

# **OWNER'S MANUAL**

PLEASE CAREFULLY READ THIS ENTIRE MANUAL BEFORE OPERATING YOUR NEW ELLIPTICAL!

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**ATTENTION-**THIS ELLIPTICAL IS INTENDED FOR **RESIDENTIAL USE ONLY**AND IS WARRANTED FOR THAT APPLICATION. ANY OTHER APPLICATION **VOIDS** THIS WARRANTY IN ITS ENTIRETY.



## CONGRATULATIONS ON YOUR NEW ELLIPTICAL AND WELCOME TO THE SPIRIT FAMILY!

Thank you for your purchase of this quality elliptical trainer from Spirit Manufacturing, Inc. Your new elliptical was manufactured by one of the leading fitness manufacturers in the world and is backed by one of the most comprehensive warranties available. Through your dealer, Spirit will do all we can to make your ownership experience as pleasant as possible for many years to come. The local dealership where you purchased this elliptical is your administrator for all Spirit warranty and service needs. Their responsibility is to provide you with the technical knowledge and service personnel to make your experience more informed and any difficulties easier to remedy.

Please take a moment at this time to record the name of the dealer, their telephone number, and the date of purchase below to make any future, needed contact easy. We appreciate your support and we will always remember that you are the reason that we are in business. Please complete and mail your registration card today and enjoy your new elliptical.

Yours in Health,	
Spirit Manufacturing,	Inc

Name of Dealer	
Telephone Number of Dealer_	
Purchase Date	

# Product Registration

#### **RECORD YOUR SERIAL NUMBER**

Please record the Serial Number of this fitness product in the space provided below.

<b>~</b> • • • • •			
<b>Serial Numbe</b>	ır		

## **REGISTER YOUR PURCHASE**

The self-addressed product registration card must be completed in full and returned to Spirit Manufacturing, Inc or visit <a href="https://www.spiritfitness.com">www.spiritfitness.com</a> to register online.

# Important Safety Instructions

**WARNING** - Read all instructions before using this appliance.

- Do not operate elliptical on deeply padded, plush or shag carpet. Damage to both carpet and elliptical may result.
- Keep children away from the elliptical. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the elliptical if it has a damaged cord or plug. If the elliptical is not working properly, call your dealer.
- Keep the cord away from heated surfaces.
- Do not operate where aerosol spray products are being used or where oxygen is being administered. Sparks from the motor may ignite a highly gaseous environment.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- To disconnect, turn all controls to the off position, then remove the plug from the outlet.
- Do not attempt to use your elliptical for any purpose other than for the purpose it is intended.
- The hand pulse sensors are not medical devices. Various factors, including the user's movement, may affect the accuracy of heart rate readings. The pulse sensors are intended only as exercise aids in determining heart rate trends in general.
- Wear proper shoes. High heels, dress shoes, sandals or bare feet are not suitable for use on your elliptical. Quality athletic shoes are recommended to avoid leg fatigue.

SAVE THESE INSTRUCTIONS - THINK SAFETY!

# Important Electrical Information

#### **WARNING!**

- NEVER remove any cover without first disconnecting AC power supply.
- If A.C. voltage varies by ten percent (10%) or more, the performance of your elliptical may be affected. **Such conditions are not covered under your warranty.** If you suspect the voltage is low, contact your local power company or a licensed electrician for proper testing.
- **NEVER** expose this elliptical to rain or moisture. This product is **NOT** designed for Use outdoors, near a pool or spa, or in any other high humidity environment.

# Important Operation Instructions

- **NEVER** operate this elliptical without reading and completely understanding the results of any operational change you request from the computer.
- Understand that changes in resistance do not occur immediately. Set your desired level on the computer console and release the adjustment key. The computer will obey the command gradually.
- NEVER use your elliptical during an electrical storm. Surges may occur in your household power supply that could damage elliptical components.
- Use caution while participating in other activities while using your elliptical such as watching television, reading, etc. These distractions may cause you to lose balance which may result in serious injury.
- Always hold on to a handrail or hand bar while making control changes.
   Do not use excessive pressure on console control keys. They are precision set to properly function with little finger pressure. Pushing harder is not going to make the unit go faster or slower. If you feel the buttons are not functioning properly with normal pressure, contact your Spirit dealer.

# Assembly Instructions

#### UNPACKING THE UNIT

- 1. Carefully remove all parts from carton and inspect for any damage or missing parts. If damaged parts are found, or parts are missing, contact your dealer immediately.
- 2. Locate the hardware package. The hardware is separated into steps. Remove the tools first. Remove the hardware for each step as needed to avoid confusion.

## STEP 1: REAR RAIL ASSEMBLY

- 1. Remove the hardware from the hardware pack for step 1. You should have four 3-3/4" X 3/8" bolts, four curved washers, two 1/4" X 3/8" bolts, two flat washers and six 3/4" X 1/8" Phillips head screws.
- 2. Put the two flat washers on the 2-1/4" bolts and hand-tighten them, through the top of the middle stabilizer tube, into the rear rail assembly.
- 3. Put the four curved washers on the 3-3/4" bolts and hand-tighten them through the front of the middle stabilizer tube, into the rear rail assembly.
- 4. Using the wrench provided tighten all six bolts securely.
- 5. Locate the four plastic covers (XE150, XE350 only) for the rear rail assembly and the one cover for the front stabilizer and install them using the six 3/4" X 1/4" screws and the Phillips head screw driver provided.

#### STEP 2: CONSOLE MAST ASSEMBLY

- 1. Remove the hardware from the hardware pack for step 2. You should have one 2-3/4" X 3/8" bolt, one lock washer, two 1" X 3/8" bolts, two curved washers and four 1/2" X 1/4" Phillips head screws.
- 2. Locate the console mast and console mast cover and slide the cover onto the mast as far as it will go. Make sure the cover is facing the correct way.
- 3. At the top opening of the main body of the elliptical is a wire harness. Unravel and straighten out the wire harness and feed it into the bottom of the console mast tube and out of the top opening.
- 4. Install the console mast into the receiving bracket in the top of the main body.

- NOTE: there is one bolt already installed in the receiving bracket that will engage with the slot at the bottom of the console mast. This needs to be tightened at the end along with the three other console mast bolts.
- 5. Put the flat washer onto the 2 3/4" bolt and the two curved washers onto the two
  - 1" bolts. Install, and hand tighten, the 2 3/4" bolt through the left side of the receiving tube into the console mast. NOTE: There is a wire running through the tube. Be careful not to damage or pinch this wire during this procedure. Damage to the electronic console could result. Install, and hand tighten, the two 1" bolts through the front of the receiving tube into the console mast.
- 6. Using the two sided wrench tighten the three bolts, and the fourth bolt which is pre-installed, firmly. These bolts should be tightened as much as you possibly can.
- 7. Locate the electronic console and the four 1/2" X 1/4" Phillips head screws.
- 8. There will be two electrical wire connectors at the top opening of the console mast, one 4 pin (hand pulse sensors), one 10 pin (main wire harness). Connect these to the mating connectors on the back of the console. The connectors are keyed so you cannot plug them in the wrong way so do not force them.
- 9. Storing the excess wire back into the console mast, carefully install the console onto the mounting plate and secure using the four Phillips head screws.

#### **STEP 3: HANDLE BAR ASSEMBLY**

- 1. Remove the hardware from the hardware pack for step 3. You should have two 5/8" X 3/8" bolts, two large flat washers, two large wave washers and four self tapping Phillips head screws.
- 2. Locate and install the 2 large wave washers onto the handle bar axle, one on each side.
- 3. Slide the left and right handle bars onto the appropriate side of the axle. There is a sticker on each handle bar indicating **L** for left and **R** for right.
- 4. Put the large flat washers onto the two 5/8" X 3/8" bolts and install, and tighten, in the threaded holes in the ends of the axle.
- 5. Install the plastic covers over the handle bar/axle connections with the six self tapping Phillips head screws.

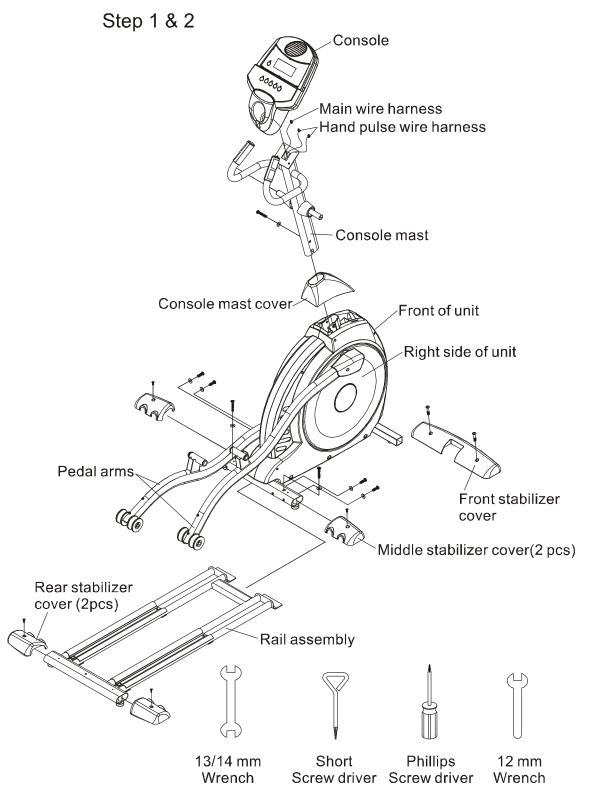
#### STEP 4: FOOT PAD/CONNECTING ARM ASSEMBLY

1. Remove the hardware from the hardware pack for step 4. You should have two 1-1/4" X 3/8" bolts, two flat washers, two Nyloc® nuts, four 5/8" machine screws (long), four 3/8" machine screws (short) and two self tapping Phillips head

screws.

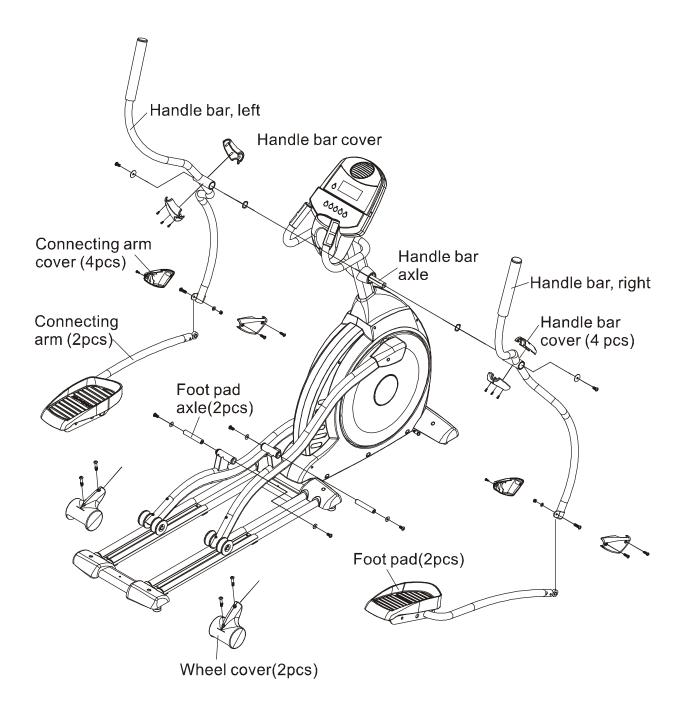
- 2. On the pedal arms, in the middle on top, there are two axles already installed in the bushing housings. Remove, from one side of each axle, the bolt (one should be loose) and washer. Remove the axle and set aside for the next step.
- 3. Locate the left foot pad/connecting arm. Holding the rear of the foot pad with your right hand and the connecting arm, just in front of the foot pad, with your left hand, place the foot pad over the bushing housing.
- 4. Holding the axle (removed in step 2) in one hand, and the foot pad in the other, line up the large hole in the side of the bracket (under the foot pad) with the hole in the bushing housing and insert the axle all the way until the washer is flush against the bracket. You may have to wiggle the axle while moving the foot pad slightly to get the axle to go in.
- 5. Take the bolt and washer that you removed from the axle in step 2 and thread it into the hole in the axle. Tighten the bolt using two wrenches provided. You have to put a wrench on both axle bolts to tighten firmly.
- 6. Align the hole in the end of the connecting arm (pivoting rod end) with the hole in the bracket of the handle bar. The rod end should be on the inside of the handle bar bracket. Take one of the 1-1/4" X 3/8" bolts and install it through the handle bar bracket and the rod end. Install a flat washer and Nyloc® nut on the bolt and tighten firmly using a wrench on the nut and one on the bolt.
- 7. Repeat for the right side foot pad/connecting arm.
- 8. Install the plastic covers over the connection of the rod end and handle bar. The front inside hole in the plastic uses a self tapping screw and the two rear holes use the 3/8" machine screws (short). There is a short Phillips screw driver provided for installing the inside screws.
- 9. Install the two wheel covers using the four 5/8" machine screws (long).
- 10. Install the locking pins for the adjustable foot pads into the desired holes (XE350, XE550 only). \*See Foot pad angle adjustment section for details of this feature.
- 11. This step is for the XE550 only. Install the two plastic parts that make up the rear shroud using the seven Phillips head screws.

# Assembly drawing (XE150.XE350.XE550) XE150

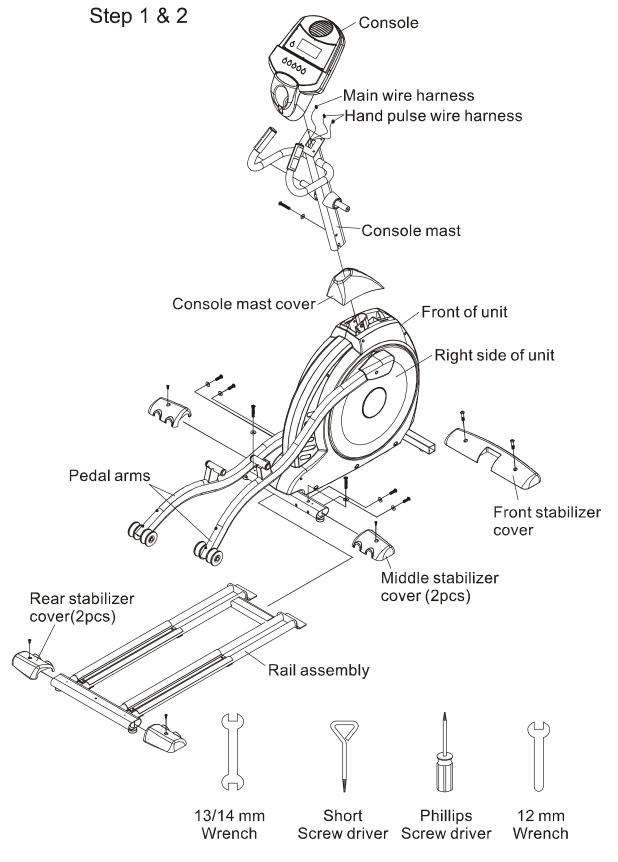


940920 PM1900

Step 3 & 4

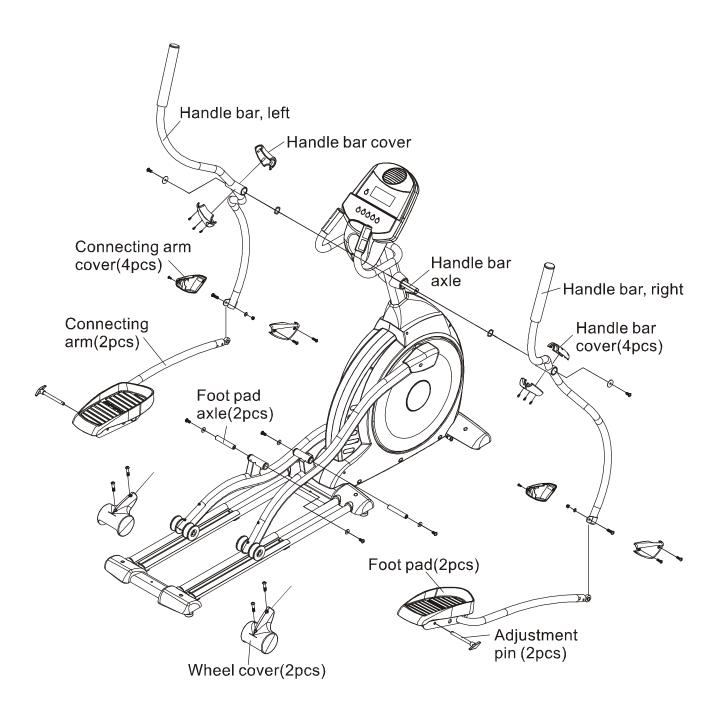


## XE350



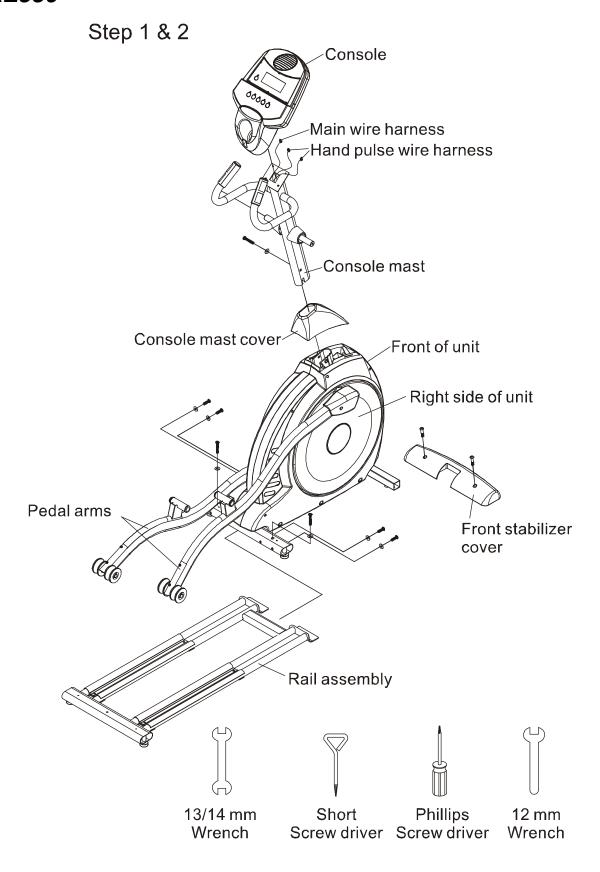
940920 PM1900

Step 3 & 4

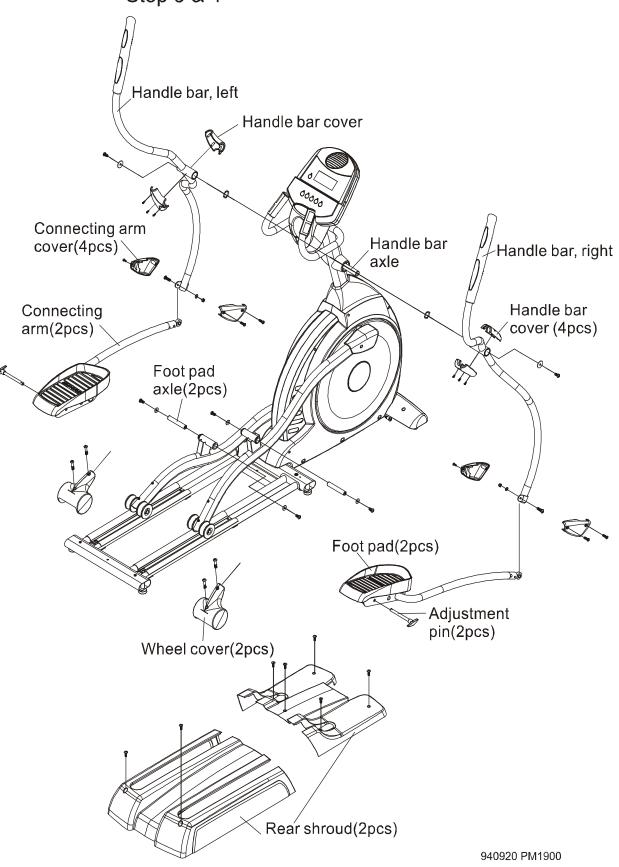


940920 PM1900

## XE550



Step 3 & 4



## **Features**

# Adjustable foot pedals, and orthopedically correct foot pads XE350 and XE550 only

Through research performed with a leading sports scientist and physical rehabilitation expert, Spirit engineering has developed a breakthrough in pedal design. No other elliptical, at any price, offers these unique features. The history of elliptical use over the past few years tells us that many users suffer from numb toes while working out on elliptical trainers. Many other users complain of ankle, Achilles tendon, knee and/or hip pain. While researching a solution to these common problems Spirit engineers consulted Richard DeKok, P.T., M.T.C., of St. Bernards Industrial Rehabilitation Center in Jonesboro Arkansas.

Together we identified the inherent problem in elliptical designs and developed solutions to solve the problems. What we found is that when you use an elliptical you tend to push outward during the power stroke and not just straight back. This causes stress on the outer part of the foot and throws off the natural alignment of the joints. The second problem we found is that many people tend to stay up on the ball of their foot during the elliptical motion. Our solutions were simple but effective:

- The first solution was to add a 2 degree inward angle to the foot pads. This might sound simple but what it does is puts the users joints back into a neutral alignment. This eases the over stressing of the ankles, knees and hips.
- The second solution was to make the foot pedal adjustable to the user's style of pedaling the elliptical. We achieved this by adding an adjustment that allows the angle of the foot pad to be changed. There are three adjustments. The lowest one will set the footpads at zero (0) degrees, or flat, at the bottom of the elliptical stroke. The second position sets the footpad to five (5) degrees and the top position sets the foot pads to ten (10) degrees.

Because every body is different, and there are as many styles to pedal an elliptical as there are people, we found there is no one angle that fit every user. Some users would be up on the balls of their feet, resulting in numb toes, so we decided to let the user adjust the back of the foot pad upward to support the heel, taking the pressure off of the nerves in the balls of the feet and the Achilles tendon. The result was no more numb toes. Some users are uncomfortable at this angle so for them we designed in three different adjustable angles so they could find one that feels best for them.

A great side benefit of the adjustable foot pad angle is that you end up working different muscle groups. At the highest angle you will work the quadriceps more. At the lowest angle you work the hamstrings and glutes harder. Not a bad perk!

## **Transportation**

The elliptical is equipped with two transport wheels which are engaged when rear of XE Series Elliptical is lifted.

## Getting familiar with the control panel

## XE150 Console



## Starting a program

#### **Quick Start**

After the console powers up you may press the Start key to begin, this will initiate the Quick Start mode. In Quick Start the Time will count up from zero and the workload may be adjusted manually by pressing the Up/Down buttons. Distance and Calories will accrue, starting from zero.

The Calorie window will switch between Calories and Watts every 5 seconds. The Calorie reading shows total Calories burned and is an approximate number. The Watt reading indicates how much work you are doing. If the Watt reading is 100, this means you are doing enough work to light a 100 watt light bulb.

The bottom left data window will switch between RPM and Speed every 5 seconds. RPM is your actual pedal rotation speed, and the Speed readout is in MPH, indicating approximate road speed as if pedaling a bicycle in 7<sup>th</sup> gear.

The Distance window shows distance traveled, based on pedal speed, in miles. The Pulse window will display your heart rate in beats per minute if you are holding the heart rate hand sensors, or wearing a chest strap transmitter.

Using the Up/Down keys, highlight the Manual icon at the top of the display and press Mode key. The profile will be blinking and you may use the Up/Down keys to adjust the program work level and then press Mode. The Time window will now be blinking. Use the Up/Down keys to adjust the program Time and then press Mode. The Distance window will now be blinking and you can adjust a target Distance using the Up/Down keys then press Mode. Calories will now be blinking, repeat the same process as above to set, then press Mode. The Watt icon will be blinking. If you choose to set the Watts then the machine will automatically adjust the workload to maintain continuous work. What this means is that if you set the Watt to 100 the machine will try to keep you working at a rate of work that equals 100 Watts (or working at a rate that will keep a 100 Watt light bulb burning). Watts are determined by the amount of work you are doing. On the ZE50 Elliptical this means the speed you are pedaling at combined with the workload of the machine. In Watt mode, if you change your speed the machine will automatically change the workload to maintain the same Watt level. If you pedal faster the workload will decrease and if you pedal slower the workload increases.

After adjusting all the parameters, press Start to begin your workout.

## **Preset Programs**

There are 12 preset programs to choose from. After power up, or reset, press the Up/Down keys to highlight the Program icon. Press the Mode key to enter the program mode. The display will show P1, for two seconds, then change to the P1 program profile. You may keep pressing the Up/Down keys to scroll through the 12 programs. When you see a program you want, press the Mode key to enter. At this point you may press start to begin the program with the default settings or you may customize the program.

To customize the work level, press the Up key. You will see the profile increase in size. When the work level is where you like it press the Mode key (If you do not want to customize the profile, just press the Mode key to bypass).

The Time window will now be blinking. Use the Up and Down keys to adjust the workout time and then press Mode.

The Distance window will now be blinking. Repeat the same process to set the distance to count down, if desired, and press Mode.

The Calorie window will now be blinking. Repeat the same process then press Mode. The Pulse window will now be blinking. Entering a Pulse number will set an alarm that will beep when your heart rate reaches the programmed number to let you know you have reached your target.

Once you have set the data you may press Start to begin the program. You may also press Start at any time during the programming to begin. Any data that is not programmed at that point will count up from zero.

When the program ends there is a series of audible beeps. You may press Start to restart the program or press Reset to return to the start-up screen.

This mode allows you to build and save your own custom program.

Press the Up or Down key until the User icon at the top of the display is blinking then press Mode. The first column of the profile will be blinking. Use the Up/Down keys to adjust the work level then press Mode. The second column will now be blinking. Repeat the same process as above and press Mode. Repeat this process until all the columns are adjusted to your liking. All the settings will be saved as a custom program.

## **Target HR**

This program allows you to set a target heart rate and the machine will automatically adjust the work load to safely reach the target and maintain that target.

Use the Up/Down keys to select the Target HR program and press Mode. The display will show a number and the age icon at top will be blinking. Use the Up/Down keys to adjust the age and press Mode. The display will now show a blinking percent number or the letters THR.

You may use the Up/Down keys to choose either 55%, 75%, 90% or THR. The percentage choices will automatically set the target to a percent of your maximum heart rate, based on your age. This is why it is important to adjust the age properly. The console will use a formula to determine the correct percentage: 220 - age = maximum HR. For example a 30 year old persons' Max HR is 190 BPM (220 - 30 = 190 BPM). If the 30 year old wants to work at 75%, their target HR will be 142BPM.

If you want to choose to work at 75% - for example - then use the Up/Down arrows to highlight 75% and press mode. Now the Time window will be blinking and you can program it and other data the same as other programs. If you want to set your own custom Target HR then use the Up/Down arrow to highlight THR and press mode. The Pulse window will now be blinking. Use the Up/Down arrows to set your own Target HR and press Mode to continue.

## Recovery

Used to measure how fast your heart rate (HR) recovers from exercise. The faster your HR returns to normal from exercise level, the better aerobic shape you are in. Pressing the recovery button will start a 60 second count down. Hold the hand pulse sensors and do not exercise during the count down. At the end of the 60 seconds a score will be displayed ranging from F1 to F6 with F1 being the highest score and F6 being the lowest.

**TIME:** Count up: accumulates training time from zero to 99:59.

Count down: counts down from preset time to zero.

**SPEED/ RPM:** Automatically toggles between SPEED and RPM every 6 seconds.

Speed is in miles per hour (or kilometers per hour)

**DISTANCE:** Count up: accumulates training distance from 0.00 to 99.99 miles.

Count down: counts down from preset distance to zero.

**CALORIES:** Accumulates calories burned from 0 to 9999. This is an estimated

number only to be used from workout to workout to compare your progress. Actual calorie burn cannot be measured accurately on any consumer exercise equipment because every individual burns calories

at a different rate.

**WATTS:** Indicates the amount of work being done in Watts.

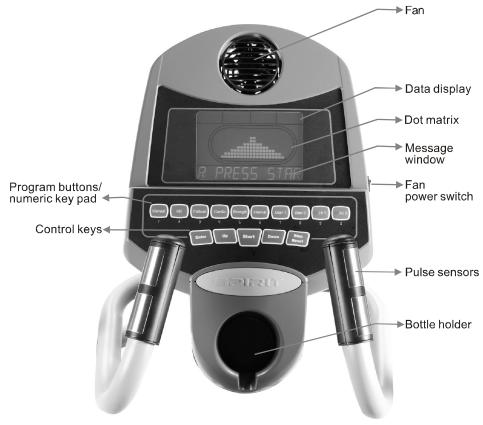
**PULSE:** Displays your current heart rate when you grasp the hand sensors or

wear the chest strap transmitter.

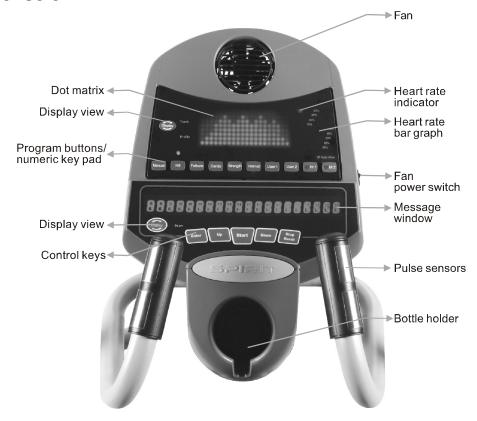
**LEVEL:** Shown next to the workout profile. Indicates the level of work being done

from 1 to 16.

## XE350 Console



## XE550 Console



manner. For space consideration we will describe the operation and note where the two differ.

## Power up

The XE Series Elliptical is supplied with an external power supply. When power is connected to the XE Series Elliptical, the console will automatically power up. If there is no input to the console for 4 minutes the console will go to stand-by mode. In stand-by mode the console display will turn off. To turn the console on press any key

When initially powered on the console will perform an internal self test. During this time all the lights will turn on. When the lights go off the dot matrix display will show a software version (ie: VER 1.0) and the message window will display an odometer reading. The odometer reading displays how many hours the elliptical has been used and how many virtual miles the elliptical has gone. The display will look like this: ODO 123 MI 123 HRS.

The odometer will remain displayed for only a few seconds then the console will go to the start up display. The dot matrix display will be scrolling through the different profiles of the programs and the message window will be scrolling the start up message. You may now begin to use the console.

## **XE550 Console Operation**

#### **Quick Start**

This is the quickest way to start a workout. After the console powers up you just press the Start key to begin, this will initiate the Quick Start mode. In Quick Start the Time will count up from zero and the workload may be adjusted manually by pressing the Up or Down buttons. The dot matrix display will have only the bottom row lit at first. As you increase the work load more rows will light indicating a harder workout. The elliptical will get harder to pedal as the rows increase.

#### **Basic information**

The **Dot Matrix** has two display modes:

#### XE350

The XE350 shows the dot matrix and track at the same time

#### XE550

When you begin a program it will be in the Profile display mode. To the left of the dot matrix there is a button labeled Display. Pressing this button once will switch the display to show a quarter mile track. If the Display button is pressed again the Track indicator light, next to the Display button, will start to blink. This indicates the display is in Scan mode. The display will switch back and forth between Track and Profile mode every few seconds. To turn off the scan mode press the Display key again. This will return you to the profile display mode.

The **Message Window** will initially be displaying Time and Distance information. On the bottom left of the message window is another Display button. Each time this Display button

is pressed the next set of information will appear, four windows in all. In order: Time and Distance, Pulse and Calories, Speed in RPM and MPH, Work Level and Watts. If the Display button is pressed during the Level and Watts display the Scan light will come on and the message window will show each set of data for four seconds then switch to the next set of data in a continuous loop. Pressing the Display button again will bring you back to the beginning.

To the right of the Dot matrix display on the **XE550** is a **Heart Icon** and a **Bar Graph.** The **XE350** has a heart icon only in the main screen. The XE Series Elliptical has a built in heart rate monitoring system. Simply grasping the hand pulse sensors on the stationary handle bars, or wearing the heart rate transmitter (optional on XE150), will start the **Heart Icon** blinking (this may take a few seconds). The Message Window will display your heart rate, or Pulse, in beats per minute. The **Bar Graph** represents the percentage of your maximum heart rate you are currently achieving.

NOTE: You must enter your age for the Bar Graph to be accurate. Refer to Heart Rate section for details about these features and how they can help you work out more efficiently.

The **Stop/Reset** button actually has several functions. Pressing the Stop/Reset key once during a program will **Pause** the program for 5 minutes. If you need to get a drink, answer the phone or any of the many things that could interrupt your workout, this is a great feature. To resume your workout during Pause just press the Start key. If the Stop/Reset button is pressed twice during a workout the program will end and the console will return to the start up screen. If the Stop/Reset key is held down for 3 seconds the console will perform a complete **Reset**. During data entry for a program the Stop/Reset key performs a **Previous Screen** function. This allows you to go back one step in the programming each time you press the Stop/Reset key.

The **Program Keys** are used to preview each program. When you first turn the console on you may press each program key to preview what the program profile looks like. If you decide that you want to try a program, press the corresponding program key and then press the Enter key to select the program and enter into the data setting mode.

The program keys also act as a **Number Key Pad** when you are in the data setting mode. Under each program key is a number. If you are setting new data, such as Age, weight etc., you can use these keys to enter the numbers quickly.

The XE series consoles include a built-in fan to help keep you cool. To turn the fan on, flip the switch on the right side of the console case.

## Programming the console

Each of the programs can be customized with your personal information and changed to suit your needs. Some of the information asked for is necessary to ensure the readouts are correct. You will be asked for your **Age** and **Weight**. Entering your **Age** ensures that the Heart Rate bar graph shows the correct number. Your Age is also necessary during the Heart Rate control programs to ensure the correct settings are in the program for your Age. Otherwise the work settings could be too high or low for you. Entering your **Weight** aides in calculating a more correct **Calorie** reading. Although we cannot provide an exact calorie

count we do want to be as close as possible.

A message about Calories: Calorie readings on every piece of exercise equipment, whether it is in a gym or at home, are not accurate and tend to vary widely. They are meant only as a guide to monitor your progress from workout to workout. The only way to measure your calorie burn accurately is in a clinical setting connected to a host of machines. This is because every person is different and burns calories at a different rate. Some good news is that you will continue to burn calories at about the same rate as during exercise for 20-30 minutes after you have finished exercising!

## **Entering/Changing Settings**

When you enter a program, by pressing a program key, then enter key, you have the option of entering your own personal settings. If you want to workout without entering new settings then just press the Start key. This will bypass the programming of data and take you directly to the start of your workout. If you want to change the personal settings then just follow the instructions in the message window. If you start a program without changing the settings the default, or saved, settings will be used.

The default computer settings are: Age = 35, Weight = 150 Lbs., Time = 30:00, Max Level, each program has a different maximum work level: Hill = 7, Fatburn = 5, Cardio = 7, Strength = 8, Interval = 7.

NOTE: Age and Weight default settings will change when you enter a new number. So the last Age and Weight entered will be saved as the new default settings. If you enter your Age and Weight the first time you use the Elliptical you will not have to enter it every time you work out unless either your Age or Weight changes or someone else enters a different Age and Weight.

#### Manual

The Manual program works as the name implies; manually. This means that you control the work load yourself and not the computer. To start the Manual program follow the instructions below or just press the Manual button then the Enter button and follow the directions in the message window.

- 1. Press the **Manual** key then press the **Enter** key.
- 2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
- 3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
- 4. Next is **Time**. You may adjust the Time and press enter to continue.
- 5. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
- 6. Once the program starts you will be at level one. This is the easiest level and it is a

- good idea to stay at level one for a while to warm up. If you want to increase the work load at any time press the Up key; the Down key will decrease the work load.
- 7. During the Manual program you will be able to scroll through the data in the message window by pressing the adjacent **Display key**, switch between the profile display and a quarter mile track by pressing the Display key adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate **Auto-Pilot** mode (XE550 only. See Heart Rate section for details of this feature).
- 8. When the program ends you may press Start to begin the same program again or Stop to exit the program or you can save the program you just completed as a **custom user program** by pressing a User key and following the instructions in the message window.

## **Preset Programs**

The XE Elliptical has five different programs that have been designed for a variety of workouts. These five programs have factory preset profiles for achieving different goals. The initial built-in level of difficulty for each program is set to a relatively easy level. You may adjust the level of difficulty for each program before beginning by following the instructions in the message window after selecting your program.

## The Programs

## HILL

The **Hill** program simulates going up and down a hill. The resistance in the pedals will steadily increase and then decrease during the program. To start the Hill program follow the instructions below or just press the Hill button then the Enter button and follow the directions in the message window.

- 1. Press the **Hill** key then press the **Enter** key.
- 2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
- 3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
- 4. Next is **Time**. You may adjust the Time and press enter to continue.
- 5. Now you are asked to adjust the **Max Level.** This is the peak exertion level you will experience during the program, at the top of the hill. The factory setting is level seven. Adjust the level and then press enter.
- 6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
- 7. If you want to increase or decrease the work load at any time during the program press the Up or Down key. This will only affect the workload for the present position in the profile. When the profile changes to the next column it will return to the preset work level.
- 8. During the Hill program you will be able to scroll through the data in the message

- window by pressing the adjacent **Display key**, switch between the profile display and a quarter mile track by pressing the Display key adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate **Auto-Pilot** mode (XE550 only. See Heart Rate section for details of this feature).
- 9. When the program ends you may press Start to begin the same program again or Stop to exit the program or you can save the program you just completed as a **custom user program** by pressing a User key and following the instructions in the message window.

#### **Fat Burn**

The **Fat Burn** program is designed, as the name implies, to maximize the burning of fat. There are many schools of thought on the best way to burn fat but most experts agree that a lower exertion level which stays steady is the best. The absolute best way to burn fat is to keep your heart rate at around 60% to 70% of it's maximum potential. This program does not use heart rate but simulates a lower, steady, exertion workout.

To start the Fat Burn program follow the instructions below or just press the Fat Burn button then the Enter button and follow the directions in the message window.

- 1. Press the **Fat Burn** key then press the **Enter** key.
- 2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
- 3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
- 4. Next is **Time**. You may adjust the Time and press enter to continue.
- 5. Now you are asked to adjust the **Max Level.** This is the peak exertion level you will experience during the program. The factory setting is level five. Adjust the level and then press enter.
- 6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
- 7. If you want to increase or decrease the work load at any time during the program press the Up or Down key. This will only affect the workload for the present position in the profile. When the profile changes to the next column it will return to the preset work level.
- 8. During the Fat Burn program you will be able to scroll through the data in the message window by pressing the adjacent **Display key**, switch between the profile display and a quarter mile track by pressing the Display key adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate **Auto-Pilot** mode (XE550 only. See Heart Rate section for details of this feature).
- 9. When the program ends you may press Start to begin the same program again or Stop to exit the program or you can save the program you just completed as a **custom user program** by pressing a User key and following the instructions in the message window.

#### Cardio

The **Cardio** program is designed to increase your Cardio vascular function. This is, simply said, exercise for your heart and lungs. It will build up your heart muscle and increase blood flow and lung capacity. This is achieved by incorporating a higher level of exertion with slight fluctuations in work. To start the Cardio program follow the instructions below or just press the Cardio button then the Enter button and follow the directions in the message window.

- 1. Press the **Cardio** key then press the **Enter** key.
- 2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
- 3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
- 4. Next is **Time**. You may adjust the Time and press enter to continue.
- 5. Now you are asked to adjust the **Max Level.** This is the peak exertion level you will experience during the program. The factory setting is level seven. Adjust the level and then press enter.
- 6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
- 7. If you want to increase or decrease the work load at any time during the program press the Up or Down key. This will only affect the workload for the present position in the profile. When the profile changes to the next column it will return to the preset work level.
- 8. During the Cardio program you will be able to scroll through the data in the message window by pressing the adjacent **Display key**, switch between the profile display and a quarter mile track by pressing the Display key adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate **Auto-Pilot** mode (XE550 only. See Heart Rate section for details of this feature).
- When the program ends you may press Start to begin the same program again or Stop
  to exit the program or you can save the program you just completed as a custom user
  program by pressing a User key and following the instructions in the message
  window.

## Strength

The **Strength** program is designed to increase muscular strength in your lower body. This program will steadily increase in resistance to a high level and then keeps you there. This is designed to strengthen and tone your legs and glutes. To start the Strength program follow the instructions below or just press the Strength button then the Enter button and follow the directions in the message window.

- 1. Press the **Strength** key then press the **Enter** key.
- 2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.

- 3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
- 4. Next is **Time**. You may adjust the Time and press enter to continue.
- 5. Now you are asked to adjust the **Max Level**. This is the peak exertion level you will experience during the program. The factory setting is level eight. Adjust the level and then press enter.
- 6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
- 7. If you want to increase or decrease the work load at any time during the program press the Up or Down key. This will only affect the workload for the present position in the profile. When the profile changes to the next column it will return to the preset work level.
- 8. During the Strength program you will be able to scroll through the data in the message window by pressing the adjacent **Display key**, switch between the profile display and a quarter mile track by pressing the Display key adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate **Auto-Pilot** mode (XE550 only. See Heart Rate section for details of this feature).
- 9. When the program ends you may press Start to begin the same program again or Stop to exit the program or you can save the program you just completed as a **custom user program** by pressing a User key and following the instructions in the message window.

#### Interval

The **Interval** program takes you through high levels of intensity followed by periods of low intensity. This program increases your endurance by depleting your oxygen level followed by periods of recovery to replenish oxygen. Your cardio vascular system gets programmed to use oxygen more efficiently this way. To start the Interval program follow the instructions below or just press the Interval button then the Enter button and follow the directions in the message window.

- 1. Press the **Interval** key then press the **Enter** key.
- 2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
- 3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
- 4. Next is **Time**. You may adjust the Time and press enter to continue.
- 5. Now you are asked to adjust the **Max Level.** This is the peak exertion level you will experience during the program. The factory setting is level seven. Adjust the level and then press enter.
- 6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
- 7. If you want to increase or decrease the work load at any time during the program press the Up or Down key. This will only affect the workload for the present position in

- the profile. When the profile changes to the next column it will return to the preset work level.
- 8. During the Interval program you will be able to scroll through the data in the message window by pressing the adjacent **Display key**, switch between the profile display and a quarter mile track by pressing the Display key adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate **Auto-Pilot** mode (XE550 only. See Heart Rate section for details of this feature).
- When the program ends you may press Start to begin the same program again or Stop
  to exit the program or you can save the program you just completed as a custom user
  program by pressing a User key and following the instructions in the message
  window.

## **Custom User Defined Programs**

There are two customizable **User** programs that allow you to build and save your own workout. The two programs, **User 1** and **User 2**, operate exactly the same way so there is no reason to describe them separately. You can build your own custom program by following the instructions below or you can save any other preset program you complete as a custom program. Both programs allow you to further personalize it by adding your name.

- 1. Press the **User 1 or User 2** key. The message window will show a welcome message. If you had previously saved a program the message will contain your name. Then press the **Enter** key to begin programming.
- 2. When you press enter, the message window will show "Name A", if there is no name saved. If the name "David" had been previously saved the message window will show "Name David" and the D will be blinking. If there is a name saved you can change it or you may press the Stop key to keep the name and continue to the next step. If you want to enter a name use the Up and/or the Down key to change the first letter then press Enter to save the first letter and continue to the next letter. When you have finished entering the name press the Stop key to save the name and continue to the next step.
- 3. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
- 4. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
- 5. Next is **Time**. You may adjust the Time and press enter to continue.
- 6. Now you are asked to adjust the **Max Level**. This is the peak exertion level you will experience during the program. The factory setting is level seven. Adjust the level and then press enter.
- 7. Now the first column will be blinking and you are asked to adjust the level for the first segment of the workout. When you finish adjusting the first segment, or if you don't want to change, then press enter to continue to the next segment.
- 8. The next segment will show the same level as the previously adjusted segment. Repeat the same process as the last segment then press enter. Continue this process until all twenty segments have been set.
- 9. The message window will then tell you to press enter to save the program. After saving the program the message window says "New program saved" then will give you the option to Start or modify the program. Pressing Stop will exit to the start up screen.

- 10. If you want to increase or decrease the work load at any time during the program press the Up or Down key. This will only affect the workload for the present position in the profile. When the profile changes to the next column it will return to the preset work level.
- 11. During the User 1 or User 2 program you will be able to scroll through the data in the message window by pressing the adjacent **Display key**, switch between the profile display and a quarter mile track by pressing the Display key adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate **Auto-Pilot** mode (XE550 only. See Heart Rate section for details of this feature).

## **Heart Rate programs**

## Before we get started, a word about Heart Rate:

The old motto, "no pain, no gain", is a myth that has been overpowered by the benefits of exercising comfortably. A great deal of this success has been promoted by the use of heart rate monitors. With the proper use of a heart rate monitor, many people find that their usual choice of exercise intensity was either too high or too low and exercise is much more enjoyable by maintaining their heart rate in the desired benefit range.

To determine the benefit range in which you wish to train, you must first determine your Maximum Heart Rate. This can be accomplished by using the following formula: 220 minus your age. This will give you the Maximum heart rate (MHR) for someone of your age. To determine the effective heart rate range for specific goals you simply calculate a percentage your MHR. Your Heart rate training zone is 50% to 90% of your maximum heart rate. 60% of your MHR is the zone that burns fat while 80% is for strengthening the cardio vascular system. This 60% to 80% is the zone to stay in for maximum benefit.

For someone who is 40 years old their target heart rate zone is calculated:

```
220 - 40 = 180 (maximum heart rate)

180 \times .6 = 108 beats per minute (60% of maximum)

180 \times .8 = 144 beats per minute (80% of maximum)
```

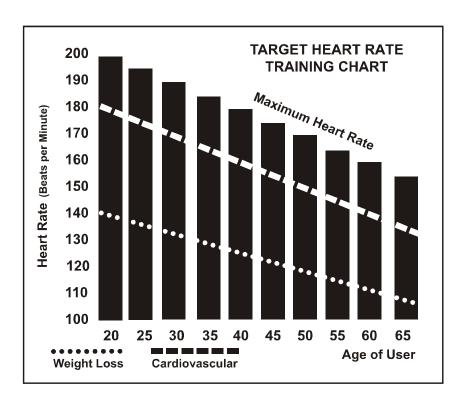
So for a 40 year old the training zone would be 108 to 144 beats per minute.

If you enter your age during programming the console will perform this calculation automatically. Entering your age is used for the Heart Rate control programs and also for the Heart rate bar graph. After calculating your Maximum Heart Rate you can decide upon which goal you would like to pursue.

The two most popular reasons for, or goals, of exercise are cardiovascular fitness (training for the heart and lungs) and weight control. The black columns on the chart below represent the Maximum Heart Rate for a person whose age is listed at the bottom of each column. The training heart rate, for either cardiovascular fitness or weight loss, is represented by two different lines that cut diagonally through the chart. A definition of the lines' goal is in the bottom left-hand corner of the chart. If your goal is cardiovascular fitness or if it is weight loss, it can be achieved by training at 80% or 60%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your

physician before participating in any exercise program.

With all Spirit Heart Rate Control elliptical machines you may use the heart rate monitor feature without using the Heart Rate Control program. This function can be used during manual mode or during any of the nine different programs. The Heart Rate Control program automatically controls resistance at the pedals.



#### Rate of Perceived Exertion

Heart rate is important but listening to your body also has a lot of advantages. There are more variables involved in how hard you should workout than just heart rate. Your stress level, physical health, emotional health, temperature, humidity, the time of day, the last time you ate and what you ate, all contribute to the intensity at which you should workout. If you listen to your body, it will tell you all of these things.

The rate of perceived exertion (RPE), also know as the Borg scale, was developed by Swedish physiologist G.A.V. Borg. This scale rates exercise intensity from 6 to 20 depending upon how you feel or the perception of your effort.

The scale is as follows:

Rating Perception of Effort

6 Minimal

7 Very, very light

8 Very, very light +

9 Very light

10 Very light +

11 Fairly light

12 Comfortable

13 Somewhat hard

14 Somewhat hard +

15 Hard

16 Hard +

17 Very hard

18 Very hard +

19 Very, very hard

20 Maximal

You can get an approximate heart rate level for each rating by simply adding a zero to each rating. For example a rating of 12 will result in an approximate heart rate of 120 beats per minute. Your RPE will vary depending up the factors discussed earlier. That is the major benefit of this type of training. If your body is strong and rested, you will feel strong and your pace will feel easier. When your body is in this condition, you are able to train harder and the RPE will support this. If you are feeling tired and sluggish, it is because your body needs a break. In this condition, your pace will feel harder. Again, this will show up in your RPE and you will train at the proper level for that day.

## Using a Heart Rate Transmitter

How to wear your wireless chest strap transmitter:

- 1. Attach the transmitter to the elastic strap using the locking parts.
- 2. Adjust the strap as tightly as possible as long as the strap is not too tight to remain comfortable.
- 3. Position the transmitter with the Spirit logo centered in the middle of your body facing away from your chest (some people must position the transmitter slightly left of center). Attach the final end of the elastic strap by inserting the round end and, using the locking parts, secure the transmitter and strap around your chest.
- 4. Position the transmitter immediately below the pectoral muscles.
- 5. Sweat is the best conductor to measure very minute heart beat electrical signals. However, plain water can also be used to pre-wet the electrodes (2 black square areas on the reverse side of the belt and either side of transmitter). It's also recommended that you wear the transmitter strap a few minutes before your work out. Some users, because of body chemistry, have a more difficult time in achieving a strong, steady signal at the beginning. After "warming up", this problem lessens. As noted, wearing clothing over the transmitter/strap doesn't affect performance.
- 6. Your workout must be within range distance between transmitter/receiver to achieve a strong steady signal. The length of range may vary somewhat but generally stay close enough to the console to maintain good, strong, reliable readings. Wearing the transmitter immediately against bare skin assures you of proper operation. If you wish, you may wear the transmitter over a shirt. To do so, moisten the areas of the shirt that the electrodes will rest upon.

Note: The transmitter is automatically activated when it detects activity from the user's heart. Additionally, it automatically deactivates when it does not receive any activity. Although the transmitter is water resistant, moisture can have the effect of creating false signals, so you should take precautions to completely dry the transmitter after use to prolong battery life (estimated transmitter battery life is 2500 hours). The replacement battery is Panasonic CR2032.

## **Erratic Operation:**

Caution! Do not use this elliptical for Heart Rate Control unless a steady, solid Actual Heart Rate value is being displayed. High, wild, random numbers being displayed indicate a problem.

Areas to look for interference which may cause erratic heart rate:

- (1) Microwave ovens, T.V.'s, small appliances, etc.
- (2) Fluorescent lights.
- (3) Some household security systems.
- (4) Perimeter fence for a pet.
- (5) Some people have problems with the transmitter picking up a signal from their skin. If you have problems try wearing the transmitter upside down. Normally the transmitter will be oriented so the Spirit logo is right side up.
- (6) If you continue to experience problems contact your dealer.

Both programs operate the same, the only difference is that HR 1 is set to 60% and HR 2 is set to 80% of maximum heart rate. They both are programmed the same way. To start the **HR 1 or HR 2** programs follow the instructions below or just press the HR 1 or HR 2 button then the Enter button and follow the directions in the message window.

- 10. Press the **HR 1 or HR 2** key then press the **Enter** key.
- 11. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
- 12. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
- 13. Next is **Time**. You may adjust the Time and press enter to continue.
- 14. Now you are asked to adjust the **Heart rate Level**. This is the heart rate level you will experience during the program. Adjust the level and then press enter.
- 15. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
- 16. If you want to increase or decrease the work load at any time during the program press the Up or Down key. This will allow you to change your target heart rate at any time during the program.
- 17. During the HR 1 or HR 2 programs you will be able to scroll through the data in the message window by pressing the adjacent **Display key.**
- 18. When the program ends you may press Start to begin the same program again or Stop to exit the program or you can save the program you just completed as a custom user program by pressing a User key and following the instructions in the message window.

## Auto-pilot (XE550 only)

The **Auto-pilot** feature is a unique heart rate program. This program allows you to enter the Heart Rate Control program on the fly. At any time, during any program, you can press the Auto-pilot button and the console will switch to heart rate control mode. The console will maintain your heart rate at the current level when you press the Auto-pilot button. For instance: If you are in the Manual mode and your heart rate is at 150 beats per minute, pressing the Auto-pilot button will switch the console to heart rate control and keep your heart rate at 150 beats per minute automatically.

# Manufacturer's Limited Warranty

# Effective October 15, 2005 ELLIPTICAL WARRANTY

Spirit Manufacturing Inc. warrants all its elliptical parts for a period of 2 years from the date of retail sale, as determined by sale receipt, or eighteen (18) months from the original factory shipping date, whichever comes first. Spirit's responsibilities include providing new or remanufactured parts, at Spirit's option, and technical support to our independent dealers and servicing organizations. In the absence of a dealer or service organization, these warranties will be administered by Spirit directly to a consumer. An extended warranty period applies to the following components:

Labor 1 Year
Frame Weldments Lifetime
All Other Components 5 Years

#### NORMAL RESPONSIBILITIES OF THE CONSUMER

This warranty applies only to products in ordinary household use, and the consumer is responsible for the items listed below:

- 1. The warranty registration card must be completed and returned to the address listed on the card within 10 days of the original purchase to validate the manufacturer's limited warranty.
- 2. Proper use of the elliptical in accordance with the instructions provided in this manual
- 3. Proper installation by an authorized Spirit service company in accordance with instructions provided with the elliptical and with all local electric codes.
- 4. Proper connection to a grounded power supply of sufficient voltage, replacement of blown fuses, repair of loose connections or defects in house wiring.
- 5. Expenses for making the elliptical accessible for servicing, including any item that was not part of the elliptical at the time it was shipped from the factory.
- 6. Damages to the elliptical finish during shipping, installation or following installation.

#### **EXCLUSIONS**

This warranty does not cover the following:

1. CONSEQUENTIAL, COLLATERAL, OR INCIDENTAL DAMAGES SUCH AS PROPERTY DAMAGE AND INCIDENTAL EXPENSES RESULTING FROM ANY BREACH OF THIS WRITTEN OR ANY IMPLIED WARRANTY.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.

- 2. Service call reimbursement to the consumer. Service call reimbursement to the dealer that does not involve malfunction or defects in workmanship or material, for units that are beyond the warranty period, for units that are beyond the service call reimbursement period, for elliptical not requiring component replacement, or elliptical not in ordinary household use.
- 3. Damages caused by services performed by persons other than authorized Spirit service companies; use of parts other than original Spirit parts; or external causes such as alterations, modifications, abuse, misuse, accident, improper maintenance, inadequate power supply, or acts of God.
- 4. Products with original serial numbers that have been removed or altered.
- 5. Products that have been sold, transferred, bartered, or given to a third party.
- 6. Products that do not have a warranty registration card on file at Spirit Mg. Spirit reserves the right to request proof of purchase if no warranty record exists for the product.
- 7. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE.

#### **SERVICE**

Keep your bill of sale. Twelve (12) months from the date on the bill of sale or eighteen (18) months from the date of factory shipping as determined by the serial number establishes the warranty period should service be required. If service is performed, it is in your best interest to obtain and keep all receipts. This written warranty gives you specific legal rights. You may also have other rights that vary from state to state. Service under this warranty must be obtained by following these steps, in order:

- 1. Contact your selling authorized Spirit dealer. OR
- 2. Contact your local authorized Spirit service organization.
- 3. If there is a question as to where to obtain service, contact our service department at (870) 935-1107.
- 4. If no local service is available, Spirit will repair or replace the parts, at Spirit's option, within the warranty period at no charge for parts. All transportation costs, both to our factory and upon return to the owner, are the responsibility of the owner. The owner is responsible for adequate packaging upon return to Spirit. Spirit is not responsible for damages in shipping. Make all freight damage claims with the appropriate freight carrier. DO NOT SHIP ANY UNIT TO OUR FACTORY WITHOUT A RETURN AUTHORIZATION NUMBER. All units arriving without a return authorization number will be refused.
- 5. For any further information, or to contact our service department by mail, send your correspondence to:

Spirit Manufacturing, Inc. P.O. Box 2037 Jonesboro, AR 72402-2037

Product features or specifications as described or illustrated are subject to change without notice. All warranties are made by Spirit Manufacturing, Inc. This warranty applies only in the 50 states of the U.S.A. and Canada.