

READ THIS SECTION FIRST!

Laser Safety Information



CAUTION

This system is designed to be used with a class II diode laser with an output of up to 1 mW of visible radiation at 670 nm. The aperture in the AFM scanning head is labeled with the logotype (shown below). DO NOT stare directly into the laser beam. To ensure safe operation, the scanner must be operated and maintained in accordance with the instructions included with the laser. The laser must only be powered by a controller that includes an on/off switch, such as the PicoScan controller. DO NOT attempt to make any adjustments to the laser, the laser's electronics, or optics. If laser malfunction is suspected, immediately return the scanner to MOLECULAR IMAGING for repair or replacement; there are no user-serviceable parts.



WARNING

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous light exposure. Furthermore, the use of optical instruments with this product may increase eye hazard.

In accordance with federal FDA requirements, the following laser precaution is affixed to the scanner:



Caution statements will identify conditions or practices that could result in damage to the PicoScan equipment, other property, and in some cases, possible personal injury.

Power Supply



CAUTION

It is not necessary to open the PicoScan Controller to make changes to the power supply. However, the power cord should always be unplugged before making any adjustments to the power source. The PicoScan Controller has several different power supply options available. The input voltages available are $100/120/220/240 \, \text{V}_{\sim}$. The maximum current ratings for the PicoScan Controller are $10/8/5/4 \, \text{Amps}$.

PROCEDURE FOR CHANGING INPUT VOLTAGE

- 1. Unplug the power cord from the PicoScan Controller.
- 2. Remove the fuse holder located on the back of the controller.
- 3. Underneath where the fuse holder was located is the input voltage control switch.
- 4. Pull out the switch and rotate it to the desired input voltage 100/120/220/240V.
- 5. Reinsert the voltage switch with the desired voltage.
- 6. Replace the fuse holder.



Piezo Scanner Precautions



IMPORTANT

It is important to note that piezo scanners are, by nature, very FRAGILE pieces of equipment. The piezo material that does the scanning is a ceramic and is consequently quite easily broken. Dropping a piezo scanner will result in damage to the scanner that can only be repaired by completely replacing the scanner piezo core. This can be an expensive and time-consuming process and so it is advised that the utmost care is used when handling the scanners. Molecular Imaging recommends that the scanners be stored in the padded scanner case that was supplied with the scanner and that the scanner be kept in a dry environment when not in use. Piezo scanners also perform better with consistent use. If a scanner is not used for some time it may require a short period of use before the scan range is stable and the calibration is correct. It may also be necessary to recalibrate the scanner from time to time. The calibration can be verified using a calibration standard and adjustments can be easily made using the calibration tools available in PicoScan.

General Care Requirements



IMPORTANT

SPM equipment is sensitive scientific equipment. Care must be used when handling all parts. When removing scanners from the microscope ensure that all cable connections to the scanner are disconnected. This includes cables for photo-diode detectors. Also, the photo-diode detector should be removed from the scanner prior to the removal of the scanner from the microscope.

All equipment, especially the sample plates and scanner nose modules should be kept clean and free from contamination when not in use. It is recommended, to prolong the life of these items, that after use all sample stages and noses are cleaned thoroughly and dried off prior to storage. Cleaning can be done using an organic solvent. Please refer to the appropriate sections of the manual for further information regarding the proper cleaning of equipment.

Disclaimers

This User's Manual, as well as the hardware herein described, is licensed and can only be used in compliance with such terms and agreements as entered in by MOLECULAR IMAGING. Users of these products understand, except where permission is given by MOLECULAR IMAGING by said license, no part of this manual may be copied, transmitted, stored in a general retrieval system, in any form or means, electronic, or mechanical, without prior written permission of MOLECULAR IMAGING. Information contained herein this User's Manual is for general information use only. Information is subject to change without notice. Information should not be construed as a commitment by MOLECULAR IMAGING. Furthermore, MOLECULAR IMAGING assumes no responsibility or liability for any misinformation, errors, or general inaccuracies that may appear in this manual.



Molecular Imaging Product Warranty

Molecular Imaging (MI) warrants that products manufactured by MI shall be free of defects in materials and workmanship for the warranty period, which commences on the date of shipment from MI. MI tests the performance of each unit as part of its final test procedure, prior to shipment from its factory. MI warrants that the unit meets MI's published specifications at time of shipment from its factory. For a period of one year after shipment to Customer, the MI product warranty provides parts (excluding all normal consumable, wear, and maintenance items) and labor. Warranty repair will be done on a return to MI factory basis, with the shipping party responsible for its shipping costs. If the Customer requests on-site service, MI's service labor rate for travel in effect at the time of the request and the actual travel expenses will be invoiced to and paid net 30 days by the Customer. A purchase order from the Customer is required in advance to schedule on-site service.

MI will warrant instruments, parts and accessories not manufactured by MI, for the specific items and periods in accordance with the terms provided by the warranty received by MI from the Original Equipment Manufacturer. All such warranties extended by MI are limited in accordance with all the terms, conditions, and other provisions stated in the Original Equipment Manufacturer's warranty. MI makes no warranty whatsoever concerning products or accessories not of its manufacture, except as noted above.

CUSTOMER RESPONSIBILITIES

The Customer bears the following responsibilities with regard to maintaining a valid warranty. Failure to comply with any of the following will automatically void the warranty. The Customer shall:

- 1. Perform the routine maintenance procedures at the required intervals as specified in MI's operating manuals.
- 2. Use MI replacement parts.
- 3. Use MI or MI-approved consumables.
- 4. Provide MI authorized service representative's access to the products during normal MI working hours during the warranty period to perform service.
- 5. Provide adequate and safe working space around the products for servicing by MI authorized representatives.
- 6. Provide access to and use of all information and facilities determined necessary by MI to service and/or maintain the products. Insofar as these items may contain proprietary or classified information, the Customer shall assume full responsibility for safeguarding and protecting them from wrongful use.

REPAIRS AND REPLACEMENTS

MI will, at its option, either repair or replace defective instruments or components with conforming goods. Repair or replacement of products or parts under warranty does not extend the original warranty period. With the exception of consumable and maintenance items, the replacement parts or products used on instruments out of warranty are themselves warranted to be free of defects in materials and workmanship for 90 days.

Any products or parts returned to MI for evaluation or repair shall have MI's prior approval, with the Customer requesting a Returned Goods Authorization approval (RMA). This RMA and the associated RMA number may be obtained from MI Service or directly from MI's Phoenix, AZ facility at (480) 753-4311. If the item is not under warranty, to obtain a RMA, the Customer must provide, at the time of the request for the RMA, a Purchase Order (PO) for the repair. If the item is under warranty and the Customer is requesting an expedited exchange, as may be the case for the printed circuit board where MI ships a replacement part prior to receiving the Customer's returned part; a PO will be required. MI will issue a credit against this PO upon receipt of the item as returned in accordance with the RMA instructions. The returned item should be shipped prepaid by the Customer with the RMA number clearly marked on the exterior of the shipping container and on the enclosed shipping documents. If the returned item is under warranty and repaired, return shipping will be prepaid by MI. If the returned item is not under warranty, all return shipping costs will be charged to the Customer.

WARRANTY LIMITATIONS

The warranty does not cover:

- 1. Parts and accessories, which are expendable or consumable in the normal operation of the instrument.
- 2. Any loss, damage, and/or instrument malfunction resulting from shipping or storage, accident (fire, flood, or similar catastrophes normally covered by insurance), abuse, alteration, misuse, neglect, or breakage or abuse of parts by Customer.
- 3. Operations other than in accordance with correct operational procedures and environmental and electrical specifications.
- 4. Performance to specifications or safety of use if the unit is physically installed on, used in conjunction with, or used as part of a third party's equipment that is not approved or supplied by MI or is not installed by a MI authorized service engineer.
- 5. Performance to specifications or safety of use as a result of the use of MI's equipment with that of a third party due to the third party's product design.
- 6. Modification of, or tampering with, the products or parts.
- 7. Improper or inadequate care, maintenance, adjustment, or calibration by Customer.
- 8. Customer-induced contamination.
- 9. Any loss, damage, and/or instruments malfunction resulting from use of Customer-supplied software, hardware, interfaces, or consumables other than those specified or approved by MI.

WARRANTY EXCLUSIONS

In the course of normal use and maintenance, certain parts have finite lifetimes. For this reason, the consumables, wear, and maintenance parts as specified in MI's operating manuals carry a 90-day warranty unless otherwise specified.

POST WARRANTY PERIOD SUPPORT AND PRODUCT OBSOLESCENCE

After the expiration of the warranty period described above, MI will provide service support for MI manufactured products at MI's service labor rates and parts pricing in effect at the time of the repair. MI will continue to provide billable service support for the products for a period of three years after discontinuance or design obsolescence by MI. After this three-year period, service support will be offered at the sole discretion of MI.



LIABILITY LIMITATIONS

THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER EXPRESSED OR IMPLIED WARRANTIES, INCLUDING (BUT NOT LIMITED TO) WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES WILL MOLECULAR IMAGING BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFIT) OR LOSS OF ANY KIND, WHETHER BASED ON WARRANTY, CONTRACT, TORT, OR ANY OTHER LEGAL THEORY. THE LIMITS OF MOLECULAR IMAGING'S LIABILITY IN ANY DISPUTE SHALL BE THE PRICE RECEIVED FROM THE PURCHASER FOR THE SPECIFIC EQUIPMENT AT ISSUE. THE LAWS OF THE STATE OF ARIZONA APPLY TO ALL ASPECTS OF THIS WARRANTY.

Effective November 11, 2004

Packing Materials

Do not discard the packing materials. Please retain the materials used to ship Molecular Imaging components, as they will be required for any future service needs that may arise. The use of unapproved shipping materials may delay or void service.

Despite the care taken in packing shipped orders, small bags or parts can slip among packing materials while in transit.

Contact Information

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