DMX-50A
DMX Controller

USER MANUAL
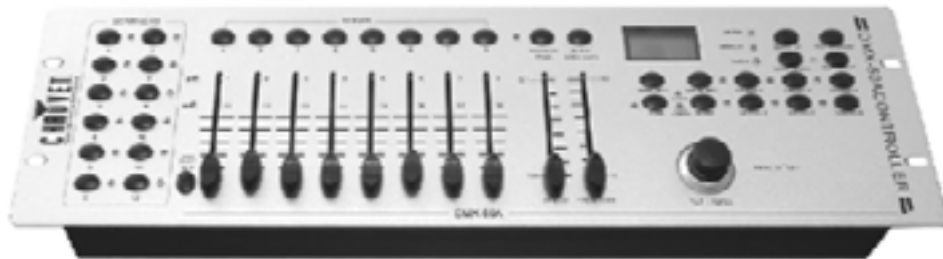
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BEFORE YOU BEGIN

What is included

➤ DMX-50A controller
➤ DC 9-12V 500mA, 90V~240V Power Adapter
➤ Manual with warranty card

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Safety Instructions

⚠

Please read these instructions carefully, which includes important information about the installation, usage and maintenance?

• Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
• Always make sure that you are connecting to the proper voltage and that the line voltage you are connecting to is not higher than that stated on decal or rear panel of the fixture.
• This product is intended for indoor use only!
• To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
• The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
• Always disconnect from power source before servicing or replacing lamp or fuse and be sure to replace with same lamp source.
• In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
• Don't connect the device to a dimmer pack.
• Make sure power cord is never crimped or damaged.
• Never disconnect power cord by pulling or tugging on the cord.
• Do not operate this device under 113° F ambient temperature conditions.

Caution! **There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET.**

INTRODUCTION

Features

- Universal DMX-512 Controller
- Controls 12 intelligent lights of up to 20 channels
- 30 banks of 8 scenes, 240 scenes total
- 240 DMX channels of control
- 6 sets of chases containing 240 scenes
- Execute multiple chases simultaneously
- Re-assignable channels
- Joystick assignable Pan/Tilt and 16bit control
- Beat-activation, tap sync, auto run
- Grab any fixture on the fly
- Polarity selector
- 3 space 19" rack or table top mount
- Midi compatible

General Overview

The DMX-50A is a universal intelligent lighting controller. It allows the control of 12 fixtures composed of 20 channels each and up to 240 programmable scenes. Six chase banks can contain up to 240 steps composed of the saved scenes and in any order. Programs can be triggered by music, midi, automatically or manually. All chases can be executed at the same time.

On the surface you will find various programming tools such as 8 universal channel sliders, a joystick and LED display indicators for easier navigation of controls and menu functions. You can control the pan and tilt of different intelligent lighting fixtures using the same joystick at the same time by means of a programmable joystick. This joystick allows the user to assign individual pan and tilt channels for every fixture.

Product Overview (front)
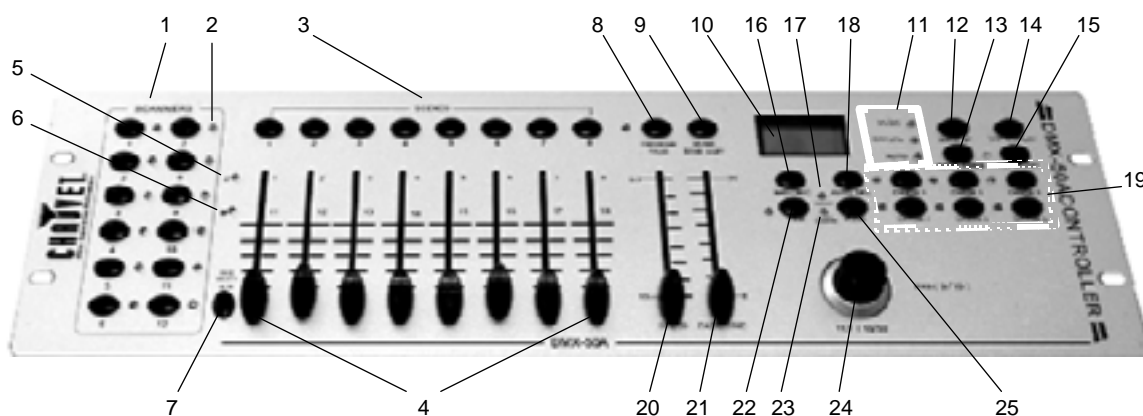
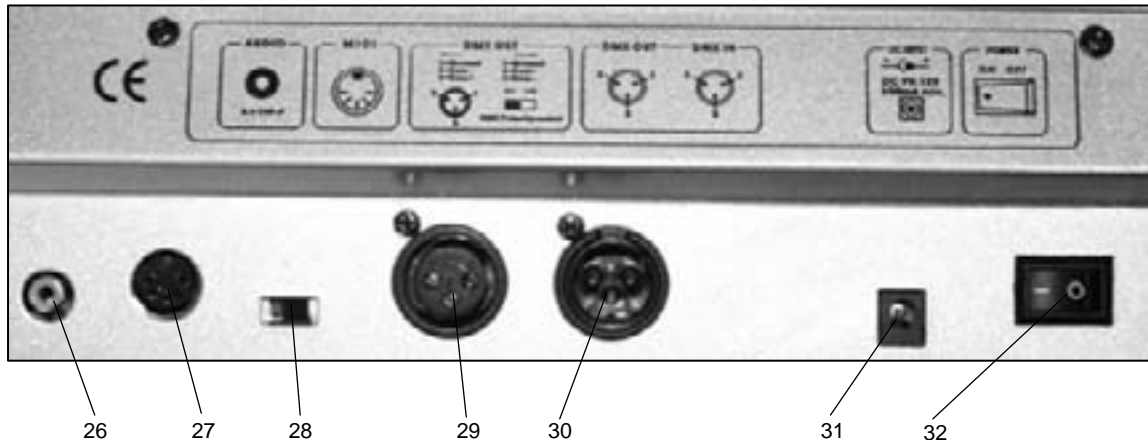| Item	Button or Fader	Function
1	Scanner select buttons	Fixture selection
2	Scanner indicator LEDS	Indicates the fixtures currently selected
3	Scene select buttons	Universal bump buttons representing scene location for storage and selection
4	Channel faders	For adjusting DMX values, Ch 1~8 can be adjusted immediately after pressing the respective scanner select button, Ch 9~16 after pressing the Page select button
5	Page A Indicator LED	Represents Ch 1~8 range selected, Tip! Tap A, B then B again to control both pages simultaneously.
6	Page B Indicator LED	Represents Ch 9~16 range selected
7	Page select button	In manual mode, press to toggle between pages of control or to select both pages simultaneously. Both LEDS on will allow control of both lower and upper range channel.
8	Program button	Used to enter programming mode
9	Music/Bank Copy button	Used to activate Music mode and as the copy command during programming
10	LCD display window	Status window displays pertinent operational data
11	Mode Indicator LEDS	Provides operating mode status, (manual, music or auto)
12	Bank Up button	Function button to traverse Scene/Steps in banks or chases Incremental DMX values while FINE button is active.
13	Bank Down button	Function button to traverse Scene/Steps in banks or chases Decremental DMX values while FINE button is active.
14	Tap Display button	This is a Tap-Sync during playback and during programming changes the DMX value displayed in the LCD panel to percentages
15	Blackout button	Sets the shutter or dimmer value of all fixtures to "0" causing all light output to cease
16	Midi/Rec button	Activates MIDI external control and also used to confirm the record/save process
17	Assign LED	Indicated the controller is in Channel assign mode during the initial setup of the controller
18	Auto/Del button	Used to activate Auto mode and as the delete function key during programming
19	Chaser buttons	Chase memory 1 ~ 6
20	Speed fader	This will adjust the hold time of a scene or a step within a chase
21	Fade-Time fader	Also considered a cross-fade, sets the interval time between two scenes in a chase
22	Fine button	Activates 16 bit control of the joystick, movement will be in extremely small increments. Note: While FINE is active Bank UP/DOWN buttons will increase and decrease DMX values by one for either the joystick or the slider in focus or currently moved.
23	Pile Up / Chase LED	
24	Joystick	Generally used to control the pan and tilt movement of a fixture
25	Mode button	

Product Overview (rear panel)

Item	Button or Fader	Function
26	Audio input jack	Direct audio feed for use in sound-active mode
27	MIDI input port	For external triggering of Banks and Chases using a MIDI device
28	DMX polarity switch	May be used to correct signal polarity
29	DMX output connector	DMX control signal
30	DMX input connector	Used to transfer programmed data between 2 controllers
31	DC Input jack	Main power feed
32	ON/OFF power switch	Turns the controller on and off

Common Terms

The following are common terms used in intelligent light programming.

- **Blackout** is a state by where all lighting fixtures light output are set to 0 or off, usually on a temporary basis.

- **DMX-512** is an industry standard digital communication protocol used in entertainment lighting equipment. For more information read Sections "DMX Primer" and "DMX Control Mode" in the Appendix.

- **Fixture** refers to your lighting instrument or other device such as a fogger or dimmer of which you can control.

- **Programs** are a bunch of scenes stacked one after another. It can be programmed as either a single scene or multiple scenes in sequence.

- **Scenes** are static lighting states.

- **Sliders** also known as faders.

- **Chases** can also be called programs. A chase consists of a bunch of scenes stacked one after another.

- **Scanner** refers to a lighting instrument with a pan and tilt mirror; however, in the ILS-CON controller it can be used to control any DMX-512 compatible device as a generic fixture.

- **MIDI** is a standard for representing musical information in a digital format. A MIDI input would provide external triggering of scenes using midi device such as a midi keyboard.

- **Stand Alone** refers to a fixture's ability to function independently of an external controller and usually in sync to music, due to a built in microphone.

- **Fade** slider is used to adjust the time between scenes within a chase.

- **Speed** slider affects the amount of time a scene will hold its state. It is also considered a wait time.

- **Shutter** is a mechanical device in the lighting fixture that allows you to block the lights path. It is often used to lessen the intensity of the light output and to strobe.

- **Patching** refers to the process of assigning fixtures a DMX channel or**..**

OPERATING INSTRUCTIONS

Setup

SETTING UP THE SYSTEM

1) Place the DMX-50A on a leveled surface. Note! The DMX-50A can also be rack mounted, occupying 3U spaces.

2) Plug the AC to DC power supply to the system back panel and to the mains outlet.

3) Plug in your DMX cable(s) to your intelligent lighting as described in the fixtures respective manual. For a quick Primer on DMX see the "DMX Primer" section in the Appendix of this manual.

FIXTURE ADDRESSING

The DMX-50A is programmed to control 20 channels of DMX per fixture, therefore the fixtures you wish to control with the corresponding "**SCANNER**" buttons on the unit, must be spaced 20 channels apart.

FIXTURE OR SCANNER #	DEFAULT DMX STARTING ADDRESS	BINARY DIPSWITCH SETTINGS SWITCH TO THE "ON POSITION"
1	1	1
2	21	1,3,5
3	41	1,4,6
4	61	1,3,4,5,6
5	81	1,5,7
6	101	1,3,6,7
7	121	1,4,5,6,7
8	141	1,3,4,8
9	161	1,6,8
10	181	1,3,5,6,8
11	201	1,4,7,8
12	221	1,3,4,5,7,8

Please refer to your individual fixture's manual for DMX addressing instructions. The table above refers to a standard 9 dipswitch binary configurable device.

JOYSTICK ASSIGNMENT

Because not all intelligent lighting fixtures are alike or share the same control attributes, the DMX-50A allows the user to assign the joystick the correct pan and tilt channel for every individual fixture including 16 bit channel assignments. It also allows the user to re-assign physical faders to fixture DMX channels so that the user can combine or unify control of similar or the same attributes across different types of fixtures.

Action ☛

1) Press and hold **FINE** & **MODE** buttons together, (2) times to access the channel assignment mode. The Assign LED will light.

2) Press a **SCANNER** button that represents the fixture you would like to set the pan & tilt.

3) Move the **FADE TIME** fader until you arrive at controller channel "X "which is the joystick pan.

Notes ▱

All physical faders and even the joystick can be re-assigned to output on a different DMX channel. Both faders and the joystick are given a channel number and are labeled on the surface of the controller as such.

The Pan & Tilt Joystick use controller channel 9 & 10 (Page A) respectively. FINE movement is controlled using channels 19 & 20 (Page B).

4) Move the **SPEED** fader to select the DMX channel that controls the (Pan) for the selected fixture.

5) Press the **MIDI/REC** button to confirm setting.

6) Repeat steps 3 ~ 5 for (Y /tilt), (X fine) and (Y fine).

7) Press and hold **FINE** & **MODE** buttons to exit mode.

You can re-assign the DMX channel to all controller fader channels.

PHYSICAL FADER ASSIGNMENT

Use this feature to combine or unify fixture control attributes across different fixture sources. For example; if you were controlling 4 moving mirrors and 4 moving yokes, the color, gobo and dimmer channels may not line up ideally on the physical faders. Use this function to re-assign the dimmer, color and gobo channels to faders 1, 2 and 3. From now on you will be able to control the same attributes on all fixtures using the same fader location.

Action ☟

1) Press and hold **FINE** & **MODE** buttons together, (2) times to access the channel assignment mode. The Assign LED will light.

2) Press a **SCANNER** button that represents the fixture whose faders you would like to re-assign.

3) Move the **FADE TIME** fader until you arrive at controller channel (number).

4) Move the **SPEED** fader to select the DMX channel.

5) Press the **MIDI/REC** button to confirm setting.

6) Repeat steps 3 ~ 5 as often as necessary.

7) Press and hold **FINE** & **MODE** buttons to exit mode.

Notes 🗋

All physical faders can be re-assigned to output on a different DMX channel. Both faders and the joystick are given a channel number and are labeled on the surface of the controller as such.

You can re-assign the DMX channel to all controller fader channels.

COPY SCANNER ASSIGNMENTS

Example: Copying Scanner 1 into Scanner 2

Action ☟

1) Press and hold **SCANNER** button # 1.

2) While holding button # 1 press **SCANNER** button # 2.

3) Release **SCANNER** button # 1 first before releasing **SCANNER** button # 2.

4) All **SCANNER** LED indicators will flash to confirm successful copy.

Notes 🗋

To save time, you can copy the settings of one Scanner button to another.

REVERSE CHANNEL OUTPUT

Action ☛

1) Press and hold **FINE** & **MODE** buttons together (1) time to access the channel assignment mode then press the **SCANNER** button.

2) Move the **FADE TIME** fader until you arrive at the controller channel you wish to alter.

3) Move the **SPEED** fader all the way up until N changes to Y.

4) Press and hold **FINE & MODE** buttons (2) times to exit.

Notes ▱

You can permanently reverse the output of any given channel on the controller.

FADE TIME ASSIGN

You can choose whether the board's fade time during scene execution is implemented broadly to all output channels or only to the Pan & Tilt movement channels. This is relevant because often you will want gobos and colors to change quickly while not affecting the movement of the light.

Action ☛

1) Turn OFF the controller.

2) Hold the **MODE** and **TAP DISPLAY** buttons simultaneously.

3) Turn ON the controller.

4) Press the **TAP DISPLAY** button to toggle between the two modes. Either ALL CH (all channels) or ONLY X/Y (Pan & Tilt only)

5) Press **MODE** and **TAP DISPLAY** to save settings. All LEDS will blink to confirm.

Notes ▱

ALL CH: All channels
ONLY X/Y: Only Pan & Tilt

Operation

MANUAL MODE

The manual mode allows direct control of all scanners. You are able to move them and change attributes by using the channel faders and joystick.

Action 👈

1) Press the **AUTO DEL** button repeatedly until the MANUAL LED is lit.

2) Select a **SCANNER** button.

3) Move joystick and faders to change fixture attributes.

PAGE/SELECT A/B button:
Use to switch between fader control of (A: Ch 1~8), (B: Ch 9~6) or both (A & B together)

TAP DISPLAY button:
Press to toggle the output indicator on the LCD display between DMX values (0-255) and percentage (0-100)

Notes 🗋

All changes made while in Manual Mode are temporary and will not be recorded.

REVIEW SCENE OR CHASE

This instruction assumes that you have already recorded scenes and chases on the controller. Other wise skip section and go to programming.

Action 👈 **{SCENE Review}**

1) Select any one of the 30 banks by pressing the **BANK UP/DOWN** buttons.

2) Select a **SCENE** button (1~8) to review.

3) Move joystick and faders to change fixture attributes.

Action 👈 **{CHASE Review}**

1) Press any one of the 6 **CHASE** buttons.

2) Press the **TAP DISPLAY** button to view the step number on the display.

3) Press the **BANK UP/DOWN** buttons review all scenes in the chase.

Notes 🗋

Make sure you are still in MANUAL Mode.

Programming

A program (bank) is a sequence of different scenes (or steps) that will be called up one after another. In the DMX-50A 30 programs can be created of 8 scenes in each.

ENTERING PROGRAM MODE

1) Press the **Program** button until the LED blinks.

CREATE A SCENE

A scene is a static lighting state. Scenes are stored in banks. There are 30 bank memories on the controller and each bank can hold 8 scene memories. The DMX-50A can save 240 scenes total.

Action ☞	Notes 🗋
1) Press the **PROGRAM** button until the LED blinks.	*Deselect **Blackout** if LED is lit.*
2) Position **SPEED** and **FADE TIME** sliders all the way down.	
3) Select the **SCANNERS** you wish to include in your scene.	*You can select more than one fixture.*
4) Compose a look by moving the **sliders** and **joystick**.	*You can access channels 9~16 by pressing the **Page Select** button. This is necessary for fixtures that use more than 8 channels of control.*
5) Tap **MIDI/REC** button.	*There are 8 scenes available in every bank.*
6) Choose a **BANK** (01~30) to change if necessary.	
7) Select a **SCENES** button to store.	*-> All LEDs will flash to confirm. The LED display will now indicate the Scene number and Bank number used.*
8) Repeat steps 3 through 7 as necessary. 8 scenes can be recorded in a Program.	
9) To exit program mode, hold the **PROGRAM** button.	

Tip!
Press the **FINE** button, activate joystick or slider by moving it then use the **Bank Up/Down** buttons to change values in increments of "1".

Shortcut: Press **[PROGRAM]** ➲ **[SCANNERS]** ➲ Adjust **[Faders & Joystick]** ➲ **[BANK]** ➲ **[SCENE]** ➲ Press **[PROGRAM]** to store.

RUNNING A PROGRAM

Action ☞	Notes 🗋
1) Use **BANK UP/DOWN** buttons to change **Program** banks if necessary.	*Deselect **Blackout** if LED is lit.*
2) Press the **AUTO DEL** button repeatedly until the **AUTO** LED turns on.	
3) Adjust the **PROGRAM** speed via the **SPEED** fader and the loop rate via the **FADE TIME** fader.	
4) Alternatively you can tap the **TAP DISPLAY** button twice. The time between two taps sets the time between SCENES (up to 10 minutes).	*Also called a Tap-Sync.*

CHECK PROGRAM

Action ☞ | *Notes* ☐

1) Press and hold the **PROGRAM** button until the LED blinks.

2) Use the **BANK UP/DOWN** buttons to select the **PROGRAM** bank to review.

3) Press the **SCENES** buttons to review each scene individually.

EDITING A PROGRAM

Scenes will need to be modified manually.

Action ☞ | *Notes* ☐

1) Press and hold the **PROGRAM** button until the LED blinks.   *Deselect **Blackout** if LED is lit.*

2) Use **BANK UP/DOWN** buttons to change **Program** banks if necessary.

3) Select the desired fixture via the **SCANNERS** button.

4) Adjust and change fixture attributes using the channel faders and joystick.

5) Press the **MIDI/REC** button to prepare the save.

6) Select the desired **SCENES** button to save.

COPY A PROGRAM

Action ☞ | *Notes* ☐

1) Press and hold the **PROGRAM** button until the LED blinks.   *All 8 scenes in a Program bank will be copied.*

2) Use **BANK UP/DOWN** buttons to select the **PROGRAM** bank you will copy.

3) Press the **MIDI/REC** button to prepare the copy.

4) Use **BANK UP/DOWN** buttons to select the destination **PROGRAM** bank.

5) Press the **MUSIC BANK COPY** button to execute the copy. All LEDs on the controller will blink.

Chase Programming

A chase is created by using previously created scenes. Scenes become steps in a chase and can be arranged in any order you choose. It is highly recommended that prior to programming chases for the first time; you delete all chases from memory. *See "Delete All Chases"* for instructions.

CREATE A CHASE

A Chase can contain 240 scenes as steps. The term steps and scenes are used interchangeably.

Action ☛	Notes ▱
1) Press the **PROGRAM** button until the LED blinks.	
2) Press the **CHASE** (1~6) button you wish to program.	
3) Change **BANK** if necessary to locate a scene.	
4) Select the **SCENE** to insert.	
5) Tap the **MIDI/REC** button to store.	
6) Repeat steps 3 ~ 5 to add additional steps in the chase. Up to 240 steps can be recorded.	
7) Press and hold the **PROGRAM** button to save the chase.	

RUNNING A CHASE

Action ☛	Notes ▱
1) Press a **CHASE** button then press the **AUTO DEL** button.	
2) Adjust the Chase speed by tapping the **TAP DISPLAY** button twice at a rate of your choosing.	*The time between 2 taps will set the chase speed (up to 10 minutes)*

CHECKING A CHASE

Action ☛	Notes ▱
1) Press and hold the **PROGRAM** button until the LED is lit.	
2) Select the desired **CHASE** button.	
3) Press the **TAP DISPLAY** button to switch the LCD display to steps.	
4) Review each scene/step individually by using the **BANK UP/DOWN** buttons.	

EDIT CHASE (COPY BANK INTO CHASE)

Action	*Notes*
1) Press and hold the **PROGRAM** button to enter programming mode.	
2) Press the desired **CHASE** button.	
3) Select the **BANK** to be copied using the **BANK UP/DOWN** buttons.	
4) Press **MUSIC/BANK COPY** button to prepare copy.	
5) Press **MIDI/REC** button to copy the bank. All LEDs will blink.	

EDIT CHASE (COPY SCENE INTO CHASE)

Action	*Notes*
1) Press and hold the **PROGRAM** button to enter programming mode.	
2) Press the desired **CHASE** button.	
3) Select the **BANK** that contains the scene to be copied using the **BANK UP/DOWN** buttons.	
4) Press the **SCENE** button that corresponds to the scene to be copied.	
5) Press **MIDI/REC** button to copy the scene. All LEDs will blink.	

EDIT CHASE (INSERT SCENE INTO A CHASE)

Action	*Notes*
1) Press and hold the **PROGRAM** button to enter programming mode.	
2) Press the desired **CHASE** button.	
3) Press the **TAP DISPLAY** to switch the LCD display to steps view.	
4) Use the **BANK UP/DOWN** buttons to navigate steps and locate the insert point of the new scene. The display will read the step number.	*I.e. To insert a scene between Steps 05 and 06 navigate using BANK buttons until the display reads STEP05.*
5) Press **MIDI/REC** button to prepare the insert.	
6) Use the **BANK UP/DOWN** button to locate the **SCENE**.	
7) Press the **SCENE** button that corresponds to the scene to be inserted.	
8) Press **MIDI/REC** button to insert the scene. All LEDs will blink.	

DELETE A SCENE IN A CHASE

Action ✎	Notes 🗋
1) Press and hold the **PROGRAM** button to enter programming mode.	*Remember that we use scene and steps interchangeably.*
2) Press the desired **CHASE** button that contains the scene to be deleted.	
3) Press the **TAP DISPLAY** button to switch the LCD display to steps.	
4) Select the scene/step to be deleted using the **BANK UP/DOWN** buttons.	
5) Press **AUTO DEL** button to delete the step/scene. All LEDs will blink.	

DELETE A CHASE

Action ✎	Notes 🗋
1) Press and hold the **PROGRAM** button to enter programming mode.	
2) Press the **CHASE** button (1~6) to be deleted.	
3) Press and hold **AUTO DEL** button and the respective **CHASE** button to delete the chase. All LEDs will blink.	

DELETE ALL CHASE PROGRAMS

CAUTION! This procedure will result in irrevocable loss of chase step memory. The individual scenes and program banks will be preserved.

Action ✎	Notes 🗋
1) Turn OFF controller.	
2) Press and hold the **BANK DOWN** button and the **AUTO DEL** button while turning ON the controller.	
3) All LEDs will blink.	

Scene Programming (Steps)

INSERT A SCENE

Action ☛	Notes ▭
1) Press and hold the **PROGRAM** button to enter programming mode.	
2) Press the desired **CHASE** button.	
3) Press the **TAP DISPLAY** to switch the LCD display to steps view.	
4) Use the **BANK UP/DOWN** buttons to navigate steps and locate the insert point of the new scene. The display will read the step number.	*I.e. To insert a scene between Steps 05 and 06 navigate using BANK buttons until the display reads STEP05.*
5) Press **MIDI/REC** button to prepare the insert.	
6) Use the **BANK UP/DOWN** button to locate the **SCENE**.	
7) Press the **SCENE** button that corresponds to the scene to be inserted.	
8) Press **MIDI/REC** button to insert the scene. All LEDs will blink.	

COPY A SCENE

Action ☛	Notes ▭
1) Press and hold the **PROGRAM** button to enter programming mode.	
2) Select the **BANK** that contains the scene to be copied using the **BANK UP/DOWN** buttons.	
3) Press the **SCENE** button that corresponds to the scene to be copied.	
4) Press **MIDI/REC** button to copy the scene. All LEDs will blink.	
5) Select the destination **BANK** that contains the scene memory to record onto using the **BANK UP/DOWN** buttons.	
6) Press the desired **SCENE** button to complete copy. All LEDs will blink.	

DELETE A SCENE

Action ☛	Notes ▭
1) Press and hold the **PROGRAM** button to enter programming mode.	*When deleting a scene the physical location is not removed, however, all 240 DMX channels available to the scene will be set to value 0.*
2) Select the **BANK** that contains the scene to be deleted by using the **BANK UP/DOWN** buttons.	
3) Press and hold the **AUTO DEL** button.	
4) Press the **SCENE** button that corresponds to the scene you want to delete. All LEDs will blink.	

DELETE ALL SCENES

Action ☛	Notes ▱
1) Press and hold the **PROGRAM** button and the **BANK DOWN** button while turning off power to the controller. 2) Turn the controller back on.	*CAUTION!* *This process is irreversible. All scenes with data will be set to 0.*

Playback

RUNNING IN SOUND-MODE

Action ☛	Notes ▱
1) Press the **MUSIC BANK COPY** button until the **MUSIC** LED turns on.	*In the Sound mode, programs will be triggered by the sound using its built-in microphone.*
2) Select the program **BANK** to run in sound-active mode using the **BANK UP/DOWN** buttons.	
3) Alternatively you can press a single **CHASE** button (1~6) or several **CHASE** buttons in sequence and all selected chases will loop in the order selected.	*Multiple chases selected will loop and run in the order originally selected.*
4) You can adjust the duration time using the **FADE TIME** fader.	

RUNNING IN AUTO-MODE

Action ☛	Notes ▱
1) Press the **AUTO DEL** button until the **AUTO** LED turns on.	*In the Auto mode, programs will be triggered by controllers fade and speed time as set on the faders.*
2) If a **CHASE** button is not pressed the controller will automatically run a **BANK** program.	
3) Change **BANK** programs by using **BANK UP/DOWN** buttons.	
4) Alternatively you can press a single **CHASE** button (1~6) or several **CHASE** buttons in sequence and all selected chases will loop in the order selected.	*Multiple chases selected will loop and run in the order originally selected.*
5) You can adjust the time between steps by moving the **SPEED** fader and the duration of the step by moving the **FADE TIME** fader.	

RUN MULTIPLE CHASES SIMULTANEOUSLY

Action ☛	Notes ▱
1) Press and hold **AUTO DEL** button.	*IMPORTANT! To avoid conflict between scenes running simultaneously that control the same fixture attributes consider creating individual color and gobo chases.*
2) While holding down **AUTO DEL**, in succession press and release each **CHASE** you would like to run simultaneously.	

BLACKOUT

The **Blackout** button brings all lighting output to 0 or off.

Midi Operation

The controller will only respond to MIDI commands on the MIDI channel which it is set to full stop. All MIDI control is performed using Note on commands. All other MIDI instructions are ignored. To stop a chase, send the blackout on note.

Action ☛

1) Press and hold the **MIDI/REC** button for about 3 seconds.

2) Select the MIDI control channel (1~16) via the **BANK UP/DOWN** buttons to set.

3) Press and hold the **MIDI/REC** button for 3 seconds to save settings.

4) To release MIDI control, press any other button except the **BANK** buttons during step 2.

Notes ▱

This is the Channel that the controller will receive MIDI note commands.

MIDI NOTE	FUNCTION (TURN ON/OFF)
00 to 07	Scenes 1~8 in BANK 1
08 to 15	Scenes 1~8 in BANK 2
16 to 23	Scenes 1~8 in BANK 3
24 to 31	Scenes 1~8 in BANK 4
32 to 39	Scenes 1~8 in BANK 5
40 to 47	Scenes 1~8 in BANK 6
48 to 55	Scenes 1~8 in BANK 7
56 to 63	Scenes 1~8 in BANK 8
64 to 71	Scenes 1~8 in BANK 9
72 to 79	Scenes 1~8 in BANK 10
80 to 87	Scenes 1~8 in BANK 11
88 to 95	Scenes 1~8 in BANK 12
96 to 103	Scenes 1~8 in BANK 13
104 to 111	Scenes 1~8 in BANK 14
112 to 119	Scenes 1~8 in BANK 15
120	Chase 1
121	Chase 2
122	Chase 3
123	Chase 4
124	Chase 5
125	Chase 6
126	BLACKOUT

Data Transfer

It is possible to transfer the programs stored in one DMX-50A controller to another. Connect from the DMX output of the programmed controller to the DMX input of the other.

Action ☛

1) Source unit: Turn unit Off, press and hold **SCANNER** buttons 2, 3 and **SCENE** button 1 then turn unit back On.

2) Destination unit: Turn unit Off, press and hold **SCANNER** buttons 8, 9 and **SCENE** button 2 then turn unit back On.

3) Both units are now ready to transmit and receive. Press **SCENE** buttons 7 & 8 simultaneously on Source unit to begin transmission.

Notes ▱

The display should show TRANSMIT, this indicates it is ready to transmit data.

The display should show RECEIVE, this indicates it is ready to receive data transmission.

APPENDIX

DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). CHAUVET carries 3-pin XLR DMX compliant cables, DMX-10 (33'), DMX-4.5 (15') and DMX-1.5 (5')

FIXTURE LINKING

Figure 1 - DMX connector configuration

COMMON

DMX +

DMX -

INPUT

OUTPUT

Resistance 120 ohm 1/4w between pin 2 (DMX -) and pin 3 (DMX +) of the last fixture.

Termination reduces signal errors and to avoid signal transmission problems and interference, it is always advisable to connect a DMX signal terminator.
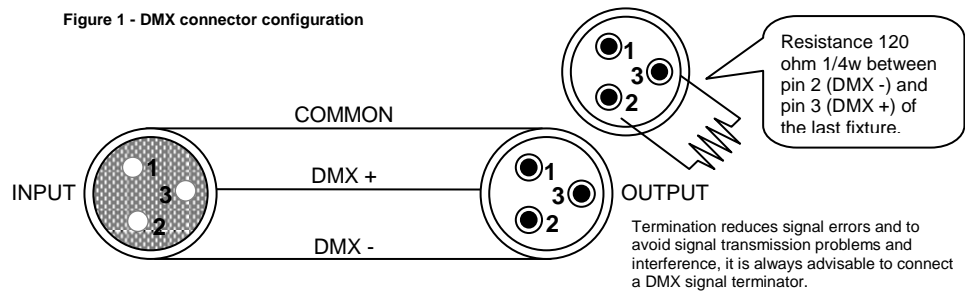
Note!   **If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. Chauvet Model No: DMX5M.**
The chart below details a proper cable conversion:

3 PIN TO 5 PIN CONVERSION CHART

CONDUCTOR	3 Pin Female (output)	5 Pin Male (Input)
GROUND/SHIELD	Pin 1	Pin 1
DATA (-)SIGNAL	Pin 2	Pin 2
DATA (+) SIGNAL	Pin 3	Pin 3
DO NOT USE		Do not use
DO NOT USE		Do not use

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RA #). Products returned without an RA # will be refused. Call CHAUVET and request RA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

DMX Dipswitch Quick Reference Chart

DMX Address Quick Reference Chart																					
Dip Switch Position																					
DMX DIP SWITCH SET				#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
0=OFF					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
1=ON					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
X=OFF or ON					#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5																	
0	0	0	0	0			32	64	96	128	160	192	224	256	288	320	352	384	416	448	480
1	0	0	0	0		1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481
0	1	0	0	0		2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482
1	1	0	0	0		3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483
0	0	1	0	0		4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484
1	0	1	0	0		5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485
0	1	1	0	0		6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486
1	1	1	0	0		7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487
0	0	0	1	0		8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488
1	0	0	1	0		9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489
0	1	0	1	0		10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490
1	1	0	1	0		11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491
0	0	1	1	0		12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492
1	0	1	1	0		13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493
0	1	1	1	0		14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494
1	1	1	1	0		15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495
0	0	0	0	1		16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496
1	0	0	0	1		17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497
0	1	0	0	1		18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498
1	1	0	0	1		19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499
0	0	1	0	1		20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500
1	0	1	0	1		21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501
0	1	1	0	1		22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502
1	1	1	0	1		23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503
0	0	0	1	1		24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504
1	0	0	1	1		25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505
0	1	0	1	1		26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506
1	1	0	1	1		27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507
0	0	1	1	1		28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508
1	0	1	1	1		29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509
0	1	1	1	1		30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510
1	1	1	1	1		31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511

Dip Switch Position   DMX Address

General Troubleshooting

Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Auto shut off	Check fan thermal switch reset	✓			
Beam is very dim or not bright	Clean optical system or replace lamp Check 220/110v switch for proper setting	✓			
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Fixture is not responding	Check DMX Dip switch settings for correct addressing Check DMX cables Check polarity switch settings	✓			
Fixture is on but there is no movement to the audio	Make sure you have the correct audio mode on the control switches. If audio provided via ¼" jack, make sure a live audio signal exists Adjust sound sensitivity knob	✓		✓	✓
Lamps cuts off sporadically	Possible bad lamp or fixture is overheating. Lamp may be at end of its life.	✓			
Light will not come on after power failure	Some discharge lamps require a cooling off period before the electronics in the fixture can kick start it again, wait 5 to 10 minutes before powering up	✓			
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
Moves slow	Check 220/110v switch for proper setting	✓			
No flash	Re-install bulb, may have shifted in shipping	✓			
No laser output	Bounce mirror motor may have shifted during shipping, readjust	✓			
No light output	Check slip ring & brushes for contact Install bulb Call service technician	✓			
Relay will not work	Check reset switch Check cable connections				✓
Remote does not work	Make sure connector is firmly connected to device	✓	✓		
Stand alone mode	All Chauvet lighting fixtures featuring stand-alone functions do not require additional settings, simply power the fixture and it will automatically enter into this mode	✓			

Technical Specifications

WEIGHT & DIMENSIONS
Length...514 mm (20.25 in)
Width..89 mm (3.5 in)
Height .... 171 mm (6.75 in)
Weight... 2.7 Kg (6 lbs)

POWER
Operating Range... DC 9V-12V 500mA min
Adapter ....Provided

THERMAL
Maximum ambient temperature.. 45°C (113° F)

CONTROL & PROGRAMMING
Data input .... locking 3-pin XLR male socket
Data output ....2 x locking 3-pin XLR female socket
Data pin configuration ....pin 1 shield, pin 2 (-), pin 3 (+)
Protocols...DMX-512 USITT

ORDERING INFORMATION
DMX-50A Controller DMX-50A

EC DECLARATION OF CONFORMITY
We declare that our products (lighting equipments) comply with the following specification and bears
CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive
89/336/EEC.
....EN55014-1: 1993, EN61000-3-2: 1995, EN61000-3-3:1995
.... EN55014-2: 1997 CATEGORY II
....EN61000-4-2: 1995, EN61000-4-3: 1995, EN61000-4-4:1995
....EN61000-4-5: 1995, EN61000-4-6: 1995, EN61000-4-11: 1994
Harmonized Standard EN60598-1: 1993
Safety of household and similar electrical appliances Part 1: General requirements
Following the provisions of the Low Voltage Directive 73/23/EEC and 93/68/EEC.

EC DECLARATION OF CONFORMITY

We declare that our products (remote controller) comply with the following specification and bears CE
mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive
89/336/EEC.
.... EN55015: 1993
....EN50082-1: 1997
....EN61000-3-2: 1995
....EN61000-3-3: 1995