USER MANUAL

COMPU WARE 2004

Getting started manual

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2004 software Manual

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1 Other manuals

Other manuals are available for softwares listed below:

3D Software
ScanLibray Editor
Easy Show

2 Preface

Welcome.
If you belong to those people who are familiar with and keen on, software systems and/or computerized light-controllers, then you must be very similar to us... If you have an eager inquiring mind and if you wish to rapidly create some "effects" then, once again, you are very similar to us, you would probably rather enjoy discovering up-to-date software functions and potentialities than read a thick instructions-manual.

Thank you for selecting 2004 Software package. Since the original versions were released on the market, we have constantly been working to electronically improve our products and software programs. This product is sold in more than 40 countries and over several thousands items have been sold so far.

We have been investing much time and energy to equip our software with a most accessible, easy-to-use interface. However, under its cover, there is an extremely powerful runtime software that is capable of running 5120 light-fixtures or DMX channels. It also allows you to pilot numerous exclusive and/or simultaneous scenes, to control fade-racks, to change colors and/or to pilot moving lights.

We are confident that much satisfaction will be derived from this product. Should any of our products fail to bring you full satisfaction, please let us know about your possible problems or remarks. By being constantly attentive to our users we have been able to upgrade the quality of our products. Any suggestion or experimental comment will be welcome to significantly improve our product-range.

Warning

Reading this manual and programming this software require some general knowledge of PC-type computers.

In particular, it is necessary that such notions as "software", "files", "folder", "save", "desktop browsing" should be acquired. This new version optimizes the potentials of an up-to-date PC. It also uses such notions as "multiple-windows", "drag &drop", "dialog-boxes", "instant help" and so forth…

To sum up, good command of Windows interface is desirable if not essential to fully optimize the multiple potentials offered.

Likewise, reading this guide-book and programming require good command and handling of light-fixtures, faders, moving lights and more generally of light-equipment.

You can find more informations our website.

3 Contents and installation

This package contains : • "step-by-step" manual, • CDROM, • USB-DMX512 interface.	

To be fully operational, this package should be used with a PC having the following features :

- Laptop or desktop computer with USB port
- Windows ME, XP or any up-to-date version
- 800x600 screen resolution (1280x1024 recommended)
- 256Mb Memory (512 Mb recommended)
- Clock frequency : 800 Mhz (1.5 Ghz recommended)
- a 32Mb RAM video card to use the"3D software" software (latest generation for best results)

The software is made available in accordance with user's requirements and comes out in several versions with various interface models. In order to meet all possible situations for instant working-order guaranteed, two installations have been made distinct : Step one : Installing the DMX 512 interface. Step two : installing the software. In both cases installation is carried out via Windows interface and should be easy to complete…

DMX 512 INTERFACE

The USB-style interface is a small translucent box which is connected to your PC's USB port (see photo below).The software uses the DMX512 protocol to control lighting equipment. This protocol is universal, which is a bonus. Interfaces have a 3-pin XLR-type connector. If your equipment uses a 5-pin XLR connector, it will be necessary to replace the 3 pin connector or purchase an XLR3/XLR5 adaptor. Make sure the connection is properly made (pin 1 to pin 1, pin 2 to pin 2…) when building your own adaptor cable.

REMARKS

The USB/DMX interface is specifically equipped with a memory which allows it to work in Stand Alone mode in case of PC-failure or restricted use. In Stand Alone mode the USB/DMX is equipped with a connector which allows it to be externally-powered (9V or 12V DC). In Stand Alone mode, the interface can recall up to 255 scenes which will be called back in numerical order by pressing the "Previous" or "Next" buttons on the top of the interface box.
To program the Stand Alone mode, Easy Stand Alone software is necessary and should be installed from the CDrom. Even though it is easy to use, its own instruction booklet has been enclosed within.

3.1 How to install the USB-DMX 512

OVERVIEW

The USB standard defines a new type of serial-communication as well as a new type of connector. This standard was introduced in 1997 and has been spreading ever since 2001.
It offers many advantages in comparison with former standards. For instance, it allows devices to be directly powered via the USB port as well the simultaneous use of several devices at once. Plug and play is also made possible.

The USB-DMX interface is a world's first innovation. It thoroughly respects the USB protocol specification and DMX512 for output. It is directly powered via the USB port and controls all 512 potential channels of a DMX line. If the 512 channels are not sufficient, the software can run up to 10 USB interfaces simultaneously, i.e. 5,120 channels altogether.
If simultaneous use of several interfaces is made, a USB hub is a necessary and normally obtainable from any distributor.

USB INSTALLATION

The USB interface is set and ready to use. When using one for the first time, it is necessary that the USB drivers should be installed. Actually, when first installing them, the files required to use the interface will be installed inside your PC, whether using a laptop or a desktop computer.

In order to install USB interface, just connect it to your PC even if it is switched on. Your computer will automatically detect any new device and you will be prompted to load a driver for it (via a Window wizard).

If you use Windows XP, you will find this type of wizard:

Then insert the CDrom into your PC and click on Next. Windows will find the appropriate driver.

Although Microsoft does not numerically register this driver, there is no risk of incompatibility. Click "Next" and carry on the driver installation.

That's it, you are away ! Your USB-DMX is now operational !
If this window does not appear or if any other problem arises, which is very unlikely to happen, please contact your retailer.

2004 Software software is operational up to 10 simultaneous interfaces, that is 5120 channels as a whole. However beware that the more interfaces you use, the more computer resources are requested. A performant computer would then be needed.

<u>If you are using several interfaces:</u> Connect all interfaces before starting on your computer in order to proceed to programming. If not so, the cards order could be inverted next time your computer get started. Your programming would consequently lose coherence.
Would you proceed to computer or interface reinstallation, prefer to start again computer before opening software.

You can find more informations about the DMX interfaces by reading: Hardware manual.

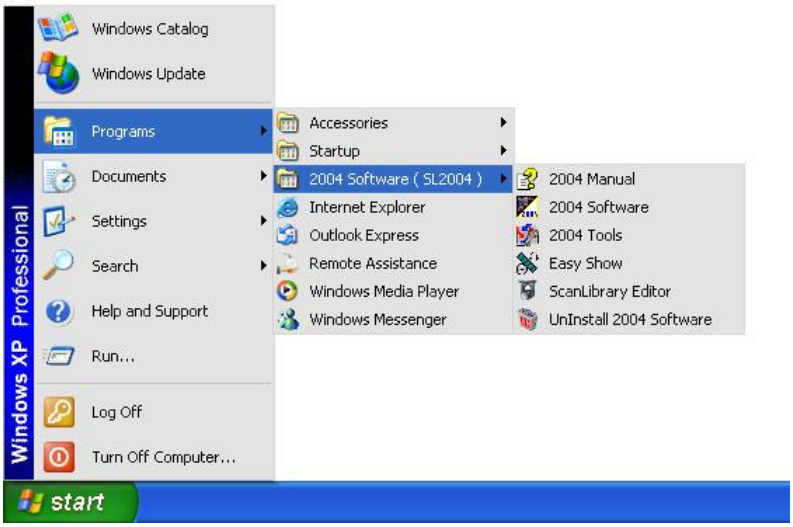
3.2 How to install 2004 Software

In this chapter, you will find step-by-step guidance to install the software.
First step : insert the CDrom. The "CD-Rom setup" dialog-box automatically appears on the screen.

You can install 2004 Software software as shown below:

Click on 2004-icon to start software installation. A wizard will prompt you to proceed as follows :
Language selection : English by default is suggested by the wizard.
Selection of installation-folder : By default "C:\SL2004 is suggested.

Once installation has been completed, you can easily start the software by clicking on the Windows"Start" button.



On launching the application, you can see the following screen. If the interface has been properly installed, its reference can be found back: "1SL512FC" here, for instance. Otherwise, the software will work in demo-mode. You will still be able to call this screen back later by clicking on " About…" in the menu.

It is possible to install a disk several times, which a show-organizer may find useful and convenient to save different configurations. To archieve this, a different file should be selected each time, when installing the software. Each disk will then be displaying in Windows "Start Program" menu.

4 Getting start manual

This step-by-step manual has been written especially for you. It describes the main functions and presents the specific features of our product and will be used as a step-by-step guide when implementing the system for the first time. Our goal was to write out a most concise, efficient and clear guide-book, keeping in mind what would be most useful to the new user.

This manual is not an exhaustive description of this software's potentials. It has been designed for you to have all the pre-requisites to implement your creations in light-control. We have selected the main functions and features in order to grant you some autonomy. (i.e. so as not to have one hand on the key-board and the other flipping through the instructions-manual).

To clearly understand this lighting program, you must understand the purpose of each function:

Pages
The page is what defines what fixture is being used. Basically you can have one page for one kind of fixture. A page shows all the function available on your fixture (colors, gobos...) and contains the following buttons:

Scenes
A scene is basically a cue and can be dynamic (movement...) or static. The software creates pre-programmed scenes allowing to control your fixtures without programming. We will see later how to create our own scenes. When you call a scene, the previous one (in the same page) is automatically released.

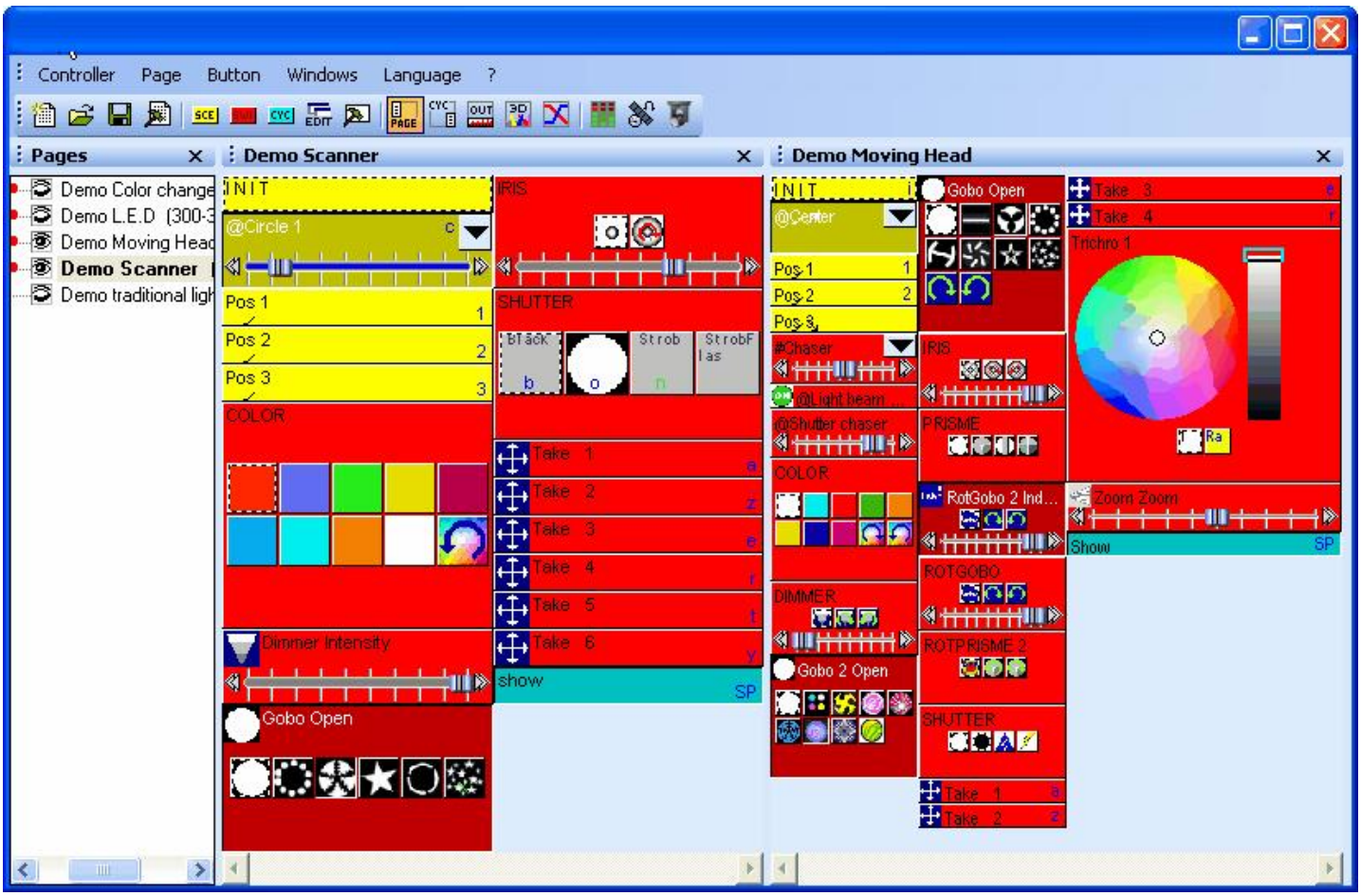
Switches
The switches can be used simultaneously and comprise a click "activates/deactivates" click. Indeed, several of them can be activated at once and you just have to click so as to toggle from active to inactive position and vice versa. They could be compared to contact breakers wired up in parallel. They can be used to change a color, a gobo, reset your fixtures...

Cycles
A cycle is basically a cue list made programmed with switches and scenes. A cycle can also be used to synchronize a sound track (WAV, MP3...) with your lights.

Thanks to this hand-book, we truly hope you will quickly become proficient in the use of the software. Enjoy your reading!

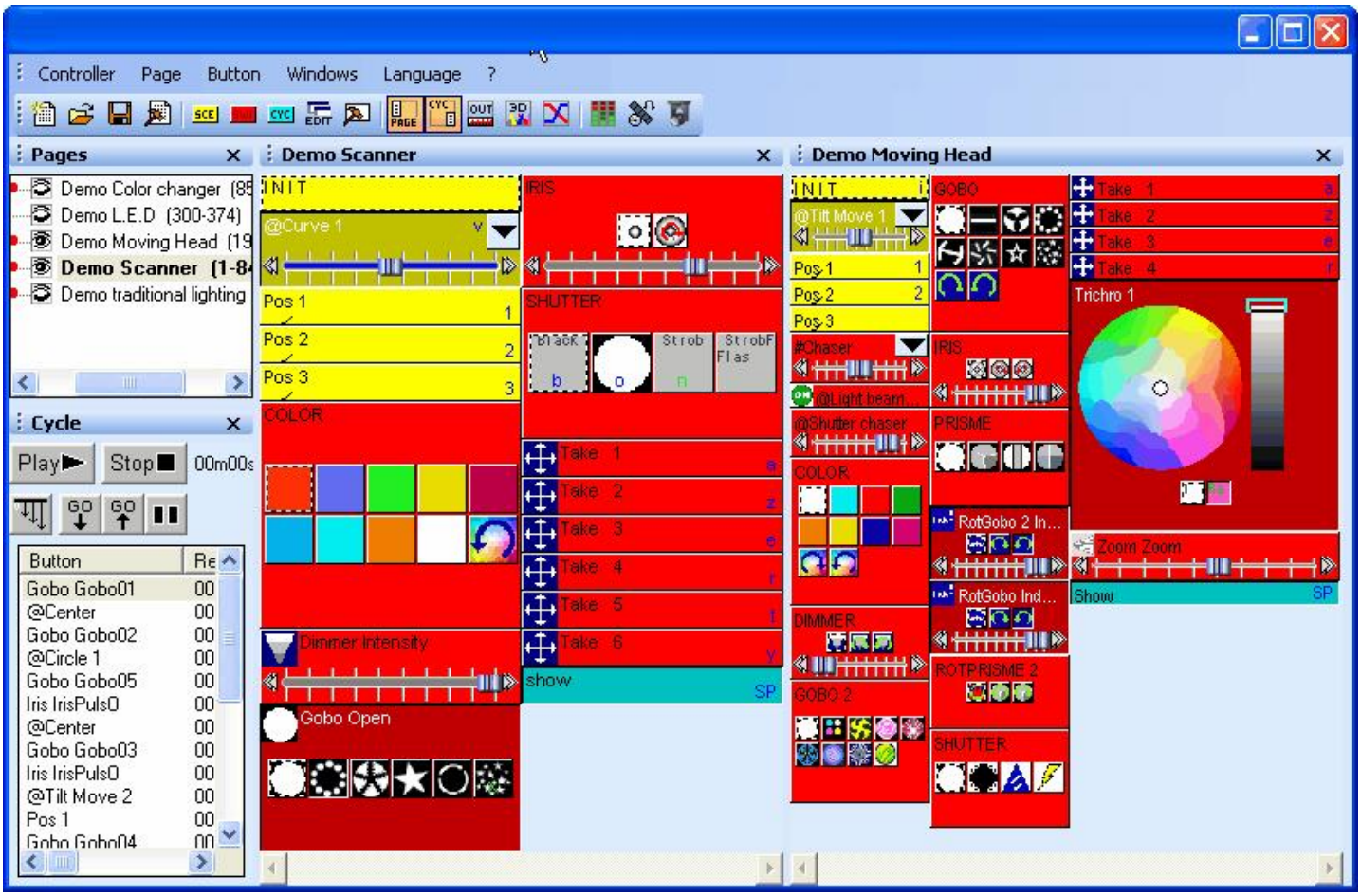
4.1 Customizing the user screen

When used for the first time, the software can be visualized as a button grid.



Utilizing the icons in the toolbar, the screen can be divided in several areas:

	Displays window to visualize "Pages "
	Displays window to visualize "Cycles"
	Displays window to visualize "Outputs"
	Allows visualization of fading windows
	Starts the 3D software
	Starts "Easy Show" software
	Starts "Audio Analysis" plug-in
	Starts "ScanLibrary" editor



These windows can be moved into a re-sizeable and/or hidden floating window.

Such notions as "pages" and "cycles" will be defined later, but first of all, let's have a look at the main area, that is the button grid. Activation of these buttons will allow you to conduct your lighting-control. Some of them are gray, blank and will remain un-activated until they are assigned a specific mode.

You can make a "page" visible or not, but it does not mean that the page is activated (or not). It only means that you can make a page visible as a window or keep it activated but not displayed. In the "Pages" window, visible pages are written in bold. There are several ways to make a page visible or not :

- you can go to the "Page" menu and click on "Display the page"
- from the "Pages" window, right-click on the page name and select "Display the page"
- from the "Pages window", click on the small eye (left of page name, see below).

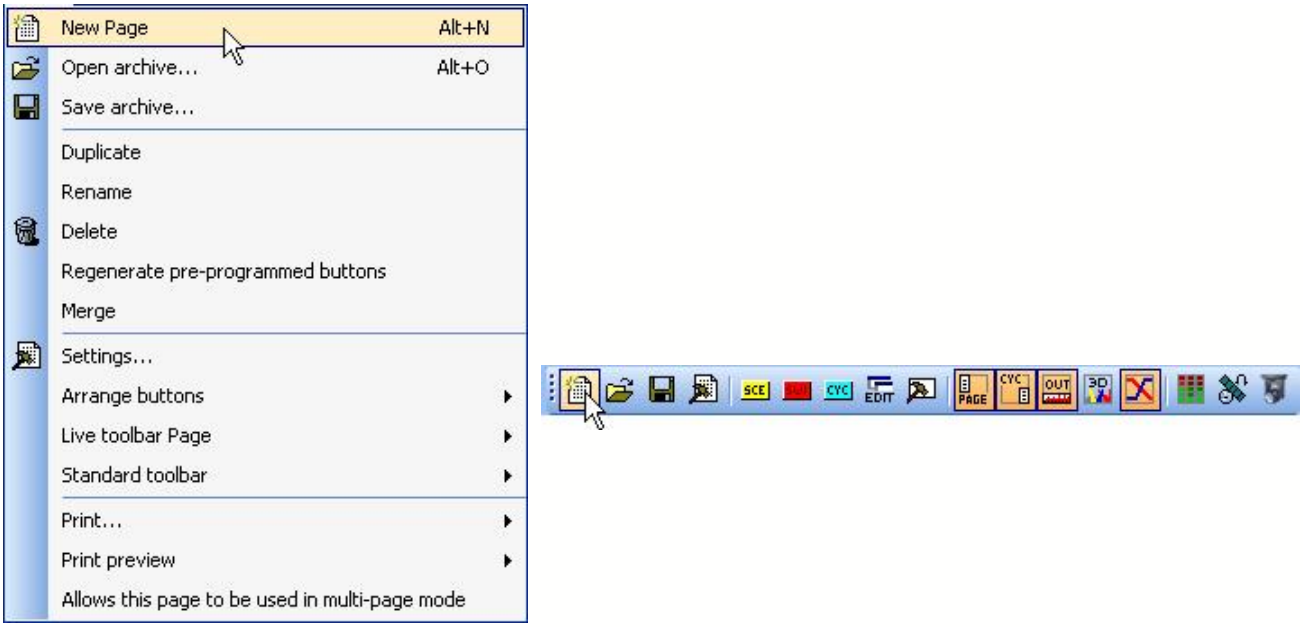
You can restore default positions by selecting the "Reset to default positions" option from the "Windows-Reset positions" menu.

4.2 Creating our first show

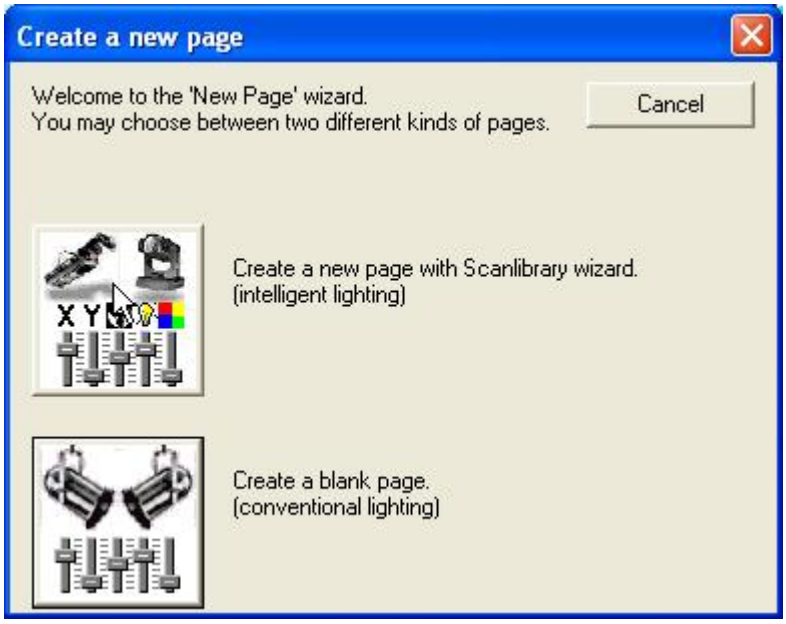
4.2.1 Let us start with 6 SPOT 575

We are about to create our first show with 6 SPOT 575. We just need to know the DMX address of our first fixture and the software will be automatically inserting our 6 moving heads with their correct address. In a few minutes, we will be able to control our fixtures with a real efficiency. Let us start creating our first page now, and see how easy it is to use our fixtures with 2004 Software.

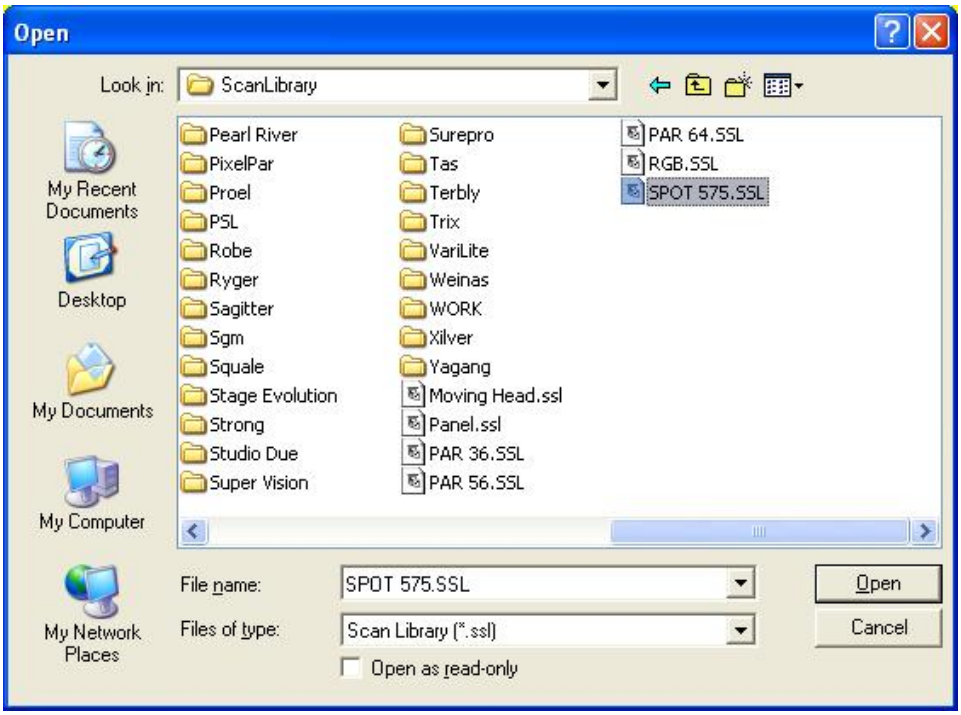
Once the software has been started, we must create a page with our 6 SPOT 575. There is nothing easier. First, we must launch the "New Page" wizard which will guide us during the creation of our page. To do so, we must click on the "Page" menu and select "New page" or click on the "Create a new page" icon from the standard toolbar as shown below.



Then, the following window appears and two choices are possible. We can create a page with the wizard (1st choice) or create a page manually (2nd choice) for conventional lighting. We must select the first choice to create our 6 fixtures.

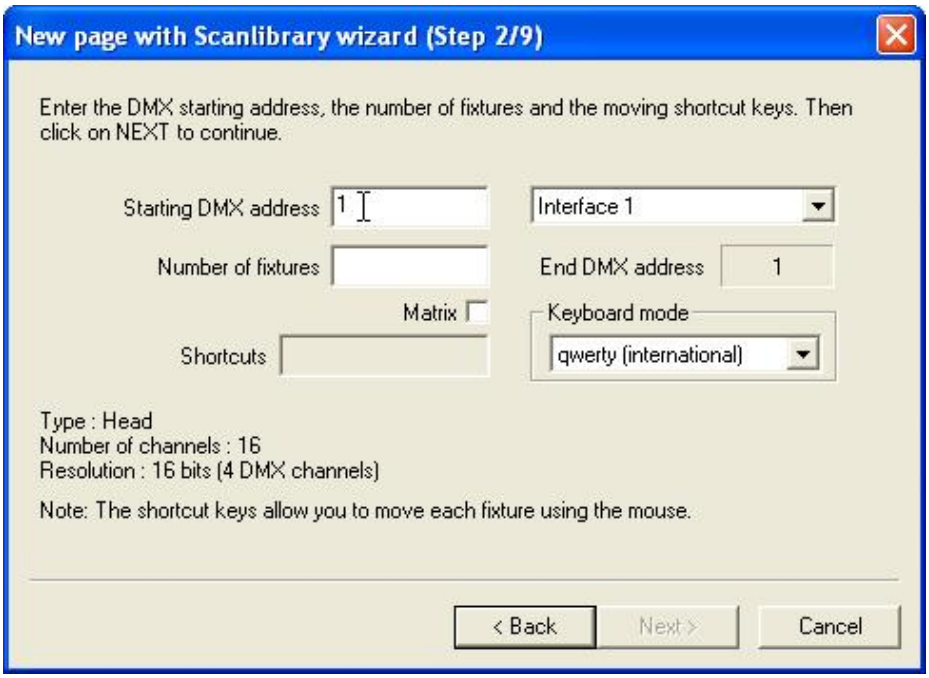


Select the profile of our fixtures from the "ScanLibrary". Click on explore to browse the "ScanLibrary" directory. Browse the "ScanLibrary" to find our SPOT 575 profile.



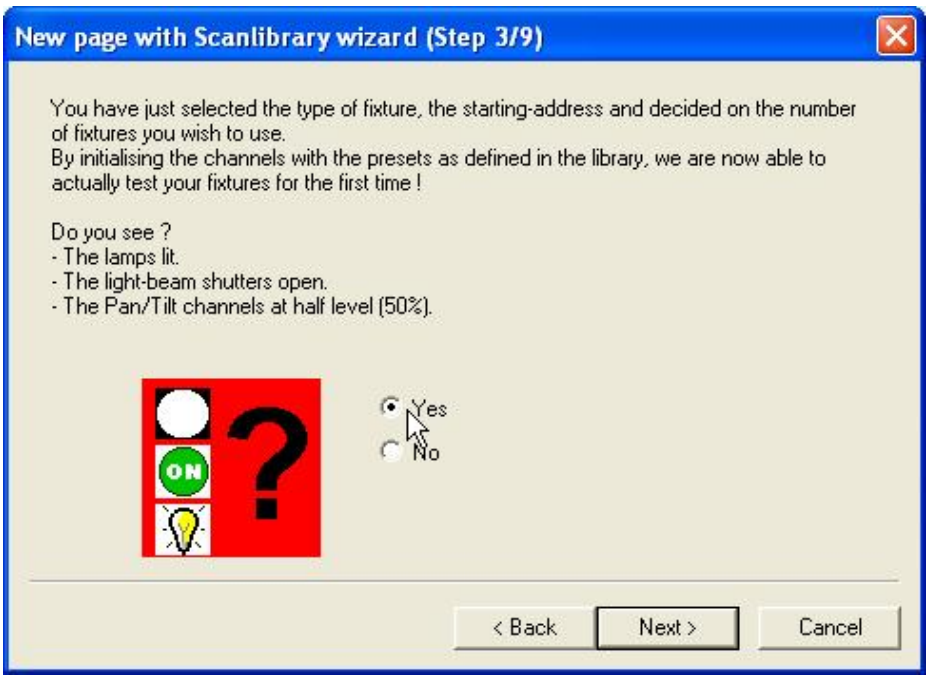
Open the folder of the manufacturer and select the correct library.

Once the library has been selected, click on "Next" button to open the next step.

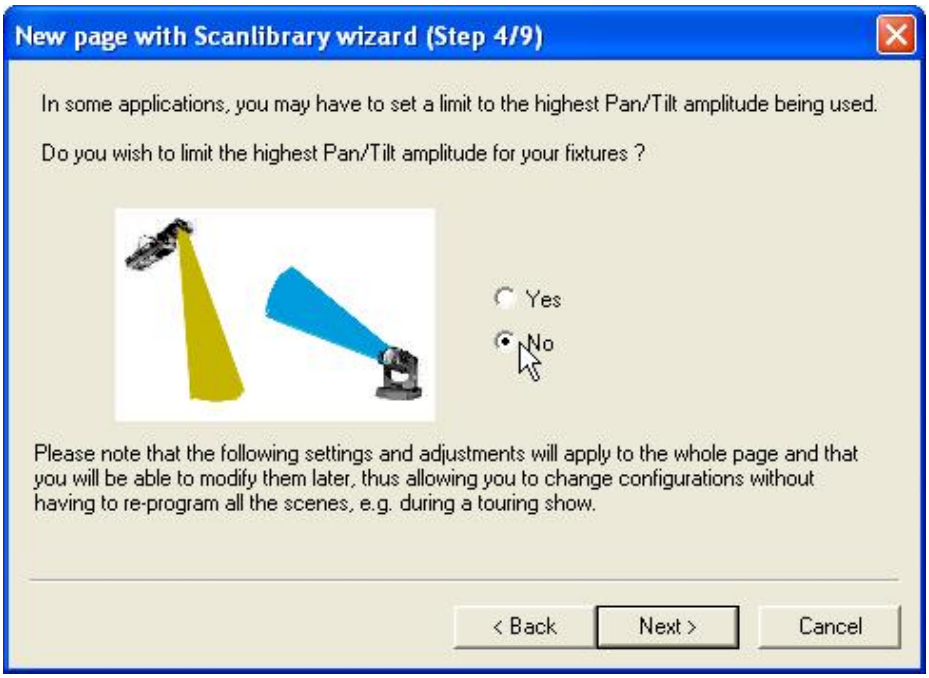


Here, enter the DMX address of our first fixture. So, specify 1 for our first SPOT 575.

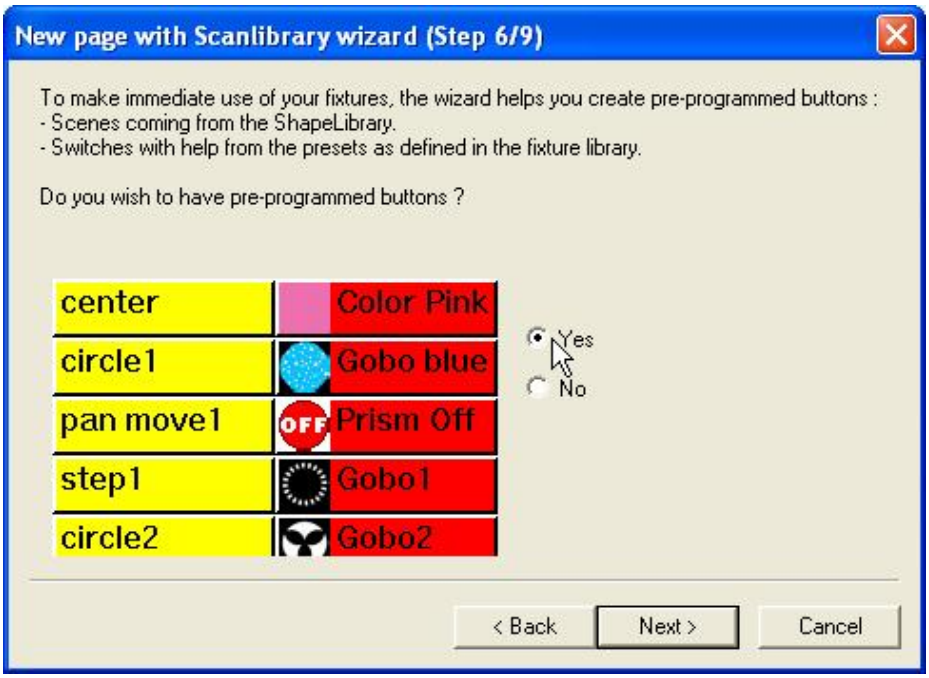
Then, specify the number of fixtures (6 for us) and click on "Next" button to carry on.



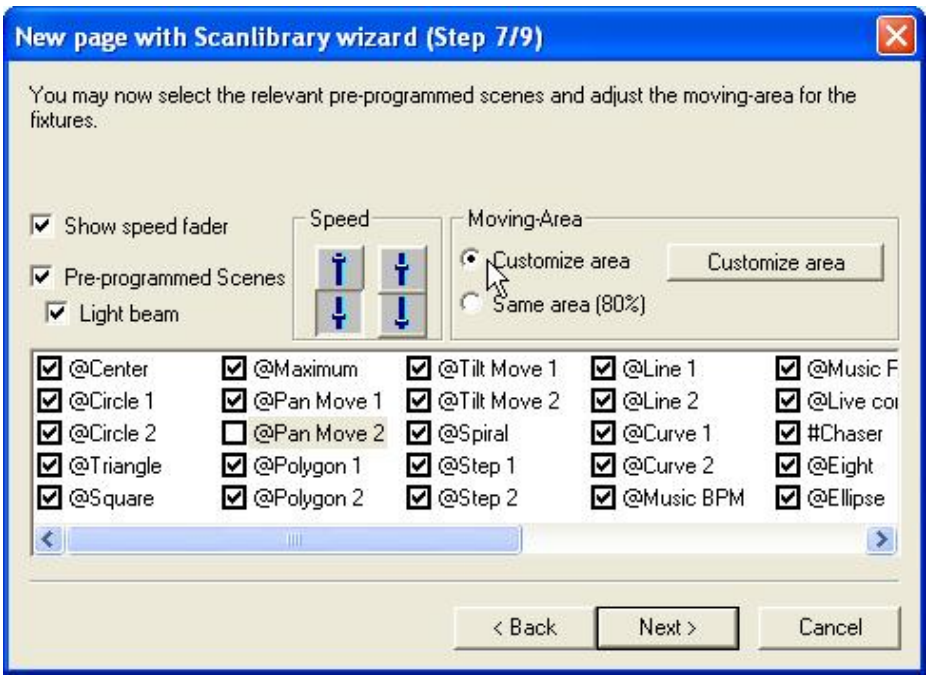
Here we should be able to see the beams of our SPOT 575 and select "Yes" before to click on "Next" button. If we can not see the beams, we must select "No" to check the settings of our fixtures.



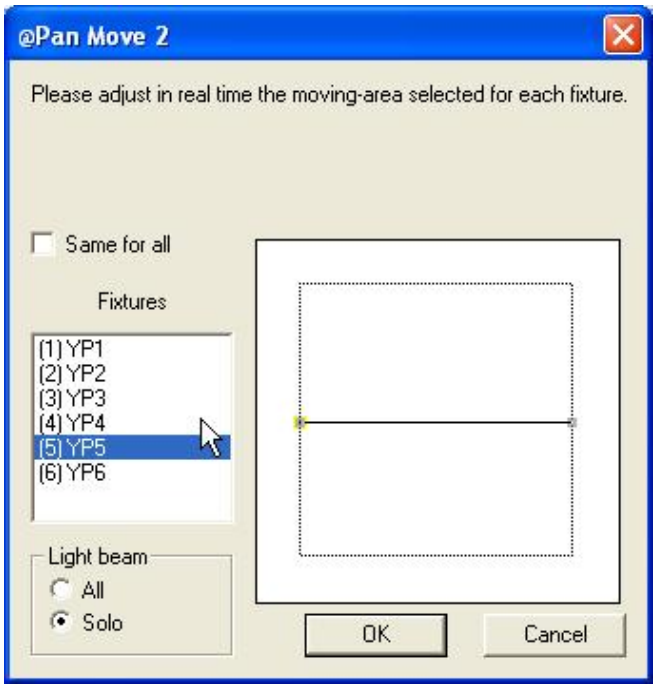
We decide not to change the highest X&Y amplitude for our first page. This means we will use the maximum amplitudes of our SPOT 575. Then, click on "Next" to go to the next step.



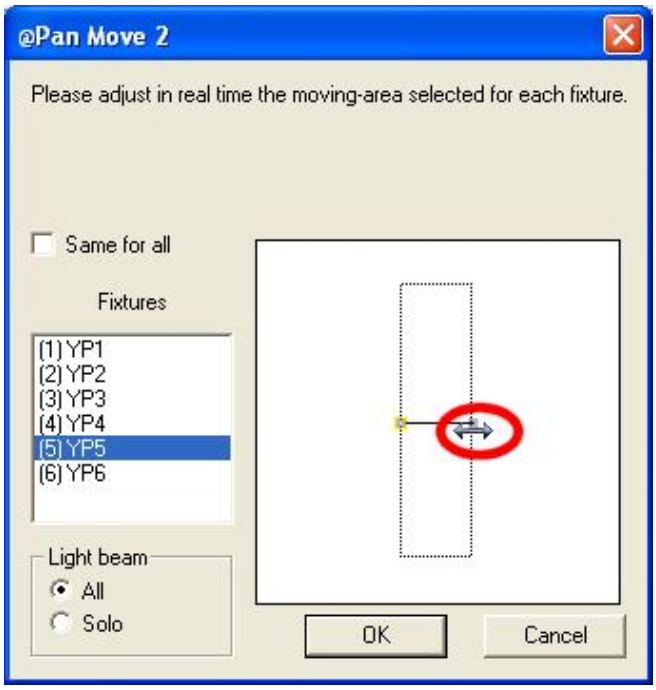
Here is one the most important step. 2004 Software will create pre-programmed buttons (scenes, switches) which will allow us to control our moving heads before programming. So, select "Yes" to be able to use those buttons. Then, click on "Next" to carry on.



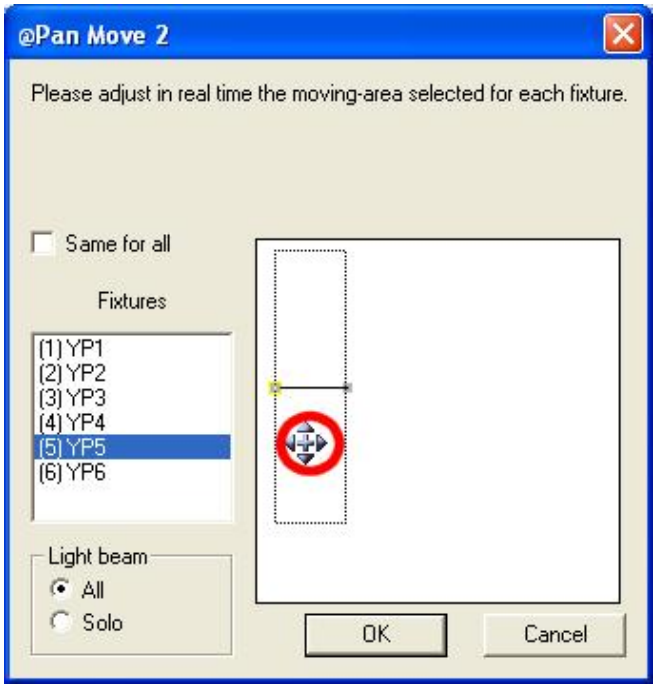
Here we can test each pre-programmed scene with our fixtures and then decide to include it or not in our new page. By default, all the pre-programmed scenes use the same area (80% of their maximum amplitude). However, it might be very important to modify this setting to make our 6 SPOT 575 always move in the wished area (e.g dance-floor...). So, select "Customize area" and click on the associated button to open the following window.



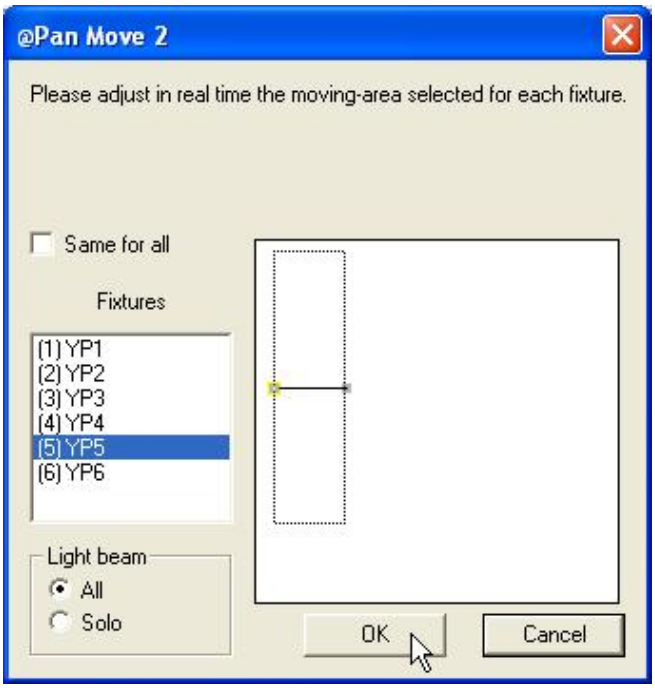
We are now testing the "@Pan Move 2" scene with our moving heads. We can run the scene either independently on each fixture or with all of them by selecting "Same For all". In this example, we will be modifying the moving-area for only one of our SPOT 575.



First of all, we would like to resize the moving-area. We must do as shown above.



Then, we can modify the position of the scene as shown above. Please note that these changes are affected to all the pre-programmed scenes.



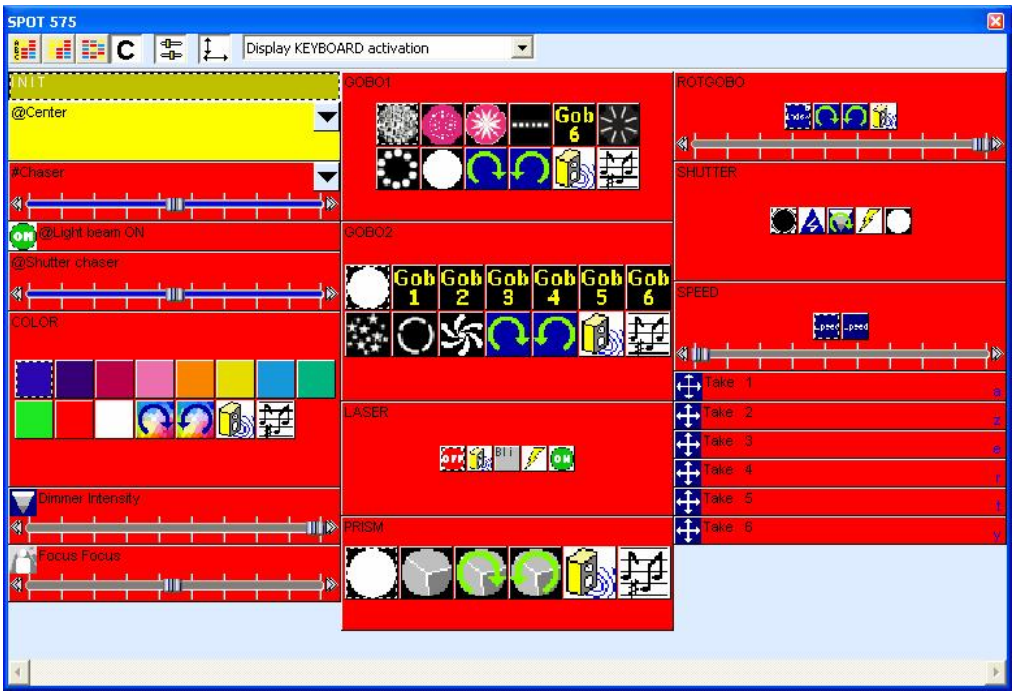
Then, we click on "OK" to save the modifications. You can click on "Cancel" to use the default settings.

Here, we can select the pre-programmed switches we want to add to our page. For each channel of our SPOT 575 (list on the left side) we can check or uncheck the available presets (list on the right side). Then, click on "Next" to go to the last step.

Here we are. We can change the name of our page from this step. By clicking on "Finish", our SPOT 575 page is created and now available in our 2004 Software software.

4.2.2 Using ou first page

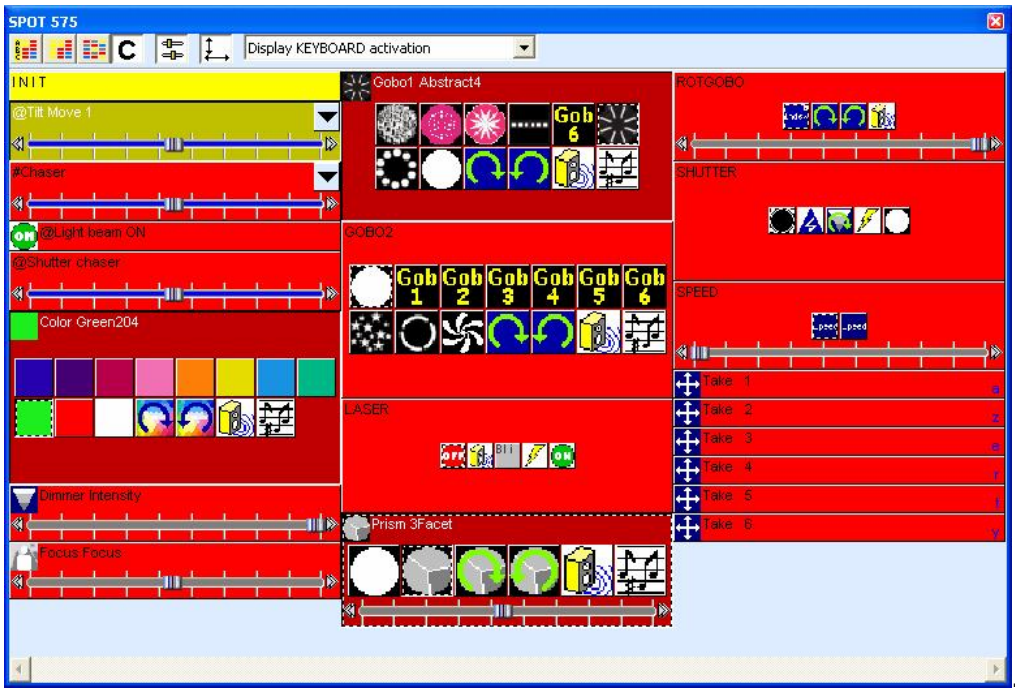
Once created the page appears as follows. All the pre-programmed scenes and switches have been created and our fixtures are now ready to be used.



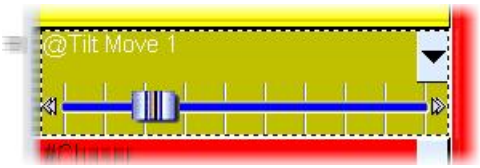
It is now important to give a short description of the page. The page is an independent window that can be moved, resized and/or attached to the software window. Using our fixtures is very easy with all these buttons. All the functions of our fixtures are available and easy to find on the page. In our example, we can find all the colours of the colour wheel (one colour = one button), all gobos...prisms, dimmer...
Let us start playing with our SPOT 575, first of all we can select a scene (yellow). This would open the shutter-beams and select the colour white. To select a scene we must click on the small arrow located on the upper-right corner of the scene button (see below).

All the pre-programmed scenes are now listed and we just have to select one of them. We decide to select the "@Tilt Move 1" scene...and here it goes. Our fixtures are now making a tilt movement. We can also select the "Green204" colour, then a gobo like "Abstract4" and finally a "3Facet" prism and our first effect has been created.

The page appears as follows with a few buttons selected.

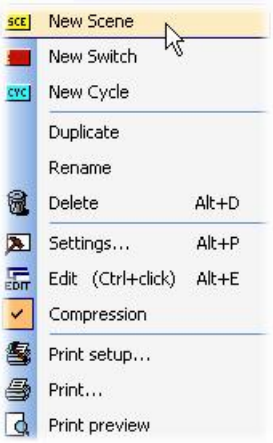


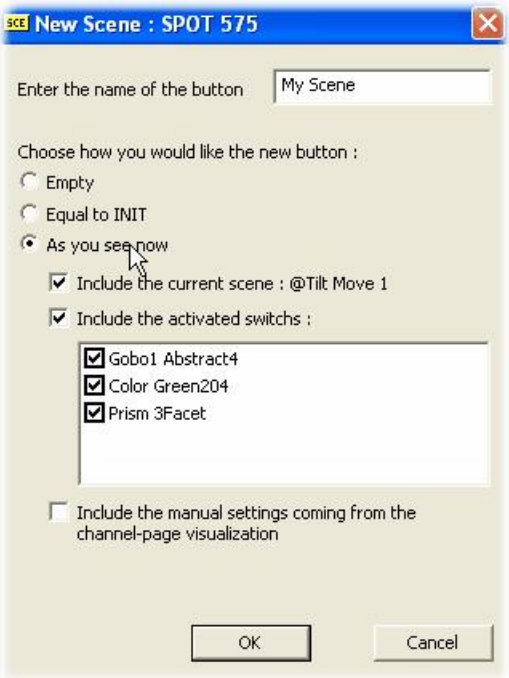
If we think that the movement is too fast, we can decrease the speed by moving the SPEED fader on the button (we can also increase if we want). You can see the fader below. There is one fader per scene, so you can specify a different speed for each of them.



4.2.3 Creating a new scene

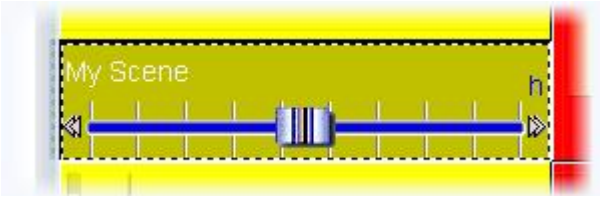
Now we want to save this effect in one scene. To do that, we must go to the "Button" menu and select "New scene". The following window appears. We select the option "As you see now" which means that we want to create a new scene including all activated buttons.



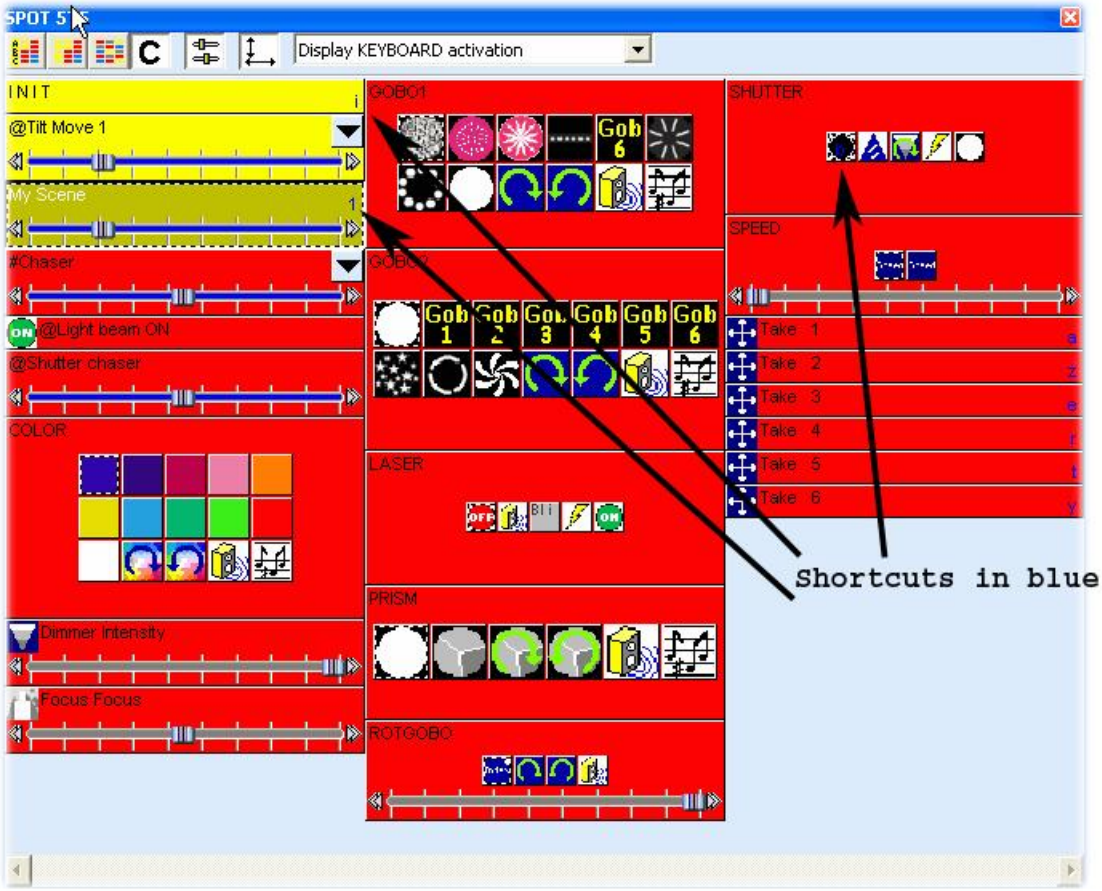


4.2.4 Using the sortcuts

Our new scene is now available in our page. We can test it to check whether everything has been saved. To release all the buttons, we can double-click on the "INIT" scene. However, this should be easier if we had a key shortcut to do so. Imagine we want to use the "i" button to release everything. There is nothing easier, we just need to select the "INIT" scene and press "Ctrl+i" on our keyboard..."Ctrl+h" would mean that we select the "h" key...

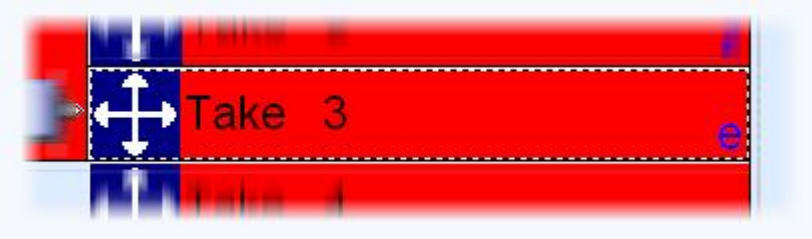


Now we know how to add a shortcut on a button (scene, switch or cycle) by pressing the "Ctrl" plus the key : "i" in our example. We want to add the "b" shortcut to the "Shutter Close" button, we must select the button and then press "Ctrl+b". We can also add a shortcut to our scene, we select the scene and then we press "Ctrl+1". Now we can call our scene with the "1" key of our keyboard. Let us give a look to page now.



4.2.5 Using the "TAKE" buttons

We will now see how to use the "Take" buttons and what we can do with them. They are easy to use and very useful for "Live" applications or to create a new scene without movement. They are made with the "LiveControl" rack which is located in the editor screen. There is one Take switch for each fixture of the page.

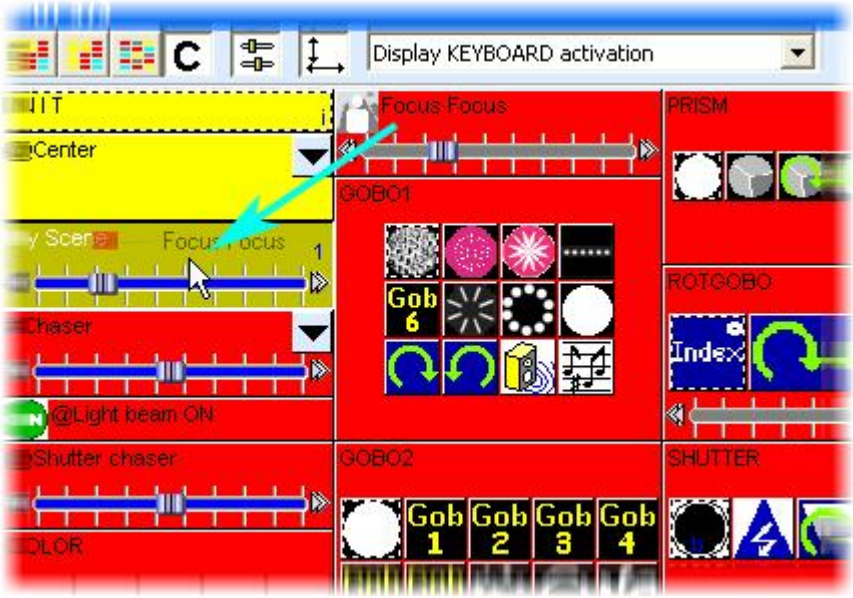


They allow to control the Pan/Tilt channels in real time while a scene is running. Imagine one scene is running with our 6 fixtures and that you want to use one of them as a follow spot. As you can see, each fixture has its own shortcut (a or q for the 1st one, z or w for the 2nd one, e for the 3rd one...depending on the keyboard). So, if we want to call the 3rd fixture we must press and hold the "e" key and move the mouse. The fixture is now following our mouse...You should have an icon like below showing the mouse position while you are moving.

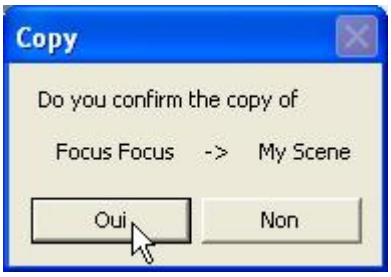
The fixture moves while you are holding the "e" key pressed. When you release the key, the fixture stops moving and stays at its last position. If you press the key again, the take button is released and the fixtures goes back to the scene program.

4.2.6 Using the Drag&Drop

Imagine now that we want to adjust the focus of our fixtures. We click on the "Focus" button and we move the fader until the good position. This means that we keep the same settings for our 6 fixtures, we will see later how to setup a different value for each fixture. Then we can save the changes in our scene...we don't have to open and edit the scene to do that. We just have to drag&drop the switch. Let us see how to do...



First of all, we must click on the "Focus" switch with the right button of the mouse and hold the button while we are moving the switch...Then, we release the mouse button when we are above the scene and the following message box appears. If we click on "Yes", the changes are saved.



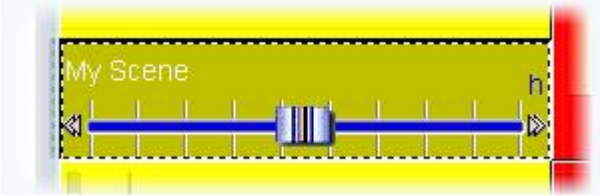
4.3 Modifying the show

4.3.1 What is the difference between a scene and a switch

It is very important to understand the difference between scenes and switches to use the software. Let us see what is the difference.

Scenes

The "scene" buttons belong to an exclusive type (one button at a time). Activating a "scene" button automatically releases the previous button of the same type.
Use the "scene" buttons in order to create lighting environment or control a group of fixtures.
Since a group of fixtures cannot be off and on simultaneously, the latest command has precedence and cancels the previous ones.
Once programmed as a "scene", the button turns yellow.

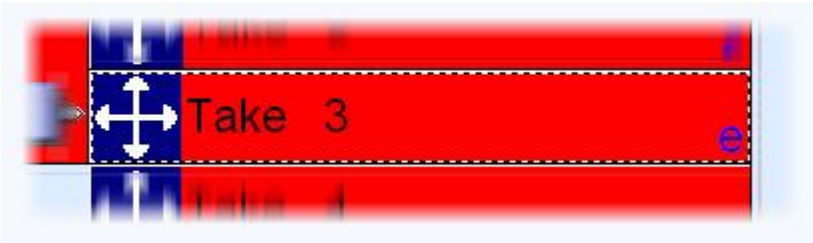


Let us take a chaser for example : Several chasers cannot logically be initiated simultaneously on a whole set of fixtures. On the contrary, it is logical that each chaser should follow one another. Generally speaking, "scene" buttons will enable you to control sets of traditional or, for more sophisticated effects such as moving or light environment, intelligent lighting.

Once again, keep in mind that you have at your disposal an unlimited number of "scenes", "switches" or "cycles". Your work is then optimized without having to pay attention to the amount of buttons available on the "lighting-desk".

Switches

The "Switch" buttons can be used simultaneously and comprise a click "activates/deactivates" click. Indeed, several of them can be activated at once and you just have to click so as to toggle from active to inactive position and vice versa. They could be compared to contact breakers wired up in parallel.



If several "Switch" buttons are activated simultaneously and control the same DMX channel (or several of them) the last one to be triggered takes precedence and releases the others.

Switch priorities

A Selection can be made from a priority-range for a Switch button (in the menu, call "Button, Parameters" and "Switch" index)

- LTP-priority: (default selection) If several switches are activated, the latest one takes priority (This is convenient when using intelligent lighting)
- HTP-priority: If several switches are activated then the highest levels take priority (This is convenient when using conventional lighting)
- ADD-priority: In such a mode, a switch will enable the user to increase current intensity on the channels selected.
- SUB-priority: In such a mode, a switch will enable the user to decrease current intensity on the channels selected.

How to operate LTP switches

LTP-priority is the mots commonly-used mode for Switch buttons it is therefore important to have good command of this mode. The basic principle is: "the latest LTP switch which is activated takes priority."

Caution: this priority can only apply on the channels required. In the case of moving light, the "Gobo" Switches will only operate on the channels corresponding to the Gobos and will have no effect whatsoever on the overs channels. This selection can simply be made via the OFF function. The OFF channels in an LTP switch will not be operational !
Therefore the DIMMER function on 0% and the OFF function produce different results in an LTP switch :
if the channel is on OFF, activating the switch will have no effect on the channel concerned.
if the channel is on DIMMER 0%, activating the switch will force the channel concerned down to 0%.

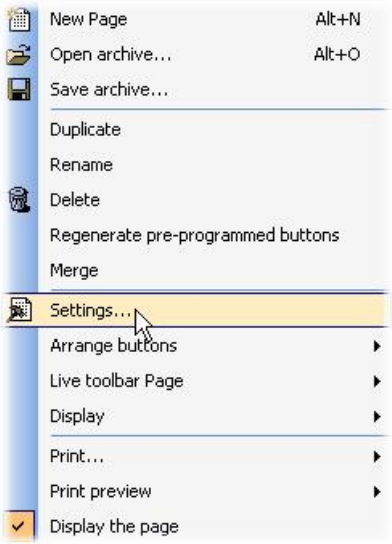
LPT switches also have a "Auto-release" mode.

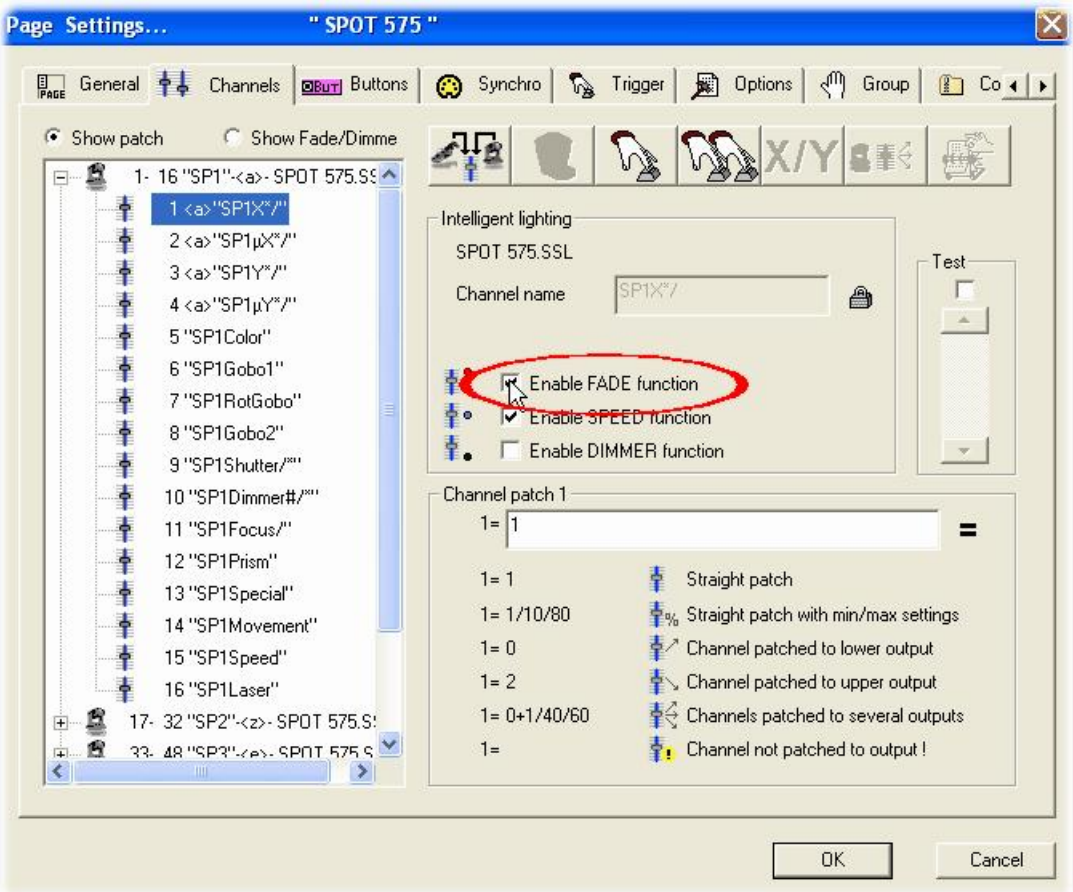
For example, with several switches used for selecting different gobos, if "Auto-release" mode is activated on these switches, clicking on "GOBO-STAR" will automatically release the "GOBO-CIRCLE" switch which was previously pressed.

NB : Auto-releasing among several LTP switches will be fully-operational provided the switches operate on the same channels (i.e. OFF functions on the same channels).

4.3.2 How to make a fade between two scenes

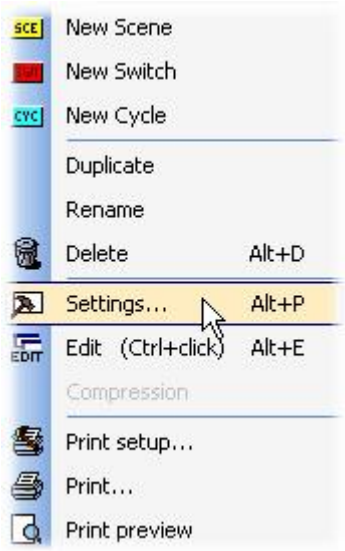
It is possible to fade from one scene to another one. For instance, this is really useful to go from one position to another one very slowly, to open/close the dimmer of your lights...A few things need to be checked before to start programming our 2 scenes. First of all the "FADE" function must be allowed on the channels we want to use. To do so, we open the "Page Settings..." window from the menu and we go to the "Channels" tab (see below).

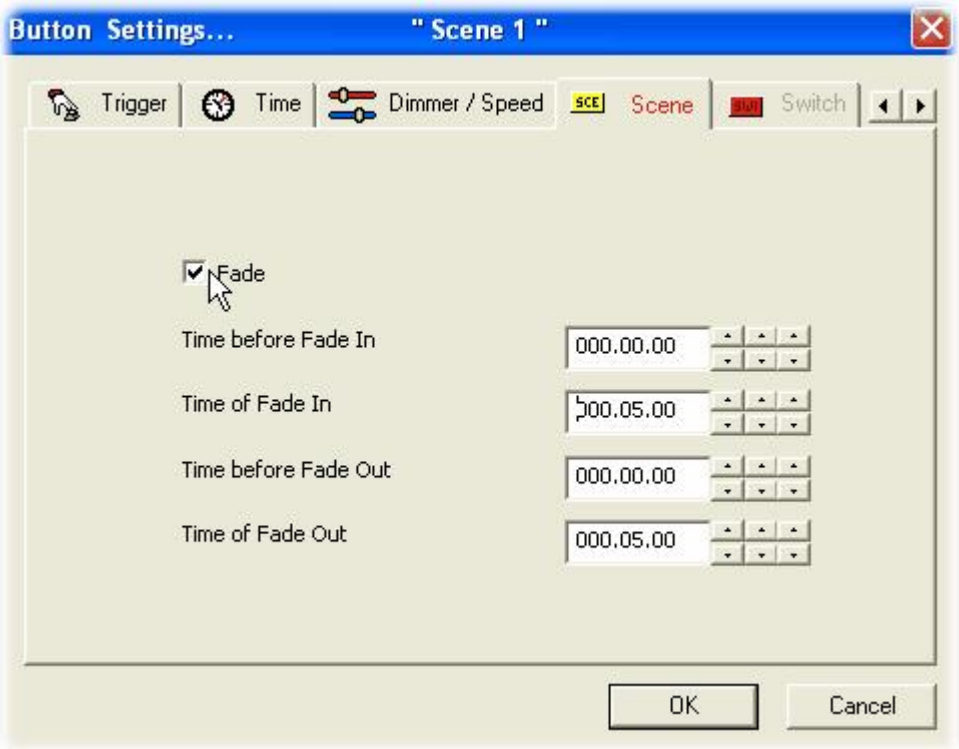




All the channels of our page are listed in the list situated on the left side of the window. We want to make a fade between 2 positions, so we must enable the "FADE" function on Pan&Tilt channels for all our fixtures. Please note that the function is already enable on Pan&Tilt channels...however this is good to see how to do it. Now it is time to create our 2 scenes. In the previous chapter we saw how to create a scene "As you see now"...we will use the same function and create the scenes using the TAKE buttons.

First we start the "@Center" scene to open the beams and to place the fixtures in centre position. After that, we use the TAKE buttons to move our 6 fixtures to the correct positions. When all fixtures are ready, we can save the scene by calling the "New Scene" window from the "Button" menu and selecting "As you see now" like we saw in the previous chapter. Our first scene (Scene 1) is now created and we are ready to enable the Fade function on it. To do that, we must open the "Button Settings" window from the "Button" menu (see below) and go to the "Scene" tab.



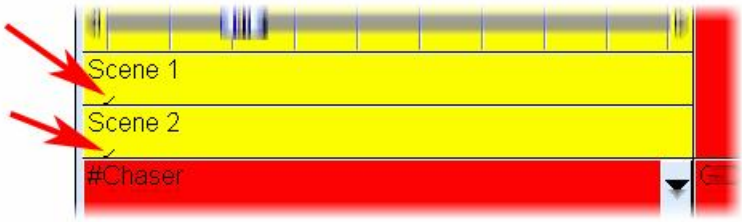


Once the "Fade" function has been selected, we can setup the fade times. Please keep in mind that the channels can have their levels increasing (Fade In) or decreasing (Fade Out):

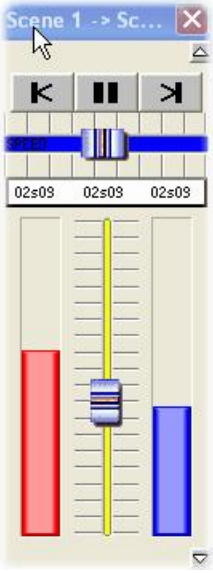
- Time before fade In : Time between the call of the scene and the beginning of the Fade In
- Time of Fade In : Fade In time
- Time before fade Out : Time between the call of the scene and the beginning of the Fade Out
- Time of Fade Out : Fade Out time

Here, we can leave the default settings which are 5 seconds for the Fade In/Out times and no time before Fade In/Out. We can click on OK when it is finished and our first scene is now ready to be used. Let us create the 2nd one and call it "Scene 2". To do so, we release all the buttons in our page (double click on INIT) and we call the "Scene 1". Then we use the TAKE buttons to setup a different position for each fixture and we save the scene with the "As you see now function". Now we just have to setup the Fade times (as we did with the 1st one) and we are ready to fade from our "Scene 1" to our "Scene 2".

When a scene has been programmed to make a fade, we can see a small icon on the bottom left corner as shown below.



When a fade is running, the following window appears and shows you the FADE IN (left, red) and the FADE OUT (right, blue). This window allows to make a break, to increase the speed of the fade, to jump to the end of the fade or to go back to the beginning. Please note that you can make this window visible or not by clicking on "Fade" from the "Windows" menu.



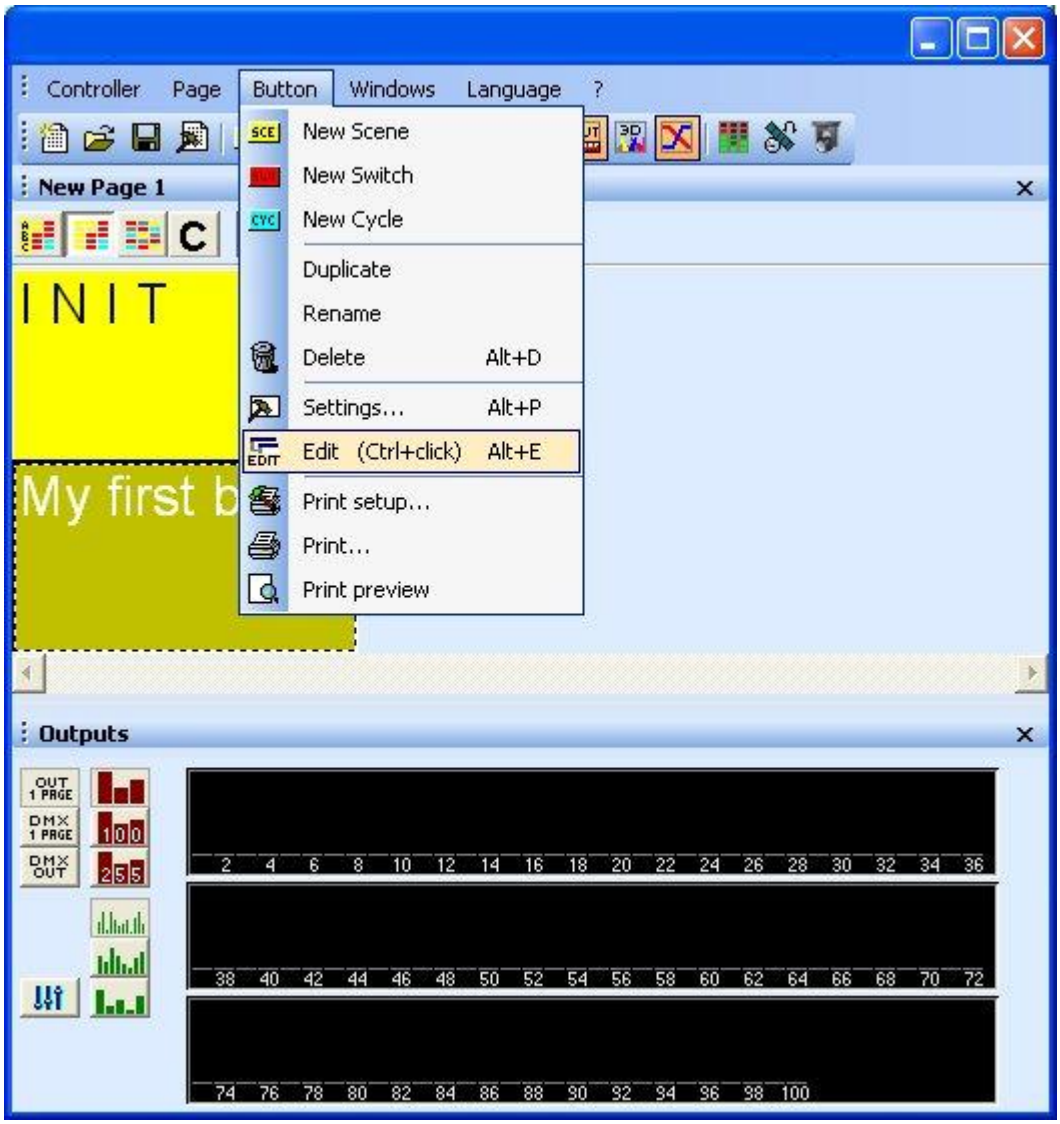
Please keep in mind that the FADE function is not available on channels which have been programmed with the ON/OFF mode. This is very useful to make some channels fading or not in a scene. Imagine you want to fade from one position to another one with your fixtures but you want to change the gobo without fading in the same scene. The gobo channel must be programmed with the ON/OFF mode, or the FADE function (Page Settings window) must be disable on this channel.

Summary:

A "Scene" in "transfer" mode can be recognized by a small icon	
The fade-out scene	
The new fade-in scene	

4.3.3 How to program a "Scene" or a "Switch"

Now that we have defined the role of different buttons, let's turn to important matters. To program a button, just click it (1) then select "Edit" (2) (from the button-menu). An icon from the tool-bar or shortcut keys can also be used.



Now you can access the programming-window for your button called the "Editor".
The "Editor" features a number of tools. These tools work as independent racks you can access by clicking tabs in the upper part of the Editor.

NB : "Blind" or "Live" Editing ?
If a button is activated on the page (button is pressed) edition is in "Live" mode. Then, you can master the fixtures. In such a situation, the edition icon is displayed as a "Green Light".

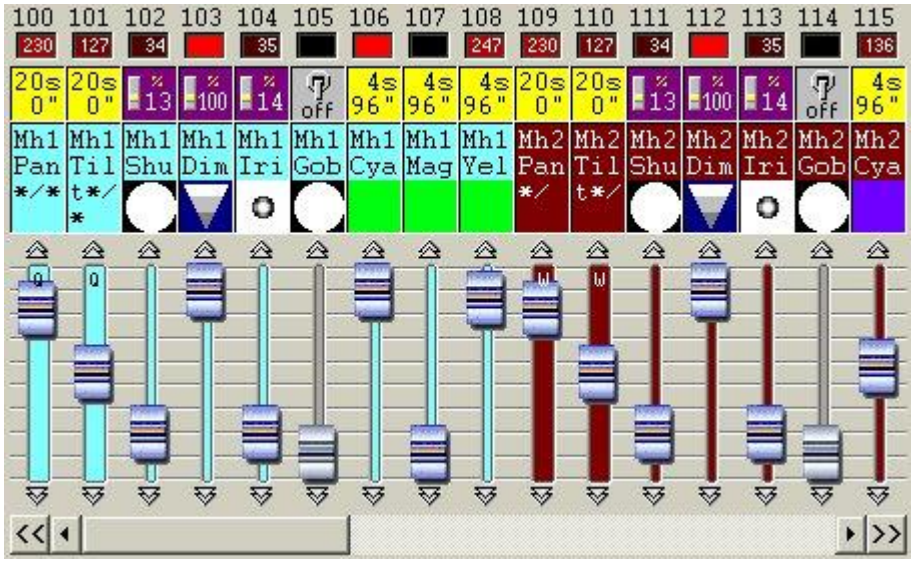
If you wish to modify any programming in "Blind" mode, the button should not be activated on the page. (button released) In such a mode, the Editor icon is displayed as a "Red Light".

Shift-Click enables you to select a button without actually activating it if you wish to start editing immediately in "Blind" mode. (Shift-Click means Keeping shift key pressed while clicking on the button)
Transition from "Live" to "Blind" or inversely can be carried out directly from the Editor by clicking "Live --> Blind" or "Blind --> Live"

4.3.3.1 The "Editor" screen

In the upper part of "Editor" you will find a number of modules which you can use. The "EasyTime" module is the most important one and is the best tool to control your channels in step time. It is displayed first and should be mastered first for convenience. The other racks make it possible for example to program chasers, to create a "follow spot" or to use "MIDI" functions for instance.

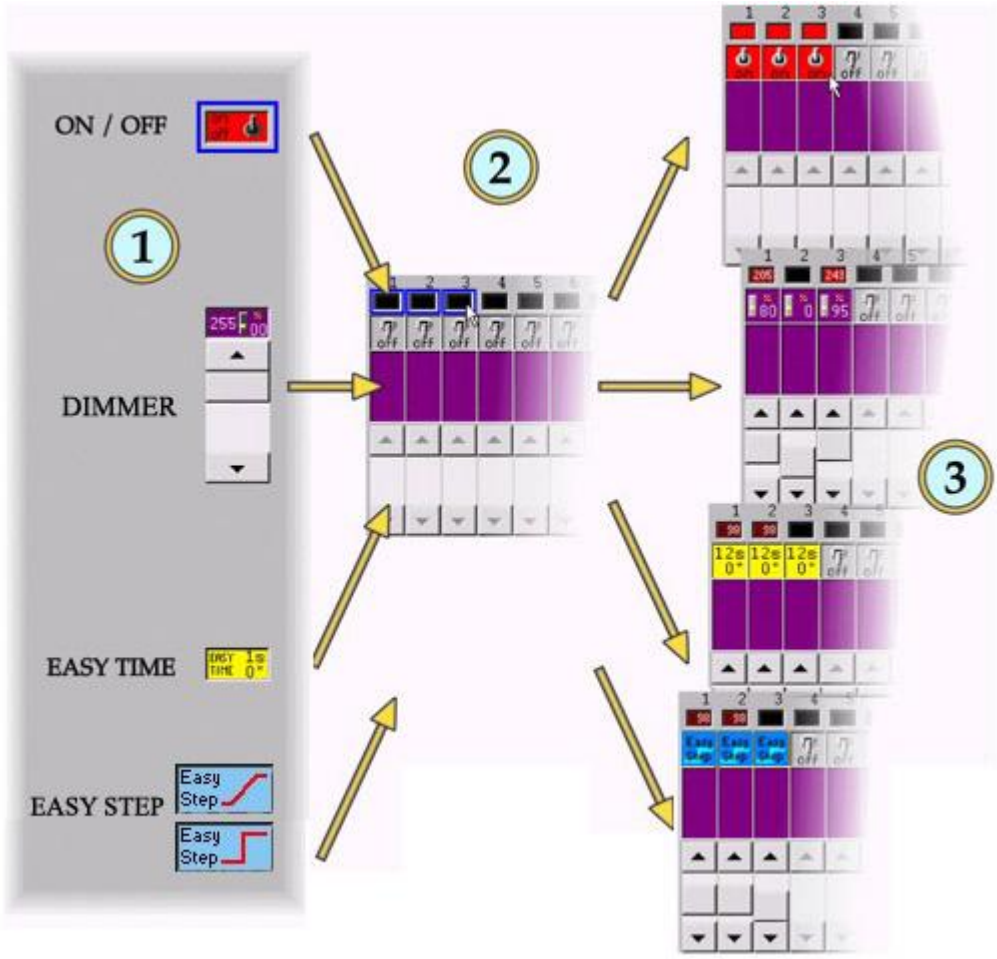
The lower part of the "Editor" displayed as a horizontal-scrolling window, you will find all the channels accessible on the active page, (i.e. the page which the button comes from). These channels are those allocated (and assigned) in the patch of this page…
Therefore, it is no use trying to find "Spot 575" channels when editing a scene from page "Spot 250". In extreme cases, it can be said that a page can store from one channel up to a maximum 2048!



Each channel is therefore represented as a fader whose position adjusts the DMX value. Above the fader, there are three indicators. For instance, the largest area will directly show you the active gobo or the color being used in the shape of a mini-icon.

4.3.3.2 How to use the "Editor"

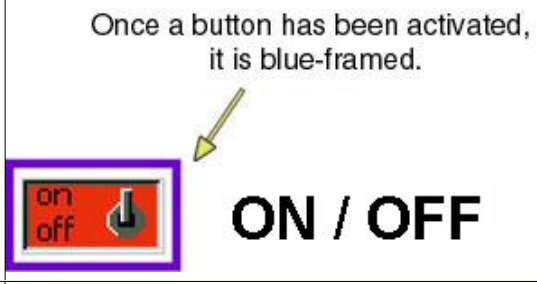
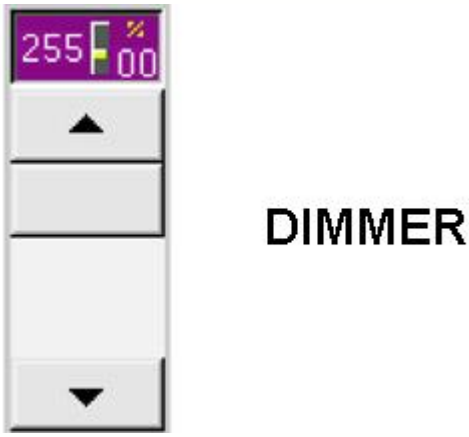
To use the "Editor", select the mode (1) then assign it to the leds of the channels you wish to program (2). There you are ! (3).
Each channel displays a specific icon which clearly shows its programming-type.



The following icons may be found:

	"ON" mode
	"OFF" mode
	"DIMMER" mode
	"EASY STEP" with fade mode
	"EASY STEP" without fade mode
	"EASY TIME" mode

The "EasyTime"function is only available from the "EasyTime" tab, and the "EasyStep" function only from the "EasyStep" tab.

On/Off mode It is used to program a channel in set "On" mode as long as the scene is activated. "On" mode is activated (set position : 100%) by clicking left-clicking. "Off" mode is activated (set position : 0%) by clicking right-clicking.	
Dimmer mode It is used to program a channel by setting its DMX value as long the scene is activated. By default this value is on a minimum 0% level but may be modified. For instance, to program several channels on 50%, the easiest way is to set Dimmer-mode on 50% then to click on the leds of the channels.	
EasyStep mode The Easy Step rack allows to create simple steps scenes. These steps can fade or not between each of them. To use the rack, you must select the appropriate function (fade or not) and then link it up to the outputs. Using fade and wait time is really simple, you only have to setup both of them in the appropriate control.	
EasyTime mode It is used to program a sequence of steps for a channel which will play automatically once the button has been activated. The EasyTime module enables you to program (and visualize) each step for all the channels programmed in "EasyTime" mode.	
Copy/Paste mode It is used to copy one or more channels from other channels. For instance, if you have carefully set a color-type or a stroboscope-value, you just have to copy then to apply it to other fixtures.	

NB:

- You can assign channels one by one or else assign a whole series in one operation by "dragging & dropping" channel-leds.
- "On/Off" modes and "faders" make it possible to program set positions. To program variable intensity, position, colour or focus on the button it is essential to assign "EasyTime" mode and to use the "EasyTime" rack.
- To assign the modes available within the racks, proceed in a similar way. First select what you wish to assign then click the channel led(s).

4.3.3.3 What is the difference between dimmer and On/Off modes

By default, when programming a "Scene" or a "Switch" for the first time, all the channels are in "off" mode.
A channel in "On" mode is very similar to a channel in 100% "Dimmer" mode. Likewise, a channel in "Off" mode is very similar to a channel in 0% "Dimmer", but not entirely so...

In the event of a fade between two "Scenes", intensity of channels in "On" and "Off" mode will change abruptly whereas other channels will gradually adjust to the new preset value.

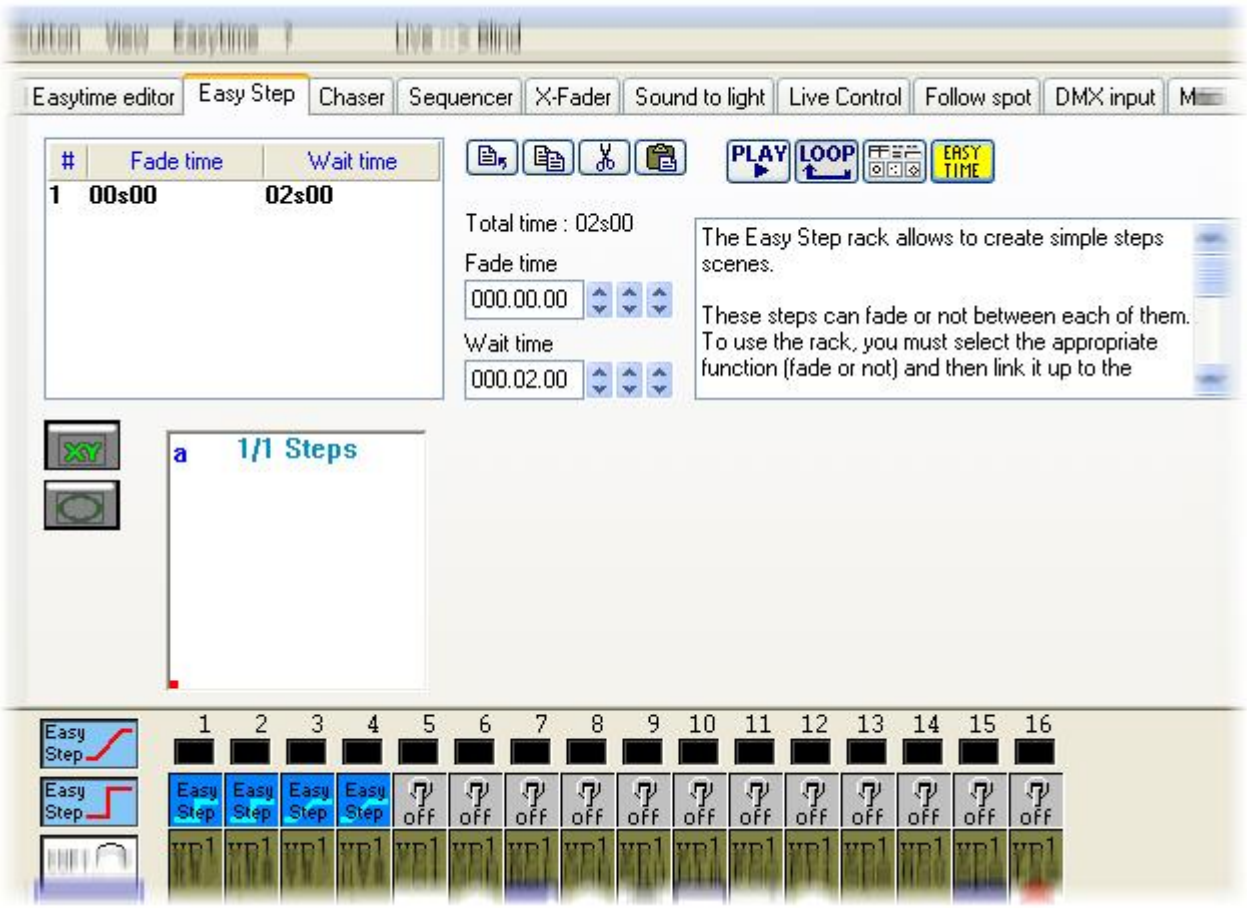
In the case of a "Switch", channels in "Off" mode will be ignored and will therefore remain unchanged.

Ex : if you want to create a magnificent rocket-takeoff effect for a show or on a dance-floor, it is easy : just use channels in "On" mode to activate DMX-controlled smoke-generator(s) and DMX-operated fans while activating dimmers to intensify light to symbolize flames (via a fade). The whole process will be programmed on a "Scene" called "Take off"...

	In a "Scene"	**In a "Switch"**
"Dimmer" mode	The channel is adjusted to appropriate level with a possible transfer (fade)	The channel is adjusted to appropriate level
"On" mode	The channel is immediately switched on 100% (no transfer)	The channel is on 100%
"Off" mode	The channel is immediately switched on 0% (no transfer)	The channel is ignored

4.3.3.4 Programming a scene with Easy Step

The Easy Step rack allows to create simple steps scenes.



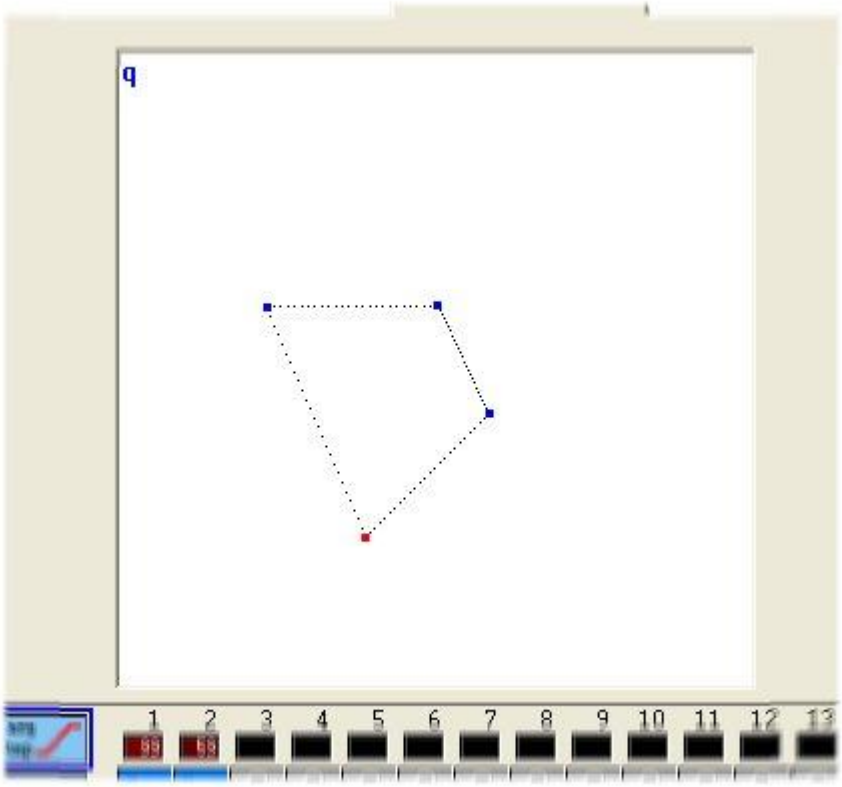
These steps can fade or not between each of them. To use the rack, you must select the appropriate function (fade or not) and then link it up to the outputs.

Easy Step	"EASY STEP" function with fade
Easy Step	"EASY STEP" function without fade

You might have to create a scene fading between two positions of beam and keep the color changing quickly between each step. To do so, you must use the "EasyStep with fade" function on Pan/Tilt channels and "EasyStep without fade" function on color channels for example.

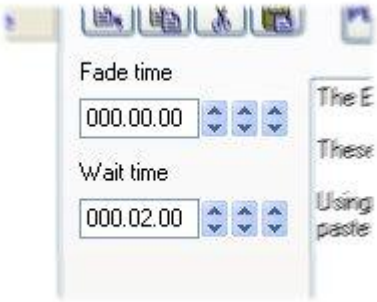
Like with "EasyTime", we can find a movement area for each fixture. It helps us to create a shape rapidly but we can not use pre-programmed shapes (circle, polygon...) unlike with "EasyTime".

If you are using "Easy Step" on Pan&Tilt channels you can see the following area below the list of steps.



Each step can be moved individually with the mouse. A step can be selected by clicking on the corresponding point (shape area) or directly from the list of steps.

Each step has its own wait and fade time. Using fade and wait time is really simple, you only have to setup both of them in the appropriate control (see bellow).



Various function are available : copy, cut, paste and insert a step. You can also choose to make your scene loop or not as well as scannerized your step to make then work with Easy Time.

4.3.3.5 "EasyTime"

4.3.3.5.1 How to use "EasyTime"

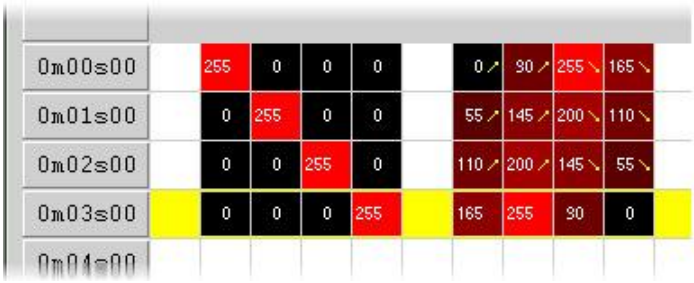
Easy Time is an advanced tool which must be used to program movements (circle, curve...). If you want to simply create steps, it is easier to use Easy Step.

"EasyTime" is a tool which enables you to control channels in time. Each channel is programmed independently. "EasyTime" has been designed for maximum ease and convenience when programming "Scenes" and "Switches".

"EasyTime" is similar to an Excel-sheet displaying all the values of each channel in time. Channels are shown on a horizontal axis and elapsing time on a vertical axis. This grid is called the "time sheet".

Therefore, "Time sheet" therefore globally represents the progress made by all the channels on a specific page from the corresponding "Scene" or "Switch" activation onwards.

Even though each "Scene" or "Switch" has access to the "Editor" and therefore to "EasyTime", it is essential to know that each button has its own "time sheet".



Each line refers to a specific moment, since the button was activated.
To activate a period of time, i.e. to be able to visualize what will happen at some point, just move (yellow) edit line to appropriate time-cell. Each column in a time-sheet represents a channel.
As soon as a "Scene" or a "Switch" has been activated, the time-sheet associated with this button will be read from line 000'00'00 to the final line containing information.

To program a time-sheet with fade effects, you may program all cells in sequence but to make things easier, this software includes very efficient tools such as "Fade" or "Cut/Copy/Insert" modes.

Now a little training...

Things will go smoothly once the channel has been set in "EasyTime" mode as was done for "On" or "Dimmer" modes.
Just click "EasyTime" mode to pilot all the channels required in "EasyTime" mode (click and drag leds). Now just scroll the time-sheet to time-indication. To set value, just move the fader. The value will be displayed in the cell concerned, i.e. at the channel column concerned.

You must move the cursor to the line corresponding on the total expected time for your scene before to setup your channels with EasyTime function. For example : for a 10s scene, we move the cursor (yellow line) to the 00m10s00 line and then we affect EasyTime function on selected channels.

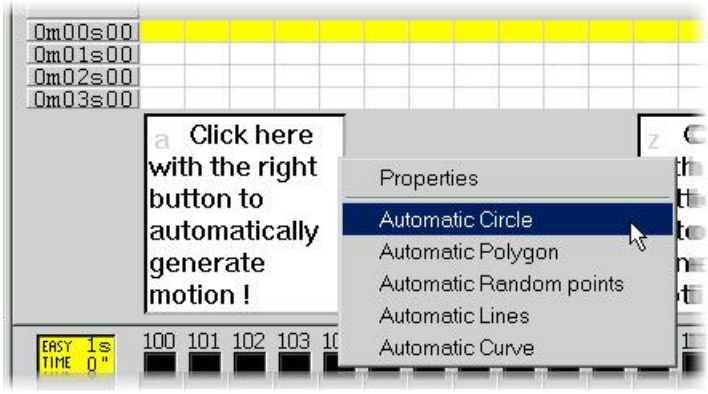
In case there are blank cells in between the latest time programmed and current time, you will be prompted to answer the following questions :

- Prolong previous value up to current time?
- Gradually move from previous value to new value?
- Assign new value from latest cell programmed onwards ?

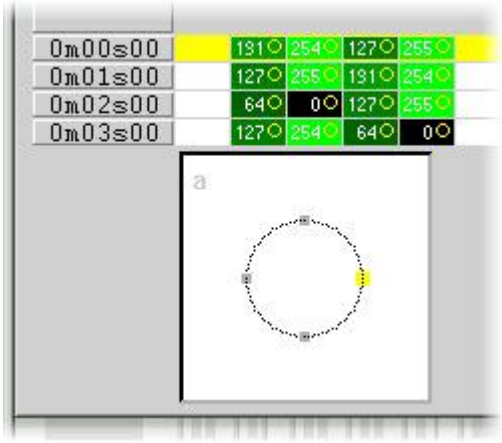
Type, click on an Easy Time column figure to open the following menu :

This menu allows to change the way steps are linked together. "Linking" may be set according to tempo or programmed on step-by-step mode.

If you use moving lights, this software contains extremely quick basic functions to create sophisticated vectorial motion-effects.
The first interesting figure you may wish to create is a circle. To do so, right-click anywhere in X/Y area then select "Generate a Circle" from menu.



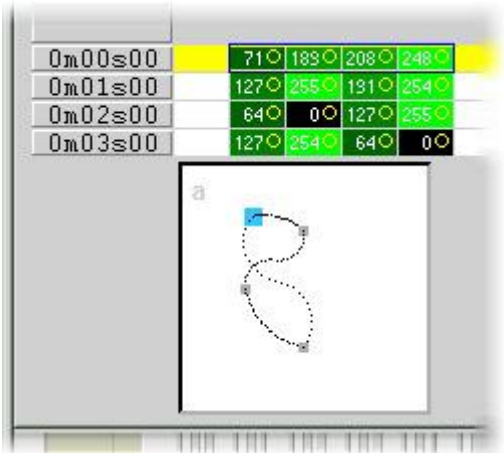
A circle will then automatically appear and EasyTime will display green cells including X/Y values as referential points.



By default, a circle is drawn from 4 points. To move any of these, several methods can be used :

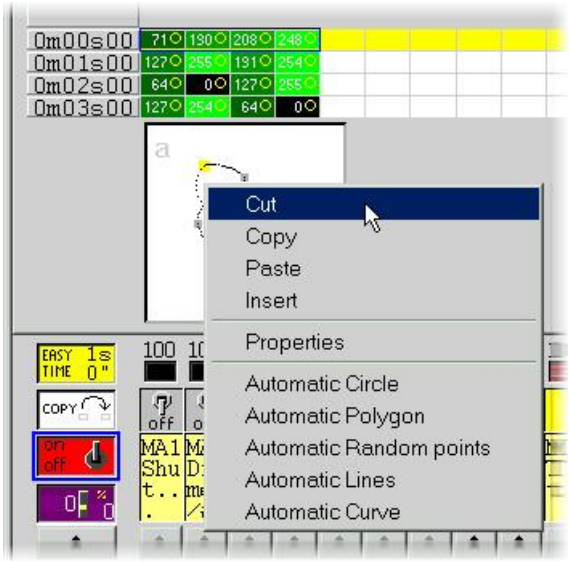
- Adjust the X/Y channels with one of the faders. Yet, this method is not very convenient.
- Press the shortcut key while moving the mouse.
- Click on the point and move it with the mouse.

As you can see, moving a point is carried out in real time on the fixture !
Secondly, you will notice that the best curve has been made by the software from these points in real time.



To add or delete a point, several methods can be used :

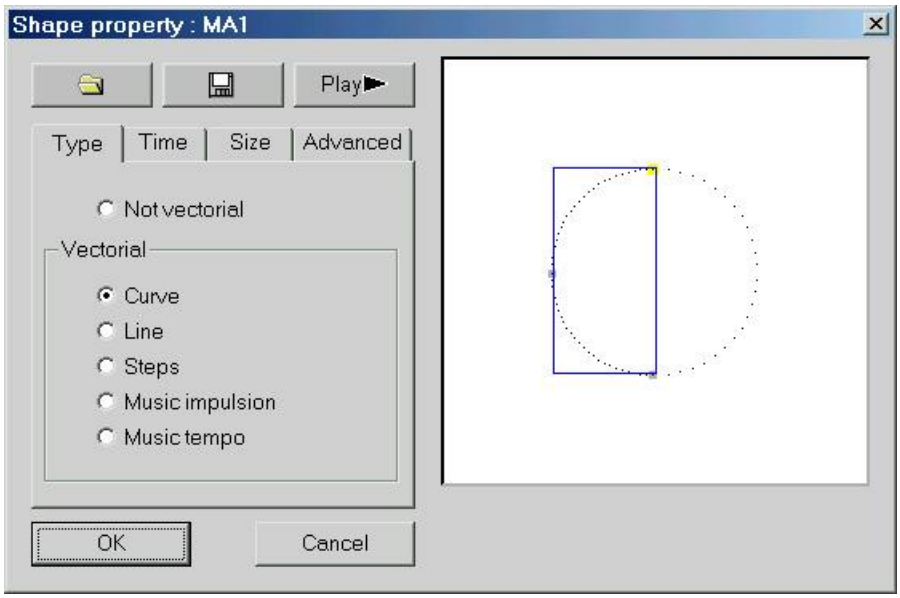
- Select the cells corresponding to the referential point (2,or 4 cells if the fixture has micro-steps) then use "Cut,Copy or Insert" from toolbar.
- Click right on the point and select "Cut","Copy" or "Insert " from menu.



There are 3 different types of vectorial movements :

- Curve (e.g. a Circle)
- Line (e.g. a triangle)
- Positions (going straight away from one point to another)

These settings are carried out on the "Properties" windows where many other functions are available (setting size in real time, selecting time-scale, saving and opening shape-files).



NB :

- A channel operated by a vectorial movement in EasyTime can be identified by green cells whereas red cells indicate that the channel is in "non vectorial" mode
- In one button, each fixture can only be assigned one type of vectorial movement (curve, line or positions). However, channels can be converted into "non vectorial" mode, then any cells can be modified.

EasyTime : "Fade" function

The "Fade" function makes it possible to create a fade-effect in between 2 cells by computing intermediate values. It can only be used with cells in "Not vectorial" mode (red cells).

To use the "Fade" function, first select a block of vertical cells, then click on "Fade" function. You will then have an alternative :
"linear" fade in between the 1st and last cell : intermediate cells are totally re-computed.
"fragmented" fade in between each cell : intermediate cells are taken into account ; this process re-computes as many intermediate fades as necessary to adjust to the number of lines.

NB : A fade can apply to several channels in one go ! Just select cells from several columns.

EasyTime : "Play" function

The "Play" button can be used at any time to visualize or stop programming in process.

When you edit a button after clicking it, the "Play" mode is necessarily active since the button itself is active...

When editing a pre-selected button without any prior shift-click, the "Play" mode is necessarily inactive since the button itself is inactive...

NB : It is essential to stop the "Play" mode to modify the "EasyTime" time-sheet.

EasyTime : "Loop" function

If "Loop" mode is activated, a "time-sheet" will be played over and over again.
If "Loop" mode is off, it will just be played once and each channel will remain unchanged and set on the latest value specified in the "time-sheet".

NB :

- If "EasyTime" programming time is the same for all the channels, (they all end up in the same line) then the loops will be identically recurrent; if at some point in the time-sheet, two channels have a similar value, then two hours (and a few minutes or seconds) later, they will have this value again simultaneously ; channels are always synchronized.
- If "EasyTime" programming time is different for all the channels (not all of them end up in the same line) then they will not recur simultaneously ; each channel will work independently ; each channel behaves as if it had its own loop and stands totally de-synchronized.
- This function is extremely powerful, if de-synchronized channels are used you will get seemingly-random combinations which are ideal if you wish to brightly illuminate light garlands, a ceiling or a solo on the drums.

4.3.3.6 "Racks"

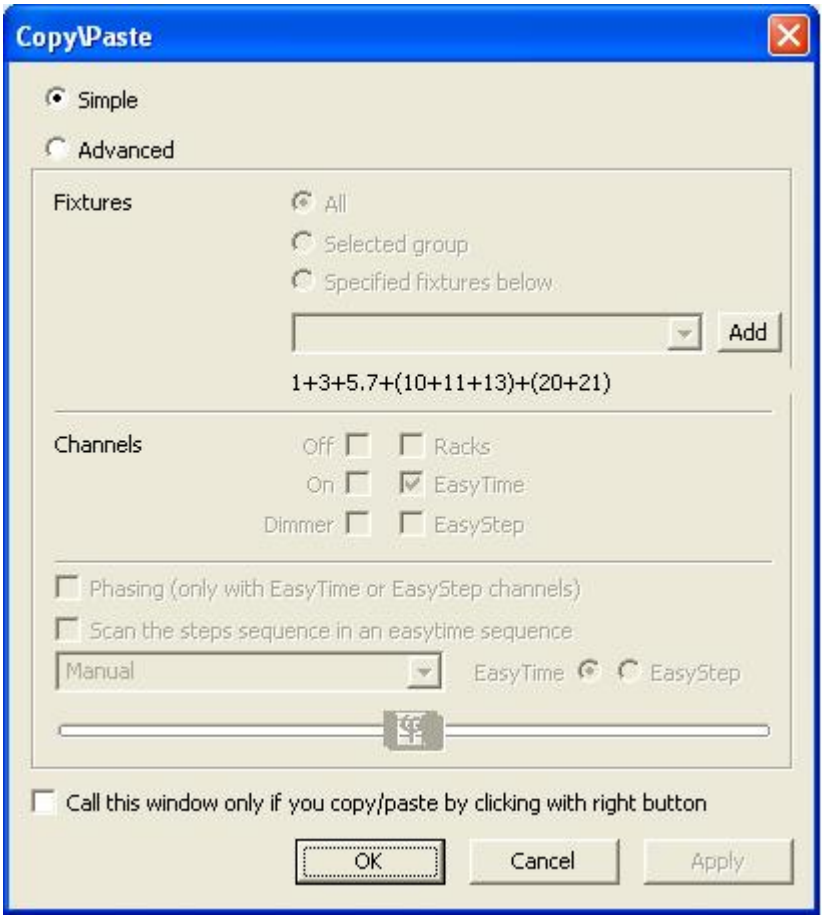
The 2004 software advanced features for "Scene" and "Switches" editing - called "racks" - enable the creation of a wide range of effects in no time :

- CHASER : enables you to work out an adjustable speed chaser with a maximum of 16 channels.
- SEQUENCER : Choose among a large range of preset sequences assignable to up to 16 channels.
- X-FADER : enables to make a fading (from 2 to 16 channels) with speed and fade adjustment from one channel to another.
- SOUND TO LIGHT : allows to control light according to sound (treble, medium, bass).
- LIVE CONTROL : channels are piloted with mouse or joystick and the sequence may be recorded.
- FOLLOW SPOT : synchronizes slave with master fixture movements (very handy when using follow spot with several lights).
- DMX input : makes it possible to control channels with an external DMX controller.
- MIDI : allows to control channels with external MIDI controller.

The DMX input features require a DMX input interface.

4.3.3.7 Copy/Paste

This feature is available with "EasyTime" and "EasyStep" racks, let us see now how to use it. With this new tool, you can quickly copy and paste a sequence to one or several fixtures. When your sequence is ready to be pasted to the other fixtures you must click on the "Copy" button (below the "EasyTime" or "EasyStep" button) and then select the channels you want to copy (like we did before). The following window appear:



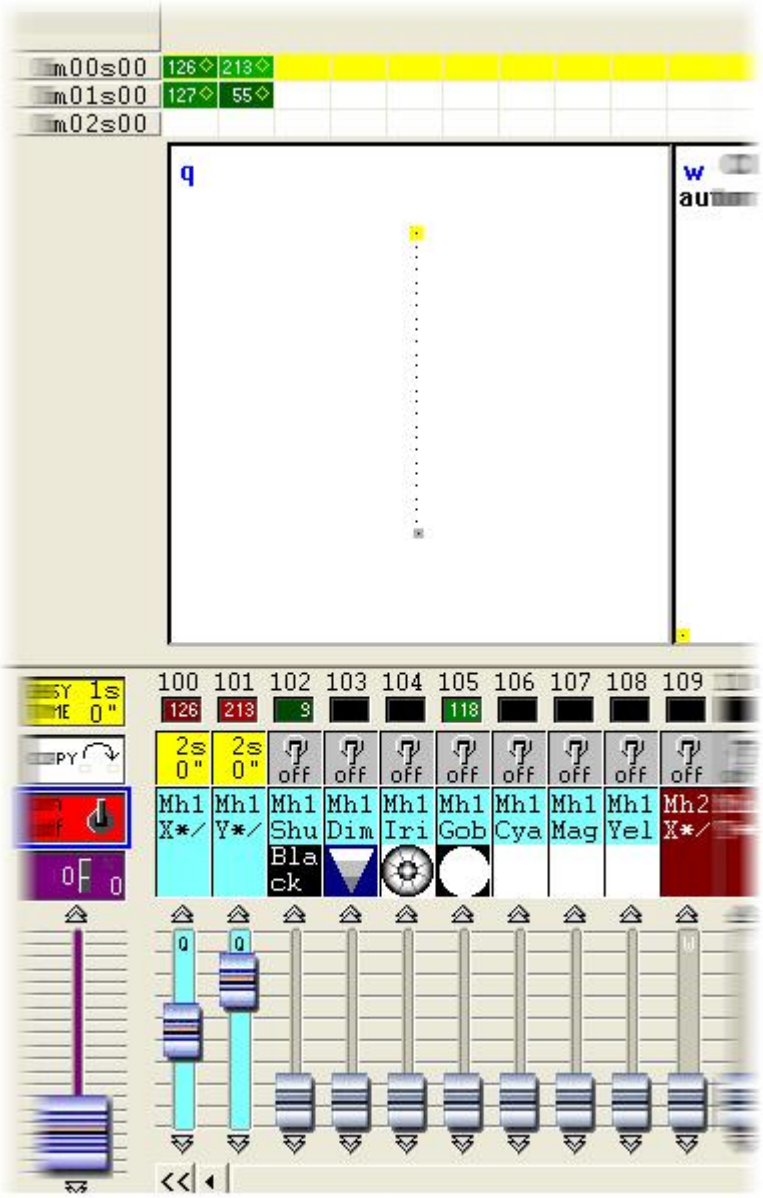
By default, "Simple" is selected. That means that the sequence will be pasted to the selected fixture. If you want to paste the same sequence to more than one fixture you have to select "Advanced" and then select the fixtures. Three options are available:

- All : means that the sequence is pasted to all (same) fixtures
- Selected group : means that the sequence is pasted only to the fixture of the selected group
- Specified fixtures below : you can select the fixtures one by one

The phasing tool allows to easily create a "wave" with your scanners or a rainbow effect with your CMY colour changers. Basically, this new tool allows to copy some channels from a fixture to the other one. However, there is an advanced option which helps you to add a delay between each fixture for the selected sequence.

How to create a "wave" or a rainbow effect

In this part we will learn how to make a wave with your fixtures. We must create a tilt movement with our first fixture. So, we click with the right button in the shape area and we select "Automatic Lines" with 2 points. We must move those 2 points to get a tilt movement (50% on pan channels) as shown below :

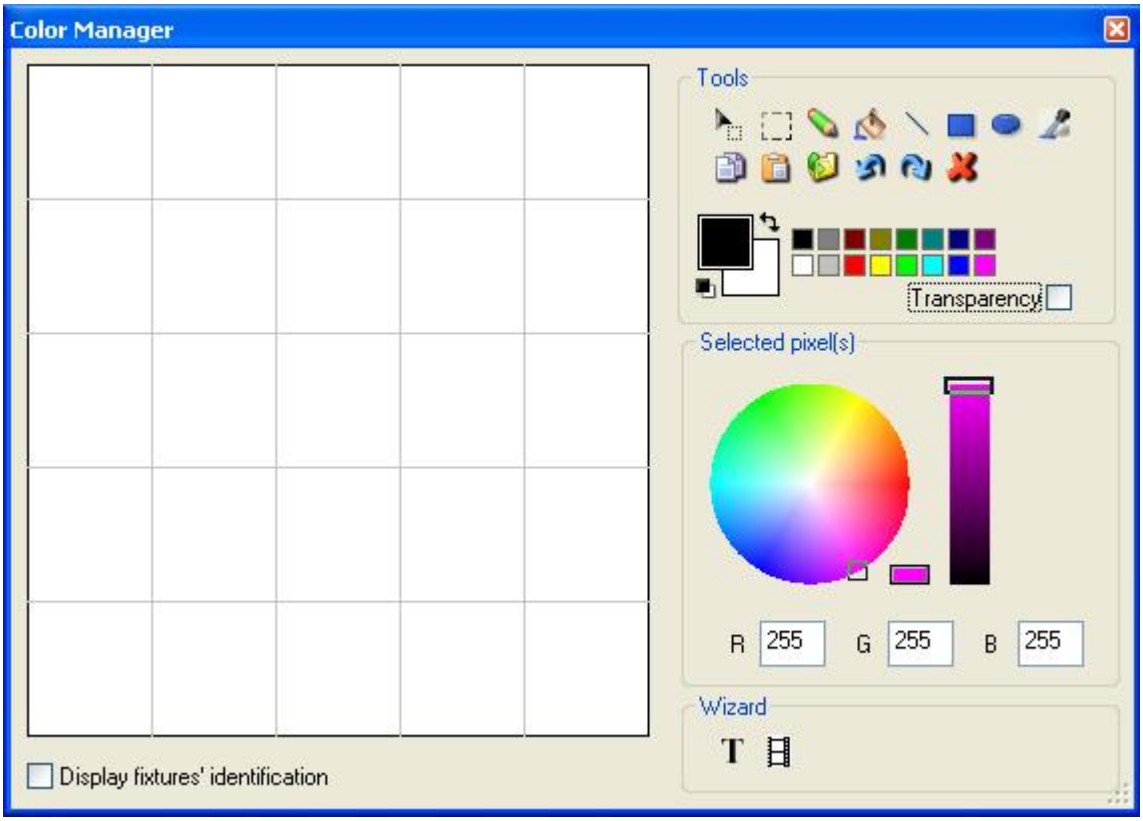


Once we have made this, we can copy the "PAN&TILT" channels and paste to one fixture. The "Copy/Paste" window appears and we must select "Advanced" to access the phasing function. After having selected "Phasing (only with EasyTime or EasyStep channels)", you must specify the type of phasing:

- Manual means you have to specify the delay manually with the cursor
- Other options are pre-programmed delays taking the number of fixtures into account

4.3.3.8 Color Manager

The "Color Manager" tool is basically a colour editor for RGB or CMY fixtures. It allows to create either static or dynamic colour sequences very easily. Imagine you want to load a bitmap or simply write a text on your matrix of LEDs, "Color Manager" will help you to make it in a few seconds. To open "Color Manager", click with the right button of your mouse on a color mixing channel in the editor screen. Several functions are available, let us see know how to use them:



Basic tools

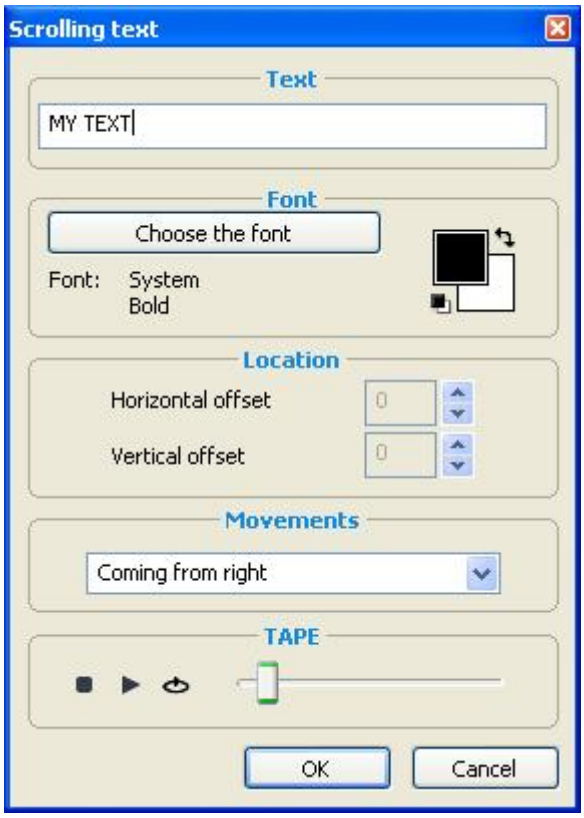
The basic tools are situated in the "Tools" area of the window. You can find the main functions available in a bitmap designer and select a color for each fixture very quickly. Each fixture is represented by a square on the left side. You can display the name of each of them by clicking on "Display fixtures' identification". Several tools are available:

- Select pixel and Select area: the first one allows to select fixtures one by one, the second allows to select several fixtures simultaneously
- Pen and Paint bucket: to paint one or several pixels with the selected colour
- Line, Rectangle, Circle: to draw a line, a rectangle or a circle
- Pipette: to pick a color from the fixtures area
- Copy, Paste: to copy or paste pixels
- Load an image: to draw an image (BMP, JPG...) with your fixtures

You must use the colour picker to change the colour of the selected pixel(s). You can also enter the RGB values manually.

Text wizard

The text wizard allows to write easily a text on your matrix. You can make either static or scrolling text, choose the font, the background color...You must click on the "T" button ("Wizard" area) to open the following window.



Here we must enter our text and then choose a font and a colour. You can specify a colour for the text and for the background. It is also possible to move your text vertically and/or horizontally with the "Horizontal offset" and "Vertical offset" cursors. Then, if you want your text not to be static, you must select the type of movement from the list situated in the "Movements" area. The cursor in the "TAPE" area makes it possible to change the speed of the scrolling.

4.3.4 Changing the SPEED, SIZE or the DIMMER of my scene

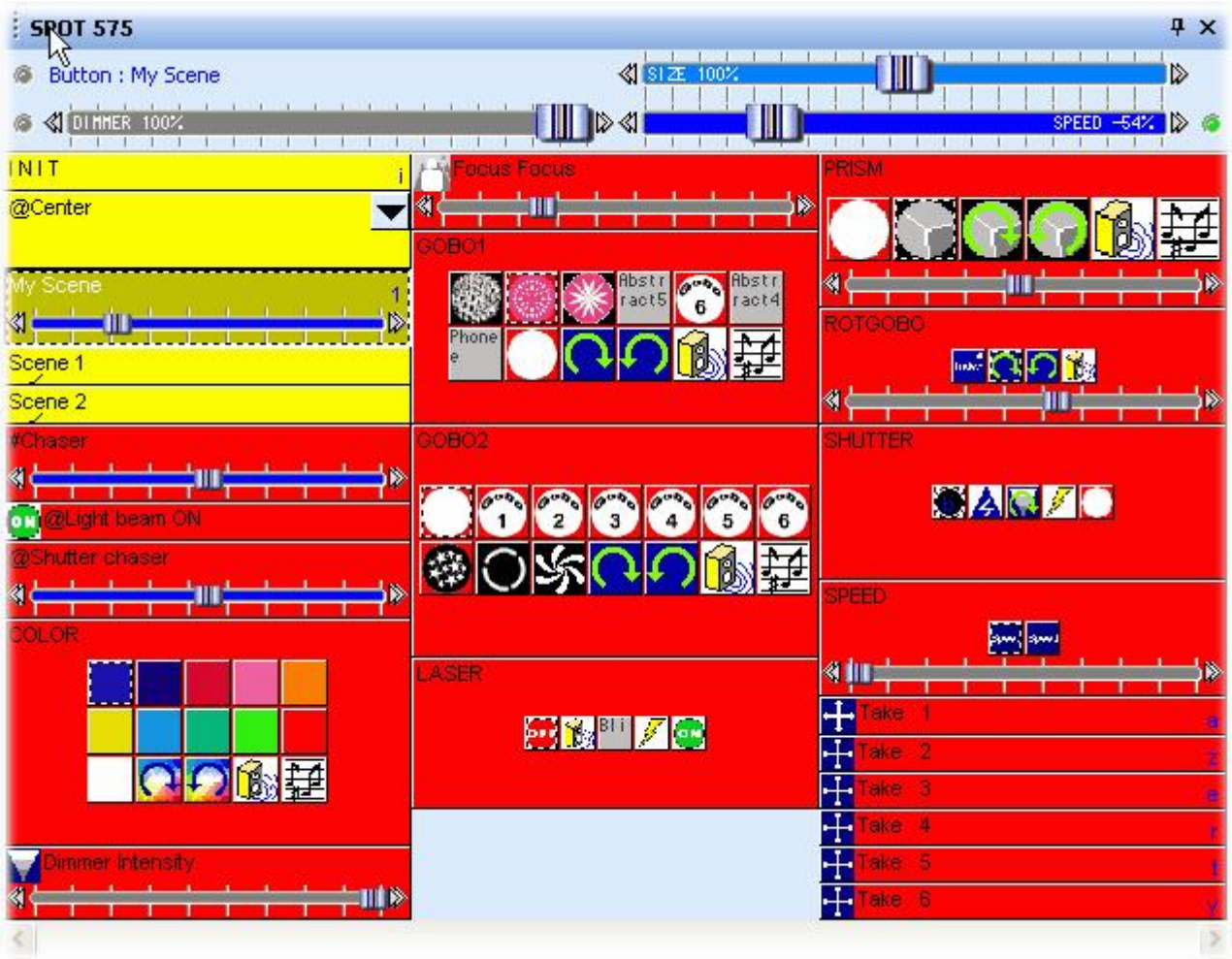
As we saw in the previous chapter, it is possible to have a "FADER" on a button : scene or switch. These faders can have 3 different functions, SPEED, DIMMER and SIZE. Each button can have its own faders. DIMMER and SPEED functions can also work as global parameters for a page. Let us see now how to use these 3 functions.

First of all, it is important to see how to enable these functions. If we want to use DIMMER and SPEED functions we must allow the channels of our page to be controlled by these faders. To do so, we must go to the "Page Settings..." window and select the "Channels" tab. We can call the window from the "Page" menu by clicking on "Settings...".

The Speed function

If you want to increase (or decrease) the speed of a sequence (Easy Time or Easy Step) in real time you must use the SPEED function. The main interest is that you don't have to modify your program to change the speed. All the changes made with the SPEED faders are not saved. Of course the position of the SPEED fader is saved, but you can go back to the programmed speed at any time by resetting the fader position.

You can display the faders on the buttons or use the toolbar : "Live toolbar Button". Using the toolbar enables to save space. Drawing the fader makes the button bigger and even if it is possible to group the buttons it can be difficult to visualize all of, them on a small resolution screen. The toolbar allows to use the 3 functions : SPEED, DIMMER and SIZE so it could be very helpful to save a lot of space. You must go to the "Page-Display" menu and then select "Live toolbar Button" to show the window. It is also possible to call the toolbar by clicking with the right button of your mouse on the page title bar. Please see the toolbar below.

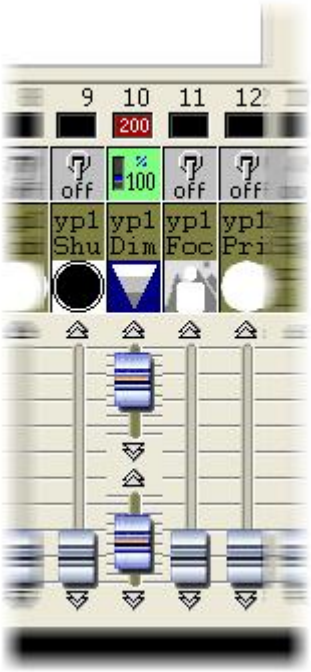


The Dimmer function

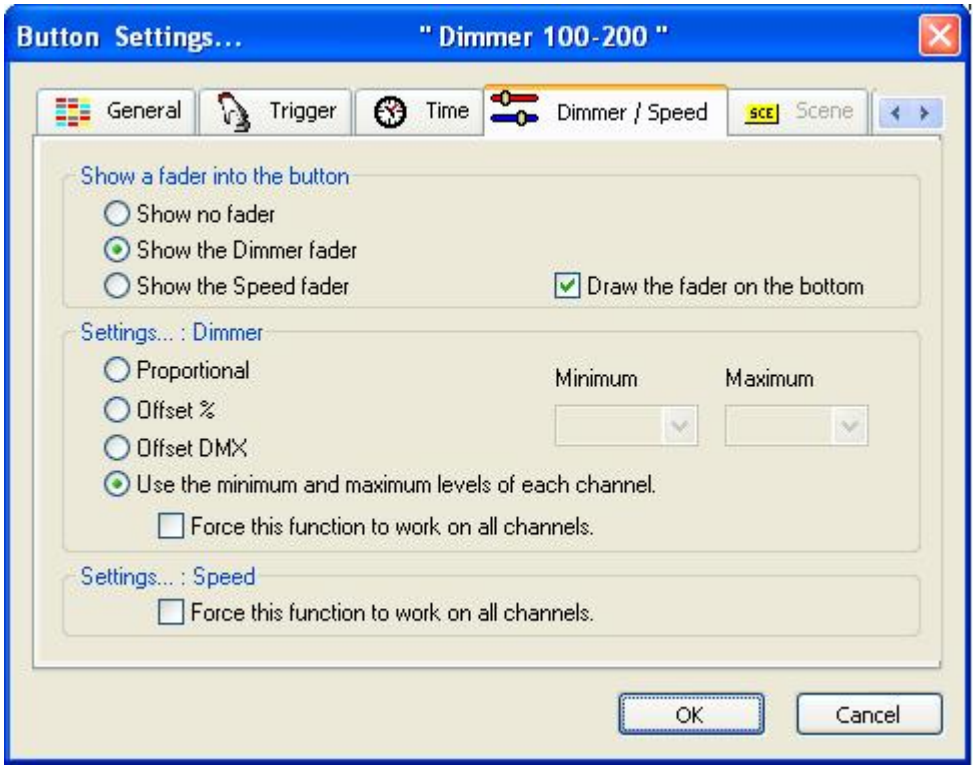
This function allows to modify easily the DMX level of some channels in a button in real-time. If the library of your fixture has been made correctly you should have a DIMMER fader on Dimmer, Zoom, Iris, Focus...channels. This helps you to modify the channels intensity without editing the buttons.

It can also be very useful to use this function for conventional lighting (PAR...), this make a button allowing to modify the beam intensity in real-time.

Let us see now how to use this function on a dimmer channel. We will see how to create a switch which allows to control the dimmer from 100 to 200 (DMX values) with the fader. This can be very useful to know how to do that when the dimmer is located on the shutter channel (e.g. Blackout from 0 to 99, Dimmer from 100 to 200 and Strobe from 201 to 255%). First of all, we must create a new switch ("Button" - "New Switch"), we can call it "Dimmer 100-200". Then we must edit this button by clicking on "Edit" from the "Button" menu. Then, select the "Dimmer" function and link it to the channels using the mouse right button to affect 2 levels (minimum and maximum). Once the 2 levels have been programmed, the channel appears as below:



Close the editor screen (do not forget to save the modifications). The switch is now ready to be used and we will add a DIMMER fader on it. To do so, open the "Button settings..." window and go to the "Dimmer/Speed" tab. First of all, click on "Show the Dimmer fader" to enable the function. Select "Draw the fader on the bottom" if you want to have the fader under the button name. Then, select "Use the minimum and maximum levels of each channel" to make the fader working between 100 (minimum programmed) and 200 (maximum) on the channel. See the window below:



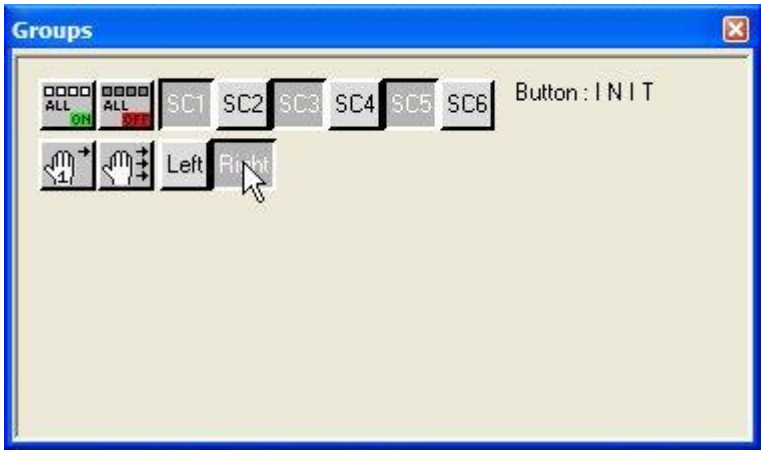
The Size function

This function allows to modify easily the size of a movement. Imagine that a scene doing a tilt movement with your fixture is running. For any reason, you want to reduce the amplitude of the movement without editing your scene. You must use the SIZE function to do so. You just have to move the fader on the toolbar while the scene is running and you will see the changes in real-time on your fixtures.

It is important to know that we can also use the DIMMER and SPEED functions as global parameters for our page. To do that we must call the "Live toolbar Page" from the "Page" menu or by clicking with the right button of your mouse on the page title bar. Make sure that you do not forget the changes you have made from this toolbar because they have the priority on all the buttons of your page.

4.3.5 How to use our fixtures independently

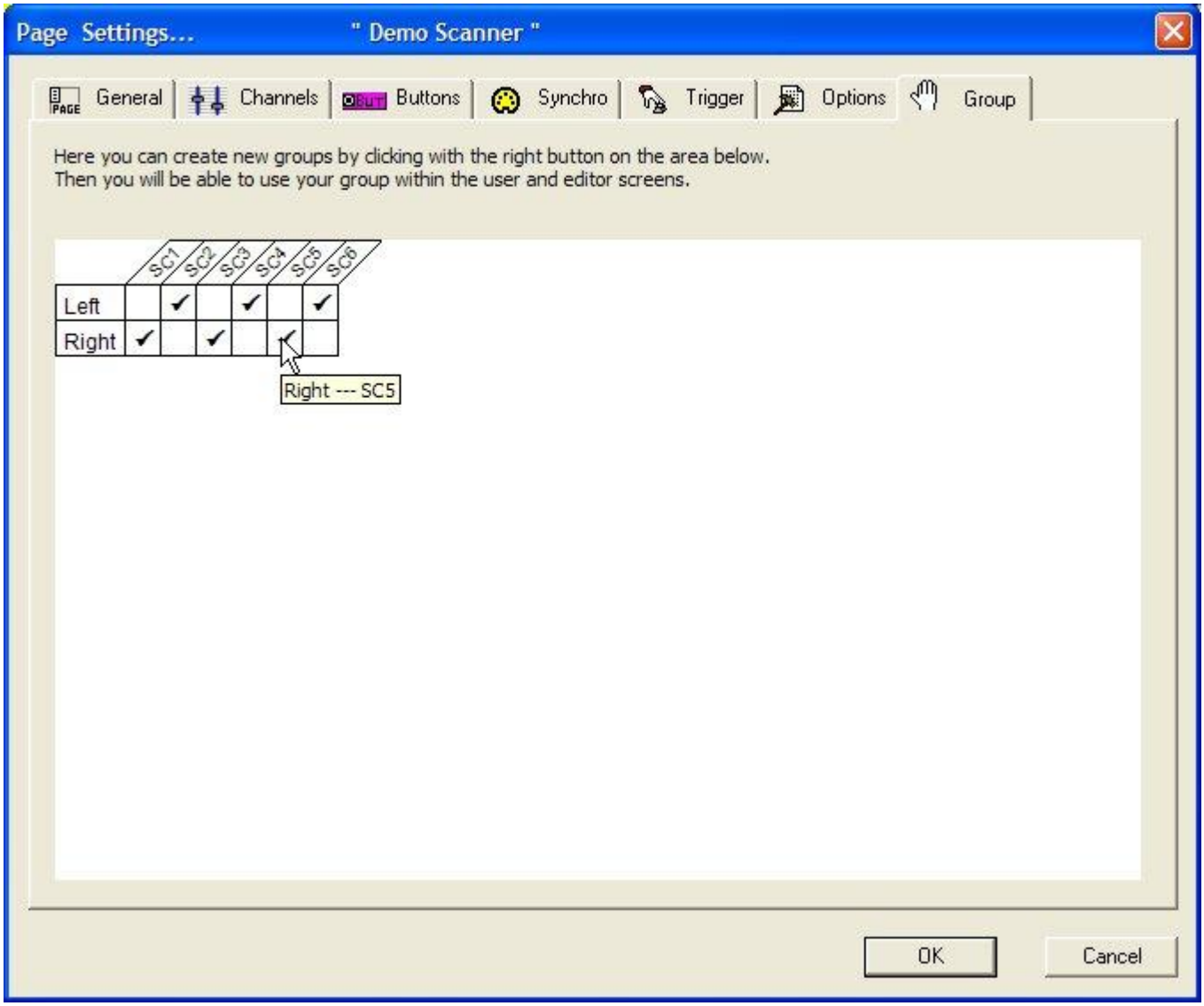
Thanks to this tool, it is possible to create groups of fixtures in a single page. Programming time will be significantly reduced as well as access time to the various functions of each fixture for a LIVE use.
Fixture groups can also be programmed for a better user-friendliness. For example, two groups of fixtures have been created in the following case : stage left and stage right. A special effect (colour, gobo, movement...) is then attributed to each group in no time at all.



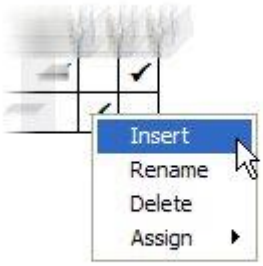
The first stage is then to program groups. You will see how to proceed in the next chapter.

4.3.5.1 How to program groups

Group programming is run from the below window. To have access to it, you should first go in the page parameters and then click on group tab. Just remember that the page parameters are accessed through the "Page" menu from the 2004 software version.



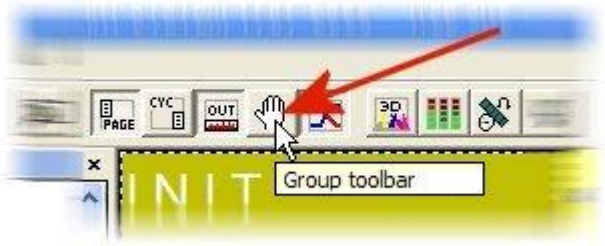
To create, suppress or change a group, you should click on the right mouse button in the white area above so that the following menu appears on the screen:



You will then be able to create a new group, rename it or destroy it and also allocate it a keyboard shortcut to make it even easier to use later on.

4.3.5.2 How to use groups with both main and editor screens

The choice is yours to display or not the "Group" toolbar on the main screen. If you choose to do so, all you have to do is select "Groups" in the "Window" menu of the 2004 software version or click on the following button in the standard toolbar:



You can also choose to display or not the "Groups" toolbar in the Editor screen: click on "Display" menu and then "Groups" toolbar...

Main Screen Mode

There are three different modes existing for using groups. You can switch from one mode to the other by resorting to the two buttons below. If these two buttons are released, you will have access to the third mode (default mode).

Default Mode	Any group using will be effective for the selected button (scenes or switches). For example, if the "Color red switch) is pressed and that the "stage left" group is activated, only fixtures belonging to this group will be allocated the red color.
	In similar case, the "group" function will be only applied to this one and only action.
	The "group" function will be applied from now on to each new action until complete release of the button.

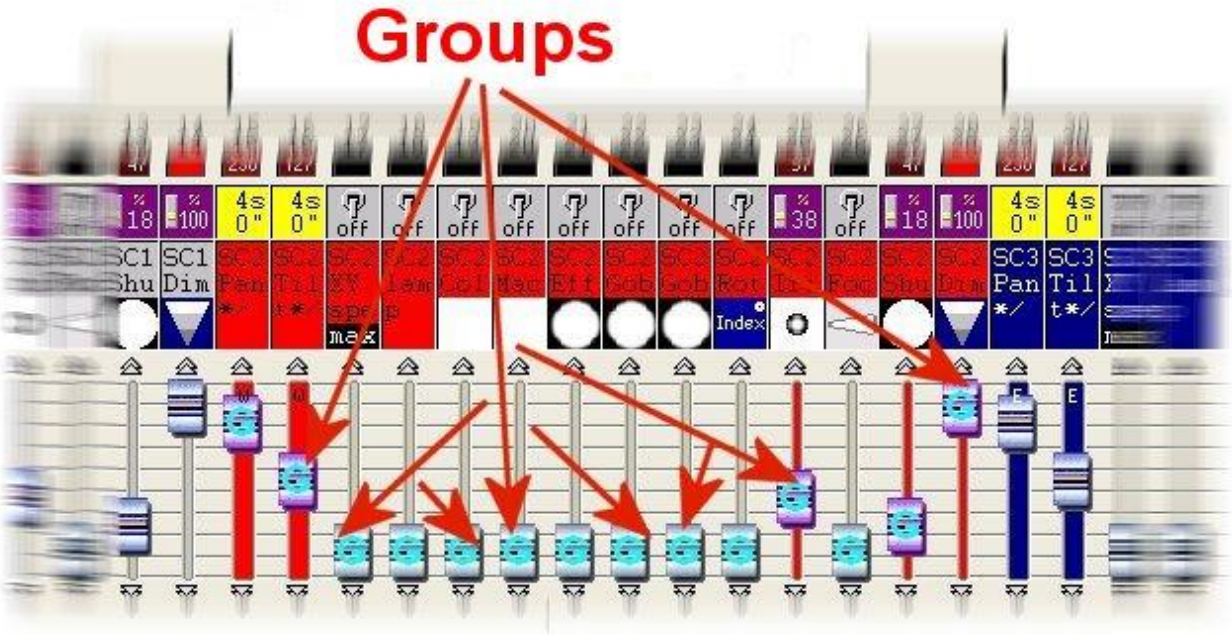
A button (scene or switch) to which the group function is applied will immediately take on the following aspect:

The button font becomes blue and a small "G" appears at the bottom.

Editor Mode

Here, only the two previous modes are present. Before using the group function, you should first select one of the two options. Once you have pressed the selected button, you only have to run the programming on one of the fixtures. The same programming will be allocated to the whole set of fixtures belonging to the same group.

One fixture belonging the selected group can be visualized by the following way:



4.3.6 How to create a Cue

Considering you have managed to read this manual so far, you have now acquired some skill in programming your own light-effects. You know that this software works with buttons, under each of which there is a time-sheet that can be programmed individually.
The "Scene" buttons are exclusive (only one type can be activated at a time) whereas the "Switch" buttons are simultaneous. Now you are therefore able to program lamp-lighting, motions, scans, static lighting and much more...
Theoretically-speaking, you can even program a whole show by just using one button! Even though it is not the best way, it is possible but it comes up to building up a wall with one big single brick instead of laying smaller ones. It is advisable to use a maximum of buttons so as to split complex actions into a sequence of simpler ones.

The "ONE action -> ONE button" principle should be kept in mind !

Of course, you may wish to save a sequence of actions such as PAR fading on the back wall, beams focusing on the middle of the stage, a change in gobos or colors. It is easy : just use a "Cycle".Imagine that to your favourite track, you would like to have scans sweeping across the dance-floor from right to left, then from foreground to background, then from right to left, then again from foreground to background and so on and so forth...

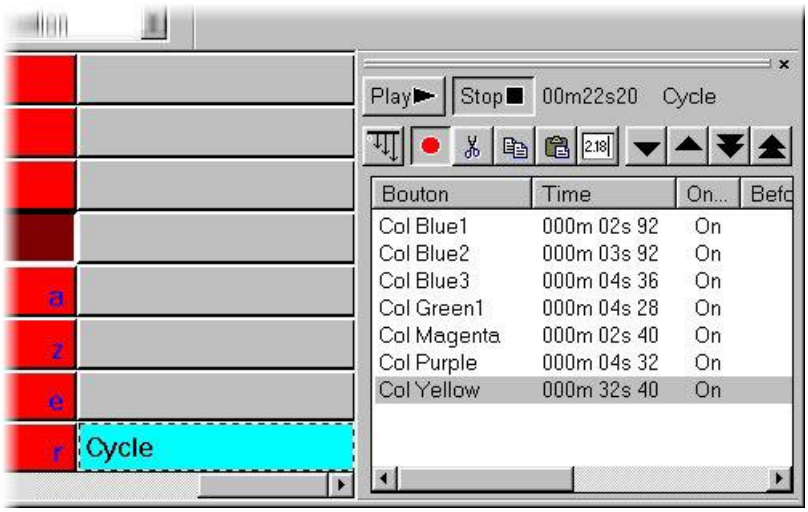
Of course you can program the whole sequence into one single time-sheet only. It will take a considerable amount of time but you will make it ... Now, how will you manage to change the sequence duration ? Will you start all over again ? Somehow you will try to change the rhythm, even though the beams are no longer tuned up to the beat...

Actually, the best way is to program two distinct scenes : one for the moves from right to left and a second one for back and forth moves. Each of them will be programmed in a very short time. Then you will just have to press a "Cycle" button to trigger off a sequence that alternately combines both scenes.

Recording a cycle

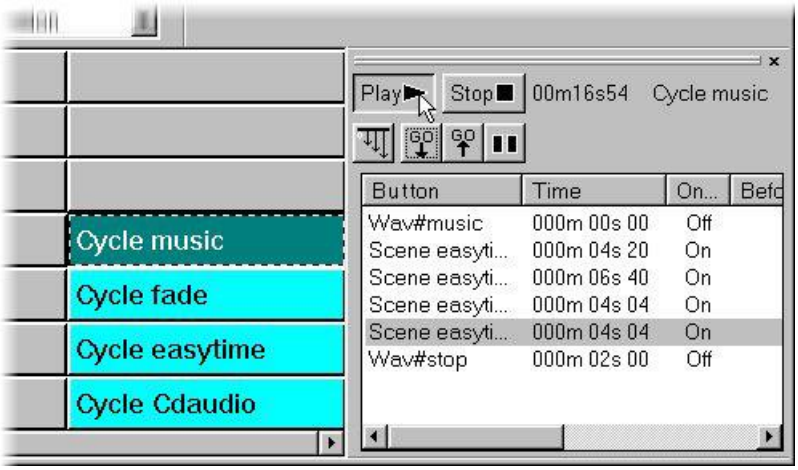
A cycle can be recorded immediately in real time. All you have to do is click on "New Cycle", to name it and record it.

While recording, a cycle memorizes the button activated and duration in between two (button)-activations. Once the last button has been activated, do not forget to stop recording-process.



Playing back a cycle

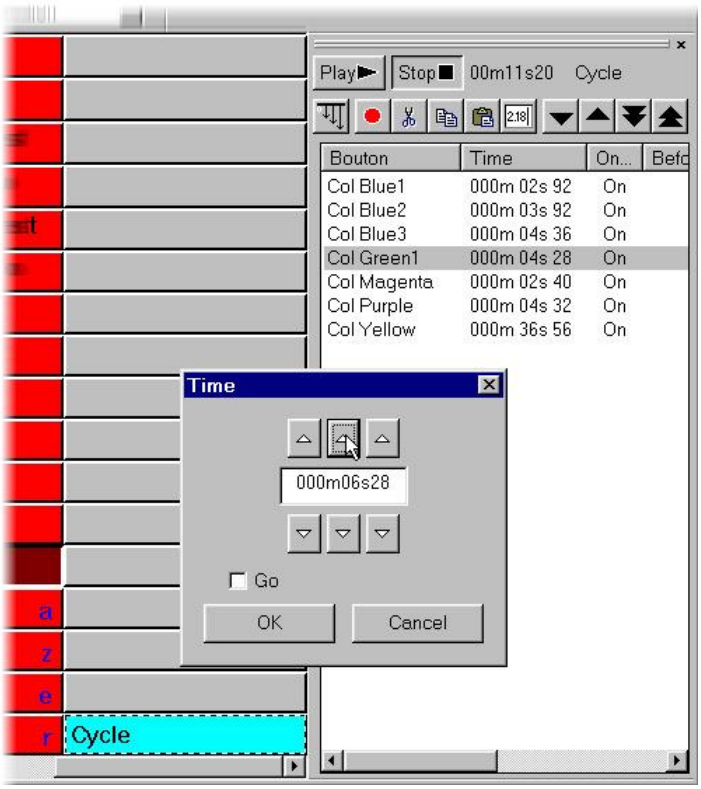
Unbelievably enough, to play back a "Cycle", all you have to do is click on the corresponding button. A "Cycle" can record any button-triggering such as "Scene", "Switch" but also another "Cycle". Programming a "Cycle"-sequence is therefore made possible.



These software-potentialities are virtually unlimited unlike, of course, your PC's hardware and memory are limited.

Modifying a cycle

Once they have been saved, cycles can still be modified, which is convenient to adjust effects. For instance, you may very well let your inspiration pervade and guide you while listening to a CD-track and create your effects immediately. It will be possible to modify timing sequentially later in order to synchronize your effects and tune them to the music-beat. To change timing, simply modify it in the cycle-window.



"Cut/Copy/Paste" functions are available from the tool-bar. If you wish to insert a new button, switch back to record mode (red indicator) then click the button selected. If this button is on a different page, then look it up in the page-window.

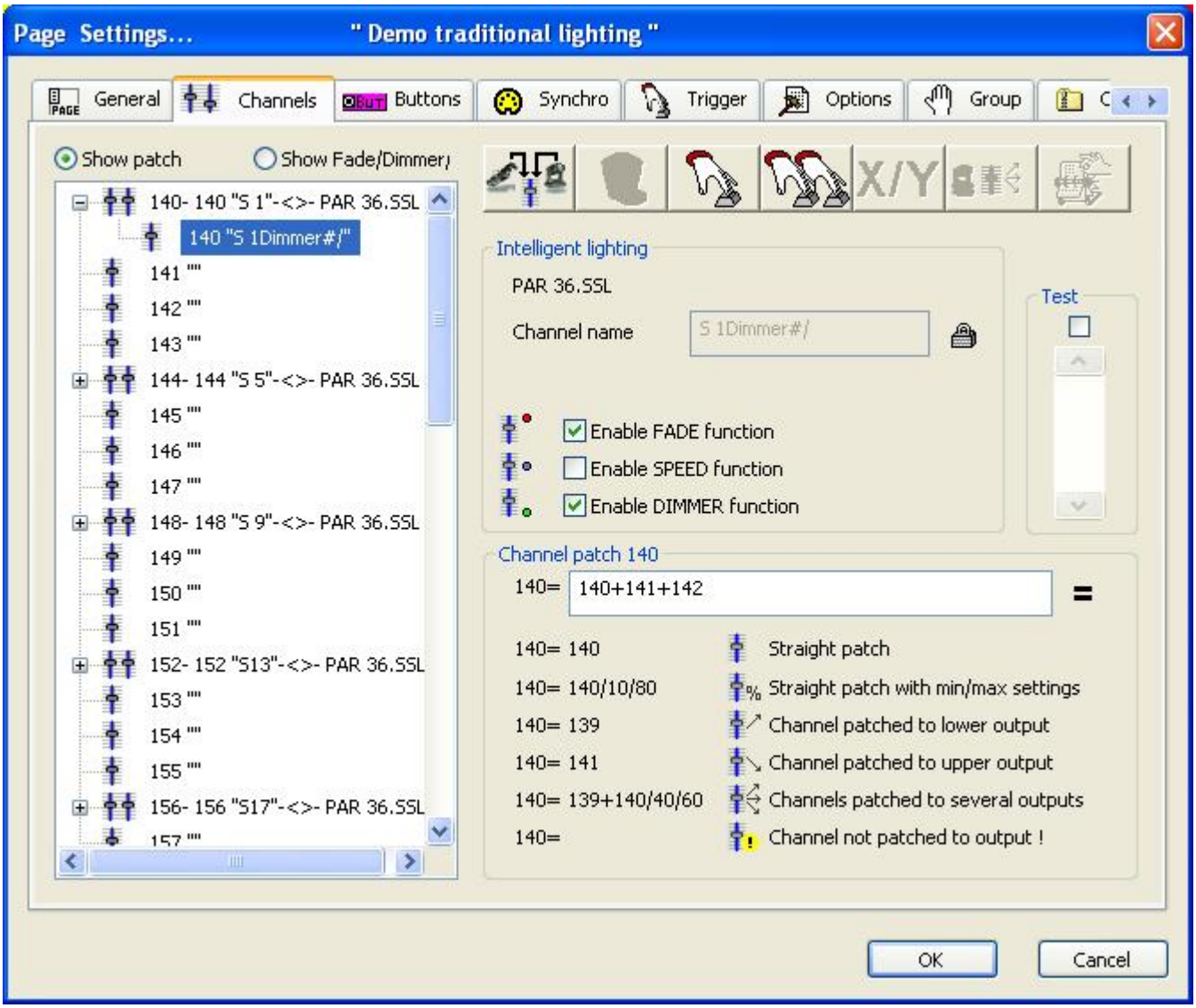
5 Advanced software features

5.1 Using the "patch"

It is very important to know the difference between channels and outputs. The outputs are the DMX channels. The patch can be straight or not. This means that the channel 1 of a page can be linked to the DMX channel 1 or not. This is very useful to link several DMX outputs on the same channel. It also enables to choose the DMX universe. Imagine that you want to use the second DMX universe (512 to 1024) for your page, you will have to use the "offset" option which enables to offset the outputs.

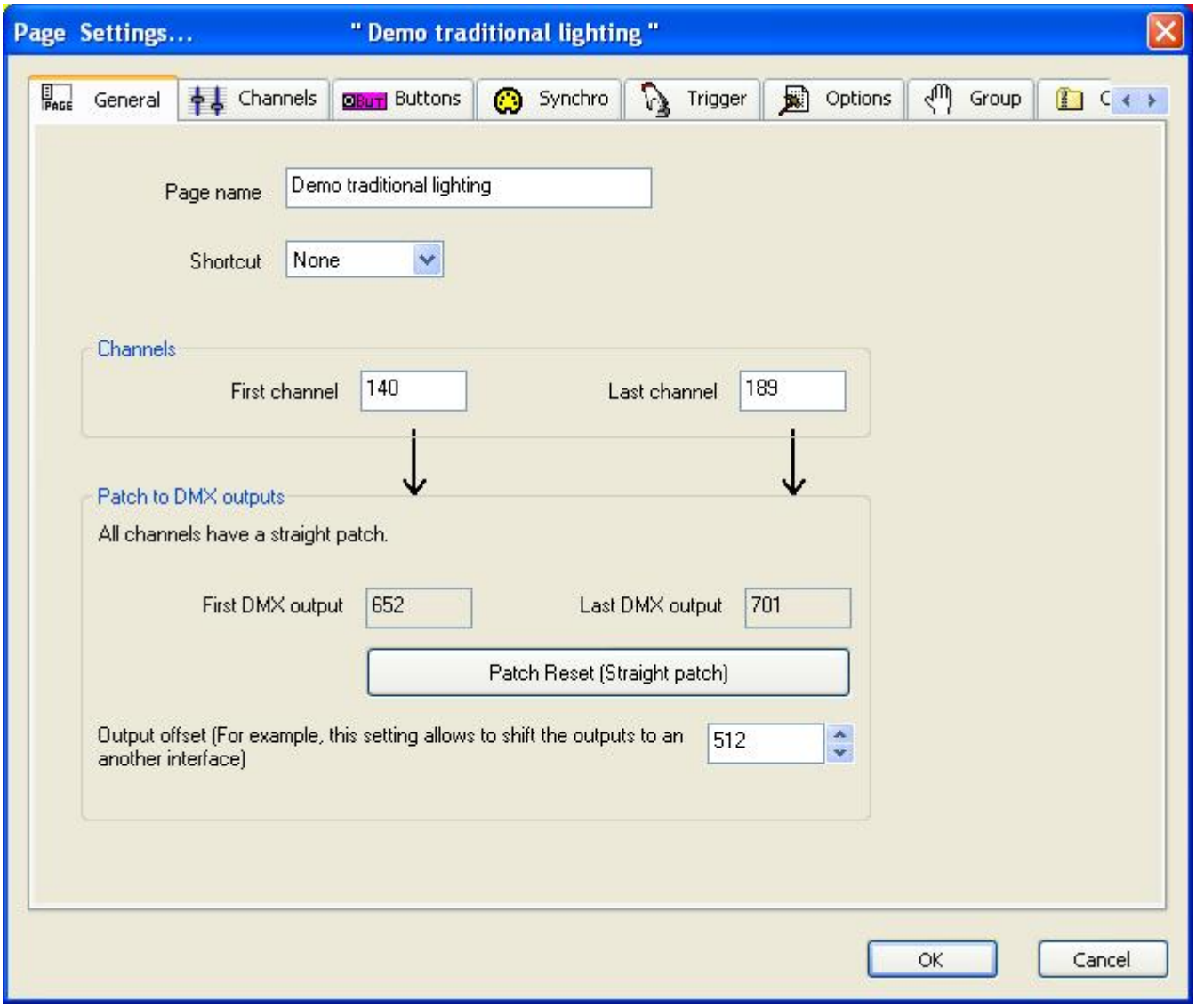
Modifying the patch

Open the "Page Settings..." window and go to the "Channels" tab to modify the patch. Imagine you want to use the same channel (140) to control several DMX outputs (140, 141 and 142). Select the channel from the list on the left-side and then go to the "Channel patch" area and enter: **140+141+142** as shown below.



Modifying the offset

Open the "Page Settings..." window and go to the "General" tab to modify the offset. Imagine you want to send the DMX information on the second universe, you will have to specify an offset to shift the outputs to the second DMX interface. To do so, enter 512 in the "Patch to DMX outputs" area as shown below.



An offset of 0 means that the software uses the first interface, 512 means the second one, 1024 the third one...

5.2 Playing with the outputs window

The outputs window makes it possible to visualize in real time the channels level of one page or of all DMX outputs. Moreover, you will be able to directly change channels settings in most of the available modes thanks to this same menu.
All channels may be straightly reached "LIVE", as if you were piloting a real lighting desk ! Enjoy !

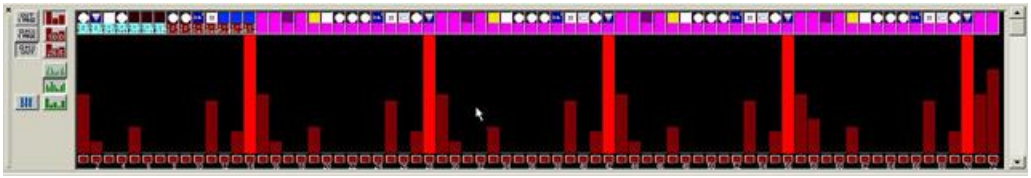
5.2.1 Display modes

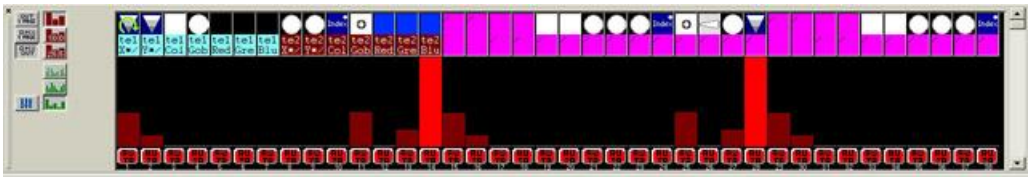
To switch between each display mode you must use the three buttons below :

OUT 1 PAGE : display the levels of the current page channels (before the patch)
DMX 1 PAGE : display the levels of the current page DMX outputs (after the patch)
DMX OUT : display the real levels of all DMX outputs

Three other modes are available :

The first one allows to see only the DMX levels : we can not take the priority. To modify a channel, we must use one of the following modes. In those cases, we are allowed to modify all channels in "LIVE".



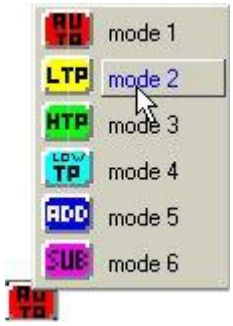


The first mode allows to see more channels but is less comfortable to use. In case of exceptional use of this window we recommend to use the first mode but if you frequently use the window it is easier to do it with the second one.

These two last display modes require more CPU time. This is why we recommend to stay in normal mode if you do not control channels manually.

5.2.2 Setting channel level manually

Channels can be set by means of five different modes. Within the default mode each particular channel is represented by a red icon bearing AUTO. With this activated mode, scene or switches have priority. If you wish to set channel manually, click right. The following menu appears on screen:

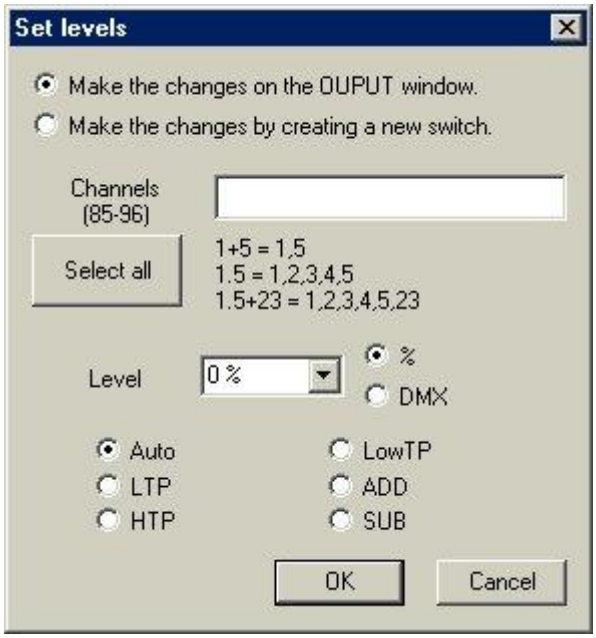


Five channel control modes are at your disposal :

- LTP : Manual mode has always priority.
- HTP : The highest level between manual mode and programmed scenes or switches has priority. For instance, let us suppose channel is adjusted at 50%, this channel may get a higher value but not a lower one.
- Low TP : The lowest level has priority.
- ADD : Manual setting value is added to the one programmed in scene or switches button. For instance, supposing manual setting is 10%, the button corresponding to the same channel will be up 10%.
- SUB : Unlike the former one, manual setting is removed from the programmed level in scene or switches button.

Several channels may be simultaneously set on the same level. To do so, press F1 or click the following button :

A window appears as follows :



Those settings may be either saved within a switch or be straight displayed in the outputs window. Watch out that in such a case settings are displayed... but not saved !

5.3 External triggering

5.3.1 MIDI features

Available only in First Class version

Using MIDI functions does not require any specific option. The sound cards currently include MIDI interface and connection is made on Joystick port (SUB-D15). You can also use a MIDI to USB converter if there is no MIDI port on your computer (e.g laptop).

4 different ways of using MIDI functions :

- MIDI TIME CODE input
- MIDI TIME CODE output
- MIDI Notes (ON/OFF triggering)
- MIDI Notes (velocity)

5.3.1.1 MIDI TIME CODE input

MIDI TIME CODE input is useful to synchronize a cycle with an incoming MIDI TIME CODE signal. In this case the software is said to be "Slave" and the external system "Master".

For such use, make sure :
that your computer is equipped with a MIDI card (usually included in sound card)
to activate "MIDI IN" function in the "Audio/Midi" section of "ToolBox - Starting parameters".
to activate "TIME CODE IN" in "Synchro" section of "Page - Parameters".

Once all the settings are over, it will be possible to synchronize with MIDI TIME CODE input all the cycles in the corresponding page. A small button "MTC IN" appears in the Cycle windows to disable/enable the function.

N.B.
Incoming MIDI TIME CODE can also be activated while creating a cycle. Timing will then be automatically computed on MIDI TIME CODE.
If you prefer to use SMPTE TIME CODE signal, an SMPTE/MIDI converter is necessary (e.g. MIDIMAN Syncman Plus)

5.3.1.2 MIDI TIME CODE output

MIDI TIME CODE output is useful to send the time of a cycle to the MIDI TIME CODE output to synchronize an external system. In this case the software is said to be "Master" and the external system "Slave".

For such use, make sure :
- that your computer is equipped with a MIDI card (usually included in sound card)
- to activate "MIDI OUT" function in the "Audio/Midi" section of "ToolBox - Starting parameters".
- to activate "TIME CODE OUT" in "Synchro" section of "Page - Parameters".

Once all the settings are over, all the cycles of the corresponding page can send current timing to MIDI TIME CODE output. A small button "MTC OUT" appears in the Cycle windows to disable/enable the function.

N.B.
If 2 cycles are played simultaneously, only the current page cycle can send the MIDI TIME CODE.
If you prefer to use SMPTE TIME CODE signal, an SMPTE/MIDI converter is necessary (e.g. MIDIMAN Syncman Plus)

5.3.1.3 MIDI Notes (ON-OFF trigerring)

Use of MIDI Notes in ON/OFF mode is convenient to trigger buttons. Up to 1600 different buttons can be triggered (16 MIDI channels, 100 notes/channel)

For such use, make sure :

- that your computer is equipped with a MIDI card (usually included in sound card)
- to activate "MIDI IN" function in the "Audio/Midi" section of "ToolBox - Starting parameters".

Assigning a MIDI note to a button is done in the "Trigger" section of the "Button - Parameters". Then select channel and note required.

N.B.
A 5-octave MIDI keyboard (60 Keys) is set by default to send notes from 36 to 96.
Via the button toolbar, you can visualize all the MIDI notes assigned on the current page.

5.3.1.4 MIDI Notes (Velocity)

Use of MIDI Notes Velocities is convenient to control a channel level in accordance with a note velocity.

For such use, make sure :

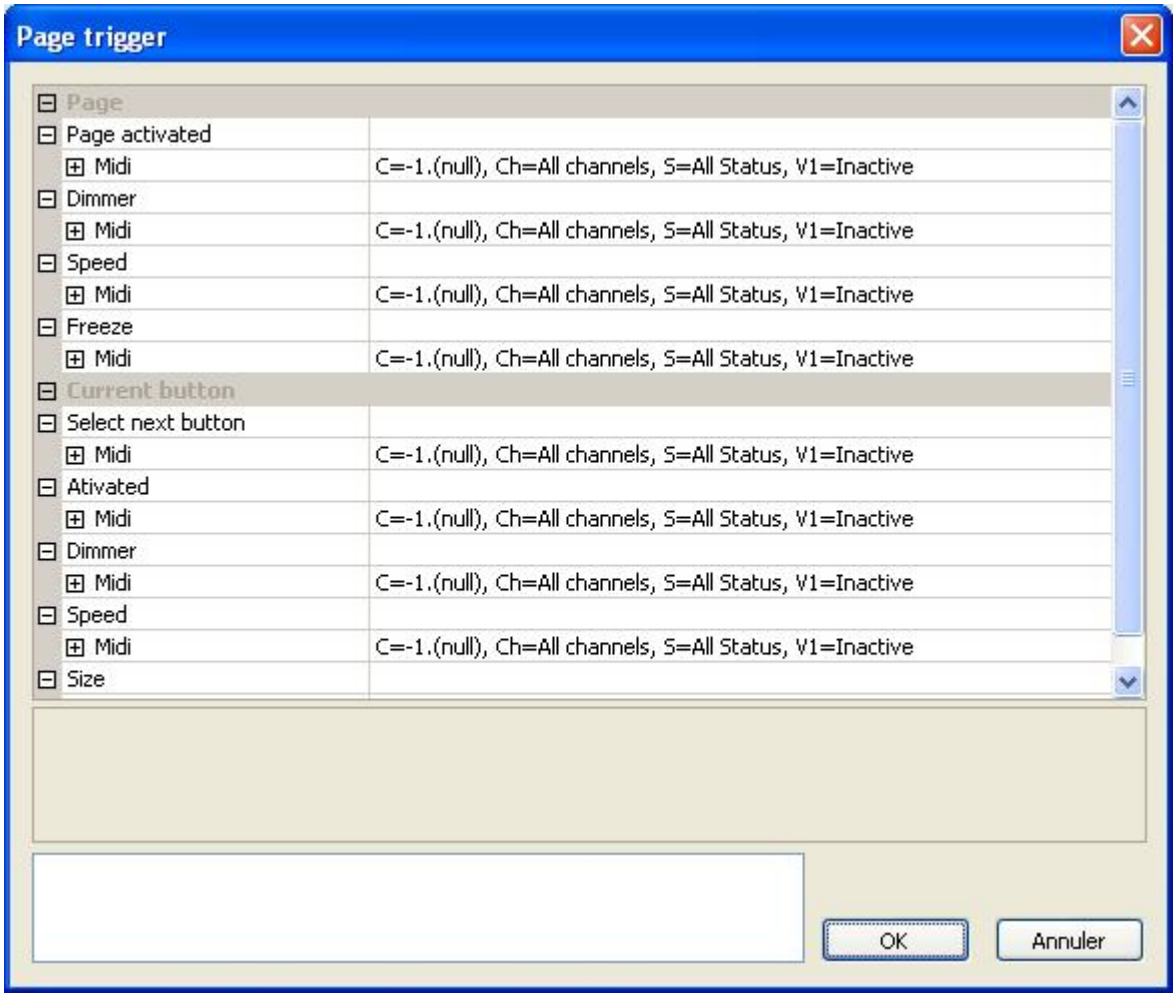
- that your computer is equipped with a MIDI card (usually included in sound card)
- to activate "MIDI IN" function in the "Audio/Midi" section of "ToolBox - Starting parameters".

Once all the settings are over, edit a "Scene" or "Switch" button and use the MIDI rack.

N.B.
A 5-octave MIDI keyboard (60 Keys) is set by default to send notes from 36 to 96.

5.3.1.5 Advanced triggering

It is possible to trigger several functions with a MIDI controller. For instance, you can control the DIMMER, SPEED and SIZE faders, freeze the outputs...It is also possible to select the buttons (scenes, switches, cycles) or select the pages with a MIDI command. To setup the MIDI options, open the "Page Settings..." window, then go to the "Trigger" tab and click on the "Advanced" button. The following window appears:



You can find more information about MIDI controller by reading the Hardware manual.

5.3.2 DMX IN features

5.3.2.1 User screen

The DMX input features require a DMX input interface.

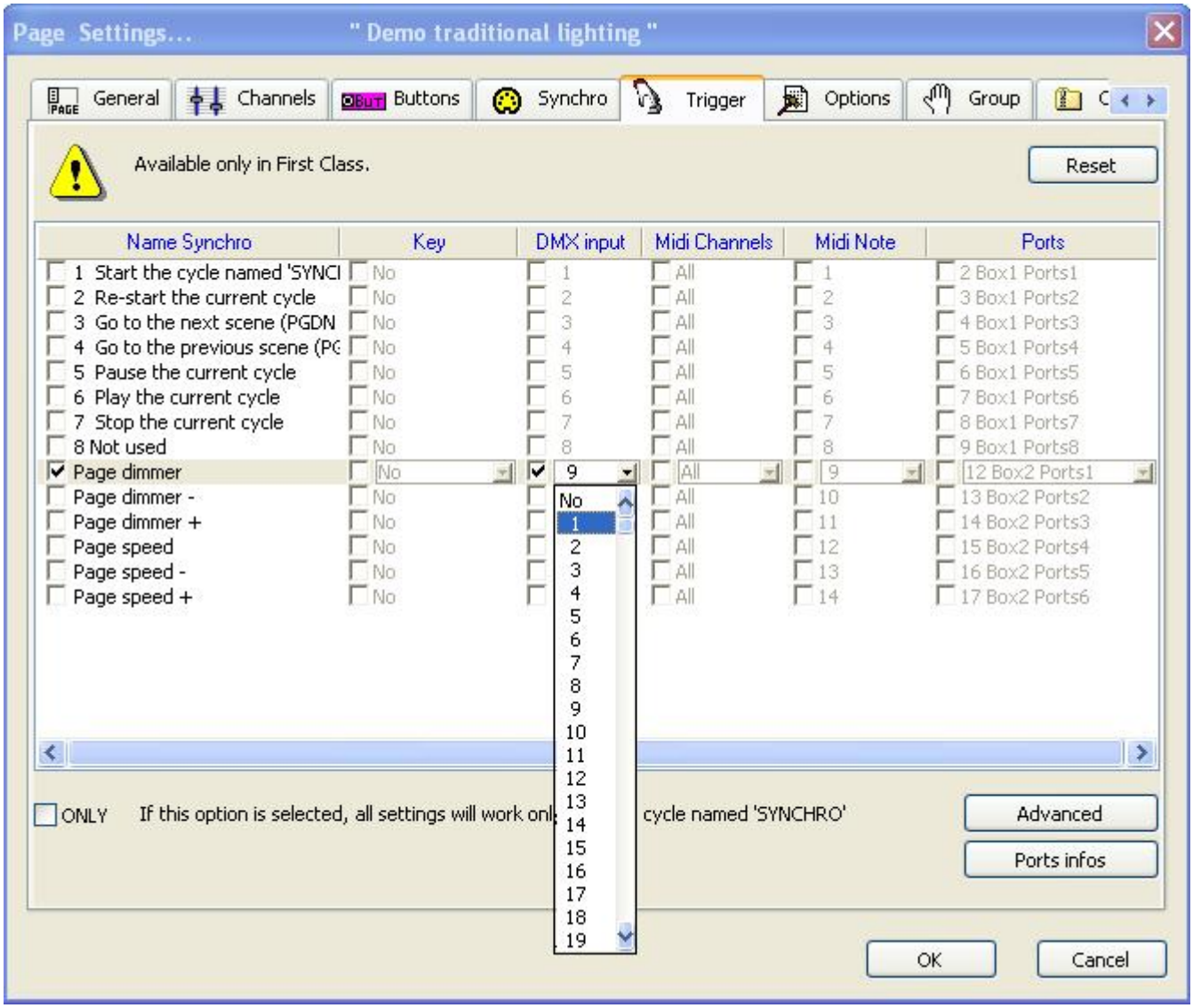
Several functions can be triggered by DMX input channels on the user screen. You can start a button (scene, switch or cycle), control the SPEED and DIMMER faders...

Buttons triggering

Open the "Button Settings..." window and go to the "Trigger" tab to specify a DMX input channel to trigger your button. For instance, if you want to trigger a scene with the channel 100, select "DMX input" in the "Trigger" area and enter 100. It is possible to work either in regular mode or in flash mode. Flash mode means that the button is released if the DMX channel level goes back to 0. See below for more details.

Faders control

The SPEED and DIMMER faders can be controlled by DMX input channels. Imagine that you want to control the DIMMER fader with the DMX channel 1. Open the "Page Settings..." window and go to the "Trigger" tab. Select "Page dimmer" and the DMX channel from the list as shown below.



Now, you can modify the dimmer of your page in real time with your external DMX controller.

5.3.2.2 Editor screen

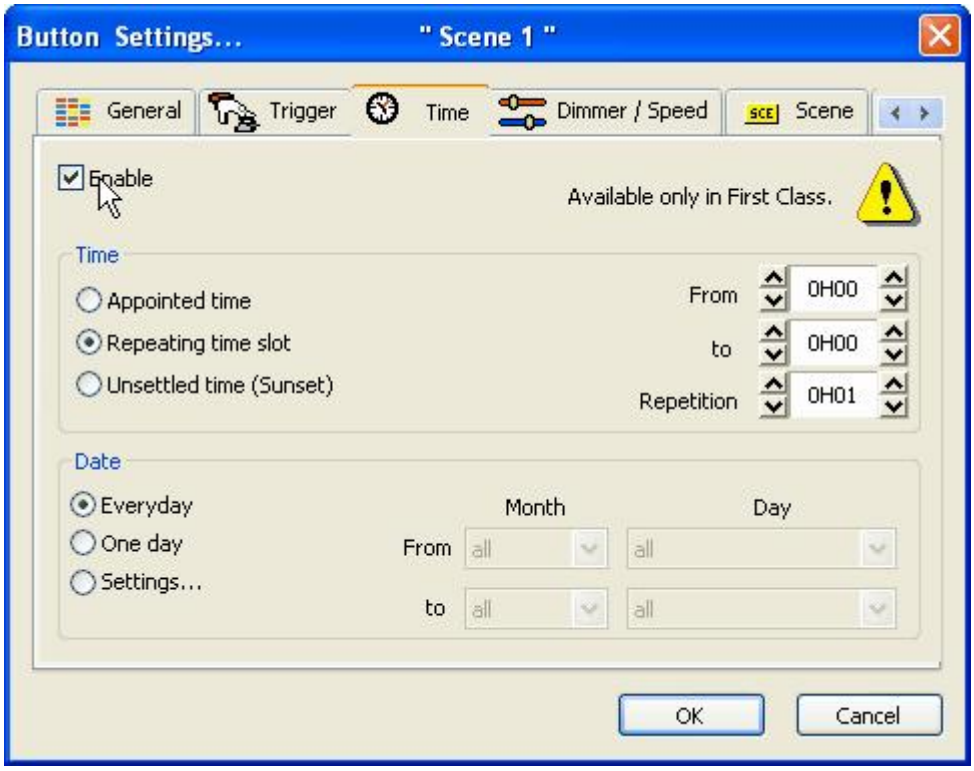
The DMX input features require a DMX input interface.

The DMX INPUT rack enables you to control channels thanks to a DMX peripheral and makes the software working as a DMX merger. The 'REC' area allows you to record the data in real time so as to automatically create an EasyTime sequence.

5.3.3 How to trigger my show with PC clock and calendar

Available only in First Class version

2004 Software can be triggered by Time (PC clock and calendar). This feature is available only in **First Class** version and is very useful for architectural lighting. You must open the following window to setup time triggering ("Button" menu, then "Settings"). The button you want to trigger must be selected before to open this window!



First of all, we must click on "Enable" to modifiy the settings. Several options are available to trigger a button (scene, switch or cycle):

Appointed time

Select what time you want to start your button.

Repeating time slot

Imagine you want to start the same sequence every 30 minutes from 10 am to 3 pm. You must setup 10H00 in the "From" box, then 15H00 in the "to" box and finally 0H30 in the "Repetition" box.

Unsettled time (Sunset)

Imagine you want to start a cycle every day following the sunset. You must use this option to do so. First, select the "Date1" (first day) and the "Date2" (last day). Imagine you want to start your sequence at 15H00 the first day and at 21H00 the last day, you must setup 15H00 in the "Time1" box and 21H00 in the "Time2" box. The software will calculate the time for every day...
Do not forget to specify UP or DOWN. UP means that the triggering time will increase every day (until the "Time2"), DOWN means it will decrease...

Finally, you must specify the days range in the "Date" area, you can specify every day, every Sunday...

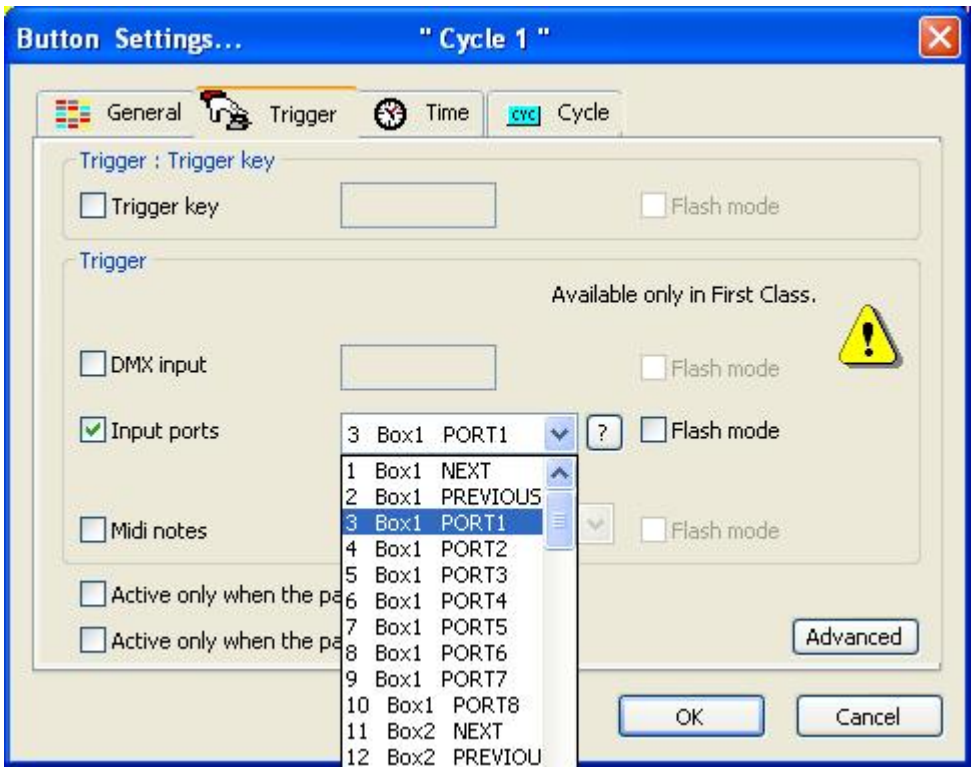
5.3.4 How to use external contacts to trigger my show

Available only in First Class version.

A 10-pin connector is available on the USB-DMX interface and makes possible to send 8 different contacts to the software. The reference of the connector is HE 10 (male). You don't need to send any power to the connector. You only have to create a contact between the pin 2 (ground) and the other 8 pins (please note that the pin 10 is not used). Several things can be triggered by ports.

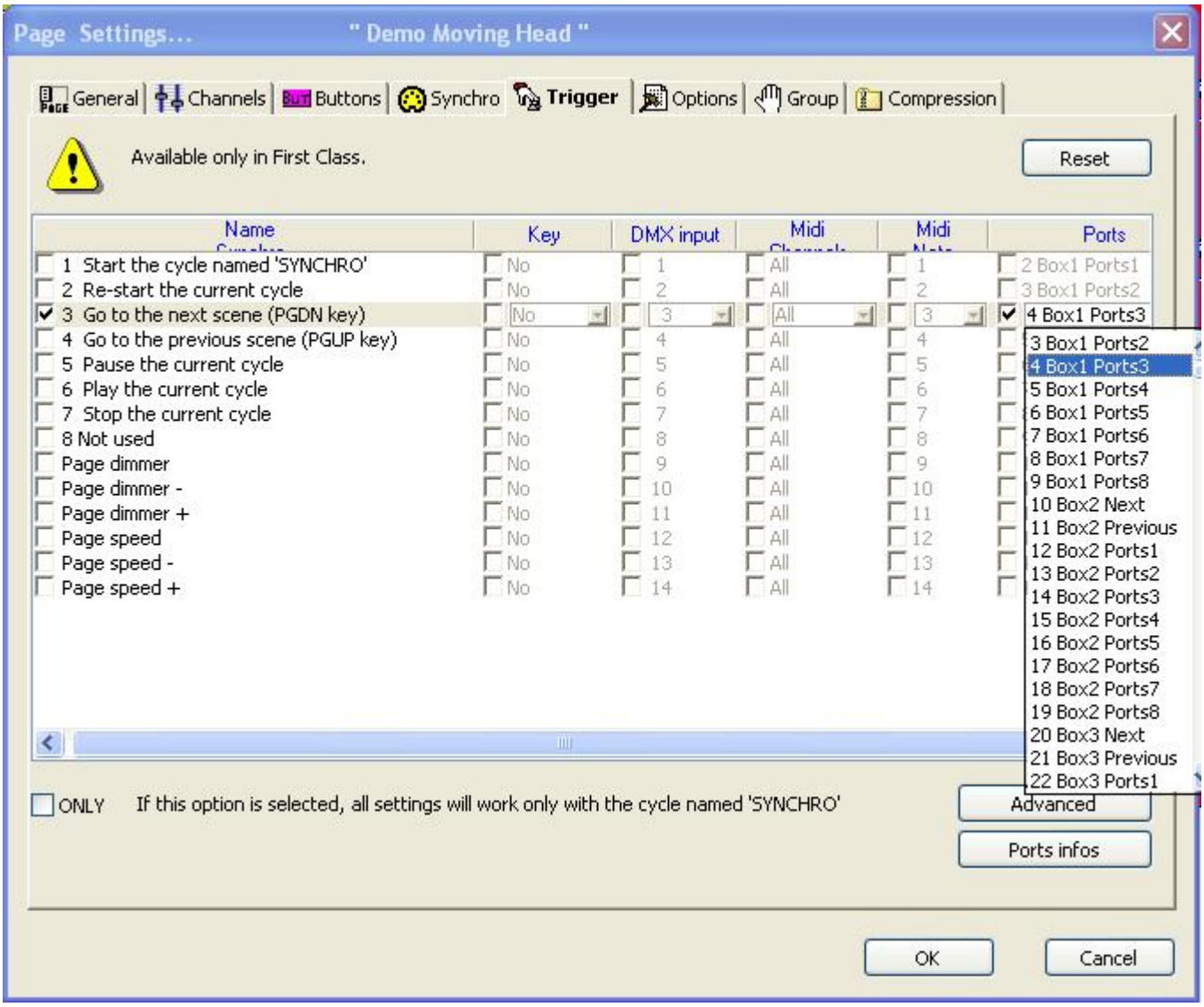
Buttons triggering

A button (scene, switch or cycle) can be triggered by a port. You must open the "Button Settings..." window and then go to the "Trigger" tab to select the contact you want to use to trigger your button. Enable the "Input ports" function by clicking on it and then use the list to select the port. There are 10 ports available on a USB-DMX interface : NEXT and PREVIOUS buttons and the 8 ports of the 10-pin connector.



Cycles triggering

It is possible to trigger the playback function of the cycles in a page. To do that we must open the "Page Settings..." window and go to the "Trigger" tab. Several options are available : play and stop the current cycle, jump to previous and next steps...
First you must enable the function that you want to trigger with a port by clicking on it and then you must enable the "Ports" triggering (last column) and select the good port from the list.



Note: If the "ONLY" option is selected, all settings will work on the cycle called "SYNCHRO".

You can find more informations about the connection of DMX interfaces by reading: Hardware manual.

5.4 Multimedia features

5.4.1 The Multimedia files

A button can trigger multimedia functions. You just have to place files with the following extensions into "**Multimedia_data**" folder :

- **WAV** Sound files
- **AVI** Video files
- **MID** MIDI files
- **MPE** MPEG Video files
- **MP3** MP3 Sound files
- **MCI** Multimedia Command Interface files
- **BAT** Batch command files
- **EXE** Windows program files

Linking a button to a multimedia file is very easy. For example:

- to trigger **MUSIC.WAV** sound file, just create a button called **WAV#MUSIC**
- to trigger **VIDEO.MPE** video file, just create a button called **MPE#VIDEO**

When CDs and/or DVD are used, the following syntactic rules should be followed:

- **CDAUDIO#01** will trigger track 1 of the Audio CD.
- **DVDVIDEO#02** will trigger track 2 of the DVD.

Stop and Pause function can be activated. For example

- To activate Pause function of an **WAV** file, just create a button **WAV#PAUSE**
- To stop an **MPE** file, just create a button called **MPE#STOP**
- To stop an **AudioCD**, just create a button called **CDAUDIO#STOP**

How to build a Multimedia Show

All you have to do is to create a sequential cycle to activate "Light" buttons and "Multimedia" buttons.

N.B.

- The Demo page contains useful examples of Multimedia buttons.
- We advise you to use "Switch" buttons to trigger Multimedia functions
- Triggering DVDs with "DVDVIDEO#" buttons is only possible if you DVD player is MCI-compatible

5.4.2 Easy Show software

Available only in First Class version

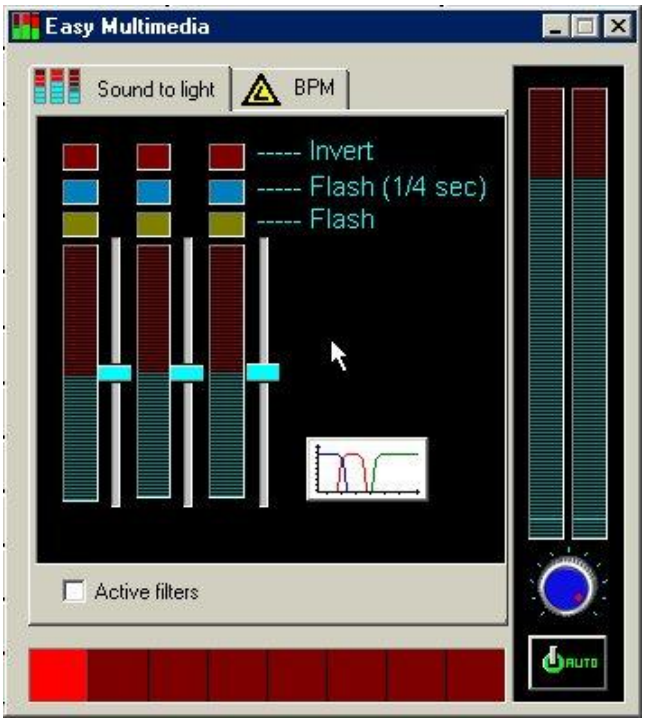
Thanks to this new tool which is included only in our **First Class** package, programming a lightshow is performed through Time-lines and Blocks (such famous software as Cubase, Premiere…). To add a "light" block, all you have to do is drag a button from the 2004 software to a Time-line with your mouse. Adding an "Audio/Video" block is just as easy since all Multimedia file-formats are supported (WAV, MP3, CD, AVI, MPEG…). With Easy Show, programming a synchronized-light show is a mere child's play !

You can find more informations about Easy Show software by reading: Easy Show manual.

5.4.3 Easy Multimedia

The Easy Multimedia program allows to read and analyze a sound data through a sound card or straight through computer files (CD, WAV files...). Tempo and BPM can thus be picked out. Moreover, within the **First Class** software version, bass, medium and treble filters are made available in the SOUND TO LIGHT tab.

It becomes now easy to get your EasyTime sequence to follow the tempo or to assign bass, medium and treble signals to the color mixing channels of your fixture.

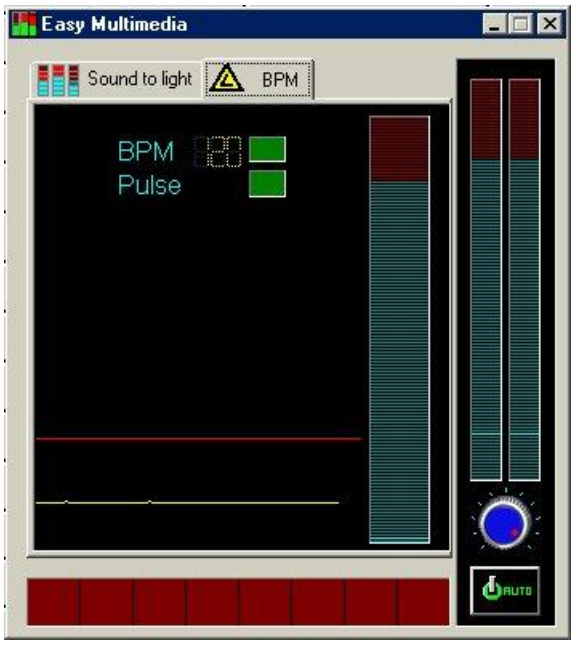


When Easy Multimedia program operates as background task, the following icon appears on the Windows toolbar.

By double-clicking this icon you may open the complete window so as to modify parameters included in BPM and SOUND TO LIGHT tabs. Let us have a closer look at both of these features :

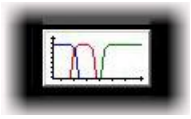
BPM

The BPM tab allows to follow the tempo of a tune. The record level is automatically computed, still it may be better-adjusted by clicking "AUTO" in the right-hand lower part of the window. The minimum trigger level can there be adjusted.

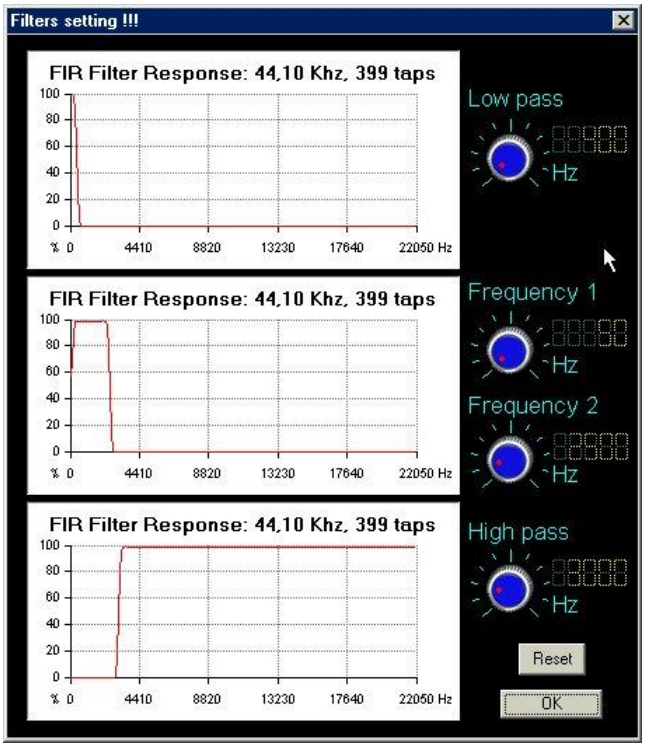


Sound to Light

The SOUND TO LIGHT tab allows BASS, medium and treble filters parameters to be set according to the type of sound as well as to what sound effect is expected. To do so, click on the following button :



The following window appears on screen :



The three filters may be personalized independently. If necessary, recover the default parameters by clicking "Reset"..

5.5 Hints and tips

5.5.1 Using "INIT" button

On each page, there is a special scene called "INIT" in the top-left corner. It is important to become familiar with what this scene is used for:

- Whenever the software is started, each page will automatically play its own "INIT" scene.
- When you create a new scene, it will always be a copy of the "INIT" scene.

It is therefore recommended to adjust "INIT" scenes to your requirements.

NB : it is impossible to delete or rename "INIT" scene.

5.5.2 Installing several software-disks

It is possible to install a disk several times, which a show-organizer may find useful and convenient to save different configurations. To archieve this, a different file should be selected each time, when installing the software. Each disk will then be displaying in Windows "Start Program" menu.

5.5.3 Using several USB Interfaces

2004 Software is operational up to 10 simultaneous interfaces, that is 5120 channels as a whole. However beware that the more interfaces you use, the more computer resources are requested. A performant computer would then be needed.

Connect all interfaces before starting on your computer in order to proceed to programming. If not so, the cards order could be inverted next time your computer get started. Your programming would consequently lose coherence. Would you proceed to computer or interface reinstallation, prefer to start again computer before opening software.

6 Appendix

6.1 Commands summary

User's screen

FEATURES	EQUIVALENT MENUS	SHORTCUTS
Creating a new page	"Page" "New page"	Alt+N
Open archive	"Page" "Open archive..."	Alt+O
Save archive	"Page" "Save archive..."	Alt+S
Freeze channel	"Page" "'Live' Page toolbar" "Freeze"	F12
Short channel level setting	"Page" "'Live' Page toolbar""Set levels"	F11
Enable a manual fading	"Page" "'Live' Page toolbar""Manual fading"	F10
Activate or de-activate fixtures 3D representation (3D software)	"Page" "'Live' Page toolbar""Show fixtures in the 3D software"	F9
SPEED (-) (master)	'Live' button toolbar	F3
SPEED (+) (master)	'Live' button toolbar	F4
DIMMER (-) (master)	'Live' button toolbar	F1
DIMMER (+) (master)	'Live' button toolbar	F2
Master SPEED reset		F1+F2
Master DIMMER reset		F3+F4
Select button		Shift+click
Delete button	"Button" "Delete"	Alt+D
Button settings	"Button" "Settings..."	Alt+P
Edit	"Button" "Edit"	Alt+E ou Ctrl+click
Delete shortcut		Ctrl+Del
Implement new shortcut		Ctrl+key
Assign a MIDI shortcut (display MIDI activation)		Ctrl+Note MIDI
Assign a PORT shortcut (display PORT activation)		Ctrl+Port
Assign a DMX shortcut (display DMX activation)		Ctrl+DMX
Move a button (if enabled on "button" toolbar)		Shift+ right click
SPEED (-) (of selected button)	'Live' button toolbar	F7
SPEED (+) (of selected button)	'Live' button toolbar	F8
DIMMER (-) (of selected button)	'Live' button toolbar	F5
DIMMER (+) (of selected button)	'Live' button toolbar	F6
Display a scroll menu	"Button"	Shift+ right click

Editor screen

FEATURES	EQUIVALENT MENUS	SHORTCUTS
Close and save		Alt+S
Close without saving		Alt+Q
Channel-level display in DMX value		Ctrl+D
Channel-level display in %		Ctrl+P
No channel-level display		Ctrl+N
Visualize right hand part of the channel-list		RIGHT (pointer)
Visualize left hand part of the channels list		LEFT (pointer)
Display preset-list		Right click on channel name
Adjust several similar type of channels to the same value (e.g Pan, Shutter,...)		Shift+click

Cycles

FEATURES	EQUIVALENT MENUS	SHORTCUTS
GO forward		Page Down
GO backward		Page Up
Saving relative time in LIVE mode(if cycle in PLAY mode)		END
Select next recording (if cycle in STOP mode)		DOWN (pointer)
Select previous recording (if cycle in STOP mode)		UP (pointer)

6.2 Troubleshooting

SYMPTOMS	CAUSES	REMEDIES
Software cannot read USB interface	USB cable is not connected properly or USB port is faulty	Check cable connection or use another USB port
Interface leds are switched off	"Intelligent USB DMX Interface" is not mentioned in list of devices : driver is not installed	See section "How to install USB-DMX 512 interface"
	Interface is off	Select "USB" position on power supply or connect via an external power supply
	Yellow leds are switched on but red led does not flash	Switch box breakdown : contact your retailer
System does not respond	Receivers do not detect DMX, yet DMX signal output is operational	Check DMX wire and if possible test another DMX receiver
	DMX red led flashes, but DMX signal output is not operational	
	Channel-level is frozen in "OUT 1 PAGE" visualization window	De-activate "freeze" mode in the "'live' page" toolbar (F11 shortcut)
	Channel-levels visualized in "OUT 1 PAGE" seem incorrect	Check buttons program. Pay also attention to the activated "switches" and "dimmer"
	Channel-levels visualized within "OUT 1 PAGE" seem correct but those of "DMX OUT" do not seem so	Check channel patch ("Page" "Parameters"). Also see that no other page interferes with the same outputs
Channels do not take the fading time scheduled between 2 scenes into account	Fading is not allowed on this channel	Allow fading on these channels in the "channels" tab of the Page parameters
	Channel is set by means of "on/off" facility	Set channel with "dimmer" feature, although setting corresponds to 0%