

# MH100 ILLUMINATOR

A PRODUCT OF DOLAN-JENNER INDUSTRIES

## Operation Manual



### Voltage Selection:

The MH100 illuminator operates at either 115 VAC 50/60 Hz. or 230 VAC 50/60 Hz. as ordered from the factory.

### Fiber Optic Connection

**Notice:** Do not operate the illuminator without the fiber optic connected to the illuminator.

Loosen the fiber optic nosepiece thumbscrew.

Insert the fiber optic into the illuminator nosepiece.

Tighten the thumbscrew by hand to make a secure connection to the fiber optic. **Use of pliers or other tools is not recommended.**

Two nosepiece styles are available with the MH100 series of fiber optic illuminators. A-type with a 0.985 in. (25mm) ID, or B-type with a 0.590 in. (15mm) ID smaller than the 0.985 in. ID.

### Operation

Insert the power cord into the power entry module at the rear of the illuminator. Next, insert the power cord into a 3 wire grounded AC power receptacle. **Use only approved power cord supplied with the illuminator.**

Press the ON(1)/OFF(0) rocker switch on the front panel to ON(1). The illuminator will light and is ready for service. **The Metal Halide Lamp may take three (3) to five (5) minutes to achieve full intensity. If the illuminator is turned Off, wait 10 to 15 minutes prior to turning the illuminator On again. The MH100 is rated to run continuously. Frequent OFF / ON cycling may reduce lamp life.**



### **WARNING ULTRAVIOLET LIGHT HAZARD**

**Always operate with fiber optic and UV/IR filter in place.  
Always remove power before replacing lamp.  
Never look into fiber optic port.  
Never defeat power interlock switch.**



## Lamp Intensity Control:

The base Model MH100 Illuminator uses a mechanical iris to vary the Illuminator intensity.

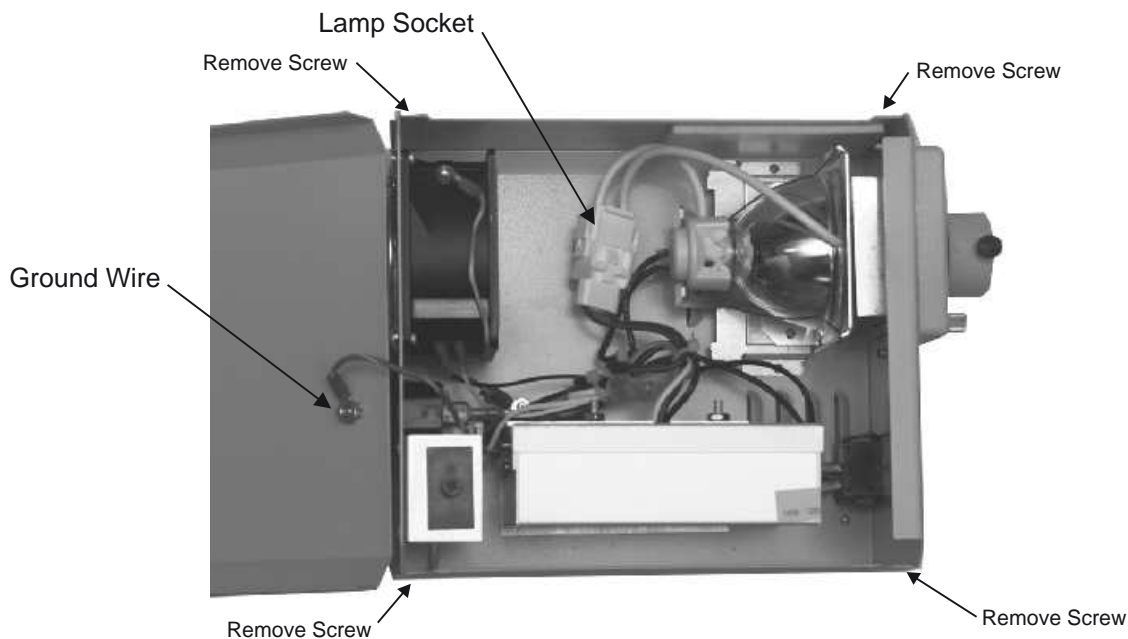


Manual Iris Lever for Intensity Control

**⚠ WARNING ⚠**  
**Risk of electrical shock.**  
**Remove power plug before lamp replacement and wait for hot lamp to cool.**

## LAMP REPLACEMENT:

1. Remove all AC power from the illuminator. .
2. Check the illuminator to verify that the chassis is cool before proceeding.
3. Remove the four screws holding the top cover to the chassis. Retain these screws to secure the top cover after lamp replacement.
4. Remove the top cover and set aside. There is a small wire attached to the top cover for grounding purposes. Do not disturb this wire.
5. Unplug the lamp power socket from the power supply connector. The plug is polarized to assure correct connection.
6. Lift and remove the lamp from the lamp holder by grasping the rear of the lamp adjacent to the lamp socket.
7. Remove the lamp from the socket by holding the lamp socket and gently pulling the lamp reflector.
8. Discard the lamp.
9. Insert the replacement lamp into the lamp socket. Be sure that the wire exiting the reflector is at the 12 o'clock position (straight up.) *CAUTION: Do not touch the interior of the lamp reflector, the lamp envelope or the lamp pins with your fingers. Touching the interior of the lamp reflector, the lamp envelope or the lamp pins will result in significant shortening of the lamp life. Handle the lamp only by the exterior of the reflector or the area adjacent to the pins.*
10. Repeat steps 1- 5 in reverse order.





## WARNING



*Replace the fuse with the correctly rated fuse as listed on the label on the back of the illuminator. Use of an improper fuse can create a hazardous situation.*

### FUSE REPLACEMENT:

1. Press the ON(1)/OFF(0) switch to the OFF(0) position.
2. Remove the AC line cord from the AC power receptacle.
3. Remove the AC line cord from the power entry module at the rear of the illuminator. The fuse drawer is part of the power entry module. The drawer is located directly beneath where the AC line cord plugs in.
4. Pull out the fuse drawer. Remove the blown fuse that is positioned closest to the illuminator and discard. The second fuse is the spare.
5. Place the replacement fuse into the fuse drawer. The fuse will work in either orientation.
6. Push the fuse drawer until it "clicks" into position.
7. Attach the AC line cord to power entry module at the rear of the illuminator. The illuminator is now ready for service.



Fuse Drawer

### Cleaning:

If necessary wipe exterior surfaces only with a soft cloth. Do not use fluids to clean the exterior of the illuminator. Under no circumstances allow fluids of any kind to enter the illuminator.

### Replacement Parts

Part No.	Description
68600903098	Fuse, 5A, 5 x 20, 250 V, fast blow
686009-03099	Fuse, 3.15A, 5 x 20, 250 V, fast blow
686009-03100	Lamp, Metal Halide 100W

*Only above parts are replaceable. Return illuminator to factory for warranty service. Attempts to replace other parts voids warranty.*

### PERFORMANCE STATEMENT

**Dolan-Jenner Industries, Inc. (DJI)** recognizes that its illuminator products may be used under an almost unlimited variety of conditions. As such, we are prepared to assist the customer in the selection and application of any of these products. This includes application engineering, sample testing and other means as determined by DJI.

Where DJI has made specific recommendations for its products, systems, or detection techniques (based on complete and detailed information furnished by the customer) we will extend every effort to assure that the customer is satisfied with the performance of our products. Continual development and improvement of DJI products may require changes in details that do not coincide with descriptions or illustrations shown. All fiber optic bundle diameters are nominal.

## DOLAN-JENNER WARRANTY ON METAL HALIDE LIGHT SOURCES

DOLAN-JENNER INDUSTRIES warrants this product to be free from defective material and workmanship for a period of three(3) years . Any light source or parts thereof which are determined by DOLAN-JENNER INDUSTRIES to be defective within three(3) years from shipment date will be replaced or repaired at our option. This warranty specifically excludes lamps, lamp sockets and terminals and optical filters.

Any products which, in our opinion, have been subjected to misuse, incorrect wiring, or where installation procedures are not in accordance with the instruction manual, are excluded from this warranty. Nor does this warranty extend to products on which repairs or alterations have been made outside the factory, or on which the identification or serial number has been altered or to accessories not of our manufacture.

Our obligation with respect to products or parts covered by this warranty shall be limited to repair or replacement, F.O.B., Boxborough, MA. In no event shall DOLAN-JENNER INDUSTRIES be held liable for consequential or special damages, or for transportation, installation, adjustment, or other expenses which may arise in connection with such products or parts. This warranty is in lieu of all other statements or warranties or guarantees, written or implied, by DOLAN-JENNER INDUSTRIES or its authorized representatives.

**Important: Please contact factory for a return authorization number prior to shipping merchandise to factory.**

### TECHNICAL DATA

Lamp	100 W Metal Halide
Voltages	115 VAC 50/60 Hz or 230 VAC 50/60 Hz. (Factory Set)
Power Consumption	200 W
Lamp Life	approx. 6,000 Hours
Fuse	5 Amp, 250V, fast blow, 5 x 20 mm      115 VAC Model 3.15 Amp, 250 V, fast blow, 5 x 20 mm      230 VAC Model
Color Temperature	6000° Kelvin .
Dimensions	4.6 H x 7.25 W x 9.5 D (inch) 11.7 H x 18.4 W x 24.1 D (cm)
Weight	12 lbs. (5.5 kg.)
Max. Housing Temp.	20°C above ambient

### **Environmental Conditions Use Specifications**

Type of Use	Indoor at max. altitude of 2,000 M
Installation Category	I
Temperature Range	5°C to 40°C
Relative Humidity @ 40° C	80% maximum up to 31° C decreasing linearly to 50% relative humidity
Pollution Degree	1

**NOTICE: if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.**

### **Corporate Headquarters and Factory:**

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