# Mojo Spin Master™

Product User Guide to MJS1, MJS2, MJS3



Mojo Spin Master™ light effects
create an energetic whirl of colored images.
Spin Master I™ emits a wild, whirling vortex of images.
Spin Master II™ lines the dance floor with racing images.
Spin Master III™ sends viewers reeling - with a swerving, turning, unlimited movement, image ray effect.

Geni Electronics Co., Ltd.



# **THANK YOU!**

Thank you for buying a Geni product. For best results, please carefully read and follow the directions in this product user manual.

Copyright 2001 Geni Electronics Co., Ltd. Product specifications may be subject to change. For more information, please visit our web site: http://www.geni.com.tw. Thank you!

#### **Congratulations!**

You have a great, innovative product from Geni Electronics Co., Ltd. Geni Mojo Spin Master™ effect lights bring excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product series provides the effect you need.

You can rely on Geni Electronics Co., Ltd., for more excellent lighting products. We design and manufacture strobes, effects, and mirrored projectors. And new products are being launched regularly. For information, please visit our web site at http://www.geni.com.tw. We work hard to keep you, our customer, satisfied.

You can get some of the best quality, best priced products on the market from Geni. So next time, turn to Geni for more great lighting equipment. Always get the best -- with Geni.

Thank you!

Geni Electronics Co., Ltd.

Main Office/Factory Address:
Geni Electronics Co., Ltd.
No. 22, Chung Cheng 5th Street
Yung Kang Tainan Hsien, Taiwan

Tel: 886-6-253-8513 Fax: 886-6-253-8685

Showroom Address: Taipei World Trade Center, Room 3A-04 No. 5, Section 5, Hsin Yi Road

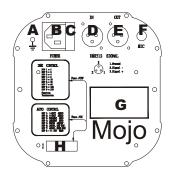
Taipei, Taiwan

Tel: 886-2-2722-2910 Fax: 886-2-2722-2918 04

Get the Best - Get Geni Geni Sets the Standard

#### **Appendix B - Back Panel**

### **Mojo Series Product Back Panel**



- A Earth (Ground)
- B IEC power connector
- C Fuse holder
- D DMX signal Canon connector (IN)
- E DMX signal Canon connector (OUT)
- F Microphone
- G Product specification label
- H DMX and function dip switches

Note: For simplicity, the back panel of one Mojo product is shown. Other product back panels may differ slightly.

#### **Appendix A - DMX Dip Switch Value Guide**

DMX products must have their own "address" to receive DMX signals. Addresses on Mojo series products are set by flipping appropriate DMX dip switches.

To do this, you need to know that DMX dip switches have the following values: #1=1; #2=2; #3=4; #4=8; #5=1; #6=32; #7=64; #8=128; #9=256. And you need to know that DMX address settings are the sum of the dip switch values.

For example, standard DMX addresses for four Mojo Spin Master III<sup>™</sup> effect lights, each of which has four channels (See page 10.), Follow:

MJS3	Address Value	DMX Dip Switches "ON"
Unit 1	1	#1
Unit 2	5	#3 & #1
Unit 3	9	#4 & #1
Unit 4	13	#4, #3, #1

Explanation: Since each unit has four channels, each address advances four values (See Address Value above).

Once address values are figured out, add DMX dip switch values to obtain the appropriate address (DMX Dip Switches "ON") for each unit. Flip appropriate DMX dip switches on each unit.

# **Mojo Spin Master<sup>™</sup> Product Guide**

This product user guide covers the following effect lights: Mojo Spin Master I<sup>™</sup> (MJS-1), Mojo Spin Master II<sup>™</sup> (MJS-2), Mojo Spin Master III<sup>™</sup> (MJS-3).

Description	Page 1
Warning	Page 1
Getting Ready	Page 2
Install the Lamp	Page 2
Lamp Installation	
Installing the Lamp (Figure 1)	Page 2
Set Up and Operation	Page 3
One-unit Audio Set Up	Page 3
Four-unit Audio	
Four-unit Audio Set Up (Figure 2)	Page 4
DMX Control	
DMX Set Up(Figure 3)	Page 5
Product Operation Overview	Page 5
Function Dip Switch Chart	Page 6
Mojo Spin Master I <sup>™</sup> DMX Channel Chart	
Mojo Spin Master II <sup>™</sup> DMX Channel Chart	Page 7
Mojo Spin Master III <sup>™</sup> DMX Channel Chart	
Maintenance	Page 8
Changing the Lamp	Page 8
Replacing the Fuse	Page 8
Troubleshooting	Page 9
No Light, No Movement - All Products	Page 9
No Response to DMX	Page 9
No Response to Audio	Page 9
Product Specifications	Page 10
Appendix A - DMX Dip Switch Value Guide	Page 1
Appendix B - Back Panel (Figure 4)	. Page 12

#### **Description**

Mojo Spin Master  $I^{TM}$  effect lights create an energetic whirl of colored images. Mojo Spin Master  $I^{TM}$  emits an energetic whirl of colored images. Spin Master  $II^{TM}$  lines the dance floor with racing images. Spin Master  $III^{TM}$  sends viewers reeling -- with a swerving, turning, unlimited movement, image ray effect.

The set up, control, and functions of various Mojo Spin Master<sup>™</sup> effect lights may differ. Please refer to specific product headings in this manual.



#### Warning!

Like all electronic products, Mojo Spin Master<sup>™</sup> effect lights must be used with common safety precautions in mind.

Mojo Spin Master<sup>™</sup> effect lights contain no user-serviceable parts. Refer servicing to qualified technicians only.

Disconnect from electric mains power supply before removing covers or changing lamps. Keep case closed while operating. Do not insert objects into air vents.

Keep away from flames and flammable material. Keep away from liquids. Never operate in rain or in damp conditions.

If effect lights are dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.

Lamp and metal become hot during operation. Allow time to cool before handling. Do not touch lamp bulb glass with bare hands.

Read user manual instructions thoroughly before operating. Follow the instructions. Never remove warning or informative labels from the unit.

#### **Product Specifications**

Name: Mojo Spin Master I<sup>™</sup>

Model: MJS-1

Voltage: 230V~50Hz (CE) Power consumption: 300W

Fuse: T3.15A

Dimensions: 475x220x160 mm

Weight: 7.5 kg

Lamp: GX5.3 24V/250W (ELC)\*

Name: Mojo Spin Master II™

Model: MJS-2

Voltage: 230V~50Hz (CE) Power consumption: 300W

Fuse: T3.15A

Dimensions: 475x220x160 mm

Weight: 7.8 kg

Lamp: GX5.3 24V/250W (ELC)\*

Name: Mojo Spin Master III™

Model: MJS-3

Voltage: 230V~50Hz (CE) Power consumption: 300W

Fuse: T3.15A

Dimensions: 475x220x160 mm

Weight: 8.7 kg

Lamp: GX5.3 24V/250W (ELC)\*

Name: Mojo Spin Master I<sup>™</sup>

Model: MJS-1

Voltage: 120V~50/60Hz Power consumption: 300W

Fuse: T3.15A

Dimensions: 475x220x160mm

Weight: 7.5 kg

Lamp: GX5.3 24V/250W (ELC)\*

Name: Mojo Spin Master II™

Model: MJS-2

Voltage: 120V~50/60Hz Power consumption: 300W

Fuse: T3.15A

Dimensions: 475x220x160mm

Weight: 7.8 kg

Lamp: GX5.3 24V/250W (ELC)\*

Name: Mojo Spin Master III™

Model: MJS-3

Voltage: 120V~50/60Hz Power consumption: 300W

Fuse: T3.15A

Dimensions: 475x220x160mm

Weight: 8.7 kg

Lamp: GX5.3 24V/250W (ELC)\*

Product specifications may be subject to change. Please visit www.geni.com.tw for details.

10

<sup>\*:</sup> Versions for other lamps may be produced. Please check the specification label on your product.

#### **Troubleshooting**

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps. If the effect does not operate properly, refer servicing to a technician.

#### No Light, No Movement - All Products

Response: Suspect three potential problem areas: the power supply, the lamp, the fuse.

- 1. Power supply. Check that the unit is plugged into an appropriate power supply.
- 2. The lamp. Replace the old lamp with a new one of appropriate specifications. See directions above for replacing lamps.
- 3. The fuse. Replace the fuse. See directions above for replacing the fuse.

#### No Response to DMX

Response: Suspect the DMX dip switch setting, DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

- 1. Check the DMX dip switch setting. Make sure the DMX dip switch address setting is correct.
- 2. Check the DMX cable: Unplug the unit; change the DMX cable; resupply electrical power. Try your DMX control again.
- 3. Determine whether the controller or light effect is at fault. Does the controller operate other DMX products properly? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.

#### **No Response to Audio**

- 1. Check the function setting of the first unit. Make sure that function dip switch #1 is on. (Function dip switch #1 on = audio control.)
- 2. Turn up the music volume.

#### **Getting Ready**

All Geni products are thoroughly tested at the factory and shipped in perfect condition. If damage has occurred during shipping or if components are missing, please contact your Geni dealer immediately.

Your package should include:

- (1) One Mojo Spin Master<sup>™</sup> series lighting effect with bracket.
- (2) One IEC electric mains power cord with plug.
- (3) One product user manual.

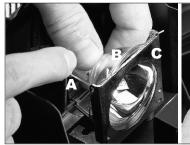
The lamp may or may not be included, depending on your Geni dealer. In most cases, the lamp is not included.

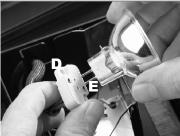
#### **Install the Lamp**

Mojo Spin Master<sup>™</sup> series effects use either the GX5.3 24V/250W lamp by Osram or the ELC lamp of identical specifications by Philips. Use only the appropriate lamp for your unit. Note that product versions that use other lamps may be offered in the future. Check your product specification label for information.

# **Lamp Installation**

- (1) Loosen the two screws on the top of the lamp cover. Open the case.
- (2) Read lamp instructions. Do not touch the lamp bulb glass. (See Figure 1.) Oil on hands shortens the lamp life. (If you touch the bulb glass, wipe off the glass with a clean, lint-free towel and rubbing alcohol.)
- (3) Hold the lamp socket with one hand. Insert the lamp pins into the holes in the lamp socket.
- (4) Make sure that the lever is up. Slide the lamp into the lamp base.
- (5) Put on the lamp cover and fasten the screws snugly.





#### **Lamp Items**

A - Lever

B - "ELC" Lamp

C - Lamp Base

D - Lamp Socket

E - Lamp Pins Figure 1

#### **Set Up and Operation**

The set up and operation of all Mojo Spin Master<sup>™</sup> light effects is similar. The main difference is that function channels of various items vary, so that dip switch settings differ slightly. Follow directions below as they pertain to your particular product and your preferred operation mode.

Before plugging unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

#### **One-unit Audio Effect**

- (1) Fasten the effect light onto firm trussing (Use a 30-kg rated or stronger C-clamp fastened onto the Mojo Moon bracket). Leave at least one meter on all sides for air circulation.
- (2) Flip "on" function dip switch #1 and regular dip switch #1.
- (3) Plug one end of the electric mains power cord into the IEC socket on the unit. (See figure 5, page 6.) Then plug the other end of the cord into a proper electric power supply socket.
- (4) Turn on the music. The effect will change to the music.

#### **Four-unit Audio**

- 1. Fasten the effect lights onto firm trussing (Use a 30-kg rated or stronger C-clamp bolted onto the Mojo Moon bracket). Leave at least one meter on all sides for air circulation.
- 2. Link the units as shown in figure 2, page 4. Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
- 3. Activate audio control: On the first unit, flip "on" function dip switch #1. Terminate the system: On the last unit, flip "on" function dip switch #2.
- 4. Set DMX dip switches as follows.

MJS1	Dip ON	MJS2	Dip ON	MJS3	Dip ON
Unit 1	#2	Unit 1	#2	Unit 1	#2
Unit 2	#3	Unit 2	#1#2	Unit 2	#1#3
Unit 3	#1#2#3	Unit 3	#1#3	Unit 3	#1#4
Unit 4	#2#4	Unit 4	#1 #2 #3	Unit 4	#1#3#4

4. Supply electric power: Plug electric mains power cords into each unit's IEC socket (see figure 4), then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply

#### **Maintenance**

Mojo Spin Master<sup>™</sup> light effects require almost no maintenance. However, you should:

Keep the unit clean. Disconnect the mains power supply, then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Clean internal components about once a year with a light brush and vacuum cleaner. Do not use alcohol or solvents.

Keep connections clean. Disconnect electric power, then wipe the DMX and audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

#### **Changing the Lamp**

If electrical power is supplied and the lamp does not light, it may be time to change the lamp. Follow directions below to do so.

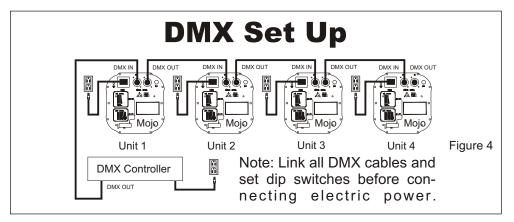
- 1. Disconnect mains power supply. Loosen the two screws on the top of the lamp cover. Open the cover.
- 2. With one hand holding the lamp reflector, pull down the lamp lever (toward the base of the unit). (See figure 1.) The lamp will be pushed out of the lamp base. Holding the lamp socket with one hand, pull the lamp out of the lamp socket with the other.
- 3. Pull up the lamp lever (away from the unit base, toward the lamp cover).
- 4. Follow directions for installing a new lamp, page 2.

#### Replacing a Fuse

Power surges or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, replace the fuse as follows:

- 1) Unplug the unit from electric power source.
- 2) Insert a flat-head screwdriver into a slot in the fuse cover (C in figure 4). Gently pry up the fuse cover.
- 3) Note two fuses: The replacement fuse is covered; The used fuse has both ends exposed. Remove the used fuse. If brown or unclear, it is burned out.
- 4) Push the replacement fuse out of its cover, then insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover.

Products are packed with a replacement fuse. If your replacement fuse is missing, a new one can be purchased at an electric appliance store. Be sure to use a fuse of the same type and specification. See the product specification label for details.



Do not supply power before the whole system is set up and connected properly.

6. Design your show according to your DMX controller functions. DMX channel functions are shown on pages 9,10, 11.

## **Product Operation Overview**

Mojo Spin Master<sup>™</sup> products are easy to operate. In general, there are two modes: audio and DMX. Activate audio mode by flipping function dip switch #1 "on" on the first unit. Allow for DMX control by leaving function dip switch #1 "off". Function dip switch #1 on the first unit determines the control mode. Leave function dip switch #1 in the "off" position on all following units, in audio and DMX modes.

In audio mode (function dip switch #1 "on"), choose various shows by flipping regular dip switches on the first unit. For example, for a slow, four-unit audio show, flip "on" function dip switch #1 on the first unit to activate audio mode, then flip regular dip switches #2 and #6 "on" to activate a slow-paced, four-unit audio show. (See the following Function Channel Chart.)

Do not activate audio dip switches on following units, but set their DMX channels according to regular DMX procedures. (See Appendix 1 for an introduction to DMX dip switch settings.)

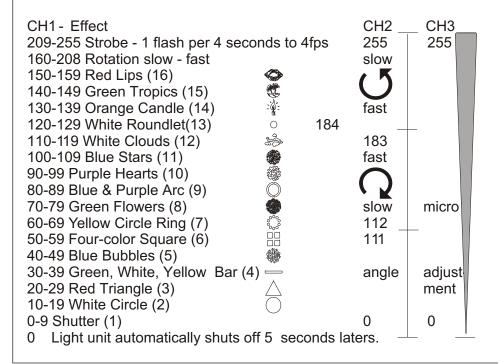
One final note: Terminate all systems by flipping "on" the second function dip switch on the last unit. This preserves clear signal transmission in both audio and DMX modes.

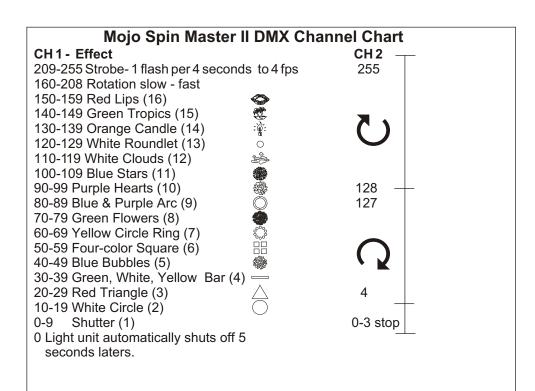
## **Function Dip Switch Chart**

Dip	OFF Mode	ON Mode
#1	Single unit show mode	Single unit audio show mode
#2	Single unit audio mode	4-unit audio show mode, master
#3	Single unit audio mode	Self-test mode
#4	Single unit audio mode	Single, slow show mode
#5	Single unit audio mode	Focus assistance
#6	1- unit audio, mixed show	Audio low BPM show mode
#7	1-unit audio, mixed show	Audio high BPM show mode
#8	Single unit audio mode	No program
#9	Single unit audio mode	No program

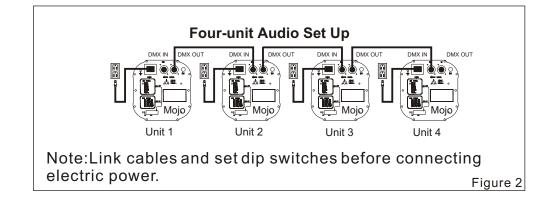
Applies only when audio mode (function dip switch #1 "on") is activated. Otherwise, these channels are DMX address setting dip switches.

# Mojo Spin Master I<sup>™</sup> DMX Channel Chart





#### Mojo Spin Master III<sup>™</sup> DMX Channel Chart CH 3 CH1- Effect CH 2 CH 4 209-255 Strobe-1 flash per 4 seconds to 4 fps 255— 255 -255 160-208 Rotation slow - fast slow 150-159 Red Lips (16) 140-149 Green Tropics (15) 130-139 Orange Candle (14) 120-129 White Roundlet (13) Fast 110-119 White Clouds (12) 184 100-109 Blue Stars (11) 183 90-99 Purple Hearts (10) Fast 128 80-89 Blue & Purple Arc (9) 127 70-79 Green Flowers (8) micro 60-69 Yellow Circle Ring (7) slow 50-59 Four-color Square (6) 112 40-49 Blue Bubbles (5) 111 30-39 Green, White, Yellow Bar (4) adjust-20-29 Red Triangle (3) ment angle 10-19 White Circle (2) 0-9 Shutter (1) 0 Light unit automatically shuts off 5 0-3 STOP 0 seconds laters.



power before the whole system is set up and connected properly. 5. Turn on the music.

Note that up to 64 units can be connected and operated in audio mode. To do so, flip on DMX dip switch #1 on the 5th, 9th, 13th, etc., unit. Then repeat settings on following units, so 6th, 10th, 14th, etc., unit DMX settings = unit 2 settings: 7th, 11th, 15th, etc., Unit DMX settings = unit 3 settings; 8th, 12th, 16th unit settings = unit 4 settings.

#### **DMX Control**

- 1. Fasten the effect light onto firm trussing (Use a 30-kg rated or stronger C-clamp bolted onto the Mojo Spin Master™bracket). Leave at least one meter on all sides for air circulation.
- 2. Link the units as shown in Figure 3. Plug a DMX signal cable from the controller to the first unit's DMX "in" socket. Then plug a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link following units.
- 3. Set DMX dip switches as follows.

MJS-I Dip ON	MJS-2 Dip ON	MJS-3 Dip ON
Unit 1 #1	Unit 1 #1	Unit 1 #1
Unit 2 #3	Unit 2#1#2	Unit 2 #1#3
Unit 3 #1#2#3	Unit 3#1#3	Unit 3 #1#4
Unit 4 #2#4	Unit 4 #1#2#3	Unit 4 #1#3#4

For more units, continue to use standard DMX dip switch settings. See Appendix 1 for details.

- 4. On the last in a series of units, flip "on" the Terminate dip switch (function dip switch #2). This keeps the signal clear. Make sure other function dip switches are "off".
- 5. Supply electric power: Plug electric mains power cords into each unit's IEC socket (see figure 5), then plug the other end of the mains power cord into proper electric power supply sockets. Do so for all units and the controller.