

# NovaFlex

High intensity source for fiber optic illumination



#### WORLD PRECISION INSTRUMENTS, INC.

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#### DECLARATION OF CONFORMITY

We: World Precision Instruments, Inc.

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USA

as the manufacturers of the apparatus listed, declare under sole responsibility that the product(s):

Title: NOVA-Z

to which this declaration relates is/are in conformity with the following standards or other normative documents:

Safety: EN 61010-1:1993 (IEC 1010-1:1990)

EMC: EN 50081-1:1992

EN 50082-1:1992

and therefore conform(s) with the protection requirements of Council Directive 89/336/EEC relating to electromagnetic compatibility.

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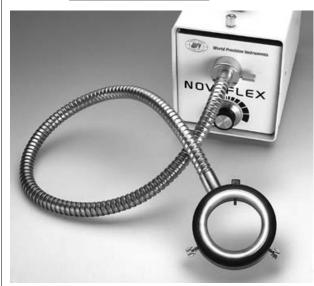
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# **INSTRUCTION MANUAL**

Serial No.\_\_\_\_\_



180412

**World Precision Instruments** 

### INTRODUCTION

The NOVAFLEX Fiber Optic Illuminator provides reliable, uninterrupted high-intensity light for microscopes and fiber optic spectrometers. This widely used halogen light source allows a continuous range of subdued or concentrated lighting controlled by a rotary dimmer on the front panel. NOVAFLEX may be used with a ring light and single or bifurcated flexible fiber bundles, enabling the light beam to be placed exactly where it is needed. Forced air cooling prolongs lamp life. The EJA lamp color temperature is 3350°K. An interlock switch automatically cuts off power when the front panel is opened to replace the bulb.

# Unpacking

Upon receipt of this instrument, make a thorough inspection of the contents and check for possible damage. Missing cartons or obvious damage to cartons should be noted on the delivery receipt before signing. Concealed damage should be reported at once to the carrier and an inspection requested. Please read the section entitled "Claims and Returns." Please contact WPI Customer Service if any parts are missing at 941.371.1003 or customerservice@wpiinc.com.

Returns: Do not return any goods to WPI without obtaining prior approval (RMA # required) and instructions from WPI's Returns Department. Goods returned (unauthorized) by collect freight may be refused. If a return shipment is necessary, use the original container, if possible. If the original container is not available, use a suitable substitute that is rigid and of adequate size. Wrap the instrument in paper or plastic surrounded with at least 100mm (four inches) of shock absorbing material. For further details, please read the section entitled "Claims and Returns."

# **OPERATING INSTRUCTIONS**

- 1. Remove the illuminator from the shipping container, checking that all parts on the packing list have been received.
- Loosen the small metal knurled knob on the top front of the instrument The front panel will open partially to permit inspections of the lamp. Verify that the lamp is properly seated and in full contact with the lampholder contact springs. Close the panel and re-tighten the knurled knob, otherwise the illuminator will not operate.
- 3. Plug the illuminator's 3-prong AC power cord into a 3-prong grounded receptacle. The unit is now ready for operation.
- 4. Turn the large black knob on the front panel in a clockwise direction. A click will indicate that the power is ON. This same knob also controls the light intensity so that when it is rotated to its extreme clockwise position, the light is at its brightest. Extreme counterclock-

- wise rotation decreases the brightness and also shuts off the power.
- 5. The metal receptacle above the intensity control has an inside diameter of 5/8-inch and accommodates NOVAFLEX fiber light guides. Insert the light guide to be used into the aperture and tighten the knurled screw on the receptacle to hold the guide firmly.
- 6. To replace the bulb, shut off the power and remove the AC power cord from the outlet. Although the power is automatically shut off by a protective slide switch when the front panel is opened, removing the AC cord is a precautionary measure. A short wire lever is located to the left of the bulb. Push this lever upward and the bulb glides up from its holder. Pull the socket away from the back of the bulb. To insert a new bulb, put the lever back in its original position, hold the lamp so that the two pins line up with the two holes in the socket. Firmly press the socket to the back of the bulb until the pins are fully seated, then press the bulb down until it is properly mounted in the holder.
- 7. Close the front panel, re-tighten the knurled knob, plug the AC power cord into the power outlet and the illuminator is again ready for operation.

**NOTE**: This unit is equipped with either a circuit breaker. The circuit breaker trips if a problem occurs. If this happens, wait until the circuit breaker cools down before attempting to reset it by pushing the plunger back in. If the breaker continues to trip, there is a short and the problem must be fixed by a qualified technician.



**CAUTION**: DO NOT ATTEMPT TO OPEN THE CIRCUIT BREAKER IF IT DOES NOT OPEN. DOING SO WILL CAUSE PERMANENT DAMAGE TO THE CIRCUIT BREAKER.

# **SPECIFICATIONS**

Lamp	150W quartz halogen
Size	24 x 13 x 16cm (9.375 x 4.75 x 6.25 in.)
Power	115 VAC, 50/60Hz, 3A
Weight	4.8kg (9 lb.)

# **ORDERING INFORMATION**

NOVA NOVAFLEX Fiber Optic Illuminator (115V, 60Hz)
NOVA-Z NOVAFLEX Fiber Optic Illuminator (230V, 50Hz)

# **Light Guides and Accessories**

500186 Bifurcated Light Guide (with lenses)

**R-8-8-WPI-01** Ring Light Guide for PZM (Requires adapter #13338

for use with PZM stereo microscopes)

**SI-72-8** Flexible Light Guide, 72 in. (183 cm) **SI-40-8** Flexible Light Guide, 40 in. (102 cm)

**L-32-32** Lens for SI-40-8

5475 Adapter for SMA-terminated Fiber Optic Cables

**EJA** Replacement Bulb, 150W, 40 hour lamp

#### WARRANTY

WPI (World Precision Instruments, Inc.) warrants to the original purchaser that this equipment, including its components and parts, shall be free from defects in material and workmanship for a period of one year from the date of receipt. WPI's obligation under this warranty shall be limited to repair or replacement, at WPI's option, of the equipment or defective components or parts upon receipt thereof f.o.b. WPI, Sarasota, Florida U.S.A. Return of a repaired instrument shall be f.o.b. Sarasota.

The above warranty is contingent upon normal usage and does not cover products which have been modified without WPIs approval or which have been subjected to unusual physical or electrical stress or on which the original identification marks have been removed or altered. The above warranty will not apply if adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, air conditioning, humidity control, or causes other than normal and ordinary usage.

To the extent that any of its equipment is furnished by a manufacturer other than WPI, the foregoing warranty shall be applicable only to the extent of the warranty furnished by such other manufacturer. This warranty will not apply to appearance terms, such as knobs, handles, dials or the like.

WPI makes no warranty of any kind, express or implied or statutory, including without limitation any warranties of merchantability and/or fitness for a particular purpose. WPI shall not be liable for any damages, whether direct, indirect, special or consequential arising from a failure of this product to operate in the manner desired by the user. WPI shall not be liable for any damage to data or property that may be caused directly or indirectly by use of this product.

#### Claims and Returns

Inspect all shipments upon receipt. Missing cartons or obvious damage to cartons should be noted on
the delivery receipt before signing. Concealed loss or damage should be reported at once to the carrier
and an inspection requested. All claims for shortage or damage must be made within 10 days after receipt
of shipment. Claims for lost shipments must be made within 30 days of invoice or other notification of
shipment.

Please save damaged or pilfered cartons until claim settles. In some instances, photographic documentation may be required. Some items are time sensitive; WPI assumes no extended warranty or any liability for use beyond the date specified on the container.

- WPI cannot be held responsible for items damaged in shipment en route to us. Please enclose
  merchandise in its original shipping container to avoid damage from handling. We recommend that you
  insure merchandise when shipping. The customer is responsible for paying shipping expenses including
  adequate insurance on all items returned.
- Do not return any goods to WPI without obtaining prior approval and instructions (RMA#) from our returns department. Goods returned unauthorized or by collect freight may be refused. The RMA# must be clearly displayed on the outside of the box, or the package will not be accepted. Please contact the RMA department for a request form.
- · Goods returned for repair must be reasonably clean and free of hazardous materials.
- A handling fee is charged for goods returned for exchange or credit. This fee may add up to 25% of the sale price depending on the condition of the item. Goods ordered in error are also subject to the handling fee.
- Equipment which was built as a special order cannot be returned.
- ullet Always refer to the RMA# when contacting WPI to obtain a status of your returned item.
- For any other issues regarding a claim or return, please contact the RMA department

# Warning: This equipment is not designed or intended for use on humans.

\* Electrodes, batteries and other consumable parts are warranted for 30 days only from the date on which the customer receives these items.