M77358



150 Long Beach Boulevard Stratford, CT 06615 Phone: (203) 377-8282 (800) 714-5393 Fax: (203) 378-2457 E-MAIL: oriel.sales@newport.com

# FLANGED FIBER BUNDLE COUPLER

# **MODEL 77358**

**USER MANUAL** 

Please read these instructions completely before operating this equipment. The specification and operating instructions apply only to the model(s) covered by this manual. If there are any questions or problems regarding the use of this equipment, please contact Newport or the representative from whom this equipment was purchased. 11/14/03

## I. INTRODUCTION

The Model 77358/77359 couples the rectangular end of a 77538 (glass) or 77539 (fused silica) fiber bundle to a flanged fitting such as the 77330 focusing lens assembly. The latter will focus the bundle's image into other optical components such as sample cells or monochromators. You may couple the glass bundles in this way directly to the monochromator slit. You will need the spacer tube as well to most effectively couple the fused silica bundle to the monochromator.

# I.1. COUPLING THE BUNDLE TO A MONOCHROMATOR WITH THE 77330

The following shows the components needed to couple either bundle type to a monochromator. (See Figure 1)

Bundle Type	Lens for 77330	Coupling 77358 to 77330
77538	39211	Direct
Glass Bundle	(f.l.= 20mm)	(no spacer tube)
77539	39313	Spacer Tube
Fused Silica	(f.l.= 32mm)	

## I.2. ASSEMBLING THE SYSTEM

- 1. Remove the lens barrel from the 77330. You do this by unscrewing the adjusting lever and pushing the barrel out of the housing.
- 2. Unscrew the lens retaining ring, remove the spacer and place the lens into the barrel, being careful not to leave fingerprints on the lens. Replace the spacer and screw the retaining ring down against the spacer.
- 3. Replace the lens barrel in the 77330 housing with the lens end nearest the male end of the housing. Screw the adjusting lever into the threaded hole which is nearest the center of the barrel.
- 4. If the fused silica bundle is being used, attach the spacer tub to the 71358 as shown. Tighten the three set screws to lock the two pieces together.
- 5. Attach the 71358 (and spacer tube, if required) to the 77330. Tighten the three set screws to lock them together.
- 6. Attach the whole assembly to the monochromator's slit holder and tighten the three set screws to hold it in place.
- 7. Set the adjusting lever at approximately the middle of its range. After the system is in operation, you may adjust the lever to optimize the output.

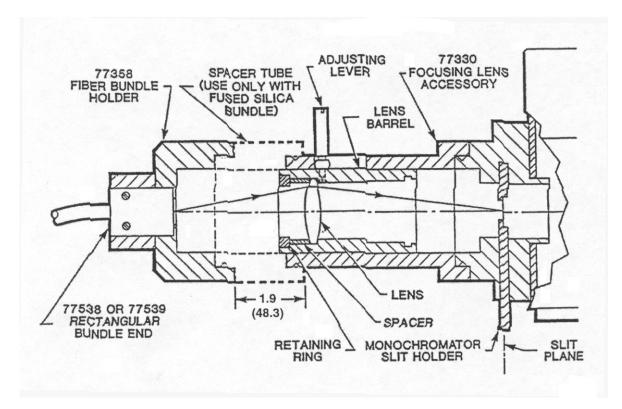


Figure 1 Coupling the Fiber Bundle to the Monochromator with the 77358 and 77330.

### **II. WARRANTY AND RETURNS**

Newport warrants that all goods described in this manual (except consumables such as lamps, bulbs, filters, ellipses, etc.) shall be free from defects in material and workmanship. Such defects become apparent within the following period:

- All products described here, except spare parts: one (1) year or 3000 hours of operation, whichever comes first, after delivery of the goods to the buyer.
- 2. Spare parts: ninety (90) days after delivery of goods to the buyer.

Newport's liability under this warranty is limited to the adjustment, repair and/or replacement of the defective part(s). During the above listed warranty period, Newport shall provide all materials to accomplish the repaired adjustment, repair or replacement. Newport shall provide the labor required during the above listed warranty period to adjust, repair and/or replace the defective goods at no cost to the buyer ONLY IF the defective goods are returned, freight prepaid, to a Newport designated facility. If goods are not returned to Newport, and the user chooses to have repairs made at their premises, Newport shall provide labor for field adjustment, repair and/or replacement at prevailing rates for field service, on a portal-to-portal basis.

Newport shall be relieved of all obligations and liability under this warranty of:

- The user operates the device with any accessory, equipment or part not specifically approved or manufactured or specified by Newport unless buyer furnishes reasonable evidence that such installations were not the cause of the defect. This provision shall not apply to any accessory, equipment or part, which does not affect the safe operation of the device.
- The goods are not operated or maintained in accordance with Newport's instructions and specifications.
- 3. The goods have been repaired, altered or modified by other than authorized Newport personnel.
- Buyer does not return the defective goods, freight prepaid, to a Newport facility within the applicable warranty period.

IT IS EXPRESSLY AGREED THAT THIS WARRANTY SHALL REPLACE ALL WARRANTIES OF FITNESS AND MERCHANTABILITY. BUYER HEREBY WAIVES ALL OTHER WARRANTIES, GUARANTEES, CONDITIONS OR LIABILITIES, EXPRESSED OR IMPLIED, ARRISING BY LAW OR OTHERWISE, WHETHER OR NOT OCCASIONED BY NEWPORT'S NEGLIGENCE. This warranty shall not be extended, altered or varied except by a written document signed by both parties. If any portion of this agreement is invalidated, the remainder of the agreement shall remain in full force and effect.

#### **CONSEQUENTIAL DAMAGES**

Newport shall not be responsible for consequential damages resulting from misfunctions or malfunctions of the goods described in this manual. Newport's total responsibility is limited to repairing or replacing the misfunctioning or malfunctioning goods under the terms and conditions of the above described warranty.

#### INSURANCE

Persons receiving goods for demonstrations, demo loan, temporary use or in any manner in which title is not transferred from Newport, shall assume full responsibility for any and all damage while in their care, custody and control. If damage occurs, unrelated to the proper and warranted use and performance of the goods, recipient of the goods accepts full responsibility for restoring the goods to their condition upon original delivery, and for assuming all costs and charges.

#### RETURNS

Before returning equipment to Newport for repair, please call the Customer Service Department at (203) 377-8282. Have your purchase order number available before calling Newport. The Customer Service Representative will give you a Return Material Authorization number (RMA). Having an RMA will shorten the time required for repair, because it ensures that your equipment will be properly processed. Write the RMA on the returned equipment's box. Equipment returned without a RMA may be rejected by the Newport Receiving Department. Equipment returned under warranty will be returned with no charge for the repair or shipping. Newport will notify you of any repairs not covered by the warranty, with the cost of the repair, before starting the work.

Please return equipment in the original (or equivalent) packaging. You will be responsible for damage incurred from inadequate packaging, if the original packaging is not used.

Include the cables, connector caps and antistatic materials sent and/or used with the equipment, so that Newport can verify correct operation of these accessories.