



# **M-HDAC8 Mirror Ball Motor**

## **User Guide**

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**CUSTOMER SUPPORT:** Contact ADJ Service for any product related service and support needs. Please visit [forums.adj.com](http://forums.adj.com) with questions, comments or suggestions.

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**REPLACEMENT PARTS** please visit [parts.americandj.com](http://parts.americandj.com)

**D O C U M E N T V E R S I O N**

An updated version of this document may be available online. Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this document before beginning installation and use.

Date	Document Version	Notes
08/21/18	1	Initial release.

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# GENERAL INFORMATION

## INTRODUCTION

Please read and understand all instructions in this manual carefully and thoroughly before attempting to operate these products. These instructions contain important safety and use information.

## UNPACKING

This product has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect each unit included for damage and be sure all accessories necessary to operate the units have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this product to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

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## WARRANTY RETURNS

All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

## LIMITED WARRANTY (USA ONLY)

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. **For warranty service, you must obtain a Return Authorization number (RA#) before sending back the product-please contact ADJ Products, LLC Service Department at 800-322-6337.** Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product, if the product has been repaired or service by anyone other than ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warrant service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- G. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

### LIMITED WARRANTY PERIODS

- **Non L.E.D. Lighting Products = 1-year (365 days) Limited Warranty** (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding LED and lamps)
- **Laser Products = 1 Year (365 Days) Limited Warranty** (excludes laser diodes which have 6 month limited warranty)
- **L.E.D. Products = 2-year (730 days) Limited Warranty** (excluding batteries which have a 180 day limited warranty)  
Note: 2 Year Warranty only applies to purchases within the United States.
- **StarTec Series = 1 Year Limited Warranty** (excluding batteries which have a 180 day limited warranty)
- **ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty**

# SAFETY INSTRUCTIONS AND GUIDELINES

To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ PRODUCTS LLC is not responsible for injury and/or damages resulting from the misuse of these devices due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of these devices and only the original rigging parts included with these devices should be used for installation. Any modifications to these devices and/or the included mounting hardware will void the original manufactures warranty and increase the risk of damage and/or personal injury.



## **PROTECTION CLASS 1 – DEVICES MUST BE PROPERLY GROUNDED**



**THERE ARE NO USER SERVICEABLE PARTS INSIDE THESE DEVICES. DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURES WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THESE DEVICES AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURES WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**



**DO NOT PLUG MIRROR BALL MOTOR INTO A DIMMER PACK!  
NEVER OPEN MIRROR BALL MOTOR!  
NEVER TOUCH MIRROR BALL AXEL WHILE IT IS ROTATING!  
UNPLUG POWER BEFORE CLEANING MIRROR BALL MOTOR!  
NEVER TOUCH LIGHT DURING OPERATION, AS IT MAY BE HOT!  
KEEP FLAMMABLE MATERIALS AWAY FROM THESE DEVICES!  
MAX LOAD CAPACITY FOR MOTOR IS 6.6 LBS. (3KG)  
MAX MIRROR BALL SIZE SUPPORTED 16-INCH (40CM)**



**INDOOR / DRY LOCATIONS USE ONLY!  
DO NOT EXPOSE DEVICES TO RAIN AND/OR MOISTURE!**



**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!  
RETINA INJURY RISK - MAY INDUCE BLINDNESS!  
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**

# SAFETY INSTRUCTIONS AND GUIDELINES

**DO NOT** position devices close to any **FLAMMABLE MATERIALS** while operating.

**DO NOT** attempt installation and/or operation of devices without knowledge how to do so.

**DO NOT** permit operation by persons who are not qualified to operate these types of devices.

**DO NOT** shake devices, avoid brute force when installing and/or operating.

**DO NOT** operate these devices if the main power cord has become frayed, crimped and/or damaged.

Replace any damaged power cords with a similar power rating.

**DO NOT** remove or break-off the ground plug from the device power cords.

**DO NOT** remove disassemble devices, there are NO user serviceable parts inside.

**ALWAYS** disconnect devices from main power source before performing any cleaning.

**ALWAYS** disconnect light from main power before replacing lamp.

**ALWAYS** be sure to install these devices in an area that will allow proper ventilation.

**NEVER** remove the ground prong from the power cable.

Power cords should be safely routed and secured so they are not likely pinched.

Disconnect power cords during long periods of non-use.

Only use recommended rigging hardware as described in this guide.

Use the original packaging and materials to transport these devices for service.

These devices should be serviced by qualified service personnel when:

- The power cords or plugs have become damaged.
- Objects have fallen on and/or liquid has spilled into the devices.
- The devices have been exposed to rain and/or moisture.
- The devices do not operate normally or exhibit a marked change in performance.

# MAINTENANCE GUIDELINES



**DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!**

## **CLEANING**

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the devices operate: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the mirror ball and/or light fixture optics. Clean the external surface of the mirror ball and the front lens of the light at least every 20 days with a soft cloth to avoid dirt/debris accumulation

**NEVER** use alcohol, solvents, or ammonia-based cleaners.

## **MAINTENANCE**

Regular inspections are recommended to insure proper function and extended life.

There are no user serviceable parts inside these devices, please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

Please refer to the following points during routine inspections:

A detailed review by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.

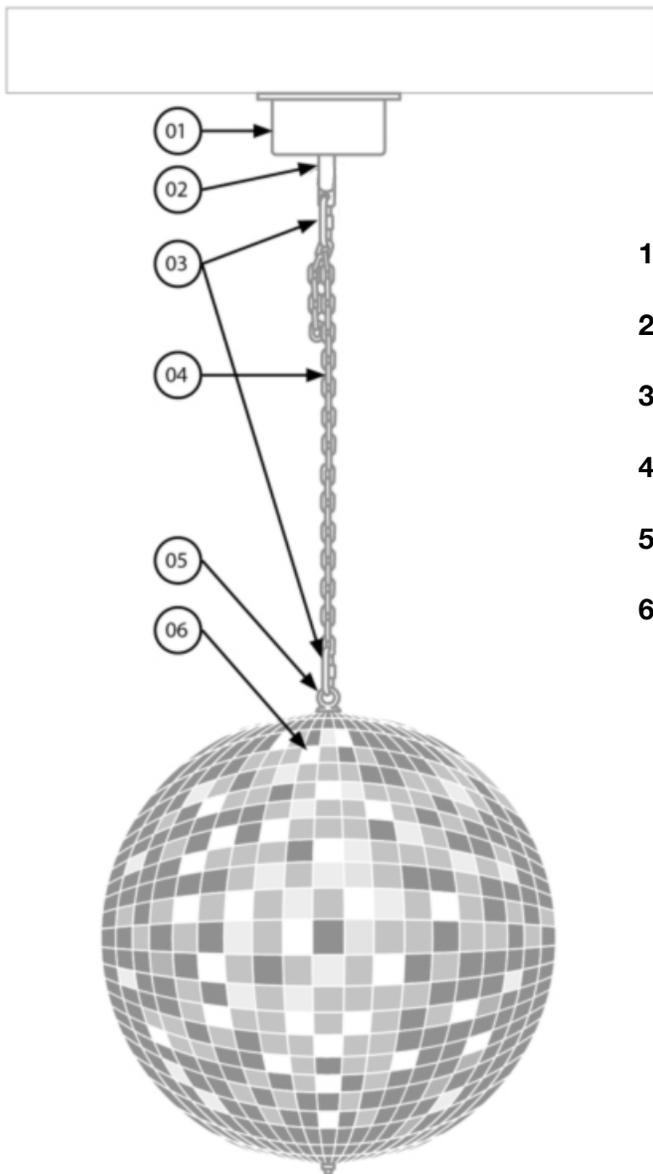
Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

Check for any deformations on the mirror ball, mirror ball motor, and light housings, lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations could allow for dust to enter into the devices. Damaged rigging points or unsecured rigging could cause the devices to fall and seriously injure a person(s).

Electric power supply cables must not show any damage, material fatigue or sediments.

# OVERVIEW

## SAMPLE INSTALLATION USING A MIRROR BALL, MOTOR (M-HDAC8) AND CHAIN:



1. M-HDAC8 Mirror Ball Motor
2. M-HDAC8 Mirror Ball Motor Axel Shaft
3. 'O' Shaped Mounting Ring (2x included)
4. 13" Mirror Ball Chain (included)
5. Mirror Ball Eyelet (not included)
6. Mirror Ball (not included)

## INCLUDED ITEMS

- (1) Mirror Ball Motor (M-HDAC8)
- (2) 'O' Shaped Mounting Ring
- (1) 13" Mirror Ball Chain

# INSTALLATION INSTRUCTIONS



## **FLAMMABLE MATERIAL WARNING**

Keep devices minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.



## **ELECTRICAL CONNECTIONS**

A qualified electrician should be used for all electrical connections and/or installations.



## **DO NOT INSTALL THE DEVICES IF YOU ARE NOT QUALIFIED TO DO SO!**

**OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, INCLUDING AMONGST OTHERS CALCULATING WORKING LOAD LIMITS, INSTALLATION MATERIAL BEING USED, AND PERIODIC SAFETY INSPECTION OF ALL INSTALLATION MATERIAL AND THE MOTOR. IF YOU LACK THESE QUALIFICATIONS, DO NOT ATTEMPT THE INSTALLATION YOURSELF. IMPROPER INSTALLATION CAN RESULT IN BODILY INJURY.**

**BEFORE RIGGING/MOUNTING DEVICES TO ANY METAL TRUSS/STRUCTURE OR CEILING, A PROFESSIONAL EQUIPMENT INSTALLER MUST BE CONSULTED TO DETERMINE IF THE METAL TRUSS/STRUCTURE OR CEILING IS PROPERLY CERTIFIED TO SAFELY HOLD THE COMBINED WEIGHT OF THE MOTOR, MIRROR BALL, LIGHT, CLAMPS, CABLES, AND ACCESSORIES.**

**BEFORE MOUNTING DEVICES TO ANY SURFACE OR STRUCTURE, MAKE SURE THE SURFACE OR STRUCTURE CAN HOLD A MINIMUM POINT LOAD OF 10 TIMES THE WEIGHT OF THE DEVICES.**

**MAKE SURE SCREWS AND/OR ANCHOR BOLTS (NOT INCLUDED) FIT INTO MOUNTING HOLES!**

**MAKE SURE TO DRILL SCREWS AND/OR ANCHOR BOLTS INTO WOOD OR METAL!**

**DO NOT MOUNT THE MOTOR TO A CEILING SURFACE MADE OF DRY WALL!**

**MOTOR MUST ONLY BE INSTALLED IN A HORIZONTAL VIBRATION-FREE POSITION!**

**MOTOR MUST ONLY BE INSTALLED IN AN OSCILLATION-FREE LOCATION!**

**FOR ADDED PROTECTION, MOUNT DEVICES IN AREAS OUTSIDE WALKING PATHS, SEATING AREAS, OR IN AREAS WERE UNAUTHORIZED PERSONNEL CAN REACH THE DEVICES.**

**MIRROR BALL BE SECURED WITH A SECONDARY SAFETY ATTACHMENT, SUCH AS AN APPROPRIATE SAFETY CABLE. (NOT INCLUDED)**

**NEVER STAND DIRECTLY BELOW THE DEVICES WHEN MOUNTING, REMOVING OR SERVICING.**

**DEVICES MUST ALL BE INSTALLED FOLLOWING ALL LOCAL, NATIONAL, AND COUNTRY COMMERICAL ELECTRICAL AND CONTRUCTION CODES AND REGULATIONS.**

**DO NOT EXCEED AMBIENT OPERATING TEMPERATURE RANGE OF 86°F. (30°C)**

**FOR USE WITH UP TO 16-INCH (40CM) MIRROR BALL. MAX LOAD 6.6 LBS. (3KG)**

# INSTALLATION [continued]

## CEILING MOUNTING

Motor can be mounted onto a flat ceiling surface using the (3) mounting holes along the outside edges. Ceiling surface must support 10 times the combined total weight of the motor and the attached mirror ball.



PLEASE CONSULT A PROFESSIONAL FOR CEILING INSTALLATION GUIDANCE!

## ATTACHING MIRROR BALL TO MOTOR

Using an 'O' shaped ring and chain (included):



Measure and trim mirror ball chain for desired mounting height. Attach mirror ball to motor axle using included 'O' shaped ring.

Using a carabineer (not included):



Attach mirror ball to fixture or motor axle using carabineer (not included) (make sure to close carabineer!).

If installing to a mirror ball motor, power ON motor and confirm mirror ball rotation functions well.

# TROUBLE SHOOTING TIPS

## **Mirror Ball Attached To Motor Does Not Rotate or Rotates Inconsistently**

1. Confirm the motor has AC power.
2. Check if circuit breaker that controls the AC outlet the motor is plugged into is not tripped.
3. Confirm the AC power cord from the motor is not damaged or cut.
4. Confirm the eyelet attached to the mirror ball is not damaged or loose.
5. If none of these solutions work, please contact ADJ Customer Service.

## **Motor Makes Noise When Rotating**

1. Disconnect AC power from the motor, remove mirror ball, and uninstall the motor.
2. Inspect the motor for any signs of damage such as from water or moisture.
3. Place the motor on a flat surface and connect to an AC power source.
4. If motor makes noise while rotating, please contact ADJ Customer Service.
5. If not, carefully rotate the motor facing the axel shaft toward the ground.
6. If motor makes noise while rotating, please contact ADJ Customer Service.
7. If not, confirm the motor can support the weight of the mirror ball.
8. If none of these solutions work, please contact ADJ Customer Service.

# FREQUENTLY ASKED QUESTIONS

Listed below are a few answers to common questions users may have.

## **1. How large of a mirror ball can be attached to the M-HDAC8 motor?**

You can connect up to a **16-inch (40cm)** mirror ball.

## **2. What is the rotation speed and can it be adjusted?**

The maximum rotation speed 3 RPM (rotations per minute) and cannot be adjusted. The actual rotation speed may vary depending on the actual weight of the mirror ball attached.

## **3. Can the M-HDAC8 be mounted onto a ceiling?**

Yes, it can be installed onto a flat ceiling surface that can support 10 times the combined total weight of the motor and the attached mirror ball. **PLEASE CONSULT A PROFESSIONAL FOR CEILING INSTALLATION GUIDANCE!**

## **4. Can the M-HDAC8 be installed to truss?**

For truss mounting, ADJ recommends the MBA-1 adapter as well as a C-Clamp attachment. These accessories can be purchased at [www.adj.com](http://www.adj.com)

## **5. Can the M-HDAC8 be connected to a dimmer pack?**

NO. However the motor can be connected to an ON/OFF switch/replay pack.

# TECHNICAL SPECIFICATIONS

## M-HDAC8 BALL MOTOR

INDOOR USE ONLY

FOR USE WITH UP TO 16-INCH (40CM) MIRROR BALL

MAX LOAD 6.6 lbs. (3kg)

### ROTATION SPEED:

3 RPM (Not Adjustable)

### DIMENSIONS

Diameter: 4.63" (117.48 mm)

Horizontal Height: 2.38" (60.33 mm)

### ELECTRICAL / THERMAL

AC 100-120V - 50/60Hz

Maximum Power Consumption: 3W

Ta = 25° Tb= 30°

Specifications subject to change without any prior written notice.

# OPTIONAL ACCESSORIES

Order Code	Description
M-1212	12" Diameter Mirror Ball
M-1616	16" Diameter Mirror Ball
S-Cable/60	Safety Cable with 60-pound weight rating
PL-1000	Pinspot PAR Light
PIN509	PinPoint Go Color is 5-Watt RGBA LED Pinspot
MBA-1	A/C Mirror Ball Motor to C-Clamp attachment adapter.



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 ADJ Supply Europe B.V. – Junostraat 2 – NL-6468EW Kerkrade  
 Model: M-HDAC8  
 Power Input: AC 100-120V 50/60Hz  
 3W, 0.025-0.03A  
 Rotating Speed: 3RPM  
 Max. Load: 3kg  
 T<sub>a</sub>=25°C T<sub>b</sub>=30°C  
 Indoor use only!  
 MADE IN CHINA

\*Read user manual before use.  
 \*Unit must be grounded.  
 \*Unplug unit from wall before servicing.

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