



inspire
BY **SPIRIT**



ZE30
Elliptical

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 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.

Serial Number _____

REGISTER YOUR PURCHASE

The self-addressed product registration card must be completed in full and returned to Spirit Manufacturing, Inc or visit www.spiritfitness.com 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 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 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 ZE30; 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 function properly 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

ASSEMBLY PACK CHECK LIST

- M8x20mm Button Head Socket Screw (4pcs)
- M8x15mm Hex Head Screw (6pcs)
- M8x50mm Button Head Socket Screw (2pcs)
- M8x45mm Button Head Socket Screw (4pcs)
- M4x30mm Self Tapping Screw (4pcs)
- 5/16" x 19 x 1.5T Curve Washer (6pcs)
- 5/16"x23x1.5T Flat Washer (8pcs)
- M8 Nylon Nut (2pcs)
- 13/14mm N Wrench (1pc)
- M5 Allen Wrench (1pc)
- Screwdriver(1pc)

Assembly

STEP 1

Install the Front and rear stabilizer into the Frame Base Support with 4pcs of M8x45m/m Hex Head Screws and 4pcs of 5/16"x23x1.5T Flat Washers. Then tightly fasten 4pcs of M5x38m/m Self Tapping Screws of the Front and rear Stabilizer Cover by using the 13/14mm N Allen Wrench and Screw Driver.

(As shown in Fig.1~7)

STEP 2

Connect the Computer Cable (Upper) with Computer Cable (Lower).

(As shown in Fig. 8)

STEP 3

Install the Front Post into the Main Frame with 6pcs of M8x15m/m Hex Head Screws and 6pcs of φ 5/16"x φ 19 x2T Curve Washers by using the 13/14mm N Allen Wrench .

(As shown in Fig. 9)

STEP 4

Connect the Computer Cable (Upper) with the Hand Pulse Cable. Install the Console with 4pcs of M5x15m/m Button Head Socket Screws by using the Screw Driver.

(As shown in Fig. 10~11)

■ STEP 5

1. Install the Handle Bar Cover Front onto the Front Post with 1pc of M5x15m/m Button Head Socket Screws.
(As shown in Fig. 12)
2. Take the Fix Handle Bar through the Hand Bar Cover Front and install it onto plate with 2pcs of M8x20m/m Button Head Socket Screws.
(As shown in Fig. 13)
3. Install the Handle Bar Cover Back onto the Front Post with 1pc of M5x15m/m Button Head Socket Screws.
(As shown in Fig. 14)

■ STEP 6

Install the Lower Swing Bar into the Left and Right Swing Bar Upper and fix it by using the Tension Adjuster.
(As shown in Fig. 15)

■ STEP 7

Install the Plastic Insert For Swing Bar (Lower End) into the Front Post and install Left and Right Swing Bar Upper with 2pcs of M8x20m/m Button Head Socket Screws and 2pcs of 5/16"x23x1.5T Flat Washers by using the M5 Allen Wrench.
(As shown in Fig. 16~18)

■ STEP 8

Install the Left and Right Pedal Bar into the U Shape Plate For Pedal with 2pcs of M8x50m/m Button Head Socket Screws, 2pcs of 5/16"x23x1.5T Flat Washers and 2pcs of M8 Nylon Nuts by using the N Wrench and the M5 Allen Wrench.
(As shown in Fig. 19)

■ STEP 9

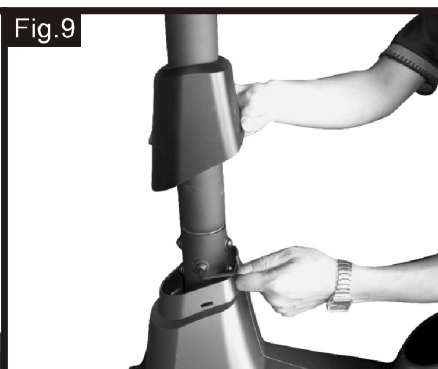
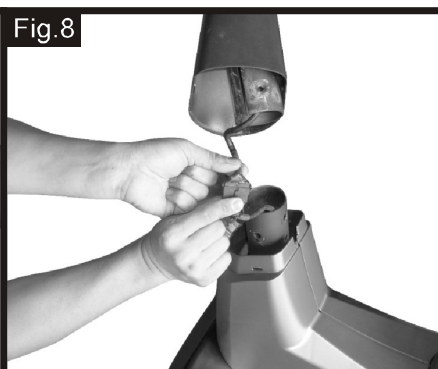
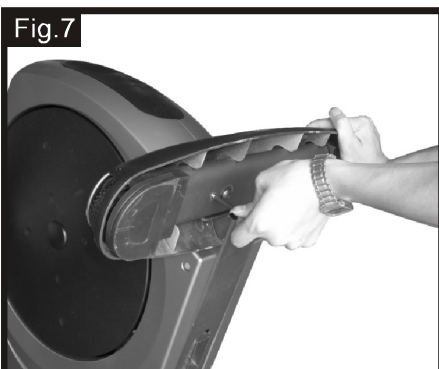
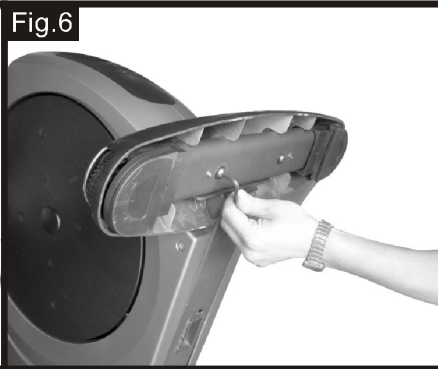
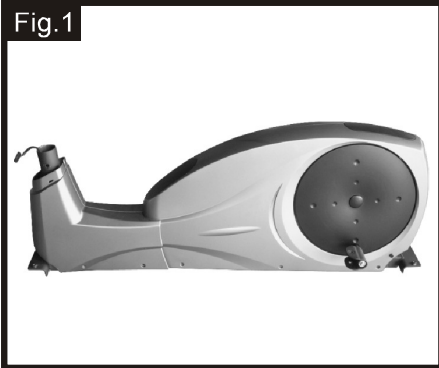
Install the Swing Bar Upper Cover Front and the Swing Bar Upper Cover Back into the Front Post with 4pcs of M4x30m/m Self Tapping Screws. And plug the two Hand Pulse Cables into the Socket at back of Console.
(As shown in Fig. 20~21)

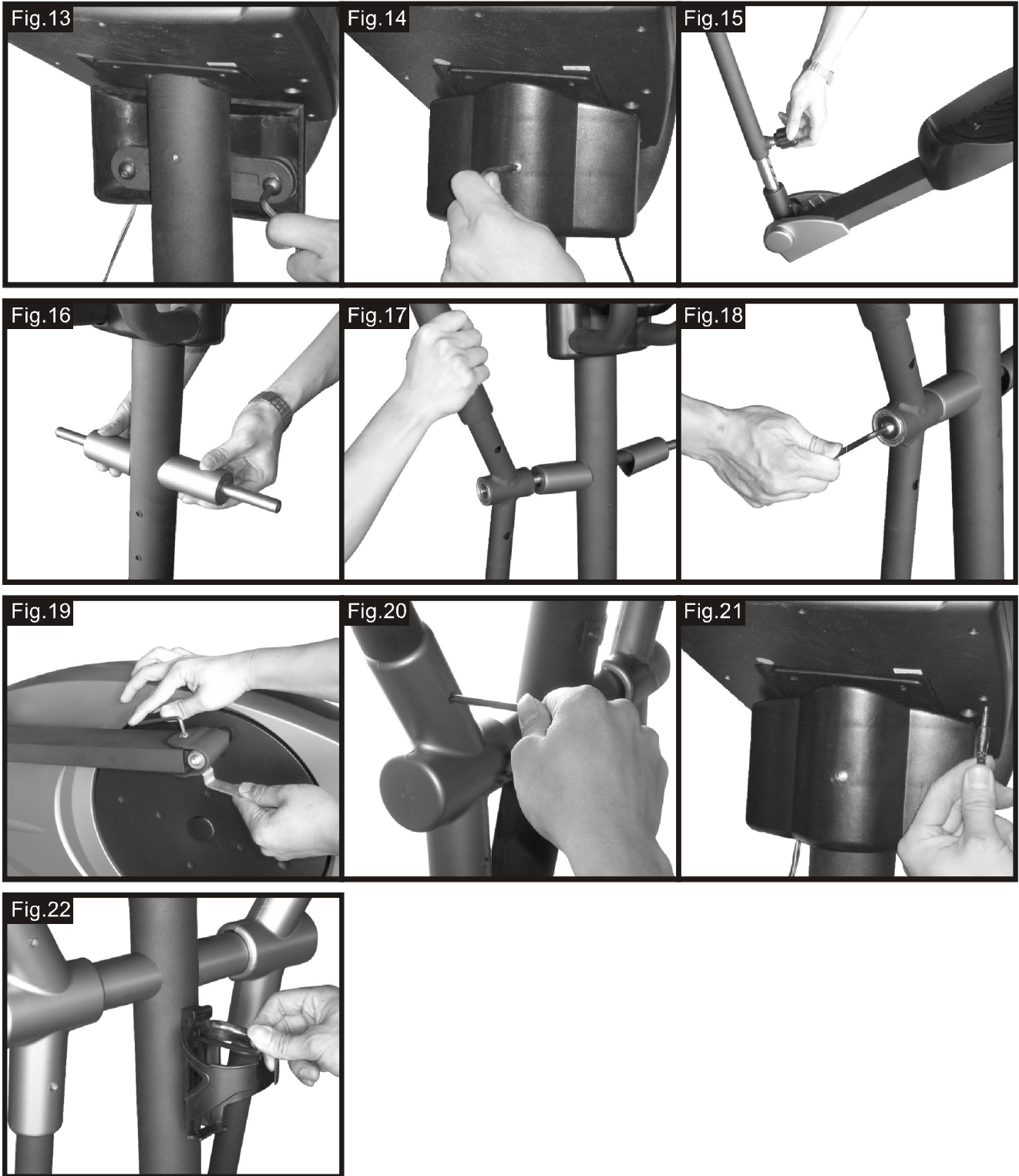
■ STEP 10

Install the Drink Bottle Holder onto the Front Post with 2pcs of M5x15m/m Socket Head Cap Screws.
(As shown in Fig. 22)

- **PLEASE LOCK DOWN ALL HARDWARE AFTER THE ACCESSORIES HAVE BEEN ASSEMBLED.**

Assembly Photos





Transport

The elliptical is equipped with two transport wheels which are engaged when rear of ZE30 is lifted.

Operation of Your Elliptical

- Console



Power up

The elliptical is supplied with a wall mount power supply. When power is connected to the 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. All work out data will be saved in stand-by mode.

When initially powered on the large display will light. The data windows will show zero and the program choices will be blinking in the large window. If the console is in stand-by mode, pressing any key or beginning your exercising will wake the console up.

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 KPH, indicating approximate road speed as if pedaling a bicycle in 7th 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.

Manual

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 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.

User Program

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.

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:

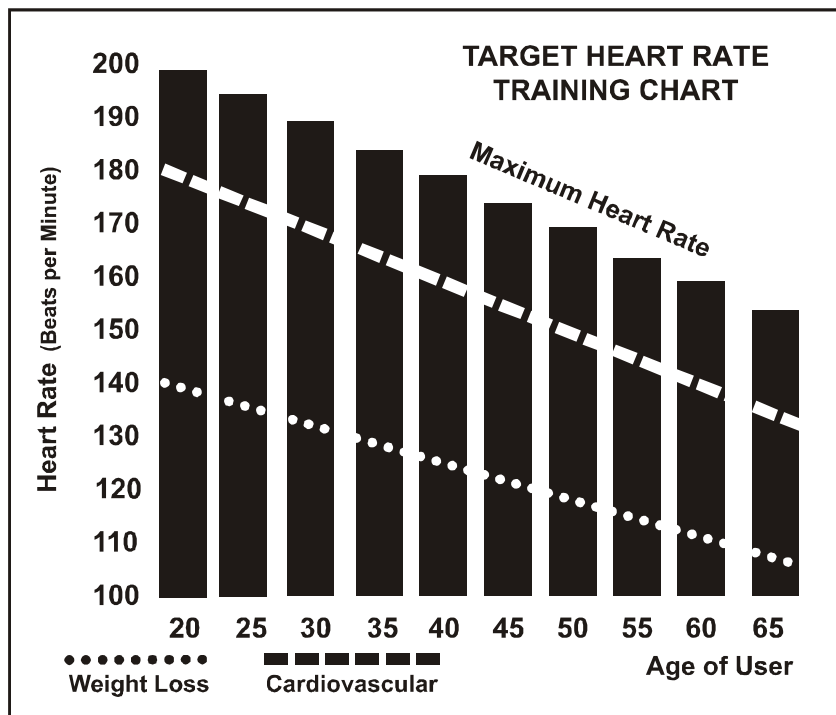
$$\begin{aligned} 220 - 40 &= 180 \text{ (maximum heart rate)} \\ 180 \times .6 &= 108 \text{ beats per minute (60\% of maximum)} \\ 180 \times .8 &= 144 \text{ beats per minute (80\% of maximum)} \end{aligned}$$

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 known 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 upon 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.*

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: $220 - \text{age} = \text{maximum HR}$. 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.

WINDOW DISPLAY

- 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.

Manufacturer's Limited Warranty

Effective October 15, 2004

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:

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 Mfg. 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.

ZE30

Labor 1 Year
Frame Weldments Lifetime
All Other Components 2 Years