Light Controller 384

Item Number: LL384C

USER MANUAL

This user manual includes important information for installation and operation. Please read this user manual carefully to install, operate, and maintain the lighting safety and correctly. A verified technician should do the installation and operation.

Please carefully check for any damages caused by transportation.

Before delivery, this device has passed strict quality control and inspection. Please follow the user manual for proper operation. If this fixture is damaged due to operation error or disregard of this manual, the fixture will be out of warranty, and the manufacture or dealer will not be held responsible.

Features:

DMX512/1990 Standard

Controls 12 intelligent lights of up to 32 channels. Total of 384 channels

30 banks, each with 8 scenes; 6 chases, each with up to 240 scenes

Record up to 6 chases with fade time and speeds.

16 sliders for direct control of channels

MIDI control over banks, chases and blackout

Built-in microphone for music mode

Auto mode program controlled by fade time sliders

DMX in/out: 3 pin XRL

LED gooseneck lamp

Plastic end housing

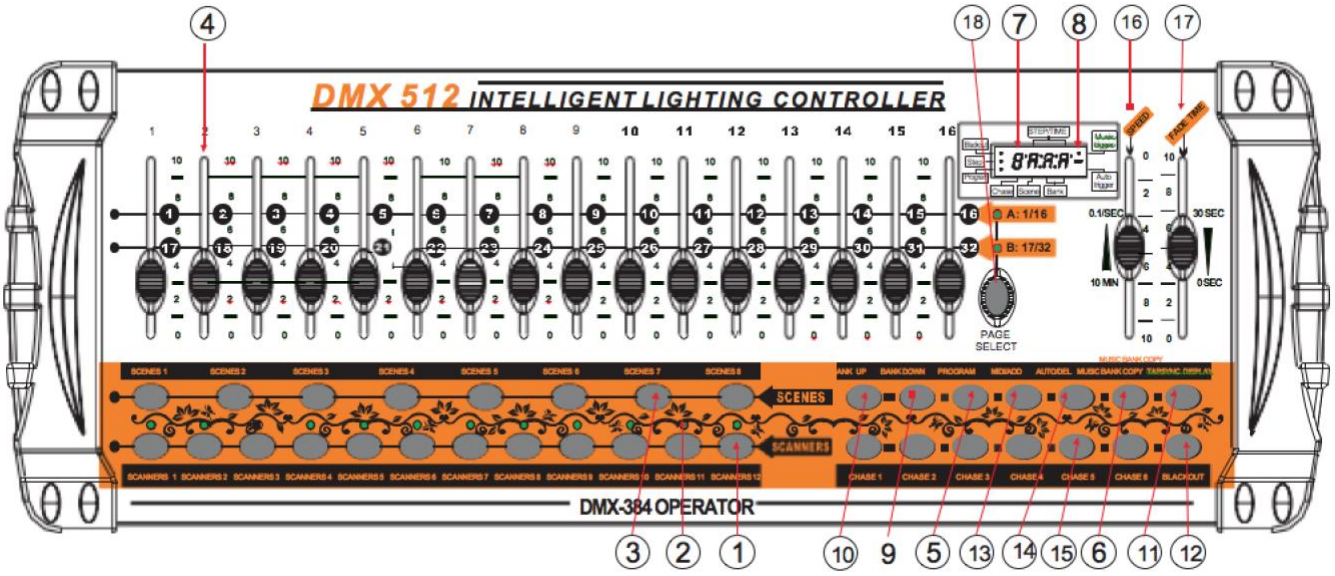
General Overview:

The controller is a universal intelligent lighting controller. It allows control of 12 fixtures composed of 32 channels each. Has up to 240 programmable scenes.

Six chase banks can contain up to 240 steps composed of the saved scenes 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 there are various programming tools: 16 universal channel sliders, quick access scanner, scene buttons and an LED display indicator for quick navigation of the controls and menu functions.

Product Overview (Front):



(Button / Fader Functions)

1. Scanner Select Buttons: Fixture selection

2. Scanner Indicator LEDS: Indicates the fixtures currently selected

3. Scene Select Buttons: Universal bump buttons represent the scene location for storage and selection.

4. Channel Faders: Used for adjusting DMX values. Channels 1-32 can be adjusted immediately after pressing the respective “scanner select” button.

5. Program Button: Used to enter programming mode.

6. Music/Bank Copy Button: Used to activate music mode and as the copy command during programming.

7. LED Display Window: Status window displays pertinent operational data.

8. Mode Indicator LEDS: Provides operating mode status (manual, music or audio).

9. Bank Up Button: Function button to traverse Scene/Steps in banks or chases.

10. Bank Down Button: Function button to traverse Scene/Steps in banks or chases.

11. Tap Display Button: Sets the chase speed by tapping, and toggles between values and percentages.

12. Blackout Button: Sets the shutter or dimmer value of all fixtures to "0" causing all light output to cease.

13. MIDI/ADD Button: Activates MIDI external control and is also used to confirm the record/save process.

14. Auto/Del Button: Used to activate auto mode and as the delete function key during programming.

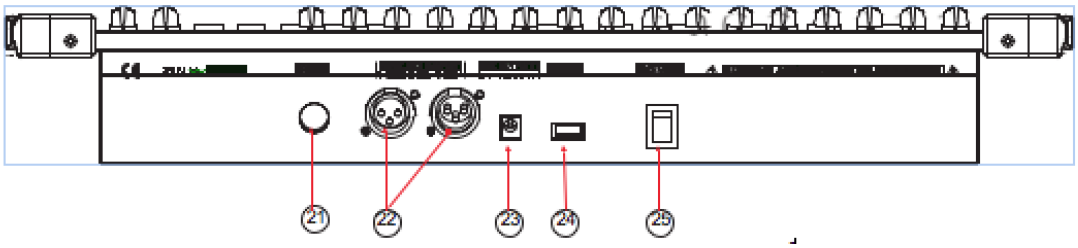
15. Chaser Buttons: Chase memory 1 – 6.

16. Speed Fader: This will adjust the hold time of a scene or a step with a chase.

17. Fade-Time Fader: Also considered a cross-fade and sets the interval time between two scenes in a chase.

18. Page Select Button: In manual mode, allows the toggle between pages of control or to select both pages simultaneously. Both LEDS 'on' will allow the control of both lower and upper range channels.

Product Overview (Rear Panel):



(Button / Fader Functions)

21. MIDI Input Port: For external triggering of Banks and Chase using a MIDI device.

22. DMX Output Connector: DMX control signal.

23. DC Input Jack: Main power feed.

24. USB Lamp Socket

25. 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 where all of the lighting fixture's light outputs 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, which can be controlled.

Programs are a scenes stacked one after another. They can be programmed as either a single scene or multiple scenes in sequence.

Scenes are static lighting states.

Sliders are 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 a block to the light's 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.

Playbacks can be either scenes or chases that are directly called to execution by the user. A playback can also be considered program memory that can be recalled during a show.

Operating Instructions

Setting up the system:

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

Plug in DMX cable(s) to the intelligent lighting as described in the fixtures respective manual.

Fixture Addressing:

The Controller is programmed to control 32 channels of DMX per fixture. The fixtures you wish to control with the corresponding *scanner* buttons on the unit must be spaced 16 channels apart.

This table refers to a standard 9 dipswitch binary configurable device.

Pan and Tilt Channels

FIXTURE OR SCANNER #	DEFAULT DMX STARTING ADDRESS	BINARY DIPSWITCH SETTINGS SWITCH TO THE " 'ON' POSITION"
1	1	1
2	33	1 , 6
3	65	1 , 7
4	97	1 ,6 ,7
5	129	1 , 8
6	161	1 , 6 , 8
7	193	1 , 7 , 8
8	225	1 , 6 , 7 ,8
9	257	1 , 9
10	289	1 , 6 , 9
11	321	1 , 7 , 9
12	353	1 ,6 ,7 , 9

Action:

Not all intelligent lighting fixtures are alike or share the same control attributes. The controller allows the user to assign the wheel the correct pan and tilt channel for each individual fixture.

1. Press and hold *program* and *TAPSYNC* different DMX channel. Faders are given a channel button together and one time access to the number, and are labeled on the surface of the channel assignment mode. All pan/tilt can be reassigned to output on a different DMX channel. Press AUTO/DEL buttons to delete the channel assignment mode.

2. Press a *scanner button* to re-assign fader.

3. Move one fader 1-32 channels to select the pan channel.

4. Press the *TAPSYNC Display button* to select pan/tilt. All pan/tilt can be reassigned to output on a different DMX channel.

5. Move one fader 1-32 channels to select the pan channel.

6. Press and hold *Program and TAPSYNC display* buttons to exit and save. All LEDS will blink.

Resetting the System

This will reset the controller to its factory default and erase all programs and settings.

Action:

1. Turn off the unit.

2. Press and hold *Bank Up and Auto/DEL*.

3. Turn on power to the unit (while still holding *Bank Up and Auto/DEL*.

Copy Scanner

Example: Copying Scanner 1 into Scanner 2

Action:

1. Press and hold *Scanner button #1. (There is the capability to copy the setting of one scanner button to another).*

2. While holding *button #1* press *scanner button #2.*

3. Release *scanner button #1* before releasing *scanner button #2.*

4. All *scanner* LED indicators will flash to confirm a successful copy.

Fade Time Assign

Board has the ability to alter fade time during scene execution and can implement broadly to all output channels or only to the Pan and Tilt movement channels. Has ability to change gobos and color while the movement of the light remains unaffected.

Action:

1. Turn off the controller.

2. Hold the *Blackout and TAPSYNC Display* buttons simultaneously.

3. Turn on the controller.

4. Press the *TAPSYNC Display* button to toggle between the two modes. Either all channels (A) or select channel Pan and Tilt only (P)

5. Press *Blackout* and *TAPSYNC Display* to save settings. All LEDS will blink to confirm.

Operation

Manual Mode

The manual mode allows direct control of all scanners. They're able to move and change attributes by using the channel faders.

Action:

1. Press the *Auto DEL* button repeatedly until the Manual LED is lit.

2. Select a *Scanner* button.

3. Move faders to change fixture attributes. *TAPSYNC Display* button: press to toggle the output indicator on the LED display between DMX values (0-255) and percentage (0-100).

Review Scene or Chase

This instruction assumes that scenes and chases have been recorded on the controller.

Action: (scene review)

1. Select any of the 30 banks by pressing the *Bank Up/Down* buttons while in *Manual Mode.*

2. Select a scene button 1-8 to review.

3. Move wheel and faders to change fixture attributes.

Action: (chase review)

1. Press any 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 to review all scenes in the chase.

Programming

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

Entering Program Mode:

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 controller can save 240 scenes total.

Action:

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 a scene. More than one fixture may be selected.

4. Compose a look by moving the sliders and wheel.

5. Tap MIDI/RED button.

6. Choose a *bank* (1 – 30) to change if necessary. There are 8 scenes available in every bank.

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. LEDs will flash to confirm. The LED display will indicate the scene 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.

Running a Program

Action:

1. Use *Bank Up/Down* buttons to change *program* banks if necessary.

2. Press the *Auto/DEL* button down 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, tap the TAPSYNC *Display* button twice. The time between two taps sets the time between scenes (up to 10 minutes).

Check Program

Action:

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 need to be modified manually.

Action:

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. Select the desired fixture via the *scanners* button.

4. Adjust and change the fixture attributes using the channel faders wheel.

5. Press the *MIDI/ADD* button to prepare and save.

6. Select the desired *scenes* button to save.

Copy a Program

Action:

1. Press and hold the *program* button until the LED blinks.

2. Use the *Bank Up/Down* buttons to select the *Program Bank* that will be copied.

3. Press the *MIDI/ADD* button to prepare for copying.

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 to delete all chases from memory.

Create a Chase

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

Action:

1. Press and hold the *program* button until the LED blinks.

2. Press the *chase* (1-6) button you wish to program.

3. Change *bank* to locate a scene.

4. Select the scene to insert.

5. Tap the *MIDI/ADD* button to store.

6. Repeat the 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:

1. Press a *chase* button then press the *Auto DEL* button.

2. Adjust the chase speed by tapping the *TAPSYNC display* button twice at the rate of your choosing. The time between two taps will set the chase (up to 10 minutes).

Checking a Chase

Action:

1. Press and hold the *program* button until the LED lights up.

2. Select the desired *chase* button.

3. Press the *TAPSYNC Display* button to switch the LED display to steps.

4. Review each scene/step individually by using the *Bank Up/Down* button.

Edit Chase (Copy Bank into Chase)

Action:

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 to copy.

5. Press MIDI/ADD button to copy the bank. All LEDs will blink.

Edit Chase (Copy Scene into Chase)

Action:

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* button.

4. Press the *scene* button that corresponds to the scene to be copied.

5. Press *MIDI/ADD* button to insert the scene. All LEDs will blink.

Edit Chase (Insert Scene into Chase)

Action:

1. Press and hold the *program* button to enter programming mode.

2. Press the desired *chase* button.

3. Press the *TAPSYNC Display* button to switch the LED display to steps.

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.

5. Press *MIDI/ADD* 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/ADD* button to insert the scene. All LEDs will blink.

Delete a Scene in a Chase

Action:

1. Press and hold the *program* button to enter programming mode.

2. Press the desired *chase* button that contains the scene to be deleted.

3. Press the *TAPSYNC Display* button to switch the LED display to steps view.

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:

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! These steps will result in irrevocable loss of chase step memory. The individual scenes and program banks will be preserved.

Action:

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)

Action: ***(insert a scene)***

1. Press and hold the *program* button to enter programming mode.

2. Press the desired *chase* button.

3. Press the *TAPSYNC Display* button to switch the LED 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. To insert a scene between steps 5-6 navigate using *bank* buttons until the display reads *STEP05*.

5. Press *MIDI/ADD* 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/ADD* button to insert the scene. All LEDs will blink.

Copy a Scene

Action:

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/ADD* button to copy the scene.

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 the copy. All LEDs will blink.

Delete a Scene

Action*:*

1. Press and hold the *program* button to enter programming mode.

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.

5. When deleting a scene the physical location is not removed. All 384 DMX channels available to the scene will be set to value 0.

Delete All Scenes

Action:

1. Press and hold the *program* button to enter programming mode. (This process is irreversible. All scenes with data will be set to 0).

2. Turn the controller back on.

Playback

Running in Sound-Mode

Action:

1. Press the *Music Bank Copy* button until the music LED turns on.

2. Select the program *bank* to run in *soundactive* mode using the *Bank Up/Down* buttons.

3. Press a single *chase* button (1-6) or several *chase* buttons in sequence, and all selected chases will loop in the order in which they were selected.

4. You can adjust the duration time using the *fade time* fader.

5. In *Auto Mode*, programs will be triggered by controllers fade and speed time as set on the faders. Multiple chases selected will loop and run in the order originally selected.

Running in Auto-Mode

Action:

1. Press the *Auto DEL* button until the Auto LED turns on.

2. If a *chase* button is not pressed, the controller will automatically run a *bank* program. In auto mode, programs will be triggered by controllers fade and speed time as set on the faders.

3. Change *bank* programs by using *Bank Up/Down* buttons.

4. Press a single *chase* button (1-6) or several *chase* buttons in sequence, and all selected chases will loop in the order in which they were selected. Multiple chases selected will loop and run in the order originally selected.

5. You can adjust the steps by moving the *speed* fader and the duration of the step by moving the *fade time* fader.

6. Multiple chases selected will loop and run in the order originally selected.

Blackout

1. 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 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/ADD button for about 3 seconds. (This is the channel that the controller will receive MIDI note commands.

2. Select the MIDI control channel (1-16) via the *Bank Up/Down* buttons to set. This is the channel that the controller will receive MIDI note commands.

3. Press and hold the MIDI/ADD button for 3 seconds to save settings.

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

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

Symbol Instruction on Fixture:

CE certificate

RoHS certificate