LEAP FROG 48/96 QUICK START GUIDE

Leap Frog 48/96 Quick Start Guide

Welcome to the Leap Frog 48/96 Quick Start Guide. This document is intended to get you started using your new Leap Frog desk – for full information, please see the User Manual which can be found on the Resource CD included with the desk.

Getting Started

Before you power up the desk, it is essential to attach all the peripherals you will be using.

The desk has support for USB peripherals such as a Keyboard and Mouse and a VGA monitor (or touch screen).   In addition, you should connect the DMX or Ethernet cables for controlling your lighting rig.

These must be connected before powering up, as subsequent connection could result in software or hardware malfunctions.

Once you have connected all the peripherals you require, power on the desk using the switch on the rear panel. If you see no immediate response, check that the power switch is set to ON, and that the IEC lead is firmly attached to the external power supply. The desk will boot up and you will be presented with the desk software.

Controlling Dimmers

The default set up for the desk gives you control of dimmers 1 to 48 (patched to DMX addresses 1 … 48 on Universe 1) on the generic preset faders 1 to 48 (or dimmers 1 to 96 on the Leap Frog 96 desk).

This can be defined differently, but for now we will assume you are working with the default settings.

Check that the GRAND MASTER fader is at the top (100%) and that the A and B MASTER faders are also at the top. The LED in the PRESET CONTROL button should be lit in "A Faders B Stored", indicating that the A MASTER is controlling the level of the Preset Faders. Moving the Preset Faders will bring their channels on, and you will see the result on stage.

If you press the PGM WIN key you can also see the results in the Program Window on the monitor screen (see later in this guide). You can bring the A MASTER fader down at any time to inhibit the level of the Preset faders.

Programming

Once you have set up a scene that you like you can then record that state into a memory or a submaster. Memories are played back sequentially in a theatre style (Cue 1 GO, Cue 2 GO, etc). Submasters are mixed together by raising the faders, useful for live events or unpredictable shows.

Memories

Recording a Memory

If you aren't already in the Memories Window, press the MEMORIES key. This will bring the Memories Window up onto the monitor, and Memory 1* will be highlighted as the "Next" memory.

As a rule any changes you are making on the monitor or LCD will happen to the highlighted "Next" memory, so follow the yellow bar on the monitor – the green bar simply shows the current memory.

Now select the memory number to be programmed, if different to the one already selected. This can be done using the + and – keys, or by pressing ENTER then using the MFKs to enter a numeric value.

To store the memory, simply press the RECORD key. The 1* will change to a 1 (the * indicates that the memory is unprogrammed) and fade times will appear for the parameters you have recorded.

The Next memory automatically increases to select another memory.

Subsequent memories can then be set up and recorded using the same method.

Adjusting Fade and Delay Times

By default, a memory will receive a 3 second fade time on the intensity parameters (dimmers) and a 0 second fade time on all moving light attributes (colour wheels, gobo wheels, etc). These are displayed in the Memories Window in the relevant columns (note that only one of Colour, Beamshape and Position times are shown at any one time. Press the relevant key to switch the monitor to displaying these times).

The fade and delay times can be adjusted by moving the cursor to the required field in the Memories Window and using the control wheels, or by moving to the field on the Memories Window, pressing the ENTER key, typing in the time using the MFKs and pressing ENTER to confirm. See the Memories chapter in the User Manual for full details of adjusting times.

Editing Memories

You can make changes to a memory by loading it back into the Program Window. To do this, press the MEMORIES key to display the Memories Window. Select the memory to be edited, then press the LOAD key. The Load Options Window is displayed on the monitor:
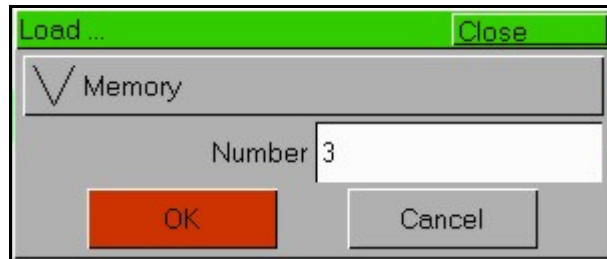
Select the [OK] button to load the memory into the Program Window. The levels from this memory will be output. Now you can make changes using the preset faders and fixture controls, and press the UPDATE key. The Update Options Window is displayed on the monitor. Select the [OK] button to complete the edit.

Naming Memories

Each memory can have a name associated with it. These are displayed in the memories window and can be useful for reminding you of the contents of a particular memory.

To set the name, press the MEMORIES key to display the Memories Window. Select a programmed memory to be named. Press the NAME key. The Name Window is displayed on the monitor:
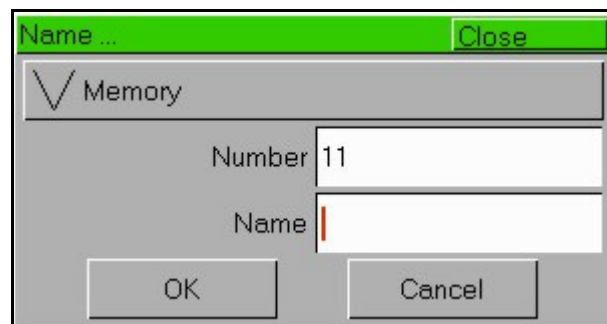

Use the MFKs to enter the memory name as required, then select the [OK] button to complete the operation.

Playing Back Memories

Before playing back the programmed memories in the stack, it is important to clear the Program Window by pressing the CLEAR button. This removes any unrecorded commands and sends fixtures to their default values (assuming that no Submasters are currently outputting).

The Playback X controls on the front panel together with the Memories Window are used to play back the programmed memories in the memory stack.
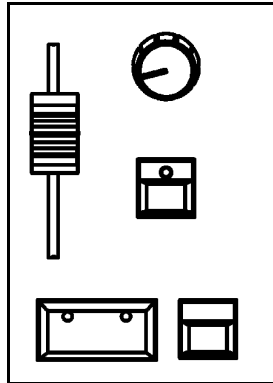
Starting the Show

Set the Playback X MASTER and GRAND MASTER faders to full. Ensure that BLACKOUT is not active. Check that the OVERRIDE control is in the central position.

Select the first programmed memory using the arrow keys and press the GO button. The memory fades up according to it's programmed fade and delay times.

Selecting the Next Memory

After a cue is run, the next memory will automatically move on to the next programmed memory. To select a different memory to be output next – move the cursor to the Next memory number field, then use the + and – keys or the UP and DOWN arrow keys to select the next memory to be output. The Next memory to be output is highlighted by a yellow bar.

Using the GO Button

When a memory is triggered by the GO button, the Intensity, Colour, Beamshape and Position fades will occur in the times programmed. If necessary, all fades may be controlled by the OVERRIDE and PAUSE controls on the front panel.

Submasters

Once you have set up a scene (or part of a scene) that you like you can then record that onto a submaster.

Recording a Submaster

Press the SUBMASTERS key to display the Submasters Window, then select the submaster number to be programmed by pressing the relevant flash button under the submaster.

Note that there are 20 pages of submasters available so check the page indicator is on 1 before continuing.

To store the Submaster, simply press the RECORD key. The Submaster LCD will indicate that a scene is stored onto the submaster, and the Program Window will be emptied.

Adjusting Fade Times

Default fade times for Intensity, Colour, Beamshape and Position are defined in Desk Setup, and can be adjusted if required via the Submasters Window.

The fade times can be adjusted by moving the cursor to the required field in the Submasters Window and using the control wheels, or by moving to the field on the Submasters Window, pressing the ENTER key, typing in the time using the MFKs or external keyboard and pressing ENTER. See the Submasters chapter in the User Manual for full details.

Editing Submasters

The easiest way to Edit a submaster is simply to use the Update function. With the submaster active, make the changes you require using the preset faders and fixture controls, then press Update.

The MFKs will list all of the currently active submasters and memories which can be updated, as well as any palettes. Select the Submaster to update, and press OK. Clear the programmer and the update is complete.

Naming Submasters

A submasters name is displayed on the LCD above it. To set the name, press the SUBMASTERS key to display the Submasters Window, then select a programmed submaster to be named. Press the NAME key and the Name Window is displayed on the monitor:
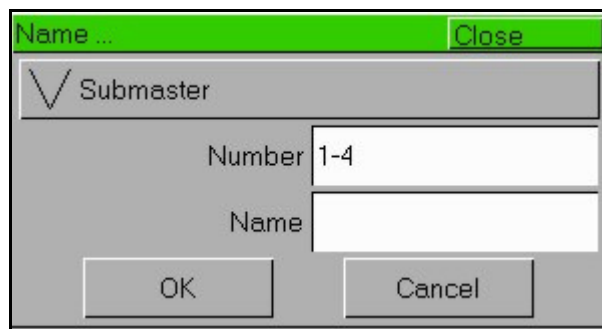
You can now use the MFKs to enter the submaster name as required and press [OK] to complete the operation. The name will be displayed on the Submaster LCD, above the fader.

Playing Back Submasters

Before playing back submasters, it is important to clear the Program Window by pressing the CLEAR button. This prevents any unprogrammed data from affecting the outuput of the submasters.

Raising a submaster fader will bring the data programmed on the submaster to the outputs. For moving lights, the submaster will trigger at 5% a crossfade to the new values. For generic lights, the submaster fader provides intensity control.
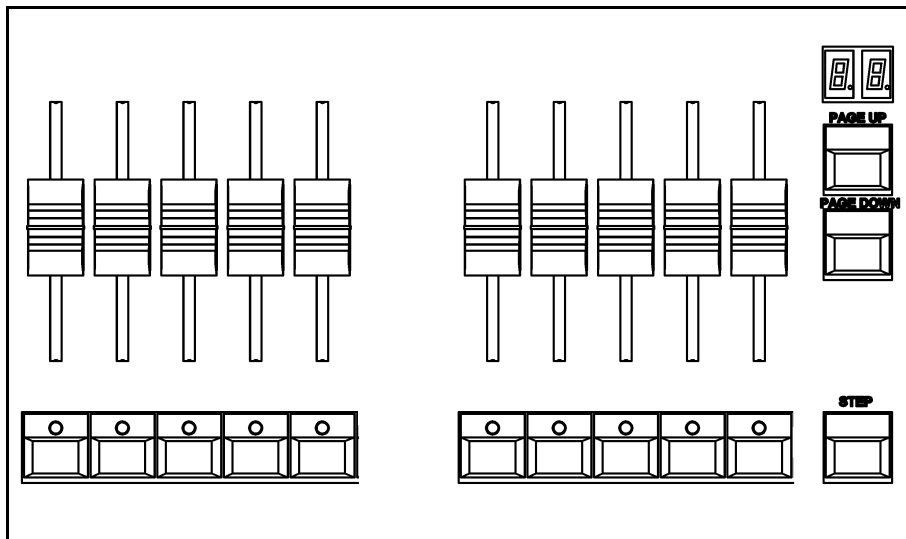
Page Overlay on Submasters

It is possible to output scene or chase data from several submasters on different pages at the same time provided that they are not controlled by the same physical fader.

If the submaster page is changed while any of the submaster faders are up, or any of the SUBMASTER FLASH buttons are being held down, the fader or button remains in control of the original data and the outputs for the original submaster are held.

The new scene, chase or transferred memory associated with the fader or button is not made available until the fader is brought back down to zero or the flash button is released.

Program Window

The Program Window is central to the programming functionality on the Leap Frog 48/96 desk.

It is recommended (but not mandatory) that the Program Window is displayed on the monitor screen when setting up memories, submasters or palettes.

To display the Program Window on the monitor press the PGM WIN key. As you adjust dimmer levels, select fixtures and adjust their parameters with the control wheels, or by other methods, the corresponding information is shown in the Program Window.

The dimmer and fixture parameter data displayed in the Program Window can then be recorded to memories, submasters or palettes as required.

The top part of the Program Window shows the dimmer channels. Tagged dimmer channels are shown in red text, untagged dimmer channels in white text.

The currently selected fixtures are highlighted in yellow. Fixture parameters which are tagged have a green background, those that are untagged have a grey background.

Program Window												Close

Percent   Smart Tag

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
100	100	100	100	100	100								48	49	47	47	48	47					
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																		30	32	32	33	30	28

	Intensity	Pan	Tilt	Color 1	Color 2	Iris	FrostFX	Prism	Focus	Gobo1	Gobo2<>	G2 <<
Goldenscan HPE [101]	100	50	90	59	0	100	0	0	100	95	0	0
Goldenscan HPE [102]	100	50	90	59	0	100	0	0	100	95	0	0
Goldenscan HPE [103]	100	50	90	59	0	100	0	0	100	95	0	0
Goldenscan HPE [104]	100	50	90	59	0	100	0	0	100	95	0	0
Goldenscan HPE [105]	100	50	90	59	0	100	0	0	100	95	0	0

Setting Up the Desk

Now you have grasped the basics of the desk, it's time to venture into the Setup area of the desk. Setup is used for all of the major functions on the desk, such as clearing out the current show, loading in a new one, or adding moving lights to your show.

To get into Setup, press the SETUP key. The Setup Window is displayed on the monitor screen, with the Patch option selected as default:
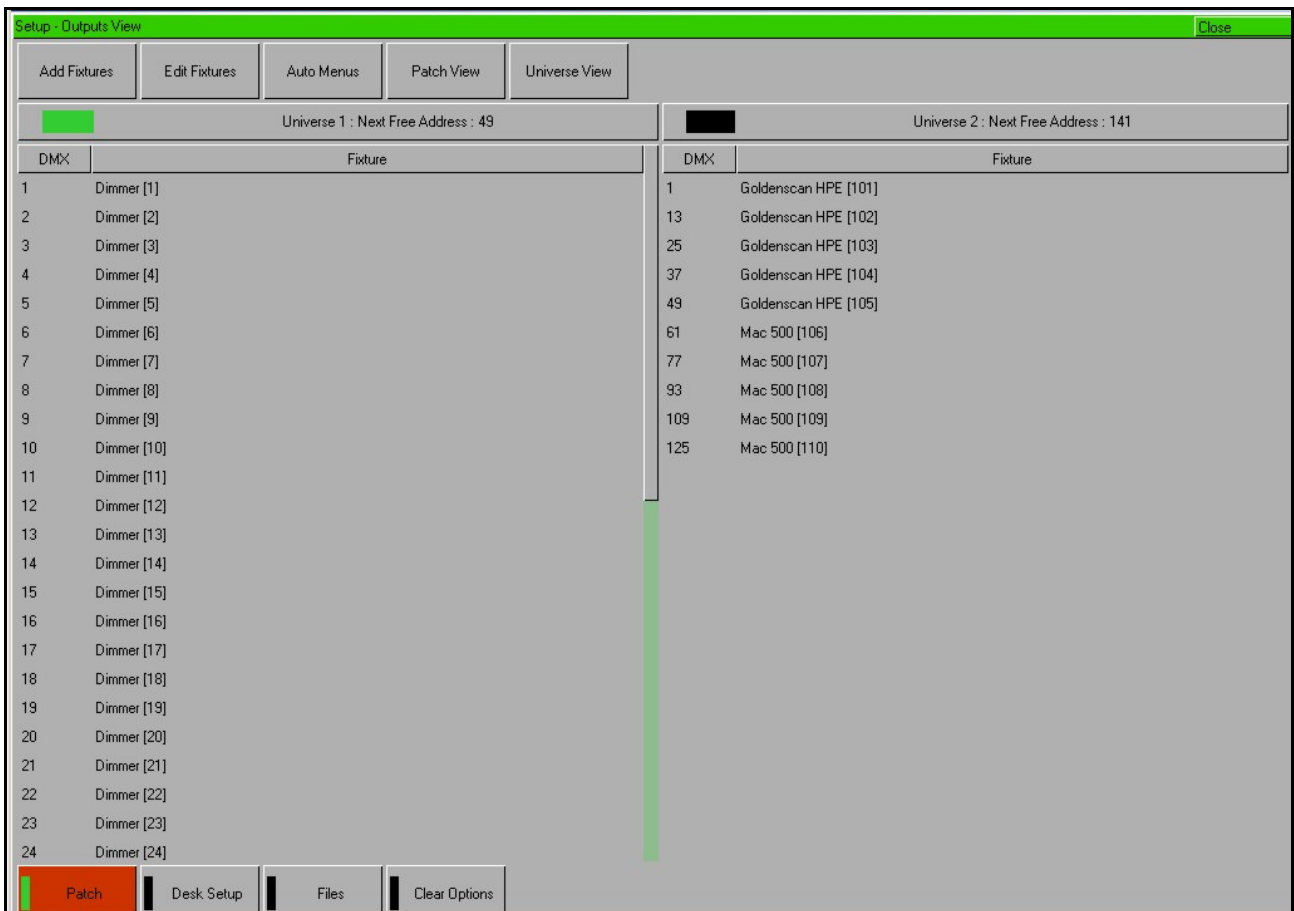
Setup gives you access to the core settings for the desk such as the patch, default fade times and output settings. As such you shouldn't normally need to enter the Setup area during a show.

It is, however also used for saving and loading of show files and updating the desk software, so you should be familiar with it even if you are only using generic lights.

Adding and Patching Fixtures

Once in Setup, you can patch in your moving lights. Moving Lights need to be set up on the desk as the desk does not automatically know what you are using.

The following operations may be be performed using the MFKs on the front panel or via the popup windows on the monitor or a combination of the two methods, as preferred.

You need three pieces of information about your moving lights before you start the process:

• The fixture manufacturer and model number - these are generally found on the light itself.

• The mode you wish to operate the moving light in. This has to be set on the moving light itself, and match on the desk – check the user manual of the light for full details.

• The DMX address of the light. This is basically the lights identifying information within your lighting system, and must be unique for each light you wish to control. Moving lights generally take up a number of channels, sometimes as many as thirty, so consult the moving lights manual before setting the DMX address.

Once you have this information you are ready to set up your fixtures…

Selecting a Fixture – Manufacturer, Fixture Type and Mode

Ensure you are in Setup mode, and that the Setup LED is lit.

Now press the [Add Fixtures] MFK.

Select the first letter of the fixture manufacturer (eg M) and then the manufacturer (eg MARTIN) using the MFKs.

The MFKs and monitor then display a list of fixture types for that manufacturer. Note that some manufacturers fixtures are spread over multiple pages, and you may need to use the Page function to find the fixtures you are using.

Select the required fixture type (eg MAC 500) using the MFKs, and then select the Mode (eg Mode 4).

Setting the DMX Start Address

Once you have selected the required fixture type (eg MARTIN MAC 500 Mode 4), you can set the DMX start address for the fixture(s):

Select the DMX universe (1-4) and enter the required start address using the MFKs or directly into the field on the popup window on the monitor.

To patch to the next available address in the selected universe use the [Next Address] MFK or soft button in the window.

Press ENTER to confirm.

Assigning Fixture Type to MFKs

Having selected the required fixture type and specified a DMX start address, you now tell the desk where you would like these fixtures to be. Press the MFK for the fixture you require. The LCD above it will change to show the fixture assigned to the MFK and the DMX address for this fixture. There are 10 pages of 20 fixtures available.

When you have assigned the fixture type to the required fixture selection key(s), press ENTER to return to the Patch options.

Note – Fixture Types

The complete Zero 88 Fixture Library is stored on the desk, but it is also possible to load additional fixture types from memory stick. If the fixture type you require is not in the fixture library on the desk you can import the fixture type – see Setup chapter of the User Manual for full details.

Auto Menus

The desk can generate automatic groups, palettes and macros based on the different fixture types that have been assigned.

To generate any or all of these items, press the [Auto Menus] MFK, then press [Create Auto Groups], [Create Auto Palettes] or [Create Auto Macros] MFK.

For further details see the Setup chapter of the manual.

Desk Setup

The Desk Setup function allows you to configure or customise the settings on the desk to your own requirements.

Desk Setup is divided into a number of different sections which are accessed by pressing the corresponding MFK or soft button on the monitor.

A summary of the Desk Setup options is provided below. For full details of the various options refer to the Setup chapter in the User Manual.

- **Displays** – Adjust the brightness and contrast of the Main LCD and other LCDs on the front panel; calibration of external touch screen monitor; screen timeout.

- **Peripheral** - Allow mouse or trackball to control pan and tilt parameters; adjust control wheel sensitivity.

- **Inputs** – Set up SMPTE and MIDI Timecode; Set CAN mode; MIDI Notes and Remote Switches configuration.

- **Outputs** – Map DMX universe to the physical DMX outputs on the desk.

- **Behaviour** – Confirm Overwrites; Recovery Mode; Preset Mixing; Keep Parameters Separate options.

- **Memory Defaults** – Set up the default delay and fade times for each attribute (Intensity, Colour, Beamshape, Position); Move on Dark parameters.

- **Submaster Defaults** – Set up default options for flash button action, trigger level and attribute fade times.

- **Set Date** – Set the date on the desk.

- **Set Time** – Set the time on the desk.

Saving Shows

The Leap Frog 48/96 desk saves the show automatically to its internal memory at regular intervals. External backups of the show data can be made to a USB Storage Device (eg memory stick).

Connect your storage device to one of the USB ports on the desk. If using an external floppy drive, remember to insert a floppy disk into the drive.

Press the [Files] MFK or select the [Files] button on the Setup Window.

Press the [Save Show] MFK or select the [Save Show] button on the monitor. The Save Show window is displayed on the monitor. Select the required Destination Device, by pressing the relevant MFK. If you do not see your device immediately, press Refresh.

Now you can enter a name for the show file, using the MFKs like a mobile phone text message. This name will be used as the file name on the destination device, so ensure it is unique and easily identifiable. Once you have entered the name, press ENTER, then press the [OK] MFK to save the show.

Loading Shows

Loading a show file will clear any existing show data from the desk so ensure that you have backed up your previous show before you load another one onto the desk.

To load a show, connect the storage media to a USB port on the desk. If you're using an external floppy drive, remember to insert the floppy disk into the drive.

Press the [Files] MFK, then press the [Load Show] MFK The Load Show window is displayed on the monitor. Select the required source device, using the MFKs.

A list of show files found on the selected device is displayed in the window (this may require you to use the Page Function to locate your show, if a lot of files are found on the disk). Select the required show file from the list, then press the [OK] button to load the show.

Clear Options

This section of Setup allows you to clear (delete) various components which make up the show file (memories, submasters, groups, palettes etc.)

There is also a Reset Desk option which clears the show completely and resets the desk setup items and DMX patch to factory defaults.

Exiting Setup

Once you have finished making changes to the setup, press the SETUP key to exit setup.

Controlling Fixtures

Once you have added your fixtures to the desk, you are ready to start controlling them.

Selecting Fixtures

Press the FIXTURES key. The MFKs become fixture selection buttons and the LCDs above the keys indicate what fixture has been assigned to which MFK. Press the MFK to select the fixture; press it again to deselect the fixture. Note that you can multi-select fixtures by holding the first fixture button down whilst tapping the last fixture button (all intermediate fixtures will be selected).

Homing Fixtures

The easiest way to see which fixtures in the rig you are controlling is to 'home' them. This sets their parameter values to the Home values defined in the Edit Fixtures table in Setup. Typically these are position (Pan and Tilt) to 50%, the dimmer to 100% with an open white beam (shutter open, no gobos or effects).

With your fixtures selected, press the HOME key. This sends all the parameters of the selected fixture(s) to their home values and automatically tags the fixture parameters.

Controlling Fixture Parameters

Each fixture type has it's own set of parameters (intensity, color, gobo, pan, tilt etc.) which are classified or grouped together into different attributes (Colour, Beamshape and Position). Once a fixture has been selected, the attribute buttons and control wheels can be used to adjust the parameter output levels as required.

Controlling Intensity

The Intensity parameter of a fixture is adjusted by control wheel. First select the fixture(s) required as described above and then press the POSITION key (if not already selected).

The intensity parameter is assigned to the second finger wheel. Use the control wheel to adjust the intensity level as required. The output value is shown on the Wheel LCD above the corresponding control wheel.

Tip – No Intensity Output ?

If the intensity output levels do not change when you adjust the intensity parameter using the wheel, check that the GRAND MASTER fader is at full and the BLACKOUT button is off. If the selected fixture(s) have a Shutter parameter, check that the shutter is open.

Controlling Colour, Beamshape and Position Parameters

The colour, beamshape and position parameters of the selected fixture(s) are controlled using the control wheels. First select the required fixture(s) and then press one of the attribute keys (COLOUR, BEAMSHAPE or POSITION).

The corresponding parameters for the fixture(s) are assigned to the control wheels and are indicated on the Wheel LCD.

If the fixture has more than three controllable parameters for the selected attribute, press the attribute key again to select the next group of parameters.

Tagging Parameters

On the Leap Frog 48/96 desk fixture parameters must be 'tagged' for them to be recorded.

The tag status of each fixture parameter is indicated on the Wheel LCD (inverse video shows tagged) and in the Program Window by it's background colour (green shows that the parameter is tagged).

If a parameter's value is changed by moving the control wheel, homing the fixture, applying a palette or directly in the Program Window, it will be tagged automatically.

It is possible to tag and untag fixture parameters manually by holding down the CLEAR key and moving the corresponding control wheel or fader.

Palettes

The Leap Frog 48/96 desk provides the user with four sets of 200 palettes. The palettes are stored under the nominal headings of Colour, Beamshape, Position and Effects. When an attribute has been selected last eg COLOUR key was pressed and the wheels are showing Cyan, Magenta and Yellow parameters, the MFKs display the Colour palettes.

Palette Windows

Each set of palettes has it's own palette window. To display a palette window on the monitor, hold down the SHIFT key and then press the appropriate attribute key (COLOUR, BEAMSHAPE, POSITION or EFFECTS). The palette window contains a soft button for each of the 200 palettes.

Colour Palettes   Close

1 C [White]	2 C [Red]	3 C [Orange]	4 C [Yellow]	5 C [Green]	6 C [Blue]	7 C [Violet]	8 C [Cyan]	9 C [Magenta]	10 C [Pink]
11 C [Blue 108]	12 C [CTC 5500-2900K]	13 C [Cyan]	14 C [Green]	15 C [Green 206]	16 C [Magenta]	17 C [Pink 312]	18 C [Red]	19 C [Red 308]	20 C [UV]
21 C [Violet]	22 C [White]	23 *	24 *	25 *	26 *	27 *	28 *	29 *	30 *
31 C My Goldenscan Palette	32 *	33 *	34 *	35 *	36 *	37 *	38 *	39 *	40 *
41 *	42 *	43 *	44 *	45 *	46 *	47 *	48 *	49 *	50 *
51 *	52 *	53 *	54 *	55 *	56 *	57 *	58 *	59 *	60 *
61 *	62 *	63 *	64 *	65 *	66 *	67 *	68 *	69 *	70 *
71 *	72 *	73 *	74 *	75 *	76 *	77 *	78 *	79 *	80 *
81 *	82 *	83 *	84 *	85 *	86 *	87 *	88 *	89 *	90 *
91 *	92 *	93 *	94 *	95 *	96 *	97 *	98 *	99 *	100 *

Available	Not Available	Unprogrammed

Recording Palettes

Programming a palette is simple. Set up the fixture outputs as required, ensuring that the correct parameters are tagged in the Program Window.
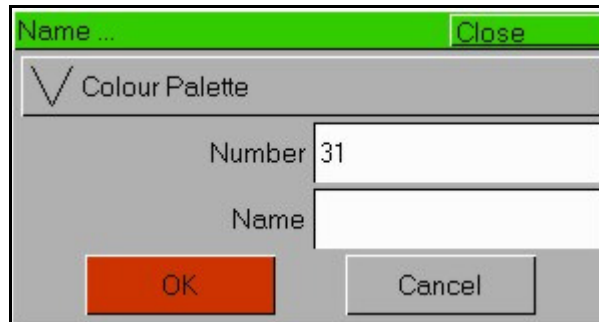
Press the COLOUR, BEAMSHAPE or POSITION key to make the MFKs palette selection keys. To store the palette, press and hold down the corresponding palette MFK for two seconds. The LED in the palette MFK is lit when the palette has been recorded.

Note – Recording Palettes

Only the tagged fixture parameters of the selected attribute (eg Colour) are recorded into the palette.

Naming a Palette

Palettes can have a name, which is displayed on the LCD and in the Palette window. To set the name, display the appropriate palette window on the monitor. Select a programmed palette to be named. Press the NAME key. The Name Window is displayed on the monitor:

Use the MFKs or external keyboard to enter the palette name as required, then select the [OK] button to complete the operation.

Outputting a Palette

Select the required fixture(s). Press the COLOUR, BEAMSHAPE or POSITION key to make the MFKs Palette Selection Keys. Use the PAGE UP or PAGE DOWN key to select the required page, if necessary. To output the palette, press the Palette MFK and the data will be output for the selected fixture(s).

Note – Outputting a Palette over Time

Holding down the TIME key and pressing a palette MFK will crossfade to the palette output values in the internal Fade Time. The internal Fade Time can be found and adjusted on Special Page 1 of the MFKs.