ILS-CON
ILS™ Control Center

USER MANUAL

Chauvet, 3000 N 29th Ct, Hollywood, FL 33020 U.S.A
(800) 762-1084 – (954) 929-1115
FAX (954) 929-5560
www.chauvetlighting.com

TABLE OF CONTENT

BEFORE YOU BEGIN **3**
- WHAT IS INCLUDED 3
- UNPACKING INSTRUCTIONS 3
- SAFETY INSTRUCTIONS 3

INTRODUCTION **4**
- FEATURES 4
- PRODUCT OVERVIEW 4
  - *Control Center (left side)* *4*
  - *Control Center (right side)* *5*
  - *Rear Panel* *5*
  - *Rear Panel* *6*

SETUP **7**
- CONNECTION DIAGRAM 7
- COMMON TERMS 8

OPERATING INSTRUCTIONS **9**
- SETUP 9
  - *Setting up the System* *9*
  - *ILS™ Fixture Addressing (Patching)* *9*
  - *Non-ILS™ Fixture Addressing (Patching)* *10*
- PROGRAMMING 11
  - *Entering Program Mode* *11*
  - *Programming Fixtures* *11*
  - *Create a Scene* *11*
  - *Apply Movement Effect to a Scene* *12*
  - *Previewing Memory (Scene or Chase)* *12*
  - *Create a Chase* *13*
  - *Overwrite a Program* *13*
  - *Delete a Program* *13*
  - *Delete a Step* *14*
  - *Clear All Memory* *14*
- PLAYBACK 14
  - *Running the Show (Light Show Mode)* *14*
  - *Using the Integrated CA-8 controller* *15*
  - *Using the Integrated Strobe Controller* *15*
  - *Using the Fog Machine Trigger* *15*
  - *Blackout* *15*
  - *Fixture Override* *15*
- PROGRAMMING SHORTCUTS 16
- CONTROLLER PRESET TRAIT SELECTIONS (VISUAL QUICK-CHART) 17
- MIDI OPERATION 17

APPENDIX **19**
- CA-8 COMPATIBLE FIXTURES 19
- DMX PRIMER 19
  - *Fixture Linking* *19*
- MAINTENANCE 21
- RETURNS PROCEDURE 21
- CLAIMS 21
- GENERAL TROUBLESHOOTING 22
- TECHNICAL SPECIFICATIONS 23

BEFORE YOU BEGIN

What is included

- 1 x ILS-CON "ILS™ Control Center"
- DC 9V 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

- DMX address ILS™ intelligent lighting fixtures from the ILS™ Control Center
- Independently control up to 24 ILS™ fixtures or 24 8-channel DMX devices
- 12 preset movement effects for quick programming
- 24 playbacks as scene or chase
- 485 total scene memory
- 2 integrated CA-8 controllers
- integrated variable strobe trigger
- integrated fog trigger
- blackout button
- chase speed slider
- fade speed slider
- built in microphone for sound activation
- midi input triggering

Product Overview

Control Center (left side)

BUTTON OR FADER	FUNCTION
Stand Alone 1 & 2	Equivalent of 2 CA-8 remote controllers, for master/slave triggering of compatible fixtures. (see appendix section "CA-8 Compatible Fixtures" **Requires optional CA-CBL Linking cable**
Scanners	Enables selection of fixtures for programming
Movement (trait)	Enables the selection of 12 preset movement patterns
Shutter (trait)	Enables shutter settings
Gobo (trait)	Enables gobo selection
Color (trait)	Enables color selection
Rotation (trait)	Enables gobo rotation selection
Dimmer (trait)	Enables dimmer selection
Focus (trait)	Enables motorized focus selection
Buttons 1~8 / 13~20	Universal keys for the selection of fixtures, preset fixture traits and memory

Control Center (right side)

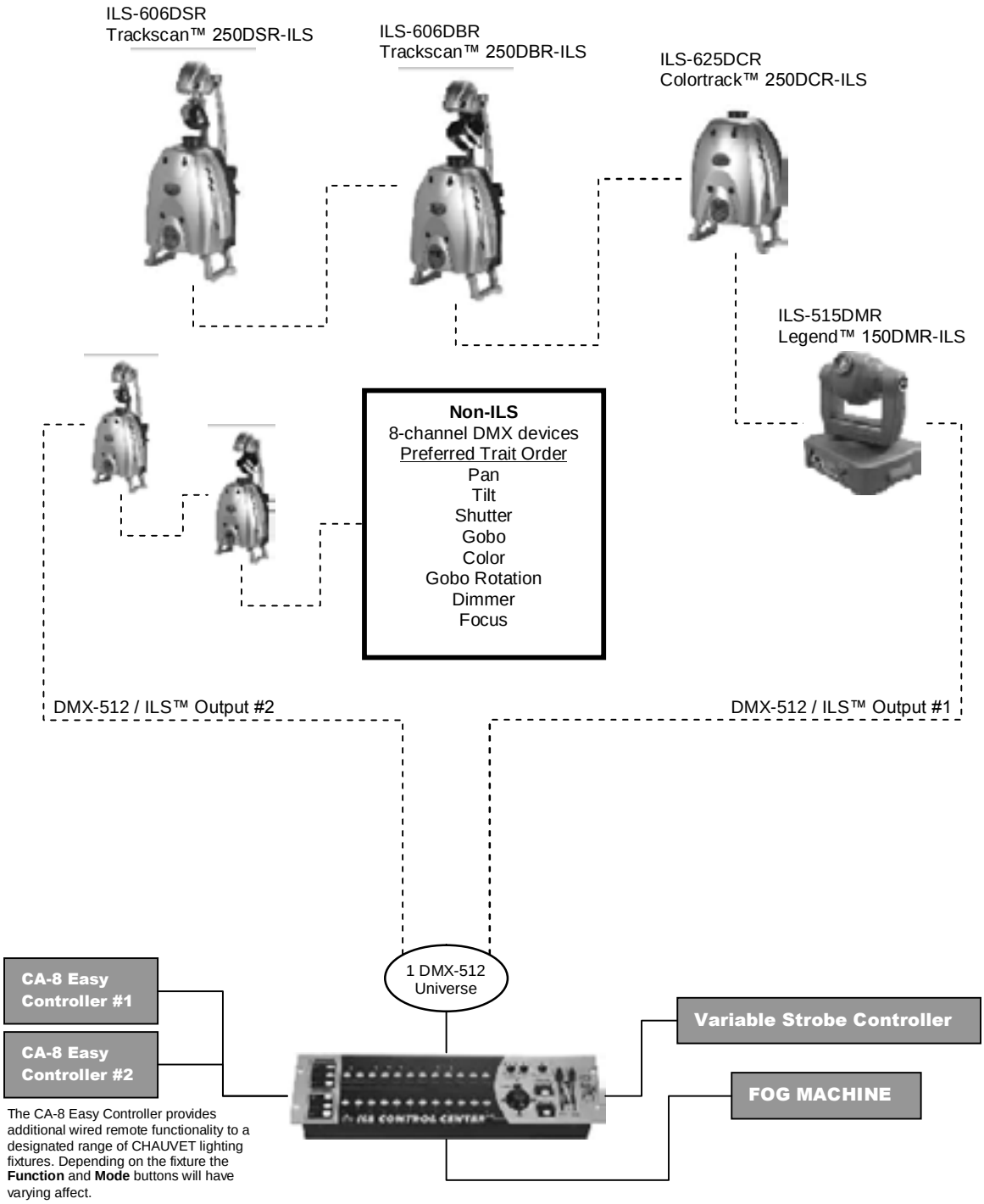
BUTTON OR FADER	FUNCTION
Page	Toggles between page 1 and page 2 comprised of 12 memory locations in each
Memory	Enables memory location selection
Cancel	Used either to delete a program or to cancel out of a function or unwanted process
Save	Used to save a program
Buttons 9~12 / 21~24	Universal keys for the selection of fixtures, traits and memory
Auto/Sound/Manual	In **Light Show mode** toggles between Auto, Sound and Manual modes
Light Show	Enables the show mode for playback
Blackout	Provides a blackout function and activates **Stand/Alone mode**
Joystick	For pan & tilt movement of intelligent lights Press down to activate **FINE** pan/tilt movement
FINE	Provides a slower and more accurate response to Pan & Tilt movement using the joystick.
Override	Allows an overriding manual control of fixtures while in **Light Show mode**
Fog	Triggers fog machine
Strobe	Momentary strobe trigger
Speed (fader)	- Used to adjust the hold or wait time of a scene while in **Light Show mode** - Varies the tilt output in **Scanner** function - Varies the tilt range in **Movement** function
XFade (fader)	- Used to adjust the time between steps within a chase while in **Light Show mode** **-** Varies the pan output in **Scanner** function - Varies the pan range in **Movement** function

Rear Panel

ITEM	FUNCTION
1. Power Switch	Turns the device ON and OFF.
2. DC Input	DC 9~12V, 300mA minimum
3. DC Fog Machine	DC Fog Machine Type remote trigger (5-pin Din)
4. Strobe	Outputs +12V DC for the control of Strobes
5. Audio In	Audio line input
6. Midi In	Midi input
7. DMX In	DMX data input locking 3-pin XLR male socket
8. DMX Out	There are two DMX output connectors on the ILS-CON, also referred to as Loop1 and Loop2 Locking 3-pin XLR female socket
9. Stand Alone	5-pin XLR to ¼" phone jack for CA-8 Easy Controller compatible fixtures for Master/Slave Mode operation
10. AC Fog Machine	AC Fog Machine Type remote trigger

SETUP

Connection Diagram



The CA-8 Easy Controller provides additional wired remote functionality to a designated range of CHAUVET lighting fixtures. Depending on the fixture the **Function** and **Mode** buttons will have varying affect.

Note! ***Please refer to your individual ILS product's user manual for DMX-512 and all other wiring connection instructions!***

Common Terms

The following are common terms used in using the ILS-CON Control Center.

- **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 series of scenes stacked one after another. It can be programmed as either a single scene or multiple scenes in sequence. Up to 485 scenes can be stored in a single program. A program can also be considered a chase.
- **Scenes** are static lighting states.
- **Sliders** also known as faders. There are 2 physical sliders on the ILS-CON Control Center.
- **Chases** can also be called programs. A chase consists of a bunch of scenes stacked one after another. In the ILS-CON every step or scene within the chase can be composed with a movement effect.
- **Movement Effects** are pre-constructed Pan/Tilt movements that can be applied to a scene. There are 12 movement effects in the ILS-CON.
- **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.
- **XFADE** 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** on the ILS™ Controller is refers to the process of assigning fixtures to any of the **Buttons 1~24.**
- **ILS™** stands for Integrated Lighting System. A component of the **ILS™** System is an enhanced version of the DMX-512 protocol that maintains backwards compatibility. The **ILS™** protocol enables the **ILS™** Controller to remotely DMX-512 address fixtures that are **ILS™** enabled. Further more, the **ILS™** System allows the control of various types of intelligent fixtures in a unison manner providing faster and efficient use of the controller.
- **Playbacks** can be either scenes or chases that are directly called to execution by user action. A playback can also be considered program memory that can be recalled during a show or running mode.

OPERATING INSTRUCTIONS

Setup

SETTING UP THE SYSTEM

1) Place the ILS-CON on a leveled surface. Note! The ILS-CON 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. Refer to the "Connection Diagram" section of this manual to assist you.
4) Plug in any CA-8 compatible fixtures to the integrated CA-8 controller interface. See "CA-8 Compatible Fixtures" in the appendix section for a list of compatible Chauvet products.
5) Plug in a compatible Chauvet Fogger to the AC Fog Machine Remote Controller connector.
6) Plug in any Chauvet **MONO** strobes in a daisy like fashion using a ¼" mono phone cable.

ILS™ FIXTURE ADDRESSING (PATCHING)

With the ILS-CON you are able to remotely DMX-512 address ILS™ fixtures.

Action	***Notes***
1) Press the **Blackout** button for at least 3 complete seconds or until the LED blinks. This will enable the **Stand/Alone Mode** for the ILS™ fixtures.	
2) Hold **Scanner** button down and bump (momentarily press) the blackout button.	
3) Wait for the lights and their LED displays to come to a complete stop. (**Very important!)**	*The only LED that will blink will be the first fixture in the Loop.*
4) Push the **joystick** down until it clicks. First fixture in the chain should light up, otherwise read the notes in this section.	*This will place focus on the first fixture in DMX output # 1, also called Loop1. There are 2 DMX outputs in the controller, Loop1 and Loop2. The first light in Loop1 will light up if it does not, then you are not connected to Loop1 but Loop2. Jump loops by moving the joystick left and right.*
5) Move the **joystick** left or right to jump Loops. The first ILS™ fixture connected to each Loop will light immediately.	*Tip! If you get lost, you probably pushed the joystick to the side and jumped Loops. Click the joystick to jump to fixture 1 on Loop1 and repeat step mentioned above.*
6) Up/Down **joystick** movement will traverse forwards and backwards along the fixtures.	
7) Press any one of the **Buttons 1~24** to patch the fixture accordingly.	*Pressing the **SCANNERS** button will toggle between pages. Page 1 allows access to (**Buttons** 1 ~ 12) and Page 2 to (**Buttons** 13 ~ 24).*
8) **Optional –** Step # 4	

Shortcut: [**Blackout**] – Hold 3sec (LED blinks) ➲ Hold [**Scanner**] & Tap [**Blackout**] ➲ Wait for lights to stop! ➲ Push to click [**Joystick**] ➲ [**Joystick**] Left/Right change Loop ➲ [**Joystick**] Up/Down change fixture ➲ Press [**Button**] to patch.

Tip! You can address multiple lights to the same address. Instead of independent control, you will have unison control.

Physical DMX Channel Addresses (ILS™) fixtures

Fixture Number	1	2	3	4	5	6	7	8	9	10	11	12
DMX channel for Moving Head, Scanner, Barrel	1	9	17	25	33	41	49	57	65	73	81	89
Color changer	3	11	19	27	35	43	51	59	67	75	83	91

Fixture Number	13	14	15	16	17	18	19	20	21	22	23	24
DMX channel for Moving Head, Scanner, Barrel	97	105	113	121	129	137	145	155	161	169	177	185
Color changer	99	107	115	123	131	139	147	157	163	171	179	187

NON-ILS™ FIXTURE ADDRESSING (PATCHING)

Although the ILS-CON was especially designed for the control of ILS™ products, it can control other DMX-512 fixtures or devices with a little bit of ingenuity. The ILS-CON control buttons are laid out and based on the DMX attributes of ILS™ fixtures. The controller expects the devices to want 8 channels of DMX control, and that those channels be in the following order; Pan, Tilt, Shutter, Gobo, Color, Gobo Rotation, Dimmer and Focus. If some of your intelligent lighting products do not exceed 8 channels, you will be able to control those devices, irrespective of the labeling on the controller.

Every control button that pertains to a fixture trait can also be controlled through the slider. By default selecting the **Scanner** button will control channel 1 and 2 of the DMX chain enabling joystick control. But it also uniquely activates both available sliders on the controller. It is important to know that selecting the **Movement** button releases control of the sliders and enables the selection of 12 preset movement effects. The joystick will still be available but only for changing the position of the effect. To regain control of the pan & tilt movement or channel 1 and channel 2 of DMX then press the **Movement** button again to release effects. If you were controlling a fixture with no pan or tilt, channel 1 and 2 could still be controlled either by the joystick or the two sliders. On the other hand if the pan and tilt were located on other channels, then you could use the **XFADE** slider to affect change. It is recommended that you program non-ILS™ fixtures individually. Non-ILS™ fixtures would require physical DMX addressing in 8 channel increments starting with channel 1. Please refer to your fixture's manual for DMX channel addressing method.

Physical DMX Channel Addresses (non-ILS™) fixtures

Fixture Number	1	2	3	4	5	6	7	8	9	10	11	12
DMX channel	1	9	17	25	33	41	49	57	65	73	81	89

Fixture Number	13	14	15	16	17	18	19	20	21	22	23	24
DMX channel	97	105	113	121	129	137	145	155	161	169	177	185

Programming

ENTERING PROGRAM MODE

By default when the ILS-CON is turned on, it will enter the program editor (mode). The LED on the **Blackout/Stand-Alone** button will be set to the OFF state.

1) While in any other mode, simply continue to press the **Blackout** button until the LED turns OFF.

PROGRAMMING FIXTURES

Action	***Notes***
1) Enter program editor (mode)	
2) Select **Scanners** button then select fixtures (**Buttons 1~24).** The default control is Pan and Tilt or Channel 1 & Channel 2.	*Tip! You can choose multiple fixtures. To deselect fixtures just press the button twice.*
3) You can now control the pan and tilt by using the **joystick**.	*Press the Scanners button to toggle between fixtures 1~12 and 13~24 as indicated by the top LED and bottom LED respectively.*
4) Skip **Movement** button for now and proceed to step 5.	*If you pressed **Movement** and the joystick does not respond, press **Movement** again to regain control.*
5) Select any of the **trait** buttons with exception of the **Movement** button.	***Tip! Program faster and easier by selecting individual traits such as gobos, colors and dimming. Go to page 18 for a Visual Quick Chart of "Controller Preset Trait Selections" to assist in programming.***
6) Select any of the **Buttons 1~24** or the **XFADE/VALUE** slider to affect change.	*Open the shutter on the light and make sure the dimmer level is set to full. In addition, the sliders can also be used when programming fixture traits.*
Repeat steps 5 and 6 to change other traits of the fixture.	***Buttons 1~24** contain preset values and the slider allows you to adjust the trait values manually. Refer to Page 18 for a Visual Quick Chart.*

Shortcut: Tap [**Blackout**] until LED turns OFF ➲ Select [**Scanner**] ➲ Select [**Button(s)**] (fixtures) ➲ Select [**trait** button] ➲ Move [**Joystick**] or select [**Buttons 1~24**] or move [**sliders**] ➲ Repeat trait selection and modification

CREATE A SCENE

A scene is a static lighting state. The ILS-CON can store 24 playbacks consisting of either a static scene or a series of scenes forming a chase.

Action	***Notes***
1) Program fixtures.	*See "Programming Fixtures" above.*
2) Press the **Save** button.	*Buttons LED will light up that contain previously stored programs.*
3) Select **Buttons (1~24)** to store into memory.	*The buttons section will now turn into memory locations 1 ~ 24. Press **Page** button to toggle between **Buttons(1~12) & Buttons(13~24)***

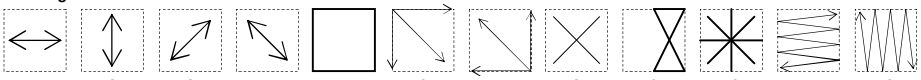
Shortcut: {Programming Fixtures} ➲ Press [**Save**] ➲ Select [**Button 1~24**] to store to memory

APPLY MOVEMENT EFFECT TO A SCENE

There are 12 preset Pan/Tilt movement programs available for you to choose while programming intelligent lights. These are also called effects. You can apply a different movement effect to every step in a chase if you so desire.

Action	***Notes***
1) Enter program editor (mode)	
2) Select **Scanners** button and select fixture(s) (**Buttons 1~24).**	*You can choose multiple fixtures. To deselect fixtures just press the button twice. Tap the **Scanners** button to toggle between fixtures 1~12 and 13~24 as indicated by the top LED and bottom LED respectively. This is called changing pages. You will notice that not all trait buttons have 2 pages, so therefore only buttons 1 ~ 12 are available.*
3) Press the **Movement** trait.	*Tip! Quickly open the shutter on the light by pressing **Shutter** and **Button #2**. Then return to **Movement**.*

12 Programmed movement effects



4) Select any of the 12 movement effects available by pressing any one of the **Buttons (1~12).**	*To disable effects or to return control to the joystick tap **Movement** again.*
5) Press the **Save** button.	*The buttons section will now turn into memory locations 1 ~ 24 for playback.*
6) Select **Buttons (1~24)** to store into memory.	

Shortcut: Tap [**Blackout**] until LED turns OFF ➲ Select [**Scanner**] ➲ Select [**Button(s)**] (fixtures) ➲ Select [**Movement**] ➲ Select [**Buttons 1~12**] ➲ Select other [**traits**] & modify ➲ Press [**Save**] ➲ Select [**Button 1~24**] to store to memory

PREVIEWING MEMORY (SCENE OR CHASE)

While in the program editor, you can preview a scene or chase. A chase consists of one or more scenes. Every scene within a chase is considered a step. We will use the term scene and step interchangeably through out this manual.

Action	***Notes***
1) Press the **Memory** button.	
2) Select the scene or chase you previously stored represented by **Buttons (1~24).**	*Remember! The **Page** button toggles between Page 1 and Page 2 giving you access to memory locations 13 ~ 24.*
3) If previewing a chase, simply press the same memory button again to preview another existing step in the chase.	*There is no way of traversing backwards so if you pass a step you wanted to edit you will need to either continue forward until it loops back again or select another memory button and then return to the one desire.*

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] (program) ➲ Select same button to preview another step ➲ Select other [**Button 1~24**] to preview another scene or chase

CREATE A CHASE

As mentioned previously, a chase consists of one or more scenes stepped together. Scenes in a chase are considered steps. The ILS-CON can store a maximum of 485 scenes and all of those scenes can be stored in a single chase.

Action	***Notes***
1) A chase is created by adding another step to the same program memory button. Press the **Memory** button.	
2) Select the program you wish to add a step to. **Buttons (1~24).**	***Page** button toggles between (1~12) and (13~24).*
3) See "Programming Fixtures"	*See instructions on page 12.*
4) Press the **Save** button.	
5) Select the same **Button (1~24)** originally selected to add this newly created scene to.	
6) Repeat steps number 3 through 5 to add more scenes.	

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] ➲ {Program fixtures} ➲ Press [**Save**] ➲ Select the same [**Button 1~24**] to add step to memory ➲ Repeat from {Programming Fixtures}

OVERWRITE A PROGRAM

Action	***Notes***
1) Press the **Memory** button.	
2) Select the program you wish to overwrite. **Buttons (1~24).**	***Page** button toggles between (1~12) and (13~24).*
3) Create a new scene. See "Programming Fixtures"	*See instructions on page 12.*
4) While holding down the **Save** button, press the program button **Buttons (1~24)** you previously selected again.	

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] (program) ➲ Create new scene {Program fixtures} ➲ Hold [**Save**] and press the same [**Button 1~24**] to overwrite

DELETE A PROGRAM

Action	***Notes***
1) Press the **Memory** button.	
2) Select the program you wish to delete. **Buttons (1~24).**	***Page** button toggles between (1~12) and (13~24).*
3) While holding down the **Cancel** button, press the program button **Buttons (1~24)** you previously selected again.	

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] (program) ➲ Hold [**Cancel**] and press the same [**Button 1~24**] to delete

DELETE A STEP

Action	Notes
1) Press the **Memory** button.	
2) Select the program you wish to edit. **Buttons (1~24).**	***Page*** *button toggles between (1~12) and (13~24).*
3) See "Previewing Memory" above for instructions on selecting a step within this program.	*See instructions on page 13.*
4) While holding down the **Memory** button, press the program button **Buttons (1~24)** you previously selected again to delete the step.	

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] (program) ➲ Select same button to preview another step ➲ Hold [**Memory**] & and press the same [**Button 1~24**] to delete the step

CLEAR ALL MEMORY

Action	Notes
1) Press the **Blackout** button for at least 3 complete seconds or until the LED blinks.	
2) Press the **Memory** and **Blackout** buttons at the same time to erase all memory.	

Shortcut: [**Blackout**] Hold 3secs ➲ Press [**Memory**] & [**Blackout**] simultaneously

Playback

RUNNING THE SHOW (LIGHT SHOW MODE)

You will need to program scenes or chases in order to use this mode.

Action	Notes
1) Press the **Light Show** button	
2) The first mode you will encounter will be the **Auto** mode, indicated by LED number 1.	*In Auto mode, programs selected will loop automatically. You can change the speed of the chase and the Fade time by moving the* ***Speed*** *slider and the* ***XFade*** *slider.*
3) Select program **[Button 1~24)** for playback.	*Tap the* ***Page*** *button to toggle between* ***Buttons 1~24*** *and* ***Buttons 13~24.***
4) Pressing the **A-S-M** button will activate the Sound mode, indicated by LED number 2.	***A-S-M*** *is short for Auto – Sound – Midi, and it refers to the button directly to the left of the* ***Light Show*** *button.*
5) Pressing the **A-S-M** button again will activate **MIDI** triggering, indicated by LED 3.	*In the Sound mode, programs will be triggered by the sound using its built-in microphone.*
6) Pressing the **A-S-M** button again will revert back to **Auto** mode, indicated by LED 1.	*Programs would be triggered by a* ***MIDI*** *device, such as a MIDI keyboard.*

Shortcut: Press [**Light Show**] default (Auto Mode) ➲ Optional: Choose another mode by pressing [**A-S-M**] (2nd Sound Mode, 3rd MIDI Mode) ➲ Select programs using [**Button 1~24**] ➲ Optional: Modify [**Speed**] and [**XFADE**] sliders

USING THE INTEGRATED CA-8 CONTROLLER

The CA-8 Easy Controller provides additional wired remote functionality to a designated range of CHAUVET lighting fixtures. Depending on the fixture the **Function** and **Mode** buttons will have varying affect. The ILS™ Control Center has 2 individual integrated CA-8 controllers. You will need (2) CA-CBL linking cables to begin the chain. Cables are sold separately.

You will need to consult with your individual fixture's manual for a detailed description of the controlled parameters. Below is a general description of what the individual buttons will do.

BUTTON	ACTION
STAND BY	In general, this function will provide a blackout mode to all units connected.
FUNCTION	The **function** button is a multi-purpose button providing for the selection of minor program changes, such as strobing, step advancement, fast/slow selection and more features that depend on the particular CA-8 compatible lighting fixture you are controlling. The user will need to review the section about the CA-8 Easy Controller in the Users Manual of the lighting fixture he/she is controlling to determine the specific outcome.
MODE	This button also serves a multi-purpose function. Depending on the lighting fixture, the **mode** button could make available the selection of programs, audio enable or slow/fast speeds.

USING THE INTEGRATED STROBE CONTROLLER

Press the **Strobe** button to activate the strobes. You can vary the strobe rate by holding down the **Strobe** button and selecting **Buttons 1~12.** You will notice that the **Strobe** LED will blink at different rates as you select different **Buttons 1~12.**

USING THE FOG MACHINE TRIGGER

The Fog **Machine** button is really simple to use. Just press the button to trigger the fogger.

BLACKOUT

The **Blackout** button brings all lighting output to 0 or off. The same affect as sliding the **Master** slider all the way down.

FIXTURE OVERRIDE

While in show mode, press the **Override** button to control fixtures manually. The LED will light up indicating that it is active. Press the **Scanners** button then select the fixtures you would like to manually control. Follow steps 2 through 7 under "Programming Fixtures" for details on controlling fixtures.

Programming Shortcuts

Fixture addressing (patching)

Shortcut: [**Blackout**] – Hold 3sec ➲ Hold [**Scanner**] & Tap [**Blackout**] ➲ Wait for lights to stop! ➲ Push to click [**Joystick**] ➲ [**Joystick**] Left/Right change Loop ➲ [**Joystick**] Up/Down change fixture ➲ Press [**Button**] to patch

Programming fixtures

Shortcut: Tap [**Blackout**] until LED turns OFF ➲ Select [**Scanner**] ➲ Select [**Button(s)**] (fixtures) ➲ Select [**trait** button] ➲ Move [**Joystick**] or select [**Buttons 1~24**] or move [**sliders**] ➲ Repeat trait selection and modification

Create a scene

Shortcut: {Programming Fixtures} ➲ Press [**Save**] ➲ Select [**Button 1~24**) to store to memory

Apply movement effect to a scene

Shortcut: Tap [**Blackout**] until LED turns OFF ➲ Select [**Scanner**] ➲ Select [**Button(s)**] (fixtures) ➲ Select [**Movement**] ➲ Select [**Buttons 1~12**] ➲ Select other [**traits**] & modify ➲ Press [**Save**] ➲ Select [**Button 1~24**] to store to memory

Previewing memory

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] (program) ➲ Select same button to preview another step ➲ Select other [**Buttons 1~24**] to preview another scene or chase

Create a chase

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] ➲ {Program fixtures} ➲ Press [**Save**] ➲ Select the same [**Button 1~24**) to add step to memory ➲ Repeat from {Programming Fixtures}

Overwrite a program

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] (program) ➲ Create new scene {Program fixtures} ➲ Hold [**Save**] and press the same [**Button 1~24**] to overwrite

Delete a program

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] (program) ➲ Hold [**Cancel**] and press the same [**Button 1~24**) to delete

Delete a step

Shortcut: Press [**Memory**] ➲ Select [**Button 1~24**] (program) ➲ Hold [**Cancel**] and press the same [**Button 1~24**] to delete

Clear all memory

Shortcut: [**Blackout**] Hold 3secs ➲ Press [**Memory**] & [**Blackout**] simultaneously

Run light show

Shortcut: Press [**Light Show**] default (Auto Mode) ➲ Optional: Choose another mode by pressing [**Light Show**] (2^{nd} Sound Mode, 3^{rd} MIDI Mode) ➲ Select programs using [**Button 1~24**] ➲ Optional: Modify [**Speed**] and [**XFADE**] sliders

Controller Preset Trait Selections (Visual Quick-Chart)

Shutter

Button	1	2	3	4	5	6	7	8	9	10	11	12
Upper	Blackout	Open	Slow Strobe	Strobe	Strobe	Strobe	Strobe	Strobe	Strobe	Strobe	Strobe	Fast Strobe
Button	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
Lower	Shaking	Shaking	Shaking	Shaking	Shaking	Shaking	Shaking	Shaking	Shaking	Shaking	Shaking	Open

Gobos & Rotation

Button	1	2	3	4	5	6	7	8	9	10	11	12
Upper	Open	Open	Gobo 1	Gobo 1	Gobo 2	Gobo 2	Gobo 3	Gobo 3	Gobo 4	Gobo 4	Gobo 5	Gobo 5
Button	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
Lower	Gobo 6	Gobo 6	Gobo 7	Slow Scroll	Scroll 1	Scroll 2	Scroll 3	Scroll 4	Scroll 5	Scroll 6	Scroll 7	Fast Scroll

Button	1	2	3	4	5	6	7	8	9	10	11	12
Rotation	Stop	Fast CCW Speed	CCW Speed 1	CCW Speed 2	CCW Speed 3	Slow CCW Speed	Slow CW Speed	CW Speed 3	CW Speed 2	CW Speed 1	Fast CW Speed	Stop

Colors (Full Color)

Button	1	2	3	4	5	6	7	8	9	10	11	12
Upper	White	White	Green	Green	Magenta	Magenta	Light Blue	Yellow	Yellow	Orange	Orange	Blue
Button	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
Lower	UV Purple	Light Green	Light Green	Pink	Slow scroll	Scroll 1	Scroll 2	Scroll 3	Scroll 4	Scroll 5	Scroll 6	Fast scroll

Colors (Split)

Button	1	2	3	4	5	6	7	8	9	10	11	12
Upper	White	Green	Green + Magenta	Magenta	Magenta + Light Blue	Light Blue	Light Blue + Yellow	Yellow	Yellow + Orange	Orange	Orange + Blue	Blue
Button	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
Lower	Blue + UV Purple	UV Purple + Light Green	Light Green	Pink	Slow scroll	Scroll 1	Scroll 2	Scroll 3	Scroll 4	Scroll 5	Scroll 6	Fast scroll

Dimmer

Button	1	2	3	4	5	6	7	8	9	10	11	12
Dimmer	100%	90%	82%	74%	64%	55%	46%	37%	28%	19%	10%	0%

Midi Operation

You can run a chase, adjust the speed and fade time, switch light show to auto or sound, and blackout using MIDI commands. This allows you to synchronize a light show against a midi track. You cannot perform live control or programming functions with MIDI.

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.

When programming a MIDI controlled sequence, you should always start by sending a page command, as you don't know what the current page setting will be on the controller. When you recall a chase by MIDI, the chase will run at its programmed speed, fade and sound activation settings. Change the speed, fade and sound activation by MIDI command after you have started the chase. The speed, fade and sound setting which you set by MIDI will not be remembered as part of the chase.

MIDI NOTE	NOTE NAME	FUNCTION
36	C3	Chase 1
37	C#3	Chase 2
38	D3	Chase 3
39	D#3	Chase 4
40	E3	Chase 5
41	F3	Chase 6
42	F#3	Chase 7
43	G3	Chase 8
48	C4	Chase 9
49	C#4	Chase 10
50	D4	Chase 11
51	D#4	Chase 12
52	E4	Chase 13
53	F4	Chase 14
54	F#4	Chase 15
55	G4	Chase 16
56	G#4	Chase 17
57	A4	Chase 18
58	A#4	Chase 19
59	B4	Chase 20
60	C5	Chase 21
61	C#5	Chase 22
62	D5	Chase 23
63	D#5	Chase 24
74	D6	SPEED
75	D#6	X-FADE
76	E6	AUTO MODE
77	F6	SOUND MODE
78	F#6	BLACKOUT ON
79	G6	BLACKOUT OFF

APPENDIX

CA-8 Compatible Fixtures

MODEL NUMBER	MODEL NAME
ILS-625DCR	Colortrack™ 250DCR-ILS
DMX-100SQ	DJ Squeeze™
CH-649X	Explorer Plus™
DMX-100	Fascination™
DMX-100S	Imagination™
CH-610	Insignia™
CH-605	Intimidator™
ILS-515DMR	Legend™ 150DMR-ILS
DMX-515R	Legend™ 150R
DMX-1655R	Legend™ 250RX
DX-427W	Mini Legend Wash™
DMX-425	Mini Legend™
CH-636X	Navigator Plus™
LGG-2050RG	Orbiter RG™
DMX-100B	Sensation™
TFX-900	Stage Wash™ 900
ST-200X	Techno Strobe™ 200X
ILS-606DBR	Trackscan™ 250-ILS (Barrel)
ILS-606DSR	Trackscan™ 250-ILS (Scanner)
DMX-606R	Trackscan™ 250R

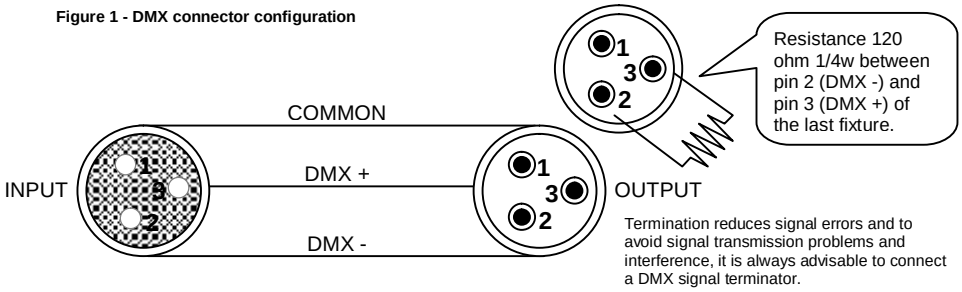
DMX Primer

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



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

Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint. Do not to touch the lamp glass when cleaning fixture. Oil and dirt can cause damage and premature aging of the lamp. In the event that the lamp is touched or becomes dirty, clean the lamps with an alcohol wipe.

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. - Always dry the parts carefully. - Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

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.

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 ..... 485 mm (19.09 in)
Width ..... 135 mm (5.3 in)
Height ..... 80 mm (3.15 in)
Weight ..... 2.5 Kg (5.5 lbs)

POWER

Operating Range ..... DC 9V-12V 300mA 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

ILS™ Control Center ..... ILS-CON
CA-8 Linking Cables ..... CA-CBL

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