



OPERATION MANUAL



**HOW TO GET THE MOST OUT OF YOUR
LIFECYCLE® WORKOUT**

Introduction

How to Get the Most Out of Your Lifecycle Trainer Workout

Congratulations . . . and welcome to the world of Life Fitness and the Lifecycle 6500HR Heart Rate aerobic trainer.

Your new bike is the culmination of over 20 years of technological innovation. Today, it is recognized as the world's most popular and most advanced computerized stationary bicycle.

The Lifecycle aerobic trainer offers a host of exclusive features designed to help you achieve your fitness goals more quickly and enjoyably. Its new Heart Rate Management program, Lifepulse™ digital heart rate monitoring system with near 100% accuracy,* and Fit Test program provide the exceptional motivation that will help you stay with your conditioning program.

Who rides the Lifecycle aerobic trainer? People who value time and who need to make every minute count. Olympic athletes, movie stars, busy executives, top government administrators, sports celebrities, and others all make the Lifecycle trainer their exercise choice. Whether at a fitness facility, at home or at the office, riding a Lifecycle stationary bike is an excellent way to lose weight and improve your cardiorespiratory condition. And it's fun! More health clubs use Lifecycle trainers for cycling than any other computerized stationary bike.

Why ride a Lifecycle aerobic trainer? Aerobic training with a Lifecycle stationary bike is more than just a motivating experience. Regular aerobic exercise improves energy and endurance, reduces body fat, lowers your probability of heart disease, and tends to prolong life.** Consistent workouts can also diffuse the effects of everyday stress. Competitive athletes train aerobically to increase heart strength, lung capacity and muscular endurance.

Read this manual now. Before beginning a Lifecycle Personal Exercise Plan (PEP), it is essential that you read this entire manual. It explains how to operate your Lifecycle bike and helps you design an aerobic workout tailored to your personal fitness needs.

If you have further questions regarding the operation of your Lifecycle trainer, please call Life Fitness Product Support toll-free at (800) 351-3737. In Illinois, call (708) 451-0036.

*Based on research from the Exercise Physiology Laboratory, University of Massachusetts Medical School.

**Paffenbarger, R.S. Jr., Hyde, R.T., Wing, A.L., et al: Physical Activity, All-cause Mortality, and Longevity of College Alumni. N Engl J Med 1986;314(March 6):605-613.

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The Lifecycle model 6500HR aerobic trainer is an advanced and refined version of the famous ergometric bicycle that started the electronic fitness revolution of the 1970s.

The Lifepulse™ digital heart rate monitoring system on the Lifecycle 6500HR trainer is unique to Life Fitness products. This system gives the most accurate heart rate readings available — virtually 100% as accurate as a clinical EKG* — without requiring you to wear chest-strap sensors. The Lifecycle 6500HR is equipped with the Heart Rate program that maintains your heart rate by automatically varying pedal resistance in response to your current heart rate. By exercising at a level within your Training Heart Rate Range, you can be assured that you are gaining the full benefits of aerobic exercise.

In the past, people with special needs or conditions have been advised by their doctor or exercise specialist to maintain a specified level of watts or calories per hour during their workouts as an indirect means of regulating their heart rate. With the Lifecycle 6500HR trainer, these types of exercise prescriptions are unnecessary, since you can directly monitor your heart rate regardless of the program you use, and with the Heart Rate program, you can work out at a prescribed heart rate profile automatically.

This Lifecycle aerobic trainer is manufactured by Life Fitness.

*Based on research from the Exercise Physiology Laboratory, University of Massachusetts Medical School.

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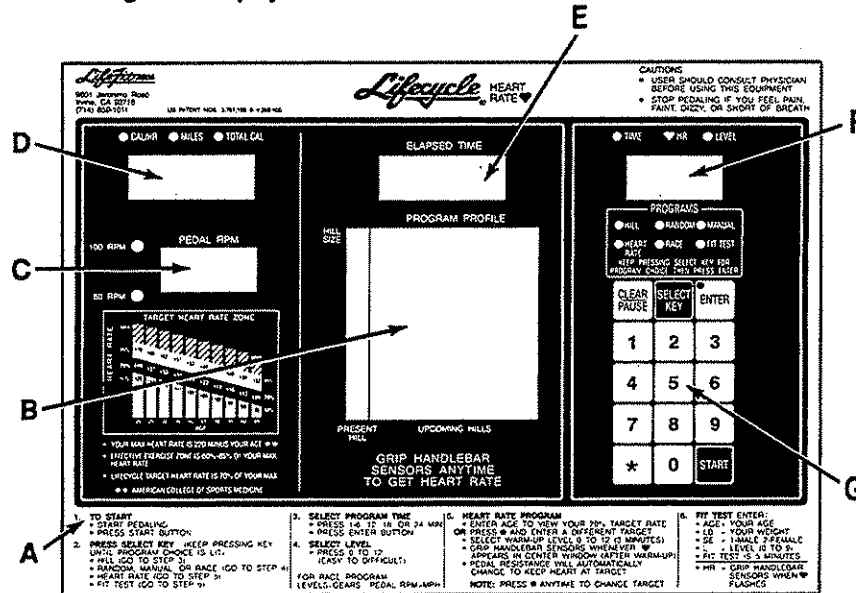
How to Use the Display Console

The computerized display console allows you to watch your progress as you ride.

The on-board computer lets you tailor your workout to your individual fitness capabilities and provides a unique means of measuring your fitness improvement from one workout to the next. You'll want to challenge yourself by gradually increasing exercise intensity and exercise time as your endurance improves.

The display console is simple to program and easy to use. It shows only data essential to using the bike effectively.

Figure 1: Display Console



A. INSTRUCTION PANEL: Instructions on how to begin your Lifecycle trainer exercise regimen are printed at the bottom of the display console to remind you how to select your program and intensity level. Keys to abbreviations are also listed.

B. PROGRAM PROFILE WINDOW: This matrix of LED "lights" shows your present position (yellow column) and the upcoming terrain (red columns). As you pedal, the lights move across the screen from right to left. The higher the yellow column of lights, the harder you will be pedaling. In the Heart Rate and Fit Test programs, a large heart shape will flash in this window, prompting you to make contact with the sensors to obtain a heart rate. When you are making good

program. You must press the asterisk key immediately preceding the entry of a new target heart rate number.

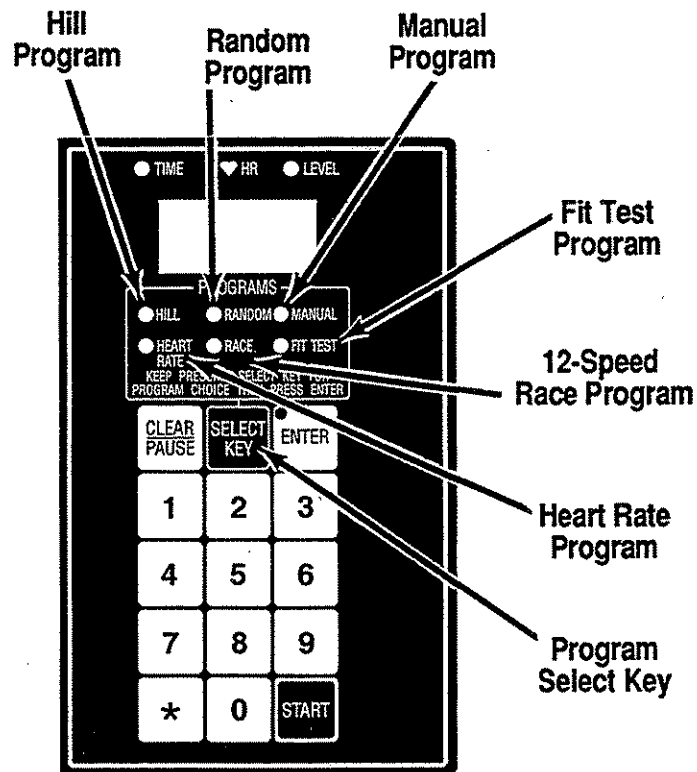
ENTER KEY: This key enters the riding time of your Hill Profile program into the Lifecycle on-board computer. It is also used to enter your resistance level, your age or selected target for the Heart Rate program and each component of the Fit Test program.

CLEAR-PAUSE KEY: Use this key to put your exercise program on hold, clear an incorrect entry, or restart a program. To put your exercise program on hold, press the key once and keep on pedaling. (If you stop pedaling, all power is lost and the display goes blank.) Pedal resistance is at a minimum while the program is on hold. You can use this "rest" feature if you begin to feel tired to the point of discomfort.

When the CLEAR-PAUSE key is pressed once during a program, the bike's stopwatch feature is activated and time is displayed in the ELAPSED TIME window. Use this stopwatch to time your rest period. To resume your exercise program, simply press the ENTER key.

To cancel the current exercise program, press CLEAR-PAUSE twice. (The current exercise program is also canceled when you stop pedaling.)

Figure 2: Selection of Hill, Random, Manual, Heart Rate, 12-speed Race and Fit Test Programs.



for longer periods of time promotes fat loss, because these longer periods of exercise burn more calories from stored fat.

If you are working to reduce the probability of heart disease or improve endurance, your goal is to build a stronger heart and lungs (cardiorespiratory improvement). By expanding lung capacity, your body's intake and utilization of oxygen is increased. Regular aerobic exercise accomplishes this and improves muscle endurance at the same time. (See Figure 3, page 15 for a Heart Rate Training Zone Chart with suggested heart rates for fat loss and cardiorespiratory training.)

FIT* Guidelines

FIT stands for FREQUENCY of exercise, INTENSITY of exercise and the amount of TIME (duration) you spend exercising. These are the three variables in designing an effective Personal Exercise Plan (PEP). Here's how to use the FIT guidelines to develop your PEP:

FREQUENCY. . .refers to how many times you ride your Lifecycle trainer each week. If your objective is to improve cardiorespiratory fitness, you should ride the bike at least three times a week, with no more than two days between workouts. At first, you should give your muscles a chance to adapt to increased activity.

When you begin your FIT regimen, do not exercise more than once every other day. This should prevent muscle soreness and fatigue. Even after you have progressed sufficiently, the American College of Sports Medicine still recommends that your workout not exceed 5 times per week. Increased frequency yields minimal additional cardiorespiratory improvement and increases the risk of muscle strain. Only highly trained, competitive athletes should consider daily workouts. However, if your goal is fat loss, you should exercise more frequently, for longer periods of time, at a lower level of intensity.

INTENSITY. . .refers to how hard you work your heart. A heart rate of 75% of your theoretical maximum heart rate is the threshold above which optimum cardiorespiratory training occurs for those who are medically fit. 85% of your theoretical maximum heart rate is a safe upper limit for these same people.** Select a level of intensity that puts your heart rate between 75% and 85% of your theoretical maximum for cardiorespiratory improvement. Beginners will want to exercise at a heart rate which is closer to 70% while highly trained athletes may want to exercise closer to 85% of the theoretical maximum heart rate.

*Not to be confused with Fit Test, a computer program that measures your cardiorespiratory fitness.

**American College of Sports Medicine, Guidelines for Exercise Testing and Prescription, Third Edition (Lea & Febiger: Philadelphia, 1986), p. 32.

How to Exercise Effectively

Using the Lifepulse System

Exercising too hard is as ineffective as not working hard enough. In fact, it can be harmful. For an effective workout, you must determine your optimal workout frequency, duration and intensity and stick to it!

The Lifepulse digital heart rate monitoring system is an exclusive patented feature of Life Fitness products. Through the use of sensors built into the handlebars and unique software, you can check your heart rate at any time during any Lifecycle program.

When you make contact with the 4 handlebars sensors (2 on the topside, 2 on the underside), the Lifepulse system detects the electrical impulses your heart gives off each time it beats. Through a sophisticated software system, the Lifecycle trainer computer uses these impulses to calculate your heart rate.

NOTE: You must contact all four handlebar sensors to activate the Lifepulse system and receive a heart rate reading. This can be done by grasping the sensors, palms down, with your palms and fingers reaching around the top of the handlebars and your thumbs extended around the underside of the handlebars.

The Lifepulse system takes the guesswork and error out of manually counting pulse beats as the seconds tick by. It's easy and convenient to use, and does not interrupt your Lifecycle program in any way.

Calculating Your Training Heart Rate Range (THRR)

To approximate your Training Heart Rate Range (THRR), first calculate your theoretical maximum heart rate. (The following formula is recognized by the American College of Sports Medicine as a method for determining theoretical maximum heart rate.*) Subtract your age from 220. For example, if you are 35 years old, your theoretical maximum heart rate is 185. Establish your THRR by multiplying this number (185) first by 60% to establish the lower limit and then by 85% to establish the upper limit.

Example: Age 35

CARDIORESPIRATORY TRAINING:

Lower limit: $(220 \text{ less } 35 = 185) \times .75 = 139 \text{ beats/min.}$

Upper limit: $(220 \text{ less } 35 = 185) \times .85 = 157 \text{ beats/min.}$

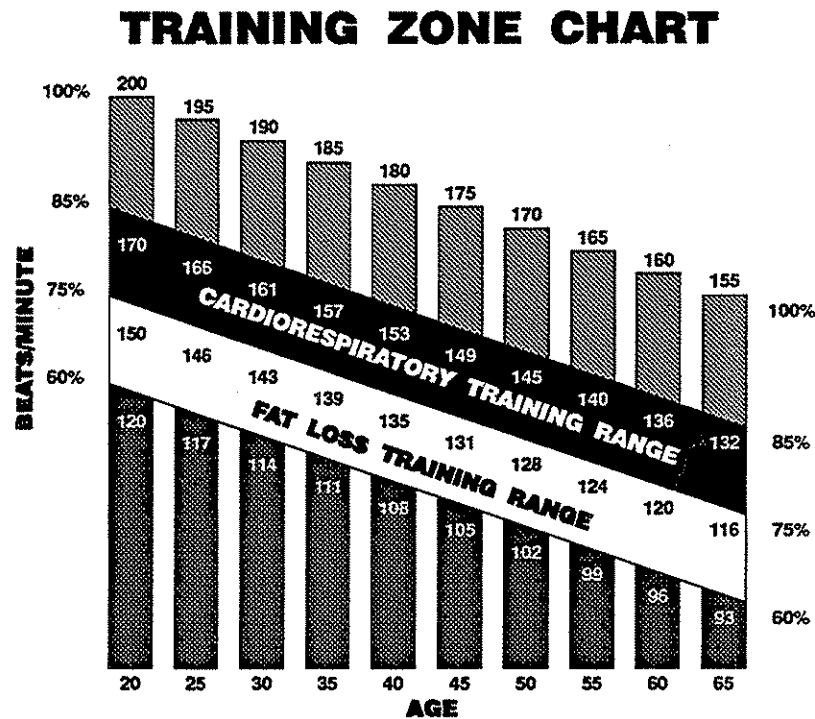
FAT LOSS TRAINING RANGE:

Lower limit: $(220 \text{ less } 35 = 185) \times .60 = 111 \text{ beats/min.}$

Upper limit: $(220 \text{ less } 35 = 185) \times .75 = 139 \text{ beats/min.}$

* American College of Sports Medicine, Guidelines for Exercise Testing and Prescription, Third Edition (Lea & Febiger: Philadelphia, 1986), p. 32.

Figure 3: Training Zone Chart



Training above 85% of your theoretical maximum heart rate is not recommended.

CARDIORESPIRATORY TRAINING RANGE – between 75% and 85% of your theoretical maximum heart rate.

FAT LOSS TRAINING RANGE – between 60% and 75% of your theoretical maximum heart rate.

For most people, training benefits are difficult to achieve below 60% of their theoretical maximum heart rate.

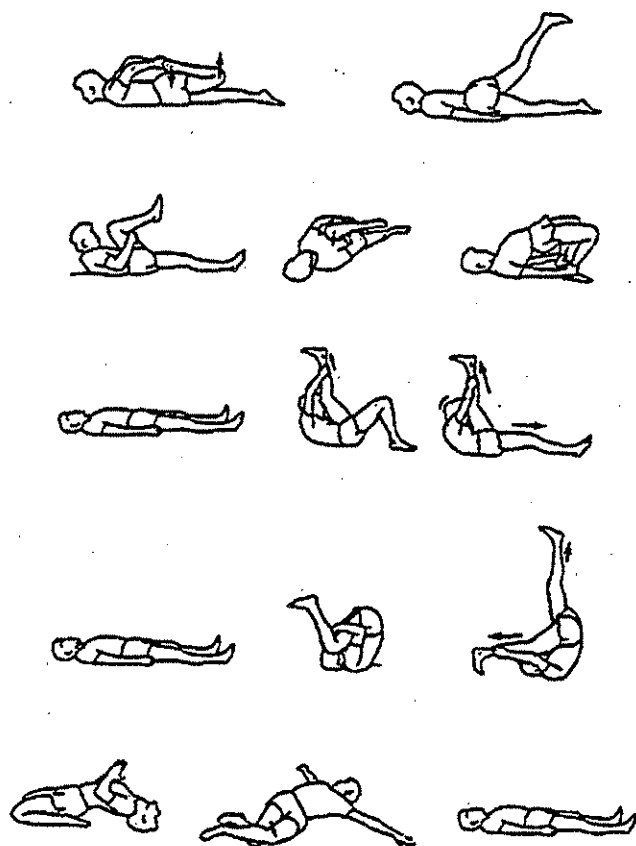
Proper Stretching Techniques

Stretching is perhaps the most neglected element of physical conditioning, because people do not associate flexibility with the more glamorous aspects -- speed, strength and a lean body appearance. However, without significant flexibility, real gains in fitness are unnecessarily difficult to achieve and maintain.

Limber joints, muscles, and connective tissues provide the freedom of motion that makes exercise easier and more enjoyable to perform, while lessening the risk of injury. Without proper, consistent stretching, ligaments and tendons can become taut and shortened with decreased circulation. These inflexible tissues are more prone to chronic soreness or rupture than loose, stretch-conditioned tissues. And, nothing is more discouraging than nagging injuries. Stretching helps people of all ages and fitness levels to prepare themselves for the exertion required to participate in a program of regular muscular and aerobic training.

**FLEXIBILITY
AS A
FITNESS
SAFETY
FACTOR**

See pages 18 and 19 for illustrations of recommended stretching exercises.



Do's and Don'ts for Minimizing Soreness and Muscular Stress

The following do's and don'ts will help reduce the chance of soreness and increase the effectiveness of your workout.

- ☐ **DO OBTAIN PROPER MEDICAL CLEARANCE PRIOR TO STARTING YOUR PERSONAL EXERCISE PROGRAM BY HAVING A PHYSICAL EXAM.**
- ☐ Do set realistic goals and objectives.
- ☐ Do exercise within your THRR.
- ☐ Do warm up and cool down properly.
- ☐ Do stretching exercises before you begin your Lifecycle trainer program.
- ☐ Do stretching exercises after you complete your cool-down.
- ☐ Don't increase duration by more than one level per week.
- ☐ Don't increase intensity and duration at the same time.
- ☐ Don't overextend yourself in hot and/or humid weather.

Cool-Down Period: Reduced pedal resistance which calls for pedaling at 80 RPM for 1/3 of the time, then faster (100 RPM) for the second 1/3, followed by a return to 80 RPM for the last 1/3. The last 1/3 of this exercise period gradually reduces your heart rate to the lower end of your THRR. The cool-down period allows your body to begin removing accumulated end products of exercise, such as lactic acid, which tend to build up in muscles during your workout and contribute to muscle soreness.

An integral part of the end product dissipation process is the period of rapid pedaling (100 RPM) mentioned above. A small flashing "light" to the left on the Pedal RPM window on the display console signals you to increase from 80 RPM to 100 RPM and then to resume 80 RPM again.

Heart Rate Check Point: Your heart rate should be checked near the end of the plateau period and at the end of the interval training period. (See Figure 5 on page 24 for the exact time of each heart rate check point.) Always check your heart rate at the times indicated to make sure you are staying within your personal THRR.

The Hill Profile diagram (Figure 5) shows the terrain encountered while riding on the Lifecycle aerobic trainer. Hills and valleys are simulated on the display console by columns of red and yellow "lights" in the Program Profile window. The columns move from right to left as you pedal.

The higher the column, the steeper the hill and greater the resistance. Consequently, you must increase your effort.

The Random Program

In the Random program, the computer randomly selects hill-and-valley terrain which varies with each ride. Over one million combinations are offered in an interval training format. Because resistance levels are greater in this program than in the Hill Profile program, it is recommended that you set the Random program lower than the level of intensity you would normally select on the Hill Profile program.

Heart Rate Check Points: You should check your heart rate after the first 5 minutes of exercise in the Random program and every 5 to 10 minutes thereafter to ensure that you are exercising within your THRR.

The Manual Program

This program provides steady-pace exercise with fixed pedal resistance equal to that of the highest hill encountered on the Hill Profile program at the same level of intensity. Because of the higher resistance levels of this program, it is recommended that you set the Manual program 2-3 levels lower than the level of intensity that you would normally select on the Hill program.

Heart Rate Check Points: You should check your heart rate after the first 5 minutes of exercise on the Manual program and every 5 to 10 minutes thereafter to ensure that you are exercising within your THRR.

You can also design your own interval training program using the Manual mode by varying the level of intensity during the course of your workout. To do so, you select a high level of intensity until you reach the maximum heart rate in your THRR, then pedal at a lower level of intensity until your heart rate drops to the bottom of your particular THRR. Then, increase the level of intensity until you reach your maximum heart rate again. By repeating this process, you will be simulating your own hills and valleys.

The Heart Rate Program

The Heart Rate program is designed to maintain your heart rate by varying pedal load. The program, through the use of the Lifepulse system, provides you with an accurate and convenient means of obtaining your heart rate while automatically adjusting the pedal load to work your heart rate at or around a pre-determined value based on your age and the Training Zone Chart. You are free to change your target heart rate at any time during the program simply by pressing the asterisk (*) key and entering a new target. Using this option, you can create your own warm-up and cool down periods by varying your target to be at different percentages of your theoretical maximum. Pedal resistance will vary based on your current heart rate and your pedal RPM.

The Fit Test Program

The Fit Test program is a unique feature of Lifecycle aerobic trainers, and is designed to help you evaluate your level of cardiorespiratory fitness compared to other people of the same age and gender by providing an estimate of VO_2 max (ml/kg 1 min). With regular use of the Fit Test program, you can track your progress as you become more cardiovascularly fit. It will motivate you to continue with your Lifecycle workouts and provide you with a measure of how your fitness condition has improved over time. You can also use your Fit Test score to select an appropriate 12-week exercise program (see Table 2, page 31).

8. Once your heart rate has been received, a score will appear in the Data Entry window. Use the table on page 30 to determine where you rank with others in your specific category. (Make a mental note of the figure or write it in your Training Log at the end of this manual so you can chart your improvement the next time you use the Fit Test program.)

Fit Test Tips

- ☐ The computer does not accept:
 - heart rates less than 90 or greater than 199 beats per minute
 - body weights less than 74 or greater than 399 pounds
(1 kilogram = 2.2 pounds)
 - ages less than 10 or greater than 99 years
 - data input that exceeds human potential. When this occurs, "ERR" appears in the Display Entry window

- ☐ If you make an error when entering any Fit Test information, you can correct it by pressing CLEAR-PAUSE and re-entering the accurate data *before* pressing the ENTER key.

- ☐ Heart rate is dependent on many factors. It is important to take the Fit Test under similar circumstances each time:
 - amount of sleep the previous night (7 or more hours is recommended)
 - time of day of the test
 - time you last ate (2 to 4 hours after their last meal is recommended)
 - time since you last drank a liquid containing caffeine or alcohol, or smoked a cigarette (4 or more hours is recommended)
 - time since you last exercised (at least 6 hours is recommended)

For the most accurate Fit Test results, perform the Fit Test on three consecutive days and average the three scores.

Determining Your Exercise Program Level

Once you take the Fit Test and receive a Fit Test score, you are ready to select a 12-week program that will help you maintain or improve your fitness level. First, select the exercise activity you wish to follow: stationary cycling or walking. Once you select one of these activities, you should stick with it for the full program; however, you may supplement it with other aerobic activities.

How to Select Your 12-Week Workout

1. Take the Fit Test.
2. Obtain your Fit Test score ($\text{VO}_2 \text{ max}$).
3. Locate your Fit Test score in the left column of Table 2 below.
4. The corresponding letter is your Recommended Exercise Level.
5. For Lifecycle trainer exercise, use Table 3, page 32 to determine your program.
6. For a walking exercise program, use Table 4, page 33.

Table 2: Fitness Program Levels

| FIT TEST SCORE $\text{VO}_2 \text{ max}$ (ml/kg/min) | PROGRAM |
|--|----------------|
| <22 | A |
| 22-33 | B |
| 34-44 | C |
| 45-55 | D |
| >55 | E |

Table 4: Walking Exercise Programs

| PROGRAM LEVEL A | | | | | | | | |
|-----------------|-------|-------|-------|-------|-------|--------|-------|--------|
| WEEK | 1 | 2 | 3-4 | 5-6 | 7-8 | 9-10 | 11-12 | |
| MILEAGE | 1.0 | 1.25 | 1.25 | 1.5 | 1.75 | 2.0 | 2.0 | |
| PACE (mph) | 2.5 | 2.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.25 | |
| PACE (min/mi) | 24 | 24 | 20 | 20 | 20 | 20 | 18:28 | |
| DURATION (min) | 24 | 30 | 25 | 30 | 35 | 40 | 36:56 | |
| HEART RATE* | 60 | 60 | 60-70 | 60-70 | 60-70 | 60-70 | 70 | |
| FREQUENCY | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| CALORIES/DAY | 86 | 107 | 114 | 136 | 159 | 182 | 182 | |
| PROGRAM LEVEL B | | | | | | | | |
| WEEK | 1 | 2 | 3-4 | 5-6 | 7-8 | 9-10 | 11-12 | |
| MILEAGE | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.25 | 2.5 | |
| PACE (mph) | 3.0 | 3.0 | 3.25 | 3.5 | 3.75 | 3.75 | 3.75 | |
| PACE (min/mi) | 20:00 | 20:00 | 18:28 | 17:08 | 16:00 | 16:00 | 16:00 | |
| DURATION (min) | 30:00 | 40:00 | 36:56 | 34:16 | 32:00 | 36:00 | 40:00 | |
| HEART RATE* | 60-65 | 60-65 | 60-70 | 60-76 | 70-80 | 70-80 | 70-80 | |
| FREQUENCY | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| CALORIES/DAY | 137 | 182 | 182 | 182 | 187 | 210 | 234 | |
| PROGRAM LEVEL C | | | | | | | | |
| WEEK | 1 | 2 | 3-4 | 5-6 | 7-8 | 9-10 | 11-12 | Maint. |
| MILEAGE | 2.0 | 2.5 | 2.5 | 3.0 | 3.0 | 3.5 | 4.0 | 4.0 |
| PACE (mph) | 3.5 | 3.5 | 3.75 | 3.75 | 4.0 | 4.0 | 4.0 | 4.0 |
| PACE (min/mi) | 17:08 | 17:08 | 16:00 | 16:00 | 15:00 | 15:00 | 15:00 | 15:00 |
| DURATION (min) | 34:16 | 42:51 | 40:00 | 48:00 | 45:00 | 52:30 | 60:00 | 60:00 |
| HEART RATE* | 60-65 | 60-65 | 70 | 70 | 70-80 | 70-80 | 70-80 | 70-80 |
| FREQUENCY | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 |
| CALORIES/DAY | 182 | 228 | 234 | 281 | 287 | 334 | 382 | 382 |
| PROGRAM LEVEL D | | | | | | | | |
| WEEK | 1 | 2 | 3-4 | 5-6 | 7-8 | 9-10 | 11-12 | Maint. |
| MILEAGE | 2.5 | 2.5 | 3.0 | 3.0 | 3.5 | 3.5 | 4.0 | 4.0 |
| PACE (mph) | 3.75 | 4.0 | 4.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| PACE (min/mi) | 16:00 | 15:00 | 15:00 | 13:20 | 13:20 | 13:20 | 13:20 | 13:20 |
| DURATION (min) | 40:00 | 37:30 | 45:00 | 40:00 | 46:40 | 46:40 | 53:20 | 53:20 |
| HEART RATE* | 60 | 60-70 | 60-70 | 70 | 70 | 70 | 70-80 | 70-80 |
| FREQUENCY | 5 | 5 | 4 | 4 | 3 | 3 | 3 | 3 |
| CALORIES/DAY | 234 | 239 | 287 | 323 | 377 | 377 | 431 | 431 |
| PROGRAM LEVEL E | | | | | | | | |
| WEEK | 1 | 2 | 3-4 | 5-6 | 7-12 | Maint. | | |
| MILEAGE | 3.0 | 3.5 | 3.5 | 4.0 | 4.0 | 4.0 | | |
| PACE (mph) | 4.0 | 4.0 | 4.5 | 4.5 | 4.5 | 4.5 | | |
| PACE (min/mi) | 15:00 | 15:00 | 13:20 | 13:20 | 13:20 | 13:20 | | |
| DURATION (min) | 45:00 | 52:30 | 46:40 | 53:20 | 53:20 | 53:20 | | |
| HEART RATE* | 60 | 60-70 | 60-70 | 60-70 | 70-80 | 70-80 | | |
| FREQUENCY | 3-4 | 3 | 3 | 3 | 3 | 3 | | |
| CALORIES/DAY | 287 | 334 | 377 | 431 | 431+ | 431+ | | |

*Percentage of theoretical maximum. Calories based on 70 kg (154 lb.) individual. Based on research from the Exercise Physiology Laboratory, University of Massachusetts Medical School.

Table 5: Relative Program Intensities

| | Hill Profile/Heart Rate | Random/Race | Manual/Fit Test |
|-------------|-------------------------|-------------|-----------------|
| Level of | 0-2 | 0-1 | 0 |
| Intensity | 3-4 | 2-3 | 1 |
| (Pedal | 5-7 | 4-6 | 2 |
| Resistance) | 8-9 | 6-7 | 3 |
| | 10 | 7-8 | 4 |
| | 12 | 9-10 | 5 |
| | 12 | 11 | 6 |
| | 12 | 12 | 7 |
| | 12 | 12 | 8 |
| | 12 | 12 | 9 |
| | 12 | 12 | 10 |
| | 12 | 12 | 11 |
| | 12 | 12 | 12 |

Interpretation: level 3 or 4 in the Hill Profile program is equivalent to level 2 in the Random Program and level 1 in the Manual program. In other words, it is more difficult to pedal at the same level of intensity in the Manual program than on the Random program, and the Random program is more difficult to pedal at the same level of intensity than the Hill Profile program.

Note: the 3-minute warm-up period in the Heart Rate program is similar in difficulty to the Hill Profile program.

Lifecycle Hill Simulation and Miles Traveled

The programs of the Lifecycle model 6500HR have graduated levels of intensity to simulate riding through hills and valleys. As you encounter the hills in various programs, the pedal resistance will increase or decrease for the duration of the hill shown in the Program Profile window. This window graphically depicts the upcoming terrain, giving you a preview of what you are about to encounter. Additionally, the Lifecycle model 6500HR has different levels of intensity or difficulty. These levels simulate the effect of a rider encountering a series of hills whose inclines vary based on the level of intensity selected. The hills encountered on level 0 are easiest, with those on level 12 being the most difficult, or having the greatest incline.

Except for the 12-Speed Race program, the Lifecycle trainer is a "constant work" system that does not allow you to cheat during an exercise program. In the other programs, the pedal resistance compensates for changes in pedal speed or RPM. The slower you pedal, the more resistance you will encounter. Conversely, the faster you pedal, the less resistance you will encounter. Because the amount of exercise is constant and the amount of resistance depends on the actual RPM, the distance traveled will always remain the same. This means that pedaling faster will not bring you to the end of a program sooner because the programs are based on time and a predetermined amount of exercise to be performed during the selected time period. Only the 12-Speed Race program features varying pedal resistance to simulate the feel of a real bike. The pedal resistance increases with increased pedaling speed, thus allowing you to control the intensity of the program and the level (or gear) you are on.

Step 2: Start Pedaling

The Lifecycle heart rate trainer does not require electricity from an outside source. You supply the power by pedaling. You should start pedaling briskly BEFORE you start the Lifecycle trainer.

Step 3: Press the START Key

Once you are pedaling briskly at a speed of approximately 80 RPM, you should press the START key. When you press START, the program selections will begin flashing and a flashing dash appears in the Data Entry window. If you are not pedaling briskly enough when you press the START key, you will not get the program selections to illuminate so you can select your program. If this occurs, increase pedaling speed, then press the START key again.

Step 4: Select Exercise Program

A flashing dash appears in the Data Entry window requesting that you choose one of the six Lifecycle 6500HR programs: Hill Profile, Random, Manual, Heart Rate, 12-Speed Race or Fit Test. Press the SELECT KEY until the LED to the left of the program is lit, then press ENTER. (Note that each time the SELECT KEY is pressed, the computer scrolls to the next program selection.)

Step 5: Select Target Heart Rate (For Heart Rate Program Only)

Use the keypad to enter your age, then press ENTER. The Lifecycle trainer will calculate a target heart rate for you. If you don't wish to use the heart rate selected by the Heart Rate program, you can press the asterisk key (*) and enter your own heart rate target, then press ENTER.

Step 6: Select Exercise Time (Hill Profile Program Only)

If you have selected the Hill Profile program, the time LED above the Data Entry window will flash requesting you to enter your program time of 1-6, 12, 18, or 24 minutes. **NOTE: The console does not accept Hill Profile programs of durations other than those listed here. There is no need to enter a time for the Random, Manual, Heart Rate, 12-Speed Race or Fit Test programs. After entering your time, press the ENTER key.**

programs, the light occasionally changes from the bottom position (80 RPM) to the top position (100 RPM). This tells you to increase your pedal speed to 100 RPM. This occurs during the cool-down phase of the Hill Profile and at various points during the Random programs.

Unlike the Hill, Random and Manual programs with a constant-work pedal resistance, the 12-Speed Race program's pedal resistance varies with the speed at which you are traveling as well as the level or "gear" chosen. During your ride, the Miles LED will remain lit and your total miles traveled will be displayed. The Pedal RPM window will display the speed (miles per hour) at which you are traveling.

Step 9: Check Your Heart Rate

You should check your heart rate periodically during each exercise session to ensure that you are working within your THRR. (Suggested times to check heart rate are shown in Figure 3 on page 15.) If you wish to check your heart rate, simply grasp the handlebar sensors to use the Lifepulse system.

Step 10: Changing Level of Intensity (Difficulty)

If your heart rate is above your THRR, reduce your level of intensity by entering a lower number on the keypad (except in the Heart Rate program). If your heart rate is below your THRR, you can enter a higher number to increase the level of intensity. Do not change the workout intensity if your heart rate is within your THRR. You can change the level of intensity at any time during your ride by simply pressing a new number on the keypad.

Step 11: Changing Your Target Heart Rate (Heart Rate Program Only)

To change your target heart rate goal at any time during the Heart Rate program, press the asterisk key followed by the new value entered on the keypad. Use the Target Heart Rate Chart on the console as a reference.

- ☐ Reduced boredom and the potential for increased adherence to the overall exercise plan.*

Steady-Pace Training

For those who prefer steady-pace training, it is also available on the Lifecycle trainer. It is provided through the Manual, 12-Speed Race or Heart Rate program. You can create your own programs using the Manual or Race program simply by changing levels during the course of your ride or the Heart Rate program by changing the target heart rate. For example, if you are riding the Manual program at level 4 and wish to increase the pedal resistance, merely press a numbered key that is greater than 4. Likewise, you can select a lower number. If you are in the Heart Rate program and your target rate is 110, you can reduce or increase resistance by pressing the asterisk key and entering a higher or lower target heart rate.

Some exercise physiologists believe in the combined use of both steady-pace and interval training. The Hill Profile and Manual programs offer this variety. If your time is limited, however, we recommend that you choose the Hill Profile program because it can provide greater cardiorespiratory improvement per unit of time than steady-pace training.

If, for some medical or physiological reason, you have been advised to maintain a steady heart rate while you are exercising, select the Heart Rate program and enter your own target heart rate using the asterisk key.

* Rippe, J.M., et al. "Comparisons Among 12-Minute Hill, 12-Minute Steady State Cycle Training Programs," (Abstract) American College of Sports Medicine, 1988.

5. Be Realistic. The degree of endurance and strength you can reach is always determined by your genetic potential, your fitness program, and your environment. Don't compare yourself just to top athletes or celebrities. Judge real development by improvement from where you start. You will have a sense of pride and accomplishment when you achieve goals you have set for yourself, and nothing is more motivating than success.

6. Keep a Progress Chart. A daily log, like the one included at the end of this manual, helps you monitor your progress objectively. Subjective comments about how you feel during and after your workout can keep you aware of subtle changes as you improve, and this is a good way to catch yourself in slumps.

7. Enlist the Support of Family and Friends. Tell those close to you about your fitness goals and ask them to support your efforts. Working out with a friend can produce amiable challenges and be twice the fun of exercising alone.

How to Solve Operating Problems

Symptom: No power

- ☐ Perhaps you need to replace the 9-volt battery on the underside of the bike's console. (See page 47.)

Symptom: Hard to pedal

- ☐ The Lifecycle aerobic trainer may be harder to pedal during its break-in period. This "tightness" usually subsides after the first 10 to 15 hours of use.
- ☐ Perhaps you've selected a level of intensity that is too difficult for you at this time. If so, try a lower level and graduate to a higher level when you are ready.

Symptom: Keys do not respond (not including START key)

- ☐ Are you trying to enter a duration for the Hill Profile program that is not available? Remember, the console will not accept Hill Profile programs other than 1-6, 12, 18 or 24 minutes.

Symptom: Shuts off during ride

- ☐ Did you stop pedaling or slow your pedaling speed below 80 RPM? Interrupting the pedal cadence, even for a short period, can cause the display console to go blank.
- ☐ Did you program the correct time? If you want to ride the 12, 18 or 24 minute program, it's important that you enter the digits within two seconds of each other. Failure to enter each number properly may result in a 2 minute program instead of a 12 minute program. Also, be sure both numbers are displayed before pressing the ENTER key.

Symptom: Lights flicker or fade in and out

- ☐ Are you pedaling fast enough? Pedaling below 50 RPM may cause the "lights" in the Program Profile window to flicker or fade in and out.
- ☐ Perhaps you need to replace the 9-volt battery.
- ☐ With a Phillips screwdriver, remove the Display/Handlebar Assembly from the frame. Disconnect the wire harness and reconnect.

Symptom: Lifepulse Heart Rate Monitoring System Does Not Respond

- ☐ Are you grasping the heart rate sensors with both hands? Are you making contact with all four sensors? Place hands palms down over sensors with your thumbs contacting the sensors on the underside of the handlebar.
- ☐ Clean sensors with a soft cloth and liquid, non-abrasive cleaner.

How to Replace the Battery

A 9-volt alkaline battery is located in a small compartment in the lower center of the back of the display console (as you view it from the seat). Occasionally, this battery needs to be replaced. Follow these steps:

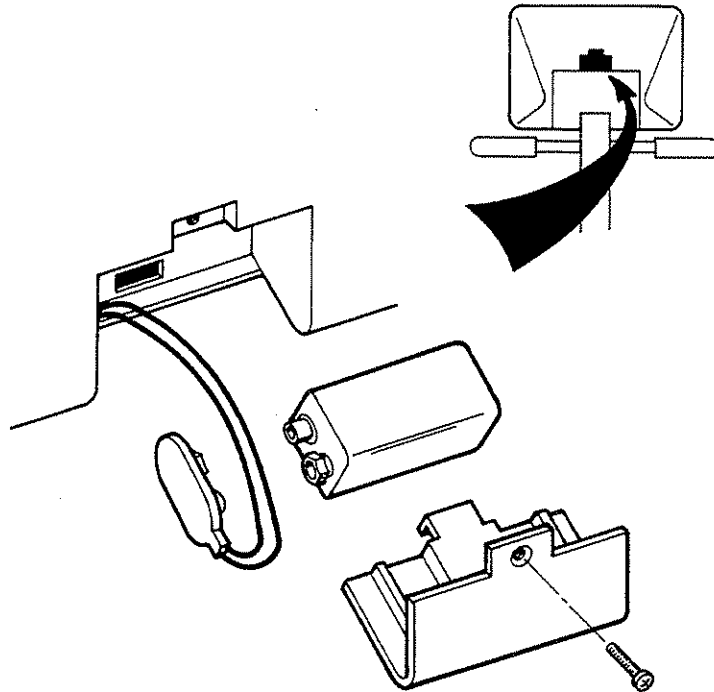
Step 1: Remove the screw from the **DISPLAY CONSOLE** using a Phillips screwdriver.

Step 2: Gently pull the **BATTERY WIRES** out so that you can disconnect the old **BATTERY** and connect the new **ALKALINE BATTERY** as shown.

Step 3: Cradle the **ALKALINE BATTERY** on the **BATTERY COMPARTMENT DOOR** and install by first inserting the tab on the back of the **BATTERY COMPARTMENT DOOR** into the opening on the **DISPLAY CONSOLE**, and then, by gently pushing up, carefully tuck the **BATTERY WIRES** back into the **DISPLAY CONSOLE** while reinserting the **DOOR**. Tighten the screw until snug. **CAUTION: DO NOT OVERTIGHTEN.**

CAUTION: USE AN ALKALINE BATTERY ONLY!

Figure 7: Replacing the Battery

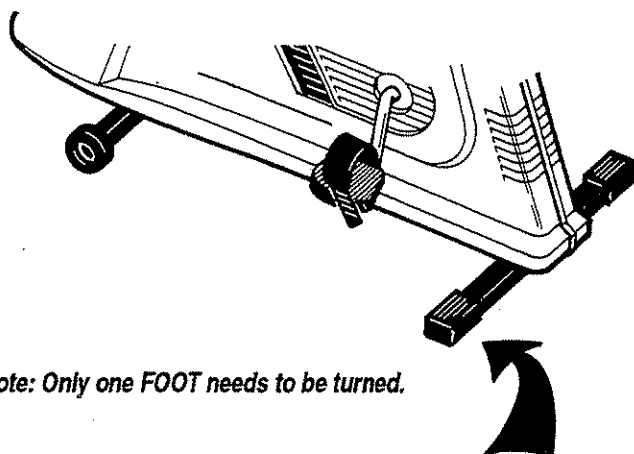


How to Level the Lifecycle Model 6500HR

The Lifecycle model 6500HR trainer may have to be leveled, depending on the surface on which it is placed.

After placing the Lifecycle aerobic trainer in the intended location for use, check the stability of the bike. If the Lifecycle trainer is not level, turn the FOOT in the stabilizer bar in either direction until the rocking motion is diminished. If one end of the Lifecycle trainer is not touching the floor, rotate the FOOT so it is touching the surface.

Figure 9: Leveling the Bike



Note: Only one FOOT needs to be turned.

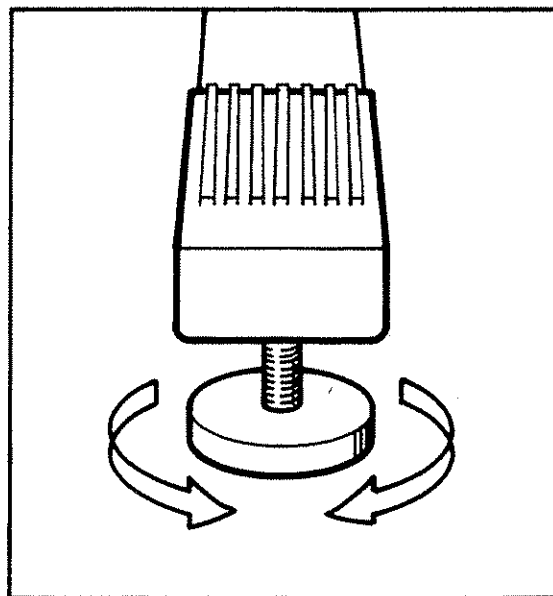


Table 6: Training Heart Rate Range (THRR) for Fat Loss and Cardiorespiratory Improvement

| Age | Max HR* | 60% HR | 75% HR | 85% HR | Optimal Training HR** |
|-----|---------|--------|--------|--------|-----------------------|
| 20 | 200 | 120 | 150 | 170 | 160 |
| 21 | 199 | 119 | 149 | 169 | 159 |
| 22 | 198 | 119 | 148 | 168 | 158 |
| 23 | 197 | 118 | 148 | 167 | 158 |
| 24 | 196 | 118 | 147 | 167 | 157 |
| 25 | 195 | 117 | 146 | 166 | 156 |
| 26 | 194 | 116 | 145 | 165 | 155 |
| 27 | 193 | 116 | 145 | 164 | 154 |
| 28 | 192 | 115 | 144 | 163 | 154 |
| 29 | 191 | 115 | 143 | 162 | 153 |
| 30 | 190 | 114 | 142 | 162 | 152 |
| 31 | 189 | 113 | 142 | 161 | 151 |
| 32 | 188 | 113 | 141 | 160 | 150 |
| 33 | 187 | 112 | 140 | 159 | 150 |
| 34 | 186 | 112 | 139 | 158 | 149 |
| 35 | 185 | 111 | 139 | 157 | 148 |
| 36 | 184 | 110 | 138 | 154 | 147 |
| 37 | 183 | 110 | 137 | 155 | 146 |
| 38 | 182 | 109 | 136 | 155 | 146 |
| 39 | 181 | 109 | 136 | 154 | 145 |
| 40 | 180 | 108 | 135 | 153 | 144 |
| 41 | 179 | 107 | 134 | 152 | 143 |
| 42 | 178 | 107 | 133 | 151 | 142 |
| 43 | 177 | 106 | 133 | 150 | 142 |
| 44 | 176 | 106 | 132 | 150 | 141 |
| 45 | 175 | 106 | 131 | 150 | 140 |
| 46 | 174 | 105 | 130 | 149 | 139 |
| 47 | 173 | 104 | 130 | 148 | 138 |
| 48 | 172 | 104 | 129 | 147 | 138 |
| 49 | 171 | 103 | 128 | 145 | 137 |
| 50 | 170 | 102 | 127 | 144 | 136 |
| 51 | 169 | 101 | 127 | 144 | 135 |
| 52 | 168 | 101 | 126 | 143 | 134 |
| 53 | 167 | 100 | 125 | 142 | 134 |
| 54 | 166 | 100 | 124 | 141 | 133 |
| 55 | 165 | 99 | 124 | 140 | 132 |
| 56 | 164 | 98 | 123 | 139 | 131 |
| 57 | 163 | 98 | 122 | 138 | 130 |
| 58 | 162 | 97 | 121 | 138 | 130 |
| 59 | 161 | 97 | 121 | 137 | 129 |
| 60 | 160 | 96 | 120 | 136 | 128 |
| 61 | 159 | 95 | 119 | 135 | 127 |
| 62 | 158 | 95 | 118 | 134 | 126 |
| 63 | 157 | 94 | 118 | 133 | 126 |
| 64 | 156 | 94 | 117 | 133 | 125 |
| 65 | 155 | 93 | 116 | 132 | 124 |
| 66 | 154 | 92 | 115 | 131 | 123 |
| 67 | 153 | 92 | 115 | 130 | 122 |
| 68 | 152 | 91 | 114 | 129 | 122 |
| 69 | 151 | 91 | 113 | 128 | 121 |
| 70 | 150 | 98 | 112 | 135 | 120 |

See footnotes and explanation on page 52.