

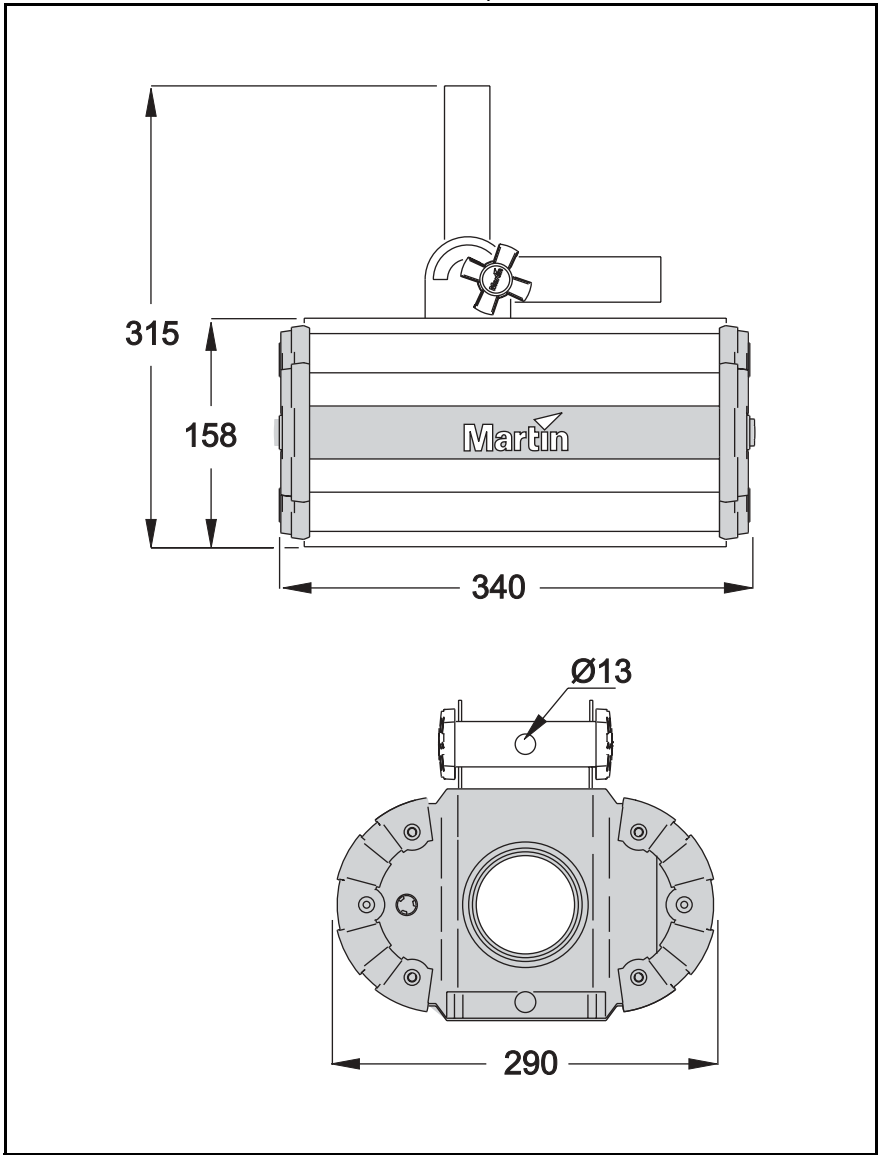
Mania PR1

user manual



Martin

Measurements are expressed in millimeters.



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INTRODUCTION

Thank you for selecting a Martin Mania PR1. The Mania PR1 is a gobo projector with a motorized rotating gobo. Gobo rotation speed and direction can be adjusted, and a remote control is supplied with the product. The beam angle can be adjusted from 25° to 32°. A 43° beam angle can also be obtained using a separately available accessory.

SAFETY INFORMATION

Warning! This product is not for household use. It presents risks of lethal or severe injury due to fire and heat, electric shock, and falls.

Read this manual before powering or installing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture. If you have questions about how to operate the fixture safely, please contact a Martin distributor for assistance. Refer any service operation not described in this manual to a qualified technician. Do not modify the fixture or install other than genuine Martin accessories and upgrade kits.

Refer servicing to qualified personnel.

Maximum ambient temperature $T_a = 40^{\circ}\text{C}(104^{\circ}\text{F})$.

See serial label for replacement fuse size and lamp type.

Suitable for mounting on normally flammable surfaces.

Do not look directly into the light.

Risk of fire, electrical shock and burns.

Use only in dry locations.

For indoors use only.

Do NOT block exhaust vents.

Shields, lenses or ultraviolet screens must be changed if they become visibly damaged to the extent that their effectiveness is impaired, for example, by cracks or deep scratches.

The lamp must be changed if it becomes damaged or thermally deformed.

If the external power cord of this luminaire is damaged, it must be replaced by a special cord exclusively available from your Martin dealer.

Avoiding electric shocks

Warning *Always disconnect from mains power before replacing the lamp, fuses, or any part, and when not in use.*

- Before operation ensure that factory setting of voltage and frequency match local power supply.
- Always ground (earth) the fixture electrically.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- Do not expose the fixture to rain or moisture.
- Never operate the fixture with missing or damaged lenses and/or covers.

Protecting yourself and others from burns and fire

Warning *Hot lamp. The exterior of the fixture can become hot. Allow to cool for at least 20 minutes before handling or opening.*

- Surface temperature under steady state condition = 95°C (203° F).
- Minimum distance to flammable material = 0.3 m (1 ft).
- Minimum distance to illuminated surface 1.0 m (3.3 ft).
- Never attempt to bypass the thermostatic switch or fuses. Always replace defective fuses with ones of the specified type and rating.
- Ensure that the air flow through vents is free and unobstructed.
- Provide a minimum clearance of 0.1 meters (4 inches) around air vents.
- Never place filters or other materials over the lens or in the optical path.
- The exterior of the fixture can become hot. Allow the fixture to cool for at least 20 minutes before handling.
- Do not operate the fixture if the ambient temperature (T_a) exceeds 40° C (104° F).
- Do not stare directly into the light.
- Never operate the fixture without all lenses and covers installed: an unshielded lamp emits dangerous UV radiation that can cause burns and eye damage.

Preventing injuries due to falls

- When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.
- Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.
- Block access below the work area whenever installing or removing the fixture.

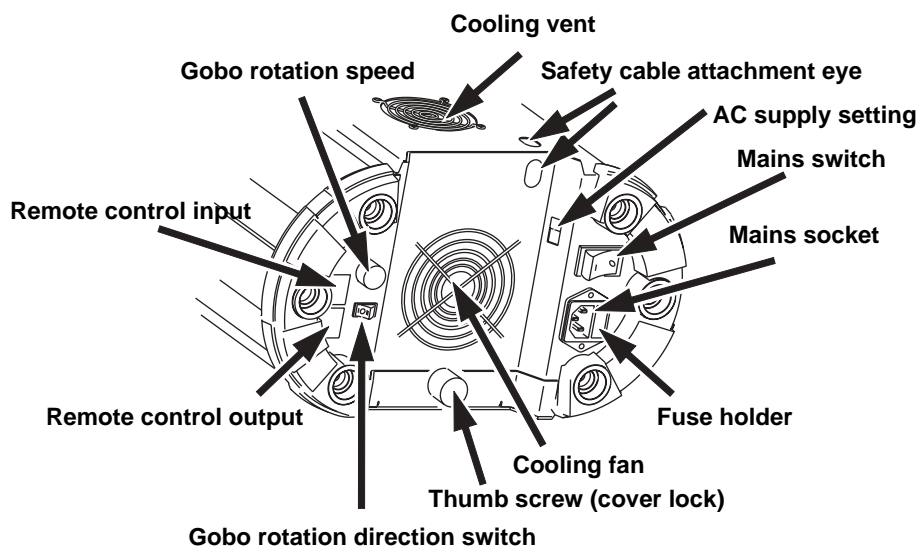
UNPACKING

The packing material is carefully designed to protect the fixture during shipment - always use it to transport the fixture.

The Mania PR1 is packaged with the following:

- 3-wire power cable
- User manual
- Blue-hued texture glass
- Steel gobo with Martin logo
- Remote control unit with 5-metre (16.4 ft) RJ-45 cable
- White glove with Martin logo

MANIA PR1 OVERVIEW



INSTALLATION

2

AC POWER

Before operation, ensure that factory setting of voltage and frequency match local power supply.

Always ground (earth) the fixture electrically.

Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.

Note: *If the external power cord of this luminaire is damaged, it must be replaced by a special cord exclusively available from your Martin dealer.*

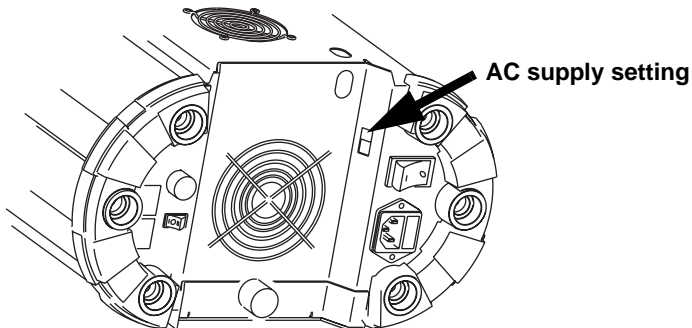
Configuring for local mains power

The Mania PR1 has a switch-selectable power supply that can operate in the following voltage ranges at 50-60 Hz:

- 115 - 120 volts (setting 115)
- 220 - 240 volts (setting 230)

Warning *Do not operate the fixture on a power supply that falls outside of these ranges.*

Select the operating range using the red AC supply switch at the rear of the fixture.



Installing a plug on the mains lead

Warning! *For protection from dangerous electric shock, the fixture must be grounded (earthed). The AC mains supply must have overload and ground-fault protection.*

Important! *Verify that the feed cables are undamaged and rated for the current requirements of all connected devices before use.*

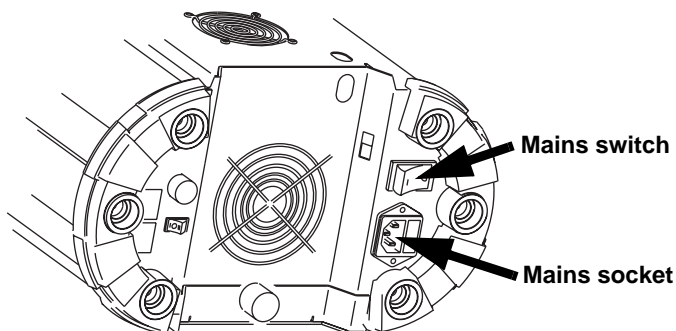
The fixture's mains lead may require a grounding-type cord cap that fits your power distribution cable or outlet. Consult a qualified electrician if you have any doubts about proper installation.

Following the cord cap manufacturer's instructions, connect the appropriate wires to ground (earth), live, and neutral. The following table shows some common wire identification schemes.

Function	Wire (EU)	Wire (US)
live	brown	black
neutral	blue	white
ground	yellow/green	green

To apply power:

- 1 Connect the mains power cable.



- 2 Turn the power on using the mains switch.

OVERHEAD MOUNTING

The Mania PR1 is designed to be hung overhead with a clamp (not included).

Warning! Block access below the work area before proceeding.

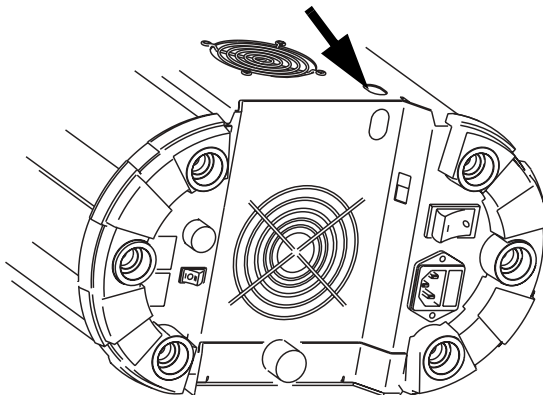
Always use a secure means of secondary attachment.

For indoors use only.

To hang the Mania PR1 on an overhead support:

- 1 Verify that the structure can support at least 10 times the weight of all installed fixtures, clamps, cables, auxiliary equipment, and other items.
- 2 If hanging the fixture with a rigging clamp, verify that the clamp is undamaged and is designed for the fixture's weight. Bolt the clamp securely to the mounting bracket on the fixture with a grade 8.8 (minimum) M12 bolt and lock nut, or as recommended by the clamp manufacturer, through the clamp hole in the mounting bracket.
- 3 If permanently installing the fixture, verify that the hardware (not included) and mounting surface can bear at least 10 times the fixture's weight.
- 4 Working from a stable platform, clamp or fasten the fixture to the structure.
- 5 Install a safety cable that can hold at least 10 times the weight of the fixture through the safety cable attachment point on the fixture.

Safety cable attachment point



- 6 Loosen the swivel locks, tilt the fixture to the desired angle, and retighten.
- 7 Verify that the fixture is at least 1 meters (3.3 ft.) from the surface to be illuminated and at least 0.3 meters (1 ft.) from any combustible materials. Verify that the clearance around the air vents is at least 0.1 meters (4 in.).

OPERATION

3

The lamp will light when the mains switch at the rear of the fixture is turned on.

Important! *This fixture is designed for use with a gobo and/or structured glass filter. Do not use it without either a gobo or a filter installed. Doing so may cause heat damage that is not covered by the product warranty.*

INSTALLING A GOBO/TEXTURE GLASS

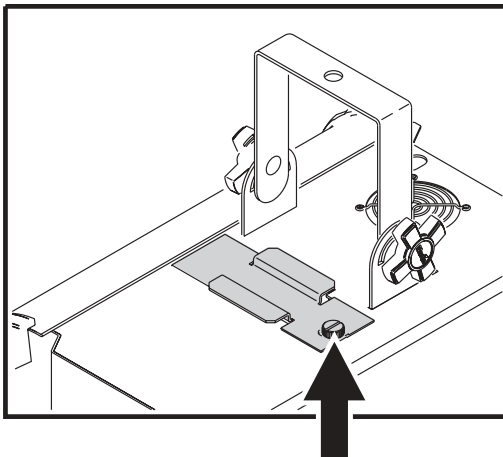
The fixture comes with a:

- Red-hued texture glass (installed)
- Blue-hued texture glass

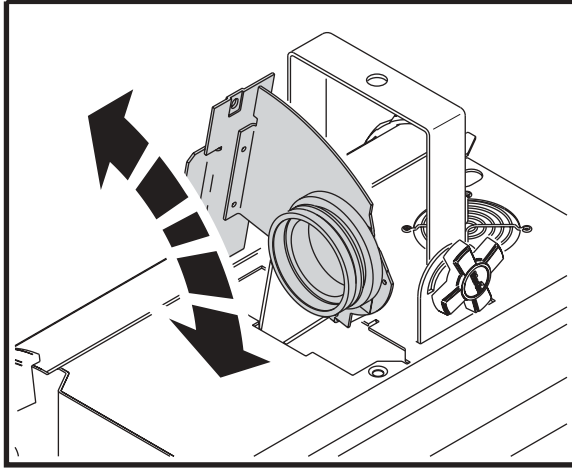
You can install standard size D gobos with a maximum image diameter of 40 mm (1.6 in.).

To change the gobo/texture glass:

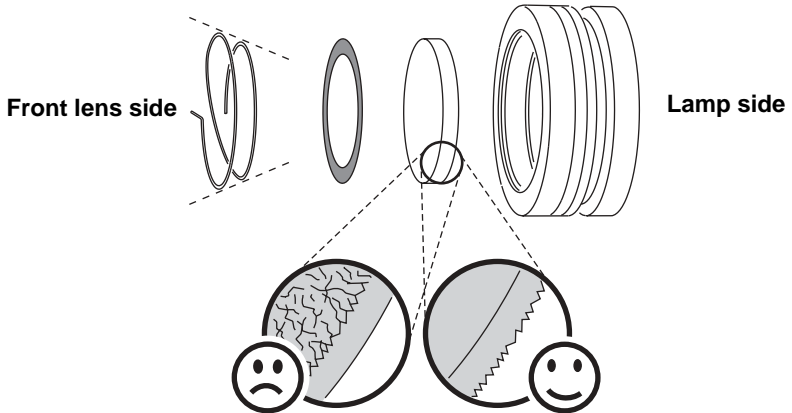
- 1 Switch the mains power off and allow the fixture to cool for 20 minutes.
- 2 Unscrew the gobo access hatch on the top of the fixture.



- 3 Lift the gobo holder out of the fixture.



- 4 The gobo/texture glass is held in place by a steel spring. Remove the spring to remove the gobo/texture glass that is presently installed.



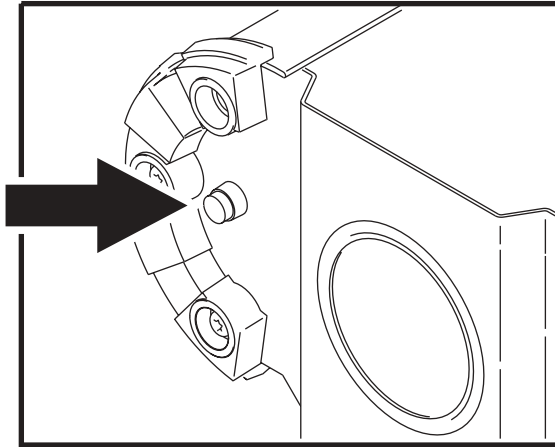
- 5 Install the replacement gobo or textured glass. Note that the coated or textured side should face the lamp.
- 6 Replace the gobo holder, and screw the access hatch closed, before applying power.

INSTALLING A COLOR FILTER

You can install a color filter in the slot that can be found on the lamp side of the gobo holder. This slot can hold a 51 x 54 mm (2 x 2.1 in.) filter with a thickness of between 1.1-2.0 mm (0.05-0.08 in.).

FOCUSING THE MANIA PR1

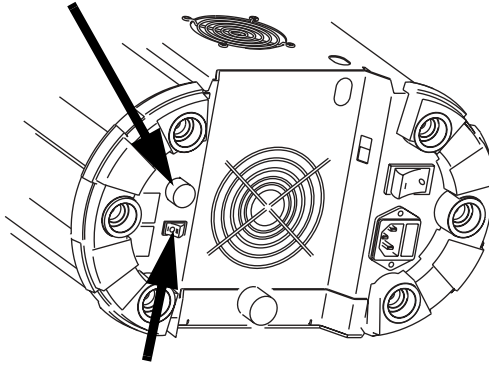
The focus is adjusted using the dial next to the lens. Twist the dial until a sharp image is acquired.



GOBO ROTATION

You can adjust the speed and direction of the gobo rotation using the controls at the rear of the fixture.

Gobo rotation speed

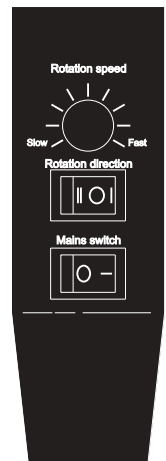


Gobo rotation direction switch

REMOTE CONTROL OPERATION

The remote control unit can control up to four daisy-chained Mania PR1s. Connect the remote control to the RJ-45 In connector on the first Mania PR1 fixture and connect successive fixtures using the RJ-45 Out connector.

The maximum cable length between daisy-chained fixtures is 10 metres (33 ft).



BASIC SERVICE

4

This chapter describes the maintenance procedures that you can perform yourself.

Warning *The exterior of the fixture can become hot. Always disconnect the fixture from AC power and allow to cool for at least 20 minutes before handling or opening.*

CLEANING

Regular cleaning of the elements in the optical path, as well as the air vents, is vital to maintaining the operational quality of the Mania PR1.

Important! *Excessive dust, smoke fluid, and particulate buildup degrades performance and causes overheating and damage to the fixture that is not covered by the warranty.*

Cleaning the air vents and fan

To maintain adequate cooling, dust must be cleaned from the air vents periodically. Remove dust from the air vents with a soft brush, cotton swab, vacuum, or compressed air.

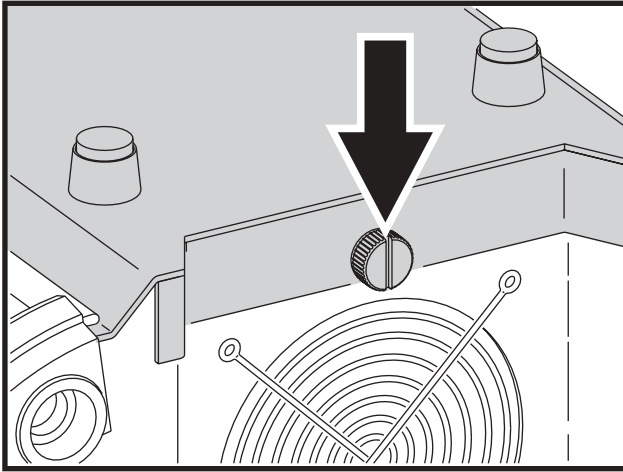
Cleaning optical components

Clean the optical components regularly. The presence of smudges or dust on optical surfaces can reduce the strength of the light output and the quality of the effects.

Use care when cleaning optical components and work in a clean, well lit area. The coated surfaces are fragile and easily scratched. Do not use solvents that can damage plastic or painted surfaces.

- 1 Disconnect the fixture from power and allow it to cool for 20 minutes.

- 2 Remove the thumb screw holding the cover in place.



- 3 Slide the fixture cover open.
- 4 Vacuum or gently blow away dust and loose particles with compressed air.
- 5 Remove stuck particles with an unscented tissue or cotton swab moistened with glass cleaner or distilled water. Do not rub the surface: lift the particles off with a soft repeated press.
- 6 Remove smoke, and other, residues with cotton swabs or unscented tissues moistened with isopropyl alcohol. A commercial glass cleaner may be used, but residues must be removed with distilled water. Clean with a slow circular motion from center to edge. Dry with a clean, soft and lint-free cloth or compressed air.
- 7 Close the fixture cover and tighten the thumb screw, taking care not to trap any loose wires.

LAMP MAINTENANCE

Warning *Isolate electrically before re-lamping. The lamp must be changed if it becomes damaged or thermally deformed.*

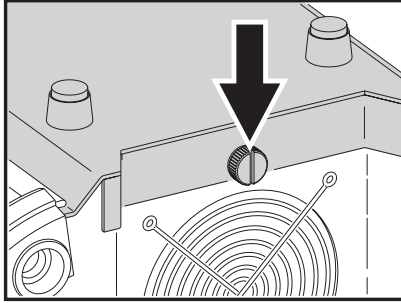
Caution *Hot lamp.*

Important *The Mania PR1 is supplied with a Philips 6958 24V 250W 10H lamp (Martin P/N 97000115) with an average life of 1000 hours. The fixture must only be used with this lamp. Using any other*

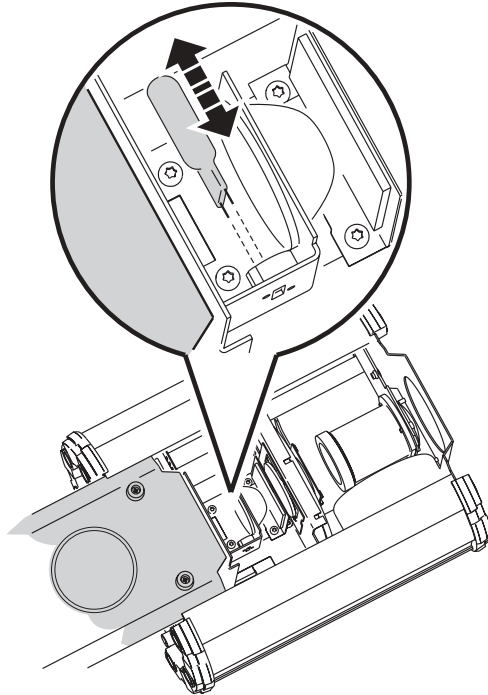
lamp type may damage the fixture and will invalidate the product warranty.

Installing a lamp in the Mania PR1

- 1 Disconnect the fixture from power and allow it to cool for 20 minutes.
- 2 Remove the thumb screw holding the cover in place.



- 3 Slide the fixture cover open.



- 4 Gently grasp the bulb as close to the base as possible and lever it out of the bulb socket.

- 5 Replace the bulb. Use only a Philips 6958 24V 250W 10H lamp (Martin P/N 97000115).

Warning *Installing any other lamp may damage the fixture!*

- 6 Close the fixture cover and tighten the thumb screw, taking care not to trap any loose wires.
- 7 Reapply power to the fixture.

RECONFIGURING THE BEAM

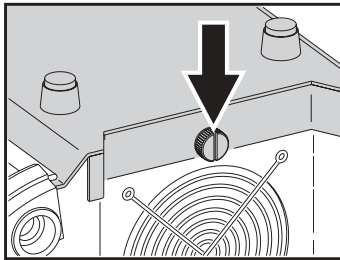
The Mania PR1 is supplied with an adjustable lens module allowing the beam angle to be set to either 25° or 32°. A 43° beam angle converter is also available from your Martin dealer as an accessory.

The lens is factory-set to 25°, but this can be changed to 32° as follows.

You will need a 2mm Allen key for this operation.

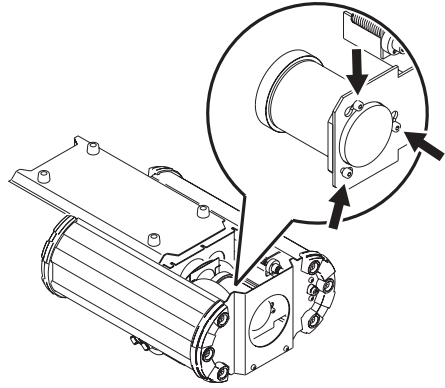
To reconfigure the lens:

1. Disconnect the fixture from power and allow it to cool for 20 minutes.
2. Turn the fixture over and remove the thumb screw holding the cover in place.

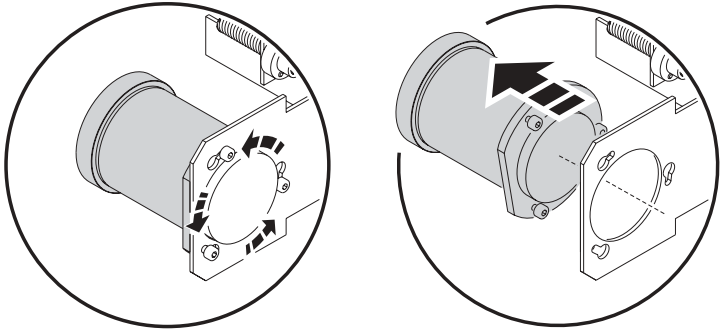


3. Slide the fixture cover open.
4. Turn the focus knob clockwise as far as it will go. This will move the lens module towards the front of the fixture, giving enough space to remove the lens module.

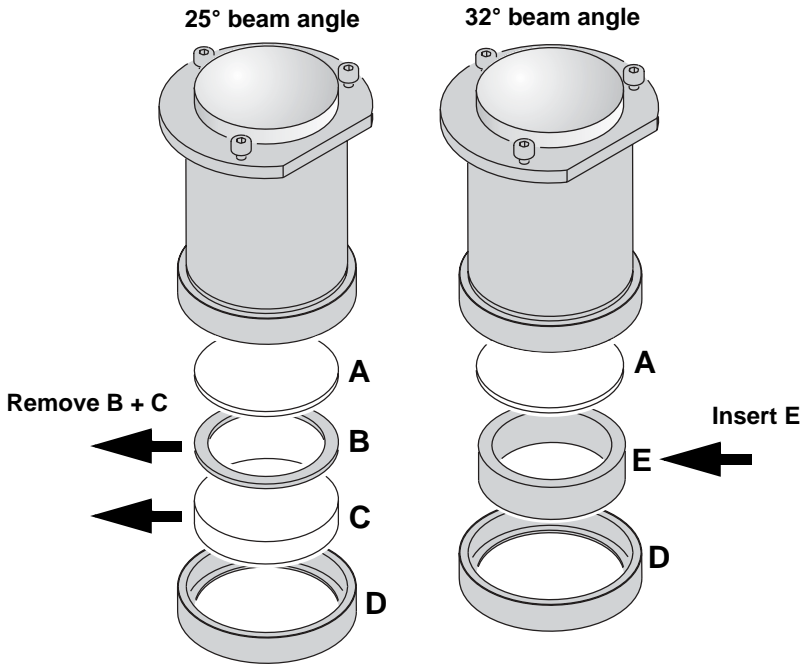
5. The lens module has a bayonet-type fitting. Working through the front aperture of the fixture, loosen – but do not remove – the three 2mm Allen bolts around the lens.



6. Working inside the fixture, grasp the lens module and twist it counterclockwise so that it is released from the mounting screws. Lift the lens module out of the fixture.



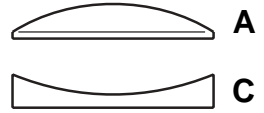
7. Prepare a soft cloth or similar device to catch components if they fall out of the lens module.
8. See illustration below. Open the lens module by unscrewing the retaining ring (D). To obtain a 32° beam angle, remove the concave lens (C) and thin spacer (B). Insert the thick spacer (E) supplied with the fixture and retighten the retaining ring (D).



9. Retain components B and C for possible future use.

LENS ASSEMBLY

When you open the Mania PR1 lens module, you may find out the hard way that it is easy to mix up the lenses. To reassemble the lenses correctly, see the illustration on the right and remember that:



- The flat surfaces must face towards the lamp
- The concave lens (C) must be placed closest to the lamp, and the convex lens (A) furthest away from the lamp.



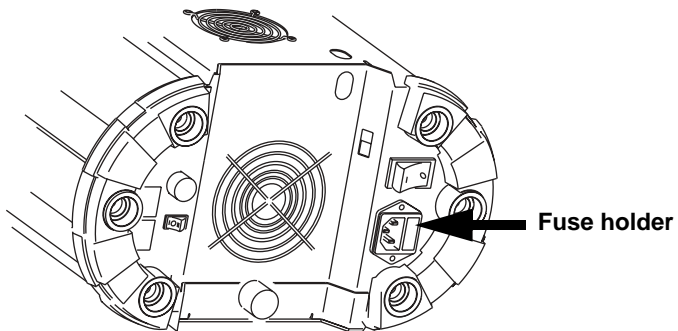
REPLACING THE MAINS FUSE

The Mania PR1 uses a time-delay fuse for protection against current overload. An indication that the fuse may have blown is that when power is applied and the lamp is switched on, no light is produced.

If the fuse blows repeatedly, there is a fault with the unit that requires service by a Martin technician.

Never bypass the fuse or replace it with one of another size or rating.

- 1 Unplug the mains cable from the input socket.
- 2 Pry open the fuse holder (located next to the mains power connector) with a flat-head screwdriver and remove the fuse.



- 3 Replace the fuse with one of the same type. The fuse rating is listed on the serial number label and in "Specifications" on page 24.
- 4 Replace the fuse holder.

TROUBLESHOOTING

5

problem	probable cause(s)	suggested remedy
No light	No power to the fixture	Check connections
	Blown fuse	If power is applied and the lamp is switched on, but does not light, then check and replace fuse if necessary.
	Burned out lamp	Install new lamp
	Fixture too hot	Allow to cool Improve air flow around fixture
No action	Electrical malfunction	Refer to a Martin service technician
Fuse blows repeatedly	Electrical malfunction	Refer to a Martin service technician

SPECIFICATIONS



PHYSICAL

Size without mounting bracket (LxWxH) . . .340x290x158 mm (13.4x11.4x6.2 in.)
Weight9 kg (19.8 lbs)

CONSTRUCTION

Housing steel and aluminum

THERMAL

Exterior surface temperature under steady state condition95°C (203°F)
Time required to cool before handling at least 20 minutes
Maximum ambient temperature (T_a) 40° C (104°F)

INSTALLATION

Minimum distance to flammable material 0.3 m (1ft)
Minimum distance to illuminated surface 1.0 m (3.3ft)
Minimum clearance around air vents 0.1 m (4in)

CONTROL

Gobo rotation direction manual switch
Gobo rotation speed dial
Remote control unit 4-fixture control with up to 10 m (33 ft) between each fixture

GOBO

Size D
Maximum image diameter 40 mm (1.6 in.)

COLOR FILTERS

Size 51 x 54 mm (2 x 2.1 in.)
Thickness 1.1-2 mm (0.05-0.08 in.)

PHOTOMETRICS

Beam angle 25°, configurable to 32°. Also 43° option.

ELECTRICAL

Input 3-prong IEC male socket
AC Power switch selectable, operating ranges 115-120 V / 220-240 V, 50-60 Hz
Main fuse 3.15 AT (time delay),

TYPICAL POWER AND CURRENT

115 V, 50 Hz	255 W, 2.1 A
115 V, 60 Hz	255 W, 2.2 A
120 V, 50 Hz	263 W, 2.2 A
120 V, 60 Hz	262 W, 2.2 A
220 V, 50 Hz	229 W, 1 A
220 V, 60 Hz	228 W, 1 A
230 V, 50 Hz	255 W, 1.1 A
230 V, 60 Hz	255 W, 1.1 A
240 V, 50 Hz	265 W, 1.1 A
240 V, 60 Hz	261 W, 1.1 A

INCLUDED ITEMS - US VERSION

2 m (6.5 ft) US mains cable 18AWG with US male connector (UL approved)
Philips 6958 24V 250W 10H lamp (1000 hours average life) . . . P/N 97000115
User manual
Blue-hued texture glass
Steel gobo with Martin logo
Red-hued texture glass (installed)
Remote control with 5 m (16.4 ft) RJ-45 cable
White glove with Martin logo

INCLUDED ITEMS - NON-US VERSION

3 m (9.8 ft) EU mains cable 3x1.0mm² with Schuko male connector
3 m (9.8 ft) EU mains cable 3x1.0mm² with no male connector
Philips 6958 24V 250W 10H lamp (1000 hours average life) . . . P/N 97000115
User manual
Blue-hued texture glass
Steel gobo with Martin logo
Red-hued texture glass (installed)
Remote control with 5 m (16.4 ft) RJ-45 cable
White glove with Martin logo

ACCESSORIES

Philips 6958 24V 250W 10H lamp (1000 hours average life) . . . P/N 97000115
Half-coupler clamp P/N 91602005
3.15 AT fuse P/N 05020013
UTP patch cable 5 m (16.4 ft) RJ-45 P/N 11840095
White glove with Martin logo P/N 50590002
43° beam angle converter

ORDERING INFORMATION

Mania PR1 US version P/N 90430031
Mania PR1 non-US version P/N 90430030

Martin

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