



**SPIN 250W DMX moonflower
USER MANUAL V4**

EVL Lighting
a division of **BPC Circuits Ltd**

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Safety Points..

- *Read the operating instructions before attempting to use the equipment.
- *Save this manual for future reference.
- *Please heed all warnings.
- *Follow instructions carefully.
- *Consult your dealer if unsure about installation, operation or safety of equipment.
- *Do not use this fixture near water.
- *Do not obstruct ventilation openings. Overheating will cause damage.
- *Do not install this fixture near heat sources such as radiators or amplifiers.
- *Do not defeat the safety purpose of the grounding plug. This has two blades and a third grounding pin (earth). This pin is for your safety. When the grounding pin does not fit into your outlet please consult a qualified electrician for advise.
- *Never guess or take chances with electrical equipment. Please gain advise from your dealer if unsure of any aspects of this equipment.

SAFETY FIRST

Lethal voltages and high temperatures exist inside lighting fixtures and must be serviced by qualified personnel only.

Introduction..

Thank you for purchasing this fixture. Please be sure to read this user manual and follow all instructions carefully.

Designed and built to the latest specifications this product will provide excellent performance and reliability if used correctly.

This intelligent lighting fixture is built with the following features..

- *Full 512 DMX control, compatible with most control desks.
- *Ultra smooth micro stepped movements.
- *High quality Stepper Motors for smooth precise movement.
- *Dichroic colour filters for rich colour projections.
- *Advanced software and microprocessor systems give ultimate performance.
- *Built in "stand alone" facility with Master & Slave mode featuring 'Mimic' operation and 'DHLS' Dual Head Light Show mode (multi sequence programme)
- *'ASL' Adaptive Sound to light Operation. Sound enhancement software allows the light show programmes to emulate various musical styles.
- *Slot for "CUSTOM" Gobo. Your SPIN is supplied with a 'MERRY CHRISTMAS' Gobo. An Event Gobo pack is also available for special occasions.
- *Rapid lid removal system. Just 2 release screws.
- *Lamp save option for greater lamp life.
- *Electronic dimming. Gives PULSE effects and full DMX dimming operation.
- *Lightweight unit for easy mounting and transportation.

Warning..

Caution..

Always allow the fitting to cool down before removing the lid, with special regard to the lamp chamber. A minimum of 20 minutes is advised.

Caution..

Disconnect from the mains before servicing, lethal voltages are present.

Caution..

Never power up the fixture without protection from the lamp. UVA and UVB radiation can be present.

Caution..

This fixture should be allowed to cool for 20 minutes before moving.

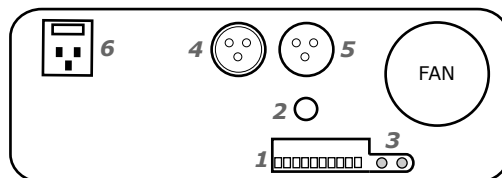
Caution..

Internal temperatures can reach 600°C (1112°F)

Preparation..

Your unit comes complete with the lamp already fitted and requires no optimisation. Lamp replacement must be performed by qualified service personnel only and as specified in the technical manual. Use only the components provided with the fixture to attach the handle. Safety chains should be attached to the metal tab on the rear of the fixture, and must be capable of handling the mass of the fixture. A suitably rated power cord set complying with the requirements of UL 817, type SV or SJ, 18AWG VW-1, with a minimum length of 1.5 m (4.9 ft) must be used. The power supply spur / branch feeding the equipment must be individually fused to suit the power consumption of the fixture. (See the power consumption rating on the equipment label). Suitable data cable conforming to the DMX standard (USITT DMX512 / 1990) must be used to conform to current CE / FCC legislation, such as Belden 9841. Do not mount the fixture near curtains or any flammable objects. Do not use if ambient (room) temperature is below 10°C (50°F) or above 40°C (104°F). The IP rating of this product is 20. This equipment is for indoor use only and must be allowed to cool before moving. If you move the fixture to another venue, follow directions above and make sure the cables are routed in a safe manner. Also make sure the fixture is mounted securely above head height.

Connections..



1. Dip switches..

Switches 1-9 sets the required DMX channels when using the unit with a DMX controller. Set switch 10 down to set the lamp save option. 11 & 12 are unused. Set 1-9 all up to put the unit into stand alone (local) mode. If 2 or more 'Spins' are linked together without a DMX controller set head 1 to local mode (1-9 all up) this head becomes the "master". You now set the other "slave" heads to either mimic the "master" head by setting the slave dip switch No.8 down, or put slave dip switch 6 down to select the '(DHLS) Dual head light show' (multi sequence programme) mode.

2. Microphone..

When the unit is used in stand alone mode the built in microphone senses the beat of the music to create light movement (sound to light).

3. LED indicators..

When the 'red' LED is on it is indicating a DMX signal present. The 'green' LED is on during the units power up procedure. When a sound to light signal is detected the 'green' LED flashes.

4. DMX OUT..

Use this to link to other DMX effects.
Pin1=Ground, Pin2=Data-(COLD) Pin3=Data+(HOT)

5. DMX IN..

Plug in the Input lead from any DMX controller eg: EVL Pro controller or Micro controller. Pin connections are as above.

6. Mains power input..

Connect with an approved quality IEC mains lead. The IEC inlet holds the main 4 Amp power fuse. If this fuse should fail please return the unit to your dealer for inspection.

Programming the fixture..

This unit can be used either with a DMX controller or as a stand alone fixture.

DMX controller operation..

When using a DMX controller the fixture needs to be given a DMX channel, this is the base* channel the controller will use to activate the unit. You set this channel by selecting dip switches 1 - 9 with binary code to the channel level required. Calculators with binary display mode can be used to convert channel levels to binary code. If all channels are set at 255 the SPIN will operate via its own internal programmes.

***Base Channels** BASE=DISH. BASE+1=GOBO/COLOUR. BASE+2=N/A. BASE+3=DIMMER

DMX values..

GOBO/COLOUR

DMX level	Action
0 - 159	Scroll from BLACK-OUT through to CUSTOM GOBO slot
160 - 166	CUSTOM GOBO slot
167 - 173	FOUR COLOUR SPLIT (cyan/hot pink/yellow/lime green)
174 - 180	LINES / MEDIUM BLUE
181 - 187	BUBBLES / YELLOW
188 - 194	FOUR DOT / LIME GREEN
195 - 201	TRIANGLE / ORANGE
202 - 208	TUNNEL / HOT PINK
209 - 215	DOT CIRCLE / RED
216 - 222	OPEN / CLEAR
223 - 229	BLACK-OUT
230 - 254	STROBE
255	SOUND ACTIVATED FLASH

DISH

DMX level	Action
0	Stop (no movement)
1 - 126	Clockwise (higher value gives slower movement)
127 - 129	Stop (no movement)
130 - 255	Anti-clockwise (lower value gives slower movement)

DIMMER

DMX level	Action
0	Off
1 - 127	Off - Full
128 - 140	Full On
128 - 254	Pulse effect, slow - fast
255	Sound activated Pulse effect

Stand Alone (local) mode..

The unit can be used individually or in multiples without a DMX controller. The built in microphone provides the 'beat' input to activate the units own lighting programmes. Set the units dip switches 1-9 all up, this puts the 'master' head into local 'ASL' sound to light operation, the EVL Adaptive Sound to Light software features a more advanced programme that adapts to the style and feel of musical beats and rhythms. Other heads are linked from this 'master' head. Link together extra heads with DMX leads, these extra heads now become 'slave' units. Set the slave heads with either mimic operation (copies the master head) by setting dip switch number 8 down or to '(DHLS) Dual Head Light Show' (multi sequence programme) by setting dip switch number 6 to the down position. If multiple units are connected together the above settings can be mixed to create varied visual effects. For example if 4 SPIN effects are linked together as below..
ie: Master head set to local, Slave head1 on DHLS, Slave head 2 on mimic, Slave head 3 on DHLS. This will create a more visually exciting effect from the four linked SPIN units.

Specification..

Physical

Shipping Dimensions: 44 x 33 x 29cms
Net Weight: 9Kgs - Gross Weight: 10Kgs
Power consumption: @230V / 50Hz

Optical

Design: Custom optical system, attains higher output than other brand projectors.
Lenses: 70mm Bi-Convex type.
Mirror dish: 20 facet high quality rear surfaced.
Lamp: Philips ELC/5H 250W halogen (24V).

Movements / effects

'ASL' Adaptive Sound to light Operation. Sound enhancement software allows the light show programmes to emulate various musical styles.
Micro stepping on all channels.

Dimmer: Electronic.
Mirror dish: Beam rotation 0 - 82 rpm Vari-speed & Bidirectional.
Gobos: Open + 6 + *Custom Gobo slot (supplied with 'MERRY CHRISTMAS' Gobo.
Colours: Open white + 6 fixed Gobo + Split 4 colour.

Fuses

Mains power inlet: 4A

Mechanical Specifications

Motors: Type 17 stepper motor, (one motor per channel).
Construction: Metal housing.
Cooling: Custom fan.
Operating position: Any.
Finish: Powder coated BLACK.

Due to continuous improvements, specifications may change without prior notice.

***Custom Gobo slot..**

Your 'SPIN' Gobo wheel features a slot for a metal custom Gobo, eg. your mobile disco name or logo. These can be ordered direct from DHA Lighting Ltd by using the order slip at the back of this manual. Please remember there are limitations to what can be produced on to a metal Gobo of this size. DHA will confirm your total cost and advise you of any changes that may be required to your artwork.
Your SPIN is supplied with a 'MERRY CHRISTMAS' Gobo. Also available is an Event Pack, this includes 4 Gobo's for special occasions such as "Happy New Year". You will find the order slip at the back of this manual.
To fit your custom Gobo always switch off the power to the unit and allow it to cool for at least 20 minutes. Remove the lid and locate the Gobo/colour wheel.
The custom slot has 3 locating tags, gently bend open the tags, fit the Gobo and bend back the tags around the Gobo.

Custom Gobo size: OD 23.5mm / Image size 15mm. Order code: EVL SPIN.

Maintenance..

During the units life it will be subjected to dirt accumulation from smoke fluid residue, dust and cigarette smoke. Every few weeks the case and lens should be cleaned with a soft damp cloth. A small amount of washing up liquid will remove grease and dirt,

DO NOT USE ABRASIVE CLEANERS OR SOLVENTS!

THIS FIXTURE MUST NOT BE IMMERSSED IN WATER!

Check the cooling fan intake for dirt build up, this is best removed with a vacuum cleaner. A blocked fan intake will cause the unit to overheat, this will damage the units components and result in failure or shorten the fixtures working life.

If this fixture is operated for prolonged periods, such as in a nightclub installation, the unit should be serviced by one of our qualified dealers on a regular basis.

Do not attempt to service internal components yourself. This unit contains delicate parts and there are potential electrical hazards inside.

REPLACING THE POWER SUPPLY FUSE..

The fuse must be replaced with a fuse of the specified type and rating only. This is indicated on the lids technical label.

If the fixture fails to power up, and you have determined that it is attached to an appropriately rated power source, you can examine the power supply fuse.

To replace the power supply fuse:

Disconnect power from the fixture, and allow it to cool.

Locate the fuse holder, moulded into the power connector.

Remove the power cord from the fixture.

Remove the fuse holder with a small flat-blade screwdriver.

Gently remove the fuse from its holder and examine it.

If the fuse is damaged, replace it the same type only as indicated on the label adjacent to the power connector. Please be aware that there are two possible locations for the fuse to fit in the draw. The closest to the fixture is the correct location, the other is not used.

REPLACING A LAMP..

This section discusses how to replace the lamp, no optimisation is necessary.

To replace the lamp:

Disconnect power from the fixture, and allow it to cool.

Remove the power cord and any DMX cables from the fixture.

Place the fixture on a clean work surface in a position that allows you to access it easily.

Make sure the fixture has cooled sufficiently to allow safe access (allow 20 minutes).

Remove the lid as before.

Gently ease the old lamp out of its holder.

Pull the lamp upwards until it clicks out of its holder.

Installing the new lamp is the reverse action of the above. Do not touch the quartz envelope of the lamp, and always handle it by outer glass reflector.

Refit the lid and make sure all fasteners are replaced tightly.

Troubleshooting..

Symptom	Suggested Action
<i>Fixture does not turn on</i>	Check power line connection. Check the green power LED. The LED should be ON solid when the fixture is receiving power. If still not functioning, contact your dealer.
<i>Output power seems low</i>	Make sure the front lens is clean. Seek technical help.
<i>Fixture does not respond to DMX signal</i>	Check the cable from the controller, look for bad connections and bad cables in the chain. Make sure a terminator is installed on the female DMX "out" port of the last fixture in the link. (Put a 100 ohm resistor across pins 2 & 3 of the XLR connector). Check controller is sending a DMX signal.
<i>Fixture loses position on one or more of its functions</i>	Check the motors can move freely and are not hindered at all, else contact your dealer for further instructions.
<i>The fixture is set to a DMX channel but performs in local mode</i>	Check the DMX channel is not set to c000. Check the polarity of the DMX signal, pin 3 is +ve / hot and 2 is -ve / cold.
<i>The fixture does not respond to the music in local or controller sound activated strobe</i>	Make sure the fixture is close to a mid range sound source. Try tapping the fixture's internal microphone to see if it responds. If so, move the fixture closer to the audio source.

Guarantee..

EVL Lighting guarantee the fixture to the original purchaser to be free from defects in workmanship or materials for a period of 2 years from the date of purchase. Please return the registration slip within 14 days of purchase.

This guarantee covers parts and labour. Proof of purchase must be provided by you for all guarantee repairs. This will usually be in the form of a dated receipt. In cases where no proof of purchase exists,

The guarantee does not cover any damages created through accident, misuse, abuse, neglect, improper installation or alteration other than by EVL Lighting or its authorised representatives. EVL is not responsible for damages or loss during shipment. Lamps, mirrors, dichroic filters and lenses are not covered by this guarantee. Repair or replacement will be made at the option of EVL Lighting. EVL or its agents will not be liable for any incidental or consequential damages for breach of any express or implied guarantee on this product. Except to the extent prohibited by applicable law, any implied guarantee of merchantability or fitness for a particular purpose on this product is limited to the duration of this guarantee.

Shipping for Repair

Never return a piece of equipment for repair until you have obtained a 'Return Authorisation Number' (RET #) from your dealer or distributor. Returned equipment will not be accepted without this. Shipping costs are the purchaser's responsibility. EVL will cover one way shipping costs for guarantee repairs within Europe. Never ship returns to us freight collect. Expedited deliveries are not covered under Guarantee.

***GUARANTEE REGISTRATION SLIP**

SERIAL No:

DATE OF PURCHASE:

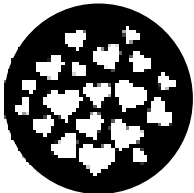
SUPPLIERS DETAILS:

YOUR DETAILS:

***TO BE RETURNED WITHIN 14 DAYS OF PURCHASE**

Custom Gobo order forms ..

EVENT GOBO PACK



SPIN Events Pack: includes 4 custom Gobo's for special occasions

Please rush me my EVL SPIN Event Gobo pack at **£19.99** inc VAT & postage.

My name & address:

.....
.....
.....

Telephone No:

Post to EVL Lighting (a division of BPC Circuits Ltd).
Omni House Sheene Road Gorse Hill Industrial Estate
Leicester
LE4 1BF

CUSTOM GOBO ORDER FORM

Please rush me my EVL SPIN CUSTOM Gobo.
Cost from **£55.00** including tooling & set up costs.
I have attached/sent my design artwork *.

Quantity..... Deadline.....

My name & address:

.....
.....
.....
.....

Telephone No:

* Hard copy artwork (eg. your business card) will require studio time charged at £12.50 per 1/4 hour.
Web site images are not suitable.
emailed design files should be Vector EPS format.

Total costs & layout will be confirmed by ROSCOLAB Ltd.
Please allow 7 working days for delivery

Send this form & artwork to:

ROSCOLAB LTD
Blanchard Works
Kangley Bridge Road
Sydenham, LONDON SE26 5AQ

Tel: 0208 659 2300 Fax: 0208 659 3153
email: sales@roscoe-europe.com

