

American DJ®

Emerald Sync

Ruby Sync



User Instructions

Emerald/Ruby Sync™ General Introduction

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

Introduction: Thank you for purchasing the American DJ® Emerald Sync/Ruby Sync™. The Emerald Sync/Ruby Sync™ is a unique laser effect that projects 16 different patterns. It is a sound sensitive unit that can operate as a stand-alone unit or in a Master/Slave configuration.

Customer Support: American DJ® provides a toll free customer support line, to provide set up help and to answer any questions should you encounter problems during your set up or initial operation. You may also visit us on the web at www.americandj.com for any comments or suggestions. For service related issue please contact American DJ®. 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

To purchase parts online visit <http://parts.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 American DJ® Customer Support.

PLEASE do not discard the shipping carton in the trash. Please recycle when ever possible.

Emerald/Ruby Sync™ General Instructions

Please carefully read and understand the instructions in this manual thoroughly before attempting to operate this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

CAUTION IMPORTANT! When installing this projector, make sure that it is mounted in a manner that prevents the audience from looking directly into the beam, and the beam from striking the audience.

Emerald/Ruby Sync™ Features

- 4.9mW Green Laser Diode (Emerald Sync)/ or 4.9mW Red Laser Diode (Ruby Sync)
- Built-In Hanging Yoke
- Sound Active with Internal Microphone
- Master/Slave Operation
- Fan Cooled
- 16 Patterns
- Blackout Controller (Not Included)

Emerald/Ruby Sync™ Warranty Registration

The Emerald Sync/Ruby Sync™ carries a 90 day 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.

Emerald/Ruby Sync™ Fuse Replacement

Caution: Always replace with the exact same type fuse, unless otherwise specified by an authorized American DJ® technician. Replacement with anything other than the specified fuse can cause fire or electric shock and damage your unit, and will void your manufacturer's warranty.

Warning: If you continue to blow fuses, STOP using the unit. Contact

Emerald/Ruby Sync™ Fuse Replacement cont.

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. Use a flat head screw drive to unscrew the fuse holder. When the fuse holder is exposed remove the old fuse and replace it with the same type of fuse. When replacing and checking the fuse, be sure to check that the fuse has the metal ends completely exposed.

Emerald/Ruby Sync™ Safety Precautions



CAUTION IMPORTANT! When installing this projector, make sure that it is mounted in a manner that prevents the audience from looking directly into the beam, and the beam from striking the audience.

Safety Issues: This unit may blow a fuse if the maximum allotted load of 2 amps is reached.

- 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.
- 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. Do not attempt to operate this unit if the power cord has been frayed or broken.
- Disconnect from main power before making any type of connection.
- Do not remove the cover under any conditions. There are no user

Emerald/Ruby Sync™ Safety Precautions cont.

- serviceable parts inside.
- 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 out doors voids all warranties.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit on safe and stable matter.
- Power cords should be routed so they are not likely to be walked on, or pinched by items placed upon or against them.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 11 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 on, or liquid has been spilled into the unit.
 - C. The unit has been exposed to rain or water.
 - D. The unit does not appear to operate normally or exhibits a marked change in performance.

Emerald/Ruby Sync™ Laser Warnings and Safety

NON-INTERLOCKED HOUSING WARNING

The Emerald and Ruby Syncs™ contain high power laser devices internally. **Do not** open the unit's housing, due to the potential exposure to unsafe levels of laser radiation. The laser power levels, if the unit is opened, can cause instant blindness, skin burns and fires.

STOP AND READ ALL LASER SAFETY DATA OPERATION INSTRUCTIONS AND LASER SAFETY

The light source emitted from this product can potentially cause eye injury if not set up and used properly. The light source emitted from a laser is very different from any other light sources with which you may be aware of. Laser light is thousands of times more concentrated than any light from any other kind of light source. This concentration of light can cause instant eye injuries, primarily by burning the retina (the back of your eyeball containing cells that are sensitive to light). Even if you cannot feel "heat" from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser beam light are potentially hazardous even at long distances. Laser eye injuries can be sustained faster than you can blink.

Do not think that because this laser splits the laser beam into hundreds of beams and that the laser beam is scanned out in high speed, that an individual laser beam is safe for eye exposure. This laser uses dozens of milliwatts of laser power (Class 3B levels internally) before it splits into multiple beams (Class 3R levels). Many of the individual beams are potentially hazardous to the eyes.

Do not think that because the laser light is moving, it is safe. This is not true. Nor, do the laser beams always move. Since eye injuries can occur instantly, it is critical to prevent even the smallest possibility of any direct eye exposure. In the laser safety regulation, it is not legal to aim Class 3R lasers in areas which people can get exposed. This is true even if it is aimed below people's faces, such as on a dance floor.

Do not operate the laser without first reading and understanding all safety and technical data in this manual.

Always set up and install all laser effects so that all laser light is at least 3 meters (9.8 feet) above the floor on which people can stand.

Emerald/Ruby Sync™ Laser Warnings and Safety

After setting up, and before public use, test laser to ensure proper function. Do not use if any defect is detected. Do not use if laser emits only one or two laser beams rather than dozens/hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels above Class 3R.

Do not point lasers at people or animals. Never look into the laser aperture or laser beams.

Do not point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.

Do not point lasers at highly reflective surfaces, such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.

Never point a laser at aircraft, this is a federal offense.

Never point un-terminated laser beams into the sky.

Do not expose the output optic (aperture) to cleaning chemicals.

Do not use laser if the laser appears to be emitting only one or two beams.

Do not use the laser if the housing is damaged, the housing is open, or if the optics appear damaged in any way.

Never open the laser housing. The high laser power levels inside of the protective housing can start fires, burn skin and will cause instant eye injury.

Never leave this device running unattended.

The operation of a class 3R laser show is only allowed if the show is controlled by a skilled and well-trained operator, familiar with the data included in this manual.

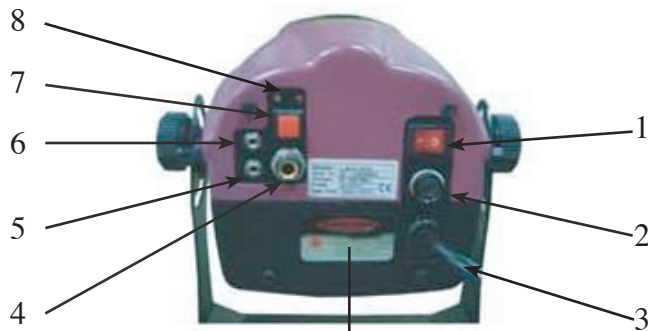
The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.

Always use proper lighting safety cables when hanging lights and effects overhead.

Emerald/Ruby Sync™

Warning Labels





1. **Power Switch** - This switch is used to turn the unit On and Off.
2. **Fuse Holder** - This housing stores the 2 amp GMA protective fuse. Always replace with the exact same type fuse, unless otherwise instructed, by an authorized American DJ® service technician.
3. **Power Cord Connection** - This connection is used to supply main power to the fixture. Use only the supplied I.E.C. power cord. Be sure the main power matches the required power of your fixture.
4. **Remote Controller Input** - This input uses a 1/4" (6.3mm) microphone jack. The optional blackout controller plugs in here and is used to control the first unit, and other units if linked together. It controls stand by and blackout function.
5. **Signal Output** - This output connection is used when linking unit's in master/slave configuration. The connection uses a 3.5mm stereo microphone jack. Output is used when the unit has been selected as the master, and when linking more than one slave.
6. **Signal Input** - This input connection is used when linking unit's

in master/slave configuration. The connection uses a 3.5mm stereo microphone jack. The input is used when a unit has been selected as a slave unit. The input connection requires a 3.5mm microphone jack.

7. **Mode Button** - This button is used to switch the laser on and off, when in stand-alone mode. The button will activate master/slave mode when units are linked together in that configuration.

8. **Red and Yellow LED's** - When the laser is on, and the unit is operating in stand alone mode, the red and yellow LED will be lit. When the LED's are not lit, it means that blackout mode is activated. When the units are linked in a master/slave configuration the yellow LED will be lit on the master unit, indicating that the master/slave mode has been activated.

Power Supply: This unit is available in both 120v and 220v options, before plugging your fixture in be sure the source voltage in your area matches the required voltage for your American DJ® Emerald Sync/Ruby Sync.™

CAUTION IMPORTANT! : When installing this projector, make sure that it is mounted in a manner that prevents the audience from looking directly into the beam, and that the beam will not strike the audience.

General Operation: *Plug and Play operation.* This fixture is designed to operate as a stand alone unit or as a simple master/slave configuration. It has been tested at the factory there is no assembly necessary. The Emerald Sync/Ruby Sync™ is ready to be plugged in, out of the box. This Emerald Sync/Ruby Sync™ is a sound active unit that can function as a stand-alone unit, or in a Master/Slave configuration. The unit comes with 16 built-in patterns that automatically cycle through when the unit is operating, the patterns may not be selected manually. If there is no sound the unit will blackout after 7 seconds. If the unit does not turn on after the power has been switched on, be sure the fuse has not blown and the unit is properly plugged in to a matching wall outlet. If problem continue to persist, please contact customer support for further instructions.

Stand-Alone Mode: After the unit has been plugged in, flip the power switch to the “On” position. If the LED’s on the back of the unit do not light up, press the mode button once. The unit should then start projecting the laser at whatever it is facing.

Master/Slave Mode: When set-up in a Master/Slave configuration, one unit is chosen as the master, the other units that are linked will follow whatever pattern the master projects. To set-up Master/Slave mode:

1. Select which unit will act as master, and connect the 3.5mm cable into the output connection on the back of the unit.
2. Then simply connect the other end of the cable to the back of the slave unit, where the input connection is. Press the mode button on the back of the master unit, to activate master/slave mode. When the mode is activated the yellow LED on the back of the master should glow. None of the slave LED’s should glow.

To connect more than one slave unit. Connect another 3.5mm cable to the output connection on the back of the slave unit, to the input connection on the back of the second slave unit and so on.

Fixture Cleaning: Due to fog residue, smoke, and dust cleaning the internal and external lenses should be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew). In heavy use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp beam output.

MANUFACTURER’S LIMITED WARRANTY

A. American DJ, Inc. hereby warrants, to the original purchaser, American DJ and American Audio 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. Contact American DJ, Inc. Service Department at 800-322-6337. Send the product only to the American DJ, Inc. factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, American DJ, Inc. 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 it’s original package. No accessories should be shipped with the product. If any accessories are shipped with the product, American DJ, Inc. shall have no liability whatsoever for loss of or damage to any such accessories, nor 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 American DJ, Inc. concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American DJ, Inc. factory unless prior written authorization was issued to purchaser by American DJ, Inc.; 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, American DJ, Inc. will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of American DJ, Inc. under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of American DJ. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. American DJ, Inc. 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. 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 American DJ, Inc. 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 American DJ, Inc. be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

This warranty is the only written warranty applicable to American DJ and American Audio Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

MANUFACTURER’S LIMITED WARRANTY PERIODS:

- All American Audio Products = 1-year (365 day) Limited Warranty (except V-Plus Series Amplifiers)
- All American Audio V-Plus Series Amplifiers = 3-year (1095 day) Limited Warranty
- American DJ Lighting and American DJ Branded Products = 1-year (365 day) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobos, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding Laser Products, lamps, and Star Tec Series)
- American DJ Laser Products and Star Tec Products = 90-Day Limited Warranty
- American DJ L.E.D. Products = 3-year (1095 day) Limited Warranty (excluding motors which have a 1-year (365 day) Limited Warranty)

Emerald Sync™**Specifications****Model: Emerald Sync/Ruby Sync™**

Voltage:	120v~60Hz or 220v~50Hz
Laser:	4.9mW Green
Fuse:	2A GMA/120V or 2A GMA/220v
Dimensions:	10.2" (L) x 6.5" (W) x 5.5" (H)
Weight:	6.5 Lbs./ 3 Kgs.
Duty Cycle:	None
Ventilation:	Fan Cooled
Warranty:	90 Day

Ruby Sync™**Specifications****Model: Ruby Sync™**

Voltage:	120v~60Hz or 220v~50Hz
Laser:	4.9mW Red
Fuse:	2A GMA/120V or 2A GMA/220v
Dimensions:	10.2" (L) x 6.5" (W) x 5.5" (H)
Weight:	6.5 Lbs./ 3 Kgs.
Duty Cycle:	None
Ventilation:	Fan Cooled
Warranty:	90 Day

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.