

*American DJ*®

*Show Designer*

Software Revision 2.08

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## **OVERVIEW**

Show Designer is a new lighting controller designed to control the many intelligent moving stage lights that are now available. The approach of this controller is to try to simplify the programming process as much as possible while still offering a high level of control at a low cost.

Sixteen lighting fixtures of up to 32 channels each can be controlled using the DMX 512 protocol. Unlike many small lighting controllers, control of all 512 DMX channels is possible. A selection of the most popular fixtures is available to assign to any of the 16 fixtures as well as several generic settings.

Groups of like fixtures can be defined within a single fixture provided that the number of channels per fixture will allow them to fit in a 32 channel space. For example, fixture 1 can be made up of 8 fixtures of the same type that use 4 channels each. This allows Show Designer to control up to 128 fixtures of 4 channels each or 64 fixtures of 8 channels each. Individual control of each fixture is possible using the faders which are arranged in 4 banks of 8.

Non-volatile memory is provided for Presets, Chases, Scenes, and Shows. Presets are preprogrammed channel levels for any number of channels. Chases are recordings of sequences of movements or changes within fixtures or across groups of fixtures. Scenes are recordings of what the stage currently looks like including all chases or static fixture settings, and Shows are timed sequences of scenes.

Programming is quick and simple. Fixture selection, channel changes, Presets and Chases are used to achieve a look on stage. This can then be saved as a Scene. A Scene is defined as the entire state of the stage which can include channel levels, any number of presets as well as up to 8 chases running simultaneously. Saving the scene is as simple as pressing the Record switch and then selecting a page number and a scene number. Up to 1024 scenes can be saved this way. Editing scenes is also simple. Call the scene, make any changes then save it.

The operating system uses flash memory instead of an EPROM so that the system software can be updated using any PC. Software updates will be made available on the American DJ web site at [www.americandj.com](http://www.americandj.com).

Show Designer is packaged in a 3 space rack mount chassis that has a 45 degree angle cut into the rear panel so that it can sit on a flat surface and face the operator at a convenient viewing angle.

### ***REAR PANEL CONNECTIONS***

Rear connectors include:

- A 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.
- A DMX 512 output using a 3 pin female XLR connector. Next to the connector is a polarity switch for pins 2 and 3. Some lighting fixtures send data minus on pin 2 and some on pin 3. The more commonly used 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. MIDI is used for external calling of scenes and shows and for memory backup.

- A DB9 connector configured for RS232. This is used for connection to a trackball or to a PC to update the software or backup the memory.
- An audio input. This is used for syncing chases to an external audio source. This is a line level input for connection to the line output of a mixing console. Do not connect speaker level signals to this.

## ***FRONT PANEL***

Front panel features include assorted switches for programming, Eight 60mm faders for direct control of lighting fixture channels, a wheel for pan, tilt and data entry and an LCD display for programming.

## **MENU**

System configuration is accomplished using the menu switch, the menu control switches and the LCD. Pressing “Menu” brings up the message “PRESS ENTER TO” followed by a choice of menu items. You can cycle through the menu choices using the cursor switches, the + and - switches or the data wheel. (The Data LED next to the wheel must be lit for the data wheel to work.) Pressing “Enter” when the desired menu item is displayed brings that function to the LCD. Once a menu item is selected, in general the cursor switches allow you to select a value on the display to edit and the + and - switches or the data wheel allow you to edit the value. “Enter” must always be pressed following any data entry to record the change. This will allow you to cycle through all of the possible choices before changing anything.

Several of the menu items are hidden to prevent unauthorized or accidental changes to the memory. The memory lock/unlock feature is hidden as well as the erase all memory feature. These choices can only be selected by pressing and holding down the “Add” switch while selecting the last items 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.

### ***CHOOSE FIXTURES***

This menu item allows you to select from a list of lighting fixtures in the fixture library. With the cursor under the fixture number use the + or - switch or the data wheel to select a fixture number from 1 to 16. Move the cursor to the bottom line of the display to choose a fixture type for this fixture number. You must press “Enter” to record the choice. You can press “Erase” to select “No Fixture” which is also one of the fixture choices. If auto patch is enabled, a warning will appear telling you that some of the fixture DMX start addresses may be changed. Press “Yes” to confirm or “No” to exit. After pressing “Yes” the message “DONE” will appear for 1 second. If auto patch is enabled, the start addresses of all higher numbered fixtures will be adjusted to accommodate the new fixture.

### ***PATCH FIXTURES***

This menu item allows you to turn auto patch on and off, to view the start addresses for each fixture and to edit the start addresses for each fixture. Auto patch must be turned off to be able to change the start addresses of the fixtures. To turn auto patch on or off, place the cursor under the words “ON” or “OFF” next to “AUTO PATCH”, then use the + or - switch to select on or off. 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 start addresses may change. Press “Yes” to proceed or “No” to exit. Auto patch will assign start addresses to each fixture number in ascending order with each DMX start address immediately following the last channel of the previous fixture.

**Note:** Some of the fixtures in the list have “dummy” channels added to them in order for their start addresses to be aligned with the banks of 8 faders. For example some 12 and 14 channel fixtures will actually use 16 channels so that when grouped together under one fixture number, fader bank 1 and 2 will control one fixture and banks 3 and 4 will control the other. Check the start addresses as described in the next paragraph if you are using auto patch to see what addresses have been assigned to each fixture or group of fixtures.

By moving the cursor to the bottom line under the fixture number you can cycle through fixtures 1-16 and see the starting address for each fixture. The address (001-512) will appear next to the word “CHNL” The word “OFF” will appear next to “CHNL” if there is no fixture currently assigned to that particular fixture number. You can move the cursor under any of the three digits of the channel number. If auto patch is on you will not be able to change the value of the start address. If auto patch is off you can use the + and - switches or the data wheel to change the start address for each fixture. You must press “Enter” following any edit to record the change. The message “DONE” will appear for 1 second after pressing “Enter”.

### **MULTI FIXTURE**

Show Designer supports intelligent lighting fixtures which use up to 32 channels. Since most fixtures use far less than 32 channels, Show Designer will allow you to control groups of smaller fixtures that are of the same type under a single fixture number. For example if you have assigned a 4 channel intelligent light to fixture number 1 you can multi this to 8 fixtures since 4 channels divides into 32 channels 8 times. When fixture 1 is enabled you will use all 32 control channels of fixture 1 to access these 8 fixtures. Since show designer supports 16 fixtures of 32 channels each you can control up to 128 separate 4 channel fixtures this way.

You control the individual channels of each fixture within the group using the 4 banks of 8 faders. When using the pan and tilt wheel or the trackball, all of the fixtures within the group will respond if they have a pan and tilt feature. Set individual pan and tilt levels using the faders.

To assign multiple fixtures, move the cursor to the fixture number and use the + and - switches or the data wheel to select a fixture. Move the cursor to the number next to the “X” (which stands for multiply) then increment or decrement this value. You can only choose numbers between 1 and the maximum number of fixtures that will fit within 32 channels. If there is no fixture assigned to this fixture number the multi value will be 0 and cannot be changed. 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 exit.

### **MODIFY FIXTURE**

This feature allows you modify the attributes of a lighting fixture after you install it from the fixture library. You can also use this to create a new fixture that isn’t in the library. To do this you must first select a fixture as described above in the “Choose Fixture” section. 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. Use the “Copy Fixture” feature as described in the next section to duplicate your new fixture.

Once installed, there are nine fixture attributes which Show Designer uses to define a lighting fixture that you can modify. The attributes in order are: fixture name, number of channels, black channel, black value, pan channel, pan fine channel, tilt channel, tilt fine channel and crossfade mode. After you have entered the “Modify Fixture” menu, use the cursor switches to move the underline cursor to the fixture number (displayed as FIXT 01) to select which fixture you want to modify. Use the + and - switches or the data wheel to select the fixture number. Next move the cursor to the “attribute” which is displayed immediately to the right of the fixture number. Select from the nine fixture attributes which are described in the following paragraphs. Next move the cursor to the bottom line of the display to select the value for

the attribute you are changing. Finally you must always press “Enter” to record any changes you make to any attribute. The message “DONE” will appear in the display when the change has been recorded.

**NAME** is the fixture name that appears whenever you select or deselect a fixture. You may want to modify this on all of your fixtures to show fixture purpose or location such as “MAX left” or “DIMMERS 1-16”

**CHANNELS** is the total number of channels for 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 if you drastically change the number of channels for a fixture that has already been set up and is in use. Fixture attributes such as black channel, pan or tilt will also be automatically disabled if you select a number that is smaller than the channels that are already assigned to those attributes. For example if you 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 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 value that will be sent to the selected black channel(s). This will accommodate fixtures that use the gobo wheel for blackout and that use a value other than 0 to set the gobo wheel to blackout.

**PAN CHANNEL** is the channel used by the fixture for pan. 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.

**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.

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

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

**FADE MODE** is used to set the crossfade method for each of the fixture’s channels. This attribute is displayed on the top line of the display as “FADE 01”. The number represents the channel number within the fixture. Use the + and - switches or the data wheel to select the channel desired. Once the channel is selected move the cursor to the bottom line and 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.

“Crossfade” will make the channel fade between levels when changing scenes. The crossfade time will vary from scene to scene depending on how it was programmed for that scene. 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, they will cause the wheels to step through all positions between the start and end positions of a long fade.

“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 long crossfades.

“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.

### ***COPY FIXTURE***

This allows you to copy the fixture settings from one fixture number to another. Use the + and - switches or the data wheel to select a fixture number to copy from on the top line of the display. Move the cursor to the fixture number on the bottom line of the display to select a fixture number to copy to. 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 exit. 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 settings. Press “Yes” to copy over it or “No” to exit.

### ***SET DMX SPEED***

Some lighting fixtures are unable to accept a DMX512 signal at a fast refresh rate. This menu item allows you to slow down the refresh rate by adding some extra time between each byte of channel information in the DMX transmission. Use the + or - switch to select between fast and slow then press “Enter”.

**Note:** There will be no noticeable difference in the response of the lighting fixtures between the fast and slow settings. Try the slow setting if some fixtures appear to be losing the signal intermittently.

### ***SET MIDI CHANNEL***

This allows you to select the MIDI channel that Show Designer will receive on. Select from 1-16 using the + or - switch and press enter. On the bottom line of the display you can also enable extra MIDI channels by moving the cursor to the number and use the + or - switch to select from 0 - 9. Extra MIDI channels will allow you to use more than one MIDI channel to call additional scenes and shows. If extra is set to 0, only messages on the selected MIDI channel will be received. If set to 1 or higher, messages can be received on the next consecutive MIDI channels as well. Read the section on MIDI for more info.

### ***SET SHOW TM DISP***

This is an abbreviation for “Set Show Time Display”. This allows you to select the type of timing display when recording and playing shows. Use the + or - switch to select between “Real Time” or “Hold Time”. “Real time” displays the show clock in hours, minutes and seconds from the start of the show. “Hold time” displays the show clock as the length of time to hold the current step before calling the next one.

### ***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 varies depending on the size and complexity of the scenes.

### ***SEND MEMORY FILE***

This allows you to back up the memory to a PC using either the RS232 port or the MIDI port on Show Designer. Pressing the + or - switch selects between computer port (RS232) or MIDI port. Pressing “Enter” starts the data transmission. The contents of the memory are encoded in text format and can be recorded using a MIDI sysex recorder attached to the MIDI port or by using Hyper Terminal in Windows 95 on a PC attached to the RS232 port. Read the sections at the end of this manual on how to back up the memory.

### ***LOAD MEMORY FILE***

This allows you to update the memory from a backup that was made using the RS232 port and a PC. Pressing “Enter” configures the port for memory read and waits for the file to be sent from Hyper

Terminal running on Windows 95. Read the sections at the end of this manual on how to back up and restore the memory.

### **UPDATE SOFTWARE**

This menu item allows you to update the software inside Show Designer from a computer connected to the RS232 computer port. The message “DOWNLOAD NEW PROGRAM” will appear when you press “Enter”. Show Designer will wait for the computer to send the proper file. The message “RECEIVING NEW PROGRAM” will appear as the computer sends the new software file. Upon completion, the system will reboot. The only way to exit this menu item is to turn the power off. You can also call this menu item during power up by pressing and holding “Menu” and “Erase” together while turning on the power.

To update the software you must use a PC running windows 95 along with a serial lap link cable. Read the section at the end of these instructions for more details.

### **LOCK/UNLOCK MEMORY**

This is one of the hidden menu items that can only be found by holding the “Add” switch while cycling through the menu selections.

This 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 the memory is locked and anyone presses the record switch. All other menu items that are not hidden will also be locked out to protect the memory.

To lock or unlock the memory, use the + or - switches to select the desired state then press enter.

### **ERASE ALL MEMORY**

This is another one of the hidden menu items that can only be found by holding the “Add” switch while cycling through the menu selections.

This menu item allows you to clear the entire battery backed memory of Show Designer. This does not erase the software that runs the system but erases all of the scene, chase and show data and the system parameters such as fixture assignments. The message “ARE YOU SURE? HOLD “YES” 5 SEC” will appear. 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 controls and their functions.

### **NUMBER SWITCHES**

There are 16 number switches which are multi-purpose. Their function depends on which of the 6 function switches just to the right of the number switches are pressed. Only one function is enabled at a time and the LED for the particular function will be lit when enabled. The following is a description of each function.

### **FIXTURE SWITCH**

This switch allows you to select which fixtures are “live” for programming. The number switches 1-16 are used to select the active fixtures. When a fixture is “live” it can be controlled using the channel control faders or the pan and tilt wheel or the trackball. A live fixture can also be controlled using a preset. A

fixture does not have to be live to be controlled by scenes and shows. If a fixture is not live it will only be disconnected from the manual controls, it is not turned off.

Any number of fixtures can be live. Pressing a number switch toggles the fixture and the corresponding LED on or off. Pressing and holding a single number switch for about 1 second will turn all other fixture LEDs off and solo the selected fixture LED. If no fixture type has been assigned to a particular fixture number its LED cannot be turned on. When a fixture is selected its name will appear in the LCD.

**Note:** Pressing the left or right switch on a mouse or trackball that is connected to Show Designer will shift the fixture selection left or right. Pressing and holding one of the trackball switches will auto repeat the shift.

## **CHANNEL FADERS**

Just below the number switches are 8 faders. These are used to control the individual channels within each fixture. With these you can address up to 32 channels per fixture by using 4 banks of 8. The bank switch to the left of the faders is used to select which bank of 8 channels is currently active. An LED to the left of the faders shows the current bank. The channel numbers for 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 then some banks and some faders will not be used. Before a fixture can be addressed by the channel faders the fixture must be enabled “live” by turning on the fixture LED using the number switches in fixture select mode. Any number of fixtures can be controlled at once. If for example all fixtures are enabled, moving channel fader 1 with bank 1 selected will change channel 1 on every fixture.

If you are using the “multi” fixture feature of Show Designer then the channel faders are used to control each of the individual fixtures within the group. If for example you have defined 8 fixtures of 4 channels each, channel faders 1-4 will control the first fixture of the group, faders 5-8 the second and so on.

When you move a fader, its channel number and value will be displayed on the LCD.

## **BANK SWITCH**

The bank switch selects the current bank of 8 channel faders. This allows you to 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 channel number of the fader for the selected bank. As a convenience the bank select will only go as high as needed for the size of the currently selected fixtures.

## **WHEEL**

The rotary wheel at the center of Show Designer is multi-function. It can be used for data entry when using the setup menus, and for controlling chase speed, crossfade times, pan and tilt. There are 6 switches next to the wheel which are used to select the current function of the wheel.

When “data” is selected, the wheel duplicates the action of the + and - switches. This allows for faster data entry within the various setup menus.

When “speed” is selected, the wheel is used for programming and adjusting chase speed.

When “fade” is selected, the wheel is used for programming and adjusting crossfade times between scenes or chase steps.

When “pan” or “tilt” is selected, the wheel is used for controlling pan or tilt for any selected fixtures. The “fine” switch will affect the resolution of the pan or tilt movement. When “fine” is on, the wheel will



move the pan or tilt using the smallest possible steps for any selected fixture. When fine is not on, pan or tilt will increment or decrement in steps of 5 for fixtures that use 1 channel for pan or tilt or control the coarse channel for fixtures that use a coarse and fine channel for pan or tilt. If there are multiple fixtures within a selected fixture number, all fixtures in the group will respond to the pan and tilt changes.

## ***TRACKBALL***

A trackball, mouse or any similar pointing device can also be used for controlling pan and tilt. The device must be either Microsoft or Logitech compatible. It is plugged into the 9 pin connector on the rear panel of Show Designer. As with the wheel, 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.

## ***BLACK SWITCH***

Pressing “Black” will stop all activity and cause a blackout on the appropriate channels of 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 will turn off all channels. The LED will remain on to indicate that a blackout was called. Pressing the switch a second time will turn the LED off and restore the scene to its previous settings.

Pressing and holding black for 2 seconds will force all DMX channels to 0 and clear the scene edit memory for a clean start when creating scenes.

# **SCENES**

## ***RECORDING SCENES***

A scene is a recording of the state of the entire stage. Individual channel levels as well as presets and chases can make up a scene. Show Designer keeps track of all the actions you perform to make the stage appear as it does. For example, if you change channel levels using the faders or the trackball then call a chase then call a preset, these events which affect the look of the stage are always saved in temporary memory so that you can at any time record them as a scene. This also means that you can call a scene that is already recorded, modify it and then save it as a new scene at a different location or back to the same location that it was originally stored.

Once you have a look on stage that you want to save as a scene, save it by pressing “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 on the LCD under each character of the name, then use the + or - switch or the data wheel to modify the character. Move the cursor under the fade time or put the wheel in Fade mode to change the crossfade time for this scene.

Finally select the number where you want to store the scene. You can use the page switches to select from pages 1 to 64 which will allow 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”.

**Note:** It can take up to 30 seconds to overwrite or erase a scene depending on how much of the memory is currently filled.

If at any time you wish to exit record mode without saving anything, press “Record” and you will exit record mode.

## ***ERASE SCENE***

To erase an existing scene, press “Record” then “Scene” then “Erase”. As when recording a scene, all LEDs that contain a scene will light. Next select the scene number to erase. That scene will be called on stage and its name will appear in the LCD. The message “Erase This?” will also appear. 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” again to exit record mode.

**Note:** It can take up to 30 seconds to overwrite or erase a scene depending on how much of the memory is currently filled.

## ***RECALLING SCENES***

Once a scene is recorded it can be recalled by turning on the “Scene” LED, and then selecting the desired page and then selecting 1 of 16 number switches. Only one scene can be active at a time since a scene is the state of the entire stage. Pressing the scene number that is currently lit will turn off that scene and set all channels to 0. You can also call scenes using MIDI. Read the section later in this manual on MIDI for more information.

## **PRESETS**

A preset is a recording of selected channel levels within selected fixtures. Presets allow for fast and easy programming giving you instant access to colors and beam settings without having to search through channel levels with the faders. Presets also save scene memory because many scenes can reference the same preset.

There are two sets of preset memories provided, “Color” and “Beam”. Show Designer allows you to record up to 256 of each type and in addition provides 16 pre-recorded presets of each type referred to as “factory presets”. The words color and beam are for convenience only, in actuality you can record any type of effect or channel setting into each type of preset.

Unlike scenes, presets do not record the entire stage, they only record the channels that you select while in preset record mode. This allows you to record things such as color only or gobo only or beam position only. Once recorded they can be recalled and layered to make a scene.

**Note:** Factory presets are not available for all of the fixtures in the Show Designer library. Some will be added in later software updates.

## ***RECORDING PRESETS***

Before recording a preset you must first do some preparation. In order to be able to view features such as color or gobo you will need to first set some channel levels in order to see the color or gobo to be recorded. Do this by selecting the fixture or fixtures to be used 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 recording.

To start recording a preset press “Record”, its LED will flash. Next press either “Color” or “Beam”, this LED will also flash. The page display will light and any number locations that already contain presets will also light showing you where there are already presets recorded. There are 16 pages of memory locations available for each type of preset. Page 0 is reserved for factory presets and can’t be recorded on.

Next adjust the channel or channels that you want to include in the preset. These adjustments will be recorded into the preset so take care not to move any channels that you don’t want included.

**Note:** If when recalling a preset, some channels are changed that weren't intended as part of the preset, chances are that a fader was bumped or the trackball was bumped and those channels were accidentally added when the preset was being recorded. If this happens, go back and rerecord the preset.

If you need to turn different fixtures on or off while recording the preset you can press "Fixture" and then use the number switches to toggle any fixtures on or off. Press "Fixture" again to turn off the fixture LED to go back to 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 on the LCD under each character then use the + or - switch or the data wheel to modify the characters of the name.

To store the preset in memory, select the number where you want to store it. 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 16 which will allow you to store up to 256 color presets and 256 beam presets. Page 0 is reserved for factory presets.

**Note:** It can take up to 30 seconds to overwrite or erase a preset depending on how much of the memory is currently filled.

After you have stored the preset, Show Designer remains in preset record mode allowing you to continue to record more presets. Any channel changes that you have made since entering preset record mode will be included in any additional presets.

To exit record mode, press "Record", the LEDs will stop flashing.

### ***ERASE PRESET***

To erase an existing preset, press "Record" then "Color" or "Beam" 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 LCD. The message "Erase This?" will also appear. 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 up to 30 seconds to overwrite or erase a preset depending on how much of the memory is currently filled.

### ***EDITING PRESETS***

To edit a preset that has already been recorded, press "Record" followed by "Color" or "Beam". 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 has something recorded on it. The 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 have precedence.

## ***RECALLING PRESETS***

To add a preset to the current scene on stage, first select the fixtures that you want to control with the preset. Next, press the “Color” or “Beam” switch, select the page of the desired preset then use the number switches to select 1 of 16 presets on that page. Unlike scenes, you can have as many presets turned on as you want as long as the presets are controlling different channels. If two presets control the same channels, the last preset that was turned on will have control. If a preset has been completely canceled by another, it will automatically be switched off. Likewise if a chase has been completely canceled by a preset it too will be switched off automatically. When you turn a preset off, any channels that are being controlled by the preset will be set to 0.

A fixture must be enabled to include it in the preset even if it was part of the preset when you recorded it. This allows you to put all fixtures into a preset but only control 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. Then you can select the fixtures you want to be red by calling the “Red” preset which will change only those fixtures.

When selecting preset page 0 the letters “FP” for “factory preset” will appear in the page display. These presets give you quick access to colors and gobos and are only available for certain fixture types. They are prerecorded and can’t be erased or changed.

## **CHASES**

Show Designer allows you to record up to 256 chases and in addition provides 16 pre-recorded chases referred to as “factory chases”. A chase is a sequence of steps that can be played back creating motion or quick repetitive changes on stage. Each chase step is a recording of selected channel levels and or presets. The steps are then played back in a continuous loop at a programmed chase speed.

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

**Note:** Factory chases are available starting with revision 1.10 of the Show Designer software. If you have an earlier version, download version 1.10 or later from the American DJ website and install it. Refer to the software update installation instructions in this manual.

## ***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 apertures as needed. These things will not be recorded into the chase if they are done before recording.

To start recording the chase press “Record”, its LED will flash. Next press “Chase”, the chase LED will also flash. The page display will light and any number LEDs that already contain chases will also light. There are 16 pages of memory locations available. Page 0 is reserved for factory chases and can’t be recorded on.

The display will show the number of the current chase step being recorded on the top line and the default speed and fade rate on the bottom line.

To start recording the first chase step, move the channel or channels to the positions that you want by either adjusting the faders or by using the wheel in pan or tilt mode or by using the trackball. These adjustments will be recorded into the step so take care not to move any channels that you don't want included. You can at any time press the fixture switch and turn fixtures on or off while recording the step. You can also press the color or beam switches allowing you to include any preset in the chase step. As when calling presets only the fixtures that are enabled will be included.

After you have recorded a step press "Enter". The step indicator on the display will automatically go to the next step. Repeat the previous actions to record up to 256 steps. You can enter empty steps as well by pressing enter without moving any channels. On playback these empty steps will not do anything but can be used to lengthen the time between steps that do contain channel information. You can also record into these empty steps later.

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

Pressing "Enter" when at the last step of the chase will always add an additional step to the end of the chase. If you press enter while the step number is at a lower step you will advance to the next step number the same as if you incremented the step number using the "+" switch.

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.

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 LCD 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 value and the screen will change showing 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 modify the letters.

The chase speed is 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 while it is running and the new speed can be recorded with a scene. This allows you to use the same chase in many scenes but run it at different speeds for each scene.

The fade value is displayed as a percentage and is 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 steps giving a smooth continuous motion between steps. If set to 0% the steps will move with no fade in between. 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 when recording a scene.

The speed lock and unlock feature allows you to tell the chase whether or not to ignore the audio or beat switches when the chase is running. When set to "NO BEAT/AUDIO" the chase will only run at the programmed speed and will not be affected if you use the beat or audio switches to set the chase speeds. This is useful when you have a chase that needs to run at a high speed to create a certain special effect and needs to always run at this speed.

After you have recorded all of the steps for the chase, you can store it in memory. To do this, select the page and number where you want to save it. Make sure that the fixture, color or beam LEDs are off. If you select a chase number that is already lit, a message will appear asking 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. Page 0 is reserved for factory chases.

**Note:** It can take up to 30 seconds to overwrite or erase a chase depending on how much of the memory is currently filled.

After you have stored the chase, Show Designer remains in chase record mode allowing you to continue to edit the chase. To exit record mode, press “Record”, the LEDs will stop flashing.

### ***ERASE CHASE***

To erase an existing chase, press “Record” then “Chase” then “Erase”. As when recording a chase, all LEDs that contain a chase will light. Next select the chase to erase. The chase name will appear in the LCD and the message “Erase This?” will also appear. Press “yes” or “no”. If you press “yes” the chase will be erased. Erase chase only works when there is no chase being edited. 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 up to 30 seconds to overwrite or erase a chase depending on how much of the memory is currently filled.

### ***EDITING CHASES***

To edit a chase that has already been recorded, press “Record” followed by “Chase”. Before making any channel changes, press the chase number of the one 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 steps at the current step number by pressing “Add”. You will be prompted whether or not to add an empty chase step here. Press “Yes” to insert an empty chase step at the current step number. All following chase steps will be moved up one number. Once the empty step is added you can record channel levels or presets there.

After making changes to the chase you can store it at the same memory location or at a new location by selecting the page and by pressing the number switch. You can also use this method to copy a chase to another location by saving it without making any changes. The color and beam LEDs must be off before saving the chase.

### ***RECALLING CHASES***

To run a chase, press the chase switch, then select the desired page and number switch. The chase will begin to run at the default speed that was set when it was recorded. Pressing the switch of a chase that is running will turn it off. You can run more than one chase (up to 8) as long as they are chasing different channels.

You can adjust the speed of any chase that is running by pressing the “Speed” switch next to the wheel. The LED will light and the display will show the name of the chase on the top line and the page and chase number on the bottom line along with the current speed in beats per minute (BPM). Turning the wheel will adjust the speed as the chase is running. If more than one chase is running, pressing one of the cursor switches or the + and - switches will bring up the next running chase in the display. 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.

Likewise the chase fade rate can be adjusted for each chase that is running. Use the same method as was described in the previous paragraphs for adjusting the chase speed.

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 some but not all of its channels are overridden. The channels that are still available will continue to chase.

## **FACTORY CHASES**

When you select chase memory page 0, “FC” for “factory chase” will appear in the page display. These 16 chases are preprogrammed to provide beam movement patterns for any fixture that has a pan and tilt feature. Some hard to program movements such as circles and figure eights can be found here. These chases control the pan and tilt channels of any selected fixtures. Unlike chases that you program yourself, you must first enable the fixtures you want to include before you turn on the chase.

## **AUDIO SWITCH**

The audio switch enables the audio input as a trigger for chase steps. Pressing the audio switch turns on the LED which 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 section on chases regarding how to lock the chase speed. Turning on audio automatically turns off “Beat”. The audio switch state is independent of any scene and is not stored when recording 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 that is tapped in. Any chases that are running will sync to this beat unless the speed has been locked in for that chase. Read the section on 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 independent of any scene and are not stored when recording a scene.

# **SHOWS**

A show is a sequence of scenes that are recorded and played back in an order at preprogrammed times. Show Designer lets you record up to 256 shows which are accessible as 16 pages of 16 shows.

## **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. Also you can select the timing method used to enter and display steps. The two choices are “real time” and “hold time”. Consult the previous section under “Menu” and “Set Show TM Display” for more information.

To start recording a show press “Record”, the “Record” LED will flash. Next press “Show”, the “Show” LED will also flash. The page display will light and any number locations that already contain shows will also light showing you where there are already shows recorded.

The top line of the LCD display will show the current show step that is ready to record and the bottom line will show the scene page and scene number for that step. The word “Empty” will appear in place of the scene page and number if there is no scene recorded at this step. This will be followed by the time for the step which is displayed as hours, minutes and seconds. The hours, minutes and seconds are separated by colons “:” with seconds having a decimal point allowing tenths of a second resolution.

If you have set the show time mode to display hold times, “Start” will be displayed as step 0 when beginning a new show. 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.

To record a show step, press the "Scene" switch which will light the "Scene" LED. Choose the scene for the step by selecting the scene page and pressing the desired scene number. Next select the time for this step. The first step will usually be at 00:00:00.0 when using the real time display making this the start of the show. When using the hold time display, 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 then press the + or - switch or use the data wheel to change the time. When using the real time display, the time you select for each step is the time that the step will be played starting from the beginning of the show. If for example you want a new scene to be called every 5 seconds, set the step times to 00:00:00.0 for step 1, 00:00:05.0 for step 2, 00:00:10.0 for step 3 and so on. You cannot set the time for a step to be any lower than the time of the previous step. If you set the time for a step to the same time as the previous step, the scene will be called immediately following the previous one. This means that you may not see any of the previous scene since it will be replaced immediately by the next one.

Once the scene has been selected and the time set, press "Enter". The step number will automatically advance to the next step and the time will automatically move up by 5 seconds when using the real time display. This allows you to quickly enter a series of scenes that will be 5 seconds apart. You can go back and change the times after the scenes have all been entered. You can enter up to 255 steps in the show. When using the real time display, the last step will always be labeled "End" and can't have a scene recorded there. When using the hold time display, there is no "end" step but there is a "start" step 0 which can't have a scene. If you press "Enter" without selecting a scene, the step number will advance leaving the previous step empty.

The time setting for a new step will automatically be incremented by whatever interval you last used between steps. Whenever you change the time interval between two steps while writing the show, this new time interval will become the default interval for any new steps you create. For example, if you set the times between steps 2 and 3 to be 2 seconds apart, the default time interval between any new steps you write will automatically be set to 2 seconds unless you change it. This allows you to select a time interval and then enter a series of steps that will be evenly spaced apart. You can later edit the step times to set any desired interval.

As you are recording a show you can move from step to step by putting the display cursor under the step number and use the + or - switch to select a new step. You can edit the scene number or time setting for any recorded step this way. Pressing "Enter" when editing the last scene step (1 step before the end step) or when the "End" step is displayed 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 "+" switch.

At any time while recording the show you can enter a name for the show. Use the right arrow cursor switch to move the cursor on the LCD to the right, continuing past the time values. The screen will change showing the name and the loop status for the show. Edit the name characters by putting the cursor under each character then use the + or - switch or the data wheel to change the character.

The loop status allows you to set the show to loop continuously or play once through and stop.

After you have recorded all of the steps for the show, you can store it in memory. To do this, select the 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". You can use the page switches to select from pages 1 to 16 which will allow you to store up to 256 shows.



**Note:** It can take up to 30 seconds to overwrite or erase a show depending on how much of the memory is currently filled.

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

### ***ERASE SHOW***

To erase an existing show, press “Record” then “Show” then “Erase”. As when recording a show, all LEDs that contain a show will light. Next 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. Erase show 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 exiting record mode by pressing the record switch.

**Note:** It can take up to 30 seconds to overwrite or erase a show depending on how much of the memory is currently filled.

### ***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 the current step. You can also insert additional steps at the current step number 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. Once the empty step is added you can record a scene or time value there.

When using “real time” display, whenever you change the time for a show step, all of the times for the following steps will be adjusted by the same amount. The time intervals between scene steps will stay the same. If for example you change the time for step 2 to be 1 second later, steps 3, 4, 5 etc. will also appear one second later as well. These are the times as measured from the start of the show. This is not an issue when using “hold time” display.

After making changes to the show you can store it at the same or at a new location by pressing any show number. Make sure the scene LED is 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.

### ***RECALLING SHOWS***

To run a show, press the “Show” switch, then select the desired page and number switch. You can only run one show at a time since shows call scenes and only one scene can be on at a time. The name of the show will be displayed on the top line of the LCD and the bottom line will display the current scene and time. When using real time display, the clock will start at 00:00:00.0 when you start the show. If the show is set to loop, it will restart after the end step. It is important to have a time assigned to the “End” step to allow a delay between calling the last scene of the show and the start of the first scene of the show when looping. If the show is set to play once through, the show will stop on the last scene.

When using “hold time” display, the hold times will be shown at the start of each step and will count down before calling the next step.

Pressing the “Black” switch will pause a show as well as blacking out the fixtures. Pressing black again will 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 scene while a show is running it will also turn off the show. If you accidentally turn the show display off at any time by pressing a switch you can restore the display by pressing the “Show” switch.

## **MIDI**

Show Designer allows you to use MIDI to call scenes and shows using a MIDI sequencer or MIDI keyboard so that you can synchronize lighting to a MIDI performance. Six pages of scenes and one page of shows can be called using MIDI note commands on any MIDI channel. This gives you access to 96 scenes and 16 shows per MIDI channel. MIDI note numbers 0-95 are used to call scenes and note numbers 96-111 are used to call shows. Show Designer must be set to the same MIDI channel as the sender and you must connect the MIDI in from show designer to the MIDI out on the sending MIDI device using a standard MIDI cable.

Show Designer will allow you to call more than 96 scenes with MIDI by using extra MIDI channels. When you select the MIDI channel from the setup menu you can also enable additional MIDI 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 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 set to MIDI channel 1 and you have enabled 2 extra channels, scene pages 1-6 will be called using MIDI channel 1, scene pages 7-12 will be called from MIDI channel 2 and scene pages 13-18 will be called from MIDI channel 3. Note numbers 0-95 will be used by each MIDI channel.

With Show Designer only 1 scene can be on at a time and only 1 show can be running at a time. When a MIDI note is received it will call a scene or start a show that corresponds to the note number. If the same note number is received again the scene or show will be toggled off. If a different note number is received, a new scene or show will replace the one that is running.

### ***MEMORY BACKUP***

You can also use MIDI to back up Show Designer’s 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 labeled “send memory file”. From there, use the + switch to select “send memory file to MIDI port”. Next press “enter” to start the transmission from Show Designer. An encoded copy of the entire memory will be transmitted to the MIDI out port. The time to send the memory will vary depending on the amount of memory currently in use. This will send a copy of the entire memory including all fixture settings, scenes and shows with all of their components.

### ***MEMORY RESTORE***

To restore the memory in Show Designer using MIDI, set the MIDI recorder to playback the system exclusive message to the MIDI in on Show Designer. The MIDI port is always listening for new messages unless Show Designer is in record mode (record LED flashing). As soon as the message is received the display will read “RECEIVING FILE”. The length of time it takes to update the memory will vary depending on the amount of memory in use at the time it was recorded. You do not have to call any of the menu functions on Show Designer before receiving the file. If any errors have been detected, Show Designer will prompt you to retry. Check you connections and try again.

Use MIDI to transfer the memory from one Show Designer to another.

## **USING THE COMPUTER PORT**

The RS232 port on the back of Show Designer can be used for connecting to a computer as well as to a mouse or trackball. To connect Show Designer to a computer you must use a serial lap link cable available at any computer store. A lap link cable is normally used to connect a laptop computer to a desktop computer or to connect 2 computers together. A standard RS232 cable will not work.. Connect the RS232 port on Show Designer to one of the serial “COM” ports on your PC. Some COM ports use a 25 pin connector and some use a 9 pin. Most lap link cables come with both types of connectors.

Once connected, you can use a PC running Windows 95 to backup or restore the memory in Show Designer and also to update the software that runs Show Designer. This allows you to update your controller with the latest features by downloading new Show Designer software from American DJ’s web site.

### **CONFIGURING WINDOWS 95**

Windows 95 comes with an accessory called Hyper Terminal which can be used to communicate with Show Designer via one the COM ports on your PC. Determine which of your 2 COM ports is available and connect as described in the previous paragraphs to the RS232 port on Show Designer. COM 1 is generally used for the mouse on your PC so you will probably be using COM 2 to connect to Show Designer.

You must first configure Hyper Terminal to work with Show Designer. Run Hyper Terminal by clicking on “Start” in Windows 95 then “Programs” then “Accessories” then “Hyper Terminal”. If for some reason Hyper Terminal is not installed on your version of Windows 95, install it from your Windows 95 CD.

Once the Hyper Terminal folder is open, double click on “Hypertrm.exe” or “Hypertrm” which will start the Hyper Terminal program. You will be asked to choose a name and an icon. Name it Show Designer and pick any icon and click on OK. Go to the bottom of the next dialog box and choose “connect to” “Direct to COM 2”. Ignore the telephone number and other settings in this box and click OK. In the next dialog box, set bits per second to 19200, data bits to 8, parity to none, stop bits to 1, flow control to none, then click OK. You will now be running Hyper Terminal. One last item needs to be set by clicking on “File” in the upper left of the window, then “Properties”, then select the “settings” tab. From the settings tab click on the box that says “ASCII Setup”. From that dialog box make sure the box labeled “send line ends with line feeds” is checked, you can also leave the box labeled “wrap lines” checked but leave all of the other boxes unchecked. Click OK and you are done with setup. Close Hyper Terminal and you will be prompted to save this Hyper Terminal setup. Click yes to save it and you will return to the Hyper Terminal folder. There should now be a program in the folder labeled “Show Designer.ht” or “Show Designer”. You may want to make a shortcut on your desktop if you plan to use your PC with Show Designer often. From this point on, whenever you communicate with Show Designer using your PC, call this Show Designer Hyper Terminal configuration.

### **MEMORY BACKUP**

Once configured, you can use Hyper Terminal to back up Show Designer’s memory as a file and save it on your hard disk or a floppy. Make sure Show Designer is connected to your PC as described in the previous paragraphs. Next you must create an empty text file on your PC to write the memory data into. Do this by opening the drive and or folder from the windows desktop where you want to store your Show Designer memory files. Click on “File” in the upper left of the window then select “New” then select “Text Document”. A new empty text document will be created in the window. Type in a name for the new document such as “Show Designer Memory 1” and press return. This will be the file you will use to save the memory to.

Next call the version of Hyper Terminal that you created for Show Designer. Click on “Transfer” on the top menu bar and select “Capture Text”. A dialog box will appear allowing you to select the empty text file that you created for this backup. Use browse to find the drive and folder where you created the file, find the file and open it then click on “Start”. Hyper Terminal is now ready to receive the file from Show Designer.

Next, go to the menu selection in Show Designer labeled “send memory file” and press enter. The display will show “send memory file to computer port”. Press enter to start the transmission from Show Designer. An encoded copy of the entire memory will be transmitted to your PC. A series of numbers will be displayed in the Hyper Terminal window as the file is being copied to your disk drive. The time to send the memory will vary depending on the amount of memory currently in use. When the file is finished being sent, Show Designer will return to its startup display and the numbers will stop scrolling in the Hyper Terminal window. Finally, close Hyper Terminal and the file will automatically be saved.

**Note:** When creating additional memory backup files, always start with an empty text file. Hyper Terminal will not write over an old file that has data in it but will add the new data to the end of it giving you multiple memory dumps in one file.

### **MEMORY RESTORE**

To copy a memory file from your PC back to Show Designer, go to the menu selection in Show Designer labeled “load memory file”. Press “Enter” and the display will read “waiting for file from com port”. Show Designer is now ready to receive the file from your PC.

Next call the version of Hyper Terminal that you created for Show Designer. Click on “Transfer” on the top menu bar and select “Send Text File”. A dialog box will appear allowing you to select the Show Designer text file that you created for backup. Find the drive and folder where you created the file if it is not in the current window, select the file and click on “Open”. Hyper Terminal will begin to transmit the file. The display in Show Designer will read “receiving file”. When the file has been sent, Show Designer will restart and show its startup display. If any errors have been detected, Show Designer will prompt you to retry. Check you connections and try again. The length of time it takes to update the memory will vary depending on the amount of memory in use at the time it was recorded.

### **UPDATING THE SOFTWARE**

The software that runs Show Designer can be updated with new versions that will be available from the American DJ web site at [www.americandj.com](http://www.americandj.com). New software updates will include things such as new features, additional lighting fixtures and additional factory presets and chases. You can also download updated versions of this manual which will be in MS Word format. The files will be zipped so you will have to run them to unzip them or use Winzip.

To copy the new software from your PC to Show Designer, go to the menu selection in Show Designer labeled “update software”. Press enter and the display will read “download new program”. Show Designer is now ready to receive the file from your PC. As an alternative you can access this menu item by holding down the “Menu” and “Erase” switch while powering up Show Designer.

Next call the version of Hyper Terminal that you created for Show Designer. Click on “Transfer” on the top menu bar and select “Send Text File”. A dialog box will appear allowing you to select the Show Designer Software text file that you downloaded from the web site. Make sure that the file has been unzipped before trying to use it. Find the drive and folder where the file is located, select the file and click on “Open”. Hyper Terminal will begin to transmit the file. The display in Show Designer will read “receiving new program”. When the file has been sent, Show Designer will restart and show its startup display. If any errors have been detected, Show Designer will prompt you to retry. Check you connections and try again. It can take a minute or so to transfer the file.

**The following is the list of lighting fixtures in the Show Designer fixture library.  
 \* denotes that factory presets are included**

Generic Dimmer (1 Channel)	Elation Joy-150
32 DMX Channels	Elation X-Calibur/SC
American DJ PP-DMX20 Switch Pack	Elation Waterfall
American DJ DP-DMX20 Dimmer Pack	Elation FS-150SCI
American DJ X-treme	Elation MB-1500
American DJ Eliminator *	Elation Color Spot-250 & 575
American DJ Sidewinder *	Elation Color Wash-250
American DJ Max *	Elation Stage Color
American DJ Mighty Scan *	Elation MDP-1219
American DJ Patend-575 *	Elation DP-619
American DJ Patend-1200 *	
American DJ Startec H150	High End Technobeam 18 Channel Mode
American DJ Elation EL-1712	High End Technobeam 14 Channel Mode
American DJ Arcbeam *	High End Technoray 14 Channel Mode
American DJ Spiriraltec II *	High End Technoray 12 Channel Mode
American DJ Virtual Beam VR8 *	High End Technopro 12 Channel Mode
American DJ Dual Color	High End Cyberlight 20 Channel Mode
American DJ Onyx	High End Cyberlight 15 Channel Mode
American DJ Onyx II	High End Studio Color 16 Channel Mode
American DJ Vortex	High End Studio Spot 575
American DJ Swivel Beam	High End Studio 250
American DJ Strobetec	High End Trackspot
American DJ X-Cel	High End Intellabeam
American DJ Vertipro	
American DJ Progressor	Martin P-812 7 Channel Mode
American DJ Color-250 DMX	Martin P-518 Mode 1
American DJ Matrix Spot	Martin P-518 Mode 2
American DJ Gamma Ray	Martin P-518 Mode 3
American DJ Tempest II	Martin P-218 Modes 1 and 2
American DJ Snap Shot DMX	Martin P-218 Mode 3
American DJ X-Elon	Martin Imagescan Mode 1
American DJ X-Centric	Martin Imagescan Mode 2
American DJ Joy 300	Martin Pro 1220 CMYR Modes 1 and 3
American DJ Water-Column/4	Martin Pro 1220 CMYR Modes 2 and 4
American DJ S-1500/DMX	Martin Pro 1220 XR Modes 1 and 3
American DJ Mega-Strobe/DMX	Martin Pro 1220 XR Modes 2 and 4
American DJ S-150/DMX	Martin Pro 1220 RPR Modes 1 and 3
American DJ Color-150/DMX	Martin Pro 1220 RPR Modes 2 and 4
American DJ MIDI-Pak	Martin Pro 1220 RPR Modes 2 and 4
American DJ Rampage	Martin Mac 1200 Modes 1 and 3
American DJ Radd	Martin Mac 1200 Modes 2 and 4
American DJ Pocket Scan	Martin Mac 500 Modes 1 and 3
American DJ Spin-Out	Martin Mac 500 Modes 2 and 4
American DJ Marvel	Martin Mac 600 Modes 1 and 3
American DJ Rainbow-250	Martin Mac 600 Modes 2 and 4
American DJ Spiral Scan	Martin Mac 250 Mode 1
Elation Mobile Scan *	Martin Mac 250 Modes 2 and 4
Elation Techno Flash	Martin Mac 250 Mode 3
Elation Syncro-Tech	Martin Pal 1200 Modes 1 and 3
Elation Barrel-Tech	Martin Pal 1200 Modes 2 and 4
Elation Syncro Spot	Martin Pro 918 Modes 2 and 4

Martin Robozap  
Martin Robozap MSR 1200  
Martin Robocolor II  
Martin Robocolor MSD  
Martin Robocolor Pro 400  
Martin Punisher X250  
Martin Roboscan 1004  
Martin Minimac Profile  
Martin Minimac Wash  
Martin Acrobat  
Martin MX-1, MX-4

Clay Paky Mini Scan  
Clay Paky Mini Scan HPE  
Clay Paky Golden Scan  
Clay Paky Golden Scan HPE  
Clay Paky Stage Scan  
Clay Paky Super Scan Zoom 16 Channel Mode  
Clay Paky Pin Scan  
Clay Paky Stage Color 300  
Clay Paky Stage Light 300

Coemar 600/400  
Coemar Micro Scan 3  
Lampo  
Vari\*Lite VL5 and VL6  
Vari\*Lite AR500  
Vari\*Lite AR5 Low Res.  
Vari\*Lite AR5 High Res.  
L.E.D. MSR 400  
Futurelight MSD 200  
Futurelight Duke 1200  
Futurelight Miracle  
Futurelight Genesis 575  
Futurelight AS200 and PS/D200  
Futurelight CC-200 Pro  
NJD IQ 250 and 500  
Infinity  
Prince Scan 575  
Scan 200 MSD  
KLS SE 204/205  
TAS Mini Ultra Scan 2  
TAS Symbol 700  
TAS Ultra Scan 700  
Coef 200 MSD  
Coef P200 Show  
Meteor Clublight 250  
Varyscan III Special  
Show Pro Accubeam AB-400  
Show Pro Accucolor Power AB-60  
Show Pro Accustar Power AB-20  
Show Pro Cyberscan  
Fly Fos 3 and 4  
Fly Pallete

Fly Wave 7 Channel Mode  
Fly Wave 9 Channel Mode  
Strong Scan 300 HTI  
Strong Big Scan  
SGM Victory II  
Acme Inflection  
Acme Supermodel  
Mobolazer ML8  
Mobolazer ML16  
Mad Q-Star  
Mad Q-Scan  
Mad Scan 611  
Microh Arena Profile Spot  
Microh Arena Colour Wash

Genius Nexus  
Genius Nexus 2  
Genius Nexus 3  
Genius Motor Spot  
Genius Micromega  
Genius Omega  
Genius Omega 2  
Genius Mizar  
Genius Mizar 2  
Genius Quasar  
Genius Mammut  
Genius Micro Scan  
Genius Spectra  
Genius Micro Roller  
Genius Color Pro  
Genius Color Eco  
Genius Super Quark  
Genius Motor Show  
Genius Motor Color  
Genius Next Scan  
Genius Next Roller