STAGE SETTER-24

User's Manual

24-004-1940-00
Rev1.0

Introduction:

Thank you for purchasing the Elation Professional® Stage Setter-24™. To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. The Elation Stage Setter-24™ is a simple to use, 24 channel dimming console. This unit has been tested at the factory before being shipped to you, there is no assembly required.

Customer Support:
Elation provides a toll free customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions.

Service Hours are Monday through Friday 8:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (800) 322-6337
Fax: (323) 582-2610
E-mail: support@elationlighting.com

Warning!
To prevent or reduce the risk of electrical shock or fire, DO NOT expose this unit to rain or moisture.

Caution!
There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service, please contact your nearest Elation dealer.

Do not discard this cartoon in the trash. Please recycle when ever possible.

Upon unpacking, carefully inspect your unit for any damage that may have occurred during shipping. If damage may have occurred, do not plug the unit in, please contact your dealer as soon as possible.

Technical Specifications:

DC Input...DC 12~20V, 500 m A min.
DMX OUT...3-pin XLR female
MIDI In/Thru...5 pin multiple socket
Patterns...15 patterns consisting of 10 user programmable patterns
and 5 built-in patterns
Dimensions..8.75"x15"x3.25"
Steps...Up to 64 steps per chase
Weight...8lbs.

Please Note:
Improvements and changes in specifications and design to this manual and unit may be made at any time without any prior written notice.

FEATURES:

Stage Setter-24™ features include:

- 24 channel dimmer console
- 2 x 3-pin XLR DMX OUT
- Three operating modes: 2 x 12, 12 x 12, and 1 x 24
- 15 chases: 5 built-in chases and 10 user programmable chases
- 64 steps per pattern
- MIDI compatible
- Two Scene Crossfade operation
- Tap SYNC operation
- 12 Scene master playbacks
- 12 Bump master playbacks
- Chase speed/fade control
- Back up memory protection
- 4-digit digital display
- Password protected record access

Memory Dump:

This function allows you to reset the unit's factory default settings.

Caution:
Performing this operation will erase all user programs.

To reset the unit:
1. Flip the main switch OFF.
2. Press and hold down Bump Buttons 1, 4, 5, and 8 down, at the same time and flip the power switch ON.
3. Factory default settings will then have been restored to the console.

Display Settings (Percentage or DMX Value):

The display setting can be changed to read between 0-100% and DMX values 0-255.

To change the display settings:
1. Flip power switch OFF.
2. Press and hold down Bump Buttons 1-4, at the same time and flip the power switch ON.
3. Tap Bump Button 12 to change between percentage and DMX value display settings. 100 represents the percentage setting and 255 represents the DMX value setting.
4. Once set, tap the Blackout Button to exit and store you're the setting.

WARNINGS:

- Do not allow for any liquids to spill into or onto your unit.
- Be sure that the local power outlet match that of the required voltage for your unit.
- Do not attempt to operate this unit if the power supply cord has been frayed or broken. Be sure to route your power supply cord out of the way of foot traffic.
- Disconnect from main power before making any type of data connections.
- Do not remove the top cover under any condition. There are no user serviceable parts inside.
- Disconnect the unit's main power when left unused for long periods of time.
- Never plug this unit into a dimmer pack.
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and any surrounding walls or objects.
- Do not attempt to operate this unit, if it becomes damaged in any way.
- Never operate this unit when its cover is removed.
- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture.

Unpacking:

Every Stage Setter-24™ has been thoroughly tested and shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your unit for any damage. If damage is found, please contact our toll free customer support number for further instructions.

Power Supply:

Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your Elation Stage Setter-24™. Because line voltage may vary from venue to venue, you should be sure to plug your unit into a matching wall outlet before attempting to operate your controller.

Data Cable (DMX Cable) Requirements:

Your controller and packs require a standard 3-pin XLR connector for DMX data input and output (Figure 1). If you are making your own cables, be sure to use standard two conductor shielded cable. Your cables should be made with a male and female XLR connector on either end of the cable as pictured in figure 1. Also, remember that DMX cable must be daisy chained and should never be "Y"ed or split.

Figure 1

Connection Diagram:

Please refer to Figure 2 when making your own cables.

Pin 1 = COMMON
Pin 2 = DMX-
Pin 3 = DMX+

DMX512 OUT
CONTROLLER
CONNECTOR
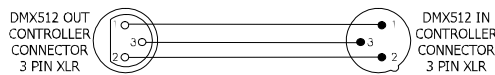3 PIN XLR

DMX512 IN
CONTROLLER
CONNECTOR
3 PIN XLR

Figure 2

MIDI Settings:

To change the MIDI settings:
1. Flip power switch OFF.
2. Press and hold down Bump Buttons 1-4, at the same time and flip the power switch ON. The current MIDI Receive channel will be displayed in the LCD.
3. Tap Bump Button 11 to change the MIDI Receive channel until you reach your desired MIDI channel. The MIDI receive channel range is from 1-16.
4. Tap the Blackout Button to exit and store your new MIDI channel setting.

MIDI Implementation:
This console receives MIDI program changes according the following table:

NOTE NUMBER	VELOCITY	FUNCTION
0-23	Channel intensity	Turn on or off channels 1-24
24-35		Turn on or off Bump Button 1-12
36-50		Turn on or off Chase 1-15
51		Blackout
52		Full On
53		Mode
54		Audio

Recording Chases (1x24 mode):

When in the 1x24 mode, both the Scene X (faders 1-12) and the Scene Y Channels (faders 13-24) can be used.

To Record a 24 channel chase:
First, access Record mode. Press the Mode button until the green 1x24 LED is ON solid. Select the Chase button, 1-10, that you wish to record to. Set the X Crossfader and Master Level fader all the way up to 10. With channel faders 1-24, create a desired scene. Tap the Record Button to store the step. LED's 1-24 will momentarily flash indicating that the chase step was recorded.

Example:
We will program a 4 step chase into Chase Button #10. It will consist of channels 1, 8, 16, & 24 at full intensity in sequence.
1. Press and hold down the RECORD button then sequentially press BUMP BUTTONS 1,6,8,1,6,8.
2. Press the MODE button so the green 1x24 LED illuminates ON solid.
3. Press Chase button #10.
4. Adjust X Crossfader and Master Level fader all the way up to 10.
5. Lower faders 1-12 to 0 (zero) if they are currently up.
6. Raise fader 1 to maximum.
7. Press the Record Button to store the step.
8. Lower fader 1 and raise fader 8 to maximum.
9. Press the Record Button to store the step.
10. Lower fader 8 and raise fader 16 to maximum.
11. Press the Record Button to store the step.
12. Lower fader 16 and raise fader 24 to maximum.
13. Press the Record Button to store the step.
14. Lower fader 24 and press BLACKOUT to exit.

Special Note: DMX Line Termination

When data runs in excess of 100' are used, you may need to use a terminator on the last unit to avoid erratic fixture behavior. A terminator is a 120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). The terminator should be installed into the output of the last unit in your daisy chain.
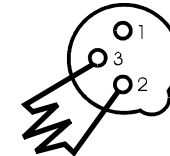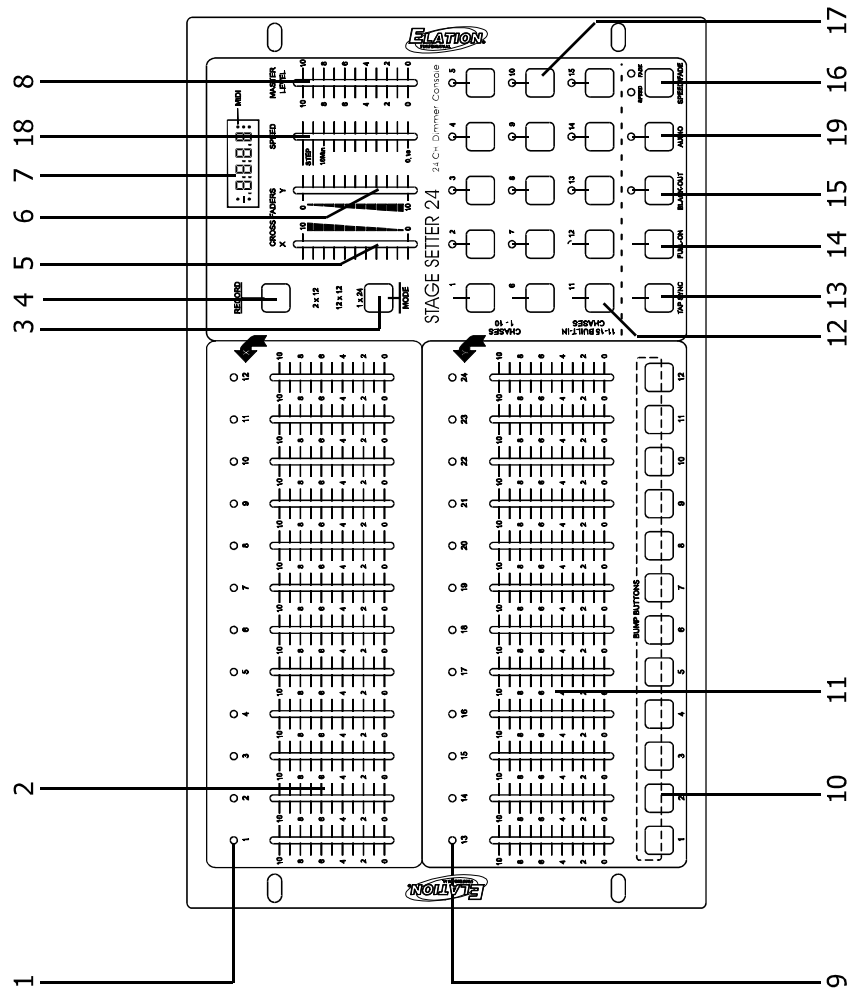
Terminator Specifications:

Figure 3

Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminator, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

Front Panel

Front Panel - Controls and Functions

1. Channel LEDs (1-12):
These 12 LED's detail the current intensity for channel fader's 1-12. The higher a channel fader is raised, the brighter the output. The LED indicators will reflect fader level changes in real time.

Recording Chases:
Up to 10 Chases, consisting of up to 64 steps each, can be stored to Chase buttons 1-10. When in 2x12 and 12x12 modes, the control functions as a 12 channel board in which case up to 12 channel chases can be created and stored memory. When in 1x24 mode, the board functions as a 24 channel board in which case up to 24 channels can be created and stored to memory.

Recording Chases (2x12 and 12X12 modes):
To Record a 12 channel chase:
First, access Record mode. Press the Mode button until the green 2x12 or 12x12 LED is ON solid. Select the Chase button, 1-10, that you wish to record to. Set the X Crossfader and Master Level fader all the way up to 10. With channel faders 1-12, create a desired scene. Tap the Record Button to store the step. LED's 1-24 will momentarily flash indicating that the chase step was recorded.

Example:
We will program a 12 step chase into Chase Button #5. It will consist of channels 1-12 at full intensity in sequence.
1. Press and hold down the RECORD button then sequentially press BUMP BUTTONS 1,6,8,1,6,8.
2. Press the MODE button so the green 1x12 or 12x12 LED illuminates ON solid.
3. Press Chase button #5.
4. Adjust X Crossfader and Master Level fader all the way up to 10.
5. Lower faders 1-12 to 0 (zero) if they are currently up.
6. Raise fader 1 to maximum.
7. Press the Record Button to store the step.
8. Lower fader 1 and raise fader 2 to maximum.
9. Press the Record Button to store the step.
10. Lower fader 2 and raise fader 3 to maximum.
11. Press the Record Button to store the step. Continue to repeat this process until all 12 channels have been stored.
12. Lower fader 12 and press BLACKOUT to exit.

Scene Bump Masters:

Scene Bump masters only operate in 1x24 mode. When in the 1x24mode, the Bump Buttons (10) can be programmed as momentary flash scenes. These are scenes that can be created by any of the 24 channels. Once a Bump Scene is created, that Bump Scene can be triggered by pressing the relevant Bump Button it was assigned to.

To Record a Scene Bump Master:

First, access Record mode. Press the Mode button until the green 1x24 LED is ON solid. Set the X Crossfader to all the way up to 10. With channel faders 1-24, create a desired scene. Tap the Bump Button, 1-12, that you want to store the scene to. LED's 1-24 will momentarily flash indicating that the scene bump master was recorded.

Example:

We will program a scene into Bump Button Master #3. The scene will consist of channels 1, 4, 6, 14 and 24 at full intensity and channel 12 at 50%- the remaining channels will be OFF.
1. Press and hold down the RECORD button then sequentially press BUMP BUTTONS 1,6,8,1,6,8.
2. Press the MODE button so the green 1x24 LED illuminates ON solid.
3. Adjust X Crossfader and Master Level fader all the way up to 10.
4. Lower faders 1-24 to 0 (zero) if they are currently up.
5. Raise faders 1, 4, 6, 14 and 24 to maximum.
6. Raise fader 12 to 50% or 5 (between 4 & 6).
7. Tap Bump Button #3. LED's 1-24 will momentarily flash indicating that the scene bump master was recorded.
8. Lower all active fader channels and repeat steps 1-7 to record additional scene bump masters. Press BLACKOUT to store and exit.

Front Panel - Controls and Functions (Cont.)

2. Scene X - Channel Faders 1-12:

These 12 faders are used to control the intensities of channel's 1-12. The overall intensity of channel faders 1-12 is controlled by the X Crossfader (5).

3. Mode Button:

This button is used to change the unit's operating mode. There are three different operating modes: 2x12, 12x12, and 1x24. The unit's current operating mode will be indicated by a lit LED that above the relevant mode. Operation modes are explained further on page 15.

4. Record Button:

This button, in conjunction with the record access code 1,6,8,1,6,8, is used to activate the unit's record mode. Press and hold down the "Record" button then sequentially press Bump Buttons (10) 1,6,8,1,6,8. As a result, the red Record LED should illuminate. Furthermore, when the Record LED is lit, the Record button should be used to store chase steps, scene master's and bump master's. You may store up to 12 scene masters, 12 bump masters and 10 of your own chases in Chase Buttons 1-10. See page 17 for further programing details.

5. X Crossfader:

This fader controls the overall intensity of the Scene X channels 1-12. The X (5) and Y (6) faders allow crossfading between Scene X (2) and Scene Y (11) channels. The X Crossfader is at its maximum intensity while in the full up position. In 1x24 mode, the X Crossfader controls the intensities of channels 1-24.

6. Y Crossfader:

This fader controls the overall intensity of the Scene Y channels 13-24. The X (5) and Y (6) faders allow crossfading between Scene X (2) and Scene Y (11) channels. The Y Crossfader is at its maximum intensity while in the down position.

Front Panel - Controls and Functions (Cont.)

7. Digital Segment Display:
This multi-function display will detail the unit's current operation. The display will indicate last channel settings, active audio function, active MIDI signal, chase speed and fade settings.

8. Master Level Fader:
This fader controls the overall channel intensity levels for all 24 channels and will also control the master intensity level for all chase's. This fader takes no effect while the Full On (14) and Bump (10) buttons are active.

9. Channel LEDs (13-24):
These 12 LEDs detail the current intensity for channel 13-24. The more you raise the channel fader, the higher the output intensity. The LED indicators will directly reflect fader level changes in real time.

10. Bump Buttons:
The Bump Buttons are serve multi functions. One function is as master scene bumps. Each of the 12 Bump Buttons can be programmed to control a single or a group of channels. These buttons can then be used to playback the single or group of channels by momentarily pressing the relevant Bump button.

Another function for the Bump Buttons is to momentarily bump channels 1-12 to full intensity regardless of the Blackout (15) function or the Master Level (8) setting.

The Bump Buttons are also used when in record mode. When recording master bump scenes and master playback scenes to the faders, these buttons should be used to assign the scene to the relevant bump button or fader.

Operating Modes:

The Stage Setter 24ₜₘ has three different operating modes: 2x12, 12x12, and 1x24. These modes are selectable with the Mode Button (3). The active mode is indicated by the lit Mode LED.

In **2x12 mode**, Crossfader X (5) controls channels 1-12, and Crossfader Y (6) controls channels 13-24. This mode is traditionally referred to as two scene operation mode.

In **12x12 mode**, Scene Y (11) faders, (13-24), function as scene master playbacks. Scenes can be set with faders 1-12 and stored to faders 13-24 for playback. During playback, Scene X (2) channels (1-12) function as normal dimmer channels.

In **1x24 mode**, the controller functions as a straight 24 dimming console. X Crossfader (5) and the Master Level fader control the intensities of channels 1-24. Bump buttons 1-12 function as Bump scene masters. Scenes can be recorded and stored for momentary playback to the Bump buttons.

Getting Started:

Access Record Mode:
To access Record mode, press and hold down the RECORD button and sequentially press Bump Buttons 1,6,8,1,6,8. The Record LED should illuminate ON solid.

Scene Masters:
Scene Masters can only be accessed and recorded while in 12x12 mode. When in 12x12 mode, Bump Buttons (10) and the Fade function (11) can be used to store Scene Masters. A Scene Master consists of channels 1-12.

To Record a Scene Master:
First, access Record mode. Press the Mode button until the green 12x12 LED is ON solid. Set the X Crossfader to all the way up to 10. With channel faders 1-12, create a desired scene. Press the SPEED/FADE button so the green FADE LED illuminates. Adjust the SPEED/FADE button to store a fade time to your scene if desired. Tap the Bump Button below the relevant fader, 13-24, that you want the scene stored to. LED's 1-24 will momentarily flash indicating that the scene master has been recorded.

Example:
We will program a scene into Scene Master #5. The scene will consist of channels 1 and 6 at full, intensity and channel 7 at 50%- the remaining channels will be OFF.
1. Press and hold down the RECORD button then sequentially press BUMP BUTTONS 1,6,8,1,6,8.
2. Press the MODE button so the green 12x12 LED illuminates ON solid.
3. Adjust X Crossfader and Master Level fader all the way up to 10.
4. Lower faders 1-12 to minimum or 0 (zero) if any are up.
5. Raise faders 1 and 6 to maximum.
6. Raise fader 7 to 50% or 5 (between 4 & 6).
7. Tap Bump Button #5. LED's 1-24 will momentarily flash indicating that the scene master was recorded.
8. Lower all active channel faders and repeat steps 1-7 to record additional scene masters. Press BLACKOUT to store and exit.

Rear Panel - Controls and Functions (Cont.)

6. MIDI Thru:
This jack is used to parallel an incoming MIDI signal through to another MIDI device.

7. MIDI In:
This jack receives an incoming MIDI signal from an external MIDI controller or keyboard.

MIDI THRU		MIDI IN
1=NC; 2=GND 3=NC; 4=V+ 5=Signal	3 1 5 4 2	1=NC; 2=NC 3=NC; 4=V+ 5=Signal
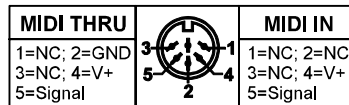
8. Audio jack:
Audio (0.1V-1Vp-p). This should be connected to a line level input of a mixing console.

Front Panel - Controls and Functions (Cont.)

11. Scene Y:
These 12 faders are used to control the intensities of channels 13-24. The overall intensity of channel faders 13-24 are controlled by the X Crossfader (5) and Master Level fader.

12. Built-in Chase 11-15:
These five Chase buttons are used to activate any of the five built in chases. When selected, the relevant chase LED should flash continuously and remain active until deselected.

13. Tap Sync:
This button is used to create a chase rate. Tapping this button twice consecutively will establish a chase rate that corresponds to your tap rate. The Tap Sync LED will flash at the established chase rate. A chase rate may be set at anytime, whether a chase is running or not. Adjusting the Speed fader to set a chase rate will override the Tap Sync button. In turn, the Tap Sync button will also override the Speed setting. The active running mode will be determined by the last action.

14. Full On Button:
This button is used to bring all channel output (1-24) to full intensity. This function will override the Blackout (15) function. The Full On LED (14) will illuminate ON solid while the Full On (14) button is pressed.

15. Blackout Button:
This button is used to disable all channel output (1-24). Only the Full On (14) and Bump Buttons (10) can override this function. Blackout is active when the green Blackout LED solid ON.

Front Panel - Controls and Functions (Cont.)

16. Speed/Fade Button:
This is a multi function button used to select between chase speed and fade functions. When the red LED is illuminated, Speed can be set using the SPEED/FADE fader. When the green LED is illuminated, Fade time can be set using the SPEED/FADE fader. The Speed and Fade time range is 1/10 second ~10 minutes. 0.10 denotes one tenth of a second per chase step and 1:00 denotes 1 minute per chase step.

17. Chases 1-10:
These buttons are used to record and playback any of the relevant user programmable chases. When a user programmed chase has been selected for playback, The relevant chase LED will illuminate ON solid.

18. Speed/Fade fader
This fader is used to adjust and set a chase fade time and chase speed. When this fader is adjusted to the top, the display will read "STEP". Chase steps for a selected chase can then be manually triggered by pressing the Tap Sync button.

19. Audio Button
The audio button activates the internal microphone or line level input for chase audio trigger. If no line level input is detected, the internal microphone will take precedence and trigger chase steps. If a line level input is detected, chase steps will trigger as signal is detected.

Rear Panel
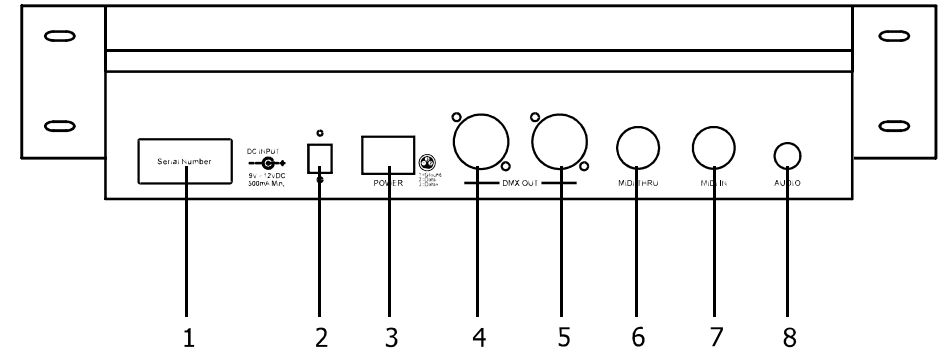
Rear Panel - Controls and Functions

1. Label: Authorized company serial number.

2. DC Power Input:
This input should be used to connect the supplied external power supply. Only use the included DC 12~20V, 500 mA minimum power supply. If it becomes necessary to replace the original power supply, only use an approved Elation power supply.

3. Power Switch:
This switch is used to turn the unit's main power On/Off.

4. DMX Out:
This XLR output is used to send DMX data to your DMX dimmer pack or compatible device.

5. DMX Out:
This is a secondary XLR output that is used to send DMX data to your DMX dimmer pack or other compatible devices in line.