

Scientific Solutions For Fitness™



**CARDIOVASCULAR TRAINING
& INTELLI-FIT™ SYSTEM GUIDE**

CONTENTS

Foreword

Journey of improvement 3

Introduction

A message from Paul Robbins 4

Chapter 1

The science behind cardio training 6

Chapter 2

What is circuit training with intervals? 11

Chapter 3

The 30/30 interval training program 14

Chapter 4

Putting it all together. 17

Chapter 5

SCIFIT's pyramid of cardiovascular training 18

Chapter 6

Welcome to SCIFIT's intelli-fit system 20

Training schedule for heart fit & power fit 38

Rpm targets for heart fit and cardiovascular training 39

Wattage levels by product for heart fit test protocol 40

Training levels for power fit test protocol 42

FOREWORD JOURNEY OF IMPROVEMENT

Every day we continue to develop smarter ways to help people of all fitness levels get moving, stay motivated and achieve their goals. At SCIFIT we work with experts and specialists to ensure our unique product features can be utilized by every individual, coach, therapist and exercise specialist.

This guide was created to provide a simple understanding of cardiovascular routines and programs with our extensive array of cardiovascular exercise products. SCIFIT is working with renowned cardiovascular trainer and metabolic specialist, Paul Robbins, who consults for numerous manufacturers and organizations. Paul has written the content of this guide to help motivate and lead you on your journey of improvement. As you go on your journey, this guide will help you get the very best from our products and cardiovascular training regardless of functionality or fitness level.



INTRODUCTION A MESSAGE FROM PAUL ROBBINS

Cardiovascular training has been associated with misery for a long time, starting with Phys. Ed. class when we were kids. As we grew older and fatter, cardio was our best hope for losing weight and involved long periods on a bike or treadmill, working away slowly and steadily, enjoying a good book with hopes it would make the workout go faster. Well, no wonder so few of us actually lost body fat and no wonder ALL of us became bored and disillusioned with our cardio workouts. This guide will surprise you and will show that cardio training can be fun! It will also have you losing body fat while you increase your overall endurance, muscular strength and cardiovascular strength, which is often overlooked during training. How do you improve your cardio strength?

“YOU WILL FIND THAT YOUR CARDIO WORKOUTS FLY BY AND THAT WITH EACH WORKOUT YOU ARE ABLE TO WORK HARDER AS YOUR ENDURANCE SOARS.”

By training outside of your comfort zone and adding intervals to each workout. This guide will focus on cardiovascular conditioning and will provide you with specific programs already built into the SCIFIT products. If you are just beginning an exercise program or clinically prescribed therapy, you will learn how to build a cardio program that supplements your other therapy/activity or strength training. You will burn fat while strengthening your entire cardiovascular system. That, in addition to regular strength/functional therapy training, will have you in the best shape of your life. From athletes and more advanced exercisers to limited functional users this guide will allow you to learn how to take your cardiovascular training to the next level, with huge improvements in endurance and your body's ability to recover faster than ever before.

Will you have to work hard to see these improvements? Of course, but you will find that the programs offer a constant challenge and change of intensity, keeping you focused and motivated to reach the next level. There is never boredom because there is no time



INTRODUCTION

to be bored during your workout! You will find that you're cardio workouts fly by and that with each workout you are able to work harder as your endurance soars.

Over years of training clients, we have seen many "sure thing" cardio programs come and go. Left in the wake of these questionable programs are frustrated, overweight folks that never did see the promised fat loss and energy gains, despite working as hard as they could (or so they thought). It is generally assumed that body fat reduction can only result from extended periods of time on a piece of cardio equipment or in a group exercise class. This is based on a theory known as the "fat burning zone," which advocates exercising for longer periods of time but at a low intensity. Although you may be utilizing fat as a fuel in this zone, you will be burning a low number of calories and your metabolism will not be increasing. Increasing your metabolism is the key to burning fat, as well as burning more overall calories throughout the day. Body fat reduction can only take place when there is more energy being burned than consumed. It's that simple, and we will discuss other more effective ways to burn fat in the upcoming chapters.

CHAPTER 1

THE SCIENCE BEHIND CARDIO TRAINING

Like weight training, cardio training falls under the principle of specificity. Typically, what was once considered the “fat burning zone” is thought of as the time when the body is mainly using fat as fuel, however glucose is also a major source of fuel for exercise. For both to be used more efficiently, the body must be able to receive enough oxygen (O₂). Oxygen allows fat and glucose to be burned as fuel. This, in turn, produces the waste products of carbon dioxide (CO₂) and water. Think of this like a car burning gasoline, with the body’s “exhaust” being CO₂ and water.

Respiratory Exchange Ratio

The amount of O₂ and CO₂ exchanged in the lungs normally equals that used and released by body tissues. This allows the body to use these respiratory gasses to estimate caloric expenditure. The method is called indirect calorimetry. It can be measured with a metabolic analyzer to detect an individual’s respiratory exchange ratio (RER). RER is the ratio of CO₂ produced to the volume of O₂ consumed.

To estimate the amount of energy used by the body, first determine the type of energy sources (carbohydrate, fat, or protein) that are being oxidized (or burned for energy). The fact that fat and carbohydrates differ in the amount of oxygen used (in addition to the fact that carbon dioxide is produced during oxidation) can help to determine what kind of fuel is being used.

The body uses the highest percent of its fuel from fat when the body has an RER of 0.71 (see chart). If the body uses a maximal percent of its fuel from fat at 0.71 RER, then why shouldn’t an individual exercise at this level all the time? The answer lies in the fact that the only time the body can be at 0.71 RER is when it is at complete rest. This is where the “fat burning zone” theory starts to break down. Although the percentage of fat being burned is maximal, the amount of energy used (calories burned) is minimal and, therefore, not very productive for the goal of weight or fat loss. Remember, it is not the percentage of fat an individual burns that ultimately dictates body fat reduction. Instead, it is how many calories are burned. Individuals that do their low intensity training at 0.85 RER are burning fat as a fuel (about 50%) but are still burning very low amounts of calories. Training at 1.0 RER, on the other hand, will burn more calories (most coming

from carbs) but you will hit a plateau after training at that level for several months. Later in this basic guide we will discuss intervals that will take you off this chart, bringing your workload closer to 1.1 RER for short periods.

RER (respiratory Exchange Ratio)

RER	% Carbohydrates	% Fats
0.71	0.0	100.0
0.75	15.6	84.4
0.80	33.4	66.6
0.85	50.7	49.3
0.90	67.5	32.5
0.95	84.0	16.0
1.00	100.0	0.0

Burn more calories and fat

The goal of the programs in this guide is to show you how to increase your metabolism through exercise so you are burning more calories and fat after your workout. Unlike training slow and steady in the “fat burning zone,” the higher the intensity at which you train, the more fat and calories you will burn. One of the main objectives of the human body is to expend as little energy as possible. To do so, it must readily adapt to the demands placed upon it. Fortunately, the human body is a highly adaptable organism, with the capability to streamline physical and mental demands over time, using minimal energy. One must understand this principle and be able to use it to produce desirable results and to maximize the caloric expenditure of a training session. This is made easier by maximizing the O₂ consumed for the duration of (as well as the recovery from) the training session. This recovery oxygen consumption is known as excess post exercise oxygen consumption (EPOC).

THE SCIENCE BEHIND CARDIO TRAINING - CONT

EPOC is simply the state in which the body's metabolism is elevated after exercise. This means that the body is burning more calories after exercise than before the exercise was initiated. Think of EPOC as a caloric afterburner that is caused by exercise (much like a car engine stays warm for a period of time after it has been driven). After exercise, the body must use increased amounts of oxygen to replenish energy supplies, lower tissue temperature, and return the body to a resting state.

Circuit Training with Intervals

One way to achieve this effect is by doing intervals in a set pattern, called circuit training, which we will explain in detail in Chapter 2. Circuit training will help prevent what is called plateauing, which means getting stuck at the same body weight and / or fitness level after training for some length of time. Individuals of all fitness levels often find themselves hitting a plateau. This is the point at which many people give up on their program entirely or remain forever in the dreaded plateau, assuming this is as good as it gets for them. These people hit the plateau by training at the same intensity during every cardio workout for months at a time. Training too hard too often and not letting your body rest is as counterproductive as training slow and steady all the time. It is the combination of those two intensities that makes the magic happen.

**“TRAINING TOO HARD AND TOO OFTEN
AND NOT LETTING YOUR BODY REST IS AS
COUNTERPRODUCTIVE AS TRAINING SLOW AND
STEADY ALL THE TIME.”**

An example of overtraining could be an individual that runs several times a week at an average of six to seven mph or someone that participates in a group exercise class several times a week. These people are working harder than the slow and steady, low intensity exerciser whose heart rate never exceeds 130 bpm, but because they are training at the same level every day, they will hit a plateau in both their weight loss and

cardiovascular improvements. Many of these individuals claim they train hard every time they workout, but if we monitor their intensity and heart rate closely, we will see that they average the same intensity every day. This is because they don't understand the importance of circuit training with intervals.

Case Study: Mark

We recently heard from an individual who was a perfect example of someone hitting a plateau. Mark started to train about a year ago hoping to lose weight and to become more fit. He changed his diet and began exercising with great results initially. He lost 40 pounds in one year! Then his progress- and his enthusiasm- came to an abrupt halt.

We asked about his cardio training program and he explained that he was doing his cardio exercise five times per week and he was keeping his heart rate between 150-160 bpm every workout, which Mark felt was an adequate intensity. We did a cardio assessment on him to determine his current cardiovascular level. This assessment was a simple bike test (he prefers the bike because of bad knees) where we increased the intensity (this is also referred to as "workload" and in this case, using a bike, we increased the wattage) every 30 seconds as we measured his VO_2 capacity.

“THE LOW VO_2 NUMBERS SHOWED THAT EVEN THOUGH HE LOST WEIGHT INITIALLY, HIS CARDIO WORKOUT WAS NOT ENOUGH TO IMPROVE HIS OVERALL FITNESS.”

VO_2 testing is the gold standard in the fitness industry to determine cardio fitness. The more air you can move, shown as your VO_2 ml/kg/min., the better cardiovascular shape you are in. In Mark's case, we saw good numbers at the beginning of the test and he could maintain the intensity with no problem. Once we got his heart rate above 155 bpm, however, he began struggling with the workload and was breathing very hard. He

THE SCIENCE BEHIND CARDIO TRAINING - CONT

was only able to complete another minute or so of the test, because his heart rate was climbing so quickly and his legs hit total fatigue.

As we suspected, his VO_2 numbers were not as high as we would like to see because he was unable to push himself to a high intensity. This confirmed that he had been staying in a lower comfort zone during each cardio workout and that was the reason for his plateau and ultimate frustration. He stopped losing weight and his heart and leg strength never improved.

The low VO_2 numbers showed that even though he lost weight initially, his cardio workout was not enough to improve his overall fitness. Basically, he looked better but still needed to get his heart in shape so he could continue to progress.

One other issue that is important to note from this assessment is Mark's lack of leg strength and endurance. We noticed he may have been developing stronger legs using resistance equipment in addition to his cardio training, but because of the early fatigue in his legs during the bike test, it was clear he hadn't improved his leg endurance. He could push the pedals hard... but not for very long. Because he never pushed himself and trained at a more challenging intensity, his overall endurance did not improve so his legs would fatigue too fast, preventing him from even trying to reach that next level. Frustration and fatigue caused the training plateau. Mark is a perfect candidate to add circuit training with intervals for a change of pace, which will help him achieve his cardio fitness goals.

CHAPTER 2

WHAT IS CIRCUIT TRAINING WITH INTERVALS?

Circuit training is a combination of high-intensity cardio and resistance training designed to be easy to follow while targeting fat loss, muscle building and heart-lung fitness. An exercise circuit is one completion of all prescribed exercises in the program; the idea being that when one circuit is complete, you begin again with the first exercise to complete another circuit. Intervals are the specific exercises performed during the circuit. The time between intervals in circuit training is short, often with rapid movement to the next exercise.

Because of their intensity, these circuits are designed to be used 1-2 times per week, in addition to your regular cardio routine. In some cases we will use a program called metabolic circuits which can be done as many as 4 times per week, however overtraining is a risk. Too much of a good thing in this case can lead to fatigue, a higher resting heart rate and injuries because your body has not been allowed adequate rest. In order

“IN ORDER TO PUT 100% INTO EACH CARDIO WORKOUT, YOU HAVE TO BE SURE YOUR BODY IS WELL NOURISHED, RESTED AND HYDRATED.”

to put 100% into each cardio workout, you have to be sure your body is well nourished, rested and hydrated. Low intensity days are worked into your program to ensure this happens. We will also teach you the importance of monitoring your heart rate to gauge your progress and to alert you to any overtraining. We will discuss the best way to start and progress through these circuits based on your fitness level.

To help you design the most effective circuit program without risk of overtraining or injury, we reviewed some popular programs that research has shown to have positive results. One of the best known interval training programs consists of eight 30-second intervals for a total of four minutes of high intensity work- 20 seconds of hard work and a ten second recovery, repeated eight times.

WHAT IS CIRCUIT TRAINING WITH INTERVALS? - CONT

Research has shown this short circuit will:

- Help burn substantially more fat than low intensity cardio training
- Help build as much muscular endurance as 45 minutes of normal cardio training
- Increase your anaerobic capacity by over one quarter
- Increase aerobic fitness

This is a good example of what high intensity in your workout can do to improve fitness levels. To achieve these benefits, however, the intensity has to be very high and repetitive intervals at this high intensity will be necessary.

Other high intensity web based programs have shown significant results as well. A recent study showed an 8.2 second improvement in 2000m rowing time following a four week high intensity training program. The program consisted of eight 2 ½ minute intervals at 90% of VO_2 max with recovery periods between each interval. This equates to a significant 2% improvement after just 7 sessions. What this study and these programs provide is more information on how to set up your interval training circuits based on time. 2 ½ minute intervals may be more realistic to start than the four minute blocks that the first program suggested.

Other high intensity web based programs have also claimed fitness improvements, but lack of proper monitoring during high intensity training has been known to cause muscle breakdown, or rhabdomyolysis (rhabdo), which occurs when tiny shreds of muscle fiber are absorbed by the bloodstream and ultimately poison the kidneys. This occurs after training for long periods of time at an extremely high intensity. Though rhabdo is rare, if you don't progress slowly you can set yourself up for other injuries, which can cause a setback in your training. The circuit training programs we will provide are comprised of all the best features described in the programs above while providing safe progressions to prevent overtraining or injuries. In addition, you will learn how to track your progress and get the most from each workout.

Heart Rate

Tracking your progress by monitoring your heart rate, repetitions and heart rate recovery is very important and many programs overlook the importance of this. You must keep a record of how many repetitions you perform and the workload during each interval (speed, weights, incline, watts, etc.), which enables you to make the necessary adjustments as you progress. The goal is to increase the reps and workload every workout. If you see either reps or workload decreasing over time, this is a sign of overtraining and can lead to injury or at the very least, may cause you to reach a plateau in your fitness level and in your motivation.

“YOU MUST LOOK AT HOW HIGH YOUR HEART RATE INCREASES DURING THE WORK PHASE AND, MORE IMPORTANTLY, YOUR HEART RATE RECOVERY BETWEEN INTERVALS.”

Another way to determine intensity is to use heart rate. You must look at how high your heart rate increases during the work phase and, more importantly, your heart rate recovery between intervals. The faster your heart recovers from exercise, the more fit you are and tracking improvements in your heart rate recovery is a key factor in tracking your overall fitness gains. An easy way to start your program is to perform 30-second work intervals followed by 30 seconds of rest. All SCIFIT cardio equipment has the 30/30 interval training programs already built in. We recommend that you use a Polar heart rate monitor to gauge your heart rate with SCIFIT products.

No matter what type of heart rate monitor you use, the most important thing to remember is to monitor your workouts (Heart Rate and reps). Intensity is the key and you should work up to two to four minute intervals. The following chapters will help you understand our programs and how they best fit your needs.

CHAPTER 3

THE 30/30 INTERVAL TRAINING PROGRAM

Clients have had tremendous success with the 30/30 program and we will share it with you in the following pages. The program can be customized to suit your individual goals and current fitness level. Here are some highlights of the 30/30 program.

- You will burn more calories and increase your metabolism to continue to burn fat after your workout. Low intensity exercise will only raise your metabolism for a short period of time, but circuit training with intervals will keep your body burning more calories for hours.
- 30-second interval training / circuit workouts are great for beginning exercisers through advanced athletes. You complete as many intervals as you'd like. Advanced athletes may do continuous intervals while a beginner may need a longer rest and recovery in between and may only be able to complete two or three intervals per circuit workout.
- The 30-second intervals will help keep you focused on your workout. The workout will move quickly, keeping motivation high.
- You choose the intensity of your workout. In the SCIFIT products the 30/30 program (Heart Fit) has pre-defined workloads – Beginner, Intermediate, Advanced and Sports Performance. These four levels all have five 30-second high intensity periods alternating with five 30-second recovery periods. A 30-second rest, or recovery, begins automatically after each interval during which you maintain a consistent RPM throughout the high Intensity and recovery phases to ensure the correct HR recovery score can be replicated.

Gauge your improvements. The program tracks and records your average heart rate as well as your maximum heart rate achieved during each workout session. The goal is to increase intensity levels (speed, watts or incline), which may increase your maximum heart rate. Challenging your cardiovascular system will help improve heart rate recovery and cardiovascular endurance. The Heart Fit program will also record the average number of beats your heart rate drops during the recovery periods. This number is what shows cardiovascular improvement and can also be used as an indication of overtraining. If your heart rate recovery is poor, you may be overtraining and should perform more moderate exercise that day.

Getting Started

Heart Fit is a circuit made up of a series of intervals and is completed when you perform the series of work and rest intervals. The goal is to do a challenging 30-second interval, or burst of exercise, followed by a 30-second recovery. The key is what is challenging for you. The Heart Fit program is designed by pre-determined watts or workload. If you are not sure of your starting level, it is recommended that you start at beginner level. Move up one level at a time until you find the level that challenges you. The Heart Fit Program is based on your current fitness level and the intensity will increase as you continue your interval training program.

The Heart Fit Program begins the 3-minute warm up by a ramped sequence of 65%, 75% & 95% of the pre-determined wattage (workload). This 3 minute warm up moves you up to the first 30-second high intensity interval followed by a 30-second recovery phase. You will conduct this 5 times and it is important to maintain a consistent cadence (RPM) throughout the program. On the last recovery phase the SCIFIT products will calculate your heart rate recovery averaged over the 5 intervals and display the results. The results can be saved onto any USB flash drive which in turn can be imported into Excel, Word or similar application for individuals to track their own progress and improvement.

The 30/30 Heart Fit level (Beginner, Intermediate, Advanced & Sports Performance) that you conducted to get your heart rate recovery score is the level you choose to complete when you go into the Heart Fit Training. When you select Heart Fit Training you always start at the test level and Program 1 regardless of your level. Please refer to Exhibit A for Heart Fit Training Schedule. We are recommending that when you see a higher recovery number and the test is not challenging you, the recovery improvement is indicating that you could move up to the next level and higher resistance/workload.

Your Fitness Score: Heart Rate Recovery

The faster your heart rate drops the better your cardiovascular condition. When reviewing the results, you will see how fast your heart rate drops during the rest, or recovery, period. For example, when you begin your cardio program your heart rate

THE 30/30 INTERVAL TRAINING PROGRAM - CONT

may drop 8 beats between a work and rest interval. If over a period of time it then drops 11 beats between the work and rest interval, you are improving. This one simple number is, in a sense, your fitness score. This is also a good way to prevent overtraining which will lead to a fitness plateau. Using that same heart rate recovery as a fitness score, you may see days where your heart rate doesn't drop as fast as it did previously. If your heart rate normally drops 11 beats in the 30-second rest period but is now just dropping 8 beats, this may be a sign that you are in an over trained state. This could also be caused by stress, poor nutrition, and lack of quality sleep, inadequate rest and recovery, illness, training too often or a combination of these factors.

CHAPTER 4

PUTTING IT ALL TOGETHER

We have discussed the length of the work phase of your intervals. Some circuit programs suggest as little as 20 seconds and others up to two minutes, which is a big difference in time. The one factor that is common to all of the various circuit training programs is the importance of intensity. The circuit program you design must be one which allows you to maintain a high intensity while keeping perfect form. For this reason, we will use 30 seconds as our base and build from there. Anyone can do 30 seconds of high intensity exercise. For some this could mean simply walking faster while for others it may be an all out sprint on a track or on a piece of cardio equipment. There are many pieces of equipment on which this can be done, however we recommend something that will measure watts or power output. The key is to monitor the speed (rpm) and workload (watts) during the 30-second interval and to maintain this power output, not only throughout the 30-second interval, but to repeat it during each subsequent interval. The 30-second recovery can be a slow walk or just standing to catch your breath. The goal of the 30-second recovery is to allow enough of a break to enable you to do the same speed / intensity on the next interval. When you can no longer hit the top speed / intensity, it is time for a longer rest period of 2-5 minutes. After this complete recovery you can repeat the intervals at your top speed / intensity.

The 30/30 program allows you to create a lot of variety in your workouts (see Exhibit A - Heart Fit Training Programs) as well as build up your interval time by combining each high intensity interval with a 30-second (or longer) rest period. The basic program will show you how to create some 30/30 workouts using cardio equipment, however other programs can be designed and modified by using weight equipment during the high intensity intervals. More advanced programs could involve a high intensity interval followed by a low intensity movement interval, immediately followed by another high intensity interval, with no rest period in between the three. This enables you to slowly build up to longer intervals while maintaining proper form. Soon you will be able to safely do two 3-minute intervals.

Here at SCIFIT we have built the 30/30 program (Heart Fit Test and Heart Fit Training) right into our equipment and can give you direct feedback on your fitness improvements and save it on a USB flash drive during the cool down.

CHAPTER 5

SCIFIT'S PYRAMID OF CARDIOVASCULAR TRAINING

Energy Systems

All SCIFIT products offer a three tiered solution for any level of cardiovascular training. The baseline and foundation of all our programs is the development of individuals' Energy Systems. This suits the "Not Yet Fit" population through to top athletes. In basic terms the energy systems we are talking about are aerobic and anaerobic. These energy systems are required by the body for maintenance, growth, everyday activities and exercise (Active Daily Living tasks).

The aerobic energy system is usually the first to be used. When you're active, the demand for energy increases, as does the demand for more oxygen by the muscles. This extra demand for oxygen is met by an increase in the rate and depth of breathing and an increase in blood supply due to increased heart rate.

As exercise becomes more intense, the body utilizes the anaerobic energy system more and becomes less aerobically efficient. While training at this level has many important benefits (it improves muscular development and increases speed), it cannot be sustained for long durations. We have designed our training programs (Heart Fit and Power Fit) with an interval training strategy in mind. Knowing the precise moment your body becomes less aerobically efficient can help you boost your overall performance.

Iso-Strength/Power

Once we have established the foundation of our improved Energy Systems we can further develop the middle tier of the SCIFIT Pyramid which is Iso-Strength/Power. Our Iso-Strength feature, which includes Power Burst, is a self-applied, accommodating resistance that is concentric only (positive work) and can be used to develop an individual's power. The accuracy of our workload (wattage) means that we develop a client's workload to suit their ability and build on their improvement and cardiovascular strength and power. This middle tier is unique to SCIFIT which gives us the ability to improve the foundations of the energy systems. A specific example would be Fall Prevention Programs. Some people ask the question, "What is power?" This can be easily explained as a strength movement with speed or velocity.

Specialisation

The third and final piece of the pyramid is Specialization. This area is where SCIFIT implements the unique features of our programs and “prescribes” an exercise specific to the individual needs by using our data tracking software, Fit-Key 5.0. This entry level, PC-based software allows us to capture the feedback and prescribe programs by Basic protocol or Client protocol. With Basic protocol, you are guided through the program without collecting data. With Client protocol, the data is tracked and recorded after each exercise session.

All three components of the pyramid are within the capability of all SCIFIT products. This leads nicely to the next chapter where we will go through each individual program to meet the needs of end users, therapists, coaches and exercise specialists.



CHAPTER 6

WELCOME TO SCIFIT'S INTELLI-FIT SYSTEM

he layout of the Intelli-Fit console has a built in water bottle holder and a robust utilities tray for personal belongings. A sturdy reading lip is also incorporated for the casual exerciser.

Record Workouts

Integrated into either side of the console we have a USB flash drive or Fit-Key device port for upgrades and data transfer from the console to other means and the other port can be used for USB charging of phones or personal media devices.

Personal Fan

For personal comfort, a 3 speed fan is integrated into the console and is available during exercise or may be switched off.

METs

The user can set their weight in lbs. to ensure accuracy of calorie and METs output. The METs display is variable depending on the wattage (workload) produced during the exercise duration, however, end users must assume that the METs and calorie feedback is based on a 150 lb. person, unless they enter their weight.

Cool Down

An optional 5 minute cool down is offered at the end of each program (except Quick Start and Stress Test).

Save Data

During the cool down the workout summary is available to view and the user is prompted to save the data via the Fit-Key port on a USB flash drive, the data is saved in a text file and may be imported into Excel, Word, or similar applications.

Programs

Our Intelli-Fit programs are broken down into three product categories:

Rotary, Steppers/Climbers & Treadmills.

PROGRAMS FOR ROTARY PRODUCTS



1. Quick Start

A great program for the user to get on and go, the time clock counts up automatically without being set, 20 levels of resistance with 0.1 increments of change giving the user 200 levels of progression.

- A "Power Burst" function, an Iso-Strength (Self Accommodating, Concentric, Positive Workload) rotary power surge is available anytime during the exercise which is defined within the user/factory set up.
- The workout feedback during exercise is Level, Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. You have the option to change view which simplifies the feedback and displays Level, RPM, Time, Watts and Heart Rate.
- There is no cool down or data feedback at the end of the workout to save on a USB flash drive device.

2. Manual Program

This program can be used to show small increments of improvement, allowing the user to set time in 15 second increments, which counts down to the finish and provides 20 levels of resistance with 0.1 increments of change giving the user 200 levels of progression.

- Power Burst function available.
- The workout feedback during exercise is Level, Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. Change View simplifies the feedback and displays Level, RPM, Time, Watts and Heart Rate.
- The workout summary displays Peak Watts, Average Watts, Peak Heart Rate, Average Heart Rate, Calories and Time.



PROGRAMS FOR ROTARY PRODUCTS - CONT



3. Hill Profile Programs

Select between 7 different profiles of various intensity and intervals. The following designed profiles are available: Hill Course; Sprints; Twin Peaks; Peak; Progressive; Multi-Peaks and Ramp.

- There are 20 levels of resistance, 0.1 increments of change which can give the user 200 levels of progression and is proportionate during the profile.
- Power Burst function available.
- The workout feedback during exercise is Level, Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. You have the option to change view which simplifies the feedback and displays Level, RPM, Time, Watts and Heart Rate.
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. The workout summary displays Peak Watts, Average Watts, Peak Heart Rate, Average Heart Rate, Calories and Time.

4. Random Program



An infinite choice of hill profiles can be chosen to suit the individual's requirements. The level of intensity throughout this program varies in sequence towards the profile you have chosen. You can change the profile during your exercise program to suit the user's needs or wishes.

- There are 20 levels of resistance, 0.1 increments of change which can give the user 200 levels of progression and is proportionate during the profile.
- Power Burst function available.

- The workout feedback during exercise is Level, Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. You have the option to change view which simplifies the feedback and displays Level, RPM, Time, Watts and Heart Rate.

The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. The workout summary displays Peak Watts, Average Watts, Peak Heart Rate, Average Heart Rate, Calories and Time.



5. Heart Rate Program

Enables the user to set a target heart rate. Through real-time monitoring of the user's heart rate, Intelli-Fit maintains the user's heart rate in a zone near the established target rate by altering the intensity (resistance levels /wattage). Personal physiological condition of an individual will determine the heart rate target zone and the resistance levels as it will vary for each individual going through this program.

Note: This program will work only with the optional chest strap heart rate transmitter.

- Setting the Target HR range is from 0 to 240 BPM
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. * Please note that this program has a minimum time limit of 12 minutes.
- The workout feedback during exercise is Target, Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. You have the option to change view which simplifies the feedback and displays Target, RPM, Time, Watts and Heart Rate.

PROGRAMS FOR ROTARY PRODUCTS – CONT



3. Hill Profile Programs

Select between 7 different profiles of various intensity and intervals. The following designed profiles are available: Hill Course; Sprints; Twin Peaks; Peak; Progressive; Multi-Peaks and Ramp.

- There are 20 levels of resistance, 0.1 increments of change which can give the user 200 levels of progression and is proportionate during the profile.
- Power Burst function available.
- The workout feedback during exercise is Level, Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. You have the option to change view which simplifies the feedback and displays Level, RPM, Time, Watts and Heart Rate.
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. The workout summary displays Peak Watts, Average Watts, Peak Heart Rate, Average Heart Rate, Calories and Time.



4. Random Program

An infinite choice of hill profiles can be chosen to suit the individual's requirements. The level of intensity throughout this program varies in sequence towards the profile you have chosen. You can change the profile during your exercise program to suit the user's needs or wishes.

- There are 20 levels of resistance, 0.1 increments of change which can give the user 200 levels of progression and is proportionate during the profile.
- Power Burst function available.

- The workout feedback during exercise is Level, Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. You have the option to change view which simplifies the feedback and displays Level, RPM, Time, Watts and Heart Rate.

The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. The workout summary displays Peak Watts, Average Watts, Peak Heart Rate, Average Heart Rate, Calories and Time.



5. Heart Rate Program

Enables the user to set a target heart rate. Through real-time monitoring of the user's heart rate, Intelli-Fit maintains the user's heart rate in a zone near the established target rate by altering the intensity (resistance levels /wattage). Personal physiological condition of an individual will determine the heart rate target zone and the resistance levels as it will vary for each individual going through this program.

Note:

This program will work only with the optional chest strap heart rate transmitter.

- Setting the Target HR range is from 0 to 240 BPM
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. *** Please note that this program has a minimum time limit of 12 minutes.**
- The workout feedback during exercise is Target, Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. You have the option to change view which simplifies the feedback and displays Target, RPM, Time, Watts and Heart Rate.
- The workout summary displays Peak Watts, Average Watts, Peak Heart Rate, Average Heart Rate, Calories and Time.

PROGRAMS FOR ROTARY PRODUCTS - CONT



6. Iso-Strength Program

Enables the user to set a target RPM rate. Think repetitions (reps) per minute. The Intelli-Fit system allows the program to continuously monitor the RPM, and increases the resistance if the measured RPM exceeds the target RPM. (Not available on our climbers.) Resistance increases to match the user's effort. This safe functional strength (rotary power) component is an isokinetic concentric movement. This program is pure "Positive Work" and as such post exercise muscle soreness associated with strength training is significantly minimized. This is the program used for 'Power Burst' and Fit-Quik as the power /strength component which is explained further in this guide. It is also the component used during the Power Fit Test and training for the high intensity periods. The accurate measurement of wattage pertaining to the individual gives a metric of measurement of power (wattage) which can be used to prescribe specialization programs at any level.

- Setting the Target RPM range is from 20 to 200
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. The workout summary displays Peak Watts, Average Watts, Peak Heart Rate, Average Heart Rate, Calories and Time.

7. Constant Work Program



pedal resistance is automatically adjusted to compensate for any change in pedal speed (RPM), thus, workload (watts) will remain constant at any given setting. Therefore, at higher cadence of RPM's, the perceived load on the muscles is reduced while maintaining target wattage. (Not available on treadmills /climber).

- The user sets their weight in lbs. to ensure accuracy of MET and calorie output. The MET display is fixed depending on the wattage (workload) produced during the exercise duration. The fixing of the METs insuring the formulae relating to the users weight and wattage is a huge benefit for prescribed exercise protocols.
- Setting the Target Watts range is from 06 to 999 Watts (workload).
- The workout time can be set in 15 second increments (minimum 2 minute limit), which counts down to the finish followed by an optional 5 minute cool down period.
- The workout feedback during exercise is Time, Distance in Miles, RPM, Watts, MET's, Heart Rate and Calories. You have the option to change view which simplifies the feedback and displays RPM, Time, Watts and Heart Rate.
- Power Burst function available.
- The workout summary displays Peak Watts, Average Watts, Peak Heart Rate, Average Heart Rate, Calories and Time.

PROGRAMS FOR ROTARY PRODUCTS - CONT



8. Heart Fit Test

This program uses the Science of the 30/30 protocol as described earlier. Heart Fit Test is our protocol to record and evaluate heart rate recovery by allowing end users, coaches, trainers and clinical professionals to have a consistent, accurate and simple program that can be repeatable to show improvement.

- Heart Fit Test program will work only with the optional chest strap heart rate transmitter.
- The workout is 10 minutes in duration, which consists of a 3 minute warm up that takes you into a series of five 30-second sprints and recovery phases (5 minutes), followed by 2 minutes cool down.
- The user selects from 4 levels; Beginner; Intermediate; Advanced and Sports Performance. If you are not sure at which level to start, we recommend Beginner level. The aim is to find a level or start point that challenges you but allows you to keep exercise form (the same RPM's) throughout the test phase.
- At the last phase of recovery there is a 6 second pause where the program calculates your feedback, Peak Heart Rate, Watts, Calories and most importantly the individual Heart rate recovery score indicated by beats per minute (BPM). This calculation is based on the five peak heart rates and the five recovery heart rates during the protocol and the average is calculated to give the individual recovery score in BPM.
- Comparisons of your personal recovery score can be achieved if you replicate the same test conditions by the same product group (i.e. Upright Bike) and maintain the same cadence or RPM during the test.

- The workout summary for the test will be Peak HR and your recovery score for each interval, Peak Heart Rate average from the 5 intervals, Peak watts and calories. The most important number that is recorded is the “Average Recovery Score” which can be used to evaluate improvement, overtraining and exercise development.

9. Heart Fit Training



Designed to improve heart rate recovery, Heart Fit Training uses interval training and constant workload to progressively train for improved cardiovascular fitness. Use results from the Heart Fit Test to set level (Beginner, Intermediate, Advanced, and Athlete.)

- It is recommended that all users start with Program 1, regardless of level.
- A recommended training schedule with re-testing is at the back of this document (Exhibit A).
- This program will work only with the optional chest strap heart rate transmitter.

10. Power Fit Test



Used to set a benchmark for power, strength and endurance, Power Fit Test measures power output over a series of 30-second sprints. After completing 4-6 weeks of Power Fit Training, the Power Fit Test can be repeated to measure improvement. Use the Power Fit Test score as a fitness indicator to calculate training wattage.

- It is recommended that an individual attempting this test protocol warms up with medium intensity before starting this test.
- A constant workload, 3-minute warm up takes you into a series of five 30-second sprint/recovery intervals by using our Isokinetic (Iso-Strength) mode in each of the five high

PROGRAMS FOR ROTARY PRODUCTS – CONT

intensity sprints – prompting the user to do maximum effort during that 30 seconds of self applied force with the aim to achieve the same wattage levels throughout the five sprints.

- Constant workload of minimum wattage is used for the five 30-second recovery phases.
- The 2 minute cool down phase will give the following feedback, Peak average wattage during the 5 sprints; the Power drop % of all 5 sprints and finally the total Average wattage gained over the 5 sprints which can be used to determine training wattage for more specialized programs.

11. Power Fit Training



This follows the Power-Fit test and is a program designed to improve power, strength and endurance using interval training and the Iso-Strength and Constant Work settings.

- It is recommended that all users start with Program 1, regardless of level.
- A recommended training schedule with re-testing is at the back of this document (Exhibit A).

12. Stress Test



The stress test is a step test designed for coaches, exercise specialists, trainers and clinical professionals. The protocol allows them to use it as a training program or with other diagnostic devices (if appropriate). It can also be used to assess or train individuals by setting the time of the interval with a preset wattage increment and a starting target wattage.

- The starting target wattage is recommended by the product type and capability of the individual going through the step test.
- Users set their weight in lbs. to ensure accuracy of calorie output.



13. Fit-Quik®

SCIFIT's exclusive Fit-Quik program encourages cardio movement, motivation and progression to suit all activity levels by combining the sports science of interval, circuit, power and cardiovascular training for a results-producing workout. The Fit-Quik program starts with a cardio stage, followed by a short Iso-Strength stage. This can be customized by the facility to create a unique circuit concept.



14. Power Burst

This function is an Iso-Strength (self accommodating, concentric, positive workload) rotary power surge available during the exercise. The length of the burst or challenge can range from 6 to 59 seconds as defined in the set-up mode. Power Burst defaults to 8 seconds and is preceded by an alert on the screen with a 5 second no resistance count down. Available in the Quick Start, Manual, Hill Profile, Random and Constant Work programs.

The DC1000 treadmill is currently only available in the U.S. Please contact us for more information - see page 44 for full contact details.

PROGRAMS FOR TREADMILLS

AC5000, AC5000M AND DC1000

The AC5000, AC5000M and DC1000 treadmills have the same programs with two exceptions; the AC5000M has decline elevation and reverse speed features.

Note: For each of the following treadmill programs, the user can set their weight in lbs to ensure accuracy of METs and calorie output.



1. Quick Start

A great program for the user to get on and go, the time clock counts up automatically without being set. Press the START button and the treadmill alerts with a 3 second count down before the belt starts to move at 0.1mph/ 0.16kph (0.4 mph/0.64kph for DC1000) and 0 % elevation. The user now has the option to increase speed and elevation to the desired levels. The speed and elevation can be increased in tenths to the desired level up to 12mph/19kph (10 mph 16kph for DC1000) and elevation in .5 increments up to 15% elevation (10% for DC1000).

- The workout feedback during exercise is Ascent (feet), Time, Distance, METs, Heart Rate, Calories, % Grade, Speed and Pace.



2. Manual Program

This program can be used to show small increments of improvement, allowing the user to set time in 15 second increments, which counts down to the finish. The user now has the option to increase speed and elevation to the desired levels. The speed and elevation can be increased in tenths to the desired level up to 12mph/19kph (10 mph/16kph for DC1000) and in .5 increments up to 15% elevation (10% for DC1000).

- The workout feedback during exercise is Ascent (feet), Time, Distance, METs, Heart Rate, Calories, % Grade, Speed and Pace.

- The workout summary displays Average Speed, Average Grade %, Peak Heart Rate, Average Heart Rate, Calories and Time.



3. Hill Profile Programs

Select between 7 different profiles of various speeds and elevations. The following designed profiles are available: Hill Course; Sprints; Twin Peaks; Peak; Progressive; Multi-Peaks and Ramp.

- There are 2 options to select from, Speed Profile and Elevation Profile.
- The workout feedback during exercise is Ascent (feet), Time, Distance, METs, Heart Rate, Calories, % Grade, Speed and Pace.
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. The workout summary displays Average Speed, Average Grade %, Peak Heart Rate, Average Heart Rate, Calories and Time.



4. Heart Rate Program

Enables the user to set a target heart rate. Through real-time monitoring of the user's heart rate, Intelli-Fit maintains the user's heart rate in a zone near the established target rate by altering the intensity (speed/elevation). Personal physiological condition of an individual will determine the heart rate target zone and the intensity levels as it will vary for each individual going through this program.

Note: This program will work only with the optional chest strap heart rate transmitter.

PROGRAMS FOR TREADMILLS

AC5000, AC5000M AND DC1000 - CONT

The Target Heart Rate range setting is from 0 to 240 BPM. The user sets the speed and the treadmill adjusts elevation to achieve the target heart rate.

- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. * Please note that this program has a minimum time limit of 12 minutes.
- The workout feedback during exercise is Ascent (feet), Time, Distance, METs, Heart Rate, Calories, % Grade, Speed and Pace.
- The workout summary displays Average Grade %, Average Speed, Peak Heart Rate, Average Heart Rate, Calories and Time.

6. Pace Program

During the Manual and Quick Start programs a Pace/Speed Option is available. A pace instead of speed can be selected and the treadmill adjusts the speed to accommodate the pace setting. The Speed/Pace button toggles between Speed and Pace to instruct the treadmill how to respond to the up and down arrows.

PROGRAMS FOR CLIMBER AND STEPPER

TC1000 AND RST7000

Note: For each of the following climber and stepper programs, the user sets their weight in lbs to ensure accuracy of METs and calorie output. The METs display is variable depending on the wattage (workload) produced during the exercise duration, however, end users must assume that the METs and calorie feedback is based on a 150 lb. person, unless the user enters their weight at the beginning of the program.



1. Quick Start

A great program for the user to get on and go, the time clock counts up automatically without being set, 20 levels of resistance with 0.1 increments of change giving the user 200 levels of progression.

- The workout feedback during exercise is Level, Time, Steps Per Minute (SPM) Ascent in Ft. Total Steps, Heart Rate, Calories, Watts and METs.
- There is no cool down or data feedback at the end of the workout to save on a USB flash drive device.

2. Manual Program

This program can be used to show small increments of improvement, allowing the user to set time in 15 second increments, which counts down to the finish and provides 20 levels of resistance with 0.1 increments of change giving the user 200 levels of progression.

- The workout feedback during exercise is Level, Time, Steps Per Minute (SPM) Ascent in Ft. Total Steps, Heart Rate, Calories, Watts and METs.
- The workout summary displays Steps, Ave SPM, Peak Heart Rate, Average Heart Rate, Calories and Time.



PROGRAMS FOR CLIMBER AND STEPPER

TC1000 AND RST7000 - CONT



3. Hill Profile Programs

Select between 7 different profiles of various intensity and intervals. The following designed profiles are available: Hill Course; Sprints; Twin Peaks; Peak; Progressive; Multi-Peaks and Ramp.

- There are 20 levels of resistance, 0.1 increments of change which gives the user 200 levels of progression and is proportionate during the profile.
- The workout feedback during exercise is Level, Time, Steps Per Minute (SPM) Ascent in Ft. Total Steps, Heart Rate, Calories, Watts and METs.
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. The workout summary displays Steps, Average SPM, Peak Heart Rate, Average Heart Rate, Calories and Time.



4. Random Program

An infinite choice of hill profiles can be chosen to suit the individual's requirements. The level of intensity throughout this program varies in sequence towards the profile you have chosen. You can change the profile during your exercise program to suit the user's needs or wishes.

- There are 20 levels of resistance, 0.1 increments of change which can give the user 200 levels of progression and is proportionate during the profile.
- The workout feedback during exercise is Level, Time, Steps Per Minute (SPM) Ascent in Ft. Total Steps, Heart Rate, Calories, Watts and METs.
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5

minute cool down. The workout summary displays Steps, Average SPM, Peak Heart Rate, Average Heart Rate, Calories and Time.



5. Heart Rate Program

Enables the user to set a target heart rate. Through real-time monitoring of the user's heart rate, Intelli-Fit maintains the user's heart rate in a zone near the established target rate by altering the intensity (resistance levels / wattage). Personal physiological (condition of an individual) will determine the heart rate target zone and the resistance levels as it will vary for each individual going through this program.

Note: This program will work only with the optional chest strap heart rate transmitter.

- Setting the Target HR range is from 0 to 240 BPM
- The workout time can be set in 15 second increments, which counts down to the finish followed by an optional 5 minute cool down. ** Please note that this program has a minimum time limit of 12 minutes.*
- The workout feedback during exercise is Level, Time, Steps Per Minute (SPM) Ascent in Ft. Total Steps, Heart Rate, Calories, Watts and METs.
- The workout summary displays Steps, Average SPM, Peak Heart Rate, Average Heart Rate, Calories and Time.

TRAINING SCHEDULE FOR HEART FIT AND POWER FIT TRAINING

Training schedule for heart fit & power fit

Fitness Level	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Beginner	Program 1 1/week	Program 1 1/week	Program 1 1/week	Test	Program 2 1/week	Program 1 1/week
Intermediate	Program 1 2/week	Program 1 2/week	Program 1 2/week	Test	Program 2 2/week	Program 2 2/week
Advanced	Program 1 2/week	Program 1 2/week	Program 1 2/week	Test	Program 2 2/week	Program 2 2/week
Sports Performance	Program 1 2/week	Program 2 2/week	Program 3 2/week	Test	Program 3 2/week	Program 3 2/week
Fitness Level	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Beginner	Program 2 1/week	Test	Program 1 1/week	Program 3 1/week	Program 3 1/week	Test
Intermediate	Program 2 2/week	Test	Program 1 2/week	Program 3 2/week	Program 3 2/week	Test
Advanced	Program 2 2/week	Test	Program 1 2/week	Program 3 2/week	Program 3 2/week	Test
Sports Performance	Program 3 2/week	Test	Program 3 2/week			

Training Notes:

- Ave Wattage improvement compared against the pre defined wattage levels within Heart Fit wattage levels or 30% HR improvement (Heart Fit Recovery score) move to next level.
- If you don't achieve the recommended % increase then continue with your current program for another week and re-test the following week – keep that pattern until you achieve the HR % or increased average wattage (workload) needed to move on to the next level.
- If attained Sports Performance level consult with exercise specialized, therapist, coach or trainer for specialization delivered by our FIT-KEY software 5.0.

RPM TARGETS FOR HEART FIT AND CARDIOVASCULAR TRAINING

Training levels for power fit test

Product Type	Target RPM Range
Ground Based UBE - PRO1 Sport	50 to 60 RPM
Seated UBEs - PRO1 or PRO1000	55 to 65 RPM
Seated All Body Trainer - PRO2	60 to 70 RPM
Upright Bikes - ISO1000 or ISO7000	70 to 80 RPM
Recumbent Bikes - ISO1000R or ISO7000R	65 to 75 RPM
Recumbent Elliptical - REX	55 to 65 RPM
Weight Bearing Elliptical - SXT7000	60 to 70 RPM

Training Notes:

- For cardiovascular training it is important to maintain a constant cadence in RPM's while your workload varies to ensure consistency in feedback and performance results for comparison to view improvement.
- The above table for target RPM's are only a guide and can be higher or lower to suit the individuals exercise form and preference. The main goal is to maintain the consistency throughout the test or training program.

WATTAGE LEVELS BY PRODUCT FOR HEART FIT TEST PROTOCOL

Wattage by product for heart fit test

Level	Activity Intensity	ISO Bikes	
BEGINNER - sedentary or limited exerciser but medically fit enough to start activity.	PEAK	100 WATTS	
	RECOVERY	33 WATTS	
INTERMEDIATE - Average fitness level that is a fully or partial functional exerciser.	PEAK	160 WATTS	
	RECOVERY	53 WATTS	
ADVANCED - above average fitness level that is a fully or partial functional exerciser.	PEAK	250 WATTS	
	RECOVERY	83 WATTS	
SPORTS PERFORMANCE - at a fitness level that is going to consider some form of specialization.	PEAK	325 WATTS	
	RECOVERY	108 WATTS	

Training Notes:

- See recommended target RPM's (Exhibit B) for each product group. It is essential that at all levels the end user keeps the RPM's consistent throughout the peak and recovery phase.
- It is recommended to complete a level that is achievable by maintaining form/RPM's throughout the 10 minute test protocol.
- The aim is to use this as an individual score (BPM – Heart Rate Recovery) – as you increase the number from the test over training periods the number should increase to indicate that the individual is “Improving” their cardiovascular fitness. The conditions must reflect the same to compare the scores, (Use the same product group to compare test scores).

	SXT Ellipticals	REX Elliptical	PRO Series Upper Body	PRO2 All Body Trainer
	75 WATTS	100 WATTS	50 WATTS	100 WATTS
	25 WATTS	33 WATTS	17 WATTS	33 WATTS
	110 WATTS	145 WATTS	80 WATTS	160 WATTS
	36 WATTS	48 WATTS	27 WATTS	53 WATTS
	175 WATTS	225 WATTS	140 WATTS	260 WATTS
	58 WATTS	75 WATTS	46 WATTS	86 WATTS
	250 WATTS	300 WATTS	200 WATTS	325 WATTS
	83 WATTS	100 WATTS	66 WATTS	108 WATTS

Training Notes:

- It is recommended that the level you test is the same level for the Heart Fit Training programs – once you improve your Heart Rate recovery score by 30% then move up a level. If at Sports Performance level please discuss with your trainer, therapist or coach.
- Refer to Exhibit A for the training programs.

TRAINING LEVELS FOR POWER FIT TEST PROTOCOL

Training levels for power fit test

	ISO Bikes	SXT Ellipticals	
TARGET RPM - PEAK	60 RPM	35 RPM	
RECOVERY WATTAGE	50 WATTS	20 WATTS	
TRAINING WATTAGE (% of average watts)	75%	65%	

Training Notes:

- Individuals of any fitness or functional level can do Power Fit, however, as the warm up is based on intermediate level then supervision is advised when trying this test protocol if end users are below average fitness levels.
- Ramped 3 minute warm up based on 60%, 75%, and 90% of Intermediate Heart Fit wattage levels - see definition of Intermediate level.
- It is recommended to give your best effort during the Red (High Intensity) but ensuring to keep exercise form and the recovery phase is just to recover as slow as possible to prepare for the next best effort.
- The aim is to use this as an

	REX Elliptical	PRO Series Upper Body	PRO2 All Body Trainer
	45 RPM	35 RPM	45 RPM
	20 WATTS	20 WATTS	50 WATTS
	60%	50%	70%

Training Notes:

individual assessment of Workload (Wattage) – You take the Average Wattage over the 5 high Intensity intervals and apply the % to give you a score of training wattage which you compare against the Heart Fit Wattage Table (Exhibit C) to allow you to work out the correct level for Power Fit Training.

- It is recommended you take the Average Wattage minus % of recommended product group

giving you a fitness level for power training – as your workload improves it will move you up the levels of Power Training. If at Sports Performance level please discuss with your trainer, therapist or coach for specialization.

- Refer to Exhibit A for the training programs. Regardless of fitness level you always start at Program 1 with Heart Fit and Power Fit Training.



Scientific Solutions For Fitness™

International

SCIFIT Systems Inc.
5151 S. 110th E. Ave
Tulsa, OK 74146
USA

Tel +1.918.359.2054

Fax +1.918.359.2012

Email info@scifit.com

www.SCIFIT.com

UK, Europe & Middle East

SCIFIT Ltd (UK)
Lexham House
Forest Road
Binfield
Berkshire RG42 4HP

Tel +44 (0)1344 300 022

Fax +44 (0)1344 868 838

Email info@scifit.uk.com

www.SCIFIT.uk.com