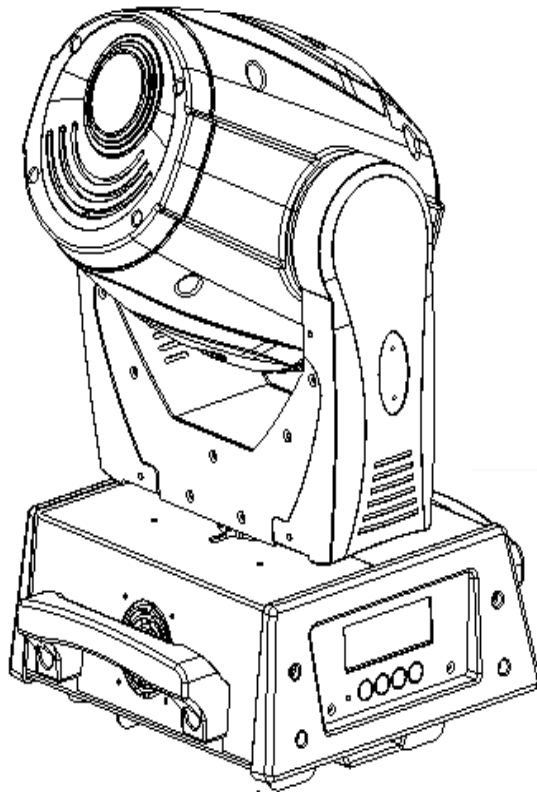# Revo 120
User Manual

irradiant™
by: AMERICAN LIGHTING

GENERAL INFORMATION

Congratulations, you have just purchased one of the most innovative and reliable lighting fixtures on the market today! The Revo 120 has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

UNPACKING

Thank you for purchasing the Revo 120 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 damage and be sure all accessories necessary to operate the unit 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 unit to your dealer without first contacting customer support at the number listed below.

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.

Please do not discard the shipping carton in the trash. Please recycle whenever possible.

FEATURES

. **8 Dichroic Colors**
. **16 Gobos**
. **LED Lamp Source With Equal Output to 575W Discharge**
. **15° Beam Angle**

Colors
. **Color wheel: 7 dichroic colors plus white, with two direction rainbow effect**

Gobos
. **16Gobos**
. **Two gobo wheels**
. **Gobo wheel 1: 7 rotating / indexing replaceable gobos**
  3 metal, 4 glass gobos
. **Gobo wheel 2: 9 replaceable static gobos.**
. **Gobo Size 28.9mm (outside dimensions) / 23mm (inside dimensions)**

Special Effects
. **3 Facet Rotating / Indexing Prism**
. **Motorized Iris- Built-in Iris (5% ~ 100%), with Iris Pulse Effect**

Shutter/Dimmer
. Variable speed Shutter / Strobe
. Strobe effect with 0-18 flashes per second
. Dimmer 0-100%

Light Source
. 1989 Lux / 185 fc at 16 feet / 5 meters at full
. LED lamp source with equal output to 575W discharge
. Lamp life: 50,000 hours, 6500° K, CRI=70
. Lamp: CBM-360-W LED 90Watt

Optical System
. 15° Beam Angle
. Motorized focus
. Improved optics and flat beam field

Movement
. Pan / Tilt 540/630 x 265
. Automatic Pan / Tilt correction

Control
. 15 Channels DMX
. LCD display
. USITT DMX-512 Complaint
. 16 prism macros
. 8 built-in programs
. 16 bit mode
. 3 operation modes: DMX controlled, stand alone or sound activated

Operation Parameters
. Max ambient temperature: 45°C
. IP Rating: IP20
. dB Rating: 55 dB at 3'

Power Supply
. User selectable power supply
. Nearly 1/2 power consumption of standard DS250 PRO
. 180W MAX / 120v-240V 50/60hz

Connectors
. 3-pin DMX connections

Dimensions and Weight
. Dimensions: (L x W x H)11.8" x 11.8" x 22" /300mm x 300mm x 560mm
. Weight: 34 lbs / 15.5 kg

Approvals
. CE approved

SAFETY INSTRUCTIONS

The Revo 120 is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

1. Always be sure that the fan and the air inlets remain clean and are never blocked. Allow about 6" (15cm) between this fixture and other devices or a wall to allow for proper cooling.
2. Never touch the fixture during normal operation. This can cause severe personal injuries and/or damage to the fixture.
3. Be sure to unplug the Revo 120 the power outlet before performing any service related issues.
4. Never look directly into the light source. You risk injury to your retina, which may induce blindness.
5. For safe operation, follow the Installation guide described in chapter six of this manual. Operating the SPOT LED without suited safety aids such as safety cables or clamps can increase the risk of damage and/or personal injury.
6. Qualified and certified personnel should only perform installation.
7. When mounting this fixture, use only the original rigging parts included with this fixture. Any structural modification will void the original manufactures warranty and may increase the risk of damage and/or personal injury.
8. To reduce the risk of fire or shock, do not expose this fixture to rain or moisture.
9. Do not attempt to operate this fixture if the power cord has become damaged or frayed.

Important Notice: Damages resulting from the disregard of safety and general user instructions found in this user manual are not subject to any warranty claims.

MOUNTING AND INSTALLATION

Cautions
For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personal.
Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.
Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.
Never stand directly below the device when mounting, removing, or servicing the fixture.

Mounting
The Revo 120 is fully operational in two different mounting positions, hanging upside-down from a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 ft) away from any flammable materials (decoration etc.).
Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.
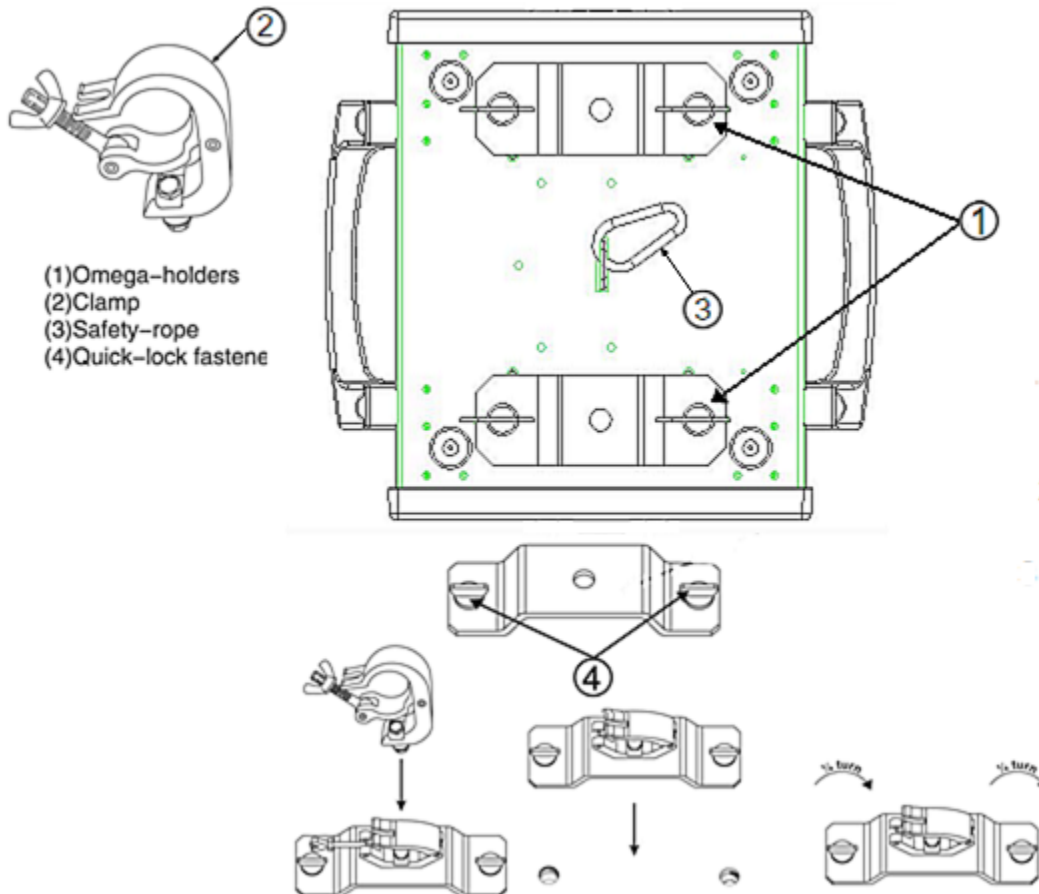
Mounting points
Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.
Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Clamp Mounting

The Revo 120 provides a unique mounting bracket assembly that integrates the bottom of the base, the included "Omega Bracket," and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "omega bracket". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly

(1)Omega-holders
(2)Clamp
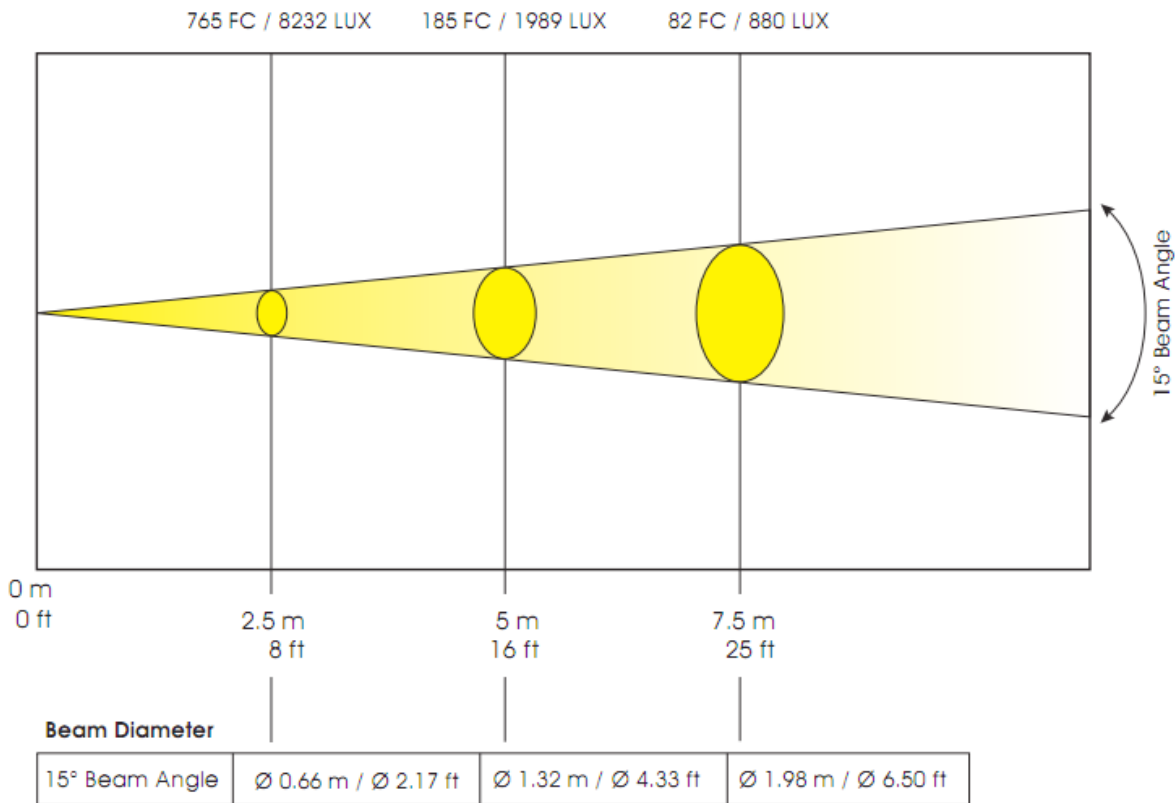(3)Safety-rope
(4)Quick-lock fastene

Regardless of the rigging option you choose for your SPOT LED, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

Photometric Beam Angle Data

15° Beam Angle

LUX × 0.0929 = FC

	765 FC / 8232 LUX	185 FC / 1989 LUX	82 FC / 880 LUX

15° Beam Angle

0 m
0 ft

	2.5 m / 8 ft	5 m / 16 ft	7.5 m / 25 ft

Beam Diameter

15° Beam Angle	Ø 0.66 m / Ø 2.17 ft	Ø 1.32 m / Ø 4.33 ft	Ø 1.98 m / Ø 6.50 ft

FIXTURE MENU (Default settings in grey)

DMX Address	A001~AXXX		
Auto Play	Auto Run Music Control		
Reset	On/Off		
Reverse Pan	On/Off		
Reverse Tilt	On/Off		
Special	Reset Default	On/Off	
Edit Program	Auto Program1 ... Program8	Steps (1...48) Scenes 01 ... Scenes XX	Pan=XXX... Time=xx.xS

DMX CHANNEL TRAITS

Channel	Channel Value	Function
1	000 - 255	Pan Movement
2	000 - 255	Fine Control of Pan Movement (16 Bit Pan)
3	000 - 255	Tilt Movement
4	000 - 255	Fine Control of Tilt Movement (16 Bit Tilt)
5 (Color)	000 - 015 016 - 031 032 - 047 048 - 063 064 - 079 080 - 095 096 - 111 112 - 127 128 - 189 190 - 193 194 - 255	Open/White Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color Wheel Scroll (clockwise, fast - slow) Stop Color Wheel Scroll (counter clockwise, slow - fast)
6 (Gobo 1)	000 - 009 010 - 019 020 - 029 030 - 039 040 - 049 050 - 059 060 - 069 070 - 079 080 - 099 100 - 119 120 - 139 140 - 159 160 - 179 180 - 199 200 - 219 220 - 255	Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 1 (shake slow to fast) Gobo 2 (shake slow to fast) Gobo 3 (shake slow to fast) Gobo 4 (shake slow to fast) Gobo 5 (shake slow to fast) Gobo 6 (shake slow to fast) Gobo 7 (shake slow to fast) Rotating Gobo Wheel (rotation slow to fast)
7 (Gobo 1 Rot.)	0 - 3 4 - 127 128 - 131 132 - 255	Gobo Rotation Stop Clockwise Rotation (fast to slow) Gobo Rotation Stop Counter Clockwise Rotation (slow to fast)
8 (Gobo 2)	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 111 112 - 123 124 - 135	Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 1 (shake slow to fast) Gobo 2 (shake slow to fast) Gobo 3 (shake slow to fast)

DMX CHANNEL TRAITS

Channel	Channel Value	Function
8 (cont.)	136 - 147 148 - 159 160 - 171 172 - 183 184 - 195 196 - 207 208 - 255	Gobo 4 (shake slow to fast) Gobo 5 (shake slow to fast) Gobo 6 (shake slow to fast) Gobo 7 (shake slow to fast) Gobo 8 (shake slow to fast) Gobo 9 (shake slow to fast) Gobo Wheel Rotation (slow to fast)
9 (Strobe)	0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	Closed Open Strobe (slow to fast) Open Pulse-Effect in Sequences Open Random Strobe Effect (slow to fast) Open
10 (Dimmer)	0 - 255	Dimmer 0 - 100%
11 (Focus)	0 - 255	Near - Far
12 (Prism)	0 - 5 6 - 127 128 - 189 190 - 193 194 - 255	Prism Out Prism In Forward Rotation (fast to slow) Prism Stop Backwards Rotation (slow to fast)
13 (Iris)	0 - 191 192 - 223 224 - 255	Max. Diameter to Min. Diameter Pulse Opening (fast to slow) Pulse Closing (slow to fast)
14 (Pan/Tilt)	0 - 255	Max to Min Speed
15 (Special)	0 - 19 20 - 29 30 - 39 40 - 79 80 - 99 100 - 119 120 - 139 140 - 159 160 - 179 180 - 199 200 - 219 220 - 239 240 - 255	Normal Color Change Color Change to Any Position Color and Gobo Change to Any Position No Function Motor Reset Internal Program 1 Internal Program 2 Internal Program 3 Internal Program 4 Internal Program 5 Internal Program 6 Internal Program 7 Internal Program 8