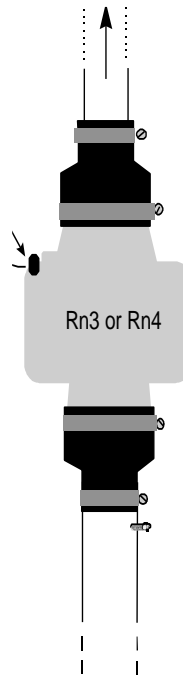
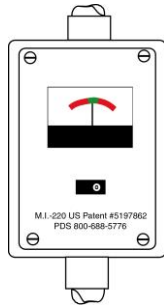




PROFESSIONAL DISCOUNT SUPPLY

**INSTALLATION INSTRUCTIONS FOR THE METER INDICATOR-Rn3/4 SYSTEM**



**Description of System:** The system consists of one (1) Power Source/Indicator Box and one (1) matching Rn3 or Rn4 fan. This system is typically used in applications where a watertight NEMA 4 box is advantageous. It is also used in applications where it is desirable to have an indication as to whether the fan is still performing in the manner in which it was originally installed. The M.I.-Rn3 or Rn4 system provides both of these features.

The M.I.-Rn3 or Rn4 system is designed to be a part of a ventilation, depressurization, or exhaust system where non-explosive or non-flammable air mixtures will be encountered. The manufacturer cannot make any representations as to the entire system of which the M.I.-Rn3 or Rn4 and fan are integral parts, since they are designed and installed by others. For proper installation of the Rn3 or Rn4 fan, refer to Fantech's installation and maintenance instructions. Note, since the fan motor is isolated within a plastic housing, grounding of the fan is not necessary.

Fan Model	Volts	Wattage Range	Max Amps	CFM vs. Static Pressure in Inches W.C.>								Max. Ps	
				0"	0.5"	0.75"	1.0"	1.25"	1.5"	1.75"	2.0"		

MI												
Rn3	115	85-152	1.30	344	260	226	193	166	137	102	58	2.46"
Rn4	115	85-180	2.1	552	500	486	436	381	361	322	285	4.3"

### **MI-Rn3 or Rn4 Indicator Adjustment**

After final installation of system ductwork, fan, power supply, and wiring, the system should be ready to turn on. Plug in the 6 foot electrical cord directly into a 120 volt AC wall socket, and turn on the switch located on the main MI-Rn3 or Rn4 panel.

When the fan is energized, the needle of the indicator on the face of the MI-Rn3 or Rn4 box will move to the right. After the fan has come up to speed (10 minutes), and the system has come to equilibrium, the needle should be adjusted so that it is centered on the line saying "Initial Installation" located on the face of the meter. The needle is adjusted by rotating the screw on the face of the meter with a screwdriver. Look at the needle after adjustment to make sure that any magnetism in the screwdriver has not affected the needle position. If so, readjust until the needle is centered when the screwdriver is removed. Deviations in the air flow of the system will cause the needle to move to either side of the centerline of the indicator, which will alert the building occupant to a potential problem.

It is important to note that the system should be fully installed prior to indicator adjustment. If modifications are made to the system that would affect the "normal" system airflow, the meter can be re-adjusted as described above.

DO NOT ADJUST Rn4 Internal Speed Control below 7/10 speed or Meter Indicator will not function properly

**READ AND SAVE THESE INSTRUCTIONS**  
**MI-Rn3 or Rn4 - Fan & Indicator Trouble Shooting Guide**

If the Indicator needle moves to the right of center "Initial Installation Line":

This is caused when *more* air is being handled by the fan than it did when it was originally installed.

Check for leaks in the ductwork system.

If Indicator needle moves to the left of center "Initial Installation Line":

This is caused by *less* air being handled by the fan than it did when it was originally installed

- Check for any restrictions to air flow in the suction and discharge ductwork
- Check for obstructions in the fan ( see Safety Caution below).  
If Indicator needle is far to the left and not moving:  
This is caused by a disruption in the power to the fan:
- Check to see that MI-Rn3 or Rn4 box is plugged into The 120 volt receptacle.
- Check the switch of the MI-Rn3 or Rn4 box. This is the main power switch is on the main panel

If the switch causes the main circuit breaker to trip, unplug the unit and call the installer for service.

With the switch in the OFF position, unplug the MI-Rn3 or Rn4 box. Remove and inspect the fan for obstructions such as debris or ice. If ice is entering the fan contact the installer about installing a Hydro-Sep™ device.

- Check wiring between the MI-Rn3 or Rn4 box and the fan. If broken, contact installer.
- Check the fan to see if it is turning. if not, the fan may be non-functional Contact

the installer or manufacturer. If the system is to be removed for warranty repairs, disconnect both the MI-Rn3 or Rn4 box and the MI-Rn3 or Rn4 fan. Call for a return authorization number.

**SAFETY CAUTION:** Before servicing or removing fan, disconnect the MI-Rn3 or Rn4 box and the cable to the fan.

## **INSTRUCTIONS CONNECTING CONDUIT**

### **WARNING**

This composite enclosure does not automatically provide grounding between conduit connections. Use of grounding bushing and jumper wires as part of the installation.

1. When connecting conduit to this enclosure, only use UL listed or recognized conduit hubs that have the same environmental type rating as the enclosure.
2. Conduit hubs must be connected to the conduit before being connected to the enclosure.
3. This enclosure must be mounted using the mounting holes located in the base external to the equipment cavity.

## **GROUNDING OF EQUIPMENT AND CONDUIT**

### **WARNING**

To avoid electric shock, grounding must be installed by the customer as part of the installation. Non-metallic enclosures do not provide grounding between conduit connections.

Ground in accordance with the requirements of the National Electrical Code.

Conduit hubs for metallic conduit must have a grounding bushing attached to the hub on the inside of the enclosure. Grounding bushing has provisions for connection of a grounding wire.

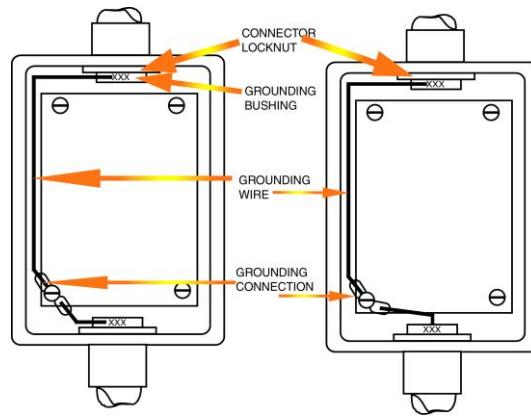
Non-metallic conduit and hubs require the use of a grounding wire in the conduit. Grounding bushings are not required.

System grounding is provided by connection wires from all conduit entries to the sub panel or to other suitable point, which provides continuity. Any device having a metal portion or portions extending out of the enclosure must also be properly grounded.

### **TYPICAL GROUNDING ILLUSTRATIONS**

#### **METALLIC CONDUIT**

#### **NON-METALLIC CONDUIT**



## M.I.-Rn3 or Rn4 SYSTEM WARRANTY

Congratulations. You are the owner of a M.I.-Rn3 or Rn4 from KT Ventures a wholly owned subsidiary of Professional Discount Supply, a pioneer in the packaged fan industry. PDS is proud of this system and its durability. PDS warrants the power control box against defects in workmanship, which existed when the power control box was manufactured. Which would result in failure of the fan to operate for a period of **one year** from the date of purchase noted on the original invoice. The holder of this warranty should verify that the system has been installed correctly by reading the installation instructions.

### **THIS WARRANTY APPLIES ONLY IF THE FOLLOWING PRECAUTIONS ARE TAKEN:**

- Packaged fan must be installed in strict compliance with the installation instructions, including vertical mounting of fan.
- If the duct system (to which the fan is attached) is exhausted outside, a screen of no larger than 1/4 inch must be installed on the exhaust to prevent entry of extraneous materials and small animals.
- The M.I.-Rn3 or Rn4 Power control box must not be installed in a hazardous environment.
- For 3-year **warranty on the Fantech Rn3 or Rn4- fan**, see attached copy of the Fantech installation and maintenance instructions.
- ***The MI-Rn3 or Rn4 control box must retain its NEMA-4 integrity at all times;*** in order to maintain its warranty. Any modifications made must conform to the NEMA-4 rating. This includes conduit connections. Conduit connections should be, entirely sealed, by means of a hermetic connector, seals, caulking, or other approved methods.

This warranty further does not apply to damage that may have occurred during the shipping of this system. Claims due to this type of damage should be made directly to the shipper

If the fan is mounted outside in climatic conditions where freezing condensation would result in ice entering the system ductwork, a means for condensation removal should be included in the system installation.

### **RETURN POLICY**

Should a defect occur within the warranty period of this system, the warranty holder must call PDS for a RMA # before returning the unit in its entirety to the address shown below at holders cost. PDS will repair

or replace the system after a determination has been made that the above exceptions to warranty coverage do not apply. Once PDS has determined that the unit is under warranty, it shall repair or replace the equipment and ship the functioning unit to the warranty holder. PDS is not responsible for the cost of reinstallation of the repaired unit, or shipping charges. The returned unit may either be the original unit (repaired), or another unit with a similar manufacturing date. The original one-year warranty period will remain in force from the date of manufacture of the originally purchased system.

#### **LIMITATION OF LIABILITY**

**The return policy described above is the sole and exclusive remedy for any defect in the packaged fan. EXCEPT AS EXPRESSLY SET FORTH HEREIN, THE PACKAGED FAN IS SOLD ON AN "AS IS" BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL PDS BE LIABLE FOR DAMAGES, INCLUDING ANY LOST PROFITS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES, ARISING OUT OF THE USE OR INABILITY TO USE THE PACKAGED FAN, EVEN IF PDS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. PDS IS NOT RESPONSIBLE FOR THE EFFECTIVENESS OF ANY SYSTEM IN WHICH THE PACKAGED FAN IS A COMPONENT NEITHER WILL PDS BE RESPONSIBLE FOR ANY DAMAGES RESULTING FROM THE MISUSE OR THE IMPROPER INSTALLATION OF THIS SYSTEM. IN ANY EVENT, ANY DAMAGES FOR WHICH PDS MAY BE LIABLE SHALL NOT EXCEED THE COST OF THE PACKAGED FAN TO WHICH THIS WARRANTY APPLIES.**

*14 February 2003*

# **MI-Rn3 or Rn4 WARRANTY**

## ***MI-Rn3 or Rn4 FAN SYSTEM***

Indicator box

**90 DAY** - PARTS LABOR AND RETURN SHIPPING STANDARD GROUND

**90 DAYS TO 1 YEAR** - PARTS AND LABOR

**1 YEAR TO 5 YEARS** – PARTS

Fantech Rn3 or Rn4 Fan - Fantech's 5 Year Warranty Applies

### **LABOR CHARGES ARE AS FOLLOWS**

STANDARD LABOR FOR ONE YEAR TO Five YEARS IS \$45.00

RETURN SHIPPING - APPLICABLE CHARGES

PROFESSIONAL DISCOUNT SUPPLY **WILL NOT ACCEPT** CHARGES FOR RETURN TO PLANT SHIPMENTS VIA THIRD PARTY BILLINGS.