

# American DJ® **FASCINATOR™**



## User Instructions

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### Fascinator™

### General Information

**Unpacking:** Thank you for purchasing the Fascinator™ by American DJ®. Every Fascinator™ 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 your fixture for any damage and be sure all equipment necessary to operate the unit has arrived intact. In the event damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

**Introduction:** This unit use a single color/gobo wheel combination for vibrant colors and extravagant gobo patterns. The Fascinator™ is an intelligent fixture that can operate in DMX mode, as a stand alone sound active piece, or in a Master/Slave configuration. The Fascinator™ comes with several build in programs and is best used in multiples of four. This piece is best used with a fog or haze machine to enhance the beam output. When used in DMX mode the fixture requires 3 DMX channels. When used as a stand alone unit or when used in multiples linked in a master/slave configuration an optional MINI/C controller may be used to control a blackout function.

**Customer Support:** American DJ® provides a toll free customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at [www.americandj.com](http://www.americandj.com) for any comments or suggestions. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (800) 322-6337  
Fax: (323) 582-2610  
E-mail: [support@americandj.com](mailto:support@americandj.com)

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

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

## Fascinator™

## Quick Start™ Instructions

To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. If you do not wish to read through the manual, listed below are the master/slave dip switch setting. Link the units together using microphone cables and follow the dip switch chart for sound activation mode. Please keep this manual with the unit, for future reference.

## Fascinator™

## Product Registration

The Fascinator™ carries a one year (365 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Please contact American DJ® customer support for a R.A. number.

## Fascinator™

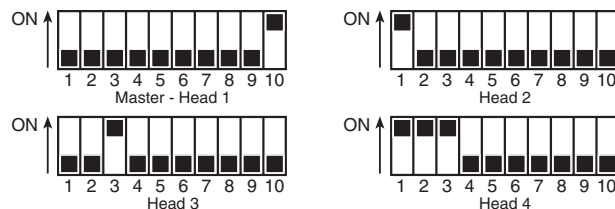
## Features

- Micro-Stepping Motors for Smooth Gobo Transitions
- Unique Rotating Dichroic Lens
- Internal Moon Flower Dish
- DMX-512 Protocol Compatible (Uses 3 DMX Channels)
- Master/Slave Operation
- Internal Microphone with Volume Sensitivity Knob
- Easy Lamp Replacement (ZB-ELC 24v/250w Lamp)
- Optional MINI/C Remote Controller

## Fascinator™

## Master/Slave Settings

This chart details the Master/Slave dip switch setting for Master/Slave configuration. Use this configuration only when you will be using your fixtures in a Master/Slave configuration. Be sure the number 2 function switch is set to the on position for sound-active operation.

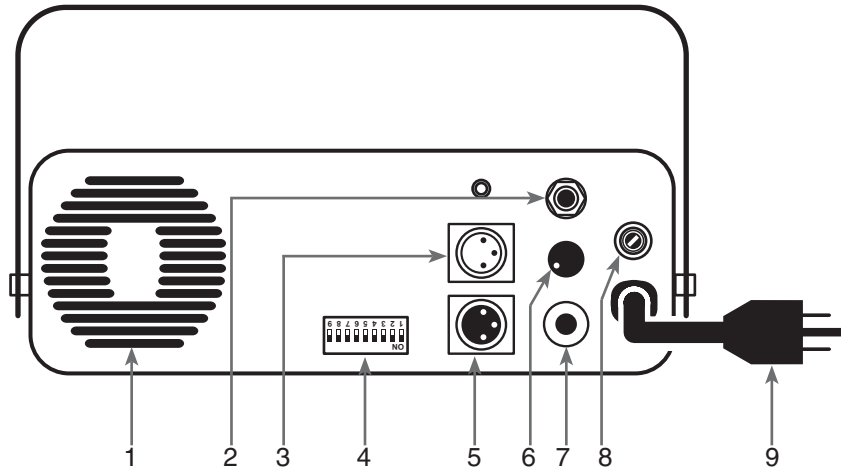


## Fascinator™

## Safety Precautions

- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- Do not spill water or other liquids into or on to your unit.
- Be sure that the local power outlet match that of the required voltage for your unit.
- Do not attempt to operate this unit if the power cord has been frayed or broken.
- Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of connection.
- Do not remove the cover under any conditions. There are no user serviceable parts inside.
- Never operate this unit when it's cover is removed.
- Never plug this unit in to a dimmer pack
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- Do not attempt to operate this unit, if it becomes damaged.
- This unit is intended for indoor use only, use of this product outdoors voids all warranties.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 13 for cleaning details.
- Heat -The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged.
  - B. Objects have fallen, or liquid has been spilled into the appliance.
  - C. The appliance has been exposed to rain or water.
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance.

## REAR



1. **Cooling Fan** - Keep the fan grill clean. Never block the fan vents, always allow at least four inches between the fan and any other surface. Improper cooling may result in premature lamp failure.
2. **MINI/C Controller Jack** - This is for use the optional MINI/C Black out controller only. **Do not attempt to connect an audio signal this jack, this will damage the PC board and void your manufactures warranty!**
3. **XLR Input Jack** - This jack is used to accept an incoming DMX signal or Master/Slave signal.
4. **Dip Switches** - These switches serve two functions. In master slave mode these switches are used to assign a specific head address. In DMX mode these switches are used to assign a DMX address to the unit. In DMX mode each switch corresponds to a specific value based on binary code. See page 7 for a detailed explanation of DMX binary code.
5. **XLR Output Jack** - This jack is used to transmit the incoming DMX signal to another DMX fixture, or transmit a Master/Slave

signal to the next Fascinator™ in the chain. For best results in DMX or Master/Slave mode terminate this jack if it is the last unit in the chain. See “Terminator” on page 7.

6. **Audio Sensitivity Knob** - This adjust audio sensitivity of the internal microphone (3). Turning the sensitivity knob in the clock-wise direction will increase the sensitivity to sound. Turning the knob in the counter clockwise direction will decrease the fixture’s sensitivity to sound.
7. **Microphone** - This microphone receives external low frequencies to trigger the unit in Sound-Active and Master/Slave mode.
8. **Fuse Holder** - This housing stores the 5 amp GMA protective fuse. Always replace with the exact same type fuse, unless other wise instructed, by an authorized American DJ® service technician.
9. **Power Cord** - Connect only to a matching power outlet. Never use this fixture is the ground prong has been removed or broken off.

## Operating Modes:

You may operate your Fascinator™ in three different ways:

- **Stand Alone Mode** - The unit will react to sound, chasing through the built in programs. You may also use the optional MINI/C Remote to control a blackout function.
- **Master/Slave Mode** - This mode allows you to daisy chain up to 4 units together to get a synchronized light show that will react to sound and chase through the several built in programs.
- **DMX Mode** - This function will allow you to control each individual fixtures traits with a standard DMX 512 controller such as the American DJ Show Designer.™

*Note: Stand-Alone and Master-Slave operation require sound to activate! If the units do not move adjust the volume sensitivity knob on the rear of the fixture.*

*Note: To conserve lamp life, the unit will automatically turn off the lamp when the fixture has been inactive for longer than 60 seconds. This is not a malfunction and will aid lamp and unit longevity by decreasing heat.*

**Stand-Alone Operation (Sound Active):** This function allows a single unit to run to the beat of the music. Only use this function when running a single unit, or when running several units as individuals.

1. To activate the Sound-Active mode refer to “*Master Unit*” on the *Master-Slave DIP SWITCH* chart on page 3).
2. The unit will now react to the low frequencies of music via the internal microphone.
3. Adjust the audio sensitivity knob on the top of the unit to make the unit more or less sensitive to sound. Turning the sensitivity knob in the clockwise direction will increase the sensitivity, turning the knob in the counter-clockwise direction will decrease the fixture’s sensitivity to sound.
4. The optional *MINI/C Blackout Controller* may be used with this function for blackout.

**Master-Slave Operation (Sound Active):** This function will allow you to link up to 4 units together and operate without a controller. The units will be sound activated. In Master-Slave operation one unit will act as the controlling unit and the others will react to the controlling units

programs. Any unit can act as a Master or as a Slave.

1. Using standard XLR microphone cables, daisy chain your units together via the XLR connector on the rear of the units. Remember the Male XLR connector is the input and the Female XLR connector is the output. The first unit in the chain (master) will use the female XLR connector only - The last unit in the chain will use the male XLR connector only. For longer cable runs we suggest a terminator at the last fixture.
2. Follow the chart on page 3 for proper unit dip switch settings.
3. The optional *MINI/C Blackout Controller* may be used with this function to temporarily blackout the units.
4. After all the units settings have been set and are plugged in, adjust the sensitivity knob on the rear of the master unit to make them react to sound.

**Universal DMX Control:** This function allows you to use a universal DMX 512 controller as the American DJ® DMX Operator™ or Show Designer.™ to control mirror movement and the color/gobo wheel. The use of a DMX controller will allow you to customize the use of fixtures allowing you to control the rotation direction as well as the rotation speed. Operating through a DMX controller allows the freedom to create unique programs tailored to one’s individual needs.

1. The Fascinator™ uses 3 DMX channels. Channel 1 controls gobo wheel, channel 2 controls the internal mirror dish, and channel 3 controls the dichroic lens movement. See page 14 for detailed description of the DMX traits.
2. To control your fixture in DMX mode, follow the set-up procedures on pages 9 - 11 as well as the set-up specifications that are included with your DMX controller.
3. Use the controller’s faders to control the various DMX fixture traits.
4. This will allow you to create your own programs.
5. When using a DMX controller and setting up for DMX operation follow the dip switch settings on page 14.
6. For help operating in DMX operation consult the manual included with your DMX controller.
7. For longer cable runs (more than a 100 feet) use a terminator on the last fixture.

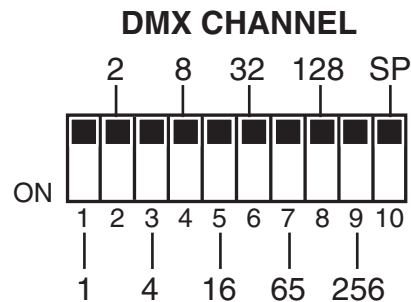
**Power Supply:** Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your American DJ® Fascinator.™ The American DJ® Fascinator™ is available in a 120v and 220v version. Because line voltage may vary from venue to venue, you should be sure your unit voltages matches the wall outlet voltage before attempting to operate you fixture.

**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a DATA “OUT” terminal).

**DMX Linking:** DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

**Dip-switches in DMX mode:** This unit uses dip switches to assign a DMX address. Each dip switch represents a binary value.

- Dip Switch 1 address equals 1
- Dip Switch 2 address equals 2
- Dip Switch 3 address equals 4
- Dip Switch 4 address equals 8
- Dip Switch 5 address equals 16
- Dip Switch 6 address equals 32
- Dip Switch 7 address equals 64
- Dip Switch 8 address equals 128
- Dip Switch 9 address equals 256
- Dip Switch 10 - Some unit omit dip switch 10. When a unit does included



dip switch 10 it is used for special functions such as sound activation.

Each dip switch has a preset value. A specific DMX address is set by combining the dip switches that sum your desired value. For example: To achieve a DMX address of 21, combine dip switches 1, 3, and 5. Sense dip switch 1 has a value of 1, dip switch 3 has a value of 4, and dip switch 5 has a value of 16, the combination of the create a DMX value of 21.

Set DMX address 21:  
 Dip switch # 1 = 1  
 Dip switch # 3 = 4  
 Dip switch # 5 = 16  
 = 21

Set DMX address 201:  
 Dip switch # 1 = 1  
 Dip switch # 4 = 8  
 Dip switch # 7 = 64  
 Dip switch # 8 = 128  
 = 201

**Data Cable (DMX Cable) Requirements (For DMX and Master/Slave Operation):**

The Fascinator™ can be controlled via DMX-512 protocol. The American DJ® Fascinator™ is a four channel DMX unit. The DMX address is set on the front panel of the Fascinator™. Your unit and your DMX controller require a standard 3-pin XLR connector for data input and data output (Figure 1). If you are making your own cables, be sure to use standard two conductor shielded cable (This cable may be purchased at almost all pro sound and lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and can not be split.



Figure 1

**Notice:** Be sure to follow figures two and three when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable’s shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR’s outer casing. Grounding the shield could cause a short circuit and erratic behavior.

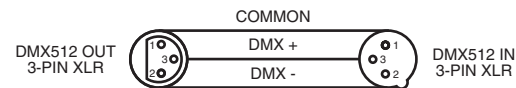


Figure 2

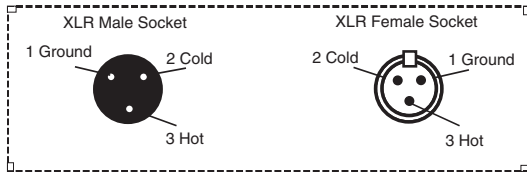


Figure 3

XLR Pin Configuration	
Pin 1 =	Ground
Pin 2 =	Data Compliment (negative)
Pin 3 =	Data True (positive)

**Special Note: Line Termination.** When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 90-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number ZDMX/T) will decrease the possibilities of erratic behavior.



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

Figure 4

**5-Pin XLR DMX Connectors.** Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The chart below details a proper cable conversion.

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use

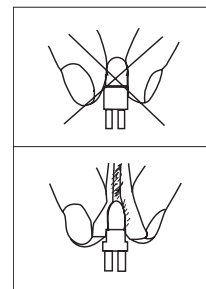
**Caution:** Always replace with the exact same type lamp and fuse, unless otherwise specified by an authorized American DJ® technician. Replace with anything other than the specified part can damage your unit and will void your manufactures warranty.

**Warning:** If, after replacing the lamp or fuse either one continues to blow, STOP using the unit. Contact customer support for further instructions, you may have to return the unit for servicing. Continuing to use the unit may cause serious damage.

**Fuse Replacement:** Disconnect the unit's main power supply. Insert a standard flat head screw driver in to the fuse holder housing. Turn the screwdriver in counter-clockwise direction to remove the fuse holder. Remove the fuse holder to expose the fuse. Remove the old fuse and discard it. Replace the fuse with the same type. Insert the fuse holder back into it's housing and turn it in clockwise direction to lock the holder in place.

**Lamp Replacement:** Caution! Never attempt to change the lamp while the fixture is plugged in. Always disconnect the main power and allow the unit ample time to cool before attempting to replace the lamp. Lamp replacement has been made simple by incorporating the use of a flip-up front cover that is retained by thumb screws.

1. Be sure to follow the proper handling procedures that deal with halogen lamps.
2. Remove the thumb screw on the top/rear of the unit that holds the lamp socket assembly cover in place.
3. After removing the thumb screw, pull out the cover from the rear of the unit to expose the lamp socket assembly.
4. Carefully remove the old lamp and discard it in the trash.
5. Replace the lamp with an exact match and reassemble in reverse order.



**Halogen Lamp Warning:** This fixture is fitted with halogen lamps which are highly susceptible to damage if improperly handled. Never touch the lamps with your bare fingers as the oil from your hands will shorten lamp life. Also, never move the fixture until the lamps have had ample time to cool. Remember, lamps are not covered under warranty conditions.

**Fixture Cleaning:** Due to fog residue, smoke, and dust cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (I.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Use a brush to wipe down the cooling vents and fan grill.
3. Clean the external optics and mirror with glass cleaner and a soft cloth every 20 days.
4. Clean the internal optics with glass cleaner and a soft cloth every 30-60 days.
5. Always be sure to dry all parts completely before plugging the unit back in.

**Trouble Shooting:** Listed below are a few common problems that you may encounter, with solutions.

**No light output from the unit;**

1. Be sure you have connected your unit into a standard 120V wall outlet.
2. Be sure the external fuse has not blown. The fuse is located on the bottom panel of the unit.
3. Remove the lamp cover and be sure the lamp is seated in its socket properly. Occasionally lamps become loose during shipping be sure the lamp is push in to its socket all the way.
4. Be sure the fuse holder is completely and properly seated.

**Unit does not respond to sound;**

1. Low frequencies (bass) should cause the unit to react to sound. Tapping on the microphone, quiet or high pitched sounds may not activate the unit.
2. Be sure the *SENSITIVITY KNOB (6)* is not set to the minimum position

The charts below details the DMX traits and the gobo patterns. The individual trait can only be accessed by an universal DMX controller.

DMX CHANNEL					
1		2		3	
Gobo Wheel		Mirror Dish Rotation		Dichroic Lens Movement	
Strobe 2	252-255	Fast Rotation	255	Function 6	235(Fast) ~ 255(Slow)
Function 8	240-251			Function 5	214(Fast) ~ 234(Slow)
Function 7	228-239			Function 4	193(Fast) ~ 213(Slow)
Function 6	216-227			Function 3	172(Fast) ~ 192(Slow)
Function 5	204-215			Function 2	151(Fast) ~ 171(Slow)
Function 4	192-203			Function 1	130(Fast) ~ 150(Slow)
Function 3	180-191			Fast	129
Function 2	168-179			Slow	128
Function 1	156-167			Automatic Rotation	48
Strobe 1	144-155			Manual Rotation	47
Gobo 11	132-143			Fast Rotation	01
Gobo 10	120-131	Stop	00		
Gobo 9	108-119				
Gobo 8	96-107				
Gobo 7	84-95				
Gobo 6	72-83				
Gobo 5	60-71				
Gobo 4	48-59				
Gobo 3	36-47				
Gobo 2	24-35				
Gobo 1	12-23				
Blackout	01-11				
Lamp Off	00				

