



OWNERS MANUAL

450 SERIES
500 SERIES
550 SERIES

RESIDENTIAL TREADMILL

Manual • Pre-Program • Heart Rate Control • CI-Cardiointeractive

Thank You For Selecting A True Treadmill



"Our original goal was to build the world's best treadmills, and today we believe we're doing it!"

—Frank Trulaske
President

In 1981, Frank Trulaske launched True Fitness Technology, Inc. and began manufacturing hand-crafted treadmills.

His team's obsession with quality has propelled True to the top of the industry and has created one of America's oldest, largest and most respected treadmill manufacturers. True's 131,000 square foot facility just outside St. Louis, Missouri, houses the manufacturing plant, engineering laboratory and testing facility.

Over the years, True has designed, developed and fabricated new and cutting-edge components for their complete residential and commercial treadmill line, including innovative frame and suspensions systems.

Intensive quality control standards guarantee excellence in every phase of production, resulting in the finest treadmills available in the marketplace. Today, True is the choice for workouts among beginners, rehab patients and world-class athletes. True treadmills are consistently rated #1 in smoothness, quietness and softness.

True will continue to develop new and innovative products with *Intelligent Engineering for a long life...yours!*

SERIAL NUMBER

The serial number of your treadmill is located on a plate next to the power cord on the frame. Record the serial number below.

Serial Number _____

NOTE: The serial number must remain intact for the warranty to remain valid.
Please check your serial # ID to verify it has not been tampered with, removed or altered.



**THE 450/500/550 MODEL TREADMILLS
ARE FOR RESIDENTIAL USE ONLY.**

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Congratulations on your purchase of a TRUE residential treadmill. You have chosen a premium piece of exercise equipment designed to meet your fitness needs for a lifetime.

Before using your treadmill, please review this manual to learn about the unit's features, functions, maintenance procedures, and safe operation.

SAFETY TIPS:

1. Always use the safety key and attach lanyard to your clothing at about waist height.
2. Wear comfortable, good-quality walking or running shoes.
3. Warm-up and cool-down periods are important for a complete workout.
4. Always straddle the belt and allow it to start moving before stepping onto it.
5. Hold the grab bar while adjusting the controls.
6. Keeping your eyes focused straight ahead will help you maintain your balance.
7. Adjust your own speed and grade. Never make adjustments for another person or allow someone else to make adjustments for you.
8. Always allow the belt to stop completely before dismounting. Gradually slowing down also minimizes the sensation of feeling like you are still moving after you stop.
9. Allow space behind treadmill and sides in the event you lose your balance.
10. Always inspect your treadmill to ensure there are no foreign objects obstructing the moving parts.
11. To avoid any possibility of being struck or caught between moving parts, bystanders should not be within reach of the treadmill while it is in motion.
12. For safety reasons and to prevent damage to your treadmill, allow only ONE person at a time on your machine.
13. Never leave unsupervised children near your treadmill.
14. Animals should never be allowed on or near your treadmill.
15. Keep the power cord clear of the incline system. Allow extra slack for inclining the machine. Do not run the power cord under the treadmill.
16. Your treadmill is designed for indoor use only.
17. Never use your treadmill around water or while you are wet. Using the unit around a pool, hot tub or sauna will void the warranty.
18. Do not operate treadmill while using bottled oxygen.

THE BASICS

Your treadmill is made up of two main sections: the base and the pedestal.

The base of the treadmill consists of a metal frame, a shock-absorbing deck system and a powerful 2.5 continuous-duty horsepower DC motor. The motor powers a pulley system which moves the running belt over the deck. (See figure 1, page 1-4)

The pedestal mounts on the top of the frame. It places the displays, information readout and touch keys within easy sight and reach.

(See figure 1, page 1-4)

SETTING UP YOUR TREADMILL

Place your treadmill on a clean, level surface. Make sure the electrical cord easily reaches a grounded three-pronged outlet and has enough slack to allow the deck to incline unhindered by the cord. Do not allow the treadmill assembly to rest on the cord. Although your treadmill is designed to operate on most carpeted surfaces, some deeply padded or heavy shag carpets can cause damage to the unit. To prevent damage to your treadmill or carpet, have someone stand on the deck and make sure the treadmill belt doesn't touch the carpet at any point.

Your TRUE treadmill is designed for indoor use only. Always keep the control panel out of direct sunlight.

IMPORTANT ELECTRICAL REQUIREMENTS

Your True treadmill requires a **dedicated** 110 VAC 15 amp grounded outlet circuit. **WARNING:** Do not use an extension cord or an ungrounded outlet. The ground helps prevent electrical damage to your treadmill and enhances your safety by preventing shock.

A GROUNDED OUTLET IS CRITICAL FOR THE HRC SYSTEM TO FUNCTION PROPERLY.

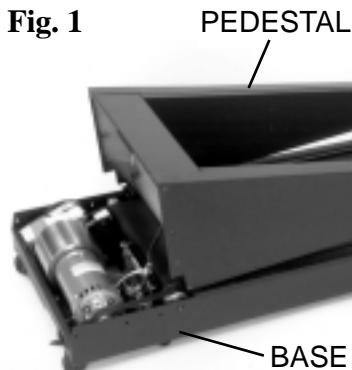


Fig. 1

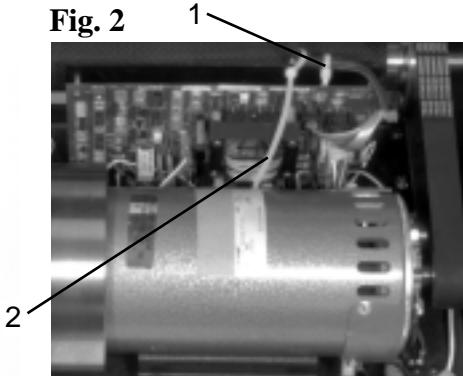


Fig. 2



Fig. 3

PARTS INCLUDED:

- 1 - ALLEN WRENCH
- 6 - SCREWS
- 6 - STAR WASHERS (LOCK WASHERS)
- 1 - OWNERS MANUAL
- 1 - WARRANTY CARD
- 1 - HEART RATE TRANSMITTER WITH STRAP (HRC MODELS ONLY)

ASSEMBLY

TRUE treadmills are shipped in two pieces: the pedestal assembly (which includes the control console) and the base.

Instructions for assembling the unit:

1. Remove the protective packaging materials. **NOTE:** Do not lift the treadmill by the motor when removing from carton!
2. Lay pedestal on deck as shown. (Fig. 1)
3. Feed wire harness through reusable wire ties from left to right. (Fig. 2)
NOTE: Do not cut off excess wire tie. These are reusable.
4. Tighten wire ties and tuck excess tie down between motor and PWM board. (Fig.2)
NOTE: Do not cut off excess wire tie.
5. Raise top of pedestal into place.
6. Install three of the enclosed screws with lock washers on each side, then tighten all six screws. (Fig. 3)

IMPORTANT: Do not operate unless all six screws are fastened securely. Be sure screws and lock washers thread into the holes in pedestal. Reverse procedure whenever removing the pedestal. Remove pedestal console only while treadmill is at zero grade and unplugged.

ELECTRICAL REQUIREMENT:

Your TRUE treadmill requires a dedicated 110 VAC 15 amp grounded outlet circuit.

WARNING: Do not use an extension cord or an ungrounded outlet. The ground helps prevent electrical damage to your treadmill and enhances your safety by preventing shock. This grounded outlet is critical for the HRC system to function properly. **NOTE:** Units produced for use outside of the U.S.A. will have voltage indicated on the identification tag.

BELT ADJUSTMENTS

Your treadmill's running belt has been properly aligned at the factory. However, when the treadmill is used on an uneven surface, please follow these instructions:

PREFERRED METHOD

Level the treadmill by placing shims 1/8" to 3/8" thick under the front wheel and rear shock absorber on one side. **NOTE:** This method will provide extended belt life by keeping both rollers parallel. Adjusting the belt tracking by using the roller bolts will cause the belt to stretch on one side.

NOTE: Your authorized True dealer may provide additional support.

ALTERNATIVE METHOD

1. Stand beside the treadmill, insert the safety key into the bottom of the control panel and follow operating instructions for running the treadmill at 5 mph. (Section 2.5)
2. If the belt is off-center to the right, turn the left roller adjustment bolt counter clock-wise 1/4 turn. If the belt is off-center to the left, turn the left roller adjustment bolt 1/4 turn clockwise. (Figure 1 Detail 1)
3. Let the machine run for several minutes to check the alignment. (Belt alignment does not need to be perfect). If more correction is needed, turn the adjustment bolt 1/4 turn and check again.

TREADBELT TENSION:

To assure maximum life of the treadbelt, roller and drive motor, make sure the treadbelt tension is set correctly. (Your treadbelt has been properly tensioned at the factory.)

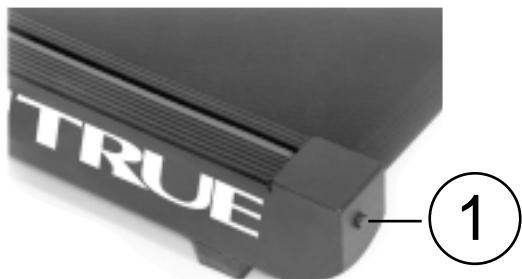


Figure 1

- Turn both rear roller adjustment bolts (Detail 1) counter-clockwise until treadbelt just begins slipping when walking on it, then turn both rear roller adjustment bolts clockwise in equal quarter turn increments until treadbelt stops slipping. NOTE: Be sure to run on treadbelt to ensure that the treadbelt does not slip while under load.

SAFETY FEATURES

PADDLED HAND RAIL

The padded hand rail is mounted to the rear of the control console. The bar provides a convenient support to use throughout your workout.

ON/OFF SWITCH

The on/off switch is located to the right of the power cord on the front of the machine. It completely removes AC power from your treadmill. It is recommended that you use this switch to turn the machine off after each workout.

CIRCUIT BREAKER

Your TRUE treadmill is protected from overload by a 15 amp circuit breaker that can be reset in the event of a power overload. It is located to the left of the power cord.

SAFETY KEY AND LANYARD

You can protect yourself from injuries resulting from unexpected loss of balance by attaching the lanyard to your clothing at about waist height when you use your treadmill. When the safety key is detached, your treadmill will not operate. **Storing the safety key in a secured location while your treadmill is not in use will prevent children and other unauthorized users from operating your treadmill.**

REAR ROLLER SHIELDS

Steel guards over the ends of the rear roller prevent towels and other items from getting caught in the running belt.

FULLY ENCLOSED MOTOR

The motor and flywheel are fully enclosed in a protective metal compartment.

LOW PROFILE FRAME

To enhance safety, TRUE treadmills are designed to be as low to the ground as possible.

450/500 CONTROL PANEL

HRC MODEL SHOWN

WINDOWS

DISTANCE:

Indicates miles traveled in .01 mile increments up to .99, and .1 mile increments past 10 miles. Can also be set to countdown (See countdown on page 2-7)

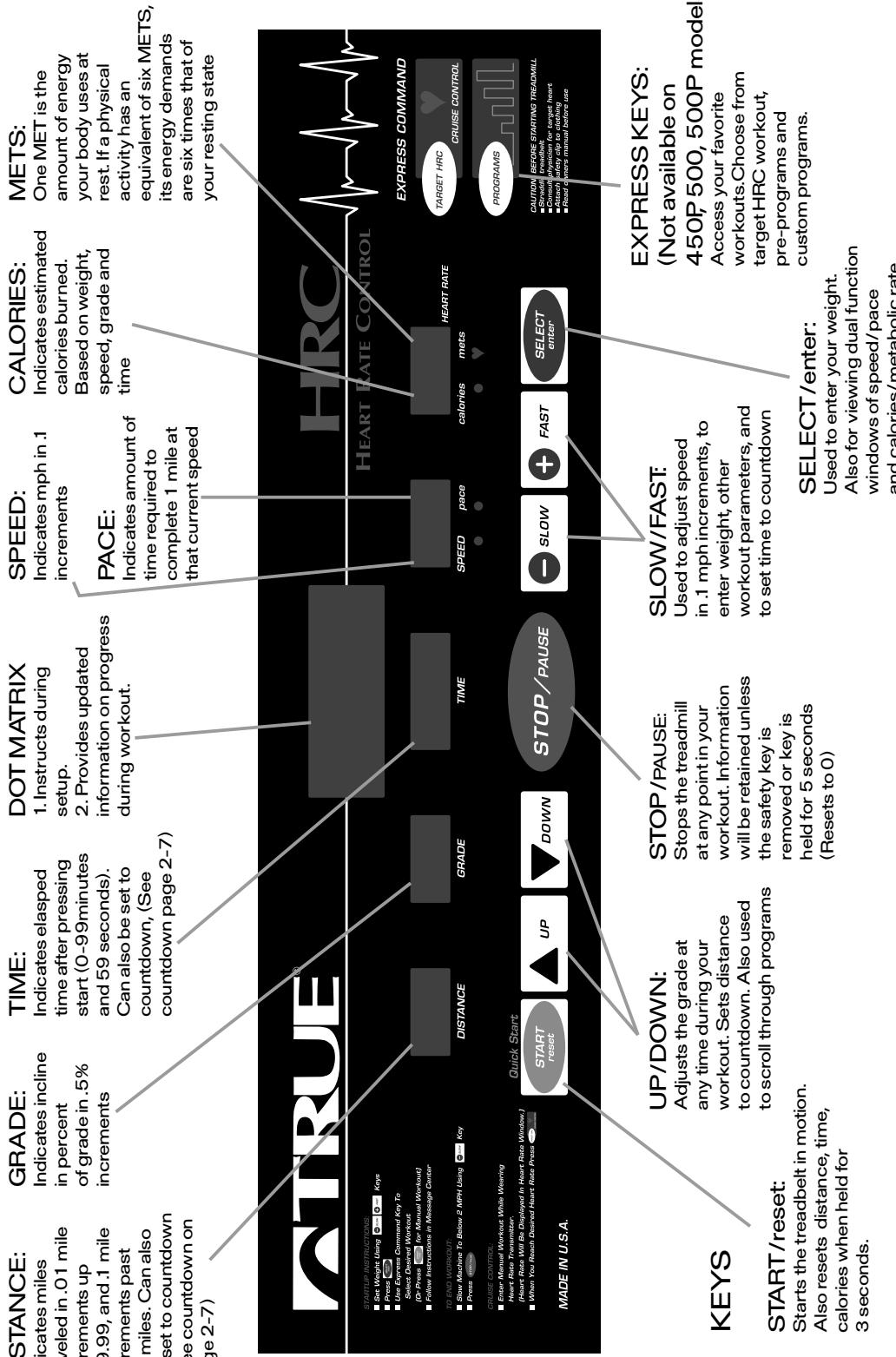
GRADE:

Indicates incline in percent of grade in .5% increments

TIME:

Indicates elapsed time after pressing start (0-99 minutes and 59 seconds).

Can also be set to countdown, (See countdown on page 2-7)



550 CONTROL PANEL

HRC MODEL SHOWN

WINDOWS

DISTANCE: Indicates miles travelled in .01 mile increments up to 9.99, and .1 mile increments past 10 miles. Can also be set to countdown (See countdown on page 2-7)

TIME: Indicates elapsed time after pressing start (0-99 minutes and 59 seconds). Can also be set to countdown, (See countdown page 2-7)

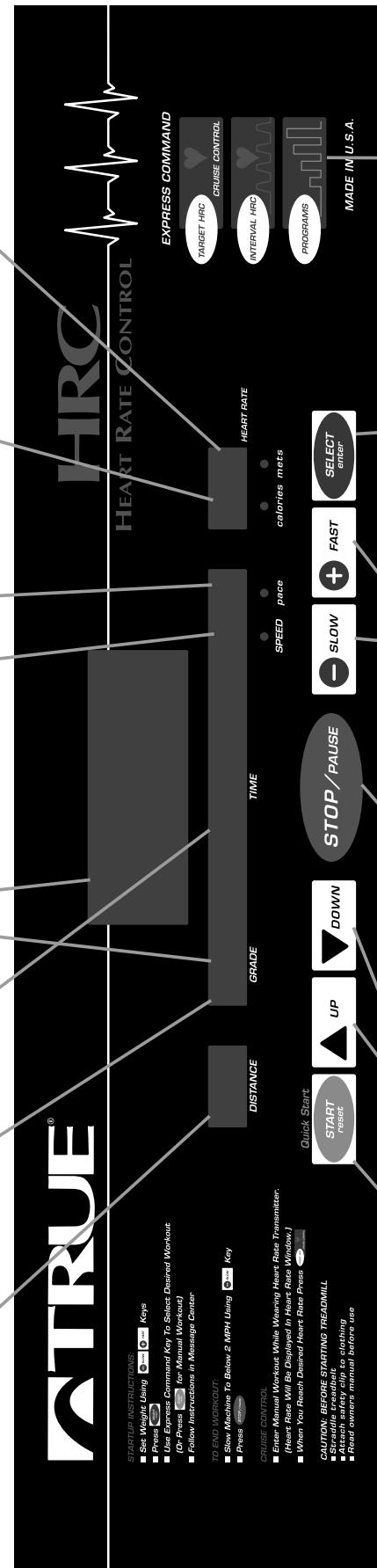
MESSAGE CENTER/ DOT MATRIX

1. Instructs during setup.
2. Provides updated information on progress during workout

SPEED: Indicates mph in .1 increments

PACE: Indicates amount of time required to complete 1 mile at that speed

METS: One MET is the amount of energy your body uses at rest. If a physical activity has an equivalent of six METS, its energy demands are six times that of your resting state



UP/DOWN: Adjusts the grade at any time during your workout. Sets distance to countdown, also scroll through programs.

STOP/PAUSE: Stops the treadmill at any point in your workout. Information will be retained unless the safety key is removed or key is held for 5 seconds (resets to 0)

SLOW/FAST: Used to adjust speed .1 mph increments, enter weight, and other workout parameters, and to set time to countdown

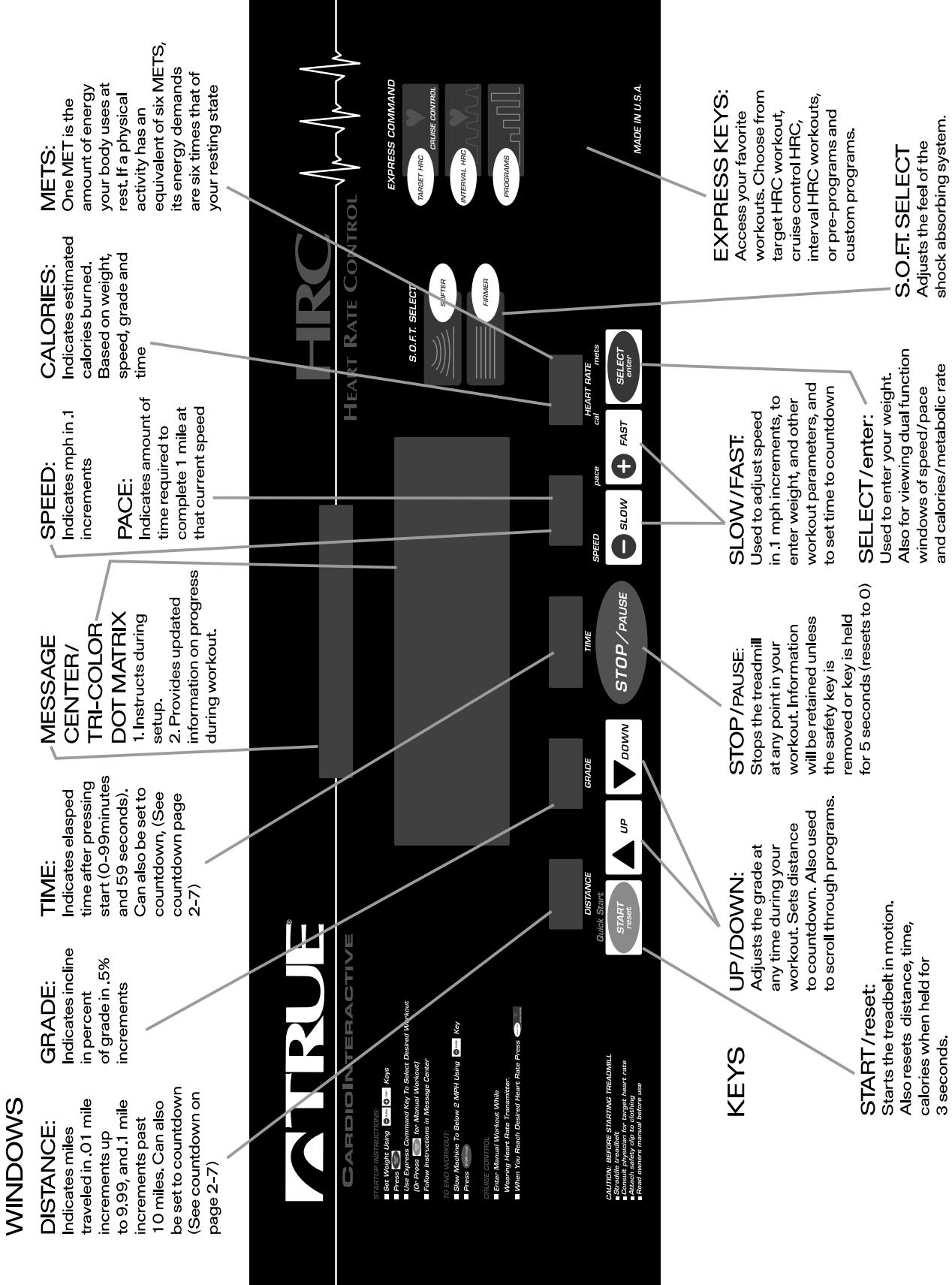
EXPRESS KEYS: Access your favorite workouts. Choose from target HRC workout, cruise control HRC, interval HRC workouts, or pre-programs and custom programs.

SELECT/enter: Used to enter your weight. Also for viewing dual function windows of speed/pace and calories/metabolic rate

KEYS

START/reset: Starts the treadmill in motion. Also resets distance, time, calories and metabolic rate when held for 3 seconds

500/550 CI (CARDIOINTERACTIVE) CONTROL PANEL



THE TRUE S.O.F.T. SYSTEM IS A DIFFERENCE YOU CAN FEEL.

True's unique S.O.F.T. System is the most advanced shock-absorbing system available. It cushions the initial impact and then transitions to a firm, secure surface for push-off providing lateral stability throughout, eliminating deck shift from side to side. The benefit is less stress on the ankles, knees, hips and back.

ADJUST THE FEEL WITH S.O.F.T. SELECT.

All True S.O.F.T. Select series treadmills take the user to a new level of comfort. Now you can "personalize" the treadbelt surface to suit your walking or running needs, from soft to firm or anywhere in between.

This True feature is ideal for users of differing weights or those with special physical needs.

MANUAL ADJUSTMENT

It's simple for the user to choose from 12 manually adjustable settings on the right side of the treadmill base.



Simply slide the S.O.F.T. Select control knob to the desired setting.

ELECTRONIC ADJUSTMENT (500/550 CI)

You electronically adjust the settings on the 500/550 CI models on the control panel. The display will indicate the level from 1-12. With 1 being the softest and 12 being the firmest. This special feature makes it even quicker and easier to meet your changing workout needs.

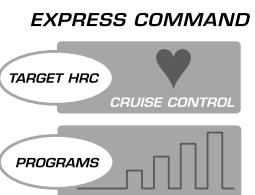
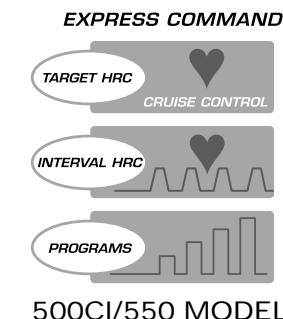
- **Adjustment of S.O.F.T. Select:** Press and hold either or .

- **To review your S.O.F.T. Select Setting:** Quickly press either or .

NOTE: Movement of S.O.F.T. Select motor does not occur until is pressed.

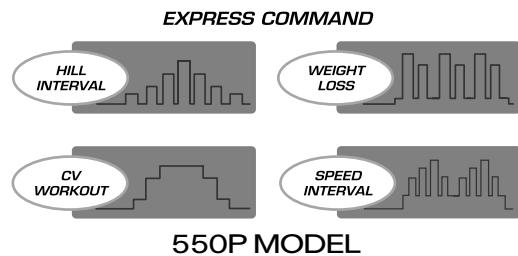


ACCESS YOUR FAVORITE WORKOUT WITH EXPRESS KEYS ON HRC MODELS.



450/500 MODEL

True HRC models feature Express Keys which allow simple access to HRC workouts and pre-programs. 550 Pre-programmed models also offer one touch Express Keys to access pre-programs.



550P MODEL

NOTE: 450/500 model does not include interval HRC.

The following is a quick overview of the basic operating features of your True treadmill.

While more detailed operating instructions are on the following pages, these quick references will familiarize you with the basic operating procedures needed to get started.

BASICS:

- Straddle Treadbelt
- Insert Safety Key, attach lanyard to clothing

QUICK START:

(Manual Workout Only)

Press 

Adjust Speed Using   Keys

Adjust Grade Using   Keys

PROGRAMS:

Set Your Weight Using   Keys

Press 

Scroll To Desired Program

Using   Keys

Set Program Level Using   Keys

(Pre Programs Only)

Press 

Set Time Using   Keys

(15:00-99:00 Minutes)

Press 

TO END WORKOUT:

Slow Machine To Below 2 MPH

Using  Key

Press  Key

With Express Command Keys

The following is a quick overview of the basic operating features of your True treadmill. While more detailed operating instructions are on the following pages, these quick references will familiarize you with the basic operating procedures needed to get started.

BASICS:

- Straddle Treadbelt
- Insert Safety Key, attach lanyard to clothing

HEART RATE CONTROL:

Set Weight Using Keys

Press

Press Either or to access HR workout.

Scroll through workouts using same HRC Key used to access workouts

Press

Edit HR Using Keys

Press

Edit Max. Speed Using Keys

Press

Edit Time Using Keys

(For Interval HRC There Will Be Several Time Variables To Edit. Total Time, Work Time, Rest Time.)

Press

Edit Max. Grade Using Keys

Press

NOTE: 450/500 does not have interval HRC Key.

CRUISE CONTROL

Enter Manual Workout While Wearing Heart Rate Transmitter. (Heart Rate Will Be Displayed In Heart Rate Window.) When You Reach Desired Heart Rate

Press

QUICK START:

(Manual Workout Only)

Press

Adjust Speed Using Keys

Adjust Grade Using Keys

PROGRAMS:

HRC MODELS:

Set Your Weight Using Keys

Press

Press key to access programs

Scroll To Desired Program Using Key

Set Program Level Using Keys

(Pre Programs Only) Press

Set Time Using Keys (15:00-99:00 Minutes)

Press

550P MODELS:

Set Your Weight Using Keys

Press

Press Desired Program Key

Set Program Level Using Keys

Press

Set Time Using Keys (15:00-99:00 Minutes)

Press

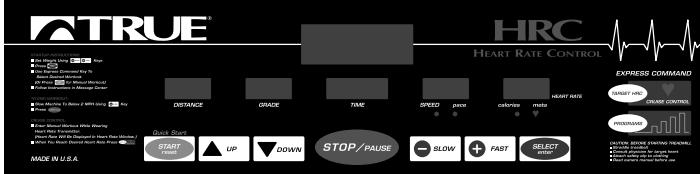
TO END WORKOUT:

Slow Machine To Below 2 MPH

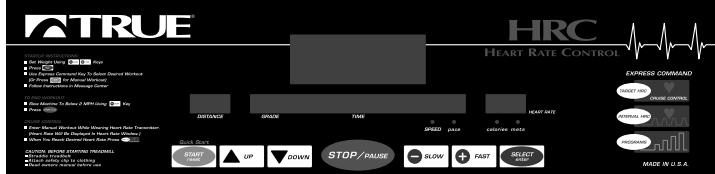
Using Key

Press

450/500 HRC



550 HRC



BASICS

- Straddle Treadbelt
- Insert Safety Key, attach lanyard to clothing

QUICK START

(Manual Workout Only)

Press

Adjust Speed Using Keys

Adjust Grade Using Keys

BASIC START-UP

- Plug machine into a grounded 110 VAC outlet.
- Turn on the power switch.
- Step onto the treadmill.
- Straddle the treadbelt.
- Insert safety key into the console behind the grab bar.

Caution: When the safety key is inserted, the treadmill will return to 0% grade. Please keep the area under the treadmill free from obstructions.

- Connect safety lanyard clip to the waist band of your clothing. Do not operate treadmill without safety lanyard clipped to your clothing at about waist height.

The message will read

WT FAST/SLOW followed by**PRESS SELECT****PRESS START**

The time window will display last entered weight. Use to change the weight and press .

MANUAL MODE

- Message now reads **NEXT UP/DN** followed by **PRESS START**

Press to get tread belt moving.

- Hold the grab bar and carefully step onto the treadbelt and begin walking. It is important to start at a safe speed. It is not recommended to exceed 2.0 mph when starting the treadmill.
- Speed and grade may be adjusted any time during your workout by pressing for speed and for grade.
- To stop or pause your workout:** Slow machine to below 2 mph by pressing . Press . This will stop the treadbelt and retain all workout information. To restart your workout, press , enter speed and step back onto treadbelt. To shut off the control panel, remove the safety key and turn off the on/off switch. (Located by the power cord.)
- To reset distance, time, and calories:** (During workout) Press and hold until zeros appear in the time, distance, calorie windows. If not in use, press and hold .

Countdown Feature: (Time and distance)

450 / 500-Enter weight press (twice) or until the lights in the time and distance windows flash. Press to set distance and to set time. When you press , time and distance will begin counting down.

550-Enter weight press

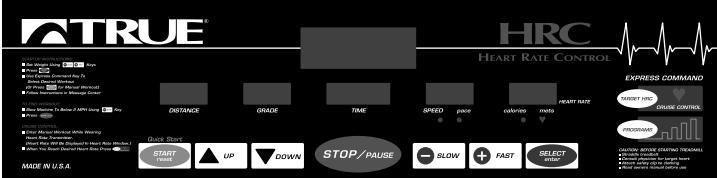
Press again and **ADJ TIME** will appear in message center. Set time using key or 10-key pad. Message reads: **PRESS ENTER**. Press again and **ADJ DISTANCE** using keys. Message reads: **PRESS START**. Press .

NOTE: These functions will give you an audible signal and begin counting up when the time or distance has reached zero. The treadbelt will continue to move.

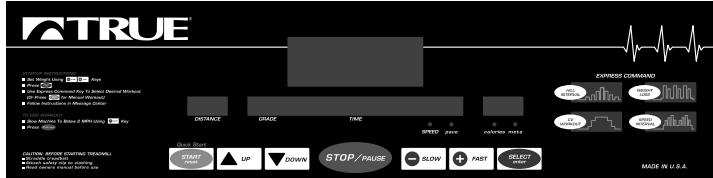
Pre Program Operating Instructions

2-8

450/500 HRC



550 P



BASIC START-UP

- Plug machine into a grounded 110 VAC outlet.
- Turn on the power switch.
- Step onto the treadmill.
- Straddle the treadbelt.
- Insert safety key into the console behind the grab bar.

Caution: When the safety key is inserted, the treadmill will return to 0% grade. Please keep the area under the treadmill free from obstructions.

- Connect safety lanyard clip to the waist band of your clothing. Do not operate treadmill without safety lanyard clipped to your clothing at about waist height. The message will read **ADJ WGT FAST / SLOW** followed by **PRESS SELECT**.

The time window will display last entered weight. Use **- SLOW** **+ FAST** to change the weight and press **SELECT enter**.

PROGRAM MODE 450/500

- **NEXT UP/DN** message appears, followed by **EDIT SELECT**. Press **▲ UP** or **▼ DOWN** to access the programs
- Press **▲ UP** and the message will read **HILL INTRVL** followed by **ADJ LVL FAST / SLOW** followed by **PRESS START**. Scroll to desired program using **▲ UP** **▼ DOWN** keys. Select a level using **- SLOW** **+ FAST**
- Press **SELECT enter**
- After program and level have been selected, set time using **- SLOW** **+ FAST** keys (15:00-99:00 minutes)
- Press **START FRESH** to begin
- Carefully step onto treadbelt.

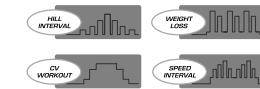
- **To Stop or pause your workout:** slow machine to below 2 mph by pressing **- SLOW**. Press **STOP/Pause**. This will stop the program and save all valuable information. To restart a program, press **START FRESH**. To end workout, press **STOP/Pause** and remove the safety key.
- **To reset distance, time, and calories:** (During workout) Press and hold **START reset** until zeros appear in the time, distance, calorie windows. If not in use, press and hold **STOP/Pause**.
- **To change level during workout:** press and hold **SELECT enter**. **L** - will appear in speed window, press **- SLOW** **+ FAST** keys to select new level. After new level is entered press **SELECT enter**.
- **Recall of accumulated data (at end of work out):** obtained by pressing the **STOP/Pause**.

550P MODELS:

Set Your Weight Using **- SLOW** **+ FAST** Keys

Press **SELECT enter**

Press Desired Program Key



Set Program Level Using **- SLOW** **+ FAST** Keys

Press **SELECT enter**

Set Time Using **- SLOW** **+ FAST** Keys (15:00-99:00 Minutes)

Press **START FRESH**

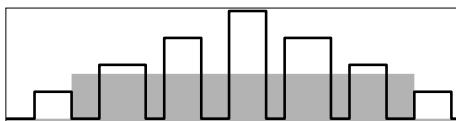
NOTE: All workouts (programs) are able to be set from 15:00 - 99:00 minutes. Default value (if no time entered) is 30:00 minutes. When timer reaches 0:00 it will beep and begin counting up. You must press **STOP/Pause** to end workout!

NOTE: When in run mode user may switch from one workout to the next selected, joining the workout in process at the same time as the previous workout.

EXAMPLE: Working out in weight loss at the 15:00 mark user pressed CV Workout, computer and readout reflects move to CV Workout and continues countdown at 15:00.

Pre-Program Profiles

HILL INTERVAL WORKOUT

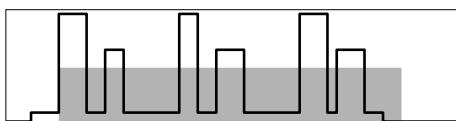


— solid line is the grade

■ screened area is the speed

LEVEL	SPEED (MPH)		GRADE (%)	
	MIN	MAX	MIN	MAX
1	2.0	2.4	1.0	4.0
2	2.2	2.8	1.5	5.0
3	2.6	3.2	2.0	6.0
4	3.0	3.6	3.0	7.0
5	3.4	4.2	4.0	8.0
6	3.8	4.6	5.0	9.0
7	4.0	5.0	6.0	10.0
8	4.4	5.4	7.0	11.0
9	4.8	6.0	8.0	12.0

WEIGHT LOSS WORKOUT

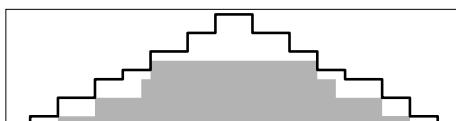


— solid line is the grade

■ screened area is the speed

LEVEL	SPEED (MPH)		GRADE (%)	
	MIN	MAX	MIN	MAX
1	1.4	2.6	0.0	2.0
2	1.6	2.8	0.5	3.0
3	1.8	3.0	0.5	4.0
4	2.0	3.2	1.0	5.0
5	2.2	3.4	1.5	6.0
6	2.4	3.6	2.0	7.0
7	2.6	3.8	2.5	8.0
8	2.8	4.0	3.0	9.0
9	3.0	4.2	3.5	10.0

CARDIOVASCULAR WORKOUT

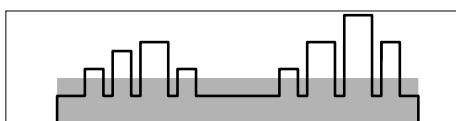


— solid line is the grade

■ screened area is the speed

LEVEL	SPEED (MPH)		GRADE (%)	
	MIN	MAX	MIN	MAX
1	2.0	2.4	0.5	4.0
2	2.2	2.8	0.5	5.0
3	2.6	3.2	0.5	6.0
4	3.0	3.6	1.0	7.0
5	3.4	4.2	1.0	8.0
6	3.8	4.6	1.0	9.0
7	4.0	5.0	1.0	10.0
8	4.4	5.4	1.0	11.0
9	4.8	6.0	1.5	12.0

SPEED INTERVAL WORKOUT



— solid line is the speed

■ screened area is the grade

LEVEL	SPEED (MPH)		GRADE (%)	
	MIN	MAX	MIN	MAX
1	2.0	2.4	2.0	4.0
2	2.2	2.8	3.0	5.0
3	2.6	3.2	4.0	6.0
4	3.0	3.6	5.0	7.0
5	3.4	4.2	6.0	8.0
6	3.8	4.6	7.0	9.0
7	4.0	5.0	8.0	10.0
8	4.4	5.4	9.0	11.0
9	4.8	6.0	10.0	12.0

User Program Operating Instructions

USER PROGRAM

A total of 50 changes can be made to speed and/or grade in a user program. One speed and grade change per 30 second time block ie: (0:-30, :30-1:00, 1:00-1:30) can be made.

NOTE: If you wish the program to end at zero speed, your last :30 entry should be zero speed when you stop the treadmill.

STORING USER PROGRAM

- Complete a manually-controlled workout.
- Press .

- Press and hold until **SAVE USER 1** appears.
- Press until **USER 1, 2 OR 3** message appears. When you have selected which user file you want to save to, press and hold the until **SAVE USER 1, USER 2 OR USER 3** message appears.
- Your user program is now saved.
- Remove the safety key.

INTRODUCTION

You are now the owner of the most sophisticated Heart Rate Control treadmill available. The TRUE HRC is unique and patented. It accommodates users from rehabilitation to world class athletes, and all those in between. The TRUE HRC treadmill allows you to do a completely hands free heart rate controlled workout using speed, grade or both.

By training at a specific target heart rate, you can exercise at a more efficient cardiovascular level.

The TRUE HRC system is unique because you must enter the key parameters of your workout; target heart rate, maximum speed, maximum grade, and time, prior to beginning your HRC workout. As you approach your target heart rate, the treadmill's computer takes over and changes the speed and/or grade automatically to keep you near your target heart rate. This gives you a completely "hands free" workout.

RECOMMENDATIONS

Before selecting a target heart rate control workout, it is important to use the treadmill for several workouts in the manual mode while monitoring your heart rate.

You can monitor your heart rate during workouts by wearing the heart rate transmitter included with your treadmill.

After you have spent some time learning how your heart responds to different levels of speed and grade, you will have a better understanding of how to select the maximum speed and maximum grade required to reach your target heart rate.

CONSULT YOUR PHYSICIAN TO DETERMINE YOUR TARGET HEART RATE.

WORKOUT GUIDELINES

1. Target Heart Rate Training (Heart Rate Workouts 1-5):

Preset your target heart rate, maximum speed, maximum grade, and time of workout. These are time-based workouts. The distance traveled will vary depending on speed.

2. 2 Mile, 4 Mile, 5K, and 10K Target Heart Rate Training (Model 500CI/550 only)

For these workouts you preset target heart rate, maximum speed, and maximum grade. These are distance-based workouts. The duration of the workout will depend on your speed.

3. **Interval Heart Rate Training (Model 500CI/550 Only)**
Interval heart rate training takes your workout to an even higher level. Interval training allows you to program periods of rest between periods of work. For each workout, you enter target heart rate, maximum speed, maximum grade, duration of workout, and duration of work and rest intervals. These are time-based workouts. The distance traveled will depend on your speed.
4. **Cruise Control (see 2-16)**
Manual workout with heart rate transmitter. When you reach desired heart rate, press cruise control key and it's hands-free.
5. **Manual Workout:**
This is a completely user controlled workout. You control the speed and the grade throughout your work out. Your heart rate may be monitored during this workout, but it is not heart rate controlled.
6. **Programs:**
There are 4 preprogrammed workouts:
 - Hill Interval workout
 - Weight Loss workout
 - Cardiovascular workout
 - Speed Interval workoutEach workout has 9 levels of intensity. The treadmill controls both the speed and grade. These are not heart rate controlled, but will monitor heart rate.
User determines duration of programs are 15:00 to 99:00 minutes.
7. **User Program:**
A total of 50 changes can be made to speed and/or grade in a user program. One change per 30 second time block, IE: (0:-30, :30-1:00, 1:00-1:30) can be made.
8. **Method Used To Increase Heart Rate:**
To raise your heart rate in the HRC mode, speed will always increase until maximum speed is attained, followed by grade (if grade is used in the workout).
9. **Method Used To Decrease Heart Rate:**
To lower heart rate in the HRC mode, grade will always decrease until zero grade is reached, followed by speed (if grade is used in the workout).
10. **Speed Change:**
Each change in speed is in .1 M.PH. increments.
11. **Grade Change:**
Each change in grade is in .5% grade increments.

NOTE: The heart rate control workouts are files which store workout parameters once you have completed an HRC program. You do not need to enter all parameters each time you use the same workout. Just insert the safety key, select which file or workout you want, and press start.

This unique, simple, and safe system is easy to use and understand.

The user first sets their personal maximums for both speed and grade. This allows the user to customize and create a variety of workouts. By setting personal maximums for speed and grade, the user is provided safe workouts that fit their capabilities. Once this data is entered, along with target heart rate and workout time, the user is ready to start their Heart Rate Control workout.

The initial stage of the Heart Rate Control workout is the warm-up stage and allows the user the flexibility to adjust their speed or grade at anytime. The warm-up stage is not predetermined by the amount of time input prior to workout, and the user may take as much time as they wish to approach their target heart rate. The warm-up stage ends when the user's heart rate is ten beats below the pre-set target heart rate.

At this point, the user enters the Heart Rate Control stage, and the treadmill's computer takes control of both the speed and grade (hands free).

The treadmill software gradually increases the user's heart rate to within 10 beats of the target heart rate.

In the situation where workload needs to be increased in order to elevate the heart rate, the speed will be increased first in 1 / 10 mph increments.

If needed, the speed will continue to increase up to the pre-set maximum. If the user still requires additional workload to raise the heart rate, the grade will be raised in .5% increments up to the maximum pre-set grade (unless zero grade was entered).

Conversely, whenever the workload needs to be reduced in order to lower the heart rate, the grade will always be reduced first. The grade will be reduced to zero (if required), before speed is reduced.

EXAMPLES OF HOW HRC CAN WORK FOR YOU:

Example #1:

A user who physically cannot walk over 2.5 mph can safely use heart rate control by entering maximum speed of 2.5 in a Heart Rate Control workout.

Example #2:

A runner can run up to a speed of 10 mph, without hills, by entering a maximum speed of 10 mph and a maximum grade of 0%.

Example #3:

A walker enters a maximum speed of 4.0 mph and a maximum grade of 6%. The walker is limited to a maximum speed of 4.0 mph and grade will be used if required to elevate the heart rate up to a maximum of 6%.

Optional TRUE-UltraCoach software and RS 232 port.

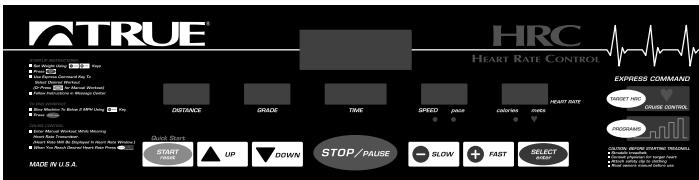
TRUE 500 HRC and CI treadmills are equipped to receive an RS 232 port. This allows your True treadmill to connect to your personal computer and utilize True's optional TRUE-UltraCoach software. The RS 232 port is included with the purchase of TRUE-UltraCoach.

True Ultracoach is a prescriptive software package that takes you through the process of a fitness test and then prescribes workouts based on your fitness test and workout history. This software package also graphs and stores workouts to be used as a base of reference for future prescriptive workouts.

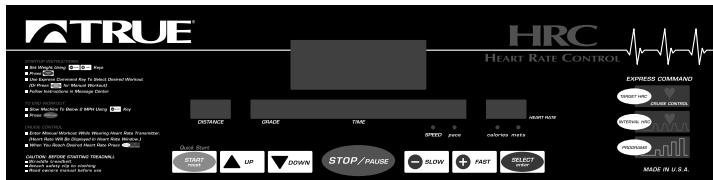
For further information on the True Ultracoach contact your local dealer or call True Fitness toll free at 1-800-426-6570.

Cardiointeractive & HRC Target Operating Instructions 2-12

450/500 HRC



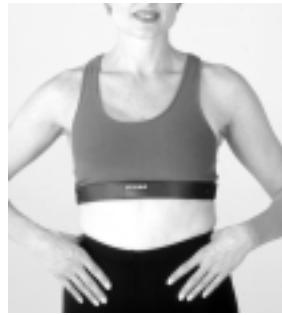
550 HRC



OPERATING INSTRUCTIONS

450/500/550 HEART RATE CONTROL

Before beginning operation in Heart Rate Control, you must first attach the heart rate transmitter around your chest. The radio frequency transmitter strap should be worn directly against your skin, 1-2 inches below the pectoral muscles/breast line. Women should be careful to place the transmitter below their bra line. Initially, the transmission signal for heart rate may be erratic or non-existent. Perspiration on your skin is necessary for proper transmission. In most cases, by the end of your warm up, transmission becomes consistent and accurate. If not, saline solution should be used to moisten the sensors on the back of the strap. The Heart (❤) LED will flash, showing that the heart rate signal is received.



BASIC START-UP MODEL 450, 500 AND 550

- Plug machine into a grounded 110 VAC outlet.
- Turn on the power switch.
- Step onto treadmill.
- Straddle treadbelt.
- Insert safety key into the console behind the hand bar.

Caution: When the safety key is inserted, the treadmill will return to 0% grade. Please keep the area under the treadmill free from obstructions.

- Connect safety lanyard clip to the

waistband of your clothing. Do not operate treadmill without safety lanyard clipped to your clothing at about waist height. The message will read

WGTFAST/SLOW followed by
PRESS SELECT/PRESS START

NOTE: CI model only, soft select position shows briefly in message center.

The time window will display last entered weight. Use **SLOW** and **FAST** to change the weight and press **SELECT**.

ALL TRUE HEART RATE CONTROL WORKOUTS CONSIST OF THREE STAGES:

1. Warm -up Stage
2. Target Heart Rate Control Stage
3. Cool Down Stage

TO USE TARGET HRC WORKOUTS

Press the **MESSAGE**

Message Reads

EDIT/SELECT

NEXT UP/DN

PRESS START-only when ready to begin the workout.

NOTE: Check the target heart rate each time you use target heart rate training workouts.

Press to scroll to desired workout.

2-13 Cardiointeractive & HRC Target Operating Instructions

Press  (In the window labeled heart rate the last edited heart rate will appear.)

The message will read:

ADJ TARGET + -

NEXT-SELECT

PRESS START.

Using   , edit heart rate.

Press .

The message will read:

ADJ MAX SPEED + -

NEXT-SELECT

PRESS START.

Using   , enter your desired maximum speed.

Press .

The message will read:

ADJ TIME + -

NEXT-SELECT

PRESS START.

Using   , enter your desired time at target heart rate.

Press .

The message will read:

ADJ MX GRD + -

NEXT-SELECT

PRESS START.

Using   , enter your desired maximum grade.

NOTE: Time is not entered for 2 mile, 4 mile, 5K, and 10K workouts. These are distance based workouts. (Refers to 550 Model only.)

Press  to begin your workout.

NOTE: If you accidentally press  again, the **HEART RATE** window will flash.

Press  to begin your workout.

The message will read:

STARTING3

STARTING2

STARTING1

ADJ SPEED + -

ADJ GRADE + -

WARM UP

TARGET XXX

WARM UP STAGE

The treadmill will operate as if in the manual mode during the warm-up stage. You control both speed and grade. You may only increase speed and grade to the preset maximum values entered. It is important that you start at a low level of perceived exertion and gradually increase your work load over several minutes until you approach your target heart rate. This allows your body to adapt to your workout. Increasing work load gradually will allow you to enter the heart rate control stage without overshooting your target.

NOTE: Warming up too fast may cause you to overshoot your target. If this occurs it may take several minutes before the computer software can control your heart rate. You may overshoot and undershoot your target for several minutes until control is achieved.

Wear the heart rate transmitter, provided with your treadmill, directly against your skin, 1-2 inches below the pectoral muscles/breast line. Initially the transmission signal for heart rate may be erratic or non-existent.

Perspiration on your skin is necessary for proper transmission. The Heart () LED will flash, showing that the heart rate signal is received.

Warm-up Stage Instructions: Using  , gradually increase speed to a comfortable walk. If you have entered a maximum grade in your workout, you may increase grade gradually by using  . Remember, warm up slowly! Continue increasing speed and/or grade to gradually increase your heart rate. You may only increase speed and grade to the preset maximum values entered.

When your heart rate is within 15 beats from the target, the message will read

APPROACHING TARGET XXX

NOTE: If while you are warming up you feel that your selected target is too high or too low, you can edit your target heart to a new value as follows:

Press 

Using   , edit heart rate (a maximum of 5 beat changes are permitted when editing target heart rate down). Do this only while display is flashing or the software may exit you from heart rate control.

Press  to set new heart rate target. Continue to warm up.

HEART RATE CONTROL STAGE

Heart Rate Control Stage Instructions: When your heart rate is 10 beats away from your target, the message will read:

BEGINNING
TARGET HRC
HANDS FREE

The computer software takes control of the treadmill at this point, allowing "HANDS FREE" operation. The time window will reset and begin descending from the time you originally entered in the setup of the workout parameters. The treadmill's computer now controls all speed and grade changes. The treadmill will gradually continue to increase your workload until you reach your selected target heart rate. When your heart rate is at plus or minus 2 beats, the message center will read:
AT TARGET

NOTE: Do not touch  

  Touching any key before pressing  or  first will immediately exit you from heart rate control and begin your cool down stage.

As your heart rate increases or decreases from your target, the treadmill will automatically make adjustments to speed and/or grade to keep your heart rate near your selected target. If your speed or grade reaches your preset maximums, **MAX SPEED** or **MAX GRADE** will be displayed.

NOTE: To edit your target heart rate to a new value while in heart rate control stage:

Press  . (The target value will be displayed, **TARGET XXX, ADJ TARGET +-**).

Using   edit heart rate. (a maximum of 5 beat changes are permitted when editing target heart rate down). Do this only while the display is flashing or the software may exit you from heart rate control.

Press  to set new target heart rate. The treadmill will now adjust the work load to bring you to your new target. To end your workout before the time you previously selected, press .

2-15 Cardiointeractive & HRC Target Operating Instructions

COOLDOWN STAGE

Cool Down Stage Instructions: When time is elapsed or distance has reached zero and the HRC stage is completed, there will be an immediate 50% MET reduction in your work load. The message will read:

COOLDOWN followed by audible signal
Avg Heart Rate XXX
DIST XXX
CALS XXXX
TIME XX:XX
COOLDOWN

NOTE: Your accumulated average heart rate, distance, calories, and time are summarized.

COOLDOWN will remain in the message to remind you that you are in the cool down stage.

The treadmill will now operate in the manual mode. The time will reset to 00:00 and begin to ascend. You will be in complete control of all speed and grade changes. It is recommended that you spend an equal amount of time in the cool down stage as you did in the warm up stage, or a minimum of at least two minutes. Press  when you are finished!

NOTE: Workout totals of average heart rate, time, distance and calories will appear in message at the end of your workout. If you prematurely press speed or grade to end your workout during the HRC stage, you will enter the cool down stage and your workload will remain constant. You may then manually adjust speed and grade.

NOTE: Accumulated data of average heart rate, distance, calories, and time is displayed each time  is pressed.

CRUISE CONTROL HEART RATE CONTROL

Here's the simplest way to enter target heart rate training. While in manual workout on all HRC, CI models, you can easily enter Target Heart Rate Control by simply pressing the Target Heart Rate Express Key marked Cruise Control.

- Secure heart rate transmitter around chest. (see page 2-12.)
- Step onto treadmill.
- Straddle treadbelt.
- Insert safety key into the console behind the hand bar.

Caution: When the safety key is inserted, the treadmill will return to 0% grade. Please keep the area under the treadmill free from obstructions.

Connect safety lanyard clip to the waistband of your clothing. Do not operate treadmill without safety lanyard clipped to your clothing at about waist height.

The message center will read
WGT FAST/SLOW followed by
PRESS SELECT/PRESS START

The time window will display last entered weight. Use   to change the weight and press 

Press .

Begin manual workout, heart rate will be displayed as it is picked up. When you reach desired heart rate press  (cruise control). You are now hands-free in target heart rate control.

NOTE: To change target press .

You are now in full manual control.

Work to desired target heart rate

press .

To end workout press .

- To increase your heart rate while in the HRC mode, the speed will always increase until the maximum speed is attained, then the grade will begin to increase.
- To lower heart rate in the HRC mode, grade will always decrease first, followed by speed.
- If you enter the HRC stage, below 5mph, the speed you enter will be the maximum speed of your workout. i.e.: If you like to walk at a maximum speed of 3.8 mph, you should enter HRC at 3.8 mph.
- If you enter the HRC stage above 5 mph, you will have an additional 1 mph of speed. i.e.: If you enter HRC at 6 mph, your maximum attainable speed in the HRC stage will be 7 mph.
- If at any time you enter the HRC stage with grade, you will have an additional 4% of grade available in the HRC stage. i.e.: If you enter the HRC stage at 1% grade your maximum attainable grade will be 5%.
- If you do not enter the HRC stage with grade, no grade will be available during the HRC stage of your workout. Only speed will be used to control your heart rate.

EXAMPLES OF WALKING WORKOUTS:

1. Enter HRC at 3.5 mph and 4% grade to allow a maximum speed of 3.5 mph and 8% grade.
2. Enter HRC at 4.2 mph and 6% grade to allow a maximum speed of 4.2 mph and 10% grade.

EXAMPLES OF RUNNING WORKOUTS:

1. Enter HRC at 6 mph and 0% grade to allow a maximum of 7 mph and 0% grade.
2. Enter HRC at 5 mph and 2% grade to allow a maximum of 6 mph and 6% grade.

2-17 Cardiointeractive HRC INTERVAL Operating Instructions

ALL TRUE HEART RATE CONTROL WORKOUTS CONSIST OF THREE STAGES:

1. Warm -up Stage
2. Target Heart Rate Control Stage
3. Cool Down Stage

TO USE HRC INTERVAL WORKOUTS

Interval Workouts offer variety and help you attain higher levels of conditioning in a shorter period of time.

It is recommended that you do not do an interval workout until you have used this treadmill on a regular basis and have a working knowledge of your target heart rate and fitness level.

BASIC START-UP 500CI, 550 HRC/CI Models

- Plug machine into grounded 110 VAC outlet.
- Turn on the power switch
- Step onto the treadmill
- Straddle the treadbelt.
- Insert safety key into console behind the handbar.

Caution: When the safety key is inserted, the treadmill will return to 0% grade. Please keep the area under the treadmill free from obstructions.

- Connect safety lanyard clip to the waistband of your clothing. Do not operate treadmill without safety lanyard clipped to your clothing at about waist height.

Message will read

WT FAST / SLOW followed by

PRESS SELECT

PRESS START

Last entered weight will be displayed. Use

(- SLOW + FAST) to change the weight and press **SELECT**.

Press 

Scroll to desired workout using 

Press **SELECT** (In the window labeled heart rate the last edited heart rate will appear.)

ADJ TARGET + - will appear in the message followed by
NEXT-SELECT
PRESS START.

Press **(- SLOW + FAST)** to change your target heart rate.

Press **SELECT**. The message will read:

ADJ MX SPD + -

NEXT-SELECT

PRESS START

Press **(- SLOW + FAST)** to enter your desired maximum speed.

Press **SELECT**. The message will read:

ADJ TIME + -

NEXT-SELECT

PRESS START

Press **(- SLOW + FAST)** to enter your desired time.

Press **SELECT**. The message will read:

ADJ WORK + -

NEXT-SELECT

PRESS START

Press **(- SLOW + FAST)** to enter your desired work interval time. You may adjust work interval from :30 seconds to 9 minutes in :05 second segments. Press **SELECT**. The message will read:

ADJ REST + -

NEXT-SELECT

PRESS START

Press **(- SLOW + FAST)** to enter your desired rest interval time. You may adjust rest interval from :30 seconds to 9 minutes in :05 second segments. Press **SELECT**. The message will read:

ADJ MX GRD + -

NEXT-SELECT

PRESS START

Press **▲ UP ▼ DOWN** to enter your desired maximum grade.

Press **START** to begin workout.

NOTE: If you accidentally press **SELECT** again, the **HEART RATE** window will flash.

Press **START** to begin your workout.

Cardiointeractive HRC INTERVAL Operating Instructions 2-18

The message will read:

STARTING 3
STARTING 2
STARTING 1
ADJ SPEED +-
ADJ GRADE +-
WARM UP
TARGET XXX

WARM-UP STAGE

Warm-up Stage Instructions: The treadmill will operate as if in the manual mode during the warm up stage so you can control both speed and grade. It is important that you start at a low level of perceived exertion and gradually increase your work load over several minutes until you approach your target heart rate. This allows your body to adapt to your workout. Increasing work load gradually will allow you to enter the heart rate control stage without overshooting your target.

NOTE: Warming up too fast may cause you to overshoot your target. If this occurs it may take several minutes before the computer software can control your heart rate. You may overshoot and undershoot your target for several minutes until control is achieved. Wear the heart rate transmitter provided with your treadmill directly against the skin 1-2 inches below the pectoral muscles/breast line. Initially the transmission signal for heart rate may be erratic or non existent. Perspiration on your skin is necessary for proper transmission. The Heart (❤) LED will flash, showing that the heart rate signal is received.

NOTE: If while you are warming up you feel that your selected target is too high or too low, you can edit your target to a new value as follows:

Press  (The target value message will appear, **TARGET XXX**). Using **SLOW** and **FAST**, edit heart rate (only 5 beat changes are permitted when editing target). Do this only while display is flashing or the software may exit you

from heart rate control.

Press  to set new heart rate target. Continue to warm up.

Warm-Up Stage Instructions: Using **+** **FAST** gradually increase speed to a comfortable walk. If you have entered a maximum grade in your workout, you may increase grade gradually by using  **UP**. Remember, warm up slowly! Continue increasing speed and/or grade to gradually increase your heart rate. You may only increase speed and grade to the preset maximum values entered. When your heart rate is within 15 beats from the target, the message center will read **APPROACHING TARGET XXX**

INTERVAL HEART RATE CONTROL

Heart Rate Control Stage Instructions: When your heart rate is 10 beats away from your selected target heart rate, the message center will read:

BEGINNING
INTERVAL HRC
HANDS FREE.

The computer software will take control of the speed and grade at this point to allow **HANDS FREE** operation. By taking control before you actually reach your target heart rate, the computer reduces the chances of overshooting your target heart rate.

NOTE: Do not touch **- SLOW** **+** **FAST**    , or  first will immediately exit you from heart rate control and begin your cool down stage.

The treadmill will now control all speed and grade changes. The treadmill will gradually continue to increase your workload until your heart rate reaches your selected target.

When your heart rate is at the selected target, the message will read:
AT TARGET

2-19 Cardiointeractive HRC INTERVAL Operating Instructions

The message will then read **WORK INT XX:XX**. The time will decrease from the work interval time you entered. When you reach zero, the message will read **REST INT XX:XX**. The time will decrease from the rest interval time you entered.

INT HRC NOTE: additional displayed data include: **HR REMAIN XX:XX** (total time remaining at target heart rate), this message follows both the work interval and rest interval display.

XX:XXW (displayed in time window) time remaining in work interval. **XX:XXR** (displayed in time window) time remaining in rest interval.

NOTE: Mets and pace is displayed briefly in message center after target message.

As your heart rate increases or decreases from your target, (while you are in the work interval,) the treadmill will automatically make the adjustments to speed and/or grade to keep your heart rate near your selected target.

Interval Training is one of the fastest ways to increase cardiovascular fitness. The treadmill will monitor your heart rate and adjust the speed and/or grade while in the work interval. When you enter the rest interval, there will be a **50% MET reduction**. Your work level will remain the same throughout the rest period to allow your heart rate to decrease. Your heart rate will be monitored during this time, but there will be no adjustment to speed or grade in the rest interval.

When you return to the work interval, your speed will return to a calculated average of the speeds and/or grades which were used in the previous work intervals. Your speed and/or grade may increase or decrease while you are in your work interval. This averaging of speed and/or grade enables you to return to a work level which will bring you near your selected target heart rate.

NOTE: If you feel that your selected target is too high or too low, you can change your target heart rate as follows, when you are in Heart Rate Control.

Press  . The target value message will appear:

TARGET XXX
ADJ TARGET +

Using  , change your target heart rate. Only 5 beat changes are permitted when editing target while in Interval Workouts.

Press  to set new heart rate target. The treadmill will now adjust the work load to bring you to your new target. Do this only while the display is flashing or the software may exit you from Heart Rate Control. In Interval Training it may take a few work intervals to bring you to your new selected target heart rate.

To end your workout press .

COOL DOWN STAGE

Cool Down Stage Instructions: When the time is elapsed and the HRC stage of your workout is finished, there will be an immediate 50% MET reduction in your workload.

The message center will read:

COOLDOWN followed by audible signal

DIST XXX

CALS XXXX

TIME XX:XX

COOLDOWN.

COOLDOWN will remain in the message center to remind you that you are in the cool down stage.

The treadmill will now operate in the manual mode. The time will reset to 0 and begin to ascend. You will be in complete control of all speed and grade changes. It is recommended that you spend an equal amount of time in the cool down stage as you did in the warm up stage or, a minimum of at least 2 minutes. Press  when you are finished!

NOTE: Workout totals of average heart rate, distance, calories will be displayed at the end of your workout. If while in the HRC stage you prematurely end your workout, you will enter the cool down stage and your work load will remain constant. You may then manually adjust speed and grade.

NOTE: Accumulated data of average heart rate, distance, calories, and time is displayed each time  is pressed.

- The Heart Rate Monitor strap provided with your treadmill should be worn directly against your skin, 1-2 inches below the pectoral muscles/breast line. Initially the transmission signal for your heart rate may be erratic or nonexistent. Perspiration on your skin is necessary for proper transmission. In most cases, by the end of your warm-up, transmission becomes consistent and accurate. If not, saline solution should be used to moisten the sensors on the back of the strap. Women should be careful to place the transmitter below their bra line. If the transmitter strap is adjusted or moved while exercising, communication may be temporarily affected.
- If communication is lost for 30 seconds, the treadmill will automatically shut off. It is important to keep the transmitter adjusted properly.
- The transmitter emits a fairly weak signal to the receiver, so interference from more powerful airwaves (everything from other exercising equipment to airplanes) is not uncommon. The good news is that interference is usually quite brief. If you continue to have intermittent heart rate display problems, consult your local service technician. The problem may be with the transmitter batteries.
- Oxygen intake directly affects your heart rate. To prevent your heart rate from spiking up, maintain a constant rate of oxygen intake. Maintaining a fluid motion while walking or running and refraining from talking helps to keep your heart rate from spiking.
Note: Talking while in the HRC stage can cause your heart rate to rise independent of your workload and cause the software to make necessary changes. This will cause inappropriate speed and/or grade changes, and affect the efficiency of your HRC workout.
- A grounded outlet is critical for the HRC system to function properly.
- If erroneous heart readings are displayed above the target selected, you can pull the transmitter portion away from your chest for several seconds. This will keep you from exiting HRC.

- Two users wearing the same kind of transmitter at the same time, in close proximity, may cause false heart rate display readings.
- Use only the transmitter provided with your **TRUE HRC Treadmill**, or a Polar standard transmitter.
- Use dedicated 110 VAC, grounded outlet to help prevent interference.

Your **TRUE HRC Treadmill** is designed to meet the needs of both walkers and runners by adjusting speed and grade accordingly:

- To raise your heart rate in the HRC mode, speed will always increase first, until you reach your maximum speed, followed by grade (if grade is used in the workout).
- To lower your heart rate in the HRC mode, grade will always decrease first, until you reach 0% grade, followed by speed (if grade is used in the workout).
- Each change of speed is .1 MPH increments.
- Each change of grade is .5% grade increments.
- For examples of workout maximum speed and maximum grade, refer to program charts on page 2-9.

HEART RATE SAFETY PARAMETERS

Your **TRUE HRC Treadmill** computer software is programmed with the following safety parameters:

- If your heart rate exceeds your target by 12 beats, there will be a 30% MET reduction in workload to reduce your heart rate.
- If your heart rate exceeds your target by 20 beats, the unit will automatically shut off as a precautionary measure. (Be cautious when selecting your target heart rate so the 20 beat variance will not exceed your maximum heart rate as determined by your physician).

Heart Rate Control Patent 5,462,504

2-21 Pre-Program Operating Instructions With Express Keys

450 HRC, 500 HRC/CI, 550 HRC/CI

BASIC START-UP

- Plug machine into a grounded 110 VAC outlet.
- Turn on the power switch.
- Step onto the treadmill.
- Straddle the treadbelt.
- Insert safety key into the console behind the grab bar.

Caution: When the safety key is inserted, the treadmill will return to 0% grade. Please keep the area under the treadmill free from obstructions.

- Connect safety lanyard clip to the waist band of your clothing. Do not operate treadmill without safety lanyard clipped to your clothing at about waist height.

The message will read
WT FAST/SLOW followed by
PRESS SELECT

The time window will display last entered weight. Use **- SLOW** **+ FAST** to change the weight and press **SELECT enter**.

PROGRAM MODE

- **NEXT UP/DN** message appears, followed by **EDIT SELECT**. Press **PROGRAMS** to access the programs
- Press **PROGRAMS** to scroll to desired workout. Select a level using **- SLOW** **+ FAST**
Press **SELECT enter**
After program and level have been selected, set time using **- SLOW** **+ FAST** keys (15:00-99:00 minutes)
Press **START focus** to begin
- Carefully step onto treadbelt.

- **To Stop or pause your workout:** slow machine to below 2 mph by pressing **- SLOW**. Press **STOP/PAUSE**. This will stop the program and save all valuable information. To restart a program, press **START**. To end workout, press **STOP/PAUSE** and remove the safety key.
- **To reset distance, time, and calories:** (During workout) Press and hold **STOP/PAUSE** until zeros appear in the time, distance, calorie windows. If not in use, press and hold **STOP/PAUSE**.
- **To change level during workout:** press and hold **SELECT enter**. Press **- SLOW** **+ FAST** keys to select new level. After new level is entered press **SELECT enter**.
- **Recall of accumulated data:** obtained by pressing the **STOP/PAUSE**.

USER PROGRAM

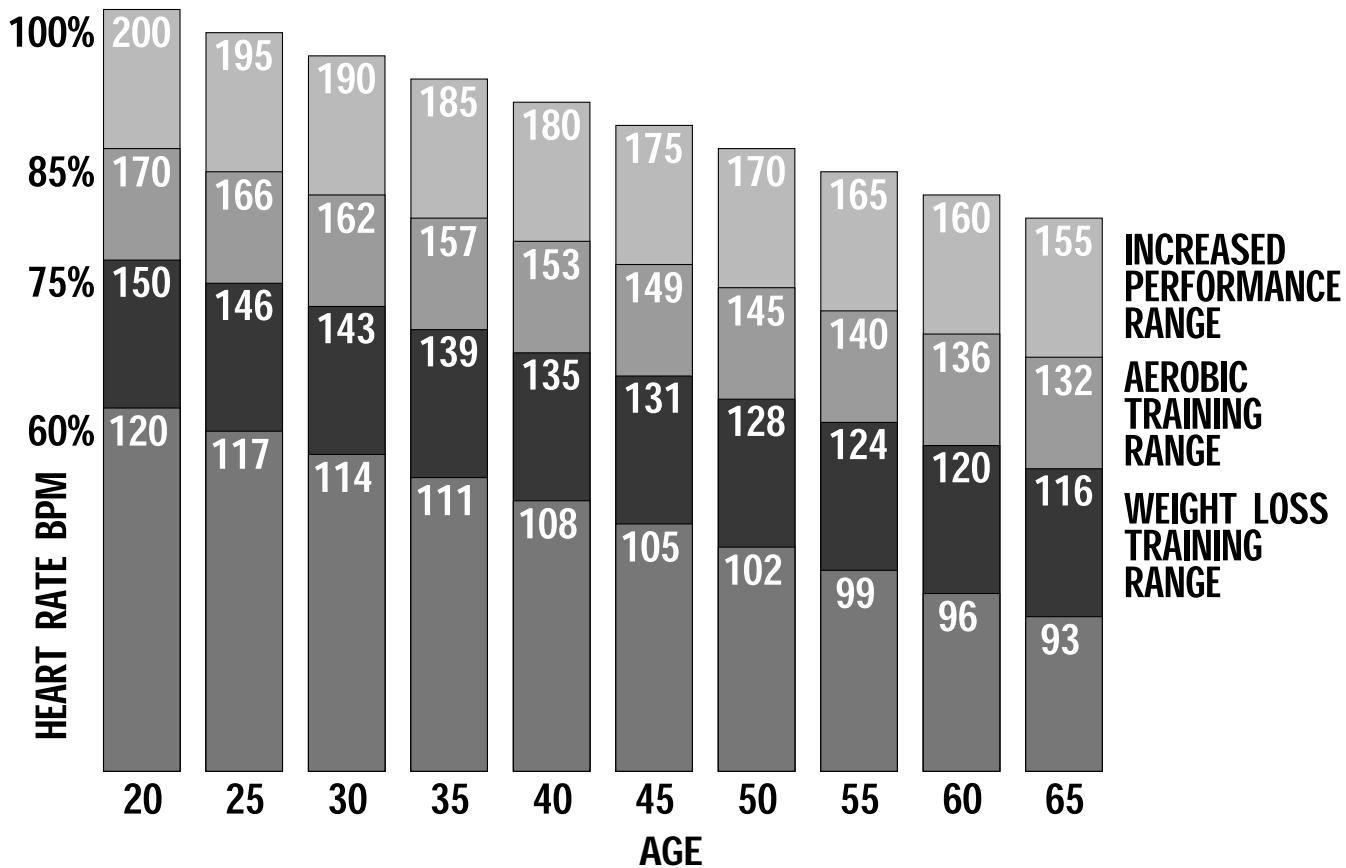
A total of 50 changes can be made to speed and/or grade in a user program. One speed and grade change per 30 second time block ie: (0:-30, :30-1:00, 1:00-1:30) can be made.

NOTE: If you wish the program to end at zero speed, your last :30 entry should be zero speed when you stop the treadmill.

- Complete a manually-controlled workout.
- Press **STOP/PAUSE**.
- Press and hold **SELECT enter** until **SAVE USER 1** appears.
- Press **▲ UP** until **USER 1, 2 OR 3** message appears. When you have selected which user file you want to save to, press and hold the **SELECT enter** until **SAVE USER 1, USER 2 OR USER 3** message appears.
- Your user program is now saved.
- Remove the safety key.

Target Heart Rate Chart

2-22



WARNING!

Consult your physician to determine your target heart rate before using the heart rate control mode of this treadmill!

The above chart is to be used only as an average reference point and is in NO WAY a recommendation of your personal abilities!

Medications may affect your heart rate.

Consult your physician for specific advice before exercising.

Do not use this treadmill if you have an acute illness, cold or fever.

STOP EXERCISING IF:

- YOU FEEL FAINT OR DIZZY.
- YOU EXCEED YOUR MAXIMUM HEART RATE SET BY YOUR PHYSICIAN.

THE F.I.T. FORMULA

(Frequency, Intensity, Time)

YOUR FITNESS PROGRAM

You can get valuable fitness benefits from your TRUE Treadmill. Using the treadmill 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 treadmill will also help you develop added muscle endurance and balanced strength throughout your body.

DETERMINING YOUR NEEDS

Calculate your maximum heart rate as a first step in developing your fitness program. The formula to calculate average maximum heart rate for one minute is 220 beats per minute minus your 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. (Refer to chart on page 2-22.)

It's also important to know your target training zone or target heart rate. The American Heart Association (AHA) defines target heart rate as 60-75 percent of your maximum heart rate. This is high enough to condition, but well within safe limits. The AHA recommends that you aim for the lower part of the target zone (60 percent) during the first few months of your exercise program. As you gradually progress you can increase your target to 75 percent. According to the AHA, "Exercise above 75 percent of the maximum heart rate may be too strenuous unless you are in excellent physical condition. Exercise below 60 percent gives your heart and lungs little conditioning."

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 previous chart 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.

BEGINNING YOUR EXERCISE PROGRAM

WARM-UP: Slow and Deliberate Exercise

You are not warmed up until you begin to perspire lightly and breath more deeply. Warming up prepares your heart and other muscles for more intense exercise and helps you avoid premature exhaustion. Begin each workout by walking even if you plan to run. Start slowly, exploring different speeds until you can comfortably sustain your speed, a suggested 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.

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 moving your arms and legs smoothly. Walk naturally and avoid jerking motions that can cause pulled muscles, sprained joints, and loss of balance.

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.

UNDERSTANDING THE F.I.T. FORMULA

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 minimal 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 periods 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 walking at a speed of 1-2 MPH. As you use your treadmill regularly, higher speeds may be more comfortable and more effective.
- Inability to maintain a smooth, rhythmic motion suggests that your speed and/or elevation may be too great.
- If you feel out of breath before you have exercised 12 minutes, you are probably overdoing it.

As your fitness level improves, you will need to increase your workload in order to reach your target heart rate. The first increase may be necessary after two to four weeks of regular exercise. Never exceed your target heart rate zone.

Increase the speed and/or incline on the treadmill to raise your heart rate to the level recommended by your doctor. The incline feature can be used to greatly increase the workload without increasing speed. The chart below indicates how much the effort changes with each percent of grade at popular speeds for a person weighing 155 pounds.

METS

One MET is the amount of energy your body uses when you're resting. If a physical activity has an equivalent of 6 METS, its energy demands are 6 times that of your resting state. The MET is a useful measurement, because it accounts for differences in body weight.

Grade %	MPH Minutes per mile	20 30	2.5 24	3.0 20	3.5 17	4.0 15
	METS	METS	METS	METS	METS	METS
0	2.5	2.9	3.3	3.7	4.1	
1	2.8	3.3	3.7	4.2	4.6	
2	3.1	3.6	4.1	4.7	5.2	
3	3.4	3.9	4.5	5.1	5.7	
4	3.7	4.3	5.0	5.6	6.3	
5	3.9	4.7	5.4	6.1	6.8	
6	4.2	5.0	5.8	6.6	7.4	
7	4.5	5.3	6.2	7.1	7.9	
8	4.7	5.7	6.6	7.6	8.5	
9	5.0	6.0	7.1	8.0	9.0	
10	5.3	6.4	7.5	8.5	9.6	
11	5.6	6.7	7.9	9.0	10.1	
12	5.9	7.1	8.3	9.5	10.7	
13	6.1	7.4	8.7	10.0	11.2	
14	6.4	7.7	9.1	10.5	11.8	
15	6.7	8.1	9.5	10.9	12.3	
16	7.0	8.4	10.0	11.4	12.9	

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, 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.

USING THE F.I.T. FORMULA

The F.I.T. formula and chart are designed to help you begin a program tailored to your needs. You may wish to keep an exercise log to monitor your progress.

BEGINNING 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 exercise.

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 AEROBIC FITNESS

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.

MAINTAINING AEROBIC FITNESS

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.

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).

ATHLETIC TRAINING

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.

THE F.I.T. CHART

	FREQUENCY	INTENSITY	TIME
BEGINNING EXERCISE PROGRAM	2-3 times/week	60-65% of MHR*	3-5 minutes
ESTABLISHING AEROBIC FITNESS	3-4 days/week	60-75% of MHR*	12-20 minutes
MAINTAINING AEROBIC FITNESS	4-6 days/week	70-85% of MHR*	20-30 minutes

*MHR = maximum heart rate

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.

Your TRUE treadmill is constructed of quality materials and manufactured to provide many years of faithful service. Simple routine cleaning and a preventive maintenance program will extend the life of your treadmill.

NOTE: To prevent electrical shock, be certain the treadmill is turned off and unplugged from the electrical outlet before performing any cleaning or routine maintenance.

TREADBELT AND RUNNING DECK LUBRICATION:

For maximum treadmill life, True Treadmills are designed to require a routine lubrication as part of a general maintenance for the machine. This simple maintenance procedure will prevent premature wear of the treadbelt, running deck and drive motor system. Lubrication is a necessary maintenance procedure, and failure to lubricate can result in a voided warranty, please follow the recommended lubrication schedule as closely as possible.

USAGE	LUBRICATION
1-4 mph	once per year
4-7 mph	every 6 months
7 mph and above	every 3 months

This schedule is the recommended application for a single user, up to 30 minutes per use on a daily basis. If there is more than one user regularly using the treadmill, please contact True Fitness for the recommended lubrication schedule.

APPLICATION OF LUBRICANT:

The best time to apply lubricant is **IMMEDIATELY** after a workout. The deck will take the lubricant best when it is warm.

1. If not immediately after a workout, walk on the treadmill for 2-3 minutes at 3-4 mph.
2. Turn off the power and disconnect the treadmill from the electrical outlet.
3. Lift the treadbelt edge near the front 1/3 of belt. Apply 1/4 tsp. of lubricant from both sides of the unit as close to center of the running deck as possible.

4. Plug the power cord into the electrical outlet.
5. Immediately after applying the lubricant **WALK** on the treadmill for 3-4 minutes at 1 mph. You must **WALK** on all areas of treadbelt to ensure the lubricant is evenly distributed.

Your TRUE dealer can provide lubricant and additional instructions, or you may call **TRUE Fitness at 1-800-426-6570.**

CAUTION: USE ONLY TRUE LUBRICANT. DO NOT USE TEFLON, SILICONE OR GRAPHITE. USE OF OTHER LUBRICANTS WILL ADVERSELY AFFECT THE PERFORMANCE OF THE TREADMILL AND VOID THE WARRANTY.

CLEANING DAILY: Perspiration should be wiped from the control console and treadmill surfaces after your workout.

CLEANING WEEKLY: You should wipe down your treadmill once a week with a water dampened, soft cloth. Be careful not to get excessive moisture between the edge of the digital display panel and the console, as this might create an electrical hazard or cause the electronics to fail.

IMPORTANT: DO NOT CLEAN OR WIPE THE TOP OF THE DECK UNDER THE CENTER OF THE RUNNING BELT.

MONTHLY: Clean dust and dirt that might accumulate under and behind your treadmill once a month. Small rubber particles from the soles of walking shoes will accumulate alongside the belt and also behind the unit.

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

SYMPTOM	CAUSE	SOLUTION
Circuit breaker on treadmill trips when the power cord is plugged into wall	A. Damaged motor B. Damage of defective motor power supply board	Service required Service required
Circuit breaker on treadmill trips when inputting speed and starting	C. Damaged motor control circuit board D. Restricted belt or flywheel E. Treadbelt over tensioned	Service required Check and remove obstruction or call dealer See Adjustments Page 1-5
Computer display LED's do not illuminate	A. No power to treadmill B. Circuit breaker trip C. Pedestal to frame electrical connector not connected or completely connected	Restore power at electrical outlet or reset circuit breaker if in off position Reset Circuit breaker Service required
Incline Motor and tread motor will not turn on*	A. Pedestal to frame electrical connector not connected or completely connected	Service required
Incline motor does not operate but the treadbelt moves*	A. Incomplete wire harness connection	Service required
Scrambled digits on computer LED's	A. Damaged E-Prom B. Damaged computer board	Service required Service required
Squeaking noise from motor while using the treadmill	A. Poly V-belt slipping B. Motor brush noise excessive	Service required Service required
Treadbelt tracks left to right	A. Uneven floor B. Rear roller not adjusted for sloped floor	Move treadmill to even surface Refer to Owner's Manual to adjust belt
Treadmill trips household or institutional circuit breaker	A. Defective breaker B. Circuit too small C. Circuit over-loaded	Replace breaker Use 20 amp circuit Remove the other electrical appliances on same circuit
Treadbelt feels unsmooth, jerks intermittently	A. Object between belt and deck B. Object under belt C. Loose tread motor drive-belt D. loose treadbelt tension	Remove object between belt and deck Remove object from under belt Service required Refer to Owner's Manual

* Computer LED Displays are illuminated

YOUR TRUE TREADMILL IS EQUIPPED WITH BUILT IN DIAGNOSTIC INFORMATION AND MAINTENANCE REMINDERS

The following error messages will be displayed as they occur. Every time these messages are displayed, an audible will sound twice.

E1:INCLINE	Incline moving when not commanded to.
E1:MINIMUM	Minimum incline calibrating error. Error cleared by calibrating incline.
E1:RANGE	Difference between zero position and maximum incline not sufficient.
E1:STALL	Incline not moving when commanded to.
E2:OVERSPEED	This error occurs when an acceleration >2.1 mph occurs. Error cleared by turning off power switch then turning it back on.
E2:CAL	Feedback cannot reduce or increase speed to target. Error cleared by calibrating.
E3:EEPROM	This error occurs when a data error is detected on the EEPROM, replace the control panel.
E5:SENSOR	This message is displayed when there is no speed feedback.

The following service messages will be displayed as they occur, as well as for the subsequent six safety key insertions. These messages will be displayed until a key is pressed. Every time these messages are displayed, an audible will sound twice.

S1:LUBE	This message is displayed when lubrication of the deck is recommended.
S2:CLEAN	This message is displayed every 500 miles. - Prompt to clean treadmill.
S3:MOTOR	This message is displayed every 2500 hours. - Prompt to check motor brushes.
S7:SLCT	S.O.FT. select-(CI model only) this message is displayed when there is a calibration error for CI S.O.FT. select system. Error is cleared by calibration of S.O.FT. select system.

INDIVIDUAL PERFORMANCE CHART

Photocopy this chart for repeated use and keep a weekly record of your performance progress.

<i>NAME DATE</i>	<i>WORKOUT TIME</i>	<i>DISTANCE</i>	<i>AVERAGE SPEED</i>	<i>PROGRAM LEVEL</i>	<i>GOAL</i>	<i>TARGET HEART RATE</i>			
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

Performance Chart

4-2

INDIVIDUAL PERFORMANCE CHART

Photocopy this chart for repeated use and keep a weekly record of your performance progress.

<i>NAME DATE</i>	<i>WORKOUT TIME</i>	<i>DISTANCE</i>	<i>AVERAGE SPEED</i>	<i>PROGRAM LEVEL</i>	<i>GOAL</i>	<i>TARGET HEART RATE</i>			
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TRUE FITNESS TECHNOLOGY, INC. P.O. BOX 8803, 865 HOFF ROAD, O'FALLON, MO 63366





The industry's most modern treadmill manufacturing facility located just outside St. Louis, Missouri. Over 131,000 square feet is dedicated to treadmill research, design and manufacturing.

The engineering and design of True Treadmills is the result of consultation with medical professionals in the cardiac rehabilitation and orthopedic sectors.

Our service and support personnel work in unison with our extensive factory trained dealer network to provide fast, friendly and knowledgeable response to customer needs.

If you have any questions or comments, please call us toll free at 1-800-426-6570

TRUE®



Founded 1981

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Specifications subject to change