

chapter one

Quick Start

In This Chapter:

Just Get on and Ride! Starting Up Change Workouts Any Time You Want Pausing Your Workout Change the Data Display



CHAPTER 1: Quick Start

Just Get on and Ride!

QUICK START

JUST GET ON AND RIDE!	The best way to learn to use the Z5 Elliptical is to keep pressing keys to see what happens — explore it at your own pace. REMEMBER: the Z5 elliptical must be plugged into a wall outlet using the supplied wall transformer. The power input jack is located in the rear of the elliptical.
Starting Up	 Begin pedaling to start up the Z5.1 elliptical. (The Z5 display will already be on.) The display will wake up and prompt for your weight, workout selection, and workout time. Enter your workout parameters and press <i>start</i>, or immediately press <i>start</i> for a quick start into a manual workout.
Change Workouts At Any Time	At any time during your workout, change workouts by pressing a program key.
Pausing Your Workout	The Z5 elliptical will pause indefinitely when you stop pedaling, retaining your workout data until you press CLAP . The Z5.1 will retain your workout data for about 15 seconds.
CHANGE THE DATA DISPLAY	Press the Change Display key (Burge) to change the workout data display.

Riding Your Elliptical

In This Chapter:

Getting Comfortable Using Your Heart Rate to Exercise Using the Chest Strap Using Contact Heart Rate Getting the Best Results Possible

Place your feet anywhere on the foot

Most riders prefer their feet to be as close together as possible, but choose your own position for maximum comfort.

RIDING YOUR ELLIPTICAL

Getting Comfortable

RIDING YOUR ELLIPTICAL

Variations in human

exercise efficiency are

another potential source of error, with

differences of plus or

minus 10% common

in the population.

SETTING YOUR WEIGHT

Set your weight before every workout. This allows the Z5 Elliptical to control your workout more effectively.

The body weight setting does not affect the calorie expenditure calculation. Unlike treadmills or other weight-bearing exercises, calories burned during exercise

biking does not change with different body weights.

FOOT POSITION



pads.

ADJUSTING STRIDE LENGTH The Z5.1's stride length can be adjusted from 18 to 24 inches. Rotate the adjustment wheel counter-clockwise to lengthen the stride, and clockwise to shorten the stride.



Most users will be comfortable near

the center of the adjustment range, from 19 to 22 inches. Slightly different muscles are used at different stride lengths. so changing stride length during your exercise may give you a better workout.

Using the Exercise Arms

RIDING YOUR ELLIPTICAL

You have three hand and arm options when exercising:

Use the upper-body exercise arms.

The elliptical's motion will complement your body's natural rhythm, encouraging extra exercise from your upper body and making for an easy exercise balance.



Grasp the exercise arms in a position so that you are wellbalanced and your arm motion is comfortable. Grip the handles with a relaxed, not tight, grip.



You can use the exercise arms for mainly balance, or you can use them for significant upper-body exercise. Any power you apply to them will be accurately recorded by the elliptical console.

Use the balance bar.

Again, grasp the handles with a relaxed grip.



Keep your hands free.

Use caution with this method, as this requires good balance and exercise form.



Many exercisers use all three options during their workout.

Monitoring Your Heart Rate

RIDING YOUR ELLIPTICAL

Breathe in a regular and relaxed manner. Many exercisers do not breathe enough, which reduces their exercise capacity and comfort. You might want to try breathing deeper and more frequently to see if it helps your exercise regime.

BREATHING

The Z5 Elliptical can monitor your heart rate using a chest strap that transmits your heart rate to the elliptical via radio.

Although your elliptical functions fine without using the heart rate monitoring feature, this kind of monitoring gives you valuable feedback on your effort level. Chest strap monitoring also allows you to use Heart Rate Control, which is the most advanced exercise control system available.



Monitoring Your Heart Rate

CHEST STRAP HEART RATE MONITORING

When you wear a Polar[®] or compatible transmitter strap, the elliptical will display your heart rate as a digital beats-perminute (bpm) readout.

The transmitter strap should be worn directly against your skin, about one inch below the pectoral muscles/breast line (see picture below). Women should be careful to place the transmitter below their bra line.



Examples of Heart Rates Found in Daily Life

An average 30-year-old might have a resting heart rate, when sitting totally still for several minutes, of **65**. During hard exercise that can be sustained for 10 to 15 minutes it might be around **140** continuously. A maximum heart rate that requires maximal exercise for several minutes to attain is **185**.

A 30-year-old in good shape might have a resting heart rate near 55, and might exercise for 20 minutes at a heart rate of 160.

A world-class distance runner or professional cyclist might have a resting heart rate near **45**.

Some moisture is necessary between the strap and your skin. Sweat from your exercise works best, but ordinary tap water may be used prior to your workout if desired.

The Display

In This Chapter:

Your Display The Upper Panel The Lower Panel





Your Display THE DISPLAY

YOUR DISPLAY

The elliptical display has two jobs: to let you control the elliptical operation, and to give you feedback about your workout. The controls are simple and designed to be foolproof; it's hard to press a "wrong" key. You can monitor eight different kinds of physiological data, and your workout progress is tracked graphically with the center matrix display







The Upper Panel

THE DISPLAY



The Lower Panel

THE DISPLAY

Manual and Pre-Set Programs

In This Chapter:

How These Modes Work Program Profiles

How Your Elliptical Controls Your Workout

MANUAL AND PRE-SET PROGRAMS

MANUAL MODE Manual mode changes workload in roughly 10-watt increments. The faster you pedal, the more power is required, just like walking or riding an outdoor bike.

| Three different preset programs are available:

PRE-SET

PROGRAMS

- *C-V Workout*, with the workload gradually rising until you reach the middle of your workout time, then gradually decreasing to the end.
- *Weight Loss*, with a warmup stage increasing to a steady-state workload for the majority of the workout, then a cool-down at the end.
- *Hill Interval*, with four work intervals separated by four rest intervals.

The Random program creates a different program profile each time you press the key.

Sixteen different levels are available to change the difficulty of a program. The workload intensities expand and contract depending on the level. **Program Profiles**

MANUAL AND PRE-SET PROGRAMS



Program Profiles

MANUAL AND PRE-SET PROGRAMS



Heart Rate Control

In This Chapter:

Constant HRC HRC Options and Information Target Heart Rate Chart Heart Rate Control Programs Important Points About HRC

Constant HRC

True's heart rate control (HRC) workout lets the elliptical monitor your relative exercise intensity by way of your heart rate, then automatically adjust the workload to keep you at your desired exercise intensity.

Your heart rate is a good measure of your body's exercise stress level. It reflects differences in your physical condition, how tired you are, the comfort of the workout environment, even your diet and emotional state. Thus, using heart rate to control workload takes the guesswork out of your workout settings.

Consult your physician before using heart rate controlled workouts for advice on selecting a target heart rate range. Also, it is important to use the elliptical for several workouts in the manual mode while monitoring your heart rate. Compare your heart rate with how you feel to ensure your safety and comfort.

You need to wear a heart rate monitoring chest strap to use heart rate control. See the "Monitoring Your Heart Rate" section in *Chapter 2* for a guide to proper usage.



HRC Options and Information

HEART RATE CONTROL

The Z5 Elliptical has two types of heart rate control: TYPES OF HRC • *Constant:* pick a target heart rate, and the elliptical will control your workout from the very beginning so that you reach your target within five to seven minutes. • *Cruise Control:* while in any program, set your current heart rate as your target by pressing a single key. MAXIMUM HEART RATE Remember to check with your physician before beginning any AND TARGET exercise program. She can help determine an appropriate target heart rate. Medications often affect heart rate. HEART RATE

HEART RATE CONTROL



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HEART RATE CONTROL

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Target Heart Rate Chart

HEART RATE CONTROL

Heart Rate Control Programs

HEART RATE CONTROL

Constant HRC is the best-known type of HRC, and is the easiest to use. The elliptical will gradually raise your heart rate so that you reach your target within 5 to 7 minutes.

Note that as you tire during your workout, especially in the last third, workload will usually have to be reduced to keep you at a steady target heart rate.

Cruise Control is the simplest way to enter Constant HRC training. While in manual or any program you can enter Constant HRC by simply pressing the Heart Rate Control key. Your current heart rate will be set as the target.

For best results, you should be at least five minutes into your workout and warmed up. This will allow Cruise Control to more accurately control your heart rate.

Remember, you must be wearing a chest strap, and your heart rate should be displayed in the Heart Rate window.

To change your target heart rate press Heart Rate Control. Edit the target using - / + or numeric keys and press

CRUISE CONTROL

CONSTANT

HRC

Important Points About HRC

HEART RATE CONTROL

IMPORTANT POINTS ABOUT HEART RATE CONTROL	The heart rate monitor transmitter strap should be worn according to the guidelines in <i>Chapter 2</i> .
	If the transmitter strap is adjusted or moved while exercising, heart rate monitoring may be temporarily affected.
	If communication is lost for 30 seconds, the elliptical will exit the HRC workout into a manual workout.
	The transmitter strap sends a low-level radio signal to the elliptical, so interference from other radio and sound waves (including everything from cordless telephones to loudspeakers) is possible. The good news is that this interference is usually quite brief. If you continue to have intermittent heart rate display problems, consult your local service technician, as the transmitter strap batteries may be low.
	Make sure you breathe smoothly and regularly.
	Talking during your workout usually causes heart rate spikes of five beats per minute or more, so avoid talking as much as possible.
	Maintain a smooth walking or running motion.
	Two users wearing the same kind of transmitter at the same time and in close proximity may cause false heart rate display readings.

Creating an Exercise Plan

In This Chapter:

The F.I.T. Concept Defined Utilizing the F.I.T. Concept Beginning Your F.I.T. Program Establishing and Maintaining Fitness Weight Management A Sports Training Program
The F.I.T. Concept Defined

CREATING AN EXERCISE PLAN

WHAT IS THE F.I.T. CONCEPT? The workout portion of your exercise program consists of three major variables: Frequency, Intensity, and Time.

Frequency: How Often You Exercise

You should exercise three to five times a week to improve your cardiovascular and muscle fitness. Improvements are significantly smaller with less frequent exercise.

Intensity: How Hard You Exercise

Intensity of exercise is reflected in your heart rate. Exercise must be sufficiently rigorous to strengthen your heart muscle and condition your cardiovascular system. Only your doctor can prescribe the target training heart range appropriate for your particular needs and physical condition.

Start with exercise that stimulates you to breathe more deeply.

Alternate days of moderate and easy exercise to help your body adapt to new levels of exertion without unnecessary strain.

If you are just beginning an exercise program, you may be most comfortable using your elliptical at low workloads. As you use your elliptical regularly, higher workloads may be more comfortable and more effective.

If you feel out of breath before you have exercised 12 minutes, you are probably exercising too hard.

As your fitness level improves, you will need to increase your workout intensity in order to reach your target heart rate. The first increase may be necessary after two to four weeks of

More F.I.T. Concept Overview

CREATING AN EXERCISE PLAN

regular exercise. Never exceed your target heart rate zone. Increase the workload on the elliptical to raise your heart rate to the level recommended by your doctor.

METs

One MET is the amount of energy your body uses when you're resting. If a physical activity has an equivalent of six METs, its energy demands are six times that of your resting state. The MET is a useful measurement because it accounts for differences in body weight.

Time: How Long You Exercise

Sustained exercise conditions your heart, lungs, and muscles. The longer you are able to sustain exercise within your target heart range, the greater the aerobic benefits.

To begin, maintain two to three minutes of steady, rhythmic exercise and then check your heart rate.

The initial goal for aerobic training is 12 continuous minutes.

Increase your workout time approximately one or two minutes per week until you are able to maintain 20-30 continuous minutes at your training heart rate.

Utilizing the F.I.T. Concept

The F.I.T. concept is designed to help you begin a program

tailored to your needs. You may wish to keep an exercise log

USING THE

F.I.T. CONCEPT

CREATING AN EXERCISE PLAN

to monitor your progress. **YOUR FITNESS** | You can get valuable fitness benefits from your True Elliptical. PROGRAM Using the elliptical regularly may increase the ability of your heart and lungs to supply oxygen and nutrients to exercising muscles over an extended period of time. The elliptical will also help you develop added muscle endurance and balanced strength throughout your body. DETERMINING | Calculate your maximum heart rate as a first step in YOUR NEEDS developing your fitness program. One formula to calculate average maximum heart rate for one minute is: 220 - Age To find your pulse, locate a vein on your neck or inside your wrist, then count beats for ten seconds, then multiply by six. It's also important to know your target training zone or target heart rate. The American College of Sports Medicine (ACSM) suggests 55% to 65% for lower-conditioned users, 75% to 80% for moderately conditioned users, and up to 90% for wellconditioned users. Z5 Elliptical Owner's Guide

Beginning Your F.I.T. Program

CREATING AN EXERCISE PLAN

CREATING AN EXERCISE

In addition to monitoring your heart rate as you exercise, be certain of how quickly your heart rate recovers. If your heart rate is over 120 beats per minute five minutes after exercising, or is higher than normal the morning after exercising, your exertion may be too strenuous for your current level of fitness. Reducing the intensity of your workout is recommended.

The age-adjusted target heart rates indicated in the chart in *Chapter 5* reflect averages. A variety of factors (including medication, emotional state, temperature, and other conditions) can affect the exercise heart rate appropriate for you.

Warning: Consult your doctor to establish the exercise intensity (target heart rate zone) appropriate for your age and condition before beginning any exercise program.

Warm-Up: Slow and Deliberate Exercise

You are not warmed up until you begin to perspire lightly and breathe deeper. Warming up prepares your heart and other muscles for more intense exercise and helps you avoid premature exhaustion. Start slowly, exploring different workloads until you can comfortably sustain your exercise level. A good suggestion is a minimum of three minutes. Perspiration on your brow is a good indicator of a thorough warm-up. The older you are, the longer your warm-up period should be. Beginning Your Exercise Program

Your F.I.T. Program Continued

CREATING AN EXERCISE PLAN

Workout: Brisk and Rhythmic Exercise

The workout trains and conditions your heart, lungs, and muscles to operate more efficiently. Increase exercise in response to your heart rate to train and strengthen your cardiovascular system. Concentrate on exercising smoothly.

Cool-Down: Slow and Relaxed Exercise

Cooling down relaxes your muscles and gradually lowers your heart rate. Slowly reduce your workload until your heart rate is below 60 percent of your maximum heart rate. The cool down should last at least five minutes, followed by some light stretching to enhance your flexibility.

Beginning a Fitness Program

If you cannot sustain 12 continuous minutes in your target heart rate zone, exercise several times a day to get into the habit of exercising.

Try to reach and maintain 60-65 percent of your maximum heart rate. Alternate exercise with periods of rest until you can sustain 12 continuous minutes of exercise at 60-65 percent of your maximum heart rate.

Begin exercising in three to five minute sessions.

Establishing and Maintaining Fitness

CREATING AN EXERCISE PLAN

If you can sustain 12 but not 20 continuous minutes of exercise in your target heart rate zone:

Exercise three to five days a week.

Rest at least two days per week.

Try to reach and maintain 60-75 percent of your maximum heart rate with moderate rhythmic exercise.

Begin with 12 continuous minutes. Increase your time by one to two minutes per week until you can sustain 20 continuous minutes.

If you can sustain 20 continuous minutes in your target heart rate zone, begin to increase the length and intensity of your workout:

Exercise four to six days a week or on alternate days.

Try to reach and maintain 70-85 percent of your maximum heart rate with moderate to somewhat hard exercise.

Exercise for 20-30 minutes.

Maintaining Aerobic Fitness

CREATING AN EXERCISE PLAN

Managing Weight	Consistent aerobic exercise will help you change your body composition by lowering your percentage of body fat. If weight loss is a goal, combine an increase in the length of your workouts with a moderate decrease in caloric intake. For weight control, how long and how often you exercise is more important than how hard you exercise.
	Exercise four to five times a week.
	Try to reach and maintain 60-75 percent of your maximum heart rate with moderate exercise.
	Exercise for 30-45 minutes at 60-65 percent of your target heart rate.
	Here are some tips to achieving your weight management goal:
	Consume most of your dietary calories at breakfast and lunch, and eat a light dinner. Do not eat close to bedtime.
	Exercise before meals. Moderate exercise will help suppress your appetite.
	Take exercise breaks throughout the day to help increase metabolism (calorie expenditure).

Creating an Exercise Plan

A Sports Training Program

CREATING AN EXERCISE PLAN

When you are training to improve strength and performance:

Exercise four to five days a week. Alternate exercise days and intervals of hard to very hard exercise with easy to moderate exercise.

Exercise for 30 minutes or longer.

Warning: these strategies are intended for average healthy adults. If you have pain or tightness in your chest, an irregular heartbeat, shortness of breath or if you feel faint or have any discomfort when you exercise, **STOP!** Consult your physician before continuing. Remember, every workout should begin with a warm-up and finish with a cool-down.

SPORTS TRAINING

Care and Maintenance

In This Chapter:

How to Care for Your Elliptical

CHAPTER 1: Quick Start CHAPTER 2: Riding Your Elliptical CHAPTER 3: The Display CHAPTER 4: Manual and Pre-Set Programs CHAPTER 5: Heart Rate Control CHAPTER 6: Creating an Exercise Plan CHAPTER 7: Care and Maintenance

CHAPTER 8: Important Safety Instructions CHAPTER 9: Elliptical Specifications

CARE AND MAINTENANCE

How to Care For Your Elliptical

Your Z5 Elliptical doesn't require any routine maintenance, not even lubrication. Keeping it clean is the most important task.

After every workout: Perspiration should be wiped from the control console, shrouds.



Weekly: Wipe down your Z5 Elliptical once a week with a water-dampened soft cloth. Make sure to remove any debris from the footskate track.



Expert service and maintenance at a reasonable cost are available through your factory-trained, authorized True Fitness dealer. The dealer maintains a stock of repair and replacement parts and has the technical knowledge to meet your service needs.

chapter eight

Important Safety Instructions

In This Chapter:

Review for Your Safety

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CHAPTER 9: Elliptical Specifications

When using this exercise elliptical, basic precautions should always be followed, including the following:

Read all instructions before using this exercise elliptical.

Consult your physician before beginning any exercise program.

Do not use if you have an acute cold or fever.

Warning: to reduce the risk of burns, fire and electric shock and injury to persons, follow these instructions:

If the elliptical is plugged in:

Danger: To reduce the risk of electric shock, always unplug it immediately after use and before cleaning.

Unplug it from the outlet when not in use and before any service is performed.

Keep the power cord away from heated surfaces.

Never operate this exercise elliptical if it has a damaged power cord or plug, if it is not working properly, if it has been damaged or dropped, or if it has been submerged in water. In these cases, the exercise elliptical should be examined by a qualified service technician.

Review for Your Safety

IMPORTANT SAFETY INFORMATION

Other safety precautions:

Close supervision is necessary when this exercise elliptical is being used by or near children, or disabled persons.

Use this exercise elliptical only for its intended use as described in this manual.

Do not use attachments not recommended by the manufacturer.

Never drop or insert any object into any opening.

Do not allow animals on or near your exercise elliptical.

Use the exercise elliptical indoors only.

Never use your exercise elliptical near water or while wet. Using the exercise elliptical around a pool, hot tub or sauna will void the warranty.

Do not operate where aerosol (spray) products are being used or where oxygen is being administered.

Allow only trained personnel to service this equipment.

Avoid the possibility of bystanders being struck or caught between moving parts by making sure that they are out of reach of the exercise elliptical while it is in motion.

Allow only one person at a time on your elliptical.

Elliptical Specifications

In This Chapter:

Physical Specifications

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Physical Specifications

SPECIFICATIONS

SPECIFICATIONS | Workload Range: 30 - 350 watts.

Weight: 365 pounds

Maximum User Weight: 300 pounds.

Workload Control System:

- **Z5.1:** self-generating electromagnetic braking.
- **Z5:** electromechanically adjustable eddy current braking.