### CONDITIONS OF OPERATION

Adjusting the Light Rail 3.5 Intelli Drive variable time delay will be up to you, as all gardens are different. We suggest first setting the delay to 30 seconds. Then after observing your plant growth you may want to change the length of delay. A longer delay would dictate more light on the ends and less in the middle. A shorter delay would be visa versa.

The first few weeks of operation will be the Drive Motors break-in period. The trolley wheels will turn a dark gray as well as shed some nylon. The Drive Wheels O-Ring may turn silver, and it too will shed some skin. These are both normal conditions as the moving parts of the Drive Motor conform to their prospective grooves of the Rail.

After several weeks of operation you may notice a slight pause as the Drive Motor changes direction, this is normal. It is the D Hole of the molded Drive Wheel showing some wear and loosening up upon the Drive Motors' shaft. Again this is normal and is a good thing as it will allow the Drive Wheel to self adjust upon the Motors' shaft. As for the pause when the Drive motor changes direction, this also is normal and good. It will reduce the load on the gear train while changing direction.

It is a good idea to use a timer on the Drive Motor. After all, the lamp need not be moving when the lights are out. This period of off time adds up, and will greatly reduce wear on the Drive Motor.

If you are operating under dusty conditions, you may wipe the Rail off with a dry cloth from time to time.

### **LIGHT RAIL \*3.5 LIMITED WARRANTY**

1. IF YOUR LIGHT RAIL \*3.5 DRIVE UNIT SHOULD FAIL TO OPERATED DUE TO MATERIAL DEFECT OR WORKMANSHIP WITHIN TWO (2) YEARS FROM DATE OF PURCHASE, GUALALA ROBOTICS WILL REPLACE, OR, AT OUR OPTION, REPAIR IT AT NO CHARGE TO YOU. PLEASE SAVE YOUR RECEIPT OF PURCHASE FOR THE DURATION OF WARRANTY.

#### 2. LIMITATIONS:

Implied warranties, including those of fitness for a particular purpose and merchantability (an unwritten warranty that the product is fit for ordinary use), are limited to Two (2) years from date of purchase. We will not pay for loss of time, inconvenience, loss of use of your Light Rail \*3.5 or property damage caused by your Light Rail \*3.5 or its failure to work, or any other incidental or consequential damages. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDEN TAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION OR LIMITATIONS MAY NOT APPLY TO YOU.

#### 3. WARRANTY SERVICE PROCEDURE:

You must send your dated sales receipt along with a detailed description of the failure which occurs, and the drive unit to Gualala Robotics, Inc., 2535 Copper Ridge Drive, P.O. Box 774288, Steamboat Springs, CO 80477, including your NAME, ADDRESS, and TELEPHONE NUMBER. You must pay shipping to the factory. After repair or replacement of your drive unit, Gualala Robotics will ship it back at no charge. REPAIR OR REPLACEMENT OF YOUR LIGHT RAIL \*3.5 DRIVE UNIT IS YOUR EXCLUSIVE REMEDY.

This warranty does not cover alterations, unauthorized repair, misuse, failure to follow instructions for installation, failure of any part other than the drive unit, fire, flood, and acts of God. We do not warrant that your Light Rail \*3 system, or any part thereof, will be compatible with any other similar product.

THIS WARRANTY IS THE ONLY ONE WE GIVE ON THE LIGHT RAIL \*3.5 SYSTEM, AND IT GIVES YOU SPECIFIC RIGHTS. THERE ARE NO OTHER EXPRESS WARRANTIES. THERE ARE OTHER LEGAL RIGHTS WHICH YOU MAY HAVE, WHICH VARY FROM STATE TO STATE.

#### \*TM PATENTED

### REPLACEMENT PARTS

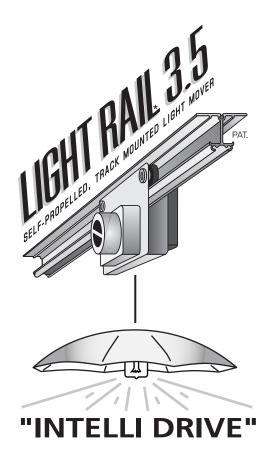
Like all moving mechanical objects, parts wear out. i.e. your new car will need new brakes and tires someday. At some point in time your Drive Motor will need some parts as well. As not all Light Rail \*3.5 Dealers stock these parts, you may want to order them today, so you will have them on hand when needed.

Gualala Robotics, Inc. offers a refurbish kit for sale direct from the factory. It contains one (1) O-RING and DRIVE WHEEL ASSEMBLY as well as one (1) TROLLEY WHEEL KIT with INSTRUCTIONS and FASTENERS. This refurbish kit sells for \$6.95. If you are interested in obtaining this refurbish kit, simply fill out the form below and send it and a money order payable to Gualala Robotics. We will fill your order promptly. Sorry, no C.O.D. or checks.

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# REPLACEMENT PARTS ORDER FORM

Please send me	Refurbish Kit(s) @ \$6.95 (U	I.S. dollars) each. Included is my mon	ey order payable to Gua	ılala Robotics.
NAME				
ADDRESS				
CITY		STATE	ZIP	



### IMPORTANT SAFETY INSTRUCTIONS

Manufactured by Gualala Robotics, Inc., 2535 Copper Ridge Drive, P.O. Box 774288, Steamboat Springs, CO 80477. \*FOR USE WITH GROW LAMPS THAT ARE U.L. LISTED AND / OR C.S.A. CERTIFIED.\* RISK OF FIRE AND ELECTRICAL SHOCK, THIS PRODUCT REQUIRES PROPER FIELD WIRING AND IS INTENDED TO BE INSTALLED BY A QUALIFIED ELECTRICIAN ONLY.

Please read these instructions and the operating instructions before installing your unit. The instructions supplied with your unit contain important information. Review all documentation before installing your unit.

- 1. Dropping this unit will cause serious damage to it.
- 2. Straight and secure Rail mounting is essential for both safety and operation. If you are inept at this sort of thing, hire a carpenter or ask a friend who is one. Refer to STEP ONE of the mounting instructions inside.
- 3. If you are using chain and/or hooks to hang your Grow Light from the drive unit, be sure they are load rated to handle the weight of your Grow Light.
- 4. This unit is rated for use on specific voltage identified by a label fastened to your unit. Never use this unit on a different voltage than specified.
- 5. Your unit is equipped with a 3-Wire grounding type electrical plug. This unit will only fit into a grounding-type outlet and is a safety feature. DO NOT DEFEAT THE GROUNDING CONNECTION. If you are unable to insert the plug into an outlet, call an electrician to replace the obsolete electrical outlet.
- 6. After installation, be sure there is plenty of slack in power cords as described in STEP FOUR of instructions.
- 7. The electrical portion of this unit is non-serviceable. Do not attempt to remove the switch box cover under any circumstances. If unit fails to operate due to an electrical malfunction, unplug, remove from Rail and return to manufacture.
- 8. Always unplug unit if: you are adjusting Grow Light Height; removing Drive Unit for service; or any procedure. A moving Grow Light warrants Danger.

# **INSTALLATION**

## STEP ONE: RAIL MOUNTING

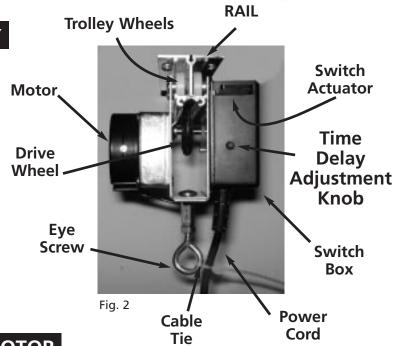
To mount the Rail above area to be serviced, it is **strongly suggested** that the rail is first mounted to a board. The board should then be mounted to the ceilings mounting points. **If you are mounting to a finished ceiling, be sure to mount to the ceiling joist beneath the drywall. Straight, level and secure rail mounting is essential for safety and operation. If you are inept at this sort of thing, hire a carpenter or ask a friend who is one.** 



Fig. 1

## STEP TWO: VARIABLE TIME DELAY

The Light Rail 3.5 Intelli Drive has a variable time delay that dictates how long the Drive Motor will pause at each end of the Rail. The length of delay can be adjusted by turning the knob on the left side of the Drive Motors' switch box. Turning the knob counter clockwise until it stops, sets the time delay at 2 seconds. From that point the length of delay can be increased as the knob is turned clockwise until the maximum delay of 60 seconds is achieved.



### STEP THREE: **INSTALLING DRIVE MOTOR**

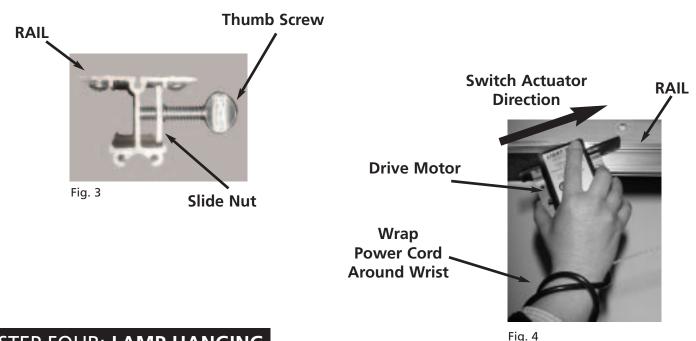
After the Rail is securely mounted above the area to be serviced, the Drive Motor can be installed on the Rail. First, turn the time delay knob counter clockwise until it stops. Next plug the unit into the power source. Place the leading two trolley wheels onto the Rail (FIG. 4) while gently pushing upward. The Drive Motor should pull itself onto the Rail. If it wants to come back into your hand, push the switch actuator towards the Rail. We **strongly suggest** wrapping the cord around your wrist, incase of accidental drop.

## STEP FOUR: **SWITCH STOPS**

The switch stops are 2 thumbscrews and 2 rectangular nuts (slide nuts). First thread the thumb screws into the rectangular nuts. The switch stops are installed in the Rails' vertical channel (Fig. 3) one on each side of the Drive Motor, at any location along the Rail you desire.

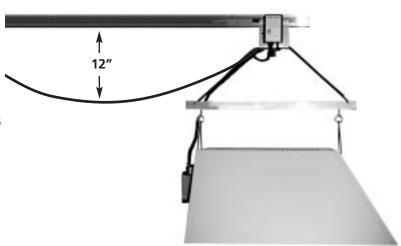
# **INSTRUCTIONS**

To tighten them, hold the slide nut in a vertical position in the Rails' channel and turn the thumb screw clockwise until it contacts the Rail. After tightening, the end tab of the thumb screw needs to be in a vertical position. you may need to use pliers to obtain this position. It is important that the thumbscrews are tight.



## STEP FOUR: LAMP HANGING

There are several ways to hang a Grow Lamp from the Light Rails Drive Motor. There are 2 holes at the bottom, these work well with the chain and hook method of Lamp Hanging. Also supplied is an eye-screw for threading into the coupler nut at the bottom of the Drive Motor. Gualala Robotics, Inc. manufactures a device called "Robo Stik" that works great for Lamp Hanging as it helps to balance and stabilize the Lamp when hanging from the Light Rail. Robo Stik sold at retail Hydroponics stores world wide. The important issue when hanging a lamp from the Light Rail is: Be sure to leave enough slack in the cords so the



Drive Motor can travel its full distance without restriction. We recommend that there be at least 12 inches distance from the bottom of the rail to the center of the power cords arc when the cord's are fully extended and fasten both cords to the bottom of the Drive Motor. You can fasten to either of the two holes or the eye screw described earlier. Please do not fasten to the Motors Wires.

### Instructions: Add A Lamp Kit for Light Rall 3 and 3.5

Parte List

1- Audiery Reil 1 - Audiery Trolley 1 - Cord Tie 1 - Extension Rod 8/8" x 6" 4 - 3/8" Hax Nuts 12 - Reil Mounting Somes

#### Step One: Hanging Auxiliary Rail

As stated in the Rail mounting instructions with your Light Rail 3 or 3.6 system. Straight level, and secure Rail mounting in essential for both eafety and operation. It is strongly suggested that you obtain and mount the Rail to a board, and then mount the board above your desired area of service. You may hang the Auxiliary Rail at either end of your systems main Rail. The end result is that the two Rails are mounted end to end, with the ends of each Rail butted together. They should then form one straight Rail.

#### Step Two: Mounting Auditory Trolley and extension rod

Position the Light Rail Drive Motor at the switch stop where the two Rails are butted together (center). Position the Auxiliary Trolley at the open and of the Rail you have chosen as the suctilary Rail (opposite of center) Now you are ready to install the Extension Rod. Thread one 3/8" hex nut onto each end of the 3/8" Extension Rod. The hex nuts should be positioned about 3" from their prospective ends. Next insert one end of the extension rod through the eyelet on the Drive Motor. Then Insert the remaining end of the extension rod through the eyelet on the Auxiliary Trolley. After this in done, thread the remaining two 3/8" hex nuts (one at each end) onto the extension rod. At this point, both the Drive Motor and the Auxiliary Trolley should be captured by the Hex nuts upon the Extension Rod.

#### Step Three: Before you hang your lamp. Travel Distance. What to look for

The following references to left and right are for the diagrams below. With the Drive motor on the switch stop at the right end of its Rail (center). The Auxiliary Trolley should be 1" to 2" from the open end of its Rail (opposite center). As you can see, if this adjustment is not proper, the drive motor could push the Auxiliary Trolley off the open end of its Rail before contacting the switch stop. To make this adjustment, aimply move the Hax nuts to the right or left as needed. After this adjustment is made, plug the Drive Motor in and run it down to the left end of its Rail. Unplug it just as it contacts the ewitch stop. Now check that the Auxiliary Trolley is 1" to 2" sway from the ewitch stop located at the center of the Rails. With the system setup in this manner, the center area of service will be common to both lamps. If deelined, you can move either ewitch stop to the middle of its Rail. This will eliminate the "Hot Spot" below the center of the Two Lamp Systems.

### Step Four: Hanging Your Lamps

After you have completed the above three steps you may hang your lamps. It is best if the lamp hooks are hung from the eyelets on both the drive motor and the Auxiliary Trolley. However it is acceptable to hang from the extension rod if need be. Next run all power cords up and out of the way. As stated in the Light Rail 3.6 instructions, be sure the system can travel its full distance in both directions without arry restriction from the power cords.

