

LIGHTFACTORY

**QUICK START
GUIDE**

V1.2

**Copyright © 2004 - 2007 Dream Solutions Ltd
Auckland, New Zealand**

LIGHTFACTORY QUICK START GUIDE

The software described in this book is furnished under a license agreement and may be used only in accordance with the terms of the agreement.

COPYRIGHT NOTICE

Copyright © 2004 - 2007 Dream Solutions Ltd.

All Rights Reserved.

This document may not, in whole or in part, be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine-readable form without prior consent in writing from DREAM SOLUTIONS LIMITED, of Wilkinson Way, Browns Bay, Auckland, New Zealand.

ALL EXAMPLES WITH NAMES, COMPANY NAMES, OR COMPANIES THAT APPEAR IN THIS BOOK ARE IMAGINARY AND DO NOT REFER TO, OR PORTRAY, IN NAME OR IN SUBSTANCE, ANY ACTUAL NAMES, COMPANIES, ENTITIES OR INSTITUTIONS. ANY RESEMBLANCE TO ANY PERSON, COMPANY, ENTITY OR INSTITUTION IS COINCIDENTAL.

DISCLAIMER

Every effort has been made to ensure the accuracy of this manual. However, DREAM SOLUTIONS LIMITED makes no warranties with respect to this documentation and disclaims any implied warranties of merchantability and fitness for a particular purpose. DREAM SOLUTIONS LIMITED shall not be liable for any errors or for incidental or consequential damages in connection with the furnishing, performance or use of this manual or the examples herein. The information in this document is subject to change without notice.

INSTALLING LIGHTFACTORY

This chapter tells you how to set up a PC to run LightFactory, how to install the software, set up any required hardware, and run LightFactory for use in any lighting situation.

INSTALLATION PRE-REQUISITES

Before installing LightFactory, you need to ensure your PC meets the following minimum specifications.

- ◆ Pentium III or higher processor
- ◆ Minimum 128Mb Ram
- ◆ 300Mb of free hard drive space
- ◆ Minimum 1024 x 768 video display
- ◆ Windows 98, ME, 2000 or XP Operating system

It is also highly recommended that you attach an optical mouse with a working scroll wheel.

To produce DMX output from LightFactory you must also have installed some form of DMX hardware. See “Installing DMX hardware” (Page 42 of the LightFactory User Guide) for more information on this topic.

INSTALLATION PROCEDURE

Installing LightFactory is a simple process, and requires no special knowledge. The installation procedure is almost completely automated and self-explanatory.

LightFactory can be obtained on CD or by downloading the product off our website.

DOWNLOADING LIGHTFACTORY

To download the latest version of the software go to the LightFactory website, click on the products page and then click on downloads.

Alternatively you can go directly to this page by visiting;

<http://www.lifactory.com/download.html>

INSTALLING LIGHTFACTORY

To install LightFactory:

1. Find the Setup.exe file you have downloaded from the internet or on the CD that come with the product. If you are installing off a CD the Setup.exe will be found in the root directory of the CD. Some CD's may start this setup program automatically when the CD is placed into the drive.



2. Double click on the Setup.exe and the opening page of the setup will be displayed.



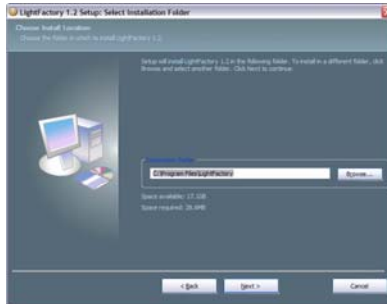
3. Click on the “**Next**” button to begin the setup procedure. The License Agreement window appears:



Please read this license agreement carefully (A copy of this can be found at the front of this user guide) before continuing with the installation.

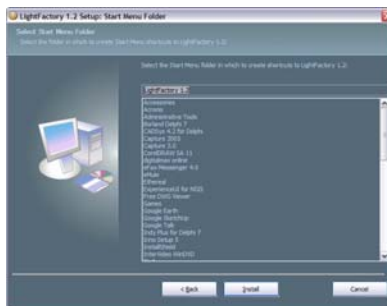
4. If you accept the License Agreement, click on the **“I Agree”** button. If you do not accept the terms of the agreement, click **“Cancel”**. This will abort the installation.

Result: The **“Select Installation Folder”** window will be displayed.



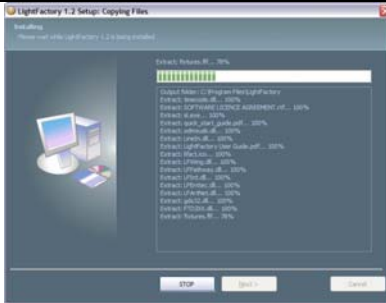
5. Accept the default destination folder (recommended), or click the **“Browse...”** button to browse for a replacement folder. When you are satisfied with the displayed folder, click **“Next”** to continue.

Result: The **“Start Menu Folder”** window appears.



6. Accept the default destination start menu folder, or type the name of the folder you want to use. When you are satisfied with the start menu folder, click **“Install”** to begin the install process.

Result: The **“Copying Files”** window appears and the wizard will begin installing LightFactory.



7. Once complete click on the **“Next”** button to finish the install process.

Result: The **“Installation Complete”** window will appear.



8. Click **“Close”** to close the window. Keep the **“Run LightFactory 1.2 now”** checked to start LightFactory when the install closes.

STARTING LIGHTFACTORY

After the installation is complete, you can begin using the software. If you did not select to start the software at the end of the install you can start LightFactory either from the Windows Start menu or from the icon on your desktop.

- ◆ From the Windows Start menu: Select the LightFactory item.
- ◆ From your desktop: Double-click on the LightFactory icon

Result: The LightFactory splash screen will appear and the software will begin to load.



LIGHTFACTORY



Note: The first time the software runs it will take slightly longer to start-up. This is because it must create the database that is used for saving show information.

During start-up the software will check for a valid registration code. If the software is not registered then the following dialog will be displayed.



Figure 1: Unregistered System Screen

If you wish to use the software unregistered (Software will function normally but no DMX output will occur) click on the "Continue" button or press enter on the keyboard.

To purchase the software on-line or find a local reseller of the software click on the "**Purchase**" button provided. You must be connected to the Internet as this will open your default web browser and redirect you to the LightFactory web site.

To enter a valid registration code received with purchase of the software click on the "**Register**" button. The following window will allow you to enter these details into the software.

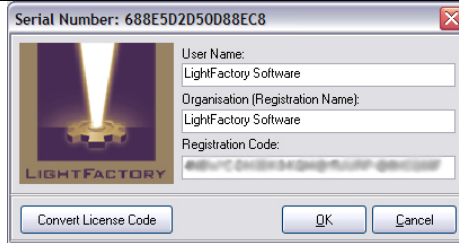


Figure 2: Registration Screen

Registration of the software is based on the “**Registration Name**”, “**Generated Serial Number**” and the “**Registration Code**”. The “**User Name**” field is optional and not used to authenticate a valid registration.

Enter your registration details and click on the “**OK**” button to continue loading the software. A dialog will inform you if incorrect details have been entered and allow three attempts to correct the mistake before returning you to the previous window.

Click on the “**Cancel**” button at any time to abort this process. Registration details can also be entered through the *System Properties* in the *File* menu once the software has started.

After the software has loaded, the main window (Command Interface) will open. You are now ready to use the software. See the “Quick Start” section (Page 9) to begin finding your way around the software.

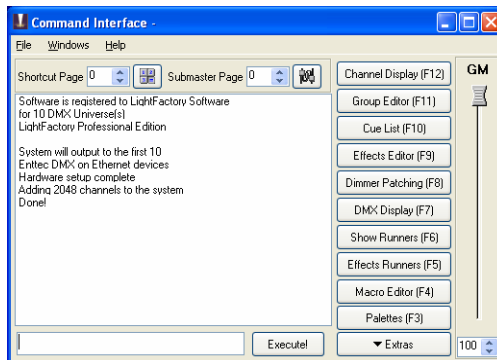


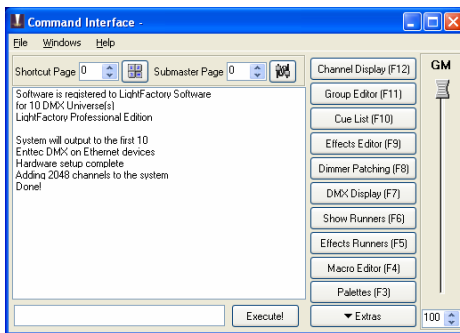
Figure 5: Command Interface

QUICK START

To get you started using your LightFactory system, the following describes a few quick examples of controlling a lighting system.

- ◆ Using the channel window
- ◆ Patching a moving light
- ◆ Controlling a moving light
- ◆ Creating a basic show

When the software is started, the “Command Interface” window is displayed and the system is ready to go. On start-up, the software will interrogate your computer and look for DMX hardware.



In this example, the software is setup to output to the Enttec DMX over Ethernet protocol and will output to the first 10 universes found on the network.

Regardless of the dimmers found the software will initially create 500 desk channels that will be

patched 1:1 with the available dimmers (The number of desk channels can be increased in the system properties). If you are using different DMX hardware with the system see “System Properties” (Page 81 of the LightFactory User Guide) for information about setting the output type.

LightFactory will always remember the last lighting state that was used and will automatically load the current show. If you start the software and find channels already active then this is because it is the state when the software was last shutdown.



Note: Make sure that the grand master (GM) is at full for all examples used in this section.

USING THE CHANNEL WINDOW

The channel window is the main access to all of the channels and fixtures that are connected to the software. It allows you to modify the output of a channel and control the properties/attributes of intelligent fixtures.

1. Open the channel window by clicking on the “Channel Display” button on the right-hand side of the command interface.

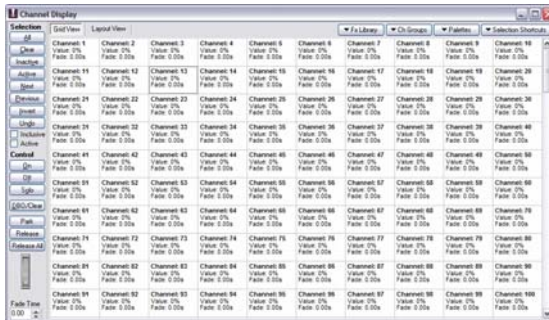


Figure 4: Channel Window

If this is the first time you have used the software you should see the window above displayed on your screen. Each channel in the system is represented by a cell in a two dimensional grid.

The grid will always try to fit as many channels across as it can and so resizing the window will allow you to see as many channels as possible.

2. A standard Windows scroll bar on the right-hand side can be used to scroll through the non-visible channels. If you do not have any channels selected you can also use the scroll wheel on your mouse to scroll through the channels.
3. Select channel 1 by left clicking on it with your mouse. You will notice that the cell changes colour to a pale blue.
4. Now click on channel 3 and notice that this cell also changes colour. By clicking and “selecting” these channels, we have told the software what it is we want to work with. We can now issue commands to these channels.

5. On your keyboard, enter the number 30 and press enter.

As you enter the numbers, you will see them appear along the title bar of the window. As soon as you press “enter” the numbers will disappear and the selected channels will now have a value of 30%.

The lights connected to those channels should now be displaying 30% of their maximum output.

6. Un-select channel 1 by clicking on its cell with the left mouse button. You will see that the cell is now highlighted green. This indicates that the channel is not selected but is active.



Note: An active channel is any channel with an output value above 0.

7. With channel 3 still selected, move the scroll wheel on your mouse up one click you should see the value increase by 5% to 35%. The mouse scroll wheel is a convenient way to control the intensity of selected channels when the exact value you want is unknown.



Note: If you do not have a scroll wheel on your mouse, use the + and – keys as replacements.

Channels can also be selected in large numbers by holding the mouse down and dragging it over the channels you want

1. Click on channel 5 and hold down the mouse button
2. Now drag the mouse over to channel 7 and release the button. You should now see channels 3, 5, 6 and 7 all selected.
3. Move the scroll wheel up and down and notice that all of the selected channels increase or decrease by 5% with every movement.

PATCHING A MOVING LIGHT

To use the channel window for controlling a moving or intelligent light we first need to tell the software where and how the fixture is patched into the DMX chain.

In this example we have a Martin MAC 250 with its starting address set to 26.

1. Open the patching window by clicking on the “Dimmer Patching” button on the right of the command interface.

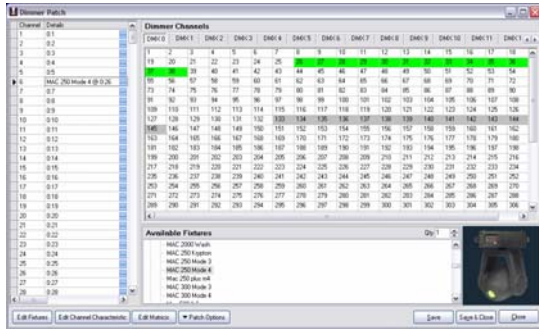


Figure 5: Dimmer Patching Window

2. Below the label “Available Fixtures” near the bottom of the window you will see a list of brands of fixtures and a special option called “Standard Dimmer”

Expand the “Martin” brand by clicking on the small plus (+) to the left of the name. You should then see the complete list of the Martin fixtures contained in the fixture library.
3. Click on the fixture labelled “MAC 250 Mode 4” and notice that the picture on the right-hand side has changed to show your selection.
4. Move the mouse over the “Dimmers” section of the window and notice that as you move the mouse the 13 dimmers trailing your mouse are highlighted. This shows that the fixture we have selected uses 13 dimmers to control it and that we should consider these reserved for this light.
5. Move the mouse over dimmer 26 (our starting address) and click and hold down the left mouse button. Drag the mouse over to the left hand side of the window and over channel 6.

When you release the mouse button you will see that the details column of channel 6 now displayed “MAC 250 Mode 4 @ 26”. This shows us that a MAC 250 is patched with the starting address of 26. See Figure 5.

6. Click on the “Save & Close” button to exit this window and complete the patching process.

We are now ready to use this fixture in the channel window as desk channel 6. To patch other moving lights, simply repeat the procedure above patching each light into the desired channel.



Note: You can patch multiple fixtures of the same type all at once by changing the quantity (Qty) number in the available fixtures section of the window.

CONTROLLING A MOVING LIGHT

This section assumes that you know how to open the channel window (see page 10) and have already done the example above in “Patching a Moving Light” (page 11).

1. Open the channel window again (if not already open) and click on the “Unselect All” button along the bottom of the window.

You will now have only the channels that are active highlighted.

2. Have a close look at channel six and notice that the content of the cell has changed. It is now labelled “Fixture: 6” and below the label is the name of the fixture followed by its properties.

To see all of the properties:

- i. Move the mouse in between the first and second row until the mouse pointer changes to the sizing cursor (two arrows pointing up and down separated by two horizontal lines).
- ii. Click and hold the left mouse button, and drag the mouse toward the bottom of the window about 2cm.
- iii. When the button is released, the top row will be resized to reveal all of the properties that can be controlled with this fixture.



Note: You can also auto size the cells to see all of the properties/attributes for all fixtures patched. Right click on the channel grid and select “Autosize cells” from the resulting menu.

- Click and select channel 6 and as well as highlighting the cell. The fixture property window will appear and attach itself to the right-hand side of the channel window.

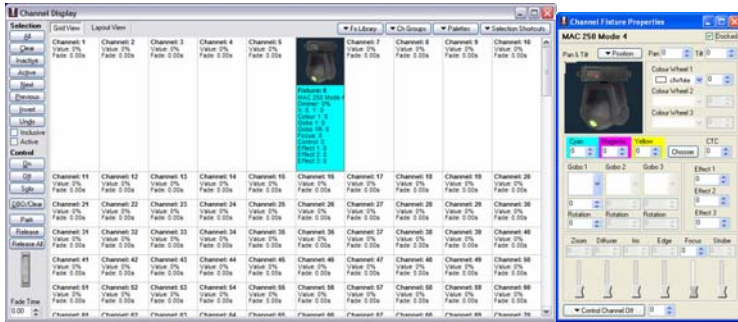


Figure 6: Channel View window showing fixture properties

The “Channel Fixture Properties” window can now be used to modify the properties of the moving light.

At the top left of the window is the picture of the luminaire. This is also the pan and tilt control.

- Click and drag the mouse around this picture to change the X and Y values of the fixture in the channel window. If the fixture is physically attached to the system the changes will immediately take effect and you will see the fixture move.

Only the controls that are applicable to the selected fixture will be active and can be changed. In the above example (Figure 6), the MAC 250 does not have CMY colour mixing. The properties window will not allow you to change these values.

- To control the dimmer of intelligent fixtures follow the same procedure for standard dimmers. Click on the “Channel View” window and either enter the desired value or use the scroll mouse to dim the light up and down.



Note: The fixture properties window can only control one type of fixture at a time. If you select multiple fixtures and there is more than one type selected the window will disappear. You can, however, select as many of the same fixture type and control all of them at once. Standard dimmers can also be selected and will not be affected by property changes.

CREATING A BASIC SHOW

A basic show is a series of cues (called a cue list) each containing a specific lighting state or scene. The transition between each lighting state can also be defined to control a fade in, fade out, and dwell time.



Note: In this example we are not covering the use of the effects engine, but only basic cues.

In the show we are going to create we will have three different scenes and will only use the first 12 channels. The table below shows the three cues and their contents. In this show, the cues transition from a very bright scene to a very dim scene and then back to a bright scene again. We have also use the moving light that we patched into channel 6 and placed it at a specific position.

Cue	Channel	Value
1	2	80%
	3	80%
	6	100%, 128X, 27Y
2	1	20%
	6	30%, 128X, 200Y
	7	20%
	11	20%
3	8	100%
	9	80%

Table 1: Basic Show Cues Example

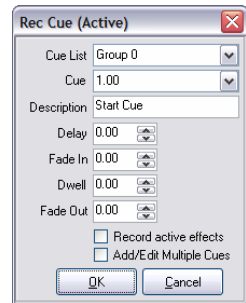
Before we create these simple cues in LightFactory, open the channel window (see “Using the Channel Window” on page 10) and set all of the fixtures back to zero so that no channel is active. To do this:

- Click on the button “DBO” along the left hand side of the window
- Now press the “Clear” button to have no channels selected.

We are now ready to start programming the show.

CREATING CUE 1

1. Click on channel 2 and 3 to select them and then type the number 80 on your keyboard and press enter. The selected channels should now be set to 80%.
2. Clear these channels and double click on channel 6 to bring it up to 100%. Because channel 6 is an intelligent fixture, the “Channel Fixture Properties” window will automatically appear. Set the pan and tilt to the desired location using the control described above (“Controlling a Moving Light” on page 13).
3. Once you have set the desired scene, right-click in the channel window. A pop-up menu will appear. Select “Add active channels to a cue” from the resulting pop-up menu.
4. The small dialog box at right will be displayed. You will need to select the cue list and cue number to add these channels. Enter the number 1 into the box labelled “Cue” press the “OK” button. The cue has now been recorded with the active channels in their current state.



CREATING CUE 2

1. Select channels 2 and 3 and set their value back to zero.
2. Now select channels 1, 7 and 11 and set all their values to 20%.
3. Click on the “Unselect All” button and then click on channel 6 only. Bring its intensity back to 30% by either typing 30 on your keyboard or using the scroll wheel.
4. In the “Channel Fixture Properties” window set the new position that you want the fixture in for cue 2.
5. Now that the second scene is set, right click and select “Add active channels to a cue” from the resulting pop up menu.

Alternatively you can use the keyboard shortcut control-c to perform the same operation.

6. In the resulting cue selection dialog, cue 2 should already be set in the “Cue” edit box. If this is not the case, enter the number 2 and press the “OK” button.

CREATING CUE 3

1. Click on the “DBO” button to reset all channels back to dimmer levels of 0.
2. Double click on channel 8 to bring it up to 100%.
3. Unselect channel 8 and select channel 9. Set the value of channel 9 to 80%.
4. Now that the third scene is set, right click and select “Add active channels to a cue” from the resulting pop up menu.
5. In the resulting cue selection dialog, cue 3 should already be set in the “Cue” edit box. If this is not the case, enter the number 3 and press the “OK” button.

THE CUE LIST EDITOR

To view the newly created show, open the “Cue List Editor” by clicking the button on the right of the command interface.

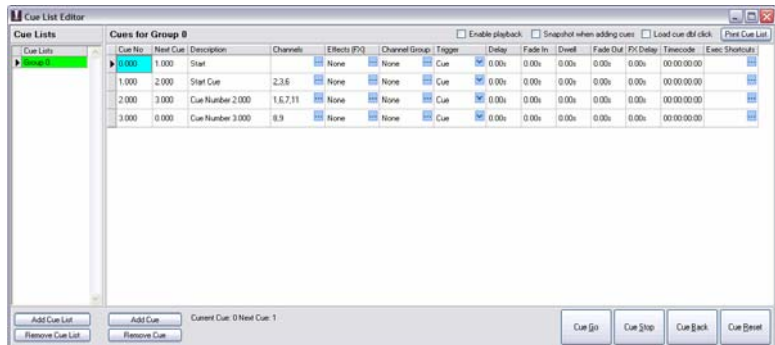


Figure 7: Show Editor Window

This window will show the three cues we just created, and we will see in the channel field the fixtures we selected.

SETTING THE TRANSITION BETWEEN CUES

In this example, we have decided to apply the following transition between each cue.

1. Cue 1 will fade in slowly over 5 seconds
2. Cue 1 will fade out in 2 seconds
3. Cue 2 will then fade in quickly (1 second)
4. Cue 2 will fade out in 3 seconds while cue 3 fades in.

To apply these rules, we need to set the fields on the right-hand side of the window.

5. In the row for cue 1, enter the number 5 into the field labelled "Fade In" and the number 2 into the field labelled "Fade Out".
6. We do not want cues 1 and 2 to cross fade, so we need to set a delayed start on cue 2 of 2 seconds. This will cause cue 2 to wait the same length of time it takes cue 1 to fade out. In the row for cue 2, enter the number 2 in the field labelled "Delay" and enter a 1 into the field "Fade In".
7. For cue 3 we do want a cross fade so we can set the "fade out" of cue 2 to 3 seconds and the "fade in" of cue 3 to 3 seconds.

The right-hand fields should now be set as per Figure 8 below,

s	Trigger	Next Cue	Delay	Fade In	Dwell	Fade Out	FX Delay	Timecode
...	Cue	1.000	0.00s	0.00s	0.00s	0.00s	0.00s	00:00:00:00
...	Cue	2.000	0.00s	5.00s	0.00s	2.00s	0.00s	00:00:00:00
...	Cue	3.000	2.00s	1.00s	0.00s	3.00s	0.00s	00:00:00:00
...	Cue	0.000	0.00s	3.00s	0.00s	0.00s	0.00s	00:00:00:00

Figure 8: Basic Show Example, Fade In, Fade Out, and Delay settings

RUNNING THE SHOW

We are now ready to run our show for the first time and see the result of the procedure above. If you have a real lighting rig connected to the system, you should see the result apply to your dimmer system. If you do not have any dimmers connected, use the "channel window" or "DMX display" to view the output.

If the start cue (cue 0) is not highlighted in green as shown in Figure 8 above, select it as the starting cue by double-clicking on its

row. In this example, we have chosen to leave this cue blank without any fixtures set. There is no reason not to use this cue other than to have a blacked-out state when the show begins.

Along the bottom of the cue list editor are the playback controls for the currently selected cue (highlighted in green).

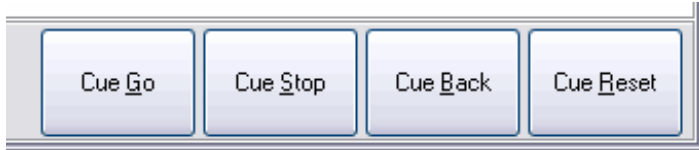


Figure 9: Cue Playback Controls

Press the “Cue Go” button and notice how channels 2, 3, and 6 slowly fade from zero to their set values over a period of 5 seconds. Once this cue has finished, (A counter below the cue window will count down the number of seconds remaining, and display “Cue Complete” when finished) click the “Cue Go” button again to go from cue 1 to cue 2. This time cue 1 will fade out, then cue 2 will slowly fade in. The current cue will always be highlighted in green and you will notice the green line following the cue execution.



Note: You can see the time remaining in an active cue below the cue window. When the cue is finished, it will say “Cue Complete”.

At any time we can return to the previous cue by clicking on the “Cue Back” button and can stop a cue execution (i.e. Fade In) by clicking on the “Cue Stop” button.



Note: A show can be run either via the Show Editor as per the example above, or via the Show Runners.