ELATION
PROFESSIONAL

SHOW DESIGNER 1™

user manual

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D O C U M E N T   V E R S I O N

Please check www.elationlighting.com **for the latest revision/update of this manual.**

Date	Document Version	Software Version	Notes
07/20/16	1	3.19	Updated manual format.
05/18/17	1	3.20	Software update includes updated fixture library.

C O N T E N T S

CONTENTS

GENERAL INFORMATION

INTRODUCTION

Congratulations, you have just purchased one of the most innovative and reliable DMX controllers on the market today! This device has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important information regarding safety during use and maintenance.

UNPACKING

Every unit has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your unit for damage and be sure all accessories necessary to operate the unit have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this unit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

BOX CONTENTS

- 9-12VDC Power Supply
- Manual & Warranty Card

CUSTOMER SUPPORT

Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. For service related issue please contact Elation Professional®.

ELATION SERVICE USA - Monday - Friday 8:00am to 5:00pm PST

Voice: 323-582-3322   **Fax: 323-832-9142**

E-mail: support@elationlighting.com

ELATION SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET

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WARRANTY REGISTRATION

Please complete and mail in the enclosed warranty card or register online: http://www.elationlighting.com/Login.aspx to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

I M P O R T A N T   N O T I C E !

There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. Damages resulting from modifications to this fixture and/or the disregard of safety and general user instructions found in this user manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.

LIMITED WARRANTY

A.   Elation Professional® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional® product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days), from the original date of purchase. This warranty excludes discharge lamps and all product accessories. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Elation Professional® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional® will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional® shall have no liability what so ever for loss and/or or damage to any such accessories, nor for the safe return thereof.

C.   This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Elation Professional® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional® factory unless prior written authorization was issued to purchaser by Elation Professional®; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.

D.   This is not a service contract, and this warranty does not include any maintenance, cleaning or periodic check-up. During the periods as specified above, Elation Professional® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship.   The sole responsibility of Elation Professional® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional®. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.

E.   Elation Professional® reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional® be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.

G.   This warranty is the only written warranty applicable to Elation Professional® products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

SAFETY INSTRUCTIONS

This device is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

This device falls under **PROTECTION CLASS 1**. It's essential this device be grounded properly. Only qualified personnel should perform all electrical connections.

INDOORS USE ONLY!
DO NOT EXPOSE DEVICE TO RAIN AND MOISTURE!

DO NOT PLUG DEVICE INTO A DIMMER PACK!

• For proper operation, follow the **Installation** guidelines described in this manual. Only qualified and certified personnel should perform installation of this device. Any modifications will void the original manufactures warranty and increase the risk of damage and/or personal injury.

• Do not operate this device if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace it immediately with a new one of similar power rating.

OVERVIEW

The Show Designer 1 is a stage lighting controller for DMX 512 lighting fixtures. It's designed to simplify the programming process as much as possible while still offering lots of power at a low cost. You can control 16 lighting fixtures of up to 32 channels each from the single DMX 512 universe. If you are controlling smaller lighting fixtures that use fewer than 32 channels each, you will be able to control more than just 16 fixtures. You can control as many fixtures as will fit within a single DMX 512 universe. Support for Elation and American DJ intelligent lighting fixtures as well as other popular brands is included in the setup menu.

REAR PANEL CONNECTIONS

- **Power input** - for an external 9V power supply. This requires a transformer with a 9VDC output at 500ma. The plug polarity is + center with an inside diameter of 2.1 mm.

- **DMX 512 output** - uses a 3 pin XLR connector. There is also a polarity switch that swaps pins 2 and 3. Some older lighting fixtures require this. The more commonly used and correct DMX 512 polarity is data minus on pin 2 (switch is to the right as you're looking at the back of the unit).

- **MIDI in and out -** used for calling scenes in an automated installation.

- **9 pin RS-232 connector -** used for connection to a PC to update the software or backup the memory. It can also be used to connect to a mouse or trackball.

- **Audio input -** used for syncing chases to an external audio source. This is a line level input for connecting to the output of a mixing console. Do not connect speaker level signals to this.

FRONT PANEL

The front panel includes assorted switches for programming, eight 60mm faders for direct control of lighting fixture channels, a data entry wheel, a joystick for pan and tilt control and a backlit display for programming.

MENU

The menu switch is used to configure the Show Designer 1 for your particular lighting setup. The left and right cursor switches, the + and - switches, and the data wheel allow you to select settings for the various menus that appear on the display. Pressing the menu switch displays the message "Press Enter To" on the top line of the display. You will be given a choice of menu items on the bottom line of the display. You can cycle through the choices using the + and - switches or the data wheel. Press "ENTER" to select the desired menu item. After selecting the menu item, the cursor switches will allow you to select a field on the display to edit and the + and - switches or the data wheel will allow you to change the value in that field. An underline cursor shows the selected field. The "ENTER" switch must always be pressed following any change to make it permanent. This allows you to look at all of the possible choices first.

Several of the menu items are hidden to prevent unauthorized or accidental changes to the memory. The "Memory Lock/Unlock" function is hidden as well as the "Erase All Memory" function. These choices can only be reached by pressing and holding down the "Add" switch while selecting from the menu list. This is a safety feature for the benefit of installers who wish to protect the memory from unauthorized tampering.

The various menu items are explained in the following paragraphs.

MENU [continued]

CHOOSE FIXTURES

To configure the SD1 for your particular set of lighting fixtures, you must select from a list of fixtures in the fixture library and assign them to a fixture number from 1 to 16. Use the + or - switch or the data wheel to first select a fixture number (1 to 16). Next, select the type of fixture to assign to this number by moving the cursor to the fixture type (press the right arrow switch) then use the + or – switch or the data wheel to make a selection. You must press, "ENTER" to record the choice. You can also press, "ERASE" to select "No Fixture". If auto patch is enabled, a warning will appear telling you that some DMX start addresses may be changed. Press "YES" to confirm. After pressing "YES" the message "DONE" will appear for 1 second. If auto patch is enabled, the start addresses of all fixtures may be adjusted to accommodate the new fixture. Auto patch is the default setting and automatically sets each fixture's DMX start address for you in ascending order.

There is a list of all of the included fixtures in the back of this manual. If a particular fixture is not included in the list, you can select one that is similar to the one you want and then use the "Modify Fixture" feature to create it.

PATCH FIXTURES

This allows you to manually turn auto patch on or off and also allows you to set the DMX starting address for each fixture. Auto patch must be turned off to manually change any start addresses. To turn auto patch on or off, place the cursor under the word "ON" or "OFF" next to "AUTO PATCH", then use the + or - switch or the data wheel to change it. You must press, "ENTER" for the change to take effect. If you are turning auto patch on, a warning will appear telling you that some DMX starting addresses may change. Press "YES" to proceed or "NO" to quit without saving. Auto patch will assign an address to each fixture in ascending order with each DMX address immediately following the last channel of the previous fixture.

You can select from fixtures 1-16 and see the starting address for each fixture. If auto patch is off, you can then move the cursor under any of the three digits of the channel number to select a new starting address. If auto patch is on you will not be able to change the address. You must press, "enter" to record any change. The message "DONE" will appear for 1 second to confirm.

M E N U   [c o n t i n u e d]

MULTI FIXTURE

Show Designer 1 can support lighting fixtures that use as many as 32 DMX channels. Since most fixtures use fewer than 32 channels, Show Designer 1 lets you configure a group of smaller fixtures that are of the same type, under a single fixture number. For example if you have selected a 4-channel LED for fixture number 1, you can set "Multi" to 8. When fixture 1 is selected you will be able to use all 32 of the channels available for fixture 1 to control 8 of these 4 channel LEDs.

NOTE: This feature is for controlling large numbers of small fixtures so that a fixture number is not wasted on just one small fixture.

You will be able to control the individual channels of each fixture separately using the 4 banks of 8 faders. When using the joystick, all of the multi fixtures within that fixture number will respond if they have a pan and tilt feature. To control individual pan and tilt levels separately you will have to use the faders.

To use the multi fixture mode, move the cursor to the fixture number and use the + and - switches or data wheel to select a fixture number. Move the cursor to the multi number (to the right of "X") to increment or decrement this value. You can only choose numbers between 1 and the maximum number of fixtures that will fit into 32 channels. If it is a 4 channel fixture the multi value can be no higher than 8. You must press, "ENTER" to record the change. If auto patch is enabled you will be given the warning that some addresses may change. Press "YES" to continue or "NO" to quit without saving.

MENU [continued]

MODIFY FIXTURE

This allows you modify the channel attributes of a fixture that is already assigned to a fixture number. You can also use this to create a new fixture that isn't in the library. To create a new fixture you must first select an existing fixture as described above in the "Choose Fixture" section. Try to choose something that is similar to the one you are trying to create or start with the "Generic Dimmer" which is the first choice from the list. You can later use the "Copy Fixture" feature as described in the next section to duplicate the new fixture.

There are nine fixture attributes that can be modified. The attributes are: fixture name, number of channels, black channel, black value, pan channel, pan fine channel, tilt channel, tilt fine channel and crossfade mode. From the "Modify Fixture" menu, use the cursor switches to move the underline cursor to the fixture number to select the fixture you want to modify. Next move the cursor to the "attribute" which is displayed immediately to the right of the fixture number to select from the nine fixture attributes. Next move the cursor to the bottom line of the display to select the value for the attribute you are changing. You must always press "ENTER" to record any changes you make to an attribute. The message "DONE" will appear in the display when the change has been recorded. The fixture attributes are described in the following paragraphs.

NAME is the fixture name that appears whenever you select or deselect a fixture. You may want to modify this attribute for each of your fixtures to show fixture purpose or location. You must place the underline cursor on the character you want to edit then use the + or – switch or the data wheel to select a character.

M E N U   [c o n t i n u e d]

CHANNELS are the total number of DMX channels used by the fixture. This can be any number from 1 to 32. When you change the number of channels be aware that other things such as fixture addresses and number of multi fixtures can be automatically changed when you change the number of channels for an existing fixture. Fixture attributes such as black channel, pan or tilt will be automatically disabled if you select a number that is smaller than the channel numbers that are already assigned to those attributes. For example if you have already assigned pan to channel 8 and you reduce the total number of channels for the fixture to 4, pan will automatically be set to "None". Likewise if you increase the number of channels from 8 to 9 and you had previously set up 4 multi fixtures using all 32 channels, the multi fixture setting will automatically be reset back to 1.

BLACK CHANNEL is the channel that will be affected when the "BLACK" switch is pressed. You can choose any available fixture channel as well as "ALL" which will force all channels to the selected black value.

BLACK VALUE is the DMX channel level that will be used for the selected black channel(s). This will accommodate fixtures that use the gobo wheel for blackout and use a value other than 0 to set the gobo wheel to black. You may also want to blackout all channels to a value other than 0 since this is used as a reset by some fixtures. For some fixtures a value of 1 achieves the same result as a value of 0 for blackout.

PAN CHANNEL is the channel used by the fixture for pan motion. This can also be set to "None" if the fixture does not have a pan feature. This is also the pan coarse channel or pan high byte channel for those fixtures that use two channels to control pan. This directs the joystick output as well as other pan functions.

PAN FINE is for fixtures that use two channels to control pan. This is also referred to sometimes as the pan "Low Byte" channel. Set this to "None" if the fixture uses only one channel for pan. The joystick will control this channel with "Fine" mode turned on.

TILT CHANNEL is the same as described above for pan channel except that it controls tilt motion.

TILT FINE is the same as described above for pan fine except that it controls tilt.

MENU [continued]

FADE MODE is used to set the crossfade method for each of the fixture's channels. Use the + and - switches or data wheel to select the desired channel, then move the cursor to the value to select the crossfade mode. The choices are "Crossfade", "Snap Before Fade" and "Snap After Fade". You must press "ENTER" after each channel has been programmed.

Selecting "Crossfade" will cause a channel to smoothly fade from one setting to another when changing scenes. The crossfade time will vary from scene to scene depending on how that scene was programmed. Use this setting for channels that control functions like pan and tilt or dimming to achieve a smooth transition from scene to scene. If you use this setting for gobo or color wheel channels, this will cause the wheels to step through all positions between the start and end positions of a long fade. This is usually the default setting for pan, tilt and dimmer channels.

Selecting "Snap Before Fade" will cause the channel to jump immediately to the next scene level as soon as the new scene is called. Use this setting for channels that control motor speed so that pan and tilt will move at the correct speed during the fade. You can also use this setting for wheel channels that you want to change at the start of a long crossfade. This is usually the default setting for speed and mode channels.

Selecting "Snap after fade" will cause the channel to jump immediately to the next scene level at the end of a crossfade. Use this setting for wheels and effects that you want to take effect after a long crossfade is complete. This is usually the default setting for color and effects wheels.

COPY FIXTURE

This is used to copy the fixture type from one fixture number to another. This feature saves time by letting you copy the fixture selection rather than searching through the list when setting up a group of fixtures that are all the same. Select a fixture number to copy from and to. Press, "ENTER" to complete the copy process. If auto patch is enabled you will be given the warning that some addresses may change. Press "YES" to continue or "NO" to quit without saving. If a fixture is already set up at the "Copy To" location, you will be asked if you want to copy over the existing fixture, press "YES" to copy over it or "NO" to exit.

MENU [continued]

PAN AND TILT INVERT

The joystick can be used to control pan and tilt if a fixture has a pan and tilt feature. Sometimes a fixture is oriented in a way so that its pan or tilt movement is opposite that of the joystick movement. You can use this to invert the direction of the pan or tilt as it applies to the joystick for each fixture. This setting will not affect the channel faders when they are used to control pan or tilt. Select the fixture then select "Normal" or "Inverted", then press, "ENTER" to save the selection.

MOVE FACTORY CHASES

Show Designer 1 provides 48 preprogrammed chases of pan and tilt movements that are referred to as factory chases. These are mostly circle movements and some other pan and tilt effects. This menu allows you to adjust the pan and tilt centers of these chases. This feature is helpful when one of the circle chases is close to what you want but is not in the exact desired location. You can adjust the pan and tilt offset while the chase is running so that you can see the results. You must select 1 of 48 factory chases then adjust the pan or tilt offset. The offset can be adjusted in a plus or minus direction. Unlike most of the other menus, this menu does not require you to press "ENTER" to complete the change. Be aware that any scene that uses this factory chase will be affected by this adjustment.

SET SCENE FLASH

This allows you to configure the number switches as "Flash" or "Bump" buttons while in scene select mode. A scene will remain on as long as its number switch is held down and then turned off when the switch is released. Please note that if this mode is active, after you record a scene it will flash off when you release the switch.

SET MIDI CHANNEL

This allows you to select the MIDI channel that Show Designer 1 will use when sending and receiving MIDI messages. Select a value from 1-16 and press enter. On the bottom line of the display you can also enable extra MIDI channels by selecting a value from 0 - 9. Extra MIDI channels will allow you to use more than one MIDI channel to call large numbers of scenes and shows. If extra is set to 0, only messages on the selected MIDI channel will be used. If set to 1 or higher, messages can be used on the next consecutive MIDI channels as well. Read the section on MIDI for more info.

MENU [continued]

VIEW MEMORY SIZE

This allows you to see how much memory is left for scenes and shows. It is displayed in kilobytes remaining. Memory usage will vary depending on the size and complexity of the scenes that are recorded.

SAVE MEMORY FILE

This allows you to back up the content of the entire memory including all menu settings, scenes, presets, chases and shows to a PC using the RS-232 port or to a MIDI device. Selecting this menu brings up a second menu where you select the Com port or the MIDI port to send the memory file to. Read the section at the end of this manual on backing up the memory for more information.

LOAD MEMORY FILE

This allows you to restore the memory from a backup that was made using the RS-232 port and a PC. This menu configures the RS-232 port for the memory file and waits for the file to be sent from your PC. Read the section at the end of this manual on using the computer port for details on how to back up and restore the memory this way. The only way to exit this menu is to turn the power off.

UPDATE SOFTWARE

This allows you to update the Show Designer 1 software using a PC connected to the RS-232 port. The message "DOWNLOAD NEW PROGRAM" will appear when you press "enter". Show Designer 1 will wait for the proper file to be sent from a PC to the RS-232 port. The message "RECEIVING NEW PROGRAM" will appear as it receives the new software file. Upon completion, the system will reboot. The only way to exit this menu is to turn the power off. You can also call this menu by pressing and holding "MENU" and "ERASE" together while turning on the power. Refer to the section titled "Using the Computer Port" at the end of this manual for more details on how to do this.

MENU [continued]

LOCK/UNLOCK MEMORY

This is one of the hidden menu items that can only be selected while holding the "ADD" switch when cycling through the menu selections.

This feature allows you to lock the memory to prevent someone from changing or erasing anything that has been recorded. The message "MEMORY LOCKED, CAN'T RECORD" will appear if anyone presses the record switch. All other menu items that are not hidden will also be locked out in order to protect the memory.

To lock or unlock the memory from this menu, use the + and - switches or the data wheel to select the desired state, then press "ENTER".

ERASE ALL MEMORY

This is the other hidden menu item that can only be selected while holding the "ADD switch when cycling through the menu selections.

This allows you to erase the entire memory of the Show Designer 1. This does not erase the software that runs the system but erases all the scene, preset, chase and show data as well as the system parameters such as fixture assignments. The message; "ARE YOU SURE? HOLD "YES" 5 SEC" will appear in the display. Press and hold "YES" until the system reboots or press "NO" to exit.

SWITCH AND CONTROL DESCRIPTIONS

The following paragraphs outline the various switches and front panel controls.

NUMBER SWITCHES 1-16

The array of 16 switches on the left side of the panel, which are numbered 1-16, are multi-purpose. The function switches that are to the right of these determine what they do. Only one function is selected at a time and the LED for the particular function will be lit when selected. These functions are described throughout the rest of the manual.

FIXTURE SWITCH

This allows you to select fixtures for programming. With the "fixture" LED lit, the number switches are used to select an active fixture. When a fixture is selected it can be directly controlled using the faders or the joystick. A selected fixture can also be controlled using a preset. A fixture does not have to be selected to be controlled by scenes or shows. If a fixture is not selected it will only be disconnected from the manual controls, the fixture is not turned off.

When a fixture is selected its name will appear in the LCD. If no fixture type has been assigned to that number, it can't be turned on. Pressing and holding one of the number switches will solo that fixture.

CHANNEL FADERS

Just below the number switches are 8 faders that can be used to control the individual channels within each fixture. You can address up to 32 channels per fixture by using 4 banks of 8 faders. The bank switch to the left of the faders is used to select which bank of 8 channels is currently active. The LED to the left of the faders shows the current bank. The channel numbers controlled by the faders are printed to the left of each fader. For example the first fader can control channels 1, 9, 17 or 25 depending on which bank is selected. If a fixture has less than 32 channels, some banks and some faders will not be used. Before the channel faders can control a fixture, that fixture must be selected. Any number of fixtures can be controlled at once. If for example all fixtures are enabled, moving fader 1 in bank 1 will change channel 1 on every fixture.

If you are using the "multi fixture" feature, the channel faders can be used to control each channel of every fixture within the multi fixture group. If for example you have programmed 8 fixtures having 4 channels each, faders 1-4 will control the first fixture of the multi fixture group, faders 5-8 the second and so on.

SWITCH AND CONTROL DESCRIPTIONS [continued]

BANK SWITCH

The bank switch selects the current bank of channels controlled by the 8 faders. This lets you control up to 32 channels per fixture using only 8 faders. The bank LED next to the faders will show the currently selected bank and the numbers printed next to each fader show the corresponding channel numbers. As a convenience the bank select will only go as high as needed for the size of the currently selected fixtures.

JOYSTICK

The joystick controls pan and tilt on all selected fixtures that have a pan or tilt feature. The joystick is the return to center type. Push in the desired direction to move the selected lights. The greater the joystick movement the faster the pan or tilt movement will be. The state of the "Fine" mode switch will determine the speed of the pan or tilt movement. If a fixture uses 2 channels for pan or tilt (16 bit), the joystick will affect the fine channel with "Fine" mode on. If the fixture only uses 1 channel for pan or tilt, the movement will be slower allowing more precise control with "Fine" mode on.

FINE SWITCH

The "Fine" switch affects the operation of the joystick. With "Fine" mode on, it will increment or decrement by the smallest possible amount. With "Fine" mode off, it will increment or decrement by larger amounts.

TRACKBALL

A trackball, mouse or any similar pointing device can also be used for controlling pan and tilt. The device must be RS-232 serial and either Microsoft or Logitech compatible. It is plugged into the 9-pin RS-232 connector on the rear panel of the Show Designer 1. As with the joystick, only fixtures that are currently enabled will be affected. The left switch on the trackball or mouse will shift the current fixture selection to the left and the right switch will shift it to the right. Holding either switch will continuously repeat the shift until released. If you are using a Logitech compatible device, the middle switch will toggle "Fine" on or off.

SWITCH AND CONTROL DESCRIPTIONS [continued]

BLACK SWITCH

Pressing the "BLACK" switch will stop all activity and blackout all fixtures. Depending on the type of fixture and its capabilities, black will only turn off the channel that controls the output of the lamp but for some types of fixtures it will set all channels to 0. The "Black" LED will remain on to indicate that a blackout was called. Pressing the "BLACK" switch a second time will turn the LED off and restore the blacked out channels to their previous settings.

Pressing and holding the "BLACK" switch for 2 seconds will force all DMX channels to 0 and clear the scene buffer. This can be useful when programming a new scene.

SCENES

RECORDING SCENES

A "scene" is a recording of the state of the entire stage. Show Designer 1 keeps track of all the actions you take to make the stage appear as it does. Anything that affects the look of the stage such as changing channel levels, calling a chase or calling a preset, is recorded in the scene buffer so that you can save these things as a scene. This method of scene programming lets you edit existing scenes quickly. Just call a saved scene, change something and resave.

Once you have a look on stage that you want to save as a scene, press "record", its LED will flash. Next press "scene", its LED will also flash. The page display will light and any number locations that already contain scenes will also light. You can at this time enter a name for the scene as well as a crossfade time. Use the cursor switches to move the cursor under each character of the name, then use the + or - switch or the data wheel to modify the name characters. Move the cursor under the fade time then use the data wheel or the + and - switches to change the crossfade time.

To finish recording the scene, select the page and scene number. You can use the page switches to select from pages 1 to 64 and the number switches from 1 to 16 allowing you to store up to 1024 scenes. If you select a scene number that is already lit, a message will appear asking if you want to write over the existing scene. Press "yes" or "no". If at any time you wish to exit record mode without recording anything, press the "record" switch and you will exit record mode.

NOTE: It can take several seconds to overwrite or erase a scene depending on how much memory is currently in use.

SCENES [continued]

CROSSFADE TIME

When you record a scene you must assign a crossfade time to that scene. This sets the amount of time it will take to transition when it is played back. You can set the fade time from 0 to 25 seconds. Set to 0 if you want the scene to take effect instantly. During the fade, some fixture channels will transition to their new settings gradually while others will snap to their new positions either at the start of the fade or at the end. Channels that control beam movement and dimmer levels are typically set to fade gradually while channels that control color or beam appearance are set to snap at the beginning or end of the fade depending on personal preference. This behavior is defined in the fixture library for each fixture channel. You can override the default settings for any of your fixture channels by using the "Modify Fixture" menu. Refer to the Menu chapter under "Modify Fixture Crossfade Mode" for more info.

If a chase is part of the scene it will start right away regardless of the fade time. Presets included in the scene will either fade or snap depending on the fade mode of the preset's channels.

RECALLING SCENES (Default Solo Mode)

To call a scene, turn on the scene mode LED by pressing the "SCENE" switch, then select the desired page and scene number. Only one scene can be selected at a time in the default (solo) mode. All channels that are not included in the scene will fade to 0. Pressing the scene number switch of the currently lit scene will turn off the scene essentially giving you a blackout.

SCENES [continued]

RECALLING SCENES (add mode)

If you prefer that any unused channels in the scene remain as they are and not fade to 0, you can operate scene playback in "add mode". In add mode, channels that are not part of the new scene will be left in their current positions and any chases that were running will keep running as long as the channels in the chase are not used by the new scene. This method of playback allows channels from previous scenes to track through to the next scene as long as the new scene doesn't use those channels. This is also sometimes referred to as pile on mode.

You can turn add mode on by holding down the add switch when pressing the scene mode switch. Do this when the scene mode LED is off. To turn add mode off, press the scene mode switch while holding the erase switch. The "add mode" state is backed up in memory so you only need to set it one time if you intend to always use it this way.

NOTE: You cannot use add mode to combine scenes and then record the combined scenes as a new larger scene.

ERASING SCENES

To erase a scene from memory, press, "RECORD" then "SCENE" then "ERASE". All number LEDs that contain a scene will light. Next select the scene number to erase. That scene name will appear in the LCD along with the message "Erase This?".

Press "YES" or "NO". If you press "YES" the scene will be erased. You can then select additional scenes to be erased or you can press "RECORD" to exit record mode.

Note: It can take several seconds to overwrite or erase a scene depending on how much memory is currently in use.

PRESETS

Presets are small memories, usually containing information for just a few channels. They are used as building blocks for scenes. Presets provide fast and easy scene programming by giving you instant access to colors and beam settings without searching through channel levels with the faders. Using presets also saves memory because many scenes can reference the same preset. For example, if a preset defines a pan and tilt location for several scenes, only the preset needs to be edited in order to modify the pan and tilt for all of those scenes. If you want to use the same color or gobo for a group of fixtures, reference a preset instead of setting the channels for each individual fixture with the faders. This will use less memory.

Show Designer 1 lets you record up to 32 pages of 16 presets for a total of 512. Unlike scenes, which record the look of the entire stage, presets are used to record only several channels worth of information. This allows you to record things like color or gobo or beam position only. Presets can then be recalled and layered to make a scene.

In addition to the 32 pages available for the presets that you create, there are 2 pages labeled "F1" and "F2". These pages are for preprogrammed "factory presets". These are presets that are already programmed for some fixtures fixture types. Please note that not all fixtures have factory presets. See the fixture list at the end of this manual to see if a fixture has pre-loaded factory presets. See also the list of factory preset colors for generic fixtures with RGB channels at the end of this manual.

PRESETS [continued]

RECORDING PRESETS

Before recording a preset you must first do some preparation. In order to be able to view certain channels like color or gobo you will first need to raise dimmer levels and move the pan or tilt positions in order to see the color or gobo selection. Do this by selecting the fixture or fixtures to be used in the preset and then position the beams and turn up the dimmer levels. These things will not be recorded into the preset if they are done before pressing record.

To start recording a preset press "record", its LED will flash. Next press "PRESET", and this LED will also flash. The page display will show the current page and any number locations that already contain presets will be lit. Adjust the channel or channels that you want to include in the preset. These adjustments will be recorded so take care not to change any channels that you don't want included in the preset.

Note: When recalling a preset, if some channels are affected that weren't intended to be part of the preset, chances are that a fader or the joystick was bumped while recording and those channels were accidentally added. If this happens, go back and rerecord the preset.

While recording a preset you can turn a fixture on or off by pressing the "FIXTURE" switch. Use the number switches to toggle any fixtures on or off. Pressing "FIXTURE" a second time will turn off the fixture LED allowing you to finish recording the preset.

At any time while recording the preset you can enter a name for the preset. Use the cursor switches to move the cursor in the display under each character then use the + or - switch or the data wheel to select characters.

To save the preset, select the page and number where you want it saved. If you select a number that is already lit, a message will appear asking if you want to write over the existing preset. Press "YES" or "NO". You can use the page switches to select from pages 1 to 32, which will let you store up to 512 presets. You cannot record over or edit the factory presets on pages F1 or F2.

NOTE: It can take several seconds to overwrite or erase a preset depending on how much memory is currently in use.

After saving a preset, the record LED stays lit allowing you to continue to record more presets. Any channel changes that were made previously will still be included in any new presets. To start a new preset from scratch, toggle the "PRESET" LED off and then back on while the "RECORD" LED is still flashing. This will clear out the edit buffer. To exit record mode, press "RECORD", all LEDs will stop flashing.

PRESETS [continued]

RECALLING PRESETS

To turn on a preset, first select the fixtures that you want to control with the preset. The fixtures must have been included when the preset was recorded. Next, press the "PRESET" switch, select the page and number of the desired preset. You can have many presets turned on at the same time as long as each preset is controlling different channels or fixtures. If two different presets are trying to control the same channel, the last preset that was selected will have control of the channel. If a preset has been completely overridden by another, it will be automatically switched off.

A fixture must be selected before the preset is turned on even if it that fixture was included in the preset when it was recorded. This allows you to put every fixture into a preset but use only selected ones as needed. For example you could create a preset called "Red" that sets all color channels of every fixture to the color red. But when calling that preset, you would only select the fixtures that you want to be red at that time.

ERASING PRESETS

To erase an existing preset, press "RECORD" then "PRESET" then "ERASE". As when recording a preset, all LEDs that contain a preset will light. Next select the preset to erase. That preset name will appear in the display along with the message "Erase This?". Press "YES" or "NO". If you press "YES" the preset will be erased. You can then select additional presets to be erased or you can press "RECORD" again to exit record mode.

NOTE: It can take several seconds to overwrite or erase a preset depending on how much memory is currently in use.

PRESETS [continued]

EDITING PRESETS

To edit a preset that you have previously saved, press "RECORD" followed by "PRESET". Before making any channel changes, press the preset number of the one you want to edit. The message "Edit This Existing Preset?" will appear in the display. Press "YES" and the preset will be called up and you can add to it or modify it by changing any channel levels. After making changes you can store it at the same or at a new location by pressing any preset number. You can also use this method to copy a preset to another location by saving it without making any changes.

COMBINING PRESETS

You can add existing presets to any preset you are currently working on. While in preset record mode press the "ADD" switch followed by any preset number. That preset's channel settings will be added to the preset you are currently recording. You can add as many presets as you wish. You can use this to mix several smaller presets into a single larger one. If two presets control the same channels, the channel levels from the last one added will be used.

C H A S E S

Show Designer 1 lets you to record up to 256 chases and also provides 48 pre-recorded chases referred to as factory chases. A chase is a sequence of steps, creating motion or quick repetitive changes. Each chase step can be a recording of channel levels or presets. The steps are then played back in a continuous loop at a preprogrammed chase speed.

Unlike scenes, chases do not affect the entire stage but only the channels that you include in the chase. This allows you to chase colors, gobos or beam positions. You can run as many as 8 chases at the same time and combine them into one scene.

RECORDING CHASES

Before recording a chase you must first do some preparation. In order to be able to view features such as colors or gobos or to be able to see beam positions for moving lights, you will first need to set some channel levels. Do this by selecting the fixture or fixtures to be used and then turn up the dimmer levels or open the shutters as needed. These channel changes will not be part of the chase if they are done before recording.

To start recording a chase press "record", its LED will flash. Next press "CHASE", the chase LED will also flash. The page display will show the current chase page and any number LEDs that already contain chases will be lit. There are 16 pages each with 16 locations available on each page. Pages F1, F2 and F3 are reserved for factory chases and can't be recorded over. The display will show the current chase step, speed, and fade status. To start recording the first chase step, move the channel or channels to the desired positions by adjusting the faders or by using the joystick. These adjustments will be recorded into the step so take care not to move any channels that you don't want included in the chase. At any time while recording, you can press the fixture switch and turn fixtures on or off. You can also press the preset switch to include presets in the chase step. When using presets, only the fixtures that are currently selected will be included.

CHASES [continued]

RECORDING CHASES [continued]

After you have finished adding channels or presets to the step, press "ENTER".
NOTE: (The "Fixture" LED must be turned off before pressing "ENTER".) The step indicator on the display will automatically increment to the next step. Repeat the previous actions to record up to 256 steps. You can also enter empty steps by pressing "ENTER" before changing any channels. These empty steps can be used to lengthen the time between steps. You can record something into these empty steps later if needed.

As you are recording steps you can move from step to step by putting the display cursor under the step number and use the **+** or **-** switches or the data wheel to select a new step. You can change or add more channels to any previously recorded step this way.

Pressing "ENTER" always advances you to the next chase step. If you are at the end of the chase this will add an additional step to the end of the chase until you reach step 256 (the maximum allowed).

If you make a mistake while recording a chase step, press "ERASE" and you will be prompted whether or not to erase the contents of the chase step. Press "YES" to clear the step of all channel and preset data. If you press "ERASE" a second time, you will be prompted whether or not to remove the empty step from the chase. This will remove the step and shorten the length of the chase by one.

At any time while recording the chase you can enter a speed value, a fade value and a name for the chase. Use the cursor switches to move the cursor on the display under the item to be changed then use the **+** or **-** switch or the data wheel to modify it. To get to the name, continue to move the cursor to the right, past the fade setting and the screen will change to show the name and the speed lock status. To edit the name, move the cursor under each character then use the **+** and **-** switches or the data wheel to select the letters.

C H A S E S   [c o n t i n u e d]

RECORDING CHASES [continued]

The chase speed (in beats per minute) will be the default speed for the entire chase. This means that when you first call the chase this is the speed that it will run. You can change the speed after calling it and the new speed can be recorded as part of a scene. That way you can use the same chase in several scenes but run it at different speeds in each scene.

The fade value is displayed as a percentage and will be the same for every step in the chase. You cannot set a separate fade time for each step. This will be the amount of fade time between steps. If set to 100%, the crossfade time will be equal to the time between each step. This gives you a smooth continuous motion. If the fade time is set to 0% the steps will snap with no fade. Any settings between 0% and 100% will give varying amounts of fade time depending on the speed of the chase. As with speed, this is only the default value. It can be changed before adding the chase to a scene.

The speed lock feature lets you tell the chase to ignore the audio or beat switches when the chase is running. When set to "No Beat" the chase will only run at the programmed speed and will not be affected by the beat switch or audio signal. This is useful when you have a chase that must always run at a high speed to create a certain effect.

After you have finished recording all of the chase steps, set the speed, fade and lock status, then save the chase by selecting a page and number. The "Fixture" and "Preset" LEDs must be off. If you select a chase number that is already lit, you will be asked if you want to write over the existing chase. Press "YES" or "NO". You can use the page switches to select from pages 1 to 16 which will allow you to store up to 256 chases. Pages "F1-F3" are reserved for factory chases.

NOTE: It can take several seconds to overwrite or erase a chase depending on how much memory is currently filled.

After you have saved the chase, the "Record" and "Chase" LEDs will continue to flash, allowing you to continue to add to or edit the chase. To exit record mode, press "record" and the LEDs will stop flashing.

CHASES [continued]

RECALLING CHASES

To run a chase, press the "CHASE" switch turning on its LED, then press the desired page and number. The chase will begin to run at the speed that was programmed when it was recorded. Pressing the same switch again will turn the chase off. You can run more than one chase (up to 8) as long as they are chasing different channels.

You can adjust the speed or the fade rate of the chase that is currently shown in the display. Place the underline cursor on the field you want to edit then use the + or – switches or the data wheel to adjust the value. Place the cursor under the chase name to select a different chase if more than one is running. Any speed changes that are made will be saved if you record the current scene. This allows you to reuse the same chase in different scenes at different speeds. Press the "CHASE" switch whenever you want to see the chase display when there are chases running.

You can run up to 8 chases simultaneously. If a new chase is selected that completely overrides one that is running, the overridden chase will be automatically turned off. A chase is canceled when another one is called that controls all of the same channels. A chase will not be canceled if only some of its channels are overridden. The channels that are still available will continue to chase.

ERASING CHASES

To erase an existing chase, press "RECORD" then "CHASE" then "ERASE". As when recording a chase, all LEDs that contain a chase will be lit. Next select the chase to erase. The message "Erase This?" along with the chase name will appear in the LCD. Press "YES" or "NO". If you press "YES" the chase will be erased. This only works when there is no chase being edited or recorded. While editing a chase, "ERASE" is used to erase the chase steps. You can abort chase erase at any time by either pressing "NO" or exiting record mode by pressing the "record" switch.

NOTE: It can take several seconds to erase a chase depending on how much memory is currently in use.

CHASES [continued]

EDITING CHASES

To edit an existing chase, press "RECORD" followed by "CHASE". Before making any channel changes, press the number of the chase that you want to edit. The message "Edit This Existing Chase?" will appear in the display. Press "YES" and the chase will be called up and you can add to it or modify it by selecting steps and changing any channel levels. You can also use the "ERASE" switch to remove the contents of the current step or if the step is empty, remove the step entirely. You can also insert additional empty steps at the current step by pressing "ADD". You will be prompted whether or not to add an empty chase step here.
Press "YES" to insert a step at the current step number. All following chase steps will be moved up one number. Once the new step is added you can record channel levels or presets there.

After you have finished editing the chase you can store it at the same memory location or at a new location by selecting a page and by pressing a number switch. You can also use this method to copy a chase to another location by saving it without making any changes.

FACTORY CHASES

When you select chase memory pages "F1-F3" (Factory Chases) you have available 48 preprogrammed pan and tilt chases. Some hard to program movements such as circles and figure eights can be found here. Unlike chases that you program yourself, you must first select the fixtures you want to include before you turn on factory chase.

AUDIO SWITCH

The audio switch enables the audio input as a trigger for chase steps. Pressing the "AUDIO" switch turns on its LED. It will flash off briefly whenever an audio beat is detected at the audio input. Any chases that are running will sync to this beat unless the speed has been locked for that chase. Read the previous section on recording chases regarding how to lock the chase speed. Turning on "AUDIO" will automatically turn off "Beat". The audio switch state is not stored with a scene.

BEAT SWITCH

The beat switch allows you to override the tempo or beat of a chase by tapping on the switch in time to any music that is playing. The LED will flash in time to the beat. Any chases that are running will sync to this beat unless the speed has been locked for that chase. Read the previous section on recording chases regarding how to lock the chase speed. Pressing the "beat" switch will automatically turn off "audio". To turn off the beat, press and hold the "beat" switch for one second. The "beat" switch state and beat tempo are not stored when recording a scene; it's a manual control.

SHOWS

A show is a list of scenes that runs on a timer. This is sometimes referred to as a stack or cue list by other controllers. Show Designer 1 lets you record up to 16 pages of 16 shows for a total of 256.

RECORDING SHOWS

Before recording a Show you must first record the scenes that will be included in the show. Consult the previous sections on how to do this.

To start recording a show press "RECORD", the "record" LED will then flash. Next press "SHOW", the "show" LED will then also flash. The page number will display the current Show page and any number switches that already contain Shows will be lit.

The display will show the current step that is ready to be recorded along with the scene page and scene number in that step. The word "Empty" will appear in place of the scene if there is nothing recorded at the step. The hold time for the scene is displayed in hours, minutes and seconds. The numbers are separated by colons "**:**" with seconds having a decimal point for tenths of a second.

When you first start the record process, step 000, scene "Start" will be displayed. Step 0 is used to add a delay to the start of the show before the first scene is called. No scene can be recorded at step 0. If you don't want a delay time at the start of the show, leave the hold time as 00:00:00.0 and move on to step 1 by pressing the "**+**" switch, the "ENTER" switch or by incrementing the data wheel.

To record a show step, press the "SCENE" switch, the "SCENE" LED will be lit. Next, choose a scene for this step by selecting the page and pressing the desired scene number. Next, select the hold time for this step. The time that you select is the time that this scene will be held until the next step is called. You can select a new time by moving the cursor to the hour, minute or second number and then pressing the **+** or **-** switch or turn the data wheel to change the time.

Once a scene has been selected and the hold time set, press "ENTER". The step number will automatically advance to the next step. You can enter up to 255 steps in the show. If you press "ENTER" without selecting a scene, the step number will advance leaving that step empty.

SHOWS [continued]

RECORDING SHOWS [continued]

As you are recording a show you can go to any step by moving the cursor under the step number and using the **+** or **-** switch or the data wheel to select a new step. You can then edit the scene number or hold time. Pressing "ENTER" when on the last recorded step will add an additional step to the end of the show. If you press "ENTER" while the step number is not at the end you will advance to the next step number the same as if you incremented the step number using the data wheel.

At any time while recording the show you can enter a name for the show. Use the right cursor switch to move the display cursor to the right, continuing past the hold time numbers. The screen will change to the show name on the top line and the loop status on the bottom line. Edit the name by putting the cursor under each character then using the **+** or **-** switch or the data wheel to change the character.

Setting the loop status lets you to program the show to loop continuously or play once and stop.

If you continue to move the cursor to the right, a third display will appear that will allow you to select a linked show. On playback this will automatically call a new show after this one has finished playing. Set the link to "on" and then select a page number and show number for the link. If you enable the link, looping will be turned off. Likewise, if you turn looping on, the link will be turned off.

After you have finished entering the steps and making any adjustments, save the show by selecting a page and number where you want to store it. Make sure that the "Scene" LED is off. If you select a show number that is already lit, a message will appear asking if you want to write over the existing show. Press "YES" or "NO".

NOTE: It can take several seconds to overwrite or erase a show depending on how much memory is currently in use.

After you have saved the show, Show Designer 1 remains in record mode allowing you to continue to edit the show. To exit record mode, press "RECORD", the LEDs will stop flashing.

S H O W S   [c o n t i n u e d]

RECALLING SHOWS

To run a show, press the "SHOW" switch, and then select the desired page and number switch. You can only run one show at a time and shows can only call one scene at a time. The name of the show will be displayed along with the current step's scene and hold time. If the show is set to loop, it will restart after the last step's hold time has counted down. If loop is set to "Off", the show will end after the last scene has been called. If there is a link, a new show will be started.

Press the "BLACK" switch to pause a show and to black out the fixtures. Press "BLACK" again to resume the show and turn the fixtures back on. If you press black and hold it for 1 second the show will be turned off. If you press the number switch of the show that is currently running the show will be turned off. If you select a new show while one is running it will replace the current show. If you select a new scene while a show is running it will also turn off the show. If at any time you need to see the show display for a show that is running, press the "SHOW" switch.

Press the "LEFT" arrow switch to pause a show then press the "RIGHT" arrow switch to continue. Press the "RIGHT" arrow switch while the show is running to jump ahead to the next step.

ERASING SHOWS

To erase an existing show, press "RECORD" then "SHOW" then "ERASE". As when recording a show, all LEDs that contain a show will be lit. Select the show to erase. That show name will appear in the LCD. The message "Erase This?" will also appear. Press "YES" or "NO". If you press "YES" the show will be erased.

This only works when there is no show currently being edited. While editing a show, "erase" is used to erase show steps. You can abort show erase at any time by either pressing "NO" or by exiting record mode by pressing the "RECORD" switch.

NOTE: It can take several seconds to overwrite or erase a show depending on how much memory is currently in use.

SHOWS [continued]

EDITING SHOWS

To edit a show that has already been recorded, press "RECORD" followed by "SHOW". Instead of entering steps for a new show, press the show number of the one you want to edit. The message "Edit This Existing Show?" will appear in the display. Press "YES" and the show will be called up and you can add to it or modify it by selecting steps and changing any value. You can use the erase switch to remove a step. You can also insert additional steps by pressing "ADD". You will be prompted whether or not to add an empty show step here. Press "YES" to insert an empty show step at the current step number. All following show steps will be moved up one number. After the empty step is added you can record a scene or time value there.

After editing, a show can be saved at the same or at a new location by pressing any number switch. The scene LED must be turned off. You can use this method to copy a show to another memory location by calling it for edit and then saving it without making any changes.

MIDI

This manual assumes that you have a basic understanding of how MIDI works along with MDI messages and MIDI channels. With MIDI you can use a MIDI sequencer or MIDI keyboard to automate a performance. Show Designer 1 uses MIDI note messages to call scenes and shows. Six pages of scenes and one page of shows can be called using MIDI note messages on a single MIDI channel. This gives you access to 96 scenes and 16 shows per MIDI channel. Note numbers 0-95 are used to call scenes and note numbers 96-111 are used to call shows. MIDI only provides 128 notes per MIDI channel so that limits how many scenes and shows can be called using a single channel.

Show Designer 1 will also send MIDI note messages whenever a scene or show is called using the front panel switches. This allows you to use the Show Designer 1 as the source when recording a MIDI performance. Rather than trying to calculate which note number to use for a scene, simply record the output from the Show Designer 1 while calling scenes.

You can have access to more than 96 scenes by using extra MIDI channels. When you select the MIDI channel from the setup menu you can also enable additional channels by setting "Extra Channels" to a value of 1 - 9. When "Extra Channels" is set to 0, you will only receive on the selected MIDI channel. When set to 1, you will receive on the selected MIDI channel as well as the next higher MIDI channel. You can use up to 9 additional MIDI channels. Each channel will address six additional pages of scenes. If for example you are using MIDI channel 1 and you have enabled 2 extra channels, scene pages 1-6 will use MIDI channel 1, scene pages 7-12 will use MIDI channel 2 and scene pages 13-18 will use MIDI channel 3. Each MIDI channel will use the same note numbers 0-95.

When a MIDI note message is received it will call a scene or start a show that corresponds to that note number. If the same note number is received while the scene or show is running, the scene or show will be turned off. If a different note number is received, a new scene or show will replace the one that is running.

MIDI [continued]

MEMORY BACKUP WITH MIDI

You can also use MIDI to back up the memory to a MIDI recording system that is capable of receiving MIDI system exclusive messages. Most PC based MIDI sequencers offer this feature. Consult the instructions for your MIDI recorder on how to record a system exclusive memory dump. Once the recorder is set to record, go to the menu selection in Show Designer 1 labeled "Send Memory File". From there, use the **+** switch to select "Send Memory File to MIDI Port". Next press "ENTER" to start the transmission. An encoded copy of the entire memory will be transmitted to the MIDI out. The time to send the memory will vary depending on the amount of memory currently in use. This sends a copy of the entire memory including all fixture settings, scenes and shows with all of their components.

MEMORY RESTORE WITH MIDI

To restore the memory using MIDI, connect your MIDI recorder output to the Show Designer MIDI input and playback the memory dump. The MIDI port is always listening for new messages unless the Show Designer 1 is in record mode (Record LED flashing). As soon as the message is received the display will show "RECEIVING FILE". The length of time it takes to update the memory will vary depending on the size of the file. You do not have to call any of the menu functions on the Show Designer 1 before receiving the file. If any errors have been detected, Show Designer 1 will prompt you to retry. You can also use MIDI to transfer the memory from one Show Designer to another.

USING THE COM PORT

The RS-232 port on the Show Designer 1 can be used to connect to a Windows PC to backup memory and update firmware. This requires a USB to null modem cable. We recommend using the Startech ICUSB232FTN cable from www.startech.com. If using another brand USB to RS232 cable, make sure it is the "null modem" style. Connect the USB end of the cable to a USB port on your Windows PC and the RS232 end to your Show Designer's RS232/COM port. If connecting for the first time, allow the PC to install the correct driver before proceeding. You will also need to download the Windows app "SD File Transfer" from Elation's web site at www.elationlighting.com. Look in the downloads section on the Show Designer One page. This is where you will also find the latest firmware file. After you have installed the program, follow the directions on the help file that is included with it.

MEMORY BACKUP

To backup memory using the SD File Transfer program, follow the help instructions for "Receive file from SD". On the Show Designer 1, go to the menu selection "save memory file" and press the "enter" switch. The display will read, "Save memory file to computer port". Press "enter" to start the transmission from Show Designer 1 to your PC. A copy of the entire memory will be sent to your PC. When the file transfer is finished, Show Designer 1 will return to its startup display. The time needed to send the memory file will vary depending on the amount of memory currently in use.

MEMORY RESTORE

To copy a memory file from your PC to Show Designer 1, go to the menu selection in Show Designer 1 "load memory file". Press "enter" and the display will read "Waiting for file from COM port". Show Designer 1 is now ready to receive the file from your PC.

From the SD File Transfer program, follow the instructions for "Send file to SD". The Show Designer 1 display will read "receiving file" after you start the transmission. After the file has been sent, Show Designer 1 will reboot and show its startup display. If any errors have been detected, Show Designer 1 will prompt you to retry. If you receive an error message, check your connections and try again. The length of time it takes to update the memory will vary depending on the amount of memory in use.

USING THE COM PORT [continued]

UPDATING THE FIRMWARE

The firmware that runs Show Designer 1 can be updated with new versions available from the Elation Lighting web site at www.elationlighting.com. Look in the downloads section of the Show Designer 1 page. New firmware will include new features as well as updates to the fixture library.

To copy the new firmware file from your PC to Show Designer 1, go to the Show Designer 1 menu "update software". Press "enter" and the display will read, "Download new program". Show Designer 1 is now ready to receive the file from your PC. Note: As a shortcut you can hold down the "menu" and "erase" switches while powering up Show Designer 1.

Using the SD File Transfer program, follow the help instructions for "Send file to SD". Make sure that the file has been unzipped before trying to send it (the file should end with .txt not .zip). The Show Designer 1 display will read, "receiving new program" after you start the transmission. After the file has been sent, Show Designer 1 will reboot and show its startup display. If any errors have been detected, Show Designer 1 will prompt you to retry. If you receive an error message, check your connections and try again. It will take several minutes to transfer the file.

FIXTURE LIST

The following list contains the lighting fixtures loaded in the Show Designer fixture library. Models with (*) next to the name means the factory presets are included.

Generic Fixtures:
Generic Dimmer (1 Channel)
32 DMX Channels
RGB *
RGBA *
RGBW *
RGBWA *
RGBWAUv *
RGBD *
RGBAD *
RGBWD *
RGBWAD *
RGBWAUvD *

ELATION Fixtures:
ACL 360I - 16 CHNL.
ACL 360I - 20 CHNL.
ACL BAR/CURTAIN - 4 CHNL. MACROS
ACL BAR/CURTAIN - 6 CHNL. *
ACL BAR/CURTAIN - 8 CHNL. *
ACL BAR/CURTAIN - 10 CHNL. *
ACL BAR/CURTAIN - 12 CHNL. *
ACL 360 BAR/ROLLER/MATRIX - 17 CHNL.
ACL 360 BAR/ROLLER/MATRIX - 19 CHNL.
ACL BAR - 32 CHNL.
COLOUR CHORUS 72 - 6 CHNL. *
COLOUR CHORUS 72 - 11 CHNL. HSI
COLOUR PENDANT - 6 CHNL. RGBWI+ *
COLOUR PENDANT - 8 CHNL.
COLOUR PENDANT - 10 CHNL. *
DTW BLINDER 350 - 7 CHNL.
DTW BLINDER 350 - 9 CHNL.
DTW BLINDER 700 - 13 CHNL.
DW PROFILE - 8 CHNL.
E SPOT III - 14 CHNL. *
E SPOT III - 16 CHNL. *
E SPOT III - 20 CHNL. *
EMOTION - 32 CHNL.
FUZE PAR Z60/Z120 - 6 CHNL. *
FUZE PAR Z60/Z120 - 13 CHNL. *
FUZE PAR Z175 - 5 CHNL.

FIXTURE LIST [continued]

ELATION Fixtures:
FUZE PAR Z175 - 6 CHNL.
FUZE PAR Z175 - 7 CHNL. *
FUZE PAR Z175 - 8 CHNL. WITH SHUTTER
FUZE PAR Z175 - 9 CHNL. *
FUZE PAR Z175 - 10 CHNL. *
FUZE PAR Z175 - 11 CHNL. HSI *
FUZE PAR Z175 - 13 CHNL. *
FUZE PAR Z175 - 14 CHNL. *
FUZE WASH Z120 - 15 CHNL.
FUZE WASH Z120 - 16 CHNL. *
FUZE WASH Z120 - 17 CHNL. *
FUZE WASH Z120 - 19 CHNL. *
PLATINUM BEAM 5R EXTREME - 12 CHNL.
PLATINUM BEAM 5R EXTREME - 14 CHNL.
PLATINUM BEAM 5R EXTREME - 18 CHNL.
PLATINUM HFX - 17 CHNL.
PLATINUM HFX - 19 CHNL.
PLATINUM HFX - 26 CHNL.
PLATINUM SPOT III - 18 CHNL. *
PLATINUM SPOT III - 20 CHNL. *
PLATINUM SPOT III - 27 CHNL. *
PLATINUM SPOT LED II - 14 CHNL. *
PLATINUM SPOT LED II - 16 CHNL. *
PLATINUM SPOT LED II - 20 CHNL. *
PROTRON 3K - 4 CHNL.
PROTRON 3K COLOR - 8 CHNL. *
RAYZOR 360Z - 20 CHNL.
RAYZOR 360Z - 26 CHNL.
RAYZOR 360Z - 32 CHNL.
RAYZOR Q7 - 15 CHNL.
RAYZOR Q7 - 17 CHNL.
RAYZOR Q7 - 29 CHNL.
RAYZOR Q12 ZOOM - 17 CHNL.
RAYZOR Q12 ZOOM - 20 CHNL.
RAYZOR Q12 ZOOM - 28 CHNL.
SIXBAR 500/1000 - 11 CHNL. *
SIXBAR 500/1000 - 13 CHNL. *
SIXPAR 100/200/300 - 8 CHNL. *
SIXPAR 100/200/300 - 12 CHNL. *
SNIPER 2R - 14 CHNL. *
SNIPER 2R - 16 CHNL. *
SNIPER 2R - 18 CHNL. *
SNIPER 2R - 20 CHNL. *

FIXTURE LIST [continued]

ELATION Fixtures:
SNIPER PRO - 25 CHNL. *
SNIPER PRO - 27 CHNL. *
ZCL 360I - 17 CHNL.
ZCL 360I - 21 CHNL.
ZCL 360 BAR - 19 CHNL.

ADJ Fixtures:
ASTEROID 1200 - 20 CHNL.
BOOM BOX FX1/FX2 - 3 CHNL.
BOOM BOX FX2 - 19 CHNL.
BOOM BOX FX1 - 21 CHNL.
PAR ALL - 8 CHNL.
FLAT PAR CWWW18/9 - 5 CHNL.
FLAT PAR TRI7X/18X - 7 CHNL.
FOCUS SPOT ONE - 17 CHNL.
FOCUS SPOT TWO - 18 CHNL.
FOCUS SPOT THREE Z - 21 CHNL.
FUN FACTOR LED - 8 CHNL.
GALAXIAN
GALAXIAN 3D
GALAXIAN GEM LED - 5 CHNL.
GALAXIAN SKY
H20 DMX PRO - 3 CHNL.
INNO COLOR BEAM LED - 13 CHNL.
INNO COLOR BEAM Z19
INNO POCKET BEAM Q4 - 10 CHNL.
INNO POCKET BEAM Q4 - 13 CHNL.
INNO POCKET FUSION - 11 CHNL.
INNO POCKET ROLL
INNO POCKET SPOT - 11 CHNL.
INNO POCKET SPOT LZR - 12 CHNL.
INNO POCKET SPOT LZR - 15 CHNL.
INNO POCKET SPOT TWINS - 23 CHNL.
INNO POCKET WASH - 9 CHNL.
INNO POCKET WASH - 21 CHNL.
INNO POCKET Z4 - 16 CHNL.
INNO POCKET Z4 - 22 CHNL.
INNO ROLL LED - 8 CHNL.
INNO SCAN LED - 11 CHNL.
INNO SPOT PRO
JELLY DOME/FISH - 3 CHNL.
MATRIX BEAM LED - 4 CHNL.
MEGA BAR/PANEL/PAR - 7 CHNL.

FIXTURE LIST [continued]

ADJ Fixtures:
MEGA BAR - 11 CHNL.
MEGA GO BAR 50 RGBA - 8 CHNL. *
MEGA GO FLOOD PAR HO - 7 CHNL. *
MEGA GO PAR64 PLUS - 10 CHNL. *
MEGA PANEL LED - 26 CHNL.
MEGA PAR PROFILE PLUS - 10 CHNL. *
MEGA PIXEL ARCH - 7 CHNL. *
MEGA PIXEL LED - 7 CHNL. *
MEGA QA GO - 8 CHNL. *
MEGA QA PAR38 - 8 CHNL. *
MEGA QPLUS GO - 8 CHNL. *
MEGA-STROBE/DMX
MEGA TRIPAR PROFILE PLUS - 10 CHNL. *
MICRO WASH RGBW - 8 CHNL.
MICRO WASH WWCW - 5 CHNL.
MONSTER BEAM
MYSTIC LED
NUCLEUS PRO - 22 CHNL.
P36 LED, P64 LED PLUS *
P56P LED
PENTA PIX - 11 CHNL. *
PENTA PIX - 27 CHNL.
PINSPOT LED QUAD DMX *
PROFILE PANEL RGB
PUNCH LED PRO - 7 CHNL.
QUAD GEM DMX - 4 CHNL.
QUAD GEM DMX - 7 CHNL.
QUAD PHASE
REVO 1,2,3
REVO 4
REVO BURST
REVO RAVE
REVO SCAN LED
REVO XPRESS
RICOCHET - 15 CHNL.
ROYAL 3D II
SABER SPOT RGBW - 12 CHNL. *
STARBURST - 12 CHNL. *
STINGER
STINGER GOBO - 14 CHNL.
STINGER II - 9 CHNL.
STINGER STAR - 14 CHNL.
SUPER SPOT LED

FIXTURE LIST [continued]

ADJ Fixtures:
SWEEPER BEAM LED - 6 CHNL.
SWEEPER BEAM LED - 15 CHNL.
TRIPLEFLEX - 9 CHNL.
ULTRA BAR 6 - 8 CHNL. *
ULTRA BAR 6 - 11 CHNL.
ULTRA BAR 12 - 20 CHNL.
ULTRA HEX BAR 6/12 - 12 CHNL. *
ULTRA HEX BAR 6 - 18 CHNL.
ULTRA HEX PAR3 - 12 CHNL. *
ULTRA KLING BAR 18 - 9 CHNL. *
UV FLOOD 36 - 3 CHNL.
UV LED BAR20 - 2 CHNL.
VIZI BEAM 5R - 12 CHNL.
VIZI BEAM 5RX - 19 CHNL.
VIZI BEAM RXONE - 17 CHNL.
VIZI BSW 300 - 20 CHNL.
VIZI HEX WASH7 - 21 CHNL.
VIZI HYBRID 16RX
VIZI LED SPOT - 12 CHNL.
VIZI Q WASH7 - 19 CHNL.
VIZI ROLLER BEAM 2R - 18 CHNL.
VIZI SCAN LED PRO - 12 CHNL.
VIZI SPOT 5R - 13 CHNL.
VIZI SPOT LED PRO - 14 CHNL.
VIZI WASH LED 108
WARLOCK
WIFLY BAR QA5 - 9 CHNL. *
WIFLY BAR QA5 - 22 CHNL.
WIFLY CHAMELEON - 11 CHNL. *
WIFLY EXR DOTZ PAR - 9 CHNL. *
WIFLY EXR HEX PAR - 12 CHNL. *
WIFLY EXR HEX5 IP - 12 CHNL. *
WIFLY EXR QA5 IP - 11 CHNL. *
WIFLY EXR QA12BAR IP - 10 CHNL. *
WIFLY EXR QA12BAR IP - 14 CHNL.
WIFLY PAR QA5 - 8 CHNL. *
X-COLOR LED PLUS
X-MOVE LED PLUS R
X-SCAN LED PLUS
38P LED PRO - 7 CHNL.
46HP LED PRO - 7 CHNL.
64B,P LED PRO - 7 CHNL.

FACTORY COLOR PRESETS

The following list contains the color presets for generic and other fixtures that have RGB channels starting at channel #1.

Page "F1"

 1 - Red
 2 - Green
 3 - Blue
 4 - White
 5 - Yellow
 6 - Cyan
 7 - Magenta
 8 - Orange
 9 - Gold
10 - Turquoise
11 - Sea Green
12 - Pink
13 - Hot Pink
14 - Violet Red
15 - Dodger Blue
16 - Sky Blue

Page "F2"

 1 - Pale Turquoise
 2 - Aquamarine
 3 - Pale Green
 4 - Spring Green
 5 - Goldenrod
 6 - Salmon
 7 - Coral
 8 - Dark Orchid
 9 - Firebrick
10 - Purple
11 - Plum
12 - Maroon
13 - Deep pink
14 - Thistle
15 - Lavender
16 - Blush

TECHNICAL SPECIFICATIONS

SIZE / WEIGHT

Length: 19.0" (482mm)

Width: 5.25" (133.4mm)

Vertical Height: 4.75" (121mm)

Weight: 7.0 lbs. (3.2 kg)

ELECTRICAL

9VDC

APPROVALS

CE

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

OPTIONAL ACCESSORIES

ORDER CODE	ITEM
AC3PDMX5PRO	5 ft. (1.5m) 3pin PRO DMX Cable
	Additional Cable Lengths Available