] (Print Functions).	Macro line reads: SETUP-DISPLAY 6 ■
4. Press [1] [Enter] (Print Cues).	Macro line reads: SETUP-DISPLAY 6 ■ 1 ■
5. Press [S8], Hold for Input .	Macro line reads: SETUP-DISPLAY 6 ■ 1 ■ HOLD-FOR-INPUT
6. Press [Enter] [Live].	Macro line reads: SETUP-DISPLAY 6 ■ 1 ■ HOLD- FOR-INPUT ■ LIVE-DISPLAY
7. Press [Store Macro].	Use this macro in Live to print individual cues as you create them. To use, press [M3], enter the cue, then press [Cont Macro]

Linking macros

Any macro may end with a link to another macro. When the first macro runs, the second macro automatically follows. Press the appropriate macro key at the end of your sequence to create the link. This automatically ends and stores the macro.

This example creates a macro that sets all active channels to 50 percent, fades them out, then runs another macro.

Keystrokes:	Action/Command line:
1. Press [Setup*] [1][0] [Enter].	Selects Macro editing mode
2. Press [Macro] [1] [Enter].	Selects macro 1 to create MACRO 1 ■
3. Press [Enter] [At] [5][0] [Enter].	Sets all active channels to 50 percent Macro line reads: ■ @ 50 ■
4. Press [Sneak] [Time] [1][0] [Enter].	Sneaks all active channels out in ten seconds. Macro line reads: ■ @ 50 ■ SNEAK TIME 10
5. Press [M3].	Stores macro. Links macro to macro 3 Macro line reads: ■ @ 50 ■ SNEAK TIME 10 ■ M3

Note: You may also link a macro to a cue. See page 97.

Using submasters in macros

Submaster bump buttons can function in macros in three different ways: as a normal bump button; to always fade a submaster to full (regardless of its current condition); or to always fade a submaster out (regardless of its current condition).

Use [S5], **Sub Bump On**, to fade the submaster up, regardless of its current setting. Use [S6], **Sub Bump Off**, to fade a submaster out, regardless of its current setting.

This macro turns a submaster on for five seconds, then turns it off.

Keystrokes:	Action/Command line:
1. Press [Setup*] [1][0] [Enter].	Selects Macro editing mode
2. Press [Macro] [1] [Enter].	Selects macro 1 to create MACRO 1 ■
3. Press [S5], Sub Bump On .	Macro line reads: SUB BUMP ON
4. Press [Bump 3].	Macro line reads: SUB-BUMP-ON-3
5. Press [S7], Macro Wait .	Macro line reads: SUB-BUMP-ON-3 MACRO WAIT
6. Enter [5] and press [Enter].	Macro line reads: SUB-BUMP-ON-3 MACRO WAIT 5 ■
7. Press [S6], Sub Bump Off .	Macro line reads: SUB-BUMP-ON-3 MACRO WAIT 5 ■ SUB BUMP OFF
8. Press [Bump 3].	Macro line reads: SUB-BUMP-ON-3 MACRO WAIT 5 ■ SUB-BUMP-OFF-3
9. Press [Store Macro].	Records macro 1; leaves editing mode
10. Press [Live] [M1].	Macro runs

*Note: Be certain to press the actual sub bump button after [S3], **Sub Bump On**, and [S4], **Sub Bump Off**, rather than using the keypad.*

Playing macros

To run macros 1 through 7, press the appropriate macro key. To run any other macro, press [M*], the macro number, and [Enter]. For example, to run macro 10, press [M*] [1][0] [Enter].

A message above the command line indicates what macro is running (e.g., **Executing Macro 7**). Only one macro may run at a time.

When macro wait is in effect, the message **Holding For Macro Wait:** appears above the command line. The message disappears when macro wait ends.

Canceling a macro

To cancel a running macro, press any key unless you are at a **Hold for input** point. At a **Hold for Input**, press the macro key of the running macro or press [M*] to cancel the macro.

Modifying macros

Editing mode

In the Macro display, you can edit macros in Insert or Replace modes. In Insert mode, if you highlight a keystroke and type another keystroke, Obsession inserts the new keystroke before the highlighted one. In Replace mode, if you highlight a keystroke and type another keystroke, Obsession replaces the highlighted keystroke with the new one.

To switch from Insert mode to Replace mode, press [S1], **Replace Mode**. To switch from Replace mode to Insert mode, press [S1], **Insert Mode**.

Macro editing keys

[←] and [→] move the highlight left or right.

[S2], **Delete entry**, deletes highlighted keystroke.

[↑] and [↓] move up or down through existing macro list. If you are editing a macro, they move the highlight left or right.

[Last] and [Next] move up or down through potential macro list, allowing you to select macros that haven't been recorded yet.

Clearing macros

You must be in Macro display mode to clear individual macros. Clear all macros from the Clear Functions menu.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select 10, Macro Editing . Press [Enter].	Selects Macro display mode
3. Press [S3], Clear Macro .	Macros: CLEAR MACRO
4. Enter macro or range of macros to clear.	Macros: CLEAR MACRO 12
5. Press [Enter].	Macros: CLEAR MACRO 12 ■ Please confirm
6. Press [Enter] to clear the macro or [Clear] to cancel.	Macros: CLEAR MACRO 12 ■ Please confirm ■

Copying macros

You may copy a macro or use macros as building blocks for new macros.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select 10, Macro Editing .	Selects Macro display mode
3. Press [S4], Copy Macro .	Macros: COPY MACRO
4. Enter the number of the new macro.	Macros: COPY MACRO 5
5. Press [At].	Macros: COPY MACRO 5 @
6. Enter the macro to which you wish to copy.	Macros: COPY MACRO 5 @ 9
7. Press [Enter]. Macro copy is complete.	Macros: COPY MACRO 5 @ 9 ■

Sample macros

To create these macros, go to Macro display mode ([Setup] [1][0] [Enter]) and enter the keystroke sequences as shown below.

Macro display mode

This macro takes you directly to the Macro editing screen, bypassing the setup screen. Enter this keystroke sequence:

[Macro] [1] [Enter] [Setup] [1][0] [Enter] [Store Macro]

Macro line reads: **SETUP-DISPLAY 10 ■**

Channel check

This two-part macro automatically runs through each channel with a two second wait in between each channel. Running macro 2 starts the channel check, then runs macro 3. Enter this keystroke sequence:

[Macro] [2] [Enter] [1] [At] [Full] [Enter] [S7] [2] [Enter] [M3]

Macro line reads: **1 @ FULL ■ MACRO-WAIT 2 ■ M3**

Then enter this keystroke sequence:

[Macro] [3] [Enter] [Next] [S7] [2] [Enter] [M3]

Macro line reads: **NEXT MACRO-WAIT 2 ■ M3**

Dimmer check

This two-part macro automatically runs through each dimmer with a two second wait in between each dimmer. Running macro 4 starts the dimmer check, then runs macro 3 (from the last example). Enter this keystroke sequence:

[Macro] [4] [Enter] [Dim] [1] [At] [Full] [Enter] [S7] [2] [Enter] [M3]

Macro line reads: **DIMMER 1 @ FULL ■ MACRO-WAIT 2 ■ M3**

Clear faders and turn work lights on

This macro clears all channels from faders and turns on selected work lights. Enter this keystroke sequence:

[Macro] [5] [Enter] [Go To Cue] [0] [Enter] [#] [Thru] [#] [Full] [Enter] (#=work lights channels) [Store Macro]

Macro line reads: **GO-TO-CUE 0 ■ # < # FULL ■**

Record show on disk

This macro takes the show you are currently working on and saves it to a diskette. Be certain the diskette is in the diskette drive before running the macro. Enter this keystroke sequence:

[Macro] [6] [Enter] [Setup] [3] [Enter] [1] [Enter] [Enter] [Enter] [Store Macro]

Macro line reads: **SETUP-DISPLAY 3 ■ 1 ■ ■ ■**

Cue check

This macro uses [Go To Cue] to check your cues. Each cue's levels come up on stage in the default Go To Cue time rather than fading up normally as they would if you pressed [Go].

Enter this keystroke sequence:

[Go To Cue] [Next] [Enter].

Macro line reads: **GO-TO-CUE NEXT■**

Then go to cue 0 and run the macro repeatedly to check your cues.

Chapter 14

Profiles

A profile is a curve that describes the relationship between the time a fade takes, and the output level of a cue or dimmer at each point in the fade. By adjusting the profile, you can create a variety of effects, accommodate variations and deficiencies in your lighting equipment, and protect equipment from stress.

You may apply profiles to dimmers, in place of a patch level, or to cues. Obsession is equipped with 32 profiles, including a library of nine preset profiles. The preset profiles (1-9) may be modified; profiles 10 through 32 must be created by the user.

For more information on profiles, see *Recording a cue with non-default output profiles* on page 97, *Assigning a profile to a dimmer* on page 69, and *Setting default cue profile* on page 56.

The following options are described in this chapter:

- Using profiles
- Profile display
- Preset profiles
- Creating a new profile
- Editing a preset profile
- Reset profile
- Copying profiles
- Labeling profiles

Using profiles

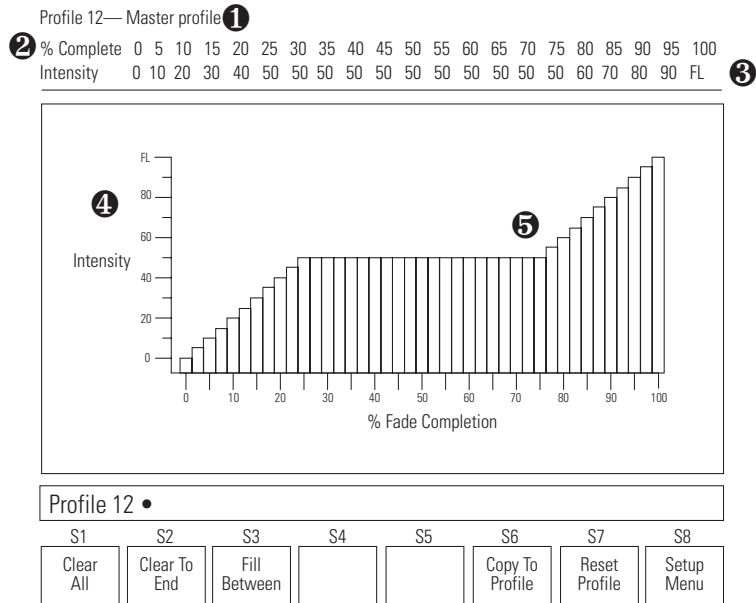
Profiles allow you to specify an output curve for a dimmer or cue.

Note: In order to be applied to a cue, a profile must start at zero and end at full. You may assign a profile that doesn't, but when the cue is executed it defaults to a linear profile.

Obsession automatically assigns a linear fade to dimmers and uses the default profile from your system settings for cues. In a linear fade, the elapsed fade time is directly proportional to the output level. In other words, when 25 percent of the fade time has passed, the output level is 25 percent of the fade's full level. When the fade is half finished, the level is at 50 percent.

Profile display

The profile display screen shows you the last selected profile and allows you to edit that profile.



- 1** The profile's number and label.
- 2** The percentage of fade completion, in five percent increments. The currently selected fade point is highlighted.
- 3** The level assigned to each fade point. ** indicates that no level is assigned to that point.
- 4** Graph showing the relationship between the fade points and the fade level.
- 5** Vertical bars showing the profile's curve. Every other bar corresponds to a fade point's level.

Profile display controls

[Next] Selects next profile.

[Last] Selects previous profile.

[→] Selects next fade point.

[←] Selects previous fade point.

[Level wheel] Adjusts level of the fade point.

[↑] Raises output level by one.

[↓] Lowers output level by one.

[+10] Raises output level by ten.

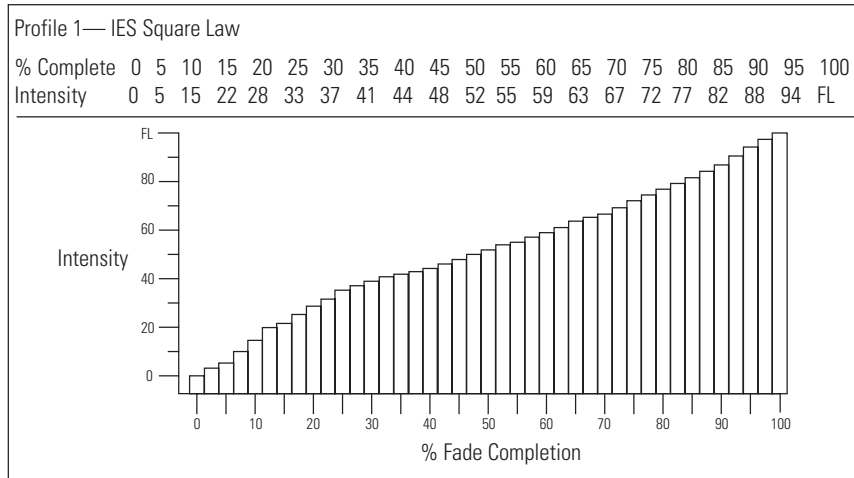
[-10] Lowers output level by ten.

You may also enter the level on the command line.

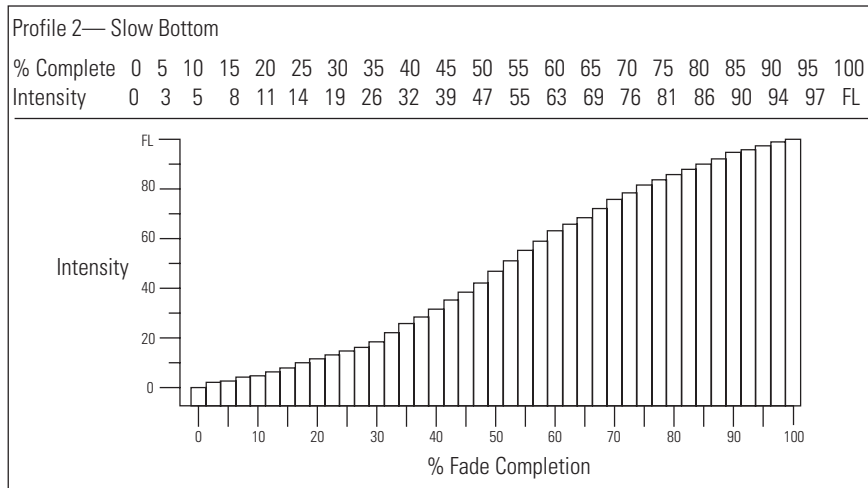
Preset profiles

Obsession provides nine factory-programmed (user-editable) profiles.

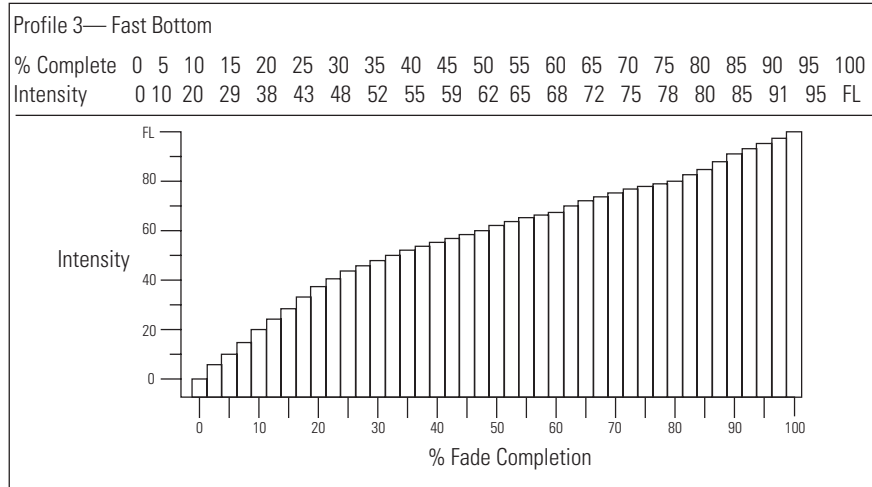
1. IES square law



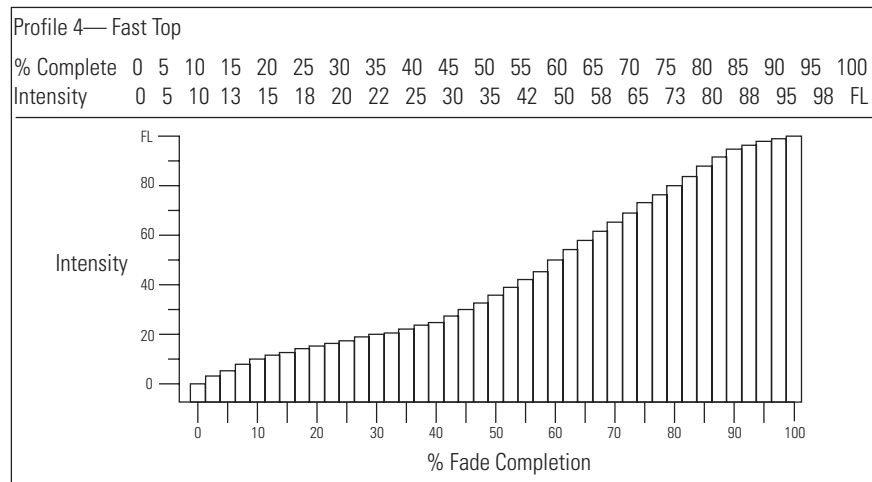
2. Slow bottom



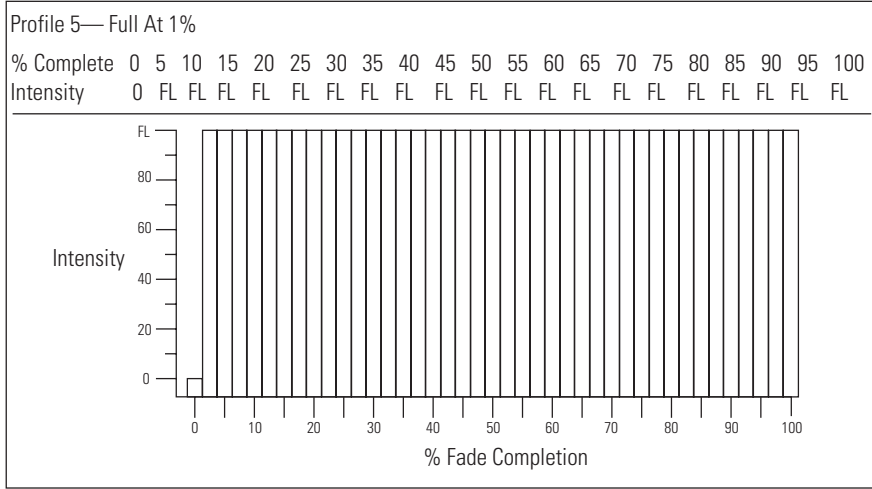
3. Fast bottom



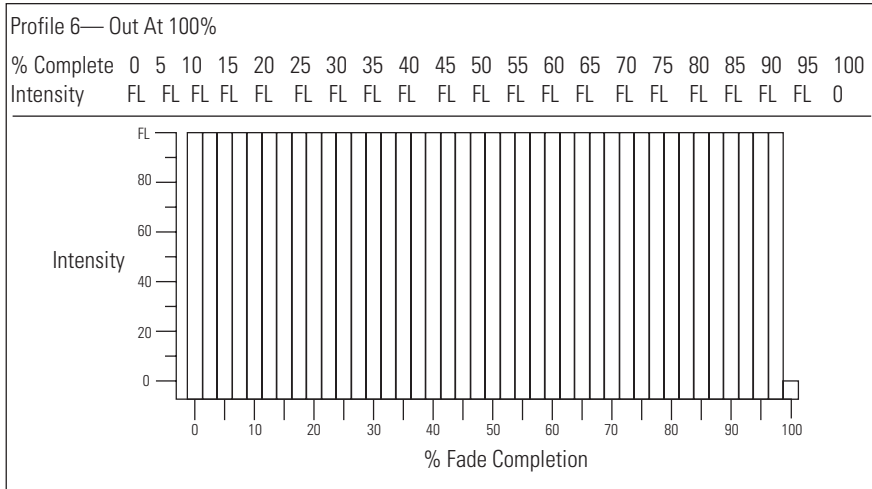
4. Fast top



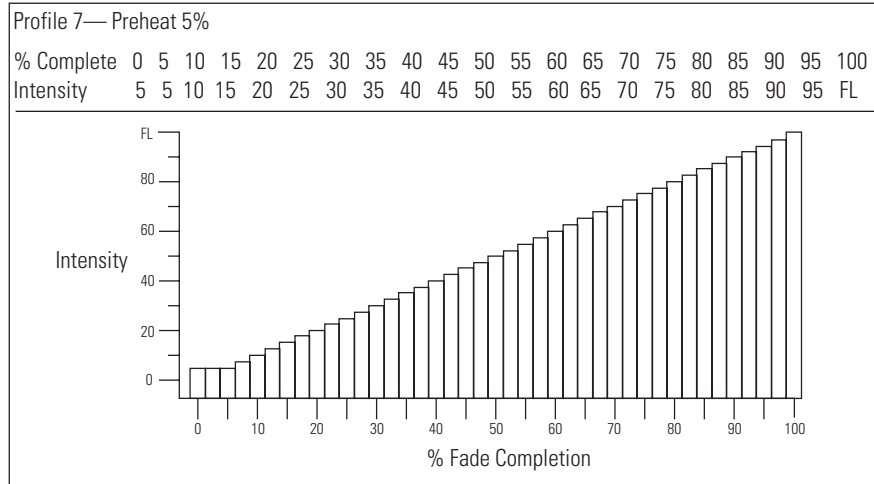
5. Full at 1%



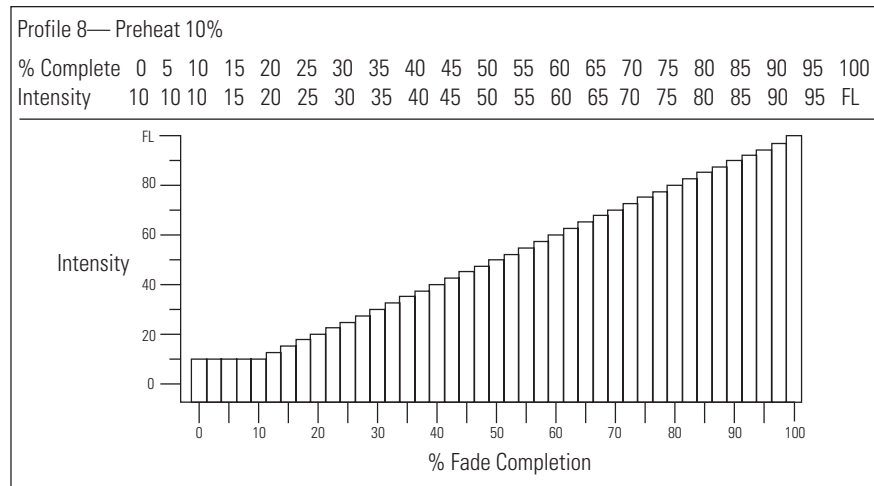
6. Out at 100%



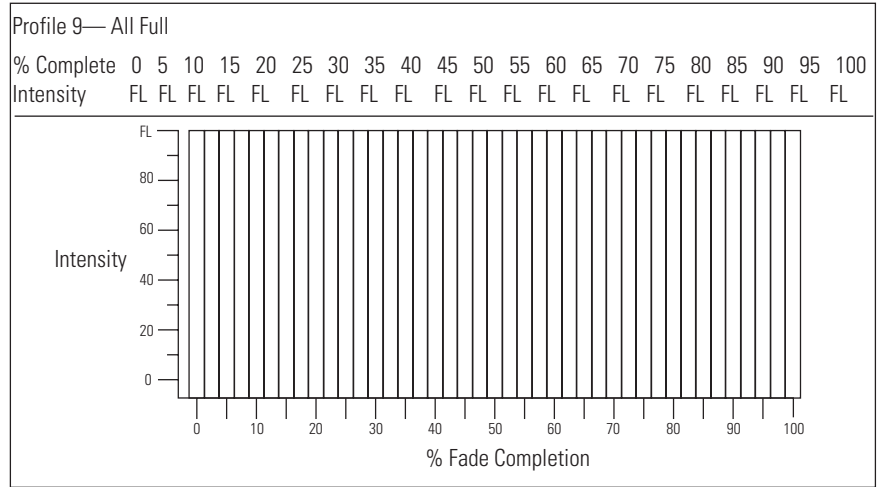
7. Preheat 5%



8. Preheat 10%



9. Hot patch



Creating a new profile

Create a profile using either the level wheel or the keypad to set a level for each of 21 fade points along the profile's curve. Use the same procedure to edit the nine preset profiles.

Editing a fade point

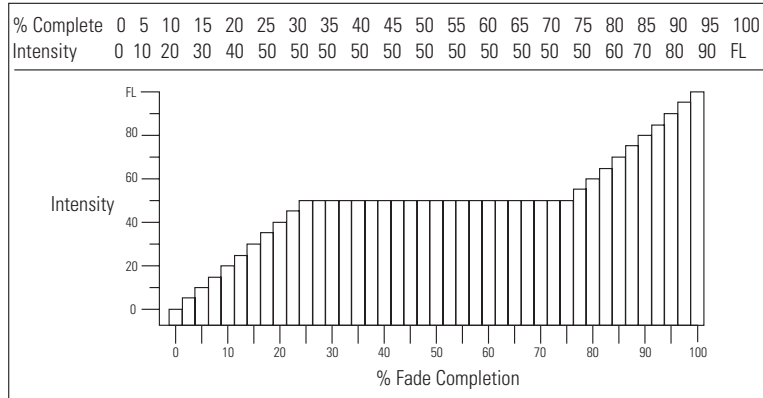
To edit a profile, select a fade point in the fade time scale, and assign an output level to it. Each fade point represents five percent of the fade's percentage of completion.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [7], Profiles , [Enter].	Selects Profiles menu Profile 1 ■
3. Press [Profile], enter the profile, and press [Enter].	Selects profile Profile 10 ■
4. Use [→], [←] to select the fade point . or... Use the keypad to enter the fade point.	Profile 10 ■ 15 @ or.. Profile 10 ■ 15
5. Use the fader wheel to select the level. or... Press [At] and enter the level.	Graph adjusts Profile 10 ■ 15 @ 50
6. Press [Enter] or move to next fade point using [→] or [←].	Adjusts graph levels; highlights next fade point Profile 10 ■ 20 @
7. Repeat steps 4 through 6 until complete.	

Clear All

Clear All removes output levels from all fade points. Obsession marks points without levels with **.

For example, say your profile looks like this:



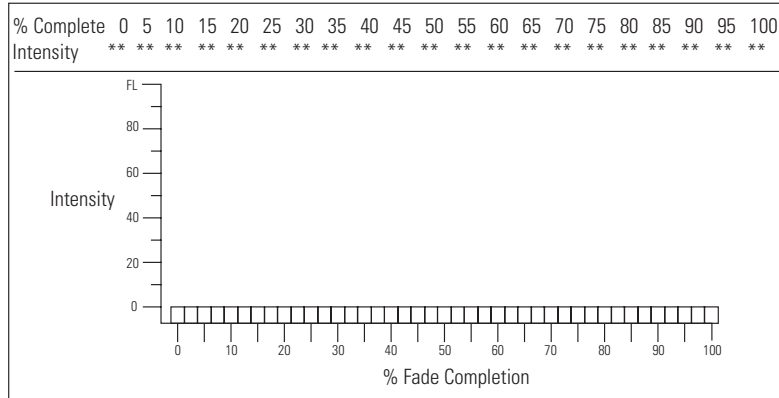
Keystrokes:

1. Press [S1], **Clear All**.
2. Press [Enter].

Action/Command line:

Profile # ■ CLEAR ALL
 Levels replaced with **
Profile # ■ CLEAR ALL ■

Once you run Clear All, your profile looks like this:

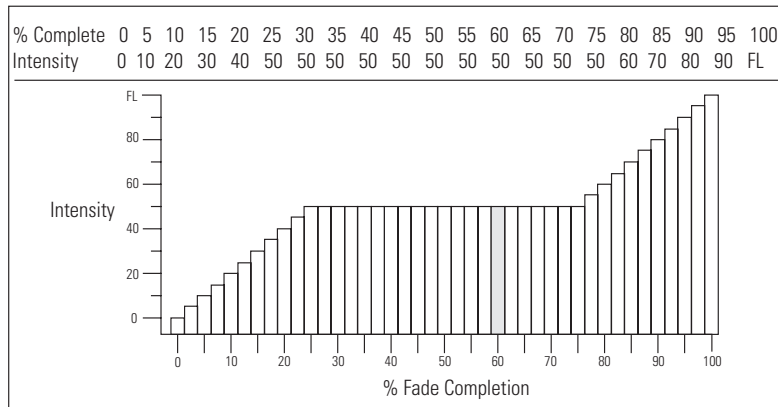


Note: To clear the level from a single fade point, select the point using [→] or [←] and press [Enter].

Clear to End

Clear to End removes the level from each fade point from the current one through 100. Obsession marks points without levels with **.

For example, say your profile looks like this:



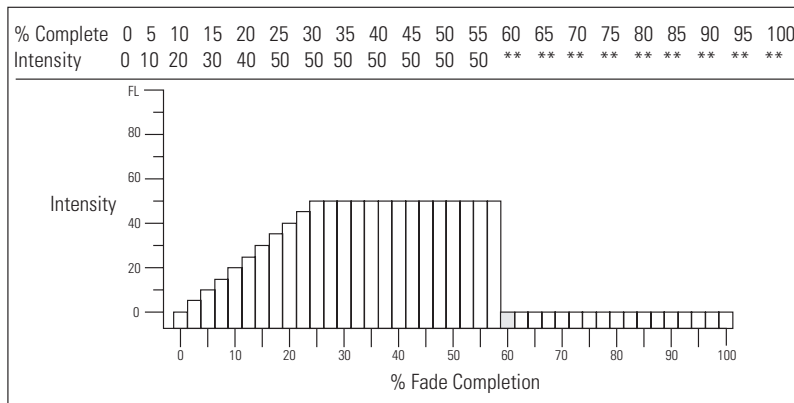
Keystrokes:

1. Press [S2], **Clear To End**.
2. Press [Enter].

Action/Command line:

Profile # ■ CLEAR TO END
 Levels replaced with **
Profile # ■ CLEAR TO END ■

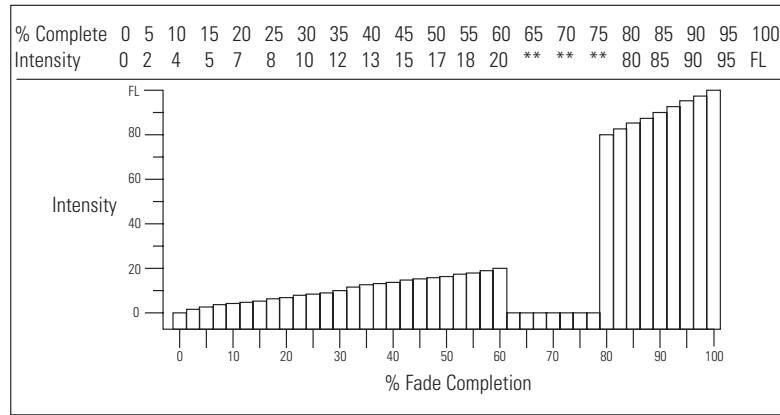
Once you run Clear to End, your profile looks like this:



Note: To clear the level from a single fade point, select the point using [→] or [←] and press [Enter].

Fill Between

If you use Clear All or Clear To End to remove the levels from some or all of the fade points in a profile, Obsession's Fill Between allows you to fill in all fade points that have not been assigned levels automatically (points marked with **). Obsession fills in evenly spaced values, creating a straight line between fade points. For example, say your profile looks like this:



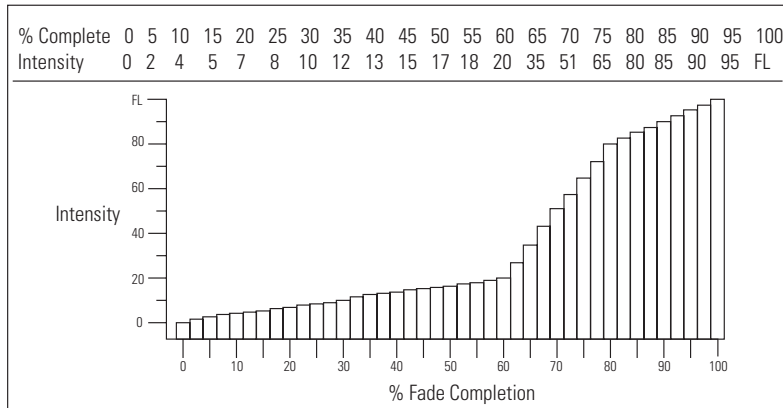
Keystrokes:

Action/Command line:

1. Press [S3], **Fill Between.** **Profile # ■ FILL BETWEEN**
2. Press [Enter]. **Profile # ■ FILL BETWEEN ■**

Note: Fade points with a level of zero are not affected by Fill Between and stay at zero.

Once you run Fill Between, your profile looks like this:



Editing a preset profile

Except for profile zero, you may edit all of the preset profiles by following the same procedure you used to create or edit the non-preset profiles. See pages 212 through 215.

Reset profile

You may return a profile to its original factory settings automatically. Preset profiles return to their preset curves, and profiles 10 through 32 return to a linear curve.

Keystrokes:

1. Press [Setup*].
2. Press [7], **Profiles**, [Enter].
3. Press [Profile]. Enter the profile to work with. Press [Enter].
4. Press [S7], **Reset Profile**.
5. Press [Enter].
6. Press [Enter] or press [Clear] to cancel.

Action/Command line:

Selects Profiles menu

Selects profile
Profile 6 ■

Profile 6 ■ RESET PROFILE

**Profile 6 ■ RESET PROFILE ■
Please Confirm**

**Profile 6 ■ RESET PROFILE ■
Please Confirm ■**

Note: Reset all profiles from the Clear Functions menu.

Copying profiles

You may copy a profile or use profiles as building blocks for new profiles.

Keystrokes:

1. Press [Setup*].
2. Press [7], **Profiles**, [Enter].
3. Press [S6], **Copy Profile**.
4. Enter the profile to copy.
5. Press [At].
6. Enter the number of the new profile.
7. Press [Enter].
8. Press [Enter]. Profile copy is complete.

Action/Command line:

Selects Profiles menu
Profile 8 ■ COPY PROFILE
Profile 8 ■ COPY PROFILE 8
Profile 8 ■ COPY PROFILE
8 @
Profile 8 ■ COPY PROFILE
8 @ 15
Profile 8 ■ COPY PROFILE
8 @ 15 ■ Please confirm
Profile 8 ■ COPY PROFILE
8 @ 15 ■ Please confirm ■

Labeling profiles

Use the alphanumeric keyboard to name profiles (up to 25 characters).

Follow these steps to add a label, such as **Fast Rise**, to a profile:

Keystrokes:

1. Press [Profile] and enter the profile to label. Press [Enter].
2. Press [Label].
3. Use the alphanumeric keyboard to enter **Fast Rise**.
4. On the Obsession keypad, press [Enter].

Action/Command line:

Profile 12 ■
Profile 12 ■ LABEL
Profile 12 ■ LABEL Fast Rise
Profile 12 ■ LABEL Fast Rise ■

Chapter 15

Park

Park lets you set channels or dimmers at a level and maintain that level on stage, regardless of other instructions. Parked channel and dimmer levels aren't affected by any other instructions and won't be recorded into cues. Parked channel and dimmer information isn't saved when you back up your show.

Note: [Blackout] will turn off parked dimmers and channels.

The following options are described in this chapter:

- Parking dimmers and channels
- Unparking dimmers and channels
- Parking groups, cues and submasters
- Park display

Shortcut: In Park mode you may omit use of the [Park] key for all procedures except Unpark All.

Parking dimmers and channels

Select the dimmer or channel to park and the level at which to park it. Once it is parked, nothing you do at the console affects that light (except for [Blackout]) until you unpark it. When dimmers or channels are parked, a message (**Parked Dimmers** or **Parked Channels**) appears in the upper right corner of the command display.

Keystrokes:

1. Press [Live*].
2. Press [Dimmer] [#].
3. Press [At] [#].
4. Press [Park] [Enter].

Action/Command line:

Selects the dimmer to park
Live: DIMMER 6

Selects the level at which to park it

Live: DIMMER 6 @ 75

Parks the dimmer at the selected level

Live: DIMMER 6 @ 75 PARK ■

To park a channel, enter the channel number in step 2.

Note: Parked channel and dimmer information isn't saved when you back up your show.

Note: If a dimmer is parked and the channel the dimmer is patched to is also parked, the dimmer's parking level takes priority over the channel's parking level. If the dimmer is then unparked, it reverts to the channel's parked level.

Unparking dimmers and channels

You may unpark one or all dimmers or channels at any time. When either is unparked, its level reverts to the level the console is currently assigning it.

Unpark one dimmer or channel

Keystrokes:

1. Press [Live*].
2. Press [Dimmer] [#].
3. Press [Park] [Enter].

Action/Command line:

Selects the dimmer to unpark

Live: DIMMER 6

Unparks the dimmer

Live: DIMMER 6 PARK ■

To unpark channels, simply enter the channel number in step 2.

Unpark all dimmers or channels

To unpark all parked dimmers, follow these steps:

Keystrokes:

1. Press [Live*].
2. Press [Dimmer].
3. Press [Park] [Enter].

Action/Command line:

Live: DIMMER

Unparks all parked dimmers

Live: DIMMER PARK ■

To unpark all channels, omit step 2.

Parking groups, cues and submasters

Obsession lets you park the channels used in groups, cues and submasters.

Parking a group, cue or submaster parks all the channels at the level indicated in the park instruction, not the recorded levels.

Park a group

Keystrokes:

1. Press [Live*].
2. Press [Group] [#].
3. Press [At] [#].
4. Press [Park] [Enter].

Action/Command line:

Selects the group

Live: GROUP 5

Selects the level at which to park the channels in the group

Live: GROUP 5 @ 50

Parks the channels in the group at the selected level

Live: GROUP 5 @ 50 PARK ■

Park a cue or submaster

To park the channels used in a cue or submaster follow these steps, pressing either [Cue] or [Sub], respectively, in step 2.

Keystrokes:

1. Press [Live*].
2. Press [Group] [Cue] [#].
3. Press [At] [#].
4. Press [Park] [Enter].

Action/Command line:

Selects the cue to park

Live: GROUP CUE 1

Selects the level at which to park the channels in cue

Live: GROUP CUE 1 @ 90

Parks the channels in the cue at the selected level

**Live: GROUP SUB 1 @ 90
PARK ■**

Unpark a group, cue or submaster

To unpark the channels in a group, cue or submaster, follow the same procedure you used to park the channels, but omit step 3 (Press [At] [#]). This unparks any associated channels in the specified cue, group or submaster.

Park display

Press [Park*] to bring up the Park display. All the command sequences given in this chapter work in Live display mode and in Park display mode. In Park mode, it is not necessary to press the [Park] key except in Unpark All commands. Use [Page +] and [Page -] to move through the Park display lists.

The screenshot shows a dark-themed interface with three main sections. The first section, 'Parked Dimmers:', displays a list of dimmers with their addresses and status. The second section, 'Parked Channels:', displays a list of channels with their addresses and status. The third section, 'Park:', shows a row of eight status indicators labeled S1 through S8, with S5 and S6 containing the letters 'A' and 'B' respectively.

Parked Dimmers:			
2	180	182	184
0	FL	75	FL

Parked Channels:		
8	12	15
50	FL	FL

Park:							
S1	S2	S3	S4	S5	S6	S7	S8
				A	B		

Chapter 16

Diskette functions

Obsession is equipped with a 3.5-inch high density diskette drive on the left end of the console's front panel or the front panel of an Obsession Processor Unit. It lets you back up your shows.

The following options are described in this chapter.

- Diskette management
- Formatting diskettes
- Storing a show and system settings on diskette
- Viewing show diskette directory
- Reading a show and system settings from diskette
- Reading patch or cues from diskette
- Storing I/O configuration
- Sharing shows with other Obsession models

Diskette management

Obsession's disk drive lets you save one show per high density 3.5-inch diskette. This allows you to work on more than one show at a time or to use more than 1,000 cues for your production by loading a second show into memory. *Chapter 17, Hard drive functions*, provides information on storing shows on Obsession's hard drive.

When you select diskette options, any fades in progress stop. Therefore, if you need to load an additional show in the middle of a performance, load it between cues when all channels are static. Fader and submaster outputs are maintained as the new show loads.

Formatting diskettes

Warning: Formatting a diskette erases all recorded information. Formatting does not affect show in console.

Standard blank IBM compatible diskettes should work without further formatting. Otherwise, you must format it on the console or on a standard PC-compatible personal computer. To format a diskette on Obsession, follow these steps.

Keystrokes:

1. Press [Setup*].
2. Press [3], **Diskette Functions**, [Enter].
3. Insert standard 3.5-inch, high-density diskette in disk drive.
4. Press [7], **Format Diskette**, [Enter].
5. Press [Enter] to format the diskette, or press [Clear] to cancel the format command.

Action/Command line:

Selects Diskette Functions menu

Diskette Functions: FORMAT DISKETTE? Please confirm

Message appears onscreen: **Operation in progress. Please stand by.** Message remains until disk is formatted
Diskette Functions: FORMAT DISKETTE? Complete ■

Warning: When you format disks, fades in progress stop.

Storing a show and system settings on diskette

When you store a show to diskette, all system settings, patch settings, cues, groups, submasters, effects, and any other information in the console at the time you record the show, are saved.

Keystrokes:	Action/Command line:
1. Insert a formatted diskette in disk drive.	
2. Press [Setup*].	
3. Press [3], Diskette functions , [Enter].	Selects Diskette Functions menu
4. Press [1], Store show , [Enter] [Enter].	Diskette Functions: STORE SHOW? ■ Please confirm
5. Press [Enter], or press [Clear] to cancel.	Message appears onscreen: Operation in progress. Please stand by. Command line reads: Diskette Functions: STORE SHOW? ■ Please confirm ■

Viewing show diskette directory

Each diskette holds information for one show. Use the Read directory option to find out the name, storage date and time of the show on any diskette.

Keystrokes:	Action/Command line:
1. Insert a formatted diskette in the drive.	
2. Press [Setup*].	
3. Press [3], Diskette functions , [Enter].	Selects Diskette Functions menu
4. Press [2], Read directory , [Enter] [Enter].	Diskette Functions: READ DIRECTORY? ■ Please confirm
5. Press [Enter], or press [Clear] to cancel.	Advisory message appears with show information Diskette Functions: READ DIRECTORY? ■ Please confirm ■

Reading a show and system settings from diskette

When you read a show and system settings from a diskette and load it into memory, the new show completely overwrites the current show, including system settings. Therefore, if you want to keep the current show, store it, as described on page 225, before you read a new show.

Fades are interrupted during the read operation and do not resume when read is complete.

Keystrokes:	Action/Command line:
1. Insert diskette in drive.	
2. Press [Setup*].	
3. Press [3], Diskette functions , [Enter].	Selects Diskette Functions menu
4. Press [3], Read all , [Enter] [Enter].	Diskette Functions: READ ALL? ■ Please confirm
5. Press [Enter], or press [Clear] to cancel.	Message appears onscreen: Operation in progress. Please stand by. Command line reads: Diskette Functions: READ ALL? ■ Please confirm ■

Once the show information is read into memory, the screen switches to the Live display.

Reading a show from diskette

When you read a show from a diskette and load it into memory, the new show overwrites the current show, but does not affect the current system settings.

To read only the show information, follow the steps listed above, but press [4], **Read Show**, [Enter] [Enter] in step 4.

Reading patch or cues from diskette

When you read patch or cue information from a diskette and load it into memory, the new information overwrites the old.

Running fades are interrupted during the read operation and resume when read is complete.

Patch

Keystrokes:

1. Insert diskette in disk drive.
2. Press [Setup*].
3. Press [3], **Diskette functions**, [Enter].
4. Press [5], **Read patch**, [Enter] [Enter].
5. Press [Enter], or press [Clear] to cancel the operation.

Action/Command line:

Selects Setup display
Selects Diskette Functions menu

**Diskette Functions: READ
PATCH? ■ Please confirm**

Message appears onscreen:
**Operation in progress. Please
stand by.**

Command line reads:
**Diskette Functions: READ
PATCH? ■ Complete ■**

Cues

To read cue information, follow the steps listed above, but press [6], **Read Cues**, [Enter] [Enter] in step 4.

Storing I/O configuration

ETCLink, dimmer monitoring, MIDI, SMPTE, and Multiuser input/output (I/O) settings are stored as part of your I/O configuration, and are not saved with show or system settings information. This configuration remains in your system's memory until it is replaced, or you reset the system. You may wish to back up your configuration information.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Select 2, Input/Output Configuration , and press [Enter].	Selects I/O Configuration menu
3. Press [S5], Store Diskette . Insert a formatted diskette in drive.	
4. Press [Enter] [Enter].	Stores configuration

Restoring configuration

To restore the configuration information after a system reset, follow the steps listed above. In step 3, press [S4], **Load Diskette**, to load a stored configuration from a diskette.

Note: If Multiuser is enabled, you must activate the restored configuration by turning your console off and then back on. If you are using Full Tracking Backup, you must reset both consoles or processors.

Other options

Press [S1], **Clear Config**, to clear the current configuration. Press [S6], **Print Config**, to print out the current configuration on your printer.

*Note: Selecting **Clear All** (from the Clear menu) will not erase configuration information from system memory.*

*Note: Selecting **Reset System** (from the Setup menu), or a deep clear ([7][8][9] held down while turning system on) does erase configuration information from system memory.*

Sharing shows with other Obsession models

Show disks created by the Obsession, Obsession 600 and Obsession 3000 may be transferred freely from one console to another.

If you move a show to a console with a lower channel, dimmer, or submaster count than the console it was created on, the show loses all channels, dimmers and submasters higher than the new console's maximum capacity.

The affected channels and dimmers are erased from all cues, groups, submasters and patch information. In effects, channels that are lost are changed to channel 608 on Obsession 600 or channel 1,536 on Obsession. Changed effects appear in red on the Effect List.

Macros that include channels higher than the maximum channel count display the **Invalid channel number** error message when they run.

Chapter 17

Hard drive functions

Obsession is equipped with an internal hard drive. This lets you back up and retrieve your I/O configuration and all or part of your shows. The following options are described in this chapter.

- Drive management
- Viewing hard drive directory
- Storing a show and system settings
- Reading a show and system settings
- Reading a show
- Reading part of a show
- Erasing a show
- Storing I/O configuration

Drive management

Obsession's hard disk drive lets you save a large number of shows on the console. The actual number depends on the size of the shows.

When you select hard drive options, any fades in progress stop. Therefore, if you need to load an additional show in the middle of a performance, load it between cues when all channels are static. Fader and submaster outputs are maintained as the new show loads.

Viewing hard drive directory

When you select Hard Drive Functions from the Setup menu, you see a list of all shows currently stored on the hard drive.

Sorted by name		Disk space left: 53%	
Show Name	Show Comments	Date	Time
Don Giovanni	Touring show	3/01/93	12:04p
Rocky Horror		3/11/93	3:09p
Sample Show	ETC Documentation	3/01/93	1:20p
Sound of Music	First Act	3/10/93	10:30
Sound of Music	Second Act	3/10/93	3:30p
The Garden Plot	Opening night	3/01/93	12:01p

Hard Drive Functions:							
S1	S2	S3	S4	S5	S6	S7	S8
Select By Name	Store Show	Overwrite Show	Erase Show	Read All	Read Show	Read Part Of Show	Sort

If you save a show, work on it, then save it again, you will see two copies of the show on the hard drive, distinguished only by the date or time of being saved.

You may list the shows using any of three methods, by name, by date, and by date in reverse order. Press [S8], **Sort**, until the method you desire appears on the command line, then press [Enter] to select that method. The upper left corner of the display indicates the method chosen.

The upper right corner of the display indicates the percentage of hard drive space still available.

Storing a show and system settings

When you store a show to the hard drive, all system settings, patch settings, cues, groups, submasters, effects, and any other information that you have in the console at the time you store the show, are saved.

Fades are interrupted during the store operation and do not resume when store is complete.

Keystrokes:

1. Press [Setup*].
2. Press [4], **Hard Drive Functions**, [Enter].
3. Press [S2], **Store show**, [Enter].
4. Press [Enter], or press [Clear] to cancel.

Action/Command line:

Selects Setup display

Selects Hard Drive Functions menu

Command line reads:
Hard Drive Functions: STORE SHOW? ■ Please confirm

Message appears onscreen:
Operation in progress. Please stand by.

Command line reads:
Hard Drive Functions: STORE SHOW? ■ Complete ■

Note: Parked channel and dimmer information is not saved when you back up your show.

Reading a show and system settings

When you read a show and system settings from the hard drive and load it into memory, the new show completely overwrites the current show, including system settings.

Fades are interrupted during the read operation; fades do not resume when read is complete.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [4], Hard Drive Functions , [Enter].	Selects Hard Disk Functions menu
3. Use level wheel or [Next], [Last], [Page+], [Page -] to select show. You may also press [S1], Select By Name , enter the show's name on the alphanumeric keyboard and press [Enter].	Highlights the selected show
4. Press [S5], Read All , [Enter].	Hard Drive Functions: READ ALL? ■ Please confirm
5. Press [Enter], or press [Clear] to cancel.	Console reads system settings, patch and show into memory Message appears onscreen: Operation in progress. Please stand by. Command line reads: Hard Drive Functions: READ ALL? ■ Please confirm ■

Once the show information is read into memory, the screen switches to the Live display.

Reading a show

When you read a show from the hard drive and load it into memory, the new show overwrites the current show, but does not affect the current system settings.

To read only the show information, follow the steps listed above, but press [S6], **Read Show**, [Enter] in step 4.

Reading part of a show

You may retrieve specific parts of a show from the hard drive. When you read part of a show and load it into memory, the new part overwrites the current part. You may read the patch, or you may read cues, submasters, effects, groups, profiles, or macros. The available parts appear on the softkeys.

Note: Currently, you may not save part of a show to the hard drive. If you want to save any part, you must record the whole show.

Fades are interrupted during the read operation and do not resume when read is complete.

Keystrokes:

1. Press [Setup*], [4], **Hard Drive Functions**, [Enter].
2. Use level wheel or [Next], [Last], [Page+], or [Page -] to select show. You may also press [S1], **Select By Name**, enter the show's name on the alphanumeric keyboard and press [Enter].
3. Press [S7], **Read Part Of Show**.
4. Press the softkey for the part you want to read. Press [Enter].
5. Press [Enter], or press [Clear] to cancel.

Action/Command line:

Selects Hard Drive Functions menu

Highlights the selected show on the display

Displays softkeys for partial show selection

**Hard Drive Functions:
READ SUBMASTERS? ■
Please confirm**

Console reads part into memory

Message appears onscreen:
Operation in progress. Please stand by.

Command line reads:
**Hard Drive Functions:
READ SUBMASTERS? ■
Please confirm ■**

Erasing a show

You may erase a show from the hard drive if you no longer need it or if you need space on the drive. Save a backup copy of the show on diskette if you might need it again.

Keystrokes:	Action/Command line:
1. Press [Setup*].	Selects Setup display
2. Press [4], Hard Drive Functions , [Enter].	Selects Hard Drive Functions menu
3. Use level wheel or [Next], [Last], [Page+], and [Page -] to select show. You may also press [S1], Select By Name , enter the show's name on the alpha-numeric keyboard and press [Enter].	Highlights the selected show
4. Press [S4], Erase Show , and press [Enter].	Hard Drive Functions: ERASE SHOW? ■ Please confirm
5. Press [Enter], or press [Clear] to cancel.	Hard Drive Functions: ERASE SHOW? ■ Complete ■

Replacing a show

You may erase a show from the hard drive and replace it with the show currently in memory. To do so, follow the steps above, but press [S3], **Overwrite Show**, [Enter] in step 4.

The new show may appear elsewhere in the list, depending on your sort method.

Storing I/O configuration

ETCLink, dimmer monitoring, MIDI, SMPTE, and Multiuser input/output (I/O) settings are stored as part of your I/O configuration, and are not saved with show or system settings information. This configuration remains in your system's memory until it is replaced, or you reset the system. You may back up your configuration information onto the hard drive.

Keystrokes:

1. Press [Setup*].
2. Select 2, **Input/Output Configuration**, and press [Enter].
3. Press [S3], **Store Config**.
4. Press [Enter] [Enter].

Action/Command line:

Selects I/O Configuration menu

Restoring configuration

To restore the configuration information after a system reset, follow the steps listed above. In step 3, press [S2], **Load Config**, to load a stored configuration.

Note: If Multiuser is enabled, you must activate the restored configuration by turning your console off and then back on. If you are using Full Tracking Backup, you must reset both consoles or processors.

Other options

Press [S1], **Clear Config**, to clear the current configuration. Press [S6], **Print Config**, to send the current configuration to your printer.

*Note: Selecting **Clear All** (from the Clear menu) will not erase configuration information from system memory.*

*Note: Selecting **Reset System** (from the Setup menu), or a deep clear ([7][8][9] held down while turning system on) does erase configuration information from system memory.*

Chapter 18

Printing

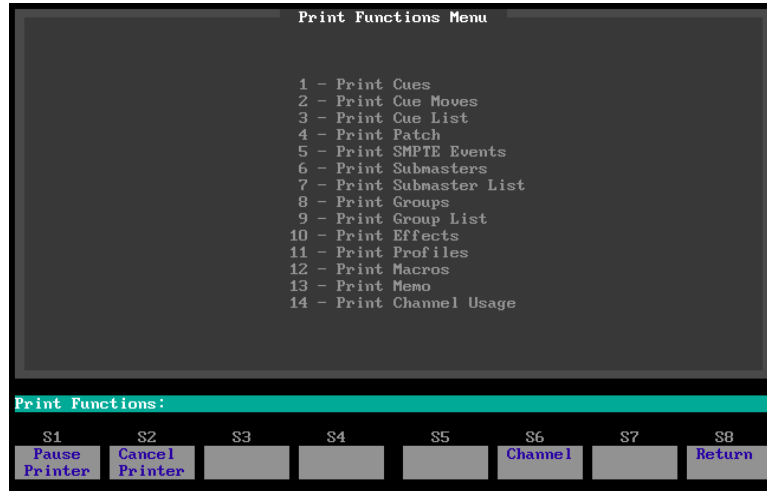
Obsession supports parallel printers, including some laser printers. See *Installing a printer* on page 317.

Information regarding each of the following may be printed.

- Cues
- Cue moves
- Cue list
- Patch
- SMPTE Events
- Submasters
- Submaster list
- Groups
- Group list
- Effects
- Profiles
- Macros
- Memos
- Channel Usage

Printer options

All print options are located on the Print Functions menu. To display the menu press [Setup*], then select [6], **Print Functions**, and press [Enter].



To stop printer temporarily while it is printing, press [S1], **Pause Printer**. The printer prints the remaining characters in its memory, then stops and waits. Press [S1] again to resume printing. To cancel a print job, press [S2], **Cancel Printer**. The printer prints the remaining characters in its memory, then stops.

Printing with Flexichannel active

The Flexichannel mode currently active in Live determines how cues, groups, and submasters are formatted in printer output. Only channels that are currently visible on the displays print.

Printing information

The Print Functions menu allows you to print information regarding most console functions. See next page for further information about each function.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [6], Print Functions , [Enter].	Displays Print Functions menu
3. Select the function to print from the menu (e.g., [1], Print Cues) and press [Enter].	Print Functions: PRINT CUES?
4. If you wish to print only a partial list, use [+], [Thru] and [-] to select the numbers to print.	
5. Press [Enter].	Print Functions: PRINT CUES? ■ Please confirm
6. Press [Enter], or press [Clear] to cancel.	File sent to the printer Print Functions: PRINT CUES? ■ Please confirm ■

Note: Printing a partial list is not an option for SMPTE events, memos, and channel usage.

Print Functions

Cues	A list of cues in the current show. Information includes all cue attributes and levels of all channels in the cue.
Cue moves	A list of move information for cues in the current show. Information includes all channels that rise or fall in the cue, all channels that are blocked or tracking, and the levels for each of them.
Cue list	A list of cues in the current show as well as all cue attributes.
Patch	<p>The current dimmer-to-channel patch, in the format of the current Patch display mode (By Dimmer, By Channel or By Label).</p> <p>You must use [S6], Channel, to select a range of channels if Patch is in By Dimmer or By Label mode. Use [Dim] to select a range of dimmers if Patch is in By Channel mode.</p>
SMPTE events	Full information about all SMPTE events in the show, including event number, event time, the element (cue, submaster or macro) recorded in the event, and rates and labels.
Submasters	Full information about all submaster memories, including upfade, dwell and downfade times, and rates and labels. Also includes levels of all channels in the submaster.
Submaster list	Full information about all submasters, including upfade, dwell and downfade times, and rates and labels.
Groups	A list of groups in the current show, including the label and the levels of all channels in the group.
Group list	A list of groups in the current show, including each group's label.
Effects	A list of effects in the current show, including complete information about the effect and each step within the effect.
Profiles	Current profile assignments.
Macros	A list of macros in the current show, including complete information about the macro and its keystrokes.
Memo	The current contents of the Memo display.
Channel Usage	A report based on your current settings in the Channel Usage display.

Chapter 19

Clear functions

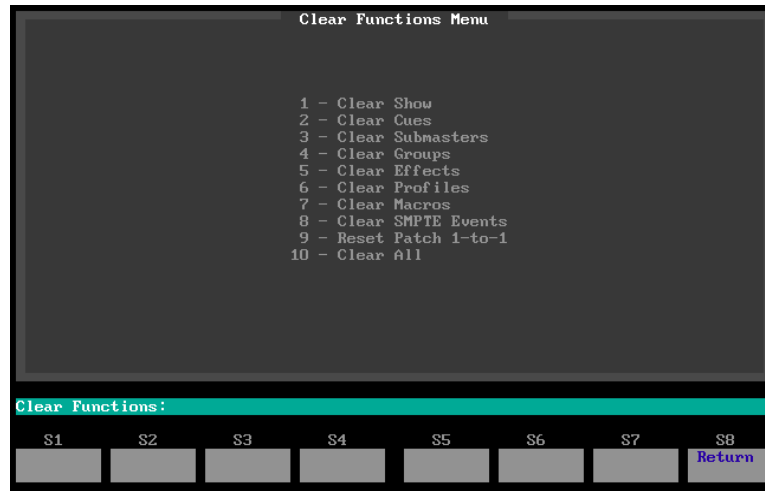
The following clear functions are explained in this chapter.

- Show
- Cues
- Submasters
- Groups
- Effects
- Profiles
- Macros
- SMPTE Events
- Reset Patch 1-to-1
- Clear all

Clear functions

Each clear function erases information regarding a function from the console's memory. If that information is saved in a show on a diskette, it can be restored to the console.

All options are on the Clear Functions menu. To display the menu, press [Setup], then select [5], **Clear Functions**, [Enter]. Obsession displays the Clear Functions menu.



Clear information

The Clear Functions menu lets you erase information regarding most console functions. See below for further information about each function.

- | Keystrokes: | Action/Command line: |
|---|--|
| 1. Press [Setup*]. | |
| 2. Press [5], Clear Functions , [Enter]. | Displays Clear Functions menu [Enter]. |
| 3. Enter the function to clear (e.g., [1], Clear Show) and press [Enter]. | Clear Functions: CLEAR SHOW? Please confirm |
| 4. Press [Enter]. You may need to press [Enter] again. | Returns to Live display mode |

Clear Functions

Show	Erases all information in a show from console memory. This does not include patch or system configuration information.
Cues	Erases all cue information..
Submasters	Erases all submaster information.
Groups	Erases all group information.
Effects	Erases all effect information.
Profiles	Resets all profile information to factory default.
Macros	Erases all macro information.
SMPTE Events	Erases all SMPTE information.
Clear all	Erases all show and system setting information, but does not affect the I/O configuration information.

Reset Patch 1-to-1

Reset Patch 1-to-1 resets your console's patch to a one-to-one, default patch. Thus, channel 1 is patched to dimmer 1, channel 2 is patched to dimmer 2, and so on. This function is independent of your show. See *Chapter 4, Patch*, for more information about patch.

To reset your patch, follow these steps:

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [5], Clear Functions , [Enter].	Displays Clear Functions menu
3. Press [9], Reset Patch 1-to-1 , [Enter].	Clear Functions: RESET PATCH? Please confirm
4. Press [Enter].	Clear Functions: RESET PATCH? Complete ■

Caution: Always back up show information and I/O configuration information to the hard drive and/or a diskette. This protects you against loss of data.

Chapter 20

Multuser

This chapter explains how to install and configure a Multuser system and describes how Multuser affects the way you work.

When you work on an Obsession that is not connected to other devices, your keystrokes appear on the command line, you press [Enter], and the console executes that command. This changes when your system includes multiple devices (consoles, Remote Interfaces, etc.) connected via ETCNet.

With multiple networked devices, often more than one user may try to do work at the same time. When they do, the command line may merge their entries, resulting in illegal commands.

Multuser avoids conflicts by assigning all network devices to one of two user groups; **User 1** or **User 2**. For added flexibility, Multuser lets you assign Remote Focus Units (RFUs) to one of three user groups called **Phantom 1**, **Phantom 2** or **Phantom 3**. Phantom RFUs only provide access to a limited set of operations.

Keystrokes entered on a User 1 device appear on the command line of all User 1 devices, but not on the command line for User 2 devices. Both User 1 and User 2 devices have most of the capabilities of a standalone network device, but are restricted from using the same channel at the same time. The following table describes how the two Users interact. If there is a conflict, the message **>>>Channel(s) on other user's wheel** appears.

Display mode	Channel conflicts
Live	Channels selected by User 1 cannot be selected by User 2 . Channels selected by User 2 cannot be selected by User 1 .
Blind	Both Users may access the same channel as long as they are working in different cues.
Group	Both Users may access the same channel as long as they are working in different groups.
Submaster	Both Users may access the same channel as long as they are working in different submasters.

Multiuser display notes

When you use Multiuser, the upper left corner of the Live, Blind, Sub, Group, and Effect screens displays **User 1** or **User 2** to indicate the User to which the device is assigned. Each User may consist of any number of devices.

Channels selected on one **User's** devices appear against a blue background on the other **User's** device displays.

Enabling Multiuser

Before you can assign devices to **User 1**, **User 2** or **Phantom**, you must enable Multiuser.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [2], Input/Output Configuration , [Enter].	Selects I/O Configuration menu
3. Press [1], I/O Options , [Enter].	Selects I/O Options menu
4. Press [3], Multiuser , [Enter].	ENABLE MULTIUSER?
5. Press [Enter] to enable Multiuser, or press [Clear] to cancel.	Multiuser is enabled
6. Turn your system off, then back on.	Multiuser is activated

Configuring Multiuser

The Multiuser Configuration screen displays all devices in your ETCNet network. The first three columns list all network devices and their network addresses. The device address is factory-assigned and is on the back of the device itself. A ♦ appears by the device number of an active RFU or TouchPad.

If a new device is added to the network, the device and its address appear on the screen once you turn the device on. Press [S6], **Sort**, to sort the list by User, then by device type (consoles, Remote Interfaces, RFUs, TouchPads).

Device Number	Device Type	Device Address	Used By	Device Label
1	Main Console	62:00:00	User 1	Control Booth
2	Video Expand	f9:00:00	User 1	Control Booth
3	Remote Interface	ff:00:00	User 1	Stage Right Wing
4	Remote Console	38:00:00	User 2	Booth Backup
5	Designer's Remote	ff:ff:ff	User 2	Backstage Control
6 ♦	Remote Focus Unit	RFU 2	User 2	Backstage RFU
7 ♦	Remote Focus Unit	RFU 1	Phantom 1	Fly RFU

I/O Devices: DEVICE NUMBER 3 LABEL Backstage RFU ▀

S1	S2	S3	S4	S5	S6	S7	S8
Device Number	Used By	Video Expand	Enable / Disable	Delete Device	Sort	Sliders	Return

This section covers:

- Assigning devices to Users
- Labeling network devices
- Using Video Expand
- RFU modes
- Slider controls
- Deleting devices

Assigning devices to Users

To configure Multiuser, assign each device in your system to a User. Assign devices as indicated.

	User 1	User 2	Phantom 1-3
Main Console	•		
Processor Unit	•		
Remote Console	•	•	
Designer's Remote Console	•	•	
Remote Interface	•	•	
Remote Video Interface	•	•	
TouchPad	•	•	
RFU	•	•	•

Keystrokes:

1. Press [Setup*].
2. Press [2], **Input/Output Configuration**, [Enter].
3. Press [2], **Multiuser Configuration**, [Enter].
4. Press [S1], **Device Number**, and enter the number of the device from the list on the screen.
5. Press [S2], **Used By**, and enter the User from the soft-keys available.

[S1], **User 1**
 [S2], **User 2**
 [S3], **Phantom 1**
 [S4], **Phantom 2**
 [S5], **Phantom 3**

6. Press [Enter] to confirm the assignment.
7. Press [S6], **Sort**, [Enter].

Action/Command line:

Selects I/O Configuration menu

Selects Multiuser Configuration screen

I/O Devices: DEVICE NUMBER 2

I/O Devices: DEVICE NUMBER 2 USED BY USER 2

Device is assigned to User
I/O Devices: DEVICE NUMBER 2 USED BY USER 2 ■

Sorts the device list by User
I/O Devices: SORT ■

Labeling network devices

You may label network devices (up to 25 characters). This will help you identify them on the Multiuser Configuration screen.

Hint: If you have more than one of a particular type of device, label each according to its use or location.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [2], Input/Output Configuration , [Enter].	Selects Input/Output Configuration menu
3. Press [2], Multiuser Configuration , [Enter].	Selects Multiuser Configuration display
4. Press [S1], Device Number , and enter the device to label.	I/O Devices: DEVICE NUMBER 3
5. Press [Label], and use the alphanumeric keyboard to enter the label.	I/O Devices: DEVICE NUMBER 3 LABEL Stage Manager
6. Press [Enter].	I/O Devices: DEVICE NUMBER 3 LABEL Stage Manager ■

Using Video Expand

Video Expand lets you display four different video screens instead of two. With Video Expand, a Remote Interface or Remote Video Interface provides two additional Channel screens.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [2], Input/Output Configuration , [Enter].	Selects Input/Output Configuration menu
3. Press [2], Multiuser Configuration , [Enter].	Selects Multiuser Configuration display
4. Press [S1], Device Number , and enter the Remote Interface.	I/O Devices: DEVICE NUMBER 3
5. Press [S3], Video Expand .	I/O Devices: DEVICE NUMBER 3 VIDEO EXPAND
6. Press [Enter].	For Device Type, Video Expand replaces Remote Interface I/O Devices: DEVICE NUMBER 3 VIDEO EXPAND ■

RFUs

Remote Focus Units (RFUs) may be **User 1** or **User 2** devices, Phantoms, or disabled. To assign an RFU to **User 1** or **User 2**, see page 250. To disable an RFU, see page 258. See next page for information about **Phantom**.

Setting the RFU number and backlight

Each RFU in a Multiuser system should have a different number (1 through 16). This makes it possible to identify them on the Multiuser configuration screen. Press [+] to move from field to field on the RFU settings display. Follow these steps to set the number of an RFU:

Keystrokes:

Action/Command line:

1. Turn off the RFU.
2. On the RFU keypad, press and hold [+], [Thru] and [-].
3. Turn the RFU back on. The RFU LCD displays the following:

RFU Number <u>01</u>	Enter to cont.
Backlight Timeout, min = 00	sec = 30

4. On the RFU keypad, enter the RFU number. Press [0] before single digit numbers.
5. Press [+]. Enter the minutes of inactivity before the LCD's backlight turns off.
6. Press [+]. Enter seconds.

Note: Set the time to 00:00, to disable the backlight. Times may go up to 99:99.

7. Press [Enter]. Updated information is stored, and the RFU returns to normal function

Phantom mode

In addition to **User 1** and **User 2**, RFUs may be assigned to **Phantom** mode. An RFU in Phantom mode may only run dimmer and channel checks, and park or unpark dimmers and channels.

Levels set by RFUs in Phantom mode do not appear on the Live display, nor are they recorded into cues, groups or submasters.

If your RFU is a **User 1** or **User 2** device, you may temporarily switch it into Phantom mode from the RFU by turning the RFU off, then pressing and holding [Clear] while you turn it back on.

If your RFU is in Phantom mode, you may temporarily switch it into **User 1** mode from the RFU by turning the RFU off, then pressing and holding [Clear] while you turn it back on. The RFU remains in **User 1** until it is turned off or reset.

*Note: While the RFU is temporarily switched out of its assigned mode, a yellow triangle marks its User in the **Used By** column on the Multiuser Configuration screen.*

Slider controls

In a Multiuser system, special rules apply to the Grandmaster, submaster or fader sliders. These rules take effect when **User 1** and **User 2** try to use the same slider simultaneously.

- **Submasters** If operators on **User 1** and **User 2** both move the same submaster slider, channels output at the higher of the two levels.
- **Playback faders** If both Users move the same fader slider, the system reads the slider set at the higher level. In other words, before you can take manual control of a fade, both Users' fader sliders must be at zero.
- **Grandmaster** If both Users move the Grandmaster, channels output at the lower of the two levels.

The Slider Allocation screen lets you bypass these rules by assigning specific sliders to **User 1** or **User 2**. Once assigned, only that User's consoles may use the slider.

This lets you use a slider even if the other User has that slider at a conflicting setting. Use the Slider Allocation screen, shown below, to assign the slider to your own User. See next page for instructions on assigning sliders.

Slider Allocation														
GM	Both													
Faders	1	2	3	4	5	6	7	8						
	Both	Both	Both	Both	Both	Both	Both	Both						
Subs	1	2	3	4	5	6	7	8	9	10	11	12		
	Usr1	Usr1	Usr1	Usr1	Usr1	Usr1	Usr1	Usr1	Usr1	Usr1	Usr1	Usr1		
	13	14	15	16	17	18	19	20	21	22	23	24		
	Usr2	Usr2	Usr2	Usr2	Usr2	Usr2	Usr2	Usr2	Usr2	Usr2	Usr2	Usr2		
	25	26	27	28	29	30	31	32	33	34	35	36		
	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both		
	37	38	39	40	41	42	43	44	45	46	47	48		
	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both		
Slider Allocation:														
S1	S2	S3	S4	S5	S6	S7	S8							
Grand-master	Fader	Sub	All Sliders	User 1	User 2	Shared By Both	Return							

Keystrokes:

1. Press [Setup*].
2. Press [2], **Input/Output Configuration**, [Enter].
3. Press [2], **Multuser Configuration**, [Enter].
4. Press [S7], **Sliders**.
5. Press the softkey for the slider(s).
[S1], **Grandmaster**
[S2], **Fader**
[S3], **Sub**
[S4], **All Sliders**
6. If you selected [S2] or [S3], enter the number of the Fader or Sub to assign. Use [+], [-] and [Thru] to enter multiple items.
7. Press the softkey for the User.
[S5], **User 1**
[S6], **User 2**
[S7], **Shared By Both**
8. Press [Enter].

Action/Command line:

Selects Input/Output Configuration menu

Selects Multuser Configuration display

Selects Slider Allocation screen

Slider Allocation: SUB

Slider Allocation: SUB 3 > 10

**Slider Allocation: SUB 3 > 10
USER 2**

Submasters 3 through 10 are assigned to **User 2** and disabled for **User 1**
**Slider Allocation: SUB 3 > 10
USER 2 ■**

Deleting devices

Once you add a device to your device list, it remains on the list even if you disconnect the device from the system. This means you don't need to reconfigure Multiuser every time you disconnect a device or turn the system off. You may remove a device that is no longer on the network from the device list.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [2], Input/Output Configuration , [Enter].	Selects Input/Output Configuration menu
3. Press [2], Multiuser Configuration , [Enter].	Selects Multiuser Configuration display
4. Press [S5], Delete Device .	I/O Devices: DELETE DEVICE
5. Enter the device number of the device to delete.	I/O Devices: DELETE DEVICE 4
6. Press [Enter].	I/O Devices: DELETE DEVICE 4 ■ Please Confirm
7. Press [Enter] to delete the device, or [Clear] to cancel.	I/O Devices: DELETE DEVICE 4 ■ Please Confirm ■

Storing Multiuser configuration

Your Multiuser configuration remains in your system's memory until it is replaced, or you reset the system. You may back up configuration information on a diskette or the hard drive. See page 228 or 237 for instructions.

Mirror

In Multiuser mode, the [Mirror] key (located between [Memo] and [Expand] on Remote Consoles and Designer's Remote Consoles) lets you monitor the actions of the other User. As soon as you use a slider, run a cue or generate a command line instruction, your displays return to normal.

Note: The Mirror function is not available from the system's main console (or backup console, if you are using Full Tracking Backup).

Enable/Disable Multiuser devices

You may disable any device on the network from any Full Console, Remote Console or Designer's Remote Console. The device stays disabled until it is either enabled from a console, or turned off and on. At least one console must remain enabled.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [2], Input/Output Configuration , [Enter].	Selects Input/Output Configuration menu
3. Press [2], Multiuser Configuration , [Enter].	Selects Multiuser Configuration display
4. Press [S1], Device Number , and enter the device.	I/O Devices: DEVICE NUMBER 2
5. Press [S4], Enable/Disable .	I/O Devices: DEVICE NUMBER 2 ENABLE / DISABLE
6. Press [Enter] to confirm the assignment.	Device is disabled I/O Devices: DEVICE NUMBER 2 ENABLE / DISABLE ■

Chapter 21

Accessories

This chapter includes instructions for working with the following Obsession accessories:

- Alphanumeric keyboard
- Remote Focus Unit (RFU)*
- Multidrop Remote Focus Unit*
- Full Tracking Backup
- Remote Console*
- Designer's Remote Console*

For accessory installation instructions, see page 309.

* These accessories are optional additions to your Obsession system. For purchase information, please contact your local dealer or ETC.

Alphanumeric keyboard

The alphanumeric keyboard plugs into your console next to the diskette drive. The keyboard is a standard PC AT compatible keyboard. For installation information, see page 316.

Selecting keyboard mode

The keyboard has three modes of use, Alphanumeric mode, Facepanel emulation mode, and Remote Display Control mode.

Use [Scroll Lock] and [Num Lock] on the alphanumeric keyboard to set its mode.

Mode	Scroll Lock	Num Lock
Facepanel	On	Off
Alphanumeric	Off	Off
Remote Display	On	On

Working in Alphanumeric mode

Use Alphanumeric mode to label various functions, such as cues, submasters, profiles, etc. Names can consist of letters, numbers or the symbols: #, %, &, *, (,), +, ', -, [,], and / as well as the comma and period. See the labelling instructions in the chapters for each function.

You can also use Alphanumeric mode to enter memos. Use memos to keep notes, reminders, or leave instructions for other console users.

Keystrokes

Action

1. Press [Memo].
2. Type in notes and memos on the alphanumeric keyboard.
3. Press any other display key. Ends Memo mode

Working in Facepanel emulation mode

In Facepanel emulation mode, every key on the console is mapped onto an alphanumeric keyboard key. This lets you use the keyboard as a subsidiary facepanel.

Keyboard chart

The following chart lists alphanumeric keyboard equivalents for all commands. Turn on Scroll Lock on the alphanumeric keyboard to activate keyboard equivalents. Turn Scroll Lock off to enter text. To display a list of keyboard assignments on your screen, press [Shift-F1] on the keyboard.

About	Z	Minus	-
And.....	+	Mirror	Shift-F3
All Manual	Alt-F9	More Softkeys.....	=
At	A	Next.....	PgUp
Blackout	Shift-F10	Out	O
Blind Display	F6	Sub Page.....	J
Clear.....	Backspace	Page +	Shift-F5
Cont Macro	Alt-0	Page -	Shift-F6
Cue.....	Q	Park	N
Dimmer.....	D	Park Display.....	Ctrl-F9
Edit command line	→ ←	Part.....	P
Effect	E	Patch Display.....	F8
Effects Display	F10	Playback Cue List.....	\
Expand	Shift-F7	Playback Group List.....	[
Faders 1-8	Alt-F1-Alt-F8	Playback Sub List]
Follow	Y	Profile	L
Full	F	Rate (Playbacks)	Alt-F10
Go	F1	Record.....	R
Go To Cue	F2	Rem Dim	H
Go to Page	Shift-F8	S1 - S8.....	Ctrl/F1-Ctrl/F8
Group	G	Setup Display	F9
Group Display.....	Ctrl-F10	Sneak	X
Help.....	?	Stop/Back.....	F3
Label	B	Store Macro	Alt-9
Last	PgDn	Sub	S
Letters (A-Z)	Scroll Lock A-Z	Sub Display	F7
Learn	Shift-F9	Swap	Shift-F2
Level	V	Thru.....	T
Link	K	Time	I
Live Display.....	F5	Track/Cue only.....	^
Load Cue.....	F4	Undo.....	U
Load Sub.....	C	Wait.....	W
Macro.....	M	0-9	0-9
Macro 1-7.....	Alt/1-Alt/7	. or / or /
M*.....	Alt-8	↑ ↓	↑ ↓
Keyboard help screen	Shift-F1	+10%	Ctrl-PgUp
		-10%	Ctrl-PgDn

Controlling remote displays

You may configure your alphanumeric keyboard to control monitor displays attached to an ETCNet Remote Interface or Remote Video Interface. Connect the keyboard cable to the connector labeled Keyboard on the Interface's back panel.

Both the Num Lock and Scroll Lock LEDs must be lit to use the keyboard with an Interface. If they are not, press [Scroll Lock] and/or [Num Lock] until they are both lit.

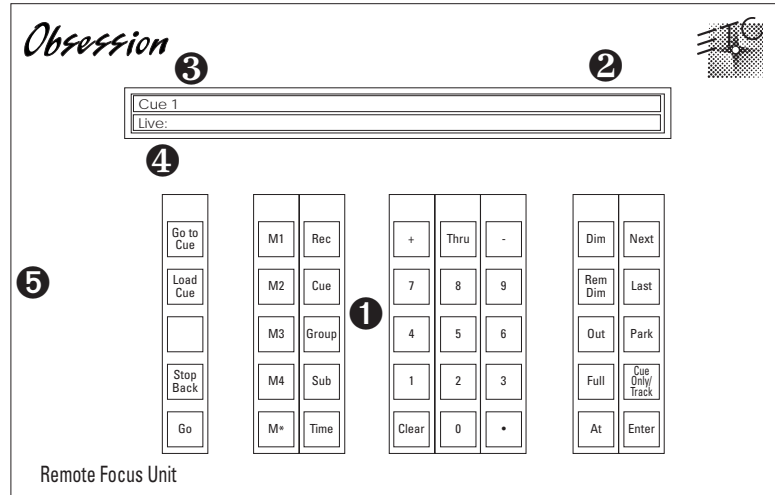
Other than the function keys ([F1] through [F10]), use only the keys on the numeric keypad.

F1	Live
F2	Blind
F3	Group
F4	Sub
F5	Effect
F6	Park
F7	Patch
F8	Memo
F9	Cue List
F10	Sub List
0	Spreadsheet
. (period)	List
1	Next
2	Page right
3	Page +
4	Last
5	Page left
6	Page -
8	Mirror
9	Swap
+	Expand
-	By Dim/Chan
Backspace	Clear
?	Help

Remote Focus Unit (RFU)

The Remote Focus Unit (RFU) is a small, portable control panel. You can use an RFU with or without a remote monitor.

The RFU includes a two-line LCD screen. The top line of the display shows the current cue on the left and counts down wait or fade times on the right. The second line is the command line.



1 Keypad	The keys on the RFU's keypad function exactly like their counterparts on the console.
2 Time display	Shows the wait or fade time for the running cue.
3 Cue display	Shows the currently running cue.
4 Command line	Shows current command entries from RFU or console.
5 Power switch	The power switch is on in the up position and off in the down position.

The console keypad and RFU operate simultaneously. Changes made from both console and RFU appear immediately on both the console monitor and the RFU LCD.

Warning: Do not connect or disconnect the RFU when it is on.

Multidrop Remote Focus Unit

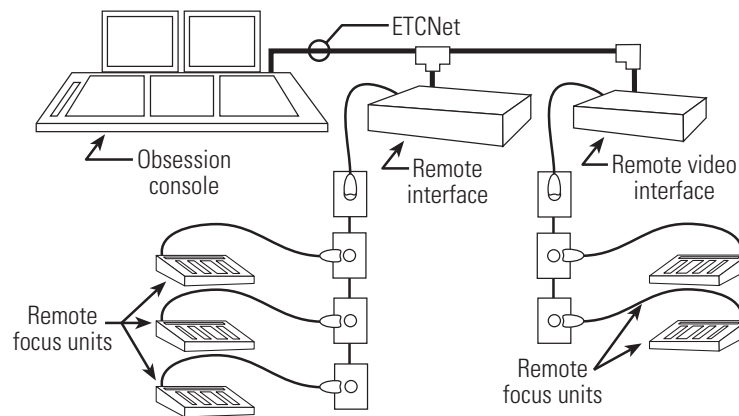
Multidrop lets you connect more than one RFU to the same RFU port. If each RFU is set to a different Multiuser identity (User 1 or 2, or Phantoms 1, 2 or 3), you can use all of them simultaneously without any interference between their command lines.

RFUs with multidrop turned on cannot be connected to a console or Processor Unit. Any other device with an RFU port supports multidrop RFUs, including Remote Consoles, Designer's Remote Consoles, Remote Interfaces, and Remote Video Interfaces.

An RFU software setting lets you turn multidrop on or off. If your site requires multidrop, we recommend that you connect all RFU connector plates to a Remote Interface or Remote Video Interface's RFU port, and turn multidrop on for all RFUs.

For more detailed wiring information and requirements, please contact ETC. See next page for instructions on configuring an RFU, including setting its multidrop status.

The illustration below shows a possible five-RFU configuration. All RFUs are plugged into connector plates wired in a daisy chain from either a Remote Interface or a Remote Video Interface.



Multidrop rules

- Cabling to support multidrop RFU must be installed by a trained electrical technician.
- To use multidrop, your RFU must have the latest software version (version 1.10) and a minor hardware upgrade.
- All RFUs connected via the same port on a Remote Console, Designer's Remote Console, Remote Interface, or Remote Video Interface must have multidrop turned on. If you connect RFUs with mixed settings to the same port, none of them will function properly.
- All RFUs connected to a port on a console or a Processor Unit must have multidrop turned off.

For information about cabling requirements or upgrading an RFU, please call ETC's Technical Services department at 800/775-4382.

Configuring RFU for multidrop

Press [+] to move from field to field on the RFU settings display. Press [Enter] when you finish configuring the RFU.

1. Turn off the RFU.
2. On the RFU keypad, press and hold [+], [Thru] and [-].
3. Turn the RFU back on. The RFU LCD displays the following:

<i>RFU ID = 01</i>	<i>Multidrop = no</i>	<i>Enter to cont.</i>
<i>Backlight Timeout,</i>	<i>min = 00</i>	<i>sec = 30</i>

4. On the RFU keypad, enter the RFU ID number (1-16). Press [0] before single digit numbers. Each RFU should have a different number so that you can identify when you set them up for Multiuser. (If you have more than 16 RFUs, you may use the same number for multiple RFUs, as necessary, but all RFUs with the same ID have the same Multiuser identity.)
5. Enter the RFU's multidrop status. Unless you use the RFU on a console or Processor Unit, enable multidrop. Press [1] to enable multidrop. Press [0] to disable multidrop.
6. Enter the minutes of inactivity the RFU waits before the LCD's backlight turns off. Press [+]. Enter seconds. Enter 00:00 to disable the backlight. Times may go up to 99:99.
7. Once the RFU number, multidrop status and backlight time are correct, press [Enter] to store the updated information, and return the RFU to normal function

Full Tracking Backup

Full Tracking Backup (FTB) lets you connect two Processor Units or consoles, using one as a backup for the other. This protects you in the unlikely event that one console should fail. FTB may consist of a dual console system, or a Remote Console and two Processor Units.

Use the System A/B keyswitch on the console or Remote Console to switch from one processor to the other.

Dual console FTB system

In a dual console FTB system, both consoles send information to the main console's processor. The command line registers keystrokes entered at either console. If the backup console's processor detects an interruption in the main console's processor, the backup takes over.

When you turn the system on, the **A** console is the main processor, and the **B** console is the backup. Set DIP switch 6 on each console to determine which is **A** and **B**. Switch control between **A** and **B** by turning the **System** keyswitch.

Note: See Appendix B for DIP switch information.

Show backup

When you turn an FTB system on, the show in console **A** (main) is loaded automatically into console **B** (backup). Shows on either console's hard drive are copied to the other console's hard drive if they are not already there. During operation, all keystrokes and slider moves entered on one console are mimicked on the other. Changes and updates are recorded on both.

*Warning: If you work on console **B** following a system crash, or while FTB is turned off, any changes you make will be erased when you activate FTB. The show in **A** always replaces the show in **B** when an FTB system starts up.*

*To avoid this, save the show on **B** to the hard drive before you reactivate FTB. If you save the show to **B**'s hard drive, the updated show is copied automatically to **A**'s hard drive when FTB starts. Load it from the hard drive into both consoles.*

LEDs

Two LEDs labeled **A** and **B** are located in the upper left corner of the consoles' face panels. The chart explains their meaning.

	A console		B console	
	A LED	B LED	A LED	B LED
Console A is main	on	off	off	slow blink
Console B is main	slow blink	off	off	on
Tracking off	off	off	off	off
Tracking interrupted, A is main	fast blink	off	off	off
Tracking interrupted, B is main	off	off	off	fast blink

Rack-mount FTB system

In a rack-mount system, two Processor Units are mounted in a standard 19-inch electronics rack. The interface to the Processor Units is controlled by one or more Remote Consoles linked to the rack over ETCNet.

If the backup Processor Unit detects an interruption in the main Processor Unit's operation, the backup takes over.

Set DIP switch 6 on each processor to determine which is **A** and which is **B**. See *Appendix B* for information on setting DIP switch 6.

*Caution: The keyswitch on the front panel of the DMX switcher does not switch between processors. It selects which processor unit's DMX512 signal is output to the dimmers. In order for your FTB system to function properly, set the DMX switcher's keyswitch to **auto**.*

When you turn an FTB system on, whatever show was in the main (**A**) Processor Unit is loaded automatically into the backup (**B**) Processor Unit. Both Processor Units are synchronized with the performance and with all recorded changes and updates.

*Warning: If you work on Processor Unit **B** following a system crash, or while FTB is turned off, any changes you make are be erased when you activate FTB. The show in **A** always replaces the show in **B** when an FTB system starts up.*

LEDs

Two LEDs labeled **A** and **B** are located in the upper left corner of the Remote Console's face panel and on the DMX switcher's face panel. The LED for the main processor is lit. The LED for the backup processor is off.

	Remote console		DMX Switcher	
	A LED	B LED	A LED	B LED
A processor is main	on	off	on	off
B processor is main	off	on	off	on
Tracking off	off	off	off	on
Tracking off, and control manually switched to A processor.	off	off	on	off
Tracking interrupted, A is main	blink	off	on	off
Tracking interrupted, B is main	off	blink	off	on

Using Full Tracking Backup

To use Full Tracking Backup, follow these steps:

1. Turn both systems on. When the systems start, they confirm that both processors/ consoles have the same shows stored on their hard drives. If the contents of their drives are not identical, the system copies shows from one to the other until they are.
2. If the show you want is not in **A**'s memory or on the hard drive, insert the show diskette into the main diskette drive. Only the main processor's diskette drive may be used.
3. Read show into memory from diskette or hard drive. The show is read simultaneously into both processors.

If the main processor does not contact the backup processor within one minute, the following message appears: **System B does not respond. System A is now operating as a stand-alone system. System B has been disconnected from the network. To reconnect System B to the network, you must reboot both System A and System B.**

Press any key to remove the message. You can now use the main console in normal, single console operation.

If either processor fails, the other processor takes control automatically and allows you to use the functioning console in normal, single console operation.

If the link between the two processors is interrupted, the system informs you and allows you to use both consoles in normal, single console operation.

*Note: An automatic switchover terminates event tracking – so the two units no longer stay in synch – but **A** stays in Standby mode, allowing you to switch back to it if desired.*

Breaking a Full Tracking Backup link

If you have two full consoles linked in Full Tracking Backup (FTB) configuration, you may break the FTB link temporarily without changing jumper or DIP switch settings. Breaking the FTB link effectively removes the backup console from the network. It no longer controls live outputs controlled by the system, however, you can use it for other purposes.

*Warning: If you work on console **B** following a system crash, or while FTB link is turned off, any changes are erased when you restore the link. The show in **A** always replaces the show in **B** when FTB starts up.*

*To avoid this, save the show on **B** to a diskette or the hard drive before you reactivate FTB. If you save the show to **B**'s hard drive, the updated show is copied automatically to **A**'s hard drive when FTB starts. You can then load it from the hard drive.*

Keystrokes:

1. Press [Setup*].
2. Press [2], **Input/Output Configuration**, [Enter].
3. Press [1], **I/O Options**, [Enter].
4. Press [7], **Full Tracking Backup**.
5. Press [Enter].

Action/Command line:

Selects I/O Configuration menu

Selects I/O Options menu

I/O Options: DISABLE FULL TRACKING BACKUP?

Advisory reads: **Full Tracking Backup has been disabled.**

Command line reads:

I/O Options: DISABLE FULL TRACKING BACKUP? ■

To reactivate FTB, follow these steps:

- | Keystrokes: | Action/Command line: |
|--|---|
| 1. Press [Setup*]. | |
| 2. Press [2], Input/Output Configuration , [Enter]. | Selects I/O Configuration menu |
| 3. Press [1], I/O Options , [Enter]. | Selects I/O Options menu |
| 4. Press [7], Full Tracking Backup . | I/O Options: ENABLE FULL TRACKING BACKUP? |
| 5. Press [Enter]. | Advisory reads: Full Tracking Backup will be enabled the next time your system is initialized. To enable Full Tracking Backup now, turn the system off and back on. You must enable Full Tracking Backup on both consoles. |
| | Command line reads:
I/O Options: ENABLE FULL TRACKING BACKUP? ■ |
| 6. Repeat steps 1-5 for the other console. | |
| 7. Turn both consoles off and back on at the same time. | FTB is reactivated |

Remote Console

A Remote Console looks like a regular console, but has no diskette drive, hard drive or electronics of its own. On your network, the Remote Console functions like a full console, as long as you have a full console or a Processor Unit elsewhere on the network.

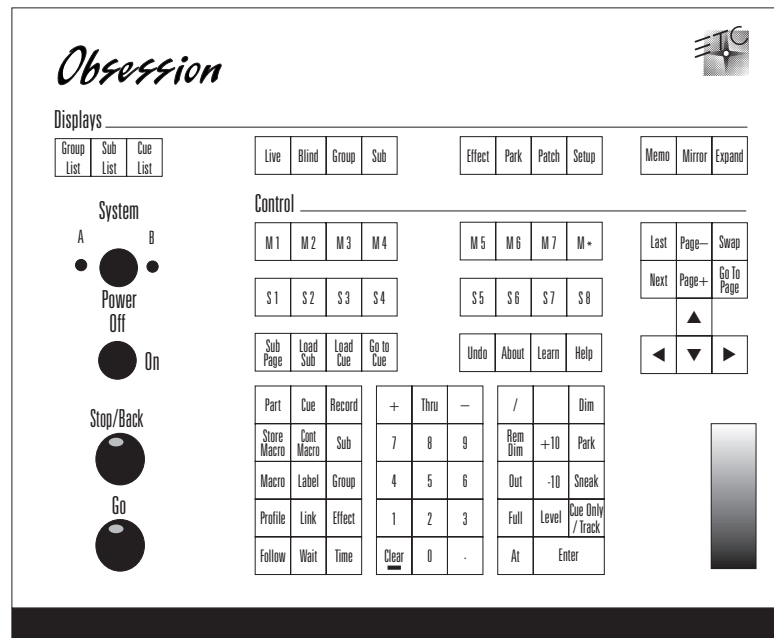
Installation of the Remote Console is identical to installation of a full console.

Designer's Remote Console

The Designer's Remote Console (DRC) is a small control panel you can use from a remote location.

The DRC contains all console controls except for submasters, faders, rate controls, Grandmaster, and Blackout button.

Back panel connectors allow you to attach an RFU, DMX512, two video monitors, an alphanumeric keyboard, and a printer to the DRC. The DRC connects to your system through ETCNet. For installation instructions, see page 325.

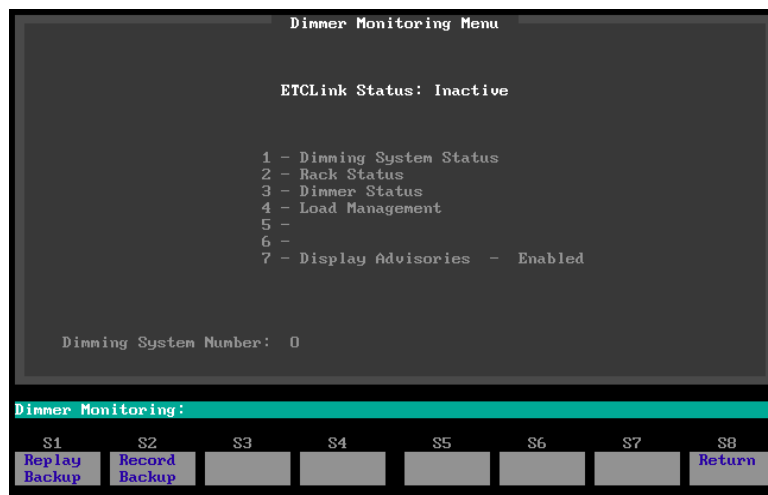


Chapter 22

Sensor dimming

Connect Obsession systems to ETC Sensor dimming systems via the ETCLink communication network. In this configuration, Obsession provides you with a wide range of system status information.

Access ETCLink functions through the Dimmer Monitoring menu. This display is only available when ETCLink and the optional I/O board are installed in a system. To reach the Dimmer Monitoring menu, press [Setup*] [1][1] [Enter].



Note: Any time you select a multiplex dimmer, if you do not specify A or B, the A channel is selected.

This chapter includes the following sections.

- Configuring ETCLink
- Enabling dimmer monitoring
- Storing ETCLink configuration
- Working with dimmer loads
- Dimmer status
- Dimmer rack status
- System Status
- Working with backup looks
- Error Messages

Configuring ETCLink

Before you use Obsession's dimmer monitoring capability, you must add the Optional I/O Card to the console. The I/O card is a printed circuit board installed in the Obsession console or Obsession Processor Unit.

Once the I/O card has been installed, you must configure the console for ETCLink dimmer monitoring.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [2], Input/Output Configuration , [Enter].	Selects I/O Configuration menu
3. Press [1], I/O Options , [Enter].	Selects I/O Options menu
4. Press [1], ETCLink Address , [Enter].	I/O Options: ENTER ETCLINK ADDRESS:
5. Press [1] [/] [1] [Enter].	I/O Options: ENTER ETCLINK ADDRESS: 1 / 1 ■ Please confirm

Note: The first number you enter in step 5 is the system number. This is almost always 1. The second number is the console number. This is usually 1, but in large systems could be 2.

- | | |
|---|---------------------|
| 6. Press [Enter] to confirm the new address; press [Clear] to cancel. | New address is set. |
|---|---------------------|

Enabling dimmer monitoring

Once the ETCLink address is set, you can enable dimmer monitoring.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [2], Input/Output Configuration , [Enter].	Selects I/O Configuration menu
3. Press [1], I/O Options , [Enter].	Selects I/O Options menu
4. Press [2], Dimmer Monitoring , [Enter].	ENABLE DIMMER MONITORING?
5. Press [Enter] to enable dimmer monitoring, or press [Clear] to cancel.	Dimmer Monitoring is enabled

Storing ETCLink configuration

Your ETCLink configuration remains in your system's memory until it is replaced, or you reset the system. You may back up configuration information on a diskette or the hard drive. See page 228 or 237 for instructions.

Working with dimmer loads

Obsession, in conjunction with a Sensor AF dimming system, lets you monitor individual dimmer loads. This helps you identify burned out lamps, incorrectly lamped fixtures and unplugged fixtures, among other problems.

The first step in monitoring loads is to record the normal load for the desired dimmers. By running Record Loads, the system *learns* what the correct dimmer loads should be during normal operation. If at any time the system detects a discrepancy of more than 20 percent between the recorded and actual loads, it displays an error message identifying the dimmer that is the source of the problem. Record Loads should be the last step in setting up your system.

Note: You may record Loads from the console or from a CEM in your Sensor AF system. Loads may not be recorded on standard Sensor systems.

Record loads

Record Loads records 24 dimmers per rack at a time until all dimmers at levels above zero have been recorded. (If you have multiple racks, 24 dimmers in each rack are recorded simultaneously.)

Note: On single phase racks, the system records 16 dimmers per rack at a time.

*Caution: Record Loads changes levels on stage. Dimmer outputs rise and fall for several minutes during the procedure. To cancel a record load operation, press [S2], **Record Loads**, [-] [Enter].*

Keystrokes:

Action/Command line:

- | | |
|---|--|
| 1. Set dimmers to be recorded to a level above zero. Only dimmers above zero are recorded | |
| 2. Press [Setup*]. | |
| 3. Press [1][1], Dimmer Monitoring , [Enter]. | Selects Dimmer Monitoring menu |
| 4. Press [4], Load Management , [Enter]. | Selects Load Management display |
| 5. Press [S2], Record Loads . If you wish, enter a specific dimmer or dimmers to record. | Load Management: RECORD LOADS |
| 6. Press [Enter]. | Load Management: RECORD LOADS ■ Please Confirm |
| 7. Press [Enter] to proceed with the load record, or press [Clear] to cancel. | New loads are recorded for all dimmers with levels above zero
Load Management: RECORD LOADS ■ Please Confirm ■ |

Check loads

Load Check compares the current load with the recorded load. Loads that differ by more than 20 percent appear in the Load Management display. To identify the dimmer(s) to check, use either the CEM or the Obsession to set the desired dimmers at a level above zero.

The system checks 24 dimmers per rack at a time until all dimmers at levels above zero have been checked. (If you have multiple racks, 24 dimmers in each rack are checked simultaneously.)

Note: On single phase racks, the system checks 16 dimmers per rack at a time.

*Caution: Load Check changes levels on stage. Dimmer outputs rise and fall for several minutes during the procedure. To cancel a check load operation, press [S6], **Load Check**, [-] [Enter].*

Keystrokes:	Action/Command line:
1 Set dimmers to be checked to a level above zero. Only dimmers above zero are checked	
2. Press [Setup*].	
3 Press [1][1], Dimmer Monitoring , [Enter].	Selects Dimmer Monitoring menu
4. Press [4], Load Management , [Enter].	Selects Load Management display
5. Press [S6], Load Check . (You may enter specific dimmers to check.)	Load Management: LOAD CHECK
6. Press [Enter].	Load Management: LOAD CHECK ■ Please Confirm
7. Press [Enter] to proceed with the load check, or press [Clear] to cancel.	Loads are checked for all dimmers with levels above zero Load Management: LOAD CHECK ■ Please Confirm ■

Clear Loads

Clear Loads lets you clear recorded dimmer loads, thus disabling load error messages for those dimmers. This can be useful if you know that the load on a dimmer or group of dimmers will change over the course of a show.

Keystrokes:

1. Press [Setup*].
2. Press [1][1], **Dimmer Monitoring**, [Enter].
3. Press [4], **Load Management**, [Enter].
4. Press [S1], **Clear Loads**. (If you wish, enter a specific dimmer or dimmers to clear.)
5. Press [Enter].
6. Press [Enter] to proceed with the load clear, or press [Clear] to cancel.

Action/Command line:

Selects Dimmer Monitoring menu

Selects Load Management display

**Load Management:
CLEAR LOADS**

**Load Management: CLEAR
LOADS ■ Please Confirm**

Loads are cleared for all dimmers with levels above zero
**Load Management: CLEAR
LOADS ■ Please Confirm ■**

Printing load errors

When a dimmer's load isn't close enough to its recorded load, it generates a load error. Load error messages appear on the Load Management display, shown here:



You may print a list of all dimmers with load errors:

Keystrokes:

1. Press [Setup*].
2. Press [1][1], **Dimmer Monitoring**, [Enter].
3. Press [4], **Load Management**, [Enter].
4. Press [S7], **Print Screen**.
5. Press [Enter].

Action/Command line:

- Selects Dimmer Monitoring menu
- Selects Load Management display
- Load Management: PRINT SCREEN**
- Load management screen sent to printer
- Load Management: PRINT SCREEN ■**

Dimmer status

The Dimmer Status display provides information about dimmers, including size and type, recorded load, firing mode, output curve, rack, slot, panic mode, and boost. Press [Setup*] [1][1] [Enter] [3] [Enter] to use the Dimmer Status display.

Dimmer Status								
Dimmer	Type	Recorded Load	Firing Mode	Curve	Rack	Slot	Panic Mode	Boost
1	20A Feedback	1400W	---	Square	2	1	---	115%
	▶ Dimmer load high at 1450W.							
2	20A Feedback	1350W	---	Square	2	1	---	---
3	20A Feedback	900W	---	Square	2	2	---	---
4	20A Feedback	850W	---	Square	2	2	---	86%
5	20A Feedback	1400W	---	Square	2	3	---	---
	▶ Dimmer output has failed off							
6	20A Feedback	1350W	---	Square	2	3	---	---
7	20A Feedback	800W	---	Square	2	4	---	---
8	20A Feedback	800W	---	Square	2	4	---	---
9	20A Feedback	900W	---	Square	2	5	---	---
10	20A Feedback	900W	---	Square	2	5	---	---
11	20A Feedback	900W	---	Square	2	6	---	---
12	20A Feedback	950W	---	Square	2	6	---	---
13	20A Feedback	950W	---	Square	2	7	---	---
14	20A Feedback	900W	---	Square	2	7	---	---
15	20A Feedback	900W	---	Square	2	8	---	---
16	20A Feedback	950W	---	Square	2	8	---	---

Dimmer Status:							
S1	S2	S3	S4	S5	S6	S7	S8
					Select Dimmer	Rack Status	Return

- **Type** shows the dimmer's amperage, and whether the dimmer is high-rise or standard. (**Feedback** indicates Advanced Features dimmer modules.)
- **Recorded load** displays the load at which the selected dimmer was recorded.
- **Firing mode** indicates whether the dimmer is normal, multiplexed, or switched. "--" indicates a normal firing mode.
- **Output curve** indicates the output curve assigned to the dimmer. "--" equals 00.
- **Rack number** indicates the rack the dimmer is located in.
- **Slot number** indicates the rack slot the dimmer is in.
- **Panic mode** indicates whether the dimmer is assigned to a panic circuit. "--" indicates an unassigned dimmer.
- **Boost** indicates the dimmer's Boost level. "--" indicates a Boost of 100 percent

The display lists up to 18 dimmers at once, with any error messages associated with each dimmer. Press [S6], **Select Dimmer**, [#] [Enter] to select a specific dimmer. Press [S6] [Enter] to view the first dimmer with a reported error.

Dimmer rack status

The Rack Status display provides information about specified racks, including rack type, starting address, port information, voltage, frequency, and ambient temperature. Press [Setup*] [1][1] [Enter] [2] [Enter] to access the Rack Status display. Press [S7], **Select Rack**, [#] [Enter] to select a specific rack, [Next] to select the next rack, or [Last] to view the last rack.



- **Rack type** displays this rack's type. Possible rack types include SR6, SR12, SR24, SR48, SP6, SP24, and SP48, followed by **AF** if it's an Advanced Features rack.
- **Start address** displays the rack's lowest dimmer number.
- **Port A/B Type** indicates whether the port is normal or Multiplex. "--" indicates a normal port.
- **Status** indicates the port's present status.
- **Rack voltage** displays the input voltage for each of the three phases (A, B and C).
- **Rack frequency** displays the input frequency in hertz (Hz).
- **Ambient temperature** displays the temperature of the air drawn into the rack by the rack's fan. Ambient temperature is not displayed unless the fan is running.
- Rack error messages appear beneath the ambient temperature.

System Status

The System Status display provides information about your Sensor dimming system. Press [Setup*] [1][1] [Enter] [1] [Enter] to access the System Status display.



- **Multiplex Firing Mode** shows whether Multiplex mode is enabled or disabled. You may switch settings by pressing [S1], **Multiplex Mode**, [Enter]. If Multiplex is disabled, dimmers in Multiplex mode function as normal dimmers.
- **Backup looks** indicates which backup look is active, if any.
- **ETCLink** displays any ETCLink errors.
- **System-Wide Panic** displays status of system-wide panic.
- **Error on Rack** displays the number of the rack with an ETCLink error. If errors exist on multiple racks, the first rack with an error is displayed.
- **Racks On-Line** displays the number of racks presently online throughout the ETCLink network.
- **Racks in Configuration** displays the total number of racks in the system.

Working with backup looks

A backup look is a recording of a selected look on stage stored in the Sensor CEM. You may save and use up to 32 backup looks.

Recording a backup look

Keystrokes:	Action/Command line:
1. Use your console to create the desired look on stage.	Creates look on stage
2. Press [Setup*].	
3. Press [1][1], Dimmer Monitoring , [Enter].	Selects Dimmer Monitoring menu
4. Press [S2], Record Backup .	Dimmer Monitoring: RECORD BACKUP
5. Enter the backup look number (1-32) and press [Enter].	Dimmer Monitoring: RECORD BACKUP 5 ■

Playing a backup look

Playing a backup look from the console or from a CEM brings up the recorded look on stage.

Only one backup look may be on stage at a time. If there is a backup look on stage when you bring up a new one, the second look replaces the first.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [1][1], Dimmer Monitoring , [Enter].	Selects Dimmer Monitoring menu
3. Press [S1], Replay Backup .	Dimmer Monitoring: REPLAY BACKUP
4. Enter the backup look number (1-32) and press [Enter].	Dimmer Monitoring: REPLAY BACKUP 5 ■

Clearing a backup look

Keystrokes:

1. Press [Setup*].
2. Press [1][1], **Dimmer Monitoring**, [Enter].
3. Press [S1], **Replay Backup**.
4. Press [0] [Enter].

Action/Command line:

Selects Dimmer Monitoring menu

**Dimmer Monitoring:
REPLAY BACKUP**

**Dimmer Monitoring:
REPLAY BACKUP 0 ■**

Error messages

ETCLink provides a wide variety of critical and secondary advisory messages, including information regarding your dimmers, racks, system, data, ports, and loads.

Critical messages include rack and dimmer overtemperature or shutdown messages, rack not responding messages, airflow messages, and phase missing messages. Critical messages are posted even when ETCLink advisory messages have been disabled. Secondary messages may be disabled.

All dimmer error messages appear in yellow on the Dimmer Status and About Dimmer screens. See *Appendix C, Error messages*, on page 345.

Disabling or enabling secondary messages

You may prevent secondary ETCLink advisory messages from being displayed while you operate the console, or enable them if currently disabled.

Note: See Secondary Errors on page 349.

Keystrokes:

1. Press [Setup*].
2. Press [1][1], **Dimmer Monitoring**, [Enter].
3. Press [7], **Display Advisories**, [Enter].
4. Press [Enter].

Action/Command line:

Selects Dimmer Monitoring menu

**Dimmer Monitoring:
DISABLE DISPLAY OF
ETCLINK ADVISORIES**

**Dimmer Monitoring:
DISABLE DISPLAY OF
ETCLINK ADVISORIES ■**

Chapter 23

Obsession Off-Line

Obsession Off-Line is an innovative software package that allows you to use your IBM PC or PC-compatible personal computer to simulate the operation of your Obsession. With Obsession Off-Line, you can create and edit your show on the PC, then save it to a diskette. Once you get to the theater, load the show on your console and run it.

Obsession Off-Line's menus, operator prompts, and help screens are identical to Obsession's. Nearly all of Obsession's features are available in Off-Line, using exactly the same keystroke sequences as the console itself. Obsession Off-Line lets you program effects, multipart cues, linked sequences, etc., and simulate cue playback on eight faders.

For more information about Obsession Off-Line, contact your local dealer or call ETC at 800/688-4116. You can download a free copy of Obsession Off-Line from ETC's home page on the World Wide Web. The address for the home page is:

<http://www.etcconnect.com>

System requirements

The Off-Line package includes the Obsession Off-Line diskette, the *Obsession User Manual*, the *Obsession Off-Line QuickGuide* and a keyboard template, all on diskettes in Acrobat format, and installation diskettes for the Adobe Acrobat Reader for Windows. If any of these items are missing, or if you need additional copies, please call ETC at 800/688-4116.

Obsession Off-Line has the following minimum hardware and operating system requirements:

- 386 processor (486 recommended)
- DOS 6.2
- 5 MB available hard drive space
- 6 MB available expanded (EMS) memory
- Color monitor
- Off-Line is incompatible with PC-DOS
- Off-Line is incompatible with Pentium processors
- Off-Line is incompatible with versions of SMARTDRV older than 5.0 (5.0 is included with DOS 6.2).
- If you have only 8MB of RAM and SMARTDRV is running in default mode, you must limit the size of SMARTDRV to 512k to leave enough memory for Off-Line to run. See your DOS manual for information on how to do this.

Windows notes

- Windows and Off-Line will not run at the same time
- Off-Line is incompatible with Windows 95
- Windows 3.1 or greater is required to run the Adobe Acrobat Reader for Windows

Macintosh notes

While we cannot guarantee that Off-Line will or will not work under other configurations, we have successfully run it on a Power Macintosh 6100/66 DOS Compatible from Apple Computer. In order to get it to work, we added the line

```
Device=C:\DOS\EMM386.EXE 6144 RAM=D000-EFFF Frame=D000
```

to the computer's **CONFIG.SYS** file.

Chapter 24

MIDI Show Control

Consoles in the Obsession line implement a subset of the MIDI Show Control (MSC) 1.0 standard.

Obsession recognizes the following MSC commands:

- Go
- Stop
- Resume
- Load
- Fire

Configuring MIDI Show Control (MSC)

Each device receiving MIDI Show Control information must be assigned a device ID. Obsession can receive MSC information, transmit MSC information, or both.

You may enable input and/or output of MSC and assign MSC device IDs for incoming and outgoing data.

1. Press [Setup*] to go to the Setup Menu.
2. Press [2] [Enter] to select the I/O Configuration Menu.
3. Press [4] [Enter] to select the MIDI Show Control Menu. The following display appears:



4. To allow your console to receive MIDI signals from another MIDI device, press [1] [Enter] [Enter] to enable **MIDI Show Control Input**.
5. If input is enabled, the console's **Obsession Device ID** must match the target device ID for the MIDI device from which you want to receive signals. Press [2] [Enter] and enter an ID (1-126).
6. To allow another MIDI device to receive MIDI signal from your console, press [3] [Enter] [Enter] to enable **MIDI Show Control Output**.
7. If output is enabled, the **Target Device ID** must match the device ID for the MIDI device to which you want to send signals. Press [4] [Enter] and enter an ID (0-126).

MSC commands received by Obsession

MIDI Show Control (MSC) lets devices send the following five commands to the Obsession console. If MSC input is enabled on the console, the console automatically executes the MSC commands.

Go	If no cue number is specified, Go is executed on the Obsession. The pending cue runs. If a cue number is specified, a Load Cue for that cue is executed, followed by a Go . The cue runs in its programmed fade time.
Stop	The Stop command holds all fades. Unlike pressing the [Stop/Back] key, consecutive Stop commands do not execute a Back command.
Resume	Resumes all holding fades.
Load	Executes a Load Cue command.
Fire	Executes the specified macro. Macro number must be in the range 1-127.

MSC commands transmitted by Obsession

MIDI Show Control (MSC) lets the console send the following commands to MIDI devices. If MSC output is enabled on the console, the console automatically sends the MSC commands.

[Go] or [GoToCue]	Obsession transmits Go with cue number.
[Load Cue]	Obsession transmits Load with cue number.
Macros	For macros 1-127, Obsession transmits Fire with macro number.
Load	If a fade is running, Obsession transmits Stop . Otherwise, Obsession transmits Go with the number of the previous cue.

Chapter 25

SMPTE

Your console lets you create and run shows controlled automatically by SMPTE time code. SMPTE times are provided by an internal SMPTE time clock. If you wish to run shows using SMPTE time code from an external source, you must purchase the Obsession Optional I/O Card upgrade.

A SMPTE program consists of up to 500 or 3,000 (for Obsession 3000) individual SMPTE events and a Reset Loop time of up to 24 hours. A SMPTE event consists of a cue, a submaster bump button, or a macro. The event is programmed to play back at a specified SMPTE time. SMPTE times are expressed in hours, minutes, seconds, and frames. Thirty frames equal one second.

The console may be in one of two SMPTE modes; Pause Mode or Run Mode.

The SMPTE Loop time allows you to set when the SMPTE program repeats. The SMPTE Loop time can be changed at any time.

If you purchase the Optional I/O Card, the system will run recorded SMPTE events in response to SMPTE time code it receives from an external source. If the flow of SMPTE data to the system is interrupted, the internal clock can take over and generate its own time code.

This chapter includes the following sections.

- Enabling external SMPTE input
- Enabling internal SMPTE input
- Setting SMPTE frame rate
- Creating SMPTE programs
- Playing back the SMPTE program

Enabling external SMPTE input

Before you can run SMPTE programs driven by an external SMPTE time source, you must enable the SMPTE port.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [2], Input/Output Configuration , [Enter].	Selects Input/Output Configuration menu
3. Press [1], I/O Options , [Enter].	Selects I/O Options menu.
4. Press [3], External SMPTE Clock , [Enter].	Enable SMPTE?
5. Press [Enter].	External SMPTE is enabled

Enabling internal SMPTE input

Before you can run SMPTE programs driven by the internal SMPTE clock, you must enable it.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [9], SMPTE Events , [Enter].	Selects SMPTE Events display
3. Press [More Softkeys] [S2], Enable Clock .	Enables the internal SMPTE clock. Internal Clock Enabled appears at the top of the display
4. Press [S2], Disable Clock .	Disables the internal SMPTE clock

Setting SMPTE frame rate

The SMPTE frame rate may be set to 24, 25 or 30 frames per second. 30 frames per second is the default.

Keystrokes:

1. Press [Setup*].
2. Press [2], **Input/Output Configuration**, [Enter].
3. Press [1], **I/O Options**, [Enter].
4. Press [4], **SMPTE Frame Rate**, [Enter].
5. Press [Enter] again.
6. Press [Enter] again.
7. Press [Enter] again.

Action/Command line:

Selects Input/Output Configuration menu

Selects I/O Options menu

I/O Options: 24 fps SMPTE?

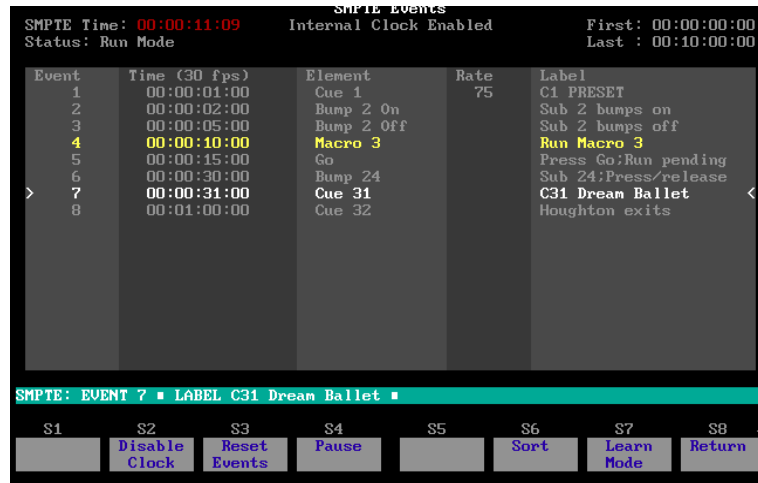
SMPTE frame rate is set to 24 fps

I/O Options: 25 fps SMPTE?

SMPTE frame rate is set to 25 fps. You may continue to cycle through the frame rates by pressing [Enter]

Creating SMPTE programs

The console lets you create SMPTE programs in the SMPTE Events display or in Learn mode.



SMPTE Time

Current SMPTE time; red is internal clock, gray is external.

Status

Current SMPTE playback status; Pause mode or Run mode.

Internal Clock Enabled/Disabled

Status of the internal clock.

First

SMPTE time at which the internal clock starts.

Last

SMPTE time at which the internal clock resets (loops) to the First time.

Event

List of events in the SMPTE program.

Time

SMPTE time of each event, also shows the number of SMPTE frames per second.

Element

Command sent out for that event. Elements may include Go, Cue, Sub Bump, Sub Bump On, Sub Bump Off, and Macro.

Rate

Sets a rate for Go or Cue events; overrides the recorded cue rate.

Label

Label for each event.

In the SMPTE Events display

Follow these steps to create a SMPTE program from the SMPTE Events display.

Keystrokes:	Action/Command line:
1. Record the cues, submasters and macros to include in the program.	
2. Press [Setup*].	
3. Press [9], SMPTE Events , [Enter].	Selects SMPTE Events display SMPTE:
4. Press [S1], Select Event , [1][Enter].	Creates and selects event 1. SMPTE: Event 1 ■
5. Press [Time] [1][0][0] [Enter].	Sets the SMPTE Time to one second SMPTE: Event 1 ■ Time 00:00:01:00 ■
6. Press [Cue] [1] [Enter].	Enters cue 1 into the event. SMPTE: Event 1 ■ Cue 1 ■
7. Press [S7], Rate , [1][2][5] [Enter].	Enters a rate of 125 percent of the recorded fade rate SMPTE: Event 1 ■ Rate 125 ■
8. Press [Label] and use the alphanumeric keyboard to enter a label. Press [Enter].	Labels event 1
9. Press [S1], Select Event , [2] [Enter].	
10. Press [S3], Bump , [1] [Enter].	Tells submaster 1 to bump
11. Press [Time] [2][0][0].	
12. Create event 3 and enter a time of three seconds.	
13. Press [Macro] [1] [Enter].	

In Learn mode

SMPTE Learn mode lets you record macro keys, submaster bump buttons and [Go] commands into SMPTE events as you press them. Learn mode lets you record a SMPTE program live without concerning yourself with SMPTE time.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [9], SMPTE Events , [Enter].	Selects SMPTE Events display
3. Press [More Softkeys].	
4. Press [S7], Learn Mode , [Enter].	SMPTE Learn Mode flashes in red under the command line SMPTE: TOGGLE LEARN MODE ■
5. If you are going to use the internal clock, press [S2], Clock Enable , to start it.	The SMPTE internal clock (upper left corner) starts to run
6. If you are going to use external SMPTE, start SMPTE data flow now. Enable the SMPTE port before you do this. See page 296 for details.	Enters cue 1 into the event. SMPTE: EVENT 1 ■ CUE 1 ■
7. Press [Live].	
8. At the exact moment in the program that each cue, submaster or macro should begin, press [Go], press the submaster's bump button, or start the macro.	Each button press is recorded as an event in your SMPTE show
9. Press [Setup*] [9] [Enter] [More Softkeys] [S7], Learn Mode [Enter].	Returns to SMPTE Events display and deactivates Learn mode
10. Edit the events as necessary.	

SMPTE Loop times

The SMPTE program executes events from the First event time to the Last event time, then resets the time and executes them again. The First and Last times appear in the upper right corner, and may be set by the user.

Note: A SMPTE loop can last from five seconds up to 24 hours. If you set the loop to less than five seconds, the internal clock resets it to five seconds from the loop's starting time.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [9], SMPTE Events , [Enter].	Selects SMPTE Events display
3. Press [More Softkeys] twice.	
4. Press [S2], Set First .	SMPTE: First Time
5. Press [1][0][0][0] [Enter].	Sets ten seconds as the starting time for the SMPTE show
6. Press [S3], Set Last .	SMPTE: Last Time
7. Press [5][0][0][0][0] [Enter].	Sets the SMPTE show to reset at the five minute mark

To clear the First and Last times use Reset Loop:

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [9], SMPTE Events , [Enter].	Selects SMPTE Events display
3. Press [More Softkeys] twice.	
4. Press [S4], Reset Loop , [Enter].	First time is set to zero and Last time is set to 23:59:59:29

Editing SMPTE programs

Once you create a SMPTE program, it's easy to make changes.

Deleting SMPTE events

Keystrokes:

1. Press [Setup*].
2. Press [9], **SMPTE Events**, [Enter].
3. Press [More Softkeys] twice.
4. Press [S6], **Delete Event**.
5. Press [5] [Thru] [6] [Enter].
6. Press [Enter] to delete the events or [Undo] to leave it unchanged.

Action/Command line:

Selects SMPTE Events display

SMPTE: Delete Event

Enters events 5 and 6 to delete
SMPTE: Delete Event 5 > 6

Inserting SMPTE events

Keystrokes:

1. Press [Setup*].
2. Press [9], **SMPTE Events**, and press [Enter].
3. Press [S2], **Insert Event**, [4] [Enter].

Action/Command line:

Selects SMPTE Events display

The new event is inserted before this event

SMPTE: Insert Event 4 ■

A new event 4 is inserted; all following events are renumbered.

Sorting Events

New events are added to the end of the event list. Events are played back based on the recorded time, not the event number. Use the Sort function to renumber events in the order of their times.

Keystrokes:

1. Press [Setup*].
2. Press [9], **SMPTE Events**, [Enter].
3. Press [More Softkeys] [S6], **Sort**.

Action/Command line:

Selects SMPTE Events display

Reorders the SMPTE event list based on each event's SMPTE Time.

Copying SMPTE events

Lets you copy the selected event or range of events from one time slot and insert the copy in another.

Keystrokes:

1. Press [Setup*].
2. Press [9], **SMPTE Events**, [Enter].
3. Press [More Softkeys] twice.
4. Press [S7], **Copy Event**.
5. Press [1] [Thru] [5].
6. Press [Time] [2][5][0][0].
7. Press [Enter].

Action/Command line:

Selects SMPTE Events display

SMPTE: Copy Event

Selects events 1 through 5 to copy

SMPTE: Copy Event 1 > 5 Time 00:00:25:00

Copies event 1 to a new event starting at 25 seconds; events copied from 2 through 5 maintain the same time spacing as the originals

To move a block of SMPTE events from one time to a different time, follow the steps above, but enter [S5], **Move Event**, in step 4.

Editing events

Each event is assigned a time. Each cue may have a rate applied, and the event may be labeled. Change any of these elements in an event by following the same procedure used to create the event.

Keystrokes:

Action/Command line:

- | | |
|--|---|
| 1. Press [Setup*]. | |
| 2. Press [9], SMPTE Events , [Enter]. | Selects SMPTE Events display |
| 3. Press [S1], Select Event , and the enter the number of the event to edit. | |
| 4. Press [Enter]. | Selects an event to edit |
| 5. Press the appropriate key for the field to change. (i.e., [Macro], [Cue], [Label], [Time], [S7], Rate , [S3], Bump , [S4], Bump On , [S5], Bump Off , or [S6], Go .) | Selects the field to edit |
| 6. Enter the new information for the field. | |
| 7. Press [Enter]. | Updates the information in the edited field |

Playing back the SMPTE program

The console lets you play recorded SMPTE events in several ways. You may use any external source of SMPTE data to run the program, you may run the program using the console's built-in SMPTE clock, or you may step through individual events. The two playback modes are Pause and Run.

Run Mode

If the console is in Run mode and the internal SMPTE clock is enabled, it automatically runs the SMPTE program. If the SMPTE status is in Pause mode, enable Run mode to execute the program.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [9], SMPTE Events , [Enter].	Selects SMPTE Events display
3. Press [More Softkeys] [S4], Run .	The status changes to Run Mode (in the upper left corner)

You may toggle Run and Pause Modes in Live as well:

Press [Live] [More Softkeys] [S4], **SMPTE Run** (or **SMPTE Pause**), [Enter].

Pause mode

If the SMPTE clock is running, press [More Softkeys] [S4], **Pause**, to interrupt the SMPTE clock when you are programming the console. While in Pause mode, the Step softkey lets you manually control playback of SMPTE events.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [9], SMPTE Events , [Enter].	Selects SMPTE Events display
3. Press [More Softkeys].	
4. Press [S5], Step . (Step only appears on the softkey in Pause Mode)	Advances to the next recorded SMPTE event
5. Repeat step 4 to advance through SMPTE events.	
6. Use Set Time to change the current time, then press [S5], Step . See page 307 for instructions on setting the time.	Causes the next event after the new current time to execute.

External SMPTE source

Once you record a series of events in a SMPTE program, the console automatically runs the program in response to SMPTE time code. To run the SMPTE program, enter Run Mode and start the flow of external SMPTE data. Make sure External SMPTE Input is enabled.

Note: In Full Tracking Backup systems, the SMPTE signal must be sent to both the Master and the Backup systems to provide redundancy. Since SMPTE cannot be 'Y'ed, and your output device has only one port, you must use a SMPTE splitter.

Internal SMPTE clock

You can use the Internal SMPTE clock to run the SMPTE program or as a backup to the external source.

You may set a particular time for the internal clock to start at.

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [9], SMPTE Events , [Enter].	Selects SMPTE Events display
3. Press [More Softkeys] [S1], Set Time , [1][5][0][0] [Enter].	Sets the current SMPTE time to 15 seconds

To clear the clock and exit Run Mode, follow these steps:

Keystrokes:	Action/Command line:
1. Press [Setup*].	
2. Press [9], SMPTE Events , [Enter].	
3. Press [More Softkeys] [S3], Reset Events , [Enter].	Sets the clock to the First time and puts the console in Pause Mode.

Appendix A

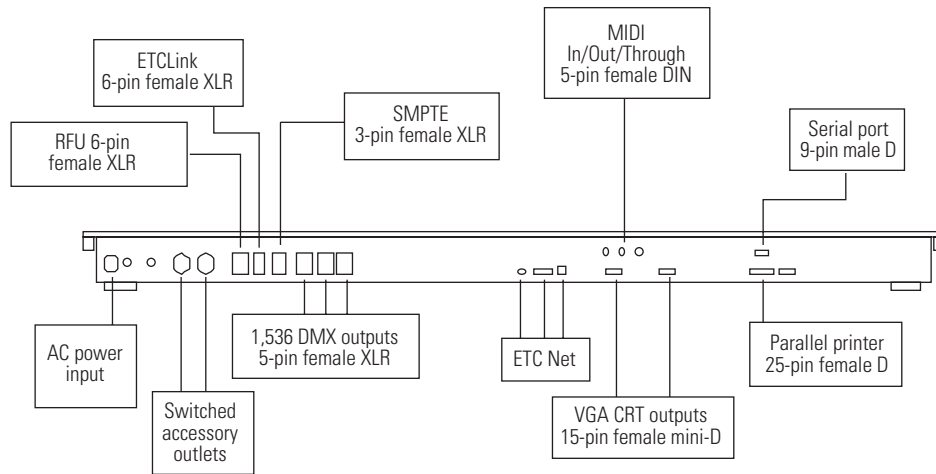
Installation

This appendix includes instructions for installing Obsession and any optional accessories. *Chapter 3, Entering system settings*, and *Chapter 4, Patch*, help you update software settings before you begin a new show.

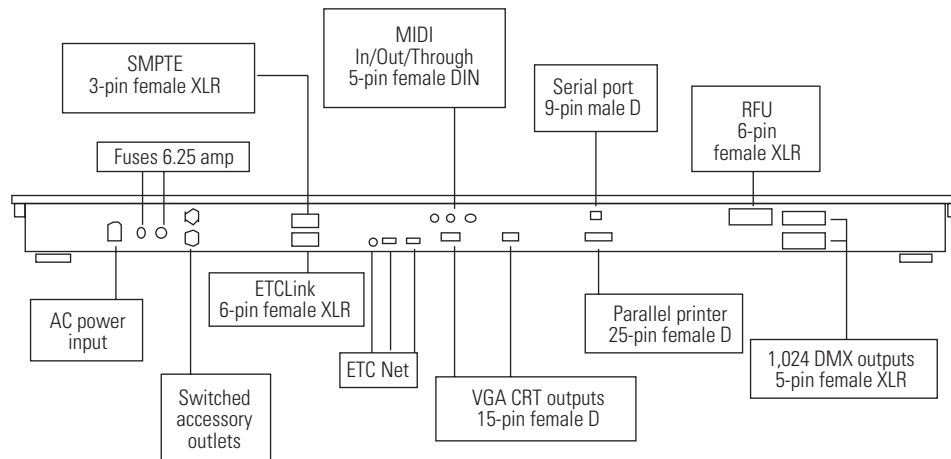
This chapter includes the following installation procedures:

- Installing your console and monitors
- Connecting dimmers
- Entering system configuration
- Installing the alphanumeric keyboard
- Installing a printer
- Installing Remote Focus Unit
- Using ETCNet
- Installing Remote Interface
- Installing Remote Video Interface
- Installing Remote Console
- Installing remote video monitors
- Installing Designer's Remote Console
- Installing Full Tracking Backup
- Installing MIDI
- Installing SMPTE

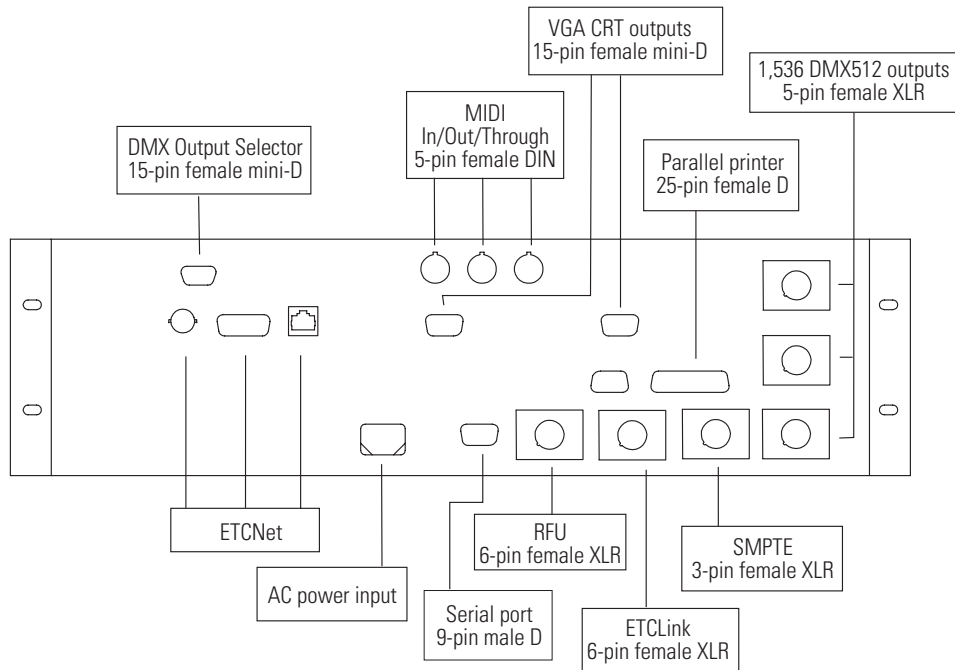
Obsession back panel



Obsession 600 back panel



Processor Unit back panel



Installing console

1. Place console on a hard, stable, flat surface at least six feet from dimmers and high-current AC lines. Leave at least six inches behind console for ventilation and cable clearance.
Caution: Do not leave the console in a road case tray or on a soft surface. This inhibits proper ventilation.
2. Insert the key into the power switch, and turn it to the **Off** position.
3. Insert the female end of the power cord in the connector labeled **Power in** on the console's back panel.
4. Insert the male end of the console power cord in a grounded 120 VAC outlet. For 220 VAC operation, consult ETC.

Installing monitors

1. Insert the end of the monitor power cord in the console connector labeled **Power out**.
2. Connect the video cable to the console connector labeled **CRT 1**. Repeat for second monitor, using the connector labeled **CRT 2**.
3. Turn console and monitor power switches to their **On** positions.

VGA monitor console connector

HD-DB15 female

VGA monitor pinout

1	Red video
2	Green video
3	Blue video
4	Ground
5	Ground
6	Red ground
7	Green ground
8	Blue ground
9	nc
10	Ground
11	Ground
12	nc
13	H. (H/V) sync
14	V. sync
15	nc

Connecting dimmers

Console	DMX512 ports	DMX512 outputs
Obsession 600	2	1,024
Obsession	3	1,536
Obsession 3000	6*	3,072

*Requires an ETCNet Remote Interface for ports 4-6

1. Verify that your dimmer connector pinout matches the pinout listed below.

Caution: Your dimmer control common must be compatible with console control common; they must either be the same level, or the dimmer control common must float. Verify compatibility with your dealer if you are not sure.

2. Connect DMX512 cables to DMX512 output connectors on back panel of console. Output connector location is shown on page 310.
3. If you are using an Obsession 3000 and wish to connect additional DMX512 outputs, install a Remote Interface onto your network. See page 320 for network installation instructions and page 321 for Remote Interface installation instructions. See page 338 for Remote Interface DIP switch settings.
4. Connect up to three more DMX512 cables (1,536 outputs) to DMX512 output connectors on the back panel of the Remote Interface. Output connector location is shown on page 321.

DMX512 Connector

XLR 5-pin female

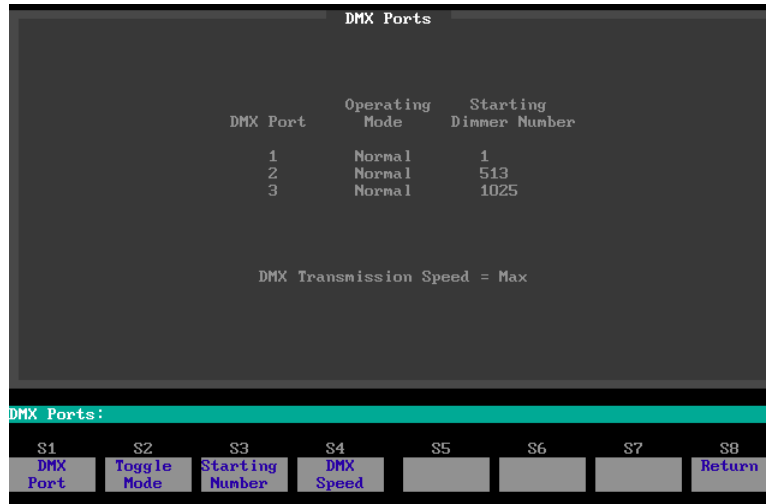
512 digital multiplex dimmers

DMX512 Pinout

- 1 Common
- 2 Data (-)
- 3 Data (+)
- 4 nc
- 5 nc

System configuration

Once your console is installed, you may need to set some hardware configuration settings. The DMX Ports display allows you to set your ports DMX512 starting numbers, set your ports for multiplexed output, and adjust the DMX512 signal speed if your dimming system requires a slower signal.



Setting DMX512 starting numbers

Console defaults set the starting dimmer number for DMX512 port 1 to **1**, DMX512 port 2 to **513**, and DMX512 port 3 to **1,025** (Obsession 3000 sets port 4 to **1,537**, port 5 to **2,049**, and port 6 to **2,561**; Obsession 600 only sets ports 1 and 2). If you prefer, you may set different starting numbers for the DMX512 ports. This would avoid having any rack receiving signals from two ports.

1. Press [Setup].
2. Press [2], **Input/Output Configuration**, [Enter].
3. Press [3], **DMX Ports**, [Enter].
4. Press [S1], **DMX Port**, enter the port to configure (1-6), and press [Enter] or use [↓] to select a port.
5. Press [S3], **Starting Number**, enter the desired number, and press [Enter] twice to confirm your choice.
6. Console indicates port starting number.

Setting Multiplex mode

If your console controls an ETC Sensor dimming system with multiplexed fixtures, specify this in the I/O Configuration screen.

Warning: Changing a port's mode forces the console to repatch.

1. Press [Setup].
2. Press [2], **Input/Output Configuration**, [Enter].
3. Press [3], **DMX Ports**, [Enter].
4. Press [S1], **DMX Port**, and enter the port to configure (1-6) or use [↓] to select a port.
5. Press [S2], **Toggle Mode**, and press [Enter] twice to confirm your choice.
6. Console indicates mode as either **Normal** or **Multiplex**.

Note: If you use multiplexed fixtures, you cannot set the ports' starting DMX512 numbers.

Note: Multiplexing is only available for use with dimming systems operating at 115V, 60Hz.

Setting DMX512 speed

Obsession is designed to run at the highest rate provided for in DMX512 specifications. Some dimming systems (including some Colortran ENR™ dimmers) may require a signal slower than the full DMX512 specification. If necessary, adjust the console's DMX512 signal speed.

Speed choices are **Slow**, **Medium**, **Fast**, and **Max**. If you have problems with outputs flashing, fades not running smoothly, or unselected dimmers rising spontaneously, experiment with slower speeds until the symptoms disappear. If they persist, please contact ETC Technical Services at 800/775-4382.

1. Press [Setup].
2. Select 2, **Input/Output Configuration**, [Enter].
3. Press [3], **DMX Ports**, [Enter].
4. Press [S4] to select the speed.
5. Press [Enter] to confirm your choice.
6. New speed setting appears on the display.

Installing the alphanumeric keyboard

You may substitute any standard PC AT compatible alphanumeric keyboard for the keyboard that shipped with your Obsession. If the keyboard is switchable, use it only in AT-compatible mode. ETC recommends the Cherry G80-1800 and Keytronic 101 keyboards. Although you may use keyboards from other manufacturers, ETC does not guarantee compatibility.

1. Set the selector switch to the AT position, if applicable.
2. Insert the keyboard cable into the connector labeled **Keyboard** on the Obsession front panel.

Console connector

DIN 5-pin female

Keyboard pinout

- 1 Clock
- 2 Data
- 3 Reset
- 4 Ground
- 5 +5 Vdc

Installing a printer

Obsession supports parallel printers, including some laser printers. Among the printers supported are the IBM Proprinter, Epson FX80 and Canon Bubblejet.

1. Insert parallel printer cable into connector labeled **Parallel Printer** on the console's back panel.
2. Insert opposite end of the printer cable into the printer.
3. Turn printer power switch on, and verify that printer is on line.

Console connector		Printer connector
DB25F		Centronics D36
Pinout	Signal	Pinout
1	STRB	1
2	D0	2
3	D1	3
4	D2	4
5	D3	5
6	D4	6
7	D5	7
8	D6	8
9	D7	9
10	ACK	10
11	Busy	11
12, 13	Not used	12, 18
14 to 17	nc	13 to 15, 17, 19 to 36
18 to 25	Ground	16

Installing Remote Focus Unit

1. Turn RFU power switch **Off**.
2. Insert the RFU cable into the connector on the back of the console (or an ETCNet Interface) labeled **RFU**.
3. Turn RFU power switch **On**.
4. Follow configuration instructions on next page.

RFU console connector

XLR 6-pin female

RFU pinout

- 1 Data (+) (to RFU)
- 2 Data (-)
- 3 Data (+) (from RFU)
- 4 Data (-)
- 5 Common (AC ground)
- 6 +12 Vdc (fused, 2A)

Configuring an RFU

Each RFU in a your system should have a different ID number (01-16). If you have more than 16 RFUs, you may use the same number for multiple RFUs.

To run more than one RFU from a single RFU port, set each RFU as a multidrop RFU. If you use a single RFU, or if each RFU has its own port, set each RFU as non-multidrop. All RFUs must have the same setting

You may also set the time the RFU waits before it dims the backlight on the LCD display.

Press [+] to move from field to field on the RFU settings display. Press [Enter] when you finish configuring the RFU

Keystrokes:

Action:

1. Turn off the RFU.
2. Press and hold [+], [Thru] and [-].
3. Turn the RFU back on. The RFU LCD displays the following:

RFU ID = 01	Multidrop = no	Enter to cont.
Backlight Timeout,	min = 00	sec = 30

4. Enter the RFU ID number (01-16). Press [+].
5. Press [1] to use multidrop RFU. Press [0] to turn off multidrop. Press [+]
6. Enter the minutes of inactivity before the backlight turns off. Press [+]. Enter seconds.

Note: Set the time to 00:00, to disable the backlight. Times may go up to 99:99.

7. Once the RFU number, multidrop status and backlight time are correct, press [Enter]. Updated information is stored, and the RFU returns to normal function

Using ETCNet

ETCNet is a proprietary communications protocol based on the IEEE standard 802.3, also known as Ethernet™. It lets you interconnect Obsession devices in a variety of configurations. These network devices include Obsession lighting control consoles, Designer's Remote Consoles, Remote Interfaces, Remote Video Interfaces, and Processor Units that provide Full Tracking Backup capability. Through these devices, you can attach peripherals such as monitors, printers, RFUs, DMX512 devices, and alphanumeric keyboards to the network.

The console and all network devices provide connectors for three types of ETCNet wiring. The connector you use depends on the wiring installed at your location. For more information about wiring choices, see the *ETCNet Planning and Installation Guide*.

To attach Obsession to ETCNet, insert the network connector into the appropriate console connector (BNC, RJ45 or DB15). Attach other devices to the interface device as described elsewhere in this manual.

To activate ETCNet, adjust the settings of jumpers on the console's logic board.

1. Loosen the two large, gray screws on the front panel that secure the face panel.
2. Raise the face panel and lock it in its upright position.
3. Set the jumpers and/or DIP switches as described in *Appendix B, DIP switch and jumper settings* on page 337.
4. Close the face panel and secure it with the screws.

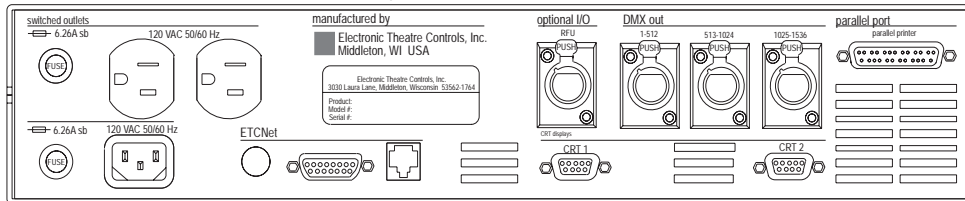
Installing Remote Interface

The Remote Interface lets you attach Obsession peripherals to your network in remote locations.

1. Plug the network cable into the appropriate connector.
2. Plug the power cable into a grounded 120 VAC outlet.

The Remote Interface provides ports for two monitors, an alphanumeric keyboard and an RFU, and provides a serial port, a parallel port and three DMX512 output ports. The illustration below shows the Remote Interface's back panel and indicates the connector used by each accessory. The alphanumeric keyboard connector is on the front panel.

ETCNet Remote Interface back panel



To activate the Remote Interface, adjust the settings of a number of jumpers on the Remote Interface's main circuit board.

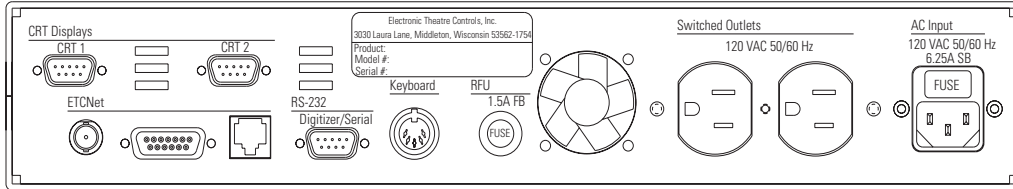
1. Remove the screws that secure the top panel.
2. Raise the top panel to expose the internal circuitry.
3. Set the jumpers and DIP switches as described in *Appendix B, DIP switch and jumper settings* on page 338.
4. Close the face panel and replace the screws.

Installing Remote Video Interface (RVI)

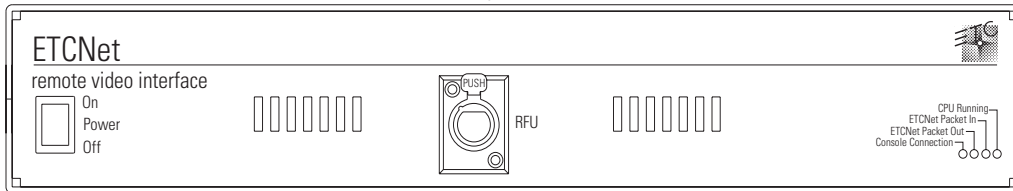
The Remote Video Interface provides ports for two monitors, an alphanumeric keyboard and an RFU, and provides a serial port.

The illustrations below show the Remote Video Interface's front and back panels and indicate the connector for each accessory.

ETCNet Remote Video Interface back panel



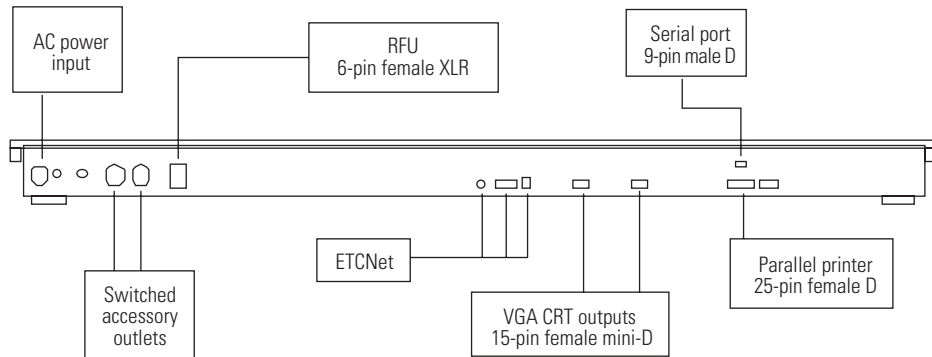
ETCNet Remote Video Interface front panel



1. Plug the network cable into the appropriate connector.
2. Plug the power cable into a grounded 120 VAC outlet.

Installing Remote Console

The following illustration shows the back panel connectors on the Remote Console.



1. Place console on a hard, stable, flat surface at least six feet from dimmers and high-current AC lines. Leave at least six inches behind console for ventilation and cable clearance.
Caution: Do not leave the console in a road case tray or on a soft surface. This inhibits proper ventilation.
2. Insert the key into the power switch, and turn it to the **Off** position.
3. Insert the female end of the power cord in the console connector labeled **Power in**.
4. Insert the male end of the console power cord in a grounded 120 VAC outlet. For 220 VAC operation, consult ETC.
5. Insert the ETCNet cable connector into the appropriate connector on the back panel. Once connected, the console communicates directly with your Obsession Processor Unit or full console. For more information about wiring, see the *ETCNet Planning and Installation Guide*.

Installing remote video monitors

You may install additional monitors at remote locations. Additional monitors duplicate the master console's displays or provide User 2 displays.

1. Insert the female end of the monitor power cord in the monitor connector, and the male end of the monitor power cord in the interface device connector labeled **Power out**.
2. Connect the monitor cable to the connector labeled **CRT 1** or **CRT 2** on the interface device.
3. Turn the monitor power switch to its **On** positions.

VGA monitor console connector

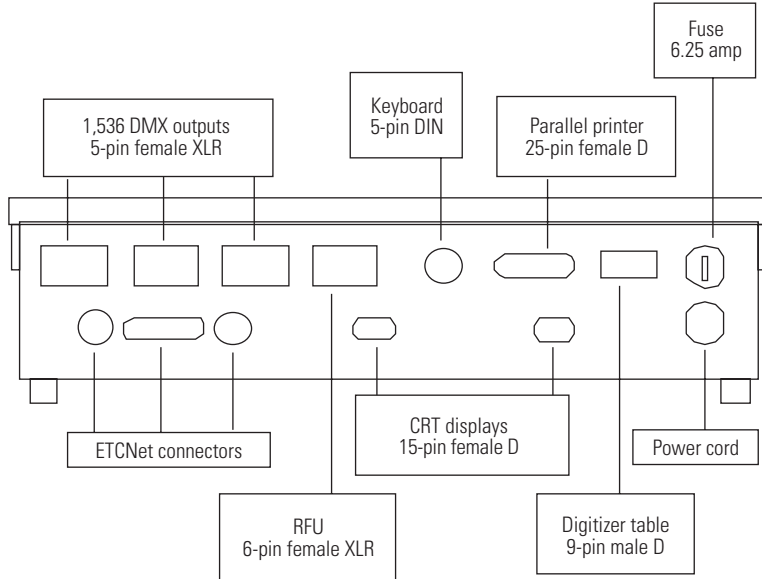
HD-DB15 female

VGA monitor pinout

1	Red video
2	Green video
3	Blue video
4	Ground
5	Ground
6	Red ground
7	Green ground
8	Blue ground
9	nc
10	Ground
11	Ground
12	nc
13	H. (H/V) sync
14	V. sync
15	nc

Installing Designer's Remote Console

The DRC provides you with connectors for two video monitors, DMX512 outputs, an RFU, a printer, and an alphanumeric keyboard. The following illustration shows the connectors on the back panel of the Designer's Remote Console (DRC).



Follow the Remote Console instructions on page 323 to install your Designer's Remote Console:

Installing Full Tracking Backup

Full Tracking Backup (FTB) lets you connect two Obsession consoles, using one as a backup for the other. See page 266.

Use the **System** keyswitch to switch from one set of electronics to the other.

1. Connect both consoles via ETCNet. See *Using ETCNet* on page 320.
2. Connect monitors to the second console. See *Installing monitors* on page 312.
3. Set DIP switches on both consoles, as described in *Appendix B, DIP switch settings*.

Note: Obsession reads DIP switch settings when you turn it on. You must turn power off and back on for the console to recognize new settings.

Installing MIDI

To use MIDI equipment with Obsession, the Optional I/O Card must have been installed at the factory. Connect your Obsession console to MIDI equipment using a standard MIDI cable.

There are three round, 5-pin, DIN-type connectors labeled **MIDI In**, **Out**, and **Thru** on the back of the console.

1. Turn console power off.
2. Connect MIDI cable from the **MIDI Out** of the electronic instrument or sequencer to the **MIDI In** on the console.
3. If you are sending MIDI commands from the console, connect another MIDI cable from the **MIDI In** on the instrument or sequencer to **MIDI Out** on the console.

MIDI console connectors

DIN 5 pin female

MIDI pinout

- | | |
|---|---------------|
| 1 | not connected |
| 2 | Ground |
| 3 | not connected |
| 4 | MIDI + |
| 5 | MIDI – |

Installing SMPTE

To use SMPTE equipment with Obsession, the Optional I/O Card must have been installed at the factory. Connect Obsession to SMPTE equipment using an appropriate SMPTE cable.

1. Turn console power off.
2. Insert SMPTE cable into the console connector labeled **SMPTE**.

SMPTE console connector

3 pin female XLR

Balanced SMPTE pinout

- 1 Common
- 2 Signal +
- 3 Signal –

*Note: This pinout is for balanced input. For unbalanced input, make the following connections in the user cable: Connect XLR pin 1 and pin 2 together, tying **Common** to **Signal +**. The unbalanced signal connects to XLR pin 3, **Signal –**.*

Appendix B

DIP switch and jumper settings

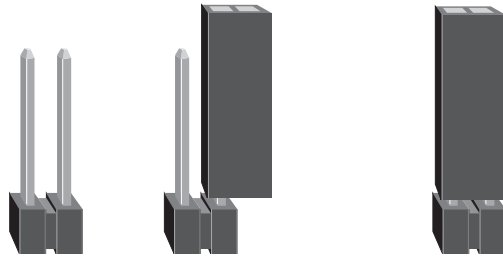
The DIP switch and jumper settings for the following components are listed in this appendix, along with instructions for changing them.

- Setting jumpers and DIP switches
- Circuit board illustrations
- Obsession console
- Remote Interface
- Remote Video Interface (RVI)
- Remote Console
- Designer's Remote Console (DRC)
- Configuring console for D192 output

Setting jumpers and DIP switches

Jumpers

A jumper is a small plastic connector used to join a pair of pins sticking out of a printed circuit board. The jumper is installed when it covers both pins. It is not installed when it covers one or none of the pins (see illustration below).



Jumper
not installed

Jumper
installed

DIP switches

Switches are either **On (Closed)** or **Off (Open)**. Obsession devices use two varieties of DIP switch. In one, the switches extend above the surface of the unit. Use your fingers to set these switches. The other, which currently appears only on the Revision D circuit board, contains switches that are recessed into the unit. Use a pin or other fine-pointed object to change the switch settings.

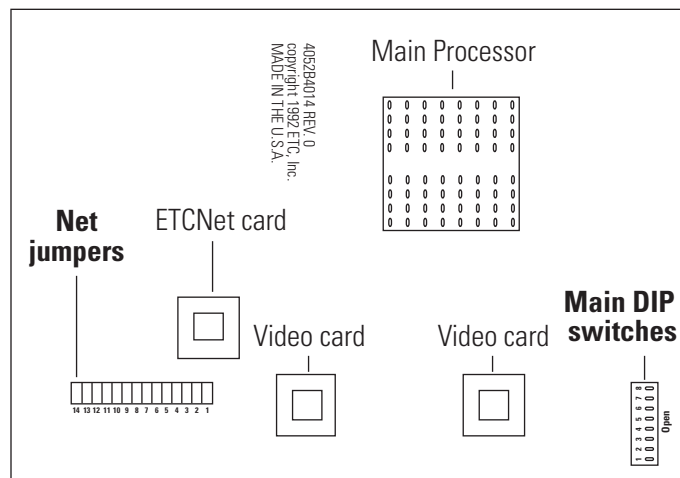
Obsession devices check DIP switch settings when the system is turned on. You must restart the console for new DIP switch settings to take effect.

Circuit board illustrations

Obsession components use one of two main circuit boards. Each component contains either a Serf board (part 4052B4011) or a Node board (part 4052B4014). Each of these boards has two versions, depending on its date of manufacture. Identify the circuit board by the revision character and part number printed on the board. Illustrations of the four boards follow.

Node Board - Revision 0

The Revision 0 Node Board appears in older Remote Interfaces, Remote Consoles, and Designer's Remote Consoles. It contains one 8-switch DIP switch unit and a set of 14 jumpers. This illustration shows the board as oriented in a Remote Interface.

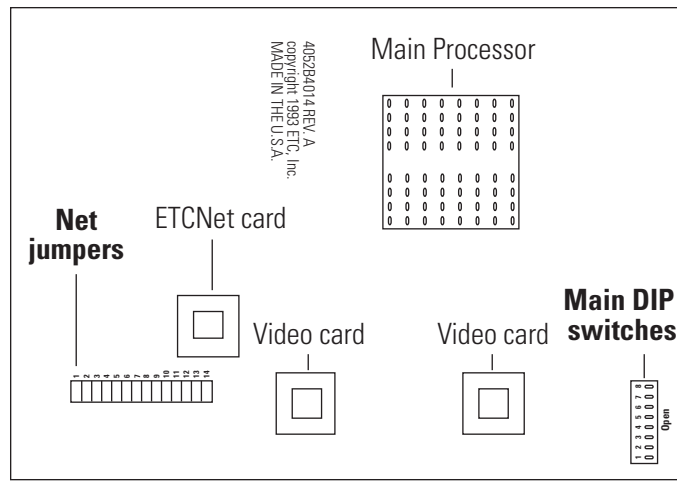


To enable the device for use on the ETCNet network, adjust the settings of a number of jumpers on the circuit board.

1. Locate Net jumpers 1 through 14. (See illustration.)
2. If your network cable is plugged into the BNC connector (ThinNet), install jumpers 9 through 14. Be certain jumpers 3 through 8 are not installed.
3. If the cable is plugged into the RJ45 connector (Twisted Pair) or the flat DB15 connector (ThickNet), install only jumpers 3 through 8. Be certain jumpers 9 through 14 are not installed.
4. Jumper 1 must always be installed. Jumper 2 must always be off.

Node Board - Revision A

The Revision A Node Board appears in newer Remote Interfaces, Remote Consoles, and Designer's Remote Consoles. It contains one 8-switch DIP switch unit and a set of 14 jumpers.

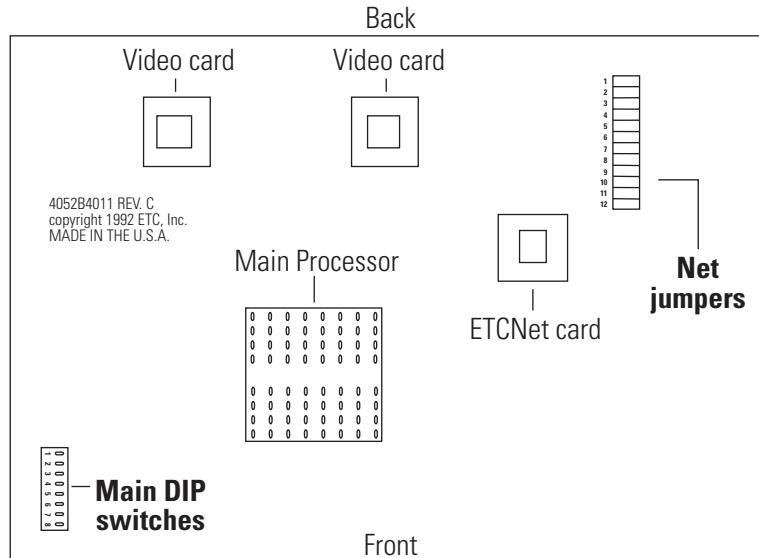


To enable the device for use on the ETCNet network, adjust the settings of a number of jumpers on the circuit board.

1. Locate Net jumpers 1 through 14. (See illustration).
2. If your network cable is plugged into the BNC connector (Thin-Net), install jumpers 1 through 6. Be certain jumpers 7 through 12 are not installed.
3. If your network cable is plugged into the RJ45 connector (Twisted Pair) or the DB15 connector (ThickNet), install only jumpers 7 through 12. Be certain jumpers 1 through 6 are not installed.
4. Jumper 13 must always be off. Jumper 14 should always be installed.

Serf Board - Revision C

The Revision C Serf Board appears in older Obsession consoles and Processor Units. It contains one 8-switch DIP switch unit and a set of 12 jumpers.

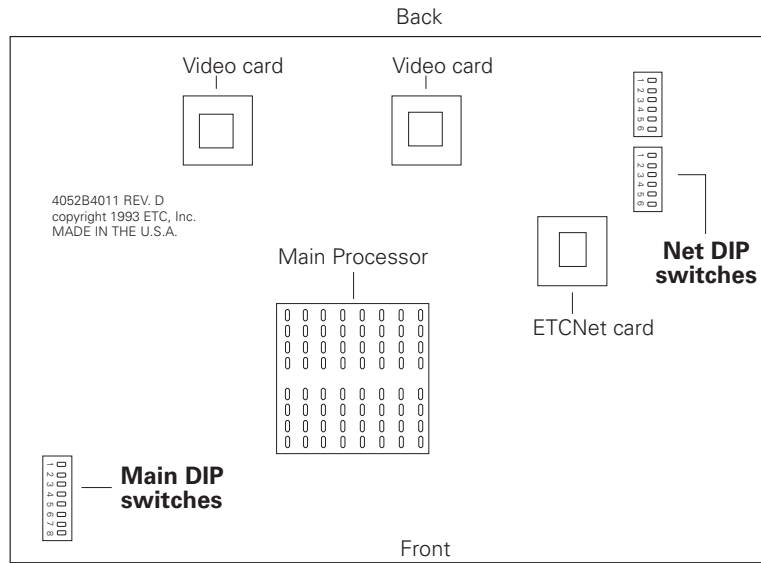


To enable the console for use on the ETCNet network, adjust the settings of jumpers on the console's logic board.

1. Locate Net jumpers 1 through 12, at the back right corner of the main circuit board (near the fans). See illustration above.
2. If your ETCNet cable is plugged into the BNC (ThinNet) connector, install only jumpers 1 through 6.
3. If your ETCNet cable is plugged into the RJ45 (Twisted Pair) connector or the DB15 (ThickNet) connector, install only jumpers 7 through 12.

Serf Board - Revision D or E

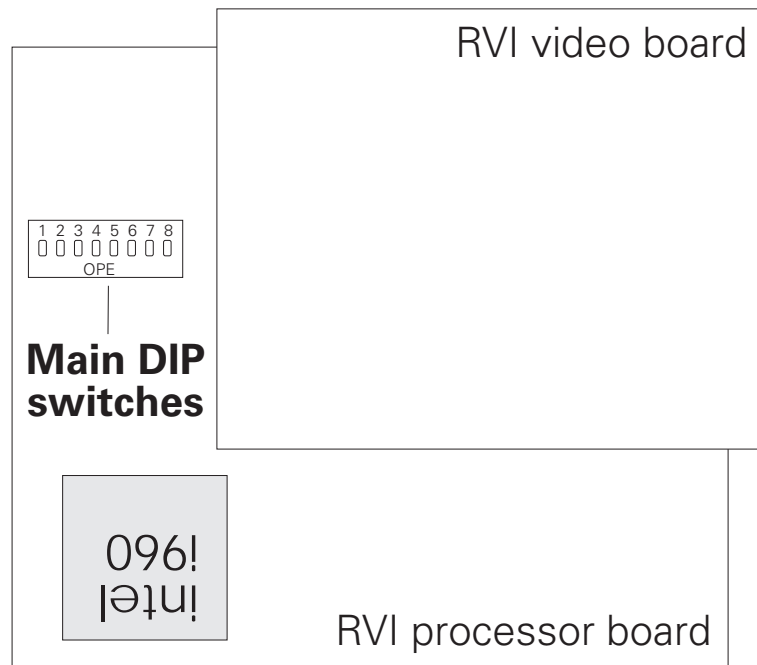
The Revision D or E Serf Boards appear in newer Obsession consoles and Processor Units. They contain one 8-switch DIP switch unit and two 6-switch DIP switch units.



The Revision D and E circuit boards contain no jumpers. Two sets of DIP switches determine ETCNet settings. See page 336 for DIP switch settings.

RVI Board

The RVI processor board is the lower circuit board in the Remote Video Interface. This board contains one 8-switch DIP switch unit. Normally these switches do not need to be changed.



The RVI circuit board contains no jumpers. See page 339 for DIP switch settings.

Obsession Console

Main DIP switch settings - Serf Boards

A set of DIP switches are located inside the console at the front left corner of the circuit board to the left of the fans. The settings of these DIP switches need only be changed if you change the status of a Full Tracking Backup system.

To change the DIP switch settings, raise the top panel and lock it in upright position. Find the switches and adjust the settings as shown on the list below.

Switches are either **On (Closed)** or **Off (Open)**. Obsession does not use DIP switches 2-5. **DIP switch 1 must be Off or the system will not start.**

<u>DIP Switch</u>	<u>Function</u>
1 Off (Open)	Factory Use Only Should always be set
2, 3, 4 & 5	Unused
6 On (Closed) Off (Open)	Console mode on start up Backup (B) Master (A)
7 On (Closed) Off (Open)	Full Tracking Backup Tracking on Tracking off
8 On (Closed) Off (Open)	Network Network installed Network not installed

Additional Net DIP switch settings - Serf Board Revisions D and E

To enable the console for use on the ETCNet network, adjust the settings of the two sets of ETCNet DIP switches on the console's Serf Board. Use a pin, or a similar fine-pointed object, to set the switches.

1. Locate the two sets of DIP switches, at the back right corner of the main circuit board (near the fans). See illustration on page 334.
2. If the ETCNet cable is plugged into the BNC (ThinNet) connector, set the back six DIP switches, labeled **S1**, to **On**. Set the other six to **Off**.
3. If the ETCNet cable is plugged into the RJ45 (Twisted Pair) connector or the DB15 (ThickNet) connector, set the front six switches, labeled **S2**, to **On**. Set the other six to **Off**.
4. Close the face panel and secure it with the screws. Configure ETCNet on the console's DIP switches. (See previous page.)

Remote Interface

Main DIP switch settings - Node Board

A set of DIP switches are located inside the Remote Interface on the corner of the circuit board nearest the power switch. Change the settings of these DIP switches if the Interface addresses DMX512 outputs higher than 1,536.

Open the Remote Interface, find the switches and adjust the settings as shown below.

Switches are either **On (Closed)** or **Off (Open)**. The Remote Interface does not use DIP switches 7 or 8. **DIP switch 1 must be Off and 2 must be On or the Remote Interface will not start.**

<u>DIP Switch</u>	<u>Function</u>
1 Off (Open)	Factory Use Only Normal operation
2 On (Closed)	Factory Use Only Normal operation
3, 4 Off (Open)	Factory Use Only Normal operation
5	Reserved
6 Off (Open) On (Closed)	DMX512 addressing Addresses DMX512 outputs 1-1,536 Addresses DMX512 outputs 1,537-3,072
7 & 8	Unused

Remote Video Interface (RVI)

Main DIP switch settings - RVI board

The RVI processor board is the lower circuit board in the Remote Video Interface. This board contains one 8-switch DIP switch unit. Normally these switches do not need to be changed.

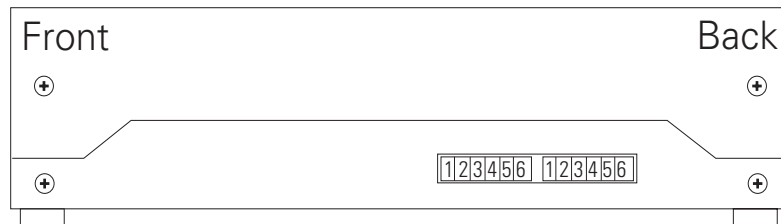
To change switch settings, find the switches (see page 335) and set them as shown below. The RVI checks switch settings when it is turned on. You must restart the RVI for new settings to take effect. Switches are either **On (Closed)** or **Off (Open)**.

<u>DIP Switch</u>	<u>Function</u>
1 On (Closed)	Factory Use Only Normal operation
2 through 5 Off (Open)	Factory Use Only Unused
6 and 7 On (Closed)	Factory Use Only Normal operation
8 Off (Open)	Factory Use Only Unused

ETCNet DIP switch settings

To enable the device for use on the ETCNet network, you adjust the settings of the two sets of ETCNet DIP switches. Use a pin, or a similar fine-pointed object, to set the switches.

1. Locate the two sets of DIP switches, visible through the right side panel of the RVI.
2. If you plug the ETCNet cable into the BNC (ThinNet) connector, set the back six DIP switches to **On** (up). Set the front six to **Off** (down).
3. If you plug the ETCNet cable into the RJ45 (Twisted Pair) connector or the DB15 (ThickNet) connector, set the front six switches to **On** (up). Set the back six to **Off** (down).



Remote Console

Main DIP switch settings - Node Board

A set of DIP switches are located inside the console at the back left corner (near a row of LEDs) of the circuit board to the left of the fans.

To change the DIP switch settings, raise the top panel and lock it into upright position. Find the switches and adjust the settings as shown on the list below.

Switches are either **On (Closed)** or **Off (Open)**. The Remote Console does not use DIP switches 7 or 8. **DIP switch 1 must be Off and 2 must be On or the Remote Console will not start.**

<u>DIP Switch</u>	<u>Function</u>
1 Off (Open)	Factory Use Only Normal operation
2 On (Closed)	Factory Use Only Normal operation
3 Off (Open)	Factory Use Only Normal operation
4 On (Closed)	Remote Console Enables Remote Console interface
5 through 8 Off (Open)	Reserved Normal operation

Designer's Remote Console

Main DIP switch settings - Node Board

A set of DIP switches are located inside the *Designer's Remote Console* (DRC) on the back left corner of the circuit board. Change the settings of these DIP switches if the console addresses DMX512 outputs higher than 1,536.

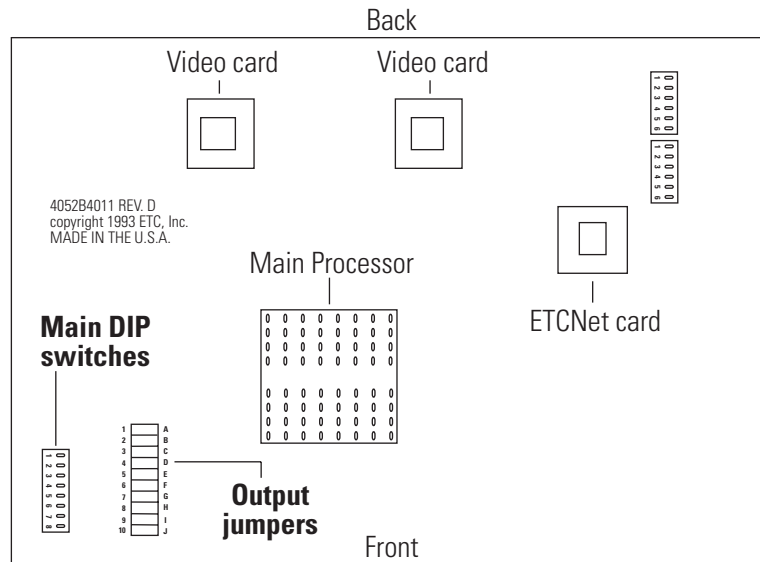
To change the DIP switch settings, open the DRC. Find the switches and adjust the settings as shown on the list below.

Switches are either **On (Closed)** or **Off (Open)**. The DRC does not use DIP switches 7 or 8. **DIP switch 1 must be Off and 2 must be On or the DRC will not start.**

<u>DIP Switch</u>	<u>Function</u>
1 Off (Open)	Factory Use Only Normal operation
2 On (Closed)	Factory Use Only Normal operation
3 & 4 On (Closed)	Remote Console Enables Designer's Remote Console
5 Off (Open)	Reserved Normal operation
6 Off (Open) On (Closed)	DMX512 addressing Addresses DMX512 outputs 1-1,536 Addresses DMX512 outputs 1,537-3,072
7 & 8 Off (Open)	Unused Normal operation

Configuring console for D192 output

To enable the console for use with D192 output, adjust the settings of a set of jumpers on the console's logic board.



Locate the Output jumpers at the front left corner of the main circuit board (near the DIP switches) as shown above. On the Revision D and E boards, these jumpers are labeled **J20**. On Revision C, they are labeled **J16**. On C and D, the jumpers are numbered 1 through 10; on E they are lettered A through J.

Once you have located the jumpers, use the chart below to set the jumpers according to the output you wish your system to generate (DMX512 or D192).

		A/1	B/2	C/3	D/4	E/5	F/6	G/7	H/8	I/9	J/10
Rev C (J16)	DMX512	off	on	on	on	on	off	off	off	off	on
	D192	off	on	off	off	off	off	on	on	on	on
Rev D (J20)	DMX512	off	on	on	on	on	off	off	off	off	on
	D192	off	on	off	off	off	off	on	on	on	on
Rev E (J20)	DMX512	off	on	on	on	on	off	off	off	off	on
	D192	off	on	off	off	off	off	on	on	on	on

Appendix C

Error messages

General errors

An effect is loaded in this submaster

When an effect is loaded in a submaster, most attributes can't be assigned or edited. You may edit the rate.

An effect is recorded in this cue or part

When an effect is loaded in a cue or part, most attributes can't be assigned or edited. You may edit the rate, link, follow, or wait.

Conflicts with DMX port configuration

Multiplex mode must be set appropriately to carry out this action.

Cue number must be in the range 0.1-999.9

Cue numbers must be between 0.1 and 999.9

Dimmer check requires a single dimmer

A dimmer check runs through dimmers sequentially, one at a time. It is not possible to check multiple dimmers simultaneously.

Dimmer is not in multiplex mode

Dimmer must be in multiplex mode to use the **A** and **B** suffixes.

Dimmer not found

When selecting dimmer by label, label must match exactly. Confirm that upper and lower case letters are correct for the dimmer.

Dwell must be Hold if up/down times are Manual

Do not attempt to enter a dwell time if your fades are manually controlled.

Elements list invalid or too long

Element lists may only be 42 characters long.

Error

Appears on the RFU's LCD display to indicate any error.

Illegal with multiple cues selected

Select only a single cue before attempting this action.

Invalid channel number

Channel number entered must be between one and the number of channels designated in the system settings.

Invalid date

Date must be in format MM-DD-YY. Month must be between 1 and 12, day must be between one and the number of days in that month, and year (1992-2091) must be between 00 and 99. The date is separated by dashes.

Invalid dimmer number

Dimmer number entered must be between one and the number of dimmers designated in the system settings.

Invalid page number

Page number must be between zero and 15.

Invalid selection

Selection number must be one of those offered on the menu.

Invalid time

Enter time in format ####, with the first two numbers being minutes (up to 99) and the second two numbers being seconds (up to 59). Times may also be entered in format ##.# with the numbers before the decimal being seconds, and the number after the decimal being tenths of seconds .

Label is too long

Label lengths vary depending on what you are labeling.

Patch labels 5 characters
 Cue labels..... 15 characters
 Effect labels 20 characters
 Group labels 20 characters
 Submaster labels..... 25 characters
 Profile labels..... 25 characters

List sizes unequal

If you are copying lists of items to a new location, both lists must contain the same number of items.

Macro wait time must be terminated by Enter

A **Macro Wait** entry in a macro sequence must be followed by the [Enter] key. Go to Macro display mode and edit macro sequence.

Maximum command line length exceeded

A command line may be up to 200 commands or 1,024 characters long, whichever comes first.

Must be the active cue

You may not update any cue other than the active cue. In Live mode, a selective record or a record to a multipart must be to the active cue.

Not valid in current configuration

You may not change the beginning number of a DMX512 port if the port is multiplexed.

Parts cannot be combined in list

You may not use specific parts of a multipart cue in a list using [Thru], [+] or [-]. Only whole cues (including multipart cues) may be included.

Resulting elements list is too long

When Obsession generates element lists using a one-to-one channel assignment, the element lists created may not use more than 42 characters each.

Show not found

When you select a show from the hard disk by name, be certain the name you enter matches the show's name exactly. Check upper and lower case letters and make sure they are correct.

Stage levels may change - Please confirm

When you update a submaster, set the submaster's slider to **10** to avoid possibly changing levels on the stage. If an output's level is higher than the current level of the slider, Obsession lowers the output level to match the slider. This allows the submaster to recreate the levels on the stage at the time of the update any time the submaster slider is returned to its setting at the time of the update.

Step time must be in seconds or tenths

You may not set step times in hundredths of a second.

Too many cues/parts to put on wheel

The channel you have selected appears in more than 1,536 cues and parts. The wheel can control a maximum of 1,536 elements.

ETCLink errors

ETCLink provides a wide variety of advisory messages, including information regarding your dimmers, racks, system, data, ports, and loads. These are either critical messages or secondary messages.

Obsession displays all messages in yellow on the Dimmer Status and About Dimmer screens. Possible error messages follow:

Critical errors

Dimmer # has shut down due to an overtemperature condition. The dimmer will remain shut down until the condition is cleared at the dimmer rack. Use About Dimmer to determine the rack number for the dimmer.

Rack # DMX port A/B failure. Either there is a problem with the DMX cabling/connections between the console and the rack, or the rack has been configured incorrectly.

Rack # A/B/C phase input (main) voltage is in error at #V.

Rack # input (main) frequency is out of spec at #Hz.

Rack # has shut down due to fan failure or other interruption of air flow. Please check the rack, looking for dirty air filters, blocked air passages, or fan failure.

ETCLink has failed. Please check cabling and connections. If the problem persists, please call a qualified service technician.

Rack # processor error.

Secondary Errors

Dimmer # has a load, but the recorded load is zero. Because the recorded load is zero, the Dimmer Monitoring system is unable to determine whether the dimmer has a load error.

The load on dimmer # has changed. Because the dimmer is not at a output level high enough to determine its level, the Dimmer Monitoring system is unable to determine the size of the load. To correct the problem use [Check Loads] to determine the size of the load change.

The load on dimmer # has changed from #W to #W. A decreased load indicates lamp failure. An increased load indicates that a lamp has been added since the last [Record Load]. Correct the problem or, to prevent further error messages, use [Clear Load] or [Record Load].

DC output has been detected on dimmer #. If this condition persists, it may harm the connected load. Please check the connected load.

An SCR has failed On in dimmer #. The dimmer should be replaced.

An SCR has failed Off in dimmer #. The dimmer should be replaced.

Dimmer # output has failed on. The dimmer should be replaced.

Dimmer # output has failed off. Either the circuit breaker has tripped or the dimmer needs to be replaced.

Dimmer #'s load has failed. The most likely cause is a lamp failure. Either replace the lamp or, to prevent further error messages, use [Clear Load] or [Record Load].

Data error on Rack # DMX port A/B. Please check DMX cabling and connections between the console and the rack.

Rack # ambient temperature is high at # degrees F. The temperature does not yet exceed acceptable operational limits, but the rack should be checked. Please check the cooling/ventilation in the dimmer room.

Rack # ambient temperature is low at # degrees F. Please check the cooling/ventilation in the dimmer room.

Rack # ambient temperature is outside the acceptable operating range at # degrees F. Please check the cooling/ventilation in the dimmer room immediately.

The phasing in Rack # is not allowed. The rack has been shut down. Please check the input power service.

Rack # DMX port A/B is now operating correctly.

Rack # phase A/B/C voltage has returned to acceptable levels.

Rack # airflow has been restored.

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