

Scientific Solutions for Fitness.

# **Users' Operations Manual**



**REX™ Orbi-Linear™ Trainer Fit-Key™ Compatible** 



Before using this product, read this manual and follow all safety rules and operating instructions.



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## SAFETY INFORMATION

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not, by themselves, eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

Look for these symbols to point out important safety precautions. It means attention! Your safety is involved.

### **A** WARNING

Failure to obey a safety warning can result in injury to yourself and others. Always follow the safety precautions to reduce the risk of personal injury.

### **A** CAUTION

Failure to obey a safety caution can result in injury to yourself and others. Always follow the safety precautions to reduce the risk of personal injury.

Read all instructions before using your SCIFIT exercise machine. Save these instructions for future reference.

Close supervision is necessary when exercise machine is being used by or near children, or individuals with disabilities. Keep children away from extended hand and foot supports.

Use the exercise machine only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.

Never drop or insert any object into any opening.

Do not use outdoors or in a harsh environment where water is present (i.e. pool or spa areas).

### **INTRODUCTION**

Thank you for your purchase of the SCIFIT REX ™ Orbi-Linear™ Trainer. We have incorporated the finest technology and ergonomic design into this machine to assist you in achieving your fitness goals. However, for your safety, please adhere to the following recommendations before you begin to exercise.

The SCIFIT REX™ Orbi-Linear™ Trainer is designed for Class "S" (Studio), Class "I" (Special Needs) and Class "II a" (Medical Device Directive) applications. The intended uses are for Cardio & Pulmonary Rehabilitation as well as Sports Medicine, Physical Therapy, Physical Conditioning and Strength Training. SCIFIT equipment is suitable for placement in fitness, medical rehab, sports performance and recreational facilities. REX has 200 levels of computer controlled resistance, which ensures that users of all fitness levels will be able to get a challenging but not overwhelming workout.

### **Consult Your Physician**

Consult your physician or medical specialist before participating in any exercise program, especially if you are pregnant, or if you are suffering from: heart disease, respiratory disease, diabetes, hypertension, high blood pressure, elevated cholesterol, arthritis, or any other diseases or physical complaints.

#### **Adult Usage**

SCIFIT equipment is designed and intended for adult usage and children of appropriate ages while being supervised. Young children should be kept a safe distance away from equipment.

### **Cool Down**

To prevent muscle injuries and soreness, you should always cool down (at least 5 minutes) by doing a series of stretches after each workout.



### **A** CAUTION

Always stretch after a workout session to reduce the risk of personal injury. Failure to stretch properly may result in injury to yourself.

#### **Guidelines for Healthy Adults**

The American College of Sports Medicine (ACSM) and the American Heart Association (AHA) are continuously updating guidelines and recommendations for physical activity.

The current basic recommendations from ACSM and AHA is:

Do moderately intense cardio 30 minutes a day, five days a week.

#### OR

Do vigorously intense cardio 20 minutes a day, three days a week.

#### **AND**

Do eight to ten strength-training exercises, eight to twelve repetitions of each exercise twice a week.

Moderate-intensity physical activity means working hard enough to raise your heart rate and break a sweat, yet still being able to carry on a conversation. It should be noted that to lose weight or maintain weight loss, 60 to 90 minutes of physical activity may be necessary. The 30 minute recommendation is for the average healthy adult to maintain health and reduce the risk for chronic disease.

To review the latest guidelines and recommendations, visit the American College of Sports Medicine website: www.acsm.org



### **A** WARNING

Stop exercising immediately if you feel nausea, dizziness, sharp pain, or any other physical discomfort. Failure to stop excercising can result in injury or death to yourself.

### **Train Intelligently**

To ensure a future of good health, you should always eat well balanced meals, drink plenty of fluid/water during a workout, and stay fit by exercising intelligently. Always follow training guidelines that are specific for your own physical condition.



### **A** WARNING

Injuries to health may result from incorrect or excessive training. Failure to stop excercising can result in injury or death to yourself.

## **SPECIFICATIONS**

Weight . . . . . . . . . 299 lbs. / 136 Kg. Max User Weight . . 500 lbs. / 227 Kg.

Power . . . . . . . . Self generating w/auto recharge battery back-up.

Optional Low Voltage AC adapter available.

Resistance System . Electromagnetic Self Generating Bi-directional Resistance

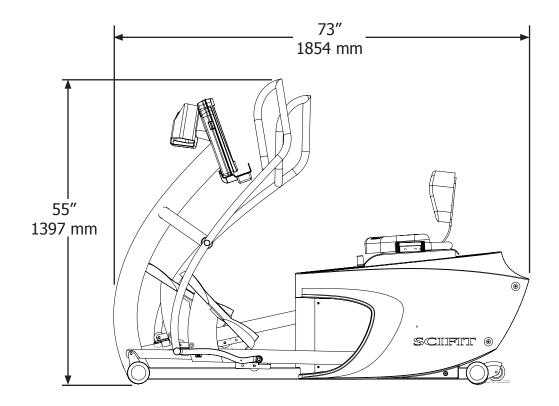
Work Load . . . . . . Speed dependent - CONSTANT WORK & ISO-STRENGTH programs

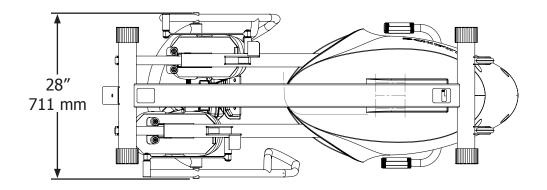
Speed Independent - MANUAL, HEART RATE, RANDOM & HILL PROFILES programs

Accuracy Class. . . . Class A

Warranty . . . . . . Within U.S. & Canada 3 years parts, 1 year labor

Outside U.S. 3 years parts, no labor





### **SETUP & INSTALLATION**

#### **Placement of Cardiovascular Machine**

To aid in the placement of equipment, two wheels are located on the rear of the unit. Movement of machine should be done with two people. Carefully lift the front of unit until wheels are engaged on floor and position unit in desired location.

Position the unit in a location that has a stable and level sub-floor. Equipment should be positioned in a location that is not in direct sunlight, in areas of extreme temperature and humidity, or where the equipment may be splashed with water or fluids. This machine is intended for indoor use only.

Equipment should be positioned with a safety perimeter of 40" or 1 meter around unit.



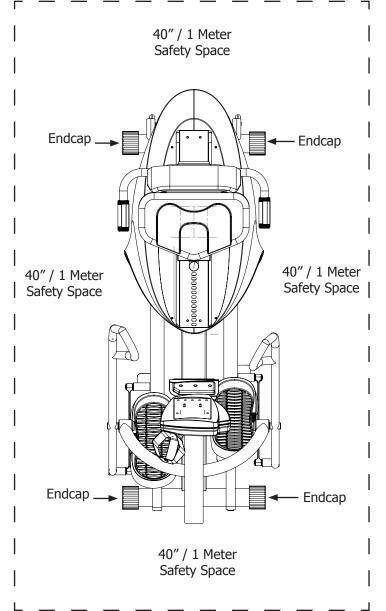
### **A** WARNING

Failure to place the equipment on a stable and level sub-floor with a safety perimeter can result in injury to yourself and others.

#### **Level Cardiovascular Machine**

If the sub-floor is unlevel, the unit is equipped with leveling end caps. The end caps are designed with the recess of end cap off centered. This allows you to rotate the endcap(s) to a position that will level the equipment. After adjustment, check and make sure end caps are fully seated against base frame tubes.





#### **Proper Supervision**

Close supervision is required when the exercise machine is being used by or near individuals with disabilities. Keep unsupervised children outside the safety perimeter.

#### Cleaning

Never clean the machine with organic solvents, alcohol or bleach based cleaners. To promote a healthy environment, wipe any sweat off of unit with a commercially manufactured wipe designed for the fitness industry, or a damp cloth.

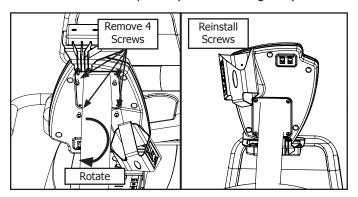
### **ASSEMBLY**

#### **Assembly**

For equipment that is shipped overseas, some assembly is required. Follow the steps below for assembly.

#### **Rotate Display Console**

1. - Remove four 1/4-20 x 1/2" Phillips Round Head Screws securing Display Console. Rotate Display Console 180 degrees (minimize ribbon cable twisting), reinstall the four screws and secure in place. (Do not overtighten)



#### **Install Handlbars**

- 1. Slide one 1/2" IGUS Thrust Washer (Item 1) onto the lower handlebar pivot pin.
- 2.- Slide one 3/4" IGUS Thrust Washer (Item 2) onto the upper handlebar pivot pin.
- 3. Insert both the upper and lower pivot pins simultaneously into the upper frame bushing and lower connecting rod bushing, being careful not to twist lower connecting rod. Use a Soft Head Mallet to tap handle in completely.
- 5. Slide one  $1/2^{\prime\prime}$  IGUS Thrust Washer (Item 1) onto the lower handlebar pivot pin.
- 6. Slide one 3/4" IGUS Thrust Washer (Item 2) onto the upper handlebar pivot pin.
- 7. Install 15/32" External Retaining Ring (Item 3) onto lower pivot pin groove.
- 8. Install 3/4" External Retaining Ring (Item 4) onto upper pivot pin groove.
- 9. Install Handlebar Pivot Cover (Item 5) with 10-32  $\times$  3/8" Phillips Round Head Screw (Item 6) and #10 Splitlock Washer (Item 7).

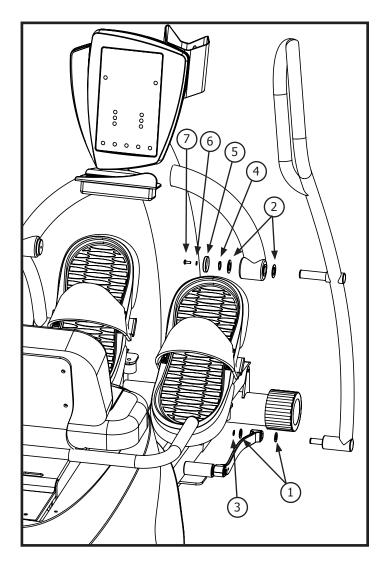
Repeat procedure for opposite side.

#### **Required Tools:**

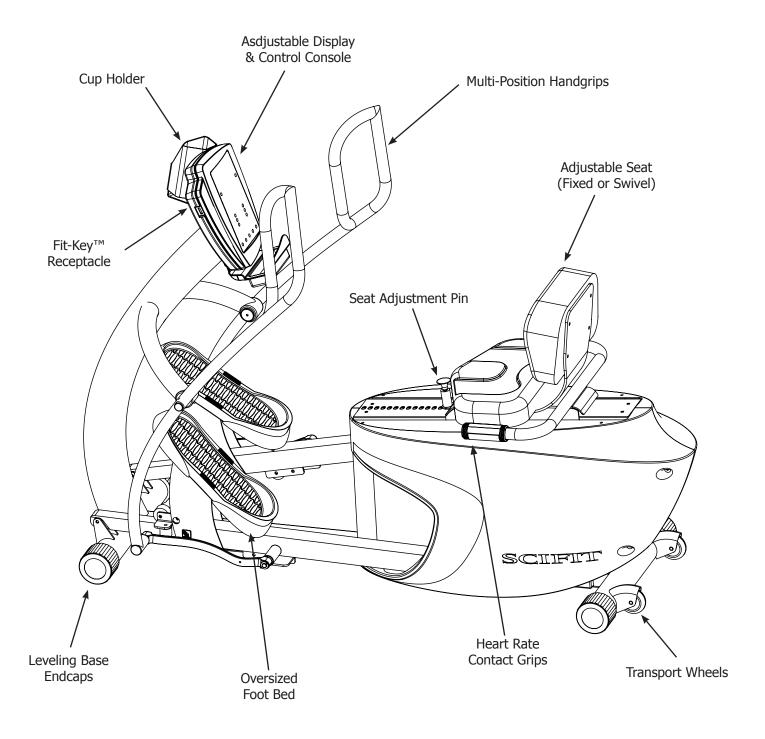
Phillips Screwdriver Snap Ring Pliers Soft Head Mallet

#### **Required Parts:**

Item	Qty.	Description	Part #
1	4	1/2" IGUS Thrust Washer	P1083
2	4	3/4" IGUS Thrust Washer	P1179
3	2	1/2" External Retainer Ring	50RE
4	2	3/4" External Retainer Ring	75RE
5	2	Handlebar Pivot Cover	A3541
6	2	10-32 x 3/8" Rd. Hd. Screw	1106SPR
7	2	#10 Split-lock Washer	10WS



## PRODUCT OVERVIEW



### **KEYPAD FUNCTIONS**

Work Level Status Screen - The Work Level Status Screen gives a progressive real-time indication of current work level of any and all programs.

**SCAN** - When Scan Key is pressed, the display will return to the normal, scan view of all the function values.

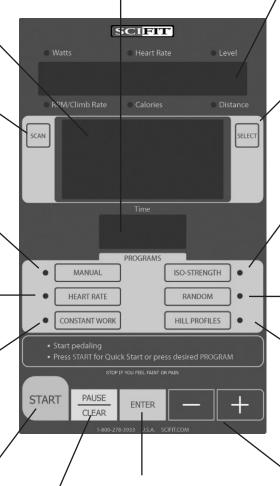
**MANUAL** - The Manual program allows the user to set the intensity at any level. This level will not change unless the user manually increases or decreases the intensity using the UP or DOWN arrow keys.

**HEART RATE** - The Heart Rate program enables the user to set a target heart rate. Through real-time monitoring of the user's heart rate, the computer maintains the user's heart rate near this established target rate by altering the intensity. This program will work only with the optional chest strap.

**CONSTANT WORK** - In the Constant Work program, pedal resistance is automatically adjusted to compensate for any changes in pedal speed (RPM), thus workload (watts) will remain constant at any given setting. Therefore, at higher RPM's, the perceived load on the muscles is reduced while maintaining a target wattage.

**START -** The Start key provides a one-touch "quickstart" in Manual mode, or after logging into a program, the start key will activate the selected program.

**TIME** - The Time readout displays the user input of work level desired in a program, also the amount of workout time desired. During the running of a program it displays the amount of minutes that are left in the workout program.



**ENTER -** The Enter key is pressed to enter selected values for the following workout parameters. Program, Level and Time.

**PAUSE/CLEAR -** The Pause/Clear key will pause the timer any time during a program. Pressing Pause/Clear when in the paused mode will clear the program. To restart a paused program, press start.

Message Screen - The Message screen displays instructions on how to start and input program parameters. It also gives feedback information particular to each program i.e. Watts (indication of work), Heart Rate amount, Level of intensity, RPM turned, Calories burned, Distance traveled. Red LED lights light up next to the corresponding output.

**SELECT -** The Select key locks the display functions at their current settings. When pressed again, Select will cause the display to roll to its next mode and lock it there.

**ISO-STRENGTH** - The ISO-Strength program enables the user to set the target RPM rate. The computer continuously monitors the RPM, and increases the resistance if the measured RPM exceeds the target RPM.

**RANDOM** - The Random program provides a different program each time. The level of intensity throughout this program varies in a random fashion.

**HILL PROFILES** - Select between six different profiles of various intensity and intervals. The six profiles are; Course, Sprints, Twin Peaks, Peak, Progressive, Multi-Peak

- and + - When pressed before a workout has begun, the plus and minus keys are used for increasing the value of the workout parameters. Time and Level '(the desired values can then be chosen using the Enter key).

When pressed during a workout, these keys may also be used to:

- (1) Change the intensity level in the Manual, Random and all Hill Profile programs.
- (2) Change the target heart rate in the Heart Rate program.
- (3) Change the target wattage in the Workload Control (watts) program.
- (4) Change the target RPM value in the ISO-Strength (Isokinetic) program.

### **BIOMECHANICAL POSITIONING**

#### **Seat Adjustment**

Proper seat position is essential to achieving the proper biomechanical position. The seat can be adjusted in 1" increments and is held in place with a spring loaded adjustment pin. The seat system is easily adjusted by pulling the seat pin up and sliding the mechanism forward or backward. Adjust the seat so your legs have a slight bend at full extension. The foot can be located in the most comfortable area on the flat surface of the foot bed.

#### **Swivel Seat**

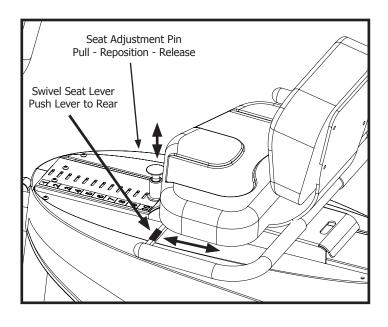
On models equipped with a swivel seat, push release lever to rear of unit and swivel seat 90 degrees until seat locks in position. Repeat procedure to return to original position.

#### **Hand Grips**

The dual position hand grips allow users of varied heights to exercise comfortably. Taller individuals will find the back handle more accommodating while shorter users will find the front handle ideal. These dual handles also allow most users to change muscle groups during use. The back handle encourages a pushing movement similar to a chest press while the front handle encourages a pulling movement that simulates a seated rowing exercise.

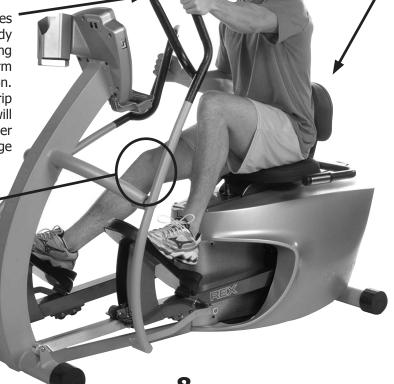
Holding high on the handles provides greater upper body involvement while holding lower will minimize arm movement and torso rotation. The photo shows a middle grip on the back handle which will provide a good blend of upper and lower body and encourage a pushing movement.

Slight Bend in Knee



#### **Upper Body Posture**

The low profile seat back is designed to promote proper posture and encourage core muscle activity. When seated properly, the movement should promote mild torso rotation ideal for strengthening the abdominal regions and the back.



### **HEART RATE TRANSMITTER STRAP & CONTACT GRIPS**

#### **Use of the Heart Rate Transmitter Strap**

The optional wireless heart rate transmitter accessory is a useful device if you desire continuous feedback on your current heart rate during a workout. In addition, the REX includes a Heart Rate Control program which requires use of the strap.

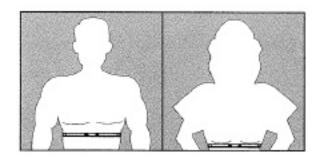
The Heart Rate Control program enables the user to setup a target heart rate. Through real-time monitoring of the user's heart rate, the computer maintains the user's heart rate at or below this established target rate by decreasing the workload if the user's heart rate exceeds the target.

### **Activating & Deactivating Transmitter**

Heart Rate Transmitter Straps come in a variety of styles and manufacturers. To properly activate, secure strap to the chest, and to deactivate follow the instructions that come with the Transmitter Strap.

## **A** CAUTION

Always follow manufacturers instructions for proper care and use. Failure to follow manufacturers instructions may result in injury to yourself.



### **WARNING**

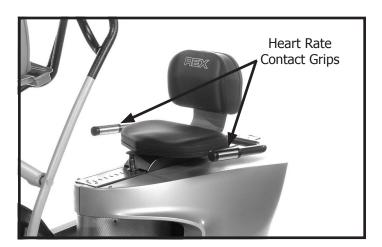
Heart Rate monitoring systems may be inaccurate. If you feel faint, stop exercising immediately. Over exercising may result in serious injury or death.

#### **Use of the Heart Rate Contact Grips**

For those models with contact heart rate grips, simply grip the contact pads lightly. After a short delay the pulse reading will appear on the display. If a heart rate transmitter strap is worn, it will override the contact pickup.

The contact grips are not designed for use with SCIFIT's Heart Rate Control program. This program requires a steady, continuous telemetry signal which can not be provided using contract heart rate grips.

While the contact grips provide a good barometer for monitoring the users heart rate, they are not recommended for medical where accuracy of monitoring is vital.



### **Calculating Target Heart Rate Zone**

Your approximate Maximum Heart Rate (MHR) is equal to 220 minus your age. The upper limit of your target zone is equal to 0.85 times your MHR. The lower limit of your target zone is equal to 0.60 times your MHR.

For Example:

Your age is 40:

220 - 40 = 180

 $180 \times .85 = 153 \text{ (max MHR)}$ 

 $180 \times .65 = 108 \text{ (min MHR)}$ 

These values are based upon averages, always consult your physician to establish the proper Heart Rate Zone for your individual health condition.

### PROGRAM INSTRUCTIONS

#### **Programs**

SCIFIT products have 200 levels of computer controlled resistance, which ensures that users of all fitness levels will be able to get a challenging but not overwhelming workout. Because the resistance is adjustable in .1 increments, it is easy for the user to track progress. SCIFIT products feature one of the highest resistance capabilities available on any cardio equipment.

SCIFIT products are self generated and have an extremely low starting resistance. One pedal movement or crank revolution activates the console and the screen will remain lit at the most minimal levels of movement.

SCIFIT products have a battery back up which will keep the screen lit for a short period after exercise or if the user stops. This varies between 30 seconds and 1 minute and can change with the amount of use each product gets.

If you prefer the computer to remain lit before and after use, an optional wall pack can be plugged in to accomplish this. This is common in medical settings and with Fit-Key Programs.

The default Work Level for Manual **MANUAL** is 4.0 **RANDOM** HILL PROFILE

OR

#### Adjust Work Level

To set the Work Level, use the +(plus) or - (minus) keys to increase or decrease the workout intensity. The higher the number, the harder the workout. The default Work Level is 1 for Random and Hill Profile.



#### Adjust Workout Time

Adjust the workout time with the +(plus) or -(minus) keys. The default time is 20 minutes.

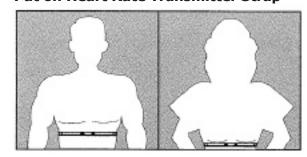


• Press Start and Begin Exercising

#### **Heart Rate Program**

The Heart Rate Transmitter Strap is required for this program. Refer to Section 8, Heart Rate Transmitter Strap for a complete instruction on using the strap. Refer to section 8, to understand how to calculate your Target Heart Rate.

#### Put on Heart Rate Transmitter Strap



- Start Movingg Crank Arms
- Press HEART RATE program key.



#### Adjust Target Heart Rate

Use the + (plus) or - (minus) keys to adjust Heart Rate. The default value is 100.



#### Adjust Workout Time

Adjust the workout time with the + (plus) or - (minus) keys. The default time is 20 minutes.



Press Start and Begin Exercising

**ENTER** 

### PROGRAM INSTRUCTIONS

#### **Constant Work**

Constant Work is a unique program that allows a user to set a target wattage output (or workload). The computer will control the resistance so that the user is always working at that target level, regardless of speed. Resistance is lower at higher speeds and higher at lower speeds.

- Start Moving Crank Arms
- Press Constant Work program key.

CONSTANT WORK

#### Adjust Target Watts

Use the + (plus) or - (minus) keys to adjust Watts until the desired wattage is displayed. The default value is 50.



#### Adjust Workout Time

Adjust the workout time with the + (plus) or - (minus) keys. The default time is 20 minutes.



Press Start and Begin Exercising

#### **ISO-Strength**

This is an iso-kinetic program, meaning that the unit will resist your movements in order to force you to stay at a set speed. This type of strength workout will not cause excessive soreness because it is accommodating. The computer adjusts resistance based upon the strength or weakness at a specific point in the movement and reacts to fatigue.

- Start Moving Crank Arms
- Press ISO-Strength program key.

ISO-STRENGTH

#### Adjust Target RPM

Use the + (plus) or - (minus) keys to adjust RPM until the desired RPM is displayed. The default value is 50.



#### Adjust Workout Time

Adjust the workout time with the + (plus) or - (minus) keys. The default time is 20 minutes.



Press Start and Begin Exercising

#### Fit-Key™ System (Optional)

All SCIFIT equipment is equipped with the Fit-Key<sup>™</sup> system, but it is not required to operate the unit. Fit-Key<sup>™</sup> is a program that records and stores work out data on a key that can be then transferred to a computer with a Fit-Key<sup>™</sup> reader.

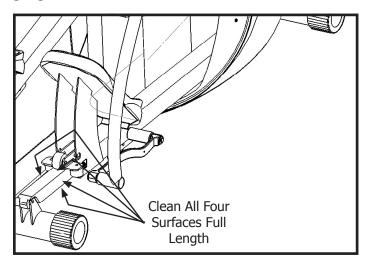
### **MAINTENANCE & SERVICE**

#### **Maintenance**

The REX Orbi-Linear Trainer is virtually maintenance free. After training, always wipe down your SCIFIT exercise product. Perspiration that continuously settles on the frame, upholstery, casings, and control console may eventually cause rust or damage. Damage resulting from lack of maintenance is NOT covered under warranty.

Clean the console, seat, hand grips and body with a commercially manufactured wipe designed for the fitness industry, or a damp cloth.

Pay special attention to the surfaces that the rollers roll on. Small debris on these surfaces will cause a rough feel in motion and can lead to pitting and small gouges.



### **A CAUTION**

In order to maintain a safe level of operation, equipment must be inspected on a routine basis for damaged or worn parts. Failure to inspect equipment may result in injury to yourself or others.

Special attention should be paid to rollers, pins, pivot joints and bearings. Check for loose screws / nuts / bolts periodically. If defective components are identified and require replacement, the equipment should be put out of service until repaired.

#### **UNITED STATES CUSTOMER SERVICE**

For assistance in the service of SCIFIT products;

phone: (800) 745-1373 or (918) 359-2040

fax: (918) 359-2045 e-mail: service@scifit.com

The Product Support department is staffed from 7:00 AM to 6:00 PM CST Monday through Friday. A voice mail service is available 24 hours a day for recording messages to request technical support and to order replacement parts. Our mailing address is:

SCIFIT Systems Inc. 5151 S. 110th E. Ave. Tulsa, OK 74146 USA

#### **UK & EUROPEAN CUSTOMER SERVICE**

phone: +44 1344 300022 fax: +44 1344 868838 e-mail: info@scifit.uk.com

SCIFIT LTD (UK)
Lexham House
Forest Road
Binfield
Berkshire, RG42 4HP

Company Number: 5970624 (UK)

### **WARRANTY**

#### **SCIFIT Statement of Warranty**

SCIFIT warranties new products against defective workmanship and/or materials under normal and proper use subject to the following limitations:

(a) SCIFIT's obligation to the original purchaser shall apply to:

Within the United States and Canada both parts and the cost of labor required to replace or repair a defective product for a period of one (1) year from user purchase date as documented by warranty card and if warranty card has not been returned by user then date of shipment from the factory. Thereafter, for a period of two (2) years, such obligation shall extend only to the supply of replacement parts or products with any labor cost associated with such replacement or repair to be at Buyer's expense.

Outside the United States and Canada replace defective product with no labor for a period of three (3) years from user purchase date as documented by warranty card and if warranty card has not been returned by user then date of shipment from the factory.

- (b) SCIFIT's obligation shall be limited to repairing or replacing defective parts. No allowance shall be granted for repairs made by Buyer without SCIFIT's prior written approval. The decision to replace or repair shall be solely at SCIFIT's discretion.
- (c) SCIFIT's warranty does not apply to parts requiring replacement or repair due to abnormal wear and tear, improper use, corrosion (perspiration), improper maintenance, improper rated, grounded or dedicated electrical circuits or improper storage, nor does it apply where all or part of the product has been altered from its original state.
- (d) THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, **EXPRESSED** OR IMPLIED, ARISING BY LAW OR OTHERWISE INCLUDING **WARRANTY OR MERCHANTABILITY OR FITNESS** FOR PURPOSE, AND IS IN LIEU OF ALL OTHER LIABILITIES OF SCIFIT INCLUDING DIRECT, INDIRECT, SPECIAL AND CONSEQUENTIAL **DAMAGES** OR **PENALTIES EXPRESSED** OR IMPLIED WHETHER ARISING OUT OF CONTRACT, NEGLIGENCE OR OTHER TORT.

(e) Certain wear items are excluded from warranty coverage unless determined to be defective. These items include, but not limited to:

Seat, Rubber Footpads, Pedal Straps if equipped, Water Bottle Holder, Magazine Rack.

#### Freight and Shipping

SCIFIT is not responsible for the repair or replacement of any unit or part damaged during transit or installation. Fire, flood and acts of nature are NOT covered under this warranty. The customer is responsible for inspection of each unit and part for shipping damage at the time of delivery or installation. The customer is responsible for pursuing all freight damage claims with the appropriate transit company. If the customer signs an unqualified receipt for freight-damaged goods, customer is solely responsible for the cost of repair or replacement for such freight damage.

Record Your Model Number:
Record Your Serial Number:
Record Your Date of Purchase:



## Scientific Solutions for Fitness.

5151 South 110th East Avenue Tulsa, Oklahoma 74146 USA

Sales: 1-800-278-3933 • 1-918-359-2000 Customer Service: 1-800-745-1373 www.scifit.com



Part No. P3857 Rev.: A; 12/15/07