



DOVE SYSTEMS

SceneMaster 8

Portable Dimming System

User Manual



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The Basics

Receiving Your Unit

As soon as you have received your equipment, open the boxes and examine the contents. If the equipment in the carton does not match your order or the packing slip, contact the factory immediately and we will be happy to help you. If any damage is noted, contact the carrier immediately to file a claim for damages. You can be sure that when the equipment left the factory it was in capable condition, thoroughly tested, and properly packed.

Introduction

The SceneMaster 8 is a portable, rugged DMX-512 controller with eight integrated 1000 Watt dimmers assigned to DMX channels 1 through 8. It is 15 inches wide x 10 inches deep x 5½ inches high and weighs 13 pounds with a comfortable carrying handle. It features a single scene with hold 12 channel DMX control console with a split crossfader, a grandmaster slider, a blackout button, and Bump buttons for each channel. Very easy to setup and use, it requires just two wall outlets for power. With single U-Ground (Edison) outlets per channel on the back panel, the output loads plug right in. A foot switch is available for hands-free pre-programmed crossfades. DMX IN and OUT ports are available for use with other DMX-512 equipment.

This manual covers all three versions of the SceneMaster 8: SM806-SUG, SM808-SUG, and SM810-SUG. They vary only in their power inlet types accommodating various power connectors and capacities.

Getting Started

Mechanical Installation

- 1) Remove all packing material from the carton and from the unit. Make certain that all vent holes are free from obstruction on all sides of the unit.
- 2) Set the SM8 on a smooth, cool surface, preferably in an area which remains cool. Maximum air temperature must not exceed 40°C (104°F).
- 3) Make certain that the vents have at least 6 inches of free air around them. Do not block any vent holes. It is essential that this unit have adequate cooling for safe, reliable performance.
- 4) The SM8 may be operated in any orientation, but the area near the unit should be clean, dry, and protected from falling objects which could damage the slide controls or buttons. It

is recommended that drinks or food not be allowed near the console as they can easily be spilled and could cause a malfunction in the equipment.

Electrical Installation

The SM8 has 8 dimming channels, each capable of driving a 1000 Watt load. The total power to be delivered to the loads simultaneously is limited by the building’s electrical circuits. The SM8 should be connected to two 120 VAC (50/60Hz) outlets on separate electrical circuits (they do not share the same circuit breaker or fuse). To avoid tripping the building’s circuit breakers, it is recommended that no other equipment be connected to the circuits driving the SM8. Required current and connector type for each model variant is listed in the following table:

Model	Required Source Capacity (Each Inlet, Amps)	Required Source Connector
SM806-SUG	15	NEMA 5-15R or 5-20R
SM808-SUG	20	NEMA L5-20R
SM810-SUG	30	NEMA L5-30R

Power input to the SM8 is via flush-mount male connectors on the back panel. An appropriate heavy-gauge extension cord will work for this purpose. Always use 3-wire, grounded cables. 12AWG or larger cable is recommended. Output channels 1-4 are powered by inlet A, and outputs 5-8 are powered by inlet B. One must be aware of the total power used by the loads in these two groups to avoid over loading the source circuits.



SM806, 15A Inlets



SM808, 20A Inlets



SM810, 30A Inlets

The console will operate reliably with just Inlet A powered. The console will power-up with power only to Inlet B, but may not be reliable when outputs 5-8 are activated.

The rocker switch on the back panel controls power only to the console; the dimmers are always on, but only send power to their loads when commanded by the console. All 12 channel sliders should be down and the 3 Master & Crossfade sliders on the left should be up when the rocker is switched on.

Grounding

The term “**grounding**” refers to a separate wire, usually with green insulation, which is connected from the equipment case to earth ground. This is not the same as the neutral or common and must not be confused with them. The **neutral** is a separate, load-carrying conductor, and **common** refers to the control signal’s common or reference voltage which should only be allowed to reach ground at a single point in the entire system to avoid ground loops.

When the SM8 is connected to its power source by a flexible cable, this ground connection is made through a third wire in the cable, and the ground prong on the plug. For maximum safety, and to comply with electrical codes, this connection must be made. Do not use an adapter (or “cheater”) plug.

Load Connections

The SM8 will dim any load up to 1kW per channel. The load may be incandescent, inductive or resistive. This includes conventional incandescent, quartz incandescent, "rain lights", pin-beams, and similar "low-voltage" lighting loads containing transformers. Fluorescent and neon loads can be controlled by the SM8 with no damage to the dimmer, but the nature of these loads requires specialized circuitry to get full range dimming. Consult the factory if you need to dim such loads.

Many "dimmable" LED bulbs work fine with the SceneMaster (though it's common for them to dim only to about 10% before turning completely off which can be disappointing), and the percentage of those in the market continues to increase with time as bulb manufactures improve their circuitry's compatibility. Still, some LED bulbs will flicker at low power levels. There are a few approaches to dealing with these bulbs: The easiest is to test several different bulb models, and just avoid the trouble makers. Some control consoles can be programed to avoid the problematic low power levels. In some cases, the flickering can be mitigated by adding parallel loads in the form of a low power incandescent bulb or resistors. Dove Systems offers factory installed 4.7k Ω output resistors by special order or retrofit.

Plug the load or an extension cord to the load into the outlet which corresponds to the circuit you wish to use. Always use grounded cords. Loads may be single fixtures or combinations of lights not exceeding a total of 1kW per channel. Each output channel is protected by a 10 Amp circuit breaker. If the breaker trips, it is generally due to an overload or short in the output load. However, elevated ambient temperatures or lack of ventilation can also result in breakers tripping just shy of their rated current.

Control Connections

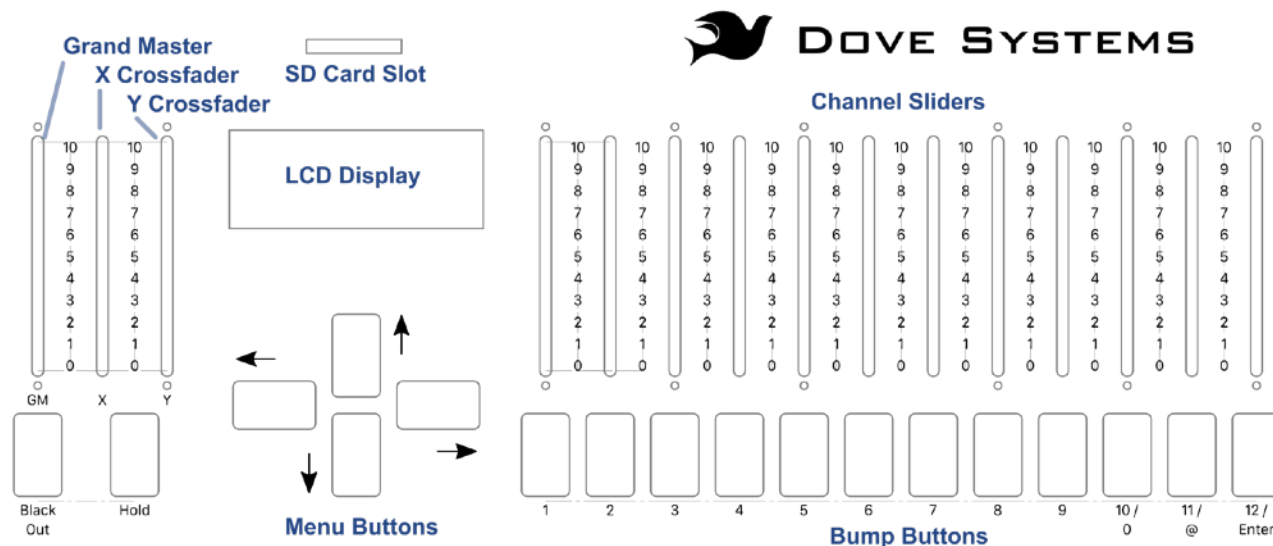
If external DMX devices are to be controlled, the **DMX OUT** port should be connected to them using DMX-512, 5-pin cables providing access to all 512 DMX channels.

If an another DMX console is to be used with this system, it should be plugged into the **DMX IN** port. See the sections on manual Blackout & Grandmaster controls as well as programing patch tables and cues for details about the DMX IN capabilities.

If using the optional **External Go** foot switch (or other remote switch), it can be plugged into the center of the back panel. See the section on running a show with timed crossfades for details on its use.

Basic Operation

This section describes manual operation of the SceneMaster 8 in its factory default configuration using the **1:1 Patch Table** where control channel (slider) 1 drives DMX output channel (dimmer) 1, control channel 2 drives dimmer 2, etc.



1. Before applying power, the console power switch on the back panel above the B Power Inlet should be off (down). The Grand Master and the X and Y crossfaders on the left should be all the way up, and the control faders (channels 1 through 12) to the right of the display should be all the way down. With power applied to both inlets, turn on the console power switch.
2. Within 6 seconds, the DMX output will be valid and the display will say:

```
dovesystems.com
IQ512M V070214
```

3. Set the first scene with the channel faders. The lights on stage will respond with the faders.
4. To set the next scene, press the Hold button. Note that the Hold button lights, and the display reads:

```
New scene, then
crossfaders down
```

5. Without moving the crossfaders, adjust the channel sliders to the settings for the next scene. The lights on stage will not yet change.

-
6. When it is time to switch to the next scene, move the X and Y crossfaders all the way down, fading into the new scene.
 7. Once the crossfaders have been moved to the down position, the Hold button goes out and the display returns to the normal IQ512 display. At this point, the channel sliders are once again "live."
 8. If desired, you could return to the previous scene by just sliding the crossfaders back up.

Then, set up the next scene:

9. Press Hold again.
10. Set the sliders for the new look.
11. Move the crossfaders up, changing the stage look.

The general sequence is:

1. Press Hold
2. Set up scene
3. Move crossfaders down
4. Press Hold
5. Set up scene
6. Move crossfaders up

Repeat as needed.

You can instantly blackout all lights by using the Blackout button or sliding the Grand Master control down on the console's far left.

Questions & Comments

We look forward to hearing your comments and questions on the SceneMaster 8. You can email comments to dove@dovesystems.com or contact us using the information on the front cover of this manual. If something seems to not be working right, try working through the Troubleshooting section near the end of this manual. If that does not resolve the issue, please do not hesitate to call or email. We want to do all we can to make your use of Dove Systems' products productive and enjoyable.

Control Console Details

Overview

Description & Features

The SceneMaster 8 control console designed for small venues, houses of worship, and schools. The console may be used with up to 512 channels of DMX-512 lights, dimmers, and other devices. In Remote Focus Unit mode, direct manual control of a full DMX universe is easily achieved. In normal operation, it stores a distinct look on each of its control sliders through a full proportional softpatch. Memory cues and the softpatch are saved automatically and held indefinitely. To support quick changes in configuration, multiple patch tables are also available. Smooth fades from one look to another are executed through standard theatrical split crossfade controls or preprogrammed timed crossfades. Menus on a backlit LCD guide the user through all operations. It stores an unlimited number of cues and shows on standard SD memory cards. Shows may be edited offline on any personal computer with an SD Card Reader. Finally, it can pass through and capture looks from another console, making it easy to use as a backup to bigger consoles or to add memory features to manual consoles.

Start Up

Slide the left sliders (GM, X, and Y) all the way up. Slide the right sliders (channels 1 through 12) all the way down. Turn on the power switch on the back above power inlet B. The display should read:

```
dovesystems.com  
IQ512M VXXXXXX
```

(where “XXXXXX” is a 6 digit version #, this manual was written based on V070214). Startup time to valid DMX outputs and this display is about 6 seconds. Without an SD card inserted, the time is reduced to 2 seconds.

Slide each of the channel sliders up and down to verify that they are controlling dimmers 1 through 12. Press each of the Bump buttons (one through nine and zero) below the channel sliders. The appropriate lights on the dimmers should flash to full. If they do not, try restoring the default 1:1 patch to the active patch table. See the section “Load 1:1 Patch” in the Patch Tables section of this manual for details.

Manual Operation



Crossfades

A **crossfade** creates a smooth transition from one scene to the next. Start with the grandmaster and X & Y crossfaders all the way up to make the channel faders live. Set the first scene with the channel faders. To set the next scene, press the Hold button. The Hold button lights up and the display reads:

**New scene, then
crossfaders down**

Don't move the crossfaders yet! Adjust the channel faders to the settings for the next scene. The lights on stage will not change. When it is time to move to the next scene, move the X and Y crossfaders all the way down, fading into the new scene. It's possible to delay the fade out of the old scene or to delay the fade in of the new scene (perhaps even doing a fade to black between scenes) by delaying the motion of the X or Y crossfader. Once the crossfaders have been moved to the down position, the Hold button goes out and the display returns to the normal IQ512 display. At this point, the channel sliders are once again "live." To set up a new scene, hit hold again, set the new look, then move the crossfaders up.

The general sequence is:

1. Press Hold
2. Set up scene
3. Move crossfaders down
4. Press Hold
5. Set up scene
6. Move crossfaders up

Repeat as needed.

Blackout Button & Grandmaster

Use the **blackout button** to plunge the stage into darkness immediately. The LED on the blackout button will light up red. The display will read:

Blackout Enabled

You can press the blackout button again to return to the previous stage look immediately, or set new channel levels while in blackout that will come up immediately when the blackout button is pressed again, or set new channel levels while in blackout and slowly fade up.

Here's how to slowly fade up after blackout:

1. Press the blackout button. The stage goes dark.
2. Run the grandmaster down.
3. Press the blackout button again.
4. Set new channel levels.
5. Run the grandmaster up. The lights get bright again.

The **grandmaster** slider is a proportional control over the channel faders. If channel 1 is at 75% and the grandmaster is at 50%, the dimmer comes on at 38% (75% x 50%). When the grandmaster slider is down, the red LED on the blackout button flashes rapidly and the display reads:

Grand Master = 0

When making use of the DMX IN and pass-through feature (as a stage manager's remote for example), the blackout button and grandmaster slider also affect the incoming DMX stream from the external controller. The incoming channels are scaled in proportion to the grandmaster level. The blackout button plunges the stage into darkness.

Introduction to Memory Control

Note: Memory control functions require use of an SD card, included with new systems. For more details on supported cards, see the "IQ512M File Formats" section later in this manual.

A **show** is a collection of lighting cues saved in a text file on the SD card. There are three methods to creating a show with the IQ512-M which are detailed in the "Creating Cues" section later in this manual:

- Manually adjusting the control channel faders for each scene (see "Create New Show" & "Edit Show")
- Capturing scenes sent by an external controller (see "Capturing DMX Input")
- Writing a show file in a text editor on an external computer (see "IQ512 File Formats")

Most users will use the first method to create shows by adjusting the channel faders since this requires no additional equipment. If the show is created on an external computer or control console, it must be edited there as well; the IQ512 will only play shows created with these two methods.

Menu Summary

The menus in the IQ512 are two sets of function lists. The **Main Menu** allows running a Show, entering Remote Focus Unit (RFU) mode, or password access to the Advanced Menu.

Load Show?

Remote Focus
Unit Mode?

Enter Password

The **Advanced Menu** includes functions for the patch tables, cues, and configuration which if used improperly could keep the console from functioning as intended.

Using the Main Menu

To enter (or exit) the menu, simultaneously press the Right and Left arrows, ← → keys, once. Use the Up and Down arrows, ↑ ↓ keys, to scroll through menu selections. The Right arrow, → key, takes you farther into a menu selection. The Left arrow, ← key, backs you out of the current selection.

When entering the main menu, the display reads:

Load Show?

Press the ↓ key. The display reads:

```
Remote Focus  
Unit mode?
```

Press the ↓ key again. The display reads:

```
Enter Password  
***
```

The password prevents unauthorized users from accidentally overwriting patch and cue information. The default password is "123". Simply press the Bump Buttons under the first, second, and third channel slide pots to enter the password. See "Change Password" in the Advanced Menu section to change it. When the password has been entered, the Advanced Menu functions can be accessed.

Press the ↓ key again, and menu loops back to the top. Alternatively, use the ↑ key to cycle through the options in the opposite order.

Loading and Running a Show

Shows are sequences of lighting cues stored on SD cards as text files.

Before entering the menu, make sure the card is inserted and that both crossfaders are *full up*. To play an existing show, enter the main menu (press ←→). The display will read "Load Show?" Press → to select Load Show. Use ↑ and ↓ to scroll through the shows saved on the card.

```
Load Show?  
SHOW1.TXT
```

If there is no card installed, the display will briefly read:

```
Insert MMC/SD  
card
```

When the desired show is visible, press → to select it. The top line of the display will display which show was loaded. The bottom line shows the next cue (which is the first one).

Move both crossfaders down to make the next cue live. The first cue number will move to the top line of the display, indicating it is live, and the next cue will show on the second line. Slide the crossfaders back to bring up the next cue. When the crossfaders hit the other end of their travel, the cue previously on the bottom will have moved to the top, and the next cue will show on the display's bottom line. If the show was edited off line, it may include cue descriptions along with cue numbers. If the show was created and edited on the IQ512M, only cue numbers (of the form 1.0) will be shown.

Use ↑ and ↓ to select a cue out of order. These can be used to skip a cue or step back in the show. Note that patience is required to step back especially with long show files. At the end of the show, "End of show!" will display on the bottom line of the screen. Use ← to exit the show and return to manual mode at anytime.

The channel sliders are active when playing back memorized cues and can be used to "pile-on" and manually bring up lights that are not in the saved cue. The DMX passthrough feature is active and "piling-on" during show playback. The Grandmaster slider and Blackout button are also active during show playback.

Running a Show with Timed Crossfades

Timed Crossfades allow some automation of the show playback. Load the show using the same method as when running the show manually (described above). Then, instead of using the crossfaders to move from one cue to the next, use the → key to start the fade into the following cue. The display will show the progress of the crossfade. While the crossfade is in progress, the ← key may be used to pause the crossfade and the → key to continue. When the crossfade is complete, the "live" cue will be on the first line of the display and the next cue on the second line.

The optional **External Go** button or foot-switch may also be used to advance through cues. Using this input with a foot-switch is an easy way to implement hands free control of a show. Also very useful, is using this input with an on-off switch. While the external input is closed, the show will run continuously and loop back to the beginning. This can be used in cases such as museum displays where automated playback is desired.

Timed crossfades allow individual control of the fade-out-time of the current cue, the delay before the fade into the next cue, and the fade-in-time of the next cue. See "Create New Show" for more information on programming timed crossfades.

Remote Focus Unit Mode

Remote Focus Unit or **RFU** mode allows the user to quickly control any of the 512 individual dimmer channels. This is handy when hanging and focusing lights for an upcoming production.

Use the ↑ and ↓ keys to go through the main menu until the display reads:

```
Remote Focus  
Unit mode?
```

Press the → key to enter this mode. You then choose a channel increment of 12 or 1 using the ↑ and ↓ keys.

```
Chan Increment =  
1?
```

```
Chan Increment =  
12?
```

Set the increment to 12 to scroll by twelve dimmers per keystroke or 1 to scroll one dimmer per keystroke. Once the desired channel increment is set, press the → key. The display reads:

```
RFU Mode - Chans  
1 thru 12
```

This indicates slider 1 is controlling DMX channel 1 and slider 12 is controlling DMX channel 12. Depending on how you set the increment, press the ↑ key to go up 1 or 12 DMX channels, or the ↓ key to go down 1 or 12 DMX channels. When in remote focus mode, you may use the ↑ and ↓ keys to quickly scroll through dimmers.

You may also set the start channel directly by keying it in as a three digit number (with leading zeros as needed) using the Bump buttons as digits. For example, keying in 034 causes the sliders to control DMX channels 34 through 45. The console looks at the last three digits keyed to determine the starting channel.

Finally, the Grandmaster, Blackout, and DMX passthrough are all active in RFU mode. The Hold button and crossfaders have no effect. As always, use the ← key to back out of this mode.

Advanced Menu

The protected **Advanced Menu** provides access to the more advanced features which should only be accessed by those who are trained and responsible for system configuration and show programming. All the protected functions will be explained in detail in the following sections.

A 3 digit password prevents unauthorized users from accidentally overwriting patch and cue information. Use the ↑ and ↓ keys to go through the main menu until the display reads:

```
Enter Password
***
```

Passwords

The default password is "123." Simply press the Bump buttons under the first, second, and third channel slide pots to enter the password. If the password has been changed, that 3 digit number will need to be keyed in using the Bump buttons (1 through 9 and 0). The system evaluates the last three keys entered. If these match the password, entry is allowed. If they do not, the system continues to wait for the password.

The emergency password is "911" which will always allow entry into the system, even if the default has been changed. As always, ↑ and ↓ keys will continue to scroll through the main menu, and the ← key exits.

Using the Change Password function (see below in the Configuration section) to set the password to 000 allows entry into the advanced menu system without use of a password. It effectively merges the main and advanced menus into one. **This feature should be used with caution.**

Advanced Menu Summary

The Advanced Menu provides access to the 15 functions listed below in the order that they are displayed when using the ↓ key.

Change Password?	Edit channel @dimmer@level?
Select Patch Table?	Capture DMX to channel?
Load wrap patch in table N?	Capture Rx Dmx to new show?
Load 1:1 patch in table N?	Edit show?
Clear patch table N?	Create New Show?
Load Patch From MMC/SD?	Delete show?
Save Patch to MMC/SD?	Format MMC/SD?
Edit dimmer @channel@level?	

It is helpful to think of these functions as falling into three categories: **Configuration**, **Patch Tables**, and **Cues**. This is how they are grouped into sections below.

Note that each function is described below starting from within the advanced menu, i.e., after entering the password.

Configuration

Change Password

To set the 3-digit password (for accessing the Advanced Menu), from the advanced menu, press the ↑ or ↓ key until the display reads:

```
Change password?
```

Press the → key to enter this menu option. The display will say:

```
New passwrđ then  
right key ***
```

Key in a 3-digit number using bump buttons 0 through 9. When the desired password is visible, press the → key to save the new password. The display will indicate the password has been saved. Finally, use the ← key to back out of the menu.

Format SD Card

IMPORTANT — See the “IQ512M File Formats” section below for details on what card types are supported. Formatting an MMC or SD card will *permanently erase* any information previously stored on it using other devices such as cameras, portable music players, PDAs, and cell phones. For best results, do not share cards between these devices.

Any new card purchased for the console should be formatted by the unit to guarantee reliability. Use the ↑ and ↓ keys to scroll through the advanced menu for:

```
Format MMC/SD?
```

First, insert a card then press the → key to select this option. The display reads:

```
Confirm Format?  
Deletes all data
```

Press → key to confirm. Formatting the card takes a few minutes. The display briefly says:

```
Formatting card
128MB card           (depending on the size of the card)
```

Then the line of dots will animate during the process:

```
Formatting card
.....
```

Delete Show

IMPORTANT — Once deleted, a file is gone forever!

The Delete Show function permanently deletes any type of file. There is no undelete feature.

To prevent hours of work recreating an accidentally deleted show, consider archiving it under a familiar name such as spring_fundraiser_lighting_cues.txt on a computer instead of deleting with the console.

After a show has closed, it may be desirable to delete the file containing the memory cues for that show. This not only allows the memory space on the card to be reused, it shortens the list of files through which one must scroll to find a desired file.

Insert a memory card in the slot. Scroll through the advanced menu items to:

```
Delete show?
```

Press the → key. The display then reads:

```
Delete show?
SHOW1.TXT
```

Use the ↑ and ↓ keys to scroll through the files to reach the obsolete show. Press the → key when the appropriate file is shown. The display then reads:

```
Confirm Delete?
SHOW1.TXT
```

Up to this point, you can use the ← key to change your mind. Press the → key to confirm that you want to delete the file. The display briefly says:

```
Deleting  
SHOW1.TXT
```

Then briefly:

```
SHOW1.TXT  
Deleted!!
```

You are returned to the advanced menu where you can choose another function or back out with the ← key to exit.

Patch Tables

The IQ512M features an overlapping, proportional **softpatch**. Any channel slider can control many dimmers (up to 512), all at different levels, and any dimmer can be controlled by many sliders. In effect, a complete stage look can be stored on any slider. These user defined Channel to Dimmer patch assignments are stored in a section of internal memory called a "**patch table**." Patch tables can also be copied to a memory card for backup or editing in a text editor. Every Dimmer output is the highest of any channel's current value multiplied by the patch table output to that dimmer.

To illustrate how softpatching works, let's consider the following simplified patch table for only three slider channels and four DMX dimmer outputs.

Sliders	Ch1	Ch2	Ch3
DMX Out			
Dim1	100%	0%	25%
Dim2	0%	100%	25%
Dim3	0%	0%	0%
Dim4	0%	0%	100%

Example mini Patch Table

This example has channel 1 assigned only to dimmer 1 at 100% and channel 2 assigned only to dimmer 2 at 100%. So as long as channel 3 is at 0%, sliders 1 & 2 will have direct control of those two dimmers — a 1 to 1 relationship. While simple and easy to use, this approach usually leads to manipulating too many sliders at once to achieve a desired look.

Channel 3 is more interesting. Here when the channel 3 slider is full up, dimmers 1 and 2 are both set to be 25% and dimmer 4 will be 100%. All three dimmers fade proportionally as the channel is faded down. An entire stage look can thus be assigned to a single channel and is the core of this unit's ability to control a large complex lighting system with a small manageable console.

Let's look in detail at how proportional soft patching of multiple channels are combined using a highest takes precedence (HTP) function to generate the final dimmer outputs. Continuing with this example patch table, say Ch1 is set to 50%, Ch2 10%, and Ch3 to 80%. Dimmer 1 output will be the greater of 50% x 100% and 80% x 25%: 50%. Dimmer 2 will be the greater of 10% x 100% and 80% x 25%: 20%. Dimmer 3 0%, and finally, Dimmer 4 80% x 100% gives 80%. A few simple setups can be combined forming a large palette with a minimum of sliders.

Sliders		Ch1	Ch2	Ch3	
Level		50%	10%	80%	
DMX Out					Output Values
Dim1		100%	0%	25%	50%
Dim2		0%	100%	25%	20%
Dim3		0%	0%	0%	0%
Dim4		0%	0%	100%	80%

Example mini Patch Table Execution

Now, extend this table concept to 12 channels and 512 dimmers and you'll see the full capability of this console's softpatch feature.

Select Patch Table

The console can store up to seven patch tables, numbered 0 through 6. When shipped, the active patch table is number 0. The console will retain the active table selection without power.

From the advanced menu, scroll with the ↑ or ↓ keys to the following function and press the → key:

Select Patch
Table?

The display then reads:

Using pTable 0 up/dn changes

Press the ↑ or ↓ keys to change the patch table from 0 to 6. The console stores patch assignments in internal memory, not on the SD card, and remembers which patch table was last used.

Load 1:1 Patch

A preconfigured “1 to 1” patch table is available. The 12 fader controls are assigned only to the first 12 DMX dimmers. This patch table assigns channel 1 to dimmer 1, channel 2 to dimmer 2, etc. The console leaves the factory with the 1:1 patch loaded in table 0.

To load the 1:1 patch into the selected table (over writing whatever carefully crafted table may already be there), press the ↑ or ↓ key until:

**Load 1:1 patch
in table N?** (where “N” is the active table number)

appears on the LCD. Press the → key to select this patch table. The display momentarily reads:

**1:1 patch loaded
in table N** (where “N” is the active table number)

The display then returns to “Load 1:1 patch in table N?” in the advanced menu.

Load Wrap Patch

The other preconfigured patch table available in the IQ512M is the “Wrap Around” patch. This patch table assigns control channel 1 to DMX dimmers 1, 13, 25, etc., while assigning control 2 to DMX 2, 14, 26, etc. The 12 controls are assigned to the first 12 DMX dimmers, then repeat until all 512 DMX dimmers are used.

To load the wrap around patch into the currently active table (over writing whatever carefully crafted table may already be there) from the advanced menu, press the ↑ or ↓ key until:

**Load wrap patch
in table N?** (where “N” is the active table number)

appears on the LCD. Press the → key to select this patch table. The display momentarily reads:

WrapPatch loaded
in table N

(where “N” is the active table number)

The display then returns to “Load wrap patch in table N?” in the advanced menu.

Clear Patch

Sometimes it is helpful to remove all patch assignments from the active patch table in order to build a configuration from scratch. **IMPORTANT** — when the patch table is cleared, **NO** channel slider controls **ANY** dimmer. New patch assignments should be made immediately so the console doesn’t appear “broken.”

To clear the active patch table from the advanced menu, press the ↑ or ↓ key until

Clear patch
table N?

(where “N” is the active table number)

appears on the LCD. Press the → key to select this option. The display momentarily reads:

Patch table N
cleared

(where “N” is the active table number)

The display then returns to “Clear patch table N?” in the advanced menu.

Edit Softpatch Dimmers & Channels

Patch table editing operates on the currently active table.

Any dimmer can be assigned to one or more channels at a different proportion for each channel. Any channel can have more than one dimmer assigned to it, all at different proportions. Thus it is possible to build a complete stage look for each control channel. For example, channel 1 can control dimmer 4 at 50% and dimmer 6 at 75%, while channel 2 controls dimmer 4 at 75% and dimmer 8 at 35%.

When making patch assignments, it is usually easiest to think of which dimmers you want on a particular channel, make those assignments, and then go on to the next channel. From the advanced menu, use the ↑ or ↓ key to scroll through the menu until the display reads:

Edit dimmer
@channel@level?

Press the → key to select this option. The display will say:

dimmr@chan@level

Run up to full the channel slider to which you are making dimmer assignments. This allows you to see the effect live on stage as you build the look. Key in a patch table using a series of numbers separated by @ signs. The @ sign can be found underneath channel slider 11. After each patch entry is completed, the <Enter> key (under slider 12) is used prior to starting the next patch table entry. "0" is under slider 10.

For instance:

```
1 @ 1 @ 50 <Enter>
```

```
2 @ 1 @ 75 <Enter>
```

assigns dimmer 1 to channel 1 at 50% and dimmer 2 to channel 1 at 75%. If the channel slider #1 is up to full (and all other channels are down to avoid confusion), you will see the light on dimmer 1 shining at 50% and the light on dimmer 2 shining at 75%. When a dimmer is assigned to a channel without setting a level, for instance 1@1<Enter>, the dimmer is assigned to the channel at 100%. To clear that assignment, press 1@1@0<Enter>. Now channel 1 will not control dimmer 1.

The valid range of dimmers is 1 to 512, channels from 1 to 12, and levels 0 to 100. If an invalid value is entered, the display will momentarily display the error and then new values can be entered. If you catch yourself in an error before pressing <Enter>, you can use the ← key to return to the advanced menu and then → key to return to table editing. If more than three digits are keyed consecutively, the error is displayed, and the user can start re-entering the value and continue or just ← out then → back to editing.

Changes are saved in internal, non-volatile memory as you go. Continue entering assignments with the keys until finished, then press the ← key to return to the advanced menu.

Because the patch table is just a two dimensional table of values, it doesn't really matter if the values are addressed by "dimmer @ channel" or "channel @ dimmer." The user is free to use the opposite order if desired. From the advanced menu, use the ↑ or ↓ key to scroll through the menu until the display reads:

```
Edit channel  
@dimmer@level?
```

Press the → key to select this option. The display will say:

chan@dimmr@level

In this case:

2 @ 1 @ 75 <Enter>

channel 2 will control dimmer 1 at 75%. Other than the order of channel and dimmer, editing works exactly the same.

Capturing DMX Input to a Patch Channel

The IQ512M can capture levels sent to it from an external controller and save them as a patch assignment for a channel in the active patch table. Use the ↑ or ↓ key to scroll through the advanced menu until the display reads:

Capture DMX
to channel?

When selected with the Right arrow key, the display reads:

Press Bump to
capture DMX to

First run all the channels on this console down and set the stage look with the external controller, then press the Bump button beneath the desired channel slider. The display briefly reads:

Saved Rx DMX to
channel 1 (or whichever channel bump was pressed)

And then returns to:

Capture DMX
to channel?

At this point, use the → key again to capture another channel, ↑ or ↓ to choose another function, or ← key to exit the menu and return to normal operation.

Save Patch To SD card

The IQ512M allows saving of internal patch tables to an SD card for backup or offline editing. See the “IQ512M File Format” section below for details on what card types are supported and file name limitations.

Patch tables are saved as simple text files that can easily be edited on any computer. To save an existing patch table to an SD card, use the ↑ and ↓ keys on the advanced menu to make the display read:

```
Save Patch to  
MMC/SD?
```

Press the → key to select this function. If a card is not present, a reminder will momentarily be displayed before returning to the advanced menu. If a card is inserted, the display then says:

```
Copy patch table  
0 to MMC/SD?
```

Use the ↑ or ↓ key to select which patch table you would like to save. Press the → key to accept this selection, or ← to abort the operation.

The display will show the progress of the writing of the patch table, then show the name of the patch file that was created. Patch tables are given a file name of PATCHn.TXT where “n” is a number from 1 on up. The console uses a number that is one higher than the highest existing patch table file number. Patch tables can be given a more friendly name on an external computer. They can also have any extension, though it is suggested the TXT extension be kept so external computers associate the file with a text editor for simple offline editing.

Load Patch From SD Card

Any of the patch tables in the IQ512M can be loaded from a file on the SD card. Users often want to back up the patch table for a particular show so it can be reloaded into the IQ512M for a later run of the show. Since patch files are simple text files, they are also easy to create and edit on an external computer. See “Offline Editing” later in this manual.

To load a patch file from the SD card, use the ↑ and ↓ keys to move through the advanced menu to:

```
Load Patch From  
MMC/SD?
```

Press the → key to select this function. If a card is not present, a reminder will momentarily be displayed before returning to the advanced menu. The display should then say “Load Patch” on the top line, and the file name of the card’s first file on the bottom line.

Use the ↑ or ↓ key to find the file you wish to load. Press the → key to select that file. The display should then show the patch file name on the top line and “to PatchTable 0?” on the bottom line. Use the ↑ or ↓ key to select the patch table number to which the file will be copied. Press the → key to accept this selection. The display will show that it is copying the file, and then:

Done!

If it is not the currently active table, you may want to switch to that table with the Select Patch Table function.

Creating Cues

Create a New Show

Channel levels set on the IQ512M can be saved as cues on an SD card then played back one by one in a performance.

Note: Patch assignments are not automatically saved to the SD card, only to internal memory. If a show is written with particular patch assignments in mind, that patch table must be active (see "Select Patch Table") for the stage to have the desired look. If the patch table is edited or the wrong patch table is active, cues written with channel values can appear “broken.”

To create and save memory cues, first insert (and format if needed, see “Format SD Card”) a card. Scroll through the advanced menu to:

Create New Show?

Press the Right arrow → key.

Shows are saved with the names SHOW1.TXT, SHOW2.TXT, etc. The new show name will be one higher than the highest show number existing on the card. Show files created or edited on an external computer can have any name such as “lighting.cue” consisting of a filename of up to eight characters and an extension of up to three characters. It is suggested, however, that file names use the TXT extension so the computer associates a text editor with the file.

The display reads:

**dn001 000 up001
Save as 01.0?**

Set the control sliders to the desired levels. If **timed crossfades** are going to be used, set them by keying in a nine digit number where:

- first three digits are the **fade down** time of the previous cue (in seconds)
- second three digits are the **delay** between the start of the fade down and the start of the fade up
- third three digits are the **fade up** time

The sign of the delay time can be changed by pressing the @ key. A positive delay starts the fade up after the fade down starts. A negative delay starts the fade down after the fade up starts. Once the levels and times (if desired) for this cue have been set, press the → key. The display briefly says:

```
dn001 000 up001
Saving Cue 1.0
```

(fade times will be whatever you set) then briefly:

```
Dn001 000 up001
Cue 1.0 Saved!
```

Next, the display reads:

```
dn001 000 up001
Save as 02.0?
```

Set the control sliders to the levels (and fade times, if desired) for the next look then press the → key to save cues 2.0, 3.0, etc. Press the ← key to end the process. The memory cues were saved to the card one at a time.

If a show is to be run continuously using the External Go input (see “Running a Show with Timed Crossfades”), a useful trick is to create cues with identical looks as the one before to use as a “delay” between crossfades. This way as cues are played continuously as triggered by the external input, the timed crossfade into the identical cue looks like the “dwell time” between crossfades.

Edit Show

See the “IQ512M File Format” section below for details on what card types are supported and file name limitations.

Note - If a show is created on an external computer or console, it must be edited on an external computer. It cannot be edited on the console, only played back or deleted (see “Delete Show”).

Editing a show allows cues to be overwritten, inserted/added, or deleted by cue number. To edit shows created on the IQ512M or SceneMaster 8, scroll through the advanced menu items to:

Edit show?

Press the → key to select this option. (Be sure to insert an SD card first!) The display reads:

**Edit show?
SHOW1.TXT**

Press the ↑ or ↓ key to scroll through the list of shows available. Press the → key to select the desired show. Momentarily, the display says:

EDIT SHOW1.TXT (or which ever show was selected)

The display then reads:

**Dn001 000 up001
Save as Q1.0?**

Press the ↑ or ↓ key to change cue numbers. To change an existing cue, scroll to that cue number, or to insert a new cue, scroll to a cue number between existing cues. For example to insert a cue between 2.0 and 3.0, set the system to save at Q2.5, then press the → key. The new levels are saved on the card. The values for the existing cues are not output on DMX nor are the saved crossfade values displayed while changing cue numbers, just the current slider settings and most recently entered crossfade values.

To delete an existing cue, scroll to that cue and press the Black Out button. The display will momentarily read:

**Dn001 000 up001
Cue 1.2 deleted!**

Also, the Black Out LED will turn on and the DMX outputs will all be set to zero. If you are going to continue deleting cues, you can ignore the LED; but if you are going to change or add cues, it is recommend to press the Black Out again to turn the outputs back on since it is perfectly okay to delete nonexistent cues. One should do this before changing the cue number so that a programed cue is not accidentally deleted trying to turn the outputs back on.

The numbers on the display's top line represent how many seconds of fade down time of the previous cue, the delay before fading into the new cue, and the fade up time of the new cue.

These values are used for timed crossfades. They are not used for manual crossfades. A delay of 000 means the old cue starts fading out and the new cue starts fading in at the same time. A positive delay (for example 010) causes the fade in of the new cue to start after the old cue begins to fade out (for example, 10 seconds after the fade out starts). A negative delay (such as -010) causes the fade out of the old cue to start after the new cue begins to fade in.

You can change crossfade times by keying in a nine digit number where:

- first three digits are the **fade down** time of the previous cue (in seconds)
- second three digits are the **delay** between the start of the fade down and the start of the fade up
- third three digits are the **fade up** time

The sign of the delay is toggled by hitting the @ key.

Once the crossfade values are set and the desired levels are set on the 12 channel sliders, press the → key to write this cue to the card. While writing the change, the display will momentarily read:

```
Dn001 000 up001
Saving cue 2.5
```

Followed by the following momentary notification:

```
Dn001 000 up001
Cue 2.5 saved!
```

Continue overwriting, inserting/adding, and deleting cue numbers as needed. When finished, use the ← key to exit the Edit function.

To edit or create a show using a simple text editor on an external computer, see the “IQ512M File Format” section below. If the computer does not have an SD card reader, low cost readers that plug into a USB port are available.

Capturing DMX Input to Show Cues

The IQ512M can capture levels sent to it from an external controller and save them to create a new set of memory cues (be sure the working, external controller is plugged into this controller’s DMX Input and a formatted SD card is inserted). Use the ↑ or ↓ key to scroll through the advanced menu until the display reads:

```
Capture Rx DMX
to new show?
```

Press the → key, and the display reads:

New SHOW1.TXT (or SHOW2.TXT, etc, the highest number on the card)
Save Rx as Q1?

Press the → key to save the levels input from the external controller as the first stage look in the series of cues. Set new levels on the external controller, then press the → again to save the levels as the second cue. Continue to write as many cues as desired, then press the ← key to exit this menu item. Memory cues are written to the SD card as you go. Up to 512 dimmer levels are written for each cue allowing the IQ512M to run a very large show.

Crossfade times are not available while capturing cues with this method. However, they can be added to the file for playback by editing the text file on a computer. See the “Offline Show Editing” section below.

IQ512M File Formats

General

The console only supports standard capacity SD cards (32MB, 64MB, 128MB, 256MB, 512MB, and 1GB) formatted as FAT16. 2GB, SDHC, and SDXC are not supported at this time.

The IQ512M Format saves shows as simple ASCII text files. This section describes the file format to aid users in editing these files.

FAT16

The console saves shows and patch tables as text files in the root directory (shows cannot be in subdirectories or folders) of an MMC or SD card using the FAT16 file format. The IQ can also format the cards.

Show File Names

The console creates show files with the name “SHOWnnn.TXT” where “nnn” is a number. The first file to be created will be “SHOW1.TXT”. The IQ512M will read files with any name as long as the name is 8 characters or less followed by an extension of 3 characters or less (long filenames are not supported).

Patch File Names

The console creates patch files with the name “PATCHnnn.TXT” where “nnn” is a number. The console will read files with any name as long as the name is 8 characters or less

followed by an extension of 3 characters or less (long filenames are not supported).

File Records

Cues are stored in a “pipe delimited” text file. Each cue ends with a carriage return and line feed. On cue playback, the carriage return is ignored, and the line feed is interpreted as the end of record marker. This allows show files to be created and edited with text editors under a variety of operating systems. Pipe character (|) is used as a field delimiter since it is a visible character (which would not be the case in a tab delimited file) and is also not commonly used. Comma delimited files generally require quotes around strings, since a string may include a comma. Pipe delimiting avoids this requirement. Records are not case sensitive.

Shows Captured in the IQ512M Format

The console can capture a cue from its DMX input. The cue record shows dimmer levels from dimmer one through the last dimmer with a non-zero level. A sample captured cue is below:

```
q00030| |d1|000|000|255
```

This is cue 3.0. The cue description is blank. The Level Type is “d1” indicating the following levels are dimmer (output) levels (not control channel levels that need to be run through the active patch table) starting with dimmer 1. The level fields indicate dimmers 1 and 2 are at zero level (off), while dimmer 3 is full on. Since captured cues are of variable length, they are not at fixed positions in the file. Because they are not at fixed positions, they cannot be edited on the IQ512M. If editing is required, it must be done offline on a computer. The console checks for the letter 'q' in file position 640. If not found, it is assumed that the file has cue records that are not in fixed positions, and cue editing and deletion are disabled.

Offline Show Editing

Shows may be created or edited offline on any computer using the SD card and a text editor. Thanks to the large display and more flexible user interface of a text editor compared to the console’s compact and specialized interface, this is one of the most powerful features of the IQ512M Format. However, shows created or edited offline cannot later be edited on the console itself. The start of a simple show file is below:

```
q10|Houselights|t1|y0|n1|d512|100%  
q20|Blackout|t1|y0|n1|0  
q30|Act1 Scn1|t1|y0|n1|50%|100%|10%|75%|100%|0|10%
```

Note that cue 1.0 sets dimmer 512 to 100% for the houselights. As the operator crossfades into cue 2.0, the houselights fade down until all lights are out. As the operator crossfades into cue 3.0, the lights are brought up for Act 1 Scene 1. Control channel levels are here specified in percent. Each cue has a fade out time and fade in time of one second and a delay time of

zero seconds. If a cue does not include crossfade timing information, the last executed values are used.

Show File Field Type Summary

Each record contains several fields. The field types are:

- Cue Number [q]
- Cue Description
- Fade Out (Down) Time (seconds) [t]
- Delay Time (second) [y]
- Fade In (Up) Time (seconds) [n]
- Level Type [c,d]
- Level

Each record is required to have each of these fields except Fade Out/Fade In times and the Level Type. Levels that start with 0x are interpreted as hexadecimal (0x00 - 0xFF), and levels that end with a % are interpreted as percentages (0% - 100%). Otherwise, they are read as decimal (0 - 255).

Show File Field Types

q

The **Cue Number** field starts with the letter 'q' and is followed by the cue number. Cue numbers are ASCII decimal digits with a suppressed decimal point. Cue 1.0 is saved as "q10." Cue 1.5 is saved as "q15". Cue numbers are for identification only. Cues are played back in the order they are in the file. They are not played back in numerical order unless they are recorded in numerical order (which they will be if they are recorded on the IQ512M).

The **Cue Description** is displayed on the console during cue playback. The first character must be a letter. The Cue Description should be 10 characters or less so it can fit on the 16 character display line along with the Cue Number.

t

The **Fade Out Time** is preceded by the letter 't' (for **ouT**). It is the number of seconds over which the old scene will be smoothly faded down. It is an integer between t000 and t999 (inclusive). The default time (when no ouT field is present for playback) is to repeat the last executed fade out.

y

The **Delay Time** is preceded by the letter 'y' (for **delay**). It is an integer between y-999 and y999 (inclusive). It is the number of seconds between the start of the Fade Down of the old scene and the start of the Fade In of the new scene. If this number is positive, the new scene starts fading up after the old scene starts fading down. If it is negative, the new scene starts fading up before the old scene starts fading down. If it is zero, the old scene starts fading

down at the same time the new scene starts fading up. If no delaY field is present, the last executed value is used.

n

The **Fade In Time** is preceded by the letter 'n' (for **iN**). It is the number of seconds over which the new scene will be smoothly faded up. It is an integer between n000 and n999 (inclusive). The default time is to repeat the last executed fade in.

c or **d**

The **Level Type** is an optional field. If the Level Type is not specified, the console assumes the next Level field is control channel 1. **Control Channels** are run through the active patch table to yield dimmer values, which are sent to the dimmers. The Level Type consists of either the letter 'c' (for **Control** channel) or 'd' (for **Dimmer**, output channel) followed by a number indicating the control channel or dimmer number the next level represents. For example, "c6" would cause the next level field to be interpreted as control channel 6. "d500" would cause the next field to be interpreted as dimmer number 500. A single record may include multiple Level Type fields as required.

The **Level Field** determines the control or dimmer level to be used for this channel for this cue. The decision as to whether the level is a control or dimmer level is based on the last Level Type field. The level is assumed to be a control channel level (which is passed through the patch table) if there is no Level Type field prior to this Level Field. Successive Level fields are assigned to successive control channels or dimmers.

The Level field contains a number representing the level to be sent to that control channel or dimmer. The level may be a number between 0 and 255 (decimal value of the DMX slot), 0x00 to 0xff (hexadecimal value of the DMX slot), or 0% to 100% (percentage value that is converted to an 8 bit value of 0x00 to 0xff for transmission on the DMX line). Numbers without a '%' or 'x' character are assumed to be a DMX level of 0 to 255. Numbers that start with **0x** (zero x) are assumed to be hexadecimal. Numbers that end with a percent sign, %, are assumed to be percentages.

Patch File Field Types

Every line of a patch file must start with "pn" where "n" is a number between 1 and 12, inclusive. This number represents the control channel (slider) with which this patch record is associated. This is followed by a pipe delimiter (|) and the first dimmer (output channel) level for this proportional patch. The first dimmer level is followed by up to 511 more dimmer levels (up to 512 dimmers may be patched to a control channel). Dimmers that are not patched to a control channel should have values of zero in the appropriate field. Dimmer levels may be decimal (0 to 255), hexadecimal (0x00 to 0xff), or percent (0% to 100%).

If a large number of dimmers are to be skipped (perhaps control channel 12 drives the houselights on dimmer 512), the dimmer number that the next level is to be associated with may be specified. This is analogous to the Level Type field in Show Files.

A couple examples follow:

```
p1|255|0x80|25%
```

The above line patches control channel 1 to dimmer 1 at full (DMX level 255), to dimmer 2 at half (DMX level 128), and to dimmer 3 at 25% (DMX level 64). Running slider 1 to full will cause all three fixtures to light at these levels.

```
p2|d500|100%|100%|100%|100%|100%
```

The above line patches control channel 2 to dimmers 500 through 504 at 100%.

NOTE that each line of a patch file must begin with p and a number, and end with CRLF, LFCR, or LF (allowing for a variety of operating system text file formats). Care should also be taken not to use invalid channel or dimmer numbers as some firmware versions have had bugs that did not prevent invalid numbers from causing a fault state requiring factory service to recover.

Dimmer Details

Features

The SceneMaster 8 incorporates eight 1kW dimmers. The integrated dimmers are factory set to be controlled by dimmers 1 through 8 in the DMX OUT control signal. No user configuration of the dimmer section is required. Each outlet is a separate channel. 1 through 4 are powered by inlet A, and 5 through 8 are powered by inlet B. Each dimmer channel has its own 10 Amp circuit breaker adjacent to its numbered outlet. The button with the current rating on it will pop out in case of an over current event, just push it back in to reset.

See “Getting Started” at the beginning of this manual for the details on connecting power and loads.

In Case of Trouble

Overview

A review of the following paragraphs may save you the cost of a service visit or of shipping and repair. Even if something is still wrong, this process will help you explain the malfunction to the service technician.

First, read the operating instructions carefully. Be sure you know how to operate the equipment. Do not expect this equipment to operate exactly like others. Many apparent failures result from not being familiar with the unit's operating characteristics.

The SceneMaster 8 has two major sections to consider when troubleshooting: the control console and the dimmers. The control console refers to all the sliders, buttons, LEDs, and display on the front panel as well as the DMX in & out jacks, power switch, and cue switch jack on the back panel. The console has many programable features that influence operation especially softpatching — for example, **if the active patch table has been cleared, none of the sliders will change any outputs**. The dimmers do the work of controlling the 8 load outputs and include the u-ground outlets and circuit breakers on the back panel. Any load connected to these outputs must be compatible with phase control dimming and draw no more than 10 amps.

Control Troubleshooting

The most common problem with the control console is outdated and/or confusing softpatch information. Turn off the controller. Slide the grandmaster and crossfader sliders all the way up. Slide the channel sliders all the way down. Turn it back on. Check that the console is properly configured, paying particular attention to the softpatch table settings. Try selecting an unused patch table and then loading the 1:1 patch for the sake of troubleshooting (see the “Load 1:1 Patch” section of this manual). Then slowly run the channel sliders up and down.

If lights don't come on:

1. Check the power to the console. There should be a message in the LCD display at all times.
2. Check the circuit breakers on the back panel.
3. Check that the fixtures are plugged in and are working properly. Test them directly on a wall outlet to be sure.
4. Check the output circuit wiring (cords and connectors). Plug a test load directly into the dimmer.
5. For external lights/dimmers (those using DMX control, not the 8 internal dimmers), examine the control cables. Check that they are continuous, undamaged, and wired correctly. The male end of the cable goes into the female XLR connector on the console

labeled DMX OUT. The female end of the cable goes into the male XLR connector on the device.

6. For external dimmers, check the power to the dimmers, including the power input breaker and any fuses or breakers protecting the output circuits. Check the dimmer status LED to see if it indicates a valid control input. Check the starting channel select switch and any test switches.

If the lights do anything else:

1. Examine the console for signs of abuse or damage, particularly the sliders. Sliders that feel gritty are likely responsible for flickering on that channel. This can occur if dirt, coffee, or some other liquid is spilled into the slide control slot. Curing this problem usually requires the replacement of the control. Cleaning with WD-40 or TRI-FLOW may fix it temporarily.
2. Other potential internal faults between the console and dimmer sections will require service at the factory.

The following steps for external DMX devices may be helpful:

1. Set the DMX termination switch or put a termination plug into the last dimmer in the chain. Try using a DMX512 inline optical isolator to eliminate possible ground loop or long control run problems. Try moving the console to the dimmer and connecting the two with a short DMX cable.
2. Swap cables and circuit cards one by one to see if the problem follows the part.
3. Dimmers with lights stuck at full usually have shorted triacs or solid state relays. The dimmer will have to be sent back to the factory to have the part replaced.

Dimmer Troubleshooting

Check all lamps and wiring for shorts that can cause damage to the dimmers.

There are three forms of malfunctions common to solid state dimmers:

- **“Failed Off”** (in which the lights do not come on)
- **“Failed On”** (in which the lights are stuck on)
- **“Flickering”** (where the levels will not be maintained and cut in and out)

If a load has "Failed Off," check that the instrument is plugged in and that the lamp has not burned out. Verify that the unit has power to both inlets — is the display on when only the A or B inlet is connected? Check if the circuit breaker on the unit needs to be reset — the button with the current rating on it will pop out, just push it back in to reset.

If a load has "Failed On," especially after resetting a breaker, it is probably due to a shorted triac. Triacs can fail when a short in the output overloads it faster than a circuit breaker can protect it. The short can be in the cable, in the connectors, in the light fixture, or most often in the lamp itself. Please check the load by plugging it into a known good *wall* outlet **before**

plugging it into other dimming channels. If a short has killed one channel, there is no sense in damaging more channels with it.

Sometimes flickering is caused by a problem with an external control cable. Try unplugging cables connected to DMX IN and DMX OUT.

In some installations, a dimmer's breaker may trip after a long time in use. This is most likely to occur when a channel is loaded at or near its maximum rating and there are high ambient temperatures or limited ventilation. The solution will be to either decrease the load or improve cooling. Cooling can be improved by increasing the free space around the unit, using a fan, and access to cooler air. The SceneMaster should never be installed in an enclosed space without plentiful free flowing air.

Obtaining Service

We are always happy to help you troubleshoot or brainstorm new solutions. Emailing photos of the situation to dove@dovesystems.com will provide a helpful point of reference for a phone call, 805-541-8292.

Service technicians are generally available between the hours of 8am to 3pm (Pacific Time) Monday through Friday. Please have a specific description of the problem, preferably from personnel who were onsite at the time. If at all possible, bring the telephone into the venue and have the equipment at hand.

Do not open the unit for examination. Dove Systems cannot provide phone support, replacement parts, or schematics for component level testing. The SceneMaster 8 is a microcontroller based product running proprietary software. Unauthorized repair on this product shall void the warranty, and the buyer may be charged for subsequent factory repair, even if the product is defective.

To obtain service, please visit the Repairs page of our website, <https://www.dovesystems.com/repairs>, download the Repair Form, and follow the instructions. We will get your SceneMaster operating like new and return it quickly.

VERY IMPORTANT: PLEASE ENCLOSE THE REPAIR FORM DESCRIBING THE PROBLEM — EVEN IF YOU HAVE CONTACTED THE FACTORY BY PHONE.

WARRANTY INFORMATION

The manufacturer agrees that the SceneMaster shall be free from defects in material or workmanship from date of shipment over a period of one year. Said warranty will not apply if equipment is used under conditions of service for which it is not specifically intended. The manufacturer is not responsible for damage to its apparatus through improper installation, physical damage, or poor operating practice.

If any device is found unsatisfactory under the warranty, the buyer should notify the manufacturer, and after receipt of shipping advice, buyer may return it directly to Dove Systems, San Luis Obispo, CA, shipping prepaid. Such equipment will be replaced or put in proper operating condition, free of all charges except transportation.

Manufacturer is not responsible for any freight chargers. The correction of any defects by repair or replacement by the manufacturer shall constitute fulfillment of all obligations to the purchaser. Manufacturer does not assume responsibility for unauthorized repairs to its apparatus, even though defective.

Manufacturer shall not be liable for any consequential damage in case of any failure to meet the conditions of any warranty of shipping schedule, nor will claims for labor, loss of profits, repairs, or other expenses incidental to replacement be allowed.

No other representations, guarantees or warranties, expressed or implied, are made by the manufacturer in connection with the manufacture and sale of its equipment. This warranty is non-transferable and applies to the original buyer only.

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