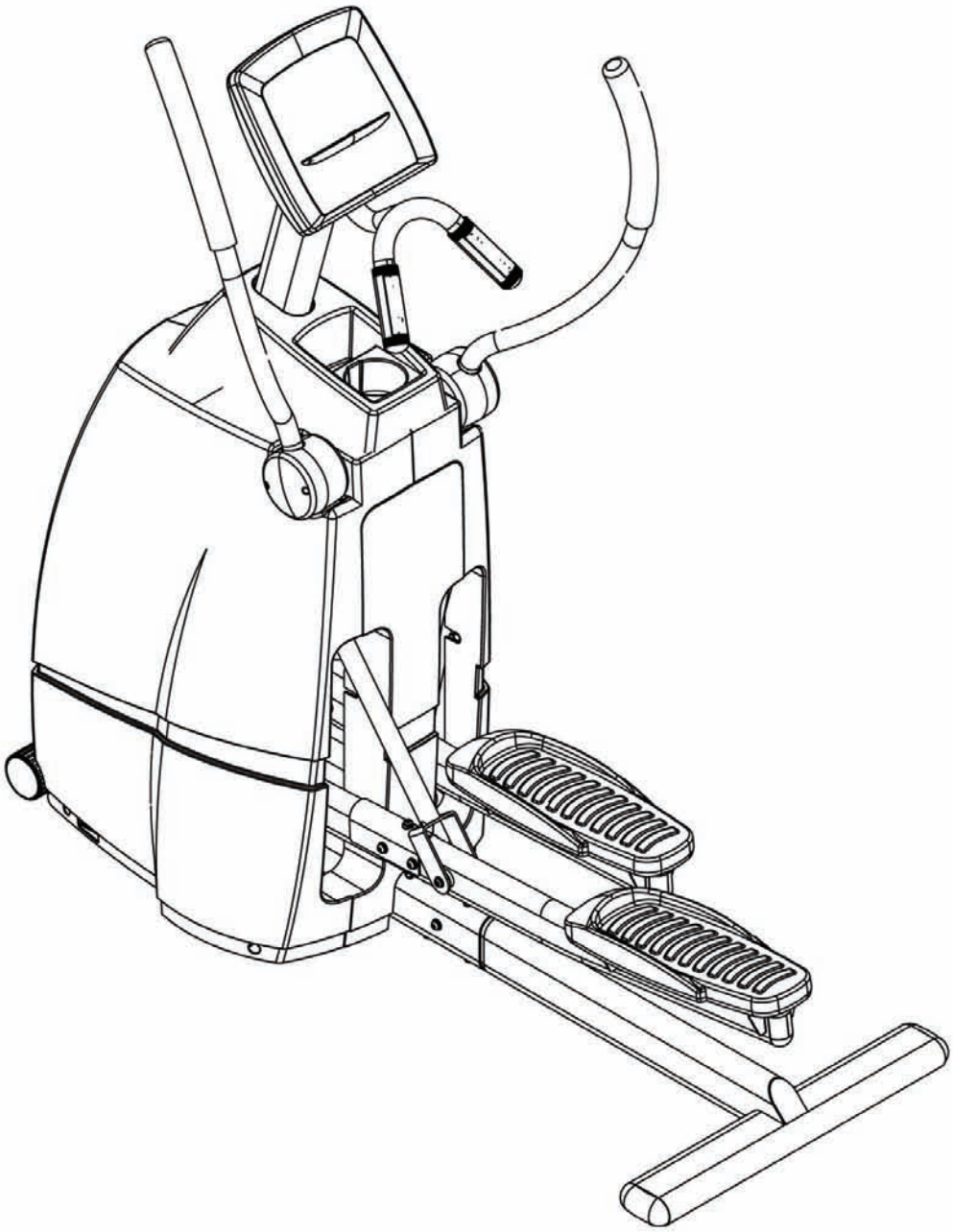
ENDURANCE®



E7 and E7HRC OWNER'S MANUAL

Proper ergonomics transform workouts

When it comes to elliptical cross trainers, the newest and fastest growing category of fitness equipment, all definitely are not created equal. Anyone can step onto several different machines and quickly realize that each has its own very distinct motion and feel, unlike other fitness equipment such as treadmills and stationary bikes.

An elliptical cross trainer is a unique combination of a stair climber and a cross-country ski machine, requiring the feet to follow an elliptical motion that typically goes forward or reverse. Some units also include arms that engage the upper body as well. The advantage of these total-body machines is that they require on upright, weight bearing position in a natural, closed kinetic chain while training all the body's major muscle groups - including the gluteals, hamstrings, quadriceps, calves, lats, chest, deltoids, biceps, and triceps - which, worked together, result in maximum calorie burn and distinguishes ellipticals from virtually all other cardiovascular equipment.

Quality elliptical machines foster a smooth, natural, low-impact cardiovascular workout that challenges everyone from beginners to elite athletes. Studies have shown that compared to other exercises, total body elliptical cross trainers require significant oxygen consumption and result in high caloric expenditure for efficient, effective workouts. Also, total body machines that disperse the exercise throughout enable exercisers to work at higher intensities without actually perceiving greater exertion.

It is easy to see why these machines are tremendously popular, but before investing in an elliptical cross trainer, it is critical to evaluate its overall feel.

The importance of biomechanics

Biomechanics, which is the study of human movement, is an important consideration for any piece of fitness equipment, but even more so with the elliptical cross trainer due to the complexity and variance of its movement. For the optimum workout, the machine must fit the exerciser; individuals should never be required to adapt their posture, position of movement pattern to fit a piece of equipment. Elliptical cross trainers ideally should simulate how the body naturally moves for people of various shapes and sizes.

The motion on an elliptical cross trainer should replicate movements like walking of running, which involve similar biomechanics. Engineers therefore must consider numerous factors to make the exercise biomechanically correct while eliminating unnatural alignment of excessive, repetitive stress or torque.

On most elliptical cross trainers, the biomechanical analysis is as follows: the body moves in a linear direction through flexion and extension at numerous joints in the sagittal plane, including the shoulder, elbow, hip, knee, and ankle. Machines with arms may also include a minimal amount of radial and ulnar deviation in the frontal plane at the wrist joint. Also, in total body units, the erector spinae may engage in a bit of rotation in the transverse plane throughout the range of motion.

Critical ergonomic factors

While biomechanics are integral in developing elliptical cross trainers, ergonomics is really where the rubber hits the road. Ergonomics is the science of adapting external conditions to suit individuals, or in this case, using biomechanical analysis to build the best feeling elliptical cross trainers to satisfy exercisers and deliver results.

The essential ergonomic factors for elliptical cross trainers all contribute to its motion or feel, and exercisers should evaluate the following when choosing equipment:

Stride length - Either extreme, long or short, can cause hyperextension in the hip joint in the forward motion as wall as unnatural, forced hip flexion when going in reverse, and both can cause discomfort. The optimal stride length of 18.5", should comfortably accommodate the majority of individuals in both forward and reverse motion.

Stride angle / height - This refers to the shape of the actual ellipse, whether it is more circular or oblong. It should not feel too vertical like a stair climber of cycle or too flat like a cross-country skier. The result is a natural, comfortable ride that optimally engages all major lower body muscles.

Stride width / pedal spacing - The wider the space between the pedals, the greater the hips shift laterally during the movement, which can create lower back pain. In addition, a wide stance feels distinctly unnatural, since people walk and run with their feet and legs close together.

Pedal acceleration - Anyone who has tried several brands of ellipticals immediately notices the difference in how quickly and smoothly the pedals move. Some are faster on the down-stroke and drag on the upswing, others have a "kick" on the upswing that unnaturally propels the pedals and can throw exercisers off balance. Without steady pedal acceleration, the result is an uncomfortable and potentially unsafe movement.

Inertia - Inertia deals with the amount of effort it requires to get the pedals moving. With too much inertia, it is difficult to get the machine going, but once started, momentum kicks in and relieves exercisers of significant effort, which takes away from the workout.

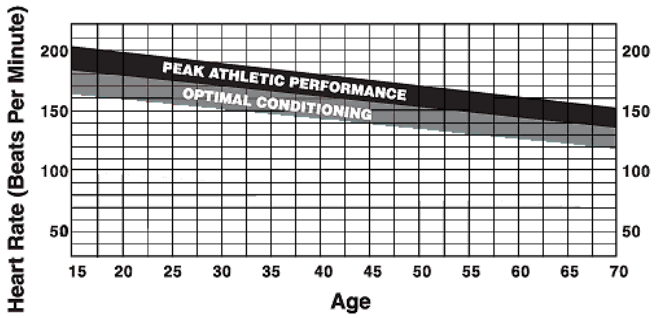
Pedal articulation - In most elliptical machines, the ankle joint engages in dorsi flexion on the downstroke and plantar flexion on the upstroke. Excessive plantar flexion leads to transient paresthesia, a "numb toe" condition due to compression of nerves in the foot, and extreme dorsi flexion can limit knee and hip extension, which are essential for a complete range of motion.

Upper body pivot point and range of motion - Unlike treadmills, stationary cycles and stair climbers, many elliptical cross trainers engage the upper body in movements that should be synchronized with leg motion. Arm handles should simulate natural shoulder and arm flexion and extension as seen in walking or running, and that excessive radial or ulnar deviation may cause wrist discomfort.

Heart Rate Training Maximizes Performance

During exercise, the heart beat, or pulse rate, is a valuable gauge of intensity level - the more vigorous the workout, the faster the heart must pump to deliver oxygen rich blood to hard working muscles. Research shows that exercising in target heart rate zones is the best way to improve cardiovascular health while preventing under-training which minimizes results, as well as over-training and risking injury or burnout. Essentially, it amounts to smarter, more effective workouts.

Cardiovascular exercise should be performed at 55% to 90% of one's maximum heart rate (MHR), one way to determine your MHR is by using the following equation: 220-age=MHR. Or by using a chart:



Technology boost heart rate monitoring

Heart rate can be measured by palpating an artey and counting the beats. But even simpler is using a heart monitor, which consists of a strap worn around the chest that picks up the heart's electric signal and a wristband receiver that displays the number of beats. Quality monitors are nearly as accurate as clinical EKG's.

The first heart rate monitor was developed in 1977 as a training tool for the Finnish National Cross Country Ski Team. During the 1980s, heart rate monitoring became more popular with athletes, as they saw its effectiveness in enhancing their performance. Endurance athletes like elite runners, competitive cyclists, and even Olympic athletes have attested to better overall results due to heart rate training.

Advances in fitness equipment

Premium cardiovascular machines feature technology that facilitates accurate heart rate monitoring using telemetry or hand sensors. With telemetry, exercisers wear a chest strap, and the machine wirelessly picks up the heart's signal and displays the heart rate on the console. Some manufacturers also offer hand sensors that exercisers grip to get a heart rate reading. Because muscle contraction interference can cause erratic readings with hand sensors, telemetry is generally more accurate.

Some fitness equipment also offers pre-designed programs that take the guesswork out of heart rate training by keeping exercisers at predetermined heart rate zones. For example, in a workout that requires 80% MHR, the machine picks up the heart rate from the exerciser's chest strap and automatically varies resistance levels so the user maintains the proper intensity.

The advantage is that exercisers don't have to continually monitor and readjust to ensure that they are at the appropriate level because the machine does it for them. These programs also provide valuable variety, enhance motivation and help improve performance.

Save these instructions

Failure to follow any of the following safety instructions may result in injury or serious health problem:

- Use this exercise product only as intended and described in this Owner's Manual. Do not use attachments not recommended by the manufacturer.
- Never drop or insert any object into any opening, or on the Pedal Arm Guide Rails.
- Do not place fingers, feet or any other object into or near the moving parts.
- Never turn foot pedals, pedal arms or crank by hand.
- To avoid entanglement and possible injury, do not expose hands or arms to the drive mechanism.
- Do not dismount the E7 until the pedals are at a complete stop.
- Warn bystanders to keep a safe distance away. Do not allow anyone (other than the user) to touch the machine while it is in operation.
- Do not remove the side covers. Only on authorized retailer should perform maintenance or repair services.
- Do not use outdoors.

Children

- Keep children off and away from your E7 at all times.
- When the E7 is in use, young children and pets should be kept at least 10 feet away.

Other safety tips for your E7

- CAUTION! If you experience chest pains, nausea, dizziness or shortness of breath, stop exercising immediately and consult your physician before continuing.
- Don't wear loose clothing that might catch on any part of the E7.
- Read this Owner's Manual in it's entirety before operating the E7

Cleaning

- Use a damp cloth to wipe your E7 and console free of sweat and dust. Always avoid getting extra moisture on the console. By keeping the console face free of sweat, you can extend the console's life.
- Important Reminder: NEVER use petroleum - based solvents when cleaning. Doing so will damage the finish on your E7.

Assembly

If you have elected to assemble this product yourself, please read and follow each of the steps in the enclosed assembly instructions. It is recommended that assembly be performed by an authorized retailer. If you have any questions regarding any part or function of your E7, contact your retailer.

Moving your E7

Your E7 has a pair of transport wheels built into the front foot. It is easy to move your E7 by picking up the back end and rolling it on the front wheels.

Placement in your home

It is important that you place your E7 in a comfortable and inviting room. Your E7 is designed to use minimal floor space. Many people will place their E7 facing the TV or a picture window. To make exercise a desirable daily activity for you the E7 should be in attractive setting.

Leveling your E7

If your E7 wobbles when you have placed it where you intend to use it, raise or lower the four adjustable levelers. Two are located on either side of the rear stabilizing frame, and two are on each side under the housing.

Foot position

Your E7 has a large foot pedal, offering you a variety of foot positions. When using your E7 you may notice that your heel rises off the footpad. This is normal heel-toe-plant walking or running motion and you should not try to prevent this.

How to use the E7

To start using the E7 simply stand on the foot pedals with the toes of your shoes close to the front edge of the foot platform.
Place your hands in a comfortable position on the handlebars. Simply move your highest foot forward and follow the natural path of the machine.

E7 motion handles

Working in unison with the adjustable resistance of the elliptical stride, the motion handles are designed to work your upper body in rhythm with your lower body. The ergonomic design encourages good posture and proper technique. When working with the motion handles for the first time, start out at slow pace to get accustomed to the total body motion.

The stationary handles are there for additional support. On the stationary handles are the metallic contact heart rate pads, to be used if you are not wearing a Heart Rate Monitor Transmitter.

Converting from metric to standard
First locate the switch on the reverse side of the panel. Flipping the switch to the upper position means your readouts are in the STANDARD format. Flipping the switch down converts the readouts to METRIC. Remember that 1 mile equals 1.6 kilometers.

Turning the screen display on
You can turn your console on by either pressing the START button at the bottom of the console or by simply getting on your elliptical and beginning your stride.

Clearing previously stored information
Your elliptical will retain information from your previous workout such as calories and distance for a few minutes. You can clear this information by holding down the CLEAR RESET button.

Console feedback
Your E7 provides you with the information you need for an effective workout every time.

Time
There are two modes of time display. You can choose either Count Up Mode or Count Down Mode for a programed time limit.

To operate in Count-Up Mode:
Simply get on the elliptical and start striding. The console will automatically turn on and the time display will advance from zero and keep time until you finish your workout.

To operate in Count-Down Mode:
Turn on the console by pressing the RESET button. Press the SHIFT button to cycle through the feedback windows until TIME is displayed. Next, press the “+” button until the desired number of minutes of your workout is displayed. Then, start pedaling. The TIME display will show your specified time counting down to zero. When you have reached your goal, the console will beep until you press the RESET button again.

Distance
The DISTANCE display will show this amount of mileage you have “traveled” in your workout. Keeping a record of your progress is a great motivational tool. You can also program the amount of distance you desire for your workout:

To operate a specific distance:
Turn on the console by pressing the RESET button. Press the SHIFT button to cycle through the feedback windows until DISTANCE is displayed. Next, press the “+” button until the desired distance for the workout is displayed. Then, start pedaling. The DISTANCE display will show your specified mileage counting backwards to zero. When you have reached your goal, the console will beep until you press the RESET button again.

Speed
This readout will display your speed in miles per hour.

Calories
The calories display will show the approximate number of calories you burn during your workout. Your can also program your elliptical to notify you when you have burned a specific number of calories.

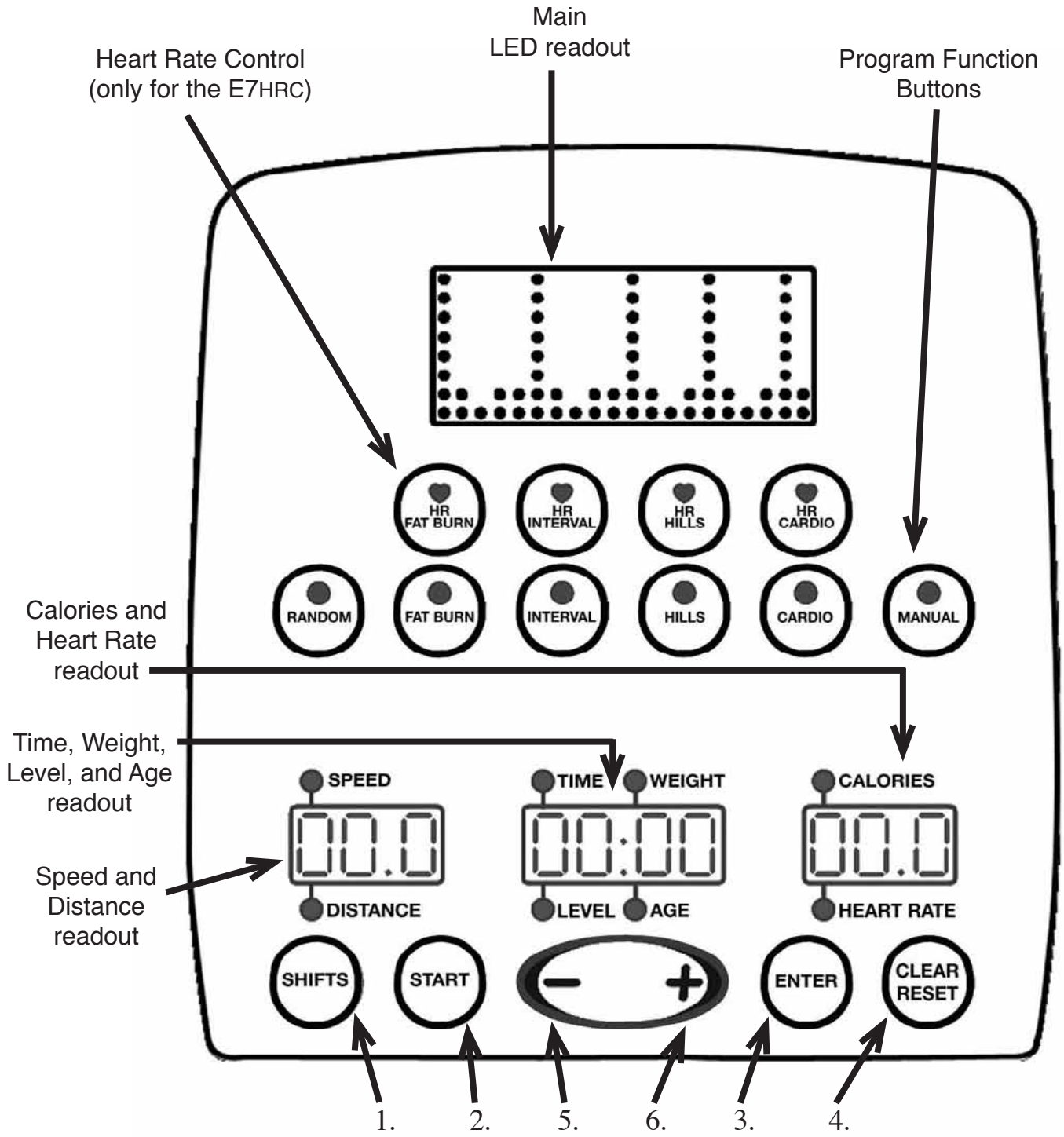
Top program a calorie countdown:
Turn on the console by pressing the RESET button. Press the SHIFT button to cycle through the feedback windows until CALORIES is displayed. Next, press the “+” button until the desired number of calories are displayed. Then, start pedaling. The CALORIES display will show your specified calories counting backwards to zero. When you have reached your goal, the console will beep until you press the RESET button again.

HEART RATE
The HEART RATE display will show your heart rate in beats per minute. During your workout, press the SHIFT button until HEART RATE is displayed. Next, grasp the inner upright handles with your palms on the heart rate sensors. After 10 seconds your heart rate will be displayed and will change as your heart rate changes. NOTE: Always consult a physician before starting an exercise program. This will be helpful in determining your target heart zone.

Setting the main display window
The automatic display mode on your elliptical is set to SCAN. In this mode, information from each of the feed back windows is cycled. If you desire to keep one feed back function on for quick reference, press the SHIFT button until the feed back function you desire is displayed. When it does, you will see your selected feedback information.

Turn the screen display off.
The elliptical console automatically shuts off after a few minutes of inactivity.

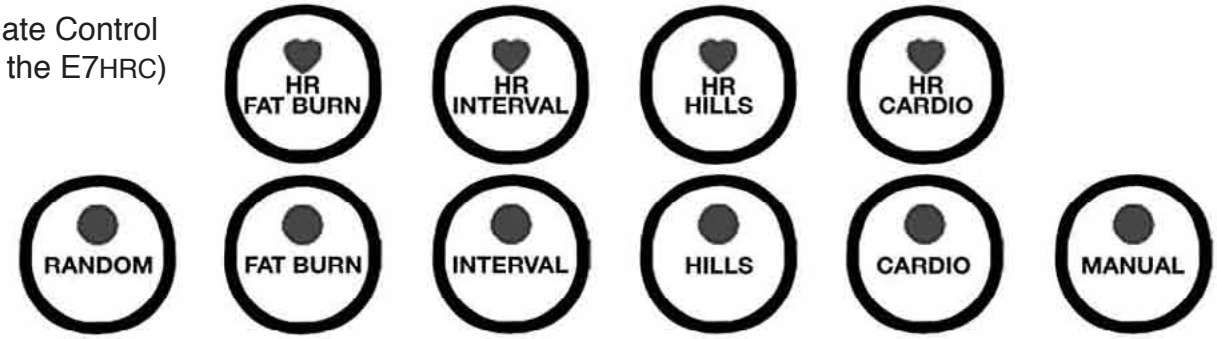
CONSOLE



(BUTTON IDENTIFICATIONS ON PAGE 3)

BUTTONS

Heart Rate Control
(only for the E7HRC)



Program Function Buttons

1. 

Automatically shifts display information every 8 seconds, or stays fixed on the information.

2. 

Start the program

3. 

Confirm Button

4. 

Pauses program, or hold for 3 seconds to CLEAR all information to RESET.

5. 
Decrease the value of program / Select the program

6. 
Increase the value of program / Select the program

THE PROGRAMS

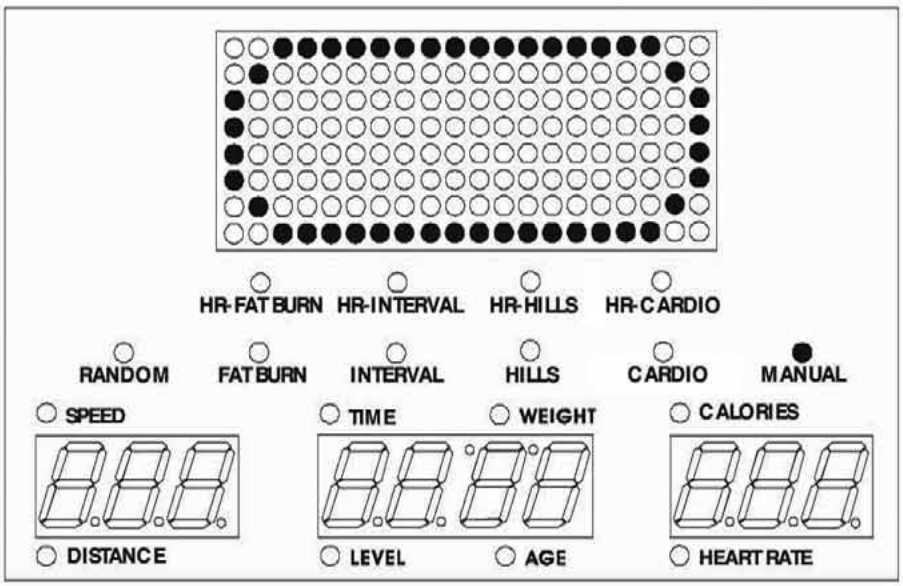
The elliptical motion exercise machine is the result of combining the vertical motion of a stair climber and the striding motion of a treadmill. The machine generated elliptical shape is designed to move in both a forward or reverse motion and when combined with the upper body work out supported by the moving handles, train all the body's major muscle groups: Gluteals, Hamstrings, Quadriceps, Calves, Lats, Chest, Deltoids, Biceps and Triceps. The low impact of the elliptical motion provides a cardiovascular workout for everyone from beginners to serious athletes. When compared to other cardio exercises, the elliptical trainer's unique motion requires a higher level of oxygen consumption that results in a more intense workout with the same amount of effort typically required on other cardio equipment.

The main exercise programs are designed for two reasons; get you moving quickly with the least amount of set up, and also to guide you through a number of different and motivating routines that maximizes your workout.

Turn the power on, all the lights will go on for one second. The Main Readout will display the programs sequence: "Manual, Cardio, Hills, Interval, Fat Burn, Random, HR Fat Burn, HR Cardio, HR Interval, HR Hills.

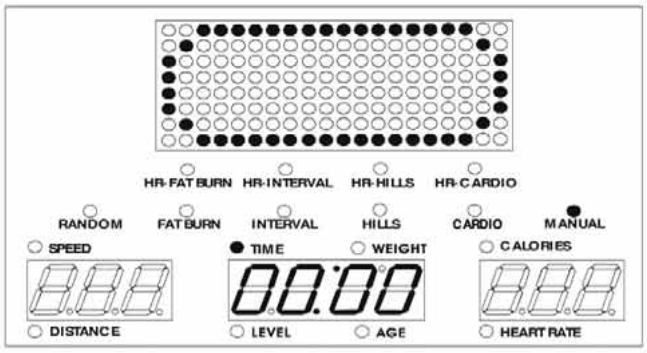
1. Press the "Start" button or move the pedals, this will start the Manual program.

During any of the programs, you can use the "+/-" buttons to adjust the Level of resistance, at any time.

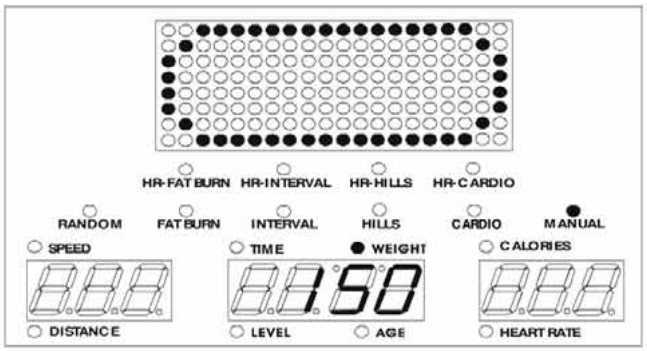


2. MANUAL Program: The fastest and simplest way to get started. Just get on the machine, input the basic information and start moving.

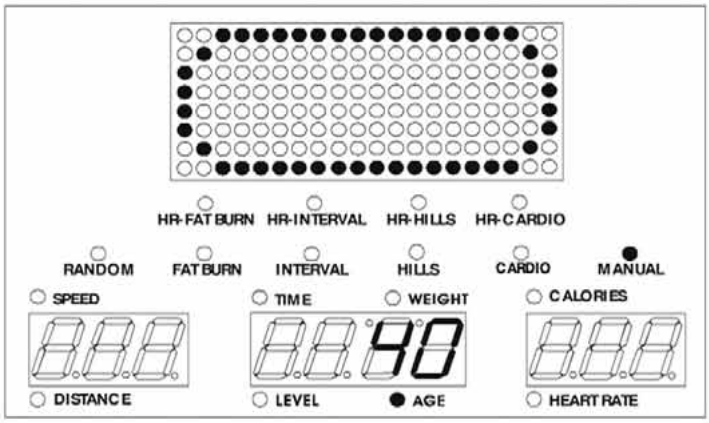
A. Press the “Manual” button (the MANUAL light will go on, and the Main Readout will display an “oval” graphic). Set up the Time, using the “+/-” button.



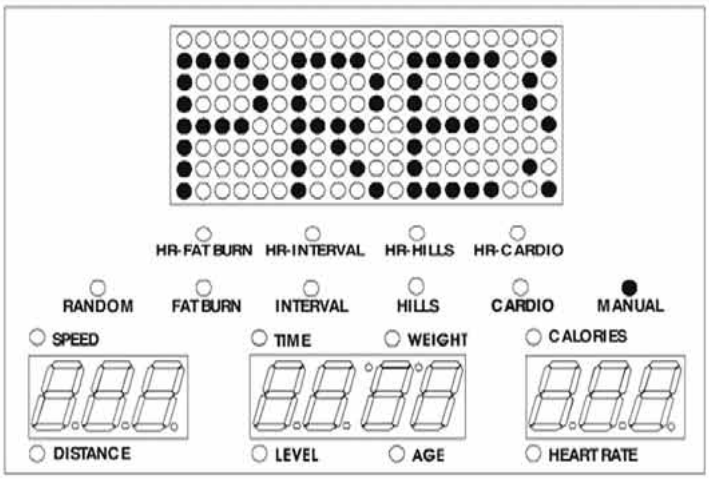
B. Press the “Enter” button, until the WEIGHT light goes on. The Weight Screen will display 150(flashing), us the “+/-” button to adjust.



C. Press the “Enter” button, until the AGE light goes on. The Age Screen will display 40(flashing), us the “+/-” button to adjust.

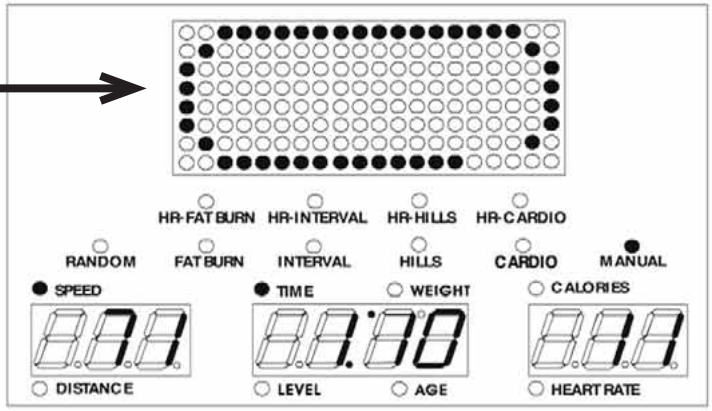


D. Press the “Enter” button, until the Main Readout scrolls “PRESS START”

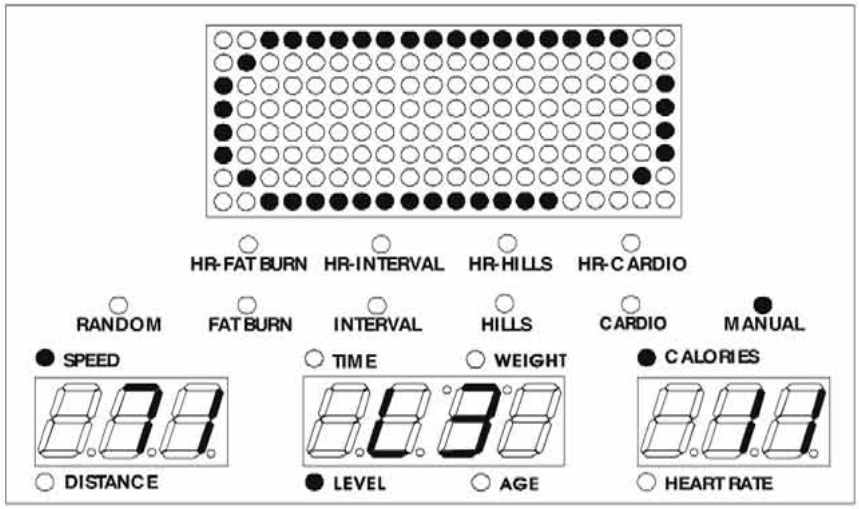


E. Press the “Start” button, to start the program.

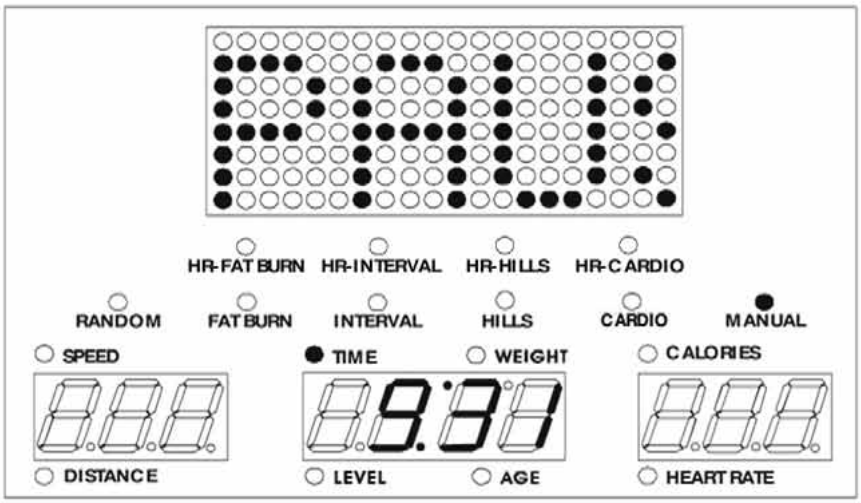
The oval track distance equals .25 miles



A. During all programs, you can adjust the resistance level by using the "+/-" button.

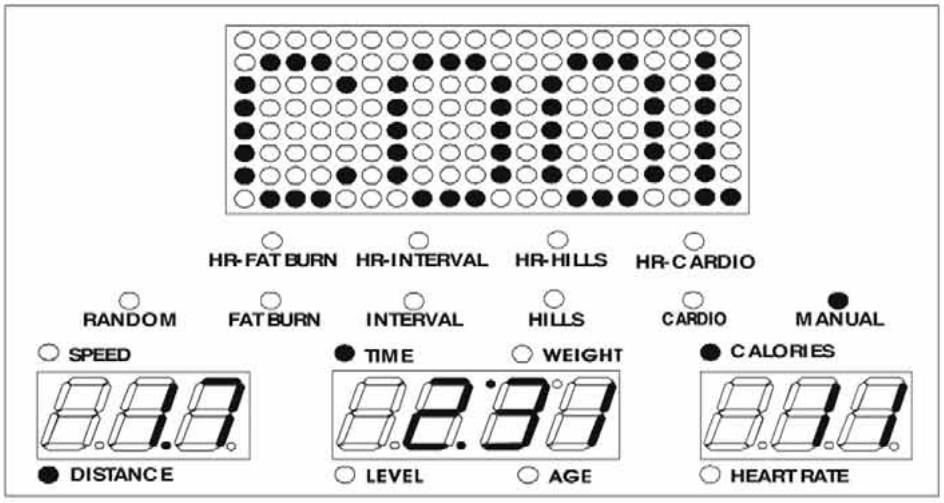


B. If you stop pushing the petals for 10 seconds or press the "Clear Reset" button the Main Readout will scroll "PAUSE". Then will start a 10 minute count down. If there is no motion during these 10 minutes, the program will reset.

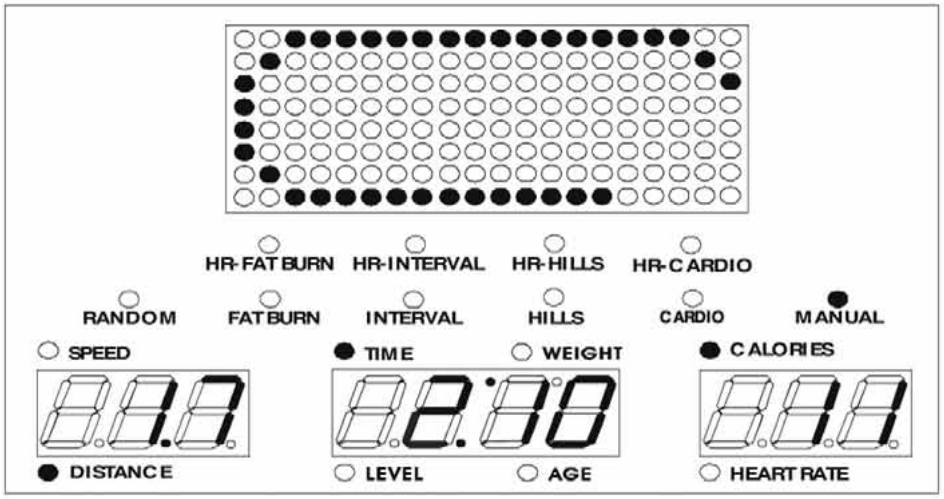


C. There will be three beeps at the conclusion of the pre-set time.

D. At the end of the program:
The Main Readout will scroll “COOL DOWN”, twice.



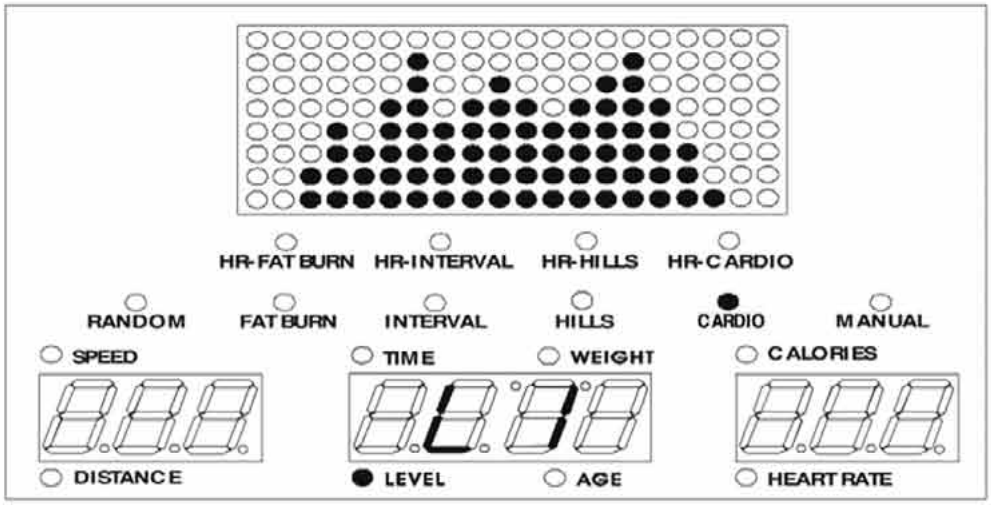
E. After the display of “COOL DOWN”, the Main Readout will go back to the oval track.



F. After the count down, the Main Readout will display “END”.

3. CARDIO program:
The gradual increasing and decreasing of the resistance provides a challenging workout along with maximizing cardiovascular benefits. The program is designed to keep your heart rate at 80% of your calculated maximum heart rate.

A. Press “Cardio” button (“Cardio” light will go on).



B. Setup the “LEVEL”,

*Setup the same way as in the Manual program. (on pages 8 and 9).

Press “ENTER”.

C. Setup the “TIME”, *, Press “ENTER”.

D. Setup the “WEIGHT”, *, Press “ENTER”.

E. Setup the “AGE”, *, Press “ENTER”.

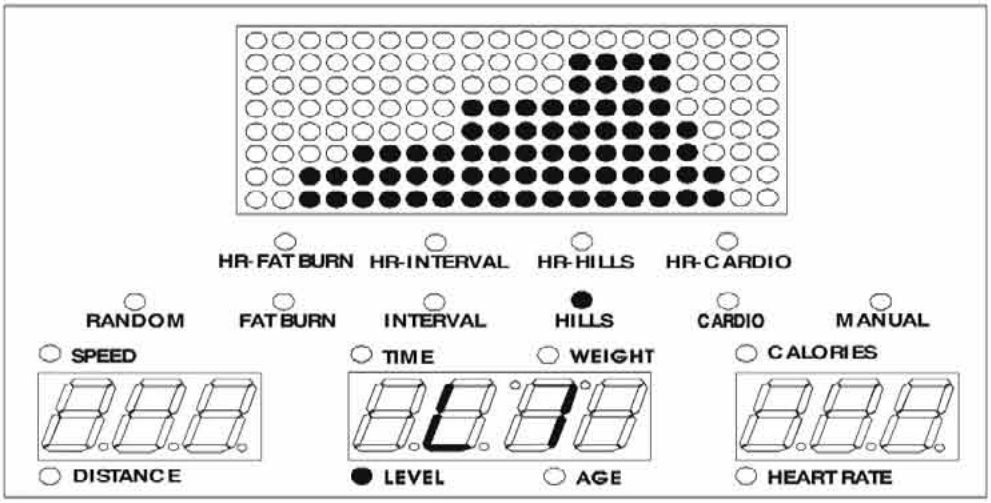
F. The Main Readout will scroll “PRESS START”.

Press “START” button, to start the program.

G. You can still adjust the level with the “+/-” button.

4. HILLS program:
Like walking or jogging up a hill, the stepped increase of the resistance provides a challenging workout that continually builds resistance and heart rate during the length of the program. Similar to sporting activities such as basketball and soccer.

A. Press “Hills” button (“Hills” light will go on).



B. Setup the “LEVEL”,

*Setup the same way as in the Manual program. (on pages 8 and 9).

Press “ENTER”.

C. Setup the “TIME”, *, Press “ENTER”.

D. Setup the “WEIGHT”, *, Press “ENTER”.

E. Setup the “AGE”, *, Press “ENTER”.

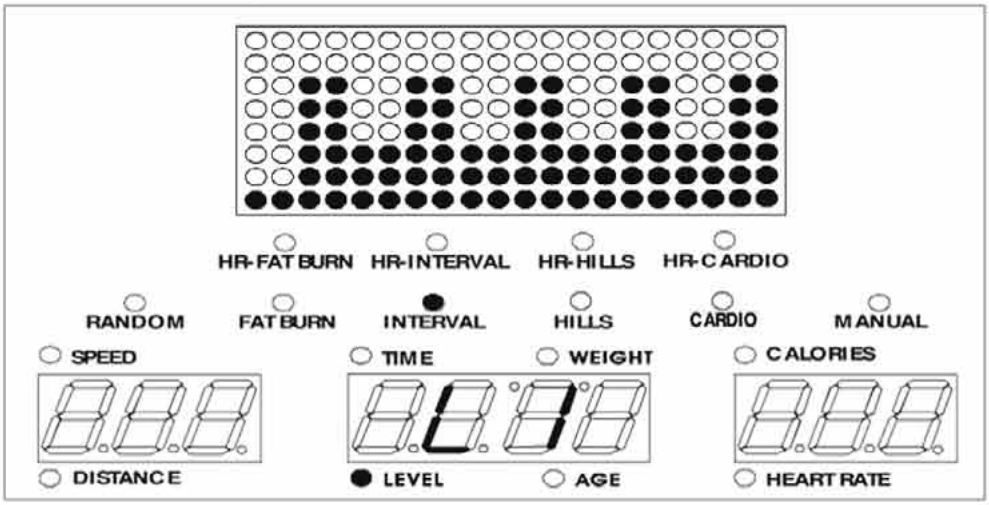
F. The Main Readout will scroll “PRESS START”.

Press “START” button, to start the program.

G. You can still adjust the level with the “+/-” button.

5. INTERVAL program:
This program varies the intensity of the workout between low and high resistance to quickly raise and lower the heart rate in 2 minute intervals, similar to endurance type training. The upper and lower resistance levels may be independently adjusted to vary the size of the interval.

A. Press “Interval” button (“Interval” light will go on).



B. Setup the “LEVEL”,

*Setup the same way as in the Manual program. (on pages 8 and 9).

Press “ENTER”.

C. Setup the “TIME”, *, Press “ENTER”.

D. Setup the “WEIGHT”, *, Press “ENTER”.

E. Setup the “AGE”, *, Press “ENTER”.

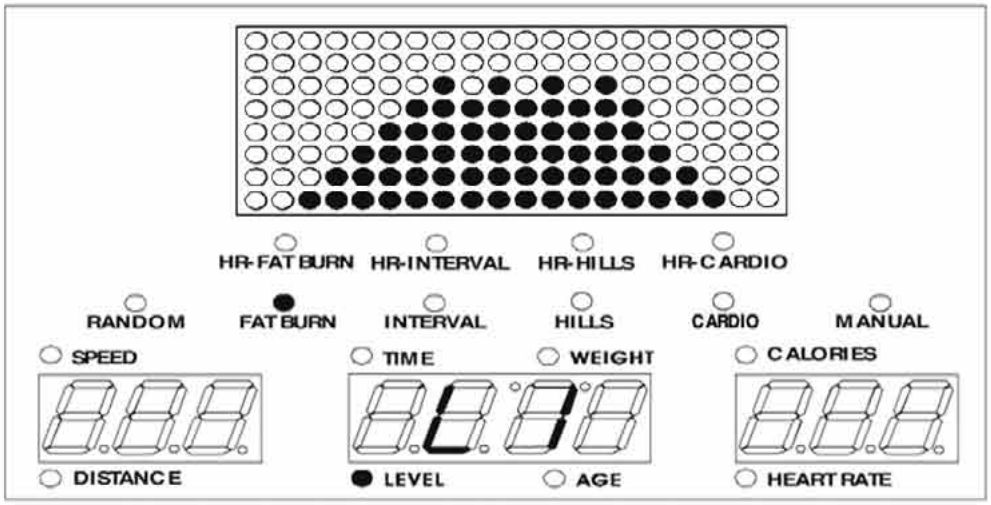
F. The Main Readout will scroll “PRESS START”.

Press “START” button, to start the program.

G. You can still adjust the level with the “+/-” button.

6. FAT BURN program:
This program does just what the name suggests -gets your heart rate up fast and maintains it at 65% of your calculated maximum heart rate with slight variations to provide optimal calorie burn.

A. Press “Fat Burn” button (“Fat Burn” light will go on).



B. Setup the “LEVEL”,

*Setup the same way as in the Manual program. (on pages 8 and 9).

Press “ENTER”.

C. Setup the “TIME”, *, Press “ENTER”.

D. Setup the “WEIGHT”, *, Press “ENTER”.

E. Setup the “AGE”, *, Press “ENTER”.

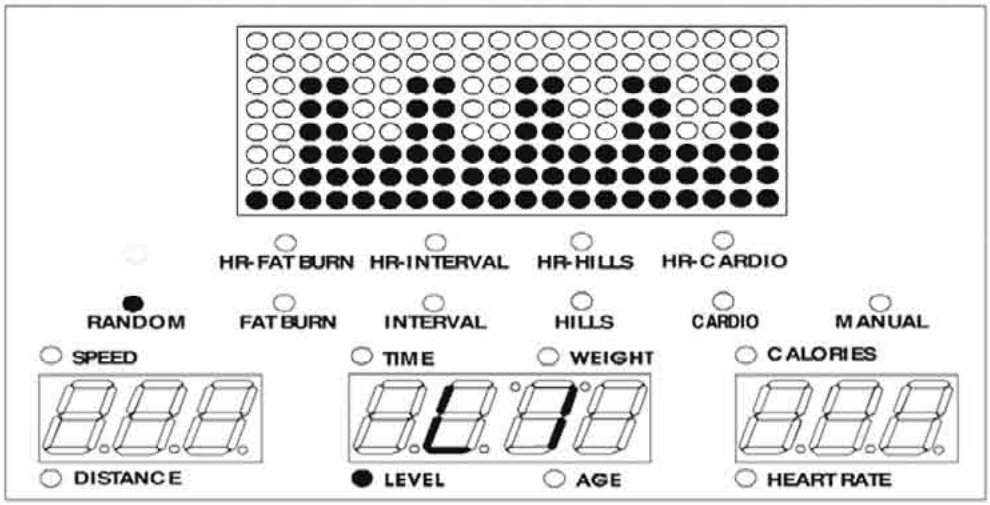
F. The Main Readout will scroll “PRESS START”.

Press “START” button, to start the program.

G. You can still adjust the level with the “+/-” button.

7. RANDOM program:
This program provides different combinations of increased and decreased resistance designed to motivate and challenge. Each time this program is selected, the computer generates a new course.

A. Press “Random” button (“Random” light will go on).



B. Setup the “LEVEL”,

*Setup the same way as in the Manual program. (on pages 8 and 9).

Press “ENTER”.

C. Setup the “TIME”, *, Press “ENTER”.

D. Setup the “WEIGHT”, *, Press “ENTER”.

E. Setup the “AGE”, *, Press “ENTER”.

F. The Main Readout will scroll “PRESS START”.

Press “START” button, to start the program.

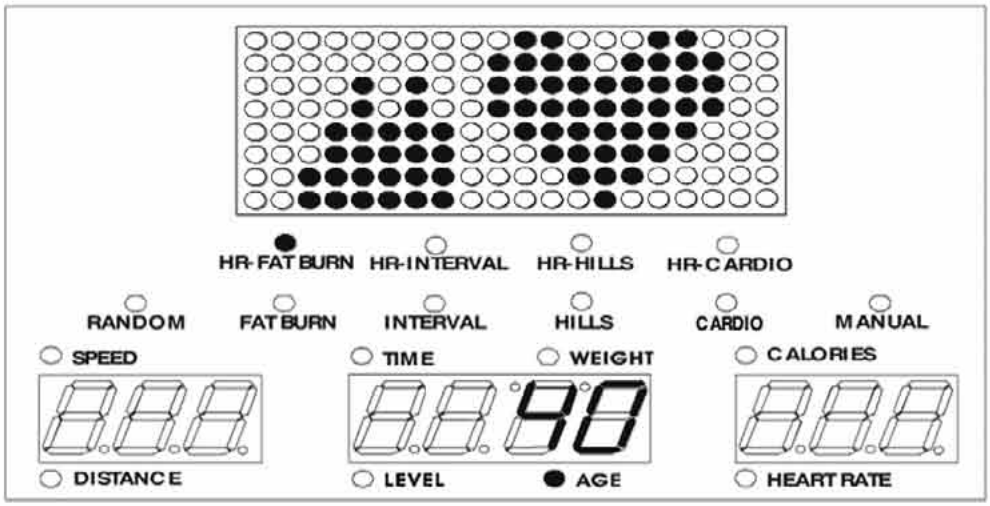
G. You can still adjust the level with the “+/-” button.

HEART RATE CONTROL (E7HRC ONLY)

Heart Rate programs are designed to add another dimension to your workout by monitoring and adjusting the programs to your calculated maximum heart rate or CMHR, See page 22. Each cardio program also includes the ability to adjust the exercise levels to each user's ability. All the earlier programs have a 3 minute warm up period which will safely raise your heart rate to the specific program level. The programs also have a cool down period to allow your body to recover after a vigorous workout.

1. HR FAT BURN program:
   Similar to the earlier Fat Burn program, the added benefit of the HR program is the monitored resistance that will keep your heart rate at 65% of the CMHR.

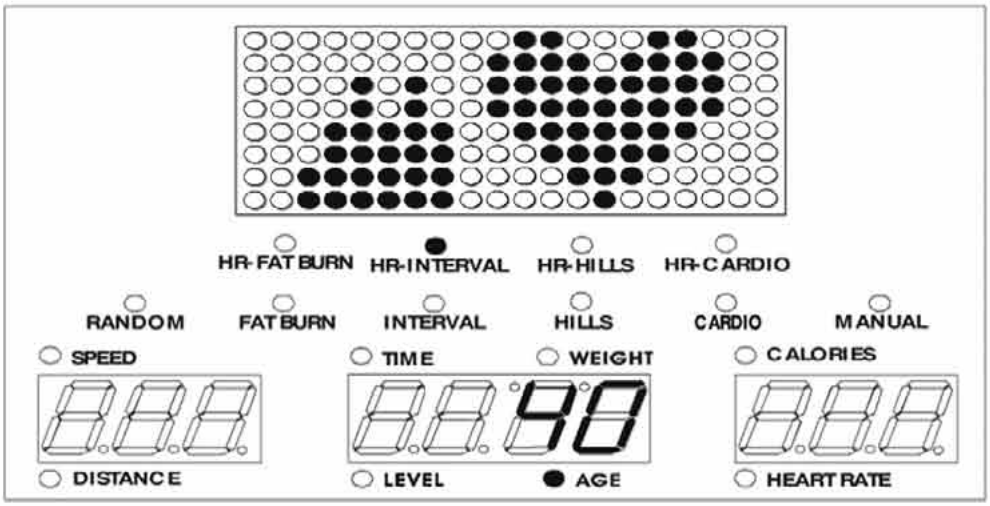
   A. Press "HR FAT BURN" button ("HR FAT BURN" light will go on).



   B. Setup the "AGE",
   *Setup the same way as in the Manual program. (on pages 8 and 9).
   Press "ENTER".
   C. Input your Target Heart Rate using the "+/-" button
   (for your Target Heart Rate, see page 20).
   Press "ENTER".
   D. Setup the "TIME",*, Press "ENTER".
   Setup the "WEIGHT",*, Press "ENTER".
   Setup the "LEVEL",*, Press "ENTER".
   E. The Main Readout will scroll "PRESS START".
   Press "START" button, to start the program.
   F. You can still adjust the level with the "+/-" button.

2. HR INTERVAL program:
Similar to the earlier Interval program, the added HR program monitors progress towards your maximum heart rate. After the warm up, the computer beeps once and the program will increase resistance to raise your heart rate to 70% of your CMHR. After 2 minutes at that level, the computer will beep twice and the program will increase resistance to 80% of your CMHR. After another 2 minutes at that level, the computer will beep once and the program lowers the resistance down to the 70% level. As before, the size of the interval may be independently adjusted.

A. Press “HR INTERVAL” button (“HR INTERVAL” light will go on).



B. Setup the “AGE”,
*Setup the same way as in the Manual program. (on pages 8 and 9).
Press “ENTER”.

C. Input your Target Heart Rate using the “+/-” button
(for your Target Heart Rate, see page 20).
Press “ENTER”.

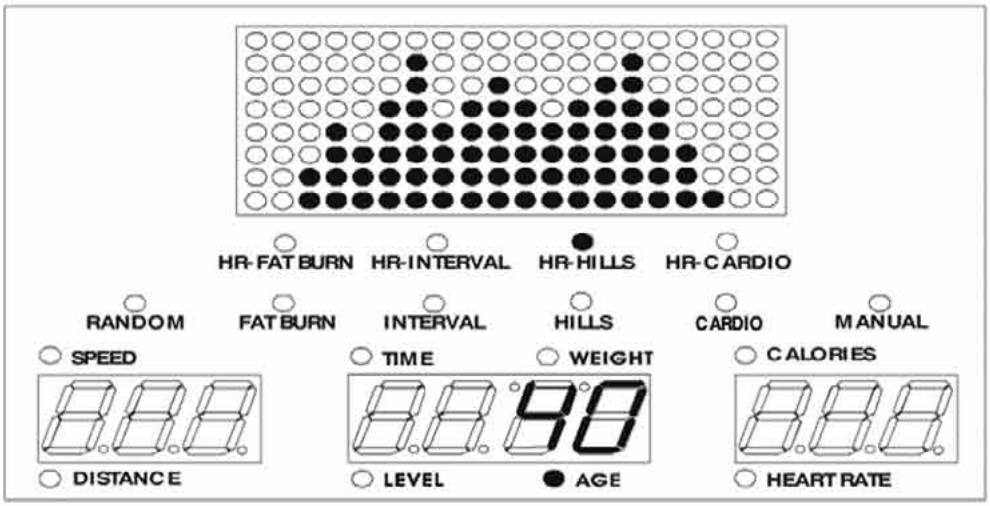
D. Setup the “TIME”,*, Press “ENTER”.
Setup the “WEIGHT”,*, Press “ENTER”.
Setup the “LEVEL”,*, Press “ENTER”.

E. The Main Readout will scroll “PRESS START”.
Press “START” button, to start the program.

F. You can still adjust the level with the “+/-” button.

3. HR HILLS program:
Similar to the earlier Hills program, the added benefit of the HR program maintains the intensity of your heart rate by starting out at 65% of your calculated maximum heart rate. After maintaining this rate for 2 minutes, the program changes the resistance to get your heart rate to the next level of 75% of your calculated maximum. After another 2 minutes at this rate, the computer adjust the resistance again to reach a new target heart rate of 85% of your calculated maximum.

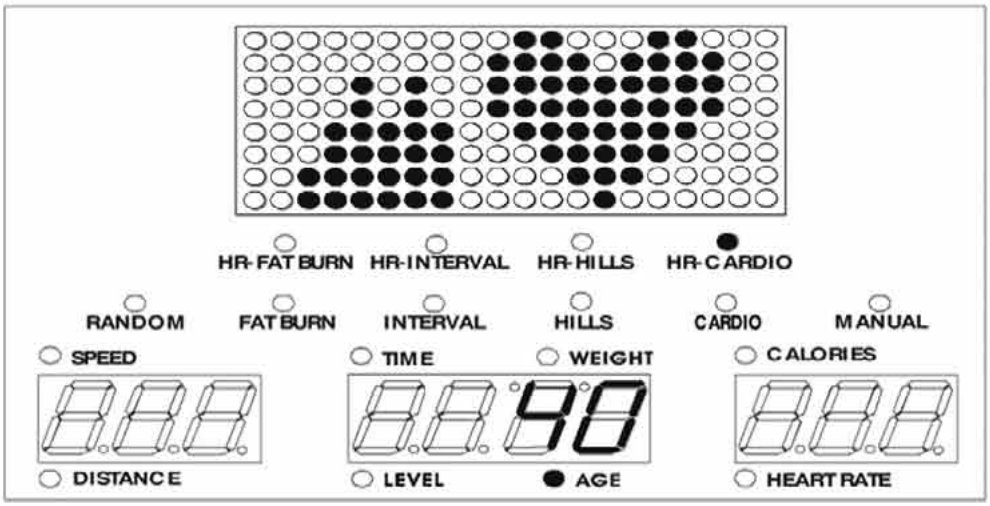
A. Press “HR HILLS” button (“HR HILLS” light will go on).



B. Setup the “AGE”,
*Setup the same way as in the Manual program. (on pages 8 and 9).
Press “ENTER”.
C. Input your Target Heart Rate using the “+/-” button
(for your Target Heart Rate, see page 20).
Press “ENTER”.
D. Setup the “TIME”,*, Press “ENTER”.
Setup the “WEIGHT”,*, Press “ENTER”.
Setup the “LEVEL”,*, Press “ENTER”.
E. The Main Readout will scroll “PRESS START”.
Press “START” button, to start the program.
F. You can still adjust the level with the “+/-” button.

4. HR CARDIO program:
Maximizes calorie burn by keeping your heart rate at 80% of your CMHR. During the initial 3 minute warm up, the levels may be adjusted. After the warm up, the computer will control the levels to maintain your heart rate at the pre-determined level.

A. Press “HR CARDIO” button (“HR CARDIO” light will go on).



B. Setup the “AGE”,
*Setup the same way as in the Manual program. (on pages 8 and 9).
Press “ENTER”.
C. Input your Target Heart Rate using the “+/-” button
(for your Target Heart Rate, see page 20).
Press “ENTER”.
D. Setup the “TIME”,*, Press “ENTER”.
Setup the “WEIGHT”,*, Press “ENTER”.
Setup the “LEVEL”,*, Press “ENTER”.
E. The Main Readout will scroll “PRESS START”.
Press “START” button, to start the program.
F. You can still adjust the level with the “+/-” button.

What is cross training?

With more fitness tools available than ever before, today it is easy to cross train, or incorporate variety in workouts such as jogging on Mondays and Wednesdays and lifting weights and swimming on Tuesday and Thursday. Or it can be spending 15 minutes each on a stationary cycle trainer and treadmill for a 45-minute session.

Varying workouts ultimately produces the best outcomes whether that means losing weight, running a race or playing better golf.

Breaking habits

Why not just do the same exercise routine day in and out? Because performing the exact exercise routine over time actually can hinder progress.

The body adapts, over time, to the demands imposed on it. By repeating the same exercises, the neuromuscular system will become stronger and better coordinated, so that eventually the body is more energy efficient at that activity. As efficiency increases, caloric expenditure can drop by as much as 25%, which can result in less effective workouts and plateaus.

Therefore, cross training is instrumental to continually challenge the body and deliver results.

Benefits of cross training

In addition to sustaining physiological progress, cross training leads to a myriad of other benefits:

Better overall fitness level-no single activity can yield all the potential benefits of exercise such as better cardiovascular health, stronger muscles and bones, enhanced flexibility and lower body fat.

Reduced risk of injury- Excessive in one activity can lead to overuse injuries. Distributing the exercise stress throughout the body results in a stronger, more balanced system.

Improved athletic performance- Peak performance in virtually all physical activities more than just one physical attribute. So a sprinter still benefits from weight training to build overall strength.

Enhanced motivation and reduced boredom- Trying new activities can prevent burnout and keep exercisers committed over the long haul.

Cross training within one machine

The elliptical cross trainer is currently the fastest growing piece of fitness equipment. A cardiovascular machine breakthrough, ellipticals combine the motion of a cross country machine and a stair climber, with the feet traveling in an egg shaped, or elliptical, motion, delivering a weight bearing, easy on the joints, simple to use, effective workout unlike any other fitness product.

Units easily facilitate cross training on the same machine by allowing for forward and backward motion and including arms for synchronized, total - body movement. Studies have shown that total - body elliptical cross trainers engage numerous muscles, including the gluteals, hamstrings, quadriceps, calves, pectorals, lats, deltoids, biceps and triceps in a natural closed kinetic chain, unlike any other modalities such as treadmills, stationary cycles or stair climbers. Plus, core musculature strength and stability are constantly taxed on a total-body machine, as exercisers must recruit the abdominals and lower back to maintain balance.

Another benefits is that total-body elliptical may not feel as intense as other machines due to the movement's low impact nature and dispersion of effort throughout the entire body. Furthermore, simulating realistic motions such as walking or running on a total-body elliptical cross trainer can lead to " transferable" gains that help improve performance of everyday activities. Ellipticals also may enhance balance, coordination and fluidity of motion, all of which play a critical role in activities of daily living.

The bottom line is a more intense workout with greater oxygen and muscular demands and caloric expenditure, all at a lower overall perceived exertion level and with practical application.

Cross training is the most effective way to train. Taking advantage of an elliptical cross trainer provides unique options all within one workout on one machine.

SIGNS OF OVERTRAINING

A little exercise is good for you, so more must be better, right?

Well, sometimes more is just that-more. In the search for better health and fitness, it is sometimes difficult to quell one's enthusiasm and take a break from exercise. But if exercise is leaving you more exhausted than energized, you could be suffering from a case of overtraining. Individuals who excessively exercise are risking more than poor performance: they're risking their health. If you recognize the following symptoms in yourself or a friend, it is essential that you seek professional help. Here are 10 signs of overtraining.

1. Decreased performance

Slower reaction times, reduced speeds and lowered endurance levels are all common signs of overtraining.

2. Agitation, moodiness, irritability or lack of concentration

Too much exercise and too little rest can wreak havoc on the hormones, cause mood swings and create an inability to concentrate.

3. Excessive fatigue and malaise

A body that never has a chance to fully recover from a previous workout will continue to feel more and more fatigued. Some people describe this feeling as "heavy legs."

4. Increased perceived effort during normal workouts

Overtraining takes a toll on the body, and workouts that were once a breeze can begin to feel like a grind.

5. Chronic or nagging muscle aches or joint pain

Overused muscles and joints can cause constant aches, which may go unnoticed until the body is given proper rest.

6. More frequent and illnesses and upper-respiratory infections

Too much exercise taxes all of the body's systems and makes it more difficult to ward off infections.

7. Insomnia or restless sleep

During sleep the body has time to rest and repair itself. An overtrained body, however, is sometimes unable to slow down and completely relax, making it difficult to recover between workouts.

8. Loss of appetite

Overtraining can cause an increase in hormones such as epinephrine and norepinephrine that tend to inhibit appetite. The physical exhaustion and anxiety that often comes with overtraining can also have the same effect.

9. Chronically elevated heart rate at rest and during exercise

A clear sign of an overworked heart muscle is a chronically elevated heart rate. Also, people who overtrain will often find that it takes longer for their heart rate to return to normal after a workout.

10. Menstrual cycle disturbances in women

Exercising excessively and not consuming enough calories may disrupt a woman's menstrual cycle. While some may experience irregular periods, others will stop menstruating altogether.