



# ProScenium<sup>DMX</sup>

For Windows 95 and 98®

## Multimedia Lighting Control System for Personal Computers

UK User's Manual  
Version 8

Developed for Martin Professional A/S by



<http://www.digimedia-mls.com>

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## **ProScenium<sup>DMX</sup> HARDWARE REQUIREMENTS AND SOFTWARE INSTALLATION**

### **Hardware requirements**

**ProScenium<sup>DMX</sup>** Multimedia Lighting Control software requires a PC with the following features:

- IBM-PC compatible with Windows 95 or 98 ® installed
- minimal CPU: Pentium ®133 MHz
- 16 MB user available memory
- 8 MB free disk space

### **Software installation**

Insert Martin ProScenium<sup>DMX</sup> CD-ROM in the CD drive. If AutoPlay is active, wait for the program installation window and then click on « Install » to install software on the PC.

If automatic notification at CD-ROM insertion is disabled, click on the “Setup.exe” file to manually start the installation process .

To install software on a PC without a CD-ROM drive, follow these steps:

- Insert Martin ProScenium<sup>DMX</sup> CD-ROM in any other computer that has a CD-ROM drive.
- In “My Computer” window, select the CD-ROM drive.
- Select all files contained in the “\install” directory in ProScenium<sup>DMX</sup> CD-ROM.
- Prepare 5 blank, formatted 1.44 MB floppy disks.
- Using Drag & Drop, move all CD-ROM files on the 3.5” Floppy drive.
- Windows95 will ask to insert, sequentially, all 5 floppies, to copy a total of around 6-MB of files (If you don’t copy the manuals that are in “\manuals” directory.)
- Go back to the target, CD-ROM-less PC and create a temporary directory (e.g. C:\TEMP)
- Copy all 5 floppies into the temporary directory
- In the temporary directory, click on the “Setup.exe” file to start the installation process.
- At installation complete, remove the temporary directory (to free 6 MB of hard disk space).

The installation program will start, automatically creating the « MartinPS » directory, copying all the required files onto the hard disk, and creating program group and program icons.

At installation complete, the program may be started by clicking on the «ProScenium<sup>DMX</sup> » icon obtained following the « START -> PROGRAMS » pull-menus starting from Win95 toolbar.

## ProScenium<sup>DMX</sup> HARDWARE INSTALLATION

### Martin ProScenium<sup>DMX</sup> ISA card

#### Introduction

Martin ProScenium<sup>DMX</sup> ISA card allows configuring ProScenium<sup>DMX</sup> in desktop PC platforms.

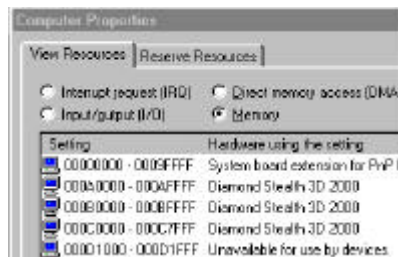
**Note: the DMX I/O card can be damaged by static electricity. Follow usual procedures to prevent electrostatic discharge: always release static electric charge by touching a grounded metal object before handling the card. In any case always handle the card by its bracket and edges, avoiding touching components directly.**

#### Installation procedure

Martin ISA card is a memory-mapped I/O device. Before installing the card, the occupation of the PC memory space by the different devices must be checked in order to verify the correct allocation of the card in the system.

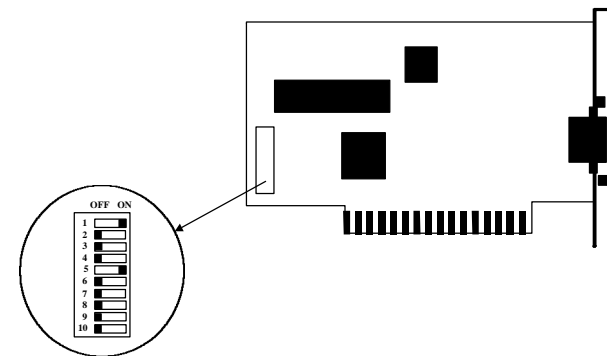
This can be done under Windows95™ through the following steps:

- right-click twice on “My Computer”
- click on “Properties”
- click on “Device Manager”
- click on “Properties”
- click on “Memory”



This operation opens a window that details the memory assignment. Martin DMX ISA card may use any available 4KB block in the “D” segment, that is a 1000 (hexadecimal) wide block in the 000D0000-000DFFFF (hexadecimal) space. The default address of the Martin ProScenium<sup>DMX</sup> ISA card is 000D1000 (hexadecimal). Check that this area is available, and in case it is not, locate an available region and annotate the address for later use in card DIPswitch configuration.

The card is equipped with DIPswitches that select the base address of the used memory area. The DIPswitch location and default settings shown in the following figure:



As shown, the DIPswitch is formed by 10 small switches, numbered from 1 to 10, that may be in the OFF (left in the figure) or ON (right in the figure) position.

To set DIPswitch to match the annotated memory address, set all switches OFF and then set ON the switches corresponding to the selected address as shown in the following table:

BLOCK	ADDRESS RANGE	DIP-switches ON
D0	000D0000-000D0FFF	5
<b>D1</b>	<b>000D1000-000D1FFF</b>	<b>1,5 (DEFAULT)</b>
D2	000D2000-000D2FFF	2,5
D3	000D3000-000D3FFF	1,2,5

D4	000D4000-000D4FFF	3,5
D5	000D5000-000D5FFF	1,3,5
D6	000D6000-000D6FFF	2,3,5
D7	000D7000-000D7FFF	1,2,3,5
D8	000D8000-000D8FFF	4,5
D9	000D9000-000D9FFF	1,4,5
DA	000DA000-000DAFFF	2,4,5
DB	000DB000-000DBFFF	1,2,4,5
DC	000DC000-000DCFFF	3,4,5
DD	000DD000-000DDFFF	1,3,4,5
DE	000DE000-000DEFFF	2,3,4,5
DF	000DF000-000DFFFF	1,2,3,4,5

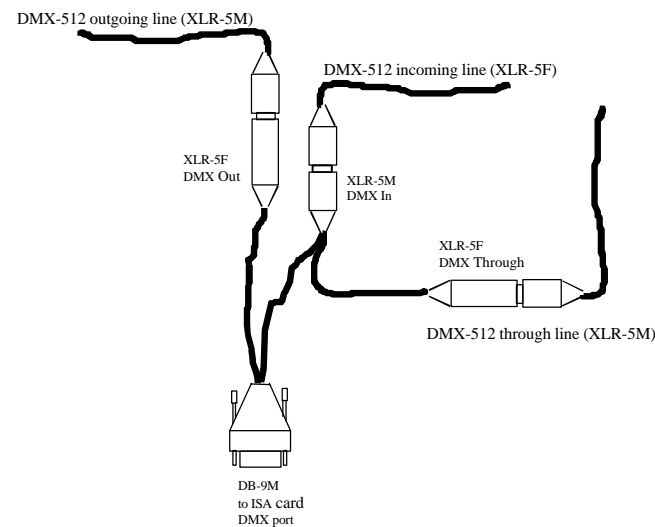
Once the DIPswitch is set as described, the card may be installed through the following steps:

- Turn off the computer and disconnect the power cord to avoid risk of injury.
- Remove the cover.
- Find an available ISA expansion slot (using the PC manual for instructions).
- Remove the slot cover plate from the back of the chassis. Save the screw for fastening the DMX I-O card later on.
- Holding the card by the bracket and the edge, push the copper finger connector into the expansion slot, seating it firmly and fixing it with the saved screw.
- Replace the cover.
- Reconnect the power cord.
- Connect DMX cables as required by the application.
- Turn on the computer and start ProScenium<sup>DMX</sup> program.
- Use the Hardware choice section on Configuration panel to setup the proper address, or using the new Auto-Detect Hardware function.

Note: after installing the card, the selected address space will be declared used by Windows95™. To verify that the board is detected by the system, check that the selected address space is flagged “Unavailable for use by device”.

#### Cable connection

DMX Cable connection should be done as in figure:



## Troubleshooting

If using the following instruction the card is still not selected by the ProScenium<sup>DMX</sup> program, verify again all the setting in this order:

- check the DIP-switches setting
- check the proper insertion of the card in the expansion slot
- check the ProScenium<sup>DMX</sup> program address setting
- check the following troubleshooting list:

### In master mode, DMX receivers (dimmers, etc) detect no signal.

If a new DMX appliance (receiving module) is being used, check it for full compliance with USITT DMX-512/1990. If DMX marginal timings are suspected, use the “Reduced Rate” feature in ProScenium<sup>DMX</sup> Configuration Panel to relax DMX timings. If the problem persists, verify the output of the card in Master Mode with a DMX tester or another ProScenium<sup>DMX</sup> system used in Slave Mode. If problems are found with the DMX signal, contact your dealer for assistance. There are no user-replaceable parts on the DMX card.

If following the steps above, there are still problems, contact your dealer for assistance.

## Martin DMXADP LPT Parallel Port adapter

### Introduction

Martin DMXADP Parallel Port adapter allows configuring ProScenium<sup>DMX</sup> in desktop and notebook PC platforms.

**Note: the DMADP adapter can be damaged by static electricity. Follow usual procedures to prevent electrostatic discharge: always release static electric charge by touching a grounded metal object before handling the adapter.**

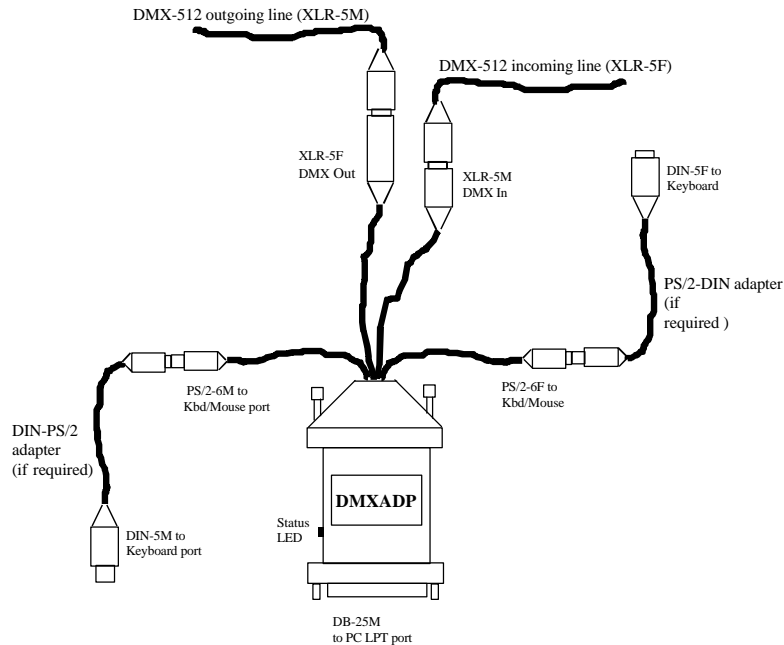
## Installation procedure

Differently than the ISA card, DMXADP does not require to open the computer or to perform any specific setting. The device should just be installed following these steps:

- turn off the computer and disconnect the power cord to avoid risk of injury
- locate the Parallel Port (25-pin D-type female connector)
- locate a mouse or keyboard port (PS/2 6-pin female or DIN 5-pin female)
- connect DMXADP adapter body to the Parallel Port, fastening it with the two screws
- if the selected mouse or keyboard port is an optional expansion port, simply connect the male PS/2 connector of the DMXADP cable in the port (using the PS/2 to DIN adapter if required)
- if the selected mouse or keyboard port is used by a peripheral, interconnect DMXADP in pass-through mode using both the male and female PS/2 connectors of the DMXADP cable (using PS/2 to DIN adapters if required)
- connect DMX cables as required by the application
- turn on the computer and start ProScenium<sup>DMX</sup> program
- select the address of the Parallel Port using the Configuration panel or using the new Auto-Detect Hardware function

### Cable connection

The external connections of the DMXADP adapter are sketched in the following figure:



### Troubleshooting

If following the installation steps above there are still problems, follow these steps:

- verify the connections of the DMXADP adapter to the PC
- verify the address of the Parallel Port using Windows95™ Control Panel as described in the ProScenium<sup>DMX</sup> program configuration section.
- verify the following Troubleshooting checklist:

#### Turning on the PC, the Status LED does not turn on

This indicates that either the DC power is not properly applied to DMXADP or the internal microcontroller has not passed Built-In-Self-Test. Make sure DMXADP cable is properly connected to the Keyboard/Mouse port and rechecks. Try on a different PC to exclude a defective Keyboard/Mouse port. If after checking power the LED does not turn-on, contact your dealer for assistance.

#### The ProScenium<sup>DMX</sup> software reports "Sense Time-out" errors

Something is wrong in the communication between the PC and DMXADP. Check the connection of the LPT connector. Avoid switching power off to DMXADP while PC is still on: always power on DMXADP while powering on the PC. If the problem persists, contact your dealer for assistance.

#### In master mode, DMX receivers (dimmers, etc) detect no signal.

If a new DMX appliance (receiving module) is being used, check it for full compliance with USITT DMX-512/1990. If DMX marginal timings are suspected, use the "Reduced Rate" feature in ProScenium<sup>DMX</sup> Configuration Panel to relax DMX timings. If the problem persists, verify the output of DMXADP in Master Mode with a DMX tester or another ProScenium<sup>DMX</sup> system used in Slave Mode. If problems are found with the DMX signal, contact your dealer for assistance. There are no user-replaceable parts inside DMXADP.

If following the steps above, there are still problems, contact your dealer for assistance.

## ProScenium<sup>DMX</sup> USER INTERFACE

### The Screen

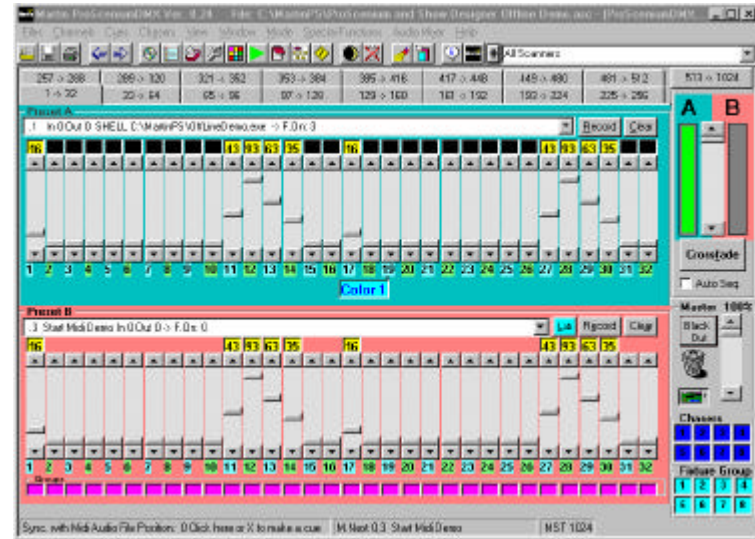


Fig. 1 - ProScenium<sup>DMX</sup> screen

From Version 788 you can maximise your screen, up to your Screen resolution. In resolutions 800x600 and higher, you can find also a direct group and chaser access on your main screen.

From the top you can find the main window title bar with the active filename, the pull-down menus, the toolbar with icons that provide immediate function access. As usual, just pausing on a function icon will pop-up a text description of the icon selected function. The right side of the Toolbar contains the scanner window.

























## ProScenium<sup>DMX</sup> Toolbar

Here is the description of the Toolbar buttons :

### Button Action

	Open an Usitt Ascii File
	Save current file
	Print current show data
	Move to previous cue
	Move to next cue
	Open Media Player
	Enter assigned channel description window
	Enter cue editor (to assign Loops, Links, specific MCI commands)
	Enter configuration window
	Enter group window
	Enter Chaser window
	Enter Usitt Ascii Edit window (delicate function only recommended for experienced users)
	Enter bi-dimensional (2-D) light plan
	Enter digital patch window
	Total BlackOut of channels, groups, and chasers...
	Stop all Audio files playback (CD Audio, MIDI, Mpeg3, Wav)
	Spots library
	Filters library
	Show ProScenium <sup>DMX</sup> on-line Help
	About ProScenium <sup>DMX</sup> (information on hardware, software, libraries revision level)


Channel pages support navigation across the whole channel set, from 1 to 512 (or 1 to 1024 in the 1024 channel version) and selecting the required page is as simple as clicking the folder tag.


The center screen block is dedicated to channel display and shows two Presets (A and B) that simulate a traditional, manual console. The crossfade block slider can be easily used to switch between banks A and B. The output level of banks A and B is gauged by the red and green bars.

Each preset (A or B) provides:


- A combo box with the list of all cues: a cue is brought back to the preset just clicking it on the combo box.



- A « Record » button to assign bank (A or B) contents to a cue. Note that a cue can be recorded or modified in Blind mode just using the inactive Preset (normally Preset B) 

- A « Clear » button to clear the contents of the related bank 



- 32 faders  to control the output of each single DMX channel. As with standard Windows 95 controls, fader handle may be directly activated with mouse or stepping may be performed clicking on the top and bottom arrows (1% steps), clicking on the space between handle and fader end (5% steps), using the « PageUp » e « Page Down » (large steps), using the « Home » key (single-stroke full selection) or the « End » key (single-stroke zero selection).

### Channel selection via keyboard

A channel may be selected via the keyboard just pressing “\*” or “C” followed by the channel number. To select a channel via the keyboard and add it to the current selection, just key the channel number.

A channel series may be simply selected typing the first channel, then “/” (division slash) followed by the last channel of the series.

A channel may be simply added to the current selection pressing the “+” key.

A channel may be removed from the current selection pressing “+” followed by the channel number and by the “-“ key to designate subtractive add (removal).

*Selected channels are displayed on the screen in different color.*

Selecting a channel belonging to a different page make the new page be automatically selected. Moreover, it is possible to go to the next screen channel page by pressing “P” and to go to the previous pressing “O”.

The current selection may be cancelled at any time pressing the “Esc” key.

#### Channel level selection

##### a) With Keyboard

The level to be assigned to the selected channels is assigned pressing “.” followed by the desired percent figure.

For zero level enter 0



For levels 1 to 9 enter 0 plus one digit (e.g..09 for 9)

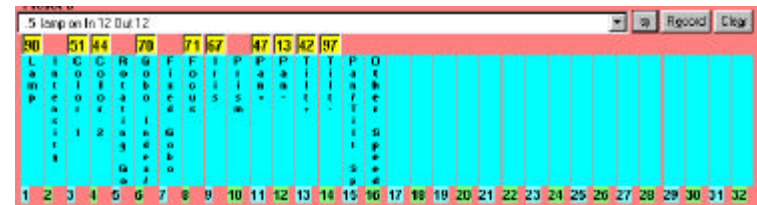
For level 100 (full) press “.” Again

The level of selected channels may also be increased smoothly using the thumbwheel with the up-arrow and down-arrow keys (1-% steps) or with the “PgUp” and “PgDn” keys (5% steps)

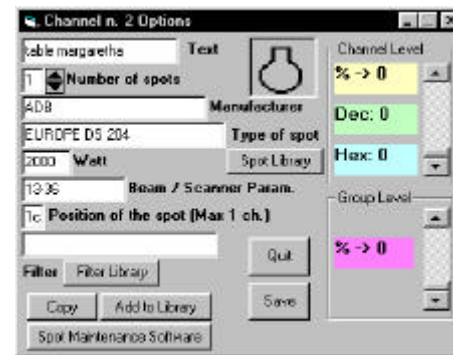
##### b) with Joystick

If the computer is equipped with a gameport and a Joystick or the **FADJOY Plus** optional control pad is installed, the selection wheel may be directly accessed EXCEPT WHEN THE SCANNER WINDOW IS SELECTED. The type of control device must be specified in the Configuration Panel/Joystick folder, setting the device code to 4 for a simple Joystick and to 5 for FADJOY Plus.

- The channel level window (6)  that displays the level in percent (0 to FL), or (only on bank B) in hexadecimal (for full resolution) if the option is selected in the configuration panel. If the channel is controlled by a group (groups higher than channels) the level is shown in purple color, otherwise in yellow.
- Channel number.  Moving mouse on top of channel numbers, a pop-out text is visible if defined for the channel. Clicking the channel with the left mouse button, the channel is added/removed to the selection that is assigned to the thumbwheel (13). The channel definition window (text, type of spot,...) may be shown at any time clicking the channel with the right button.



On Preset B there is a new button at the side of the Record Button: This button allows to toggle between sliders and labels, with the textual description of the channel contents.



This window allows channel and group setting, level display in percent or direct DMX hexadecimal representation. Moreover, the type of spot is displayed clicking on Spot Library and selecting it in the library. To change icon, click on the selected one. To use ProScenium<sup>DMX</sup> graphical functions, a number larger than zero (this number correspond to the number of installed spots in the circuit) should always be used, and a text description should be assigned. If similar channels need to be defined, the “copy” button may be used, specifying a channel destination number. If a new type of spot not present in the library has been defined, the “Add to Library” button should be used (except when using scanners, whose use is described in a dedicated section of this manual). ProScenium<sup>DMX</sup> program directory contains a Spot Maintenance utility (called “sptmaint.exe”) that allows simplified access to spot libraries.



A Status Bar is shown at the bottom of the screen, providing the type of installed DMX interface hardware, the number of channels sent/received and the operating mode (Master/Slave).



The Grand Master fader is in the bottom right corner: The Master is the general output level of the console. A Black-Out button is provided for immediate blanking. Clicking the button again the Master is selected back to Full with no modification of the pre-existing channel values.

In the same frame is found the Trash Bin. Following the Drag & Drop technique, a cue may be deleted just selecting it on the B preset, dragging it and dropping it in the trash bin. The same procedure may be used with all ProScenium<sup>DMX</sup> objects: Groups (selected clicking on the group numbers), Channels (selected clicking on the channel number) and Scanners (selected clicking on the « + » sign close to the scanners Combo Box).

## CUES

When a scene has been edited, it can be easily stored into a cue for later retrieval and playback. The levels of all channels are transferred in the selected cue.

### Recording a scene into a Cue



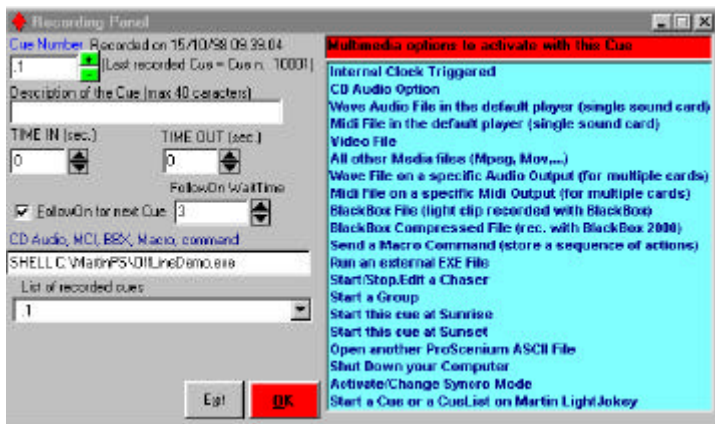
Key “M”

A scene can be recorded into a cue just clicking the « Record » button of the corresponding Preset (A or B) or clicking on the «M» key in your keyboard. Differently than other lighting systems, ProScenium<sup>DMX</sup> has no notion of “preparation” and “transfer” mode: all actions are possible at any time. The user is asked for a number to assign to the cue, in the form of a ten-digit real number (a total of ten digits including decimals). Cues are automatically inserted in the correct ascending sequence. For example cue 11.1 may be inserted between cues 11 and 12 and later on a 11.11 cue may be inserted between 11.1 and 11.2 and so on.

**Attention !!! only period (.) is allowed as decimal separator, never use the comma (,) separator.**

In any case the user is prompted for confirmation before overwriting an existing cue.

When the « Record » button is clicked, in addition to the channel number the program shows the following window:



and requires the insertion of:

- a) **Description of the Cue**
- b) **Time In** and **Time Out** in hours:minutes:seconds format, following the following Usitt convention:

00:30      30 seconds  
 01:00      1 minute  
 01:45      1 minute and 45 seconds  
 02:00:15    2 hours and 15 seconds

- c) **FollowOn** time, that allows automatic start of the next cue after this time has elapsed

**From Version 806 you can find a combo box that helps you to fill a multimedia option to activate with your cue.**

Note that From this version **you can also decide to have only The Multimedia command without having the Light Output**, just clicking the «Don't send Light Output» check Box.

This Option will call your cue «NoLight». Please don't modify this text because it is necessary to ProScenium to avoid the light output.

**These options are in the order :**

**Internal Clock Triggered :** Let Proscenium fill the Cue name for Cues to be triggered with syncro 1 and Syncro 11 (refer to this chapter for further informations).

**CD Audio Option :** Let Proscenium fill the Cue name for Cues to be triggered with CDPlayer (syncro 3)

**MCI Option** to let the user specify the name of a MCI (Media Control Interface, see

Appendix 2) compatible file, like a MIDI music clip, a Wave sound clip or an MPEG clip or an AVI video clip. The Multimedia effect is automatically played back at crossfade start.

There is the capability, for MIDI and Wav files, to play it in the default sound card, or, if multiple sound cards are installed in your computer, to select the sound device to play your audio file.

The name of a **BBX** (ProSceniumDMX Black Box) file. These files are generated by BlackBox (Available as a standalone program) who records, direct to disk, DMX 512 data stream, like for example, in MIDI (Musical Instruments Digital Interface), with a sequencer. ProSceniumDMX can play these files. At the beginning of crossfade BBX file are automatically played. To stop this file press « Esc ». To make a Loop, refer to Loop argument in Cue Edit section.

The name of a **BBK** (ProSceniumDMX Black Box Compressed file). These files are generated by BlackBox (Available as a standalone program) who records, direct to disk, DMX 512 data stream, like for example, in MIDI (Musical Instruments Digital Interface), with a sequencer.

**SendKeys (Macro)**

Sends one or more keystrokes to ProScenium as if typed at the keyboard.

Each key is represented by one or more characters. To specify a single keyboard character, use the character itself. For example, to represent the letter A, use "A"

for string. To represent more than one character, append each additional character to the one preceding it. To represent the letters A, B, and C, use "ABC" for string.

The plus sign (+), caret (^), percent sign (%), tilde (~), and parentheses ( ) have special meanings to SendKeys. To specify one of these characters, enclose it within braces ({}). For example, to specify the plus sign, use {+}. Brackets ([ ]) have no special meaning to SendKeys, but you must enclose them in braces. To specify brace characters, use {{} and {}}.

To specify characters that aren't displayed when you press a key, such as ENTER or TAB, and keys that represent actions rather than characters, use the codes shown below:

Key	Code
BACKSPACE	{BACKSPACE}, {BS}, or {BKSP}
BREAK	{BREAK}
CAPS LOCK	{CAPSLOCK}
DEL or DELETE	{DELETE} or {DEL}
DOWN ARROW	{DOWN}
END	{END}
ENTER	{ENTER} or ~
ESC	{ESC}
HELP	{HELP}
HOME	{HOME}
INS or INSERT	{INSERT} or {INS}
LEFT ARROW	{LEFT}
NUM LOCK	{NUMLOCK}
PAGE DOWN	{PGDN}
PAGE UP	{PGUP}
PRINT SCREEN	{PRTSC}
RIGHT ARROW	{RIGHT}
SCROLL LOCK	{SCROLLLOCK}
TAB	{TAB}
UP ARROW	{UP}
F1	{F1}
F2	{F2}
F3	{F3}
F4	{F4}
F5	{F5}
F6	{F6}
F7	{F7}
F8	{F8}
F9	{F9}

F10	{F10}
F11	{F11}
F12	{F12}
F13	{F13}
F14	{F14}
F15	{F15}
F16	{F16}

To specify keys combined with any combination of the SHIFT, CTRL, and ALT keys, precede the key code with one or more of the following codes:

Key	Code
SHIFT	+
CTRL	^
ALT	%

To specify that any combination of SHIFT, CTRL, and ALT should be held down while several other keys are pressed, enclose the code for those keys in parentheses. For example, to specify to hold down SHIFT while E and C are pressed, use "+(EC)". To specify to hold down SHIFT while E is pressed, followed by C without SHIFT, use "+EC".

To specify repeating keys, use the form {key number}. You must put a space between key and number. For example, {LEFT 42} means press the LEFT ARROW key 42 times; {h 10} means press H 10 times.

Note You can't use SendKeys to send keystrokes to an application that is not designed to run in Microsoft Windows. Sendkeys also can't send the PRINT SCREEN key {PRTSC} to any application.

This is an example for Changing, from a cue, from Master to slave mode :  
**SENDKEYS %}{BS}**

### Run Exe

Runs an executable program in Windows95/98 : a dialogue window let the user specify the name of any Windows .Exe File. For example you can ask ProScenium to run a PowerPoint presentation, to record a sound file, to send a fax or an E-mail.

**Start /Stop Edit a chaser** ProScenium helps you to fill the chaser command to activate a chaser with your cue. (refer to the Chaser section for more details)

### Start at Sunrise

### Start at Sunset

To make a cue to be triggered at Sunset or Sunrise, in the recording panel just click on the combo box «Multimedia options to activate with this cue» and select «Start at Sunrise» or «Start at Sunset». Note that this option will call your cue «Start at Sunrise», so do not modify the cue name, because it is needed by ProScenium to trigger this Cue.

### Open another ProScenium ASCII File

Just select the name of the ProScenium file to open. This option is useful to open immediately a new file with new groups, chasers...

### Shut down your computer

This option let you start a special ProScenium add-on that shut-down or reboot your PC. You have 25 seconds to stop the process.  
Note that in new PC with ATX case, you can set-up an alarm to switch your computer on in a specific hour. This mean that you can decide if you want to let your machine always powered on, or you prefer switch it off every day

### Activate/Change Syncro Mode

This option let you change dynamically the synchronisation mode:  
For example you can start an internal clock syncro, and decide to run a CD synchronised show at 12.00.00, so you have to store a cue called 120000 in which you'll select the MCI command SYNC 3, followed automatically by a cue that starts your CD player "Play CdAudio from 1 to 8"

### Start a Cue or a cuelist on Martin LightJockey

This option let you start cues or cuelists on LightJockey. You need a full Martin LightJockey software running on your computer in order to activate this option.



To edit a cue, select it in the Combo Box and just click the Record button when finished with editing.

### Inserting a new Cue



A new cue can be inserted in the same way as a new cue is stored, using the appropriate number to insert the cue at the proper place.

### Deleting a Cue



To delete a cue, select it in the Combo Box and just click either one of the two Trash icons in the toolbar or in the Master window. Alternatively, the cue may be deleted selecting it on preset B and dragging-dropping it directly on the Trash Bin.

The user is prompted to confirm the cue number, showing the contents and asking for confirmation before actually deleting the cue.

### Cue summary display



This function displays a complete summary of the recorded cues. A large dialog box is used to display the attributes of each cue: number, description, time-in, time-out, Follow-on time, Link, MCI command, date and time of recording. Using this window it is possible to change the cue number, and to insert other cue parameters that are not immediately accessible on the recording window:

- a) A **Link** to perform automatic linking with one of the recorded cues: If you insert a link on cue 5 to cue 2 you will link, each time you arrive to cue 5 a jump to cue 2.
- b) A **Link** with a Loop number specification: In the link cell insert the number of cue to link, followed WITHOUT ANY SPACE by letter «L» and the number of loop you want to execute. For example if in Cue 5 you insert the link cell « 2L3 » you will have 3 time the jump from cue 5 to cue 2, after the third time your sequence will continue normally.
- c) A **MCI command** (Media Control Interface) that will be executed at crossfade start time. Here are some examples:

Play cdaudio from 1 to 2 (plays the first track of a CD-Audio)

Stop cdaudio (stops CD-Audio play)

Chaser1 On (start Chaser1 with the menu-bar options)

Chaser1 Off (stops Chaser1).

Look at the MCI Command Examples to see more examples like these

### Advance to next Cue (NextMemory)

Key: " L "



This function is used to select the next recorded cue for playback with a single keystroke. This is particularly useful in show setup when the same scene is played multiple times, tuning the channel values.

### Step back to previous Cue (BackMemory)

Key: " K "



This function is complementarily used to select the previous recorded cue for playback with a single keystroke.

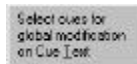
### Select Cues for global modification

Activated from Cue editing window

This is one of the most advanced functions of ProScenium<sup>DMX</sup> and allows to select one or more cues to be globally modified. The different actions provided by ProScenium<sup>DMX</sup> are described in the following.

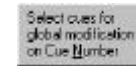
It is good recommended practice to save the show on a backup file before using this function that can cause loss of important information in case of errors done by a non-experienced user.

Selection based on cue text field



To select cues for global modification, just key a string to search. For example consider the case where multiple cues have been recorded involving the curtain, like "Curtain Open", "Curtain closed" etc. Keying the "Curtain" string will let ProScenium<sup>DMX</sup> identify all cues that contain the keyword and select them all for global modification. In the first phase, ProScenium<sup>DMX</sup> shows the result of the search and prompts for confirmation.

Selection based on cue number



To select cues, just type the number of the first cue of the interval selected for global editing, followed by the number of the last memory in the interval. In this first phase ProScenium<sup>DMX</sup> shows the result of the selection and prompts the user for confirmation before continuing. This function is also used to perform scanner re-calibration (refer to scanner section for further details).

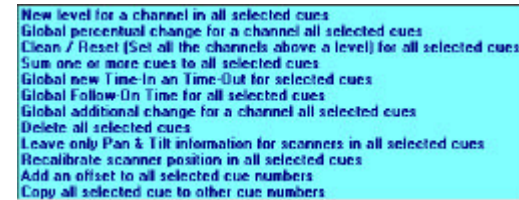
Selection of all cues



Click on this button to select all cues.

Global editing

Global editing is performed through the Global Editing window:



b1) New channel level in all selected cues

this option lets a channel level be globally set to a new value (e.g. cleared) in all selected cues.

b2) Channel percent adjustment all selected cues

this function lets a channel be proportionally adjusted in all selected cues. This is very useful when touring a show. For example, if the new theatre has the distance of the stage from the stalls reduced by 50%, with this feature the intensity of the spots coming from the stalls side may be reduced of the same

rate to obtain the original lighting balance, and this can be automatically done in all cues with a single advanced command.

#### *b3) Incremental level change in all selected cues*

*This function is used to raise or lower a circuit in all selected cues. It is particularly useful when a show is toured along. If, for instance, the distance of spots coming from the stalls is reduced, an increment of 10 may be applied to the selected channel. This is specially useful to reposition all motorised luminaires, automatically in all cues.*

#### *b4) Clean-up*

this function allows setting a threshold value below which all channels are cleared in all cues. This is useful to clean up channel selection at very low percent (e.g. 3%, 5%) that are usually due to user mistakes. Be careful to avoid using this function if color scrollers or scanners are used: in this case a low channel value may be significative. It is also an easy way to set all values to 0 (setting the percent at 100)/

#### *b5) Add*

this option lets one or more cues be added to all selected cues, allowing the addition of a new lighting element common to multiple scenes.

#### *b6) Time*

this option allows a global time change in all selected cues.

#### *b7) Link*

this option allows a global change of the «link: attribute of all selected cues The user is double-prompted for confirmation before the change can be committed by ProScenium<sup>DMX</sup>, and the previous values are restored if confirmation is negative.

#### *b8) Delete all selected cues*

this option allows to delete all selected cues. The user is double-prompted for confirmation before the change can be committed by ProScenium<sup>DMX</sup>.

#### *b9) Leave only Pan & tilt information*

This option allows you to leave only Pan and Tilt information for the moving light, erasing all other information.

#### *b10) Recalibrate Scanner position in all selected cues*

look at the Automatic Scanners recalibration chapter in the Scanner / moving light section

#### *b11) add an offset to all selected cue number*

This option allows to add an offset to all selected cue Numbers. For example you can rename cues 1, 2, 3, 4 in cues 101, 102, 103, 104.

**Note that the destination number has to be possible for ProScenium in the opposite you can have abnormal results. Pleas make a backup copy of your file before starting this operation .**

#### *b12) Copy all selected cue numbers in other cue numbers*

This option allows to copy your selected files in other cue number with an added offset to all selected cue Numbers. For example you can copy cues 1, 2, 3, 4 in cues 101, 102, 103, 104.


**Note that the destination number has to be possible for ProScenium in the opposite you can have abnormal results. Pleas make a backup copy of your file before starting this operation.**

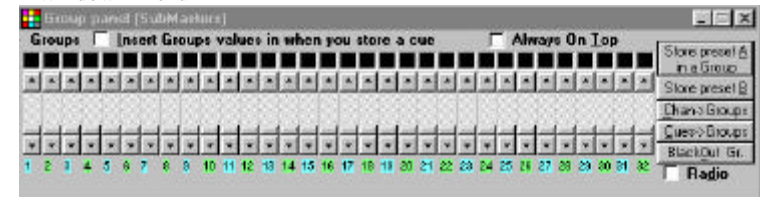
## BLIND MODE

Blind mode allows displaying and editing any recorded cue without altering the active (ON BOARD) cue or scene. This is particularly useful when, during cue playback, the user wants to verify the contents of a future cue before playing it back.

On ProScenium<sup>DMX</sup>, blind mode is simply obtained selecting the cue for display/editing on the inactive Preset (e.g. selecting it on preset B while preset A is On-Board or viceversa).

## GROUPS

The Group window may be invoked clicking the  toolbar icon, or using the « Window » menu



Groups are a very useful tool for lighting console programming.



A scene may be transferred into one of the 32 defined groups. For example, the user may group all the spots lighting the stage from the stalls-side just setting them at the desired intensity and then store them into a group. The resulting group will be managed like a single channel with a description and a level, but will be displayed in the Group Window using different colors than channels for clarity of representation.

Group logic is the following: the group is superimposed to the active scene, but it does not overwrite the pre-existing values. When a group is removed, the scene is restored to the pre-existing value. The value of a channel included in a group, if higher than the value selected with the normal procedure, is displayed in a different color. During playback groups are always kept active and may be removed from the active scene just clicking the « Clear Groups » button. An option is present in the Configuration Panel to let the user decide if Groups should be considered or not when storing scene in cues.

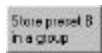
The “Radio”  **Radio** check-box allows to select only one group at once. It means that if group n.2 is selected and you select group n.3, ProScenium automatically, in a single operation (the pushing of “F3” key), switch-off group n.2 and switch on group n.3. Very useful when you stock scanner position on groups to have an instant access with the function keys. A good way to make live shows with ProScenium.

The Check-box “Insert group values when you store a cue” allows you to include or not the value of the groups when you are recording a scene on a preset.

#### Store a Preset into a Group



This function lets the active scene on Preset A be stored into a Group. The user is prompted for a group description string. Other active groups are included in this new group only if the “Insert group values when you store a cue” check-box is checked



This function lets the active scene on Preset B be stored into a Group (also in blind mode). The user is prompted for a group description string. Other active

groups are included in this new group only if the “Insert group values when you store a cue” check-box is checked

#### Editing a Group



A group may be edited just editing the active scene and then storing it back in the Group as originally done when creating the Group.

#### Group playback



*Mouse: on selected Group*

*ON-OFF Keys: " F1 " -> " F10 " (+Ctrl +Shift +Alt)*

Groups may be operated with mouse in the same way as channels are operated. For example channels assigned to the group may be selected for level adjustment clicking the group with the left button. Even in this case the mouse button may be used on the window to perform flash and toggle. Keeping left button pressed, a group may be dragged into a preset. In this way, after the prompted confirmation by the user, a group may be inserted in a preset in channel form (yellow) rather than in group form (violet).

An additional, useful hot-key access capability is provided to control groups in an ON-OFF toggle fashion using function keys F1 to F10. Groups 1-10 are accessed with straight « F1 » -> « F10 » keys, groups 11->21 are accessed using the Ctrl key modifier as « Ctrl » + « F1 » -> « F10 » and groups 21-31 are accessed using the Shift key modifier as « Shift » + « F1 » - « F10 » and groups 31-32 are accessed using the Alt key modifier as « Alt » + « F1 » - « F2 ».

## BLACK OUT

ProScenium<sup>DMX</sup> provides three different blackout commands, described in the following.

### Total Black Out



Clears all dimmer outputs controlled by channels/groups/chasers.

### Group Black Out



Clears all dimmer outputs controlled by groups

### Channel Black Out



Clears all dimmer outputs controlled by channels of Preset A or Preset B

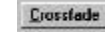
## CROSSFADE



Allows a smooth move from the present to the next cue. Using the DMX-512 protocol feature of 44 packet/second data transfer capability, a crossfade is just a very fast sequence of lighting states in the appropriate sequence to let the eye perceive a smooth, continuous light change.

### Go (crossfade)

Key: " G ", « Space Bar »



A crossfade is started clicking the « Crossfade » button in the crossfade window at the top right of the screen or pushing the space-bar. This plays back on board (on Preset A) the scene present on Preset B in the time in-out stored in the cue.

During crossfade, a couple of green/red bars is used as a graphical display of the Preset A/B evolution.

A Crossfade may be interrupted clicking the same button, whose label is changed to « Pause » during crossfade.

During crossfade, it is possible to modify the predefined timing parameters in four ways:



Clicking "/" a crossfade is terminated stopping at the present level

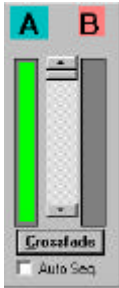
Clicking ">" a crossfade is immediately anticipating at the final level without waiting the predefined time

Clicking "+" accelerates the crossfade execution

Clicking "-" decelerates the crossfade execution

When crossfade is terminated, ProScenium<sup>DMX</sup> updates the number of active cue and it is ready for the next effect.

#### Manual Crossfade



This function provides a manual crossfade, letting the user crossfade manually between Preset A and Preset B. This can be accomplished acting with mouse on the fader present in the center of the Crossfade panel.

Clicking the "Auto Seq." check box allows the cue number to be automatically advanced also in case of manual crossfade (this action has no effect on the automatic mode).

#### Crossfade Synchronization

A specific crossfade synchronisation option may be selected in the Configuration Panel. Several different synchronisation options are provided by ProScenium<sup>DMX</sup>: Refer to Configuration section.

#### CHASERS

A chaser is a sequence of cues that may be running in parallel to a crossfade, following a predefined time sequence. From version 777 there is a new visual chaser window that allows you to access directly to 8 chasers and to change

parameters. Be careful to understand the chaser mechanism reading the following chapter.

Chasers may be activated from the "Chaser" menu, from the keyboard with keys "E", "R", "T", "Y", "U", "I", "D", "F", in toggle mode, or inserted from the MCI command of the menu editor. Accepted commands are the following (using chaser 2 as an example):

chaser2 on

chaser2 off

chaser2 cue 10 (starts a chaser from cue N. 10)

chaser2 int 2 (fixes a 2 second Interval for a chaser)

**You can also select the Chasers option from the recording panel to auto-fill these fields.**

#### **BE CAREFUL TO RESPECT THE EXACT SYNTAX (keywords, blanks) IN MCI COMMANDS**

In alternative one of the following options in the Chaser Menu may be selected:

##### Start from Cue

Allows selection of the cue from which a chaser should start. At the end of the sequence (unless a link is encountered) the Chaser will restart from this Cue. Be Careful to put the right link sequence, and to understand the jumps you make in the sequence using links. Chaser links are the same that normal links, so changing links for the chasers, means changing links also for normal crossfade operations.

For example you make cues:

- 1000
- 1001
- 1002
- 1003

And from the cue edit window you link 1003 to 1000 (writing 1000 in the link field for cue 1003), and after you make

- 2000
- 2001
- 2002
- 2003

And from the cue edit window you link 2003 to 2000 (writing 2000 in the link field for cue 2003)

And so on....

#### Chaser Interval

Allows to select the interval (in seconds) between a cue and the next one. For example, use 1.5 for a second and a half or 0.3 for a third of a second and 120 for two minutes. If you leave this interval at 0, each chaser step will automatically take the Cue Time In.

**From version 8.22 if you don't put any chaser interval, or you put an interval of 0 seconds, chasers will fade through different steps, just tacking the Time In information of the Cue Time In**

#### Start Chaser (key E,R,T,Y,U,I,D,F)

Starts selected Chaser. The same effect may be obtained in the Cue editing window, using the editing command and loading in the MCI command column the "chaser1 on" command (without quotes of course). In this case when the related crossfade will be started, the selected chaser will be started.

#### Stop Chaser (key E,R,T,Y,U,I,D,F)

Stop selected Chaser. The same effect may be obtained in the Cue editing window, using the editing command and loading in the MCI command column the "chaser1 off" command (without quotes of course). In this case when the related crossfade will be started, the selected chaser will be stopped.

From version 8.12, and only for normal resolution timer mode, it is possible to trigger also the MCI command present in the different cues that compose a chaser. In this way it is possible to have several complete multitasking activities, or to stop a chaser after a cycle putting for example for chaser n. 1, the "Chaser1 off" command.

## PATCH

It is a digital way to change the dimmer-channel association. It is particularly useful for theatres that have a fixed wiring and require to change the spot numbering from the console rather than re-arranging the power plugs in the dimmer sockets.

## Edit Patch / Inhibit a channel



*Menu: CHANNEL -> PATCH*

Lets a control-channel number to be assigned at each dimmer circuit, allowing to set a percent level preprocessing. This proportional level patching is useful when coupling multiple spots with different lighting efficiency and, if dimmers allow this, when using 110Volt spots on a 220Volt installation. The percent modifier may be greater than 100% in order to compensate the lighting differences between spots in both ways. Whenever the patched level exceeds 100%, the level is automatically corrected (or "clipped") at 100% by the program.


The default patch for a dimmer circuit is the channel with the same number (dimmer n.1 is controlled by channel n.1 at 100% and so on). It is possible to swap some channels (dimmer n.1 is controlled by channel n. 8 and viceversa), to select a group of dimmers that respond to the same number (dimmers n.1, n.2, n.3 are controlled by channel n.1 and so on) which is useful when large surfaces, like a large white background, are to be lighted by multiple spots lit at the same intensity and large power (5 or 10 kW) dimmers are not available. The following commands are provided by the « Patch » submenu of the « Channel » menu:

*View Patch by channel, View Patch by dimmer*

This opens a dialog box that displays all patches by channel or by dimmer, letting the user check that the specified patches are correct.

*Set Patch default, Set all at zero*

With this function it is possible to clear all defined patches and go back to default patch (1-1, 2-2 etc.) or to a blank patch (1-0, 2-0 etc.) at any time. This is useful when a patch application has to be totally changed.

The complete patch dialog box can be invoked at any time clicking the Patch  icon of the toolbar.

Another use of the patch is to inhibit a channel (in all scenes/cues/groups) patching it to dimmer 0 or assigning it a 0 level, which is not a valid number and nullifies the channel action.

## CURVES



The curve functions are used to control the profile of a dimmer change. For example, the ON-OFF curve is particularly useful for appliances like discharge lamps or electronics ones (a TV, an LCD projector) where the AC voltage should not be regulated but rather switched on-off only.

### Edit Curve




Allows to assign to each dimmer a defined curve. The presently available curves are the following:

- "0" **linear** (default)
  - "1" **ON-OFF** (0 if zero, 100 if different than 0)
  - "2" to define the first channel of a **16-bit** circuit (for additional information see scanner chapter)
  - "3" to let a circuit be constantly **at its patch level**, independently from master and black-outs. The only way to change this circuit is to change its curve.
  - «4» Snap to final position in a crossfade, it means that in a crossfade, channels with a snap curve will go immediately to the final position.
  - "5" Custom (look at the ProScenium profile editor software)
  - "6" Custom (look at the ProScenium profile editor software)
- Add 10** to have a No Master effect (channels will not change following master position), for ex. curve 14 = Snap + No Master
- Add 20** to have Pure LTP (Last Take Priority)
- Add 30** to have Pure LTP No Master (for scanners)
- Add 40** to have LTP that considers 0 as null (doesn't send channels if they are at 0, to send minimal value set value 1)
- Add 50** to have LTP that considers 0 as null (doesn't send channels if they are at 0, to send minimal value set value 1)

To make circuit independent from master (particularly useful with scanners and color-scrollers) a No-Master curve modifier may be used. This is obtained adding 10 at the base curve number, obtaining the following curve values:

- "10" linear + **No-Master**
- "11" ON-OFF + **No-Master**
- "12" first channel of a 16-bit circuit + **No-Master** (for additional information see scanner chapter)

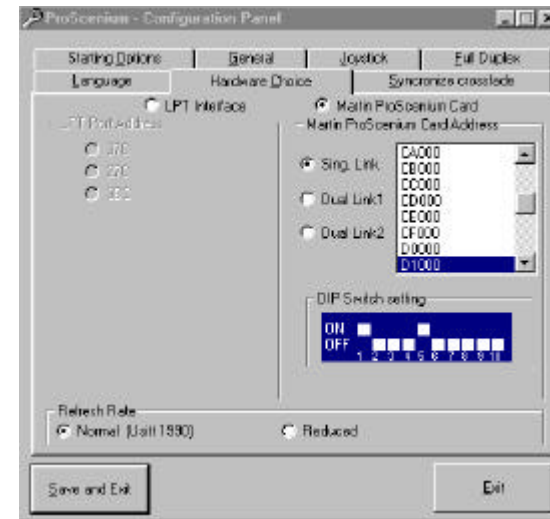
«14» Snap to final position in a crossfade, it means that in a crossfade, channels with a snap curve will go immediately to the final position.

Curve selections may be input in the patch dialog box that is invoked at any time clicking the Patch  icon of the toolbar.

## ProScenium<sup>DMX</sup> CONFIGURATION



The configuration dialog box allows to change and save a number of different ProScenium<sup>DMX</sup> program settings. Different show files may have different configuration options, since the configuration information is saved as part of a show file.



The configuration dialog box

Six tabs are displayed in the Configuration dialog box:

### Language

(Only English language is available at this time)

### Hardware Choice

Starting the software the first time Proscenium detects automatically the type of hardware (external or internal) you have, and select the right address. To force a defined address you can select it manually.

From this panel the type of DMX interface is selected. If the interface installed is a DIGIMEDIA parallel port interface, the parallel port base address should be selected in the left frame. In case of problems to perform this operation, please verify the base address as described in the Troubleshooting section.

If a Martin ProScenium<sup>DMX</sup> ISA Card is installed, the base memory address should be selected in the right frame. Please refer to the card User's Manual for installation procedure.

If DMX line stability problems are encountered (DMX devices not behaving properly) and the proper cabling and layout of the line has been verified, it is possible that some of the DMX devices used are not compliant with the USITT-specified, DMX-512/1990 protocol used by ProScenium<sup>DMX</sup>. In this case ProScenium<sup>DMX</sup> allows to relax DMX timings (mainly longer break and lower refresh rate) letting timing-marginal DMX devices be used, with no major visible degradation of the line responsivity. To activate this feature, select the "DMX Relax" option, exit the program and perform a full power off/power on cycle of the PC. This operation is necessary, only in this case, to fully reset software and DMX interface. At following software starts, no specific operation is required. To come back to standard (USITT 1990) timings, the same reset cycle described above should be performed.

From Version 7.80 a new High resolution timer was introduced in the software. This allows a much better movement for 16 bit professional moving lights, with a more regular DMX-Output, independent from the event queue list and modal windows in Windows 95.

### Synchronize Crossfade

**When Multimedia synchronization is selected, a synchronization cue may be inserted in real time just clicking with left button of mouse the first panel of the toolbar. If the time required to prepare the exact cue values is not available, create the reference points first (recording the related cues), and then edit the recorded cues off-line.**

A specific crossfade synchronization option may be selected. Several different synchronization options are provided by ProScenium<sup>DMX</sup>.

Note the option button in the bottom of this window in the frame "synchronization priority": You have two different choices:

#### 1) Time priority (by default)

This option is the normal synchronization standard: ProScenium triggers all the cues corresponding to the returned code position. In this mode you can be sure to have a perfect time synchronization, but it is not 100% safe in all condition: if a big video file is running, and you are checking 25 frames a second is it possible to lose some reference points. Another way to lose a cue is when you manually write his number. For Example in Midi Time Code standard has a resolution of 2 frames, this means that 1 frame (even or odd following the SMPTE type) is not received.

By the way you will not have this problem if you set the positions just clicking on the first panel of the status bar when the synchronization is running.

#### 2) Trigger all positions

In this way you are sure to pass from all positions, because, also if a position is skipped, it can be recuperated to the following frame, also if the name doesn't match. Be careful, because if you are making mistakes in the sequence (for example setting two cues wit a fade time of 5 seconds at only 1 second of interval), ProScenium will **always** sending all the cues, and this can cause a delay in the sequence. Note that with a normal sequence (99% of applications) you will never have this kind of problems.

**These are the different synchronization options are provided by ProScenium<sup>DMX</sup>.**

**0) No synchronization:** the user runs the crossfade manually;

**1) Synchronisation with PC internal clock:** the program runs the crossfade automatically for memories that have the same number as current time. For example if current time is 12:11:11 (hours:minutes:seconds format) and a cue numbered 121111 exists (requiring the plain number with no space and no delimiter), this cue will be automatically started with the stored time in/out parameters.

From version 804, for this Syncro Type and for Syncro 11 you will also create masks, for not repeating cues with different starting hours.

For example you want your Exterior 600 change of colour all the 10 minutes for all the day.

You will make the cue with the right colour, and call it 991099.

This Cue will be triggered by ProScenium all the hours at minute 10.

Cue Number (Mask)	Frequency	Triggered by ProScenium
<b>991099</b>	minutes	All the hours at min. 10
<b>991599</b>	minutes	All the hours at min. 15
<b>999199</b>	minutes	All the ten minutes at min. 1
<b>999599</b>	minutes	All the ten minutes at min. 5
<b>999930</b>	seconds	All minutes at sec. 30
<b>999900</b>	seconds	All minutes at sec. 00
<b>999991</b>	seconds	All the ten seconds at sec. 1
<b>999995</b>	seconds	All the ten seconds at sec. 5

In Sync mode 1 and sync mode 11 you can ask ProScenium to Trigger the Sunset and the Sunrise event.

The first time you want to use this function you have to select the System location in the Sunrise Form. To visualise the Sunrise form you have to go in the Main Menu / Special Functions / Sunrise and sunset information. Once you are in this form you have to click on the «Change selected city location» button to visualise a list of the most important city of the world.

Click on your city, or on the location nearest to you to give to ProScenium the latitude and the longitude of your location.

You can edit with a text editor the file Sitename.txt to include missing entry to the list.

To make a cue to be triggered at Sunset or Sunrise, in the recording panel just click on the combo box «Multimedia options to activate with this cue» and select «Start at Sunrise» or «Start at Sunset». Note that this option will call your cue «Start at Sunrise», so do not modify the cue name, because it is needed by ProScenium to trigger this Cue.

**2) Synchronization with MTC (Midi Time Code).** The program reads Midi Time Code (MTC) through the Midi port (using a SoundBlaster™ compatible

card). If the MTC returned is 12:11:11 (hours:minutes:seconds format) and a memory numbered 121111 exists, it will be started as in the case above;

**3) Synchronization with Audio CD.** The program reads the positioning on the CD (with the Track:Minutes:Seconds format). If for instance the CD is running Track 12:11:11 i.e. track 12, 11 minutes and 11 seconds, the program will check if a cue numbered 121111 exists, and will start it as in the case above;

**4) Synchronization with MIDI Data Stream (all notes).** The program reads the MIDI note via the MIDI interface (requires a Sound Blaster™ compatible audio card) and it runs the channel corresponding to the note. For example, playing MIDI note #36, will operate channel 1, playing note #37, will operate channel 2 and so on.

**5) Synchronisation with MIDI Data Stream (all notes) + Note 96 (C8) = GO and Note 95 (B7) = Back.** The program reads the MIDI note via the MIDI interface (requires a Sound Blaster™ compatible audio card) and it runs the channel corresponding to the note. For example, playing MIDI note #36, will operate channel 1, playing note #37, will operate channel 2 and so on. Playing note #96 (C8) will activate the «Go» command and playing channel #95 (B7) will step back one cue.

**6) Synchronization with MIDI Data Stream (Control Change).** The program reads from the MIDI port the Control Change codes (still requiring a Sound Blaster™ compatible audio card).

These are the codes that are implemented:

CONTROL	Action
Control Change 44 Value 0 to 4	Go
Control Change 44 Value 5 to 9	Back
Control Change 44 Value 11	Chaser1 On/Off Toggle
Control Change 44 Value 12	Chaser2 On/Off Toggle
Control Change 44 Value 13	Chaser3 On/Off Toggle
Control Change 44 Value 14	Chaser4 On/Off Toggle
Control Change 44 Value 15	Chaser5 On/Off Toggle
Control Change 44 Value 16	Chaser6 On/Off Toggle
Control Change 44 Value 17	Chaser7 On/Off Toggle
Control Change 44 Value 18	Chaser8 On/Off Toggle

Control Change 44 Value 21      Group1 On/Off Toggle  
Control Change 44 Value 22      Group2 On/Off Toggle  
...  
The same for all 32 groups  
...  
Control Change 44 Value 52      Group32 On/Off Toggle

Control Change 25 Value 1 to 127      Starts cue 1 to 127  
Control Change 26 Value 0 to 127      Starts cue 128 to 255  
Control Change 27 Value 0 to 127      Starts cue 256 to 383  
Control Change 28 Value 0 to 127      Starts cue 384 to 511  
Control Change 29 Value 0 to 127      Starts cue 512 to 639  
Control Change 30 Value 0 to 127      Starts cue 640 to 767  
Control Change 31 Value 0 to 127      Starts cue 768 to 895  
Control Change 32 Value 0 to 127      Starts cue 896 to 1023  
Control Change 33 Value 0 to 127      Starts cue 1024 to 1151  
....

Note that MIDI standard considers a Control Change as a state change: therefore for example to command group 1 on an off the following commands are required:

**Control Change 44 Value 21      Group1 On/Off Toggle**

followed by an inactive Control Change, e.g.:

**Control Change 44 Value 20** (no change, just passing to another control)

then again:

**Control Change 44 Value 21      Group1 On/Off Toggle**

while the sequence:

**Control Change 44 Value 21      Group1 On/Off Toggle**  
**Control Change 44 Value 21      Group1 On/Off Toggle**

does not cause any Control change.

**7) Synchronization with Wave Audio File.** The program reads the reference position of the Wave Audio file. If for instance the returned value is 597, the program checks for the existence of a cue numbered 597 (with no spaces or

delimiters) and if such a cue exists will start the crossfade with the stored cue timing parameters.

**8) Synchronization with Midi Audio File.** The program reads the reference position of the Midi Audio file. If for instance the returned value is 597, the program checks for the existence of a cue numbered 597 (with no spaces or delimiters) and if such a cue exists will start the crossfade with the stored cue timing parameters.

**9) Synchronization with AVI Video File.** The program reads the reference position of the AVI Video file. If for instance the returned value is 597, the program checks for the existence of a cue numbered 597 (with no spaces or delimiters) and if such a cue exists will start the crossfade with the stored cue timing parameters.

**10) Send a Midi Control Change 44 Value 1 (Go) to cross-synchronize two ProScenium<sup>DMX</sup> systems.** Every time a GO is commanded on the main console, if the secondary console is configured with Synchronization option n. 6, the GO command will be received and actuated also by the secondary console. Useful to guarantee complete cross-synchronization when running two parallel ProScenium<sup>DMX</sup> systems

**11) Synchronisation with PC internal clock, loading a Day file** (refer to point n. 2). When proscenium starts, it checks for a Day of the week file in your Martin ProScenium default directory in this order :

From version 798 the scheduler has been improved like that :

Base of triggering	Day to trigger	EX.File Name	
YEAR	all theSundays	<b>1.asc</b>	Will start all Sundays of the year
	« Mondays	<b>2.asc</b>	Will start all Mondays of the year
	« Tuesdays	<b>3.asc</b>	Will start all Tuesdays of the year
	« Wed.ys	<b>4.asc</b>	Will start all Wednesdays of the year
	« Thursdays	<b>5.asc</b>	Will start all Thursdays
	« Fridays	<b>6.asc</b>	Will start all Fridays year
	« Saturdays	<b>7.asc</b>	Will start all Saturdays



<b>QUARTER OF YEAR</b>	All days in this quarter of year	<b>Q_4.asc</b>	Will start all days from September to December
<b>QUARTER OF YEAR with day of week specification</b>	All specific days in this quarter of year	<b>Q_4_6.asc</b>	Will start all Fridays from September to December
<b>MONTH</b>	All days in this Month	<b>M_10.asc</b>	Will start all days of October
<b>MONTH with day of week specification</b>	All specific days in this Month	<b>M_10_6.asc</b>	Will start all Fridays of October
<b>WEEK</b>	All days in this Week	<b>W_42.asc</b>	Will start all the days of the 42th week of the year
<b>WEEK with day of week specification</b>	All specific days Week	<b>W_42_6.asc</b>	Will start on Friday of the 42th week of the year
<b>SPECIFIC DAY</b>	One specific day of the year	<b>12_25.asc</b>	Will start all Christmas

**N.B. For ProScenium week 1 is assumed to be the first full week of the year and not the one in which January 1 occurs. (January 1 occurs often in week 53).**

This means that if you are on Synchronisation 11, and you start ProScenium on Monday, Proscenium will check for 2.asc file, and, if the file exists, it will load it and start the syncro with the information inside, that can be different for all the days of the week. If you need an «year along» synchronisation and you want a special program for example for Christmas, you can call the file 12\_25.asc. The syntax is MM\_DD.asc, for the 1<sup>st</sup> of January the name will be 1\_1.asc.

You can also ask ProScenium to fill the filename for you just clicking on the menu **Files/Save as date file**

**12) Synchronization with MIDI Data Stream (Program Change).** The program reads from the MIDI port the Control Change codes (still requiring a Sound Blaster™ compatible audio card).

The codes of different program changes (0 to 127) are the same of the Control Change explained at point n.6

**13) Synchronization with generic multimedia File.** The program reads the reference position of any of previous described multimedia file. You can change dynamically the source of synchronization.

**14) Count Down Timer.** This is a special function, useful in applications that has to show the time before a specific event. Imagine for example that you want to show how many seconds are remaining in this millennium, until 1st January 2000. First of all you have to find some fixtures, or group of fixtures that are able to show the 10 numbers, from 0 to 9 (Martin has some different solutions to do it).

You can do it with gobos, but also with conventional lights, like for example a group of normal lamps with a small dimmer, like in the normal displays. After you have to make 10 memories for every fixture (one memory for every number). The structure of the numbers is the following:

...	X	X	X	X	X	X	X	X 0->9
...	8	7	6	5	4	3	2	1

So you have to make cue 10 to show a 0 for the first fixture, cue 11 to show an 1, and so on until 9. For the second fixture you start with cue 20, to show a 0, after 21 to show a 1 and so on...

...	3	1	5	3	6	0	0	0
...	8	7	6	5	4	3	2	1

So for example to make the number 31.536.000 (one year expressed in seconds), ProScenium will add cue 83+71+65+53+46+30+20+10

This means that all you have to do is to make 80 cues with the right positions and the right numbers from 0 to 9.

After, in the special function menu, you have to enter the date of the event, for example 1/1/2000 0.00.00, or 25/12/1998 23.59.59 to have the count-down until Christmas.

After, in the special function menu, you can decide to show the time in seconds, minutes, hours or days.

The last option is to have the countdown on preset A, or instead on chaser 1, in multitasking, leaving you the main crossfade for other tasks.

An interesting option is the following: when the countdown reaches the 0 (at the moment of the event), ProScenium will automatically send the last cue, (that you can link to any other one in the sequence, with a music, a video, or you can start a complete light show at the moment of the event (with the MCI commands and all the capabilities that you can have with a normal cue).

**15) Crossfade Counter.** This special function is similar to the previous one, but it can count the number of time you make an action: Imagine that you want to display how many people is coming in your museum, cinema, hotel, and you want to project it on the main wall of your hall.

First of all you have to connect a Crossfade “Go” device (remember that in ProScenium you can trigger crossfades with the mouse, the keyboard, but also with joystick, Midi, DMX...).

You can also put any sensor and interface it to simulate the joystick1 button1 closing 4 and 6 Pin in your Sound Card joystick interface. You can contact us for more informations about the sound card Pin-Out.

This functions allows you to increase of 1 the main counter, every crossfade, or every specific number of crossfades.

If you select to show the counter on chaser 1, every time you press a “go” you will see the counter projection increasing of one unit.

For the details of how to make cues, refer to previous point (14- Count Down Timer).

**16) Synchronization with MIDI Data Stream (Pitch Wheel).** The program reads from the MIDI port the Pitch Wheel Value (still requiring a Sound Blaster™ compatible audio card).

The codes of different Pitch Wheel Value call directly the respective Cue number.

For example receiving the Pitch Wheel value 100, will start cue 100 with the respective Time In and Time out, Mci command and so on.

**17) Synchronisation with MIDI Data Stream (all notes)-> Cue Number.**

The program reads the MIDI note via the MIDI interface (requires a Sound Blaster™ compatible audio card) and it runs the Cue corresponding to the note (with his Time In and Time Out, Mci command and so on). For example, playing MIDI note #36, will start Cue 1, playing note #37, will start Cue 2 and so on.

**When Multimedia synchronization is selected, a synchronization cue may be inserted in real time just clicking with left button of mouse the first panel of the toolbar. If the time required to prepare the exact cue values is not available, create the reference points first (recording the related cues), and then edit the recorded cues off-line.**

#### *Starting Options*

If in a shortcut you start ProScenium followed by a valid filename, the software will check for the existence of this file, and if it is a valid Proscenium file, it will start it.

Allows to automatically start crossfade (or sequences) at program initial launch. Coupled with a shortcut in the AutoStart folder, this option allows totally automatic show control.

The other option allows to disable the pause on double click during crossfade. Normally if you click again the “Go”, you pause crossfade. If you disable this feature you do not access the “Go” button until the end of crossfade.

#### *General*

- shows level value in decimal/hexadecimal
- Include groups in recordings (very useful when some elements e.g. the hall lights, are set in groups but are not desired to be included in cue recording).
- Restart crossfade when arrived at the last cue (to perform a loop with the crossfade, like a chaser with time-in and time-out)

#### *Joystick*

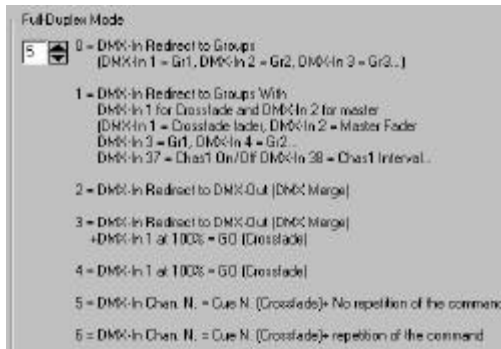
This option allows the selection of the joystick device to be connected to the gameport input of the PC. The installation of a Joystick requires to have a gameport (normally part of the soundcard logic), and to use Windows Configuration panel to calibrate Joystick 1 (for options 2, 3, 4) or Joystick 1 and 2 (for options 1 and 5). For option 6 select a joystick 2 axis and 4 buttons. Refer to Windows on-line for Joystick calibration. This form allows to select one of 6 joystick options:

- 0) No joystick
- 1) DigiMedia FADJOY optional Fader Panel for conventional lighting (in this case four sliders are provided, from left to right: Crossfade, Master, Group1, Group2)
- 2) Absolute scanner movement with 2-axis Joystick (this option makes scanner movement very fast and difficult to control)
- 3) Relative scanner movement with 2-axis Joystick: the center position makes no move, moving joystick selects a proportionally faster movement.

- 4) Enhanced Relative scanner movement with 2-axis Joystick: same as point 3 with these variations: when inside the scanner window, Joystick buttons allow to pass to previous/next scanner window. On scanner window exit, the Joystick function is the same as the Thumbwheel. In this case Joystick buttons command the “GO” function.
- 5) DigiMedia FADJOY Plus optional interactive lighting control unit. In this case two sliders are provided for Crossfade and Master control, with “GO” button on the left, while the embedded Joystick behaves like point 4.
- 6) A normal joystick with 4 buttons will start respectively cue1, cue2, cue3, cue4.

#### Full duplex

If a full-duplex DMX interface is installed, it is possible to use the signal coming from an external DMX console connected to the DMX-IN input and redirect it in different ways. In this way direct manual control of the show may be achieved using an inexpensive DMX fader panel or console. Here is the full-duplex redirection scheme:



These are the supported Full-Duplex mode

**0 = DMX-In Redirect to Groups:**  
(DMX-In 1 = Gr1, DMX-In 2 = Gr2, DMX-In 3 = Gr3...)

**1 = DMX-In Redirect to Groups With DMX-In 1 for CF and DMX-In 2 for master**  
DMX-In 1 = Crossfade fader, DMX-In 2 = Master Fader,

DMX-In 3 until 34 : DMX-In 3 = Gr1, DMX-In 4 = Gr2...  
DMX-In 36 at 100% = GO (Crossfade)  
DMX-In 37 until 44 : DMX-In 37 > 0 = Chas1 On DMX-In 37 = 0 Chas1 Off  
DMX-In 38 = Chas1 Interval.  
DMX-In 39 = Chas2 On/Off DMX-In 40 = Chas2 Interval... and so on for all the chasers

**2 = DMX-In Redirect to DMX-Out (DMX Merge)**

**3 = DMX-In Redirect to DMX-Out (DMX Merge) + Automatic Crossfade"**  
Like mode 2 + DMX-In 1 at 100% = GO (Crossfade)

**4 = DMX-In 1 at 100% = GO (Crossfade)** (The output of ProScenium Can be linked to another link of 512 channels and it is not merged with the Input.). This function is useful for getting 512 DMX Channels from the main desk, and 512 additional from ProScenium, or to link two sessions of ProScenium together.


**5 = DMX-In N. at 100% = Cue N. Go** (The output of ProScenium Can be linked to another link of 512 channels and it is not merged with the Input). Selecting channel 2 at 100% will start cue 2 (with all the attributes). This for all the DMX channels. Without repetition of the command

**6 = DMX-In N. at 100% = Cue N. Go** (The output of ProScenium Can be linked to another link of 512 channels and it is not merged with the Input). Selecting channel 2 at 100% will start cue 2 (with all the attributes). This for all the DMX channels. With repetition of the command if the input DMX Channel is not setted again at 0.

At the end of the changes it is possible to save them permanently or to exit without saving: in this case the changes will only be active until the program is exited.

#### SHOW DATA SAVE

ProScenium<sup>DMX</sup> performs an automatic backup save of all the changes done to the show. This allows to guarantee that the latest profile of the show is saved if the PC is shut down without saving.

In addition to this, a show may be saved into a disk file at any time. Show files are always saved using the USITT ASCII format (version 3.0) letting any editor (like the editor provided by ProScenium<sup>DMX</sup> and invoked by the  icon) be used to edit a show off-line directly in the ProScenium<sup>DMX</sup> save format.

**Save**



Menu: FILES

This function saves the show in the file previously defined for it. If no file name has been specified yet, the next function is automatically invoked.

#### **Save As**

*Menu: FILES*

This function lets a show be saved into a file. During save, all vital ProScenium<sup>DMX</sup> data are copied including cues, channel text, patch, curves and so on. The program prompts for a filename. The file type will be automatically set to ".ASC" to serve as a mnemonic designator of the USITT-ASCII format. In case a file with the same name is already present, the user is asked for confirmation before overwriting.

#### **Open**



*Menu: FILES*

This functions let a previously saved show be opened. The file type is automatically assumed to be ".ASC" by ProScenium<sup>DMX</sup>. Opening a new files makes the previous ProScenium<sup>DMX</sup> data be lost: for this reason ProScenium<sup>DMX</sup> current show should be saved into a file before opening a new show if the present data is meaningful. In any case ProScenium<sup>DMX</sup> performs a temporary save in the BACKUP.DMX that can be manually recovered and saved into a show file if still valid.

#### **New**

*Menu: File -> New*

This functions performs a complete reset of all ProScenium<sup>DMX</sup> variables. Since all present show data are lost, the user is asked for confirmation of the wipe-out action.

If confirmed, a full reset is performed including cues, groups, channel attributes and so on.

#### **Printer Setup**

*Menu: File -> Printer Setup*

This function performs printer selection.

#### **Print**

*Menu: File -> Print Show data*

This function prints all show data (with the only exception of the light plan that is printed directly from the light plan window).

#### **Export**

*Menu: File ->Export*

This function exports show files in a format compatible with ADB Vision 10 lighting control console.

#### **Import**

*Menu: File ->Import*

This function imports show files from ADB Vision 10 lighting control console. To do this the **memories.asc** used by ADB to save show should be located in the user default directory on the Vision machine.

#### **Exit program**

*Menu: FILE -> Exit*

This function exits from ProScenium<sup>DMX</sup> leaving the last active scene loaded in the DMX interface hardware. This allows restarting ProScenium<sup>DMX</sup> without visible scene changes. When restarting, ProScenium<sup>DMX</sup> reloads the last active scene automatically and plays it back on board.

If the user prefers to start ProScenium<sup>DMX</sup> without loading the first scene automatically, it may press the "Ctrl" key during program load. In this case a different memory may be manually selected for playback while the previous scene is still sent to dimmers.

## STATISTICAL INFORMATION

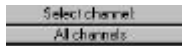
ProScenium<sup>DMX</sup> is able to provide the user with a set of statistical information useful for lighting show design:

### Maximum channel level in cues and groups

*Menu: Channel->Utilisation of channels in cues and groups*

This function is used to detect the maximum value that a channel has in all the defined cues and groups. Differently than other programs that indicates only if a circuit is used, ProScenium<sup>DMX</sup> lets the level be displayed. In this case a circuit used at 5% due to a user mistake may be detected and removed from the show lighting plan. The function indicates also that the circuit is used by a cue or a group. Using the « Select channel » button, a single channel may be selected for display, thus knowing the cues and groups in which it is used, and the percent level that it reaches in each of them.

Using the « All-channels » button will open a dialog box showing all channels and will create a file called “channels.txt” on the hard disk to let the user edit/print the file off-line.



### Library of spots for theatre, TV and cinema



A library of spots for theatre, TV and cinema is present in the ProScenium<sup>DMX</sup> directory on a file called SPOTLIST.DBT that has a comma-separated syntax. The list is always accessible on-line using the « Window » menu. The SPOTLIST.DBT file may be manually edited by the user with the Notepad or Write programs distributed with Windows 95.

In ProScenium<sup>DMX</sup> this function has been extended to the graphical symbols used for the spots. The icons used to define spot symbols are stored in the “Spots” subdirectory of ProScenium<sup>DMX</sup> home directory. To modify an icon file (extension \*.ico) the IMGEDIT.EXE utility is provided in the home directory of ProScenium<sup>DMX</sup>.

WARNING !!! Icon files are numbered in a strictly progressive fashion: to add a symbol, be sure to choose the first unassigned number in the “Spots” subdirectory. An erroneous icon numbering may cause serious malfunction of

the program. Moreover, when manually editing a spot, the database structure should be strictly respected.

### Library of spot filters



A library of spot filters is present in the ProScenium<sup>DMX</sup> directory on a file called FILTLIST.DBT that has a comma-separated syntax. The list is always accessible on-line using the « Window » menu and is shown in alphabetic order. An additional field specifies if a LEE or ROSCO filter code is used. The “Trans.” field indicates the filter transmissivity. In some filters the RGB color composition is also reported. This function is useful for scanner with automatic color control. Clicking on these filters automatically invokes a color selection window.

To edit the FILTLIST.DBT files, the same recommendations reported for the spot list file apply.

### Used Channels window



This toolbar icon should be click to invoke the channels windows .

This is how the window looks like:



A description of all used channels is shown. Clicking on the icon in the left-top corner, the spot symbol may be dragged-dropped on the light plan.

## ProScenium<sup>DMX</sup> DMX-IN FUNCTIONS

A key distinctive feature of ProScenium<sup>DMX</sup> is the ability to read the DMX-512 signal coming from another console. In fact, the DMX-512 protocols defines an unidirectional data transmission from the console to the dimmers and the other lighting devices. When set in "Slave" mode, ProScenium<sup>DMX</sup> is able to perform features that are often only found in dedicated devices:

### a) DMX Tester

In "SLAVE" mode the exact readout of the values driven on the DMX line by the external driving agent may be obtained on ProScenium<sup>DMX</sup> screen. This removes the need for a separate DMX tester purchase.

### b) DMX Monitor

Most of the existing DMX consoles do not provide a full screen readout of scene composition. Connecting ProScenium<sup>DMX</sup> configured in "Slave" mode to such consoles, a clear and powerful channel display is provided maintaining the traditional advantages of a manual fader-based console.

### c) Backup Console unit

It is often not adequate to rely on a single console for a show lighting control. In many cases, the users end up buying two identical consoles and connecting them in parallel to be able to switch to the second one in case the first has any problem.

ProScenium<sup>DMX</sup> provides a much better cost-performance solution. ProScenium<sup>DMX</sup> is in this case pass-through inserted between the primary console and the DMX-512 devices. ProScenium<sup>DMX</sup> is set in "Slave" mode to let the DMX signal pass unmodified (this occurs even in the case that ProScenium<sup>DMX</sup> is switched off).

In SLAVE mode ProScenium<sup>DMX</sup> has all the same scene management capability that in Master mode. It is therefore possible to capture the scenes from the master console and store them on ProScenium<sup>DMX</sup> cues on the PC disk. In this way all cues may be transferred from the primary console to ProScenium<sup>DMX</sup>, editing the time attributes to have the same lighting effects.

Once the backup show programming is available on ProScenium<sup>DMX</sup>, the backup function may be accomplished just switching ProScenium<sup>DMX</sup> in Master mode and taking control of the show. This switches the primary console off the line,

letting it be accessible for maintenance while the show is continued on ProScenium<sup>DMX</sup> through the saved scenes.

Different shows may be naturally backed up saving them on floppy or hard disks using the practically unlimited storage capability of ProScenium<sup>DMX</sup>.

### MASTER-SLAVE mode switch

Key: " Alt " + " Backspace "

Menu: MODE

Pressing these keys, or using the menu bar, switches ProScenium<sup>DMX</sup> back and forth between the two operating modes. The program is fully automatic and no cable change or hardware action is required. When the simpler DMXADP hardware is used without the intelligent cable option, the user is automatically prompted to remove the alternate DMX agent from the line unplugging the DMX-IN cable before setting DMXADP in Master mode.

### Full-Duplex mode

For the Martin ProScenium<sup>DMX</sup> Card a *Full-Duplex* mode is provided to allow controlling the show from an external DMX console. Refer to configuration chapter for more details on the Full-Duplex redirection options.

## ASCII-USITT DATA FORMAT



USITT (United States Institute for Theatre Technology) has defined an ASCII standard for show representation that allows to exchange lighting show data across different-branded consoles in a way that maintains the most of the show features as designed by the lighting designer.


This format uses the standard ASCII character data format (common to all computers regardless the operating system used), letting different consoles (e.g. consoles based on IBM or Apple PCs) exchange data using different media (e.g. floppy, serial lines, etc.).

The purpose of this data organization standard, called "lighting console data stream" is to transfer lighting data between consoles of totally different nature. The show data, classified in a very logical and intuitive fashion, may even be edited by the user using any editing tool.

The capability to transfer the show across different machines is obviously limited to the features that the two machines have in common, typically covering most of the required features like cue definition/timing, digital patch and other advanced features.

Most of the lighting design simulation and control software tools (e.g. Microlux™ or WYSIWYG™) are capable to export shows in this format, so that ProScenium<sup>DMX</sup> may be effectively used as an output device for shows generated by these tools.

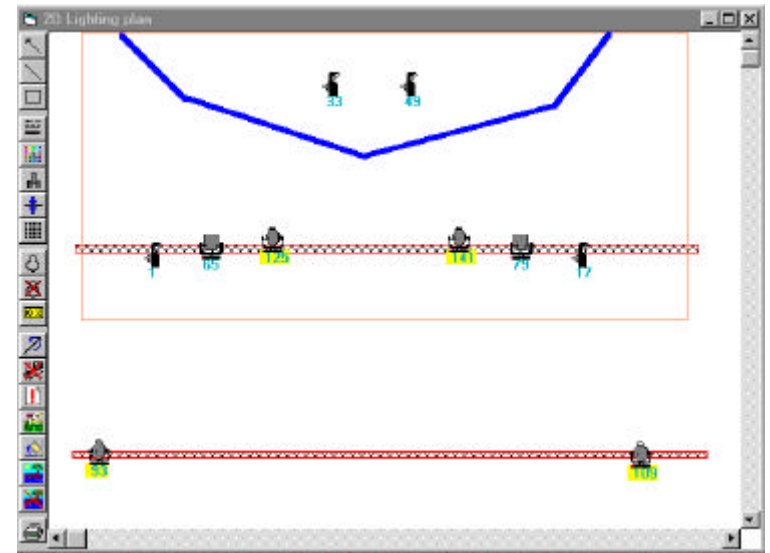
ProScenium<sup>DMX</sup> complies with Version 3.0 of the Usitt standard, introduced in 1992, and uses this format for show representation and saving.

Experienced users will find editing the ASCII-USITT saved representation of the show very useful. This can be done, for example, with the text editor provided by ProScenium<sup>DMX</sup> and invoked with the  toolbar icon. In this way, cut-and-paste functions may be used (e.g. to quickly define multiple channels that use the same kind of spots) then the show may be saved and read back on ProScenium<sup>DMX</sup> using the "Update to ProScenium<sup>DMX</sup> Memory" function.

## ProScenium<sup>DMX</sup> GRAPHICAL LIGHTING CONTROL

A major innovation offered by ProScenium<sup>DMX</sup> is the ability to work on a lighting plan or with traditional faders indifferently.

Here is an example of a graphical lighting plan:



Bottom line: the innovation potential of this function requires no explanation. From now on, no need to remember spot numbers or location: just click it on the plan and you have direct access to the control wheel for that channel.

One step at a time, though...












To load the plan with spot symbols, two different techniques may be used: from "Channels" window a symbol may be selected and dragged-dropped on the plan. In this case the spots must be defined, have a text description and a spot number greater than zero.

The Lighting Plan window size is variable and depends from the screen resolution. If more space is required, scrolling may be performed with the usual scroll/bars.








This plan contains two object types: symbols and labels.  
 The label background color is white when the circuit is off and takes different hues of yellow according to the spot intensity. This allows direct, intuitive control of all show channels.

<b>Action :</b>	<b>Left Mouse Button</b>	<b>Right Mouse Button</b>
<b>Symbol (Icon)</b>	Double click: opens channel property window	Allows Drag & Drop on lighting plan (or to the Trash bin)
<b>Label (Channel number)</b>	Selects circuit and assign it to the Thumbwheel. If the spot is a scanner, opens scanner window.	Click: opens channel property window

Here is the Toolbar buttons description:

ICON	FUNCTION
	Returns to manual pointer
	Traces a line, starting from left mouse button press, up to its release. The line is automatically gauged by an increasing progressive number
	Traces a rectangle with style, width, color and filling attributes previously selected
	Selects line texture type
	Selects line color
	Selects rectangle fill pattern
	Selects line width
	Selects/Deselects reference grid
	Show icons. This option allows to disable icon display. This is useful if spots have already been drawn as part of the plan background image. This option leaves program functions unchanged, letting each user choose his graphic editor program of choice for the creation of the lighting plan.
	Hide icons. This option allows to disable icon display. This is useful if spots have already been drawn as part of the plan background image. This option leaves program functions unchanged, letting each user choose his graphic editor program of choice for the creation of the lighting plan
	This option allows to visualise channel level instead of an icon. This adds to ProScenium a geographical tracking screen. Note

that for moving light the channel number represent the address of the fixture, and the level number represent the level of the intensity channel.

	Cancels last graphical command
	Deletes all lighting plan attributes
	Loads all previously defined spots in the lighting plan automatically. They may then be dragged-dropped on the lighting plan
	Redraws lighting plan. To be used in case of temporary plan updating lack
	Loads a background image
	Deletes a background image
	Prints lighting plan. Some printers could have rendering problems when printing line attributes



## ProScenium<sup>DMX</sup> DYNAMIC LIGHTS CONTROL

Scanners (or dynamic lights) are becoming more and more popular. Every scanner provides access to the luminaries functions using the DMX-512 standard (in addition to other often provided proprietary communication links). The number of channels used varies with the model and manufacturer. For example, Martin PAL 1200 uses 26 channels per luminaire, assigned in the following order:

Channel	Assignment
• 1	• Lamp
• 2	• Intensity
• 3	• Shutter 1a
• 4	• Shutter 1b
• 5	• Shutter 2a
• 6	• Shutter 2b
• 7	• Shutter 3a
• 8	• Shutter 3b
• 9	• Shutter 4a
• 10	• Shutter 4b
• 11	• Shutter Rotation
• 12	• Cyan
• 13	• Magenta
• 14	• Yellow
• 15	• Color Wheel
• 16	• Gobos
• 17	• Gobo Rotate
• 18	• Focus
• 19	• Zoom
• 20	• Frost
• 21	• Pan (MSB)
• 22	• Pan (LSB)
• 23	• Tilt (MSB)
• 24	• Tilt (LSB)
• 25	• Pan/Tilt Speed
• 26	• Other Speed

ProScenium<sup>DMX</sup> has built-in definitions for a large number of the most popular scanners.

In this case the program is able to retrieve the channel data assignment from the library, and to format them in the **Moving Light Window** in a way totally transparent to the user. The window is activated selecting the scanner to be activated inside the Scanner Combo Box:



If the scanner of choice is not present in the scanner library, it can be added using the **Spot Maintenance Utility** you can find in the ProScenium<sup>DMX</sup> program group, or manually in the following way:

- 1) Open the spotlight.dbt file using Windows95 Notepad utility
- 2) Copy a line from a similar scanner. Note that lines have this format:

```
"Martin","MAC 600 Mode DMX
4",575,"#Lamp#Intensity#Cyan#Magenta#Yellow#Color_
Wheel#Gobos#Frost#Pan+#Pan-#Tilt+#Tilt-#Pan/Tilt Speed#Other Speed"
```

- 3) Paste the line changing the fields that need to be changed depending on the new scanner channel assignment, without altering commas and the "/,/# delimiters. The resulting line could be:

```
"YOURFIRM","YOURSPOT",WATT,"#PARAM1#PARAM2#PARAM3#PAR
AM4#PARAM5#PARAM6#PARAM7_#PARAM8#PARAM9#PARAM10#PAR
AM11#"
```

In the channel parameter naming, the following rules must be followed:

To define **pan** and **tilt** for 16-bit DMX mode use exactly the following channel labels:

**PAN+**  
**PAN-**  
**TILT+**  
**TILT-**

for 8-bit DMX mode use the following labels:

**PAN**  
**TILT**

To define **colors** for RGB color model use exactly the following channel labels:

**RED**  
**GREEN**  
**BLUE**

For CMY color model use the following labels:

**CYAN**  
**MAGENTA**  
**YELLOW**

To define **intensity** channel use exactly the following label:

**INTENSITY**

Then add parameter labels for all remaining channels implemented in your scanner. In this case there is no keyword syntax requirement as long as labels are shorter than 12 characters.

The luminaire user manual should be referenced for detailed information on the channel assignment and definition.

Normally all channels have 8-bit resolution with the exception of PAN and TILT (horizontal and vertical mirror movement) that are defined at 16-bit to have a finer resolution. In this case the first DMX channel represents the most significant byte (control unit=256 microsteps) and the second the least significant (control unit=1 microstep).

This makes no difference when programming the position, but affects the smoothness of panning during crossfades. ProScenium<sup>DMX</sup> provides the option of 16-bit resolution using a special curve. In this case 16-bit arithmetic is performed during crossfades and no rounding error stepping is generated. Nevertheless, note that the perception of jagged movement is often depending from the motor speed that should be adjusted case-by-case to achieve the smoothest movement.

#### Assigning a Scanner

Click on the first scanner channel with right button, click on the «From Library» button and select the scanner and the corresponding DMX mode, clicking on the scanner Icon on the fixture list.

If the scanner of choice is not present in the list, follow the instructions of the previous chapter.

You will be prompted to assign «snap» channels, it means that in a crossfade, snap channels (for example gobos) will go immediately to the final position. You can change this setting after, setting a curve 10 (linear no master) instead of 14 (snap no master) in the patch window.

To confirm your choice press «OK» in the channel window.

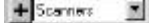
A precise syntax convention is used by ProScenium<sup>DMX</sup> to support the features of the automatic moving light window.

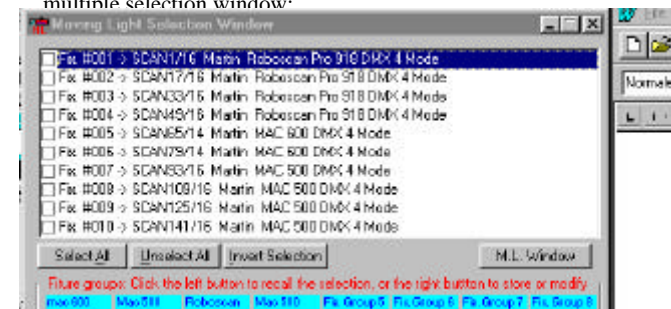
To invert pan and tilt for a 16-bit mode scanner just check the swap Pan and swap Tilt check-box.

#### Drag & Drop

This function is extremely handy to manage moving lights. Often when adding a moving light to a cue, all parameters must be edited in the previous cue, setting intensity at zero. In this way during crossfade only the selected effect will happen, without undesired changes that could happen during the transition.

Moreover, it is possible to preset a series of position for all scanners (e.g. table or drums etc.) storing them in cues with very large numbers like 9900, 9901, etc. During the final programming, Drag & Drop may be used to copy the pre-recorded scanners in the selected cues.

1. Select a scanner in Scanners Combo Box  (to select all scanners at once, click on **Scanners**, first list entry). This action invokes the multiple selection window:



This window allows to select all the luminaries that will be subject to the next action e.g. simultaneous multiple scanner copy via Drag&Drop.  
From this window you can also set fixture groups.

2. Select in Preset B the cue where the selected scanner parameters should be copied.
3. Click with Mouse on the « + » button at the left of the Scanners Combo Box (a scanner icon will be activated).
4. Keeping left button down, drop the scanner on Preset B.
5. When prompted for Set Intensity to 0 reply with the option desired and click on OK.

#### Automatic Scanners recalibration

When touring a show, often the most tedious task is the recalibration of all scanners setup. With ProScenium<sup>DMX</sup> this operation is extremely simplified:

First of all, include in your show two additional cues freely numbered (e.g. 901 and 902); assign them a number to immediately call them up later. For example: 901 is “old scanner reset point” and 902 is “new scanner reset point”. Then setup a scene where scanners are pointing to a uniquely defined and easily identified reference point on the stage (e.g. on the leftmost corner or on a fixed position object). Try to focus the scanner beams as much as possible for greater accuracy. Store this scene on both 901 and 902 cues. Save this show on a file of choice.

After changing the stage, to recalibrate all cues, start from 902 playback and adjust all luminaires to point to the new position of the same object used as a former reference point on the earlier stage setup.

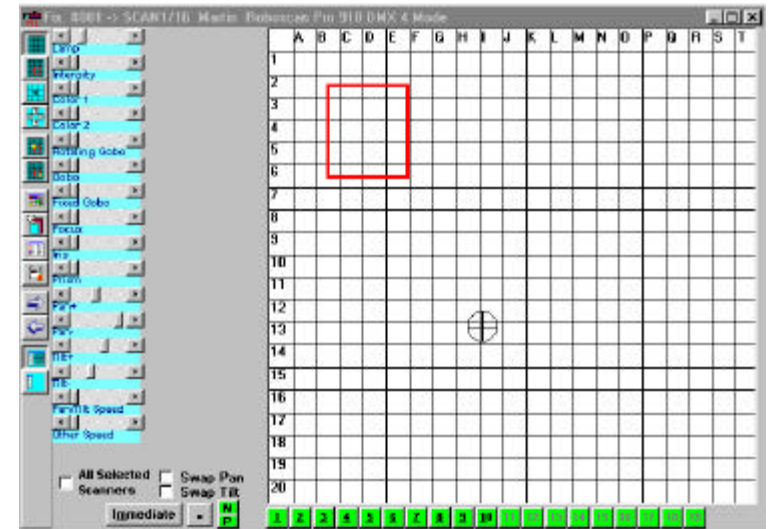
**Recalibrate scanner position in all selected cues**


Then select Cue Editor (Cues -> Global Modification menu). Select this button: and insert the interval of the cues where scanners should be recalibrated (normally all cues are included). Select it, insert the number of the earlier reference cue (901 in our example), then the number of the new reference cue (902). All scanners in all cues will be automatically adjust using the two reference points.

Only when the positional skew inherent to a global recalibration process is remarkably noticeable, a minor manual tuning will be required to recover the optimal pointing.

#### Moving Light window

Key “S”



Selecting a scanner in the  Toolbar list/box, ProScenium<sup>DMX</sup> opens a window that is used to allow one-time two-dimensional mirror control with Mouse or Joystick and to control color with (Red, Green, Blue) color mixing.















The title bar displays the name and type of luminaire and the circuits that it uses (e.g. for Martin PAL 1200 , channels 1 to 26).






For movement control, an absolute movement window is provided that simulates all moving range (entire Pan-Tilt span) of the luminaire.



Note that this window is ruled with a number/letter reference grid. Light movement is achieved just moving across this window with mouse left button pressed. A crossed-circle is used to simulate the luminaire spot. Light movement can also be achieved using the up/down, left/right arrow keys.

When a set element is located, e.g. a table located at E6, the object will be directly pointed just moving and clicking mouse on E6 grid cell.


The window contains this toolbar:

ICON	FUNCTION
	<b>1</b> This button set visualisation mode 1 (Full range). Moving your mouse over the grid will move your fixture around the whole range.
	<b>2</b> This button set visualisation mode 2 (Selected range). Moving your mouse over the grid will move your fixture around the range you have defined with buttons 5 and 6.
	<b>3</b> This button set visualisation mode 3 (Generic Zoom). Also if you aren't in the selected range, clicking this button you will see your fixture in the center of the grid. Moving your mouse over the grid will move your fixture smoothly around the centre.
	<b>4</b> This button set visualisation mode 4 (Arrows). Clicking on an arrow with left button will move slowly in the direction of the arrow. Clicking with right button will move faster.
	<b>5</b> This button defines Top-Left corner of your range. First of all put your fixture in the position you want for Top-Left and then click this button to store the position.
	<b>6</b> This button defines Bottom-Right corner of your range (width and height of the new range rectangle). First of all put your fixture in the position you want for Bottom-Right and then click this button to store the position.
	<b>7</b> <b>CMY Colour</b> allows to select the colour to assign to the luminaire. It may be chosen among the predefined colours, in continuous mode or personalised by the user. Clicking on Picking from palette you can pick colours directly from any bitmap (try with the Van Gogh sample). From this window there is a button that allows to add your CMY selection to the filter library. The new colours will be added at the bottom of the filter list.
	<b>8</b> <b>CMY Filter Colour from filter list.</b> allows to select a filter in the filter library. CMY values for the main filter manufacturer are collected in this database.
	<b>9</b> <b>Immediate</b> button opens the immediate window.
	<b>10</b> <b>Copy selected parameters in one or more fixtures. Follow the step by step instructions you read in the HowTo window.</b>
	<b>11</b> <b>Moves to the next fixture.</b>
	<b>12</b> <b>Moves to the previous fixture.</b>
	<b>13</b> <b>Show the movement grid.</b>
	<b>14</b> <b>Hide the movement grid.</b>

     **Direct Scanner selection** : goes immediately to selected fixture described above.

  Allow fast scanner to scanner stepping.

**Zoom-In/Zoom-Out** button allows to tune the grain of mouse-controlled movement.

 «-«/»+» button also allows to hide/show the absolute movement grid.

#### The Immediate Window for Scanner Personalities



This extremely powerful function allows to store visually any scanner parameter in the personality window. Activating any parameter of any scanner and dragging the parameter label on this window makes the source channel and value be stored and associated to a personalized icon and label set. At any time the icon may be clicked and the channel/value pair will be played back. Every value may be added and any variation of the library item may be generated and saved on disk. Clicking on Edit allows also a direct editing of the file contents (critical operation recommended only to experienced users). Clicking on "IconEd" allows to create your specific icon. Remember to click after on "Ref. Lib" to load the new icon in ProScenium<sup>DMX</sup> memory.

The List Style button allows to have a Report or an Icon List Style.

Enabling the « All Scanner » check-box, all changes done on a scanner will also be applied to all scanners THAT HAVE THE SAME NAME for the selected parameter.

## **Audio Mixer**

From version 788 a new digital audio Mixer is provided with ProScenium DMX.

If you have a sound card installed in your system (like a Sound Blaster card), you will find the Audio Mixer entry of your main menu enabled.

If you check the first item of this menu you let ProScenium controlling the audio Mixer.

In this case channels back from 512 to the number of installed music devices(or 1024 if you have a 1024 channels version), will be filled with music channels (CD Audio left, CD Audio Right, Wave Audio left, Wave Audio right and so on).

Now, adjusting these channel level, will change the Windows Mixer level.

To store the music level in a cue, just select the right level, and record the cue.

All the options you have for light channels (Time in, Time out...) will be active also for music channels.

You can also store audio levels in a group, and recall it later with function keys.

The second item of the Audio Menu shows you all the device enabled in your system, and sets the channels labels to music devices description.

All the other item will set the level of audio mixer at 100%, 50%, and 0.

## **MEDIA PLAYER**

From Version 8.03 ProScenium introduces a new Media Player to simplify the synchronization tasks.

You can find, from the top to the bottom of this form :

### **The Main Menu :**

From the Media Device item you can select the Media Device to open.

From the synchronization menu you can ask ProScenium to automatically adjust the synchronization mode following the open device type of file.

### **A Toolbar.**

The commands in the toolbar are the following :

Play  
Stop

Previous track (for the CD Player) or -100 frames for the other media files.  
Fast rewind  
Fast Forward  
Next track (for the CD Player) or +100 frames for the other media files.

Take this reference point and put it in the Reference Combo Box.

Go at the top of the file and start playing.

#### **The Reference Points Combo Box.**

You can stock in this box several positions (clicking on the 7<sup>th</sup> button of the toolbar).  
Just clicking on the selected reference point will start the playback of the media file from the selected point.

#### **The Stop Synchronization Check Box.**

Allows to Suspend/Resume the Main ProScenium Synchronization.

#### **The Always on top Check Box.**

Allows to put this form on top of your computer screen.

#### **The Time code label**

This label reports the actual Time code.  
Clicking on this label allows to manually introduce a different starting position.

#### **The Total Frames Label**

Reports the number of tracks for an Audio CD, or the total number of frames for any other media device.

#### **The Recorded Cues Combo Box**

This is a list of recorded cues for a rapid Drag&Drop of cues in the Media Device frames.  
Under this Combo Box is displayed the name of the open device.

#### **The Frames Labels :**

These 12 Labels represent the smaller unit of a Media File.  
On Each Label is printed the number of frame.

The red Label is the Media Device Current frame, A yellow Label represent a position that will start the respective ProScenium Cue. (A cue that has the same number of the Yellow label).

Clicking on these labels will perform the following action :

#### **With Left Button :**

Will play from the selected label until the last (12th) frame of the current frame page.  
This is to exactly find the good position for the Syncro.

#### **With Right Button :**

If it is a normal Cyan or red label (with no cue recorded on it), this action will record preset A in the selected label.

If you click on a Yellow label, you can Move (Dragging & Dopping) the reference point across the 12 selected frames.

Dropping a yellow label on herself will delete the selected cue.

#### **A Slider**

This slider represents the whole media device.  
You can use it to move across media files (on some devices this action will take a little delay, just the time to put the media to the right position).

#### **The command buttons :**

There are 5 command buttons :

#### **Play 6 Frames**

The first one allows to play all the 12 frames, and after to putt the current position after 6 frames : Very useful to find a reference point across the media, always having the queue of the previous page.

#### **Page left**

Moves the current page of 11 frames on the left

### Page right

Moves the current page of 11 frames on the right

### Frame left

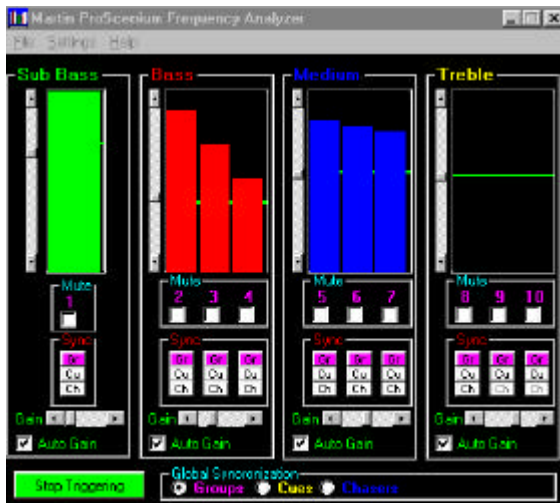
Moves the current page of 1 frame on the left

### Frame right

Moves the current page of 1 frame on the right

## Special functions

### Martin ProScenium Frequency Analyser



To work with the Frequency Analyser Plug-in, first of all you must start ProScenium

You have now 4 frames for Sub Bass, Bass, Medium and Treble.

In every frame you have two sliders: the vertical one is for the triggering level (from 0 to 100), and it is represented by a green line.

The horizontal one is for the digital gain of each group of frequency. If you select an Auto Gain, the software will auto adjust the gain level in relation with the volume received by your sound device (Microphone, CDPlayer and so on). Working on these two sliders you can auto generate hundred of different lighting situations

The bar you see on the Analyser are the levels (from 0 to 100) of the first 10 groups/cues/chasers of ProScenium, that you can fill as you want.

Every bar has a 3 buttons to direct the frequency activity :

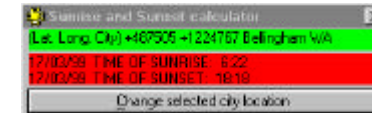
1. **Gro** sends the level of the bar directly to the group number : band1 -> Group1 and so on. The level you will get is the level between the threshold and 100%
2. **Cue** sends the label of the bar directly to a cue number : band1 -> Cue1 and so on.
3. **Cha** sends activity of the bar directly to a chaser number : band1 -> chaser1 and so on. Every time that the level pass the threshold, you will go to the next step in your chaser.

Every bar has a mute check-box to enable/disable the group activity.

If you don't see any output in the bars, please check your recording mixer selection in Windows (Play Control/Options/Proprieties/Recording, and be sure that you have selected the right input (Microphone, CD-Audio, Wave file...))

If you have the bars in the Analyser, but ProScenium Doesn't trigger the output, please click twice the <Start Triggering/Stop Triggering> button.

### Martin ProScenium Sunrise and Sunset information



In Sync mode 1 and sync mode 11 you can ask ProScenium to Trigger the Sunset and the Sunrise event.

The first time you want to use this function you have to select the System location in the Sunrise Form. To visualise the Sunrise form you have to go in the Main Menu / Special Functions / Sunrise and sunset information. Once you are in this form you have to click on the «Change selected city location» button to visualise a list of the most important city of the world.

Click on your city, or on the location nearest to you to give to ProScenium the latitude and the longitude of your location.

You can edit with a text editor the file Sitename.txt to include missing entry to the list.

To make a cue to be triggered at Sunset or Sunrise, in the recording panel just click on the combo box «Multimedia options to activate with this cue» and select «Start at Sunrise» or «Start at Sunset». Note that this option will call your cue «Start at Sunrise», so do not modify the cue name, because it is needed by ProScenium to trigger this Cue.

### Direct Access with Touch Screen panel

Martin ProScenium DMX Touch Screen Panel							
Cue 1	Cue 2	Cue 3	Cue 4	Cue 5	Cue 6	Cue 7	Cue 8
Cue 9	Cue 10	Cue 11	Cue 12	Cue 13	Cue 14	Cue 15	Cue 16
Cue 17	Cue 18	Cue 19	Cue 20	Cue 21	Cue 22	Cue 23	Cue 24
Chaser 1 ON	Chaser 2 ON	Chaser 3 ON	Chaser 4 ON	Chaser 5 ON	Chaser 6 ON	Chaser 7 ON	Chaser 8 ON
Chaser 1 OFF	Chaser 2 OFF	Chaser 3 OFF	Chaser 4 OFF	Chaser 5 OFF	Chaser 6 OFF	Chaser 7 OFF	Chaser 8 OFF
Group 1 UP	Group 2 UP	Group 3 UP	Group 4 UP	Group 5 UP	Group 6 UP	Group 7 UP	Group 8 UP
Group 1 DOWN	Group 2 DOWN	Group 3 DOWN	Group 4 DOWN	Group 5 DOWN	Group 6 DOWN	Group 7 DOWN	Group 8 DOWN

From version 8.15 ProScenium has introduced a new direct access panel. We call this panel «Touch Screen panel», because this direct access window is perfect to be used with Touch screens, in interactive applications, because no mouse or keyboard is needed. For sure it is possible to use this application also with a normal screen and a mouse or trackball.

This application is very powerful : Imagine to have a light and sound jukebox in which you can load as many different commands, songs, light effects, videos you want.

Imagine also an application like a bar, in which the final user doesn't need any experience with the software. The only action to do is pushing the right button.

The idea is to divide your computer screen in a customisable number of buttons (1 to 100).

Every button can have his own colour, text, font size.

Every button is associated with an action. Actions are sample ProScenium MCI Commands. You don't need to know the syntax of commands because a pop-up menu helps you in the construction of the commands.

For a complete list of MCI command look at the «MCI command examples» chapter.

The main screen automatically sets his dimension according to the monitor resolution.

You can select the number of rows and columns to divide your screen.

To let this screen in a public space (museum, bar...) you may need to disable editing by the user, making a difference from the installer/programmer and the final user. To disable editing select the «Start Without Pop-up menu on right button option» on right button.

If Martin ProScenium is not active this application will first open ProScenium. From the Mode Menu you can select the connection mode for this application that can be :

1. Local (on the same computer of ProScenium)
2. Connected to ProScenium by serial cable (null modem RS-232 cable)
3. Connected to ProScenium by Network (TCP-IP)

To use mode 2 and 3 you must :

- Start the MPSClient application from ProScenium (special function menu)



- In MPSClient you have to choose the type of connection and the settings (for serial port)
- In your remote touch screen application you have to choose the type of connection and the settings (for serial port)



- If you have selected TCP-IP you have to give the TCP-IP address of the computer in which Martin ProScenium is running for example (250.250.1.1 or 1.1.1.1) look at the network applet in the configuration panel to know the TCP-IP address of your computer.

#### MPSExec



This application is an interface to ProScenium that allows any external application as an HTML File, or a presentation software as Microsoft® PowerPoint® to run Proscenium MCI Commands.

You run the command on the command line (for example the command «MPSExec.exe Cue 1» will start Cue 1 on ProScenium. If Martin ProScenium is not active this application will first open ProScenium. You can also associate MPSExec as application to run MPS (Martin ProScenium MCI command macro files). These files are normal text files with an MCI command on every line. You can edit yourself these files with Windows Notepad, and save it with the MPS extension. The first time you click on an MPS File Windows will ask you the name of the application to open this kind of file. You have to select MPSExec.exe that you find in your MartinPS folder (normally c : \MartinPS \ MPSExec.exe).

To associate the MPS extension in Windows later :

In any open folder click on **View/Options/File Types**, and follow windows instructions.

Now it is possible to execute MPSExec, just clicking on an MPS file. To run ProScenium trough PowerPoint you will need to create a new PowerPoint button, and associate a command to this button as «MPSExec.exe Cue 1».

This action will start Cue 1 on ProScenium during your presentation.

To make an HTML Sheet you will need any html editor, and make an hyperlink to any MPS Macro files on your computer. After that you can run ProScenium from your browser.

#### Direct Access with Martin 2532 Direct Access

From version 8.15 ProScenium has introduced a new direct access with Martin 2532. Either if the 2532 was used in couple with the 3032 controller, ProScenium can interface it in the following way :

First of all select the «Direct access with 2532» option in the special function menu.

- The **Bank** and **Latch** buttons give a matrix of 7x8 combinations. This will start Cue 1 to Cue 56 in MPS.
- The 8 **Flash** buttons toggles chaser 1 to 8 on/off
- The first 8 **Special** buttons in the left side increase the level of group 1 to 8
- The first 8 **Special** buttons in the right side decrease the level of group 1 to 8
- **Special** button 9 on the left is the crossfade button (GO)
- **Special** button 9 on the right is the «Bak» button, to go back to the previous cue.
- **Black-Out** button toggles black-out on/off.

#### Appendix 1: ProScenium<sup>DMX</sup> Troubleshooting

##### 1. DMX interface does not turn on:


- Check connection to power supply
- Check connection to PC Parallel Port

##### 2. DMX Interface turns on but there is no dimmer output:

- verify to have an official copy of the program rather than a demo or illegally duplicated version
- Verify the correctness of the Parallel Port or Martin Isa Card base address in ProScenium<sup>DMX</sup> configuration panel

Click the System Icon in Win95 Control Panel:



Move to Parallel Port setup  Ports (COM & LPT)



Verify that ProScenium<sup>DMX</sup> configured LPT base address match the one specified by Win95, and change it to match if it does not

- Verify connection of LPT and DMX cables
- Verify that Master is selected at 100%
- Verify Patch (possibly defaulting to 1:1 to be sure)
- Verify that Patch Level is at 100%
- Verify that Curve is at 0 (linear)

### 3. The program works fine but master and crossfade stay blocked at 50%

You may have a Joystick connected to the game port of the Game Port and have not installed the Mini Fader Panel (FADJOY) option offered with ProScenium<sup>DMX</sup>.

To solve this problem:

- Install the Fadjoy option, or In the configuration Panel of ProScenium<sup>DMX</sup>, select "0" to disable Joystick functions.
- On Windows95 Configuration Panel, Joystick, select Joystick 1 and in the option box click « none ». Repeat the operation for Joystick 2 and finally click on « OK » to enforce the selection.

### 4. The software crashes starting it:

- Maybe your sound card make a conflict with the joystick (some OPTi cards has problems with the mmsystem driver).

On Windows95 Configuration Panel, Joystick, select Joystick 1 and in the option box click « none ». Repeat the operation for Joystick 2 and finally click on « OK » to enforce the selection.

If the problem persists, delete dmplus.bak and dmplus.cfg files in your MartinPS directory.

### 5. You are blocked, and you can't access to normal functions:

Probably a message window asking for an user input is hidden behind another window. Click on "Alt" or "Alt+Esc" to alternate between different active windows.

### 6. The software crashes after a while giving an error in Kernel.dll :

The Windows Multimedia Timer generate a general protection fault: Just select the normal timer instead of the **Multimedia Timer from the Configuration panel/Hardware**.

**Be sure to have a ProScenium version > 755 otherwise download a newer version**

### 7. You have no more Midi and SMPTE Synchronization In ProScenium

**You can see MIDI in MIDIDDE window, but not in ProScenium**

Microsoft has released a newer component (msvbvm50.dll ver.5.00.4139 (SP2)) in his Visual Studio Service Pack 3. In this component necessary for ProScenium there is a bug. You have to install a copy of the old msbvm50.dll (version 5.00.3724) in your Proscenium folder (normally c:\MartinPS). You can find this file in the root of your CD-Rom, or download it from DigiMedia Website.

For any other problem that is not resolved consulting the DMX Interface User's Manual, please contact your distributor or directly us using our Internet website at <http://www.digimedia-mls.com> at the **More Information** page.

### 8. The Moving Light Window is on the status line, but you cant Maximize it with a click.

**Windows has recorded your last operation as an iconized window.**

**Solution:** You can click the icon on the status line with your mouse right button, after from the pop-up menu select maximize, in the next Open/Close operation the size of the window will be normalized.

### 9. You get an “Out of Memory” message.

You are trying to open two session of ProScenium and you have not enough graphical memory (GUI).

**Solution:** Upgrade to a newer MPS version

### Appendix 2: MCI command examples

#### These are Windows MCI Commands :

```
play d:\funstuff\videos\robroy.avi
play c:\Windows\canyon.mid
set d:\funstuff\videos\robroy.avi speed 1000
play d:\funstuff\videos\robroy.avi from 500 to 600
play d:\funstuff\videos\robroy.avi from 500 to 600 fullscreen
close all
clear all
setaudio d:\funstuff\videos\robroy.avi from volume to 10
setaudio d:\funstuff\videos\robroy.avi volume to 100
play c:\win32app\mpegplay\rocket.mpg
play cdaudio from 3 to 4
```

#### These are ProScenium MCI Commands (commands that you can write in the MCI command line):

```
FileOpen C:\MartinPS\Demo.asc      'Open another ProScenium Ascii
File
BBX C:\Martinps\case.bbx           'Run a BlackBox normal File
BBK C:\Martinps\case.bbk           'Run a BlackBox compressed File
SYNC 1                             'Activate the Internal Clock Syncro
SYNC 3                             'Activate the CD-Rom Syncro
SENDKEYS p                         'Sends a Macro Command to MPS
SHELL C:\MartinPS\ShutDown.exe     'Starts any external EXE File
```

#### General Commands

```
Cfd                                'Starts the Crossfade (go button)
```

```
Bak                                'Goes Back to previous Cue
Clr                                 'Clears all DMX Output
Esc                                 'Breaks current Crossfade/loop
BOUT                                'Toggle On-Off the Black-Out
button
MACRO C:\MartinPS\MyMacro.MPS     'Runs an MPS Macro File
```

#### Cue commands

```
Cue 1 (Cue Number)                'Starts Cue 1 with his Time
and MCI
```

#### Chaser commands

```
Chaser1 on                         'Starts the first chaser
Chaser1 off                        'Stops the first chaser
Chaser1 tog                        'Toggles on/off the first chaser
Chaser1 step                        'Goes to the following step of the
first chaser
Chaser1 Int 1                      'Changes the interval for the first
chaser
Chaser1 cue 10                     'Starts a chaser from cue N. 10
```

#### Group commands

```
Group1 75                          'Sets Group 1 at 75%
Group1 0                            'Sets Group 1 at 0%
Group1 101                          'Increase Group 1 of 1%
Group1 102                          'Decrease Group 1 of 1%
Group1 103                          'Increase Group 1 of 5%
Group1 104                          'Decrease Group 1 of 5%
```

### APPENDIX 3: How To

For some of this features you need an updated version of the software.  
Please download the latest ProScenium version at:  
**<http://www.digimedia-mls.com/download>**

**Use external SMPTE to synchronize your light cues:**

You can read external SMPTE in two different ways in ProScenium:

If the PC you use is already equipped with a sound card (Sound Blaster compatible), you have already the capability to read MTC (Midi Time Code). All you have to buy is a SMPTE to MTC converter, and a normal Sound Cable to split your DB 15 connector on your sound card in MIDI In and MIDI Out. A very good converter and not too expensive is the JL Cooper PPS-2  
JL Cooper PPS2  
<http://www.soundtech.co.uk/jlcooper/stjlcpps.htm>

Another solution, if you have a free Isa slot, is an integrated MIDI/SMPTE card, like the interface card made by Opcode/Musicquest. They make a MQX-32M that supports 2 midi channels and SMPTE code directly. This would give faster frame updates and would not drop every other frame. In the long run I think this would provide better, more reliable performance when synchronizing to another device. You can get more information about the card from:

<http://www.opcode.com/products/winhardware/mqx32m.html>

Now that you have the ability to read SMPTE, all you have to do in ProScenium is to select synchronization 2 from the Control Panel, looking at the time code that is shown on the left panel of the status bar.

To make a cue in a perfect synchronization, just click with your mouse on this panel while the time code is running: make all the empty cues perfectly synchronized with your time code, after fill all the cues with the effects you prefer, just calling the cues on stage, modifying it, and pressing on «Record» -> «OK».

**Make a complex Sound & Light show in a few minutes**

First of all select the type of synchronization for your Light Show: (CD-Audio, Wav or Midi File, SMPTE or MTC...)

1. Make a first cue with all the spots in the starting position and select an MCI command from the recording panel (Ex: Play cdaudio from 1 to 2). Select Time in and Time out of 0 (zero) seconds.
2. Clear preset A
3. Put Cue 1 on Preset B and start the crossfade. The Synchronization code (TRACK:MINUTES:SECONDS:FRAMES) is shown on the first panel of the status bar.
4. Click with your mouse, on the pulsation of the music, the first panel of the status bar to make an unlimited number of empty cues you will fill after with your scenes.
5. Make a few good lighting scenes, you will record, for example, from cue 1 to cue 20
6. It is time to save your show....
7. From the cue edit window select the syncro positions (Easy way to do this: select files on text, input the string «syncr», all the position cues will be selected.
8. Click the «sum one or more cues < button. Input the first cue to sum (1), input the last cue to sum (20), select the default level of «100».
9. You have only to decide if you want to sum cues in sequence (from 1 to 20), or in random mode to all the syncro positions.

**Cut off the power of your PC without having a scandisk when you restart Windows95.**

In your hard disk root find a file called MSDOS.SYS, click on properties, unselect read only and hidden attributes. Open it with the Notepad, add a line like that:

Autoscan=0

Close the file, and set again the Hidden and read only attributes. You can also use the TweakUI software utility that you can find in the ProScenium CD-Rom in the Tools folder.

In this way you can put your PC on the general switch, and if you have the «Start Crossfade Opening Software» option selected, you can start automatically your sequence.

**Cut off the time auto adjustment («Automatically adjust clock for daylight saving changes».**

This is another action that Windows95 performs automatically, asking a confirmation to the user. To disable this action:

1. Double click on the hour you will find in the right corner of windows95 status bar.

2. Select the «Time Zone» tab of this window.
3. Uncheck the «Automatically adjust clock for daylight saving changes».

#### Access different shows directly just clicking an icon on the desktop

1. Go in your Martinps folder.
2. Select the ProScenium Exe file called dmxplus.exe.
3. Make a shortcut to the desktop.
4. Rename this shortcut with the name you prefer (Ex Show Room)
5. Click on the shortcut properties, select the **shortcut** tab
6. Add the name of the file to open automatically to the Target Text-box (Ex. C:\MartinPS\DMXPlus.exe Demo.asc)
7. When you click this icon you will start the selected files. You can put as many shortcuts you want, giving a direct access to different shows.

#### Stock hours of CD Quality music in your Hard Disk

In your ProScenium CD-Rom just click on Tools folder, and install the MPEG3 compressor freeware. Now you can compress your audio files up to 20 times without loss of quality. This tool allows you to transform the MP3 files in compressed WAV files, keeping all the synchronization facilities of ProScenium.



# ProScenium<sup>DMX</sup> BlackBox Auto Replay System User's Manual

Version 7  
For Windows 95®

Developed for Martin Professional A/S by



[Http://www.digimedia-mls.com](http://www.digimedia-mls.com)

## APPLICATIONS OF BLACKBOX (Auto Replay System)

**BlackBox** (Auto Replay System) is the ideal solution for trade shows, exhibitions, museums, shop displays and for any application requiring a repetitive lighting effect, removing the need to keep an expensive lighting console allocated to a simple task.

This Windows95™ utility program allows to record a sequence of lighting effects (cues, chasers, loops) from any DMX-512 console, to let it be played back as with any sound recorder or MIDI sequencer. Effects are recorded in real-time, with a special compression technique that allows to save several hours of lighting effects in a few megabytes of disk space.

With this tool you can use your sophisticated DMX console only to program the lighting sequence and then record the sequence with BlackBox and reproduce it one-time or in a continuous loop.

Both DMX interfaces offered with the powerful ProScenium™ lighting console package are supported, to let your PC be transformed into a BlackBox lighting recorder.

## HARDWARE REQUIREMENTS AND SOFTWARE INSTALLATION

### Hardware requirements

The BlackBox utility requires a Personal Computer with the following features:

- IBM-PC compatible running Windows 95™.
- minimum CPU: Pentium™ 90 Mhz.
- 16 MB RAM available for user applications.
- 8 MB minimum hard disk space.

### Software installation

BlackBox software is automatically installed during ProScenium™ installation.

To start the program, just click on the BlackBox icon present in Martin ProScenium™ program group. As for any other Windows95 application, a shortcut may be created on the desktop to let the application be launched with a simple mouse click.

**BE SURE TO CLOSE ProScenium™ BEFORE STARTING BLACKBOX.**  
Only one software a time can communicate with DMX interface.

### Cabling

A correct cabling requires to insert DMX-In and DMX-Out cables of the DMX interface between the main lighting console and the DMX devices. The main console connects to DMX-IN, and DMX-OUT connects to DMX devices.

In Record mode, the output of the main console is passed through to dimmers unchanged, while BlackBox captures the effects into a file.

In Play mode, BlackBox drives the DMX line with the recorded effects.

## USER INTERFACE

### The Screen







Fig. 1 - BlackBox screen

The window contains, from top to bottom: the main window title with Version number, the Pull-down menu bar, the active filename identifier and the loop checkbox. Through pull-down menus, files may be saved and restored, and the DMX interface type may be selected.

Lower in the window are the command buttons and the slider to adjust playback speed.

At the bottom of the window there is a status bar reporting messages and DMX interface identifier.

These are the functions of the command buttons:

Button	Action
	Starts DMX sequence playback. To playback in loop, activate the “Loop” check-box <input checked="" type="checkbox"/> <b>Loop</b> that will be visible when you start playing.
	Starts real-time recording of the DMX sequence.
	Pause recording or playback that can be restarted clicking the button again.
	Stops recording or playback.

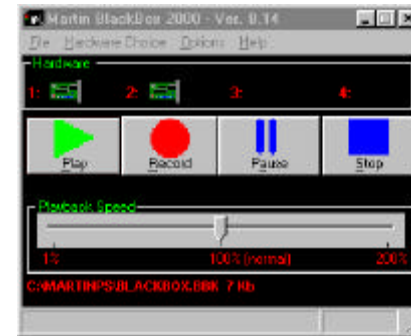


This slider lets the playback speed be adjusted at a faster or slower rate than the original real-time sequence.

The Option Menu lets you decide if start playing opening software, and if forcing a Loop opening software, in order to put BlackBox in the AutoStart of your computer.

The last item of this menu allows you to select a **standard resolution** (25 Hz, good for most of applications) and a **high resolution** (44 Hz), the maximal allowed DMX512 resolution for sending all 512 channels, that generates files that takes almost the double of disk space.

From version 7.80 you also receive an improved version of the blackbox software called BlackBox2000 that allows you to plug additional dmx interfaces until 2048 Dmx channels.



This version has a high-rate vertical/horizontal compression that allows to stock hours of light shows in your Hard Disk.  
All the command of this software are the same as described before.

**Martin ProScenium summary of commands From Keyboard:**

Martin ProScenium summary of commands	
Action	Keyboard
For all the action in Windows Buttons or Menus you can key "Alt" + the <u>underlined</u> carachter. For exemple to open a file you must key Alt +FO, to exit ProScenium Alt + FX, to record the current scene on Preset A Alt+R	
This is the list of the commands you can access directly by keyboard:	
Slave/Master mode toggle	<b>Alt+Backspace</b>
Channel select	<b>C or * (or directly channel number)</b>
Add a channel to current selection	<b>+</b>
Select UNTIL Channel	<b>/</b>
Chaser 1 Start / stop toggle	<b>E</b>
Chaser 2 Start / stop toggle	<b>R</b>
Chaser 3 Start / stop toggle	<b>T</b>
Chaser 4 Start / stop toggle	<b>Y</b>
Chaser 5 Start / stop toggle	<b>U</b>
Chaser 6 Start / stop toggle	<b>I</b>
Chaser 7 Start / stop toggle	<b>D</b>
Chaser 8 Start / stop toggle	<b>F</b>
Go to next memory	<b>L</b>
Go to previous memory	<b>K</b>
Go (Crossfade)	<b>G or SpaceBar</b>
Group 1 to 10 On/Off toggle	<b>F1-&gt;F10</b>
Group 11 to 20 On/Off toggle	<b>Ctrl+F1-&gt;F10</b>
Group 21 to 30 On/Off toggle	<b>Shift+F1-&gt;F10</b>
Group 31 to 32 On/Off toggle	<b>Alt+F1-&gt;F2</b>
Show Moving Light Window (MLW)	<b>S</b>
Move Fixture/s (with MLW open)	<b>Arrow Keys</b>
Move Fixture/s (with MLW open) FAST	<b>CTRL + Arrow Keys</b>
Go to next Page	<b>P</b>
Go to previous Page	<b>O</b>
Record this scene on a memory	<b>M</b>